STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: John F. Allen DAvenport 3 - 1527

HEARING WORKSHOP AT
STANFORD MEDICAL CENTER

release on receipt

STANFORD -- The first scientific meeting to be held in the partially completed campus quarters of the Stanford Medical Center -- a four-day workshop on the problems of the hard of hearing-- will open next Sunday (July 26).

The workshop is to be jointly sponsored by Stanford's Speech Pathology and Audiology Department and the Hearing Aid Industry Conference, a trade association representing leading hearing aid dealers.

Some 80 hearing aid dealers from the western states and Canada are expected to attend the conference, which is under the direction of Hayes A. Newby, Ph. D., Stanford professor of Speech Pathology and Audiology.

The dealers will undergo an intensive course in the physiology of hearing problems and the newest techniques for mechanically aiding hearing defects. Lectures will be presented by experts from all over the United States.

Participants will include: Doctor Newby; William C. Hardy, director of the Hearing and Speech Center at Johns Hopkins University; E. Thayer Curry, director, Department of Audiology, university of Pittsburgh School of Medicine; Raymond T. Carhart,

- more -

professor of audiology, Northwestern University, and Kenneth O. Johnson, executive secretary of the American Speech and Hearing Association.

The program will include a tour of the Department of Speech Pathology and Audiology, one of the first units to be housed in the still-building, $20,000,000 Stanford Medical Center.

The workshop is one of a series held and planned at various university centers and designed to train hearing aid dealers to aid an estimated 8,500,000 Americans with problems that can be corrected with hearing aids.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Warren Hinckle, DAvenport 3 - 1527

NEW ERA OF TREATMENT FOR 'ADULT DELINQUENTS'
SEEN BY VISITING BRITISH PSYCHIATRIST

for release upon receipt

STANFORD, California ** Mentally-ill members of the community will be better served by aid from within the community itself than confinement in penitentiaries or large mental hospitals, a leading British psychiatrist said today.

"Actually, mental hospitals are not the places to treat behavior problems," said Dr. Maxwell S. Jones, Commonwealth visiting professor of psychiatry at the Stanford University School of Medicine.

Jones, a consultant on mental health to the World Health Organization, came to the United States last week to begin work in the Stanford post.

He is the originator of the "therapeutic community" -- a new concept in treatment of mental illness based upon the interaction of groups of psychiatric patients guided by skilled physicians and social workers.

Jones opposed the rigid organization of large mental institutions with the concept of open-door wards treating smaller groups in "democratic equalitarian" environment. He considers

- more -

today's institutions all too often lacking "cohesive, integrated treatment forms" because of their hierarchial structures.

The mental health expert will help pioneer an individual-orientated program of psychiatric care at Stanford, emphasizing interaction of family, patient groups, and the university's basic science research facilities.

Jones called for a change in public attitudes concerning treatment of mental illness. "Up to now, we've simply been trying to get rid of the person who reminds us of the bad parts of ourselves by confining the psychotic and psychopath in large mental hospitals," the British psychiatrist said.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

WESTERN PSYCHIATRIC PROFESSORS TO
MEET AT STANFORD MEDICAL CENTER

STANFORD. -- Forty-three of the West's leading psychiatry teachers will gather at the new Stanford Medical Center this week to discuss such professional problems as faculty shortages, salary scales and relationships with other university departments.

The Stanford Medical School's Department of Psychiatry will play host on September 4 and 5 to an "Institute for Professors of Psychiatry West of the Mississippi."

The purpose of the meeting, which is being supported by a grant from the National Institute of Mental Health, is an exchange of views on the academic aspects of psychiatric teaching.

In attendance will be psychiatric department chiefs from most of the universities in the area, as well as other professors.

Included on the agenda are such problems as the necessity of recruiting qualified instructors, departmental budgets, training and residency programs and the teaching of students in non-medical schools.

Dr. Thomas A. Gonda, acting head of the university's department of psychiatry, will act for Stanford as host to the visitors.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Warren Hinckle, DAvenport 3-1527

NEW STANFORD HOSPITAL FEATURES 24-HOUR 'AUTOMATIC SECRETARY'

for release upon receipt

Insomnia need no longer be an unproductive state for doctors at the new Palo Alto-Stanford hospital.

A unique electronic device located in the multi-million dollar hospital plant in the Stanford Medical Center -- the 'electronic secretary' -- enables physicians to telephone a Central Dictating system at any time in the day, or sleepless hour in the night, and dictate his reports or specialized medical correspondence.

Stenographers transcribe the material the next day, and the finished copy is held at the Doctors' Lounge for proofing and signature.

The modern system will greatly aid physicians in meeting the growing load of paper work required each year.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: ON RECEIPT TELEPHONE DA 1-5310-11

STANFORD POLIO RESEARCHER

GRANTED FOUNDATION FUNDS

STANFORD -- A Stanford scientist who earlier split a polio virus into infectious and non-infectious parts has been awarded a March of Dimes grant of $29,808 to continue his studies of the structure of the dreaded virus.

Announcement of the grant to Dr. Carlton E. Schwerdt, associate professor of medical microbiology in the Stanford University School of Medicine, was made today by Basil O'Connor, president of the National Foundation.

Doctor Schwerdt has long been noted for his work on purification of the polio virus, particularly the discovery of two fraction which differ in a number of essential ways.

One fraction -- the larger of the two -- produces polio; the other does not. The two also differ antigenically: when injected in animals they provoke the production of different sorts of disease-fighting antibodies.

Doctor Schwerdt plans to continue his investigation of the relationship of the two fractions and possibly other fractions that may be present in the total virus. He also willl attempt to obtain further information on the chemical composition and physical properties of the fractions.

Beyond this point Doctor Schwerdt also will try to learn the sequence in which fractions are built up during the period when a virus is reproducing within an infected cell.

Cells will be broken up at various times after they have been infected, in the hope of isolating the fractions at different stages of development.

All of these studies are aimed at increasing man's knowledge of the nature of virus particles and of the mechanism by which they are manufactured.

Such knowledge may prove of value in devising effective drugs against polio and other virus disease or in the manufacture of vaccines.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

FIRST PATIENT AT STANFORD

Mrs. Gregorita Moreno, a 33-year old housewife, today became the first patient to enter the new Palo Alto-Stanford Hospital in the new Stanford Medical Center on the campus.

Mrs. Moreno, of 3077 Greer Road, Palo Alto, wife of Aurelio Moreno, a tube technician, was the first of 32 patients admitted during the day.

She is under treatment for a stomach ulcer.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

STANFORD RESEARCHERS

SWEEP ESSAY CONTEST

Two Stanford School of Medicine dermatologists have captured both first and second place in the Nelson Paul Anderson Memorial Essay Contest sponsored by the Pacific Dermatologic Association.

First prize went to Dr. Joseph B. Peterson for an essay discussing the effects of rubefacients on the skin. Second place went to Dr. Bernard Resnick for a paper discussing his attempts to transplant diseased skin to hamsters.

Dr. Peterson will read his paper before the annual meeting of the Dermatologic Association in Carmel, California.

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STANFORD MEDICAL CENTER NEWS BUREAU
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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE P. M. Papers of Tuesday, August 25 TELEPHONE DA 1-5310-11

PROGRAM SET FOR STANFORD
MEDICAL CENTER DEDICATION

STANFORD, Aug. 25- Dr. James Shannon, director of the National Institute of Health, and five other noted speakers will highlight the two-day dedication of the new $22,000,000 Stanford Medical Center here on September 17 and 18.

On hand also will be at least one Nobel Prize winner and Governor Edmund G. Brown, according to an announcement released today by Stanford President Wallace Sterling.

While it has been no secret that Stanford Medical School has been moving from its old San Francisco quarters to join in the same sprawling structure with a new Palo Alto-Stanford Hospital, today's was the first announcement of speakers and other details of the big dedication program.

It will include not only Doctor Shannon and Nobel Laureate Joshua Lederberg, head of Stanford's department of genetics, but a whole host of other scientists and dignitaries.

The final public ceremony marking the official opening of the Center will be held in the fountain-sprayed court in front of the building at 8 p.m. on September 18.

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STANFORD DEDICATION 2-2-2

Following an academic procession and a benediction read by Robert M. Minto, the university chaplain, President Sterling will introduce Palo Alto Mayor Noel Porter and David Packard, of Palo Alto, president of the Stanford Board of Trustees.

Following brief talks by these two and an introduction of the Governor, the major address of the evening will be presented by Frank Stanton, president of the Columbia Broadcasting System.

The move of the Stanford Medical School from San Francisco to the campus near Palo Alto is the culmination of a dream long held by President Sterling, Dr. Robert H. Alway, dean of the school, and members of the Board of Trustees -- a dream based on the expectation of the treating of every patient as a "whole" man by doctors who themselves are "whole" men.

The concept has included three major ideas: that medical students ought to be near other university departments so they can absorb a broad knowledge along with the techniques of medicine; that, as a consequence, they will learn to treat "not the ulcer but the man," and the final fruition of a long and pleasant connection between Stanford and the City of Palo Alto.

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Palo Alto's wing of the hospital, which is included in the building and which complements Stanford's teaching hospital at the other end of a central service core, is the result of a $4,000,000 bond issue passed by the city's voters some years ago.

To start off the two-day celebration there will be a welcome address on the morning of September 17 by Doctor Alway, stressing the dedication's theme: "Medical Care, the University and Society."

Doctor Alway will then introduce Doctor Shannon, the Nation's topmost official research director, who will make the keynote address.

Later in the morning there will be other talks by William McPeak, vice-president of the Ford Foundation, and Dr. E. Cowles Andrus, of Johns Hopkins University.

Following luncheon there will be another address, this by Dr. Vernon Lippard, dean of the Yale Medical School.

The other major speech of the weekend ceremony will be that of Lester Evans, president of the Commonwealth Fund, on Friday afternoon.

Throughout the two days, for both scientific and lay audiences, there also will be concurrent lectures on new research discoveries by such famed Stanford scientists as:

STANFORD DEDICATION 4-4-4

1 - Lederberg on "Viruses as Genes."

2 - Dr. Norman Kretchmer, head of Stanford's Department of Pediatrics, on "Heredity, Development and Disease."

3 - Dr. Arthur Kornberg, head of the Biochemistry Department, on "The Chemical Basis of Genetics."

4 - Dr. J. Garrott Allen, head of the Department of Surgery, on "Serum Hepatitis."

5 - Dr. Keith F. Dillon, associate professor of pharmacology, on the "Neuropharmacological Approaches to the Study of Drug Action."

6 - Dr. Edmund H. Volkart, associate professor of sociology, on "Man, Disease and the Social Environment."

Also going on at the same time during all of the two days -- but mainly available to scientific audiences only-- will be a series of seventeen scientific symposia, which will present a cross-section of the research going on at the Center.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: TELEPHONE DA 1-5310-11
upon receipt

STANFORD'S LANE LIBRARY MOVES AUGUST 31

A caravan of 160,000 medical books and journals will travel down Bayshore Freeway August 31st -- September 1.

The books -- some of them over 500 years old -- form Stanford Medical School's Lane Medical Library which is moving to new quarters in the $22,000,000 Stanford Medical Center on campus -- 35 miles south of San Francisco.

Lane Library has traditionally been housed in Stanford Medical School which has also just moved from San Francisco to the campus.

The trek will be the first for the library since 1912 when the present building was opened on Sacramento and Webster Street in San Francisco.

It involves among other things:

--18 "incunabula", some of the earliest printed books, published circa 1450-1500.

--Thousands of medical journals, books and pamphlets in more than a dozen languages.

--Half a million library file cards.

--Relics of early California medicine, including scores of instruments, saddle bag medical kits and other antiques.

--Fifty-thousand pounds of tables, chairs, files and other furniture.

-- more --

Lane Library 2/2/2/2/2/2/2/2/2/2

Twenty-five van loads of books and paraphernalia will make the trip to the new quarters where crews will be waiting to remove the books and place then in proper position in nearly five miles of shelves and stacks.

The task of moving the library has been assigned to Market Street Van & Storage, a long-time San Francisco moving firm.

It is estimated close to 500,000 pounds of books and related library equipment will be moved to the Stanford campus by the time the fall semester commences in late September.

The move is under the supervision of Elmer W. Greider, acting director of University Libraries at Stanford.

An estimated 1,650 man hours of labor is involved.

"An elaborate marking and tagging system has been developed to assure that every book is placed on the right spot on the right shelf," according to Miss Clara Manson, Lane Librarian.

Miss Munson and her staff have been working for several months tagging each shelf with color coded stickers. A duplicate sticker identifies the shelf in the new campus library. The movers will pack a shelf of books to each carton, transfer the sticker from the shelf to the filled carton and send it on its way in a carefully charted sequence to arrive at the right place at the right time at the new Stanford Medical Center. Three thousand specially-designed cartons will be used to carry the books.

"Actually the biggest problem is getting the books out of the library," a spokesman for the moving company said.

A small elevator serves only a limited part of the old Library

--- more ---

building and is much too slow for the pace planned by the movers.

To solve this problem, a "fork-lift" with a two-story reach and a series of shutes to slide the books to ground level will be used.

The priceless collection of "incunabula" will receive special handling. These delicate works will be individually wrapped in tissue paper, cushioned in containers and transported in padded cartons.

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Editors: The "fork-lift" used to move the books from the Library windows and the special equipment used to move the rare books may afford picture possibilities.

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

22-MILLION DOLLAR HOME
FOR DISEASE FIGHTERS

Stanford University medical researchers have a new 22-million dollar home in which to continue their fight against death and disease.

The Stanford Medical Center, a sprawling, fifty-six acre complex of three hospital and four medical school buildings on the northern end of the Stanford campus in Palo Alto, California, is equipped with the most modern tools of medical science to further the constant laboratory research necessary to better maintain life and safeguard health.

A seven-million electron volt 'cancer cannon,' one of the latest developments in science's fight against cancer, was transplanted from the basement of Stanford's old Medical School in San Francisco and installed in the modern Palo Alto quarters yesterday. The huge X-ray gun, which treats 20 to 25 patients per day, is a 'baby brother' of the atom-smashing 'Mark IV' linear accelerator already in use on the Stanford campus. The device enables doctors to direct the depth of radiation penetration in treating deep-seated cancers, safeguarding nearby healthy body areas.

Dr. Henry S. Kaplan, head of the radiology department in Stanford's Medical School, called recent X-ray experimentation

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"encouraging", but said the process has not been perfected for general clinical use.

A new X-ray microscope, called the "micro-fluoroscope", was installed in research quarters in the new Medical Center last week. The device allows physicans to view minute cell mechanisms deep within the body.

Stanford heart researchers have made two recent contributions to modern heart surgery. Heart fibrillation--a state in which the heart becomes unable to pump blood--has been the object of intensive sudy by Stanford's Dr. Norman Shumway. Laboratory work with animals has disclosed that a mild electrical shock--slightly stronger than the one used to induce the condition in tests--will revive the heart and restore normal pumping action.

A study of a body-cooling technique in heart surgery is being conducted by Dr. John Connolly of the surgery department. Body-cooling reduces heart activity and slows down body pressures to allow up to eight minutes of open-heart surgery. Dr. Connolly is working on application of the technique to brain surgery.

One of the main motives behind the move of the medical school from its quarters in San Francisco to the Stanford campus was to allow greater inter-action of medical teaching and research with other departments of the University. Formal dedication of the Center will be held September 17-18, but medical researchers have already taken advantage of cooperative work with other Stanford departments.

Research 3/3/3

A study group is investigating the connection between methods of medicine and sociology, and other inter-departmental acitivities are planned.

Many Stanford doctors have already moved their research activities into the new Palo Alto headquarters. Dr. Sidney Raffel, chairman of the medical microboology department, is devoting extensive research to a hitherto undiscovered factor in the blood which may explain susceptibility to tuberculosis. Other medical scientists in the microbiology department are studying allergies and immunological research centering around transplanting human tissues.

A team of research physicians directed by Dr. Rajendra G. Desai has begun a study of stomach cancer in varying racial groups. Experiments are now being conducted with the modern X-ray equipment in the new Medical Center to further knowledge of gradations of immunity and tissue transplanting.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

STANFORD, California,_____. You may come up with your own reasons for it, but tests at the Stanford Department of Physical Therapy have indicated that high school senior girls are generally stronger than college women.

These are the findings of Marian Williams, Ph.D., associate professor of physical therapy at the Stanford Medical Center.

Professor Williams is engaged in research directed toward evaluating human strength and determining norms of physical performance.

Her work promises to have widespread clinical value as a comparative measure in cases of certain patients whose medical problems have left them at a less than normal performance level.

Professor Williams' work may also soon become a measure of disability and recovery from polio and other performance-affecting afflictions.

The research was carried out with a "dynamometer" perfected for Miss Williams at Wayne State University. The "dynamometer" is a simple ring-type meter for measuring amount of tension or "pull".

Major muscle groups were tested through a range of angular positions for each muscle.

Once the norms are developed and perfected, there may be a use for both Miss Williams scales and apparatus in testing the effects of relaxants and other drugs on strength and performance.

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Preliminary reports from the studies have produced information not generally appreciated about muscle growth and development. They tell of some muscles whose strength increase appears to continue with age, to young adulthood, while that of some others hits a plateau early in life.

The studies have been conducted only on subjects ranging from 6th graders to college students. Additional studies are contemplated over a wider age range.

Professor Williams points out that factors other than strength abilities can have a decided effect on performance. "On a given day, at a given time", she emphasizes, "psychological or neurological factors may affect one's performance". Extensive testing, it is expected, will help to eliminate the effects of these factors in compiling the tables of norms.

Once completed, it is expected additional uses will be found for Miss Williams' work. Physical education classes may well use the tests as a measure of development and an indication of needed training. In a rather far-fetched way, it has been suggested that athletic squads can be compared on the basis of her studies.

"However," Professor Williams points out, "we are primarily interested in clinical applications and I'd rather somebody else developed uses for these tests in other respects."

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For further information contact: Steve Baffrey, DA 1-5310

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

STANFORD MEDICAL PRIZE AWARDED

Dr. Phyllis Bailey has been selected by Dr. Robert H. Alway, Dean of the Stanford School of Medicine, as recipient of the Julian Wolfsohn Prize for 1958-59.

The prize is awarded annually to the intern at Stanford University Hospitals who, during the year, has done the best work in internal medicine and neurology. The Julian Wolfsohn Prize consists of a certificate of award and a stipend of $100.

Dr. Bailey, the daughter of Mr. and Mrs. C. N. Bailey of Watsonville, California, plans to work in the field of health education for the Los Angeles public school system.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: Upon Receipt TELEPHONE DA 1-5310-11

X-RAYS MAY HELP SKIN GRAFTS

STANFORD, California -- X-rays, which normally diminish the body's ability to resist disease, may become a useful factor in future skin-grafting operations.

Research work at the Stanford Medical Center by Dr. Sidney Raffel -- head of Stanford University's Medical Microbiology Department, is concentrated on finding "the positive good in exposure of the total body to X-rays or shorter wave irradiations."

Raffel's research indicates that potentially negative exposures may greatly aid successful tissue grafting and organ transplantations.

Ordinarily a person will reject tissue transplants from any source but an identical twin, much in the manner a body rejects bacteria or viruses.

Total irradiation has been used to suppress this reaction in cases where transplantation of organs has been vital.

The major difficulty encountered in this type of treatment is that once the body recovers from irradiation damage it will reject or react against the foreign tissues.

If the period of non-responsiveness can be prolonged, studies have shown, the subject may "forget" how to respond against the foreign substances. This is the area of concentration at the present time.

Dr. John Steward and Miss Jacqueline Dickson are aiding Dr. Raffel in the study.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: Upon Receipt TELEPHONE DA 1-5310-11

HEART MACHLNE PROGRESS REPORT

Some sunny day in the future a local business executive will suffer an acute heart attack on his way to the 18th tee.

Today this might mean immediate death, but on that day portable heart machines will be rushed to the scene, and may save his life.

This, in essence, is the report of Dr. John Connolly of the Stanford Medical Center.

Research is now under way to make portable, for use in such emergencies, machines which are now functioning as great aides in surgery rooms.

A United States Public Health Service grant has financed Dr. Connolly's studies of mechanical assistance in acute heart failure. The study is now in its second year. His associates in this project are Dr. Marvin Baconer and Dr. David L. Bruns.

In part, the study has produced a portable "bypass kit" consisting of tubing and a pump, an offshoot of the present surgical heart pumping mechanism.

This machine functions to relieve the heart of a part of its load, drawing blood from veins returning it to the heart, and pumping it into arteries which carry it to the rest of the body.

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In its practical application the machine provides rest for the heart which may, in some cases, repair itself. In other cases it serves to prolong a patient's life until required treatment can be given.

An additional aspect of the study includes a hope that the more complex heart-lung machine, which not only pumps blood, but which also oxygenates it (the function of the lungs), may be used in similar cases. Extremely complex cases of heart failure, accompanied by a malfunctioning of the lungs, will eventually necessitate this.

At present there are many obstacles to the quick application of either machine. They require a team of medical technicians and large amounts of blood, and are now impossible to activate on short notice.

Current research -- is directed toward a more adaptable model, and testing its usefullness and practicability.

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For further information contact Steve Baffrey

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

NEW STANFORD HOSPITAL DESIGNED
FOR PATIENT, NURSE CONVENIENCE

The little things -- the ones that count -- have been installed in the new Palo Alto-Stanford Hospital for the maximum convenience to patients and nurses.

Equipment in each room includes inter-com devices at bedsides, built-in oxygen and suction apparatus, automatic raising and lowering devices on beds, individualized cabinets for clothes and personl belongings, television and telephone.

The hospital, part of the 22-million dollar Stanford Medical Center, a sprawling, fifty-six acre complex of four medical school and three hospital buildings, will be dedicated in two-day ceremonies September 17-18.

Hospital rooms were planned for the convenience of both patients and nurses. "Actually, we have found that anything convenient to the patient is also convenient to the nurse," Darlene Lutts, Deputy Director of Nurses at the hospital, said.

Much of the modern equipment works both ways. The now 'high-low' beds, which can ne rasied and lowered automatically, save a nurse the stiff arms accompanying hand-cranked beds and allows a patient an easy exit by lowering .....

_ MORE _

the bed to the floor. This method does away with the clumsy foot stools previously in use.

Nurses are saved miles of corridor travel a year by the inter-com device which enables a patient to directly communicate his wants to the nurse on duty. This system brings quicker service to the patient.

Built-in wall units which dispense oxygen and pipe in suction to aspirate fluids from body cavities provide immediate relief for a pateint; they also eliminate movement of bulky equipment to the room.

A unique feature of the hospital is the modern hand rails installed along the length of the corridors, enabling patients unsure of their footing a needed pedestrian aid. Hand rails have also been installed in the bathrooms.

Custom-tailored cabinets in the rooms provide patients with adequate storage for their clothes and belongings, and telephones, placed at each bedside, provide patients with independent means to send messages previously relayed by nurses.

An added measure of privacy is afforded patients by special rooms on each floor for individual medical treatments and examinations. This facility eliminates the need for the traditional wheeled screens that surround beds during examinations and ends transportation of bulky equipment into the room.

An outstanding feature of the hospital construction, which utilizes the Peninsula's traditionally mild weather, is

the first floor patios that enable patients to sit in a protected outdoor area and enjoy the sun.

The nurse has not been neglected in the various innovations in the new hospital. A modern system of pneumatic tube transportation speeds messages, drugs, and specimens between buildings and departments, eliminating extended foot travel. Reading lights over patient's beds have been equipped with an adjustable arm providing a nurse with direct lighting for administration of medications.

Specially-equipped medicine rooms on each floor provide a place away from hospital traffic where a nurse may prepare medications. Each patient has an individual cubicle for assigned drugs.

Head nurses have glass-enclosed offices at each nursing station. Nursing stations are equipped with ice-making machines, allowing nurses ready access to filling ice packs. A lounge for off-duty nurses has been built on each floor.

Escalators between floors facilitate inter-departmental travel.

The traditional Red Cross Gray Ladies have also been remembered in hospital planning. A room has been set aside for them to arrange flowers; previously this work was done in cramped utility rooms.

Stanford Medical Center
News Bureau Palo Alto, California

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

STANFORD TO INSTALL NEW

HEART X-RAY MOVIE DEVICE

STANFORD -- An improved double X-ray motion picture camera, combined with a heart catheter system, is being installed at the new Stanford Medical Center for use by Stanford University researchers.

The new camera permits three-dimensional viewing of the heart in action. It will eventually be used in conjunction with a to-be-installed closed circuit television system which will permit groups of physicians to see it.

Professor Herbert L. Abrams, Stanford radiologist, said the new $100,000 device has advantages former two-plane X-ray motion pictures of the heart did not have.

It also uses 11-inch screens while formerly only 5-inch screens could be used. This permits study of adjacent blood vessels to the heart at the same time that the heart is under observation.

The camera is turned on after a catheter -- a long thin steel tube -- is inserted into the heart through an artery or vein.

Opaque material is then pumped through the catheter into the chamber of the heart and can be followed as it moves with the blood through the heart and blood vessels.

By observing the movement of the blood, scientists can tell how the heart and other vessels are functioning.

- more -

The two screens used in the camera permit photographing of a double strip of film. The films may then either be studied separately or projected together to give a three-dimensional quality to the picture.

The camera device also uses two "Dynapulse" intensifiers which shorten the time a patient need be exposed to X-radiation by "storing" X-rays and releasing them in brief bursts.

Stanford's installation is the first double 11-inch screen system to be installed in the U. S. The screens were built in the Netherlands and have been purchased by other U. S. hospitals, but only for use in single sequence.

prh

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

BREAKTHROUGH IN HUMAN STERILITY

PREDICTED BY STANFORD SCIENTIST

STANFORD. -- Ten years from now a married couple previously doomed to remain childless by "sterility" may be provided with a family though eggs fertilized in a laboratory and then implanted in the mother's womb.

This prediction was made here today by a Stanford Medical Center gynecologist, Dr. R. W. Noyes, and was based on his own and the research of other fertility experts.

As a careful scientist, Doctor Noyes made no definite promises, but he did point to an experimental breakthrough which portends a relatively simple solution to the problem of so-called sterility.

"Although the period may be a full 10 or 20 years in the future," he said, "we are at a stage believed unattainable not many years ago."

Doctor Noyes' work arises out of the knowledge that only a single male sperm cell is needed to fertilize a single female egg.

Yet the chance of the single sperm reaching and fertilizing the single ovum under natural circumstances is so remote that nature has provided a tremendous excess of sperm over eggs-- literally millions of male cells to each female egg.

Thus a man is presumed to be sterile for all practical reproductive purposes if his sperm count is below 20 million cells per cc. of containing fluid.

Additionally a woman may be sterile -- in the present practical sense of the word -- if disease or malformation prevents her eggs from reaching the site where fertilization normally takes place.

- more -

STERILITY 2-2-2-2

The fact still remains that any one of the 20 million (or fewer) sperm cells can be brought into contact with any single female ovum in the proper sort of environment fertilization can take place.

Doctor Noyes' work has been largely concerned with providing such an environment, and his experiments with single-cell fertilization in mice, rats and rabbits has been satisfactory enought to warrant his confidence that human application is close.

In the animals he has by-passed the uterine tube stage of fertilization in the female on the theory that in human infertility either no ova are present here or not enought sperm cells reach the site to guarantee a fertile meeting.

Instead sperm and eggs from the male and female concerned are brought together for fertilization in uterine tubes excised from other females. (In clinical use these would be available following removal for other causes.)

In the laboratory following this sort of fertilization, the growing eggs are kept alive in tissue cultures.

Their growth can be controlled by temperature changes so that their "age" can be exactly matched to the cycle of the mother.

When this matching point arrives, the fertilized egg is implanted in the womb of the mother, and from there on the normal process of child-bearing takes over.

Doctor Noyes emphasized that much of the early work with the method has been done by other research groups. His own specific contribution has been in the field of defining the environmental conditions needed for fertilization (completely artificial uterine tubes may some day be substituted for those remobed from other females) and determining exact degrees of egg growth -- in order that implanting may be done at the right moment. #### jfa

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

STANFORD RESEARCH POINTS TOWARD
CHEMICAL BARRIER AGAINST TB

STANFORD. -- Your chance of catching tuberculosis may depend primarily on the level in your blood of a still un-named factor recently discoverd by a Stanford Medical Center research physician.

Increasing evidence of this direct relationship between blood levels of the factor and susceptibility to the disease was reported today by Dr. Sidney Raffel, head of the Medical Microbiology Department of the Stanford School of Medicine.

The report was based on a check of the factor levels of an entire medical school class of 60 students.

At the same time Doctor Raffel reported that there "is already some indication that the blood level of the factor may be raised by certain chemical means."

There is the possibility, he added, that people who face exposure to TB can be given extra protection against infection through the administering of the chemical stimulator.

Doctor Raffel first reported his discovery of the blood fraction last April. It came, he reported, as the result of a happy accident.

While working on another experiment, Doctor Raffel discovered that the factor -- which he had isolated and purified -- killed TB bacilli in the test tube.

- more -

This was an exciting discovery, since tough-shelled little tuberculosis germs are almost indestructible -- one of the reasons why TB is never entirely cured, but only held in check.

A hurried check of available patients seemed to confirm Doctor Raffel's hunch that there was a relationship between the fraction level and an individual's chances of catching the disease. But he needed sharper proof.

So he used one entire class of Stanford medical students. Of the 60 first tuberculin tested, 21 were positive -- that is, they had been exposed to TB and had the disease, although not in an active state.

The 39 who showed negatibe reactions -- indicating a lack of the disease -- all were given BCG, a TB imunizing agent made up of attenuated vacilli, strong enough to change negatives to positives but not strong enough to create a diseased state.

In every case, Doctor Raffel said, the level of the factor in the blood was higher after the BCG immunization than before.

Whether or not the level is already higher in those individuals who resist exposure and who have not been actually challenged with the bacilli or vaccine is still unknown.

Doctor Raffel and his group now are studying blood samples obtained from patients with active tuberculosis and from subjects with differing racial susceptibilities, as well as from those who have received certain drugs which appear to increase TB susceptibility.

From all these studies it is hoped that a definite pattern of relationship between the factor and TB will emerge. This, coupled with further knowledge of chemical means of enhancing factor levels, may provide a valuable weapon against what is still America's ninth ranking cause of death. ########## jfa

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

"KIDS" COME IN ALL AGES AT

STANFORD MEDICAL CENTER

STANFORD. -- Most universities think of "kids" as young men and women at the 18 year old or "admissions" level; most of the rest of us use the term for what it is that wakes us on Sunday morning.

At the Stanford Medical Center they are interested in "kids" of all ages, stretching from shortly after birth to the oldest graduate student.

This wide range of interest has been brought into sharp focus with the move of the University's medical school and hospital from San Francisco to its new $22,000,000 Center on the campus.

The move brings the Center close to the Children's Health Council, the Stanford Convalescent Home, and a high concentration of skilled pediatricians in the Stanford area, to point up this change in thinking.

The work of these groups, a new pediatrics curriculum departure, and new blood in the pediatrics department all point toward the desire to attain the levels of new teaching, research and patient care necessary to meet the requirements of 1960.

The new curriculum departure involves the over-all plans for the Medical School: that of greater integration with the other departments of the University.

In addition, the new head of the Pediatrics Department, Dr. Norman Kretchmer from the N. Y. Hospital-Cornell Medical Center in N. Y. stresses still a different point of view for specific instruction in pediatrics.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

NEW STANFORD HOSPITAL

FEATURES MODERN DIET KITCHEN

A modern kitchen where food is prepared under the supervision of expert dieticians will serve the new Palo Alto-Stanford Hospital.

All diets are specified in advance by physicians -- regular, bland, liquid, soft, or special -- and meals are brought to the patient's room by modern 'Meals on Wheels' food carts. Heated drawers in the carts, an advancement over the old hospital steam tables which once cluttered corridors at meal times, keep entrees at kitchen-hot temperatures. Salads, deserts, milk products, and other cold items are kept in refrigerated compartments.

Patients on a regular or unrestricted diet order from a daily menu which includes at least two entrees, vegetables, deserts, and choice of soup or broth. The cost of these meals is covered by normal Hospital charges, but patients may order a la carte items at nominal extra cost.

The large kitchen, which will also prepare food for the new hospital's cafeteria restaurant and the existing Palo Alto Hospital, is prepared to serve such special orders as breast of guinea hen under glass.

Head dietician for the Palo Alto-Stanford Hospital will be Mrs. Helen Anderson from Stanford-Lane Hospital in San Francisco; her assistant is Miss Ruth Cline of Palo Alto Hospital.

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"We will teach from the point of view of growth and development rather than that of disease," Kretchmer says. "To us the child is a growing organism with problems which arise from this fact; this must be seen apart from existing conceptions of kids with kids' diseases."

Dr. Kretchmer has brought new teachers and researchers to Stanford with him. They include Drs. Lewis Gluck and Sumner Yaffee, and biochemist Kenneth K. Tsuboi, Ph. D. They will assist in carrying out Kretchmer's new ideas.

The Children's Health Council and the Stanford Convalescent Home are only associated with the Medical Center, there are no direct organizational ties. Still, the facilities of each are used by the others, and the staffs and purposes all point the same way.

In addition, a joint pediatrics ward has been established in the new Palo Alto-Stanford Hospital which is a part of the Medical Center. It is the only such joint ward.

A committee of Medical School and private-practice pediatricians is the controlling body for ward policies.

The Children's Health Council is a day clinic which treats children from all walks of life, charging on an ability-to-pay basis. The Convalescent Home cares for chronically ill children requiring prolonged hospitalization.

Both these facilities are on Stanford-owned land, each less than a mile from the new Medical Center.

There is definitely growing interest in pediatrics as a medical specialty, and the intense concentration of both thinkers and doers in the Stanford area indicates that, if not already so, this area may soon become one of the great pediatrics centers of the world.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

Sept 9

STANFORD MEDICAL SCHOOL CURRICULUM
CALLED "DISTINCTIVE, PROVOCATIVE"

STANFORD. -- The Stanford University School of Medicine curriculum, which will go into effect September 30 in the new $22,000,000 Medical Center, is described as "distinctive and provocative" in the current issue of the authoritative Journal of Medical Education.

The new Stanford plan is featured in an article, "Medical Education in the United States," by Dr. Richard H. Young, dean of the Northwestern University Medical School, and secretary of The Association of American Medical Colleges.

Says Doctor Young, in part:

"In several medical schools distinctive and provocative 'experiments' in medical education are being conducted. At Western Reserve, which has completed its sixth year of a new program, and at Stanford University, which will inaugurate a similar program this fall, basic science is taught according to subjects or areas of unified interest rather than along departmental lines.

"Laboratory work is carried out in small multidiscipline laboratories employing almost exclusively the experimental approach. Individual courses in anatomy, physiology, and biochemistry, among others, have given way to cooperative courses planned and executed by committees made up of representatives of the departments concerned.

"A highly integrated and correlated course presents the fundamental principles concerning the biological aspects of man in terms of normal structure and function.

- more -

Stanford Curriculum 2-2-2-2

"Other work of the first portion of the student's career deals with man as an individual and as a member of society. The psychological, sociological, economic and anthropological aspects of man are then examined, and the student is introduced to the patient-physician relationship. .....

"At Stanford, the total medical school program is 5 years, most of the students entering at the end of 3 years of college work. The basic medical sciences are spread out over the first 3 years.

"In addition to the time devoted to medical work, an amount of time equivalent to 1 academic year is distributed equally through the first 3 years and is devoted to non-medical work."

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

MEDICAL SCHOOL DEANS TO DEBATE

MODERN TRAINING OF PHYSICIANS

Where should a modern medical school be located and how are physicians of the future best trained?

These and similar questions are to be debated by the deans of the Bay Area's two medical schools on Tuesday evening (Sept. 15) at 8 o'clock over TV Station KTVU (Channel 2).

The major participants on the weekly Doctors News Conference program will be Dr. Robert H. Alway, dean of the Stanford University School of Medicine, and Dr. John B. deC. M. Saunders, dean of the University of California School of Medicine.

A third member of the physician panel will be Dr. Loren R. (Yank) Chandler, who served as dean of the Stanford school for 20 years, prior to his resignation in 1953.

This special program in the weekly series is designed to help mark the dedication on Thursday and Friday (Sept. 17 & 18) of the new $22,000,000 Stanford Medical Center, on the campus at Palo Alto.

Differences in the philosophy of medical education are represented by the two deans, as by their schools. Stanford is just completing the movement of its medical school from San Francisco to a closer integration with the rest of the university; U. C., on the other hand recently moved all its pre-medical and medical departments away from the Berkeley campus to its Medical Center in San Francisco.

The three physicians will face a newspaper panel made up of John F. Allen, San Francisco Examiner Science Editor, Jane Eshleman Conant, of the San Francisco News-Call Bulletin, and Jack Ryan, of the Oakland Tribune. ####jfa

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

STANFORD TO HONOR EMERITUS

TEACHERS AT CENTER DEDICATION

STANFORD. -- In the midst of dedicating their new campus quarters this week (Sept. 17 & 18), officials of the Stanford School of Medicine will pause to pay tribute to a 100-year-old tradition of great medical teaching.

Honored guests at a special party on Thursday evening will be some of the men and women who helped carry that tradition forward: the medical school's 46 living emeritus teachers.

Serving as hosts for the affair, which will be held at the University Club, on the campus, will be the Stanford Medical Alumni Association, made up in great part of hundreds of local practicing physicians who once were the eager students of their honored guests.

The party for the retired professors will be just one highlight of a two-day dedication ceremony marking the opening of the $22,000,000 Stanford Medical Center -- which includes not only the medical school, but two hospitals, a rehabilitation center, research laboratories and other facilities.

In contrasting the new building with the old tradition of great teachers, Dr. Robert H. Alway, medical school dean, reminded the alumni:

"This year Stanford starts its medical students in a new medical school in a new location with a new educational program and many new faculty.

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"Under these circumstances, there is a risk of losing all carry over from the past -- all tradition. The Stanford medical school tradition most essential to perpetuate is the education of good doctors.

"The emeritus teachers you will honor contributed greatly to maintaining that tradition -- and we intend to do as well.

"We must remember that a doctor is 'good' in relation to his times and not in relation to any absolute standards. Stanford's many changes were predicated on making most likely the continued education of good doctors, looking to the future and society's attendant changes and needs."

Stanford medical school's history dates back just 100 years, because it was in May of 1859 that Dr. Samuel Elias Cooper welcomed the first class of students to his new school in San Francisco -- a school that was to be absorbed by Stanford in 1908.

As a further reminder of what Stanford owes to the past, oil portraits, busts and other momentoes of Doctor Cooper and those who followed him have been moved down from San Francisco to the new Center.

These, with appropriate placques, will be placed in various rooms and corridors of the new medical school in time for the dedication.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: WEDNESDAY, SEPT. 16 TELEPHONE DA 1-5310-11

$22,000,000 STANFORD MEDICAL CENTER
TO BE DEDICATED TOMORROW, FRIDAY

STANFORD, Sept. 16. -- Reports from a Nobel Prizewinner and the Federal Government's top research scientist will highlight dedication ceremonies of the $22,000,000 Stanford Medical Center here tomorrow and Friday.

Dr. Joshua Lederberg, Stanford professor of genetics and 1958 Nobel Laureate in medicine, and Dr. James M. Shannon, director of the National Institutes of Health, head a list of eleven nationally known scientists and laymen who will participate in the dedication.

Fifty thousand people are expected to visit the sprawling, 56-acre complex of three hospital and four medical school buildings during the two-day ceremony and a weekend of open house tours.

Other participants in the program, which will carry out the over-all theme of "Medical Care, the University and Society," will include William McPeak, vice-president of the Ford Foundation; Dr. Vernon Lippard, dean of the Yale Medical School; Dr. Lester Evans, executive associate of the Commonwealth Fund, and Dr. E. Cowles Andrus, of Johns Hopkins University.

Stanford Medical School scientists and teachers will present these reports on current research:

Doctor Lederberg on "Viruses as Genes," Dr. Norman Kretchmer, head of the Pediatrics Department, on "Heredity, Development and Disease," Dr. Arthur Kornberg, head of the Biochemistry Department, on "The Chemical Basis of Genetics," Dr. J. Garrott Allen, head of the department of Surgery, on

- more -

"Serum Hepatitis," Dr. Keith F. Killam, Jr., associate professor of pharmacology, on "Neuropharmacological Approaches to the Study of Drug Action," and Dr. Edmund H. Volkart, associate professor of sociology, on "Man, Disease and the Social Environment."

Concurrent with the speeches and research lectures, there will be seventeen scientific symposia during the two days -- round table discussions by Stanford and outside experts on every facet of human health. All will be open to the public.

The final ceremony will be the dedication proper on Friday evening at 8 o'clock in the open area before the spraying fountains which [illegible] dramatically mark the entrance to the new structure.

The major speech at this ceremony will be made by Frank Stanton, president of the Columbia Broadcasting System. Also listed as speakers are California Gov. Edmund G. Brown, Stanford President Wallace Sterling and Noel Porter, mayor of Palo Alto.

The whole program is designed to emphasize the paramount reason for moving Stanford's medical school from San Francisco to the campus: the geographical and intellectual integration of the school with the rest of the university, in an environment that will enable doctors of the future to be more capable of understanding and treating his patients as total persons.

The medical school, under Dr. Robert H. Alway, the dean, has revamped its curriculum into a five year program tailored to make the doctor himself a "whole" man. Continued teaching of the humanities and other non-medical subjects through the medical school years, integration of medical courses and independent research in extended free time will be emphasized.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: TELEPHONE DA 1-5310-11

NOTE TO CITY DESKS, WRITERS, ET AL:

Press conferences covering participants in the Stanford Medical Center Dedication -- described in the attached release -- will be held in advance of the actual ceremonies, as follows:

WEDNESDAY, Sept. 16 beginning at 2 p.m.:

Dean Alway
Doctor Shannon
Dr. Alvin Cox, Jr.
Others

THURSDAY, Sept. 17, beginning at 2 p.m.

Doctor Kornberg
Doctor Allen
Doctor Killam
Dr. Lowell Rantz
Dr. Thomas Gonda
Others

In addition, wherever possible full copies of talks and lectures will be available, plus pictures and releases.

The Press Room is Room 121, in the Edwards Building of the new Center.

Their will be a press reception and buffet supper, with many of the scientists and speakers present, on Thursday evening, Sept. 17 at the Pioneer Hotel, Woodside. You and your representative are invited.

John F. Allen

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: P. M.'s OF THURSDAY, SEPT. 17 TELEPHONE DA 1-5310-11

STANFORD MEDICAL CENTER DEDICATION

SPEAKER ATTACKS DOCTOR ATTITUDES

STANFORD, Sept. 17. -- From the patient's point of view the modern doctor is too often an arrogant and selfish man who pretends to knowledge he doesn't have and is more concerned with his own bank account and convenience than with the health of those under his care.

Driven by the selfish manipulation of man's fear of death, modern medical research is badly out of balance and too much concerned with the quantity of lives saved instead of the "quality of living."

These two accusations were leveled at the medical profession here today by William McPeak, vice-president of The Ford Foundation, in a talk he labeled "The Small, Frantic Voice of the Patient," delivered as a feature of the Stanford Medical Center's formal dedication ceremony.

In underscoring his two major points, McPeak said:

"The major theme of my paper is that the voice of the typical patient in his own ultimate welfare is too little heeded in the practitioner's office and too strictly heeded in the research laboratory.

"In medical care the patient is not in a position to act as his own spokesman; in research he is not sufficiently competent or objective to do so.

"The weakness of the patient's voice, together with the correspondingly dominant voice of the doctor, can result on occasion in sub-standard medical care and certainly produces frequent dissatisfaction in the patient.

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"In research, on the other hand, the patient and his family do have some voice. It is amplified by special disease organizations, by philanthropists, by government legislators and government agencies and swells into a vast chorus of dread and fear. It focusses on the disease that is dramatic, even though, like polio, it may not be widespread-- and on the big killers like heart disease and cancer."

In amplifying the "small, frantic voice of the patient," McPeak divided his accusations under three major headings:

1 - The doctor's "sense of personal convenience (and sometimes his profit)."

"Many doctors' offices reflect a disregard for patients through their inefficient management...the wastage of millions of hours of patient time...Such practices save the doctor little time or trouble, and therefore signify only his selfishness or his carelessness...

"...the difficulty of getting doctors to make house calls, especially at nights or weekends...too frequently real disasters occur as a result...

...unnecessary hospitalization...When the patient is hospitalized for days and given only a series of routine tests which might be given in the doctor's office, he suspects his physician of arranging things largely for his own convenience..."

2 - The doctor's attitude of knowing everything.

"...one of the attitudes on the part of doctors that pains and frustrates the patient is the one implied by his air of knowing all the answers...The most troublesome situation is in the instance of differential diagnoses, when one doctor says one thing is wrong and another with equal assurance says the opposite.

"...the patient is often at the mercy of the doctors and frequently follows one expensive and prolonged regime after another...everyone would be better if doctors would more often acknowledge that they don't know the answers.

DOCTOR ATTITUDES ATTACKED 3-3-3-3

"The extreme case is the liklihood that surgery is recommended when not necessary...the practical difficulty a patient encounters in getting second or consulting opinions."

3 - The personal attitude of the doctor toward his patient.

"...recent survey showed two-thirds of patients complained they missed the human warmth and personal responsibility of the old-time general practitioner .. What undoubtedly is involved is the personality change in the man who is becoming more and more the specialized scientist...a narrowing of the base for human contact..

"...welcome improvements in the attitude of organized medicine... American Medical Association and many medical societies are no longer the unenlightened trade unions and vested interests they once were...reform has resulted largely from the compromise necessary to exist and has not sprung basically from a concern for people as patients...

In order to redress the imbalance of medical research, McPeak said, "there is no need for a moratorium on research of any particular kind, but only a rational balance."

"Perhaps this means," he added, "first a balance between the rewards of research and the rewards of practice, so that those with lesser talent for research and greater talent for other pursuits will not be seduced into research activities of minimal and marginal promise.

"Secondly, I would ask a better balance between research concentrated on the killer diseases and that devoted...to such fields as psychiatry and psychosomatic medicine and all the various phenomena affecting one's sense of physical well-being, such as energy, fatigue, stress and rest. The refocus would aim to help many people stay well, in the fullest sense, instead of to help a few stay barely alive."

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IMPROVED CAMERA
AIDS HEART VICTIMS

for release upon receipt

Stanford Medical School radiologists have installed an improved X-ray motion picture camera in a laboratory in the new Medical Center on campus.

The apparatus films pictures studies of the heart in three dimensions.

Such studies are possible with the $100,000 device originally installed in the Stanford hospital located in San Francisco. The project was financed by a grant from the National Heart Institute of the U.S. Public Health Service and by private gifts.

A closed circuit television system has now been incorporated into the unit for use in the new Stanford Medical Center. This will permit a group of physicians in the room to follow the course of a catheter, or plastic tube, as it is inserted into the heart from an arm or leg vein. Remote viewing

- more -

by students and other physicians will also be possible.

"We can study cardiac motion and blood flow through the heart, lungs, and great vessels in two planes simultaneously," said Professor Herbert L. Abrams, Stanford radiologist in charge of the project.

"Conventional single-plane equipment give you only the height and width of a heart chamber. To study the chamber's motion and blood volume, you also need its depth, or third dimension.

"We can also 'stop' movement down to a thousandth of a second to get sharper views of pumping heart chambers and blood jets."

The perfected Stanford equipment employs 11-inch "image intensifiers" at right angles. One is sunk vertically into the floor beneath the patient, the other is mounted horizontally on rollers at his side.

Like the ordinary fluoroscopes, the electronic intensifiers form the X-ray picture on their circular 11-inch screens. Until recently, only 5-inch screens were available. The large screen permits study of the adult heart and pulmonary vessels at the same time.

The intensifiers make the fluoroscopic image 100 times brighter, thus lowering the amount of X-rays needed. This permits use of diagnostic motion picture techniques that give much

smaller X-ray dosage to patients than is possible when movies are made without intensifiers.

After a catheter has been inserted into the heart, an opaque substance is rapidly and automatically injected through the catheter into a heart chamber.

Meanwhile, X-ray tubes suspended from the ceiling beam their rays at right angles through the patient directly into the image intensifiers. The two images produced are photographed on 35 mm. motion picture film. Thus, movement of opaque material through the heart, lungs, and great vessels is recorded. In this way, actual events within the heart are depicted in motion, and may be viewed and re-viewed.

The end product is a double film strip showing the same motion from different angles. The two films can be studied or projected together to give dimensions of the cardiac chambers in two planes simultaneously.

In addition, two electronic "Dynapulse" devices are coupled to the apparatus. These further heighten picture intensity and permit very short exposure time. Essentially, these devices "store up" X-rays and release them in concentrated split-second burtts synchronized with the speed of the film through the camera. Film speed can be varied from six to forty-eight frames per second.

The 11-inch intensifiers were built in Holland and are the largest in use. A number of other single plane 11-inchers are being used in medical centers elsewhere, but Stan-

X-RAY 4/4/4/4/4/4

ford's is the first installation designed for simultaneous two-plane studies in the world.

The camera device is installed in the radiology department on the first floor of the Hospital in the newly-opened Medical Center

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Warren Hinckle, DAvenport 3-1527

for release upon receipt

NEW $1,400,000 HEATING SYSTEM

TO SERVE STANFORD MEDICAL CENTER

A $1,400,000 steam heating system, under construction this summer on the Stanford campus, will provide heat for the new Stanford Medical Center in the fall.

The plant, which will also serve other Stanford classroom and administration buildings, is being constructed near the western terminus of Serra Street on the campus proper. Four boilers delivering 160,000 pounds of steam pressure an hour will be installed and the building erected around them.

6500 feet of buried trunk line is being installed below campus streets.

A special line will be constructed from the plant to the location of the new Medical Center and the Palo Alto-Stanford Hospital on the northern end of the campus.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Phillip Hughes, DAvenport 3-1527

for release upon receipt

STANFORD'S NEW MED CENTER ---
BEAUTIFUL BUT FUNCTIONAL

The ultra-modern and "very functional" medical center opening this fall on the Stanford University campus may well be an architectural masterpiece.

Designed by an internationally renowned architect, Edward D. Stone -- who also conceived the American Embassy at New Delhi and the U. S. Pavilion at the Brussel's Fair -- the multimillion dollar, fifty-six acre complex includes three hospital and four medical school buildings. A total of sixteen acres of floor space is included in the Center which may be enlarged or modified depending upon the future demands of medical science.

Admittedly inspired by Stanford's traditional rectangular "Main Quadrangle," Stone patterned the new Center along the same lines. It is of similar height -- three stories -- and in the shape of an irregular letter "H" interconnected by a single red-pebbled roof. The architect felt that the three story height of the new group was both practical and economical. A feeling of

- more -

harmony with the rest of the Campus is also the result.

Similarly, the avenue of approach and the open park in front of the original Stanford Quadrangle has been incorporated into the planning of the Medical Center which it approximates in size. Like the majestic Palm Drive access to the Campus, the public approach to the Center from Willow Road will be tree-lined and formal, although in a natural setting.

"I tried to retain the spirit and principle of the old quadrangle without slavishly copying that which was neither practical nor economically justifiable," Stone says.

"There are many historical examples of institutions such as Oxford, Cambridge, and Harvard where unity and harmony has been achieved although the buildings which have been built over several hundreds of years, and the culture and taste of each successive period reflected in the architecture. The creative resourcefulness of each successive epoch was not curbed, but the skill of each designer in turn, resulted in a building harmonious with its predecessors."

The old "Quad" is built of massive sandstone blocks and pitched roofs. The Medical "Quad" is structured with reinforced concrete, with concrete columns and horizontal floor slabs.

To relieve what would be the monotony of poured concrete, the walls and columns of the Medical Center are patterned, simulating the varied surface effect provided by the old Quadrangle's

rough hewn stone work.

A flat roof extends outward on all sides to provide needed shade in what is an unusually sunny area. It also compensates visually for the lack of an expensive pitched roof and costly tiles.

Perforated cloister-like grillwork repeats the pattern to be found on the walls and columns. Grills serve to screen passageways between the seven buildings making up the complex and recall Stanford's richly ornamented Victorian-Romanesque campus a stone's throw away. All buildings are nearly the same height and like their sandstone counterparts surround planted and flowering courtyards which has the effect of unifying the Medical Center group.

Actually, much of the architecture of the main section of the Campus is hinted at in the Medical Center. It might be said to be a contemporary version of Stanford's adaptation of Romanesque which was brought to California by the Spaniards. The Catholic missions in the West are typical of this style, which at Stanford, features red tile-roofed buildings of long and low design, flanked by protective arches built on an imposing scale.

The Center's Plan

The seven separate yet interconnected buildings comprising the Farm's new "H" shaped Medical Center are set within an area

approximately 680 by 640 feet.

Beyond Governor's Square directly in front of the ediface and within the lower aperture of the Center's "H" shaped plan, is an 88 by 154 foot reflecting pool containing fountains. Behind the pool is the Clinic Building which houses most of Stanford's clinics. To the left, extending eastward, are the three buildings which make up the Palo Alto-Stanford Hospital. At the right is the Rehabilitation Building, behind which--and also extending eastward -- are the Library and the Medical Sciences Buildings which contain the main facilities of the Stanford University School of Medicine.

To the casual observer, the Medical Center appears to be a large, three-story building. Actually it contains five floor levels (ground, first, second, third and penthouse), measuring approximately 12 1/2 feet vertically from floor to floor. The first story is at grade level, and the roofline is approximately 40 feet above the ground.

Allied Fields Neighbors

"Stratification"

The new Center is designed so that related medical facilities are generally on the same floor level. For example, the Palo Alto-Stanford Hospital's third floor contains obstetrics, gynecology, and pediatrics, all related fields of medicine.

On the third floor of the clinic building, next to the hospital, are the Stanford outpatient clinics for pediatrics and obstetrics-gynecology. Here, also, are the Stanford School of Medicine's pediatrics and obstetrics-gynecology departmental offices.

On the same level of the nearby library building -- easily accessible by means of a covered walkway connecting the two buildings -- is the child psychiatry outpatient clinic.

This general pattern is followed throughout the new Center. Surgery, cardiology, neurology, physical therapy, pathology services, the Hospital's clinical and chemical laboratories and Medical School teaching laboratories, for example, are in several connecting buildings, but all on what is known as the second floor "stratum" of the Center.

Flexibility of Design

In planning the Center, a great many factors entered into determination of the final design. A key factor, however, was flexibility, necessary in a rapidly-changing field such as medicine in order to allow for changes in the assignment of space and ease of future physical modification. Also, because the Medical Center is being built in stages -- the overall design is so arranged that future buildings may be added in an orderly and practical sequence.

MED CENTER DESIGN
6-6-6-6-6-6-6-6-6

Use of a 22 foot square horizontal module in the Medical Center's design provided, for example, standard dimensions of various corridors and rooms as well as placement of doors and windows. Adoption of this module also gave the architect considerable latitude in adapting parts of buildings to particular needs. Thus, decisions concerning future additions to the Center are simplified: planners are able to regard the structures and their component parts as "building blocks" of known sizes.

Also, steel-reinforced concrete construction of floor and ceiling slabs allowed the architect to dispense with a labyrinth of interior load-bearing walls and the clutter of inside vertical supports. Except for certain basic interior load-bearing walls, the inside vertical supports are placed only at 22 foot square intervals at the corners of the "module" mentioned above. Thus, in reality, the great majority of interior walls are well-insulated partitions which can be quickly and economically removed -- next month of thirty years hence -- to make way for virtually any desired modification of interior space.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Warren Hinckle, DAvenport 3-1527

for release upon receipt

UNIQUE 'DIAL-A-TUBE' SYSTEM
INSTALLED AT NEW STANFORD HOSPITAL

Rapid transit within the walls of the new Palo Alto-Stanford Hospital is implemented by a unique device that puts the famed pneumatic tube mail system of Paris in the aboriginal category.

Swift movement of records, drugs, reports, specimens, and other small items between buildings and departments is assured by a modern and versatile pneumatic tube system that features direct dialing of other departments.

Each tube station is equipped with a telephone dialing device which enables a nurse to direct the course of the cylinder to any other part of the hospital by simply dialing a number.

This modern form of communication greatly speeds up normal hospital operations. The results of a blood test can be in a doctor's hands at a patient's bedside a few seconds after its completion in the laboratory, or a drug can be transmitted from the Hospital Pharmacy to any other Hospital location in less than a minute.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

CHRONOLOGICAL HISTORY OF

STANFORD MEDICAL SCHOOL

1858 -- First medical school on the Pacific Coast founded in San Francisco by Dr. Samuel Elias Cooper; academically chartered as the Medical Department of the University of the Pacific. The parent university, established at Santa Clara in 1851, moved in 1871 to San Jose, and from there to Stockton in 1921, where it is now known as the College of the Pacific.

May 1859 -- Formal opening ceremonies of school held in Musical Hall, San Francisco; 13 students matriculated.

Sept. 13, 1859 -- M. D. degree conferred on two candidates who, before coming to San Francisco, had completed a full course of medical lectures elsewhere.

Oct. 13, 1862 -- Death of Dr. Cooper (1822-1862)

Autumn 1864 -- Faculty suspended operations and several (including Dr. Levi Cooper Lane, nephew of Dr. Cooper, and Dr. Henry Gibbons Sr.) joined faculty of new medical school begun then in San Francisco by Dr. H. H. Toland.

1870 -- Dr. Lane and his close associates resigned from the Toland Medical College. With members of Cooper's earlier faculty, they reorganized the Medical Department of the University of the Pacific, in which all but one of the Toland students then enrolled.

1872 -- Faculty of the Medical Department of the University of the Pacific severed connections with that university and became the medical department of the University (City) College, an institution founded 12 years earlier in San Francisco. The medical department was known formally as the Medical College of the Pacific.

HISTORY
2-2-2-2

Nov. 6, 1877 -- M. D. degree conferred on Alice Higgins, the first woman physician to be graduated from the school.

October 1882 -- Faculty of the Medical College of the Pacific severed connections with the University (City) College and, with its faculty and students intact, became Cooper Medical College. The new school was founded by Dr. Lane for this purpose at the corner of Sacramento and Webster Streets in San Francisco. (This building has been in continuous use as a medical school for 77 years, the last students having left the premises in the summer of 1959)

1892 -- Additions to the medical college building by Dr. Lane.

1893 -- New hospital erected by Dr. Lane at Clay and Webster Streets, adjacent to medical school. He proposed to name the building the Pauline Lane Hospital, after his wife; but she preferred that it be called, simply, the Lane Hospital.

1895 -- Lane Hospital Training School for Nurses established, later to become the Stanford School of Nursing.

Feb. 9, 1902 -- Death of Dr. Lane (1830-1902).

Jan. 1, 1908 -- Cooper Medical College, its properties and equipment granted to Leland Stanford Junior University, at that time a very young university (instruction began at Stanford in October, 1891). In accepting the gift, the university proposed to "carry forward the aims and ideals of Cooper Medical College and to increase and extend the facilities and opportunities for medical education." President of Stanford at that time was Dr. David Starr Jordan (1851-1931).

Sept. 8, 1909 -- Instruction in medicine at the Medical Department of Leland Stanford Junior University formally inaugurated, with Stanford's Professor John M. Stillman as acting Departmental executive. Dr. Henry Gibbons Jr. remained as Dean of the Cooper Medical College faculty, which continued medical instruction until 1912, when the last of its students was graduated.

Jan. 1, 1911 -- Dr. Ray Lyman Wilbur (1875-1949) became Dean of the Medical Department faculty.

HISTORY
3-3-3-3

November 1912 -- Dedication and formal opening of Levi Cooper Lane Library of Medicine and Surgery, an outstanding collection of more than 30,000 volumes and 10,000 pamphlets. Then, as now, the Lane Library was regarded as the finest medical collection west of Chicago.

Oct. 22, 1913 -- John Casper Branner (1850-1922) became Stanford's president, as Dr. Jordan became University Chancellor.

Jan. 22, 1916 -- Dr. Wilbur became university president, after Dr. Branner's retirement. Dr. William Ophüls (1871-1933) followed as Dean of the Medical faculty.

December 1917 -- Formal opening of new Stanford Hospital which was built adjacent to medical school in San Francisco.

March 1922 -- Formal opening of Nursing Building opposite Stanford-Lane Hospital.

April 1933 -- Death of Dr. Ophüls; succeeded as Dean of the Medical faculty by Dr. Loren Roscoe "Yank" Chandler.

Sept. 1, 1943 -- Dr. Donald B. Tresidder (1894-1948) became fourth president of Stanford. Dr. Wilbur, retired as president and named Chancellor in 1941, had served as acting president in the interim.

April 5, 1949 -- Dr. J. E. Wallace Sterling became president of Stanford, following Dr. Tresidder's death in 1948,

July 1953 -- Stanford's Board of Trustees made decision to move medical school from San Francisco to university campus near Palo Alto, where new buildings were to be constructed. President of the Board at this time was Lloyd W. Dinkelspiel (1899-1959).

September 1953 -- Dr. Windsor Cooper Cutting named Dean, following resignation of Dr. Chandler.

Summer 1955 -- Architect Edward D. Stone, F.A.I.A., began work on new Stanford Medical Center.

August 1956 -- Fund-raising Public Campaign for the Medical Center announced by the Hon. Herbert Hoover. Campaign chairman was W. Parmer Fuller III of San Francisco.

March 1957 -- Dr. Robert H. Alway, Professor of Pediatrics, named Acting Dean, following resignation of Dr. Cutting.

June 1957 -- First construction activity begun for Stanford Medical Center, with excavation for Palo Alto-Stanford Hospital.

July 1957 -- Rehabilitation Building construction begun.

February 1958 -- Dr. Alway named permanent Dean.

During August 1959 -- Palo Alto-Stanford Hospital to begin admitting patients.

Sept. 17-18, 1959 -- Dedication and formal opening of Stanford Medical Center: the Stanford School of Medicine, Palo Alto-Stanford Hospital, and the Stanford Clinics.

Sept. 21, 1959 -- First classes begin in new Medical School buildings.

Two Stanford faculty members and one student will take part in a day-long conference on care for the aged tomorrow (WEDNESDAY) at Rickey's Studio Inn in Palo Alto.

The meeting is for operators and staff members of ~~XXX~~ nursing homes and institutions for the aged. It is sponsored jointly by the State Department of Public Health and the Peninsula Nursing Homes Association.

Dr. William H. Northway, professor of physical medicine at Stanford, will speak during the morning on the topic, "The Oldster." During the afternoon there will be a panel on "Helping the Aged—WhoDoes What?" Two of the panelists will be Leona McGann, assistant professor of preventive medicine, and physical therapy student Barbara Kent.
and Barbara Kent, a student physical therapist.

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Mailed Oct. 26, 1959 to
P.A. Times
S.J. Mercury-News

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat DAvenport 1-5310, 5311

RELEASE ON RECEIPT

STANFORD TO LAUNCH ALL-OUT

ATTACK ON SKIN DISEASE

STANFORD, Calif.--A Stanford Medical Center research team representing many scientific specialties is launching an all-out attack on psoriasis, the disfiguring skin disease which affects 3 to 4 million Americans.

At present, the cause of the ailment is completely unknown, although psychological, hereditary and allergic factors may be involved. Current treatment is on a trial-and-error basis and therapeutic measures have not been improved significantly in several decades, according to Dr. Eugene Farber of Stanford.

The unusual, multi-discipline attack is made possible by a generous grant to Stanford of $295,928 from The John A. Hartford Foundation, Inc., of New York City. The award was announced today by Mr. Ralph W. Burger, President of the Foundation.

The Hartford Foundation was originally established by John A. Hartford to distribute his personal charitable donations. He left it the bulk of his estate; and his brother, George L. Hartford, who died in 1957, left his entire estate to the Foundation. John A. Hartford was president of the Great Atlantic & Pacific Tea Company, and George L. Hartford was chairman of the board.

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See Psoriasis

Dr. Robert H. Alway, medical school dean, said the investigation will be under the direction of Dr. Farber, Professor of Dermatology. The grant is for a three year period.

Psoriasis is a chronic disease characterized by the eruption of round red patches covered by unsightly white scales--chiefly on the elbows, knees, scalp and back. It has been estimated that it affects as much as 2 per cent of the world's population.

The sores frequently recur and for this reason the disease is very discouraging for those who suffer from it. Doctors presently can only soothe the sores with ointments and salves, but are not able to cure the illness.

The research program is unusual for its use of the facilities and skills of numerous medical school departments and their investigators.

Doctor Farber's associates in the investigation will include Dr. Alvin J. Cox, head of the Department of Pathology; Dr. William H. Northway, director of the Division of Physical Therapy; Dr. Harold M. Schneidman, Assistant Clinical Professor in Dermatology; Dr. Anthony P. Moreci, physiologist; Dr. Victor Wheatley, chemist, and Dr. Joseph B. Peterson and Dr. Muhammed Aswaq.

Fields to be covered include chemistry, pathology, genetics, immunology, physiology, rheumatology, pediatrics, dietetics and psychiatry:

1 - Chemistry: Gas chromatography and other chemical methods will be used to study the chemical reactions of psoriasis in its active state and when it is improving.

2 - Pathology: A newly established laboratory of skin pathology will utilize latest techniques for analysis of patients' skin.

3 - Genetics: Since there is evidence that the tendency toward psoriasis may be inherited, studies will be made of common traits among victims with similar genetic backgrounds.

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4 - Immunology: There is some evidence that allergic processes are involved in the disease, so this aspect will be studied by immunologists.

5 - Physiology: Skin blood flow in psoriatic patients and their responses to environmental temperatures and humidity will be investigated.

6 - Rheumatology: Experts in the field of rheumatoid arthritis will study the significance of the fact that 6 per cent of patients with arthritis also have psoriasis.

7 - Pediatrics: Child specialists trained in dermatology will study the differences between youngsters with the disease and their normal brothers and sisters.

8 - Dietetics: Since a sudden gain in weight or a disproportionate amount of fat in the diet may cause outbreaks of psoriasis, a careful survey of patients' eating habits will be made.

9 - Psychiatry: An explanation will be sought of the fact that psoriasis may spread during a period of emotional stress.

In addition the Stanford researchers plan to investigate the natural history of the disease, to conduct a re-evaluation of currently used drugs and to study other related factors.

The research team hopes its efforts will stimulate similar work in other laboratories. The group will provide or exchange information as quickly as it is available.

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mailed October 19, 1959

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: Upon receipt TELEPHONE DA 1-5310-11

SWITCHBOARD DONATED TO

STANFORD PHYSICAL THERAPY

Old switchboards never die -- and they don't just fade away either.

At least not as long as there are groups like the Stanford Physical Therapy corps around.

The newest piece of equipment in the new $22 million Stanford Medical Center is a 25-year-old telephone company switchboard recently donated to the physical therapy unit's pre-vocational training room. Mr. Roy Maloney, Palo Alto manager of the Pacific Telephone Company, made the presentation.

The detail and accuracy needed to run a switchboard make it a valuable tool in restoring coordination lost as the result of illness or accident. The pre-vocational unit will use the instrument for testing and evaluation.

The unit's function is the evaluation of a referred patient's skills and abilities despite whatever disability he might have.

Wallace McDonald, pre-vocational supervisor, reports that telephones will be connected to the board, and in the future a recording device will also be added to it.

Evidently switchboards are pretty hard to come by -- ones not functioning, at least. Maloney looked for two months before he discovered a PBX that could be donated to the unit. "This board," he said, "finally turned up in San Leandro -- it was the only one we could find that wasn't in use or about to be put to such."

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: On Receipt TELEPHONE DA 1-5310-11

STANFORD, Calif.--Dr. James F. Jenness is now hearing things better than he has for years, thanks to an assist this fall from his alma mater.

Dr. Jenness, a retired Methodist minister, is 92 years old. Almost 70 years ago he moved west from Boston and became a member of the pioneer first graduating class of Stanford University. Only three members of the 32 in that class are alive today. The University first granted diplomas in 1892.

Dr. Jenness has had trouble hearing for about 15 years. He received some help from a hearing aid, but it gradually did him less and less good.

This summer he wrote Prof. Hayes A. Newby of Stanford's Speech Pathology and Audiology Division, asking for assistance. He had noticed in the papers that Dr. Newby was director of a workshop at Stanford Medical Center on problems of the hard of hearing.

Dr. Newby arranged some tests and decided that a binaural system, with an aid for each ear, would serve Dr. Jenness best. Dr. Jenness is suffering from a nerve-type hearing loss due primarily to age, Dr. Newby said. Late last month he fitted Dr. Jenness with the devices.

"It's quite an improvement," Dr. Jenness said that day, although he admitted some things didn't sound quite natural to him yet. Later on his wife, Beulah, reported he was "getting on to it." Her husband "is very, very deaf," she said. "Anything that helps is good." She finds it much easier to talk to him with the new aids.

The hearing aids for Dr. Jenness' use were loaned to Stanford by the Zenith Radio Corporation.

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Dr. Newby pointed out that while the Speech Pathology and Audiology Division does not provide a hearing aid advisory service for the general public, an exception was made in this instance to assist an early alumnus.

Dr. Jenness did undergraduate work at Boston University before coming to Stanford. Both he and his brother, Charles, who is now dead, graduated in 1892. Later Dr. Jenness was graduated from Iliff Theological School in Denver, then received a Ph.D. in theology from Boston University.

He was pastor of the First Methodist Church of Palo Alto from 1901 to 1903. Mrs. Jenness still remembers that University Avenue in Palo Alto was a dusty street until it was oiled during their stay in the city.

After leaving Palo Alto Dr. Jenness was a minister in Argentina, Chile and Panama. He returned to Palo Alto in 1932 when he retired. The couple now lives at 342 Oxford Ave., in the house they built when they moved here.

One of their two sons is still living. He is Arthur F. Jenness, head of the psychology department at Williams College, Williamstown, Mass. They have four grandchildren.

(mailed Nov. 2, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: on receipt TELEPHONE DA 1-5310-11

STANFORD PROFESSOR WINS RESEARCH PRIZE

Dr. Alan K. Done, assistant professor of pediatrics at Stanford University School of Medicine, has won the 1959 $1,000 Ross Laboratories Award for Pediatric Research from the Western Society for Pediatric Research.

He received the prize and a plaque at the society's annual meeting in Santa Monica last week. He was honored for his basic research in toxicology and endocrinology.

He has studied the effects of drugs, especially aspirin, on metabolism. Metabolism is the chemical process by which organisms produce energy and materials necessary for life processes.

His interests in endocrinology have centered mostly on the metabolism of adrenal hormones in children.

Dr. Done joined the Stanford faculty in September, 1958. He formerly taught and did research at the University of Utah, where he received his A.B. and M.D. degrees.

He lives at 907 Bainbridge Ct., Sunnyvale, with his wife and four children.

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(mailed Nov. 9, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: on receipt TELEPHONE DA 1-5310-11

ADMISSIONS TO BE REDUCED DURING HOSPITAL MOVE

Nonemergency admissions to Palo Alto-Stanford Hospital Center will be stopped from Nov. 24 to Dec. 2 to free staff and equipment for the big move out of the old Palo Alto Hospital, hospital administrator E. Dwight Barnett announced today.

Emergency care, including services for maternity patients, will continue without disruption during the move, Dr. Barnett said.

Departments in the old hospital will move to the new buildings in Stanford Medical Center during Thanksgiving Week. The new unit will be in full operation at 6 a.m. Nov. 30. Emergency and maternity patients will be admitted to the old hospital prior to that time.

Dr. Barnett said that the move has been planned to take advantage of the normal drop in admissions which occurs during a holiday period. In addition, Midpeninsula physicians and Stanford faculty members have been directed not to admit elective cases in surgery, medicine, gynecology or pediatrics.

Final details of the hospital shift are being worked out and will be announced later this week, Dr. Barnett said.

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(Mailed Nov. 16, 1959)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DAvenport 1-5310

INFECTIOUS DISEASES PLAN ESTABLISHED IN NEW HOSPITAL

The opening of the new Stanford Medical Center provides an unusual opportunity to put into practice certain well-established and widely accepted principles for the prevention, control and study of infectious diseases which occur in hospitals all over the world. These principles are not new. However, the details have been modified to fit the demands of modern hospital construction and medical practice.

The program affects each and every phase of hospital activity and therefore requires the full cooperation of every member of the hospital community as well as the patients and the patients' visitors. The chain of prevention and control is only as strong as its weakest link. Constant self-discipline and close supervision are the prices demanded for an effective program of this nature.

The program is as follows:

1) A hospital infection control committee was established. Known as the Infectious Diseases Advisory Committee, it includes ~~three~~ ~~four~~ representatives of the physicians practicing in the community, ~~three~~ ~~four~~ members of the faculty of the Stanford University School of Medicine, and a representative from the administration of the Palo Alto-Stanford Hospital Center. The committee advises the hospital administration and the entire medical center's personnel on matters relating to infectious diseases.

2) Dr. Lowell A. Rantz, Stanford professor of medicine and associate dean for clinical and postgraduate affairs, has been appointed hospital epidemiologist. He sees that recommendations from the committee are put into action. He is assisted by faculty members in pediatrics, surgery and obstetrics where problems are unique to their specialties.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: TELEPHONE DA 1-5310-11

NOTE TO CITY EDITORS, SCIENCE REPORTERS, RADIO-TV EDITORS, ET AL:

There will be a press conference Nov. 17, 1959, at 10:30 a.m. at the Stanford Medical Center to demonstrate and explain procedures used in the Palo Alto-Stanford Hospitals to control infections. The story is for release Thursday, Nov. 19, 1959.

Time Magazine reported last month that "Surgeons rated hospital infection as the most pressing problem aired" at the recent meeting of the American College of Surgeons. Hospital-acquired infections are a major problem all over the world, in fact. Staphylococci, especially, are a growing cause of infections in newborn infants and in surgical patients; many of these are due to "staph" that are resistant to commonly used antibiotics. Hospitals have become breeding places for serious infections because most hospitals harbor resistant staph.

Stanford Medical Center is setting up a comprehensive program directed at prevention and control of this problem. A reporter and photographer from your organization are invited to see at first hand what a thorough program involves in a new hospital. Sampling techniques, used on all hospital personnel and in every hospital room or patient area, will be shown. Sanitary procedures for housekeeping, dietary and nursing departments will be demonstrated or explained. Visits are planned to a specially equipped isolation room and an operating room.

Typical of the startling findings already turned up are: (1) It only takes half an hour for a newly introduced virulent bacteria to spread throughout a whole hospital floor--if proper isolation techniques are not used; (2) a surprisingly high percentage of doctors and nurses carry in their noses or on their hands staph which can cause infections.

Please let us know if you plan to send a reporter and/or photographer. A simple lunch will be served after the briefing session (at approximately 12:30). The conference will be in room W256 on the second floor of the Palo Alto wing of the hospitals (see enclosed map--the Palo Alto wing is the west pavilion on the map).

3) An informational and educational program has been under way for the last two months. It is directed at the professional staffs (private physicians and faculty members), nurses, the resident staff, medical and nursing students, paramedical and service personnel. A movie on proper techniques has been shown to 1,600 persons; there have been four mailings of rules and policy statements; and lectures and demonstrations have been given to various departments. The aim has been to instill in each individual working at the center a sense of responsibility for the prevention of infectious disease, and to demonstrate proper techniques.

4) A comprehensive and detailed plan for isolating patients with communicable diseases or those especially susceptible to them is being put into operation. Fourteen isolation rooms are being readied and other rooms can be put into use if necessary.

5) Modifications in equipment and techniques have been put into use for housekeeping, laundry and other service departments.

6) The ventilating system is now being improved to curb the spread of disease.

7) Several construction changes have been undertaken, particularly the installation of double doors on isolation rooms and addition of ultraviolet light equipment in operating and delivery rooms.

8) Restrictions have been placed on the use of some antimicrobial agents to insure an effective reserve of potent agents for use against antimicrobial-resistant infections.

9) A comprehensive system of case-finding has been set up for detection and control of certain infections. In practice, this means that attending physicians are obligated to take cultures from and report cases of infection. The epidemiologist may also detect cases on his own and he or his representative make daily rounds of the hospital to see whether any new cases may have

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occurred.

10) A far-reaching epidemiological survey of the hospital facilities and personnel has been started to detect and evaluate the initial incidence and magnitude of the staphylococcal problem. It is designed to dovetail with an extensive research project on wound infections, infections of newborn infants, and similar problems common to all major medical centers.

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(Prepared Nov. 17, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: on receipt TELEPHONE DA 1-5310-11

CLINICS BUILDING OPENING FOR FIRST TIME

The Boswell Building at Stanford Medical Center will open for care of clinic patients for the first time Monday morning, Dr. Andrew Hunt announced today.

Dr. Hunt is in charge of the outpatient clinics, where services are provided by faculty and students of the Stanford University School of Medicine. Since this summer all clinics have been in the adjacent Edwards Building.

Patients should report first to the reception desk on the first floor of Boswell, Dr. Hunt said. Each will then be sent to the proper clinic from there.

Medicine, surgery and dermatology clinics will move to Boswell Monday. Obstetrics, pediatrics and eye clinics are to stay in Edwards temporarily. They will move into Boswell later when the remainder of the building is finished.

Orthopedics, neurology and ear-nose-throat services will also stay in Edwards, where they will be located permanently.

Dr. Hunt said that opening of part of the facilities in Boswell provides room for expansion needed with the steady growth of the clinic patient load.

The Boswell Building makes up the crossbar of the H-shaped center. It is located directly behind the pool at the front of the center.

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(Nov. 20, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: on receipt TELEPHONE DA 1-5310-11

Services at Palo Alto Hospital, headquarters for first class medical care on the Midpeninsula since 1931, will be suspended the first week of December, Administrator E. Dwight Barnett announced today.

Beginning Tuesday (NOV. 24) personnel will start preparing for the big move from the old hospital to the new Palo Alto-Stanford Hospital in Stanford Medical Center. The following day rented trucks will begin hauling equipment to the new building.

The move will be accomplished without interruption in care of acutely ill persons, Dr. Barnett said. Emergency services will be available at all times.

At 6 a.m. Monday, Nov. 30, all admissions, including emergency and maternity cases, will be to the new hospital. Officials of Palo Alto-Stanford Hospital Center, who direct operations of both units, expect that all patients will be out of the old building by about Wednesday, Dec. 2.

The board of governors of the hospital center is studying proposals for use of the old building. A committee of the Palo Alto Medical Staff has recommended that it be used for a psychiatric care unit and for overflow when there are more patients than the new 434-bed hospital can handle.

Palo Alto Hospital has about 180 beds in the permanent parts of the building, although its capacity has been 303 beds because of overcrowding and temporary buildings attached to the structure.

The administration plans to refurbish the old building and to repair some of the equipment before opening it up again.

When patients are out of the building, it will mark the first break in service there in 28 years.

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Plans for the move have taken several weeks to prepare. They are under the general direction of Associate Administrator David Starkweather.

In all, 243 beds in the old hospital will be closed down. Sixty have already been closed. One hundred and eleven beds are now open in the new hospital. When the move is completed 372 will be in operation in the new unit. Other nursing stations will be opened as the patient load increases, Starkweather said.

Midpeninsula physicians have been asked not to admit patients for non-emergency care starting Nov. 24. Patients will again be admitted for elective care the afternoon of Dec. 2. Combined with the reduced patient load normally coming over Thanksgiving, this action will free hospital personnel and equipment so the move can be carried out.

The fewest beds planned to be available during the move is 263. However, if a disaster were to occur locally more beds could be opened promptly, Starkweather said. In that case, nurses and other personnel would have to postpone some of the moving chores to care for patients.

Starkweather estimates that approximately 90 patients will actually have to be moved from the old hospital to the new one by ambulance. This shift is scheduled Saturday and Sunday, Nov. 28 and 29. There will be no charge to patients for the ambulance service.

In addition, tons of supplies and equipment will have to be moved. They include everything from tiny needles and ampules of medicine to giant lights from surgery or the $200,000 worth of drugs in the hospital pharmacy.

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Maternity patients will stay in the old building, however, until they are dismissed. The only exception might be in the case of a mother who required a longer than usual hospital stay. No patient will be transported, though, if his or her doctor considers the move at all dangerous for the patient.

In accordance with the policy of the hospital center's board of governors, the slightly higher rates in effect for the rooms in the new hospital will be charged patients when they are moved into their new quarters.

Because some maternity and emergency patients will have to stay in the old building past the transfer hour of 6 a.m. Nov. 30, the center will actually have two staffs in maternity, surgery, and all the departments which support these services as long as they are needed.

The move is expected to take eight days. Elective admissions will be restricted for five days in advance of the actual transfer and for three days afterward to allow the staff to ready the new quarters.

(NOTE TO EDITORS: If you are interested in taking photographs of the move, the best time to photograph equipment would be Wednesday, Nov. 25. Patients will not be moved until Saturday, Nov. 28.)

(Mailed Nov. 20, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: on receipt TELEPHONE DA 1-5310-11

DEPUTY ADMINISTRATOR NAMED FOR HOSPITAL CENTER

Oliver E. Deehan, an associate administrator of Palo Alto-Stanford Hospital Center since August, 1957, has been promoted to deputy administrator.

Dr. E. Dwight Barnett, administrator of the hospital center, announced the change today.

Deehan's promotion is part of an administrative reorganization designed to free Dr. Barnett of day-to-day matters and to leave him more time for work at the policy and planning levels. Until now there has been no deputy administrator on the staff.

Other changes include transfer of certain departmental responsibilities among Barnett's five assistants. In addition to Deehan, they include three associate administrators, Miss Virginia Brown, David Starkweather and Lowell Smith, and an assistant administrator, William Moir, who supervises business affairs of the center. Starkweather and Smith were previously assistant administrators.

Deehan has full responsibility for implementing current policies of the administration. He is also in charge of personnel and in-service training. Staff members report directly to Dr. Barnett, however, when seeking policy changes or when planning new policies.

Deehan, 32, received his B.S. degree from Columbia University in 1955 and his M.S. degree in hospital administration from Columbia's School of Public Health and Administrative Medicine in 1957.

He is married and has three children, Ellen, 5, Robert, 4, and Carol, 2. The family lives at 226 Solana Dr., Los Altos.

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NOV 23 1959

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: on receipt TELEPHONE DA 1-5310-11

EMERGENCY SERVICES IN PALO ALTO

TO MOVE TO NEW HOSPITAL MONDAY

The emergency room at the new Palo Alto-Stanford Hospital will open for the first time at 6 a.m., Monday (NOV. 30), Administrator E. Dwight Barnett reminded local residents today.

The emergency room at the old Palo Alto Hospital will close at the same time, Dr. Barnett said. All patients requiring emergency treatment should come or be brought to the new hospital after that time.

The entrance to the emergency room is off a special road on the El Camino Real side of the Stanford Medical Center. The hospital can be reached off of Willow or Quarry Roads on the Stanford side of El Camino Real.

All admissions, including maternity cases, will be to the new hospital beginning at 6 a.m. Monday. Expectant mothers should go to the old hospital before that time.

Nonemergency admissions have been stopped this week to free staff and equipment for the move to the new hospital.

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(Mailed Nov. 25, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

EXPERIENCED ADMINISTRATOR NAMED TO HOSPITAL STAFF

Paul Fleming, an administrator with many years of experience, has been named to a temporary post on the staff of Palo Alto-Stanford Medical Center, it was announced today.

Fleming will serve as an assistant to Dr. E. Dwight Barnett, administrator of the center. Dr. Barnett said that for the next few months Fleming will concentrate on planning for reopening the Palo Alto Hospital, which has been closed since early December.

Recently Fleming has been a hospital consultant in the San Francisco area. He was graduated from Stanford in 1932 and later worked at two hospitals in the Bay Area.

He was assistant manager of Mills Memorial Hospital in San Mateo from 1935 to 1940 and was administrator of Hahnemann Hospital in San Francisco from 1940 to 1944.

Fleming has also served as assistant director of New Haven (Conn.) Hospital, which is associated with Yale Medical School, and as director of Huntington Hospital on Long Island, N.Y.

Fleming, 50, is the son of Mrs. Caroline H. Fleming of 1139 University Ave., Palo Alto. He is married and has one daughter, although he and his wife are separated. For the time being he is living in a hotel in Palo Alto.

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(Mailed Dec. 30, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

STANFORD MEDICAL ALUMNI ASSOCIATION ELECTS OFFICERS

Three California physicians have been named officers of the Stanford Medical Alumni Association for 1960, it was announced today.

The Association, made up of graduates of Stanford University's School of Medicine, also chose five new members of the Board of Governors.

Each new official, his year of graduation from the medical school, and his address are listed below. Each is holding an Association post for the first time unless otherwise noted.

President, Dr. Clifford B. Cherry, '35, 2400 Beverly Blvd., Los Angeles.

Vice President, Dr. G. B. Robson, '34, 2410 Clay St., San Francisco. Dr. Robson was on the Board of Governors from 1951 to 1953 and was vice president in 1954.

Secretary-Treasurer, Dr. William R. Grannis, '44, Medical Plaza, Pasteur Dr. and Welch Road, Palo Alto. Dr. Grannis is also on the Board of Governors. His term began this year and expires in 1961.

The following were elected to the Board of Governors for a three year term (1960-62):

Dr. John A. Azevedo, '23, 22146 Prospect St., Hayward.

Dr. John M. Baker, '44, 616 Alhambra Blvd., Sacramento.

Dr. Marshall J. Fiese, '44, Fresno State College, Fresno.

Dr. Louis L. Huff, '36, 5033 Southridge Ave., Los Angeles. Dr. Huff was vice president in 1958 and on the Board of Governors the three years before that.

Dr. Joseph F. Walsh, '42, 3117 "G" Street, Eureka.

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DEC 26 1959

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

THREE STANFORD FACULTY MEMBERS HONORED BY NEW YORK ACADEMY OF SCIENCES

Three members of the faculty of the Stanford University School of Medicine were recently elected fellows of the New York Academy of Sciences.

Honored by the Academy were Dr. Ronald Grant, professor of physiology; Dr. George A. Feigen, associate professor of physiology; and Dr. Carlton E. Schwerdt, associate professor of medical microbiology.

In announcing the fellows' election, an Academy spokesman said that a fellowship is a distinguished honor which is conferred upon a limited number of its members for outstanding work toward the advancement of science.

Dr. Grant was honored for his work in neurophysiology, or the functioning of nerves and brain. He is director of a Stanford research program in neurophysiology established in 1958.

Dr. Feigen was also cited for research in physiology. He has studied the physical and chemical factors that determine the effectiveness of blood substitutes used in shock, the adaptation of the circulatory system to high altitude and the process whereby isolated tissues, such as the heart, liberate histamine during allergic attacks. He is presently director of several research programs in physiological immunity.

Dr. Schwerdt is noted for his research on animal viruses. He has studied the physical and chemical characteristics and the crystallization of polio virus. He discovered that the polio virus really has two fractions--or parts--one of which causes polio, one of which does not.

The scientists will receive engraved certificates indicating their election to fellowship in the Academy. Professor Grant lives in Portola Valley while the other two men live in Palo Alto.

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DEC 2 6 1959

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

ROCKEFELLER FOUNDATION MAKES $3,000,000 GRANT TO STANFORD MEDICAL SCHOOL

The Rockefeller Foundation has made a $3,000,000 grant to Stanford University toward the development of its School of Medicine, Stanford President Wallace Sterling announced today.

Two-thirds of the total is to be used over the 10-year period beginning Jan. 1, 1960, "to strengthen work in the basic sciences." Dean Robert H. Alway of the medical school said that the $2,000,000 will help raise some current faculty salaries as well as provide funds for additional faculty to reinforce the basic medical sciences.

The remaining $1,000,000 is to be an allocation toward construction of a clinical sciences research building. In order to receive this share of the grant, however, the University must have cash, securities or firm pledges for an additional $3,000,000 for the building. Current estimates are that the building will cost at least $4,000,000.

The second part of the Rockefeller grant means that the University has reduced to $6,000,000 the amount needed to finish the first stage of development at Stanford Medical Center. The University is currently seeking $3,000,000 to complete payment on the recently opened $21,000,000 complex, in addition to the balance sought for the clinical research building.

The new grant is the second largest ever made to the medical school. The largest was $3,100,000 from the Ford Foundation in 1957 for endowment for faculty salaries.

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Just this fall Stanford moved the school from San Francisco to its new campus medical center. The medical curriculum has been drastically changed to increase student understanding of the inter-relationship of the medical sciences and to teach the social as well as the physical aspects of medicine.

"We are most grateful for the generosity of the Rockefeller Foundation," Dr. Alway said. "The grant will help us reinforce the most important part of any medical school--the faculty. It also gives us a start on financing the completion of the first stage of the Stanford Medical Center."

The clinical sciences research building was in the original program for the Medical Center, but construction was deferred until additional funds became available. The Medical Center includes the clinic and hospital facilities of Palo Alto-Stanford Hospital Center and the Stanford University School of Medicine.

The new building will provide research facilities for the school's departments of medicine, surgery and others concerned with patient care. It will be located between the Stanford hospital pavilion and the Medical School Building on the campus side of the center complex.

Some of the research facilities for the clinical departments are now located in the Boswell Building. However, Boswell was designed primarily for patient services.

There is no target date for completion of the research structure, although the Rockefeller Foundation specified the $1,000,000 must be put to use before Dec. 31, 1969.

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DEC 20 1959

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: Noon, Wednesday Dec. 16, 1959 TELEPHONE DA 1-5310-11

NOTE TO EDITORS: Announcement of the grant will be made at the kickoff luncheon of the 1960 March of Dimes drive in Santa Clara County, noon Wednesday at the St. Claire Hotel in San Jose. Release time was specified by March of Dimes officials.

MARCH OF DIMES GRANT MADE TO STANFORD MEDICAL SCHOOL

The Stanford University School of Medicine has received a $141,722 grant from The National Foundation to support teaching of methods of comprehensive care for the rehabilitation of patients afflicted by chronic disease and disability.

The program will include education of students in medicine, nursing, physical therapy, speech therapy, occupational therapy, social work and vocational counseling.

The grant was announced jointly today by J. E. Wallace Sterling, president of Stanford, and Basil O'Connor, president of The National Foundation. It is part of $1,500,000 being allocated by The National Foundation to 14 medical schools in the country for education in the health professions. The grant is effective Jan. 1, 1960.

It is the largest National Foundation grant ever made to Stanford, according to Bert L. Legg, 1960 Santa Clara County March of Dimes Chairman. The announcement was made in conjunction with the kickoff of the 1960 campaign in the county.

"Nothing is more vital to the future welfare of the disabled than for doctors to have full knowledge of modern rehabilitation techniques," Dr. Sterling said. "Tomorrow's major medical problem will be long-term, crippling diseases. We hope, through this March of Dimes grant, to help prepare tomorrow's doctors and other associated medical personnel to meet those problems."

Mr. O'Connor said that The National Foundation has been supporting pilot studies for teaching rehabilitation in medical schools since 1950. "From our experience with polio patients," Mr. O'Connor said, "we realized that when crippling or chronic disability occur, rehabilitation is a fundamental part of good medical care rather than something to be added after all else has failed.

"The battle for health is now primarily a battle against the cripplers. The National Foundation's immediate objectives are birth defects and arthritis, in addition to polio. But what is learned in such studies as are now being carried out at Stanford goes far beyond the boundary of any single disease. Our aim is to find the best means of training disease fighters for tomorrow."

The new March of Dimes grant brings to over $330,000 the support for rehabilitation teaching at Stanford given by The National Foundation. The grant is under the direction of Dr. Robert H. Alway, dean of the medical school. Coordinator of the program will be Dr. Rodney Beard, executive head of the Department of Preventive Medicine and director of the Stanford Rehabilitation Services.

"Our goal is to help the patient attain the maximum degree of physical, social, vocational and psychological adjustment to his illness or disability," Dr. Alway stated.

Medical students, nurses, physical therapists and speech therapists are already enrolled at Stanford. Occupational therapists, social workers and vocational counselors from nearby colleges and universities will take part in the program while they are getting field experience.

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(Mailed Dec. 14, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

EMERITUS NURSING DIRECTOR TO BE HONORED

Miss Enid Hutchinson, director of nurses at Palo Alto Hospital for 28 years until her retirement this summer, will be honored by her former associates at a dinner Tuesday night (DEC. 15).

Between 150 and 200 persons are expected to attend the dinner, at which Miss Hutchinson will receive a citation signifying that she has been named first nursing director emeritus.

In addition to the citation, she will also receive a gift from the Palo Alto Medical Staff, according to Dr. E. Dwight Barnett, hospital administrator.

Dr. Barnett is administrator of Palo Alto-Stanford Hospital Center, which operates the Palo Alto Hospital as well as the new Palo Alto-Stanford Hospital in Stanford Medical Center. Palo Alto Hospital is closed temporarily while the building is being refurbished. It is expected to open again in a few months.

The dinner will begin at 8 p.m. at Rickey's Studio Inn. Attending will be hospital department heads, officers of the Palo Alto Medical Staff, representatives from the board of hospital directors and the hospital administration, and other invited guests.

The dinner is part of the Christmas program for hospital employees, which also includes departmental parties. The program is being paid for by income from the vending machines in the hospital center and by a contribution from the private doctors who make up the Palo Alto Medical Staff.

Miss Hutchinson now lives in Mt. Hermon, near Santa Cruz.

DEC 10 1959

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

NURSES SHORTAGE HITS PALO ALTO-STANFORD HOSPITAL CENTER

Palo Alto-Stanford Hospital Center is unable to care for all the patients seeking hospitalization locally because of a shortage of qualified nurses, Administrator E. Dwight Barnett said today.

"We could open another nursing station right now and provide an additional 32 beds if we only had the personnel," Dr. Barnett said.

Emergency patients are not being turned away, he said. However, doctors with patients needing elective surgery or medical treatment have not been able to have them admitted.

Dr. Barnett commented that one nursing unit could be filled with patients now and another about the first of the year--if nurses were available. "I want the community to know that it is not a shortage of facilities that is keeping patients out of the hospital," Dr. Barnett said.

The new Palo Alto-Stanford Hospital has a total of 434 beds, of which 372 are now open. Just last week the hospital swung into full-scale operation and Palo Alto Hospital was closed. The old hospital, which will be refurbished in the next few months, housed up to 305 patients but was built for about 180 patients.

The hospital also needs licensed vocational nurses and nurses aides, although the stations could be staffed if enough registered nurses were on hand.

The administrator explained that a quick expansion of services is chiefly responsible for the shortage, since there has been no chance to build up personnel gradually. Last year the hospital anticipated reaching a patient load equivalent to 120,000 patient days annually by April, 1960. That figure has already been reached now.

The administration is attempting to find suitable personnel throughout the country, but Dr. Barnett predicted that the shortage would last at least until January, when the many nurses who are students' wives return to the area.

(Mailed Dec. 9, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: on receipt TELEPHONE DA 1-5310-11

DR. ARTHUR KORNBERG LEAVES TO RECEIVE NOBEL AWARD

Dr. Arthur Kornberg, professor and executive head of the Department of Biochemistry at Stanford University School of Medicine, is en route today to Stockholm, Sweden, where he will receive the 1959 Nobel Prize for Medicine.

He shares the award with Dr. Severo Ochoa of New York University. The men were honored for manufacturing nucleic acids in the laboratory. Nucleic acids are key substances in living cells. Their work is expected to have an important influence on research into cancer, viruses and heredity.

All the Nobel Prizes, including those for chemistry, physics, literature and an outstanding contribution to peace, will be presented Dec. 10 at the Stockholm Concert Hall. The presentations will be followed by a banquet at the City Hall.

The next day Dr. Kornberg will deliver a technical address on his work to the members of the Caroline Institute, which annually chooses the winner of the prize for medicine or physiology.

The night of Dec. 11 the King and Queen of Sweden will fete the winners with a banquet at the Royal Palace.

Dr. Kornberg's wife, Sylvy (cq), and their three sons are accompanying him to Europe. They left San Francisco by plane Wednesday night (DEC. 2). Mrs. Kornberg has been co-author of research articles with her husband.

They will spend this weekend in London, then fly to Stockholm Monday (DEC. 7). They will stay in Sweden until Dec. 15, and then will go to Copenhagen, Denmark. They plan a vacation on the continent before returning to the United States late in December.

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(Mailed Dec. 2, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: on receipt TELEPHONE DA 1-5310-11

PEDIATRICS GROUP TO MEET AT STANFORD MEDICAL CENTER

Approximately 150 pediatricians will gather at Stanford Medical Center Sunday (DEC. 6) for the annual meeting of the Northern California Chapter of the American Academy of Pediatrics.

Dr. Joseph H. Davis of Palo Alto is local chairman for the event. Also working on arrangements is Dr. Saul J. Robinson of San Francisco, chairman of the chapter's Scientific and Educational Committee.

In the morning there will be a panel discussion on "The Pediatrician Faces Juvenile Delinquency," followed by a business meeting.

Panel participants include Dr. Arthur Carfagni, psychiatrist with the San Mateo County Probation Department; Irving Kriegsfeld, executive director of the Mission Neighborhood Center in San Francisco; and Dr. Eli M. Bower, research coordinator for the California State Department of Education.

Moderator will be Dr. Herbert Korngold, a pediatrician practicing in Sacramento, chairman of the chapter's Committee on Juvenile Delinquency.

In the afternoon five members of the faculty of the Department of Pediatrics of Stanford University School of Medicine will discuss some of the newer advances in the field.

Speakers will include Prof. Norman Kretchmer, head of the department, Associate Prof. Luigi Luzzatti, and Instructors Norman Sissman, Louis Gluck and Sumner Yaffee.

Following the afternoon session there will be tours of Stanford Medical Center, the Children's Health Council and the Stanford Convalescent Home.

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(Mailed Dec. 2, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: To P.M.'s of Saturday, Dec. 5, 1959 TELEPHONE DA 1-5310-11

NOTE TO EDITORS: Release time set by American Heart Association to coincide with presentation of the award in New York City.

STANFORD PHYSIOLOGIST RECEIVES CITATION

Dr. Jefferson M. Crismon (cq), professor and executive head of the Department of Physiology at Stanford University School of Medicine, today received a special citation from the American Heart Association for "distinguished service to research."

The citation was presented at a meeting of the association's board of directors in New York City.

Citations were given to 15 leaders in medical teaching and research who have completed full five-year terms on the AHA Research Committee or who served as chairmen of the committee.

Dr. Crismon was a member of the committee from 1952 to 1957 and was chairman in 1956-57. The committee supervises allocations for fellowships and research grants from the association.

Dr. Crismon, 51, has been on the Stanford faculty since 1937. During 1957-58 he was a Guggenheim Fellow and worked at the Medical Research Council Laboratory in London, England.

He was named head of the physiology department in 1951. He is widely known for his research on cold injury and other effects of low body temperature.

He is married and has two children. The family lives at 1805 Guinda St., Palo Alto.

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(Mailed Dec. 2, 1959)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

HOSPITAL TO CONDUCT TOURS FOR EXPECTANT MOTHERS

Palo Alto-Stanford Hospital Center will begin holding regular tours for expectant mothers next month, it was announced today.

Tours will be held the first and third Wednesdays of each month, beginning Feb. 3. They will start at 11 a.m. from the information desk in the main hospital lobby and will last approximately one hour.

Tour groups will be limited to 10 persons. Mothers-to-be may call DA 1-1200, extension 5311, to sign up. Women with the earliest delivery dates will be given priority.

The groups will be limited to expectant mothers unless fewer than 10 persons sign up. If less than 10 are listed, a woman's husband or mother may join the tour.

The guide will be Miss Alice Denhard, assistant professor of nursing (obstetrics) in the Stanford University School of Nursing.

Miss Denhard will explain the admitting procedure and show women where the emergency room is in case they need to enter the hospital that way.

She will also show them the entrance to the labor room area, the husbands' waiting room, nurseries, and the mothers' accomodations.

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(Mailed Jan. 27, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

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(Mailed Jan. 27, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: To A.M. papers of Thursday, Jan. 28 TELEPHONE DA 1-5310-11

NOTE TO EDITORS: This story is timed for release following presentation of the research paper by the authors at the annual meeting of the Western Section of the American Federation for Clinical Research. The meeting will be held at Carmel, California.

EXPLANATION OFFERED FOR BLOOD CLOT MYSTERY

CARMEL--Two Stanford University faculty members working at San Mateo County Hospital have discovered a possible explanation for a mystery that has plagued medicine for years.

The mystery is this: Why do blood clots formed in the legs often break off and flow elsewhere in the body, seriously endangering the lives of patients, while those formed in the arms do not?

Such clots are potentially dangerous for all patients who are confined to bed. When they break off they can flow to the lungs and block the blood supply to part of that vital organ. The result can be serious damage to part of a lung, heart failure, or even death of the patient.

An explanation was offered here yesterday by Dr. Edward Rubenstein and Dr. Arthur R. Lack of San Mateo in a paper presented at the annual meeting of the Western Section of the American Federation for Clinical Research.

Dr. Rubenstein is clinical instructor in medicine at Stanford's School of Medicine. Dr. Lack is clinical instructor in pathology.

The researchers have discovered that the temperature of the blood flowing through the veins near the surface of the lower leg of a bedridden patient averaged 12 degrees Fahrenheit lower than the 98.6 degrees usually called "normal."

Further studies showed that clots formed at this low temperature are much more fragile than those formed at 98 degrees. Apparently this is so because complete formation is slowed down.

--more--

These fragile clots are probably more likely to break off and flow elsewhere in the body where they can cause serious or fatal damage, Dr. Rubenstein said.

There is always a tendency for blood to clot when it stops flowing. Low temperature favors this because cool blood is thicker. The reduced circulation of a bedridden patient contributes to the effect.

Physicians are well aware of the fact that clots are frequently formed in the arms as well as the legs. Some blood smapling methods will stop circulation and cause them, and they occur in some patients being given solutions intravenously.

"But why are the leg veins so notorious?" Dr. Rubenstein asks.

"Once a clot forms at low temperature," he said, "there is clear evidence now that it is less cohesive. It won't stick to itself or the vein wall as well and is likely to be dislodged."

The arms are considerably warmer than the legs, he said. In addition, the arms tend to stay warmer because they are usually more active then a bedridden patient's legs. When clots are formed they do not break off. Eventually they are dissolved by a normal body mechanism involving chemicals in the blood.

What can doctors do to reduce the likelihood that fragile clots will form in the legs? Dr. Rubenstein suggests that more research is needed to answer that question.

He would suggest studying the possible effects of having the patients wear socks or use more blankets, both in bed and during operations. In surgery, he said, doctors usually don't worry about the patient's legs and they may be uncovered for a long time.

The doctors' report was based on an investigation of 20 normal and 20 bed-confined subjects.

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(mailed January 26, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: in P.M. papers of Wednesday, Jan. 27, 1960 TELEPHONE DA 1-5310-11

NOTE TO EDITORS: This story is timed for release following presentation of the research paper by the authors at the annual meeting of the Western Association of Physicians at Carmel, California.

RESEARCH POSSIBILITIES IN PERU SUGGESTED

CARMEL--Scientists trying to learn more about the causes of some of the diseases which cripple and kill civilized Americans--especially heart ailments--might do well to study the less highly civilized natives of the Peruvian highlands.

That suggestion came today from a Stanford University School of Medicine heart specialist who spent a month in Peru last year examining research possibilities in the Peruvian Andes.

Dr. Herbert Hultgren, associate professor of medicine at Stanford, delivered a paper on medical problems in Peru at the annual meeting of the Western Association of Physicians. Co-author of the paper is Dr. Warren Spickard, associate clinical professor of medicine at the University of Washington School of Medicine.

The investigations were supported by grants from the United States Public Health Service and the Sonoma County Heart Association.

"Many of the interesting medical phenomena observed in the Peruvian Andes undoubtedly will provide important clues to the basic mechanisms of diseases seen in our sea level society," Dr. Hultgren says.

Certain types of heart and circulatory ailments are extremely rare, the physicians report. These include high blood pressure, coronary artery disease, and hardening and thickening of arteries.

--more--

Hard work and diet may play a role in reducing the incidence of these ailments, Hultgren and Spickard said. The natives not only do a lot of manual labor; they also have to breathe more air to get the necessary oxygen. Their food is high in carbohydrates and vegetable proteins, but their fat intake is not known precisely.

The Peruvian way of life has its medical disadvantages, however. There is a high incidence of gallstones and of disease of the biliary tract, which carries bile from the liver to the intestine. Following major surgery, though, the blood clots commonly arising in veins of American patients and which can cause lung damage, heart failure or death, seldom occur.

Normal adults and children in the area have certain physical characteristics which would be considered as signs of heart disease if the people lived at sea level. The lungs are large and the right side of the heart is enlarged.

And for visitors climate can be hazardous unless they allow time to get accustomed to the high altitude. "Soroche, or acute mountain sickness, is noticed by nearly everyone who travels from Lima (near the Pacific Ocean) to La Oroya (12,225 feet) for the first time," the authors note.

Symptoms include weakness, labored breathing, headaches, loss of appetite and occasional other discomfort. A few people do not get used to the altitude and may lose weight and suffer from severe insomnia.

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Mailed January 25, 1960

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: in P.M. papers of Wednesday, Jan. 27, 1960 TELEPHONE DA 1-5310-11

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The Peruvian way of life has its medical disadvantages, however. There is a high incidence of gallstones and of disease of the biliary tract, which carries bile from the liver to the intestine. Following major surgery, though, the blood clots commonly arising in veins of American patients and which can cause lung damage, heart failure or death, seldom occur.

Normal adults and children in the area have certain physical characteristics which would be considered as signs of heart disease if the people lived at sea level. The lungs are large and the right side of the heart is enlarged.

And for visitors climate can be hazardous unless they allow time to get accustomed to the high altitude. "Soroche, or acute mountain sickness, is noticed by nearly everyone who travels from Lima (near the Pacific Ocean) to La Oroya (12,225 feet) for the first time," the authors note.

Symptoms include weakness, labored breathing, headaches, loss of appetite and occasional other discomfort. A few people do not get used to the altitude and may lose weight and suffer from severe insomnia.

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Mailed January 25, 1960

Stanford Medical Center

News Bureau Palo Alto, California

FOR RELEASE: Wednesday, in P.M. papers of Jan. 27, 1960 TELEPHONE DA 1-5310-11

NOTE TO EDITORS: This story is timed for release following presentation of the research paper by the authors at the annual meeting of the Western Association of Physicians at Carmel, California.

Research Possibilities in Peru Suggested

CARMEL—Scientists trying to learn more about the causes of some of the diseases which cripple and kill civilized Americans— especially heart ailments—might do well to study the less highly civilized natives of the Peruvian highlands.

That suggestion came today from a Stanford University School of Medicine heart specialist who spent a month in Peru last year examining research possibilities in the Peruvian Andes.

Dr. Herbert Hultgren, associate professor of medicine at Stanford, delivered a paper on medical problems in Peru at the annual meeting of the Western Association of Physicians. Co-author of the paper is Dr. Warren Spickard, associate clinical professor of medicine at the University of Washington School of Medicine.

Insert from P.2

Use B 96A

~~Heart disease is extremely rare, the physicians report, as is atherosclerosis, the deposit of fatty substances in arteries which can lead to hardening of the arteries. So are diabetes and high blood pressure.~~

Hard work and diet may play a role in reducing the incidence of these ailments, Hultgren and Spickard said. The natives not only do a lot of manual labor; they also have to breathe more air to get the necessary oxygen. Their food is high in carbohydrates and vegetable proteins, but their fat intake is not known precisely

MORE

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

STANFORD ANATOMIST RECEIVES ANTHROPOLOGICAL AWARD

Dr. William W. Greulich, executive head of the Department of Anatomy at Stanford University School of Medicine, has been named winner of the 1960 Viking Fund medal and award for "outstanding achievement in physical anthropology."

Dr. Greulich is widely known for his studies of the growth and development of children. He has documented the retardations among Japanese youngsters who survived the atom bombs dropped on Hiroshima and Nagasaki. He has also examined children to study differences in development among different races.

Previous winners of the award include such internationally recognized anthropologists as Henry M. Vallois, director of the Museum of Man in Paris, France; Raymond Dart, discoverer of many important human fossils in South Africa; and Sir Wilfred LeGros Clark of the University of Oxford, England, who helped expose the notorious Piltdown forgery.

The medal and a $1,000 prize will be presented to Dr. Greulich at a dinner in New York during March. He is the first American to receive the award since 1957.

Dr. Greulich was selected for the award by a committee from the American Association of Physical Anthropologists. The award is sponsored by the Wenner-Gren Foundation for Anthropological Research, New York, N.Y.

Dr. Greulich received degrees from Kenyon College and the University of Denver before winning his Ph.D. at Stanford in 1934. He has been on the Stanford faculty since 1944. He lives at 1 Clayton Dr., Menlo Park.

###

(Mailed Jan. 22, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

FIRST OPEN HEART SURGERY PERFORMED AT STANFORD MEDICAL CENTER

Stanford University surgeons have performed the first open heart operation at the new Palo Alto-Stanford Hospital in Stanford Medical Center.

The operating rooms were opened in the new hospital early in December. Stanford's School of Medicine moved to the campus last fall from San Francisco.

The patient, a 36-year-old Sacramento salesman, is in good condition today, physicians said. He is eating well and can sit up in bed. He is expected to be walking around by the end of the week.

The operation was performed last Friday. It lasted for 5½ hours. For one of those hours the patient was kept alive by a heart-lung machine which maintained circulation for him while his heart was open.

The patient suffered from an atrial septal defect--a hole in the wall which separates the right and left upper chambers of the heart, or atria. Because of the defect he was short of breath and grew tired easily, symptoms which grew worse as he grew older. The surgeons stitched the hole closed.

The doctors also knew before the operation that a vein leading into the heart from the right lung was emptying into the wrong chamber. During surgery they discovered a second vein also emptied into the wrong atrium. They said that they put stitching into the heart wall to make a barrier so the blood flowed into the proper chamber.

A septal defect is one of many types of heart disease which can now be treated by open heart surgery. Head of the Stanford team is Dr. Norman Shumway, assistant professor of surgery.

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JAN 11 1960

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JAN 11 1960

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: upon receipt TELEPHONE DA 1-5310-11

STANFORD CLINICS RESUME SERVICES

FOR STUTTERERS, HARD OF HEARING

PALO ALTO--The Stanford University Speech and Hearing Clinic next week will resume group therapy sessions for adult stutterers and group instruction in lip reading for adults who are hard of hearing.

Both programs are run throughout the year except during academic vacation periods, according to Dr. Virgil A. Anderson, director of the clinic.

Sessions for the stutterers will be held Monday nights from 7:30 to 9:00, beginning January 11th. Lip reading classes are scheduled Mondays from 8:00 to 9:00 p.m., starting January 11th.

The clinic is located in Edwards Building of the Stanford Medical Center, 300 Pasteur Drive, Palo Alto. Fees are nominal--$10 for the quarter.

All interested persons are invited to attend, Dr. Anderson said. The program allows for some individual therapy if needed.

Dr. Robert J. Duffy is staff advisor for the stutterers, and Ray Lage is the clinical assistant in immediate charge of the program. The lip reading class is under the supervision of Miss M. Jo Eeckhout (cq); Miss Margaret Meeker is the therapist who teaches the class.

Further information may be obtained by calling the clinic at DAvenport 1-1200, extension 5416.

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(Mailed January 4, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

UNIQUE ISOTOPE DETECTING DEVICE INSTALLED AT STANFORD MEDICAL CENTER

A unique electronic device which should open up new areas for nuclear research and speed development of better diagnostic techniques using radioactive isotopes has been installed at Stanford Medical Center.

The instrument was specially designed and built for the Isotope Division of the Stanford University School of Medicine. While there are other devices for detecting minute amounts of radioactivity in a patient's body, the new one at Stanford has many more uses and is more precise than previously available ones.

Researchers hope that it will assist them in developing improved methods of diagnosing diseases of the thyroid, liver, kidney, blood-forming organs and brain. It should also be useful in tumor and cancer detection.

It will also be used to train medical students and doctors in latest techniques in the field of nuclear medicine. Dr. Joseph P. Kriss, director of the Isotope Laboratory, will supervise operation of the instrument. It is available for treatment of both private and teaching patients at Palo Alto-Stanford Hospital Center.

Following a two-year survey of nuclear medical equipment manufacturers, Dr. Kriss and Dr. Robert Loevinger, consulting physicist for the Isotope Laboratory, selected Atomation (cq), Inc., Division of C. W. Reed Company, Inc., to build the highly specialized instrument. Atomation, Inc., is located in Los Angeles.

It is called a Dual Detector Tri-D Scanner because of its unique ability to automatically scan in three dimensions and because of its two complete detection channels which can function independently or in combination. The scanner is expected to be marketed for about $20,000.

--more--

The instrument detects and automatically records gamma rays (X-rays) given off by radioactive isotopes which have been injected into a patient. Different chemical substances tend to be concentrated in different parts of the body, and a study of the location of materials which have been "tagged" with a radioactive isotope may help locate and define the size or function of certain organs and certain tumors.

The amount of radioactive material used is very minute, according to Dr. Kriss. It is too small to be detected by chemical means. Commonly used isotopes include those of iodine, iron, gold, copper, arsenic and chromium.

The flexibility of the device makes it unusual, Dr. Kriss said. With the two detecting and recording channels, it can detect radioactivity from two parts of the body at once or simultaneously measure the uptake of two different isotopes in the same area.

It can also detect positrons, or positively charged particles with the same mass and size charge as negative electrons. Positrons are spotted by placing the two detectors so that they face each other.

Positrons are detected when they disintegrate, because they produce gamma rays which come off in exactly opposite directions. Only those rays which enter the two detectors simultaneously are counted "in coincidence." Other rays which are scattered from a distance or which come from other isotopes do not reach the detectors "in coincidence" and are not counted. This arrangement helps appreciably in exact localization. Some tumors of the brain tend to concentrate positron-emittors, such as arsenic.

The instrument scans an area automatically and records its findings so they are available for later study. Scanning can be done either horizontally or vertically.

Funds for purchasing the scanner came from the Atomic Energy Commission, the Palo Alto-Stanford Hospital Center and an anonymous donor to Stanford University.

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(Mailed Feb. 16, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

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(Mailed Feb. 16, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DAvenport 1-1200, Ext. 5311

FILE COPY

NOTICE TO ALL CITY DESKS, NEWS DESKS, ETC.

Effective at 8 a.m., Saturday February 6, 1960, your reporters should call the Emergency Room at Palo Alto-Stanford Hospital for information about patients brought to the hospital for emergency treatment. The number to call is DA 1-1200, extension 5142.

The Nursing Office, which had previously handled all reporters' calls about patients, will now have reports on hospitalized patients only. The number for the Nursing Office is DA 1-1200, extension 5181. During the night when the nursing supervisor is making her rounds, the switchboard operator will page the supervisor for you if you need information about a hospitalized patient.

In the past the Emergency Room has not had a large enough staff to care for patients and answer your calls properly too. However, the nurses are now prepared to take the calls. This system will be instituted to make Emergency Room reports available sooner. We hope it will work satisfactorily for you.

Extra copies of this notice are enclosed for you to distribute to your reporters.

Samuel Moffat
Information Officer

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

STANFORD CLINICS' FACILITIES OPENED TO ELIGIBLE COUNTY PATIENTS

Palo Alto-Stanford Hospital Center and the County of Santa Clara have signed an agreement to permit certain north county residents to get treatment at the Stanford Clinics in Palo Alto instead of having to go to the County Hospital in San Jose, it was announced today.

The announcement was made jointly by Dr. F. George Gillick, director of medical institutions for the County of Santa Clara, and Dr. Andrew Hunt, director of ambulatory services for the Stanford Clinics.

Patients living in Palo Alto, Los Altos or Mountain View are considered north county residents by the County.

Only patients certified as eligible by the Medical Social Service Department at the County Hospital will be offered care under the program.

The County will pay the Hospital Center a fee for each patient visit, the fee to cover all services rendered. Services will include doctor's care, laboratory tests, X-rays and drugs.

Patients will be required to present written evidence of eligibility except in emergency cases.

County officials said that the agreement was signed because enough facilities are not available for clinic care in San Jose, and because it is difficult for many patients to get to San Jose.

It is not known yet just how many patients will be assigned to the Stanford Clinics, but Dr. Gillick said that only "a small number" is expected to be served. ###

(Mailed Feb. 3, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

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(Mailed Feb. 3, 1960)

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News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

PALO ALTO-STANFORD HOSPITAL CENTER APPOINTS NEW ASSOCIATE ADMINISTRATOR

Walter Rentschler, who served as an administrative resident at Palo Alto Hospital in 1958-59, has been named an associate administrator of Palo Alto-Stanford Hospital Center, Administrator E. Dwight Barnett announced today.

From last June until March Rentschler was assistant administrator of Reid Memorial Hospital in Richmond, Indiana. He has an M.S. degree in hospital administration from Columbia University and an A.B. from Gettysburg (Pa.) College.

He was an officer in the U.S. Air Force from 1954 to 1957.

His major responsibility in his new post will be supervising professional services for hospitalized patients. He began work March 14.

Rentschler is married and has a one-year-old son. The family lives at 1865 Ednamary Way, Mountain View.

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(Mailed March 29, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

200 SKIN SPECIALISTS EXPECTED AT STANFORD MEETING

Approximately 200 skin specialists from four western states are expected to attend a scientific meeting under the auspices of the San Francisco Dermatologic Society at Stanford Medical Center this Saturday. The meeting marks the establishment of the Stanford Dermatology Research Laboratories.

The principal speaker for the meeting will be Dr. Stephen Rothman, Professor of Dermatology at the University of Chicago. Dr. Rothman, an internationally recognized specialist, is best known for his original research on the chemistry and physiology of skin disease.

Dr. Rothman's topic will be "Basic Research in Dermatology: Present and Future."

There will also be a morning program on psoriasis, a disfiguring skin disease, by four members of the Stanford dermatology research staff. Speakers will be Dr. Eve Reaven, Dr. Anthony P. Moreci, Dr. Victor R. Wheatley and Dr. Muhammed Aswaq.

In the afternoon there will be a discussion of patients with specific skin diseases by Dr. Rothman, Dr. Alvin J. Cox, Head of the Department of Pathology at Stanford University School of Medicine and visiting dermatologists.

The chairman for the meeting will be Dr. George T. Wilson of Palo Alto.

The Division of Dermatology at the Medical School recently received a $295,928.00 grant from the John A. Hartford Foundation for a multi-disciplined study of psoriasis.

(mailed March 23, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

STANFORD FACULTY MEMBER NAMED MARKLE SCHOLAR IN MEDICAL SCIENCE

Dr. J. Thomas August, instructor in medicine at Stanford University School of Medicine, has been appointed a Markle Scholar in Medical Science, it was announced today.

The appointment includes a $30,000 grant which will be paid to the medical school over a period of five years to support Dr. August and to aid his research.

Dr. August is one of 25 young medical scientists in the United States and Canada selected for the scholarship program by the John and Mary R. Markle Foundation of New York. He was the only northern California faculty member chosen.

The Foundation has made grants annually since 1948 to relieve the shortage of faculty members in medical schools and to strengthen medical education.

The Stanford scholar is 32 years old. He received his A.B. degree from Stanford in 1951 and his M.D. four years later. He is married to the former Jean Nordstrom (Stanford '51) and they have two children, Christina, 3, and Paul, 1. The family lives at 500 Melville Ave., Palo Alto.

After interning at Los Angeles County General Hospital for a year, Dr. August served as resident house physician to Sir Stanley Davidson at the Royal Infirmary, University of Edinburgh, Scotland, in 1955-56.

He held posts at Beth Israel Hospital and Peter Bent Brigham Hospital in Boston and at the Harvard Medical School before coming to Stanford last year.

His research interests include studies of the endocrine glands and their secretions, and metabolism. His outside interests are reading, international affairs, skiing and hiking.

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

EMERITUS PROFESSOR TO SUPERVISE LIBRARY COLLECTION

Dr. Arthur L. Bloomfield, emeritus professor of medicine at the Stanford University School of Medicine, has been appointed director of the historical collection at Lane Medical Library, Librarian Clara S. Manson announced today.

Dr. Bloomfield retired in 1954 as head of the department of medicine after 26 years of teaching at Stanford. He now lives in San Francisco. He is one of the University's most distinguished physicians and revered teachers.

Lane Medical Library is the largest medical library west of Chicago and one of the nation's finest medical school libraries. Formerly located in San Francisco, it was moved to the University campus last summer when Stanford Medical Center opened.

Since his retirement, Dr. Bloomfield has been preparing a major work, A Bibliography of Internal Medicine: Communicable Diseases. When the first volume was published in 1958 the National Library of Medicine News hailed it as "one of those rare items which one does not hesitate to call a classic."

"Dr. Bloomfield has brought to his task the kind of wisdom which only a dean of the profession could master," the review continued. "The book is, as well, a tribute to the soundness of the collections of the Stanford Medical Library, on which it has been based."

Volume two was published last month. Both volumes were issued by the University of Chicago Press.

Dr. Bloomfield replaced Professor C. D. O'Malley, who resigned as director of the historical collection last year after holding the post 11 years.

In his new post Dr. Bloomfield will direct selection of volumes to be added to the historical collection.

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MAR 8 1960
1960

Stanford Medical Center
News Bureau Palo Alto, California

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Dr. Bloomfield retired in 1954 as head of the department of medicine after 26 years of teaching at Stanford. He now lives in San Francisco. He is one of the University's most distinguished physicians and revered teachers.

Lane Medical Library is the largest medical library west of Chicago and one of the nation's finest medical school libraries. Formerly located in San Francisco, it was moved to the University campus last summer when Stanford Medical Center opened.

Since his retirement, Dr. Bloomfield has been preparing a major work, A Bibliography of Internal Medicine: Communicable Diseases. When the first volume was published in 1958 the National Library of Medicine News hailed it as "one of those rare items which one does not hesitate to call a classic."

"Dr. Bloomfield has brought to his task the kind of wisdom which only a dean of the profession could master," the review continued. "The book is, as well, a tribute to the soundness of the collections of the Stanford Medical Library, on which it has been based."

Volume two was published last month. Both volumes were issued by the University of Chicago Press.

Dr. Bloomfield replaced Professor C. D. O'Malley, who resigned as director of the historical collection last year after holding the post 11 years.

In his new post Dr. Bloomfield will direct selection of volumes to be added to the historical collection.

MAR 8 1960

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Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

EYE DISEASE RESEARCH TOOL AT STANFORD MEDICAL CENTER

Stanford University surgeons are using a beam of light five times as intense as sunlight to explore new frontiers in the treatment of eye diseases, the Division of Ophthalmology announced today.

The beam comes from a $13,500 Zeiss light coagulator purchased with part of a $51,000 grant from the National Institutes of Health. The investigators are Dr. Milton Flocks, assistant clinical professor of surgery (ophthalmology), and Dr. H. Christian Zweng, clinical instructor in surgery (ophthalmology).

There are only a few of the light coagulators in use in the United States, the researchers report, and they are used almost entirely for treatment, particularly in cases of retinal detachment. Two of them are located in San Francisco at the University of California Medical Center and at Children's Hospital.

The Stanford grant is the only one made so far for research into new uses of the machine. It will finance three years of research.

The coagulator produces an intense beam which can be focused to a point. Light comes from a xenon tube and is so strong it is only left on for a fraction of a second when aimed at an eye. The beam is aimed with a shield in the way to reduce intensity. The shield is removed momentarily during treatment.

Because the light will pass through transparent tissue and liquid, the beam has been used to treat defects at the back of the eye. For example, the intense light will burn out a tumor on the retina, the light-sensitive coating that lines the rear of the eye.

--more--

The beam has also been used to help patients whose retina has come loose from the tissue behind it, a condition called retinal detachment. In this case, scar tissue caused by the burn holds the retina in place.

The surgeons intend to experiment with methods of artificially coloring clear parts of the eye to see whether such ailments as glaucoma or cataracts can be treated with the coagulator. These normally uncolored parts would then be burned by the light.

Glaucoma, the major cause of blindness in adults, affects a million people in the United States, including 2 out of every 100 persons over 40 years of age. It is caused by imperfect drainage of internal fluid of the eye, apparently resulting from a clogged drainage canal.

If some way can be found to color the meshwork leading to the canal, the coagulator might be able to burn an opening to allow drainage. Surgery is now required to correct cases of glaucoma which cannot be successfully treated by medicine.

At the present time experiments are already under way on animals to determine whether the glaucoma treatment method may prove feasible.

Customary treatment for cataracts is surgical removal of the patient's lens. The doctors expect to investigate the possibility of making the lens dark enough to absorb the light, so it might be obliterated without the usual surgery.

The light coagulator was invented by Prof. Gerd Meyer-Schwickerath of Bonn, Germany. He was a visiting lecturer at Stanford Medical School a year ago when the school was still located in San Francisco.

Prof. Meyer-Schwickerath first got the idea for the device after seeing patients with eclipse retinitis, or retina burns sustained while watching an eclipse of the sun without looking through smoked glass.

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(Mailed March 1, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

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(Mailed March 1, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

NOTE TO EDITORS: Your reporters and photographers are invited to a press conference for Dr. Linden at 1 p.m. on Monday, May 2, 1960. The press conference will be held in the Faculty Room, located in the Dean's Office, Room M 121, Stanford Medical Center, Palo Alto.

SEX PSYCHOLOGY LECTURES TO COVER "ROMANCE OF AGING"

Maurice E. Linden, M.D, Director of the Division of Mental Health of the Department of Public Health, Philadelphia, Pennsylvania, will give the 1960 Jake Gimbel Lectures on Sex Psychology on Monday through Wednesday, May 2-4.

The lectures, co-sponsored by Stanford University and the University of California, will be delivered Monday through Wednesday at 4:15 p.m. in Cubberley Auditorium in the School of Education Building, Stanford University Campus.

Two lectures covering the same subjects will also be given Tuesday and Wednesday evenings at 8 in the main auditorium of the Medical Sciences Building, University of California Medical Center, Parnassus Avenue near Arguello Avenue, San Francisco.

Dr. Linden's general topic will be "Romance of Aging." He will discuss the psychology of sex with respect to the process of aging in the United States.

Dr. Linden, a graduate of the Medical School of the University of California, has spent many years of study and research in the fields of psychiatry, psychoanalysis, mental health, and aging. He has served as Program Director of the Gerontologic Study Center in Norristown State Hospital, Norristown, Pennsylvania.

--more--

The title of the first lecture to be delivered at Stanford will be "The Modern Family--Breeding Ground of Character Problems." The sub-title will be "A Study in Sexual Role-reversal."

Using a historical perspective, Dr. Linden will look at the development of character and sexual maturity in the modern family. He will illustrate the lecture by comparing and contrasting an ancient Roman family and the American family following the first Industrial Revolution.

The Tuesday lecture at Stanford will deal with the "Fate of the Instincts." Dr. Linden will discuss the human life cycle as it relates to personality development. He will conclude with a comparison of infancy and senility.

"Climax and Antielimax" will be the title of Dr. Linden's final lecture at Stanford. This lecture will point out the sources of disappointment, frustration, and psychic trauma which may lead to personality breakdown with aging.

The topics of the two lectures to be given in San Francisco are: "Age Through the Ages--A History of Intergenerational Conflict," and "Growing Up or Growing Down--Aging and the Unconscious Mainstream."

The lectureship was established under the will of Jake Gimbel, a philanthropist who died in 1943. Previous speakers have included such famous people as Margaret Mead and Alfred C. Kinsey.

Dr. Linden is a member of the Committee on Aging of the Group for the Advancement of Psychiatry and the Committee on Aging of the American Psychiatric Association.

He is assistant professor in psychiatry at the University of Pennsylvania Medical School and a staff member of the Functional Clinic of the University of Pennsylvania Hospital. Dr. Linden is the author of numerous scientific and popular articles in his field.

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(Mailed April 25, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

LECTURE ON JOINT AND MUSCLE FUNCTION SCHEDULED

Dr. Jack Joseph, a faculty member of Guy's Hospital Medical School, London, England, will speak on "Practical Aspects of Joint and Muscle Function in Posture and Athletics" at the Stanford Medical Center on Wednesday, April 27.

The lecture will be held at 7:30 p.m. in Room 112 of the Medical School Building. It will be sponsored by the Stanford Department of Anatomy.

His speech will emphasize the nontechnical phases of research into body mechanics and will be of interest to persons in the fields of physical education and physical therapy as well as orthopedics.

Dr. Joseph participated in the International Anatomical Congress recently held in New York. He will fulfill speaking engagements at Stanford and the University of California Medical School. At the University of California he will speak to the Biomechanics Research Group and members of the Department of Orthopedics who arranged for his trip to the west coast.

Lectures are also scheduled at the medical schools of University of Chicago and Yale University.

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(Mailed April 21, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: To P.M.'s, Wednesday, April 13, 1960 TELEPHONE DA 1-5310-11

NOTE TO EDITORS--The following is based on a scientific paper to be presented Wednesday morning, April 13, 1960, during the 44th annual meeting of the Federation of American Societies for Experimental Biology in Chicago. Release time is set to follow delivery of the paper.

STANFORD SCIENTISTS REPORT PROGRESS ON HEREDITY STUDIES

CHICAGO--Two Stanford University School of Medicine researchers reported today they are making progress toward determining the "code" of the very complex chemical which controls the heredity of animals, plants, bacteria and some viruses.

The chemical is deoxyribonucleic acid, known as DNA. Most scientists now believe that the sequence of just four materials within DNA makes the difference between individuals or between species. One DNA molecule is thousands of units long.

Dr. John Josse, who holds a postdoctoral fellowship from the National Foundation, delivered a paper on the research this morning at the 44th annual meeting of the Federation of American Societies for Experimental Biology. He is co-author of the paper with Dr. Arthur Kornberg, head of the Department of Biochemistry at Stanford. Dr. Kornberg shared the 1959 Nobel Prize in medicine.

While Drs. Josse and Kornberg could not study the sequence of the four materials in DNA, they did devise a method of studying pairs to find out the frequency with which one material follows another.

Explaining the work in lay terms, Josse compared the materials--adenine, guanine, thymine and cytosine--with cars in a train. It is as if the scientists were able to break the couplings between every other car to find out how often a box car follows a flat car, a tank car follows a gondola, etc.

--more--

The work shows that each DNA studied has a different frequency of pair sequences. In other words, the "code" chemicals aren't put together in a random way but each DNA has its own unique pattern.

There is no method now available for learning the complete sequence of a given DNA. While the new research by no means represents a complete sequence analysis of DNA, Dr. Josse said it is "a foot in the door" toward such understanding.

The researchers conducted detailed studies on 14 different types of DNA. Their samples were obtained from organisms ranging from tiny bacteria to a mammal (the calf).

Their technique involved making DNA in the laboratory and observing the way chemicals were incorporated into it. Complicated chemical methods, including tagging with a radioactive isotope and breaking down the product with a proper natural catalyst, were used to study the reaction.

Dr. Josse said the findings are consistent with previous assumptions about the way DNA is formed.

He stressed that there is still a great deal of research to be done before real understanding of the code these four materials represent is gained. "But this is a foot in the door in learning how these materials in the chain tend to follow one another."

Learning the hereditary code could have important significance in the future for understanding hereditary diseases.

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(Mailed April 8, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

STANFORD CLINICS RESUME SERVICES FOR HARD OF HEARING

PALO ALTO--The Stanford University Speech and Hearing Clinic next week will resume group instruction in lip reading for adults who are hard of hearing.

The program is run throughout the year except during academic vacation periods, according to Dr. Virgil A. Anderson, director of the clinic.

Lip reading classes are scheduled Mondays from 8:00 to 9:00 p.m., starting April 18.

The clinic is located in Edwards Building of the Stanford Medical Center, 300 Pasteur Drive, Palo Alto. Fees are nominal--$10 for the quarter.

All interested persons are invited to attend, Dr. Anderson said. The program allows for some individual therapy if needed.

The lip reading class is under the supervision of Miss M. Jo Eeckhout (cq); Miss Margaret Meeker is the therapist who teaches the class.

Further information may be obtained by calling the clinic at DAvenport 1-1200, extension 5416.

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(Mailed April 12, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

STANFORD STUDENT NURSES WILL DONATE A DAY OF HOSPITAL SERVICE

Young faces and new white uniforms will be seen in the medical and surgical corridors of the Palo Alto-Stanford Hospital on June 2. That day graduating student nurses will don the uniform of a registered nurse for the first time and donate a day of service to the hospital.

The student nurses have chosen to work an extra day without pay "to show their appreciation for the cooperation and support which the hospital nursing staff has given them," Miss Jane Knox, Instructor in Nursing, said. Students work on the hospital floors seven quarters during the course of their training at Stanford.

Early in the morning the students will meet for breakfast in the hospital dining room. They will report for duty at 9 a.m. in the surgical and medical areas and in the intensive care unit where they have been assigned.

The 1960 class will be the first to graduate under the new five-year curriculum and the first to express its appreciation to the nursing staff in this way. Sixteen of the 24 graduating students will participate in the event.

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(Mailed May 31, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffet, DA 1-5310

STANFORD MEDICAL SCHOOL NAMES DEPARTMENT OF MEDICINE EXECUTIVE

Dr. Halsted R. Holman, 35, today (MAY 19) was named Guggenhime Professor and Executive of the Department of Medicine at Stanford University School of Medicine.

His appointment was approved by the University trustees at their meeting in San Francisco. It is effective July 1.

Holman is now on the staff of the Rockefeller Institute for Medical Research in New York City.

"Dr. Holman typifies the modern physician, well grounded in natural science and clinical medicine," Dean Robert H. Alway of the School of Medicine said. "He clearly understands the art of medicine--concern for patient care and competence in the application of medical science to everyday problems--as well as the need for excellence in the basic sciences."

Holman succeeds Dr. David A. Rytand, Bloomfield Professor of Medicine, as head of the department. Dr. Rytand has been departmental executive since 1954 but asked to be relieved of his administrative duties two years ago. He remains on the faculty as Bloomfield Professor.

The Stanford appointee is the first Guggenhime Professor. The Berthold and Belle N. Guggenhime Professorship was established with a bequest from the estate of the late Mrs. Guggenhime. The Guggenhimes' nephew, Richard E. Guggenhime of San Francisco, is a member of the Stanford University Board of Trustees.

(more)

Dr. Holman has a Stanford background. His parents are Dr. Emile F. Holman, Emeritus Professor of Surgery, and Dr. Ann Purdy (Mrs. Holman), Emeritus Clinical Professor of Pediatrics, who live in San Francisco.

Dr. Emile Holman was on the Stanford faculty for 30 years before his retirement in 1955. He was Executive of the Department of Surgery from 1926 to 1942 and from 1945 to 1955.

Following study at Stanford and U.C.L.A., Dr. Holman entered Yale University School of Medicine. He received his M.D. from that university in 1949.

In 1949-50 he was a National Research Council Fellow in Biochemistry at Carlsberg, Copenhagen, with Dr. Kaj Linderstrom-Lang. He received his clinical training at the Montefiore Hospital in New York City. He has been at the Rockefeller Institute since 1955.

Dr. Holman's major fields of interest are immunology and the rheumatic diseases. He is a member of Alpha Omega Alpha, the American Society for Clinical Investigation, Sigma Xi, the Harvey Society and the American Rheumatism Society.

Dr. Holman is married and has three children. His wife, Barbara, is a graduate in nursing from Yale and has a Ph.D. in public health from that university.

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(Mailed May 19, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

AUSTRALIAN BIOLOGIST TO DELIVER HERZSTEIN LECTURES

Eminent Australian biologist Sir Macfarlane Burnet, M.D., Ph.D., F.R.S., will speak on the "Problems of Immunity" at the seventeenth course of Herzstein Medical Lectures, sponsored by the medical schools of Stanford University and University of California.

The lectures will be held on May 24, 26-27 at 8:15 p.m. in the auditorium of the San Francisco County Medical Society, 250 Masonic Avenue, San Francisco.

Sir Macfarlane is Director of the Walter and Eliza Hall Institute of Medical Research in Melbourne and Professor of Experimental Medicine at the University of Melbourne. He has recently written three textbooks on immunity, which were published by the Cambridge University Press.

His research has dealt with the general field of infectious disease, but since 1940 has been concentrated on influenza and the influenza viruses. In 1958 he received the Order of Merit from Queen Elizabeth and this year the Copley Medal from the Royal Society for his contributions to virus research and immunology.

Lectures scheduled are: Tuesday, May 24, "Clonal Selection Theory After Three Years;" Thursday, May 26, "The Simonsen Phenomenon as a Laboratory Model of Autoimmune Disease," and Friday, May 27, "Autoimmune Disease in Man--Some Theoretical Considerations."

The lectures will be open to the public. Members of the medical profession, medical students, and other interested persons are invited to attend.

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(Mailed May 17, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

NURSES HOLD WORKSHOP ON PERSONNEL GUIDANCE

Stanford professor Arthur P. Coladarci and management expert Bert Smith will be featured speakers at the first workshop for head nurses and supervisors at Palo Alto-Stanford Hospital Center this week.

The purpose of the workshop is to provide better patient care by training professional nurses in the guidance of nursing aides, orderlies, nursing clerks, and Licensed Vocational Nurses--personnel who assist with much of the patient care in the hospital. Sessions will be held on both Thursday and Friday.

According to Miss Marjorie Keys, Director of Nursing Service Education and Training, the workshop is also aimed at educating professional nurses so they will "get satisfaction from personnel guidance as well as bedside nursing."

With the new concept of team nursing and the recent shortage of registered nurses, the bedside nurse of yesterday is rapidly becoming a professional leader in nursing today, she said.

The workshop will be given by the Department of Nursing Service. Mrs. Darlene Lutts, Director of Nursing Service, will open and close the conference.

Dr. Coladarci, Professor of Education and Psychology, will speak to the nurses Thursday afternoon. He will discuss the importance of a clear system of communication between professional nurses and the auxiliary personnel.

--more--

Smith, of C.H.&D. Sugar Refining Company and a visiting lecturer at Contra Costa College, will address the group Friday morning on "The Appraisal Process: Methods and Tools Utilized By Management". Also speaking to the nurses will be Dr. E. Dwight Barnett, M.D., Administrator of the Hospital Center. His topic will be "Role of the Nurse as a Professional Person".

A panel of physicians will conclude the workshop on Friday afternoon. Taking part in the final session on "What We Expect of the Professional Nurse" will be Dr. Barnett, Dr. A. S. Felsovanyi, Palo Alto Medical Staff; Dr. E. W. Fredell, Chief of Palo Alto Medical Staff, and Dr. Andrew Hunt, Director of the Stanford Clinics. Moderator will be Miss Virginia Brown, Associate Administrator.

Professional nurses who will participate in the sessions are: Mrs. Clare Mynderse, Miss Lois Williams, Miss Barbara Webber, Mrs. Esther Grow, Miss Jane Knox, Miss Doris Moberg, Mrs. Mary Michel, and Mrs. Patricia Fogelstrom.

Taking part in a panel discussion on "The Appraisal Process Used By Head Nurses" will be Miss Jean Butler, Mrs. Doris Fau, Miss Virginia Booth, and Miss Rachel Kopp.

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(Mailed May 9, 1960)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: UPON RECEIPT TELEPHONE DA 1-5310-11

"ON LOCATION" CAREERS CONFERENCE SLATED

Palo Alto- Stanford Hospital Center will sponsor a Medical Careers Conference on Wednesday, May 11, at which local teenagers will have a chance to see medical specialists at work "on location".

The conference will be the major event given by the Center in conjunction with Hospital Week, May 8-14. Open to all local high school students, its purpose will be to interest young people in medical careers. It will be held from 3:30 p.m. to 5:30 in the Center.

The hospital lobby will be the starting place for a series of six tours to six different hospital departments. Staff of the six departments will demonstrate their jobs for the teenagers in their laboratories and offices.

Taking part in the demonstrations will be a laboratory technician, dietitians, a physician, speech and hearing specialists, physical and occupational therapists, and nurses.

Chief technician in the clinical laboratory, Miss Ellen Charlton, will show the groups the setup for blood typing and cross matching patients receiving transfusions. She will also compare normal and abnormal blood smears.

Dietitians, Helen Anderson, Joan Nevins, and Esther Sippel, will show various types of meals prepared for patients. Also scheduled is a tour of the kitchen with its 80 gallon kettles and walk-in refrigerator which are necessary for the preparation of 2,400 meals a day.

--more--

Students will get a chance to participate in hearing evaluation tests in the Speech and Hearing Clinic. Physical therapist Catharine Graham and occupational therapist Elizabeth Harper will demonstrate equipment used in the treatment of handicapped patients.

Nurses, Miss Marjorie Keys, Mrs. Esther Grow, and Mrs. Darlene Lutts, will use a model as patient to show how the new concept of team nursing operates in the Hospital Center. Results from a physical examination will be shown and explained by a physician.

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(Mailed May 3, 1960)

UPON RECEIPT

Seven employees of the Palo Alto-Stanford Hospital Center have received awards for fifteen years of hospital employment, and one employee has received an award for thirty years' service.

Gail S. Reeves was awarded a gold pin for thirty years of work in the Stanford Hospital in San Francisco and the Hospital Center. She was honored for her work as a bacteriologist in the Infectious Diseases Department.

Of the seven women receiving silver pins for fifteen years of service, three have served in the Palo Alto Hospital and then the Hospital Center. They are Marguerite K. Brickner, R.N.; Johanna Motmans, R.N., and Irene T. Springer, Nursing Service.

Also receiving silver pins for fifteen years were Helen H. Anderson, Ruth E. Cline, and Esther L. Sippel, all of the Dietary Department, and Imogene J. Robertson, Infectious Diseases Department. These women were employed by the Stanford Hospital in San Francisco and received credit for their experience on transferring to the Hospital Center.

The annual Gold and Silver Award Banquet was held recently in the Center. Speakers were Dr. E. W. Fredell, Chief of Staff; William R. Hewlett, President of the Board of Hospital Directors, and Helen Anderson, Director of Dietetics.

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P.A. Times
S.J. News

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

STANFORD PROFESSOR AND STUDENTS TO STUDY TROPICAL DISEASES IN CENTRAL AMERICA

Dr. Quentin M. Geiman, professor of preventive medicine, and two students from the Stanford University School of Medicine will leave June 30 to study problems in tropical health for two months in Central America.

The students are Ali Abdul-Ilah Seif of Yemen and Kuo-Ping Yu of the Philippines. They will finish medical school next year. Both young men plan to return to their native countries to work after graduation.

Dr. Geiman and the students will assist in caring for patients at hospitals in Panama, Costa Rica and El Salvador. They will also conduct field studies of certain tropical diseases.

Their trip is financed by a training grant in tropical health from the U.S. Public Health Service. This training program has been in progress since October, 1959. Since January it has been conducted with the help of Dr. Charles B. Beal, another staff member of the Department of Preventive Medicine.

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(Mailed June 28, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

EDUCATIONAL FUND TO BE ESTABLISHED IN HONOR OF DR. E. DWIGHT BARNETT

The administrative staff of the Palo Alto-Stanford Hospital Center has donated $500 as the first step toward establishing the E. Dwight Barnett Educational Endowment Fund at the Hospital, it was announced today.

The proposed purpose of the fund will be to help defray Hospital expenses in connection with medical-related education and training for employees. It is hoped this will stimulate public interest and participation in supporting such undertakings.

The fund will honor Dr. E. Dwight Barnett, who resigned last week as administrator of the Hospital.

In advising Dr. Barnett of the plans for the fund, William R. Hewlett, president of the Hospital Center's board of directors, said it was being established "in gratitude for your tireless devotion as administrator...; to acknowledge your outstanding contributions in medical and paramedical education; and as a tribute to the visions you hold of a university-community medical center devoted to the highest standards of patient care and medical education."

Initially, income from the fund may be used for achievement awards, employee training and similar purposes. As sufficient funds become available, income could be used to cover some of the Hospital's expenses in maintaining intern and resident programs, not only in medicine but in other fields such as dietary service, hospital administration and the like.

Officials said that once the fund is legally created they hope the trustees of the fund will solicit contributions so that there will eventually be an endowment of more than a million dollars.

Dr. Barnett is a nationally-recognized authority in administrative medicine. Before he became administrator of the Hospital Center in 1958 he was professor of administrative medicine at Columbia University's School of Public Health and Administrative Medicine in New York City. He also is a member of many advisory and professional organizations in the field.

(Mailed June 16, 1960) ####

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

STANFORD SCHOOL OF MEDICINE HONORS TOP STUDENTS

Fifteen students in the Stanford University School of Medicine, Stanford, California, were honored for their outstanding work during this year.

Six students in the class of 1960 received awards at the annual Senior-Faculty Dinner in June. Richard R. Babb of Wilmington, Ohio, won the Hopkins Award of $100 for outstanding work in dermatology and was one of five students to win the Mosby Scholarship Book Award of $30.

Also awarded the Mosby prize were 1960 graduates, Cooley Butler, II, of Los Angeles; Charles Comfort of San Mateo, Calif., Melvin D. Flamm, Jr., of San Francisco, and Gregor M. Wilkinson of Pacific Palisades, Calif.

Joseph Van De Water of Ray, Ariz., received the Robert T. Legge Award of a book for the student showing the greatest interest and accomplishment in the field of occupational health.

Palo Alto-Stanford Hospital intern Gary R. Katz, M.D., of Hollywood won the Julian Wolfsohn Award of $100 for his work in internal medicine and neurology, and Victor R. Lavis of Los Angeles received the Roche Award as the outstanding student in the second year class.

Several students were named to Alpha Omega Alpha, national honorary medical fraternity, this year. Members from the class of 1960 are Walter F. Alexander, Sacramento, Calif.; Roger V. Cadol, Menlo Park, Calif.; Keith E. Cohn, San Francisco; Lowell M. Hill, Rolling Hills, Calif.; John M. Palmer, Berkeley, Calif.; Babb, Butler, Flamm, and Wilkinson.

--more--

Elected to AOA this spring were Donald M. Mason, Mankato, Minn., and John M. Simpson, Jr., Salt Lake City, Utah, members of the class of 1961.

EDITORS: Parents' names and addresses follow:

Walter F. Alexander, Jr., Mr. and Mrs. Walter F. Alexander, 912-46th St., SACRAMENTO, CALIF.

Richard R. Babb, Mr. and Mrs. Kroger Babb, 708 N. Walnut, WILMINGTON, OHIO.

Cooley Butler, II, Mr. and Mrs. Wallace P. Butler, 1426 N. Doheny Dr., LOS ANGELES.

Roger V. Cadol, Mr. and Mrs. W. A. Tye, 1041 Sonoma Ave., MENLO PARK, CALIF.

Keith E. Cohn, Dr. and Mrs. A.G. Cohn, 768 Funston, SAN FRANCISCO.

Charles Comfort, Mrs. M.J. Fuendeling, 585 Chelmsford Rd., SAN MATEO, CALIF.

Melvin D. Flamm, Mr. and Mrs. Melvin D. Flamm, 3135 Stockbridge Ave., LOS ANGELES.

Gary R. Katz, Mr. and Mrs. Frank M. Lax, 1419 N. Havenhurst Dr., LOS ANGELES.

Victor R. Lavis, Mr. and Mrs. Salvo Lavis, 345 S. Gramercy Place, LOS ANGELES.

John M. Palmer, Dr. and Mrs. B.M. Palmer, 100 Tunnel Rd., BERKELEY, CALIF.

Lowell M. Hill, Dr. and Mrs. Lowell R. Hill, 21 Surrey Lane, ROLLING HILLS, CALIF.

Donald M. Mason, Mr. and Mrs. Milton D. Mason, 406 Warren St., MANKATO, MINN.

John M. Simpson, Mr. and Mrs. Eric Brooks, 1363 S. 4th East, SALT LAKE CITY, UTAH.

Joseph Van De Water, Mr. and Mrs. J.C. Van De Water, Box 634, RAY, ARIZ.

Gregor M. Wilkinson, Mr. and Mrs. W.R. Wilkinson, 519 Fronteea Dr., PACIFIC PALISADES, CALIF.

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(Mailed June 16, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

MOTHER OF FIVE TO RECEIVE M.D. DEGREE

Proving that a woman can be a professional in the fields of both medicine and maternity, Joan Altekruse will receive her M.D. degree from Stanford on Sunday (JUNE 12), just three months before her sixth child is due to be born.

Mrs. Altekruse has gone through medical school in four straight years although one of her five children was born in 1956, two weeks before she began, and one in 1958 during medical school.

Nor is she the only medical student in the family. Her husband, Ernest, will begin his second year at Stanford University School of Medicine this fall.

Now that Joan has earned her degree, she won't rest on her laurels, however. She plans to intern at the U.S. Public Health Service Hospital in San Francisco for a year beginning July 1. She interned two weeks during the spring so she can take time off when the baby arrives in September.

While Joan has been studying, her husband has followed a rigorous military and academic schedule himself. He resigned his commission as a major in the Marine Corps last year after 10 years in the service. In the Marines he took night school courses in pre-medical subjects. During the next three years Ernie hopes to take advantage of the free time in the medical curriculum at Stanford to study electronics as well as medical subjects.

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Good teamwork and an early bedtime for the children enabled Joan to tackle her two jobs with equal success. Sundown study sessions were held at the dining room table after the dishes were cleared off and the children were in bed. In addition, they have had regular household help.

The financial burden of tuition and books for both parents was eased by a Hewlett-Packard fellowship Ernie won last year and which was renewed for next year. In previous years the family found it possible "to live on and save from the Marine salary."

The Altekruses both entered Stanford last fall. Joan transferred from George Washington University Medical School, where she studied for three years when her husband was stationed overseas and in Washington, D.C.

"Ernie wanted to study at Stanford because of the five-year curriculum which allows medical students to take outside courses," Joan said. His interest in medicine grew out of work in medical electronics with the Marine Corps.

In 1956 he received an M.A. in electronics from the U.S. Naval Post-graduate School in Monterey. He was graduated from the U.S. Coast Guard Academy in 1949.

During the year the family lived in Monterey, Joan took graduate work at Stanford's Hopkins Marine Station in Pacific Grove. She met Ernie in 1949, the year she was graduated from Vassar College, when they were both second lieutenants in the Marine Corps. They were married in 1950.

The student-parents foresee an easier schedule next year with five of their soon-to-be-six children in school. Philip, 6; Clifford, 5, and Lisa, 4, will attend the new Escondido Village Elementary School in the fall, while Jan, 3, and Ernest, Jr., 1, will be in Escondido Village Nursery School. All the children have birthdays this summer.

The Altekruses live at 5D Escondido Village, Stanford.

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(Mailed June 8, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

EYE BANK NOW OPEN AT STANFORD MEDICAL CENTER

The Stanford Eye Bank is now in operation at Stanford Medical Center, Dr. Frank C. Winter, acting head of the Division of Ophthalmology, announced today. The bank was previously located in San Francisco when the Stanford University School of Medicine was there.

The bank does not store eyes except for the short period before they are used in operations. It is really a file of more than 1,200 names and addresses of people who have offered to donate their eyes when they die.

The bank does not charge patients or doctors for its services, nor are eyes bought or sold, Dr. Winter said. Contributions support the bank.

Eyes must be removed within six hours of a donor's death. They must be used for a corneal transplant within 48 hours of death. The cornea is the transparent front covering of the eyeball. Transplants are frequently used to help patients with cloudy, scarred or distorted corneas.

When a donor dies his eyes are removed and brought to the bank or to any other hospital where the operation may be performed. A patient needing a transplant is notified and goes to the hospital for surgery.

In the past the bank has supplied corneas for patients throughout the Bay Area and Northern California as far south as Salinas and Monterey.

The bank's files were divided between San Francisco-Stanford Hospital and Palo Alto-Stanford Hospital when the medical school moved last fall, the latter taking all names south of Daly City. The Presbyterian Medical Center in San Francisco is now operating the bank in that city.

Prospective donors may get additional information by writing the Stanford Eye Bank, Stanford Medical Center, 300 Pasteur Dr., Palo Alto, or by calling DAvenport 1-1200, extension 5517.

JUL 28 1960

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

SIX NEW FACULTY MEMBERS NAMED BY MEDICAL SCHOOL

The chief of anesthesia and the director of the Rehabilitation Services are among six new appointments to the faculty of Stanford University School of Medicine. The appointments will be effective for the next academic year.

Dr. John P. Bunker will be professor and chief of anesthesia. He is now on the staff of the Massachusetts General Hospital and assistant clinical professor of anesthesia at Harvard Medical School.

Dr. Bunker was certified by the American Board of Anesthesiology in 1953. A Harvard graduate, he received his A.B. degree in 1942 and his M.D. degree in 1945 from Harvard.

Dr. Daniel J. Feldman was appointed director of the Rehabilitation Services and associate professor of medicine. He is now associate professor at New York University School of Medicine in the Institute of Physical Medicine and Rehabilitation.

Dr. Feldman was trained in internal medicine and physical medicine and is board accredited in both specialties. A graduate of Columbia University in liberal arts, he earned an M.D. degree in 1938 from New York University School of Medicine.

Dr. Feldman will replace Dr. Rodney R. Beard as director of the Rehabilitation Services. Dr. Beard, who has directed the services since 1955, will continue as professor and executive of the Department of Preventive Medicine.

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Other new appointments include:

Dr. J. Weldon Bellville will be associate professor of anesthesia. Dr. Bellville has been assistant professor at Cornell University Medical College since 1959. A research fellow for Sloan-Kettering Institute in 1955-56, he returned to be an assistant in its division of experimental surgery in 1958.

Dr. Herbert C. Schwartz was appointed an assistant professor of pediatrics. He has been research instructor in medicine (hematology) at the University of Utah since 1958. He is a graduate of Yale University and New York State University College of Medicine in Brooklyn, where in 1952 he won his M.D. degree.

Also named assistant professors were Dr. R. Bruce Jessup and Dr. Gustav J. Nossal in pediatrics and genetics respectively. Dr. Jessup has been acting assistant professor at Stanford and Dr. Nossal a research associate.

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(Mailed July 26, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:
Samuel Moffat, DA 1-5310

STANFORD SKIN SPECIALIST NAMED VISITING PROFESSOR IN VENEZUELA

Dr. Eugene M. Farber, professor and head of the dermatology division of Stanford University School of Medicine, is in Caracas, Venezuela, to serve as visiting professor at Central University of Venezuela.

During his three-week stay in Caracas Dr. Farber will help set up modern graduate training and research programs in dermatology. That is the medical specialty concerned with skin diseases.

Dr. Farber will give three lectures to medical groups in Caracas and will also make field trips to villages and to care centers for leprosy patients. He arrived in Caracas July 18.

The Stanford professor is an internationally recognized authority on skin ailments. At present he is directing an extensive multi-discipli attack on psoriasis, the disfiguring skin disease which afflicts between 3 and 4 million Americans.

Mrs. Farber and two of their four children accompanied Dr. Farber to Venezuela. The Farbers live at 167 Ramoso Rd., Portola Valley.

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(Mailed July 19, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NEW HOUSE STAFF ARRIVE AT PALO ALTO-STANFORD HOSPITAL CENTER

Seventy-two new house officers and four new dietary interns are now on duty at Palo Alto-Stanford Hospital Center, according to David Starkweather, associate administrator for professional and outpatient services.

The house officer category includes all the doctors who are interns, residents, trainees and fellows. They assist in the care of all teaching patients in the Hospital and in the Stanford Clinics. Some are also assigned to the emergency, operating and delivery rooms, where they serve both teaching and private patients.

All told the house staff for the year ending next July totals 145, although some of the doctors will work part of the time at other hospitals associated with Stanford. These other hospitals include the Menlo Park and Palo Alto Veterans Administration Hospitals, San Mateo Community Hospital, Santa Clara County Hospital in San Jose, The Stanford Convalescent Home and Presbyterian Hospital and Medical Center in San Francisco.

All of the young doctors care for patients but some are called trainees or fellows because they have received training grants or fellowships. The Hospital pays the salary of interns and residents who work there.

The dietary interns are young women who have completed their undergraduate training. They will work in the dietary department of the Hospital for a year getting practical experience planning, preparing and serving regular and special therapeutic meals. Seven more are scheduled to arrive in September.

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(Mailed July 19, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

WORKSHOP ON HEARING PROBLEMS TO BE HELD AT STANFORD

The physiology of hearing problems and rehabilitation of the hard of hearing is the topic of a workshop to be held at Stanford University this month. It will be co-sponsored by the Division of Speech Pathology and Audiology and the Hearing Aid Industry Conference, an organization of leading manufacturers of hearing aids.

About 75 hearing aid dealers from the western states, Hawaii and Canada are expected to attend sessions, which will open Sunday, July 17, on the Stanford campus and will run for four days through July 20. Some of the speakers at the workshop will participate in the TV program, Doctors News Conference, KTVU, Channel 2, on Tuesday evening, July 19, at 8.

The workshop is one of three co-sponsored this year by universities and the HAIC. Its aim is to train hearing aid dealers to do a better job of assisting the estimated 5,000,000 Americans with problems that can be corrected with hearing aids. Experts in the field of audiology lectured for the group last June under the auspices of Northwestern University and the HAIC. Another workshop is slated for September at the University of Pittsburgh.

Participants in the Stanford workshop will include: workshop chairman, Hayes A. Newby, Ph.D., Professor of Speech Pathology and Audiology, Stanford School of Medicine; Vincent Salmon, Ph.D., Manager, Sonics Section, Stanford Research Institute; Victor Goodhill, M.D., Clinical Professor of Surgery, (Otology), University of Southern California School of Medicine; S. Richard Silverman, Ph.D., Director, Central Institute for the Deaf, and Professor

--more--

of Audiology, Washington University, St. Louis, Mo..

Other speakers will be Leo G. Doerfler, Ph.D., Professor and Director, Department of Audiology, University of Pittsburgh School of Medicine; Kenneth O. Johnson, Ph.D., Executive Secretary, American Speech and Hearing Association, Washington, D.C., and Raymond T. Carhart, Ph.D., Professor of Audiology, Northwestern University.

Dr. Goodhill, Dr. Doerfler, and Dr. Silverman will be panelists on Doctors News Conference, with Dr. Newby acting as moderator.

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(Mailed July 12, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NOTE TO EDITORS: The following news story is based on a scientific paper which will be delivered at the meeting of the American Association of Blood Banks in San Francisco. The release time is set to follow delivery of the paper.

FOR RELEASE to P.M. newspapers of Thursday, August 25, 1960.

Population studies based on findings by a Stanford University School of Medicine investigator have provided scientists with a new tool for research into human heredity.

The results, according to Research Associate Rose Payne of Stanford, show that white blood cell factors in humans are genetically determined.

There are now available only a limited number of normal genetic "markers" suitable for studying human heredity. These include the red cell blood groups, (ABO, Rh, etc.) which have been extensively used. Many studies in the past have depended upon abnormal human conditions.

The results were reported today by Dr. Payne and Dr. Emanuel Hackel, Associate Professor of Natural Science at Michigan State University. Dr. Hackel read their joint paper at the annual meeting of the American Association of Blood Banks in San Francisco.

The study was based on analysis of white blood cell factors in 53 families, they said. Samples from the families were tested with up to 20 types of blood serum which are known to have antibodies to the cells, called leukocytes.

This type of antibody was discovered eight years ago among patients who had received a large number of blood transfusions. These antibodies are produced as a result of exposure to leukocytes of different types than the type an individual is born with.

--more--

Since that time Dr. Payne has found many more examples of such antibody production during pregnancy. If a mother and father have white cells of different types and the child inherits the father's type, the baby may stimulate antibody formation in the same way an Rh-positive baby will stimulate them in an Rh-negative mother.

Subsequent transfusions to individuals having leukocyte antibodies may induce a reaction of chills and fever. This reaction is similar to that encountered in cases of red cell incompatibility, though much less severe.

Dr. Payne's tests identified the presence of various leukocyte factors in family members. Dr. Hackel, a geneticist, then studied the incidence of the types among the families to establish their hereditary nature.

"The population studies show there is a definite pattern of inheritance," the investigators reported. They said it is too early to know the exact number of leukocyte types in humans.

Eventually they anticipate that people may be typed for white blood cells as they now are for red cells so that the reaction to transfusion can be avoided. Sensitized patients today are given transfusions which have the leukocytes removed.

Drs. Payne and Hackel believe, however, the most important effect of the present report will be to give scientists additional means for studying how characters are passed from one generation to the next.

This research is supported by grants from the National Institutes of Health and the American Cancer Society.

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(Mailed August 23, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, DA 1-5310

NOTE TO EDITORS: The following news story is based on a scientific paper which will be delivered at the meeting of the American Physiological Society at Stanford. The release time is set to follow delivery of the paper.

FOR RELEASE to A.M. newspapers of Thursday, August 25, 1960

Two investigators at the Stanford University School of Medicine have found the explanation for the severe diarrhea which is the major cause of death in cholera patients.

The husband-and-wife team of Geraldine and Frederick Fuhrman reported at the American Physiological Society meeting at Stanford yesterday that the toxin given off by the cholera organism inhibits the absorption of salt by the intestine.

This largely prevents the absortion of water, since the water is taken up only together with salt. Accordingly, water accumulates in the intestines and diarrhea occurs.

Until now, Dr. and Mrs. Fuhrman said, nobody knew why cholera patients get diarrhea. The tremendous loss of fluid from the body results in dehydration which frequently leads to death.

Cholera has not been reported in the western hemisphere since the 19th century, but it is still a major health problem in Asia. An epidemic was reported in West Pakistan earlier this month.

The disease claims tens of thousands annually in Asia and is a menace to other parts of the world. In 1947 Egypt experienced a cholera epidemic, although the disease had disappeared there after 1919.

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FILE COPY

Mrs. Fuhrman is a research associate in the Basic Medical Sciences Laboratories. Her husband is professor and director of the laboratories.

Professor Fuhrman said that he does not foresee any application of the findings in prevention of the disease. However, he pointed out that knowledge of the happenings in the course of a disease is valuable in finding ways of preventing them.

There is at present no satisfactory specific treatment for cholera, although salt solution is fed into patient's veins to replace water and salt. This treatment does reduce the death rate.

The Fuhrmans made their discovery by measuring the flow of charged particles of sodium from salt solution through a piece of frog skin and through the frog's stomach. The sodium was a radioactive isotope so its presence could be detected after it had passed through the tissue.

When the cholera toxin, the poison given off by the micro-organism which causes the disease, was put into the solution, the passage of sodium was cut to almost zero.

Frog skin was used because this tissue moves salts and water in a manner very similar to intestine, but is a simpler tissue.

Mrs. Fuhrman said the findings are clearly applicable to the action of the cholera toxin in human intestines, as well as to the action of many other toxins causing diarrhea.

The investigators are now studying the cholera toxin to determine what part of it is the active agent in the process.

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(Mailed August 23, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

AUG 11 1960

MAJOR SCIENCE MEETING SET AT STANFORD MEDICAL CENTER

Stanford University and the University of California are joint hosts for more than 700 scientists who are expected to attend the 12th annual meeting of the American Physiological Society at Stanford Medical Center August 23, 24 and 26.

Sessions will be held at the University of California Medical Center in San Francisco on August 25, according to Stanford Professor Jefferson M. Crismon, co-chairman of the steering committee.

A total of 360 papers will be given by investigators from 36 states and 7 foreign countries. The Society is the major professional organization of physiologists in this country.

Physiology is the science that deals with the functions of living organisms. It is concerned with what the parts of animals and plants do and how they do it, as contrasted with anatomy, the study of the structure of organisms.

The meeting is essentially concerned with basic investigations which are aimed at finding new facts, whether or not these have possible practical applications.

However, some of the findings to be reported shed light on human ailments and problems. Reports of this sort deal with new information about the operation of the heart, the effects of smoking, the effects of acceleration as in space travel, and other subjects.

The research papers will be presented at Stanford August 24 and 26. On August 23 there will be a refresher course. Sessions will be held at the Medical Center, in the Physics Lecture Hall, the Anatomy Lecture Room and Schultz Auditorium.

At the UC Medical Center Dr. Carl W. Gottschalk of the University of North Carolina will deliver the fifth annual Bowditch lecture on "Micropuncture Studies of Tubular Function in the Mammalian Kidney." Scientific symposia will also be held there the morning of August 25.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, DA 1-5310

MEMO TO SCIENCE WRITERS, CITY EDITORS AND NEWS EDITORS

Mrs. Judith G. Pool of 3334 Clay Street, San Francisco (Home phone JO 7-0586), a research associate in medicine at the Stanford University School of Medicine, has prepared a display for the meeting of the American Association of Blood Banks in San Francisco August 21-26.

The display deals with the preservation of two anticoagulant factors in stored blood which are essential if the blood is used for patients who are bleeding or have coagulation problems.

The display is entitled "Preservation of Antihemophilic Globulin (AHG) and Proaccelerin in Stored Blood." It is based on research by Dr. Pool and by Dr. Samuel Rapaport of the University of Southern California School of Medicine. The display will be set up at the Jack Tar Hotel this weekend.

Dr. Pool said her recommendations for processing blood to preserve the two factors are important for all blood banks, since any bank may have to supply blood for a patient with hemophilia, the so called "bleeder's disease."

Her four basic recommendations are as follows: There should be (1) efficient mixing with anticoagulant when the blood is first collected; (2) quick separation of plasma from whole blood; (3) processing at low temperatures at all times; and (4) quick freezing after separation.

She also said that it is not advisable to store the blood for more than three months, which is about the usual length of storage.

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(Mailed August 17, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Susan Roberts DA 1-5310

"ON-THE-JOB EVALUATION SET UP FOR REHABILITATION PATIENTS

Several weeks ago a 45-year-old woman went to work in the Palo Alto-Stanford Hospital Center gift shop, which is customarily staffed by members of the Hospital Center Auxiliary.

But, this woman was not a member of the Auxiliary. She was a cerebral palsy patient who, because of her handicap, had never worked before in her life. The motions of waiting on customers were difficult for her and she was afraid that customers would leave the counter because she could not serve them swiftly enough.

Today the patient, sponsored by the State Vocational Rehabilitation Service, is getting further training in the Goodwill Industries' store in San Jose. She was able to tackle the job of clerking in the Hospital Center and the state service decided that the woman was not incapable of working as had been supposed earlier.

This woman is one of eight patients who have taken four-day "jobs" in the Stanford Medical Center since spring under a new program of the Vocational Services Division of the School of Medicine's Rehabilitation Services. The program gives handicapped persons a chance to test their abilities in actual working situations as a preliminary test before they face the pressures of working in a salaried job.

The program is aimed at further evaluating a rehabilitation patient's ability to adapt to a job. As in the case of the woman above it may give patients the confidence to try to find work which they can handle. It may also save some patients from undertaking jobs when they are physically or emotionally unable to handle the work.

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Directed by Martin Acker, chief of vocational services, it is being developed with the cooperation of many departments of the Hospital Center, the Medical School, and Stanford University itself. It is an example of the cooperative effort which is a part of the Stanford Medical Center.

Palo Alto-Stanford Hospital is one of only three private hospitals in the country which have such a program, as far as is known here. Others are Massachusetts General Hospital in Boston and Cedars of Lebanon Hospital in Los Angeles. Public hospitals, including those of the Veterans Administration, have had this service in the past.

This is the third step in the Medical School's vocational program for the disabled. Until last year only aptitude and achievement tests could be offered. In October a second step became available in the prevocational laboratory, supported largely by the National Foundation. There patients test their manual skills in such operations as sorting, packaging, and office machine work.

Many of the laboratory tests provide opportunities for the patient to do real work for other Center departments rather than simulated exercises.

However, many patients who have never worked before or have been unemployed for a long time are afraid that they will not be able to adjust to working with people and to taking orders. The work program gives patients a chance to adjust to this phase of employment.

Only evaluation is provided. The patient does not get a salary and is not offered a job in the Hospital. He works up to four days in a department but does not do any work concerned with patient care.

Housekeeping, Stores, Central Supply, Volunteer and Messenger Services, the Animal Facilities and Dietetics have taken part in the program. The departments have benefitted from the "bonus" work, Acker says. In addition, personnel not usually associated with care of

patients "have had a chance to contribute to therapy and rehabilitation."

Expansion of "this pioneering adventure" to campus departments is already planned, the counselor said. Utilizing the campus and Center areas, a patient will be able to try his hand in practically any manual job a community can provide, Acker said.

The program will eventually serve all patients disabled by injuries and crippling disease who seek jobs. "By fall," Acker said, "we plan to have a patient on a job site every day."

Mailed 8-16-60

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5330

AUG 11 1960

MEMO TO CITY DESKS, NEWS DESKS, AND SCIENCE REPORTERS

On August 24 and 26, 1960, scientific papers will be given at Stanford during the 12th Annual Meeting of the American Physiological Society. A press room will be set up in Stanford Medical Center and your reporters are invited to attend.

The following stories are ones which appear to be most interesting from a layman's point of view. Abstracts of them will be available in the press room. In addition, the speakers have been asked to submit one-page summaries in lay language. Press conferences will be arranged at the request of reporters.

Would you please let us know whether a reporter will be attending from your organization. This will help us in planning to be sure enough space is available.

POTENTIAL STORIES

(Numbers refer to the listings in the program of the meeting.)

SMOKING: Effects of nicotine on growth of animal cells (with comments on cigarette filters) (80)
Effect of smoking on lung performance (310)
Cigarette smoking and fatigue (320)

SPACE MEDICINE: Effect of acceleration on heart output (10)
Effect of gravity on growth of mice (84)

HYPNOSIS: Effects of hynosis on kidney function (231)

BREATHING: Regulation of breathing in dogs (31)
Effect of breath holding on the possibility of drowning (36)

HEART AND CIRCULATION: New information about the heart (13,17,21)
Possible new tool for treating shock and heart failure (107)
A simple method of repairing blood vessels in disaster (110)
Effect of heart stoppage on brains of dogs (124)
Oxygen supply to mother and young in pregnancy and delivery in cats, rabbits and guinea pigs (125)

OTHER DISEASES: Explanation for the cause of diarrhea in cholera (132)
Blood flow in skin of patients with psoriasis (68)
Biochemical findings related to two mental diseases (335,336)
Study of anticoagulant factor in blood of hemophilia patients (163)
Study in dogs suggests adrenal corticoids could increase occurrence of stomach ulcers (227)

MISCELLANEOUS: Sex differences in brain excitability of rats (61)
Water and salt storage in pregnant rats (48)
Spawning salmon, patient with Cushing's syndrome have common characteristics (96)

FILE COPY

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

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AUG 10 ...

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

$395,028 GRANT TO SUPPORT DISEASE STUDY AT STANFORD MEDICAL CENTER

The John A. Hartford Foundation, Inc., of New York City has made a $395,028 grant for a three-year study at Stanford Medical Center of diseases of hereditary and developmental origin, it was announced today.

The research will begin September 1 under the direction of the Pediatrics Department of the Stanford University School of Medicine. The grant was announced today by Mr. Ralph W. Burger, President of the Foundation.

The grant will support a multi-discipline investigation aimed at understanding and finding methods of treatment for these diseases, which have recently assumed dramatic proportions in modern American medicine.

Disorders such as cystic fibrosis, diabetes mellitus, hemolytic anemias and various types of dwarfism will be studied in human patients as well as in laboratory animals. The basic approach will be to investigate the chemistry of life processes in animals before birth.

In addition, a case-finding center for northern California will be established at Stanford which will eventually offer opportunities for care of patients as well as counseling for them and their families.

Several million Americans of all ages are afflicted with genetic or developmental diseases and the total is increasing annually. The ailments are particularly numerous among children since recent advances in medical care have reduced the serious consequences of infectious diseases like pneumonia, meningitis, and so on.

--more--

Dr. Norman Kretchmer, professor of pediatrics and executive of the department at Stanford, will be the principal investigator. He will be assisted by several other faculty members, including Dr. Kenneth Tsuboi, Dr. Sumner Yaffe, Dr. Herbert Schwartz and Dr. Robert Greenberg. Another participant will be Dr. Robert Jacquot of the Department of Comparative Physiology, University of Paris, France, who will be a visiting assistant professor at Stanford.

The Hartford Foundation was originally established by John A. Hartford, former president of the Great Atlantic & Pacific Tea Company, who left it the bulk of his estate. His brother, George L. Hartford, former chairman of the board, left his entire estate to the Foundation.

The research project underscores the particular interest of the Pediatrics Department in problems of growth and development, Dr. Kretchmer said.

It is proposed that approximately $38,000 of the grant will be used for preparing laboratory facilities at the Stanford Convalescent Home near the medical school.

The research program will be divided into three parts:

1. In the patient-care area, a population geneticist will be employed to study the frequency of genetic problems in the state. When this study is under way the geneticist will be available for counseling of patients, their families, and doctors.

2. In the laboratory, Stanford scientists will investigate diseases in animals which are similar to those in humans, using techniques of biochemistry, physiology, and genetics.

One major question to be answered is why genetic diseases do not show up uniformly, but appear in mild and severe forms. Another puzzle

is why some patients have mild forms while others are severely afflicted. If information about these could be found, Dr. Kretchmer believes important contributions to patient care might be made.

3. Combined patient and laboratory analysis will also be undertaken using samples of patients' blood, urine, hair and nails. The scientists hope that these studies will reveal more about the mechanisms of specific diseases.

The three parts of the overall program will be coordinated to complement each other with the long-range aim of improving treatment and care, counseling, and teaching related to these diseases.

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(Mailed August 2, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat DA 1-5310

DIVISION OF CLINICAL SOCIAL WORK ESTABLISHED AT STANFORD MEDICAL SCHOOL

Dr. Daniel E. O'Keefe, until this summer chief of the Social Service Department of the 500-bed Clinical Center at the National Institutes of Health in Bethesda, Md., is chief of the new Division of Clinical Social Work in the Stanford University School of Medicine, Dean Robert H. Alway announced today.

The division is the first in the country with the aim of providing social work participation in all appropriate areas of the medical curriculum.

The new division will develop educational programs which stress the importance of social and emotional factors in the care of patients. Its work is expected to fit in with the emphasis on behavioral sciences in the new curriculum of the medical school.

Faculty and staff will also offer social service assistance to hospital and clinic patients at the Stanford Medical Center.

In addition to serving as chief of the division, Dr. O'Keefe holds the rank of associate professor. He began work late last month.

Dr. O'Keefe had held his post at N.I.H. since 1952. He was responsible for directing the medical and psychiatric social work in the Clinical Center, a 500-bed research hospital. His staff not only assisted patients but also collaborated in research carried on in the various medical disciplines and undertook independent research on the social and emotional aspects of long-term illness.

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The new division chief is 46. He is married and has three children. He received his B.S. from the University of Dayton in 1936 and his M.S. in social work two years later from Catholic University in Washington, D.C. He received his Ph.D. from the University of Minnesota School of Social Work in 1955.

His professional experience includes service with the Veterans Administration, the Army Surgeon General and the U.S. Public Health Service.

He is a charter member of the National Association of Social Workers and was chairman of its Psychiatric Social Work Section from July, 1959, through June of this year.

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(Mailed August 1, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, DA 1-5310

STANFORD CLINICS RESUME SERVICES

FOR STUTTERERS

The Stanford University Speech and Hearing Clinic next week will resume group therapy sessions for adult stutterers.

The program is run throughout the year except during academic vacation periods, according to Dr. Virgil A.Anderson, director of the clinic.

Sessions for the stutterers will be held Tuesday nights from 7:30 to 9:00, beginning October 4.

The clinic is located in Edwards Building of the Stanford Medical Center, 300 Pasteur Drive, Palo Alto.

All interested persons are invited to attend, Dr.Anderson said. The program allows for some individual therapy if needed.

Dr.J.Douglas Noll is staff advisor for the stutterers, and Tom Shipp and Bruce Porch are the clinical assistants in immediate charge of the program.

Further information may be obtained by calling the clinic at DAvenport 1-1200, extension 5416.

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(Mailed September 26, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Susan Roberts, DA 1-5310

INSTITUTE FOR CHILDHOOD APHASIA SCHEDULED

A mysterious malady which can isolate otherwise normal children in a world without language will be studied at the Institute on Childhood Aphasia, Sept. 19-21.

The Institute is sponsored by Stanford University School of Medicine, the California Society for Crippled Children and Adults, and the National Easter Seal Research Foundation. Closed sessions for the 30 participants will be held at the Stanford Medical Center during the first day of the conference and continue for two days in the Villa Hotel in San Mateo.

A meeting which will be open to the public will be held on Tuesday at 8:30 p.m. in the University of California Medical Center Auditorium in San Francisco. Three specialists will be panelists on the television show Doctors News Conference the same evening. The broadcast starts at 9:30 p.m. over station KTVU, Channel 2.

Childhood aphasia is a brain disorder which destroys the ability to reason abstractly. As a result of the ailment, speech and reading skills are lost or never acquired. The exact incidence of childhood aphasia is unknown since it is often confused with mental retardation and deafness.

Experts from the fields of medicine, psychology, speech pathology and audiology, special education and social work will meet to clarify the diagnosis, treatment and therapy for children who have been stricken with aphasia since birth. The experts will also try to identify areas where further research is needed.

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General chairman for the Institute will be Dr. Robert West, director of the Speech Clinic at Brooklyn College, Brooklyn, New York. Participants will include Dr. Richard L. Masland, director of the Department of Neurological Diseases and Blindness, National Institute of Health, Bethesda, Md.; and Dr. Chester A. Swinyard from the Institute of Physical Medicine and Rehabilitation, New York.

Also taking part will be Dr. Mildred C. Templin, associate professor in the Institute of Child Welfare at the University of Minnesota; Miss Else Haeussermann (cq), Department of Pediatric Psychiatry, Jewish Hospital, Brooklyn; Dr. Nancy Wood, specialist in speech and hearing in the Department of Health Education and Welfare, Washington, D. C., and Dr. James Carrell, director of the Speech and Hearing Clinic at the University of Washington.

Other participants include Dr. Roman Jakobson from the Department of Slavic Languages and Literatures at Harvard University; Dr. Karl Pribram, associate professor of psychiatry at Stanford, and Dr. Lamar Roberts, chief of neurosurgery at the University of Florida College of Medicine.

Interest in childhood aphasia was raised in California recently when a group of parents of children who were suspected of being aphasic formed a state-wide organization. The group later joined the California Society for Crippled Children and Adults, which today is co-sponsoring the first such institute held in the United States.

Stanford University received a grant of $10,000 for the meeting from the National Easter Seal Research Foundation and an auxiliary planning fund of $1,500 from the New York Association for the Aid of Crippled Children.

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(Mailed September 15, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, DA 1-5310

FILE COPY

An open panel discussion of medical care for the aged, jointly sponsored by the Palo Alto Medical Staff and Palo Alto-Stanford Hospital Resident Staff, will be held Thursday evening (Oct. 27, 1960) at 7 in Room M106 in the Stanford School of Medicine.

The discussion, which will be open to the public, will deal with the political and economic implications of the problem. It will be moderated by Dr. Clyde Boice, president-elect of the Santa Clara County Medical Society and vice chief of the Palo Alto Medical Staff.

Dr. Daniel J. Feldman, Associate Professor of Medicine and Director of the Rehabilitation Services at Stanford Medical School, and Joseph Donovan, Executive Secretary of the Santa Clara County Medical Society, will be principal speakers. Two members of the resident staff will complete the panel.

It will be the first of a series of projected meetings to discuss problems of interest to the medical profession and community.

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(Mailed October 25, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA1-5310

FILE COPY

"ARS MEDICA" EXHIBITION

SCHEDULED AT STANFORD MEDICAL CENTER

A unique collection of rare medical prints, including works by great masters, will be exhibited at Stanford Medical Center from October 9 to 22, it was announced today. The exhibit will be in the lobby of the Boswell Building where the Stanford Clinics are located, and will be open daily from 8 a.m. until 6 p.m.

The recently expanded exhibit now includes 134 original prints depicting the practice of medicine and pharmacy over the centuries. Among the latest additions to the collection are prints illustrating the treatment of the mentally ill as well as graphic representations of dreams and delusions. Included in the exhibit are works by Durer, Daumier, Goya, Hogarth, Raphael, Rembrandt, Schongauer and Titian. Rockwell Kent and Robert Riggs are among the contemporary artists.

Entitled "Ars Medica," or "The Healing Arts," the collection is owned by the Philadelphia Museum of Art. It is being presented by Smith Kline & French Laboratories, Philadelphia pharmaceutical firm, under whose grant the exhibition was assembled.

Carl Zigrosser, Curator of Prints for the Philadelphia Museum of Art, compiled the medical illustrations. His "pioneering of a new form of art education through the support of industry" was recently acknowledged by the Philadelphia Art Alliance when it presented him with its 1959 Medal of Achievement.

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The original collection, exhibited for the first time in 1952, was made up of 15 panels, each containing from five to 12 prints. In this form it was shown in selected art galleries, museums and medical and related schools throughout the United States, Canada, Puerto Rico, England, Wales, Scotland and Ireland. Last April, the expanded collection, now totaling 21 panels, was premiered at the Philadelphia Museum of Art during the 115th annual meeting of the American Psychiatric Association.

Among the outstanding prints in the collection are Rembrandt's "Christ Healing the Sick;" Vesalius' "Ninth Plate of Muscles;" Winslow Homer's Civil War portrayal of the "Surgeon at Work During an Engagement;" Toulouse-Lautrec's lithograph of the ailing French President Carnot; Wechtlin's woodcut of "Cosmas and Damian," patron saints of the physician and apothecary, and Hogarth's engraving of the London insane asylum, "Bedlam Hospital."

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Oct 9, 1960

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

STANFORD CLINICS RESUME SERVICES FOR HARD OF HEARING

The Stanford University Speech and Hearing Clinic next week will resume group instruction in lip reading for adults who are hard of hearing.

The program is run throughout the year except during academic vacation periods, according to Dr. Virgil A. Anderson, director of the clinic.

Lip reading classes are scheduled Wednesdays from 7:30 to 9:00 p.m., starting October 12.

The clinic is located in Edwards Building of the Stanford Medical Center, 300 Pasteur Drive, Palo Alto. Fees are nominal--$10 for the quarter.

All interested persons are invited to attend, Dr. Anderson said. The program allows for some individual therapy if needed.

The lip reading class is under the supervision of Miss M. Jo Eeckhout (cq); Miss Pat Beverly is the therapist who teaches the class.

Further information may be obtained by calling the clinic at DAvenport 1-1200, extension 5416.

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(Mailed Oct. 9, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

Memo to Science Writers:

This is to call to your attention two interesting Stanford papers being delivered during the meeting of the American College of Surgeons in San Francisco next week.

1. This is the first full report on the technique developed by Richard R. Lower and Norman E. Shumway for transplanting another dog's heart in a recipient dog. In 10 operations, 6 of the recipient animals were kept alive for from 6 to 21 days by the functioning foreign heart.

Dr. Lower has been asked to a press conference by the ACS press people and will be on hand at 3 p.m. Sunday, Oct. 9, in the Hunt Room of the Fairmont, to answer questions. The story is for release to PM's of Monday.

2. This reports a method of cooling the brain so that more time will be available for brain surgery. The current estimate, based on experiments in dogs, is that this method would double the 15-minute interruption of cerebral blood flow now permissible for patients whose whole body has been cooled. Dr. Robert J. Boyd, one of the six authors, is to deliver the paper; Dr. John E. Connolly, the senior author, will also be willing to talk to reporters.

Information about this paper (see enclosed abstract) has been sent to Miss Sara Barr Cohen of the ACS at the Fairmont. If you wish to see Dr. Boyd or Dr. Connolly, Thursday morning before the paper is delivered, you might ask her to have him come to the press room.

Samuel Moffat
Information Officer

Oct. 6, 1960

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

FOR RELEASE TO AM'S OF
FRIDAY, OCTOBER 14, 1960

Abstract of a paper to be delivered at the American College of Surgeons Meeting
San Francisco --- Neurological Surgery

AN EXPERIMENTAL STUDY OF THE TECHNIQUE AND EFFECTS OF SELECTIVE BRAIN COOLING

John E. Connolly, M. D., F.A.C.S., Edmund J. Harris, M. D., F.A.C.S.,
David L. Bruns, M. D., John W. Smith, M. D., and Robert Boyd, M. D.

General body hypothermia is currently employed by neurosurgeons to allow interruption of the cerebral circulation for periods of time up to 15 minutes. Selective cooling of the brain to cerebral temperatures lower than those currently tolerated by the heart should allow significantly longer periods of cerebrovascular occlusion.

We have investigated this approach to date on 75 dogs. Brain cooling is carried out by shunting blood from the carotid arteries through a blood heat exchanger and back into a distal carotid artery. The brain temperature is reduced from 37°C. to 15°C. in 20 minutes. At the same time the body temperature is maintained at or near normothermic levels. We have found in the dog that the brain can be safely and rapidly cooled to cerebral temperatures of 15°C. and subsequently rewarmed without evidence of neurological damage. Experience has shown that carotid flow rates must be carefully regulated as the level of brain cooling is lowered to protect against brain damage.

To test the protective effect of selective brain cooling, the cerebral circulation must be completely occluded for varying periods of time after the desired brain temperature has been reached. We have found that the only successful method of accomplishing this in the dog has been by stopping the heart after the brain has been cooled to the desired level. Utilizing this method the length of time cerebral blood flow can be completely occluded without brain damage has been correlated with various brain temperatures. The clinical application of selective brain cooling should facilitate intracranial procedures by affording an avascular field for periods of 30 minutes or more.

From the Surgical Research Laboratory, Stanford University School of Medicine, Palo Alto, California.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

PSORIASIS MAY BE DUE TO ALLERGIC REACTION, STANFORD SCIENTISTS DISCOVER

Patients who develop psoriasis, the disfiguring and incurable skin disease which afflicts 3 to 4 million Americans, may be allergic to some chemical in their systems, a team of Stanford University School of Medicine investigators reported today.

They said their findings offered a lead pointing to the fact that antibodies are formed in psoriasis. This means that a patient has been exposed to an antigen of some sort. Antigens stimulate the body to produce antibodies, one of the main defenses against disease.

On the basis of available evidence, the scientists inferred that psoriatic patients are allergic to something in their own systems. Researchers have attempted for decades to find a bacteria, virus or other outside agent which could cause the disease, but no such agent has been found.

Such allergy is called an autoimmune response. So far only a small number of human diseases have been implicated as being possibly autoimmune.

The Stanford research was reported in the November issue of the Archives of Dermatology. Authors of the paper were Dr. Muhammed Aswaq, Dr. Eugene M. Farber, Dr. Anthony P. Moreci and Dr. Sidney Raffel.

To detect the antibodies, the scientists used a procedure called the passive cutaneous anaphylactic (PCA) reaction. It is a very sensitive method of detecting antigen-antibody interactions.

Blood serum from a patient was injected between layers of a guinea pig's skin. Later, ground up skin from a psoriasis sore of the same patient was introduced into a vein of the pig. The skin "homogenate" was mixed with

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a dye to aid in detecting the interaction.

In 81% of the 32 cases, interaction was observed at the site where the blood serum has been injected. The psoriatic skin homogenate had circulated throughout the pig's body, and reacted with a part of the blood serum.

Reaction was visible because the dye collected where the antigen-antibody combination had caused damage to the minute blood vessels of the skin.

Tests were also run using blood serum from patients with atopic dermatitis, an allergic eczema, and from persons without either disease. There was no reaction where those injections were made.

The research "points to the speculation that psoriasis may depend upon an autoimmune mechanism," the report states; "however, objective evidence for this possibility is not yet available."

The scientists are now preparing to try to identify the factors involved in order to learn more about the process.

The findings represent the culmination of seven years of investigation. Previous research failed to show results because specimens were not quick frozen and apparently deteriorated.

The research is part of a multidiscipline attack on psoriasis being undertaken by the Division of Dermatology with a $295,928 grant from the John A. Hartford Foundation, Inc., of New York.

Psoriasis is a chronic disease characterized by the eruption of round red patches covered by unsightly white scales--chiefly on the elbows, knees, scalp and back. It has been estimated that it affects as much as 2 per cent of the world's population.

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(Mailed Nov. 16, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

Dr. Seymour Kolko, assistant professor of psychiatry in the Stanford University School of Medicine, has been named assistant dean for student affairs in the medical school.

Dr. Kolko is in charge of student standing and promotion as well as applications for internships and residencies. His appointment was effective late last month.

Student affairs were previously handled by Associate Dean Lyman M. Stowe, who is still responsible for academic affairs.

Commenting on the appointment, Dean Robert H. Alway of the medical school said: "Dr. Kolko was appointed to this position because of his deep interest in the students and their concerns. He has demonstrated this interest in many ways and we want the students to obtain the full benefit of it."

Dr. Kolko has been a member of the Student Standing and Promotions Committee for the last two years.

A 1945 graduate of Stanford, Dr. Kolko received his M.D. from the medical school four years later. He served his residency at the Veterans Administration Hospital in Menlo Park. He was a psychiatrist for the Air Force from 1951-53.

He joined the Stanford faculty in 1955 as an instructor while carrying on a private practice in psychiatry in San Francisco, but he is no longer in private practice. Dr. Kolko's special field is psychiatric rehabilitation and he has been a consultant for the San Francisco branch of the California Vocational Rehabilitation Services since 1955.

He is a member of the National Rehabilitation Association, American

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Psychiatric Association, New York Academy of Sciences and the Midpeninsula Psychiatric Society.

Dr. Kolko, and his wife, Edith, and three children, Joseph, 9, Donald, 8, and Sally Ann, 3, live at 815 Esplanada Way, Stanford.

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(Mailed November 9, 1960)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel J. Moffat, DA 1-5310

STANFORD MEDICAL SCHOOL NAMES NEW FACULTY MEMBERS

Four associate professors and two instructors have been named to the full-time faculty of the Stanford University School of Medicine, Dean Robert H. Alway announced today.

A new member of the voluntary faculty is Dr. E. Dwight Barnett, former administrator for the Palo Alto-Stanford Hospital Center. Dr. Barnett is serving as clinical professor of administrative medicine in the Department of Preventive Medicine for this academic year.

He was administrator of the Hospital and professor of hospital administration in the Medical School from 1958 until his resignation last June. Dr. Barnett had been professor of administrative medicine at Columbia University from 1952 to 1958.

Two of the appointments to associate professor were effective Jan. 1. Dr. Kao Liang Chow was appointed associate professor of medicine (neurohistochemistry), and Dr. William van Bogaert Robertson was named associate professor of biochemistry in the Department of Pediatrics.

Dr. Chow had been associate professor of physiology at the University of Chicago since 1954. He earned a B.A. from Yenching University, Pekin, China, in 1943 and a Ph.D. from Harvard in 1950.

He was a research assistant at the Yerkes Laboratories of Primates under the former director and leading neurophysiologist Dr. Karl Lashley. Dr. Chow has become a major contributor to the literature of the rapidly-growing field of neurophysiology.

Dr. Robertson's major role at Stanford is as director of the laboratories and research program at the Stanford Convalescent Home. He had been

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professor of biochemistry since 1952 and associate professor of experimental medicine at the University of Vermont College of Medicine since 1947. He was also consulting clinical chemist for DeGoesbriand Memorial Hospital.

Dr. Robertson received an M.E. degree from Stevens Institute of Technology in 1934 and a Ph.D. from Albert Ludwig University, Germany, in 1937. He has had extensive research experience as a biochemist.

Two other long-term appointments will be effective in early summer and at the beginning of the next academic year.

Dr. Ellis N. Cohen has been appointed associate professor of anesthesia starting July 1. He is presently associate clinical professor of anesthesiology at the University of Minnesota. He has been chief of the Department of Anesthesiology at Charles T. Miller Hospital, St. Paul, since 1949.

Dr. Cohen's research has dealt with problems of anesthesia at both the laboratory and clinical levels and he has written numerous articles on these topics.

European-trained pathologist Dr. Bruno Gerstl has been appointed associate professor of pathology beginning Sept. 1. He will be in charge of laboratory services in the Palo Alto Veterans Administration Hospital. Dr. Gerstl has been chief of laboratory service at Oakland Veterans Hospital and and assistant clinical professor of pathology at the University of California since 1947.

He received his M.D. in Vienna. He was a research assistant and instructor at Yale from 1941 to 1944 and then director of the Central Laboratory of Pathology and Research for the State of Connecticut from 1944 to 1947.

Beside Dr. Barnett's appointment, two other short-term appointments were made: Dr. Alfred D. Surtees as instructor in anesthesia, and Dr. Robert H. Sagerman as instructor in radiology. Educated at London University, Dr. Surtees is presently assistant anesthetist at Massachusetts General Hospital and instructor in anesthesia at Harvard Medical School. Dr. Sagerman is a resident in radiology at Montefiore Hospital in New York City.

(Mailed Jan. 25, 1961) ######

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel J. Moffat, DA 1-5310

NOTE TO EDITOR: This story is timed for release following presentation of a research report by the authors at the annual meeting of the Western Association of Physicians at Carmel, Calif.

FOR RELEASE TO A.M. PAPERS OF SATURDAY, JANUARY 28, 1961.

WARNING TO MOUNTAIN CLIMBERS: WATCH OUT FOR "PNEUMONIA"

CARMEL, Calif.--Many classic cases of fatal "pneumonia" among mountaineering parties were probably nothing of the sort, a Stanford University School of Medicine specialist in lung and heart ailments reported yesterday.

Instead they were very likely a little understood but more easily corrected condition which literally drowns its victims--ironically because of lack of oxygen.

The condition, called high altitude pulmonary edema, was the subject of a report by Stanford Associate Professor of Medicine Herbert N. Hultgren. He generally finds time for two or three mountain climbing trips himself each year.

Co-authors of the paper were Dr. Warren S. Spickard, associate clinical professor at the University of Washington School of Medicine; Dr. Charles S. Houston of the Aspen Clinic, Aspen, Colorado; and Dr. Kurt O. Hellriegel, medical director of Chulec General Hospital, La Oroya, Peru.

They urge all mountaineers doing extensive climbing above 10,000 feet to be aware of acute high altitude pulmonary edema and to prevent it by gradual acclimatization. Where a rapid descent to a lower elevation is not possible, oxygen should be carried for treatment.

Pulmonary edema is the movement of fluid from the blood into the air sacs of the lungs. The fluid acts like a mixture of salt water and egg white. It froths up when the patient breathes and can quickly "drown" him.

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Apparently the condition occurs because of lack of oxygen. It follows rapid exposure to altitude (above 10,000 feet) without prior acclimatization, but is not like "mountain sickness". Nearly everyone going to high altitudes experiences mountain sickness at first, Dr. Hultgren says, with its symptoms of weakness, labored breathing, headaches, and loss of appetite.

Few people get pulmonary edema, but those who do may be in danger of dying unless properly treated. Major symptoms are a persistent cough, shortness of breath following the slightest exertion, a gurgling noise in the chest, and coughing up blood-streaked sputum.

These signs resemble those of pneumonia, but the chills and fever of pneumonia are not found when edema occurs. When chills or fever do occur, they may be due to an accompanying infection.

When signs of pulmonary edema occur, three steps should be taken promptly: the patient should be removed to lower altitude; oxygen should be administered continuously; the patient should be given absolute bed rest. Recovery usually is complete within 24 to 48 hours.

Dr. Hultgren and his co-workers have thoroughly checked medical and mountaineering publications to identify cases of pulmonary edema among mountain climbers, and have located six occurring in the continental United States. Most cases, however, have been observed in Peru where one can very quickly reach altitudes of over 14,000 feet.

But records are not often complete on persons who died high in the mountains without a doctor in attendance. The research group feels certain many deaths ascribed to "pneumonia" were due to edema.

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(Mailed Jan. 23, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel J. Moffat, DA 1-5310

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(Mailed Jan. 23, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

Recent advances in the treatment of high blood pressure will be reviewed by faculty members of the Stanford University School of Medicine Saturday at a postgraduate conference for physicians, it was announced today by Associate Dean Lowell A. Rantz.

Known to doctors as hypertension, high blood pressure affects about 20 per cent of the adult population in the United States. Heart and circulatory ailments are the leading cause of death in the country, and hypertension and coronary artery disease are the commonest causes.

The conference will be held at Stanford Medical Center from 8 to 5 in room M 104.

Chairmen of the four sessions will be Dr. Halsted Holman, executive head of the Department of Medicine and Guggenhime (cq) Professor of Medicine; Dr. David Rytand, Bloomfield Professor of Medicine; Dr. Alfred Spivack, clinical teaching assistant in medicine; and Dr. John K. Lewis, professor of medicine.

Other faculty members taking part will be Dr. E. William Hancock, Dr. Herbert N. Hultgren, Dr. Gerald M. Reaven, Dr. John Young, Dr. Roy B. Cohn and Dr. Arthur Selzer. Dr. Dorothee (cq) Perloff, clinical instructor in medicine at the University of California School of Medicine, will also be a speaker at two of the sessions.

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(Mailed Jan. 11, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

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(Mailed Jan. 11, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

STANFORD CLINICS RESUME SERVICES

FOR STUTTERERS

The Stanford University Speech and Hearing Clinic next week will resume group therapy sessions for adult stutterers.

The program is run throughout the year except during academic vacation periods, according to Dr. Virgil A. Anderson, director of the clinic.

Sessions for the stutterers will be held Tuesday nights from 7:30 to 9:00, beginning January 10.

The clinic is located in Edwards Building of the Stanford Medical Center, 300 Pasteur Drive, Palo Alto.

All interested persons are invited to attend, Dr. Anderson said. The program allows for some individual therapy if needed.

Dr. J. Douglas Noll is staff advisor for the stutterers, and Tom Shipp and Bruce Porch are the clinical assistants in immediate charge of the program.

Further information may be obtained by calling the clinic at DAvenport 1-1200, extension 5416.

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(Mailed January 6, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

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Sessions for the stutterers will be held Tuesday nights from 7:30 to 9:00, beginning January 10.

The clinic is located in Edwards Building of the Stanford Medical Center, 300 Pasteur Drive, Palo Alto.

All interested persons are invited to attend, Dr. Anderson said. The program allows for some individual therapy if needed.

Dr. J. Douglas Noll is staff advisor for the stutterers, and Tom Shipp and Bruce Porch are the clinical assistants in immediate charge of the program.

Further information may be obtained by calling the clinic at DAvenport 1-1200, extension 5416.

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(Mailed January 6, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, Da 1-5310

LIBRARY COLLECTION TO BE DEDICATED TO THE MEMORY OF DR. WILLIAM H. NORTHWAY

The library collections in physical medicine and rehabilitation of the Stanford University School of Medicine are to be expanded and dedicated to the memory of Professor William H. Northway who died last Dec. 23, Dean Robert H. Alway announced today.

During 30 years on the Stanford faculty, Dr. Northway devoted his professional life to physical medicine. He served as chief of the outpatient clinic, assistant dean of the School of Medicine, and acting superintendent of Stanford University Hospital in San Francisco.

At the time of his death, Dr. Northway was chief of physical medicine of Palo Alto-Stanford Hospital Center. In recent years his particular interest in his field had been in rehabilitation of polio patients. His clinical papers on the subject were widely published.

Since undergraduate days, Dr. Northway had been continuously at Stanford, and his three sons and his brother have all attended the University.

Contributions to the William H. Northway Memorial Book Fund should be sent to the Dean's Office, Stanford School of Medicine, Stanford Medical Center, 300 pasteur Drive, Palo Alto, California.

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(Mailed Feb. 27, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

STANFORD DEAN TO ASSIST VENEZUELAN MEDICAL FACULTY

Dean Robert H. Alway of the Stanford University School of Medicine will be in Caracas, Venezuela, Friday through Tuesday (Feb. 24-28) consulting with members of the faculty of the Central University of Venezuela regarding development of a new medical school in that city.

Dr. Alway said that his hosts are seeking information on Stanford's experience in reorganizing a medical school and increasing its role in research.

In many ways the medical school of the Central University resembles Stanford's before its move to the campus two years ago. The faculty members spend about as much time in private practice as in teaching. In addition, Central University is a state school and must accept all candidates for admission, whether they are qualified or not.

Some of the Venezuelan physicians would like to establish another school at the Vargas Hospital along the lines of the Stanford plan and with stricter admission policies, the dean said. He does not plan to recommend a specific program but will outline the general needs and problems if they are to establish such a school.

The dean's invitation grew out of an earlier visit to Caracas by Dr. Eugene M. Farber, professor of medicine and head of Stanford's dermatology division. Dr. Farber was a visiting professor there last summer, at which time he reported on the new Stanford curriculum which went into effect in September, 1959.

Dean Alway was invited by Professors F. Ruben Coronil, Otto Lima Gomez and Francisco Montbrun. Mrs. Alway will accompany him also as their guest.

(Mailed Feb. 21, 1961) #######

There are two errors in the February 8, 1961, release on faculty appointments made in the Stanford University School of Medicine. If the article has not already appeared in your publication please make the changes noted on the corrected release which is enclosed.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

$35,750 AVALON FOUNDATION GRANT TO STANFORD SCHOOL OF MEDICINE FOR PEDIATRIC PROGRAM

The Avalon Foundation has given the Stanford School of Medicine a grant of $35,750 to set up a visiting professor program in the Department of Pediatrics.

The Foundation was established in 1940 by Mrs. Ailsa Mellon Bruce, the first wife of David Bruce, the newly appointed ambassador to England. It provides grants primarily in the fields of health, medicine and projects pertaining to the development of youth.

Dr. Norman Kretchmer, head of the Department of Pediatrics, has recently invited four outstanding men in the field of pediatrics to take part in the program.

Participating is Dr. Allan M. Butler, director of clinical services at the Metropolitan Hospital in Detroit and former professor of pediatrics at Harvard.

Dr. Sam Z. Levine, professor of pediatrics at Cornell University Medical College, will be at Stanford during late March.

Dr. John Lind and Dr. Leo Kanner will participate in the program during June. Dr. Lind is professor of pediatrics at Karolinska Sjukhuset, University of Stockholm, Sweden. Dr. Kanner is professor emeritus of child psychiatry, Johns Hopkins University, and honorary consultant for its hospital.

Each visiting professor will have an office, a laboratory and living quarters near campus. He will spend the time in residence in the Department of Pediatrics, taking part in its educational and clinical activities.

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Mailed February 20, 1961

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:
Susan Roberts, DA 1-5310

FILE COPY

STANFORD MEDICAL SCHOOL NAMES NEW FACULTY MEMBERS

Five men have been named to the full-time faculty of the Stanford University School of Medicine, Dean Robert H. Alway announced today.

Among those appointed was Dr. Thomas A. Stamey, who will be associate professor of surgery and chief of the Division of Urology in the Department of Surgery. His appointment will be effective July 1.

Dr. Stamey has been associate professor of urology at The Johns Hopkins University Medical School since last year and chief of urology for the Baltimore City Hospitals since 1958. He received his A.B. from Vanderbilt University in 1948 and his M.D. from Johns Hopkins in 1952.

Dr. Tag Eldin Mansour, associate professor in the Department of Pharmacology at Louisiana State University, has been appointed associate professor of pharmacology, effective April 1. He was recently awarded a five-year U.S. Public Health Service Senior Fellowship.

A native of Belkas, Egypt, Dr. Mansour graduated with honors from the University of Cairo in 1946 and received his Ph.D. in pharmacology from the University of Birmingham, England, in 1949. He was a Fulbright Fellow and instructor in physiology at Howard University from 1951 to 1952.

Dr. William M. Gilmore, Jr., was named assistant professor of pediatrics (physical medicine), effective last month. He had been

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clinical instructor of medicine (physical medicine) at Stanford since 1958.

Since 1957 Dr. Gilmore had worked as director of rehabilitation services for the Stanford Convalescent Home and medical director of the Easter Seal Society of Alameda County Rehabilitation Center.

Short-term appointments included: Dr. Irwin A. Schafer as instructor in pediatrics and Dr. Angelos Dellaporta as acting instructor in surgery (ophthalmology); also Dr. Kirk H. Prindle as clinical assistant professor of surgery and Dr. Daniel W. Meub, clinical instructor in surgery.

Dr. Schafer is presently a research fellow in the Departments of Preventive Medicine and Pediatrics at Harvard Medical School. He will join the Stanford faculty in July. Dr. Dellaporta has been a research associate and clinical instructor in surgery (ophthalmology) at Stanford since 1958.

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(Mailed February 8, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Ann Walker Da 1-5211

FILE COPY

BIOLOGICAL PHOTOGRAPHERS ASSOCIATION TO HOLD MEETING

A breed of photographers interested in the human form divine, but less in its cheesecake possibilities than in its bone-skin-and-hair detail, will get together at the Stanford Medical Center, February 17-19.

These are members of the Biological Photographers Association who will be holding their third Western States Regional meeting under the sponsorship of their Northern and Southern chapters. The Association is the only professional society in North America dedicated to the advancement of the skills of medical and biological photography. Its world-wide membership includes physicians, medical editors, educators and photographers in the field of medical and other biological sciences.

In conjunction with the three-day meeting, there will be a display of prints by Association members in the Student Lounge of the School of Medicine building, Stanford Medical Center. Among the prints is one of a fossil seashell smaller than a pinhead and magnified 750 times by a new technique of multiplane focus and photomicroscopy. The new process that produced this startlingly detailed, sharp print will be described during the meeting.

To open the three-day meeting on Friday evening, February 17, there will be a showing of medical and biological motion pictures.

A full day of activities is planned for Saturday, February 18, starting at 9:00 a.m., to which the public is invited. Seven papers will be presented in the course of the day. Among these will be one on "Visual Communication" by Verlin Yamamoto, F.B.P.A., chief of medical illustration of the Veterans' Administration Hospital in Des Moines, Iowa, and national president of the Biological Photographic Association.

A clinical workshop of photographic techniques will be held at 3:30 under moderator Howard Tribe of the University of Utah. Luncheon and refreshments will be served during the all-day Saturday session.

Mailed on February 7, 1961

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:
Samuel Moffat, DA 1-5310

FILE COPY

FLEISCHMANN FOUNDATION GRANTS $767,000 TO MEDICAL SCHOOL

The Max C. Fleischmann Foundation of Nevada has given Stanford University a grant of $767,000 to complete construction and purchase of equipment for the Basic Medical Sciences Laboratories of the School of Medicine, University President Wallace Sterling announced today.

The new grant brings to $1,192,000 the contribution from the Foundation for the laboratories and covers their whole cost. The laboratories will be named "The Max C. Fleischmann Laboratories of the Basic Medical Sciences."

"We particularly appreciate the Foundation's generosity in providing these facilities," Dr. Sterling said, "because they are at the heart and core of Stanford's new program of education for medicine."

President Sterling referred to the Stanford Plan of Medical Education which went into effect in the fall of 1959, at the same time the School of Medicine was moved from San Francisco to the University campus.

The laboratories are the "home base" of medical students for the first three years they are at Stanford. To avoid the splintering of courses found in many schools, much of the work is taught cooperatively by six departments.

More equipment is available in these laboratories than could be provided in any single departmental laboratory, and it may be used by students who wish to explore their special interests more deeply. The facilities have already produced a substantial increase in the amount of student research conducted.

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The curriculum also allows time for students to pursue interests outside of medicine by taking courses elsewhere in the University. The overall aim is to educate physicians who are more aware of the broad range of human needs.

The Fleischmann Foundation is a testamentary trust established to carry out the philanthropic wishes of the late Major Max C. Fleischmann, a long-time resident of Nevada.

The foundation earlier contributed $425,000 to the University for the laboratories in a series of gifts between 1956 and 1959.

The latest gift qualifies Stanford for an additional $255,666 under the terms of a recent Ford Foundation grant to the University. Stanford has to produce three gift dollars to earn one dollar from the Ford award. This additional money may be used for any University need.

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(Mailed March 28, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

FILE COPY

MEDICAL SCHOOL ENDS EXECUTIVE REORGANIZATION WITH PSYCHIATRY APPOINTMENT

Dr. David A. Hamburg will become professor and executive head of the Department of Psychiatry of the Stanford University School of Medicine on Aug. 1, Dean Robert H. Alway announced today.

Dr. Hamburg, 35, is now chief of the Adult Psychiatry Branch of the National Institute of Mental Health in Bethesda, Md. He is an authority on the effects of psychological stress upon human behavior, particularly among high school and college students.

He is the last executive to be appointed in the reorganization aimed at making the medical school an integral part of the University. Until one and a half years ago most of the medical instruction was carried on in San Francisco. Dr. Hamburg is the sixth new department head since Dr. Alway became dean in 1957.

"We now have the departmental executives to provide the leadership for putting into full effect the Stanford Plan of Medical Education, developed and adopted by the faculty in 1958," Dean Alway said. "Dr. Hamburg will be particularly valuable in making the most of Stanford's strengths in the behavioral sciences and in medicine."

The new curriculum, spanning five years, leaves free time for students to pursue academic interests in addition to medicine. The aim is to educate doctors who are more aware of the broad range of human needs.

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The new executive succeeds Dr. Thomas A. Gonda. "As acting head of the department for the last three years," Dean Alway said, "Dr. Gonda has played an invaluable role in furthering the development of both the psychiatric program and the medical school."

Dr. Gonda will be on sabbatical leave next year at Oxford University, Oxford, England, and then will return to his post as associate professor at Stanford.

Dr. Hamburg's research has fallen in two major areas. He has investigated effects of psychological stress on the function of the adrenal and thyroid glands. He has also studied human behavior under stress, especially the ways in which normal individuals cope with very difficult situations.

Dr. Hamburg has held his present post since 1958. He was a fellow at the Center for Advanced Study in the Behavioral Sciences, located in the foothills behind the Stanford campus, in 1957-58.

Before that he was assistant director, then associate director, of the Institute of Psychosomatic and Psychiatric Research and Training, Michael Reese Hospital, Chicago.

He received his A.B. and M.D. degrees from Indiana University where he was elected to the undergraduate and medical honorary societies Phi Beta Kappa and Alpha Omega Alpha.

He received his professional training at Michael Reese Hospital, Yale University and the Institute for Psychoanalysis in Chicago.

Dr. Hamburg's wife, Betty, has an M.D. degree from Yale and is also trained as a psychiatrist. The couple now lives at 4836 Drummond Ave., Chevy Chase, Md.

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(Mailed March 20, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:
Samuel Moffat, DA 1-5310

FILE COPY

STANFORD MEDICAL STUDENTS SUFFER HUNGER AND COLD FOR EXPERIMENT

What happens to a man suddenly dropped from the sky in the Arctic winter and left to fend for himself? What mental and physical tortures can he stand before he reaches the end of his tether? How long can he live without food?

A research team from the Department of Physiology of the Stanford University School of Medicine last month spent five days camped on a frozen Alaskan river in an attempt to get some of the answers to these questions for the Air Force. Included in the group were three medical students who, as subjects in the experiment, learned about Arctic survival at firsthand.

They can testify that a downed flier will get very irritable after a couple of days--so much so he may squabble with a good friend over the supply of firewood, even though trees are all around.

His mind will skip about from subject to subject, even though he may try to put his free time to good use.

He will do useless tasks like making a fire he doesn't need. (His clothing is so well insulated that heat cannot penetrate.) As fourth-year student Charles C. Jenkins of Piedmont put it, "A fire keeps you busy and makes you feel good." His classmate, Henry F. Davis of Susanville, Calif., added: "With a fire you feel you can master the elements."

Most important, however, is the matter of food. Though their stomachs sometimes seemed to be tied in knots, the six subjects found that

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starving for five days did them no real harm. They lost an average of about 12 pounds each, but quickly gained the weight back afterwards. They learned a man could live on nothing but melted snow if he had the sense to conserve his energy.

Interesting as these impressions may be, they are only by-products of the study. The trip was really arranged to allow Stanford physiologists to conduct a careful scientific experiment.

The experiment was carried out on the Chena River at the Air Force's Arctic Aeromedical Laboratory. The laboratory is located at Fort Wainwright (formerly Ladd Field) near Fairbanks.

As planned by Assistant Professor Terence A. Rogers, one objective was to determine the exact energy cost of living in this hostile environment. From this information Dr. Rogers hopes to predict the likely survival time of a starving man in the Arctic. Obviously such knowledge would be of vital interest to the Air Force.

Other purposes were to learn more about the dehydration which accompanies cold exposure and starvation, and about the psychological deterioration of the subjects.

Rogers, Jenkins and Davis were three of the subjects. Vance Israel, a first-year student from Palo Alto, and two Air Force men, T/Sgt. William Hommel and S/Sgt. Milford Baugh, also camped on the ice.

Professor Ronald Grant of the Physiology Department, John Klopping, cinefluorography technician in Radiology, and James Setliff, Rogers' research assistant, made up the support crew.

While the "icemen" rested in their shelters, the support crew had to work night and day. They serviced the devices which measured oxygen consumption, carried specimens to the field laboratory and did necessary analyses for the experiment.

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The scientific findings of the project will not be ready for several weeks. But the students, two of whom used part of the free time in the medical curriculum to make the trip, have learned the value and difficulties of research carried out in the field.

And they learned a great deal about the capacity of the body to withstand physical and emotional strain. Two suffered from frostbite and found their feet still extremely sensitive two weeks after their ordeal was over.

They also found out what five days of starvation can do to a man's hunger. Davis gained 13 pounds in 27 hours. Israel reported having "an immorally huge appetite. I ate until I was full and my palate still craved the eating experience," he said. "From now on I'll have a little more sympathy with compulsive eaters."

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(Mailed March 15, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Susan Roberts, DA 1-5310

FILE COPY

AIR FORCE RESERVISTS TRAIN IN PALO ALTO-STANFORD HOSPITAL

One weekend each month about 50 Air Force Reservists come to the Palo Alto-Stanford Hospital Center and exchange their blue uniforms for the white garb of hospital orderlies. The men, members of the 44th Casualty Staging Squadron, are learning to be medical technicians.

The Palo Alto-Stanford Hospital is the only non-military hospital in California providing such instruction for the Air Force. Three other reserve units are training in military hospitals at bases in the state.

The squadron, stationed in San Jose, began training in the hospital the first weekend of January. The men will take a total of 12 to 13 weekends of intensive orientation comparable to that received by hospital orderlies.

"It is our responsibility to offer our teaching as well as our medical facilities to other community agencies. This is another example of the potential for community service in a teaching hospital," Mrs. Darlene Lutts, director of Nursing Service, said.

The casualty squadrons are being trained to receive wounded from the battlefield in time of war and to administer medical care until the wounded can be airlifted out of the area. All members of this squadron received some medical instruction during basic training.

Half of the squadron attends classes and works in the hospital on the first Saturday of each month and the other half on the first Sunday. On the alternate weekend day, the groups attend classes in medical care in the Air Force Reserve Center at 40 N. Fourth St., San Jose.

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The men are being trained in the medical, surgical and pediatrics units in the hospital as well as in the Emergency Room, Operating Rooms and Central Services Department, which distributes medical and surgical supplies.

They will undertake everything from routine patient care, such as lifting and moving a patient, to the more complex isolation techniques and preoperative and postoperative care. They will have a chance to observe at firsthand surgical techniques and the administering of medications to patients.

On completing the weekends of orientation, reservists will continue working in the hospital as orderlies on the same weekend-a-month schedule until their reserve duty is completed--in come cases a period of four or five years.

Lt. Col. John Anderson of the Palo Alto Medical Staff is commander of the squadron and Capt. Ralph Allison, a resident in psychiatry in the hospital, is medical training officer. Capt. Ira Sherwin, also a resident in psychiatry, and Capt. Harlow Standage of Aptos, Calif., are instructors in the program.

Four registered nurses in the squadron, as well as head nurses in the hospital, supervise the men during their training periods.

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(Mailed March 14, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

SCIENTIST NAMED PROFESSOR OF NEUROLOGY AT STANFORD

Dr. Frank Morrell, a leading American neurologist, has been appointed professor of medicine and head of the division of neurology at Stanford University School of Medicine, Dean Robert H. Alway announced today.

Dr. Morrell, 34, is former associate professor of neurology and neurophysiology at the University of Minnesota. In addition to holding the faculty post at Stanford, he is executive of the division of neurology for Palo Alto-Stanford Hospital Center.

Dr. Morrell is widely known for his studies of epilepsy and for basic research on the molecular basis of learning. Recently he has investigated the mechanism by which single nerve cells in the brain receive and store information. His work offers the first concrete evidence for the current theory that memory is the imprinting of a code on complicated molecules of a chemical called ribonucleic acid (RNA).

Dr. Morrell succeeds the late Dr. Henry Wise Newman as head of the division. Dr. Newman, who died in 1959, was an authority on multiple sclerosis and had conducted fundamental studies on the effects of alcohol on the human body.

Dr. Morrell was educated at Columbia University, where he received his A.B. and M.D. degrees. He also holds an M.Sc. degree from McGill University. He received training at Montefiore Hospital in New York City, National Hospital, Queens Square, London, and the Montreal Neurological Institute.

At Montreal, Dr. Morrell was associated in research with Dr. H. H. Jasper, and Dr. Wilder Penfield.

He was at Minnesota from 1955 until moving to Stanford last month. He is married and has three children. The family lives at 536 Gerona Rd., Stanford.

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(Mailed March 8, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NONTECHNICAL ABSTRACT OF PAPER TO BE PRESENTED AT THE ATLANTIC CITY MEETING OF THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY, 1961

SUBJECT: INDIVIDUAL DIFFERENCES IN SENSITIVITY OF PEOPLE TO THE CENTRAL EFFECTS OF CAFFEINE.

AUTHORS: Avram Goldstein, M.D., and Richard Warren. (Dr. Goldstein is professor and executive head of the Department of Pharmacology. Mr. Warren is a medical student.)
ADDRESS: Department of Pharmacology, Stanford University School of Medicine, Palo Alto, Calif.

ATLANTIC CITY ADDRESS: Hotel Dennis.
TIME: 10:15 a.m., Monday, April 10.
PLACE: St. Dennis Room, Hotel Dennis.
PROGRAM: American Society for Pharmacology and Experimental Therapeutics.

FOR RELEASE TO P.M.'S
APRIL 10, 1961

Caffeinated beverages like coffee and tea are widely drunk and it is supposed that people derive a stimulant effect from the caffeine. This effect is variously described as "pepping one up", "making one more alert", and so on. Many people claim that when they drink coffee in the evening they cannot fall asleep easily. Others claim that coffee doesn't bother their sleep at all. Moreover, there are very great differences between people with respect to the daily amount of caffeine intake, from none at all to ten cups of coffee (or more). The purpose of our investigation was to learn more about the nature of the differences in sensitivity to caffeine and the relationship of these differences to the caffeine habit. Is it true that people differ as much as they claim in their responsiveness to a given dose of caffeine? If so, what is the cause of the difference? And what connection is there between caffeine sensitivity and caffeine habit?

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The results being reported at this time concern the effects of caffeine upon sleep. The findings show that approximately 20 per cent of the subjects were always kept awake by caffeine and 20 per cent were never kept awake by it. (See below for further details.) The implications of the results have more significance than might be indicated by a study of the effects of coffee. They suggest that an individual's response to a drug such as caffeine could be genetically determined, although this hypothesis has not been tested yet. If this hypothesis proved correct, it would have useful applications in medical practice; it might also shed new light on the problems of drug addiction and alcoholism.

Over a period of several years, unselected groups of medical students have been given a fixed dose of caffeine about an hour before bedtime, after abstaining from caffeine for ten hours or more. To minimize subjective bias the experiments were done on a "double-blind, placebo-controlled" basis. This means that subjects were given decaffeinated coffee which sometimes had added to it 150 milligrams of caffeine (the usual amount in a strong cup of coffee) and sometimes lactose powder. It had been shown, in a special set of experiments, that subjects were not able to distinguish by taste or appearance between a sample containing caffeine and a placebo containing lactose. All samples were coded by random serial number, and the person who distributed the samples did not have access to the code until the experiment was completed.

On the morning after taking each experimental sample, the subject filled out a questionnaire, reporting whether he had difficulty falling asleep, whether he slept as soundly as usual, whether he dreamed, whether he felt as well rested as usual on awaking. The experiment was repeated on several different nights with each subject.

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Although different groups of medical students were subjects and the experiments were performed in different years, the results were remarkably consistent and definitive. Considering the entire group of subjects (approximately 300 students), it is clear that caffeine, taken in this dose and under these conditions, does delay the onset of sleep. It may also disturb the soundness of sleep, although this is not proved beyond doubt. It does not increase the frequency of dreaming, nor does it alter the subject's estimate of the refreshing quality of his sleep. About 20 per cent of the subjects always was kept awake by the caffeine but never by the placebo. Another 20 per cent was never disturbed by either caffeine or placebo. The others had variable responses.

Of great interest was the wide difference in responses among the subjects. Some few were so affected by the caffeine that they were unable to fall asleep for hours; others were but slightly disturbed; yet others were wholly unaffected. These evident differences led to a special series of experiments in which we attempted to segregate those who reacted consistently to caffeine from those who never reacted to caffeine. Twenty-two selected subjects participated in experiments of the kind described above, night after night, for 12 nights. During this period each subject received, in random order, six caffeine samples and six placebo samples. Seven subjects never reported difficulty falling asleep after a placebo, but reported difficulty on all six caffeine administrations; these we termed "reactors". Five subjects never reported difficulty falling asleep on any of the 12 nights. The remaining subjects, who gave variable responses, were not further considered.

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The simplest hypothesis was now tested: that reactors absorb caffeine very well and therefore establish high blood levels (and brain levels) of caffeine, whereas non-reactors absorb caffeine poorly and consequently have low blood and brain concentrations. Five reactors and five non-reactors were given 300 milligrams of caffeine in decaffeinated coffee. Blood samples were then analyzed for caffeine at intervals, for three hours. There was absolutely no difference between the reactors and non-reactors. Both groups absorbed caffeine rapidly and completely, established the same blood levels, and eliminated caffeine at the same rate. The hypothesis is therefore rejected. At the same blood caffeine concentration, one person is stimulated by the drug, another is not.

Among the heavy coffee-drinkers there was a disproportionately large number of non-reactors. It is impossible to say whether this means that people become tolerant of the effects of caffeine when they take it frequently, or that non-reactors have to drink more than other people to get the same stimulant effect.

We are continuing these studies with the aim of learning more about the differences between reactors and non-reactors, and the reasons why some people are habituated to caffeine while others are not.

These studies were supported by a grant from the Maxwell House Division, General Foods Corporation.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

FILE COPY

NOTE TO EDITORS: The following story is for release to P.M. newspapers of Monday, April 10. Time of release is set to follow presentation of a scientific paper on the findings at a meeting of the American Society for Pharmacology and Experimental Therapeutics.

ATLANTIC CITY, N.J., April 10--If coffee keeps you awake at night, don't blame your imagination--blame your body chemistry.

So show the preliminary results of a study of the effects of caffeine upon sleep, conducted by two investigators at the Stanford University School of Medicine. They reported on their research today at a meeting of the American Society for Pharmacology and Experimental Therapeutics.

Tests on more than 300 subjects over a period of six years have shown that approximately 20 per cent was always kept awake by caffeine and 20 per cent never was. The remaining 60 per cent was sometimes kept awake, sometimes not.

The implications of the research findings have more significance than might be indicated merely by a study of the effects of coffee. The findings suggest that an individual's response to a drug such as caffeine could be genetically determined, although this hypothesis has not been tested yet.

If this hypothesis proved correct, it might help explain why some patients respond to treatment with drugs while others do not respond as well. It might also shed new light on the problems of drug addiction and alcoholism, and whether some people are more prone to become addicted or alcoholic.

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The tests were conducted by Dr. Avram Goldstein, professor and executive head of the Department of Pharmacology, and medical student Richard W. Warren. Subjects were given decaffeinated coffee which sometimes had added to it 150 milligrams of caffeine and sometimes a placebo (a drug with no effect).

The amount of caffeine that was used is the usual amount in a strong cup of coffee. Previous tests had shown that people are not able to detect by taste or appearance the difference between the samples containing caffeine or placebo.

The subjects drank their coffee samples about an hour before bedtime, after going without coffee or tea (which also contains caffeine) for at least 10 hours. The next morning they filled out questionnaires reporting how they had slept. They were tested up to 12 consecutive nights.

"Although different groups of medical students were subjects and the experiments were performed in different years," Goldstein and Warren reported, "the results were remarkably consistent and definitive. It is clear that caffeine, taken in this dose and under these conditions, does delay the onset of sleep for some people.

"It may also disturb the soundness of sleep, although this is not proved beyond doubt. It does not increase the frequency of dreaming, nor does it alter the subject's estimate of the refreshing quality of his sleep."

Another interesting finding was that among the heavy coffee drinkers tested there was a higher than average proportion of non-reactors. "It is impossible to say whether this means that people become tolerant of the effects of caffeine when they take it frequently," the investigators said,"or that non-reactors must drink more than other people to get the same stimulant effect."

The studies are continuing with selected "reactors" and "non-reactors"to find out what the difference is between the two groups.

Goldstein and Warren are trying to develop methods for telling the two types apart by testing their physical, mental and emotional reactions to caffeine. The investigators also want to learn the reasons why some people have the caffeine "habit" and others do not.

The research is supported by a grant from the Maxwell House Division, General Foods Corporation.

(Mailed April 5, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

FILE COPY

STANFORD FACULTY MEMBER NAMED MARKLE SCHOLAR IN MEDICAL SCIENCE

Dr. Stanley L. Schrier, assistant professor of medicine at Stanford University School of Medicine, has been appointed a Markle Scholar in Medical Science, it was announced today.

The appointment carries a $30,000 grant that will be paid to the medical school over a period of five years to support Dr. Schrier and to aid his research.

Dr. Schrier is one of 25 young medical scientists in the United States and Canada selected for the scholarship program by the John and Mary R. Markle Foundation of New York. He was the only California faculty member chosen.

The Foundation has made annual grants since 1948 to relieve the shortage of faculty members in medical schools and to strengthen medical education.

The Stanford scholar is 32 years old. He received his A.B. degree from the University of Colorado in 1949, and his M.D. in 1954 from Johns Hopkins Medical School.

He received additional training at Johns Hopkins Hospital, the University of Michigan Hospital and the University of Chicago Hospital. He joined the Stanford faculty in 1959.

Dr. Schrier's special field is hematology. In his current research he is studying the metabolism of the red cell wall. Metabolism is the process by which an organism produces energy for its vital functions.

Dr. Schrier and his wife, Peggy, have two daughters, Rachel, 5, and Leslie, 3. They live at 825 Ilima Court, Palo Alto.

(Mailed April 4, 1961) ######

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

ADMINISTRATOR NAMED TO DIRECT PALO ALTO-STANFORD HOSPITAL CENTER

Oliver E. Deehan has been named administrator of the Palo Alto-Stanford Hospital Center, President William R. Hewlett of the Hospital Board of Directors announced today.

Commenting on the appointment, Hewlett said, "Mr. Deehan took charge of the Hospital as acting administrator in a time of real crisis and has rebuilt public confidence in the institution. We are convinced he can provide the leadership that will bring the Hospital into the forefront among medical care centers in the nation."

Deehan succeeds Dr. E. Dwight Barnett, who resigned last June. He has been acting administrator since then.

Palo Alto-Stanford Hospital Center is the major patient care facility in the Stanford Medical Center, which also includes the Stanford University School of Medicine. The Hospital provides services for a large community in and around Palo Alto as well as for the medical school.

Deehan first joined the Hospital as associate administrator in 1957 and was promoted to deputy administrator in 1959. He received a B.S. degree from Columbia University in 1955, and an M.S. in hospital administration from Columbia's School of Public Health and Administrative Medicine in 1957.

He was in the U.S. Navy from 1946 to 1952 and during the last two years of service was a jet fighter pilot.

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At 34 Deehan becomes one of the youngest administrators of a hospital in a major medical center in the United States. "The appointment is consistent with the dynamic atmosphere of the whole Medical Center," Hewlett said. "Many of Stanford's recent faculty appointees have also been highly qualified men in their thirties."

"Both his demonstrated performance and his leadership potential led us to choose him for this key job," the Board President said.

"In the last nine months Deehan and his staff have (1) markedly improved patient care and patient services; (2) placed the operation on a sound financial basis; (3) established a high level of employee morale; and (4) demonstrated ability to work successfully with both the private physicians of the Palo Alto Medical Staff and the faculty members of the School of Medicine."

Hewlett emphasized that there is every indication that the Hospital will meet its budget this year. Last year there was a large operating deficit that prevented its meeting certain financial obligations to the owners, the City of Palo Alto and Stanford University.

As current problems are brought under control, the Board feels Deehan will be able to consider the broader, long-range aspects of the Hospital Center's operation.

It feels he has the ability to carry through, with the Board's guidance, the programs necessary (1) to broaden the financial support of the Hospital, since it is clear that patients cannot be expected to bear the whole cost of facilities and services; (2) to provide the specialized care which a normal community hospital cannot afford; and (3) to provide, in conjunction with the Stanford School of Medicine, leadership in establishing Stanford Medical Center as the major center of medical care, medical teaching and medical research on the West Coast.

Deehan is married and has three children, Ellen, 7, Robert, 5, and Carol, 4. The family lives at 226 Solana Dr., Los Altos.

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(Mailed April 3, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

NOTE TO EDITORS:

The featured speaker for the Stanford Student Medical Conference on Friday, May 26, will be Dr. Jonathan E. Rhoads,M.D., provost and chief of surgery at the University of Pennsylvania School of Medicine.

He will speak about "Calculation of the Gains and Risks of Operations for the Prevention of Cancer." No advanced text will be available but Dr. Rhoads has agreed to meet with reporters that morning.

The Press Conference will be held at 11 a.m. Friday in the Make-up Room in Dinkelspiel Auditorium on the Stanford campus. The room is located behind the stage and is marked "Make-up Room." Your reporters are invited to attend.

Another story from the meeting, based on a student research paper to be presented the same day, is enclosed with this memorandum.

---Sam Moffat

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, DA 1-5310

NOTE TO EDITORS: This story is timed for release following presentation of a research paper at 10:55 a.m. Friday.

FOR RELEASE TO P.M. NEWSPAPERS OF Friday, May 26, 1961.

HEAVY COFFEE DRINKERS FOUND PHYSICALLY DEPENDENT UPON CAFFEINE

Heavy coffee drinkers are inclined to have headaches and to feel sluggish and tired if they don't get their dose of caffeine in the morning, a Stanford medical student reported today (MAY 26) at the first Stanford/Medical Student Conference on the University campus.

The report by Richard Warren, who will receive his M.D. degree next month, was one of six presented today as examples of significant research being conducted by students in the School of Medicine.

Three of the papers were read by students in the first-year class, indicating that the new medical school curriculum which went into effect less than two years ago is encouraging research as the faculty had planned. These students did all or part of their work in the Max C. Fleischmann Laboratories of the Medical Sciences where they have a special opportunity to pursue their own interests more deeply.

Warren's research, done in cooperation with Dr. Avram Goldstein, professor of pharmacology, was based on detailed analysis of reactions of six heavy coffee drinkers who usually have five or more cups a day.

They did without their morning coffee, and then drank decaffeinated coffee containing either caffeine or a drug having no effect.

When they got caffeine this way, the subjects "tended to feel alert, talkative, jumpy, nervous, stimulated and more motivated to work," Warren said. "They tended to describe a feeling of well-being."

- more -

When the coffee contained the drug that had no stimulative effect, "subjects tended to complain of a headache" and to feel sleepy, sluggish groggy, tired, and depressed.

Careful tests beforehand with 50 coffee drinkers had shown that they could not distinguish the two beverages apart by taste or appearance.

Warren said that "withdrawal effects" are most prominent among the heaviest coffee drinkers. This study indicates that heavy coffee drinkers have physical dependence upon caffeine as shown by headache and mood changes when it is withdrawn.

The research was supported by a grant from the Maxwell House Division of General Foods, Inc.

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(Mailed May 24, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, DA 1-5310

OPEN HOUSE FOR SCIENCE STUDENTS TO FOLLOW DEDICATION OF LABORATORIES

An open house with a series of demonstrations of equipment used in the education of medical students will be held Saturday afternoon (MAY 27) from 1 to 4 p.m. at the Stanford Medical Center.

The open house will follow ceremonies at 11:30 a.m. marking the dedication of the $1,192,000 Max C. Fleischmann Laboratories of the Medical Sciences.

Demonstrations will be planned primarily to interest high school and college students who are considering careers in medicine or the biological sciences. Microscopes which can show living bacteria in motion, and an instrument which can simultaneously measure and record four types of information on body function (respiration, electrical waves in the heart, and so on) are among those to be shown in actual operation.

Displays and demonstrations will be set up in the Fleischmann Laboratories on the second floor of the Medical School Building in the Medical Center.

The entire cost of the student laboratories and the expensive equipment in them was paid for by the Max C. Fleischmann Foundation of Nevada.

Francis R. Breen of Reno, Nevada, a trustee of the Foundation, will take part in the dedication ceremonies, together with Dr. Wallace Sterling, president of Stanford University, and Dean Robert H. Alway of the Stanford School of Medicine.

- more -

There will be a brief discussion of "The Unity of the Medical Sciences" during the ceremony. Dr. Frederick A. Fuhrman, director of the laboratories, and two students will speak. The students are Lawrence T. Eschleman of Represa, California, and Michael A. Altman of Highland Park,Illinois, presidents of the classes of 1964 and 1965 respectively.

The two classes represented are the first to use the new laboratories, which were opened when the Stanford School of Medicine was moved to the campus from San Francisco in the fall of 1959.

The facilities are the "home base" of medical students for the first three years they are at Stanford. To avoid the splintering of courses found in many medical schools, some of the work is taught cooperatively by seven departments.

More equipment is available in these laboratories than could be provided in any single departmental laboratory, and it may be used by students who wish to explore their special interests more deeply. The facilities have already produced a substantial increase in the amount of student research conducted.

Students are assigned permanent places in the laboratories and may work there any hour of day or night. Professors come to the laboratories to teach the courses which are given before students begin assisting in the care of patients. In most schools the reverse is true--the students must use different facilities for each course.

The Fleischmann foundation was established by Max C. Fleischmann, former chairman of the board of The Fleischmann Company, originators of Fleischmann's Yeast. The company later merged with Standard Brands Incorporated.

The Foundation has continued to support the philanthropic organizations which interested Major Fleischmann. These ranged from educational institutions to health and youth services.

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(Mailed May 23, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NOTE TO EDITORS: We are attempting to arrange a press conference with Dr. Rhoads Friday morning. Abstracts of the student papers will be mailed to science writers later this week.

MEDICAL CONFERENCE TO FEATURE STUDENT RESEARCH AT STANFORD

Six significant reports of scientific research conducted by medical students and a discussion of operations for cancer will highlight the first Stanford Student Medical Conference.

The conference will be held all day Friday (MAY 26) in Dinkelspiel Auditorium on the Stanford campus. Sponsors are the Stanford Student Medical Association and the Stanford Medical Alumni Association.

Student papers, some of which will be submitted for publication in scientific journals, cover such diverse topics as heavy coffee drinkers' physical dependence upon caffeine and the effect of high altitude on laboratory animals.

Three of the papers are by students who are just completing their first year of medical school. Selection of their papers indicates that the new medical curriculum which went into effect less than two years ago is encouraging student research as the faculty had planned.

These students did all or part of their research in the Max C. Fleischmann Laboratories of the Medical Sciences where they have a special opportunity to pursue their own interests more deeply. The laboratories will be dedicated Saturday morning (MAY 27). Saturday afternoon there will be an open house and demonstration of equipment in the laboratories.

The principal address will be given on Friday by Dr. Jonathan E. Rhoads, provost and chairman of the Department of Surgery at the University of Pennsylvania. He will speak on "Calculation of the Gains and Risks of Operations for the Prevention of Cancer."

- more -

On Friday afternoon members of the graduating class of 1961 will present details of a program of patient diagnosis and treatment from the wards of the Palo Alto-Stanford Hospital Center.

The purpose of the conference is to further the intellectual development of students, to demonstrate student accomplishments, to stimulate research by providing an outlet for communicating results of investigative projects, and to bring about closer relations with the alumni.

Medical student Donald J. Prolo of San Jose is chairman of the committee which organized the meeting. Augustus A. White III of Memphis, Tenn., president of the Stanford Student Medical Association, headed the research paper selection committee.

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(Mailed May 22, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, DA 1-5310

600 YEARS OF SERVICE HONORED BY HOSPITAL CENTER

Fifty-one employees of the Palo Alto-Stanford Hospital Center whose combined length of service comes to more than 600 years were honored at the Hospital Center's third annual Gold and Silver Award Banquet this week.

Administrator Oliver E. Deehan presented silver pins for 20, 15 or 10 years' service to 50 of the men and women.

In addition, Miss J. Marie Havneros, administrative assistant in the Nursing Service, received a corsage as the employee with the most experience in the Hospital. She first came to work for Palo Alto Hospital 36 years ago this month.

The employees' group includes William Gilmour of Menlo Park, a cook, and his wife, Vivian, who works in the laundry. Gilmour started work in the Hospital 13 years ago. A year and a half later he got his wife a "temporary job" there but it turned into a regular career for her.

This was the first time 10-year pins were awarded, so some employees in that group actually have worked at the Hospital for more than that amount of time.

Principal speaker for the banquet, given at Rickey's Studio Inn, was Gordon P. Smith, vice president of the Board of Hospital Directors, who discussed "The Challenging Future of the Medical Center."

Employees who received awards are as follows:

Katharine O'Hair of Administration and Lura Robles of Laundry, both from Palo Alto, silver 20-year pins.

- more -

Nursing Service's Gertrude Edwards of Menlo Park, Kathryn McPhail of Palo Alto, and Verla Martin of Mountain View, for 15 years of service.

Forty-five 10-year silver pins went to the following:

From PALO ALTO: Naomi Kincaid, Virginia Graves, Jennie Duarte, Myrtle Hanson, Clare Mynderse, and Etty Huynen of Nursing Service; O. Denzel Braden and Anona Koehler of Operating Rooms; Hazel Tierce and Marien Cunningham of Business Office; Blanche Freeman of Communications; Virginia Howe of Admitting; Peteris Strautnieks and Ida Lausten of Housekeeping.

From MENLO PARK: Nadine Whiteaker, Peggy Gwinn, Vivian Enzenbacher, Esther Grow, Jean Laing, Margaret Riecks, and Pauline Karns of Nursing Service; William Gilmour of Dietary; Vivian Gilmour of Laundry.

From EAST PALO ALTO: Hazel Webber of Nursing Service; Jessie Martin of Hematology.

From LOS ALTOS: Flora Williams and Nell Parker of Nursing Service; Katherine Morales and Celestine Zangrando of Central Services.

From REDWOOD CITY: Pearl Searcy and Hazel Williams of Nursing Service; Kathryn Moore of Laundry; June Thompson of Labor and Delivery; Bessie Williams of Dietary; Gertrude Couch of Operating Rooms.

From SANTA CLARA: Helen Petrucci of Business Office; Delbert Hicks of Maintenance.

From SAN MATEO: George Barbieri of Operating Rooms.

From MOUNTAIN VIEW: Naomi Fell of Operating Rooms; Ona Williamson of Nursing Service; Margaret Hockensmith of Laundry; Dorothy Hirschberg of Dietary.

From SUNNYVALE: Genevieve Clark of Nursing Service.

From SAN JOSE: Frances Ingersoll of Medical Records.

From CUPERTINO: Loretta Harris of Nursing Service.

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(Mailed May 18, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:
Samuel Moffat, DA 1-5310

AOA HONORARY MEMBERSHIP AWARDED DR. WILLIAM W. GREULICH

Alpha Omega Alpha, the medical scholastic honors society, presented Dr. William W. Greulich, executive head of the Department of Anatomy of the Stanford University School of Medicine, with an honorary membership at its annual dinner last night (MAY 12).

Dr. Greulich is widely known for making the first survey of Japanese children who survived the atomic bombing of Hiroshima and Nagasaki, and then following their subsequent growth and development. His findings in the skeletal development of individuals of different races have set scientific standards in the field. He was science adviser to Dr. James B. Conant, U.S. High Commissioner for Germany between 1952 and '54, and was chairman of the Fulbright Commission between 1953 and '54.

The members of AOA initiated the award as a particular tribute to Dr. Greulich, a Ph.D. and not an M.D. eligible to regular membership, for his long and distinguished career as an anatomist and teacher. The topic of Dr. Greulich's address at the dinner was "Books and their Authors."

The AOA dinner also welcomed to its membership seven students of the class of '61, and three of the class of '62: William Abbott, John Bruner, David Hunt, Donald Johnson, Bernard Nelson, R. Cree Pillsbury and Donald Prolo of '61; Donald Doty, Laurence Kedes and Victor Lavis of '62.

Only those in the upper one-fifth of a Medical School class are eligible to membership in AOA, and only one-sixth of a graduating class may be elected to it. Of 52 medical students graduating from the Stanford School of Medicine this June, nine are in AOA, with John M. Simpson, Jr., serving as president of the Society.

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(Mailed May 12, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat DA 5-5310

FILE COPY

HOSPITAL WEEK TOUR OF STANFORD MEDICAL CENTER PLANNED SUNDAY, MAY 14

Palo Alto-Stanford Hospital Center will celebrate national Hospital Week by holding an open house with a tour through Stanford Medical Center on Sunday, May 14, from 3 to 5 p.m., Administrator Oliver E. Deehan announced today.

Six areas in the Hospital Center and the Stanford University School of Medicine will be displayed to demonstrate the complex and diversified parts which make up a major medical center. Examples of diagnostic and therapeutic equipment, supporting services and teaching laboratories will be shown.

A special parking area will be reserved for visitors. This area is at the end of Edwards Building, the first building on the right as you drive toward the Center from Willow Road.

Volunteers from the Hospital Center Auxiliary and the Gray Ladies of the American Red Cross will be stationed along the tour route to assist visitors.

The tour will begin in the Hospital lobby. Stops will include Physical Medicine where physically handicapped patients are treated; the laboratories used by medical students when they are learning basic medical sciences; Cardiology, where diagnostic studies are made on patients with heart disease; the Pediatric playroom; Therapeutic X-ray where cancer patients are treated; and the Dietary Department.

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(Mailed May 9, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, DA 1-5310

FOREIGN SERVICE POST SET FOR STANFORD MEDICAL SCHOOL PROFESSOR

Dr. William W. Greulich, executive head of the Department of Anatomy at Stanford University School of Medicine, has been named senior scientific attache for the United States Embassy in London.

From 1952 to 1954 Dr. Greulich held a similar post when he was science advisor to Dr. James Bryant Conant, then U. S. High Commissioner for Germany.

He will be responsible for advising embassy officials on scientific issues, expediting exchange programs such as the Fulbright scholarships, visiting universities in Great Britain and attending scientific meetings as an official United States representative.

Dr. Greulich is now en route to Washington, D.C., where he will spend about two weeks before going to England late in July. He will be on sabbatical leave from Stanford while he is in London. Professor Donald J. Gray will be acting executive during his absence.

The Stanford executive is widely known for his studies of the growth and development of children. He has documented the retardation among Japanese youngsters who survived the atom bombs dropped on Hiroshima and Nagasaki.

He has also examined children to study differences in development among different races.

Dr. Greulich received degrees from Kenyon College and the University of Denver before winning his Ph.D. at Stanford in 1934. He has been on the Stanford faculty since 1944.

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(Mailed June 28, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat DA 1-5310

MEDICAL STUDENTS, INTERN RECEIVE AWARDS AT MEDICAL SCHOOL CONVOCATION

Nine outstanding students of the Stanford University School of Medicine and an intern in the Palo Alto-Stanford Hospital Center received awards at the convocation of the class of 1961 held at Stanford Medical Center Saturday (JUNE 17).

Dean Robert H. Alway presented the awards to the men, after which the faculty address was delivered by Dr. David A. Rytand, Arthur L. Bloomfield Professor of Medicine at Stanford.

Dr. Bloomfield, professor of medicine emeritus, then administered the Hippocratic Oath to the new physicians. Dr. Bloomfield served on the Stanford faculty from 1928 to 1954 and is one of the University's most distinguished physicians and revered teachers.

Student Donald J. Prolo received the Borden Undergraduate Research Award of $500, given him for "research during his undergraduate career deemed most meritorious." He was also one of the five top-ranking senior medical students receiving a Mosby Scholarship Book Award.

John Bruner, David Hunt, Donald Mason and Ronald Pillsbury were the other students to receive Mosby Scholarship Book Awards, each worth up to $30.

The Hopkins Award of $100 for the outstanding senior medical student in dermatology went to Stephen Bennett.

The Merck Manual Award, offered to each of two outstanding senior medical students, went to William Abbott and Ralph Gianelly.

Douglas Bowden, a second-year student, was given the Roche Award of an Omega wrist watch as an "outstanding student of medicine who has successfully completed the first two years of medical school."

- more -

Clayton Feldman, M.D., received the Julian Wolfsohn Award of $100 as the "intern at the Stanford University Hospital who, during the year, did the best work in neurology or internal medicine."

EDITORS: Students and their parents' names and addresses are listed below:

Donald Prolo, Mr. and Mrs. James R. Prolo, 1163 Crescent Dr., SAN JOSE.

John Bruner, Dr. A.M. Bruner, HOT SPRINGS, SOUTH DAKOTA, and Lois C. Bruner, 2909 E. Lester Dr., TUCSON, ARIZONA.

David Hunt, Mr. and Mrs. Arthur J. Hunt, 4237 Drakes Brand Rd., NASHVILLE, TENNESSEE.

Donald Mason, Mr. and Mrs. Milton D. Mason, 406 Warren St., MANKATO, MINN.

Ronald Pillsbury, Dr. and Mrs. S.G. Pillsbury, 4035 Country Club Dr., LONG BEACH.

Stephen Bennett, Prof. and Mrs. Merrill K. Bennett, 1103 Ramona St., PALO ALTO.

William Abbott, Mr. W.L. Abbott, 822 G St., ARCATA, and Mrs. Gene Walker, 330 Cherry St., SAN FRANCISCO.

Ralph Gianelly, Mr. and Mrs. Eugene G. Gianelly, 20 Bow St. Ct., STONEHAM, MASS.

Douglas Bowden, Prof. and Mrs. D.J. Bowden, 936 S. High St., BLOOMINGTON, IND.

Dr. Clayton Feldman, Mr. and Mrs. David Feldman, 2718 N. 58th St., MILWAUKEE, WIS.

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(Mailed June 20, 1961)

Note to editors: All the students except Douglas Bowden received their M.D. degrees at Stanford's commencement Sunday (JUNE 18).

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

COST CUTS SAVE COUNTY MONEY FOR STANFORD CLINICS PATIENTS

Charges to Santa Clara County for psychiatric patients treated in the Stanford Clinics under the Short-Doyle Act will be reduced 13 per cent per patient visit during the coming year.

The savings are a result of lower operating costs in the Clinics since a year ago. County charges will drop from this year's $7.29 per visit to $6.31 next year. The reduced costs will also result in lower charges to the patients themselves, since they pay fees which are supplemented by Short-Doyle funds.

The Santa Clara County Board of Supervisors Wednesday (JUNE 14) approved $54,000 in the budget of the County Health Department to cover expenses of the program. A contract between the Department and the Palo Alto-Stanford Hospital Center was signed in May, but was contingent upon Board allocation of the necessary funds.

The Short-Doyle Act provides matching funds for counties to provide psychiatric care for its residents. Patients are charged fees based upon family income. The state and county funds make up the difference between patient charges and actual clinic costs.

Patient charges are based on the Heller guide, a scale which offers a guide for charges depending upon several factors, including family income, expenses, and the number of persons in each family.

Average cost per visit in the psychiatry clinic last year was $12.82, but has been estimated to be 7.6 per cent less, or $11.84, for 1961-62. This lower cost will be reflected in reduced charges to the county during the fiscal year beginning this July 1.

(Mailed June 15, 1961) ######

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

TWO FACULTY APPOINTMENTS AND TWO NEW DEPARTMENTS ANNOUNCED

An internationally recognized tissue chemist and an outstanding anesthetist will join the faculty of the Stanford University School of Medicine on Sept. 1, Dean Robert H. Alway announced today.

The new appointees are Dr. David Glick, professor of pathology, and Dr. Vernon Thomas, associate professor of anesthesia. Dr. Glick is currently professor of physiological chemistry and director of the Histochemistry Laboratory at the University of Minnesota. Dr. Thomas is a former professor and chairman of the Division of Anesthesia at the University of Rochester, N.Y.

Dean Alway also announced the formation of two new departments in the medical school, Anesthesia and Dermatology. Until recently they were divisions of the Departments of Surgery and Medicine respectively.

Executive head of the Department of Anesthesia is Dr. John P. Bunker, who came to Stanford from Harvard last year as professor and head of the division.

The Department of Dermatology is headed by Dr. Eugene M. Farber, who has been professor and division chief from 1950 to the present. Dr. Farber is directing the department's extensive, multi-discipline investigation of psoriasis, the disfiguring skin disease which afflicts millions of Americans.

In the Department of Pathology Dr. Glick will organize and direct research activity in micro-histochemistry. Histochemistry is the study of chemical substances in body tissues, and is frequently conducted at the cellular level.

- more -

For many years Dr. Glick has contributed to the development of new techniques of chemical analysis using very small samples, such as microscopic fragments or single cells. These have become widely used and are important in helping identify the elements of tissue that are responsible for specific chemical processes.

He has held his current post as professor at the University of Minnesota since 1950. He is the author of 149 papers in professional journals and publications, and is editor of the journal Methods of Biochemical Analysis.

He received his B.S. from the University of Pittsburgh in 1929 and his Ph.D. in biochemistry there in 1932.

Dr. Thomas is considered an outstanding teacher and an expert in obstetrical anesthesia and the resuscitation of newborn infants. He has been in private practice in Rochester, N.Y., for the last two years.

From 1955 to 1959 he was chairman of the division of anesthesia at the University of Rochester. He was an associate professor from 1955 to 1958, and full professor the following year.

Dr. Thomas was born in the British Isles and holds three degrees from the University of Wales, a B.Sc., and M.B. and a B.Ch., the last two in medicine.

In 1957 he was elected a Fellow of the Faculty of Anaesthetists (cq) of the Royal College of Surgeons in recognition for his part in setting up exchange fellowships for young British anesthetists to come to the United States.

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(Mailed June 13, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Ann Walker, DA 1-5311

EDITORS: The following student is brought to your attention as possible feature material for use in connection with Stanford's 70th annual Commencement, June 18, 1961.

JORDAN R. WILBUR, School of Medicine; grandson of Ray Lyman Wilbur, third president of Stanford University. A psychology major, he graduated from Stanford in '53, spent two years in the Navy, returned to Stanford for two years of premedical and postgraduate work in psychology; then four years in School of Medicine. Son of Dr. Dwight Wilbur; will intern at Children's Hospital and Medical Center in Boston, the first pediatrician in three generations of a family of doctors. (Ray Lyman Wilbur was an M.D. and the first dean of the Stanford School of Medicine before becoming president in 1916.) Married graduate of Pomona, Violet Rakich; has two children, Teresa, 4½, Bruce, 1½. Home address: 2035 El Prado, Redwood City.

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Mailed June 12, 1961

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Ann Walker, DA 1-5310

FILE COPY

ACCIDENT LED TO LIFESAVING FOUNDATION--AND STANFORD NURSE'S CAREER

When Linda Collins steps up to receive her diploma from the School of Nursing at Stanford University's graduation ceremonies Sunday (JUNE 18) she will be wearing--as she always does--an unusual bracelet on her left wrist.

The story behind that bracelet is the story of an unlucky accident which set the lucky pattern of 22-year-old Linda's life today.

But for the accident which almost claimed her life eight years ago, Linda would not have entered nursing.

But for it, and the bracelet she wears, many who are alive today would have died or suffered unnecessarily.

But for it, and her success in championship golf, she would probably never have met the young doctor she will marry this fall.

The bright red letters on the bracelet read "MEDIC ALERT." There is also a picture of a staff with a snake entwined about it--the staff of Aesculapius, the symbol of medicine. On the back there is the message: "Allergic to Horse Serum, Aspirin, Sulfa Drugs."

It was Linda's allergy to horse serum which made her accident serious. When she was 14 a B-B gun lever snapped back and cut her finger. Her uncle, a physician, stitched up the wound but before giving her a routine anti-tetanus shot decided to give her a precautionary skin test.

His caution saved her life. Even the sample in the skin test was enough to send her into anaphylactic shock, a severe reaction which nearly killed her. A full dose surely would have been fatal.

--more--

It was during her recovery in the hospital that Linda changed her career goal from teaching to nursing. "I was so impressed with the nurses and their care of me," she says, "I wanted to be like them one day."

After her recovery, though, her surgeon father, Dr. Marion Collins of Turlock, Calif., was still worried. He feared that someone might unknowingly give Linda another anti-tetanus shot if she were ever in an accident.

At first he had her carry warning notes or wear them pinned to her clothes. But he knew these might get lost in an accident. When Linda came to Stanford, he suggested tattooing the warning on her leg or arm. Not surprisingly, she objected.

Putting their heads together they came up with the bracelet idea. But then Dr. Collins began to worry about the thousands of others like his daughter with allergies or unusual illnesses who might be in as much danger.

So in 1956 he founded the Medic-Alert Foundation to supply similar warning tags for all who need them. The foundation, with headquarters in Turlock, has grown until it is an international organization today.

Medicine is only one of two strong currents in Linda's life. The other is golf, which she started playing at the age of eight. As an undergraduate at Stanford she played in several tournaments. Last year she won the San Francisco City Women's Golf Championship.

Her championship led to the next big event of her life. When Stanford senior medical student John Maurer of Madison, Wis., read about it he decided he had to meet her, because she was interested in the two things he liked best: medicine and golf.

They met last April and played golf the same afternoon they were introduced. This September they will be married. John is now interning at the Hartford, Conn., Hospital, but will return to Stanford in July as a psychiatry resident.

Linda will go to work in the Palo Alto-Stanford Hospital Center this summer, but she expects to continue to mix golf with nursing. She'll be playing in the National Women's Intercollegiate Championship at Ann Arbor, Mich., later this month, and in the National Women's Open and National Women's Amateur during the summer.

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NOTE TO EDITORS: Linda's parents are Dr. and Mrs. Marion Collins, 1030 Sierra Drive, Turlock, California.

(Mailed June 12, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NEW HOUSE OFFICERS ON DUTY AT PALO ALTO-STANFORD HOSPITAL CENTER

Forty-three new house officers have just gone on duty at Palo Alto-Stanford Hospital Center, according to Administrator Oliver E. Deehan.

These young doctors are interns, residents, trainees and fellows who are receiving advanced medical training. They assist in the care of all teaching patients in the Hospital and in the Stanford Clinics. Some are also assigned to emergency, operating and delivery rooms, where they serve both teaching and private patients.

Fourteen states plus the District of Columbia and Canada produced the 43 newcomers; they trained for their M.D. degrees at 28 different medical schools in the United States and one in Canada.

New York and California contributed the greatest numbers, with California leading 13 to 10. Two of the new house officers are women.

With the new arrivals, the house staff for the year ending next July totals 183, including those doctors who will work part or all of the time at other hospitals associated with Stanford.

These other hospitals are Palo Alto Veterans Administration Hospital, San Mateo Community Hospital, Santa Clara County Hospital in San Jose, the Stanford Convalescent Home, and Presbyterian Hospital and Medical Center in San Francisco.

All of the young doctors care for patients but some are called trainees or fellows because they have received training grants or fellowships. The Hospital pays the salary of interns and residents who work there.

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(Mailed July 26, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Ann Walker DA 1-5310

STANFORD HEART PATIENT TO RETURN TO BOLIVIA

Luisa Garron, 24, the girl from Potosi, Bolivia, whose brother brought her to this country four months ago for life-saving heart surgery, is flying home to Bolivia at 12:15 a.m. next Monday morning, July 24. Luisa's brother, Edmundo, 29, the former medical school student who borrowed $2,000 on a hospital orderly's pay (plus part-time pay teaching Spanish in two Redwood City public schools), to bring her to the Stanford Medical Center and pay for her hospitalization, is remaining in this area. He plans still to earn enough to start his own medical studies again. "If it takes until I am 50," he still says, "I shall be a doctor."

Dr. Norman Shumway, assistant professor of surgery at Stanford and head of the team which performed the operation, said on the eve of her departure: "Luisa has improved greatly since her operation and we expect her to continue to improve. She has an excellent chance to live a near-normal life, although she will never be as strong as a person with a normal heart. Without the operation, however, she would probably not have lived for more than a few years."

Chronology on Garron Story

December 1960	Edmundo Garron starts work as an orderly at the Palo Alto-Stanford Hospital Center in the Stanford Medical Center.
January 1961	Dr. Norman Shumway, assistant professor of surgery at Stanford University School of Medicine, offers to do open heart surgery on Luisa Garron without fee after being told about her condition by her brother, Edmundo. The same month Edmundo borrows $2,000 to bring Luisa to U.S.A. and cover cost of her hospitalization.
March 1961	Luisa arrives here. Her heart condition is more serious than at first suspected. It is mitral insufficiency, a congenital defect in which the ring around the mitral valve is overlarge so that the valve never entirely closes. Mortality rate for such corrective surgery is 33 percent.
April 4	Luisa has five-hour operation by Stanford 5-man heart surgery team, headed by Dr. Shumway. For 90 minutes her heart is stopped and she lives only by means of a heart-lung machine. Tucks are taken in overlarge valve ring. She remains on critical list for days.
April 16	Luisa leaves hospital to live with Mr. and Mrs. Wilbur Doxsee, 503 Arlington Rd., Redwood City. She begins to enjoy things other girls always take for granted but she never could have, such as trips to Carmel, San Francisco, Santa Cruz...
July 24	Luisa to fly home to Bolivia via United Airlines, Flight 848, 12:15 a.m. July 24, from San Francisco International Airport.

7/21/61

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

MEDICAL SCHOOL DEAN PARTICIPATES IN INTERNATIONAL SYMPOSIUM

Dean Robert H. Alway of the Stanford University School of Medicine is in Dundee, Scotland, this week, taking part in the International Symposium on Hospital and Medical School Design.

Dean Alway is one of only four Americans participating in the meeting. Most of the participants are from the United Kingdom. Sessions start Wednesday (JUNE 12) and run through Saturday.

The symposium is being held at Queen's College, the college of the University of St. Andrews (cq) which includes the University's medical school.

Dr. Alway is to speak at two sessions. During one he will outline the reasons why Stanford Medical Center was built as it was. He will cover the medical school's educational philosophy and the functional needs which had to be met to make the philosophy a working reality. When the Center opened in 1959 the school began a new five-year curriculum for medical students.

In the second session he will discuss the operation of the Max C. Fleischmann Laboratories of the Medical Sciences, the "home base" of medical students for the first three years they are at Stanford.

Professors come to the Fleischmann Laboratories to teach the courses which are given before students begin assisting in the care of patients. In most medical schools the reverse is true--the students must use different facilities for each course.

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(Mailed July 10, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat DA 1-5310

DIVISION OF CLINICAL SOCIAL WORK ESTABLISHED AT STANFORD MEDICAL SCHOOL

Dr. Daniel E. O'Keefe, until this summer chief of the Social Service Department of the 500-bed Clinical Center at the National Institutes of Health in Bethesda, Md., is chief of the new Division of Clinical Social Work in the Stanford University School of Medicine, Dean Robert H. Alway announced today.

The division is the first in the country with the aim of providing social work participation in all appropriate areas of the medical curriculum.

The new division will develop educational programs which stress the importance of social and emotional factors in the care of patients. Its work is expected to fit in with the emphasis on behavioral sciences in the new curriculum of the medical school.

Faculty and staff will also offer social service assistance to hospital and clinic patients at the Stanford Medical Center.

In addition to serving as chief of the division, Dr. O'Keefe holds the rank of associate professor. He began work late last month.

Dr. O'Keefe had held his post at N.I.H. since 1952. He was responsible for directing the medical and psychiatric social work in the Clinical Center, a 500-bed research hospital. His staff not only assisted patients but also collaborated in research carried on in the various medical disciplines and undertook independent research on the social and emotional aspects of long-term illness.

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The new division chief is 46. He is married and has three children. He received his B.S. from the University of Dayton in 1936 and his M.S. in social work two years later from Catholic University in Washington, D.C. He received his Ph.D. from the University of Minnesota School of Social Work in 1955.

His professional experience includes service with the Veterans Administration, the Army Surgeon General and the U.S. Public Health Service.

He is a charter member of the National Association of Social Workers and was chairman of its Psychiatric Social Work Section from July, 1959, through June of this year.

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(Mailed August 1, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

CANCER RESEARCH CENTER ESTABLISHED AT STANFORD

A Clinical Radiotherapy Cancer Research Center will be established at the Stanford Medical Center this fall under a $943,412 grant from the National Cancer Institute, it was announced today.

Very few patients will be hospitalized under the Center's auspices until after Jan. 1, but eventually 15 beds will be occupied by research patients. Between 200 and 500 patients a year will be cared for under the program.

The new Center is one of eight cancer research units now being set up by the NCI in medical institutions across the country.

Investigators in several disciplines will join with the Stanford School of Medicine's Department of Radiology in the research involved. Major research areas will include:

1. Studies of the value of chemicals which enhance the effect of radiation for treatment of tumors.

2. Experiments with methods of altering the amount of oxygen reaching tissue for the purpose of changing radiation sensitivity.

3. Studies of tumor blood supply, which might lead to methods of selectively making some tumors more sensitive to X rays.

4. Exploration of methods of using radio-opaque agents to reveal early tumors of the lymphatic system, which is very susceptible to the spread of cancer from other sites.

5. Studies of skin ailments and gynecologic tumors which relate to the problems and techniques listed above.

- more -

The program director for the Cancer Research Center is Professor Henry S. Kaplan, executive of the Department of Radiology. Assistant Professor Malcolm A. Bagshaw, director of the radiotherapy division of the Department, will be deputy director.

New equipment needed in the Medical Center to support the research will include a second 6-million-electron-volt medical linear accelerator, to be installed near the present unit; a new X-ray lab for tumor diagnosis; and more facilities for the Isotope Laboratory.

The present medical accelerator is now being operated at full capacity for the treatment of patients by means of conventional supervoltage X rays. Built by Stanford physicists five years ago, it was the first of its kind in the United States and has become the prototype for similar installations in the United States and abroad.

In addition to supporting the research through August of 1962, the NCI has indicated that there will be funds allocated for six succeeding years. Allocations will be negotiated annually but are not to exceed stipulated ceilings of approximately $600,000 a year.

The grant will pay all of the patients' hospital costs and there will be no professional charges. Patients will be accepted for care only on referral from a physician and only after an evaluation by Stanford physicians as well.

When the program is ready to accept patients physicians in the area will be notified by the Department of Radiology.

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(Mailed August 30, 1961)

FILE COPY

For Release
Sunday, Sept. 24, 1961

National Aeronautics and Space Administration
Ames Research Center
Moffett Field, Calif.

Scientific devices to be used in answering one of the most exciting questions in modern biology, and in space science as well, are in preliminary stages of design at Stanford University School of Medicine under a $380,640 grant from the National Aeronautics and Space Administration.

The question is: Has life evolved in any way other than it did on earth?

The equipment is planned to be a part of a space probe which could land instruments on Mars and Venus in a series of planetary missions beginning 1966-67.

No specific devices have been completed yet, but preliminary studies under an earlier $37,605 NASA grant have laid the basis for reasonable objectives in the program. The new grant provides long-term support for the research through March, 1964.

The project is being directed by Dr. Joshua Lederberg, professor of genetics at Stanford and a co-winner of the 1958 Nobel Prize in Medicine. Associated with him is Dr. Elliott C. Levinthal, a research physicist.

In general, the scientists' approach is to try to design devices which could detect microscopic organisms or chemicals which are found in them. Specifically, these chemicals are nucleic acids, the very complex molecules which make up most of their structure.

"If life exists or has existed on a planet," Dr. Lederberg says, "evidence should be found in any drop of water, pinch of soil or gust of wind. With weight limitations in rocket payloads, we have little room to mount a trap for bear."

Findings related to microbes might help explain the origin of life on earth. Despite the great diversity of life forms, the central components of all of them are the same--nucleic acids and proteins.

"If we knew how specific proteins and nucleic acids first appeared on the earth," Dr. Lederberg said, "We would have most of what we need to understand the original development of life."

Great as the contributions to basic science could be, there are possible practical applications here on earth for equipment they might develop. A rapid monitor for micro-organisms might also serve as an alarm system for hospital operating rooms or for biological warfare defense.

Dr. Lederberg has already done considerable work on a microscope device which could be landed on a planet. It would put out a plastic tape which could pick up particles of matter and pull them before a microscope. A television camera would then transmit the microscope's picture back to earth.

The scientists are exploring these other possibilities too:

1. Concentration of living organisms by flotation methods which would separate them from heavier mineral materials.

2. Optical analysis of specimens to detect those most valuable for further study; this is particularly important because microbes are known to absorb certain parts of the spectrum of ultraviolet light.

3. Use of chemicals which have a specific effect on materials found in organisms; for instance, certain natural chemical catalysts called enzymes attack specific nucleic acids, so the acids' presence could be detected by this means.

4. Detection of the presence of enzymes in material, which would then indicate the presence of living or once-living organisms.

5. Artificial cultivation of microbes in the equipment, using a method similar to present ways of growing microbes in laboratory test tubes.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

STANFORD TO TAKE PART IN NATIONWIDE STUDY OF HIGH BLOOD PRESSURE

Stanford University School of Medicine is one of eight institutions in the United States taking part in a new cooperative study of patients with high blood pressure, one of the leading causes of death in the United States.

Patients will be given exhaustive diagnostic tests to determine as nearly as possible the exact cause of the disease in each case. The cost of these diagnostic tests will be covered under the program, but surgical and medical treatment will not be paid for by the grant.

High blood pressure, either alone or with accompanying heart and circulatory ailments, accounted for almost 20 per cent of the deaths in the United States in 1959.

The new study is being financed at Stanford by a $19,350 grant from the National Heart Institute. Dr. Thomas A. Stamey, associate professor of surgery and head of the division of urology, is directing the investigation.

One purpose of the research program is to try to confirm growing evidence that hypertension, or high blood pressure, is caused by the kidney. Another aim is to find out which of seven newly developed tests is the most reliable in showing when the hypertension is caused by the kidney and whether it can be cured by surgical treatment.

Present indications are that an obstruction which reduces arterial blood flow to the kidney leads this organ to produce "renin," a chemical which sets in action a chain of events leading to a rise in the blood pressure.

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Dr. Stamey, while at the Johns Hopkins Hospital in Baltimore, Md., developed a new test for identifying kidneys responsible for high blood pressure. This is one of the tests being evaluated at the eight participating universities.

Surgery is already effective in many cases which are clearly due to arterial obstruction. A partial block in the artery may result from infection, deposit of fatty material, an inborn defect or other conditions.

The Stanford investigators say that it is particularly important for hypertensive patients under 30, and for those in the 40-70 age bracket who have developed high blood pressure in the last year or two, to seek treatment.

In both situations it is almost certain that the kidney condition is to blame. In both cases the condition may be corrected by surgery with a cure rate of about 85 per cent.

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(Mailed Sept. 13, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Ann Walker DA 1-5310

NOTE TO EDITORS: This is background material for a press conference to be held at Foothill College in Los Altos on Wednesday, Sept. 6, at 2 p.m.

PARAPLEGIC, AFTER FIVE YEARS IN HOSPITALS, RETURNS TO COLLEGE

Russell Thorp, a paraplegic of 34, who has been in the Palo Alto-Stanford Hospital Center longer than any other patient--since December 1, 1959--is planning to start classes at Foothill Junior College on Wed., Sept. 6 at 1:00 p.m. A press conference will be held there with him at 2:00 p.m. on that day, in the office of the Mass Communications Division. This is in the 1-story brick building to the left of the Administration Building.

Mr. Thorp, who is from Wyoming, was an active young man who served as an intelligence officer in the Army and was athletically inclined before the accident that made him a paraplegic five years ago last June. He was supervising a lumbering operation in northern Idaho when a tree fell on him. Since that day, he has been in hospitals, hopelessly paralyzed from the waist down, undergoing numerous operations and in a rocking bed for much of the time. Late last December he lost one of his legs to an infection.

Through the five years in the hospital, Mr. Thorp has maintained one interest that dates back to a year at the University of Wyoming (he also attended Amherst College for a year): he studied and has continued to study the Russian language. This interest has attracted to him such people as Alexander Kerensky, once premier of pre-Soviet Russia, and many of the White Russian community of this area who gave him two Christmases last holiday season, both Western style on December 25, and Russian style on January 7.

After attending Foothill College for a year, Mr. Thorp plans to enter Stanford to complete his education.

He is also planning shortly to leave the hospital, to live in a large house in Palo Alto where he will board students as a means of livelihood. He also expects to learn to care entirely for himself.

If you are interested in sending someone to the press conference at Foothill College, you should telephone this office to confirm that Mr. Thorp will attend his first class as planned. An infection may postpone this for a short while.

Foothill College is on El Monte Avenue, Los Altos, 1½ miles south of Fremont.

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(Mailed September 1, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NOTE TO EDITORS: For release to P.M. newspapers of November 2, 1961. The following story is timed for release following presentation of a report to the American Society of Tropical Medicine and Hygiene in Washington, D.C. Dr. Beal will be staying at the Willard Hotel during the meeting. A photograph of the isolator in use is available.

DISPOSABLE PLASTIC BALLOON CAN BE "OPERATING ROOM" IN TROPICS

WASHINGTON, D.C.--Balloons have gone from the toy store to the edge of the atmosphere, but here's a new location for one--the operating room.

In fact a balloon of transparent plastic can be the operating room for all practical purposes, according to a pair of investigators from the Stanford University School of Medicine.

Dr. Charles Beal and medical student Daniel P. Stites of Margate, New Jersey, reported today on the effectiveness of using sterilized disposable plastic bags to provide a sterile field for operations in the tropics. Dr. Beal spoke this morning during the 10th annual meeting of the American Society of Tropical Medicine and Hygiene.

Dr. Beal first became interested in problems of tropical surgery while he was a Baptist medical missionary in what was then the colony of the Ivory Coast from 1951 to 1958. The colony has since become the Republic of the Ivory Coast. Dr. Beal is now instructor in preventive medicine at Stanford.

During his stay in Africa he was the only surgeon serving a population of 700,000 people. He frequently had to worry not only about keeping germs out of wounds but moths and flies as well.

His solution is to attach a sterile plastic bag to the patient's skin with a "surgical adherant" or sterile glue. The surgeon then slips his arms through the sides of the inflated bag to do the operation.

- more -

A special tray of surgical instruments has been designed to go with the bag. It has a plastic cover which will stick to the bag. The cover and bag are then opened with a solvent so that the instruments are inside the bag's sterile area too.

The bag is called a "surgical wound isolator." It is kept inflated like a balloon by a small pump. The air coming in is filtered by sterilized cotton. Dr. Beal says that the air is thus kept almost entirely germ free.

Other research groups have developed plastic units with arm holes for completely germ-free surgery, but Dr. Beal says these are too expensive to replace after every operation. One of his isolators uses about 50 cents worth of plastic and fabrication costs are small.

The bags are cut so that four points project from them. These are then cut for the surgeons to get their hands inside. Eventually it may be possible simply to make large rolls of plastic tubing from which enough for each operation could be cut off.

Beal and Stites conducted bacteriological studies during 12 operations with the arrangement last summer at the Hospital Rosales, San Salvador, in the Central American country of El Salvador. They also studied eight "control" operations without the isolator. There were no infections after any of the 20 operations.

Dr. Beal says this was probably because antibiotics were used in all 20 cases. But he pointed out that "You can't use antibiotics forever because eventually resistant strains of the germs develop."

The new technique will be particularly valuable in developing countries where well built operating rooms with careful maintenance and cleaning are often not available, Dr. Beal believes. Its possible applications to modern hospital practice, to military surgery and disaster situations, and to veterinary surgery are yet to be explored.

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(Mailed Oct. 30, 1961)

NOTE: Stites is the son of Mrs. Helen Stites, 13 N. Exeter Ave., Margate, N.J.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NOTE TO EDITORS: A press conference will be held at Stanford Medical Center with three of the participants of the Conference on Obesity and Adolescence Friday, Oct. 20, 1961.

The press conference will be held in a conference room in the School of Nursing, Room M127. It will begin at 2 p.m.

Details on the conference itself are covered in the attached announcement from the American Medical Association.

Taking part in the press conference will be the following:

Dr. Edmund Volkart, professor of sociology at Stanford and director of the Stanford Program in Medicine and Behavioral Sciences. His topic Saturday will be "Sociological and Cultural Aspects of Weight Control." He said he plans to discuss the problem of "creeping obesity," or the tendency for people to gain weight because social influences encourage caloric intake and discourage exercise to use up the calories. (Dr. Volkart will talk at 11:15 Saturday morning and his remarks are for release to P.M. newspapers of Saturday.)

Dr. Hilde Bruch, clinical professor of psychiatry at Columbia University College of Physicians and Surgeons. Dr. Bruch is widely known as the author of the book Don't Be Afraid of Your Child--A Guide for Perplexed Parents. She will discuss "Psychological Problems of Overeating and Obesity" on Saturday. (Dr. Bruch will speak at the afternoon session Saturday and her remarks are for release to newspapers of Sunday.)

Dr. Luigi Luzzatti, associate professor of pediatrics and preventive medicine at Stanford. Dr. Luzzatti is on the panel for the afternoon session. He will discuss some of the biochemical problems related to obesity in order to balance the presentation as it will be balanced in the symposium itself. (Dr. Luzzatti's material will be for release to newspapers of Sunday.)

(Mailed Oct. 17, 1961)

NEWS RELEASE from
THE AMERICAN MEDICAL ASSOCIATION
535 North Dearborn Street • • • Chicago 10, Illinois • • • Phone: WHitehall 4 - 1500

FOR IMMEDIATE RELEASE

CHICAGO--An exploration into the serious problem of obesity among teenagers will be the subject of a symposium sponsored by the American Medical Association's Council on Foods and Nutrition.

The one-day conference will be held at Stanford University, Stanford, Calif., Saturday, Oct. 21. Co-sponsors include the Department of Pediatrics of the Stanford School of Medicine, California State Department of Health, California Medical Association, Santa Clara and San Mateo County Medical Societies.

Conference moderator will be Dr. Norman Kretchmer, Stanford University School of Medicine. The dean of the School of Medicine at Stanford, Dr. Robert H. Alway, will deliver opening remarks.

The morning session will deal with fat metabolism and various aspects of weight control. Psychological aspects of overeating and obesity, evaluation of calorie needs, and a panel discussion of the obese adolescent, will conclude the program.

Participants include Drs. Harold Harper, University of California School of Medicine, San Francisco; William Parson, University of Virginia School of Medicine, Charlottesville; Edmund Volkart, Stanford University; Hilde Bruch, Columbia University College of Physi-

cians and Surgeons, New York; Dr. Josef Brozek, Lehigh University, Bethlehem, Pa.

In addition to Drs. Bruch and Volkart, panel participants are Drs. Harry Jennison, Stanford University School of Medicine; Leslie Corsa, Jr., California State Department of Public Health, Berkeley; Luigi Luzzatti, Stanford University School of Medicine.

Advance registration may be made with the Council on Foods and Nutrition, American Medical Association, 535 North Dearborn, Chicago 10, Illinois.

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8/9/61

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

FOR RELEASE AFTER 3:30 P.M. (E.S.T.) FRIDAY, OCT. 20, 1961

NOTE TO EDITORS: The following story is timed for release following presentation of an invited lecture at the annual meeting of the American Heart Association in Miami Beach, Florida. Dr. Abrams will be available for interviews at the meeting. He will be staying at the Bal Moral Hotel. Still photographs of a typical X ray are available.

3-D X-RAY MOVIES USED TO DIAGNOSE HEART DEFECTS

MIAMI BEACH--Three dimensional X-ray movies of the heart offer the best method of detecting and exactly locating serious defects of the heart and the major blood vessels near it, a Stanford University radiologist said today (OCT. 20).

Dr. Herbert L. Abrams, associate professor of radiology at Stanford's School of Medicine and director of the Diagnostic Radiology Division, reported on 4½ years' experience with such 3-D movies during a lecture at the annual meeting of the American Heart Association.

The Stanford X-ray device for taking such movies is known as a biplane cineangiocardiographic unit. It is unique in its capacity to get simultaneous movies of the heart from the front and side, with ultrashort exposures (1/1000 second) at very low radiation doses to the patient. Since 1957 more than 250 patients have been tested with it.

Dr. Abrams said that one-dimensional movies are now an important tool in diagnosing congenital heart disease. But these may not show up certain kinds of defects.

He said that it is particularly important to be able to pick up small defects to know whether surgery is necessary or not.

- more -

In some cases, a heart murmur due to a small shunt may not need to be operated upon. Proper diagnosis may spare a patient unnecessary surgery or make it possible for him to lead a normal life which would have been impossible if he thought he had a serious heart condition. In other cases, surgery is essential and must be based on a correct diagnosis.

The 3-D unit's movies can then be shown side by side to give an accurate view of the heart in three dimensions.

Advantages of this technique are:

1. Valve defects or narrowing of blood vessels will show up clearly. In a single projection, there may be an overlap of parts of the picture which make diagnosis difficult or impossible.

2. Holes in the center wall of the heart or small connections between the blood vessels can be located exactly and their size determined. This way the surgeon knows exactly what he has to repair.

3. Simultaneous photography from front and side gives two pictures which can be compared against each other if the diagnosis is unclear. This is better than separate views taken at different times.

4. Only one injection of the "dye" which shows up on X ray need be used. This reduces the hazard to the patient.

Exposure from the Stanford device is small, only one-fifth of that in the so-called "G.I. series," a commonly done X-ray study of the stomach and intestines.

Recent improvements in the electronic image intensifiers produce a fluoroscopic image 3,000 times brighter than the fluoroscope in a doctor's office. The brightness and the use of high speed film makes low X-ray dosage possible.

The X rays are also pulsed for one-one thousandth of a second 50 times per second. Thus the full power is on only 5 per cent of the time the patient is under the camera.

The heart action becomes visible when the doctors run a plastic tube or catheter from a blood vessel in the arm or in the groin into the heart, and then inject a liquid which absorbs X rays.

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(Mailed Oct. 16, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat, DA 1-5310

FOR RELEASE TO AM PAPERS OF FRIDAY, OCTOBER 6, 1961

NOTE TO EDITORS: The following story is timed for release following presentation of a paper at the annual meeting of the American College of Surgeons in Chicago. Dr. Boyd will be at the meeting and will be available for interviews there. He will be staying at the Hilton Hotel.

COOLING TECHNIQUE MAY INCREASE TIME AVAILABLE FOR BRAIN SURGERY

CHICAGO--Stanford University surgeons have successfully demonstrated a new technique that should greatly increase the amount of time available for delicate operations in or near the brain which necessitate stopping the circulation to that vital organ.

In order to avoid damage to the brain, which can go without blood for only three or four minutes at normal body temperature, the surgeons circulated cold blood to a patient's head and lowered the brain temperature to about 68°F., or about 30 degrees below normal.

In the one successful operation so far circulation was stopped for 10 minutes. There are preliminary indications from experimental studies on animals, however, which suggest that the blood flow might possibly be halted for up to one hour without harming the patient.

The new technique was described yesterday at a meeting of the American College of Surgeons by Dr. Robert J. Boyd, a United States Public Health Service Research Fellow at Stanford University School of Medicine. Co-author of the paper is Dr. John E. Connolly, assistant professor of surgery at Stanford.

- more -

Surgeons now may cool a patient's whole body to lower the brain temperature. With this procedure it is not considered safe to stop brain blood flow for longer than 10 to 15 minutes. Should the new method prove safe to use for an hour, it would multiply by four the amount of time available for operations deep in the brain.

By locally cooling the brain while keeping the rest of the body near its normal temperature, the Stanford surgeons avoided certain disadvantages of whole body cooling. One disadvantage is frequent loss of the regular heart rhythm at temperatures below 86°F. A heart-lung machine may be used to bypass the heart during the operation, but this significantly reduces the patient's chances for survival.

At 68°F. the metabolism of the brain is slowed to a standstill. Its cells can then do without the oxygen, normally carried in the blood, for long periods of time.

Dr. Boyd and Dr. Connolly used a pump and cooling device fed by blood from the iliac artery in the groin. The pump then fed cooled blood to a carotid artery in the neck. This is one of the major vessels supplying blood to the brain.

The patient was a 54-year-old woman with a recurrent vascular tumor in the area of the right mastoid and middle ear. It was considered inoperable unless the head's blood supply could be cut off, because it would bleed profusely in surgery.

The ear, nose and throat surgeon who removed the tumor had said he might need 20 to 40 minutes for the operation, but found he could perform it in 10.

The Stanford doctors feel the technique will be valuable where a bloodless area is needed in order to operate upon blood vessels and tumors inside the brain. Otherwise, intensive bleeding makes it difficult if not impossible for the surgeon to successfully perform the operation.

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(Mailed October 2, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NOTE TO EDITORS: The following story is for release on Friday, Dec. 1, 1961. It is timed for release following presentation of a report at the annual meeting of the Radiological Society of North America.

BIG DOSES OF X RAYS BENEFIT EARLY CASES OF HODGKIN'S DISEASE

CHICAGO--A Stanford University radiologist reported yesterday an experimental study had shown "strikingly improved results" in the treatment of early cases of Hodgkin's disease, a malignant condition previously considered virtually incurable, using high doses of radiation instead of the conventional low doses.

This is not the first time high doses have been used for the disease. But it is the first time better results have been demonstrated in two different programs of treatment carried out concurrently on groups of patients with the same degree of illness, according to Dr. Henry S. Kaplan.

Dr. Kaplan, professor and executive head of the Department of Radiology at Stanford University School of Medicine, reported on the study at the annual meeting of the Radiological Society of North America.

He cautioned that his study was not strictly an "experiment" because the patients were not chosen at random. The treatment each received depended upon the type preferred at that time by the doctor who saw him.

Twelve of the 15 receiving high doses are alive today, all but one without recurrence of the disease. Dr. Kaplan suggested that the longest survivors, who have lived from 6 to 10 years, "may in fact be cured." But he warned this will not be known for 20 years.

Eight of the nine given lower doses of radiation are no longer living.

- more -

The idea of using high radiation doses was first proposed 20 years ago by a Swiss radiologist, Rene Gilbert. It has not been accepted by more than a handful of radiologists.

Hodgkin's disease is a cancer-like illness which attacks the body's lymphatic system. The average patient has a 25 per cent chance of living five years after the ailment is discovered. The five-year life expectancy is doubled with early diagnosis. All the patients in the Stanford study had been diagnosed early.

The disease is considered in early stages when still confined to one or two adjacent regions of the body, such as the chest and neck. Only about 20 per cent of the cases are so diagnosed now. If unchecked the disease can involve all the organs in the body.

Dr. Kaplan stressed the importance of detecting the disease early if patients are to be helped. "If the diagnosis is made while the disease is still confined to a fairly small area, the physician may still be able to offer the patient with Hodgkin's disease a real chance for cure," he said.

"There has been a tendency toward defeatism on the part of many doctors because Hodgkin's has been considered incurable for so long."

Fifteen patients were treated with doses of from 2,000 to 4,000 roentgens of radiation, which is from five to ten times the usual dose. The lower exposure usually eases the condition temporarily but rarely keeps the patient alive and well as long as ten years.

The dose Dr. Kaplan considers best is from 3,500 to 4,000 roentgens, with the total spread out over three or four weeks. It must include not only the whole area involved by the disease but the next chain of lymph nodes in each direction. This is because the disease tends to spread from one chain of nodes to the next, and is often present in microscopic form in apparently uninvolved nodes adjacent to the obvious tumor.

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Twelve of the 15 patients are still alive, three after from six to ten years following treatment. One woman died six years after treatment for extensive Hodgkin's disease in the chest, including the heart, but had no signs of the disease on autopsy.

Her death, which was caused by delayed effects of the radiation on her lungs, might have been avoided with the more powerful "supervoltage" X-ray machines which have since been perfected, including medical linear accelerators like the 6-million-electron-volt one at Stanford, and cobalt machines. These can expose patients to large doses without burning the skin and can be more sharply localized to the involved tissues deeper in the body.

"I believe it is highly desirable that such high-dose treatment be given with supervoltage radiation," Dr. Kaplan said.

The other nine living patients have gone from 24 to 55 months, all but one without recurrence of the disease. Two patients died of Hodgkin's, but only one of these got radiation over as wide an area as is treated by the present technique.

Nine other patients with similarly localized disease were treated with smaller doses and served as controls. Most received the generally accepted dose of 400 roentgens, though doses up to 1,000 roentgens were used. While this checked the disease temporarily, all suffered recurrences, usually in 8 to 12 months. All but one are now dead; the lone survivor later received the "radical" dose when he developed recurrence, and is now free of disease almost three years later.

"Our results show that high doses of radiation (from 3,500 to 4,000 roentgens) are better for treatment than the usual dose of 400 roentgens," Dr. Kaplan said. "Whether the patients are cured will not be known for 20 years. That this is a better way to treat them, though, is shown now."

Dr. Kaplan said that in the new Clinical Cancer Radiotherapy Research Center in the medical school the high dose technique will be tried on patients with later stages of the disease to see whether it can also arrest the condition even when it is more advanced.

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(Mailed Nov. 29, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Kathryne Borg, DA 1-1200, extension 5074

For Immediate Release

STANFORD MEDICAL ALUMNI DAY

The annual "Big Game" Banquet for Stanford Medical School alumni and wives at the Sheraton-Palace Hotel in San Francisco will be a highlight of the "Medical Alumni Day" on Friday, November 24. Cocktails, dinner, and dancing to Jimmy Blass' orchestra will be held in the Rose Room beginning at 7:00 p.m.

The Alumni Day activities will commence at 8:30 a.m. at the Stanford Medical Center, Palo Alto, with open house tours of the hospital and laboratories. These will be followed at 9:30 a.m. by Grand Rounds in Medicine, Pediatrics, and Surgery, with Drs. Halsted R. Holman and Roy Cohn presiding.

Dr. Clifford B. Cherry of Los Angeles, president of the Stanford Medical Alumni Association, will conduct a general meeting of the Association from 12:00 to 12:30 p.m.

A luncheon at 1:00 p.m. in the Rose Room of Rickey's Studio Inn will have as specially honored guests the fifty-year members of the class of 1911 and the Senior students of the Stanford School of Medicine. More open house tours will conclude the afternoon program.

Reservations for the luncheon and the dinner dance may be made by contacting the Stanford Medical Alumni Association office, Stanford Medical Center, 300 Pasteur Drive, Palo Alto.

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(Mailed November 15, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

FILE COPY

NOTE TO EDITORS: The following story is for release to P.M. papers of Tuesday, Nov. 14, 1961. It is timed for release following presentation of a paper at the meeting of the Western Society for Pediatric Research in San Francisco.

"STAPH" INFECTIONS IN HOSPITAL NURSERIES CURBED BY NEW TECHNIQUE

SAN FRANCISCO--Doctors at the Stanford University School of Medicine have devised a new technique which almost completely wiped out dangerous staphylococcus bacteria in the Palo Alto-Stanford Hospital nurseries for a period of 20 months.

"Staph" germs have caused epidemics and in some cases several deaths in hospital nurseries in the United States and abroad. They are the chief cause of infection in maternity units.

A key part of the technique involves washing all infants immediately after birth and daily thereafter with a solution known to reduce staph infections. The aim of this technique is to keep the ever-lurking staphylococcus germs from reaching the skin of the infants.

The method has been tried at two hospitals with spectacular results. At the Palo Alto-Stanford Hospital in Palo Alto, Calif., an extensive bacteriological study of 777 infants turned up only 10 with staph on their bodies, or 1.3 per cent of the patients.

None of these, nor any of the other 5,188 babies born during the 20-month study, developed any staph infections in the hospital.

The lowest infection rate reported before was about 1 per cent. It may range up to 70 per cent, and appears to vary with the frequency with which staph are found on infants.

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The new technique was described today by Dr. Sumner J. Yaffe, assistant professor of pediatrics at Stanford. He spoke this morning at a meeting of the Western Society for Pediatric Research.

Co-author of the report is Dr. Harold J. Simon, assistant professor of medicine and medical microbiology at Stanford. A similar study was conducted by Dr. Louis Gluck, formerly at Stanford and now an assistant professor of pediatrics at Yale.

The same technique was used at Yale University School of Medicine after its development at Stanford. Before it was put into effect one study of 500 infants showed 51 per cent carrying staph potentially able to cause disease.

But in 965 infants studied after the program started, only 3.1 per cent carried the germs.

In the average American hospital probably 40 per cent of the newborn children have such staph on their bodies. The rate may range from a low of about 25 per cent all the way to 100 per cent.

The fact that infants have staph on them does not mean they are infected. Most do not get infections. But the presence of potentially disease-causing germs means that highly susceptible infants are more likely to become infected.

Staph may cause boils, breast abcesses (in both mothers and children), pneumonia and blood stream infections.

The material used for washing the infants was a 3 per cent solution containing hexachlorophane. Nurses and doctors wash their hands in the same solution before handling each child. They also use the customary procedures such as wearing sterile gowns and restricting access to nurseries.

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During a routine survey the Stanford doctors found two nurses carrying the epidemic causing strains of staph (type 80/81). However, they were never able to find these strains on any of the babies. This is an indication of the effectiveness of the preventive program.

Whereas none of the babies became infected with staph while in the hospital, seven of the 5,965 developed minor infections after leaving. At most four of these might have started in the nurseries--and it is very doubtful that any came from the hospital.

There are also other germs which can spread infections rapidly through a nursery, and the scientists suggest that some other means should be found to control these, since hexachlorophane is not entirely effective against them.

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(Mailed Nov. 10, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NONTECHNICAL ABSTRACT OF A PAPER TO BE PRESENTED AT THE DENVER MEETING OF THE AAAS, 1961

FILE COPY

Subject: Biosocial Aspects of Disease

Author: Edmund H. Volkart, Ph.D., Professor of Sociology and Director, Stanford Program in Medicine and the Behavioral Sciences.

Address: Stanford University School of Medicine, Palo Alto, Calif.

Convention Address: Brown Palace Hotel, Denver.

Time: Friday, Dec. 29, first speaker in morning symposium which begins at 9 a.m.

Place: Stratton-Tabor Room, Brown Palace Hotel, Denver.

Program: Symposium on Sociology of Medicine: Problems and Prospects. Program of the American Sociological Association.

THE STORY ATTACHED IS FOR RELEASE TO P.M. NEWSPAPERS OF FRIDAY, DECEMBER 29, 1961

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: P.M. newspapers, Dec. 29 TELEPHONE DA 1-5310-11

NOTE TO EDITORS: Release of the following story is timed to follow presentation of a paper at the annual meeting of the American Association for the Advancement of Science. It is for release to P.M. newspapers of Friday, Dec. 29, 1961.

SOCIETY HELPS DETERMINE WHICH DISEASES PEOPLE WILL GET

DENVER--The society you live in has a key role in determining what diseases you are most likely to come down with during your lifetime, a Stanford University sociologist said today (DEC. 29).

Speaking at a joint meeting of the American Association for the Advancement of Science and the American Sociological Association, Prof. Edmund Volkart said there were four ways society or the "social environment" can influence the occurrence of disease, and that each requires more systematic research:

1. By modifying the physical environment. In industrial societies, for instance, emphasis on technological change and efficiency instead of health may underly problems of air pollution and the increasing frequency of respiratory ailments.

2. By encouraging certain routine behavior. Cigarette smoking, for example, is considered by many physicians as injurious to health. Or a common diet may cause disease, as beriberi may result from a diet largely made up of polished rice, which does not provide the vital B-complex vitamin thiamine.

3. By producing new stresses and problems of adaptation. The process of adapting to rapid social change, or to the high pressures of multiple and demanding social roles, can influence the occurrence of disease. This may be reflected in higher death rates among men, particularly in the middle years of life. The multiple roles for men include job and family obligations, which are complicated by emphasis on ambition and success.

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4. By inviting people to be sick. "In our society most illnesses, even minor ones, tend to provoke reactions of sympathy, protectiveness and release from obligations," Dr. Volkart said. "Under these circumstances, sickness has a certain attractiveness as an escape from stress."

Recent recognition of the impact of society on health by scientists in many fields has led to a paradox in contemporary medicine, Dr. Volkart continued. On the one hand, there has been tremendous growth in understanding of illness, following advances in basic medical sciences such as biochemistry and genetics. On the other hand, more social scientists than ever are entering medical areas as teachers, researchers and consultants.

Dr. Volkart is one of these medically oriented social scientists himself. He is a professor of sociology and also directs the Stanford Program in Medicine and the Behavioral Sciences for the University's School of Medicine. Studies such as the AAAS report, as well as others under the Stanford Program, are supported by the Russell Sage Foundation.

Dr. Volkart is a consultant to the National Institute of Mental Health. One of his special interests has been human behavior in time of illness, and the reasons why people do or do not seek medical care.

The increasing interest in the social side of medicine, he said, has grown out of the changing character of disease (ailments due to stress and degenerative effects are of major importance today), the recognition of the frequency of psychosomatic illness, and the results of epidemiological studies which have shown different frequencies of disease and death in different social groups.

Results such as these have led scientists to study the way people live to see what effect this may have on the varying frequency and types of disease.

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(Mailed Dec. 26, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

PRICING SYSTEM AND FORMULARY REDUCE PATIENTS' DRUG BILLS

A unique pricing system for drugs, together with a plan for prescribing them by non-proprietary rather than trade name, is saving patients at the Palo Alto-Stanford Hospital Center substantial amounts on their drug bills, according to Hospital Pharmacist John Oliver.

On expensive drugs usually prescribed for long periods of time the savings may reduce costs to patients by 50 per cent or more. The savings are less on less expensive medications.

The pricing and prescription systems have been in effect since early 1961. Top quality drugs from major manufacturers are used as before.

As far as is known, the pricing method is used by no other hospital in the United States, although it has been recommended by professionals in the field for a long time.

Prescribing by non-proprietary name instead of trade name is known as a formulary system. It has been an accepted practice in university hospitals for many years, but is not often used in hospitals with private medical staffs. The first formulary, in fact, was established at New York Hospital in 1816 (cq).

More than 90% of the private physicians on the staff of the Palo Alto-Stanford Hospital Center are voluntarily using this method for prescriptions. It is also used by the faculty of the Stanford University School of Medicine.

The purpose of the formulary is to cover the spectrum of therapeutic needs without unnecessary duplication of drugs.

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Drugs are chosen for hospital use by a special committee of physicians which selects them from monographs offered on subscription from the American Hospital Formulary Service.

It was necessary to establish the formulary before major savings could be gained, Oliver said. Once a single type of drug was selected, instead of several virtually identical ones with different trade names, it was possible to purchase larger lots at lower cost.

Since the fall the Hospital Center has put major drug items out to bid and further reduced what it must pay for them.

"And all that we save is passed on to the patients by our pricing system," Oliver said.

The Hospital Center charges a flat fee for filling a prescription, instead of adding a percentage markup to the wholesale cost. Fees range from $1 to $4.50, but the average is $1.75.

The fee is determined by the complexity of the process of filling the order and does not depend upon the purchase price to the pharmacy. Oliver says this is the fairest way of covering the pharmacy's operating expenses.

The usual method of charging a markup penalizes the patient who needs a costly drug. And it costs just as much to process a prescription whether the drug costs a penny a unit or a dollar a unit. Care and accuracy is just as important in either case, he said, since the medication is important for the patient's recovery.

As an example of the savings involved, Oliver said that a well known broad spectrum antibiotic cost $30.60 per 100 tablets before the new plan went into effect. On a bid recently received, the cost is now $15.45 per 100.

One of the corticosteroids formerly cost $15 per hundred. The price the hospital now pays is less than $3.

The Hospital Center administration feels that while the economics of drug purchasing and pricing is important, there is also another gain with the method used here. The system reduces the number of drugs which must be kept track of by personnel, and it is assumed that this reduces the likelihood of any mishaps in giving drugs to patients.

A year ago the pharmacy stocked 3,000 different items. Now there are fewer than 2,000.

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(Mailed Dec. 20, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

NOTE TO CITY EDITORS AND SCIENCE WRITERS:

Early this year the Palo Alto-Stanford Hospital Center put into effect a unique pricing system for drugs. This pricing method, together with the formulary system for prescribing drugs by non-proprietary rather than trade name, is saving patients substantial amounts on their drug bills.

The combined plans have been in effect long enough to demonstrate their value. The savings to patients may exceed 50 per cent over the previous prices for expensive medications prescribed for long periods. The savings are less on less costly items. As far as is known, no other hospital in the United States uses the pricing method, although the formulary system is used widely in university hospitals.

Knowing the public concern about drug prices we thought this story might interest your readers. We have scheduled a press conference about it for Wednesday afternoon, December 20, at 1 p.m. Sandwiches will be served at 12:30 for those who may not be able to get lunch because of the early hour in the afternoon.

Attending the press conference will be the Hospital Pharmacist, John Oliver, who set up the plans, and Dr. Windsor Cutting of Stanford, who was an advisor during the planning stages. Mr. Oliver will leave the Hospital Center Jan. 1 to take a new job as coordinating director of the American Society of Hospital Pharmacists. Dr. Cutting is former dean of Stanford University School of Medicine and now professor of experimental therapeutics. He is also on the committee of the U. S. Pharmacopoeia, the official compendium of drug standards, and the reference committee of the American Hospital Formulary Service, which issues monographs describing all new drugs available for therapeutic use.

Lunch and the press conference will be held in the Board Conference Room, room C200, Stanford Medical Center. I would appreciate knowing by Tuesday whether a reporter from your publication will want lunch so we can be sure to order enough sandwiches.

--Sam Moffat
Information Officer

(Mailed Dec. 15, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

STANFORD PSYCHIATRY DEPARTMENT NAMES PSYCHOLOGIST TO FACULTY

Dr. Joseph H. Handlon, for the last four years a research psychologist at the National Institute of Mental Health in Bethesda, Maryland, has joined the faculty of the Stanford University School of Medicine, Dean Robert H. Alway announced today.

He is an associate professor of psychology in the Department of Psychiatry. He will conduct research and teach in the field of psychological stress and adaptive behavior.

Dr. Handlon is the author of eighteen articles in professional journals, the latest of which deals with experimental methods for studying emotional and adrenal hormone responses to stressful experience.

He is a former instructor in psychology at Princeton, and holds an A.B. degree from UCLA and a Ph.D. from the University of California at Berkeley.

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(Mailed December 11, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

NOTE TO EDITORS AND WRITERS: The story below may be of added interest because of President Kennedy's comments Dec. 5 that "We are under-exercised as a nation. We look instead of play, ride instead of walk. Our push-button existence deprives us of the minimum of physical activity essential for healthy living."

'CREEPING OBESITY' IS CATCHING UP WITH MANY AMERICANS

"Creeping obesity" seems to be catching up with Americans as they spend less time working and more time eating, drinking and playing, according to a Stanford University sociologist.

Prof. Edmund Volkart says that "many social and cultural forces of our time are both pushing and pulling more people into caloric intake while at the same time reducing energy output."

While these forces don't mean that any individual will gain too much weight, they do mean that more and more people will become overweight as our easy living goes on.

Dr. Volkart's comments are contained in a survey of scientific literature on the subject of obesity. He stressed that he was not discussing overweight caused by specific disease states such as metabolic defects, glandular imbalance or psychiatric compulsions. "These diseases are important but they do not seem to me to account for the growing tide of 'plumpness' or 'overweight' or even 'obesity,'" he says.

Dr. Volkart is professor of sociology and director of the Stanford Program in Medicine and the Behavioral Sciences for the University's School of Medicine. He is a consultant to the National Institute of Mental Health. One of his special interests has been human behavior in time of illness, and the reasons why people do or do not seek medical care.

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"Many labor-saving devices have subtle, almost hidden consequences for weight control," Dr. Volkart says. On the farm, a man driving a tractor will burn up fewer than half the calories he would per hour if he were walking behind a horse-drawn plow. Furthermore, he'll get the work done much sooner.

Even office workers use less energy. A typist using an electric typewriter will expend 15 fewer calories an hour than the girl who has to type on a manual machine.

At the same time, fattening foods are consumed in greater amounts than they used to be. Dairy products, candy and soft drinks are no longer luxuries but are often eaten daily.

And "the cocktail party, with its associated edibles, has practically become a social institution in professional circles and among the upper and middle classes."

The tendency to eat and drink persists despite the popular interest in slenderness, evidenced by the fact that "Metrecal" has become "a household word" almost overnight, Dr. Volkart says.

Doctors should consider these social and cultural pressures in dealing with their patients, the sociologist believes. While the medical profession has stressed that being overweight is bad for health and may shorten life, the message has not really gotten through.

For many "overweight is a remote state, not clearly identified with disease, and to them the pleasures of eating and indolence are here and now."

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(Mailed December 8, 1961)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

JET PILOT'S PRESSURE SUIT AIDS CRIPPLED PATIENT'S TREATMENT

The Air Force has teamed up with rehabilitation experts at Stanford Medical Center in using a jet pilot's pressure suit to help a bedridden patient begin sitting up for the first time in almost four months.

The patient is Anthony Dalla-Costa, a 67-year-old retired Redwood City salesman who broke his neck in an auto accident last October. The accident damaged part of the nervous system which helps regulate his blood pressure.

As a result, if he is tilted more than 25 degrees from the horizontal the blood rushes to his feet, his blood pressure falls and he becomes unconscious. But with the suit pressing against his legs and abdomen he can be moved toward an upright position without such a severe drop in blood pressure.

The pilot's suit is on loan from Edwards Air Force Base and has already been used to tilt him to 40 degrees without a serious change in blood pressure. The doctors hope Mr. Dalla-Costa can soon be placed in a wheel chair two hours daily with the suit on.

Air Force cooperation in the rehabilitation project was secured after a friend of Dr. David C. Chambers, senior fellow in the Division of Rehabilitation Medicine, contacted Brig. Gen. Irving L. "Twig" Branch, commander of the base. Within five days two Air Force men, Major Ralph Richardson and Mst. Sgt. George Grasser, arrived at the Medical Center to assist in fitting the suit on the patient. Dr. Chambers and Dr. Daniel J. Feldman, chief of the Division, are supervising Mr. Dalla-Costa's care.

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(Mailed Jan. 31, 1962)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: Immediate TELEPHONE DA 1-5310-11

TWO PROMOTED, ONE APPOINTED BY STANFORD MEDICAL SCHOOL

Two long-time members of the faculty of Stanford University School of Medicine, Dr. Herbert L. Abrams and Dr. Joseph P. Kriss, will be promoted to full professors Sept. 1, Dean Robert H. Alway announced today.

In addition, Dr. Seymour Levine of the Institute of Psychiatry at Maudsley Hospital, London, England, will join the Department of Psychiatry faculty April 1 as associate professor of psychology, Dr. Alway said.

Dr. Abrams is a world authority in diagnostic radiology, and is particularly known for his work with X-ray motion pictures of the heart. Now an associate professor of radiology, he is acting head of the Department of Radiology this year while Dr. Henry S. Kaplan is on sabbatical leave.

Dr. Abrams joined the faculty as an instructor in 1951 after completing his residency at Stanford. He was graduated from Cornell University in 1941 and received his M.D. degree five years later at Long Island College of Medicine. He and his family live at 961 Peninsula Way, Menlo Park.

Dr. Kriss will become professor of medicine and radiology. Among his special fields are endocrinology, nuclear medicine and the use of radioactive isotopes in the treatment of cancer.

He has also made major contributions to the development of the new curriculum in the medical school. He first came to Stanford in 1948 as a teaching assistant. He is a 1939 graduate of Pennsylvania State College and earned his M.D. at Yale in 1943. He lives at 735 Mayfield Ave., Stanford.

Dr. Levine, a stimulating teacher and imaginative and productive scholar, is now a fellow at Maudsley Hospital. Before going to England he was an assistant professor at Ohio State University from 1956 to 1960.

Receiving his B.A. in 1948 from the University of Denver, he earned M.A. and Ph.D. degrees from New York University in 1951 and 1952.

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(Mailed Jan. 29, 1962)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: Immediate TELEPHONE DA 1-5310-11

STANFORD RECEIVES $117,500 GRANT FOR NEUROPHYSIOLOGY RESEARCH LABS

The United States Public Health Service has approved a $117,500 grant to Stanford University School of Medicine toward construction of new neurophysiology research laboratories at Stanford Medical Center, Dean Robert H. Alway announced today.

The grant covers only half the estimated cost of the construction and fixed equipment. It must be matched by an equal amount from private sources. Another $145,000 for movable equipment will come from research grants and private donations.

The laboratories will be used by three members of the faculty of the Neurology Division of the Department of Medicine to conduct basic investigations of the functioning of the nervous system.

The facilities will be located in the basement of the Medical School Building, in space left empty during original construction of the medical center. They will occupy 5,191 square feet. They are expected to be ready for occupancy by this summer.

The laboratories will be the principal research facilities of the Division. Faculty members using the laboratories will be:

Dr. Frank Morrell, professor of medicine and head of the Division, for investigations relating to epilepsy and neurological mechanisms in learning.

Dr. Kao Liang Chow, associate professor of neurology, for further studies of brain function.

Dr. Anthony Iannone, assistant professor of neurology, for studies of the blood flow in the brain. Dr. Iannone's research is directly related to such conditions as the common "stroke."

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(Mailed January 29, 1962)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: Sunday, Jan. 21, 1962 TELEPHONE DA 1-5310-11

NOTE TO EDITORS: The following story is timed for release following presentation of a paper before a Regional Research Workshop of the American Psychiatric Association, meeting at the University of Southern California School of Medicine.

IMPROVEMENTS CALLED FOR IN PSYCHIATRIC HOSPITAL CARE

LOS ANGELES--Major improvements in training programs for psychiatrists and in hospitalization procedures are needed if mental hospitals are to do a really sound job of caring for their patients, a Stanford University psychiatrist said yesterday (JAN. 20).

He said that young psychiatrists should get their earliest experience with the healthier patients instead of the sickest, as they now do. And he called for hospitals to treat patients more as patients than as "suspects" or "criminals."

The criticisms were contained in a talk by Dr. Seymour Kolko, assistant professor of psychiatry at Stanford University School of Medicine, during a regional workshop of the American Psychiatric Association.

"It is my contention that much in our day-to-day treatment regimes for the acutely psychotic person tends to prolong his illness or make it more severe," Dr. Kolko said.

He leveled his most serious charges at the training programs for men and women going into the field. These "still bear the format imposed on them at least 25 years ago." He urged the sequence of training be completely reversed.

A trainee should start with patients similar to those he saw in medical school and as an intern, then progress to more seriously ill ones.

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Now, he said, "the most disturbed (and perhaps most disturbing) people are placed in the hands of those least trained, working in the poorest settings and receiving the fewest rewards in terms of status or salary." And as the young doctor gains experience he begins to care for patients who are less disturbed.

Doctors who take responsibility for these seriously ill patients may not be able to control their own feelings of doubt and insecurity, either, because they are so new to their profession. This is bound to affect patients.

"Turning our current residency programs around might not only serve to allow the beginning psychiatrist a chance to gain a better command of the information about the many causes of human behavior. It would also give him the time to gain the needed insight into his own reactions before dealing with the problems of others."

Looking at the setting for treatment, Dr. Kolko contrasted the institutional hospital atmosphere with the pleasant surroundings of a psychiatrist's office where the presumably less seriously ill patient receives his care.

Furthermore, hospitalized patients are often deprived of personal belongings that help them maintain their sense of identity. Admitting procedures are more like "interrogation of the suspect" than friendly seeking out of needed information.

Hospital personnel are often as "frightened and concerned" as the patients themselves. And they probably have hidden guilt feelings too, growing out of the still current idea that the hospital is a "bad" place rather than a place where the patient's ego can be restored.

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(Mailed January 18, 1962)

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: Immediate TELEPHONE DA 1-5310-11

CONTROL OF THE MIND SYMPOSIUM TO BE SHOWN ON TV AT STANFORD

The University of California Medical Center's international symposium on "Man and Civilization: Control of the Mind" will be shown live on closed circuit television in Stanford's Memorial Auditorium Jan. 26-29, it was announced today.

An 8-foot by 10-foot viewing screen will be installed especially for the symposium.

Five nations are represented on the distinguished faculty, which will be dealing principally with the problems of conformity and creativity.

The faculty includes specialists in the biological and social sciences, the humanities and creative arts. Discussions will emphasize innate individual potentialities, and the forces that encourage or restrict their development and expression.

Among the faculty members are William H. Whyte, Jr., author of "The Organization Man"; the internationally renowned Hungarian-born violinist Joseph Szigeti; Flavio deR. Carvalho, Brazilian architect, writer and painter, and one of the principal architects of Brasilia, his country's new capital.

C.H. Waddington of the Institute of Animal Genetics, Edinburgh, distinguished British biologist; Dr. Gardner Murphy, research director of the Menninger Foundation; Dr. Hadley Cantril, board chairman of the Institute for International Social Research; and Dr. Henry K. Beecher, Henry Dorr Professor of Research in Anesthesia, Harvard Medical School.

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Sessions on Friday afternoon, Jan. 26, and Saturday morning, Jan. 27, will be of particular interest to professionals in the health and medical fields. They will cover the effects of drugs on mood and mental function.

General sessions will run from Saturday afternoon through Monday morning. Topics will be as follows:

Saturday afternoon, "Individual Potentialities"; Sunday morning and afternoon, Jan. 28, "Conformity and Diversity"; Monday morning, Jan. 29, "Creative Expression."

Tickets for the entire symposium will be available at the Stanford Memorial Hall box office beginning Jan. 22. Prices are $1 for university, college and high school students with valid student body cards, $5 for Stanford faculty, and $10 for all others. One-day tickets will be available, for all but students, at $2.50 each for Stanford faculty, and $3.50 for all others.

Programs may be obtained in person at the box office or by mail from the News Bureau, Stanford Medical Center, Palo Alto.

The television presentation is an experiment in the use of closed circuit transmission between the University of California and Stanford, according to Robert J. Wert, Stanford Vice Provost. If there is a good response, he said, similar events in the Bay Area may also be shown in this way.

This is the second UC symposium on "Control of the Mind." The first was held a year ago. The program committee for the present conference said the first generated such interest that a further examination of the many factors that influence human thought was planned.

The program is presented by the University of California School of Medicine and Continuing Education in Medicine and Health Sciences. Both symposiums have been supported by grants from the Schering Corporation and the Schering Foundation, Bloomfield, N.J.

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(Mailed Jan. 15, 1962)

We are pleased to announce that the international symposium "Man and Civilization: Control of the Mind" will be shown on closed circuit television in Memorial Auditorium Jan. 26-29. The symposium sessions will be broadcast live from the University of California Medical Center.

We think this is a significant event. It provides an opportunity for faculty and students to listen in on the important discussions on conformity and creativity by the distinguished participants. Furthermore, it is a practical demonstration of the hoped for interplay between Stanford and the University of California. We sincerely hope it is only the first of many events to be transmitted to the campus from throughout the Bay Area.

We urge you to call the program to the attention of your fellows on the faculty, and to have as many of your students attend as is possible.

ROBERT J. WERT ROBERT H. ALWAY I. JAMES QUILLEN ROBERT R. SEARS

MAN AND CIVILIZATION: CONTROL OF THE MIND

Friday, Jan. 26 1:30 to 5 p.m. "Clinical Implication of Mood" Vincent Nowlis, Professor of Psychology, Rochester; Keith F. Killam, Associate Professor of Pharmacology, Stanford; Henry K. Beecher, Professor of Research in Anesthesia, Harvard.

Saturday, Jan. 27 9 to 12 a.m. "The Evaluation of Drug Action" Leo E. Hollister, Veterans Administration Hospital, Palo Alto, Calif.; Peter B. Dews, Associate Professor of Pharmacology, Harvard; Harris Isbell, Addiction Research Center, Lexington, Ky.

Saturday, Jan. 27 1:30 to 5 p.m. "Individual Potentialities" Benjamin Pasamanick, Columbus Psychiatric Institute, Columbus, O.; Gardner Murphy, Menninger Foundation, Topeka, Kansas; S. Rains Wallace, Life Insurance Agency Management Association, Hartford, Conn.

Saturday, Jan. 28 9 a.m. to 12:15 p.m. "Conformity and Diversity" Hadley Cantril, Institute for International Social Research, Princeton, N.J.; Rollo R. May, William Alanson White Institute, New York; Richard S. Crutchfield, Institute of Personality Assesment and Research, University of California, Berkeley.

Sunday Jan. 28 1:30 to 5:30 p.m. "Conformity and Diversity" Gilberto de Mello Freyre, North East Brazil Social and Educational Research Center, Brazil; C.H. Waddington, Institute of Animal Genetics, Edinburgh, Scotland; Maurice Mitchell, Encyclopedia Britannica Films, Wilmette, Ill.; Carl R. Rogers, Departments of Psychology and Psychiatry, Wisconsin.

Monday Jan. 29 9 a.m. to 12:15 p.m. "Creative Expression" Joseph Szigeti, violinist, Geneva, Switzerland; Flavio deR. Carvalho, writer, architect, painter, Sao Paulo, Brazil; William H. Whyte, Jr., author, New York.

TICKETS WILL BE AVAILABLE AT MEMORIAL HALL BOX OFFICE JAN. 22. Prices: For the entire symposium--$1 for students; $5 for Stanford faculty; $10 for all others. For single sessions--$1.25 for Stanford faculty; $2.50 for all others. Students must show student body card.

Stanford Medical Center
News Bureau Palo Alto, California

FOR RELEASE: Immediate TELEPHONE DA 1-5310-11

TWO NAMED TO PALO ALTO-STANFORD HOSPITAL CENTER BOARD BY STANFORD

Stanford University has appointed James E. O'Brien of Palo Alto and Mrs. Edward H. Heller of Atherton to the Palo Alto-Stanford Hospital Center Board of Directors, Stanford President Wallace Sterling announced today.

The appointments bring the newly enlarged board to its full complement of 12 members. Each of the Hospital Center's owners, Stanford and the City of Palo Alto, names six directors. The board's size was increased from 8 to 12 last year to spread the growing work load among more members.

O'Brien is a member of the law firm of Pillsbury, Madison and Sutro in San Francisco. He belongs to the California and American Bar Associations. He is also on the board of directors of W.P. Fuller & Co., San Francisco.

He received his B.A. degree from the University of California in 1932 and a J.D. three years later. O'Brien is married and lives at 1530 Waverley St., Palo Alto. His term will expire in 1964.

Mrs. Heller is the first woman to serve on the hospital board. Her appointment will run until 1963. She is a Mills College graduate and also holds an honorary doctor of laws degree from her alma mater.

Active in national Democratic Party affairs and on the boards of many educational institutions and health foundations, she has been a director of the Children's Health Council in Palo Alto and on the board of the Mental Research Institute of the Palo Alto Medical Research Foundation.

Last month Mrs. Heller was made a regent of the University of California to complete the term of her husband, who died on Dec. 18. Her home is at 99 Faxon Road, Atherton. She is the mother of two sons and a daughter.

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(Mailed Jan. 8, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

STANFORD VETERINARIAN TO AID PANEL ON ANIMAL CARE

Dr. Orland A. Soave of the Stanford University School of Medicine is one of six specialists in the care of laboratory animals who are setting up professional standards for laboratory animal care and facilities in the United States under a contract with the National Institutes of Health.

As director of the medical school's animal facilities, Dr. Soave is responsible for supervising the care of 100,000 animals used for teaching and research. He is also assistant professor of preventive medicine at Stanford, and holds a degree in veterinary medicine.

Professional standards in the field are being established by the Animal Care Panel, an organization devoted to collecting and disseminating knowledge on laboratory animal care and management.

The committee of which Dr. Soave is a member will prepare a standards brochure to be published later this year.

Dr. Melvin M. Rabstein, president of the Animal Care Panel, said that the recent growth in research has led to the use of ever larger numbers of animals for scientific experiments.

The scientific community wants to be sure that professionally qualified personnel supervise animal facilities, that all people working in the facilities are properly trained, and that proper housing is provided for all the animals, Dr. Rabstein said.

Other members of the committee are Dr. Bennett J. Cohen of the University of California at Los Angeles; Dr. W.T.S. Thorp of the University of Minnesota; Dr. Thomas Clarkson, Bowman Gray School of Medicine; Dr. Bernard F. Trum, Harvard Medical School; and Dr. Robert J. Flynn, Argonne National Laboratory.

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(Mailed March 29, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Ann Walker (DA 1-5310)

STANFORD PROFESSOR RECEIVES $30,000 LEDERLE AWARD

Dr. Gerald M. Reaven, assistant professor of medicine at Stanford University School of Medicine, has received a three-year, $30,000 Medical Faculty Award from the Lederle Laboratories, a division of American Cyanamid Co.

The Lederle awards are given to encourage and develop "the highest type of teachers and investigators to augment the regular full-time faculties of medical schools." The funds are awarded to the schools to attract younger people "of demonstrated capacities...to continue in a lifetime career of teaching, scholarship and research."

The awards subsidize salaries for young faculty members. The Lederle Laboratories provide the awards because they believe it important for private sources as well as government to support medical education.

Dr. Reaven's current work in the Metabolic Research Unit is investigating how an amino acid, leucine, lowers blood sugar concentration--a unique amino-acid effect.

At the University of Chicago Dr. Reaven took a B.A. (with honors) in 1947, and an M.D. in 1953. He was a U.S. Public Health Service Research Fellow in medicine at Stanford in 1959, and in 1960 became an instructor in the Medical School. He was made assistant professor last year.

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(Mailed March 26, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

NOTICE TO EDITORS AND SCIENCE WRITERS:

Why are more women than ever getting bald? Why are California's lepers now being treated at home and not in isolated institutions?

How can a skilled specialist detect signs of certain cancers, or liver, eye and thyroid conditions, just by a careful examination of a patient's skin?

These are some of the questions which will be answered at a conference on "The Skin and Internal Disorders" at Stanford this weekend (Saturday through Monday).

The conference is for physicians. It is being planned by Dr. Eugene M. Farber, head of the Department of Dermatology at Stanford University School of Medicine, and Clinical Assistant Professor George T. Wilson.

Participants in the conference will include Stanford faculty members as well as some of the leading dermatologists from medical centers across the country. Speakers include heads of departments at Harvard, Minnesota, Southern California and Oregon medical schools, the Mayo Clinic and the National Cancer Institute.

News conferences have been scheduled Saturday and Monday mornings at 10. They will be held in Room 102 of the Physics Lecture Hall, adjacent to the physics auditorium where the medical sessions will be held.

On Saturday news conferences have been scheduled with:

Dr. Paul Fasal, Stanford, "Leprosy on the West Coast"
Dr. Eugene Van Scott, National Cancer Institute, "Hair Fall" (Baldness)
Dr. Cecil J. Watson, Minnesota, "The Skin and Its Clues to Liver Malfunction"

On Monday these speakers will summarize some of the latest knowledge concerning the clues close examination of the skin can offer about internal ailments: Dr. Louis A. Brunsting, Mayo Clinic; Dr. Francis W. Lynch, Minnesota; and Dr. Thomas B. Fitzpatrick, Harvard.

--Sam Moffat
Information Officer

(Mailed March 21, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Ann Walker (DA 1-5310)

NOTE TO EDITORS AND SCIENCE WRITERS:

Less than two weeks ago we sent you an announcement about a news conference with Anthony Dalla-Costa, the patient who wears a jet pilot's pressure suit to overcome his low blood pressure problem. The conference had to be called off because Dalla-Costa was suffering from painful shoulder muscle spasms.

The patient is now feeling much better, and the news conference has been rescheduled for 1:30 p.m., Wednesday, March 14. Background information follows:

* * * * *

Dalla-Costa can now sit up in a wheel chair and feed himself with a spoon. In late January, however, before the Air Force first fitted him with the pressure suit, he could not be tilted more than 25 degrees from the horizontal without blacking out. Because of an injury in an automobile accident almost four months before, the blood would rush to his feet when he was raised up.

Although his legs and arms are still paralyzed, Dalla-Costa has progressed so well he can sit upright in his wheel chair. He can also feed himself, using a special sling which supports his arm and lets him move his hand with his shoulder muscles.

Photographers and reporters will be able to see Dalla-Costa's suit pumped up with a bicycle pump, watch him lifted out of bed with a hoist, and see how well he can feed himself. Dalla-Costa will also be glad to answer questions from reporters.

One or both of the two doctors who have cared for the patient, Dr. David C. Chambers and Dr. Daniel Feldman of the Division of Rehabilitation Medicine at Stanford Medical Center, will also be on hand to discuss the case.

The news conference will be in Dalla-Costa's room, East 2A 212. If your reporter and/or photographer will come to the information desk in the main lobby of the hospital, the information clerk will direct them to the room.

Ann Walker
Assistant Information Officer

(Mailed Mar. 16, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat (DA 1-5310)

FOR RELEASE SUNDAY, MARCH 11, 1962

NOTE TO EDITORS: The release date for this announcement was set by the Kennedy Foundation. The Foundation is distributing a similar release in the East. The Foundation is also holding a news conference in Madison, Wis., at 10 a.m. Saturday (CST). Mr. and Mrs. Shriver and Dr. Lederberg will be available for questions and photographs at the conference.

STANFORD MEDICAL SCHOOL RECEIVES $1,100,000 FROM KENNEDY FOUNDATION

One million one hundred thousand dollars was given to the Stanford University School of Medicine today by the Joseph P. Kennedy, Jr. Memorial Foundation.

One million dollars will be used to build a new research center for studies related to mental retardation. The remainder will be used over a four-year period to stimulate new educational and research projects in the field of mental retardation.

The award was announced today by Mr. and Mrs. Robert Sargent Shriver, Jr. following a meeting in Madison, Wis., of President John F. Kennedy's Panel on Mental Retardation. Mrs. Shriver is the sister of President Kennedy and a consultant to the Panel. Shriver is head of the Peace Corps. The Shrivers jointly administer the Kennedy Foundation.

Upon hearing of the grant, a distinguished Stanford alumnus, former President Herbert Hoover, said, "The Kennedy Foundation gift of $1,100,000 to Stanford University for research in mental retardation renders possible a magnificent contribution to the welfare of millions of our people--and to children especially.

- more -

"I am grateful that my alma mater should be chosen for this task," Hoover continued. "I am confident that untold benefits to human welfare will result from this most generous gift."

The new facilities will be known as the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine. They are dedicated to an attack on the problem of mental retardation on a broad front of scientific and medical research.

Dr. Joshua Lederberg, a 1958 winner of the Nobel Prize and head of the Department of Genetics at Stanford, will coordinate the research and educational activities of the Laboratories. Many disciplines will be represented in the research program, including biochemistry and genetics, as well as pediatrics, obstetrics, neurology and psychiatry.

Dr. Lederberg is a member of the President's Panel on Mental Retardation, which is surveying existing efforts and new approaches to progress in the field.

In announcing the gift, Shriver said, "Mental retardation is one of the most pressing medical and social problems in the United States today. Three per cent of the American population is afflicted by mental retardation. It affects 20 times as many people as tuberculosis and 600 times as many as polio.

"By establishing research units such as the one at Stanford we hope to accelerate investigations by outstanding scientists across the nation with the aim of discovering and eventually eliminating the causes of mental retardation."

The Kennedy Laboratories will be part of a new Clinical Sciences Building at Stanford Medical Center in Palo Alto, Calif. The building is expected to be ready for occupancy in 1964.

The building is being financed as part of Stanford University's current 100-million-dollar PACE Program, a three-year campaign to achieve greater excellence in higher education. The Kennedy Foundation grant is the sixth gift of one million dollars or more received so far in the drive, which is more than one-third of the way to the goal.

- more -

Under a matching grant from the Ford Foundation, the gift for the Kennedy Laboratories will bring in an additional $1 for every $3 received, or a total of $333,333 from the Ford Foundation. The initials PACE stand for "A $100 Million Plan of Action for a Challenging Era."

Research in the Kennedy Laboratories will cover broad, basic areas. "Mental retardation is one of the most compelling challenges to the humanitarian and social instincts of Medicine," Dr. Lederberg said. "It is also one of the most provocative challenges to investigative insight and experimentation across a broad frontier of scientific studies.

"It concerns the development of the most complex of biological functions, the most highly evolved organ of the body--the intelligent human brain."

Dr. Lederberg cautioned against limiting investigations to areas most obviously related to the critical disease situation. "Some of the most outstanding advances in our comprehension of the problems involved in mental retardation have come from entirely unrelated fields," he said.

Specifically, he cited medical knowledge about mongolism, which is now known to be caused by improper separation of chromosomes in the development of the egg before it is fertilized.

"Our understanding of this disease stems directly from the most general investigations of human chromosomes. These studies in turn grew out of earlier investigations of chromosome variations in the formation of species and varieties in domestic plants."

Some general research projects which have already been outlined for the Kennedy Laboratories include the following:

1. Characterization of the proteins which are produced in the brain in connection with its development and with the learning process. More basic information is needed here before an understanding of the chemical relationship of these proteins to disease and intellectual function can be gained.

2. Studies aimed at preventing premature births and at providing better care for premature infants. Up to half of all babies weighing less than 3.3 pounds, for instance, have some brain damage.

3. Detailed studies of the central nervous system, of chemical processes related to disease states, and of the effects of drugs on the developing infant.

The Kennedy Laboratories will provide space specifically for the genetics, pediatrics and obstetrics departments; in addition, scientists and physicians from several other departments are expected to take part in the research program, adding to its interdisciplinary flavor.

Dr. Lederberg will serve as chairman of a coordinating committee on mental retardation research. Other members will be the following professors: Dr. Norman Kretchmer, pediatrics; Dr. Arthur Kornberg, biochemistry; Dr. Frank Morrell, neurology; Dr. Robert H. Alway, pediatrics and dean of the medical school; Dr. David A. Hamburg, psychiatry; and Dr. Charles McLennan, obstetrics and gynecology.

- more -

In addition to providing stimulation and leadership in research, the committee will be responsible for reviewing and evaluating such research, for initiating and approving new projects, for recruiting new personnel, and for developing training programs and curricula for graduate and postgraduate studies in areas related to mental retardation, especially in its fundamental molecular aspects.

The Kennedy Foundation was established 16 years ago by Joseph P. Kennedy, former ambassador to Great Britain and father of President Kennedy. It is a memorial to Lt. Joseph P. Kennedy, Jr., who was killed in action in World War II while on a secret, volunteer mission over the English Channel.

Lieutenant Kennedy's abiding affection for children has inspired the Foundation to donate more than $16,500,000 thus far to institutions and research programs related to children's diseases, particularly mental retardation.

Notable among the institutions established in whole or in part by the Kennedy Foundation are the Joseph P. Kennedy, Jr. Memorial Hospital in Brighton, Massachusetts; Joseph P. Kennedy, Jr. Community Center in the Harlem District of New York; the Joseph P. Kennedy, Jr. School for Exceptional Children, Palos Park, Ill.; the Joseph P. Kennedy, Jr. Clinics in Washington, D.C.; the Joseph P. Kennedy, Jr. Child Study Center in New York City; and the Child Study Center adjoining St. John's Hospital in Santa Monica, Calif.

Mrs. Shriver, vice-president of the Foundation, was graduated from Stanford in 1944 with a degree in social sciences.

President Kennedy, honorary chairman of the Foundation's board, is a former Stanford student. He attended the University in 1940 for a time, auditing courses in business economics and political science. He left to join the Navy, in which he served throughout World War II.

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(Mailed March 8, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Ann Walker (DA 1-5310)

NOTE TO EDITORS AND SCIENCE WRITERS:

Anthony Dalla-Costa, the patient who wears a jet pilot's pressure suit to overcome his low blood pressure problem, can now sit up in a wheel chair and feed himself with a spoon.

Just over a month ago, before the Air Force first fitted him with the suit, Dalla-Costa could not be tilted more than 25 degrees from the horizontal without blacking out. Because of an injury in an automobile accident almost four months before, the blood would rush to his feet when he was raised up.

Although his legs and arms are still paralyzed, Dalla-Costa has progressed so well he can sit upright in his wheel chair. He can also feed himself, using a special sling which supports his arm and lets him move his hand with his shoulder muscles.

We thought this dramatic progress would interest the news media, and we have scheduled a news conference at 10 a.m. Wednesday, March 7, here at Stanford Medical Center.

Photographers and reporters will be able to see Dalla-Costa's suit pumped up with a bicycle pump, watch him lifted out of bed with a hoist, and see how well he can feed himself. Dalla-Costa will also be glad to answer questions from reporters.

One or both of the two doctors who have cared for the patient, Dr. David C. Chambers and Dr. Daniel Feldman of the Division of Rehabilitation Medicine at Stanford Medical Center, will also be on hand to discuss the case.

The news conference will be in Dalla-Costa's room, East 2A 212. If your reporter and/or photographer will come to the information desk in the main lobby of the hospital, the information clerk will direct them to the room.

--Ann Walker
Assistant Information Officer

(Mailed Mar. 5, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

NONTECHNICAL ABSTRACT OF PAPER TO BE PRESENTED AT THE ATLANTIC CITY MEETING OF THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY, 1962

Subject: "Caloric cost and fluid balance in a simulated arctic survival situation."
Authors: Terence A. Rogers, Ph.D. and James A. Setliff, B.A.
Address: Department of Physiology, Stanford University, Stanford, California.
Time: 11:30 a.m., April 16, 1962.
Place: Surf Room, Ambassador Hotel.
Program: Cold Adaptation (Physiology).
Convention address: Ambassador Hotel.

RELEASE TIME: P.M.'s, April 16, 1962

This experiment was the first of a series designed to yield quantitative information about the impact of cold and starvation on an ~~airman~~ who is forced to survive in the arctic. The results indicate that the greatest threat to survival is the danger of dehydration even though there is adequate water available (in the form of melted snow). This makes a man weak, more susceptible to cold and more likely to faint. He is particularly susceptible to frostbite, since blood volume is lowered and the circulatory system compensates for this by constricting the blood vessels. This sharply reduces the amount of blood reaching the hands and feet. The causes of this paradoxical dehydration still have to be discovered.

We measured the physiological changes in men exposed individually to survival situations which simulated the real thing as closely as was possible within the limits of common humanity and the experimental procedures. The subjects were exposed to only the physical aspects of a survival situation. Therefore, they were not subject to the anxiety and foreboding that weigh on a real survivor. For this reason, the value of the experiment is limited, since we can expect that a real survivor's state of mind would affect his body chemistry. But we can also expect that the body changes brought about by cold and starvation (which we measured) will greatly affect the state of mind.

- more -

During February, 1961, six men were set out at 200 yard intervals on the frozen surface of the Chena River near Fairbanks, Alaska. Each was dressed and equipped as if he had ejected from an airplane, except that he had no food. The subjects built shelters from their parachutes and generally conducted themselves along the lines recommended to aircrews by the survival schools of the U. S. Air Force. Since we wished to measure the effects of starvation, however, they were not permitted to trap or shoot animals. The temperature ranged between zero and 30° below zero Fahrenheit.

During 5 days of starvation under these severe conditions, the subjects' oxygen consumption rates were determined using specially modified portable equipment. From these measurements we found that the average daily energy cost was about 4000 Calories per man, or only that of a moderately hard day's farm work. The weight loss measured was much greater than would be expected from this energy debt alone, and we have concluded from our urine and blood analyses that the extra weight loss was from dehydration. This dehydration came about without any sensations of thirst and regardless of the water intake, since all the subjects were drinking as much melted snow as they wanted. The causes of this dehydration and possible means of combatting it will be an important part of future investigations.

Loss of body water and sodium causes a decrease in the circulating blood volume, and our results show that this certainly happened to our subjects. From this preliminary experiment we would suggest that the physiological (and psychological) repercussions of dehydration and the consequent decrease in blood volume are the most immediate hazards to a survivor in the arctic. They could lead to the death of the survivor before he experienced advanced starvation in the usual sense.

Two of the six subjects were arctic survival instructors of the U.S. Air Force. Three were medical students and one was an Assistant Professor of Physiology, all from Stanford. In the variables we measured, the experienced arctic men showed no significant differences from the unacclimated subjects from California.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Ann Walker (DA 1-5310)

$30,000 SCHOLARSHIP FOR MEMBER OF MEDICAL SCHOOL FACULTY

Dr. Herbert C. Schwartz, assistant professor of pediatrics at Stanford University School of Medicine, has been selected as a Scholar in Medical Science by the John and Mary R. Markle Foundation of New York.

Stanford will receive a grant of $30,000 to be used over a period of five years for the support of Dr. Schwartz and his research.

Dr. Schwartz has spent most of his professional life in the field of hematology, the study of blood. He was serving his medical residency at Stanford in 1955 when he discovered a new hemoglobin--termed G--then the fifth known. Hemoglobin is the red oxygen-carrying pigment in red blood cells.

This research stimulated his interest in hematology, and he spent the next five years, between 1955 and 1960, at the University of Utah as a research fellow in medicine and biochemistry.

He has been at Stanford since 1960. His major research interest now centers on the factors which affect manufacture of hemoglobin during the formation of the embryo and after birth.

Dr. Schwartz has published 19 technical papers in professional journals, many of them in the fields of hematology and pediatric research.

He was graduated from Yale University in 1948 and received his M.D. from the State University of New York in 1952.

Dr. Schwartz is one of 25 young medical scientists in the United States and Canada who were awarded scholarships by the Markle Foundation.

The Foundation has made annual grants since 1948 to relieve the shortage of faculty members in medical schools and to strengthen medical education.

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(Mailed April 19, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Ann Walker (DA 1-5310)

STANFORD DERMATOLOGY DEPARTMENT MEMBERS TO RECEIVE TWO IMPORTANT AWARDS

A research associate and a resident in the Department of Dermatology will both receive important awards from scientific associations within the next month.

Dr. Victor R. Wheatley, research associate, will be given the Society of Cosmetic Chemists Special Award for 1962.

The citation accompanying the $1,000 award reads in part: "Dr. Wheatley is a highly gifted biochemist...(who has)... contributed greatly to our knowledge of the chemical composition of sebum (fat on the skin). One of his notable scientific achievements was the demonstration of provitamin D (the precursor of Vitamin D) in the epidermal cells. This was unsuccessfully looked for in the sebum by all previous investigators."

Dr. Wheatley, born and educated in England, received his bachelor's degree in 1947 and his Ph.D. in chemistry in 1950, both at the University of London.

The resident, Dr. Georgia Abrams, is receiving her $500 award through the Pacific Dermatologic Association for a paper submitted to the Nelson Paul Anderson Memorial Prize Essay Contest. Dr. Abrams has measured responses of skin temperature and blood flow to changes in environmental temperature.

Dr. Abrams, a native of Astoria, Ill., took a B.S. at the University of Illinois Pharmacy School in 1955, and her M.D. in 1959 at the School of Medicine of the same university.

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(Mailed April 24, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

For release after 3 p.m. C.S.T. (1 p.m. P.S.T.) Wednesday, April 18, 1962.

NOTE TO EDITORS: The following story is timed for release after presentation of a research report at the annual meeting of the American Thoracic Society.

PHOTO AVAILABLE ON REQUEST

STANFORD SURGEONS TAKE FIRST STEP TOWARD HEART SURGERY OUTSIDE THE BODY

ST. LOUIS--Four Stanford surgeons reported today they have removed dogs' hearts for up to two hours, then replaced them without apparent harm to the animals.

The surgeons say their technique may be the first step toward operations in which a patient's heart is cut out of his body in order to correct serious heart defects.

This is the first time such experiments have been performed successfully, although surgeons have been trying to develop a suitable technique for such an operation for 50 years.

A report on the new development was presented this afternoon at the annual meeting of the American Thoracic Society by Dr. Edward J. Hurley, a postdoctoral research fellow at the Stanford University School of Medicine. Co-authors of the report are Eugene Dong, Jr., also a postdoctoral research fellow, Dr. Richard Lower, a surgical resident, and Dr. Norman E. Shumway, associate professor of surgery.

The procedure might be used in the next few years to treat a condition known as transposition of the great vessels, one of the common causes of "blue babies." At present there is no satisfactory operation for the ailment, in which the vessels carrying blood from the heart to the lungs and body are reversed.

The Stanford doctors said they cannot estimate how many children might benefit from the operation if it were perfected for patients. But they believe a large number of the 15,000 babies born each year in this country with inoperable heart conditions might be helped.

- more -

So far the experiments have been successfully carried out on four dogs which are still alive from five to nine months after the operations. Careful studies have shown no important damage to the heart's function.

The new technique depends in part upon a method of removing the heart developed two years ago by Dr. Lower and Dr. Shumway in their pioneering experiments in transplanting a whole heart from one dog to another.

Instead of cutting off each vessel separately, the surgeons leave part of the heart in place. This section receives all the veins leading to the heart. When the heart is returned to the animal, it is a simple matter to stitch the heart in place. With older methods, each vein had to be sewn together individually.

While the heart is out of the dog's body, it is kept in a cold (32 to 41°F.) salt solution to prevent death of the heart muscle. The dog is kept alive by a heart-lung machine.

Dr. Hurley said that the earlier transplantation experiments showed that hearts kept at low temperatures outside of the body for as long as seven hours would still function normally. However, the heart-lung machine causes chemical changes in the dog's blood and cannot be used for that long a period.

Dr. Hurley estimated that two to three hours would be available for corrective surgery of the heart while it is outside the body. The time the heart-lung machine is in use puts more of a limit on what can be accomplished in the way of heart surgery outside the body than the damage to heart muscle caused by lack of oxygen-carrying blood.

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(Mailed April 13, 1962)

FOR RELEASE AFTER 3 P.M. (CST) WEDNESDAY, APRIL 18, 1962

Dr. Edward J. Hurley of Stanford Medical School holds "Shep," a 3-year-old part collie whose heart was removed and then replaced without apparent harm nine months ago. (See accompanying story for details.)

TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIFORNIA

Please send me a glossy print of photograph showing Dr. Hurley and "Shep."

NAME _____ PUBLICATION _____

STREET _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

AIR FORCE CITES PALO ALTO-STANFORD HOSPITAL FOR OUTSTANDING PUBLIC SERVICE

The U.S. Air Force has cited the Palo Alto-Stanford Hospital Center "for outstanding public service" in training reservists of the 44th Casualty Staging Squadron, which has headquarters in San Jose.

The citation, a "Certificate of Patriotic Service," was presented to Hospital Administrator Oliver E. Deehan by Col. L.W. Hines of Santa Rosa, region surgeon for the Northern California area.

Men from the squadron spend two days each month in the Hospital, learning to be medical technicians. After a year's experience they are qualified to serve as orderlies in the Hospital, and fulfill their reserve obligations in this way.

In case of an attack, the squadron would be responsible for receiving casualties and administering medical care until the wounded could be airlifted out of the area.

The certificate commends the Hospital for providing "an outstanding public service to the United States Air Force" and for qualifying "these airmen to function in an operational ready capacity."

The other Air Force officer taking part in the presentation ceremony was Lt. Col. John L. Anderson of Mountain View, commander of the squadron.

Participating for the Hospital, in addition to Deehan, were Mrs. Darlene Lutts, director of nursing service, and Mrs. Peggy Gwinn, the nurse who has served as instructor for the squadron's training program.

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(4·13·62)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Ann Walker (DA 1-5310)

NOTE TO EDITORS: Parents' names and home addresses are listed on page 2.

STUDENT WINS $150 CONFERENCE AWARD FOR RESEARCH

Henry R. Hilgard, a senior student at the Stanford University School of Medicine, was awarded the $150 Palo Alto Medical Clinic prize for the outstanding paper presented at the second annual Stanford Student Medical Conference, it was announced today.

The day-long conference, sponsored jointly by the Stanford Medical Student and Stanford Medical Alumni Associations, was held April 6.

Hilgard's paper, "Polyvalent Immunological Tolerance," was based on his experiments in injecting chick embryos with spleen cells from other chickens. When hatched, the blood of the injected chicks, which ordinarily would have reacted against tissue from other chickens, was tolerant to these tissues.

This tolerance remained complete until the third week after hatching. By maturity, or the eighth week of life, however, the hatched chickens lost the tolerance.

Hilgard spent five months in Australia last year doing this research under Nobel Prize winner Sir Macfarlane Burnet at the Walter and Eliza Hall Institute in Melbourne. He used his summer vacation and the 12 weeks of free time allowed senior students in the Stanford medical school for the trip.

Hilgard is the son of Dr. and Mrs. Ernest R. Hilgard of Palo Alto. Dr. Hilgard is professor of psychology and education at Stanford. Mrs. Hilgard is acting associate professor of psychiatry in the medical school.

Other students presenting papers at the conference were Carol Sowers, a third-year student from Riverside, who discussed the value of periodic health examinations; Laurence Kedes, a senior from Hartford, Conn., whose paper dealt with the effect of decreased oxygen in the blood on various portions of the circulatory system; Ronald Poze, a senior from Palo Alto, who evaluated a test for opiate addiction.

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Among other students presenting papers were Alexander Fefer, a third-year student from Brooklyn, N.Y., whose research concerned a new method of producing tolerance of adult mice to skin grafts; and Lawrence Eschelman, a third-year student from Represa, who reported on the effects of cutting sympathetic nerves upon blood flow in two major arteries after clamping the arteries.

Presentation of two clinical cases from the Palo Alto-Stanford Hospital Center were made by senior students. A case of mitral stenosis, a heart condition, was presented and discussed by Joseph Ellis of Chicago, Paul Jewett, Menlo Park, and Donald Doty, Los Angeles; and a case of disease of the small intestine by James Clever, Tracy, Victor Lavis, Los Angeles, and Laurence Kedes, Hartford, Conn. Lawrence Cohn of San Francisco, was chairman and moderator for both presentations.

Dr. Lewis Thomas, professor and chairman of the Department of Medicine, New York University School of Medicine, was the major speaker at the Conference. He discussed "The Future of Medicine as a Biological Science."

EDITORS: Parents' names and home addresses follow:

James A. Clever, Mr. & Mrs. George M. Clever, Rt. 2, Box 390, Tracy.

Lawrence H. Cohn, Mr. & Mrs. Harold F. Cohn, 39 Sea Cliff, San Francisco.

D. Benjamin Doty, Mr. & Mrs. Ben M. Doty, 3330 Charleston, Los Angeles 28.

Joseph G. Ellis, Dr. T.G. Ellis, 113 Walnut, Georgetown, Ill.
Mrs. Ruth Ellis, R.R. #2, Danville, Ill.

Lawrence T. Eschelman, Mr. & Mrs. Thomas P. Eschelman, P.O. Box 78, Represa.

Alexander Fefer, Mr. & Mrs. Joseph Fefer, 182 E. 56th St., Brooklyn, N.Y.

Henry R. Hilgard, Prof. & Mrs. Hilgard, 1129 Hamilton Ave., Palo Alto.

Paul H. Jewett, Capt. & Mrs. G.W. Jewett, 1075 Arbor Rd., Menlo Park.

Victor R. Lavis, Mr. & Mrs. Salvo Lavis, 545 So. Gramercy Place, Los Angeles 5.

Ronald L. Poze, Mr. & Mrs. M.I. Poze, 856 Devon, Los Angeles 24.

Carol J. Sowers, Mr. & Mrs. J. Stark Sowers, 5429 Greenbrier Dr., Riverside.

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(Mailed April 11, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

For release after 11:30 a.m. E.S.T. (8:30 a.m. P.S.T.), Monday, April 16, 1962.

NOTE TO EDITORS: The following story is timed for release after delivery of a research report at the annual meeting of the Federation of American Societies for Experimental Biology.

DEHYDRATION COULD CAUSE DEATH OF PILOT DOWNED IN ARCTIC, EVEN WITH WATER PLENTIFUL

ATLANTIC CITY--Can a man's body dry out even though he has all the water he wants to drink?

Under conditions of arctic survival this apparently happens, according to Dr. Terence A. Rogers and James A. Setliff of Stanford University School of Medicine.

The scientists are still puzzled as to why this occurs. But they said this paradoxical dehydration could cause a man's death before he really began suffering from starvation.

Dr. Rogers is assistant professor of physiology at Stanford, and Setliff is his laboratory assistant. They reported today on the first of a series of experiments conducted for the Air Force, which is interested in bettering the chances for a downed airman's survival in the bitter cold of the arctic.

The results were presented before the 46th annual meeting of the Federation of American Societies for Experimental Biology. They were based on measurements taken in February, 1961, when six men (three Stanford medical students, two Air Force arctic survival instructors and Dr. Rogers) camped out on the frozen Chena River near Fairbanks, Alaska, for five days.

Each man was dressed and equipped as if he had ejected from an airplane. Each built a shelter with his parachute. The temperature ranged between 0 and -30°F.

The men carried out the tasks usually associated with survival, such as gathering wood, but did not trap or shoot game since the object was to determine the effects of starvation. However, they could drink as much melted snow as they wished.

- more -

Weight loss for the men averaged 12 pounds. In every case it was more than the energy cost of the work done. The amount of energy expended was measured with portable equipment which recorded oxygen consumption.

Analysis of blood and urine samples indicates that the extra weight loss was due to dehydration. The drying out occurred even though the men noticed no extra sensations of thirst.

Further experiments will be carried out in the future to try to find out the specific cause of the dehydration, as well as methods of combating it.

The scientists concede that the experiments exposed the men to physical stresses only, and that the subjects were not faced with the psychological ones a real survivor would be.

"For this reason the experiments may be of limited value," Dr. Rogers said, "since a real survivor's state of mind would affect his body chemistry. But we can also expect that the body changes brought about by cold and starvation (which we measured) will greatly affect the state of mind."

Rogers and Setliff have recently conducted a second set of experiments in the arctic, again with medical students and Air Force survival instructors.

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(Mailed April 11, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Sam Moffat (DA 1-5310)

For release to a.m. newspapers of May 9, 1962.

NOTE TO EDITORS: The following story is timed for release following presentation of a research report at the 62nd annual meeting of the American Society for Microbiology.

NEW TEST EFFECTIVE IN DETECTING DANGEROUS "STREP" GERMS QUICKLY

KANSAS CITY, MO.--A new technique of identifying streptococcal bacteria which may lead to rheumatic fever and a serious kidney condition if not detected early can easily be put into widespread use for hospital patients, two Stanford University School of Medicine scientists reported yesterday.

The test takes less than two hours to carry out, while older methods commonly used take from two to five days. If the dangerous strain of bacteria is detected, treatment with the proper antibiotic can begin much sooner and patients will be protected from the serious diseases.

A report on the method, used for a decade in experimental laboratories but not successfully tried before on large numbers of patients, was presented before the 62nd annual meeting of the American Society for Microbiology.

Authors of the report were Dr. Helene C. Rauch, postdoctoral fellow in medical microbiology, and Dr. Lowell A. Rantz, professor of medicine at Stanford.

Rheumatic fever, which may cause permanent heart damage, and the kidney condition, glomerulonephritis, can occur as complications of "strep" throat infection or scarlet fever.

The complications may result within 10 days after diagnosis of the original infection, so prompt treatment is important, Dr. Rauch said.

Only one group of streptococci, known as group A, causes the complications. Other groups, however, may bring on strep throat.

-more-

The new technique uses a compound which fluoresces with a greenish glow under ultra-violet light. It is bound chemically with an antibody which reacts only to the A strain.

Antibodies are one of the body's main defenses against disease. The test uses antibodies from the blood of rabbits. Mixed with bacteria from the patient's throat, the fluorescent antibodies combine with the germs so they can be seen in an ultra-violet microscope.

Dr. Rauch and Dr. Rantz used the test on 767 persons with and without respiratory infections. They found it was 97 per cent effective in identifying the 160 patients with enough A germs to cause serious infections.

A comparison of results of this technique and the older method of growing the bacteria on a gelatin-like material until they become visible, indicated the new test was equally effective in detecting the germs.

The new method, known as the indirect immunofluorescent procedure, is just coming into use for diagnosis of rabies, whooping cough, and other diseases which were previously difficult to diagnose exactly in a short period of time. With the other diseases, the same fluorescent chemical is used, but with different antibodies.

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(Mailed May 4, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Marian Ellias (DA 1-5310)

HARD WORK AND NOT "HAPPY PILLS" WILL HELP THE MENTALLY ILL, PSYCHIATRIST SAYS

There will never be a Salk vaccine for mental illness.

Nevertheless, the public "blithely assumes that soon there will be a cure for our patients analogous to a cure for cancer."

These are the opinions of Dr. Don D. Jackson, director of the Mental Research Institute of the Palo Alto Medical Research Foundation and clinical associate professor of psychiatry at the Stanford University School of Medicine. His views appear in the current issue of the Stanford Medical Bulletin.

Dr. Jackson does not belittle the studies which have uncovered differences in body chemistry between certain mental patients, such as schizophrenics, and normal persons. Nor does he deny that tranquilizers and similar drugs have calmed mental patients and somewhat shortened their hospital stay.

But he feels that the emphasis on chemical aspects of mental illness does "discourage the public from facing the unpleasant facts about the administration and treatment of mental disorders." He stresses that the public and the medical profession must not lose sight of "those simple human measures that will be effective in helping the emotionally disturbed."

Each year we rediscover the fact that mental disorders, including schizophrenia, arise out of personal relationships, Dr. Jackson continued. We fill out the rest of the year "with dreams of glory about the biochemical cause of schizophrenia, and new happy pills. We somehow fail to keep in mind the analogy that 99 per cent of headaches develop as a result of social situations (and here I include hangovers); yet this does not dispute the fact that aspirin is a good remedy."

"All of us are only too eager to deny an effect on our children and others around us... It is small wonder that parents are intrigued by hereditary and chemical explanations of their child's emotional problems..."

- more -

As an example of one simple human measure that worked, Dr. Jackson cited the case of a director of a mental hospital in Stockholm, who took 50 patients on a vacation to Italy. "The senile dementia patients were not much helped by the change of scene, but eight patients with various forms of schizophrenia, all of whom had been hospitalized for more than 15 years, were permanently discharged after the group returned to Stockholm."

Senile dementia is the deterioration of intelligence in old age. Schizophrenia is the most severe and widespread form of mental disturbance. It is characterized by a loss of the sense of reality and leads to withdrawal into a fantasy world.

An innovator like the Stockholm doctor faces "sizeable odds," Dr. Jackson admitted. "He must fight an inertia in staff and administration that stems partly from waiting for the chemist to invent a pill that will take the hard work out of caring for the mentally disordered."

Dr. Jackson offered some solutions to the problems of caring for patients. We must stop building great stone and steel mausoleums far from town in order to care for the mentally disordered, he suggested. "We know that the less rupture that occurs between the mental patient and his status quo, the more quickly and effectively he can resume his usual place in society."

The type of facility Dr. Jackson prefers is a small unit of about 20 patients in a fairly old house, close to the patients' homes. "Although such a facility sounds expensive, the brevity of the patients' stay might more than make up for the greater daily cost."

Furthermore, mental facilities are not adequately staffed. Very few state legislatures vote enough funds for the support of a sufficient number of trained personnel, Dr. Jackson said.

"A hospital might deliberately choose to concentrate the bulk of its staff on promising patients and face the criticism that such a move would evoke. Good results might influence the legislatures."

"For the sake of expediency, policies are enacted that are demeaning to the human spirit. Treat a patient like a child and he will stay a child--at the taxpayer's expense."

"In addition, we must pay more attention to where the patient comes from and where he will be returning when he leaves the hospital," he emphasized. "It is conceivable that if psychiatrists were not traditionally tied to their chairs, the proper place to interview most patients who are slated for hospital entry would be in their own homes."

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(mailed June 26, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Marian Ellias (DA 1-5310)

FOR RELEASE AFTER 11 A.M. (P.D.T.) SATURDAY, JUNE 16, 1962.

EDITORS: Please do not contact the students or their families until after 11 A.M. Saturday, JUNE 16, 1962. Home addresses are listed on page 2.

MEDICAL STUDENTS WIN AWARDS FOR TOP SCHOLARSHIP

STANFORD - Ten senior medical students at Stanford University's School of Medicine received awards for superior scholarship at the Convocation for the Class of 1962 Saturday (JUNE 16). Also honored were a third-year medical student and an intern at Palo Alto-Stanford Hospital.

Lawrence H. Kedes, "whose research during his undergraduate career in the Stanford Medical School is deemed most meritorious," received the $500 Borden Undergraduate Research Award. Kedes'research involved studies of the effects of reduced oxygen supply on the hearts and blood vessels of laboratory animals. He also was one of five senior medical students who received a Mosby Scholarship Book Award.

The Hopkins award of $100 went to senior student Armar A. Strauss for outstanding work in dermatology.

Others who received the Mosby Scholarship Award, which provides a selection of any one Mosby publication with a value up to $30, were Lawrence S. Barnett, Lawrence H. Cohn, Donald B. Doty and Victor R. Lavis.

Winners of the Merck Manual Awards were Paul K. Johnson and Demosthenes Pappagianis.

Alan T.C. Lee won the Robert T. Legge Award, given by the Northern California Chapter of the American Industrial Hygiene Association to a senior who shows the most aptitude and interest in the study of preventive occupational health. The award was a book of the recipient's choice. Senior Sara Jean Christensen received an honorable mention citation from the American Medical Women's Association for her high scholastic achievement.

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The Julian Wolfsohn Award of $100 went to John M. Simpson Jr., M.D., the intern who during the year did the best work in internal medicine and neurology.

The Roche Award of an engraved Omega wrist watch was given to Alexander Fefer, selected as "the outstanding student of medicine who has successfully completed the first three years of medical school."

Dr. Robert H. Alway, dean of the Medical School, administered the Hippocratic oath, and Dr. Roy B. Cohn, acting executive of the Department of Surgery, addressed the graduates. Dr. Seymour Kolko, assistant dean for student affairs, presented the awards.

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EDITORS: Students and their parents listed below:

LAWRENCE H. KEDES - son of Mr. and Mrs. Samuel E. Kedes, 81 Hebron St., Hartford, Conn. He and his wife live at Escondido Village, Stanford.

ARMAR A. STRAUSS - lives at 723 Valparaiso, Menlo Park.

LAWRENCE S. BARNETT - son of Mr. and Mrs. S.R. Barnett, 651 Vistamont, Berkeley. He and his wife live at 540 University Dr., Menlo Park.

LAWRENCE H. COHN - son of Mr. and Mrs. Harold E. Cohn, 39 Sea Cliff Ave., San Francisco. He and his wife live at 750 Coleman Ave., Menlo Park.

DONALD B. DOTY - son of Mr. and Mrs. Ben M. Doty, 3330 Charleston Way, Los Angeles. He and his wife live at 880 Roble Ave., Menlo Park.

VICTOR R. LAVIS - son of Mr. and Mrs. Salvo Lavis, 545 S. Gramercy Pl., Los Angeles.

PAUL K. JOHNSON - son of Mr. and Mrs. O.M. Johnson, 225 12th, Casper, Wyo.

DEMOSTHENES PAPPAGIANIS - son of George Pappagianis, 704 I St., Chula Vista. He and his wife live at 409-4 Stanford Village, Stanford.

ALAN T.C. LEE - son of Mr. and Mrs. Harry Y.S. Mau, 3742-A Old Pali Rd., Honolulu, Hawaii.

SARA JEAN CHRISTENSEN - daughter of Mrs. Janet Christensen, 214 Wilson Ave., Oildale.

JOHN M. SIMPSON JR., M.D. - and his wife live at 474 Waverly, Menlo Park.

ALEXANDER FEFER - son of Mr. and Mrs. Joseph Fefer, 182 E. 56th St., Brooklyn, N.Y. He and his wife live at Escondido Village, Stanford.

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(Mailed June 14, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

Newspaper editors: This story may be of special interest to your sports desk.

CONFERENCE ON SPORTS MEDICINE AND PHYSICAL FITNESS SET AT STANFORD JULY 18-20

What is hoped to be the first Russian-American Conference on Sports Medicine and Physical Fitness ever held is being planned at Stanford University July 18-20, it was announced today.

The conference is scheduled Wednesday through Friday immediately before the major Russian-American Track and Field Meet July 21 and 22 in Stanford Stadium.

Several leading American specialists have agreed to participate, and invitations have been extended to two outstanding Russian experts in physical culture.

Emphasis will be on physiological factors in sports and fitness, and on methods of evaluating physical fitness and exercise programs.

July 19 will be devoted to a symposium for physicians and scientists. On July 20 sessions will be held for coaches and physical education specialists. A closed conference for the invited speakers in planned July 18.

The Russians invited to participate are Dr. M. F. Ivanitsky, the author of several texts about physical culture, and Dr. A. V. Korobkov of the Institute of Physical Culture in Moscow.

American participants will be Steven M. Horvath, professor of physical education at the University of California, Santa Barbara, who is noted for his research on the responses of trained and untrained individuals to exercise; Dr. Hans Kraus, associate professor of clinical physical medicine and rehabilitation at New York University, who has conducted comparative studies of fitness in American and European children; Dr. William Hunter of the Permanente Medical Group in San Francisco, who specializes in the care of muscular and skeletal disorders; and Dr. Daniel J. Feldman, director of the Division of Rehabilitation Medicine at Stanford Medical Center.

Dr. Feldman is coordinating planning for the conference, which is being financed by the Cummings Research Foundation of Beverly Hills, Calif., and the U.S. Olympic Committee.

Physicians and coaches interested in attending sessions should contact Dr. Feldman by writing him at Stanford Medical Center, Palo Alto, California.

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(June 11, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat, DA 1-5310

FOR RELEASE TO A.M. NEWSPAPERS OF JUNE 8, 1962. (Release time set by the National Institutes of Health, which are issuing an announcement for simultaneous release.)

TWO CLINICAL RESEARCH CENTERS TO BE ESTABLISHED AT STANFORD MEDICAL SCHOOL

Two new research centers for the investigation of human diseases--including the first ever established by the National Institutes of Health for the study of premature infants--will be set up at Stanford Medical Center with grants totaling $797,305 announced by the United States Public Health Service today.

The new grants make Stanford University School of Medicine the first medical school in the country to have three NIH-supported clinical research centers. Investigations of new methods of treating cancer with X rays and other radiation are already under way with a $943,412 federal grant announced last year.

The premature infants' study will be financed with a $267,305 grant. The remaining $530,000 will support a general research facility in which certain major problems such as tissue grafting, growth and development, function of the nervous system, and resistance and susceptibility to infection will be attacked over several years.

The government expects to support the research centers for a minimum of seven years, but allocations have to be made on a yearly basis depending upon the availability of funds. The prematurity center is expected to cost about 1½ million dollars to support over this period, the general center approximately 4½ million dollars.

First patients will be admitted to the Clinical Research Center for Premature Infants after August 1. Investigators in many departments of the medical school will take part in patient care, research and teaching there.

There will be major emphasis on the use of electronic equipment, of the type developed for the man-in-space program, to continuously record each infant's heartbeat, brain waves, basal metabolism, and other evidences of bodily function.

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Prematurity poses critical problems in medicine. In the United States more than half of all deaths in the first month of life are due to premature birth. This high mortality rate persists despite the widespread advances in medical science in the last 25 years.

The physicians hope their findings will lead to developing methods for reducing not only mortality, but the high incidence of mental retardation, nervous disorders and birth defects in these children.

Principal investigator will be Dr. Norman Kretchmer, executive head of Stanford's Department of Pediatrics. Program director will be Dr. Sumner Yaffe, assistant professor of pediatrics. The unit will have space for six bassinets as well as its own laboratory facilities.

The General Clinical Research Center will open in midwinter with 16 beds. The purpose of the unit is to provide an opportunity for controlled study of human diseases so that basic scientific principles can be applied to study and care of patients.

There will be beds for metabolic studies of children, for neurologic investigation with facilities for continuous recording of brain waves and similar electrical measurements in patients, and for general use. Six of the general beds will be in isolation rooms for patients with infections or who are very susceptible to infections because of their serious ailments.

Dean Robert H. Alway of the medical school is to be principal investigator. Program director for the unit will be Dr. Stanley L. Schrier, assistant professor of medicine.

The grants for both centers cover full hospitalization expenses of patients who are admitted to the units. This is expected to remove a major obstacle to the quick application of the latest medical findings to patients, since detailed studies necessary are usually far too expensive to be paid for by patients themselves.

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(Mailed June 6, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Marian Ellias (DA 1-5310)

NOTE TO CITY EDITORS, SCIENCE WRITERS AND SPORTS EDITORS

We have scheduled a news conference at 1:30 p.m. Wednesday, July 18, here at Stanford Medical Center, with the participants in the Russian-American Conference on Sports Medicine and Physical Fitness.

The news conference will be held in the Dean's Conference Room of the School of Medicine. If your reporter and/or photographer will come to the information desk in the main lobby of the hospital, the information clerk will direct them to the room.

About a dozen members of the conference will be present. They are experts in physiology, medicine, physical education, with particular emphasis on sports and physical performance. Expected to attend are Dr. A.V. Korobkov of Moscow's Institute of Physical Culture and Dr. M.F. Ivanitsky, author of physical culture books.

Americans include: Steven M. Horvath, professor of physical education at the University of California, Santa Barbara, who is noted for his research on the responses of trained and untrained individuals to exercise; Dr. Hans Kraus, associate professor of clinical physical medicine and rehabilitation at New York University, who has conducted comparative studies of fitness in American and European children; Dr. William Hunter of the Permanente Medical Group in San Francisco, who specializes in the care of muscular and skeletal disorders; and Dr. Daniel J. Feldman, director of the Division of Rehabilitation Medicine at Stanford.

Also: Dr. Donald L. Stillwell, Jr., associate professor of anatomy at Stanford; Dr. George Feigen, associate professor of physiology at Stanford; Dr. Frederick L. Behling, clinical instructor in surgery at Stanford; Franklin Henry, professor of physical education at the University of California at Berkeley; David Clark, University of California at Berkeley; and Dr. Ernst Jokl, professor of physiology at the University of Kentucky, and president of the International Council of Sports and Physical Education.

Sandwiches will be served at 1 p.m. for those who may not be able to get lunch because of the early hour in the afternoon. Please let us know if your staff member will want lunch so we can order enough sandwiches.

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(Mailed July 13, 1962)

STANFORD UNIVERSITY NEWS SERVICE

FOR INFORMATION CONTACT: Jan Studebaker

Stanford, California
DAvenport 1-2300, Local 2558

Southern California office
621 S. Hope St., Los Angeles 17
MAdison 7-0653

FOR IMMEDIATE RELEASE

STANFORD - Can what is useful also be beautiful, in the special sense that art is beautiful? When is design art? Stanford University's Art and Architecture Department is exploring these questions at its summer session this year and sharing the search in a series of public lectures.

The next program will be at 8 p.m. Wednesday (JULY 18) in Cubberley Auditorium when Donald H. Short, studio director of the Walter Landor and Associates industrial design firm, will discuss design as a problem solver.

His talk will cover the function of the industrial designer as well as creativity and design philosophy. The lectures will be augmented with slides on design in general and on specific examples of the firm's work, plus an 18-minute documentary film of an actual design project.

Short is a past president of the San Francisco Society of Designers and Illustrators, a member of the San Francisco Art Association advisory committee for the San Francisco Art Institute, and a lecturer on industrial design at San Jose State College and the Management Development Center, University of San Francisco.

In addition to their public programs, the off-campus lectures for this series each spend two days with Stanford art students--answering questions, criticizing work, bringing new ideas.

The remaining free public lectures this summer are at the same hour and place. On July 25 Stanford Art Prof. Matt Kahn continues the search for values in identifying beauty in the useful, with a discussion of art components. On Aug. 1 the speaker will be David Campbell, practicing architect and president of the American Craftsmen's Council, New York. On Aug. 8 trends in design will be the subject for Mildred Constantine, associate curator of design at New York's Museum of Modern Art.

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7/13/62

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Marian Ellias (DA 1-5310)

Editors: This story may interest your sports desk.

OPEN-END DISCUSSION TO BE FEATURE OF CONFERENCE ON SPORTS MEDICINE AND PHYSICAL FITNESS

The Russian-American Conference on Sports Medicine and Physical Fitness to be held at Stanford University July 18 and 19 will feature an open-end discussion Thursday.

The Thursday meeting will begin at 9 a.m. in Dinkelspiel Auditorium. Coaches, athletic directors, physicians and others interested in physical education and sports medicine are invited to attend. Pre-registration is unnecessary and there is no attendance fee for the meeting.

Originally planned for July 18-20, the conference now will take place on July 18 and 19. On Wednesday there will be a closed conference for participants. Discussions during both days will center around the physiological factors in sports and fitness and methods of evaluating fitness and exercise programs.

The conference will be held before the major Russian-American Track and Field Meet July 21 and 22 in Stanford Stadium. Participating will be American experts and Dr. M.F. Ivanitsky, author of several books on physical culture, and Dr. A.V. Korobkov of Moscow's Institute of Physical Culture.

The Robert Cummings Foundation of Beverly Hills, Calif., and the U.S. Olympic Committee are financing the conference, which is believed to be the first one bringing together U.S. and U.S.S.R. experts in physical culture.

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(Mailed July 6, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1 - 5310)

$493,645 GRANT TO CONTINUE RESEARCH ON DISFIGURING SKIN DISEASE

Stanford University School of Medicine's intensive investigation of psoriasis, the disfiguring skin disease which affects 3 to 4 million Americans, will continue for another three years under a grant of $493,645 from the John A. Hartford Foundation, Inc., of New York, it was announced today.

Scientists have studied the course of the ailment in more than 450 patients at Stanford Medical Center since 1959, when the program was started with an initial grant of $295,928 from the Hartford Foundation.

At present the cause of psoriasis is unknown. Treatment is on a trial-and-error basis and may partially relieve symptoms but there is no cure, according to Dr. Eugene Farber, executive head of the Department of Dermatology at Stanford and director of the research.

During the investigation intricate chemical analyses of fatty substances and proteins in many patients' skin (both normal and diseased) have been made in an attempt to learn more about the cause of the illness, what its specific characteristics are and how it relates to other diseases. New drugs and new ways of administering medication have also been tried.

Psoriasis is a chronic condition characterized by the eruption of round, red patches covered by white scales. The patches usually occur on the elbows, knees, scalp and back; at times they may cover the entire body. It has been estimated that the ailment affects 2 per cent or more of the world's population.

Thus far the multi-discipline attack has utilized specialists in chemistry, pathology, genetics, immunology, physiology and rheumatology. Working with Dr. Farber are Dr. Alvin J. Cox, executive head of the Department of Pathology; Eve P. Reaven, Donald Eddy, and Joseph Peterson, research assistants; and three new members of the Stanford faculty, Marvin A. Karasek, assistant professor of biochemistry in dermatology, and Research Associates Frank Grauer and Ian Wilkinson.

The Hartford grant will count toward the campaign total in the current Stanford PACE Program -- a $100 Million Plan of Action for a Challenging Era. The gift will bring the University an additional $164,548 under a matching grant from the Ford Foundation, which provides $1 for every $3 received from other private sources.

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Future projects planned under the Hartford grant include the following:

1. Continued collection of data from patient histories, which now record on punched cards the course of the disease in more than 500 patients in the United States and abroad. "We are now able to compare psoriasis as it exists in various regions of the United States and in some foreign countries," Dr Farber said.

As the amount of data grows it will be possible to study the frequency of disease in terms of age, sex, family, race, presence of arthritis or other ailments often seen with psoriasis, presence of the latent form as compared with the active one, and so on.

2. The use of skin transplants to find out why some diseased skin will remain abnormal when moved elsewhere on the body or will revert to normal form; and why normal skin will sometimes become psoriatic when moved to a diseased area and sometimes will not.

3. Studies of unusual forms of the disease -- inside joints, on skin surfaces inside the elbows and knees instead of outside, those brought on by administration of drugs such as certain hormones or medication for malaria, and those aggravated by ultraviolet light, which is usually beneficial.

4. Examination of the relationship with disorders commonly found among psoriasis patients, including gout, diabetes, rheumatoid arthritis, high blood pressure and obesity.

5. Continued studies of new drugs, both for application to the skin and for administration by other means.

6. Continued laboratory studies using techniques of immunology, electron microscope examination, growth of tissue in test tubes, biochemistry, and the like.

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(Mailed Aug. 28, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Marian Ellias (DA 1-5310)

HOFFMAN NAMED ASSOCIATE ADMINISTRATOR FOR FINANCE AT PALO ALTO-STANFORD HOSPITAL CENTER

Arthur J. Hoffman has been named associate administrator for finance at the Palo Alto-Stanford Hospital Center.

Business manager since May, 1959, Hoffman fills the vacancy created by the resignation of Walter R. Rentschler. In September, Hoffman will take over the position formerly held by William J. Moir. At that time the jobs of the various associate administrators, with the exception of Hoffman, will be reassigned.

Hoffman received a bachelor of science degree in business administration from the University of California at Berkeley in 1938. He then spent six years in the Finance Corps of the U.S. Army, mainly in Juneau, Alaska, and Lexington, Ky. At the time of his discharge, he held the rank of lieutenant colonel.

He entered the hospital field in 1949. For six years he was the business office manager at the Washoe Medical Center, Reno. After that he spent more than a year as administrator of the Carson-Tahoe Hospital, Carson City, Nev.

Last January he was elected vice president and program chairman of the Northern California Chapter of the American Association of Hospital Accountants.

Hoffman and his wife, Muriel, have been married for 20 years. They have three children: Michael, 17, Susan, 14, and Nancy, 9. They live in Santa Clara.

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(Mailed Aug. 16, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Marian Ellias (DA 1-5310)

FILE COPY

TWO STANFORD MEDICAL STUDENTS TO BE FIRST FROM U.S. TO JOIN PROJECT HOPE

Two Stanford students will be the first medical students from the United States to work with Project Hope, the floating people-to-people medical center now in Trujillo, Peru.

Ernest Altekruse of Ft. Wayne, Ind., and John Howell of Rochester, Minn., both fourth-year students, will spend five weeks with the Project. They hope to join the hospital ship late this month. At present they are trying to interest donors in financing their flights, each of which costs about $650 round trip. Room and board will be furnished by the Hope.

In addition to assisting the Project in bringing modern medical skill to Peruvian patients, Altekruse and Howell would like to establish the first exchange between U.S. and Peruvian medical students.

"Officials in Peru have expressed great interest in such an exchange," said Dr. Theodore M. Myers, a Stanford alumnus who practices in San Mateo and is a clinical instructor in the Stanford Medical School.

Along with other volunteers this spring, Dr. Myers set up the Hope's program in Trujillo, an area with few doctors. Before going to Peru, Dr. Myers spoke to Stanford Medical School classes to see if students were interested in joining the Hope.

"I thought the Project was something that everyone else could do, but not me," Howell said. "Then Ernie (Altekruse) really sold me on the idea. It will be a great adventure and will give us the opportunity of doing many things at once. It's about the best thing that could possibly happen."

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- more -

The two will work closely with Peruvian students and doctors on the ship, in the community and at Trujillo's new medical school. They will assist in deliveries, give vaccinations and help doctors in outpatient clinics in neighboring villages. "They will gain experience themselves and will perform an important service," said Dr. Myers.

Altekruse, 34, is an ex-Marine major and the father of six children. He and his wife met and married while both were in the Marines. Then they decided to go to medical school. Altekruse had become interested in medicine while writing a thesis on medical electronics at the Naval Postgraduate School in Monterey. His wife received her M.D. degree in 1960. Altekruse is the son of Mr. and Mrs. Fred B. Altekruse, 2604 Sherman Blvd., Ft. Wayne, Ind.

Howell, 29, a bachelor, also has a background in electronics. He received a bachelor's degree in electrical engineering from the University of Minnesota, after having earned another bachelor's degree in biology at the California Institute of Technology. This summer before going to Peru he is working in the surgical pathology laboratory at the Mayo Clinic, Rochester, Minn. He is the son of Dr. and Mrs. L.P. Howell, 1099 Plummer Circle, Rochester. His father is a member of the Mayo Clinic Staff.

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(Mailed Aug. 15, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

Samuel Moffat (DA 1-5310 or UL 1-0103)

FOR RELEASE AT 10 A.M. (P.D.T.) SEPT. 22, 1962. This story supplements a simultaneous announcement from NASA in Washington, D.C.

The National Aeronautics and Space Administration (NASA) today announced a $535,000 grant to establish a biomedical instrumentation laboratory at Stanford Medical Center.

The new facilities will permit a fourfold expansion of research efforts at Stanford University School of Medicine in the fields of space biology and biomedical instrumentation. Investigators hope to design devices which can detect life--if any--on Mars and other planets. They also anticipate that the techniques they develop may have broader applications in the fields of biology and medicine.

Research in this field is already under way at Stanford under a three-year $380,640 grant from NASA. It is being directed by Dr. Joshua Lederberg, Nobel Prize geneticist who heads Stanford's Department of Genetics. Associated with Dr. Lederberg and responsible for the instrumentation aspects of the program will be R. Elliott Levinthal, formerly president of Levinthal Electronics Products, Inc.

The biomedical laboratory will be located in a new $5.5 million Clinical Sciences Building which is expected to be ready for occupancy in 1964. Instrumentation laboratories and shops will be on the ground floor; biological applications will be studied on the third floor in an area adjacent to the recently announced $1 million Lt. Joseph P. Kennedy, Jr., Laboratories for Molecular Medicine.

The NASA-provided facilities will occupy approximately 10,000 square feet in the building. It is expected that cooperative research programs will be set up with other scientists throughout the medical school.

The grant is one of the first research facilities grants ever to be authorized by NASA. Other grants, announced simultaneously in Washington, went to the University of California (Berkeley), University of Chicago, Rensselaer Polytechnic Institute and the State University of Iowa.

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(Mailed Sept. 21, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

ANNOUNCEMENT OF NEWS CONFERENCE

Six months ago a team of Stanford surgeons, working at the Veterans Administration Hospital in Palo Alto, successfully cleaned out a completely blocked coronary artery which had crippled a 47-year-old VA patient. The patient has recovered so well that he is now ready to return to work as a laborer.

The surgeons used a new technique for the operation and for the first time with such an operation have X-ray photographs to show that the artery was completely blocked before surgery, but is now open and functioning normally.

Details of the operation will be explained at a joint Stanford-VA news conference at 10:30 a.m. Thursday, Nov. 1, 1962. The conference will be held in Building 1 (the main administration building), Room 1-A-513, Veterans Administration Hospital, 3801 Junipero Serra Blvd., Palo Alto. The hospital is located between Page Mill Road and Arastradero Road; best roads by which to reach it from Bayshore Highway are Oregon Avenue (which becomes Page Mill) or Charleston Road (which becomes Arastradero).

The patient, the surgeon and the internist who directed the difficult preoperative diagnostic tests will attend the conference. Color movies of parts of the operation will be shown and the whole procedure will be carefully explained. Copies of the X rays before and after surgery will be available. John J. Prusmack, M.D., director of the Veterans Administration Hospital, will serve as moderator. You are invited to send a reporter and/or photographer.

-- Samuel Moffat
Information Officer
Stanford Medical Center

(Mailed Oct. 26, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Marian Ellias (DA 1-5310)

COLLIES AT STANFORD MEDICAL CENTER AID RESEARCH ON EYE CONDITION

Several dozen collie dogs at the Stanford Medical Center are helping scientists study an eye condition which has been affecting more and more Americans each year.

Collies are the first known animals in which the condition -- detachment of the retina -- occurs naturally. The degenerative condition found in the collies' eyes is similar to a defect which blinds many Americans each year.

Because of the extended life span in the U.S., an increasing number of persons over 50 develops retinal detachment. Statistics on it are sketchy, but the doctors estimate that five percent of the blind population may have retinal detachment.

The study is directed by Dr. Seymour R. Roberts, a veterinarian and research associate at Stanford University School of Medicine, and Dr. A.N. Dellaporta, assistant professor of ophthalmology.

"It is well known that animal and human eyes have much in common and frequently the findings in animal eye disease can be applied to human eye disease," said Dr. Roberts. "For the first time, retinal detachment can be added to the list of diseases whose study may aid the ophthalmologist in the search for new methods of preventing blindness in humans."

According to Dr. Roberts, the studies of the Stanford collies also provide information for breeders and dog lovers. He is afraid that since the condition in collies is congenital, the defect may influence the entire breed.

"At present, about 30 percent of all the collies in the U.S. have eye defects. Half of those affected probably will develop detachment, with blindness resulting in a large number."

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"Dog lovers apparently are unaware of the seriousness of this condition," Dr. Roberts continued. Collies are the seventh most popular dog in the U.S., according to the American Kennel Club's registrations. More than 6,000 collies may be affected.

Dr. Roberts suggests that all breeding stock be examined and dogs with detachment eliminated from breeding strains. "Recognition of the defect is not easy for veterinarians not trained in diseases of the eyes. This is perhaps one reason why the defect has gone unrecognized this long and breeding of affected dogs has continued."

Dr. Dellaporta said that the majority of retinal detachments, in both humans and collies, increase in frequency with age. "In every detachment," Dr. Dellaporta continued, "there is a defect in the back of the eye, although this can be too small to be detected in each case. A tear or hole is caused in the retina, and fluid escapes between the retina and the choroid, the vessel-bearing membrane. The retina loses its nourishment and degeneration follows. In extreme cases the tissue shrinks and no longer conforms to the shape of the eye."

Preliminary treatment of retinal detachment is bed rest, so the detached part settles down again. Then an artificial inflammation is created around the hole, by high frequency electric current, chemicals, electrolysis or intense light. "The ensuing scar formation seals the hole so that no fluid can escape," said Dr. Dellaporta. In complicated cases, more radical means such as surgical shortening of the eyeball must be used.

The doctors hope to learn the following from the collie study:

1) How the defect in the collies, which produces a congenital detachment, is transmitted. This will be done through various breeding methods.
2) How study of the disease in collies may give the doctors hints about the course of the human disease and its prevention.
3) How to develop more efficient methods for curing the condition in humans.

Dr. Dellaporta specializes in the surgery of retinal detachment and Dr. Roberts, president of the American Society of Veterinary Ophthalmologists, has a private practice in Richmond (Calif.). The two have been studying the defect for more than three years at Stanford, supported by the National Institutes of Health.

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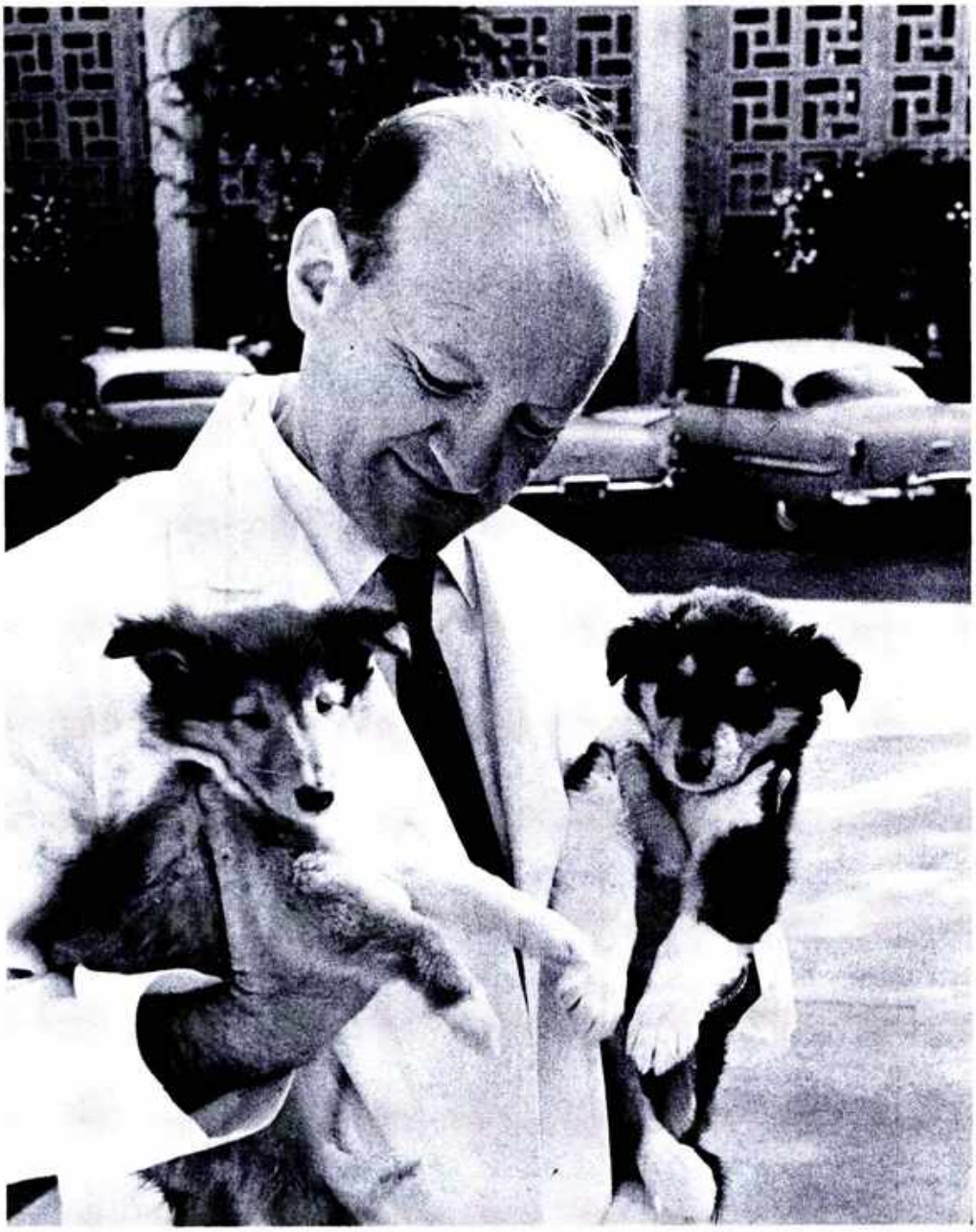
(Mailed Oct. 25)



FOR IMMEDIATE RELEASE

Dr. Seymour R. Roberts, research associate at Stanford University School of Medicine, and Richmond veterinarian, holds two collie pups from a colony with retinal detachment, an eye condition affecting many Americans over 50 years old. The dogs are helping scientists at Stanford Medical Center discover means of curing the condition in humans as well as collies. (See accompanying story for details.)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Marian Ellias (DA 1-5310)

WEST'S 1ST RESEARCH PROGRAM IN CHILDHOOD APHASIA STARTS AT STANFORD MEDICAL CENTER

The West's first research program in childhood aphasia is getting under way this week at the Stanford Medical Center.

Funds for the Scottish Rite Institute for Childhood Aphasia are being provided for by the Scottish Rite Foundation of California. The foundation contributed $22,200 as an initial grant for starting the program and will donate funds for continuing it.

The institute is being housed temporarily in the renovated "nurses' cottage" at the Palo Alto Hospital. Members of the institute staff will study childhood or congenital aphasia. An aphasic child is unable to speak or to learn to read and write as a result of brain damage. The number of aphasic children in the country has not been determined because the condition is often confused with other ailments.

Directing the institute's activities is Dr. Jon Eisenson, an internationally known expert on aphasia. A leading authority and investigator in speech pathology, Dr. Eisenson is the author of more than a dozen books in the field and has contributed numerous articles to professional journals.

Before coming to Stanford this fall he was professor and director of the speech clinic at Queens College, N.Y., and a lecturer at the College of Physicians and Surgeons, Columbia University.

He is a past president of the American Speech and Hearing Association. Dr. Eisenson received a B.S. in Social Science from the College of the City of New York and M.A. and Ph.D. degrees from Columbia.

"This will be the first program in the West -- and one of few in the country -- especially devoted to training and testing our theories and approaches to the problem of childhood aphasia," Dr. Eisenson said.

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"There are a few treatment centers elsewhere in the U.S. but this one will be the most comprehensive research program in the West.

"In a world where communication has become increasingly important, the child who has not learned to speak is severely handicapped. Aphasic children often appear to be mentally retarded, hard-of-hearing or emotionally disturbed. Yet carefully administered tests may show that a child is intelligent enough to carry out tasks which do not depend upon language."

During the center's initial stage, two or three children up to age 13 will be accepted for diagnosis and evaluation at any one time. The evaluation period may last from 3 to 10 days. Each child admitted for diagnosis will receive an examination by a pediatrician, a neurologist and a psychologist, as well as by speech and hearing specialists.

After screening, 10 to 15 pre-school youngsters with established neurological difficulties will be selected for long-term training. This training may take from one to three years.

Specific goals for the project include:

1) Detailed study of the behavior and language impairment of aphasic children in an effort to increase the effectiveness and accuracy of diagnosis.
2) The development of special techniques to teach aphasic youngsters to speak and understand language.
3) Investigations to pinpoint the learning problems associated with brain injury.
4) Counseling and guidance for parents whose children cannot be accepted for training but who will be referred to other agencies.
5) The training of teachers and speech therapists to work with aphasic children.

The Childhood Aphasia Institute was established under the auspices of the School of Medicine's Division of Speech Pathology and Audiology. Staff members of the institute will work closely with other departments at the Medical Center.

Further information may be obtained by calling the Division of Speech Pathology and Audiology.

(Mailed Oct. 4, 1962)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

NOTE TO EDITORS: The following story is a joint announcement of the Stanford University School of Medicine and Varian Associates.

NEW MEDICAL LINEAR ACCELERATORS INSTALLED AT STANFORD AND UCLA

A gleaming new version of Stanford University's once experimental medical linear accelerator, now a valued tool in the treatment of many forms of cancer, is in use at Stanford Medical Center and the University of California Medical Center in Los Angeles today.

The two $150,000 machines are the first commercial models of the accelerator off the production line of Varian Associates, Palo Alto (Calif.) electronics firm.

"The medical linear accelerator has led to real advances in the treatment of several forms of cancer," according to Dr. Henry S. Kaplan, executive head of the Department of Radiology at Stanford University School of Medicine.

Dr. Kaplan and Dr. Edward L. Ginzton, former director of the Microwave Laboratory at Stanford, directed design and construction of the first medical unit by Stanford physicists. It was installed in the medical school in San Francisco late in 1955, and the first patient was treated in January, 1956. It was moved in 1959 to Stanford Medical Center in Palo Alto, where it is still in daily use.

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In nearly seven years the medical unit has been used to treat more than 1500 patients. The 6-million-electron-volt (6 MEV) supervoltage X-ray beam penetrates to certain deep-seated tumors which are difficult or impossible to remove by surgery. It also reduces the skin reaction caused by radiation, so that a higher dose may be given than with conventional (250-thousand-electron-volt) X-ray equipment.

While many different sorts of tumors have been treated, Dr. Kaplan said that the most significant improvements in results to date have been noted in cancers of the bladder, prostate, tongue, throat, and sinuses, and in malignant tumors of the lymphoid tissues, such as Hodgkin's disease.

Even if it had not achieved better end-results, supervoltage therapy would still be valuable simply because it entails far less discomfort for patients. Reactions of the skin from the radiation are usually absent, nausea and loss of appetite are minimized, and there are few complications after treatment.

(Cobalt units, using X rays from radioactive cobalt, also produce supervoltage radiation. But the accelerator has a higher output which makes treatments shorter and thus more comfortable for the patient. The difference in output increases as the cobalt decays over a period of time. The electronic device also produces a sharper beam which is not as likely to affect normal tissue near a tumor.)

Dr. Kaplan cautioned, however, that the accelerator is not necessarily suitable for treatment of all types of cancer. For this reason, Stanford has a policy of accepting patients only on referral from their own physicians. "After consultation with his or her physician, we are better able to judge whether supervoltage radiation or more conventional therapy will be best for each individual patient," he said.

He also warned that many more years' experience will be needed before the value of supervoltage radiation can be fully appraised. "Although we are very definitely encouraged thus far, much larger numbers of cases will have to be observed over long periods of time for final evaluation of the new techniques which supervoltage equipment has made possible in cancer treatment."

Construction of the first Stanford medical accelerator was made possible by grants from the American Cancer Society and the National Cancer Institute of the U.S. Public Health Service. Construction of the heavily shielded treatment room for the new accelerator was aided by a new grant from the National Cancer Institute.

The new unit is being used in connection with the N.C.I.-supported Clinical Radiotherapy Cancer Research Center in which new methods of treatment with radiation are being devised and tested.

The Varian machine, called the Clinac, has several unique features. The unit may be rotated 360° about the patient to spread the skin exposure while the beam is aimed directly at the tumor during the full treatment.

Varian's Clinac is the first commercial medical linear accelerator of its type made in the U.S. Three British firms manufacture medical accelerators, but none are in use in this country.

The original Stanford machine was the first medical accelerator in the Western Hemisphere. Since then two others have been set up (at the University of Chicago and Michael Reese Hospital in Chicago), but neither features the movable tube characteristic of the Stanford model.

The medical accelerator is a scaled-down version of the University's one-billion-electron-volt (1 BEV) machine used in nuclear research. The large accelerator was used in the pioneering studies of Professor Robert Hofstadter of Stanford, who won the 1961 Nobel Prize in physics for making the most accurate measurements of the size of the neutron and proton.

The medical accelerator is also a relative of the 2-mile-long linear accelerator which is now being built on the Stanford campus. When that machine is finished in 1967 it will be the world's largest, with an output of 20 BEV.

Dr. Ginzton, now chairman of the board of directors for Varian Associates, directed planning for the 2-mile-long accelerator prior to its authorization by Congress in 1961. He has been on leave from Stanford since 1961, devoting all his time to Varian.

In all of these machines, tiny charged particles known as electrons are speeded up by pulses of high-frequency radio waves until the electrons reach nearly the speed of light. Even in the relatively short five-foot tube of the new medical unit the particles reach the 6 MEV energy level. They then emerge to strike a gold target, which gives off the penetrating X rays used for treatment.

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(Mailed Nov. 28, 1962)

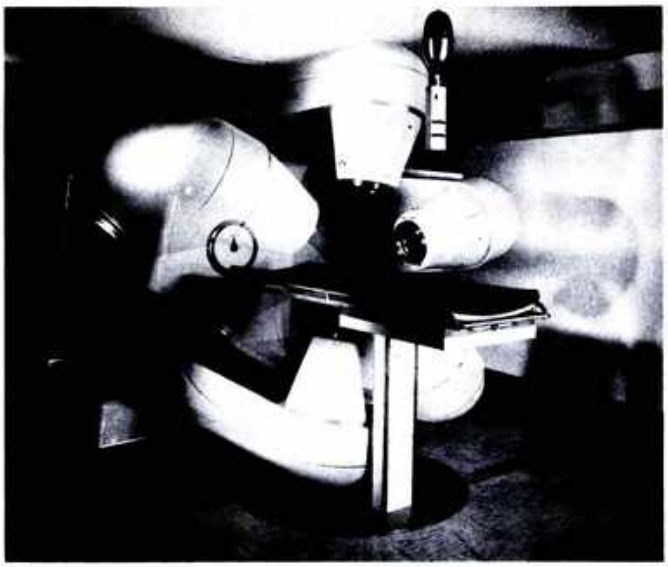

PHOTO 1

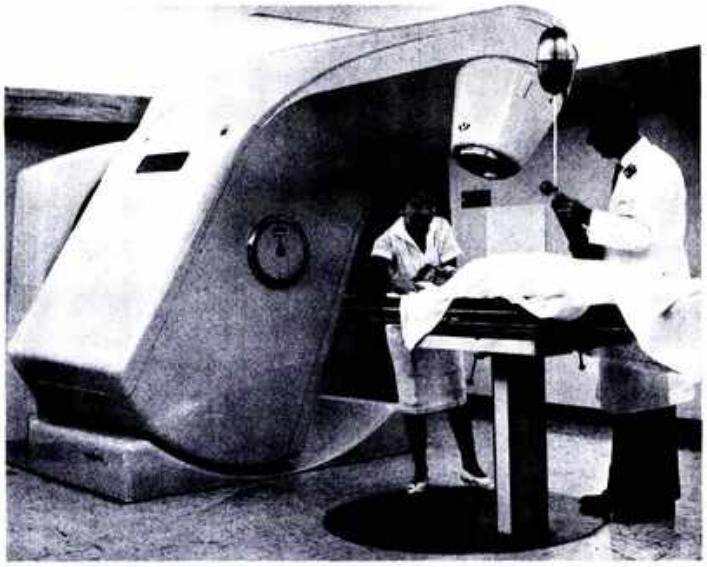

PHOTO 2

PHOTO 3

FOR IMMEDIATE RELEASE

These three photographs show new medical linear accelerator manufactured by Varian Associates in use at Stanford Medical Center. Multiple exposure in PHOTO 1 demonstrates 360° rotation of unit. PHOTO 2 shows Dr. Malcolm Bagshaw, director of the Therapy Division of the Department of Radiology, Stanford University School of Medicine, and X-ray technician Krystyna Okoniewski preparing a patient for treatment. In PHOTO 3 Mrs. Okoniewski uses light beam in machine to correctly align unit before patient is exposed to X rays. (See accompanying story for details.)

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To: NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIFORNIA

Please send me an 8 x 10 glossy print of each of the following:

____ PHOTO 1 (Multiple exposure) ____ PHOTO 2 (Long shot)

____ PHOTO 3 (Close-up)

NAME _____ PUBLICATION _____

ADDRESS _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Marian Ellias (DA 1-5310)

STANFORD MEDICAL SCHOOL ADDS TWO NEW ASSOCIATE PROFESSORS TO FACULTY

The Stanford University School of Medicine has added two new associate professors to its Psychiatry Department faculty.

They are Dr. William C. Dement and Dr. Herbert Leiderman. Dr. Dement, whose appointment begins Dec. 1, has done extensive research on the functioning of the mind during sleep and dreaming. He is now associated with the Department of Psychiatry, Mount Sinai Hospital, New York.

Dr. Leiderman's appointment becomes effective June 1, 1963. He currently is an associate in psychiatry at Harvard Medical School and a career investigator for the U. S. Public Health Service. Dr. Leiderman has carried out clinical and laboratory investigations on sensory deprivation.

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(Mailed Nov. 12, 1962)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

FOR RELEASE: At 10:30 a.m. (P.S.T.), Thursday, Nov. 1, 1962.

NOTE TO EDITORS: The following is a joint announcement from the Palo Alto (Calif.) Veterans Administration Hospital and the Stanford University School of Medicine.

PHOTOS AVAILABLE ON REQUEST.

BLOCKED CORONARY ARTERY OPENED IN RARE OPERATION

A team of Stanford University surgeons, working at the Veterans Administration Hospital in Palo Alto, Calif., has successfully cleaned out a completely blocked coronary artery which crippled a 47-year-old man.

The patient, who formerly suffered severe heart pain following the slightest physical exertion or emotional upset, is now ready to return to work as a laborer. Special X rays taken before and after the operation six months ago show the once entirely closed artery now carries blood to the heart muscle.

During the past five years a small number of operations on the coronary arteries have been performed by cutting directly through the wall of the vessel. But the high mortality rate has discouraged surgeons from continuing to use that method. The difficulty of operating on a beating heart, and the tendency for more clogging material to form at the incision, were key factors in the lack of success.

The Stanford surgeons used a new method in which the heart is stopped and repair done without cutting the coronary artery. The material clogging the blood vessel was removed by making an incision in the aorta, the large blood vessel which carries fresh blood to the body, and working down the coronary artery from its opening off the aorta.

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Such an operation can be expected to be successful in only a small number of patients at the present time, according to Dr. John E. Connolly, who headed the surgical team. However, he believes this type of surgery will be more widely applied in the next few years. "It gives hope of helping many patients who currently die from coronary artery disease," he said.

A large percentage of deaths due to heart disease is caused by blocks in coronary arteries. Roughly a quarter of these blocks are localized enough to be removed surgically.

In some cases the patient may not die even though a coronary artery is blocked, because blood reaches the heart muscle by collateral circulation from other blood vessels. But the severe pain often seriously handicaps the patient, and there is always danger a fatal heart attack will occur.

Dr. Connolly, assistant professor of surgery at Stanford University School of Medicine and a consultant surgeon for the VA, directed a team of eight men who performed the operation. Dr. Frederic Eldridge, chief of medicine at the Palo Alto Veterans Administration Hospital and an associate professor of medicine at Stanford, directed the detailed diagnostic studies which preceded surgery.

Dr. Eldridge said that before the operation the patient, William Davis of Hanford, Calif., was incapacitated by pain. He was unable to shave himself, for instance, because the slight activity brought on such severe angina.

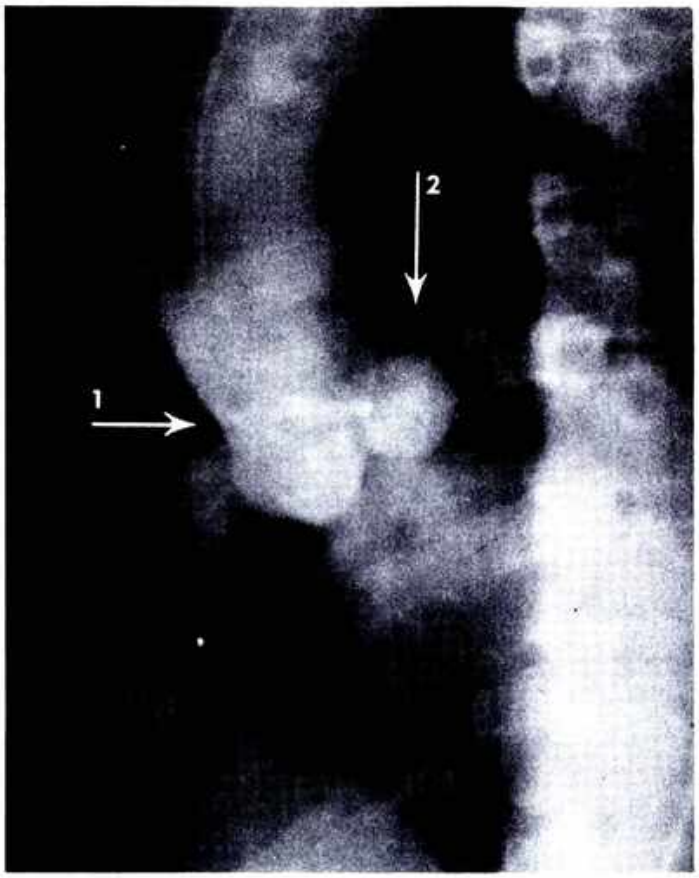
Davis' heart was stopped for three hours during surgery, and he was kept alive by a heart-lung machine. His body was also cooled to 59°F. to slow down bodily processes.

The surgeons found that Davis' right coronary artery was completely closed by stiff fibrous material containing calcium. At first they could not even locate the opening of the artery off the aorta. During the operation they also repaired the aortic valve leading from the heart, because the valve did not close entirely.

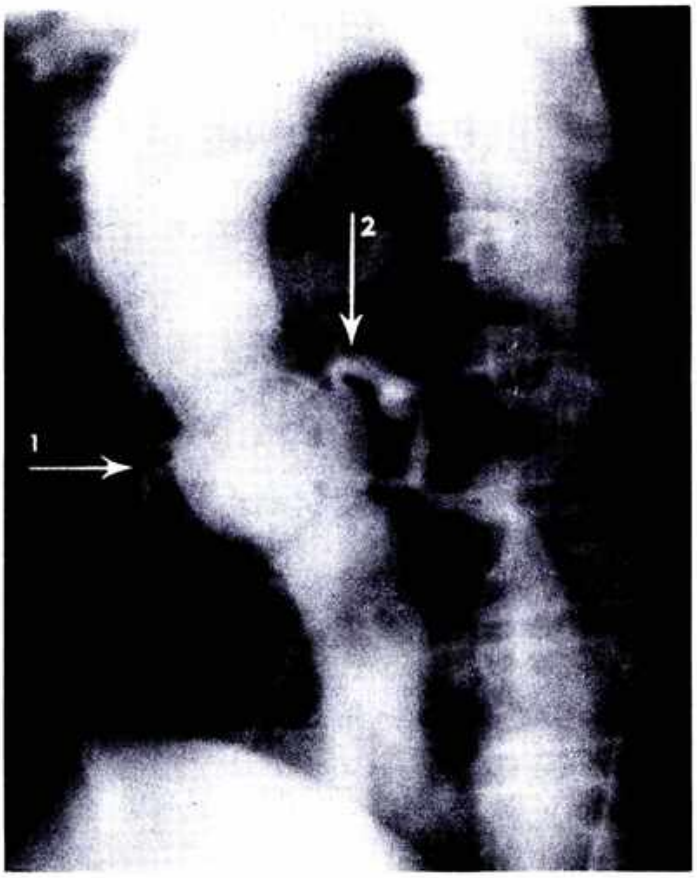
Davis has had no heart pain since the operation on April 25. His physicians believe that he will now be able to lead a completely normal life. Before the operation the block was located by a relatively new X-ray technique of injecting dye into the heart while moving pictures were made. Similar X rays made five months after surgery showed the artery is now open and of normal size.

Only one other successful coronary operation using a heart-lung machine has been reported in the medical literature. That was by a team in Paris, France. However, in that case as in all the other previous ones, the coronary arteries were not studied by X-ray techniques before or after surgery to demonstrate the arteries were successfully treated.

(Mailed Nov. 1, 1962) ####



BEFORE OPERATION



AFTER OPERATION

FOR RELEASE AFTER 10:30 A.M. (P.S.T.) THURSDAY, NOV. 1, 1962

X rays taken before and after coronary artery operation by Stanford surgeons at Palo Alto (Calif.) Veterans Administration Hospital show effectiveness of surgery. Left hand picture was taken before operation, and arrow 1 shows right coronary artery is not filling with blood. In right hand picture, taken five months after surgery, right coronary shows clearly. Arrow 2 in both pictures shows normal left coronary artery. (See accompanying story for details.)

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TO: NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Please send me a glossy print of the X rays before and after coronary artery operation.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

FOR IMMEDIATE RELEASE

STANFORD PROFESSOR NAMED PRESIDENT-ELECT OF NATIONAL SPEECH AND HEARING GROUP

New president-elect of the American Speech and Hearing Association is Dr. Hayes A. Newby, professor and associate director of the Division of Speech Pathology and Audiology of Stanford University School of Medicine.

He succeeds the current president, Dr. Jack Matthews, head of the Department of Speech, University of Pittsburgh, next January 1 and will therefore be president in the fall of 1964 at the time of the first annual convention ever to be held by the association in San Francisco.

Until the end of 1963 Dr. Newby is president of the American Boards of Examiners in Speech Pathology and Audiology, a branch of ASHA.

Dr. Newby received his B.A. at Ohio Wesleyan University in 1935, his M.A. and Ph.D. at the State University of Iowa in 1939 and 1947 respectively.

The national headquarters of the American Speech and Hearing Association is located in Washington, D.C. It is an organization of approximately 10,000 individuals working in the fields of speech and hearing. One of the primary functions of the ASHA, the only professional association in these fields, is to accredit persons for clinical competence.

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(Mailed Jan. 30, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Samuel J. Moffat (DA 1-5310)

FOR RELEASE: Thursday, February 21, 1963

MONTEREY COUNTY HEART ASSOCIATION CONTRIBUTES $8,000 RESEARCH TOOL

A valuable research tool, provided with funds from the Monterey County Heart Association, was installed in the Surgical Laboratories of Dr. Norman Shumway and Dr. Eugene Dong at Stanford Medical Center this week.

The $8,000 instrument is an electronic multi-channel recorder which will monitor several different readings simultaneously. It will be used to study the functional effects of whole heart transplantation in experimental animals. The Association's gift included a large contribution from an anonymous donor.

Seven members of the Board of Directors of the Heart Association visited Stanford to see the machine in operation. The members were David N. Gill of Pacific Grove, president; Dr. Donald Taugher of Monterey, immediate past president; Dr. Mast Wolfson of Monterey, research chairman; Dr. Arthur L. Wessels of Salinas, vice president; and Jack Patton, Mrs. Anthony Brazil and Harry L. Noland of Salinas.

Dr. Dong, the son of Dr. and Mrs. Eugene E. Dong, 1235 Garner Avenue, Salinas, is a graduate of Salinas Union High School and attended Hartnell College. He is now working in the Department of Surgery, Stanford University School of Medicine, as an Advanced Research Fellow of the American Heart Association.

The recorder can take simultaneous measurements on six different channels. It monitors such indicators of physical condition as blood pressure, temperature, electrical waves in the heart or brain, and oxygen and carbon dioxide content of the blood.

The animals to be studied have had their hearts removed surgically and then stitched back in place. The experiments are aimed at finding out whether transplanted hearts function normally over long periods of time. Some day, surgical transplantation of hearts will be available as a method for treating heart disease in human patients.

# # # #

CAPTION

Dr. Eugene Dong (left), former Salinas resident and now an Advanced Research Fellow of the American Heart Association, explains operation of a new electronic recorder purchased with an $8,000 donation from the Monterey County Heart Association. With Dr. Dong are members of the County Association's Board of Directors: (left to right) Mrs. Anthony Brazil of Salinas, Dr. Mast Wolfson and Dr. Donald Taugher of Monterey, and David H. Gill of Pacific Grove.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT:

FOR IMMEDIATE RELEASE (For information contact: Pat Black, DAvenport 1-2300, ext. 5311)

MAISIE might be any of several million dogs who have just had a litter of pups. She is, however, different than any other "mother" in history. Sixteen months ago her heart was completely removed and stitched back into place. It was without circulation for 77 minutes while the heart-lung machine took its place. The operation was performed by Dr. Edward J. Hurley, one of a team of heart surgeons at the Stanford School of Medicine. This technique may be the first step toward operations in which a patient's heart is taken out of his body in order to correct serious heart defects and then replaced. The operation may eventually help a great number of the 15,000 blue babies born each year in this country with inoperable heart conditions. Maisie's operation was so successful that she had a normal electrocardiogram both five months after the operation and on the day before her seven puppies were born March 18 in Stanford's animal quarters. Her heart was apparently not affected by the extra stress placed upon it while she was delivering her large family.

TO MEDICAL CENTER NEWS BUREAU, STANFORD UNIVERSITY SCHOOL OF MEDICINE, STANFORD, CALIF.

Please send me a glossy print of MAISIE

NAME _____ PUBLICATION _____

STREET _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

NOTICE TO EDITORS:

One of the few lasers in the world being developed for treatment of eye conditions will be demonstrated at Stanford Medical Center Monday, April 1. A laser is an electronic device which produces a light beam thousands of times more intense than sunlight. While there are many potential applications for lasers in electronics and communications, they are just being developed for medical uses.

You are invited to send a reporter and/or photographer to the news conference. A story outlining the uses of lasers for eye surgery will be distributed at that time.

The news conference will be held in the Eye Clinic classroom of Stanford Medical Center beginning at 10:30 a.m. Your representative may come to the main information desk in the hospital lobby to get instructions for reaching the classroom.

Participating will be Dr. Milton Flocks and Dr. H. Christian Zweng, the ophthalmologists who use the laser and another device, the Zeiss photo-coagulator, for treating eye diseases; and Dr. Arthur L. Schawlow, Stanford professor of physics who was co-discoverer of the laser principle.

Samuel Moffat
Information Officer

(Mailed March 27, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

STANFORD RESEARCHERS PIONEER IN JOB REHABILITATION STUDY

A truck driver is in an accident which leaves him paralyzed from the waist down. A waitress develops glaucoma and can no longer see clearly enough to move in and out among tables.

How will they find suitable jobs in view of the physical and psychological effects of their disabilities? They represent just two examples of permanently disabled individuals who need to find new ways of earning their living.

This complex problem is being explored at the Stanford University School of Medicine by a research team representing medicine, psychology, industrial engineering and human factors engineering.

It is the only project in the country that uses scientific instruments to measure the extent to which the disabled are able to use various parts of their bodies.

Purpose of the research project, headed by Dr. G. Peter Paulhe, a research associate in rehabilitation medicine at the medical school, is to develop techniques of work-capacity assessment for the disabled. The assessment methods cover most of the significant aspects of work behavior and will be modified for use in rehabilitation centers throughout the country.

The team has built a small but complete "manufacturing plant." Various jobs around the plant are set up for patients to do. The motions of each job are scientifically classified. By having a patient work at a few jobs for several days, the team is able to determine which motions he can or cannot perform and the speed with which they are done.

- more -

For example, five parts bins containing screws, nuts, and clamps are set before the subject. Following a period of instruction, he is required to assemble these parts to make a finished cable clamp. The boxes are wired to recording instruments in an adjoining room which keep track of the time it takes a subject to complete each separate part of the total assembly.

A Grass Electroencephalograph recording device registers the patient's motion times. Fumbles, mistakes in sequence, work rhythm, and delays are permanently recorded for further study. Differences in the "expected times" and the "observed times" reflect the effects of the disability on the motions involved, with some motions being more adversely affected than others.

The instrumentation also permits the team to arrive at an estimate of the patient's fatigue throughout the day, and to differentiate between true physiological fatigue and other effects such as boredom or monotony. For certain types of impairments, the ability to make this distinction is a critical factor in recommending vocational training or job placement.

Another problem the team is studying is the individual's ability to adapt to variations in supervision, and to withstand the common stresses which arise on the job.

Following a carefully prepared script, the work supervisor imposes a regime of controlled pressure for performance, building from simple suggestions to stern demands and personal criticism. The patient's verbal responses are tape recorded and examined for any inappropriate reactions. Changes in breathing pattern, sweating, blanching and "nervousness" are noted by the supervisor. Signs of disorganization are sought in the recordings of the motion times. The stress testing is followed by an interview in which the procedure is explained to the patient and he is questioned about his reactions.

The study was begun a year and a half ago. Until the present, numerous man-hours have gone into processing the data but a recent grant of $50,000 from the Office of Vocational Rehabilitation of the U.S. Department of Health, Education, and Welfare will make it possible to use new recording equipment and permit the data to be processed by Stanford's giant 7090 computer.

In addition to Dr. Paulhe, Stanford members of the team participating in the research project are Dr. David A. Thompson, assistant professor of industrial engineering; William Dauterman, chief, Vocational Rehabilitation Services; Wallace McDonald, laboratory supervisor; Dr. Jose Montero, assistant professor of medicine; Bradley Efron, Statistics Department; and Mark Draper, research assistant. Dr. James Bliss and Ken Gardner, research engineers at Stanford Research Institute, Menlo Park, complete the research group.

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(Mailed March 18, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

NATIONWIDE STUDY TO DETERMINE SIDE EFFECTS OF ANESTHETIC

A nationwide investigation is under way into the possible dangerous effects of the widely used anesthetic halothane, which are of growing concern to the medical profession, Dr. John P. Bunker of Stanford University School of Medicine announced today.

Concern that halothane (marketed under the name "Fluothane") may harm the liver and sometimes cause death is based upon recent reports of liver damage following use of this agent. Two such reports appear in the current issue of the New England Journal of Medicine. Dr. Bunker, professor and executive head of the Department of Anesthesia at Stanford, was co-author of one of the articles.

Ten deaths have been reported so far. While this number is small compared with the number of patients who have had the drug during surgery -- an estimated six million Americans -- Dr. Bunker said that for every case reported many others may have gone unreported.

There is no evidence to date, however, to indicate whether halothane caused the deaths or whether other factors were to blame.

Nearly a dozen medical centers across the country are already signed up for the study. It will be directed by the Committee on Anesthesia of the National Research Council. Dr. Bunker is committee chairman. Other members are Dr. S. H. Ngai, associate professor of anesthesia at Columbia University, and Dr. Leroy D. Vandam, professor of anesthesia at Harvard University.

Data collected under carefully controlled conditions will be assembled at Stanford. Information will be summarized and analyzed with computers in the University's Computation Center.

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"The importance of this kind of approach in studying the effects of drugs," Dr. Bunker said, "has become increasingly apparent to the medical profession and the public with the enormous number of new drugs and the appearance of unsuspected side effects from the use of such agents as thalidomide, the oral contraceptives and the polio vaccines."

Plans call for between 50,000 and 75,000 patients to be involved over 1½ to 2 years. Half will be given halothane, half another commonly used drug. All will be screened for possible liver damage by a sensitive laboratory test. If there is any indication of possible damage, further detailed tests will be ordered.

"If the incidence of liver death should turn out to be the same for halothane and non-halothane cases, presumably one need look no further," Dr. Bunker wrote in the medical journal. This would mean the anesthetic was no more harmful than other accepted drugs available.

But if significant differences in death rate due to liver damage show up, other factors will have to be investigated. Many other drugs, some often given in the course of hospitalization, may be implicated. Infectious hepatitis, a serious liver disease caused by a virus, may also be the cause of death and might occur coincidentally with use of halothane.

Half of all patients receiving general anesthesia now receive halothane, according to one estimate. It is regarded as a very useful anesthetic because of its effectiveness and because it will not explode. Older anesthetic gases had caused operating room explosions. Halothane has been in use since 1956.

Dr. Bunker said that the possibility of liver damage was not enough of a hazard to justify halting the use of the anesthetic until completion of the studies. But should a cause-and-effect relationship be established, physicians will probably cease giving halothane to patients with histories of liver disease.

Autopsies performed on patients who died from liver disease after receiving the drug showed the cells of the organ were severely damaged or dead. The liver stores and produces many chemicals necessary for life.

Other medical centers already enlisted in the program include the University of California at Los Angeles; Columbia-Presbyterian Medical Center, New York; Duke University; Hartford (Conn.) Hospital; Harvard University; University of Iowa; the Mayo Foundation, Rochester, Minn.; University of Miami (Fla.); University of Michigan; and University of Pennsylvania.

The study is already under way at Columbia-Presbyterian Medical Center and will begin at several others within the next few weeks.

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(Mailed March 15, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

HIGHEST ENDOCRINOLOGY AWARD GOES TO STANFORD PROFESSOR

The Sir Henry Dale Medal, the highest honor in endocrinology, will be presented to Philip E. Smith of Stanford University School of Medicine in May. Dr. Smith, Professor Emeritus from the Columbia University College of Physicians and Surgeons, has been a research associate in anatomy at Stanford since 1956.

The first American to be so honored, Dr. Smith is being given the award "in recognition of his outstanding and meritorious accomplishments as an investigator in the field of basic and clinical endocrinology."

Among the investigators on the function of the pituitary gland two names stand out, that of Harvey Cushing, pioneer American neurosurgeon, and Philip E. Smith, an experimental anatomist.

Dr. Smith demonstrated conclusively that the gonads, the thyroid and adrenal glands cannot develop or function without the pituitary gland, which is located at the base of the brain.

He did this by perfecting a surgical technique for removing the pituitary gland from animals without injuring their brains. Once the pituitary was removed the three glands wasted away. By injecting the pituitary into these animals, he found that these glands could be restored to their normal functions.

- more -

In recognition of his work on the pituitary gland, Professor Smith was elected to the National Academy of Sciences and was made a Chevalier of the French Legion of Honor.

Professor A. S. Parkes, one of the most widely known authorities on the reproductive system, will come from Cambridge University, England, to make the award at a dinner to be held at the Pioneer Inn, Woodside, Thursday evening, May 9, 1963.

The president of the Society for Endocrinology of Great Britain, Professor E. C. Amoroso, will be on hand for the presentation. Dr. Amoroso, one of the world's leading authorities on the structure and function of the placenta, is currently on leave from the Royal Veterinary College in London to teach for one year at Washington University in St. Louis.

Established by the Society for Endocrinology in 1959, the award has been received by such well-known scientists as Charles Best of Canada, an eminent physiologist and co-discoverer of insulin; Bernardo A. Houssay of Argentina; Professor Sir Charles Dodds of England, who was knighted because of his work; and Professor A. Butenandt of Germany. Two of the recipients, Houssay and Butenandt, are Nobel prize winners.

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(Mailed April 30, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

FOR RELEASE TO A.M. NEWSPAPERS OF SATURDAY, April 27, 1963

An unusual library -- the result of a professional lifetime of work by the dean of pediatricians on the West Coast -- has found a new home at Stanford Medical Center.

It is the collection of Dr. Harold K. Faber, head of the Department of Pediatrics at Stanford University School of Medicine for 26 years before his retirement in 1949.

A unique part of the collection is a reprint, abstract and cross-index file which covers the expanding field of pediatrics. With this file, which contains over 50,000 items, needed information is available faster than from any printed source.

The new Faber Library in the Department of Pediatrics at Stanford was the setting for a reception yesterday honoring Dr. and Mrs. Faber. Guests included many former students and house officers of Dr. Faber's, who sponsored a dinner at the Menlo Circus Club following the reception.

The library is on the third floor of the Boswell Building in Stanford Medical Center. Mahogany paneling lines the walls. On one wall hangs a portrait of Dr. Faber, painted by Alfred Jonniaux of San Francisco. In addition to the cross-index file, the library also houses specialty journals and texts.

Dean Robert H. Alway of the medical school said that "the library continues the scholarly and scientific contributions of Dr. Faber to child health and to development of many fledgling pediatricians who seek to follow in his footsteps." Dr. Alway also praised it for providing "a retrospective view of many pediatric subjects not adequately encompassed in any available printed material."

Dr. Faber is internationally known for his polio research as well as for his teaching and clinical skills. He is a former president of the American Pediatric Society, and received the Society's Howland Medal and Award in 1956 for his extensive contributions to the profession.

(Mailed April 25, 1963) # # #

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

STANFORD SPONSORS REHABILITATION INSTITUTE

Up-to-date techniques for teaching principles of rehabilitation to medical students will be outlined during the Third Institute on Teaching of Rehabilitation Medicine at Stanford April 17 - 20.

The first such institute to be held in the West, it is being sponsored by the Stanford University School of Medicine in cooperation with the Vocational Rehabilitation Administration of the U.S. Department of Health, Education, and Welfare.

More than 75 representatives from medical schools having teaching programs in rehabilitation medicine have been invited to attend the four-day meeting.

Purpose of the periodic institutes is to evaluate new methods of teaching students to recognize and manage problems caused by crippling diseases or accidents and their impact on the persons involved.

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(Mailed April 15, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

NOTE: Parents' names and addresses are given on page 2.

STANFORD MEDICAL STUDENT WINS $150 RESEARCH AWARD

Bryan Brewer, Jr., won the $150 Palo Alto Medical Clinic prize for the outstanding paper presented at the third Stanford Student Medical Conference, it was announced today.

Brewer is a third-year student at the Stanford University School of Medicine. His home is in Casper, Wyo.

He studied the effect of nitrogen mustard (a drug used in treating acute leukemia) on mice cells grown in glass flasks. Brewer found no effect on DNA (deoxyribonucleic acid) between the treated cells and samples which had not been treated, even though the drug had a marked effect on the growth of the cells. DNA is associated with the transmission of hereditary characteristics and with cell division.

Brewer's paper was one of six presented by students at the day-long conference held April 6. The annual meetings are sponsored jointly by the Stanford Medical Student and Stanford Medical Alumni Associations.

Other students presenting papers at the conference were Robert P. Erickson, a third-year student from Berkeley, whose research concerned the heredity of blood proteins in mice; Harvey L. Ozer, a third-year student from Dorchester, Mass., who localized antigens (antibody-producing chemicals) in certain cell membranes of the livers of mice; and Carl D. Petersen, a third-year student who lives in Palo Alto, who discussed the causes of mongolism in the children of young mothers.

- more -

Ward Trueblood, a senior from Indianola, Iowa, reported how the movement of the stomach affects the production of a hormone involved in gastric acid secretion. Irving Weissman, a third-year student from Great Falls, Mont., described the differences in the acceptance or rejection of skin grafts between male and female mice.

The presentation of a clinical case was also part of the day's program. John Gribble of San Jose presented the findings from the autopsy of a patient with an unusual form of diabetes. John D. Earle of Sacramento discussed the patient's X rays. Both Gribble and Earle are third-year students.

Featured speaker for the day was Dr. William Dock of the Downstate Medical Center of the State University of N.Y. He addressed the students on ballistocardiography, a technique for measuring the force of the heart beat by measuring the movement of the body.

EDITORS: Parents' names and home addresses follow:

Bryan Brewer, Jr., Mr. and Mrs. Hollis B. Brewer, 1357 East 2nd, Casper, Wyo.

John D. Earle, Mr. and Mrs. Clarence M. Earle, 3313 Edison, Sacramento

Robert P. Erickson, Dr. and Mrs. Harold M. Erickson, 1314 Grizzly Peak Blvd., Berkeley

John Gribble, Mr. and Mrs. James W. Gribble, 3629 Union Ave., San Jose

Harvey L. Ozer, Mr. and Mrs. Samuel Ozer, 11 Ashton St., Dorchester, Mass.

Carl Petersen, 3109 Maddux Dr., Palo Alto

Ward Trueblood, Mr. and Mrs. C. A. Trueblood, 906 North C St., Indianola, Iowa

Irving Weissman, Mr. and Mrs. Maurice Weissman, 3027 4th Ave. North, Great Falls, Mont.

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(Mailed April 10, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

IMPORTANT CORRECTION -- Notice to editors and writers: Due to an unintentional oversight, the story mailed yesterday regarding the laser being developed for treatment of eye conditions did not give proper credit to the developing organization or the individuals involved. In the following version, amended or new paragraphs are underlined to show where corrections have been made.

LASER BEING DEVELOPED FOR TREATMENT OF EYE DISEASES

An electronic device which produces a light beam thousands of times more intense than sunlight is being developed at the Palo Alto Medical Research Foundation to correct serious eye conditions.

The instrument is a laser, which amplifies light waves the way other electronic equipment amplifies radio waves. It is one of only a few lasers in the world used for such purposes.

Light coagulation therapy, which involves the use of intense beams generated by the laser and another machine, will be explained and demonstrated to two dozen ophthalmologists attending a postgraduate course at Stanford next week (APRIL 11-12). The second device is a Zeiss photo-coagulator, which utilizes light from a xenon gas tube.

Faculty for the course will be Dr. Milton Flocks and Dr. H. Christian Zweng of the Division of Ophthalmology at Stanford University School of Medicine, and Stanford Professor of Physics Arthur L. Schawlow.

Prof. Schawlow was a co-discoverer of the laser principle. Dr. Flocks is clinical associate professor and Dr. Zweng clinical instructor in the medical school.

The laser to be demonstrated is being developed under a National Institutes of Health grant to the Palo Alto Medical Research Foundation. Chief investigator is Dr. Narinder Kapany, who has directed the research and development for the laser at Optics Technology in Belmont, Calif. Dr. Kapany is president of the firm.

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The instrument is the collaborative effort of Dr. Kapany, Dr. Flocks, Dr. Zweng, and two engineers at Optics Technology, Norman Peppers and Norman Silbertrust. Dr. Flocks and Dr. Zweng have conducted experimental trials on animals with the laser in the Stanford Division of Ophthalmology.

It is only in the last decade that light beams have been put to use for treating eye conditions. The photo-coagulator was developed in 1954. The first experimental laser for use by ophthalmologists was made in 1962.

One condition the light beam is particularly effective in preventing is retinal detachment, in which the light-sensitive retina comes loose in the eye. Thousands of Americans develop retinal detachment each year.

If discovered early, the retina can be "spot welded" back in place by the light beam. A small scar develops where the beam has burned the tissue behind the retina, holding the retina in place.

The burning beams can also be used to scar and essentially destroy certain blood vessel tumors in the eye, to make a new pupil in a blocked iris or one that is out of position following surgery, or to destroy tumors on the surface of the eye.

The laser is regarded as an important improvement in light coagulation for three reasons. First, a much briefer exposure is required and there is no danger a patient will flinch or turn his eye; the beam need only be on for 1/1000th of a second. Second, treatment is so fast it doesn't hurt, and no anesthetic is required. Third, the equipment is more compact and thus much easier to use.

With both the photo-coagulator and the laser, the beam must be directed against a pigmented section of the eye, since the beam passes through transparent material such as the lens or the retina.

The postgraduate course is one of the first to be given on light coagulation anywhere in the world outside of Germany, where the Zeiss photo-coagulator was developed. It is the first ever to be given on laser coagulation of the eye.

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(Mailed April 2, 1963)

NOTE: NEXT TO LAST PARAGRAPH OF ORIGINAL STORY IS OMITTED.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

PALO ALTO MEDICAL STAFF ESTABLISHES MEMORIAL PROFESSORSHIP

The first Charles D. Armstrong Memorial Professorship in the Stanford University School of Medicine will be occupied by Dr. Eugene A. Stead of Duke University.

This annual visiting professorship has been established by the Palo Alto Medical Staff to honor the late Dr. Charles D. Armstrong, co-founder of the Menlo Medical Clinic, and chief of staff of the Palo Alto Hospital in 1956-57.

Dr. Stead will be in residence at the Stanford Medical Center from April 8 to 12. A professor of medicine at the Duke University School of Medicine and physician-in-chief at Duke Hospital, he is an authority on the dynamic changes occurring in the heart and circulation during heart failure.

While at Stanford Dr. Stead will be acting professor in the Department of Medicine and will take over many of the routine teaching duties. In addition, he will conduct ward rounds, work with medical students and house staff, and be available for staff consultations.

He will give a lecture Wednesday, April 10, at 8 p.m. in room M106 at the Medical Center. It is open to all physicians in the community.

Dr. Stead was chosen as the first visiting professor by a committee composed of Dr. Walter L. Arons and Dr. Marcus Krupp of the Palo Alto Medical Staff, and Dr. Halsted Holman, executive head of the medical school's Department of Medicine.

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The Charles D. Armstrong Memorial Professorship was established by the internists in the community to support the teaching program of Stanford's Department of Medicine. At the time of his death at the age of 44 last year, Dr. Armstrong was an assistant clinical professor of medicine at Stanford. In addition, he was a private practitioner and a research associate in the cancer research division of the Palo Alto Medical Research Foundation.

Funds for the Professorship are being furnished by individual contributions from members of the Division of Medicine of the Palo Alto Medical Staff plus a contribution from the Staff's general funds.

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(Mailed April 2, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

FOR RELEASE FRIDAY, APRIL 5, 1963

STANFORD PHYSICIAN CITED FOR OUTSTANDING METABOLIC RESEARCH

"A brilliant student of metabolic disturbances in man," Dr. John A. Luetscher, professor of medicine at the Stanford University School of Medicine, is this year's recipient of the John Phillips Memorial Award.

He received the award last night (April 4) from the American College of Physicians because "he has stimulated and extended our knowledge of metabolic states," according to the citation.

The Phillips Award, established in 1929, is given annually for distinguished contributions in internal medicine.

Dr. Phillips, in whose memory the award was established, died during the disastrous Cleveland Clinic fire in May 1929 while trying to rescue others from the building. At the time he was a member of the Board of Regents of the American College of Physicians.

Dr. Luetscher was cited for his pioneer work "in demonstrating and in isolating a sodium retaining hormone in the urine of patients with edema." Commonly known as dropsy, edema is an excessive accumulation of fluid in the tissues.

While seeking the causes of dropsy, Dr. Luetscher was "the first to show that a hormonal factor, later called aldosterone, was involved in various edematous conditions."

He was presented the award at the convocation ceremonies, a highlight of the 44th Annual Session of the American College of Physicians in Denver.

Nobel laureate Dr. W. F. Libby, professor of chemistry at the University of California at Los Angeles, was the major speaker at the convocation.

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(Mailed April 2, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

For Release to A.M. Newspapers of Tuesday, June 4, 1963. (Release time set by Richard King Mellon Charitable Trusts.)

STANFORD MEDICAL SCHOOL WILL RECEIVE $250,000 FOR FACULTY SALARIES

The Stanford University School of Medicine will receive $250,000 from the Richard King Mellon Charitable Trusts to augment the salaries of faculty members engaged in medical teaching, it was announced today in Pittsburgh, Pa.

Stanford is one of 23 private medical schools in the country which will receive similar grants. All told, the Mellon Trusts will distribute $5,750,000 "to help meet the most pressing need medical schools face today."

"There is an especially critical need for increased support for younger faculty members working in the basic sciences, which constitute such an important foundation in medical education," the Mellon Board of Trustees stated.

"This timely grant," Dean Robert H. Alway of Stanford's medical school said, "will enable us to recruit and retain faculty we require, particularly in the basic sciences most in need of promising young scientist-teachers."

Stanford is one of only two schools west of St. Louis receiving Mellon grants. The other is at the University of Southern California. The grants will be made in $50,000 annual installments over the next five years.

The 23 schools were chosen following a study by Dr. Willard C. Rappleye, retired dean of the College of Physicians and Surgeons at Columbia University, and Dr. Fordyce B. St. John, retired professor of clinical surgery at the Columbia-Presbyterian Medical Center in New York City. Selections were based on need, demonstrated excellence and geographical distribution.

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(Mailed May 31, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

FOR RELEASE: Friday noon (PDT), May 24, 1963. (Release is timed to follow Dr. Lederberg's talk at the Stanford Medical Alumni-Faculty Reunion.)

NOTE TO EDITORS: Reprints of the Nature article are available on request.

CONTROL OF DEVELOPMENT LIKELY TO PRECEDE APPLICATION OF EUGENICS TO HUMANS

Control of development, or "euphenics," rather than the control of heredity, eugenics, is likely to provide the first approach for altering the physical characteristics of human beings, Dr. Joshua Lederberg of Stanford University said today.

Furthermore, he said, the pace of current research in fundamental biology suggests that methods of changing human development will be available much sooner than scientists had previously expected.

Dr. Lederberg spoke at the 1963 Stanford Medical Alumni-Faculty Reunion on campus today. He recently published a paper on the same topic in the British scientific journal Nature.

A co-winner of the 1958 Nobel Prize in physiology and medicine, he is professor and executive head of the Department of Genetics at Stanford University School of Medicine.

Dr. Lederberg has coined the word "euphenics" to show the difference between what he is talking about and the approach of eugenics. Eugenics aims at altering the genetic makeup of individuals by such methods as selective breeding. The new word comes from a term in genetics, the phenotype, which means the visible organism that develops from the genetic material, the genotype.

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Genetic changes would take much longer to put into widespread use, Dr. Lederberg believes. Not only is the knowledge of human genetics still very limited, there are also social constraints and long periods of time between generations. All of these will delay application of eugenic principles.

In contrast, some techniques for euphenics are nearly ready. Transplantation of life-extending organs has begun with the kidney and the methods may be ready soon to allow other organs to be grafted.

In another part of the body, "it would be incredible if we did not have the basis of developmental engineering technique, for example, to regulate the size of the human brain by prenatal or early postnatal intervention."

Dr. Lederberg bases his conclusions on recent accomplishments and anticipated discoveries in molecular biology. This is the study of living things at the molecular level, where life processes are directed and regulated.

It includes the chemical makeup of genes and how small changes in them alter the organism produced. It also deals with the manufacture of proteins, the chemicals which make up most of the structure of living things and which direct life processes such as the development of an egg into an animal, subsequent growth to adulthood, the recording of information in the brain, and many more.

Molecular biology should have broad applications in embryology, learning, immunity (to diseases, and to foreign tissues which might provide new organs in place of diseased ones), and to the understanding of cancer and aging.

"The emphasis on eugenics as the point of application of molecular biology overlooks the most immediate prospects for the understanding and then control of human development...development is the translation of the genetic instructions of the egg...to direct the unfolding of its substance to form the adult organism in all its aspects," Dr. Lederberg wrote.

"Until now, major problems of human development -- embryology, learning, immunity, uncontrolled cellular growth such as cancer, and aging -- could be approached only at the most superficial level. They are about to be transformed in the sense that genetics has been," as a study of small chemical steps.

"The present intensity of effort suggests a span of from five to no more than 20 years" for development of a systematic understanding in these areas.

Scientists must begin thinking about the implications of research results which are just around the corner, Dr. Lederberg believes. Even though "the risks of scientific prophecy are well known," some concerted forethought is needed now to plan how to deal with the possibilities.

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(Mailed May 22, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

YALE SURGEON NAMED TO HEAD DEPARTMENT AT STANFORD MEDICAL SCHOOL

Dr. Robert A. Chase of Yale University School of Medicine will become executive head of the Department of Surgery at Stanford University School of Medicine August 1.

Now chief of the Section of Plastic and Reconstructive Surgery at Yale, he was appointed by the Stanford Board of Trustees at its May meeting. He succeeds Dr. Harry A. Oberhelman, Jr., acting executive for the last year.

"In addition to his clinical and investigative skills, his excellence as a teacher is noteworthy," Dean Robert H. Alway of Stanford's medical school said. The Yale medical graduates of 1962 gave him the Francis Gilman Blake Award as their outstanding teacher of medical science.

Dr. Chase's selection culminates an intensive two-year search for a departmental executive able to lead surgical education and training in Stanford's new five-year curriculum. The curriculum went into effect in 1959, the same year the medical school moved from San Francisco to Stanford.

(Dr. Chase will be attending the Stanford Medical Alumni-Faculty Reunion at Stanford Friday (MAY 24) to meet alumni for the first time.)

The new executive is 40 years old. He earned a B.S. degree from the University of New Hampshire in 1945 and received his M.D. from Yale two years later. At Yale he was elected to Alpha Omega Alpha, the medical honor society. He joined the Yale faculty as an assistant professor of surgery in 1959 and was subsequently promoted to associate professor.

- more -

He received his postgraduate training in general surgery at Yale New Haven Medical Center and in plastic and reconstructive surgery at the University of Pittsburgh.

As a surgeon in the U.S. Army he was chief of surgery at the Ft. Monmouth (N.J.) Army Hospital in 1950-51 and at the Army Hospital in Leghorn, Italy, 1954-57. He was chief of the hand surgery service at Valley Forge (Pa.) Army Hospital in 1951-52.

Dr. Chase's research has been in two principal areas. One relates to patients with cleft palates and other palate and pharynx disorders. The pharynx is the tube running behind the nose, throat and voice box.

These studies, which include analysis of breathing, X-ray movie techniques, and other methods, are aimed at improving treatment for patients with these disorders.

The other area involves laboratory investigations of tendon healing and regrowth of nerves, which are important problems in reconstructive surgery.

Dr. Chase is married and the father of three children.

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(Mailed May 21, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat or Kathryne Borg (DA 1-5310)

MEDICAL ALUMNI TO MEET AT STANFORD REUNION MAY 24

A Nobel Prize geneticist and two physicians will be the featured speakers for the Stanford Medical Alumni-Faculty reunion Friday, May 24.

This is the first time the reunion has been scheduled in the spring. It is now being held immediately before the Stanford Alumni Conferences May 25 to allow medical alumni to attend both meetings. Medical Alumni Day used to be held before the Stanford-California Big Game in November.

Major speakers for the reunion are Dr. Halsted R. Holman, Dr. David A. Hamburg and Dr. Joshua Lederberg. They head the Stanford Departments of Medicine, Psychiatry and Genetics respectively. They will speak in the morning at Memorial Auditorium.

Dr. Holman will discuss "The Survival of Tissue Grafts," Dr. Hamburg "Recent Research on Grief and Depression," and Dr. Lederberg "Medicine and the Future of People." Dr. Lederberg shared the 1958 Nobel Prize in physiology and medicine.

Another new feature of the reunion this year will be an afternoon of clinical sessions for the physicians, held at Stanford Medical Center. The three sessions will run concurrently; each will include lectures on five different topics.

Two sessions will deal with medical specialties. The third, sponsored by the Stanford Surgical Society, will cover surgical topics.

In the evening there will be an alumni-faculty dinner dance at the Menlo Circus Club in Atherton.

# # #

(Mailed May 15, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat or Kathryne Borg (DA 1-5310)

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(Mailed May 15, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

DEDICATION CEREMONY TO MARK OPENING OF CENTER FOR STUDY OF PREMATURE INFANTS

The first research center established by the National Institutes of Health for the study of premature infants will be dedicated at Stanford Medical Center Friday (MAY 17).

First patients will be admitted to the six-bassinet unit next week. It is the only center in California devoted exclusively to research into the problems of prematurity.

The purpose of the center is to provide a setting for intensive investigation of a small number of infants. Electronic equipment of the type developed for the man-in-space program will be used to continuously record information about the babies' bodily functions from their heartbeats to their metabolism.

Main speakers for the dedication will be Dr. Samuel Z. Levine, professor emeritus of pediatrics at Cornell University Medical College, and Dr. Robert A. Aldrich, director of the National Institute of Child Health and Human Development. Dr. Aldrich is the newest member of the National Institutes of Health in Bethesda, Md.

Workshop sessions dealing with problems of caring for newborn infants will be held for physicians and nurses during the afternoon.

Babies will be admitted to the center only on referral from physicians. Admission will depend upon the availability of beds and the particular needs of the center for infants of various weights and ages. It is expected most babies will come from within 50 miles of Stanford.

The $267,305 grant from the NIH for construction and the first year of operation covers full hospitalization expenses for patients. The NIH expects to support the center for a minimum of seven years, with an estimated investment of about 1½ million dollars.

Program director for the center is Dr. Sumner Yaffe, assistant professor of pediatrics. Investigators from many departments of the Stanford University School of Medicine will take part in patient care, research and teaching programs. The physicians hope their findings will lead to methods for reducing the high death rate among premature infants as well as the high incidence of mental retardation, nervous disorders and birth defects.

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(Mailed May 14, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

NOTE TO EDITORS: For release to papers of May 9, 1963

STANFORD RESEARCHERS TRACK DOWN GENES IN INFECTION-CAUSING BACTERIA

CLEVELAND -- What is the elusive element in some bacteria that make them capable of causing infection when many closely related bacteria are normal inhabitants of the human body and usually cause no harm?

Research being conducted at Stanford University School of Medicine by Dr. Robert Roantree, assistant professor of microbiology, and Dr. John Steward, instructor in basic medical sciences, may lead to the answer to this question.

Dr. Roantree disclosed the progress of this research in a paper presented last night (MAY 8) at the annual meeting of the American Society for Microbiology.

The two doctors have found that a mutation (a change in a gene) toward penicillin resistance, probably involving only a single gene, greatly reduces the ability of a strain of bacteria to cause death from infection.

The blood serum of most animals kills some bacteria because of the action of antibodies in conjunction with certain other serum proteins. The bacteria used in these experiments are resistant to this serum. However, the mutation which makes the bacteria less able to cause infection also makes them sensitive to the serum.

Drs. Roantree and Steward have been using a strain of bacteria which causes mouse typhoid fever and find that the mutant strain is 10,000 times less able to cause infection in the mouse than the parent strain.

A back mutation has been discovered which yields a strain of bacteria that is just like the parent and is again deadly for the mouse.

It is hoped that finding the structural and genetic differences existing between the original and mutant strains will lead to the discovery of one of the reasons for the disease-causing properties of the virulent strain and other bacteria of the typhoid fever group.

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(Mailed May 7, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CALL DA 1-5310

NEW NEUROLOGY FACILITY OPENS AT STANFORD MEDICAL CENTER

A new and greatly expanded diagnostic facility for comprehensive and up-to-date analysis of diseases of the nervous system has just been opened at Stanford Medical Center.

This facility will offer the community and referring physicians the possibility of much more detailed diagnostic evaluation of patients with epilepsy, Parkinsonism, cerebrovascular disorders (strokes), neuromuscular disease, multiple sclerosis, cerebral palsy, mental retardation and other neurologic diseases of infancy and childhood.

The unit is located on the third floor of the Palo Alto-Stanford Hospital and serves both hospitalized patients and outpatients visiting the Stanford Clinics.

The 2,900-square-foot unit cost $116,800 for construction and office equipment. This was paid for by Stanford University School of Medicine. The facility also includes $106,000 worth of scientific equipment which was paid for principally by grants from the National Institutes of Health.

The new facility will be operated in conjunction with two clinical neurological research facilities (one for premature infants and one for adult inpatients) recently awarded by the National Institutes of Health. Some new and very promising approaches to diagnosis and treatment of neurological disease are being explored in these research facilities.

- more -

Among the most important of the methods recently developed is one which analyzes the minute electrical signals generated within a particular sensory system in a small part of the brain (such as the part which responds to sound or to verbal signals). The system is sensitive enough to detect brain damage even in young children where ordinary examination shows no defect or the children are considered behavior problems or mentally retarded. In many such cases a specific and localized abnormality of electrical pattern or biochemical reaction has been found which drastically alters the course of treatment and offers a greater possibility of cure. Most of the work so far has been concentrated on youngsters whose ears and auditory nerves function properly but who can't make sense of what they hear or fail to develop normal speech. The difficulty has been traced to a damaged portion of the brain's auditory association area, where hearing sensations are compared with past experience and with other sensations such as sight.

In addition, the Stanford neurologic service has been designated as part of a National Institutes of Health-Veterans Administration Epilepsy Center. This includes a 47-bed ward at the Palo Alto V.A. Hospital and two free beds at Stanford Medical Center. Stanford faculty members care for patients at both institutions.

The facilities are under the direction of Dr. Frank Morrell, Stanford Professor of Medicine (Neurology) and head of the Division of Neurology and Electroencephalography Laboratories. The new unit will enable the Hospital to double its capacity for electroencephalographic (EEG) and electromyographic (EMG) examinations. EEG tests record brain waves, EMG tests record electrical signals in muscles.

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(Mailed June 25, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

AVALON FOUNDATION PROVIDES $50,000 FOR STANFORD MEDICAL SCHOOL SCHOLARSHIPS

The Avalon Foundation has given Stanford University School of Medicine a grant of $50,000 to be used for scholarships over the next three to five years, Dean Robert H. Alway announced today.

"This grant is particularly valuable in that it makes possible scholarships for first-year medical students," Dean Alway said.

"Until now money has not been available for first-year scholarships. As a result, some excellent students have not been able to enter Stanford, even though it was their first choice."

This is the third scholarship grant to Stanford from the Foundation. The medical school received $10,000 in 1961 and again in 1962.

The Avalon Foundation was established in 1940 by Mrs. Ailsa Mellon Bruce. Its headquarters are in New York City. In 1961-62 its grants for medical school scholarships came to $1,963,500.

The new grant will bring in an additional $16,666 for the unrestricted use of the University under the terms of the 1960 Ford Foundation 5-year incentive grant to Stanford. The Ford Foundation is providing $1 for every $3 raised from other private sources. Its grant sparked the current $100 million PACE (Plan of Action for a Challenging Era) campaign.

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(Mailed July 30, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

TOP CELLULAR CHEMIST NAMED TO STANFORD MEDICAL FACULTY

Dr. Robert L. Hunter of the University of Michigan, considered one of the nation's finest histochemists, will join the faculty of Stanford University School of Medicine Sept. 1.

He will be an associate professor of anatomy. His appointment rounds out the department's program in microscopic anatomy.

Histochemistry is the study of chemical substances in the body on a cellular level. Dr. Hunter is noted for developing new techniques for detecting enzymes, or natural chemical catalysts, in tissues.

He now holds a Career Development Award from the National Institutes of Health. These are given to the most promising younger investigators in the medical sciences.

At present Dr. Hunter is organizing an international conference on histochemistry to be held at the University of Recife in Brazil next month.

He received his bachelor's and master's degrees from Ohio Wesleyan University and his Ph.D. at Michigan. He has been on the Michigan faculty since 1953, and is now an associate professor of anatomy there.

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(Mailed Aug. 28, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

NOTE TO EDITORS: Photo of Dr. Newby available on request.

AUTHORITY ON HEARING NAMED HEAD OF STANFORD MEDICAL SCHOOL DIVISION

Dr. Hayes A. Newby, nationally known expert on hearing, takes over as director of the Division of Speech Pathology and Audiology in Stanford University's School of Medicine Sept. 1.

He replaces Dr. Virgil A. Anderson, an authority on the voice and its disorders, who will continue on the faculty and devote most of his time to teaching and writing.

The new director is president-elect of the American Speech and Hearing Association and is serving his second year as president of ASHA's Board of Examiners in Speech Pathology and Audiology. He will be president of ASHA in the fall of 1964 at the time of the Association's annual convention. It is the first ASHA convention ever to be held in San Francisco.

Dr. Newby has been on the Stanford faculty since 1947. In addition to his teaching duties at Stanford, he was director of the San Francisco Hearing and Speech Center from 1948 to 1956 and is currently a consultant to that organization as well as the Veterans Administration and the California State Department of Health. He is a member of the training panel in speech pathology and audiology for the Vocational Rehabilitation Administration.

- more -

For the last six years Dr. Newby has been associated with the TV program Doctors News Conference. He has moderated the program for the past two years.

In 1958 he wrote Audiology, a textbook dealing with hearing and hearing disorders. The second edition of the book is being prepared for publication in the spring of 1964.

A graduate of Ohio Wesleyan University, Dr. Newby received his M.A. and Ph.D. from the State University of Iowa. He has taught at Louisiana Polytechnic Institute and the State University of Iowa, and has served as an officer in the U.S. Navy.

Dr. Anderson has been on the Stanford faculty for three decades. He was director of the Speech and Hearing Clinic of Stanford's Department of Speech and Drama from 1932 until 1957.

That year the Clinic became a division of the medical school and Dr. Anderson remained the director. Dr. Anderson is the author of one of the pioneer texts in his field, Training the Speaking Voice.

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(Mailed August 26, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

FOR RELEASE after 2 p.m. (P.D.T.) Tuesday, Aug. 20, 1963

NOTE TO EDITORS: Copies of this release will also be available at a press conference which Dr. Levinthal will take part in at the Cow Palace, beginning at 10:30 a.m. Aug. 20.

2-POUND INSTRUMENT DESIGNED TO DETECT POSSIBLE LIFE ON MARS

A small instrument weighing just over two pounds and capable of a wide range of biological experiments has been designed at Stanford Medical Center to investigate the possibility that life might exist on Mars.

Details of the device, known as a multivator, were outlined today at the Western Electronic Show and Convention (WESCON) at the San Francisco Cow Palace.

The multivator was developed under a grant from the National Aeronautics and Space Administration to the Instrumentation Research Laboratory of the Department of Genetics at Stanford. It is being considered for the first capsule mission planned for a landing on Mars.

Nobel Prize winner Dr. Joshua Lederberg, who heads the department, and his associate Dr. Elliott Levinthal spoke at a special WESCON session on extraterrestrial life. Dr. Lederberg discussed some of the broad problems involved in detecting life in space, and Dr. Levinthal explained how the multivator was designed to serve as a possible experimental device.

Physically, the instrument package is about the size of a milk carton. It is just under 10 inches long and about 2 3/4 inches in diameter. It weighs about 30 ounces at this stage of development, but may be miniaturized later.

- more -

Dr. Levinthal stressed that the device is a joint effort involving the contributions of many men, including members of the Mechanical Engineering Department at Stanford, and the Jet Propulsion Laboratories in Pasadena.

The instrument was designed specifically to accomodate a wide variety of experiments, so that it can be used by other investigators jointly with the Stanford group.

The purpose of the instrument is to analyze a dust sample for microscopic organisms, since these would be found in every pinch of dust or puff of wind. The dust will be collected from the planet's surface and blown into the reaction chambers within the multivator.

The dust will collect on a sticky coating on the chamber walls. A solvent, probably water, will be injected into the chambers where chemically reactive materials will already have been stored.

There are 15 chambers, three of which are blanks. The 12 working chambers will contain the reactive materials which will amplify certain steps in the metabolism, or chemical activity associated with life processes, of the microbes. Thus the presence of relatively few organisms can be detected. The blank chambers will serve as checks on the reaction to insure the reliability of the tests.

At present a test is being devised for a common enzyme (natural chemical catalyst) which is produced by all earthly organisms. The product of the enzyme reaction is a fluorescent material which can be electronically detected when a small light goes on inside the multivator. Information as to the progress of any reaction within each chamber can be telemetered back to earth.

The multivator could also measure growth of bacteria and be adapted to use radioactive tagging techniques. Solvents other than water, different solvents in each chamber, and measurements of conductivity, acidity and the like, could be worked into the design.

In outlining the problems of detecting signs of life elsewhere than on earth, Dr. Lederberg said that one could look for any one of the three stages in the evolution of life on Mars:

1. The development of complex organic (carbon) compounds which are typically associated with life but do not necessarily indicate that life exists.

2. The development of more complicated compounds which are reproduced and which contain genetic information that specifies what organisms will be like. Errors in this reproduction, together with natural selection, bring about evolution and the great variety of earthly life.

3. The evolution of mechanisms for thought, perception, and the accumulation of knowledge associated with intelligent communication.

The multivator has been designed to examine the possibility that the second stage has occurred. The presence of organic materials would indicate biological processes could have developed, but would not provide a precise indication that life existed.

Current experiments proposed for the instrument are based on the assumption that life on Mars would depend upon the same basic carbon chemistry that supports life on our planet. Should this prove not to be the case, further experiments would have to be designed to test for alternative forms of life.

In attempting to analyze Martian soil for traces of life, the scientists hope eventually to be able to tell whether Mars took the same general path as the earth in the chemical development of life, and how it diverged at any of the stages of evolution.

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(Mailed August 19, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

STANFORD PHYSICIAN'S BOOK COVERS ROLE OF KIDNEY IN HIGH BLOOD PRESSURE

Dr. Thomas A. Stamey of the Stanford University School of Medicine is the author of a new book about the latest methods of studying kidney conditions in man which lead to high blood pressure.

The book, entitled "Renovascular Hypertension," was recently published by The Williams & Wilkins Company of Baltimore, Md. (pp. 232, $14.50).

Dr. Stamey is associate professor of surgery and chief of the Division of Urology for the medical school. He is widely known for his work in developing a new test for telling when a kidney is responsible for high blood pressure.

Information gathered during the development and use of the test forms much of the material in the book. The technique depends upon obtaining separate urine samples from each kidney, in order to compare simultaneously a diseased organ with the other normal or less diseased kidney.

In his preface, Dr. Stamey notes: "This book is addressed to all physicians interested in the problem of hypertension; the general practitioner, the internist, the urologist, the vascular surgeon, and the diagnostic radiologist."

The introduction contains a description of certain basic concepts which are intended to help the physician understand the principles involved in the test "rather than accept some magical and arbitrary figures which indicate the presence or absence of disease."

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(Mailed August 7, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Ed Andreopoulos (DA 1-5310)

PALO ALTO-STANFORD HOSPITAL CENTER ANNUAL OWNERS MEETING

The annual members' meeting of the Palo Alto-Stanford Hospital Corporation will be open to the public, its owners said today. The meeting will be Wednesday at 4:30 p.m. in Edwards Hall at Rickey's Hyatt House in Palo Alto.

Announcement of the decision was made by President J. E. Wallace Sterling for Stanford University and Mayor Dean R. Cresap for the City of Palo Alto. The Hospital is operated as a joint venture of City and University.

In the past, all business transacted at the annual owners' meeting had been previously acted upon by the City Council and only two city representatives needed to attend. This year, however, invitations have been sent to all councilmen, since the Hospital's Board of Directors wishes to make important presentations with which it feels all councilmen should be familiar.

Two major items for consideration by the owners will be the subject of open Board meetings and proposals concerning the organization of the Hospital.

Mayor Cresap will preside at the meeting.

# # #

(Mailed Sept. 23, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Ed Andreopoulos (DA 1-5310)

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(Mailed Sept. 23, 1963)

STANFORD UNIVERSITY NEWS SERVICE
FOR INFORMATION CONTACT: Katherine Pinkham

STANFORD, CALIFORNIA
DAvenport 1-2300, Ext. 2558

Southern California editors may contact Stanford Regional Office, 621 S. Hope St., Los Angeles 17, MAdison 7-0653

FOR RELEASE SATURDAY, SEPTEMBER 14, 1963

(ADVANCE) STANFORD - Stanford University will receive a $500,000 grant from the Gustavus and Louise Pfeiffer Research Foundation to endow a teaching chair in the School of Medicine, the Foundation announced today in New York.

The Emma Pfeiffer Merner Professorship at Stanford is one of six to be set up by Pfeiffer Foundation grants totaling $3,000,000 to help meet the crucial national need for first quality medical teaching. Other institutions benefiting are Harvard Medical School, the Menninger Foundation's School of Psychiatry at Topeka, Kansas, and the University of Pennsylvania Medical School.

The grants constitute the largest allocation of its capital funds ever made by the Pfeiffer Foundation. The gift to Stanford marks the first time the Foundation has made such a large grant to higher education on the West Coast.

The new chair will honor the late Emma Louise Pfeiffer Merner, the sister of Gustavus A. Pfeiffer, industrialist and philanthropist of Iowa and New York. In 1942 Mr. Pfeiffer and his wife established the foundation, with the announced purpose of benefiting mankind through support of the medical and pharmaceutical sciences.

"The Pfeiffer Foundation grants are a magnificent contribution to the whole human family," commented Stanford President Wallace Sterling. "Research and teaching have become inseparable and vital functions of medical schools. The emphasis put upon the teaching function by this forward-looking philanthropic group at a time when health research funds are relatively abundant is of essential value to all higher education."

Dean Robert H. Alway of the School of Medicine commented, "This significant gift clearly recognizes the basic importance of assuring support for men as well as projects."

Dean Alway said that the Emma Pfeiffer Merner Professor of the Medical Sciences will be a teacher whose work is at the frontier of medical knowledge and understanding in the basic medical sciences.

(more)

The grants grew out of a two-year study into the most effective role the small foundation can play in this era of massive spending by the government for medical research. The Pfeiffer Foundation study disclosed little support of medical teaching, particularly at top levels where research grants supply only a very small percentage of salaries.

A Foundation spokesman said the Pfeiffer directors hope their grants "will stimulate other medical foundations to similar action and result in a multiplication of adequately endowed teaching chairs in the American medical colleges."

The Foundation cited a survey of 87 medical schools, showing a total of more than 800 budgeted teaching posts which cannot be filled, to illustrate "how desperately medical teaching needs to be bolstered."

The physicians of tomorrow will not have the guidance of great teachers they need if interesting and remunerative fields continue to draw these men away from teaching, it was pointed out.

Emma Louise Pfeiffer was born in Cedar Falls, Iowa, April 26, 1860, and lived there for 63 years. After the death of her husband, David C. Merner, a pharmacist, to whom she was married in 1882, she moved to California in 1923 to be with her family in Palo Alto.

The Merner and Pfeiffer families have had Stanford connections extending over three generations. Mrs. Merner is described by those who knew her intimately as a gracious and lovable woman of strong influence in a family with a long matriarchal and philanthropic tradition.

The Emma Pfeiffer Merner Professorship is the eighth of 15 new chairs to be endowed in Stanford's current PACE Program--a $100 million Plan of Action for a Challenging Era. The gift will bring to the University for its general use an additional $166,666 in matching funds from the Ford Foundation. During the PACE campaign, the Ford Foundation is providing one dollar for each three received from other private sources.

END ADVANCE FOR RELEASE SATURDAY, SEPTEMBER 14, 1963.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

SPECIALIST IN HEARING DEFECTS TO JOIN STANFORD FACULTY

One of the country's leading specialists in hearing and hearing defects, Dr. Earl D. Schubert, will join the faculty of Stanford University School of Medicine next July.

He will direct a new postdoctoral training program in audiology which will be established by the Division of Speech Pathology and Audiology next summer. He will have the rank of professor.

Only a few such programs exist in the United States. It is being supported with a $37,545 grant from the National Institute of Neurological Diseases and Blindness. The grant will be used to pay for salaries, postdoctoral fellowships and research.

Dr. Schubert has a wide knowledge of all aspects of audiology. He is particularly interested in psychoacoustics (why we hear sounds the way we do) and the neurology and physiology of hearing. Although Dr. Schubert has extensive clinical experience, his main interest is research and he has published many articles in professional journals.

Since 1960 Dr. Schubert has been professor of audiology at Indiana University. From 1955 to 1960 he was professor of audiology and associate in medicine at Western Reserve University and coordinator of research at the Cleveland Hearing and Speech Center.

Dr. Schubert came to Stanford in the summer of 1962 as a visiting professor of speech pathology and audiology. He has also taught at the State University of Iowa and the University of Michigan.

Dr. Schubert received his B.S. from Manchester College in 1938 and his M.S. and Ph.D. from the State University of Iowa in 1942 and 1948 respectively.

# # #

(Mailed Sept. 3, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

STANFORD TEAM CONDUCTS UNIQUE ALASKAN HEART CLINIC

Evelyn is a small four-year-old Eskimo girl. Until recently she was so fragile and delicate she did not have the energy to play with her friends.

That is now changed. Last summer an Alaskan service doctor saw her in her native village of Kotzebue far above the Arctic Circle and decided she had a heart defect.

Within the month she was seen by a four-member team of specialists from the Stanford University School of Medicine -- not in Palo Alto but in Alaska where the specialists conduct a unique heart clinic for a few days each year.

Members of the team are Dr. Herbert L. Abrams, professor of radiology and director of the division of diagnostic radiology; Dr. Frank Gerbode, clinical professor of surgery; Dr. Herbert Hultgren, associate professor of medicine and director of the division of cardiology; and Dr. Saul J. Robinson, clinical associate professor of pediatrics.

Although Alaska is the largest state in the Union, it is the smallest when it comes to population and cannot support medical specialists in every field. As a result there is no place where the exact condition of certain types of heart patients (such as Evelyn) can be determined. These include many different kinds of congenital and acquired cardiac disease.

- more -

Each year physicians in Alaska come across over 100 such cases. Rather than refer each patient to physicians in other states, which would be prohibitively expensive and unnecessary in some cases, Dr. Gerbode decided to bring the doctors to the patients. Six years ago the first cardiac team flew from the Bay Area to Anchorage and initiated this unusual screening program.

The clinics are sponsored by the Alaska Heart Association and the state's Public Health Department. This year the team examined 170 patients in a four-day period. The cardiac screening group decides (1) if a patient has heart disease; (2) if he does, what type; (3) if the patient has to go to a medical center for further diagnostic tests or surgery; and (4) if the patient can be treated in Alaska. In Evelyn's case, the doctors felt she needed complete corrective surgery. This was later performed and she will now lead a normal life.

In addition to the service it renders patients, the group acts in a teaching capacity. Local and army doctors spend as much time as they can at the clinical sessions for the learning experience. Each day one of the visiting specialists gives a scientific paper on the latest advances in the treatment of heart conditions.

The team usually conducts the clinic in Anchorage, although it has also been held in Fairbanks and Sitka. This year the four Stanford physicians were made honorary members of the Anchorage Medical Society in recognition of their services.

# # #

(Mailed Oct. 24, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE FRIDAY, OCTOBER 25, 1963

Stanford University Friday dedicated its new Frederick W. Dohrmann, Jr., Memorial classrooms and amphitheaters in the School of Medicine and announced in conjunction a major gift of $250,000 which paid for the rooms.

The gift from Mr. and Mrs. John C. Cosgrove of Los Angeles was made as a memorial to Mrs. Cosgrove's father, Frederick W. Dohrmann, Jr., of San Francisco. It covers the cost of five classrooms and two amphitheaters in the medical school building, ranging in seating capacity from 42 to 150. The amphitheaters are considered to be among the most advanced in the country for their acoustics and seating arrangement.

In announcing the gift, Stanford President Wallace Sterling said:

"The gift from the Cosgrove family honors the memory of a distinguished business man and public-spirited citizen. It is a boon to the Stanford School of Medicine and those who learn and teach there. It is a gratifying manifestation of the encouraging support Stanford receives from the Los Angeles area."

The recent contribution to the University is in addition to an earlier gift of $75,000 made jointly by the Cosgroves and Marsh and McLennan-Cosgrove and Company to endow the John C. and Emilie D. Cosgrove Fellowship Fund. The fund supports fellowships in the Graduate School of Business.

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Cosgrove, a Stanford graduate in 1934, has been active among volunteer alumni groups working to increase the University's financial support. In the current Stanford PACE program -- a $100 million Plan of Action for a Challenging Era -- he has been working with the major and special gifts committees in the Los Angeles area. His wife, the former Emilie Blanca Dohrmann, was graduated at Stanford in 1933. The couple's two daughters, Carole and Julie, are also Stanford alumnae.

Frederick W. Dohrmann, Jr., for whom the new medical school facilities were named, was president of Nathan Dohrmann Company and a leader in the economic, civic and educational life of San Francisco. He was a long-time member of the San Francisco Board of Education and served as its president. He was also a founder and president of the pioneer mercantile firm of Parmelee-Dohrmann Company in Los Angeles and San Diego. He had been educated at St. Ignatius in San Francisco and the University of Berlin. He died in 1936.

# # #

(Mailed Oct. 23, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

NOTE TO EDITORS: For release at 9 a.m. Monday, Oct. 28, 1963. Release time is set to follow presentation of a paper by Dr. Lower at the annual Clinical Congress of the American College of Surgeons in San Francisco. Dr. Lower will attend a news conference in the Hunt Room of the Hotel Fairmont at 3:15 p.m. Sunday, Oct. 27, and will be available for questions at that time.

HEART VALVES SUCCESSFULLY TRANSPLANTED IN ANIMALS

A dog lived at Stanford Medical Center for two years with an essential heart valve that had been transplanted from another animal, two Stanford University School of Medicine surgeons said today.

The successful case, as well as other studies, indicates that living valves may prove much more durable than artificial ones made of synthetic materials, according to Dr. Richard Lower and Dr. Norman Shumway.

The surgeons said that transplants may prove particularly useful in helping patients with mitral or aortic valve disease, frequent complications of rheumatic fever. The dog experiments were all grafts replacing the mitral valve, which is located between the upper and lower chambers of the left side of the heart.

Dr. Lower added that the currently used artificial valves have drawbacks which living grafts may overcome. Patients with artificial valves tend to develop blood clots, there is difficulty getting a perfect connection between living and nonliving material, and the valve material tends to wear out with the constant motion of the heart.

- more -

A report of the Stanford research was made in San Francisco at the Clinical Congress of the American College of Surgeons. Dr. Lower is an instructor in surgery, Dr. Shumway an associate professor.

Sixteen dogs lived more than one month after receiving transplanted valves. Microscopic examination of the valves taken on autopsy showed that the transplants apparently act like corneal grafts for the eye.

The foreign tissue is rejected very slowly. The foreign cells are gradually replaced by cells from the recipient, and the tissue continues to live.

Most bodily tissue is rejected when grafted to another individual, dying within a few days or weeks. There are only a few exceptions, such as the cornea, bone and blood vessels.

Mitral and aortic valve replacements are particularly important because the disease can be so bad that only a substitute will work. In some cases of mitral disease, the hardened flaps may be cut open, but if the condition recurs little can be done without replacing the valve.

Without some sort of relief, patients are weak, short of breath, and often must stay in bed.

The aortic valve is at the opening of the last pumping chamber of the heart and leads into the major vessel carrying blood to the body.

Commenting on the research results, Dr. Lower said, "The big question in the next few years will be whether living tissue grafts will prove more successful than synthetic materials or artificial devices.

"So far, this is the only study in dogs which fairly clearly establishes that a valve from another animal can work for two years -- and possibly indefinitely. It seems very possible that transplants will succeed the synthetics if the living grafts prove durable."

Grafts of valves have been attempted in humans a few times in other countries. However, there have been no published results of successful operations, although results of some studies are not available, Dr. Lower indicated.

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(Mailed Oct. 23, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

Sixty-five students have enrolled in the first-year class at the Stanford University School of Medicine -- nine more than were enrolled last year.

The class of 1968 is composed of 57 men and 8 women representing 17 states and the island of Tobago in the British West Indies. Only 23 of the 65 are residents of California.

The new students come from 37 colleges in 17 states and 57 already have college degrees. Seventeen of the students attended Stanford University.

Following is a list of the new students with their parents' names and home addresses:

ARIZ., PHOENIX - Thomas H. Brzozowski, Mr. and Mrs. Joseph S., 5381 W. Osborn Rd.
William M. Johnson, Mr. and Mrs. Loren E. Johnson, 726 W. Latham.
Herbert Poetzl, Mr. and Mrs. George A. Poetzl, 333 W. Hazelwood St.
Alan R. Tempkin, Mr. and Mrs. Elliot H. Tempkin, 501 West Holly.

CALIF., BELMONT - Joan Louise Voris, Dr. and Mrs. Albert T. Voris, 1703 Belburn Dr.
BERKELEY - Virginia J. Borson, Dr. and Mrs. Harry J. Borson, 244 Alvarado Rd.
Barry L. Mendelsohn, Dr. and Mrs. Matthew Mendelsohn, 39 Highgate Rd.
BEVERLY HILLS - Jeffrey S. Stevens, Mr. and Mrs. David R. Stevens, 1003 N. Rexford Rd.
HEMET - Joseph S. Wakefield, Jr., Mr. and Mrs. Joseph S. Wakefield, Sr., Rt. 3, Box 244
HILLSBOROUGH - Robert H. Friedman, Mr. and Mrs. Nathan J. Friedman, 475 Pepper Ave.
LA JOLLA - Fred H. Burbank, Mr. and Mrs. Forrest Burbank, 1365 W. Muirlands Dr.
LOS ANGELES - Kai Haber, Dr. and Mrs. Heinz Haber, 322 S. Canyon View Dr.
MOUNTAIN VIEW - William G. Hayden, wife Dolores Hayden, 2250 Latham.
OAKLAND - Maria Viola, Mr. and Mrs. Vito Viola, 12669 Skyline Blvd.
ORANGE - James A. Davis, Dr. and Mrs. Perry Davis, 12872 Woodbury Dr.
ORINDA - William R. Cline, Mr. Wilson G. Cline, 518 Miner Rd.
PALM DESERT - Dale J. Cox, Mrs. Ruthanna Cox, 45-674 Toro Peak Rd.
PALO ALTO - Ronald Levy, Mr. and Mrs. Herman H. Levy, 420 Hale St.

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CALIF. (cont.)
PASADENA - C. David Erickson, Dr. and Mrs. Carl A. Erickson, 1371 Inverness Dr.
PEBBLE BEACH - Douglas P. Tustin, Mrs. Margaret M. Tustin, Box 2069.
PIEDMONT - Vernon G. Dorfman, Mr. and Mrs. Joseph Dorfman, 90 Wildwood Ave.
SACRAMENTO - Norman J. Tong, Mr. and Mrs. Bill Mi Tong, 788 - 8th Ave.
SAN FRANCISCO - Mary Ross Wertheim, Dr. and Mrs. H. Marvin Hodgson, One Cresta View Dr.
James M. Yee, Mr. and Mrs. James Yee, 2714 Fulton St.
TEMPLE CITY - David Alan Mann, Mr. and Mrs. Herbert A. Mann, 9248 Pentland St.
VALLEJO - Thomas J. Horwatt, Mrs. Josephine A. Horwatt, 220 James Rd.
VAN NUYS - Roger Griffith - Mr. and Mrs. E. C. Griffith, 7841 Pasa Robles Ave.
ILL., CARLINVILLE - Richard H. Lanzerotti, Mr. and Mrs. Emanuel L., 801 High St.
CHICAGO - Frederic A. Gibbs, Dr. and Mrs. Frederic A. Gibbs, 1427 N. Astor St.
ROCK ISLAND - M. Diane Edmund, Professor and Mrs. Rudolph W. Edmund, 4013 31st Ave.
WEST FRANKFORT - Michael Marchildon, Mr. and Mrs. Clement A. Marchildon, 606 E. St. Louis St.
IND., COLUMBUS - Thomas D. Stewart, Mr. and Mrs. Lynn N. Stewart, Box 343.
MASS., BROOKLINE - Edward R. Shapiro, Mr. and Mrs. Jacob Shapiro, 325 St. Paul St.
NEWTON CENTRE - Richard B. Borkow, Mr. and Mrs. Howard Borkow, 50 Rowena Rd.
MICH., DETROIT - Ronald S. Rubin, Mr. and Mrs. Morris B. Rubin, 18981 Woodingham.
Murray D. Schane, Mr. and Mrs. Irving Schane, 20295 Huntington.
Sanford R. Weimer, Mr. and Mrs. Harry Weiner, 21150 Pembroke.
MARSHALL - Sandra Lee Weidner, Mrs. David D. Weidner, 530 Washington St.
OAK PARK - Stephen A. Greenberg, Mr. and Mrs. Jack L. Greenberg, 25014 Rue. Versailles, East
MINN., MINNEAPOLIS - Jerry A. Segal, Mr. and Mrs. Sam Segal, 1337 Morgan Ave., North.
MONT., MISSOULA - George E. Sale, Dr. and Mrs. George G. Sale, 539 University Ave.
NEBR., LINCOLN - John W. Griffin, Mr. and Mrs. Arval W. Griffin, 4627 "A" St.
N.J., BIRMINGHAM - Kenneth W. Nobel, Mr. and Mrs. Joseph R. Nobel, P.O. Box 23.
BRADLEY BEACH - Norman T. Reynolds, Mrs. Leroy E. Reynolds, 513 McCabe Ave.
MAPLEWOOD - Keith B. Gianni, Mr. and Mrs. Carroll V. Gianni, 10 Cottage Ct.
NEWARK - Jerold D. Moss, Mr. and Mrs. Louis Moss, 200 Grumman Ave.
NORTH PLAINFIELD - Ann R. Klompus, Dr. and Mrs. Irving Klompus, 227 West End Ave.
N.M., LOS ALAMOS - Paul R. Bergstresser, Mr. and Mrs. Karl S. Bergstresser, 739 42nd St.
PORTALES - David F. Gregory, Mr. and Mrs. John V. Gregory, 309 East 11th.
N.Y., BRONXVILLE - Lawrence J. Dirksen, Mr. and Mrs. Alvin J. Dirksen, Eastbourne.
BROOKLYN - Edward H. Kreusser, Dr. and Mrs. Edward J. Kreusser, 6709 Ridge Blvd.
GOUVENEUR - Stephen C. Adler, Dr. and Mrs. Ernest L. Adler, 209 E. Main St.
GREAT NECK - Lawrence P. Johnson, Mr. Lawrence H. Johnson, 23 Birch Hill Rd.
KINGSTON - Stephen M. Zang, Mr. and Mrs. William Zang, Sherry Lane.
NEW HYDE PARK - Robert D. Henretig, Mr. and Mrs. Herman Henretig, 30 Greenway East.
NEW YORK - Michael E. Conrad, Mr. and Mrs. Earl Conrad, 25 Indian Rd.
NEWFANE - Robert M. Shuman, Mr. and Mrs. Mitford M. Shuman, 2810 Coomer Rd.
RIVERDALE - Stephen A. Smith, Mr. and Mrs. Stephen A. Smith, 5900 Arlington Ave.
ROSLYN HEIGHTS - Rochelle H. Rame, Mrs. and Mrs. Jack H. Rame, 57 Hayloft Lane.
OKLA., PONCA CITY - Michael P. Johnson, Mr. and Mrs. Howard W. Johnson, 1300 N. Fifth.
PA., NEW CASTLE - David Long Perry, Jr., Dr. and Mrs. David L. Perry, Sr., 118 Hazelcroft.
S.C., SPARTANBURG - Carl O. Page, Jr., Rev. and Mrs. Carl O. Page, Sr., 347 Spring St.
TEX., ABILENE - David S. Hutchison, Mr. and Mrs. John A. Hutchison, 1542 N. 17th St.
WIS., MILWAUKEE - Lawrence S. Hurwitz, Mr. and Herman Hurwitz, 6000 N. Kent Ave.
TOBAGO, B.W.I. - Timothy B. Coburn, Mr. Alvin F. Coburn, Scarborough.

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(Mailed Oct. 15, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

AREA RESIDENTS SPONSOR VISIT OF TWO PERUVIAN MEDICAL STUDENTS

Two interns from Peru's National University at Trujillo will study for three months at Stanford Medical Center, thanks to the joint efforts of local residents.

The interns, Augusto Chang and Orlando Hernandez, will spend part of their study in their chosen specialty and part in the medical school's infectious disease control program.

Chang has chosen to specialize in obstetrics and gynecology "because of the high mortality rate in mothers and newborn infants caused by the lack of obstetrical care in Peru."

Hernandez is studying to be an internist. He entered medicine "because doctors are so badly needed in Peru." He noted that Peru has only one doctor to 2400 persons compared to one to every 790 in the United States.

The idea for their visit originated with Dr. Theodore Myers of San Mateo while he was in Peru last year arranging for the hospital ship HOPE to visit Trujillo. Dr. Myers, a clinical instructor in medicine at the Stanford University School of Medicine, arranged to have Ernie Altekruse and John Cutting, two Stanford medical students, on the ship. At Dr. Myers' suggestion, the students invited the Peruvian interns to study at the Center.

Two Palo Alto physicians have invited the Peruvian students to live in their homes. They are Dr. Howard L. Jones of 372 Walsh Road, Atherton, and Dr. William Clark of 859 Northampton Drive, Palo Alto.

Plane fare for the visitors was paid by their own university. The Stanford University School of Medicine has absorbed the cost of their special training. The Palo Alto Medical Staff contributed funds to provide for incidental expenses.

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(Mailed October 7, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

FILE COPY

STANFORD ANATOMIST NAMED TO HEAD STUDENT AFFAIRS PROGRAM

Dr. Donald Stilwell has been appointed assistant dean for student affairs at the Stanford University School of Medicine. He will also continue his duties as associate professor of anatomy at the School.

In his capacity as assistant dean, Dr. Stilwell is chairman of the committee in charge of the student advisor program, heads the 13 premedical student advisors on campus, and will handle institutional grants to students.

Since coming to Stanford in 1949 as an instructor, Dr. Stilwell has taught neuro- and gross anatomy, as well as a relatively new program in surgical anatomy conducted in cooperation with the Division of Rehabilitation Medicine and various divisions of the Department of Surgery.

Dr. Stilwell is also resident advisor at Stanford's Wilbur Hall, a freshman dormitory.

A native of Detroit, Michigan, Dr. Stilwell got his B.S. and M.D. at Wayne State University in that city in 1941 and 1944, respectively. He is the author of numerous articles in professional publications.

Dr. Stilwell replaces Dr. Seymour Kolko, who resigned in January to become director of the Belmont Hills Neuropsychiatric Center.

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(mailed 11/20/63)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

NOTE TO EDITORS -- For release at 3 p.m. Thursday, November 21. The release time is set to follow presentation of a paper by Dr. Wilmer at 62nd meeting of the American Anthropological Association at Sheraton Palace Hotel, San Francisco.

SAN FRANCISCO -- Neither punishment nor rehabilitation programs will be effective in reducing crime as long as society prefers to label offenders as evil and continues to punish them at all cost.

Dr. Harry A. Wilmer, clinical associate professor of psychiatry at Stanford University School of Medicine, expressed this view in a report to the 62nd meeting of the American Anthropological Association here.

Dr. Wilmer, who is also a consultant to the California Department of Corrections, cited statistics showing that over 40 per cent of the parole violators return to prison with a new criminal committment.

"Once a man enters prison it is almost a fifty-fifty chance that prison will again be his way of life," Dr. Wilmer said.

This is because prison culture hardens most criminals rather than rehabilitates them, the psychiatrist said. Society views them with terror and deprives them of jobs and their civil rights.

"Of the 5,000 men in San Quentin," he noted, "society does not judge them according to their crimes but according to their incarceration. In the prison, there are the good guys, prison officials, and the bad guys, inmates.

"The distinction is inevitable and a tense and potentially dangerous situation follows with one segment preoccupied with security measures and the other thinking of freedom and escape. The prisoners, caught in the morass of loneliness, defeat, humiliation and fear, are welded together strengthening the bad guy identifications with a driving wish for revenge."

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It follows, Dr. Wilmer said, that in this state of mind, most prisoners instead of working conscientiously toward their release, adjust to the world of prison as the only existence in which they can live successfully.

Detention, however, may serve a much more important purpose, Dr. Wilmer said. It may serve the function of separating the offender from his wounding environment long enough for the psychiatrist and him to take a new view of the matter.

With this in mind, prison officials and rehabilitation experts met at Soledad State Prison in 1959, and decided to implement an extensive test of the "therapeutic community concept" in California prisons, Dr. Wilmer reported. This concept of treatment, now in use in some psychiatric hospitals, describes a technique for handling mental patients by giving them near-normal group freedom.

In May 1961, the first organized therapeutic community experiment was established by the State Department of Corrections at San Quentin prison. Its purpose was to expose a selected group of inmates to intensive social group therapy in the hope of increasing their parole success.

During the first 27 months of its operation 172 men entered the program. They were selected on the basis of a median score of the Base Expectancy Test which allows clinicians to predict whether an offender will make a favorable parole adjustment. Their average age was 30.

The men were on minimum custody and lived on the ranch just outside the walls of the main prison. They slept in dormitories, ate in a common mess hall, and worked together as they would in a normal community.

The staff in the program included two full-time prison counsellors, a full-time correctional officer, and a psychiatric consultant one full day a week. The staff was augmented by a psychiatric resident from the Stanford University School of Medicine who participated as part of his training.

Both prisoners and staff met daily after the inmates' regular work in the prison. The unit was divided into five small groups that met twice a week. It included an orientation group for newcomers, and a pre-parole group for men who were soon to be released.

In addition, there was a husband and wife group which met once a week with the staff and the psychiatrist.

"All the meetings were informal and were conducted with a minimum of staff direction. For the most part, the discussions concerned the immediate behavior problems in the community," Dr. Wilmer said. "However, crime, prison, and parole recurrently dominated the discussions. A guiding principle was to attempt to maximize participation by widening the focus of individual problems to those which all men face."

Of the 172 offenders who participated in the therapeutic community experiment, 92 were paroled, Dr. Wilmer reported. Their average stay in the program ranged from six to 18 months. Of these, only 21 offenders were parole failures over a two-year period observed.

If the percentage of parole violators continues to remain low, Dr. Wilmer added, the results will be outstanding.

An important element to the favorable outcome was the use of San Francisco's Intensive Parole agent unit as a bridge to the community. The parole officers went regularly to the prison meetings, and the prisoners were allowed to choose their parole officers if they wished.

Buoyed by this seeming progress, the State Department of Corrections has extended the therapeutic community idea to prisons throughout the state. There are more than 1,000 men and women in what is known as the Increased Correctional Effectiveness program.

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Dr. Wilmer hopes that this experiment will give new insight and direction to better rehabilitation programs. "The alternative," he said, "would be merely repeating costly failures."

Considering that there are 25,000 felons in California state prisons, the prison population studied was infinitesimal. Yet, he added, the incarceration of 172 prisoners represents an expense to society of between one and two million dollars. Aside from their victims, there are their families which share in the distress, shame, and guilt.

"Rehabilitation research is no frill," he said, "but an investment society must make for its own safety."

# # #

(Mailed November 18, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Thanks to the crusading efforts of a Stanford Medical School physician and to the support of the state public health department, disabled persons in rural communities may shed their unhappy reputation as one of the "least cared-for groups in California."

This description comes from Dr. Daniel J. Feldman, director of Rehabilitation Medicine, who believes that a man torn from his life's work by a disease or a crippling accident deserves at least a chance and that disability need not be the end -- but a challenge for a new beginning.

Each year approximately 400,000 Californians suffer disabilities which cut them off from normal activity. The disabled are those who suffer from arthritis, congenital defects, injuries from accidents or strokes, mental illness, heart disease, polio, multiple sclerosis or other such incapacitating conditions.

Those who are lucky enough to live near a medical center, with active rehabilitation programs, may benefit from the latest techniques and return to society totally or partially restored.

But most of the disabled who live in California's rural communities are penalized because rehabilitation specialists are scarce.

When Dr. Feldman surveyed their status a year ago, he found conditions grim. They still are mostly unchanged today, but in such selected counties as Colusa, Shasta, Modoc, and Monterey, pilot physical rehabilitation clinics, set up by Dr. Feldman at the request of local physicians, have begun to alleviate many of the worst problems.

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For example, a 21-year-old patient from Alturas, thought to be severely disabled by multiple sclerosis, was found lying in a county hospital. He was brought to the Stanford Medical Center for tests which revealed that he suffered from a brain tumor. An operation was performed and the tumor was removed. The patient partially regained his speech and hearing. After a few months of rehabilitation treatment at the Center, he returned home and was able to live with his family under minimum care.

Since the clinics began more than 30 patients have turned up who were able to benefit from Stanford's rehabilitation services. This fact also brought outright support from the physicians in rural communities, who have welcomed these clinics.

Before each clinic, physicians in the county prepare a list of rehabilitation patients to be seen by the Stanford team. The team consists of a physiatrist (a specialist in rehabilitation medicine), occupational therapist, physical therapist, social worker, and a rehabilitation nurse.

The Stanford physiatrist and the local doctors examine each patient and make a joint diagnosis; then they decide on a course of treatment.

Dr. Feldman said that it is not feasible for many rural counties to reproduce the kind of rehabilitation center that exists at Stanford. But it is quite feasible to carry out much of the necessary rehabilitation locally with the help of the specialists from the medical center.

The pilot clinics, he noted, have aided local physicians in bearing the responsibility of rehabilitation. Experience gained from these clinics will guide the Stanford School of Medicine in the development of training programs for rehabilitation personnel.

The clinics also will allow the Stanford team to study the rehabilitation needs of a representative number of rural communities, and to observe patients in their own surroundings.

"Many disabled persons," Dr. Feldman said, "would respond more rapidly to treatment in their own surroundings rather than in the impersonal atmosphere of a large hospital."

The clinics may serve a preventive function, too. Successful amputation of a leg, for example, does not end with the healing of the stump. The amputee needs an artificial limb, training in its use, social services designed to reassure him about his family's welfare, vocational counseling, and psychiatric help in accepting himself as a disabled person.

"We want to find out what we can do to prevent other problems from piling on the already disabling features of the disease," Dr. Feldman said.

If the rural rehabilitation clinics prove successful, Dr. Feldman foresees a wider use of them in the future. "It is a pattern of medical care that will be most practical for California and maybe other places," he said.

In addition to Dr. Feldman, staff members from the Stanford Medical Center who have taken part in the clinics are Dr. Jose Montero, assistant professor of rehabilitation medicine; Mrs. Helen Schwedenberg, occupational therapist and program coordinator; Miss Helen Blood, instructor in physical therapy; Gerald St. Denis, assistant professor of clinical social work, Miss Mary Alderson, rehabilitation nurse; and a number of residents in rehabilitation medicine who act as research assistants.

# # #

(Mailed Dec. 6, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

COMPUTER IS USED TO DIAGNOSE SKIN DISEASES

CHICAGO--Can a computer aid a doctor in diagnosing disease?

The answer is yes, according to Dr. Arthur L. Norins, assistant professor of dermatology at Stanford University School of Medicine.

Dr. Norins based his answer on preliminary studies with a computer system designed to diagnose skin diseases. The system was exhibited this week at the annual meeting of the American Academy of Dermatology in Chicago.

At this stage of development, Dr. Norins admits, he would prefer to let a medical student evaluate a patient's condition. Nevertheless, trial runs with the new system were successful.

He predicts that within ten years physicians will be depending quite heavily on computers for pinpointing patients' problems.

The Stanford system is designed to discriminate among several hundred skin diseases. For each ailment, there are 200 "attributes" stored in the computer's memory unit.

The attributes include 100 items of information about typical symptoms, physicians' observations and patients' histories. There are also 100 items about microscopic observations of tissue samples from patients with the disease.

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To make a diagnosis with the computer, a physician lists the symptoms, observations, and history of the patient involved. He also lists the results of the microscopic examination. The computer compares the specific case with its "experience" and chooses the most likely disease description.

Dr. Norins admits that he is in a fortunate position as a dermatologist. Samples of diseased tissue can be obtained from the skin by a simple biopsy, and the skin can easily be examined by the physician.

Several other groups in the United States are using computers for diagnosis. This system is the first for skin ailments. It is also the first to incorporate data from microscopic examinations.

In addition to its application in diagnosis, it is being used to accumulate statistical information on dermatologic problems and in teaching students.

The computer used in the system and in the Chicago exhibit is a Control Data Corporation Model 160A. Studies so far have utilized a 160A located at the firm's branch in Palo Alto.

Eventually, Dr. Norins said, it will be possible to have teletype links between a computer center and physicians' offices to make the system easily accessible to practitioners.

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(Mailed Dec. 5, 1963)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310) FILE COPY

Construction will start this week on a $6,150,000 clinical sciences research building for the Stanford University School of Medicine, Stanford officials disclosed today.

It will be the first major addition to the Stanford Medical Center since it was constructed five years ago. It is financed in part by Stanford University's PACE Program (Plan of Action for a Challenging Era) which recently passed its announced $100 million goal.

The new structure, which will be located between the Stanford hospital pavilion and Medical School Building, will contain facilities for investigation in medicine, surgery, radiology, pediatrics, genetics, obstetrics, and psychiatry.

It will also include the Lt. Joseph P. Kennedy, Jr., Laboratories for Molecular Medicine where basic research will be undertaken related to causes of mental retardation.

Part of the new building will house facilities, supported by the National Aeronautics and Space Administration, for research in the fields of space biology and biomedical instrumentation.

The building will consist of four stories -- a basement and three floors -- covering 152,000 gross square feet, about twice the size of existing hospital pavilions.

Funds for construction of the research facility have come from PACE program gifts and government grants for research facilities.

The largest PACE gifts were two of $1 million each from the Rockefeller and Joseph P. Kennedy, Jr., Foundations. Government grants include $2,033,918 from the National Institutes of Health, and $535,000 from the National Aeronautics and Space Administration.

The building was originally to have been built as part of the Medical Center, but when construction began in 1957 there was not enough money available.

Contractors for the building are Leon M. Wheatley, Inc., and Jacobsen Bros. Construction Company of Palo Alto, bidding as a joint venture. Edward Durell Stone of New York, is architect, with Milton D. Pflueger of San Francisco, as associate architect. The building will be ready for occupancy in the fall of 1965.

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(Mailed Jan. 20, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

FILE COPY

STANFORD PHYSICIAN DEVELOPS NEW ISOLATION UNIT

A new way to protect hospital patients who are highly susceptible to germs has been developed by a physician at the Palo Alto-Stanford Hospital.

Starting soon such patients will be placed in "plastic rooms," allowing doctors and nurses to care for them without coming into direct physical contact.

Present methods of protecting such a patient -- a process called "reverse isolation" (placing a patient in quarantine for his own self-protection) -- are complicated and costly. The room he occupies has to be sterilized, persons entering the room have to put on sterilized clothes, and all objects taken into the room have to be made as sterile as possible. Even then the patient may pick up a germ from a person who is not sick but a carrier.

The new plastic rooms, developed by Dr. Charles Beal, assistant professor of preventive medicine at the Stanford University School of Medicine, are throwaways. Everything, except the mattress, is outside the room. Shots can be given and blood drawn by inserting a needle through the plastic. Arm vents with rubber gloves are attached at intervals to the tent to allow for patient care.

The unit has a self-contained air supply. Air pressure on the inside is slightly higher than on the outside so that no bacteria can enter the tent. The patient receives his meals and other items through lock equipment much like that used in submarines.

Dr. Beal has also developed a reverse isolation "transportation bag." The bag, which is placed on a guerney, is attached to the plastic tent by a zipper and the patient is slipped into it much like he would be slipped into a sleeping bag. The transportation unit has its own air supply and permits the patient to be taken anyplace in the hospital in isolation.

Recently Dr. Beal received an $11,000 grant from the Northrop Aviation Company in Los Angeles for further experimental use on the isolator. He now hopes to modify it so that it can be used for both reverse and regular isolation.

# # #

(Mailed Jan. 14, 1964)

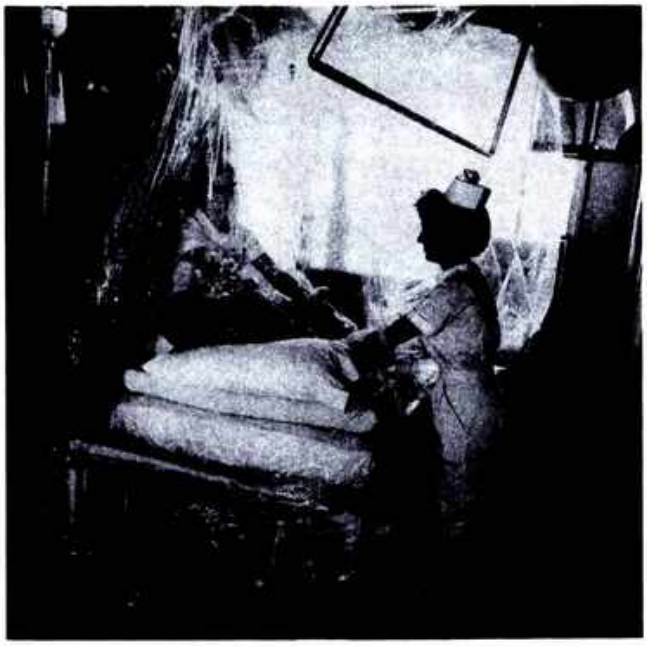

PHOTO 1

PHOTO 2

NEWLY DEVELOPED reverse isolation units are tested at the Stanford Medical Center. In PHOTO 1 nurses Rosemarie Kohler (left) and Suzanne Adelman demonstrate the ease with which bedding can be changed without entering the patient's "room." In PHOTO 2 Gail Cumberland, R.N., and Dr. Charles Beal demonstrate how a patient can be transported in "isolation."

- -

To: NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIFORNIA

Please send me an 8 x 10 glossy print of _____ PHOTO 1 _____ PHOTO 2

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ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

New executive head of the Division of Neurosurgery at the Stanford University School of Medicine is Dr. John Hanbery. His appointment became effective January 1. Dr. Hanbery has been acting head since 1960, in addition to carrying on his own private practice.

Dr. Hanbery has many Stanford ties. He received his A.B. and M.D. at the University in 1942 and 1945, respectively. He interned and did much of his residency in surgery at the Medical School in San Francisco and from 1954 to 1959 was an assistant professor there. When the School moved to Palo Alto he was appointed clinical assistant professor. In 1961 he was promoted to clinical professor.

Dr. Hanbery has spent many years in Canada, first doing research, teaching, and neurosurgical and neurological residency work at the Montreal Neurological Institute and then as a staff member both at the Institute and Royal Victoria Hospital.

A native of Enid, Oklahoma, Dr. Hanbery now resides at 70 Mercedes Lane, Atherton. He is married and has four children.

# # #

(Mailed Jan. 9, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

RESPIRATORY COMPLICATIONS STUDIED UNDER $320,000 HARTFORD FOUNDATION GRANT

A research program aimed at improving the care of some of the sickest patients in any general hospital is now under way at Stanford Medical Center.

The patients are those who have severe difficulty breathing, a frequent and often fatal complication of many operations and illnesses.

The patients are being studied in a respiratory unit financed by a three-year, $320,000 grant to the Stanford University School of Medicine from the John A. Hartford Foundation of New York City. It is the first such facility to be established in northern California.

"These patients require the most meticulous hour-to-hour care of any I know, and they need it for days on end," according to Dr. John P. Bunker, director of the program. Dr. Bunker is professor of anesthesia and executive head of the Department of Anesthesia at Stanford.

Assistant Professor Grant Fletcher is in charge of the unit where the studies are being carried out. It is part of the intensive care unit in the Palo Alto-Stanford Hospital.

The third member of the research team is Associate Professor J. Weldon Bellville, who will direct investigation of the role of drugs and disease in altering the nervous system's control of breathing.

New methods of treatment will be evaluated in the study. At the same time physicians will try to gain better understanding of the course the complications may take.

- more -

Three general areas are being covered in the program:

1. Respiratory problems resulting from mechanical limitations on breathing. These may be caused by surgery of the upper abdomen, chest injuries, and diseases such as tetanus and myasthenia gravis.

Initially, postoperative patients are receiving special attention because they are particularly prone to such complications and may be studied from the time difficulties begin. According to one study, 43 per cent of surgical patients given no preventive treatment for pulmonary complications will develop some degree of lung collapse.

2. The effect of drugs and certain diseases on the "respiratory center," that part of the nervous system which controls respiration. Certain forms of epilepsy, polio, thyroid disease and liver disease affect the respiratory center. So does barbituate poisoning, which is simply an overdose of an anesthetic.

Dr. Bunker predicts that with understanding of what happens to the nervous system under such circumstances, it should be possible to prevent or lessen the likelihood of lung collapse and the pneumonia which often follows.

3. An analysis of the course of infection in patients with depressed respiration. Pneumonia is a frequent complication after lung ventilation reaches a low level. It is not known, however, whether such infections are usually caused by the patient's own germs or come from other sources.

Whether a patient falls in category 1 or 2, he will usually recover if physicians are able to keep him breathing. But this requires an estimated eight times as much individual care, from physicians and nurses, as given on a general care ward.

Anesthetists are particularly suited for such a project, Dr. Bunker said, because of their wide experience dealing with breathing difficulties in the operating room. In assisting their patients they have had to develop new methods of management which are applicable to disturbances of respiration in nonsurgical patients.

The grant brings to $1,500,000 the amount awarded by the John A. Hartford Foundation, Inc., to the medical school for support of research and clinical programs.

The Hartford Foundation was established by John A. Hartford, former president of the Great Atlantic and Pacific Tea Company, who left it the bulk of his estate. His brother, George L. Hartford, former chairman of the board, left his entire estate to the Foundation.

# # #

(Mailed Jan. 7, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FILE COPY

The California Elks have granted $25,000 to the Stanford Medical Center for the care of needy handicapped children.

The gift would pay for the care of 50 children in the Palo Alto-Stanford Hospital, Stanford Clinics, and the Stanford Convalescent Home in 1964. It would also cover expenses for drugs, laboratory tests and, in some cases, transportation and housing expenses for the parents if they must remain in the area while their child is being treated.

In announcing the gift, Walter J. Schween, Jr., of Salinas, a trustee of the California Elks Major Project, Inc., said: "We are very happy to bring this service to needy handicapped children and hope that it will be of lasting benefit to them."

The gift would cover children suffering from conditions affecting their normal growth, chronic kidney disease, blood disorders, respiratory disease, emotional problems associated with handicaps, birth defects, orthopedic problems, and diseases of the eye.

Patients accepted in the program will be recommended by referring physicians and screened by social workers at the Medical Center.

The program will be under the direction of Dr. Norman Kretchmer, head of the Department of Pediatrics of the Stanford University School of Medicine.

This is the first major charitable venture by the California Elks in the field of inpatient care, Schween said. For the past 13 years the California Elks Major Project, a nonprofit corporation for aiding physically handicapped children, has been instrumental in providing physical therapists for the handicapped in rural areas.

# # #

(Mailed January 2, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Sam Moffat

Laboratories for investigating new techniques for surgery of the nerves and brain will be built at Stanford Medical Center with a gift from the Euphrat family of San Francisco and the Peninsula, Dean Robert H. Alway of Stanford University School of Medicine announced today.

One of the aims of the researchers working in the laboratories will be to develop new techniques of operating on tumors of the brain. Methods to be tried will include freezing and use of electronic beams or electrical probes which will destroy tissue.

E.F. Euphrat, San Francisco business and financial leader, and his sons, Jack S. and Edward F. Euphrat, joined in memorial gifts and pledges for the facilities in the new Clinical Sciences Research Building now under construction. There will be laboratory and office space for seven faculty members and postdoctoral fellows.

The Euphrat laboratories are being donated in memory of Helen E. Euphrat, and--at the request of her two sons--it will also honor her husband and their father, E.F. Euphrat. Mrs. Euphrat died Dec. 13, 1963.

E.F. Euphrat, who now heads his own securities firm in San Francisco, was founder and for many years president of Pacific Can Co. His sons are graduates of Stanford University and have been active in community and civic affairs.

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(Mailed Feb. 24, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

NOTE TO EDITORS: Two sample photos from the display are available from the News Bureau. Prints of the other photographs to be shown may be obtained from Stifler.

"FACE OF POVERTY" PHOTO STUDY TO GO ON DISPLAY AT STANFORD

Richard Stifler, a third-year Stanford medical school student who went to El Salvador last year as a member of a project studying hospital infection, spent as much or more time on another project only indirectly related to medicine.

One of the results of this second project -- a photographic study called "The Face of Poverty" -- will go on display Sunday (FEB. 23) in the Main Library at Stanford University. The show will continue through March 7.

After previewing the pictures, Daniel M. Mendelowitz, professor of art and education at Stanford, commented that "Mr. Stifler's deepest concern was with the people who were the subjects of these eloquent documentary photographs. The results are deeply moving, with the strength of unselfconscious force and honesty."

Stifler will also give a talk about his experiences in Central America. Sponsored by the Department of Medicine, it will be held in room 282 of Tresidder Union at 4:15 p.m. March 2. The talk is open to the public.

The display represents only one aspect of the photographs taken by Stifler last summer and during a subsequent trip to the Latin American republic in December.

He plans one more trip in July, at which time the pictures will be compiled into a book to be co-authored with Dr. David Burleson, a visiting professor of anthropology at the University of El Salvador.

The purpose of the book and the show is to educate Americans and others about the living conditions in an "underdeveloped" nation.

- more -

"It is only incidental that these pictures were taken in El Salvador," Stifler said. "The conditions they portray are typical of two-thirds of the world's population."

Stifler, 24, is the son of Mr. and Mrs. Robert Stifler of Phoenix, Arizona. He received a B.S. in biology at M.I.T. before coming to Stanford.

He admits he is drawn strongly toward Central and South America. "I love the area; it's hard to put into words just why. I like the dignity of the people. It shows in my pictures, even though the people are so poor. And there is great beauty in their country and their language."

He also feels that it is possible to make a real contribution in Latin America. "There is a shortage of educated people. If you are interested, you can play an important part in the development of a country such as El Salvador."

Stifler originally went to El Salvador to help study a method of controlling hospital "staph" infections in newborn babies. The project was under the direction of Dr. Harold Simon, assistant professor of medicine at Stanford University School of Medicine.

One part of the research involved taking bacterial cultures from mothers and children after they had returned home. It was during visits to many parts of San Salvador, the country's capital, that Stifler developed the interest which led to the photographic study.

# # #

(Mailed Feb. 18, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

Localized cancers can now be treated with intensive doses of drugs concurrently with intensive radiation therapy, according to Dr. Malcolm Bagshaw, associate professor of radiology at the Stanford University School of Medicine.

For the past two years he and two of his associates, Dr. Thomas Nelsen, assistant professor of surgery, and Dr. Saul Rosenberg, assistant professor of radiology, have been investigating the feasibility of using this type of combined therapy on patients with cancer so advanced that it can neither be operated on nor treated with radiotherapy.

Their findings were reported to the 1964 Science Writers Seminar of the American Cancer Society today (March 24) by Dr. Bagshaw and Dr. Henry Kaplan, head of the Stanford medical school's Department of Radiology.

Certain drugs such as purine and pyrimidine analogues may render cells more sensitive to X-ray therapy. The investigations carried on by Dr. Bagshaw and his associates have been designed to find out if the human body will tolerate a combination of drugs and X-ray treatments for long periods of time. Treatment of 30 patients with neck cancers and 10 with pelvic cancers, the areas best suited to this approach, indicate it can, Dr. Bagshaw reported.

Dr. Nelsen inserts catheters into the artery supplying blood to the tumor area, insuring a high concentration of the drug where it is needed and minimizing its general circulation. Because the pressure of the arteries is so great, he had to devise an electrical pump system with its own power supply which would slowly force the drug into the artery. The power supply is portable and enables the patient to be completely mobile.

- more -

The researchers have found that patients are able to tolerate catheters in their arteries for as long as eight weeks with little discomfort.

They usually receive the drug eight hours a day and a heparin solution the rest of the day. The latter is given to keep arteries open. Dr. Bagshaw says patients can safely be given the drug concurrently with X-ray therapy for as long as six weeks.

Although the study is designed to find out if this method of treatment is feasible and not as a statistical study of treatment drugs, Dr. Bagshaw notes that in 18 of the first 22 patients receiving this type of combined treatment the cancerous tumor started regressing.

One of the first patients to receive this type of treatment, a 42-year-old housewife, was thought to have an incurable cancer of the throat which had already spread to her neck glands. Since being treated, her tumor has disappeared with no signs of returning. However, Dr. Bagshaw stresses the fact that it is still too soon to judge the effectiveness of the combined therapy. Most of the patients have been under treatment for a relatively short period.

Combining drugs with X-ray therapy is just one type of experiment being conducted in the 15-bed cancer research unit at the Center. The unit, completely supported by a grant from the National Institutes of Health, has been set up to study various new methods of carrying on X-ray therapy of cancer patients.

# # #

(Mailed March 24, 1964)

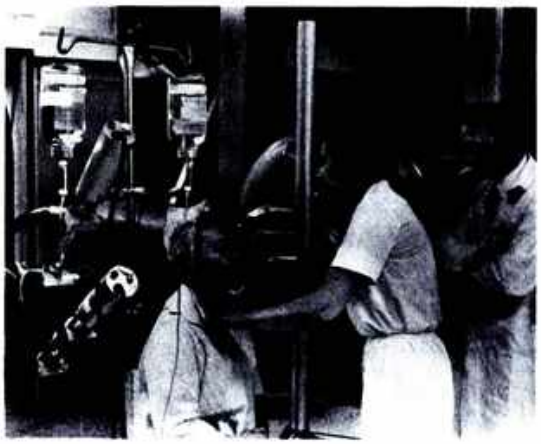

PHOTO 2

PHOTO 1

PHOTO 1 - The mobility of the pump used to force a drug into an artery is demonstrated by Ruth Boyko of Tahoe Valley, Calif. Mrs. Boyko is one of the patients at the Stanford Medical Center receiving intensive doses of drugs concurrently with intensive radiation therapy for treatment of a localized cancer.

PHOTO 2 - Radiology Technician Joyce Lawson prepared Mrs. Glenna Kirk for her daily X-ray treatment. Mrs. Kirk, a resident of Redwood City, is also receiving combined drug-radiotherapy treatment for a malignancy. At right is Dr. Malcolm Bagshaw, associate professor of radiology at the Stanford University School of Medicine.

- -

To: NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIFORNIA

Re: Photos of drug-radiotherapy treatment

Please send me an 8 x 10 glossy print of _____ PHOTO 1 _____ PHOTO 2

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ADDRESS _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

By simply using a thread, physicians can measure their patients for lack of stomach acidity, according to Dr. Charles Beal, assistant professor of preventive medicine at the Stanford University School of Medicine.

He has developed a simple device which consists of cotton thread impregnated with Congo red dye coiled in a gelatin pharmaceutical capsule. One end of the thread protrudes through a hole in the capsule. The physician holds the thread as the patient swallows the capsule which carries the thread to the stomach.

Within one minute the capsule dissolves and the thread is quickly withdrawn. If the Congo dye remains red, it indicates the person who swallowed the thread has very low stomach acidity. If the color changes to purple or black, the person has a normal or above normal amount of acid.

Low acidity in a person's stomach is sometimes associated with pernicious anemia or stomach cancer, Dr. Beal pointed out. The new capsule does not give an exact measurement of stomach acidity, i.e., it does not indicate excess acidity, a frequent accompaniment of peptic ulcers. However, it can help a physician decide if further tests are indicated.

So far, 500 tests using the gelatin capsule have been given successfully to medical students, patients and employees at the Center.

With this device, measuring a person for lack of acidity will be as simple as taking a blood pressure reading and can become a routine part of physical examinations, Dr. Beal said.

# # #

(Mailed March 18, 1964)

PHOTO 1

PHOTO 2

In PHOTO 1 a thread, used to measure stomach acidity, is gently and painlessly pulled back from a patient's stomach by Marie Havneros, R.N., of the Palo Alto-Stanford Hospital's employee health service. She takes a quick acidity measurement from messenger Johnny Starr, who is taking the physical examination given each employee at the hospital. PHOTO 2 shows the size of the new capsule used to measure patients for lack of stomach acidity.

- -

To: NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIFORNIA

Re: Photos of stomach acidity capsules

Please send me an 8 x 10 glossy print of _____ PHOTO 1 _____ PHOTO 2

NAME _____ PUBLICATION _____

ADDRESS _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

91-YEAR-OLD PHYSICIAN VOLUNTEERS FOR AGING-FITNESS STUDY

A 91-year-old physician-physiologist whose physical fitness has astonished doctors at Stanford Medical Center is currently "playing guinea pig" in a study that may produce an unmatched record of his aging process.

The man is Dr. Percy Millard Dawson, the oldest elected member of the American Physiological Society still living, and long familiar here for his weekly hikes on the foothills back of the Stanford campus.

Dr. Dawson is unusual in two other respects. He is the best possible example of his life-long preaching and practice, that regular exercise and hygienic habits make for a healthy, lengthy life. Just 50 years ago he first tested his exercise capacity and other physiological functions on a bicycle ergometer; he has checked himself at intervals since, producing an extraordinary record of the effects of aging on his work ability.

Fortunately last year Dr. Dawson and his history came to the attention of two researchers. The two are Dr. Karlman Wasserman, assistant professor of medicine and director of the Pulmonary Function Laboratory of the Stanford University School of Medicine, and Dr. D. B. Dill, long with the Harvard Fatigue Laboratory and now -- at 73 -- a National Research Foundation research scholar in physiology at Indiana University.

Mounting Dr. Dawson once more on the saddle of a bicycle ergometer, they have repeated the tests he started 50 years ago. Among other things they measured his oxygen consumption, heart rate, blood pressure, ventilation, and mechanical efficiency, thus bridging the years with the most complete longitudinal record of one man. Their conclusions in part:

"While there is a decrease of his working capacity during these 50 years, Dr. Dawson's exercise ability at age 91 is comparable to healthy men of 60.

"So far as we know the record of Dr. Dawson is a unique achievement for his age. It is noteworthy that since college days his body weight has been constant, that he has exercised strenuously and that he has never used tobacco."

The investigators further acknowledge that "according to actuarial tables of 1,000 men who were 20 years old in 1893, only 20 are alive today. No one knows how many of these survivors would venture a 30-minute ride on a bicycle."

- more -

Dr. Dawson was born in Montreal in 1873, when Ulysses S. Grant was President of the United States; when Queen Victoria was only halfway through her reign, and when Alexander II ruled Russia.

He played lacrosse and cricket as a youth and was an avid hiker in his search of insects and fossils. He enrolled at McGill University in 1889, but was driven south by recurring winter bouts of bronchitis. He ended at the Johns Hopkins University, where he earned his A.B. and M.D. degrees. For four years he played varsity lacrosse.

"I made training for this an all year process," he recalls now. "I continued such year-round training with more or less strictness all the rest of my life. The result was that, for a person with a sedentary occupation, I could do remarkable feats of endurance -- nothing Olympic, but things out of the ordinary in hiking over the mountains and plains."

After obtaining his M.D. Dawson remained at Hopkins from 1898 to 1909, rising to associate professor. In the latter year settlement work in the slums of Baltimore led him to the conclusion that "while Science is so splendid, Society is so awful; it has to be straightened out or we shall all be lost."

To help, he enrolled at Harvard Divinity School in 1910, and emerged two years later as a Unitarian minister. But the call of physiology was too strong; after a year as a pastor to a church at Ann Arbor, Mich., he joined the faculty of the University of Wisconsin.

There he shifted his interest from physiological research to the physiological aspects of physical education and wrote a book which was once widely used as a college text. It was called The Physiology of Physical Education for Physical Educators and Their Pupils. A chatty sort of book, it was written in simplified spelling, one of Dr. Dawson's long-time enthusiasms.

Later Dr. Dawson taught for a time at Duke and -- as late as 1951, when he was 78 -- at Stanford. He still works a hard lively day at his home in Los Altos (where he lives with his second wife) writing his autobiography, and caring for his garden.

Although 15 years ago he "had found hiking inconvenient and given it up," he resumed it in 1952 when, at a Harvard alumni dinner in Palo Alto, he met Augustus Locke, now 81, a noted geologist.

"In spite of his advantage in age and strength," says Dr. Dawson, "he was willing to humble himself to my speed in hiking, and so we became an inseparable pair. We walk all year once a week on the mountain roads. At first it was eight miles, later only six . . . . The bicycle ride at Stanford was a magnification of these walks."

# # #

NOTE: Dr. Dawson's address is 107 E. Portola Ave., Los Altos
Dr. Locke lives at 1275 San Mateo Dr., Menlo Park

(Mailed March 16, 1964)

PHOTO 1

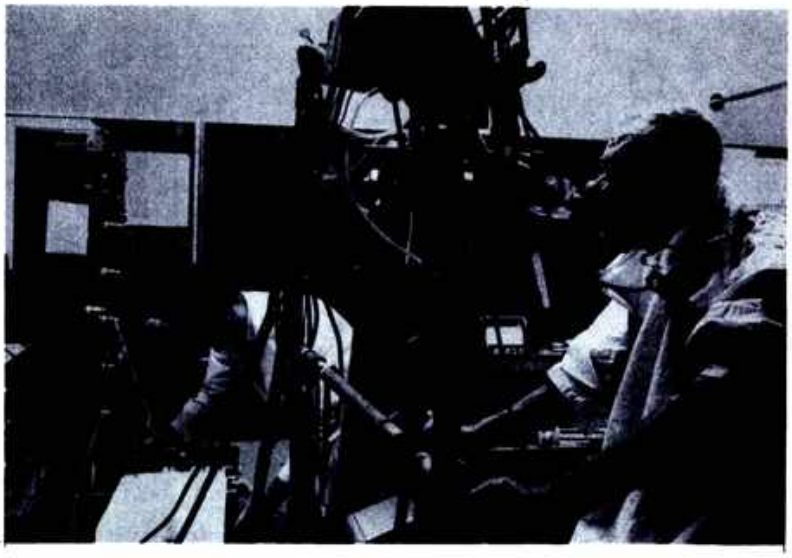

PHOTO 2

PHOTO 1 - Dr. Percy Millard Dawson, 91, (right), and his "hiking pal" noted geologist Augustus Locke, 81, shown during one of their weekly six- to eight-mile walks on the foothills back of the Stanford campus. Dr. Dawson whose physical fitness has astonished doctors at Stanford Medical Center has volunteered for a unique study to determine the effects of aging on his work capacity.

PHOTO 2 - Mounted on the saddle of a bicycle ergometer, Dr. Percy Millard Dawson, a 91-year-old physician-physiologist, is being tested for his exercise capacity and other physiological functions by Anthony L. Van Kessel, research associate in cardiology. The work is being conducted at the Pulmonary Function Laboratory of Stanford University School of Medicine. According to the researchers Dr. Dawson compares physiologically to healthy men of 60.

To: NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIFORNIA

Re: Photos of Aging Fitness Study

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NAME _____ PUBLICATION _____

ADDRESS _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

NOTE TO CITY EDITORS

On Thursday, March 12 Stanford University's School of Law and the Department of Psychiatry of the School of Medicine will present a lecture by the Honorable David L. Bazelon, chief judge of the United States Court of Appeals for the District of Columbia.

He will speak on "The Interface of Law and the Behavioral Sciences" at 8:30 p.m. in Room M106 at Stanford Medical Center. The meeting will be open to faculty and students. Members of the press are also invited.

Judge Bazelon is the author of the opinion of the United States Court of Appeals in Durham v. United States in 1954. In this case he formulated the rule that "an accused is not criminally responsible if his unlawful act was the product of a mental disease or mental defect."

He received the Isaac Ray Award for 1960-61, given annually by the American Psychiatric Association for contributions to the improvement of relations between law and psychiatry.

In 1957 Judge Bazelon received a certificate of commendation from the A.P.A. for bringing to American jurisprudence through his opinions "the concept that when criminal acts are perpetrated as a result of mental illness, the courts will consider the nature of the illness of the accused."

Judge Bazelon is also a lecturer on psychiatry and law at the University of Pennsylvania and a member of the United States Judicial Conference Committee on the Administration of Criminal Law.

If your reporter will come to the information desk in the main lobby of the Stanford Medical Center, 300 Pasteur Drive, Palo Alto, the information clerk will direct him to the lecture room.

# # #

(Mailed March 9, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

NOTE TO EDITORS: This release is about the Stanford Medical Center's Institute for Childhood Aphasia which is supported by a continuing grant from the California Scottish Rite Foundation. The Foundation is holding a state-wide workshop to be followed immediately by its annual meeting Saturday, March 7, at the Sutter Club in Sacramento.

Four-year-old Johnny could neither speak nor understand words when he came to the Stanford Medical Center's Institute for Childhood Aphasia. Seemingly, his only interest in life was sitting in a rocking chair and humming to himself. He had all the symptoms of a mentally retarded child.

Now, only six months later, Johnny is an alert youngster able to associate words with pictures. There is a good chance that by the time he is six he will be able to enter the first grade and compete with other children his age.

Johnny is one of thousands of children in the U.S. with aphasic language disorders. Aphasia is caused by brain damage which impairs a child's ability to speak and, in some cases, to comprehend written and spoken language. Unlike some forms of brain damage, it does not often impair a child's intellectual potential.

The causes of childhood aphasia usually occur prenatally. In many instances, however, aphasia may occur in children under two years of age -- before they have had a chance to establish normal language patterns. Often aphasia is complicated by emotional and social problems. It is therefore frequently necessary to distinguish between aphasic and emotional disturbance.

For these reasons Johnny's case was unusually difficult to identify and evaluate. Johnny's father does a considerable amount of traveling and his mother seems to be unable to deal with "normal" children, much less one with Johnny's problems. In this case the mother has to be counseled while Johnny receives treatment.

The Institute for Childhood Aphasia, a unit of the Division of Speech Pathology and Audiology at Stanford University School of Medicine, was established in September 1962 with a continuing grant from the California Scottish Rite Foundation to investigate such problems. The Institute is headed by Dr. Jon Eisenson.

Objectives of the Institute are to treat severe cases of aphasia, develop special training techniques, train personnel to understand and work with the many manisfestations and problems presented by aphasic children, and counsel parents of such children.

- more -

One of its most important functions is in diagnosis and suggested treatment for children who will not continue in the Institute for training. Children in this category have been referred from the western part of the U.S., Alaska, Canada, and several foreign countries.

The Institute cooperates closely with the Stanford medical school faculty. Each child who comes to the Institute as a patient, or for evaluation, routinely receives a pediatric and a neurological examination, including an EEG, and an audiological examination. He is referred to other departments when necessary (frequently a psychiatric evaluation is indicated).

Staff members at the Institute give each child a battery of diagnostic language and psychological tests to assess his ability to perceive and comprehend, and his intellectual potential. Younger children are accepted as patients with the ultimate aim of placing them in a regular school when they are of school age. The Institute tends to get the most difficult cases -- those frequently turned away as being too difficult for other institutions to manage.

The philosophy of the Institute is that each child must be studied as an individual and therapeutic devices selected and designed for him. Even the diagnostic aspects often need to be adapted in the light of the child's limitations to receive and produce language symbols.

In some cases this is done with games where a child learns to identify objects or pictures with words. In other cases spoken language is initially bypassed and the child is taught to respond to visual materials as a basis for appreciating the relationship between pictures and language symbols. Some of these children are in fact taught the beginnings of reading before they begin to use conventional spoken language.

After communication of some sort is securely established with a child, clinicians may then proceed to teach him to discriminate between sounds and eventually to speak and understand conventional language.

Since the Institute was established, more than 80 children have been evaluated. At present 15 are seen daily by staff clinicians, and others have been given suggestions for treatment by their own doctors or schools. Of those treated to date by the Institute, five have been "discharged" to special or regular classes in public schools.

In addition to Dr. Eisenson, staff members at the Institute are: Dr. Joel Stark, postdoctoral fellow; Mrs. Silvia Cohen, psychologist; Robert Gottsleben, senior clinician; Carol Foster, clinician; Mrs. Jane Gidden, junior clinician; and Mrs. Lilian Clark and Mrs. Maxine Carlson, secretaries. Dr. Thomas Forest is the Institute's representative of the Department of Pediatrics and acts as liaison with the medical faculty.

# # #

(Mailed March 5, 1964)

PHOTO 1

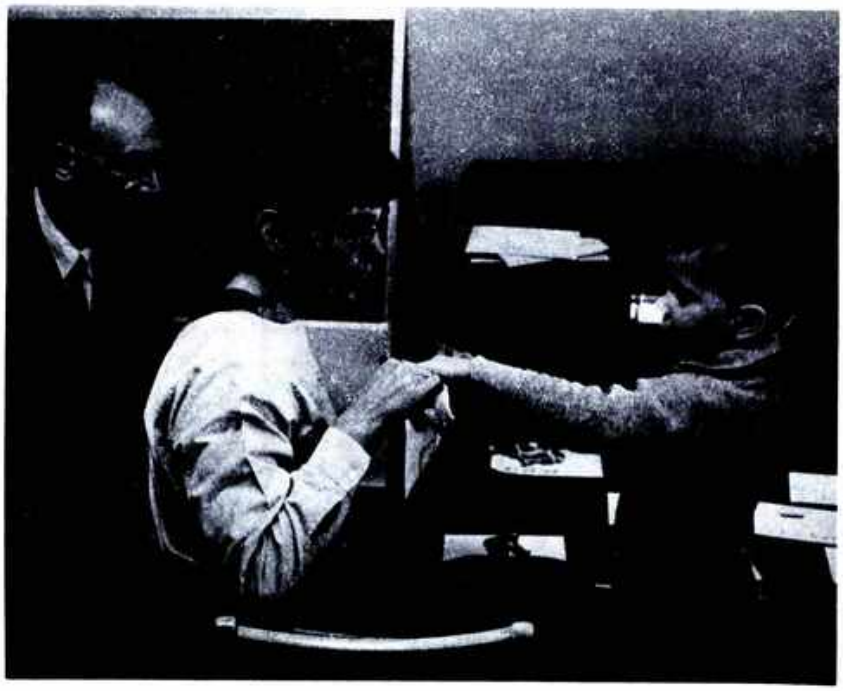

PHOTO 2

PHOTO 1 - Sounds made by animals, easily learned by aphasic children, are taught to a new patient at the Stanford Medical Center's Institute for Childhood Aphasia. The instructor is Robert Gottsleben.

PHOTO 2 - Dr. Jon Eisenson, director of the Stanford Medical Center's Institute for Childhood Aphasia, watches clinician Jane Giddan teach a patient to associate written words with objects. The Institute is supported by a continuing grant from the California Scottish Rite Foundation.

- -

To: NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIFORNIA

Re: Photos of the Stanford Medical Center's Institute for Childhood Aphasia

Please send me an 8 x 10 glossy print of _____ PHOTO 1 _____ PHOTO 2

NAME _____ PUBLICATION _____

ADDRESS _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Pat Black (DA 1-5310)

A new system of obtaining eyes for corneal transplants has been instituted at the Stanford Medical Center.

Called "Eye Alert," it will revolutionize present eye banks, according to Dr. Frank C. Winter, acting head of the Division of Ophthalmology. "Eye Alert" makes it possible to obtain eyes where they are needed and when they are needed.

It works this way: The admitting office, nursing office and emergency room at the Center are alerted to notify the ophthalmologist on duty when a patient dies. If the eyes are in good condition, the ophthalmologist immediately gets in touch with the patient's family and secures permission to use the eyes in transplant surgery. So far, more than half of the families have responded favorably. Usable eyes are available within two days at the most after "Eye Alert" is put into effect.

"Eye Alert" has three main advantages over the present eye banks, Dr. Winter said: fresher corneas are available, a patient doesn't have to wait two or three weeks for his transplant operation, and the procedure is much less expensive. Fresh corneas -- no more than 24 hours old -- are vital to the success of an eye transplant.

Eye banks have provided an invaluable service, Dr. Winter said, but there is no way of knowing when donor eyes will be available, how long it will take to transport them to the Center, and whether they will be usable when they arrive. Eyes have been sent to the Center from as far away as Boston and some of them have not been usable. Corneas cannot be used if they came from persons who had venereal diseases, diseases of the liver, cancer, long periods of weakness or debility, high fevers, burns, or various virus conditions.

So far, more than a dozen successful transplants have been performed at the Center under "Eye Alert" on patients who have come from as far away as Alaska and Peru.

# # #

(Mailed March 3, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

RESEARCH CENTER FOR PREMATURE INFANTS WILL BE FEATURED ON KQED

The life of a premature baby -- a fragile, vulnerable and totally dependent morsel of humanity -- will be explored on Science Reporter Thursday, March 12 at 4:30 and 10 p.m. on KQED-TV (Channel 9) in San Francisco.

Host John Fitch will take television viewers on a rare tour of Stanford Medical Center's research facility for prematurely born babies.

Featured on the half-hour program will be Dr. Norman Kretchmer, executive head of the Department of Pediatrics of Stanford University School of Medicine, and Dr. Philip Sunshine, assistant director of the Research Center for Premature Infants.

They will discuss the purpose of the Center and what basic knowledge investigators hope to glean that can be applied in the saving, care, and feeding of premature babies everywhere.

The Research Center for Premature Infants was opened at Stanford a year ago. It is the first such center established by the National Institutes of Health for the intensive investigation of prematurely born babies.

# # #

(Mailed Monday, March 2, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

One of the many peaceful facets of the nuclear age -- the application of its knowledge and products in the field of medicine -- will be demonstrated in the Stanford Medical Center's exhibit, "A Glimpse at Nuclear Medicine," at the second annual Santa Clara County Health Festival, April 3 through 5.

The festival, sponsored by the San Jose Junior Chamber of Commerce, will be in the County Fairgrounds Pavilion in San Jose.

Stanford's exhibit will describe some of the latest developments which have made possible the use of radioactive isotopes in diagnosis and treatment of disease.

These include improvement of radiation detection equipment, development of radioactive substances that concentrate in particular organs and tissues, and better understanding of the factors necessary to obtain clear pictures that can be interpreted by the physician.

The display will show how radioisotopes are used at Stanford Medical Center to diagnose diseases of the brain, liver, kidney, heart, thyroid, spleen, pancreas, bone and lung; also how these radioactive substances are used to destroy certain cancers, to study the cardiovascular system, circulation of the blood, and to measure body fluids, and as tracers in the study of metabolism.

Another part of the exhibit will emphasize the instruments and methods used to obtain pictures of an organ of the body in which radioactive material has been injected, as well as the precautions taken to eliminate the hazards of patient and personnel exposure to harmful radiation.

Nearly 60 exhibits have been entered at the festival by hospitals and health organizations in Santa Clara County. The festival's goal is to make residents more aware of health problems and to show them all the institutions to which they can turn for help.

Admission to the festival will be free.

# # #

(Mailed April 1, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE MONDAY, APRIL 14, 1964

CHICAGO--A versatile new method for studying the chemical composition of the cells with an intense beam of "laser" light was reported today by researchers from Stanford Medical Center in Palo Alto.

It is an important new application of the laser, an optical device that produces pencil-thin beams of light of immensely high energy.

Dr. Robert C. Rosan, assistant professor of pathology, and Dr. David Glick, head of the division of histochemistry at Stanford University School of Medicine, described the laser's newest application at the 48th annual meeting of the Federation of American Societies for Experimental Biology.

In essence, the intense energy from a laser beam is focused through a microscope on a spot of tissue about two hundredths of an inch in diameter. The tissue is vaporized by the laser at a temperature of 18,000 degrees in about 10 billionths of a second. The vapor is passed into an electric arc and each element in the vapor yields a characteristic spectrum of lines that can be recorded on film.

The lines represent not only each chemical element's "fingerprint" but their intensities may give an estimate of the amount of the element in the tissue, the investigators reported.

The new method was described "as simple and rapid, permitting simultaneous analysis of 10 or more elements in any tissue." The entire procedure takes less than a second and requires very small tissue samples (about one thirty billionth of an ounce). The very small spot of tissue needed permits the analysis to be applied to a few cells of a given type.

- more -

The same analysis, done with conventional test-tube methods, would require 20 to 30 minutes for every single element, the researchers emphasized.

The type of equipment used in the Stanford experiments was the Laser Microprobe with a conventional spectrographic device. It was developed by Frederick Brech of the Jarell-Ash Company at Waltham, Mass. It uses a "ruby laser" in which the beam is produced by exposing a synthetic ruby rod to an intense flash of light.

The two researchers have already applied the new technique in the study of the calcium, iron, cobalt, and zinc, among other elements, in adrenal glands, kidneys, and teeth. They have also applied it to living animals and one volunteer researcher without harm, thus obtaining a direct analysis of skin, tooth, and hair.

Dr. Rosan and Dr. Glick plan to use the laser device to study the effect of the adrenal gland on the distribution of salts and metal in body fluids. These fluids are important in such conditions as stress, cardiovascular disease, and stomach ulcers.

Another area of future investigation is a children's disease known as cystic fibrosis of the pancreas. In this disease, the secretions of the intestine become too thick for normal function, and too much salt is secreted when the child perspires.

The new laser device could be used to find out why the sweat of these children has so much salt, the researchers said.

# # #

(Mailed April 10, 1964)

A new important application of the laser to the study of the chemical composition of the cells has been reported by researchers from Stanford Medical Center. By using the pencil-thin beams of light of immensely high energy from a laser, the Stanford researchers have been able to conduct simultaneous analysis of 10 or more elements in any tissue, including tissue of living animals. The entire process takes less than a second. The device used in the experiments consists of a laser, microscope and spectrograph. Pictured here with the laser is Dr. Robert C. Rosan, assistant professor of pathology, and Miss Mollie Settle, research assistant.

- -

To: NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIFORNIA

Re: Laser/spectrograph

Please send me an 8 x 10 glossy print of photo above.

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ADDRESS _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Dr. Alvin J. Cox, executive head of the Department of Pathology at Stanford University School of Medicine, has asked to be relieved of his administrative responsibilities, Dean Robert H. Alway said today.

Dr. Cox will join the Department of Dermatology as professor of pathology and will devote himself to expanded research activities in skin pathology, particularly as it relates to psoriasis. His new appointment will be effective September 1.

He is noted for his pioneer studies in the fields of stomach pathology, chronic poisoning, and experimental cancer.

Dr. Cox, an alumnus of Stanford University School of Medicine, joined the Medical School faculty in 1931. He served as executive head of the Department of Pathology for the past 23 years. Dr. Cox played a key role as chairman of a 22-man faculty committee which evaluated long-term objectives of Stanford medical teaching, and recommended a new curriculum adopted in 1959.

# # #

(Mailed April 20, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

EDITORS: This story transmitted on Business Wire 4/30/64.

Dr. LeRoy E. Bates, 41, has been appointed executive vice president and director of the Palo Alto-Stanford Hospital, its board of directors announced Thursday.

Dr. Bates, currently director of the Union Memorial Hospital in Baltimore, Md., will assume his new duties in July. He will fill the post vacated by Oliver E. Deehan who resigned as administrator in January.

Gordon P. Smith, president of the board, said that "the Palo Alto-Stanford Hospital is most fortunate to attract as administrator a person of Dr. Bates' knowledge, ability, and professional experience."

Selection of the new administrator was made after a nationwide search by the board.

Dr. Bates was born in Charleston, S. C. He received his Bachelor of Science degree from the College of Charleston, his medical degree from the Medical College of South Carolina, and a Master of Public Health degree from the School of Public Health of the University of California at Berkeley.

Previously, Dr. Bates served as a medical officer with the U.S. Public Health Service and the World Health Organization, and did research in tuberculosis in India, Denmark and Egypt.

Before joining the Union Memorial Hospital, Dr. Bates held positions as secretary of the Council on Professional Practice and assistant director of the American Hospital Association in Chicago, and as assistant director in charge of outpatient services at Johns Hopkins Hospital in Baltimore.

He and his wife Judith have 6 children. She is formerly of Bakersville, Calif.

# # #

(Mailed April 30, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

The John A. Hartford Foundation of New York has made a three-year grant of $318,590 to the Stanford University School of Medicine to continue its intensive studies of diseases of hereditary and developmental origin, it was announced today by Ralph W. Burger, president of the Foundation.

The studies were launched at Stanford in 1960 with an initial Hartford Foundation grant of $395,028. They are under the direction of the Department of Pediatrics.

Purpose of the multi-discipline investigations is to obtain information useful in the understanding and treatment of hereditary diseases whose cause and cure are unknown.

Crippling diseases affecting bones and connective tissues, intestinal disorders, congenital heart defects, blood disorders, neuromuscular diseases as well as some aspects of mental retardation will be studied in children and laboratory animals.

In addition, studies will be conducted to evaluate the effect of certain drugs and vitamins on the development of the unborn offspring. The tragic affects of the drug Thalidomide administered to pregnant women are now well-known. But there are other drugs which may affect infants in terms of their anatomical and biochemical development.

Dr. Norman Kretchmer, professor of pediatrics and executive head of the department at Stanford, is the principal investigator. He is assisted by several other faculty members including Dr. William van B. Robertson, Dr. Luigi Luzzatti, Dr. Herbert Schwartz, Dr. Kenneth K. Tsuboi, Dr. Paul H. Altrocchi, Dr. Guy M. McKhann, Dr. Robert E. Greenberg, Dr. Irwin A. Schafer, and Dr. Norman J. Sissman.

- more -

"The generous Hartford grant will strengthen further our committment to the study of growth and development," Dr. Kretchmer said. "We feel more strongly than ever that this approach offers the possibility of a maximum contribution to child health."

The proposed studies in the next three years will focus on problems of food digestion and absorption using animals as models for sick babies.

Body processes of breaking down complex foods into simple ones and synthesizing them into complex tissues differ in early life from those of the mature individual, Dr. Kretchmer explained. Abnormalities in these processes in some children lead to serious difficulties in later life.

For example, some of the muscular dystrophies are associated with a loss of potassium and can be treated simply. Most diseases of the blood in children involve abnormal production of hemoglobin, the substance within the red cells which transports oxygen to the lungs. Many of the diarrheas in infants are associated with their inability to digest and utilize carbohydrates and fats.

Dr. Kretchmer hopes that findings from this work will also be applicable to premature babies. About eight per cent of all babies born in America are born too soon. These babies are different in chemistry from normal full-term babies. They show intolerance to fats and have different protein needs.

Because they are so different they can't even handle the favorable, controlled environment of a nursery. Many of these babies die of respiratory problems or infection.

"We want to know what a premature baby is in terms of its biochemical development," Dr. Kretchmer said. "This way we can give these babies optimal care and, hopefully, increase their survival chances."

# # #

(Mailed May 25, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A study of sea lion pups that may lead to development of satisfactory formulas for babies suffering from severe diarrhea was reported today by two Stanford Medical School physicians.

The physicians are Dr. Philip Sunshine, instructor in pediatrics, and Dr. Norman Kretchmer, executive head of the Department of Pediatrics. Their report appears in the current issue of SCIENCE.

For the past year the two pediatricians studied pups of California and Stellar sea lions and found that these two species have no intestinal enzymes necessary to digest and utilize lactose, the sugar which is present in milk.

"If these animals were given lactose, they developed severe diarrhea followed by loss of weight," the two physicians reported. "These symptoms were identical to those found in human babies who could not tolerate milk sugar."

No mammal had been found without lactose in its milk until a year ago. Two researchers from the Scripps Institution of Oceanography of the University of California at San Diego reported that the milk of the California sea lion does not contain the common sugar.

Further reports from the San Diego Zoo Hospital and Laboratory showed that all attempts to feed infant sea lions or walruses with cow's milk met with disaster; these animals developed severe diarrhea.

The Stanford pediatricians have been working on the problem of lactose metabolism by infant animals as part of a large-scale investigation of diseases of hereditary and developmental origin, with support from the John A. Hartford Foundation of New York.

- more -

Hoping that by studying sea lion pups they would find a method of treating sick babies with this specific diarrhea, a team consisting of Dr. Kretchmer, Dr. Sunshine, Dr. William van Robertson, Dr. Kenneth Tsuboi, and Dr. Robert E. Greenberg last summer sailed on a 70-foot vessel of the Scripps Institution of Oceanography to the Coronado Islands off the coast of Mexico.

On reaching the islands they found many sea lion pups in a rocky cove basking in the sun. They captured three pups between one and two months of age and weighing from 19 to 30 pounds.

At the San Diego Zoo, the pups were placed in a cage equipped with a pool. Since the pups had been taken from their mothers before natural weaning, an attempt was made to simulate sea lion milk using several types of sugar-free basic diets together with vitamin supplements. Later the animals were flown to Stanford Medical Center and placed under the supervision of the Animal Care Facility.

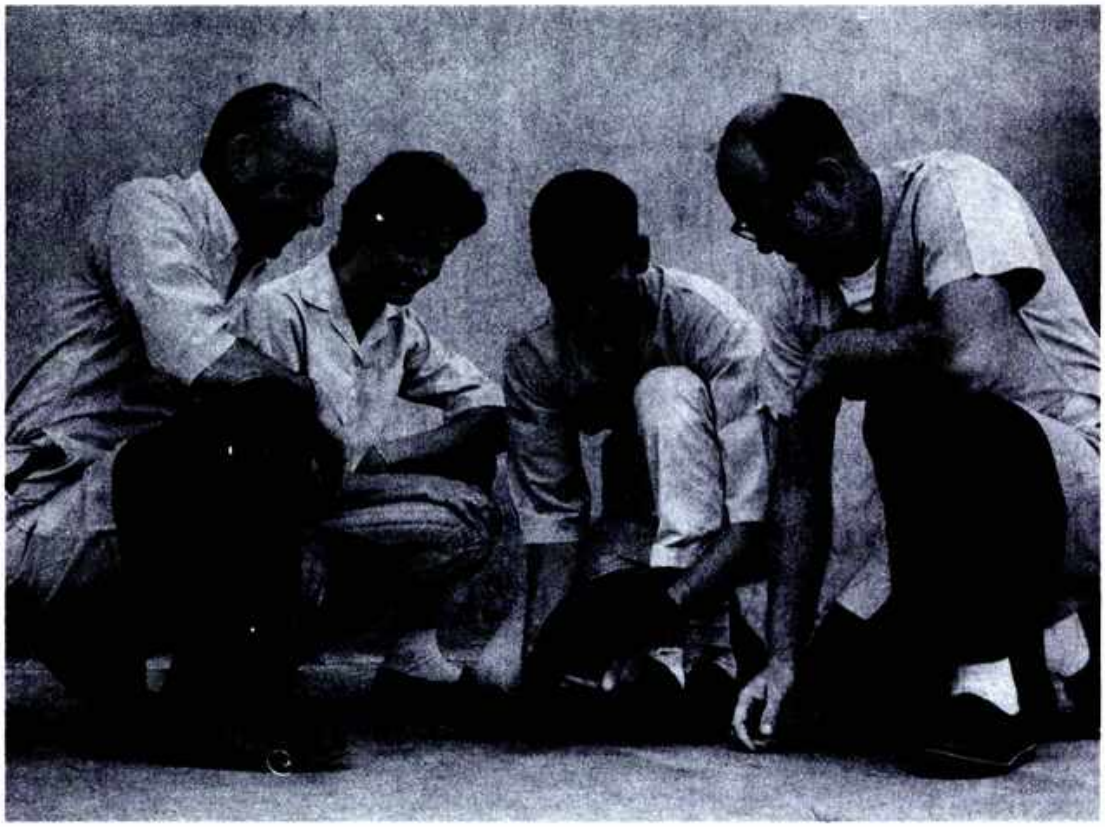
As the pups refused solid food and rejected any attempts to be fed with a bottle and nipple, a stomach tube had to be passed three times a day to maintain adequate nutrition. The investigators added various sugars to this synthetic diet and observed physiological and biochemical changes.

Dr. Kretchmer and Dr. Sunshine concluded that pups of the California and Stellar sea lions can be used as models for studying sick human infants with hereditary intolerance to some sugars.

With this knowledge they hope to develop satisfactory formulas for feeding infants who have difficulty digesting and absorbing the sugar found in milk.

# # #

(Mailed May 20, 1964)



Dr. Norman Kretchmer, left, head of the Department of Pediatrics of Stanford University School of Medicine, and Dr. Philip Sunshine, right, instructor in pediatrics, were assisted in their studies of California sea lions by two assistants at San Diego Zoo Hospital and Laboratory.

To: NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Sea Lions

Please send me an 8x10 glossy print of photo above.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

NOTE TO EDITORS: This story was prepared from information provided by the California Museum of Science and Industry and the California Museum Foundation at Los Angeles. It is for release after 10 p.m. Thursday, May 21, 1964. For further information concerning the award presentation, call Mr. Bud Hopps at Los Angeles, telephone RIchmond 9-0101.

Spyros Andreopoulos

- - -

A Stanford biochemist whose research has contributed toward understanding and ultimate control of heredity was honored last night as California Scientist of the Year.

Dr. Paul Berg, 38, professor of biochemistry at Stanford University School of Medicine, received his award from the California Museum of Science and Industry at Los Angeles at a banquet in the Beverly-Hilton Hotel.

Dr. Berg received an award of $5,000. Presentation was made by Dr. Arthur Kornberg, Stanford Nobel laureate and a member of the jury that selected the science category winner.

Honored also was Charles B. "Tex" Thornton, 50, of Los Angeles, board chairman of Litton Industries, Inc. He was named California Industrialist of the Year for his contribution to the State's economic and cultural development.

Dr. Berg is the third Stanford professor to win the prestigious award and the first biochemist. The other two are Dr. Robert Hofstadter and Dr. William M. Fairbank, both professors of physics.

Dr. Berg was selected for his accomplishment in work concerned with decoding the genetic messages or patterns which determine how living cells make proteins.

- more -

As more and more diseases have been shown to result from defective genes or aberrations in this translation process, it is believed that some forms of cancer might ultimately be explained in terms of such individual genetic patterns.

A full understanding of this process as sought by Dr. Berg and his research team, is felt to be essential for eventual prevention, treatment and hopefully cure of such hereditary diseases.

A native of Brooklyn, New York, Dr. Berg is the son of a Russian immigrant who became a fur manufacturer in New York City. His first interest in science sprang from experiments he performed as member of a Brooklyn high school science club.

Dr. Berg obtained his B. S. degree from Pennsylvania State College, his doctorate from Western Reserve University, and his postdoctoral training at the Institute of Cytophysiology in Copenhagen and at Washington University at St. Louis, Mo.

The awards are sponsored annually by the California Museum of Science and Industry in Los Angeles and its educational affiliate the California Museum Foundation, to provide public recognition to individuals who have made the most noteworthy contribution to the advancement of knowledge and the development of the State's economy.

# # #

(Mailed May 20, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE WEDNESDAY, MAY 6, 1964

Dr. William C. Dement, 35, associate professor of psychiatry at Stanford University School of Medicine, has received the $1,500 Hofheimer Prize for outstanding research accomplishment in psychiatry.

Announcement of the award was made by the American Psychiatric Association holding its 120th annual meeting in Los Angeles.

Dr. Dement was awarded the prize for his work on the nature and function of sleep and dreaming, a line of research he has pursued since he was a medical student at the University of Chicago. In 1953 he began his work there in the physiological laboratory of Prof. Nathaniel Kleitman who confirmed the occurrence of rapid eye movements during sleep.

Dr. Dement participated in these studies and received his Ph.D. in physiology in 1957. He then began to work independently, chiefly as a Research Fellow at Mt. Sinai Hospital in New York from 1958 to 1962, and since 1963 at Stanford.

After further research to confirm and evaluate the relationship of dreaming to the presence of rapid eye movements during sleep, he explored many other aspects of sleep physiology. He established that rapid eye movements occurred in discrete periods during sleep and that these movements are associated with other characteristic physiological changes.

From these studies Dr. Dement formulated the concept of "two kinds of sleep." One kind is the rapid eye movement or dreaming period, which shows intense activation of the central nervous system and other attributes which contrast it paradoxically with the common notion of the nature of sleep.

- more -

His work made it possible to study a number of properties of dreaming, such as the time of occurrence and the number of dream periods. He found that in humans, dreaming occurs nightly approximately four to six times for 20-minute periods each, and that dreaming occupies about 20 per cent of total sleeping time.

Dr. Dement also studied cats and found similarities -- rapid eye movements and "two kinds of sleep." The use of cats made it possible to carry out studies of a more experimental type on the physiological basis of dreaming.

More recently, Dr. Dement and his associates have attempted to study the function of dreaming sleep by depriving human and animal subjects of this phase of sleep. They have a hunch that the rapid eye movement or dreaming sleep may be necessary and vital for human beings. The study may shed light on the role of loss of dreaming sleep, through a number of possible mechanisms, in the development of mental illness.

Dr. Dement was born in Walla Walla, Washington. He received his B.S. degree at the University of Washington in 1951. After graduation from medical school in 1955 he was granted a U.S. Public Health Service Postdoctoral Fellowship, and a Foundations' Fund for Research in Psychiatry Fellowship in 1958. He is married and has three children.

The APA award is named in memory of Lieut. Lester N. Hofheimer who died in action in World War II and may be given annually to a research worker or group. The Hofheimer Prize Board selected this year's winner from 35 applications.

# # #

(Mailed May 5, 1964)

- 1 Copy only -

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

NOTE TO EDITORS: This story was transmitted on Business Wire 6/23/64

A study showing significant gains in the treatment of larynx cancer by X-Ray therapy was reported Tuesday at the American Medical Association convention in San Francisco.

Three Stanford Medical School physicians said they were treating the disease with large doses of radiation from a medical linear accelerator, with an X-Ray beam having a peak energy of about six million electron volts.

The physicians were Dr. Malcolm A. Bagshaw, associate professor of radiology, Dr. Michel Schlienger, visiting radiotherapist from the Curie Foundation in Paris, and Dr. Henry S. Kaplan, executive head of the department of radiology.

"The overall results in treatment of larynx cancer confined to the vocal cord were excellent," the physicians said.

Of 51 patients admitted to the Stanford Medical Center, 45 were successfully treated by radiation and four patients had laryngectomies after failure of radiation therapy. The patients who were treated by radiation have retained full use of their voice. Only two patients were not cured of the disease.

"Thus the outlook for survival is virtually 100 per cent and survival with preservation of the voice nearly 90 per cent," the doctors said.

The average radiation dose used by the Stanford team was 6000 rads in six weeks -- considerably higher from conventional standards.

- more -

Cancer of the larynx occurs in approximately two per cent of the population. Its cause is unknown, although it occurs somewhat more frequently among heavy smokers.

Unlike cancers which can be seen, cancer of the voice box cannot be felt without a special examination. But it does give a sign of its presence which can be heard. The sign is hoarseness. Fortunately, in most cases this warning note is sounded early in the development of the growth. The high rate of curability makes early diagnosis of unquestionable value.

The Stanford physicians, in somewhat less optimistic tone, noted that "there is room for improvement in the cure rates of patients with more advanced cancers of the larynx which are not confined to the vocal cord. These remain an unsolved problem to the radiotherapist as well as to the surgeon and should be explored."

They pointed out that patients were treated successfully by surgery after radiation therapy failed. But they added, "Successful irradiation of patients who have local recurrence following laryngectomy is virtually impossible."

# # #

(Mailed June 23, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR PM RELEASE, WEDNESDAY, JUNE 24, 1964

Note to Editors: This paper will be presented Wednesday at 2 p.m. in the Van Ness Masonic Temple, third floor auditorium.

A new method of detecting and treating rejection of transplanted kidneys has kept dogs alive for more than 75 days, a Stanford Medical School research team reported today.

The technique enables doctors to predict when the rejection of the grafted or borrowed organ will begin and provides a reliable guide for controlling the dosage of immunosuppressive drugs.

Authors of the report were Dr. Samuel L. Kountz, Dr. Donald R. Laub, residents in surgery, and Dr. Roy Cohn, professor of surgery. They presented their findings at the annual convention of the American Medical Association in San Francisco.

"Animals treated by the new method," the researchers said, "had longer survivals, very little toxicity, and infections responded well to antibiotic treatment."

Monitoring of the rejection process and the effectiveness of immunosuppressive drugs has been one of the major obstacles in the practical transplantation of organs.

Before the method was developed, the average survival rate of dogs with borrowed kidneys was 40 days. More than 40 per cent of them died from overdosage of the immunosuppressive drugs while the transplanted kidney was still functioning.

- more -

The researchers explained that the technique enables them to obtain measurements of the kidney blood supply during the functional period of the graft in the experimental animals. Comparing simultaneously their new techniques to other currently used methods, they found that a fall in blood flow was the first detectable signal that the rejection mechanism was taking place.

At this point they can inject drugs which suppress the rejection mechanism by restoring the blood flow. Then the successive threatened rejections "come on slower and are easier to handle," the doctors said.

Present plans at Stanford are to continue to refine the approach to the use of these drugs through animal experiments in order to pinpoint which drugs, how much of them, and when they should be given for saving the graft.

The investigators said: "If the solution of the clinical problem in kidney transplantation resides in immunosuppressive drug therapy rather than a biological maneuver to induce specific tolerance, then considerably more information must be obtained as to specific drugs, their dosage, and optimal time of administration."

The idea for the new technique was inspired mainly by a discovery reported by Dr. Kountz at the American College of Cardiology earlier this year and for which he was honored as "outstanding young investigator of 1964."

Dr. Kountz who spent a year in the Medical School of London as a Bank of America-Giannini Fellow in surgery, showed that the rejection mechanism was operating at the level of cells.

When a kidney was transplanted from one dog to another, he and his associates watched the canine patients carefully expecting the blood supply to become normal. Instead, there was a gradual but constant decline in the blood supply.

Looking for a reason, Dr. Kountz put kidney tissue under an electron microscope, and was able to spot the cause -- immature plasma cells from the blood of the host animal.

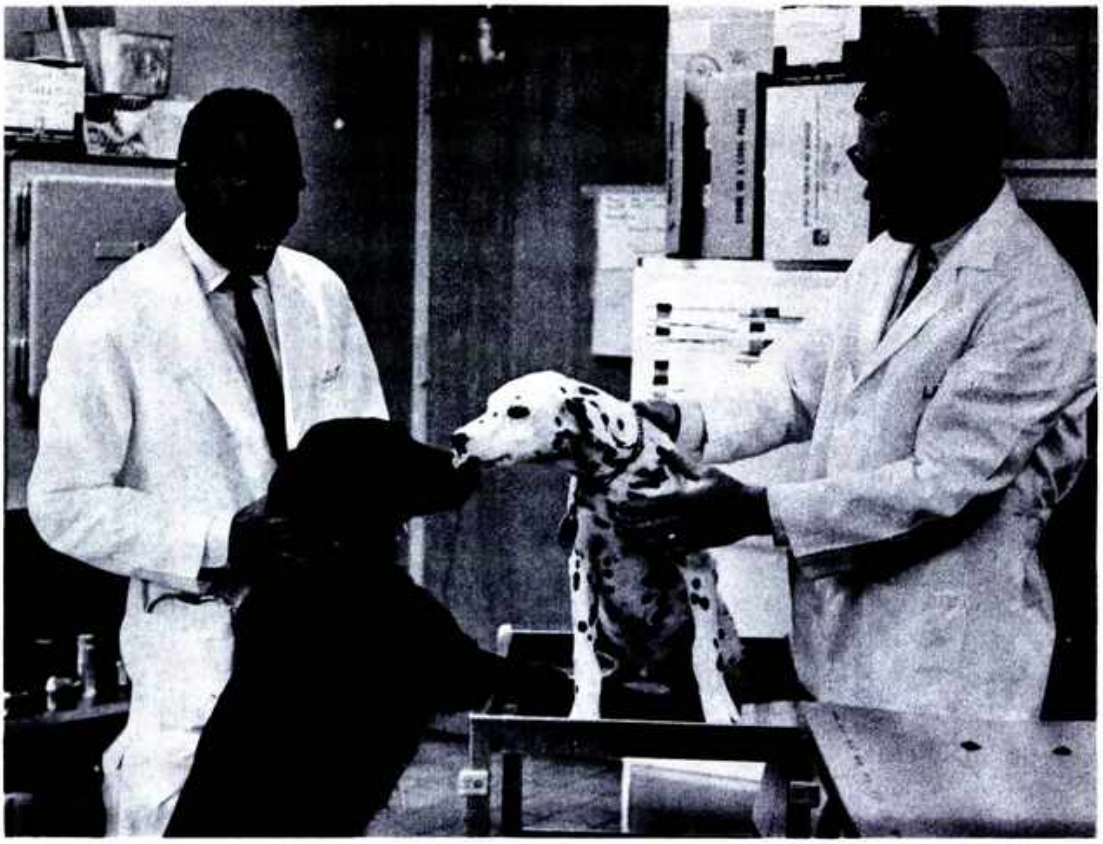
These immature blood cells had closed in and attacked the cells lining the small blood vessels of the grafted kidney. After contact, the lining cells appeared to curl up and become isolated. Soon the blood vessels of the kidney were blocked by a mass of blood cells, chocking off the blood supply.

From there on the kidney died from lack of blood-supplied oxygen.

Now, with the newest pinpoint use of immunosuppressive drugs, rejection in the kidney in its early stages can be temporarily reversed.

# # #

(Mailed June 22 , 1964)



Dr. Samuel L. Kountz (left) and Dr. Donald R. Laub of Stanford Medical Center, view the successful results of a kidney transplant operation they performed on two dogs last September. The dogs are alive because of a new method developed by Dr. Kountz and his associates. It enables them to predict when the rejection of the borrowed organ will begin and provides a more accurate way of controlling the dosage of immunosuppresive drugs.

To: News Bureau, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Kidney Transplantation

Please send me an 8x10 glossy print of photo above

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Ehman (DA 1-5310)

A Stanford professor and nationally known expert on childhood aphasia has been named a "Captain of Achievement" by the American Academy of Achievement at Oceanside, Calif.

Dr. Jon Eisenson, professor of speech pathology and audiology at Stanford University School of Medicine, will receive individual recognition at a banquet at Camp Pendleton June 27.

Dr. Eisenson will receive the achievement award for his work as director and founder of the Stanford Medical Center's Institute for Childhood Aphasia. Aphasia is caused by brain damage which impairs a child's ability to speak and often to comprehend written and spoken language. The Institute, supported by a continuing grant from the California Scottish Rite Foundation, has made it possible for Dr. Eisenson and his staff to experiment and develop techniques and procedures for diagnosis and treatment of aphasic language disorders in children.

The American Academy of Achievement is a nonprofit organization founded for the purpose of honoring annually Americans who have made outstanding contributions to the sciences, the arts, the professions, business, education and public service.

In addition to his duties at Stanford, Dr. Eisenson is chairman of the education, advisory and research committee of the United Cerebral Palsy Association, and a member of its medical and scientific committee.

Two books he has written, related to his specialty, have been published within the past year -- PSYCHOLOGY OF COMMUNICATIONS and BASIC SPEECH.

# # #

(Mailed June 22, 1964)

STANFORD UNIVERSITY NEWS SERVICE
FOR INFORMATION CONTACT: Jeff Littleboy

STANFORD, CALIFORNIA
DAvenport 1-2300, Ext. 2558

Southern California editors may contact Stanford Regional Office, 621 S. Hope St., Los Angeles 17, MAdison 7-0653

EDITORS: The following story may be of interest to your sports desk. Picture available on request.

FOR IMMEDIATE RELEASE

STANFORD - Lowell Patrick Wilson, 19, of 1230 Manu-mele St., Kailua, Hawaii, will register for summer school at Stanford on Monday (JUNE 22).

What makes Lowell P. Wilson different from the other 3600 summer students at Stanford is that he is paralyzed--probably permanently--from the neck down. He broke his spine in a dummy-tackling accident during spring football practice May 2, 1963.

From here on out, Lowell's physical world will be bounded by a rocking bed to supplement his breathing, a motorized wheel chair to get around in, and round-the-clock care by male nurses.

But nevertheless, he will attend a class in Shakespeare.

His mental world is something else again. A strong-minded optimist, Lowell still doesn't think of himself as a cripple.

At the time of his accident, Lowell's injuries were so severe he might have died on the field had not ambulance service been available immediately.

Through the joint efforts of the Student Health Service, rehabilitation services, and 11 other services at Palo Alto-Stanford Hospital, Lowell can now move his head and neck and breathe without help.

He has taught himself to type, using a rubber-tipped stick. Rolling his head to and fro operates a page-turner for reading books and switches on and off a tape recorder for dictation.

Lowell's injury, which fractured his spine between the fourth and fifth vertebrae in his neck, destroyed his breathing capacity in addition to paralyzing all muscular activity below his neck.

Dr. Allen Russell, a fellow in the Division of Rehabilitation Medicine at the Stanford Medical School, supervised Lowell's manful comeback efforts.

Dr. Russell points out that patients with fractures in this area generally succumb to breathing difficulties either from muscle failure or from respiratory illnesses.

(more)

6/21/64

The combined efforts of the hospital's intensive care unit, the respiratory unit, and rehabilitation staffs brought Lowell to the point where after 13½ months, he no longer needs continuous mechanical assistance from a respirator machine to breathe.

He now supplements his own slight breathing capacity with a method of swallowing air and by regular periods in a rocking bed, which has been set up in a former faculty resident's house attached to Wilbur Hall, freshman dormitory.

The bed pushes and pulls his abdominal organs against his diaphragm to move air in and out of his lungs.

Two student aides will maintain the physical therapy which keeps his joints movable and his muscles toned up.

"Physicians expect no further improvement in his physical condition," Dr. Russell says, "but Lowell will become more independent as he learns to use new devices such as an electric wheel chair and dictating devices."

So Lowell Wilson of Kailua, Hawaii, has brought himself back toward recovery with his fighting heart and the help of medical science.

When he came to Stanford in the fall of 1962, Lowell was an outstanding guard on the frosh football team. He was making a strong bid for a lineman's spot on the '63 varsity when fate decreed a one-in-a-million accident.

As a prep star at Kamehameha School, he was an all-state footballer, vice-president of the student body, editor of the school paper, active in debate and dramatics, a chess buff, and a Sunday School teacher.

When he registered at Stanford, it was on a straight academic scholarship with a political science major as a basis for Law School.

The University will support Lowell's efforts to continue his education at Stanford, including necessary equipment, living expenses, and tuition, for a reasonable period as long as he is able to maintain a satisfactory level of academic performance.

If young Wilson has anything to say about it, he'll make it.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE TUESDAY, JUNE 23, 1964

Investigators at Stanford University School of Medicine and the Palo Alto Medical Research Foundation have used a laser photocoagulator to treat 25 patients with a variety of retinal diseases.

Reporting these results today at the annual convention of the American Medical Association in San Francisco, Dr. Milton Flocks and Dr. H. Christian Zweng said:

"Laser energy has been used for photocoagulation of ocular tissues in animals and man. It has unique properties which promise to extend its usefulness. It is still, however, in the experimental stage."

Dr. Flocks and Dr. Zweng are practicing ophthalmologists in Palo Alto. They carried on the research work with the laser photocoagulator under U.S. Public Health Service grants to the Palo Alto Medical Research Foundation and Stanford University School of Medicine. Both physicians are Foundation research associates and members of the clinical faculty at Stanford Medical School.

The investigators used an experimental laser coagulator developed in association with Dr. Narinder S. Kapany, Norman Peppers and Norman Silbertrust of Optics Technology, Inc., at Belmont, Calif. The device consists of an ophthalmoscope with a hand-held ruby laser which fires powerful bursts of light of short duration (500 microseconds).

When aimed at the eye, the intense laser light will pass through transparent tissue and liquid and can be used to treat retinal defects.

- more -

The light beam has been particularly effective for prevention of retinal detachment. In cases in which holes or tears appear in the retina they can be "spot welded" back in place by the light beam before a retinal detachment takes place.

Before its application on humans, the laser coagulator had been extensively tested on rabbits, cats and monkeys in the Stanford Division of Ophthalmology, the physicians said.

Of the patients treated, 23 had retinal photocoagulation and two had iris photocoagulation. All but one patient were treated as outpatients. Except for heavy work they were allowed to resume normal activities after treatment.

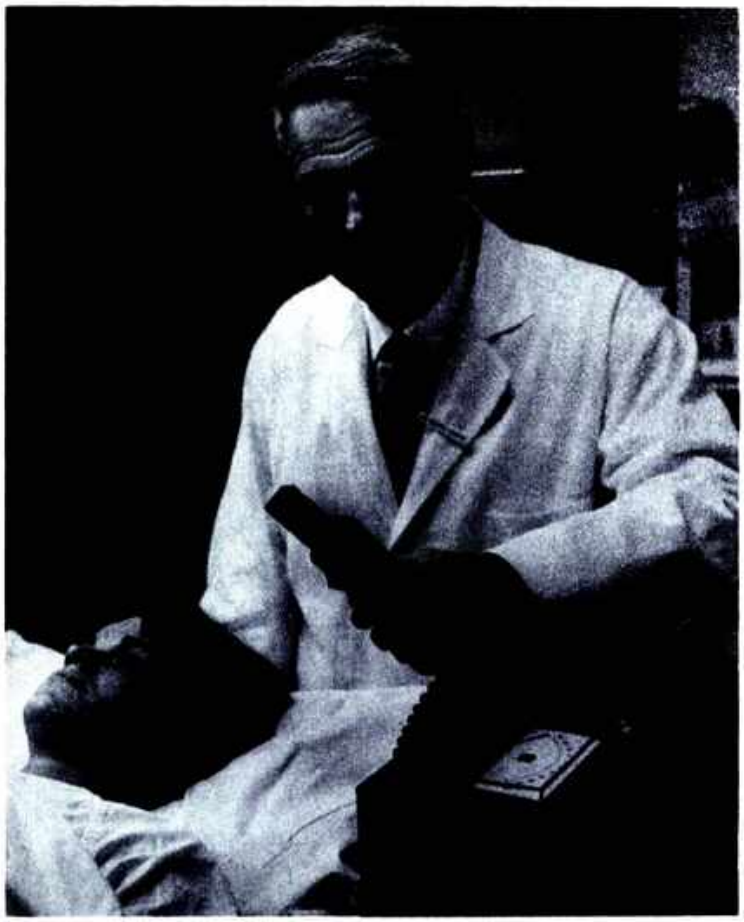
The patients directed their gaze in the position which offered the ophthalmologist the best view of the area to be treated. The area was then treated with multiple exposures to the laser. No anesthesia was needed. The eyes were not patched after treatment.

"The patients experienced remarkably little discomfort," the investigators said. "The flash of light occurred so rapidly they were hardly aware of it. Some stated they were bothered by the slight 'popping' noise of the laser burst more than the light."

The physicians reported that in the patients who have been treated no major complications have been encountered during the past nine months. However, they added, "the patients are too few, and the follow-up too short to be certain that laser coagulation will prove to be good enough to be used in preference to other modes of therapy."

# # #

(Mailed June 18, 1964)



Dr. Milton Flocks, Palo Alto ophthalmologist and member of the clinical faculty at Stanford Medical School, prepares to begin laser photocoagulation treatment on a patient. Dr. Flocks and Dr. H. Christian Zweng, also a Palo Alto ophthalmologist, told the American Medical Association convention in San Francisco that laser energy used for treatment of retinal diseases has unique properties which promise to extend its usefulness.

To: News Bureau, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Laser Photocoagulator

Please send me an 8x10 glossy print of photo above.

NAME _____ PUBLICATION _____

ADDRESS _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Ehman (DA 1-5310)

Dr. Sidney Raffel, 52, executive head of the Department of Microbiology, has been appointed acting dean of the Stanford University School of Medicine, acting president Frederick E. Terman announced today. His appointment is effective ~~immediately~~. July 15, 1964

Dr. Raffel will replace Dean Robert H. Alway who asked to be relieved of his administrative duties last December. Dr. Raffel will remain in his new capacity until a new dean is selected.

Dr. Raffel is noted for his research in immunology, specifically for work on tuberculosis and allergic disease. He has also contributed to developments in the use of X-ray in tissue grafting and transplantation.

He is the author of a textbook entitled IMMUNITY and has written numerous papers and pamphlets. He is a member of various honorary and professional societies, was a Guggenheim Fellow in 1950-51, and he has served on committees of the National Institutes of Health, the National Tuberculosis Association and as editor of various professional journals.

Dr. Raffel is a graduate of Johns Hopkins University where he also received his doctorate in science. He earned his medical degree from Stanford University School of Medicine and has been a member of the Stanford University faculty for 29 years.

He and his wife reside at 770 Santa Ynez, Stanford. They are the parents of five daughters.

# # #

6/18/64

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR PM RELEASE, MONDAY, JUNE 22, 1964

The hazards of collecting and eating wild mushrooms were detailed today by four Stanford physicians at the annual convention of the American Medical Association in San Francisco.

Dr. Donald C. Harrison, Dr. Cecil H. Coggins, Dr. Frederick H. Welland and Dr. Sherwin Nelson described the effects of mushroom poisoning in five patients treated in the Palo Alto-Stanford Hospital earlier this year.

At first, the victims suffered from nausea, vomiting, abdominal pain and diarrhea, sometimes resembling cholera in severity, the doctors reported. After a period of apparent improvement, the patients began to show signs of liver, kidney, and central nervous system damage, with life threatening consequences.

Evidence of the effects of the mushroom poison on the patients' nervous system included confusion, coma, visual disturbances and abnormal reflexes, the doctors said.

The patients -- two men and three women -- had gathered and eaten mushrooms of the *Amanita verna* and *Amanita phalloides* families. Both species grow in abundance in the San Francisco Bay Area after the fall rains and through the winter and spring.

Four of the victims have subsequently recovered. One patient died from severe liver and kidney damage, the doctors reported.

- more -

"Although we have described three distinct phases in the clinical course of mushroom poisoning," the physicians said, "all may blend into a single picture of vital liver and kidney cell destruction with death occurring at any time in more severe cases."

The physicians noted that there is no specific therapy for mushroom poisoning. The use of antiphalloidin antiserum and cortisone in the treatment of patients has not gained widespread acceptance. "In the absence of specific treatment careful supportive therapy is all that can be offered," they said.

The species Amanita phalloides, Amanita muscaria and Amanita verna are among the leading causes of mushroom poisoning in the United States, according to the Stanford physicians.

"Amateur mycologists in recent articles in national magazines have given the impression that wild mushrooms can be casually gathered and safely eaten," they said. "It is generally recognized by botanists that while some species may easily be identified, many harmless mushrooms can be distinguished from the Amanita varieties only with difficulty."

Complicating further the problem of identification is the fact that the toxin content within various species of mushrooms may vary widely with the seasons, environment, and age of the mushrooms.

"The mushroom which is harmless at one time and place might be lethal at another," the doctors said.

# # #

(Mailed June 17, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

NOTE TO EDITORS: Story was relayed by phone June 6, 1964.

Dr. Lowell A. Rantz, professor of medicine at Stanford University School of Medicine and noted authority on bacterial diseases and their treatment, died Friday in Boston where he was attending a medical meeting. He was 52.

With Dr. Rantz at the time was Dr. Kenneth L. Vosti, assistant professor of medicine at Stanford Medical School.

Dr. Rantz suffered a heart attack and was dead on arrival at Massachusetts Memorial Hospital.

Dr. Robert H. Alway, dean of Stanford Medical School commented: "We have lost a distinguished professor who, as clinician, teacher and researcher, contributed immesurably to furthering the highest aims of the School of Medicine."

Dr. Rantz's roots in Stanford were deep. Born in Placerville, Calif., he received his A.B. degree from Stanford University in 1932, and his medical degree from Stanford Medical School in 1936. After spending two years as a research fellow in medicine at Harvard Thorndike Memorial Laboratory, Dr. Rantz joined Stanford University and grew professionally with it. In 1958 he was appointed associate dean of the School of Medicine.

Much of his research work at Stanford has been concentrated on rheumatic fever. He was one of three doctors who discovered the significant fact that rheumatic fever, one of the nation's great cripplers, is always preceded by hemolytic streptococcal infections.

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Dr. Rantz was a member of many professional and scientific organizations, including the American Association of Physicians, the American Society for Clinical Investigation, and the American Association for the Advancement of Science. He was recently elected president of the Western Association of Physicians.

He also served on many committees of the American and California Heart Associations, and was president of the San Francisco Heart Association from 1950 to 1952.

In Palo Alto Dr. Rantz leaves his immediate family -- his wife Helen, and daughter, Elizabeth -- and many friends and colleagues.

Funeral services will be Tuesday at 2 p.m. at Roller and Hapgood Funeral home, 980 Middlefield Road in Palo Alto. The family requests that instead of flowers, contributions be made to the Lowell A. Rantz Memorial Fund at Stanford University School of Medicine.

# # #

(Mailed June 8, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Ehman (DA 1-5310)

Two Stanford Medical School professors will retire this summer after more than 50 years of combined service.

The two are Dr. George S. Johnson, professor of psychiatry, and Dr. William W. Greulich, professor of anatomy. Each in his own field has contributed to a broad scope of activities.

A graduate of the University of Nebraska, Dr. Johnson came to San Francisco in 1933 and became head of the psychiatric services at Stanford Lane Hospital. He served on the board of directors of the Community Chest and was chairman of the San Francisco Health Council. Many existing welfare agencies, including the well-known Family Service Agency, were organized during his tenure.

A concern with human problems led to his appointment by the U.S. attorney general as a consultant to Alcatraz Federal penitentiary. He also served on committees appointed by a succession of state governors to study psychiatric problems in the department of mental hygiene including the committee for the improvement of California's state hospitals.

A five-year grant from the March of Dimes to the Medical School was responsible for an enlarged rehabilitation program for victims of polio and other disabled patients in San Francisco. Dr. Johnson served on the committee which developed the program.

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Dr. Johnson is presently serving on the State Board of Medical Examiners. He resides at 1960 Vallejo Street, San Francisco.

Dr. Greulich's higher education started at Kenyon College, Ohio, with a degree in philosophy, a masters from the University of Denver and a doctorate from Stanford.

His itching feet continued to keep him circulating around the United States with teaching posts at the University of Colorado, Yale University School of Medicine, Western Reserve University and Stanford where he was executive head of the Department of Anatomy. Then to the Orient where he made the first survey and documented the retardations among Japanese children who survived the atom bombs dropped on Hiroshima and Nagasaki. The results of this study made him the winner of the 1960 Viking Fund medal and award for "outstanding achievement in physical anthropology."

In Europe he was science adviser to the U.S. High Commissioner for Germany after World War II. In 1961, he went to England as senior scientific attache for the United States Embassy to the Court of St. James where he now resides as his appointment has been extended until 1966.

As an authority in the fields of anatomy and anthropology, he is a member of numerous societies and has received multiple honors as well as being an author on these subjects.

He is a former resident of Menlo Park.

# # #

(Mailed June 1, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: Story was transmitted on Business Wire 7/30/64.

An Oroville woman who was dying of kidney disease left the Palo Alto-Stanford Hospital Wednesday after receiving a healthy kidney from her mother in an operation in which a new method was used.

Mrs. Ruth Bell, 22, a victim of chronic kidney failure, received a kidney from her 52-year-old mother, Mrs. Wilma Davis, also of Oroville. The operation was done July 10 and took 15 minutes.

Mrs. Bell was a patient in the new General Clinical Research Center of the Hospital which is supported by the National Institutes of Health.

"I feel very fortunate and grateful for the results of the operation," Mrs. Bell said. "I hope that many unfortunate people will be able to benefit from what is learned from the advanced surgery I have had. Until a month ago I had been told that my condition was hopeless. Now it is impossible to explain my gratitude."

Mrs. Bell will move with her mother to San Jose and will report to the Hospital periodically as an outpatient so that doctors can observe her progress. She said she plans to resume her job as a medical secretary.

Surgeons at the Hospital said that the present state of this operation is highly experimental. The operation can only be done after detailed studies of the biological relationship between donor and recipient and of the various immunological problems.

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"We were justified in conducting this operation," the surgeons said, "because we feel we have devised a method which enables us to treat the patient with lower and safer dosages of the powerful drugs that help prevent the rejection reaction. Higher dosages of these drugs frequently result in severe infection because of the depressing effect on the bacteriological defenses of the body."

When organs are transplanted from one person to another the host or recipient tends to treat the grafted or borrowed organ as a foreign invader and marshals forces to reject it. Monitoring of the rejection process had so far been inadequate and was one of the major obstacles in the practical transplantation of organs.

But last June, at the American Medical Association convention in San Francisco, a Stanford medical research team reported that it had found a reliable method which had given them a better warning of when to inject drugs to suppress the rejection mechanism.

The technique was developed after more than a year of studies on experimental animals by Dr. Samuel Kountz, Dr. Donald R. Laub, residents in surgery, and Dr. Roy Cohn, professor of surgery.

By administering radioactive tracer drugs, the researchers were able to obtain measurements of the kidney blood supply in the grafts between dogs. Comparing simultaneously their results with other currently used methods, they found that a fall in blood flow was the first detectable signal that rejection was taking place.

At this point they injected drugs which suppressed the rejection mechanism by restoring the blood flow. Then the successive threatened rejections came on slower and were easier to handle.

"Animals treated by this method," the researchers reported, "had longer survivals, very little toxicity, and infections responded well to antibiotic treatment."

The Bell-Davis transplant was the first time in which the new method was used on a human patient. It was the second human kidney transplant done in the Palo Alto-Stanford Hospital.

The first was in 1960, when a twin brother donated a kidney to Lenneth Pock of Castro Valley, who still lives. However, a transplant between identical twins -- in which the genes are most nearly alike -- is much simpler than a transplant between others.

Mrs. Bell's physicians said that the new technique has worked better than predicted because there is less genetic disparity between mother and daughter than the canine patients used in the Stanford experiments.

The idea for developing the new technique was inspired by a discovery made by the research team earlier this year.

When a kidney was transplanted from one dog to another, the investigators watched the canine patients carefully,expecting the blood supply to become normal. Instead there was a gradual but constant decline in the blood supply.

Looking for a reason, the investigators put kidney tissue under an electron microscope, and were able to spot the cause -- immature plasma cells from the blood of the host animal.

These immature plasma cells had closed in and attacked the cells lining the small blood vessels of the grafted kidney. After contact the lining cells appeared to curl up and become isolated. Soon the blood vessels of the kidney were blocked by a mass of blood cells, choking off blood supply.

From then on the kidney died from lack of blood-supplied oxygen. The newest pinpoint use of immunosuppressive drugs has shown that rejection in the kidney in its early stages can be reversed.

Present plans at Stanford are to continue to refine the approach to the use of these drugs through animal experiments, and to develop a method of selecting genetically compatible donors.

# # #

(Mailed July 31, 1964)

Mrs. Ruth Bell, 22, of Oroville, and her 52-year-old mother, Mrs. Wilma Davis, also of Oroville, left the Palo Alto-Stanford Hospital Wednesday. They were met at the Hospital entrance by Mrs. Bell's four-year-old daughter, Kathryn. Mrs. Bell who suffered from chronic kidney failure received a healthy kidney from her mother July 10, in an operation in which a new method was used. Developed at Stanford it enables doctors to monitor the rejection of the grafted organ, and to treat the patient with lower and safer dosages of the powerful drugs that help to prevent the rejection reaction.

To: News Bureau, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Ruth Bell

Please send me an 8x10 glossy print of photo above.

NAME _____ PUBLICATION _____

ADDRESS _____ CITY, STATE _____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Changes in the visiting hours of the Palo Alto-Stanford Hospital were approved Tuesday by the Hospital board of directors.

The changes will become effective January 1 and will replace the present policy of open visiting hours. The Hospital board said limitations in visiting hours were necessary for the care and comfort of Hospital patients.

New visiting hours for patients will be from 2 to 4 p.m. and from 7 to 8:30 p.m. throughout the week. There are a few exceptions:

Children may be visited by their parents at any time unless otherwise directed by their physician. Maternity patients may be visited from 3 to 4:30 p.m. and from 7 to 8:30 p.m. Newborn babies will be shown during the same period.

Other exceptions include patients who are in the intensive care unit, and patients on the day of surgery. Relatives may visit these patients at any time, with permission from the physician or the head nurse.

No more than two visitors for each patient will be permitted in the room.

"Visitors provide a welcome diversion to patients," the board said. "But we rely on the good judgment of our visitors to keep their visits short and reasonably spaced. Most people when they are sick, enjoy company for a short while during the day, no more than 20 minutes. We must request visitors cooperation when asked by a nurse to leave the room, if there is a treatment to be done, or the patient seems to be very tired."

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Ehman (DA 1-5310)

Childless women whose "biologic clocks" have stopped are able to have babies after receiving hormone injections, according to Dr. Emmet J. Lamb, assistant professor of obstetrics and gynecology at Stanford University School of Medicine.

Dr. Lamb is the director of the Infertility and Gynecologic Endocrinology Clinic at Stanford Medical Center where an extensive study of infertility in women is being conducted.

The treatment given by Dr. Lamb and his associates, is specifically for women who have not ovulated, or menstruated, for several years. After tests have proved that there are no organic disorders of the hormone producing glands, the lack of ovulation can then be attributed to a disorder of cycling mechanism of the hypothalamus. This is the part of the brain, or the "biologic clock" which regulates the release of the stimulating hormones secreted by the pituitary gland.

Artificial stimulation of the ovary is induced by injections of the drug Pergonal, a preparation of human gonadotrophines (ovary stimulating hormones). Recently, Doctor Pietro Donini of Rome, Italy, found a way to extract the hormones from the urine of postmenopausal women. Retired nuns in Italy are the donors. Ten liters of urine are purified to produce one small pellet. The pellet, Pergonal, in sterile solution is injected to replace the lack of hormones and can make a woman potentially fertile whose cycling mechanism is out of order.

"Women patients are given a test to determine the amount of stimulating hormones in their urine, a test similar to the pregnancy test," Dr. Lamb explains, "then a simulated cycle is begun. The drug is injected for 10 days to prepare the ovary to release the egg. Then chorionic gonadotrophin, another stimulating hormone, is injected to release the egg. If fertilized, pregnancies can occur immediately."

Dr. Lamb estimates up to 20 percent of infertility in women is due to disorders of ovulation which can be corrected with these drugs.

Further research is being conducted by the staff of the Infertility and Gynecologic Endocrinology Clinic on the effects of the use of Pergonal and other stimulating drugs and their application to other areas of gynecology.

One use would be to perfect the rhythm system of birth control, Dr. Lamb said. If ovulation were induced on a schedule, a woman would know the exact days when she is able to conceive. At the present time, the limits of the fertile days are difficult to define, especially in women with irregular cycles.

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(Mailed Sept. 29, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

The Palo Alto Hospital, now being renovated as part of the Palo Alto-Stanford Hospital Center, will be a leader in Western states, with life-saving monitoring equipment for cardiac patients, it was disclosed Wednesday at the meeting of the Hospital Board of Directors.

Gordon P. Smith, president of the Hospital Board, reported that a donation of $16,982 from the Palo Alto-Stanford Hospital Auxiliary will make it possible to buy and install the monitoring equipment and 10 electrically-operated beds, two of which are specially designed for cardiac patients. The contribution came from profits realized from the Hospital Gift Shop operated by the Auxiliary.

The sophisticated equipment will be installed in the 10-bed intensive care unit of the renovated hospital. Initially it will be used on four patients, and eventually it will be extended to eight.

Monitoring units on each bed will provide constant electronic surveillance of the acute cardiac patients and will relate information on the patient's pulse, heart rate and other aspects of his condition to a central alarm system in the nurses' station. With this information from the bedside monitors nurses and doctors will be able to respond immediately in cardiac emergencies.

Dr. Stanford Kroopf, a member of the Palo Alto medical staff and chairman of the committee which recommended the new program, said:

"Arteriosclerosis, which causes narrowing of the blood vessels and clot formation and leads to coronary occlusion and heart attacks is one of the chief causes of mortality in the country today. With better equipment, a large number of patients who die from heart disease could be saved. Men under 55 are affected with this type of heart trouble more frequently than women of this age bracket."

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Dr. Kroopf cited a study showing that in one private hospital in Kansas City where similar equipment is used the mortality rate of acute cardiac patients was 19 per cent compared to 43 per cent for patients treated on the general hospital floors.

He added that according to the Public Health Service, 45,000 deaths occurring from heart disease could be prevented annually in the United States.

The monitoring units work simply. Each patient is connected to the machine by wearing a photocell earpiece. On the far side of the earpiece is an infrared light permitting rays to pass through the ear to the photocell. Each time the heart beats, it concentrates more blood in the ear, reducing the amount of light reaching the photocell. When the heart relaxes, the blood concentration diminishes, increasing light transmission through the ear.

One portion of the electronic monitoring unit is a small computer that counts the pulses of blood movement within the ear, providing a continuous indication of the patient's heart rate. Each machine can be pre-set for the desired low and high heart rate limits by the physician.

If the patient's heart rate exceeds these limits the nursing staff is notified by a red light or audio alarm. The equipment was developed by the Palo Alto firm of Corbin-Farnsworth, Inc.

The intensive care unit in the Palo Alto Hospital will be serviced by registered nurses who will be given an extensive indoctrination course in both care of the cardiac patient and in the use and operation of electronic equipment, Dr. Kroopf said.

The Palo Alto Hospital will provide 160 additional beds to the Hospital Center when it is completely renovated in Spring. The Hospital is designed as an acute unit for medical patients, with the standard of service and quality of care being available in the Palo Alto-Stanford Hospital.

# # #

(Mailed Oct. 28, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE THURSDAY, OCTOBER 29, 1964

A new, large-scale study of the pharmacology of anesthetics and related drugs will be launched at Stanford Medical Center, with a grant from the U. S. Public Health Service, it was announced today.

The research will be directed by the Department of Anesthesia of Stanford University School of Medicine. The grant, announced by Dr. Luther L. Terry, surgeon general of the Public Health Service, will provide $191,505 for the first year's activities of a proposed seven-year program. Funds will be administered by the National Institute of General Medical Sciences of the National Institutes of Health.

The research program will be the first of its kind on the West Coast supported by the Public Health Service. Two other multi-faceted research programs in anesthesia are at Columbia University in New York, and the University of Pennsylvania in Philadelphia.

Dr. John P. Bunker, professor of anesthesia, will be the project director, and Dr. J. Weldon Bellville, associate professor of anesthesia, will be associate project director. They will coordinate the activities of a team of senior scientists aimed at developing more precise methods of measuring effects of anesthetics and related drugs than currently available.

Dr. Bunker emphasized the current need for extensive and detailed knowledge of the pharmacology of anesthetics and the clinical problems they present so that physicians can cope with undesirable side effects, many of which are poorly understood at present.

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Physicians can use the drugs safely, Dr. Bunker said, but they need to know more about how the drugs act, especially if more than one drug is used simultaneously. Where do they go in the body? How do the different organs react to them? Are they metabolized (burned up) or excreted and how?

For example, in one national study coordinated by Stanford, investigators have been trying to determine whether the gas halothane, used for thousands of operations yearly, causes liver damage. It has been suggested that an impurity in manufacture, present in minute quantities, may be responsible for the rare instances of liver damage which have occurred.

But, Dr. Bunker commented, the scientists find themselves looking for a complication that may occur once in 10,000 cases, and trying to evaluate the possible harm of a substance which occurs as a contaminant one part in 10,000.

These are "needle in a haystack" problems of great difficulty, Dr. Bunker noted, but they become increasingly important to the field of postsurgical care as advances in clinical applications are made and as surgical techniques become more complex.

Therefore, the study at Stanford will focus on dose-effect relationships, side effects, toxicological effects, drug interactions, and the uptake and distribution of drugs.

Precise information concerning the uptake and distribution of drugs is necessary, Dr. Bunker explained. He cited the research of Dr. Ellis Cohen, associate professor of anesthesia at Stanford, who recently extended the work of other researchers on the problem of distribution of curare.

Curare is the poison South American natives put on the tips of their blowpipe darts. Although it has been known since the time of Columbus, it was not

used as aid to anesthesia until the early 1940's. The introduction of curare as a muscle relaxant probably represents the single greatest advance in anesthesia in recent years. But physicians until recently were not sure where the curare goes and how long it stays in critical parts of the body. Dr. Cohen's work has confirmed the importance of the kidney in the elimination of this compound and has provided new information concerning the role of other organs.

The proposed study in anesthesia will be conducted in collaboration with other departments of the School of Medicine, and the University. These include the departments of preventive medicine (bio-statistics), the computation center, the departments of chemistry and statistics of the School of Humanities and Science, and the School of Engineering.

The field of anesthesiology has been identified by the National Institute of General Medical Sciences as a research area of special need, and Congress three years ago directed that additional funds be allocated for the support of anesthesiology research and research training.

Prior to assuming his present position in 1960, Dr. Bunker was assistant clinical professor of anesthesia from 1952 to 1960 at Harvard University Medical School. During this time he was also an associate anesthesiologist at Massachusetts General Hospital in Boston.

A native of Boston, Dr. Bunker received his undergraduate degree in 1942 and an M.D. degree in 1945 from Harvard University. He is the author of numerous scientific articles dealing with metabolic effects of anesthesia.

# # #

(Mailed Oct. 27, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A new book dealing with hearing and hearing disorders has been published by Dr. Hayes A. Newby, director of the Division of Speech Pathology and Audiology at Stanford University School of Medicine.

Although it was not written directly for laymen, readers will find that "Audiology" has information of value, presented in an understandable manner.

Audiology, Dr. Newby explains, refers to the study of hearing and hearing disorders and the book is for those primarily interested as professionals in this broad field. But the hard of hearing and those close to them will find their problems, both physical and psychological, discussed in layman's style, especially the chapters on rehabilitating the hard of hearing adult and training the hearing impaired child.

The book also contains valuable information on lip reading, hearing aids, and other equipment, and points out the need of seeking professional advice upon the first indication of hearing impairment.

Dr. Newby wrote the first edition of "Audiology" in 1958. The new completely revised edition attempts to integrate the latest information on developments that have occurred in this field in the past six years. The book was published by Appleton-Century-Crofts of New York.

Dr. Newby has been on the Stanford faculty since 1947. In addition to his teaching duties at Stanford he was director of the San Francisco Hearing and Speech Center from 1948 to 1956 and is currently consultant to that organization as well as the Veterans Administration.

Dr. Newby is presently president of the American Speech and Hearing Association, which will be holding its 40th annual convention in San Francisco November 21-24.

For the past eight years, Dr. Newby has been associated with the weekly television program "Doctors News Conference," and has been program moderator for the past three years.

# # #

(Mailed Oct. 26, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE SATURDAY, OCTOBER 24, 1964

Complete cure of "blue baby" heart defects can now be accomplished with negligible risk, a team of surgeons from Stanford University School of Medicine reported today.

Dr. Norman E. Shumway, associate professor of surgery, told the scientific sessions of the American Heart Association in Atlantic City that no deaths occurred in 43 consecutive operations performed in the Palo Alto-Stanford Hospital during the last four years on "blue baby" patients ranging in age from 17 months to 45 years.

He explained that although the procedures for complete surgical cure were developed nearly a decade ago, there has been considerable reluctance on the part of many surgeons to use them because mortality rates of 15 to 20 per cent were prevalent until recently. Instead they relied on older techniques which relieve but do not cure the condition.

The "blue baby" patients described by Dr. Shumway's report were born with a combination of defects called tetralogy of Fallot (for the 19th century French physician who first described the disease). The two main defects of the four characterizing the condition are: (1) an opening between the normally separate lower chambers of the heart, the ventricles and (2) a narrowing of the pulmonary artery through which "used" blood returning from the body is carried to the lungs for oxygen replenishment.

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As a result of these defects, de-oxygenated ("blue") blood makes its way into the left side of the heart through the hole between the ventricles and is pumped to the body, imparting a bluish tinge to the patient's skin.

For complete repair of blue-baby defects, surgery must be performed on the heart itself. This requires the use of a heart-lung machine which assumes the job of pumping blood to the rest of the body, enabling the surgeon to operate on a relatively dry and bloodless heart.

The practice at Palo Alto-Stanford Hospital, Dr. Shumway noted, is to undertake total correction in each patient who suffers from "blue baby" heart defects and weighs more than 22 pounds. Severely ill, smaller patients undergo surgery that relieves the condition until curative surgery can be performed later. Sixteen of the 43 patients in the Stanford series had previously had such a palliative operation.

The heart is cooled, Dr. Shumway said, until it stops beating. Repair is made by cutting a small hole into the right ventricle and sewing a plastic patch over the hole between the lower pumping chambers. The "tightness" of the pulmonary artery is relieved either by cutting away muscular tissue narrowing the vessel's outflow tract or by enlarging the tract with a plastic patch. Surgery takes from 40 minutes to one hour.

Follow-up studies by Dr. Shumway and his associates, Drs. Richard R. Lower, Edward J. Hurley and R. Cree Pillsbury--show that almost all the patients now have normally functioning hearts and can participate in normal physical activity.

# # #

(Mailed Oct. 23, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Note to editors: This paper will be presented Tuesday, December 1, at the afternoon session of the Radiological Society of North America meeting in Chicago.

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Men with localized cancer of the prostate can now be treated relatively simply by external radiation therapy, with the prospect of cure being at best as good as that following radical surgery, it was reported Tuesday to the Radiological Society of North America.

Furthermore, cure can be achieved without sacrificing the patient's virility which happens when the disease is contained by surgical removal of the prostate.

Dr. Malcolm A. Bagshaw, Dr. Henry S. Kaplan, and Dr. Robert H. Sagerman of the department of radiology at Stanford University School of Medicine said that prostate cancer treated radically by external radiation therapy produced "striking alleviation of local symptoms in all but nine of 73 patients."

After five years 13 of 30 patients treated at Stanford are still living without evidence of disease. Of the entire group of 73, 49 patients are living although some have not been followed for five years. The survival rate for the entire group was 54 per cent.

The physicians explained that success of the treatment partly depends on pinpointing accurately the position of the tumor and then de-

- more -

livering a high dose of radiation homogeneously to a small volume of tissue. This can be accomplished by special X-ray techniques.

The radiation dose used on patients was 7000 rads over a period of six weeks. It was provided by a high energy X-ray beam from the Stanford medical linear accelerator.

"We believe," the Stanford physicians said, "that this study has demonstrated a new approach to the treatment of localized carcinoma of the prostate, an approach which promises survival rates comparable to those achieved by radical surgery with less hazard to the patient and less disturbance of normal function."

Indeed, they added, some patients whose cancer is too advanced for surgery may now be treated.

For the most part, aggressive radiation therapy of the prostate does not seem to alter the patient's sexual potency, the physicians reported.

Reliable data on sexual activity was obtained on 18 patients, 14 of whom claimed to have noted no change in their sexual habits. Four patients noted a definite decrease.

A significant finding was that patients whose prostate cancer was less than a year old when treatment began have had a higher survival rate than those who had the disease longer.

This would indicate that the discovery of prostate cancer early gives the patient an excellent chance for cure. Since in most cases the cancer can be detected by a simple examination by the patient's family doctor, no man can fail to concede the value of regular medical checkups, the physicians said.

Cancer of the prostate is responsible for some 10 per cent of cancer deaths in men.

The disease may produce two quite different kinds of symptoms. One kind, due to the enlargement of the prostate itself, consists of urinary difficulty. The other is pain in other parts of the body, for instance in the lower spine, resulting from spread of the disease to the bones of the skeleton.

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(Mailed Nov. 27, 1964)

25 Nov 1964

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Changes in the visiting hours of the Palo Alto-Stanford Hospital were approved Tuesday by the Hospital board of directors.

The changes will become effective January 1 and will replace the present policy of open visiting hours. The Hospital board said limitations in visiting hours were necessary for the care and comfort of Hospital patients.

New visiting hours for patients will be from 2 to 4 p.m. and from 7 to 8:30 p.m. throughout the week. There are a few exceptions:

Children may be visited by their parents at any time unless otherwise directed by their physician. Maternity patients may be visited from 3 to 4:30 p.m. and from 7 to 8:30 p.m. Newborn babies will be shown during the same period.

Other exceptions include patients who are in the intensive care unit, and patients on the day of surgery. Relatives may visit these patients at any time, with permission from the physician or the head nurse.

No more than two visitors for each patient will be permitted in the room.

"Visitors provide a welcome diversion to patients," the board said. "But we rely on the good judgment of our visitors to keep their visits short and reasonably spaced. Most people when they are sick, enjoy company for a short while during the day, no more than 20 minutes. We must request visitors cooperation when asked by a nurse to leave the room, if there is a treatment to be done, or the patient seems to be very tired."

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

Subject: Evoked vocalization in the rhesus monkey.

Author: Bryan W. Robinson, M. D., Section of Neuropsychology, Laboratory of Psychology, National Institute of Mental Health, Bethesda, Md. (Present address: Division of Neurology, Stanford Medical School, Palo Alto, Calif.)

Address: Division of Neurology, Palo Alto-Stanford Hospital, Palo Alto, Calif.

Time: December 30, 1964 p.m.

Place: Queen Elizabeth Hotel

Program: Symposium on Communication and Social Interaction in Primates

Convention Address: Queen Elizabeth Hotel

Based on more than 5,000 electrical stimulations of the brain of the M. mulatta monkey, the author was able to locate fairly completely those areas and structures which are responsible for vocalization. At least three different types of vocalization were identified, and these appeared to be correlated with sexual, aggressive, and alimentary changes. When these responses were carefully mapped, it was found that several neural systems could be identified. These neural systems were primarily in the limbic system and related structures. Analysis of the details of localization has contributed to a better understanding of the general rules of structural and functional organization in this part of the brain, and supports the hypothesis that a wide variety of functional systems are tightly interwoven into a fabric-like arrangement. Mathematical analysis of the arrangement of the individual 'threads' of the system suggests that this arrangement approaches randomness. The significance of this finding is that it provides a model and a mechanism which can account for the flexibility and variety of the association of behaviors seen in both normal and abnormal primate and human behavior.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Connolly (321-5310)

New visiting hours will go into effect Friday at the Palo Alto-Stanford Hospital. They will replace the present policy of open visiting hours.

Maternity patients may be visited from 3 to 4:30 p.m. and 7 to 8:30 p.m. every day. Newborn babies will be shown during the same period. Other patients may be visited from 2 to 4 p.m. and from 7 to 8:30 p.m.

Exceptions are patients in the intensive care unit, patients on the day of surgery and children, who may be visited by members of the immediate family any time with permission from the physician or head nurse.

Dr. LeRoy E. Bates, director of the Hospital, said that limitations on visiting hours were necessary for the care and comfort of patients.

"Visitors provide a welcome diversion to patients," he explained. "However, we must ask our visitors to keep their visits short, no more than 20 minutes in general or 10 minutes in the intensive care unit. Most people when they are sick can enjoy company for only a very short while."

No more than two visitors for each patient can be permitted in the room at one time, Dr. Bates stated. Other rules, still in effect, are that children under 16 may not visit the pediatrics or maternity sections, and children under 10 are not allowed in the general sections of the Hospital unless they are visiting an immediate member of the family.

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(Mailed 12/29/64) Palo Alto Times, Redwood City Tribune, San Jose Mercury-News San Mateo Times, Sunnyvale Standard

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Almost three years after being crippled by a major stroke, Palo Alto attorney Donald E. Glass, 35, returned to full time law practice today, with a triumphant smile on his face.

As he walked into his newly decorated office, Glass was resuming a trip that started on a crisp morning just before Christmas in 1961.

He was on the way to work that morning when his right hand "buzzed" momentarily with a "pins and needles" feeling. Maybe, he thought, my arm is asleep.

But minutes later after he had entered the office, Glass began to feel faint, lost his balance and collapsed.

Immediately, he was taken to the Palo Alto-Stanford Hospital Center where surgeons worked diligently to save his life by removing a damaged blood vessel from his brain.

When the operation was over his road to recovery had hardly begun. The stroke had left his entire right side paralyzed. He was unable to stand, walk, speak or remember. Doctors generally agreed that his chances to work again were slim.

But his family physician, Dr. Russell V. Lee of the Palo Alto Medical Clinic did not agree. "There is no doubt in my mind that someday you will be able to practice law again," Dr. Lee had told him.

It took actually three years and the efforts of a Stanford team of rehabilitation specialists to restore Glass to useful independence.

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A stroke is a form of a breakdown in the supply of blood to the brain. When the flow to any section of the brain is interrupted, it dies along with its function--control of a limb, an area of memory, speech, vision or any of hundred abilities.

Persons afflicted by major strokes rarely do useful work again, said Dr. Daniel J. Feldman, director of the Division of Rehabilitation Medicine at Stanford Medical School. But their loss has become needless. We know now enough about strokes to be able to reduce the present atrocious waste of lives.

"Glass is an example of a brilliant lawyer who made a spectacular comeback with restorative care," Dr. Feldman said.

Today, Glass can stand and walk. He can bowl and go skiing--two of his favorite sports. Slowly, his muscles have been rescued from atrophy. Alternate nervous pathways have been trained with physical and occupational therapy. For almost a year he was totally unable to speak. Now he can speak and dictates seven to ten letters a day.

Glass still has a considerable limitation of movement in his right extremities. But his chances for improvement are good because of a new technique now being studied at Stanford.

The new technique involves the treatment of taut muscles through injection of drugs into nerves and nerve roots. This method is being evaluated and refined by Dr. Jordan Katz, assistant professor of anesthesia, in cooperation with Dr. Feldman, Dr. Leslie Knott, assistant professor of medicine, and others in the Division of Rehabilitation Medicine.

Six months ago, Dr. Katz injected a muscle-relaxing drug in Glass' right arm that has relieved the rigidity of elbow and shoulders. Although it is far from a cure-all, the technique holds promise when used in conjunction with physical and occupational therapy.

Glass attributed his recovery not only to the fact that rehabilitation began soon enough after the stroke, but also because "I suddenly realized that after a frightful incident such as this a person can draw upon hidden resources. As soon as I had regained consciousness from the operation I felt I should just get out of bed and walk."

He tried it, in fact, in the hospital when the nurses were not looking.

Speaking came harder to Glass. In his words, "It was like trying to penetrate a concrete wall." His first hint that he would speak again was when a group of students came to the Hospital to sing Christmas carols in 1961.

"I suddenly realized that I could sing," he said. But his speech did not return until later.

Glass, his wife Laddie and children, Mike, 10, Cindy, 7, and Steve, 6, live at 3314 Cowper. He is a Stanford University graduate and was editor of the Stanford Law Review in 1952.

He is currently serving on the California State Department of Social Welfare's advisory committee for aiding needy disabled persons.

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(Mailed December 21, 1964)

GLASS STORY - ADD AFTER FOURTH GRAPH ON PAGE TWO

In the beginning Glass had difficulty with what he termed his "current memory." He could not recall something that had happened five minutes earlier.

He discussed the problem with his doctors who told him that he could train his memory by going way back to his childhood and recalling his entire life.

Consequently, on leaving a rehabilitation clinic in New York to return to the West Coast, Glass took a cross-country bus instead of a plane.

He went to Washington, D.C. to visit a hotel where he had often stayed; to Des Moines, Iowa, where he was born; to Denver, Colo., where he had attended elementary school; to Salt Lake City, where he had visited; and to Pomona, where he had spent his high school days.

"This process really helped my memory considerably," he said.

PICK UP "Glass still has a considerable etc.

ADD TO GRAPH FIVE PAGE THREE

In 1950, Glass became the first George H. Mayr Scholar at Stanford. The scholarship is made possible by the George H. Mayr Educational Foundation of Los Angeles to undergraduates from the Los Angeles area.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA-5310)

Dr. Tinsley R. Harrison, a noted authority on cardiovascular diseases, will give the first John Kent Lewis Memorial Lecture, sponsored by the Stanford University School of Medicine.

He will speak on "Some Problems in the Diagnosis, Management, and Pathophysiology of Angina Pectoris". The lecture will be given Wednesday, December 9 at 7:30 p.m. in Room M106.

Dr. Harrison is professor of medicine of the Medical College of the University of Alabama. He is a distinguished teacher and writer. He wrote Failure of the Circulation, and is chief editor of the prominent textbook Principles of Internal Medicine. He received his A.B. from the University of Michigan and his M.D. degree from Johns Hopkins University School of Medicine. He received his residency training in internal medicine both at Peter Bent Brigham Hospital in Boston, and Johns Hopkins Hospital in Baltimore.

In 1941, Dr. Harrison became professor of medicine at Bowman Gray School of Medicine, and also served as physician-in-chief of North Carolina Baptist Hospital at Winston-Salem, N.C. From 1944 to 1950 he served consecutively as dean of the faculty and chairman of the Department of Medicine of Southwestern Medical School, and was also physician-in-chief of the Parkland Hospital in Dallas. In 1950, he joined the faculty of the University of Alabama.

He is a diplomate of the American Board of Internal Medicine and past president of the American Society for Clinical Investigation and the American Heart Association.

The lectures are dedicated to the memory of Dr. John Kent Lewis who died in 1961. Dr. Lewis was professor of medicine and chief of the Stanford Medical Service at San Francisco General Hospital. With his Stanford professors, A. W. Hewlett and George D. Barnett, Dr. Lewis had published some of the early work on vascular sounds, exercise and respiration. He was one of the first to study thyroid hormone in relation to the heart. He was also well known for his pioneering studies on heart sounds and cardiac arrhythmias.

Dr. Lewis had served as president of the San Francisco Heart Committee and the California Heart Association.

# # #

(Mailed Dec. 7, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A new study into the causes and cure of amyotrophic lateral sclerosis will be launched at Stanford Medical Center, it was announced today.

Amyotrophic lateral sclerosis is an invariably fatal disease of unknown cause in which motor nerve cells, those which control muscular contraction, are gradually destroyed.

Dr. Sidney Raffel, acting dean of Stanford University School of Medicine, said that the new study will be made possible by a $50,000 fund established by Raymond J. Schirm of Brea, Calif. The fund was established in memory of Mr. Schirm's wife who died of the disease earlier this year. It will be known as the Mildred Ellingwood Schirm Memorial Fund for the study of Neurological Diseases.

"It is my hope," Mr. Schirm said, "that by providing some assistance to those who seek more knowledge of neurological conditions, medical science may learn what causes amyotrophic lateral sclerosis, and may develop methods of detection which will lead to prevention and control of the disease."

Principal investigator will be Dr. Frank Morrell, chief of the Division of Neurology at the School of Medicine.

Dr. Morrell explained that it has been particularly difficult to study the disease because of the lack of refined and precise techniques, and also because there are no animals known to have it. The study of the disease has further been frustrated by the problem of getting diseased tissue in form suitable for observation.

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Recent developments, however, may have opened the way for profitable work.

"It is now possible," Dr. Morrell said, "to do precise chemical analyses of extremely small tissue samples--even as small as a single cell. The various kinds of nerve cells have different functions and different structures as seen under the microscope. These differences, in turn, must reflect individual variation in biochemical composition.

"Amyotrophic lateral sclerosis is a disease which selectively affects nerve cells connected with the motor system while leaving nearby sensory cells intact. Therefore, if one could identify the exact nature of the biochemical difference between, for example, motor and sensory cells, the information should provide a clue as to the cause of the disease and perhaps lead to prevention or treatment."

Recent developments in electronics and computer sciences have made it possible to distinguish motor from sensory cells with sensitive electrical tests, Dr. Morrell said. The next step is to apply the biochemical techniques mentioned earlier to each type of nerve cell separately.

Mr. Schirm whose gift will make this work possible is a member of an old established family in Southern California. The J. S. Schirm Company of San Diego was founded in 1885. The Company specializes in the distribution of construction materials and manufacture of portland cement. Mr. Schirm has two sons, David and Jack, who are active in the business and a daughter, Mrs. Harry R. Carlton of Laguna Beach.

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(Mailed Dec. 7, 1964)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5311)

A Nobel Prize winner in the study of virus diseases, Dr. Frederick C. Robbins, will give the first annual Harold K. Faber Lecture in a symposium on Chronic Diseases of Childhood February 6.

The one-day symposium, which begins at 8:30 a.m., is sponsored by the Stanford Children's Convalescent Hospital and the department of pediatrics of Stanford University School of Medicine. It honors Dr. Harold K. Faber of San Francisco, emeritus professor of pediatrics and former executive head of the department before his retirement in 1949. He also was medical director of the Convalescent Hospital for 39 years.

Dr. Faber is internationally known for his polio research and for his teaching and clinical work.

Dr. Faber will introduce Dr. Robbins who is professor and chairman of the department of pediatrics at Western Reserve University. Dr. Robbins will speak on "A Biographical Sketch of Poliomyelitis" at 2:30 p.m.

His lecture is one of five presentations that day in Physics Hall, Room 100. Other speakers will be Dr. Alfred M. Bongiovanni, professor and chairman of the department of pediatrics at Children's Hospital of Pennsylvania; Dr. Urie Bronfenbrenner, professor of child development and human relations at Cornell University; Dr. Leon Eisenberg, professor of psychiatry and director of Children's Psychiatric Service at Harriet Lane Home of Johns Hopkins Hospital; and Dr. Irving Schulman, professor and chairman of the department of pediatrics at University of Illinois Research and Education Hospitals.

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Dr. Robbins received his A.B. in 1936 from the University of Missouri and his M.D. from the Harvard University School of Medicine. He completed his residency training in bacteriology and medicine at the Children's Hospital in Boston, and in 1948 he became research fellow in pediatrics at the Harvard Medical School.

Dr. Robbins was appointed by the National Research Council in 1948 as a senior fellow in virus diseases to work with Dr. John F. Enders in the research division of infectious diseases at the Children's Hospital in Boston. The two men investigated properties of the mumps virus and the growth of poliomyelitis viruses in tissue culture.

He joined the Western Reserve University School of Medicine as professor of pediatrics in 1952.

He continued his research, and in 1952, he, Dr. Enders and Dr. Weller received the Nobel Prize in physiology and medicine.

Other honors include Doctor of Science degrees from John Carroll University and the University of Missouri. He is past president of the Society for Pediatrics Research.

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(Mailed January 26, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Connolly (321-5310)

A tilt table to test the balance of dizzy patients is the newest addition to a unique testing laboratory of the Ear, Nose and Throat (ENT) clinic of the Stanford University Clinics.

Dr. Richard Goode, resident in ENT, and Dr. F. Blair Simmons, assistant professor of surgery, have devised the tilt table with $9 worth of parts from a surplus market. The table is used in connection with a new electronic machine costing $3,500 called an electronystagmograph, found only in major medical centers around the country.

Stanford's balance testing laboratory now offers a combination of equipment -- old and new, costly and inexpensive --some "home-made" and some of the latest electronic gadgets, all designed to provide the most complete and accurate examination possible to locate the cause of dizziness.

Most types of dizziness are due to disorders of the inner ear, Dr. Goode explained. Other causes are head and neck injuries from falls, whiplash in auto accidents, nervous and systemic diseases, and drugs. The recent experiences of several astronauts with balance problems has pointed up interest in this field.

The dizzy patient will usually be given a general physical checkup by his physician, who will look for signs of high blood pressure, anemia or heart disease. When no definite cause is found, many patients are referred to Stanford's ENT clinic where a complete ENT exam is done as well as audiologic tests for hearing. Usually neurologic examinations are also made.

Following this, the still dizzy patient comes to the balance testing laboratory. Here the patient is placed on the tilt table and sensitive electrodes are attached beside his eyes to pick up eye movements as his position is changed. Abnormal eye movements, which indicate disorders of the balance system, are recorded on graph paper.

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A century old test, in which water of varying temperature is put in the patient's ears, is still used. But now the electronystagmograph records the response instead of the doctor relying on his naked eye.

A platform has also been built by Dr. Goode, on which the patient stands so that the least change in his balance, caused by galvanic stimulation of the mastoid, can be recorded.

With the exact knowledge which can be gained from this battery of diagnostic instruments, it is now possible to pinpoint the location and cause of a person's dizziness, Dr. Goode pointed out. Serious neurologic disorders can be differentiated from less serious inner ear problems. Certain types of dizziness can be cured with new surgical procedures. It is also possible to find cases in which special training of balance is the solution.

Dr. Goode's research on new ways of testing balance and evaluating dizziness is financed by the National Institutes of Health.

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Mailed 1/22/65 to: Palo Alto Times, Redwood City Tribune, Sunnyvale Standard, San Jose Mercury-News, San Mateo Times, Menlo Park Recorder

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Connolly (321-5310)

A new machine is being used in the Palo Alto-Stanford Hospital Center to map the brains of patients for signs of injuries, tumors or other diseases.

Called an echoencephalograph, the instrument works on the same principle as radar. It sends ultrasound waves from a crystal which then listens for echoes. The echoes are traced on an oscilloscope screen and the tracings are photographed by a polaroid camera.

According to Dr. Douglass F. Adams, resident in radiology, the echoencephalograph is a safe, new diagnostic instrument which detects problems that X-rays may not be able to find. It is also easier to use and less expensive than an X-ray machine. The echoencephalograph is compact enough to be wheeled around on a cart and brought to a patient's bedside. It can be used for abdominal, heart and eye examinations and to measure the fetus of a pregnant woman. It is absolutely safe for repeated use, he said.

Also called an "ultrasonogram," the new machine will not supplant the X-ray, but will supplement it, Dr. Adams pointed out. The echoencephalograph is particularly useful in showing changes in soft tissues that X-rays can't detect. In examining neurology patients, the echoencephalograph locates the midline of the brain. Any shift in position of the midline indicates trouble.

The echoencephalograph is operated by a physician. He holds a small metal cylinder, the crystal transducer, against the patient's skin while the sound waves probe inside. The machine makes no noise, requires no special environment. An examination takes but minutes. Further uses of ultrasound diagnosis are being explored at the Hospital.

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Mailed 1/4/65: P.A. Times, Sunnyvale Standard, S.J. Mercury, Redwood City Tribune, San Mateo Times

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Have you ever wondered what it would be like if no one understood what you said?--if you heard various speech sounds but could not repeat them properly? You would simply have to rely on gestures and facial expressions to communicate.

This was the case with four-year old Howie. When his mother brought him to the Stanford Speech and Hearing Clinic last October, she described him as having "his own language." After four months his speech improved. Various clinical exercises taught him to associate sounds with objects. As his vocabulary increased, he put words together in sentences.

Howie is one of the 150 patients who come to the clinic each year with disorders of speech, hearing or both. He is one of eight million Americans whose communication is diminished because of hearing or speech difficulties. Serving both children and adults, the clinic is operated by the division of speech pathology and audiology of the Stanford University School of Medicine.

Last year, the clinic held approximately 6,000 therapy sessions of 30 to 40 minutes in length, made about 250 diagnostic evaluations for speech and about 750 evaluations for hearing.

The staff of the clinic includes Dr. Hayes A. Newby and Dr. Virgil A. Anderson, directors; Dr. Richard F. Dixon, supervisor of clinical audiology; Dr. John F. Font, supervisor of the training clinic; Mr. Gordon Duck, supervisor of the service clinic; and Miss Virginia L. Puich and Mrs. Ellen H. Seefeldt, assistant clinic supervisors. About 60 students work with patients.

Dr. Newby pointed out, "Many of these students are working for clinical certification from the American Speech and Hearing Association, as well as for M.A. or Ph.D. degrees, so their work is closely supervised by the staff."

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Before Howie was admitted to the clinic, the staff gave him a complete speech and hearing evaluation. This is done for all cases, because a disorder may stem from one or more complex causes such as brain injury, prolonged illness, inadequate hearing, defective speech mechanism or mental deficiency. Howie's speech problem was not organic. His speech was unintelligible because he had simply failed to learn how to form speech sounds correctly.

When therapy began, Howie found it difficult to sit still. An active child, he had to be taught to listen, sit, and pay attention. Attending nursery school helped him learn to follow directions and to speak with children his own age.

In therapy sessions Howie likes to talk on a toy telephone, a valuable aid in speech training. The clinician hoped that Howie would connect his mouth movement with the common words said over the telephone. Now Howie can carry out spontaneous telephone conversations with him.

Another tool clinicians use to teach patients to speak correctly is a toy mailbox. They may ask a child to "mail a letter in the mailbox." Children soon learn how to form the "m" of "mail" with their lips.

"We have found that many problems in speech stem from problems in hearing," said Dr. Font. "This is why patients receive a hearing test as part of the evaluation before a decision is made regarding admission to the clinic."

The clinic doctors further believe that "deaf" children have some residual hearing but they have to be trained to use it effectively. Some children don't even know that sound exists unless they are taught about it. What the clinician does is to train the severely hard-of-hearing child to utilize all his residual hearing, as well as to take advantage of visual clues in speech (lipreading).

Testing consists in part of determining the threshold, the point where a patient first hears a sound. The patient raises his hand when he first hears the sound coming from an audiometer, an instrument which emits tones at varying levels of loudness.

This was the case for Maria, a three-year old child who could not hear any sounds well. In the clinic, she uses an auditory training unit which is adjusted so she hears sounds of a much greater range than can be detected with the hearing aid she normally wears at home.

It's a tough job to get a young child like Maria to use her own voice. But first you have to make her aware that she has a voice. Clinicians train patients with hearing problems to recognize, then to say words.

"What we're really aiming at," Dr. Anderson says, "is a sort of matching game. The children match what they see--a toy, for instance--with the corresponding movement of the mouth of the clinician who is saying the name of the toy."

Throughout therapy, parents are encouraged to observe through a one-way window in an adjoining room. This is part of the program to enable family members to understand the techniques employed in the clinic so they can carry them out at home.

The Stanford Medical Center is one of the few centers in the country offering a full range of patient services in speech and hearing in conjunction with a teaching program in speech pathology and audiology.

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(Mailed February 23, 1965)

Photo #1

A BOY WASHES HIS HANDS vigorously in response to the student clinician's association of the 'Sh' sound with the word 'wash'.

Photo #2

A LITTLE GIRL TOUCHES the student clinician's mouth to feel the sound he makes as she hears it through the auditory training unit, an amplified hearing device used in therapy sessions.

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Speech and Hearing Clinic

Please send me an 8x10 glossy print of photos #1_____, #2_____.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Note to Editors: This story was transmitted on Business Wire February 18, 1965.

Dr. Robert J. Glaser, 46, president of Affiliated Hospitals Center and professor of social medicine at Harvard Medical School, today was appointed dean of Stanford University School of Medicine and vice president for medical affairs. He also will serve as professor of medicine.

His appointment, culminating an eight-month nationwide search for a dean by a special faculty committee, was announced by President J. E. Wallace Sterling.

Dr. Glaser will succeed Dr. Sidney Raffel who has been acting dean since Dr. Robert Alway resigned a year ago to return to full time teaching. Dr. Raffel will resume his duties as professor and executive head of the Department of Medical Microbiology. Dr. Glaser's appointment will become effective in July.

"Dr. Glaser brings to Stanford an unusual combination of academic and administrative experience," President Sterling said. "He is nationally recognized for his concern to bring to patient care the best that medical science and teaching can provide.

"He has had experience in building a medical center, having completed one at the University of Colorado where he served as vice president for medical affairs and dean. For the past two years he has been associated with an ambitious and unique project which envisions a new kind of hospital complex in the vicinity of Harvard Medical School. The Stanford University School of Medicine is fortunate to be able to draw on Dr. Glaser's talents as scientist, teacher, and administrator."

A graduate of Harvard College in 1940 and the Harvard Medical School in 1943, Dr. Glaser interned at the Barnes Hospital in St. Louis, Mo. After completing his residency training in medicine at the Peter Bent Brigham Hospital in Boston and the Barnes Hospital he joined the faculty of Washington University School of Medicine in 1947.

-MORE-

His academic and administrative positions included assistant professor of medicine, associate dean of the faculty of medicine, and associate professor of medicine. He also acted as chief of the Division of Immunology from 1954 to 1957. In 1957 he became dean and professor of medicine at the University of Colorado School of Medicine.

Dr. Glaser returned to Harvard in 1963 to coordinate the planning of a new hospital complex which would tie in Harvard Medical School with six affiliated hospitals. Throughout his professional life, Dr. Glaser has devoted a large portion of his research activity to the rheumatic diseases. He was chief of the Rheumatic Fever Clinic in the Washington University Clinics, consultant in rheumatic fever to the State of Missouri Crippled Children's Service, and consultant in rheumatic disease to the University of Illinois. Dr. Glaser also has served as a member of the scientific advisory council of Rheumatic Fever Institute and the committee on prevention of rheumatic fever and bacterial endocarditis of the American Heart Association. He is presently a member of the National Health Research Facilities Advisory Council of the U. S. Public Health Service.

His publications include more than 40 papers, most of them dealing with experimental streptococcal infections and rheumatic fever.

Dr. Glaser also holds memberships in the medical honorary society Alpha Omega Alpha, the society of Sigma Xi, the American Society for Clinical Investigation, and the Association of American Physicians. He is currently the editor of Pharos, the national publication of Alpha Omega Alpha.

Dr. Glaser was born in St. Louis, Mo. He is married and has three children. Mrs. Glaser is also a physician, having received the M.D. degree in 1947 from the Washington University School of Medicine. Her specialty is pediatrics.

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Mailed 2/18/65

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

First prize winner in the Stanford Medical Center Art Show's painting category for the second year was Leonard Winograd, senior laboratory technician in the department of dermatology of Stanford Medical School. His painting, "Coit Tower", was in oil.

Mary Kay Walker, research technician in the division of infectious diseases of the Stanford Medical School, was runner-up for her work entitled "Night Birds", a painting in various blue tones.

Dr. Raymond C. Stofer's "Yeah Yeah Yeah" sculpture made from iron boiler plate also won a first prize. He is research associate in surgery at the Medical School.

In photography, Glenn Battle, clinical laboratory technician, won first ribbon for pictures of three towheaded children entitled "Once upon a time".

Other first place winners were: Dr. Stanford S. Kroopf of the Palo Alto medical staff for his mosaic, "Owl"; Molly Babington, Auxiliary, for her collage, "Fairy Flowers"; and Peter Engel, fifth year medical student for his print entitled "Tree".

Other runner-ups were: Molly Beth Jones, candy striper, for her cat sculpture; Dr. Allen Gates, assistant professor in obstetrics and gynecology for a photograph, "Dew Coats a Cobweb"; David B. Starkweather, associate administrator of the Hospital, for a mosaic, "Avocets"; Dr. Carl Brunsting of the Palo Alto medical staff for a sail boat mobile; and Molly Babington, Auxiliary, for an ink sketch entitled "The Banyon Tree".

More than 80 entries were submitted in the Feb. 8 through 12 Art Show. Winners were chosen by a popular vote of over 300 viewers.

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(Mailed February 16, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Connolly (DA 1-5310)

A new grant of $25,000 has been made by the California Elks to the Palo Alto-Stanford Hospital Center for the care of needy handicapped children.

A similar grant, made a year ago, provided aid for almost 100 children from 20 counties in California, according to Gerald C. St. Denis, chief clinical social worker at the Center.

The grant will again pay for laboratory tests, treatment, surgery, medicine, transportation and housing expenses for parents, if needed, when they are from out of town and must stay nearby while the child is temporarily hospitalized.

In presenting the check, John Morey of Menlo Park, treasurer of the Elks, said, "With the renewal of this grant for 1965, the Elks, along with the doctors and staff at the Palo Alto-Stanford Hospital Center, look forward to another year of great accomplishments in meeting the needs and enriching the lives of handicapped youngsters."

Children being helped by the grant include those suffering from defective hearts, blood disorders, asthma, kidney disease, eye conditions, speech problems and orthopedic handicaps. Others, who fail to grow normally, or who have emotional problems associated with handicaps, are also aided. Through the Elks support, the complete needs of each individual can be considered, Morey pointed out.

The children who receive help are recommended by referring physicians and screened by social workers at the Center. The program is under the direction of the department of pediatrics of the Stanford University School of Medicine.

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(Mailed February 16, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5311)

Thoughtful builders working on the partially completed Clinical Sciences Research Building of Stanford University School of Medicine will tip-toe around the noise problem of getting through walls by using new concrete cutting techniques.

"The builders are using 'silent drilling' so patients in the adjacent Palo Alto-Stanford Hospital may rest in quiet," said Frank Vitale, assistant administrator.

The drilling is necessary for constructing the corridor openings from the new building to the East Hospital Pavilion, Boswell Building and Medical School. Workers are using an extremely hot torch to penetrate and cut the concrete. Then, a small core of concrete is lifted out of the building.

The noiseless process eliminates the need for chipping guns and jack hammering, two cheaper techniques which have caused loud vibrations in that area previously.

Workmen direct the torch nozzle at the concrete wall where its tip blazes at 12,000 degrees F. It cuts through concrete one inch per minute. Molten cement runs out of the gap like lava from a volcano, but workmen can touch the concrete less than a foot from the torch without feeling heat.

The torch throws a flame consisting of a mixture of oxygen and propane which has been preheated. At the tip aluminum oxide powder is injected and the flame hits the wall at a pressure of 105 pounds per square inch.

Core and Flame Cutters, Inc. of Los Angeles, California, are in charge of the operation.

The new building is scheduled for completion Dec. 31, 1965. At present, the building is 55% complete.

-More-

When completed, it will consist of four stories--a basement and three floors--covering 152,000 gross square feet, about twice the size of existing hospital pavilions.

The new structure will contain facilities for investigation in medicine, surgery, radiology, pediatrics, genetics, obstetrics, and psychiatry.

It will also include the Lt. Joseph P. Kennedy, Jr., Laboratories for Molecular Medicine where basic research will be undertaken related to causes of mental retardation.

Part of the new building will house facilities, supported by the National Aeronautics and Space Administration, for research in the fields of space biology and biomedical instrumentation.

The new Clinical Sciences Research Building is the first major addition to the Stanford Medical Center since it was constructed five years ago. It is financed in part by Stanford University's PACE Program (Plan of Action for a challenging Era) and by government grants for research facilities.

The largest PACE gifts were two of $1 million each from the Rockefeller and Joseph P. Kennedy, Jr., Foundations. Government grants include $2,033,918 from the National Institutes of Health, and $535,000 from the National Aeronautics and Space Administration.

The total cost of the building is $6,150,000.

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(Mailed February 11, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)
FOR RELEASE IN P.M. NEWSPAPERS FRIDAY, FEBRUARY 12, 1965.

PHILADELPHIA--A new technique of detecting heart graft rejection has enabled Stanford University surgeons to keep a dog alive for eight and a half months with a heart transplanted from another dog, the surgical research team reported today.

Onset of rejection can be detected by a reduced electrical output of the heart muscle, measured by a widely used diagnostic tool, the electrocardiograph. Once rejection starts, drugs can be given to stop rejection. Then the drugs are stopped until rejection starts again.

The new technique allows the scientists to avoid continuous therapy with the drugs, which have dangerous side effects. The treatment program is similar to that used for patients with kidney transplants, but until now it has not been possible to spot the onset of rejection of grafted hearts.

The surgeons said that the dog has survived far longer than those treated in any other laboratory. They predicted that with their present knowledge they should be able to treat animals so that longer and longer survival will be possible.

The report was presented this morning at a meeting of the Society of University Surgeons by Dr. Richard Lower, assistant professor of surgery at the Stanford University School of Medicine. Co-authors of the study were Dr. Eugene Dong, a postdoctoral fellow, and Dr. Norman E. Shumway, associate professor of surgery.

The research was supported by grants from the American Heart Association and the U. S. Public Health Service.

- more -

The scientists studied 45 dogs with heart transplants. All grafts were done with the surgical technique originally developed by Dr. Shumway and Dr. Lower six years ago. The operation is now so successful that in a recent series of 32 transplants, all but three recovered from surgery and lived until the heart was rejected or the animals died from the toxic effects of the drugs.

"We now know how to give the drugs in the most crucial periods," Dr. Lower said. "The dog that is still alive represents our best achievement so far. There is no reason to believe that we won't do better and get longer survival."

He said that the long-term survivor is being carefully studied so that the researchers will know how well a transplanted heart can be expected to function in supporting circulation. They also want to know more about the long-term effects of the drugs. The drugs used are a steroid hormone, hydrocortisone or methylprednisolone, and azathioprine.

One serious problem which must be studied is the effect of rejection in producing muscle changes and scarring which could impair heart function. The surgeons reported that better drug treatment or better matching of the donor and recipient for genetic compatibility might help overcome this problem.

Dr. Lower declined to comment when the technique might be ready for trial on patients. "There is still so much to be learned from animal experiments that we are not ready to consider embarking on clinical trials," he said.

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(Mailed February 10, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Note to Editors: This paper will be presented Thursday afternoon at the First Annual Colloquium of the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine at Stanford University School of Medicine. Theme of the meeting is "Frontiers in Mental Retardation." Among those attending will be R. Sargent Shriver, Peace Corps director and executive director of the Lt. Joseph P. Kennedy, Jr. Foundation, and Mrs. Eunice Shriver, executive vice president of the Foundation. See program mailed earlier for details.

FOR PM RELEASE THURSDAY, APRIL 1, 1965

Evidence of a possible link between mental retardation and toxoplasmosis, an infectious disease most frequently unrecognized clinically, was reported today by a research team at Stanford University School of Medicine.

Dr. Jack S. Remington, assistant professor of medicine, told the First Annual Colloquium of the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine that there are babies born with toxoplasmosis, but the disease is not detected because the infants look normal.

The babies who are born with the disease may grow up to be mentally retarded, possibly within three to four years, Dr. Remington said. The disease is presumably passed into the fetus by the pregnant woman.

"How a chronically infected mother can pass the organism to the child is not exactly known," Dr. Remington said, "but it has been demonstrated that laboratory animals with toxoplasmosis can bear offspring a year later which is also infected."

He said evidence that toxoplasma infection may be related to mental retardation was gathered recently in a study of mentally retarded children at Sonoma State Hospital. Blood tests performed on 350 children showed significant amounts of toxoplasma antibodies in 11 percent of them. The children had been selected after a review of their records which showed their retardation to be of unknown origin.

Another 400 children also were tested after their cases had been studied to rule out toxoplasma infection as a cause of mental retardation. These children, having genetic or other definable defects, were used for comparison purposes, Dr. Remington said. Only three percent of these tests were positive.

-MORE-

Dr. Remington's work, conducted both here and in El Salvador, is supported by funds from the Lt. Joseph P. Kennedy, Jr. Foundation and the National Foundation for Retarded Children. It is carried on cooperatively by the Stanford Medical School and the Palo Alto Medical Research Foundation.

Dr. Remington noted that up to now it had been particularly difficult to study the toxoplasma organism as a cause of mental retardation because of the high rate of toxoplasma antibody found in the normal population. He added that the second group of children in which antibody was low would provide a control or test group for his studies.

Toxoplasmosis is caused by a crescent-like organism the size of a blood cell which invades the tissues. The disease may occur congenitally, or may be acquired, presumably passed into the fetus by the pregnant woman. The disease may become chronic, assuming the form of cysts (particularly within muscle and nervous tissue).

When it occurs congenitally, the disease has recognizable symptoms. It may cause a stillbirth or a premature birth. It may end with the death of the baby or the illness may regress leaving the infant with varying forms of disability such as inflammation of the retinas or hydrocephaly, a defect producing in the newborn an unusually large head.

"It is estimated," Dr. Remington said, "that one in a thousand babies born in the United States has recognizable symptoms of toxoplasma infection. But how many more are born with the disease is not known."

He noted that a recent serologic survey he conducted in Palo Alto showed that among 600 women of childbearing age, 29 percent had the toxoplasma parasite. Similar tests conducted in El Salvador proved positive for 60 percent of women of childbearing age.

"We do not know how many of these women will pass on the organism to their babies," Dr. Remington said, "but the likelihood of a chronically infected woman giving birth to a child with mental retardation due to toxoplasmosis must be extremely small."

This can be shown by comparing the high prevalence of the disease among women in the normal childbearing population to the number of retarded children who have been found to have the organism.

"Still there are tests which can be used to find out if the child has the disease," Dr. Remington said. "If it is detected early it can be treated."

Dr. Remington issued a plea for requiring that a test for toxoplasmosis be performed in at least all young infants in whom mental retardation is found because with treatment further development of the retardation may be prevented.

He said that the hemaglutination test, developed five years ago by the National Institutes of Health, is a sensitive, reliable indicator of toxoplasma antibody in human or animal serums. In this test, sheep blood cells treated with tannic acid serve as the vehicle for measuring toxoplasma antibodies.

"Since we can detect the disease, these babies deserve to be treated," Dr. Remington said.

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(Mailed March 31, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

An American delegation on physiological development of the child under the chairmanship of Dr. Norman Kretchmer, executive head of the department of pediatrics of the Stanford University School of Medicine, will be travelling in the Soviet Union from April 5 through 28 to exchange medical and biochemical information with Russian colleagues.

The delegation was established under an agreement signed by the two countries in 1964 for exchanges in scientific, technical, educational, cultural and other fields.

During their stay the delegation will visit Russian institutes and schools in Leningrad, Moscow, Kharkov, Kiev and possibly Novosibirsk.

The delegation plans to exchange information on genetics, brain metabolism, physiology of the newborn and premature, infectious diseases, child development and endocrinology.

Other delegates are Dr. Alfred M. Bongiovanni, professor and chairman of the department of pediatrics at the Children's Hospital of Pennsylvania, Philadelphia, Pa.; Dr. Urie Bronfenbrenner, professor of child development and human relations at Cornell University, Ithaca, N. Y.; Dr. Donald Harting, acting director of The National Institute of Child Health and Human Development in Bethesda, Md.; Dr. Frederick C. Robbins, professor and chairman of the department of pediatrics at Metropolitan Hospital of Western Reserve University, Cleveland, Ohio; and Dr. Irving Schulman, professor and chairman of the department of pediatrics at the University of Illinois Research and Educational Hospitals, Chicago, Ill.

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(Mailed March 31, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

All the light in the world went out for Mrs. Betty Mantooth the day she was born. This was in 1924.

Although Betty wears two plastic eyes, she has resolved to live a normal life. And today, she is doing just that.

A wife and mother of two teenage boys, Betty works full time developing film for the Palo Alto X-ray department at the Palo Alto-Stanford Hospital Center, a job she has held since 1960.

Betty is happy with her work because she is doing something worthwhile for someone else. She takes X-ray films and puts them through developing and neutralizing solutions. Her husband devised Braille timers so she can time solutions to the exact minute. Sometimes she is so busy that she has four timers ticking at once.

During lunch hours Betty "reads" by listening to records. Right now she is making her way through a detective story entitled "Mother Hunt" by R. Stout. Each month she listens to the entire Reader's Digest and Holiday magazines. Her favorite stories are about the sea.

At home Betty does all the housework, although she hates it. She cleans, cooks and washes like anyone else. Her husband helps her pick out groceries each week.

Buying clothes is something she enjoys. She has no trouble telling if something fits, but she always asks the saleswoman if the color looks well with her black hair. She likes to wear red.

-MORE-

Her favorite pastime is lifting weights. Three nights a week she goes to a gymnasium for a workout, By touch she can tell the difference between the various size weights. At the gym she walks among the equipment because she has learned to "see" by listening to different sounds. To do leg raising exercises, Betty wears six-pound shoes which her husband made for her.

Her husband, who also works in the Hospital laundry department, refuses to get into a fight with her because "once losing in arm wrestling is enough."

Betty is a Californian. She was born in Fresno and has lived in Alameda almost all her life before she moved to Redwood City in 1960. When she was growing up, she attended the School for the Blind in Berkeley during the week. On weekends she played with the neighborhood crowd. She even took up horseback riding because she found a horse that could follow a group.

In 1943, Betty started training for airplane engine mechanics in Alameda. After two months of training, she transferred into the Naval Air Station proper to operate various machines like polishing lathes and buffing wheels.

In 1945 she married and became a full-time housewife until she started to work at Palo Alto-Stanford Hospital Center in 1960. Her vocational counsellor at the School for the Blind suggested she would make a good darkroom technician and introduced her to Mrs. Martha Chandler, darkroom technician of the Palo Alto Medical Clinic, who trained her for her present job.

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(Mailed March 30, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Dr. Rachmiel Levine, a noted authority on diabetes, will deliver the nineteenth course of Herzstein Medical Lectures sponsored by the medical schools of Stanford University and University of California.

Dr. Levine, professor and chairman of the department of medicine at New York Medical College, will speak on April 5, 7 and 9 at 8:15 p.m. in the auditorium of the Medical Sciences Building at the University of California Medical Center in San Francisco.

Dr. Levine's three lectures are: Monday, April 5, Diabetes: Problems of Definition and Etiology; Wednesday, April 7, The Metabolic Lesions of Diabetes Mellitus, and Friday, April 9, Analysis of Some Theories of Insulin Action. The lectures are open to the public. Members of the medical profession, medical students, and other interested persons are invited.

Dr. Levine is president of the American Diabetes Association and has received its Banting Medal. He is a distinguished scientist, teacher and writer. He has published more than 200 papers in the fields of experimental and clinical diabetes, hormonal activity and metabolism of carbohydrates.

Dr. Levine received his B.A. and M.D. degrees from McGill University. He received his residency training in internal medicine from Michael Reese Hospital in Chicago.

From 1947 to 1960 Dr. Levine was professorial lecturer in physiology at the University of Chicago. In 1952 he became chairman of the department of medicine and director of medical education at Michael Reese Hospital. He joined the New York Medical College in 1960.

The Morris Herzstein Lectures are sponsored by the medical schools of Stanford University and University of California under an endowment from the late Dr. Morris Herzstein of San Francisco. Since its establishment in 1929, some of the world's leading medical scientists have shared their views with colleagues and the public.

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(Mailed March 29, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

NOTE TO CITY EDITORS AND SCIENCE WRITERS

On Thursday, April 1, the Stanford University School of Medicine will hold its First Annual Colloquium of the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine.

The theme of the colloquium will be Frontiers in Mental Retardation.

Among the guests will be R. Sargent Shriver, Peace Corps director and executive director of The Lt. Joseph P. Kennedy, Jr. Foundation; Mrs. Eunice Shriver, executive vice president of the Foundation; Dr. Frederick C. Robbins, Nobel prize winner in the study of virus diseases and chairman of the department of pediatrics at Western Reserve University, and members of the Foundation medical advisory committee.

The morning meeting will begin at 9 a.m. in Room M106 of the Medical School Building, and the afternoon session at 1 p.m. (A detailed program is attached.)

Among Stanford pacticipants will be Dr. Arthur Kornberg, Nobel prize winner in medicine and physiology and executive head of the department of biochemistry, Dr. Joshua Lederberg, Nobel prize winning geneticist who heads the department of genetics, and Dr. Norman Kretchmer, executive head of the department of pediatrics.

If your reporter, photographer or both will come to the information desk in the main lobby of the Stanford Medical Center, the clerk will direct them to the room.

Because of the tight schedule, no press conference is planned but the meeting participants will welcome questions from the audience.

Sandwiches will be served at 12 noon during recess in Room M125 in the Medical School Building.

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(Mailed March 25, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Don D. Hamachek, administrative associate at the Baptist Memorial Hospital in Memphis, Tennessee, has been appointed associate director for finance for the Palo Alto-Stanford Hospital Center. His appointment was announced by Dr. LeRoy E. Bates, hospital director, and is effective April 23.

Mr. Hamachek will succeed Arthur J. Hoffman who resigned in January to accept the position of controller for Covina Inter-Community Hospital in Covina, California.

Mr. Hamachek has excelled in financial management and hospital computer system planning and development. In 1960 he installed a computer system at Baptist Memorial Hospital, the first in any hospital in the country. Because it operated so successfully, the hospital became the center for anyone interested in applying computers to financial management and data handling. He went on to apply it to medical record analysis and professional service statistics. He has been employed by that hospital since 1956.

Prior to that time, Mr. Hamachek was accountant and business manager for Passavant Hospital in Chicago, a position he held from 1952 to 1956. During that time he became active in the American Association of Hospital Accountants and served as president of the Illinois chapter in 1956. He also served as lecturer in hospital accounting at Northwestern University.

Recently Mr. Hamachek was appointed to an advisory committee for comprehensive managerial information for hospitals by the American Hospital Association and serves as a member of the Association's Accounting and Business Practices Committee. He is a member of the American College of Hospital Administrators and also holds a fellowship in the American Association of Hospital Accountants. He is past president of the Memphis Hospital Council and editor of the accounting column for SOUTHERN HOSPITALS magazine.

He and his wife have four children. The oldest son and daughter are attending the University of Mississippi where their son will graduate in June and enter Duke University to study hospital administration. The other boy and girl are teenagers.

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(Mailed March 24, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

The influence of steroids--hormones secreted by the adrenal cortex and sex glands--on the brain and behavior will be studied at Stanford University School of Medicine under a Public Health Service grant.

The award was announced today by Dr. Luther L. Terry, surgeon general of the Public Health Service of the U. S. Department of Health, Education and Welfare.

The School of Medicine will receive $142,730 in direct costs for the first year plus additional support totaling $789,499 for six years from the National Institute of Mental Health in Bethesda, Md.

The study will focus initially on the female sex hormone, progesterone. Dr. David Hamburg, professor and executive head of the department of psychiatry at Stanford, will head a team of psychiatrists, biochemists, psychologists and physiologists.

They will study the role that progesterone and the corticosteroids (hormones secreted by the outer area or cortex of the adrenal glands) may play in causing the emotional distresses of women during the menstrual cycle, pregnancy, and after childbirth.

Recent research suggests many close links between the steroids, brain and behavior. Dr. Hamburg and other scientists have found that marked changes in steroid hormone production often coincide with emotional disturbance. For example, they have found increased concentrations of corticosteroids in over-responsive persons.

Other studies have shown that the body's level of the female sex hormone, progesterone, decreases during premenstrual and post-pregnancy periods. These decreases may be related to emotional disorders of these periods which have ranged from premenstrual tension and depression to psychiatric hospital admissions, violence, and suicide attempts.

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"It is well-known," Dr. Hamburg said, "that marked fluctuations of mood frequently occur in clear-cut correlation with the menstrual cycle of women. Typically the premenstrual period is likely to be a phase of increased irritability and depression.

"The phenomenon has naturally attracted considerable clinical attention but, despite the rather extensive documentation of these relationships, there has been little attempt to study the possible role of biochemical factors."

Dr. Hamburg and his associates plan a detailed study of the influence of different levels of progesterone on the brain and its consequent effects on normal and abnormal behavior.

Wives of married students at Stanford will be asked to volunteer for studies focusing on the menstrual cycle and the first pregnancy. The studies are designed to answer such questions as:

. How decreases in the female hormone, progesterone, affect premenstrual tension in different women?

. What is the relationship between hormone level changes in varying degrees of anxiety and depression in pregnant women?

. How are the brain and behavior affected by the sharp drop in progesterone following pregnancy?

. What pathways do progesterone and corticosteroids travel in the body?

. How does the body dispose of the metabolites (chemical by-products of progesterone)?

. How does progesterone affect the electrical activity of the brain? (There is considerable evidence that progesterone and its chemical by-products may have profound effects on the central nervous system such as producing certain sedative effects).

The investigators will also conduct sleep and dream studies to determine how changes in hormone levels affect sleep patterns, since there are indications that sleep abnormalities may contribute to psychological disorders.

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(Mailed March 23, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Dr. Donald W. Seldin, a noted authority on metabolic diseases, will be a guest lecturer of Stanford Medical Center on March 17.

Dr. Seldin will discuss "Dearrangements in Potassium Metabolism and Acid Balance" at 8:15 p.m. in Room M106 of the Stanford Medical School.

Dr. Seldin is professor of internal medicine at Southwestern Medical School of the University of Texas in Dallas. He is a member of numerous societies, including the American Society for Clinical Investigation, the American Society of Internal Medicine, American College of Physicians and the Endocrine Society.

He graduated from the Yale University School of Medicine in New Haven, Conn. in 1943.

His lecture is sponsored by the Charles D. Armstrong Memorial program of the Palo Alto Medical Staff and the Palo Alto-Stanford Hospital department of medicine. Dr. Armstrong was a co-founder of the Menlo Medical Clinic and chief of staff of the Palo Alto Hospital in 1956-57.

During the day, Dr. Seldin will participate in informal discussions with members of Palo Alto Medical Staff department of internal medicine.

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(Mailed March 15, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Hangover is a black cat. His name-to-fame didn't happen overnight from drinking too many martinis.

Hangover came to the Stanford Medical Center in 1961. Since that time Dr. F. Blair Simmons, assistant professor of surgery at the Stanford Medical School, has been observing him. Hangover has a hearing loss in the inner ear where the process of converting sound energy into nerve impulses begins.

Dr. Simmons, who specializes in disorders of the ear, nose and throat, hopes his research will show what kind of auditory information is necessary for Hangover to hear. "The information may possibly be applied to humans because a cat's inner ear is about the same size as the human ear," Dr. Simmons said.

"The only problem with Hangover is that he costs too much for room, board, hearing tests and drugs," added Dr. Simmons. Hangover has cost the Stanford Medical School about $4,000. It takes 25 hours to administer one hearing test on him.

"The same type of information we learn from Hangover could be obtained by studying human inner ear bones. One human would cost the Medical School only $150," according to Dr. Simmons.

But Dr. Simmons is using Hangover because he has not been able to get enough people with impaired hearing to volunteer for research on the deaf. The ultimate prevention of most deafness depends, to a large extent, on having available for research the organs which cause the deafness.

These organs are the bones of the inner ear. But the problem in research is that the inner ear cannot be seen or directly examined during life because of its inaccessible location within the temporal bones, the hardest bones within the head that surrounds the inner ear bones and their nerve structures.

Stanford Medical Center is taking part in a program sponsored by the Deafness Research Foundation. The Foundation is seeking people who wish to donate earbones when they die to bone banks. These bones will be used in research toward aiding other deaf persons with potentially repairable hearing defects.

The purpose of the bone bank is to provide the necessary channel through which individuals may bequeath their inner ear structures. And they are the greatest value when submitted with the results of hearing tests and other available pertinent medical records.

Then such tests that had to be made on Hangover would not be necessary.

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(Mailed March 8, 1965)

HANGOVER, A BLACK CAT, leads the life of Riley under the care of Dr. F. Blair Simmons, assistant professor of surgery at the Stanford Medical School.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Connolly (DA 1-5310)

"Why Some Children Can't Read" is the subject of a panel discussion Monday (March 8) on Doctors News Conference, KTVU, Channel 2, at 9:40 p.m.

Dr. Jon Eisenson, professor of speech pathology and audiology at Stanford University School of Medicine, will appear on the panel. He is also director of the Scottish Rite Institute for Childhood Aphasia at Stanford, and advisor to the California Easter Seal Society and United Cerebral Palsy Society.

Also appearing on the panel will be Dr. Douglas L. Crowther, assistant professor of neurology and pediatrics, University of California School of Medicine. The program moderator is Dr. Hayes Newby, director of speech pathology and audiology at Stanford.

The discussion will be concerned primarily with a special type of reading problem called dyslexia -- its symptoms, causes and treatment.

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(Mailed March 1, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Technicians in lipid research at Stanford Medical Center may be using a hair dryer, but they aren't drying their pincurls.

What they're really doing is drying liquid plasma extracts in thin layer plate chromotography, a technique for separating sugar from other blood plasma ingredients. Doctors in lipid research study the affect of diet, hormones and drugs on fat metabolism.

"The hair dryer is an indispensable piece of equipment," says Mrs. Rosemary Hess, the technician who purchased it for $9.

"We have to dry many layers of an extract on one plate. Waiting for each layer to dry takes too long," she said. The dryer is a time-saving device for alcohol and water solutions which evaporate slowly. For ethers which dry more quickly, however, the hair dryer is not necessary.

In addition, quick drying prevents the extract from spreading over too much of the plate's surface. By using the dryer, the technicians are able to dry the extract in a very narrow band.

Mrs. Hess said she searched everywhere for a "hood-less" dryer. This type, which can be held in the hand or set on a post, has almost been replaced on the market for the dryers which come with a hood. Today women just don't want to be bothered drying each pincurl individually. But the dryer is perfect for Mrs. Hess and others in the lipid research department.

"And it's a lot less expensive than the dryers with the hood," she added.

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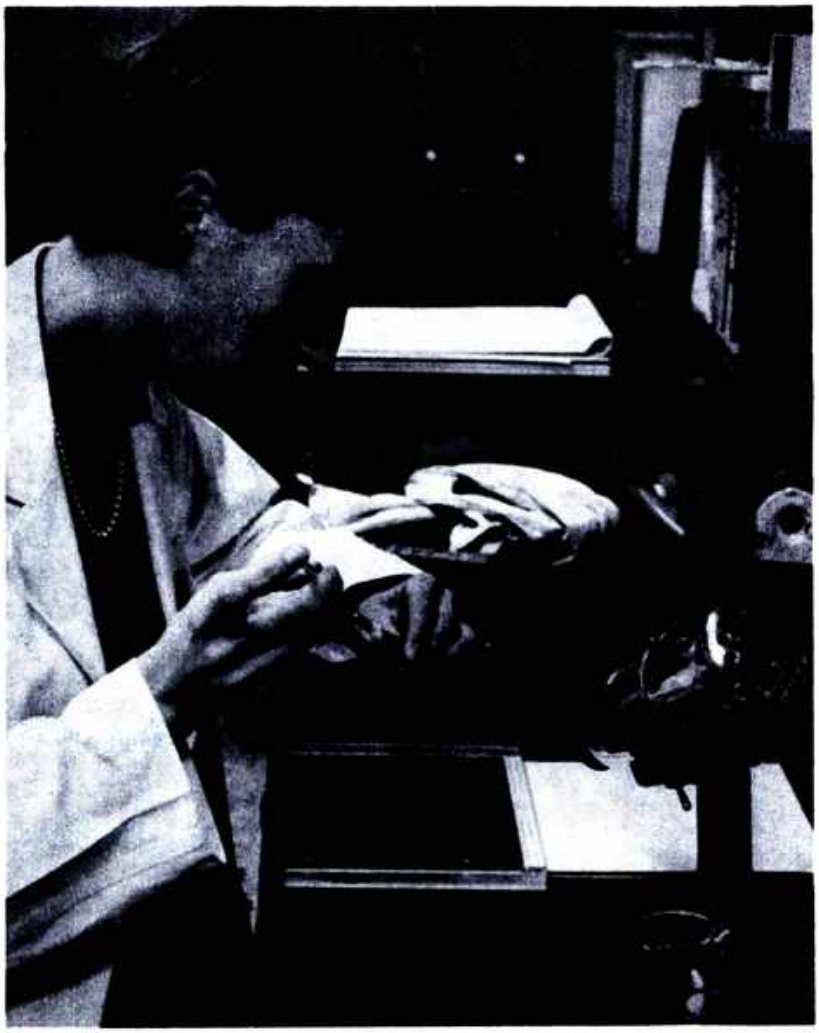
(Mailed March 1, 1965)



UNUSUAL EQUIPMENT in lipid research at Stanford Medical Center is a hair dryer. It is used to dry liquid plasma extracts in thin layer plate chromotography, a technique for separating sugar from other blood plasma ingredients. The technician is Mrs. Rosemary Hess.

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Hair Dryer

Please send me an 8x10 glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: Copies of STANFORD TODAY are available on request.

Persons undergo a personality change when they are deprived of their dreams, an investigator from Stanford University School of Medicine reported today.

Dr. William Dement, associate professor of psychiatry, said "we are not yet certain how far out of hand this can get, but we suspect that such a disturbance can play an exaggerated role in those people who are susceptible."

Dr. Dement described his studies in an article in the University magazine, STANFORD TODAY.

He said he had devised an experiment to find out what happens if a person maintains his normal hours of sleep, but is not allowed to dream.

By using earlier findings which showed that dreaming periods were precisely related to rapid, almost flickering eye movements, Dr. Dement stuck tiny electrodes on each side of volunteers' eyes and carried the leads to a brain wave machine (electroencephalograph) in the next room.

Dr. Dement awakened his volunteers whenever the brain wave machine indicated they began to dream. He allowed them to fall asleep again. And so on, night after night for up to 15 days.

By the third night, most volunteers began to act edgy and strange, Dr. Dement reported. They got hungry, anxious and irritable, had difficulty concentrating, and displayed very impulsive desires to do things they ordinarily would not consider.

In the final part of the experiment, when they were allowed to sleep as long as they wanted, the volunteers dreamed up to four times as much as usual, depending on the length of the deprivation.

-MORE-

Similar results were obtained from dream deprivation tests made on cats for 70 days. Several of them developed ravenous appetites, exhibiting a continuous, restless searching for food. Exploratory behavior in general was enhanced. And behavioral peculiarities appeared such as ceasing to groom and hypersexuality. Several of the cats tested showed signs of impaired learning. Again dream deprivation in the cats led to an intensification of the phenomenon.

Why does the body apparently require dreaming time and build up a strong compulsion to dream when deprived of it?

Dr. Dement speculates there may be a biochemical explanation. The effect of dream deprivation is such an orderly process that it is impossible to escape this conclusion, he said. Perhaps dreaming, when it is occurring normally, engenders periodic changes in brain metabolism, allowing certain biochemical adjustments to be made. In this way neural functions are kept in proper balance.

In the absence or restriction of dreaming the biochemical status of the brain shifts in the direction of increased excitability, which probably leads to personality changes, Dr. Dement said.

Working on a hunch that there may be important links between dream deprivation and certain forms of mental illness, Dr. Dement and his collaborators are now directing a major portion of their research along this line.

He said that in the illness of schizophrenia, for example, the individual involved usually has had a poor life experience, is incapable of dealing with the world around him, and is prone to devastating anxiety.

Either as the result of a gradually deteriorating process or sudden stress, such a person enters into a state of chronic anxiety. This anxiety leads to insomnia and specifically to a loss of dreaming. There is even evidence that anxiety alone, unattended by insomnia, may suppress dreaming.

Thus, it is the interference with sleep that is important, not anxiety alone, Dr. Dement said.

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(Mailed April 30, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: This story supplements a release mailed earlier by the University of California Medical Center. It provides additional information on how the technique of treating hyalin membrane disease was applied to the first patient in this country.

FOR RELEASE APRIL 30, 1965

Some 50,000 infants suffocate each year in the United States alone. The infants, most of them premature, turn blue and choke and die.

They die from something that is not to this day in most current medical directories, dictionaries or guides. It is a mysterious condition called hyaline membrane disease. Almost two years ago, this disease killed Patrick Bouvier, the younger son of the late President John F. Kennedy, and it usually kills about half the infants it strikes.

Both the cause and cure of the trouble have been heart-breakingly elusive. There are many complicated theories about how hyaline membrane disease blocks the lungs.

But a promising lead has emerged from a strange and circuitous research path blazed by a team of American and Malaysian doctors in Singapore last summer. In the busy maternity ward of the big Kandang Kerbau Hospital, these doctors tested a technique that may result in a more effective treatment of the babies in respiratory distress.

The results of this study were published today in the May issue of PEDIATRICS by Dr. John Clements and Dr. William H. Tooley of the University of California, Dr. Marshall H. Klaus, assistant professor of pediatrics and director of the Research Center for Premature Infants at Stanford Medical Center, and their associates, including Dr. Josephine Chu of Cleveland's Mt. Sinai Hospital, and Dr. M. A. Thomas, of the University of Singapore medical faculty.

These pediatricians now believe that the basic cause of the deadly breathing impairment is a constriction of thousands of small artery branches which carry blood to the lung's air spaces to pick up oxygen. They also blame a collapse of those air spaces.

"We think," the investigators reported," that this collapse results from a nerve reflex which is very active in the unborn infant, one that has been studied but has never before been demonstrated in human infants. It is a protective centralizing reflex."

-MORE-

It is well known that in certain diving animals such as seals, this reflex causes blood to be temporarily diverted from less important organs in order to send more to the heart and brain. This way the animals can conserve oxygen and prolong their stay underwater.

"In the human this reflex can come into play when the blood of the fetus becomes low in oxygen," Dr. Clements and Dr. Klaus said. "This could occur if the mother herself suffers from oxygen lack, if she has low blood pressure, or if there has been an interference with the placental circulation--a constriction of the umbilical cord, for example. What happens then is that the centralizing reflex shuts down the blood flow to the lung and kidneys and intestines and increases the flow to the heart and brain.

"The centralizing reflex makes sense in the unborn infant, whose lungs are not yet breathing air and who is getting all the oxygen from his mother through the placenta. But if the reflex goes into action after the baby is born a shut-down of the lung's circulation is dangerous, even disastrous."

Convinced that the artery constriction was an important part of the respiratory distress problem, the doctors in Singapore sought a way to counteract it. They chose a powerful nerve hormone called acetylcholine. This is a chemical naturally released at the ends of certain involuntary nerves and it is responsible for many bodily reactions--sweating, flushing, and most important in this problem, dilating lung blood vessels. Because acetylcholine is rapidly neutralized in the body by an enzyme, cholinesterase, it was necessary to give it to babies through a thin plastic tubing passed through the umbilical vein directly to the lung.

Of 12 babies treated with this method, 11 responded promptly and favorably.

Since their return from Singapore last August Dr. Klaus has continued the acetylcholine studies at Stanford Medical Center, and Dr. Clements and his associates at the University of California have been making a detailed analysis of the Singapore results.

One of the first babies to successfully receive the treatment in this country was Robert Edmond Speirs, son of Mr. and Mrs. Robert Speirs of 1104 Moffet Boulevard at Mountain View, Calif.

The baby was born in the Palo Alto-Stanford Hospital Center one month prematurely. At birth he was blue and struggling for breath, with a characteristic grunting and chest retraction. He appeared very sick, said Dr. Klaus, when the acetylcholine was started. But over the next six to 10 hours the baby's breathing returned to normal limits, and after 24 hours of treatment the continuous infusion of the drug was stopped.

The respiratory rate of the baby rose rapidly, he remained pink and breath sounds were good so the doctors decided not to restart the infusion. Nine days later, he left the Hospital and he is now a healthy 20-pound baby.

"It should be pointed out," Dr. Klaus said, "that in the future acetylcholine may not be the drug of choice in the treatment of respiratory distress, but it has been helpful in elucidating what may be the major underlying cause of the disease."

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(Mailed April 29, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Connolly (Da 1-5310)

An additional grant of $10,000 to the Palo Alto-Stanford Hospital Center for the care of needy handicapped children was announced today by the California Elks. This grant brings the Elks total contribution to the Hospital to $35,000 for the current year.

"The Elks were pleased to aid almost 100 children from 20 counties in California with last year's grant of $25,000," said John Morey of Menlo Park, Elks treasurer. "With the additional grant this year, we look forward to even greater accomplishments."

Children who receive help from the Elks grant include those suffering from defective hearts, blood disorders, asthma, kidney disease, eye conditions, speech problems and orthopedic handicaps. Others, who fail to grow normally, or who have emotional problems associated with handicaps, are also aided.

The grant pays for laboratory tests, treatment, surgery, medicine, transportation and even housing expenses for parents from out of town if they need it to stay here while their child is hospitalized. Those receiving aid are recommended by physicians and screened by social workers at the Hospital.

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Original to Palo Alto Times, April 28, 1965

Copies mailed to Redwodd City Tribune, S.J. Mercury -- April 28, 1965

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Giving Dr. Frank C. Winter an engraved gold medal was how 100 villagers in San Jose del Cabo said thanks for having their sight restored.

Two weeks ago, Dr. Winter, acting chief of the division of ophthalmology at the Stanford University School of Medicine, made his sixth trip to the isolated village at the tip of Baja, California. Touched by his mission of restoring sight to over 100 people, the villagers presented him with a gold medal inscribed in Spanish: "Con Gratitude Dr. Winter".

"I was so overwhelmed that I couldn't say anything. But the villagers understood," said Dr. Winter.

Dr. Winter has performed over 100 operations for cataracts and other disorders. He has prescribed glasses for hundreds of partially sighted people and later supplied them with glasses which were donated by Parsons Optical Company in Palo Alto.

Dr. Winter did more than help persons who needed medical services. He made friends for America by living with the people.

Senor Adolfo G. Dominguez, Mexican Consul General in San Francisco, helped to make Dr. Winter's trips possible. The Governor of the province, General Salinas Leal, has given Dr. Winter permission to perform his medical work. The district medical officer, Dr. Eduardo Rodriguez, publicizes Dr. Winter's coming so the people can come from the nearby villages by mule or truck to receive treatment at the simple 40-bed hospital in San Jose del Cabo which is operated by six nuns.

"When I arrive, the people are waiting for treatment. A village assistant helps me line them up. Then I check them for blinding conditions that can be cured by surgery."

-MORE-

One of the most remarkable phases of Dr. Winter's visit was the treatment of a nine-year-old boy. He was blinded in his right eye by a stick as a baby. What sight he had from his left eye was in great danger, due to an open sore in the cornea, the transparent part of the eye which covers the iris and admits light.

"In America he would have had an emergency operation immediately, but the general practitioners in Baja have not had the chance to specialize in eye work. Since there were no fresh corneas available for transplant when I first saw the boy last year, I fashioned a temporary patch by using tissue from his blind eye. This covered up the dangerous hole and temporarily saved the eye. But to restore the sight, a clear corneal graft was necessary."

Before leaving on his recent trip, Dr. Winter activated "The Stanford Eye Alert" for a fresh cornea which he could transport to Baja. Accompanied by Dr. Richard Yukins, fellow in ophthalmology at Stanford University School of Medicine, to assist him, and James Duncan, owner of a flight school in Palo Alto, he flew down and successfully completed the operation.

Under "The Eye Alert" system, eyes are obtained from people who die at the Palo Alto-Stanford Hospital, the Palo Alto Veterans Administration Hospital and the San Mateo County General Hospital. The admitting office, nursing office and emergency room are alerted to notify the Hospital's resident in ophthalmology on duty when a patient dies. If the eyes are in good condition, he then talks to the patient's family and secures permission to use the eyes in transplant surgery. Thus, invaluable eyes are often available within hours after "The Eye Alert" is put into effect.

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(Mailed April 27, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE MONDAY, APRIL 26, 1965

CINCINNATI -- Cell surgery, artificial limbs that feel, chemicals for welding wounds, transplantation of whole organs and other new, bold techniques for saving and prolonging human life may be possible within our own lifetime, a Stanford University professor said Sunday.

Dr. Robert Chase, executive head of the department of surgery of the School of Medicine, made this prediction as he described the brave new world of surgery at the 1965 Stanford Conference here.

He said he envisioned in the not too distant future the development of a new specialist, the ultra micro surgeon whose work would be confined to cellular and subcellular surgery.

"Blood vessels and nerves of very small caliber are already being repaired through dual microscopes with material that can barely be seen with the naked eye," Dr. Chase said.

"In the field of wound healing," Dr. Chase continued, "it is quite clear that man will ultimately be able to chemically weld wounds."

Fractures will be instantaneously repaired by restoration of full bone strength without the necessity of the long period of immobilization. And infections in wounds would be unheard of.

The mysteries of diagnosis and designs for treatment will be largely computerized in the modern hospital of the future.

"Imagine entering the hospital of 1984," Dr. Chase told the audience. "Your medical history will be taken and fed directly to a giant computer which will return the diagnostic possibilities in order of likelihood. Your examination will employ a myriad new, sophisticated laboratory and special techniques such as recording of heart beat, blood pressure, gastrointestinal activity and other functions on electronic tape for replay into the diagnostic computer."

-MORE-

One of the great accomplishments of the future, Dr. Chase predicted, would be a solution to the problem of transplantation of whole organs or parts from one individual to another, opening up a new era in the treatment of disease.

He said presently one of the more famous Stanford personalities is "Ralphie," a dog who has gone for nearly one year with a totally transplanted heart from another dog.

"If it can be done once," Dr. Chase said, "it can be done again and with predictable success once the ideal method for avoiding immunologic rejection can be achieved."

With transplantation, man will be able to control other organs as well, like the thyroid, pituitary and sex glands with ultimate goal the alteration of aging process.

"I have little doubt," Dr. Chase said, "that cancer and other new growths will come under control within the next two decades while research in neurology and anesthesia will give rise to some form of reliable electrical 'consciousness control' without the time requirements and side effects of today's drug anesthesia techniques."

Dr. Chase said that the laser beam, although still in an experimental stage, will have a place in the medicine of the future. Its possibilities in getting at disease at various depths in the body without the usual surgical dissection appear to be innumerable.

"The same may be said for the stereotactic techniques already in use for the treatment of central nervous system disorders," Dr. Chase stated. These techniques allow surgeons to probe the inner reaches of the brain with extreme precision for selective destruction of diseased or abnormally functioning units.

"The nature of research in our own laboratory at Stanford makes it logical to predict that within the next decade electronic substitutes for the hearing apparatus will be perfected," Dr. Chase said.

"Mechanical implants for direct stimulation of the hearing and auditory nerve are already functional in cats," he reported. "It takes little imagination to expand this idea to electronic substitutes for the photosensitive eye with direct stimulation of the optic nerve in people who are otherwise doomed to total blindness. Tactual sensation may also be fed into the central nervous system from electronic devices.

"We may thus develop artificial limbs with the ability to feel."

But while Dr. Chase is confident that man could turn these awesome and exciting possibilities into reality, he said he was "far less certain of our capacity to comprehend the human responsibilities involved in the brave new world of surgery."

"We are now faced with the decision, who shall live and who shall die." Can this decision be placed on the medical profession? The sociologists or religious leaders? Dr. Chase asked.

He said that surgeons are already confronted with this problem arising from the sacrifice of a kidney from one family member or voluntary donor to use in a sick recipient. While such transplants will significantly lengthen the survival for the recipient, statistics show no permanent survivors following kidney transplantation except in identical twins.

"Most assuredly," Dr. Chase concluded, "the dilemmas we now face will be geometrically compounded with the predictable breakthroughs in medical science."

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Connolly (DA 1-5310)

"How can I be sure I get the right baby?"

This is one of the many questions that prospective mothers ask on the twice monthly maternity tours of the Palo Alto-Stanford Hospital Center.

"We have never had a mixup," said Mrs. June Thompson, director of delivery rooms. "We use a foolproof tag system. Before the mother and baby leave the delivery room, a nurse puts a plastic identity band with the mother's name and a code number on the mother's wrist and two on the baby's wrists. These are not removed until mother and child have left the Hospital."

Since the Hospital opened in 1959, almost 3,000 people have taken maternity tours. They come from as far away as Half Moon Bay to Fremont and as far south as Gilroy. In groups of about 20, the prospective mothers, fathers, and even grandmothers are shown around by a volunteer Pink Lady or Gray Lady who has been trained for the job.

The maternity tours start in the main lobby at 11 a.m. on the first and third Wednesdays of every month and take about an hour. The first stop is the emergency entrance, where all maternity patients are admitted.

"Make a trial run, preferably at night," the prospective parents are advised, so there will be no panic about finding the right place when the baby is on its way!

The tour then goes up to the waiting lounge on the third floor, so the husbands can see where they will be pacing the floor or watching TV. Next the group goes into the labor and delivery areas, where Mrs. Gertrude Schweitzerhof, head nurse, explains the procedure and shows the husbands the gowns they must wear if they wish to stay with their wives during labor.

-MORE-

"Almost all husbands choose to be with their wives whenever possible," Mrs. Schweitzerhof reports. "They must scrub and wear gowns to keep the area as sterile as possible as a protection for the mother."

Next the tour goes to the delivery room exit, from which the new mother and baby will emerge, and the mother will announce whether it's a boy, a girl, or both!

The group then views the rooms where the mothers will stay after delivery, and Mrs. Mary Sunnergren, head maternity nurse, explains the routine for mother and child while in the Hospital. The next stop is the Solarium where a question and answer session is held.

Some points of information and advice that Mrs. Sunnergren frequently gives are:

"Children under 16 cannot visit in the maternity section. Don't let your husband bring your little ones outside and wave and shout from the window. It is much better to talk to them by telephone. There are phones in every room.

"The Hospital averages about 200 births a month now, with peak months like September and May running as high as 250.

"For foreign mothers who have difficulty with English, advance arrangements are made for a translator, usually a relative or friend, to be with her. The department also has a file of personnel who speak various languages and can be called in case of an emergency."

On the way out, the tour stops by the nursery window to view the newest arrivals. Many persons on the tour will be back in a few days or weeks.

"I recognized so many friendly faces that I felt right at home!" declared one young mother. "When I had to rush back for an early delivery, I wasn't scared to death as I might have been."

Prospective parents are urged to take the maternity tour at least a month before their baby is due. Reservations must be made by calling ext. 5594.

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(Mailed April 26, 1965)

Editors: Photographs are available on request.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

Note to Editors: For release at 1 p.m. on Tuesday, April 13, 1965. Dr. Pool will be staying at the Ambassador Hotel in Atlantic City should you wish to contact her.

ATLANTIC CITY, April 13--A new technique for extracting the blood fraction needed to prevent bleeding in hemophiliacs was announced today by two researchers from the Stanford University School of Medicine.

The method is so simple it can be carried out in any blood bank or hospital without special equipment. Once the fraction has been removed, the rest of the blood is available for use in regular transfusions.

The fraction is 15 times as concentrated as in normal blood plasma. This means that a hemophilic patient need not be given whole plasma which includes a great deal of liquid that overloads the body's circulatory system.

The technique was reported today at the 49th annual meeting of the Federation of American Societies for Experimental Biology.

Authors of the report were Dr. Judith G. Pool, a senior research associate at Stanford, and Mrs. Angela E. Shannon, a research assistant.

The extract may be dissolved in a small amount of sterile salt solution before administration so that it provides 15 times the concentration of antihemophilic globulin (AHG) in plasma for a given weight of protein, Dr. Pool said. While commercial preparations of AHG are available, these are only about three times as concentrated as plasma and are quite expensive.

The fraction is prepared by drawing blood in double bags now widely used by blood banks. The bag with whole blood in it is spun in a refrigerated centrifuge to separate the cells from the plasma.

-MORE-

Next, the plasma is squeezed out of the first bag into the second. Then the plasma bag is immersed in a mixture of dry ice and acetone for a few minutes to quick-freeze the liquid.

When the plasma is frozen solid the bags--still connected together by plastic tubing--are both placed in the refrigerator. Twenty-four hours later the plasma will have thawed, leaving a cold-insoluble precipitate. The bags are then re-spun to bring the precipitate to the bottom. The plasma is drained back into the bag with the cells to reconstitute the whole blood.

Bags with precipitate in them may then be frozen and stored until the AHG is needed for a patient. Activity of the AHG will last for weeks or months.

Dr. Pool has tested the effectiveness of the stored AHG with an improved clotting assay method she developed six years ago. Frozen AHG is now being accumulated at Stanford Medical Center for use by hemophilic patients in the near future.

Hemophilia is a rare hereditary condition found almost exclusively in males. Victims of it lack one of the nine or ten plasma proteins responsible for making blood clot. Patients are very susceptible to injury, but more often bleeding occurs spontaneously, particularly in the joints of the legs and arms. As a result, boys with the condition are often crippled by the time they reach adolescence.

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(Mailed April 8, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: For p.m. release Tuesday, April 13, 1965. Drs. Rosan and Glick will be staying at the Mayflower Hotel should you wish to contact them.

ATLANTIC CITY, April 13 -- The powerful light of a laser beam has been used to study the distribution of minerals in the stomach of man and experimental animals, two researchers from Stanford University School of Medicine reported today.

Dr. Robert Rosan, assistant professor of pathology, and Dr. David Glick, professor of pathology, described the newest application for the laser to the annual session of the Federation of American Societies for Experimental Biology in Atlantic City.

The Stanford investigators said they found at times more calcium and magnesium in the surface cells of the stomach of children than in the deeper cells or in the mucus which the stomach secretes. In adults the pattern of the minerals was reversed.

Until now the distribution of these minerals in stomach cells was unknown.

"We do not understand the significance of calcium and magnesium in the stomach," the researchers said, "but it may be related to the control of secretion of gastric juices."

This was the first time that such a study in samples as small as 30 millionths of an ounce has been performed, and the elements were measured in about one-thousandth of the sample, they said.

The amazing electronic device--which emits light in a brilliant, narrow beam--is focused through a microscope on a spot of tissue, sliced to thickness of one-thousandth of an inch, and frozen to prevent the minerals from diffusing.

Packing energy of about 18,000 degrees, the beam vaporizes the tissue instantly. The vapor literally rockets between electrodes which set off a spark, and the gases form a characteristic spectrum or rainbow on a sheet of film. The lines represent each chemical in the tissue.

-MORE-

"From the film each element can be recognized and measured with an error of less than 10 percent in a properly regulated laser," the researchers said.

To have a simple standard for comparison, the scientists mount the tissue slices on ordinary photographic film. The laser penetrates the film as well as the tissue, and the amount of silver vaporized from the film is used as a basis for comparing the measurement of the other elements.

Ten or more elements can be discovered from this simple, quick operation, Drs. Rosan and Glick said. The procedure takes less than a second and requires very small tissue samples. The same analysis with conventional tests requires 20 to 30 minutes for each element.

The technique may be ideal as an adjunct to other tools in diagnosing illness, where presence of certain elements are a tip off, the researchers said.

Dr. Rosan and Dr. Glick said they plan to extend their study to effects of various physiological states, and might do this in part on the living stomach wall. They have already applied the laser on living persons without pain or harm obtaining a direct analysis of skin, teeth and hair.

The type of equipment used in the Stanford experiments is a laser combined with a conventional spectrographic device. It was developed by Frederick Brech of the Jarrell-Ash Company of Waltham, Mass. The laser beam is produced by exposing a synthetic ruby to an intense flash of light generated by millions of watts of energy.

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(Mailed April 7, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

A more efficient system for storing nitrous oxide, an anesthetic known as laughing gas, has recently been installed at the Palo Alto-Stanford Hospital. Although the system is common in industry for charging whipped cream dispensers, it has not been installed in any other hospital in the country.

The system consists of one large cylinder or bulk unit containing about a three months' supply of liquid nitrous oxide. It replaces a system of 19 smaller cylinders requiring an operator to change the cylinders every two or three days.

"The new system is self-operating," said Dr. Grant Fletcher, medical director of the department of inhalation therapy. "When the supply of nitrous oxide gets low, a tank truck comes to the Hospital to refill the cylinder without shutting down the equipment or patient care."

The bulk unit has a control system which maintains the liquid at a constant temperature and pressure. The liquid nitrous oxide sits in the bottom of the cylinder like water in a basin. Gaseous nitrous oxide forms above the liquid. The pressure in the tank forces the gas into a pipeline connected to the Hospital's 14 operating rooms and four delivery rooms. As the gas is drawn off the top of the liquid, additional gas is formed by evaporation.

In the previous system, common in most hospitals, the 19 cylinders fit into a central pipeline called a manifold. Each 200-pound cylinder has to be lifted and attached to the manifold manually.

A common problem was ice forming on cylinders and pipelines when the Hospital used high amounts of the anesthetic. The chilling dropped the pressure in the cylinder and made them inoperative. This reduced the supply of nitrous oxide available for the operating and delivery rooms.

To maintain a safe supply level it was often necessary to attach a new full cylinder and discard the partly filled frozen cylinder. Freezing does not occur in the new bulk unit because the liquid is kept at a constant temperature and pressure.

A continuous supply of the gas is necessary for the Palo Alto-Stanford Hospital because 200 liters of nitrous oxide must be piped into the operating rooms at peak times, according to Dr. Fletcher. The new system has the capacity to send off 800 to 1,000 liters.

The Hospital has a contract with Ohio Chemical Co. in Richmond, California, who paid for the unit and installation. The Hospital buys over 1.5 million gallons of nitrous oxide from them each year.

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(Mailed April 6, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: For release 1 p.m. Saturday, April 10, 1965. Dr. Aschheim will be staying at the Traymore Hotel in Atlantic City should you wish to contact him.

ATLANTIC CITY, April 10 -- Scientists and laymen have known that old age induces changes in the body, including the skin which becomes wrinkled and rough and loses its flexibility.

But how these changes occur is a mystery and a subject of much speculation and controversy among researchers.

Today several hundred of the nation's physiologists met in Atlantic City at the annual session of the Federation of American Societies for Experimental Biology. They heard a report suggesting that the phenomenon of aging may be occurring partly due to "inadequate traffic of nutritional substances across vascular membranes."

It was from experiments of how small molecules such as water and large molecules such as proteins travel in inflamed skin that the suggestion and the technique to study this phenomenon were born.

In inflamed skin, vessel membranes become more permeable and make it possible for scientists to observe how various substances filter through compared with normal skin.

The study was done by Dr. Emil Aschheim, assistant professor of dermatology and physiology at Stanford University School of Medicine.

Dr. Aschheim injected protein in rats with inflamed skin. The protein had been previously labeled with a special dye called Evans blue. Since the dye combines with the protein, blueing of the skin indicates that the vessels have become permeable to blood proteins and that these leak out into the tissue.

He repeated the experiment using radioactive proteins together with radioactive rubidium which tags blood flow. By monitoring the radioactivity in the inflamed and normal skin, Dr. Aschheim was able to measure accurately the protein inside and outside the vessels and relate it to blood flow of the skin.

From these studies, Dr. Aschheim determined that transport of large molecules across the walls of blood vessels depends on blood flow. In the inflamed skin, vessels let protein out very fast at a speed proportional to the blood flow similarly to the way water is transported in normal skin. But blood proteins leaked out slowly in normal skin.

This is believed by Dr. Aschheim to be an important regulatory mechanism which sets the conditions under which water and food substances are exchanged between blood and tissue.

"It is not inconceivable," Dr. Aschheim said, "that as we age, there is progressive deterioration of the internal environment, mainly because of decreasing traffic of nutrients across vascular membranes. This deterioration could affect the performance of various organs and thus contribute to aging."

What influences the ability of vascular membranes to transfer food from the blood as the person ages is not known. Dr. Aschheim believes that further research is needed into the problem of nutritional exchange between blood and tissue.

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(Mailed April 5, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

The chances of getting an eye infection from bacterial contamination of contact lenses may be less if the lenses, when not in use, are kept in a dry case rather than a wet one, reports a research team at Stanford University School of Medicine.

Dr. Margaret F. Obear, former resident in ophthalmology, and Dr. Frank C. Winter, acting chief of the division of ophthalmology, found that the storage solution is one factor that produces a media which allows bacteria to grow in the contact lens cases.

"No method of storage will completely eliminate all bacteria," Dr. Winter said. "Contact-lens wearers' other habits of using, wetting, cleaning and storing can also contaminate the cases."

After seeing in contact-lens users two occurrences of corneal ulcer due to pseudomonas bacteria, a dangerous organism, the researchers made a study of the storage cases of 80 patients. These patients had been fitted for contact lenses, and had received their instructions and prescriptions from ophthalmologists who did not know which patients were used in the study.

After several months of wearing contact lenses, cultures were taken of the patients' contact lens storage cases, and submitted to laboratory analysis.

Results showed bacteria present in both the wet and dry cases. However, dangerous organisms, such as pseudomonas bacteria, were recovered from wet cases twice as often as from dry cases, and other organisms were found in some of the wet cases but not in dry cases, according to Dr. Winter.

Since these bacteria can ultimately contaminate the lenses which are then placed in a person's eyes and may produce an eye infection, Dr. Winter and Dr. Obear recommend using contact lens solutions for washing and cleaning the lenses, but not for storing them. They suggest the following procedures both for inserting and storing lenses:

For insertion, first wash hands with soap and water and then remove lenses from the case. Wash the lenses with wetting solution and rinse them well with running water before placing them in the eyes.

For storing, wash the hands before removing the lenses from the eyes. Then wash the lenses with wetting solution, rinse with running water, and dry with a fresh disposable tissue. Store the lenses in a covered dry case.

As an extra precaution, clean the case every three days with a detergent and toothbrush, rinse the case well with water, and then dry it.

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(Mailed April 5, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Dr. Robert C. Rosan, assistant professor of pathology at Stanford University School of Medicine, has received a three-year grant of $30,000 from the Lederle Medical Faculty Awards Program.

Under the award Dr. Rosan wants to stress molecular and biophysical aspects of pathology in teaching and hopes to refine his experimental interests in hormone control of glycoprotein secretion and divalent cations. He and Dr. David Glick, acting head of the department of pathology at Stanford University School of Medicine, hope to develop a laser spectroanalysis for quantitative histochemistry.

Lederle Laboratories Division of American Cyanamid Company, through a committee of outstanding medical educators, allocates $250,000 annually for grants to approximately a dozen young medical educators who give promise of continuing in full-time teaching and medical research.

The program, now in its twelfth year, has contributed to the support of 178 full-time faculty members of 66 medical schools in the United States and Canada for periods of one to three years.

Dr. Rosan graduated magna cum laude from the University of Colorado in 1952 with a B.A. in biology and chemistry. In 1957 he received his M.D. from Albany Medical College in Albany, N. Y. Dr. Rosan was a resident and fellow at Boston Children's Hospital Medical Center and Boston University Medical Center. He completed his training in 1962.

Dr. Rosan was appointed assistant professor in pathology at Stanford in 1963.

Dr. Rosan has had over 20 papers and several abstracts published in professional textbooks and journals. He is a member of numerous societies, including the Histochemical Society, the Society for Cell Biology, the American Association for the Advancement of Sciences and the Federation of American Scientists.

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(Mailed April 5, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: This story was transmitted on Business Wire April 1, 1965.

A mother who has a child with Down's syndrome or mongolism risks a greater chance of giving birth to a second affected child if she is 29 or younger, a Stanford Medical School investigator reported today.

"But only a part of the increased recurrence risk may be due to her transmitting an abnormal chromosome," Dr. Luigi Luzzatti, associate professor of pediatrics and preventive medicine, told the First Annual Colloquium of the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine here.

"There are other still ill-defined factors that may predispose to a recurrence of affected children in these mothers," Dr. Luzzatti said.

Down's syndrome is an abnormality affecting one child in every 650. Each child afflicted has an extra chromosome number 21. Most cases occur following faulty separation of chromosomes during formation of the female egg or the male sperm. Others are characterized by a fusion of the additional chromosome number 21 to another chromosome.

This type of the disease can occasionally be transmitted to a child by a mother who carries this abnormal chromosome, though she is a perfectly normal individual.

Dr. Luzzatti said that he and his collaborators studied 277 children with Down's syndrome. They determined first, how frequently affected children had inherited the abnormal chromosomes from the mother and second, the significance of this inheritance in young mothers giving birth to affected children after their first one was born with the disease. The children in the study were born to mothers 15 to 20 years of age.

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Findings showed that the incidence of the disease as a result of faulty separation of chromosomes in the egg or the sperm was 92.1 percent, while the incidence of the fused chromosomes was 7.9 percent. In only 1.8 percent of the children, the normal mother had transmitted the abnormal chromosome to her affected offspring.

Dr. Luzzatti calculated that the risk of a mother 15 to 29 years of age having a second baby with Down's syndrome purely on the basis that she may carry the abnormal chromosome was 9.4 times greater than that of mothers in the general population. The risk for mothers 30 to 35 was 4.2 times and for those beyond 35 no increased risk was evident.

Comparing these figures with those already available defining the increased recurrence risk of these mothers, it appears that there are other causes predisposing to a recurrence, once the presence of the abnormal chromosome in the mother is ruled out, Dr. Luzzatti said.

"For purposes of genetic counseling," Dr. Luzzatti said, "when chromosome analysis in the affected child and the parents demonstrates that the abnormal chromosome is present in the mother, the recurrence risk for the children is well defined.

"If the mother does not have the abnormal chromosome, the risk of giving birth to a second affected baby is still slightly greater than that of the general population, but it is very small."

He added that more information is necessary on other factors that may control such recurrences to help parents understand the consequences of having more children.

Dr. Luzzatti's work is supported in part by grants from the Lt. Joseph P. Kennedy, Jr. Foundation and the John A. Hartford Foundation.

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(Mailed April 1, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Helen Connolly (321-5310)

Nurses caps tell a story!

Every school of nursing throughout the entire world has its own distinctive cap awarded at graduation and worn by its graduates ever after through their nursing careers.

The latest cap count at Palo Alto-Stanford Hospital Center reveals that there are 228 different styles, representing graduates of that many schools of nursing, among the approximately 330 staff nurses.

According to a poll just made by Mrs. LaTella Atkisson, nursing service secretary, Palo Alto-Stanford Hospital nurses hail from 37 states and the District of Columbia, plus nine foreign countries: Canada, England, Scotland, Denmark, Netherlands, Norway, Ireland, Australia and the Philippines.

"Cap watching" is a favorite indoor sport among Hospital patients and personnel, to compare with bird watching outside. Styles range from perky pillboxes to starchy puffs, from mortarboards to cones, from flaring to tiny, austere to lacy. Variations may be quite hard to identify. Just a fold, a color of ribbon, a small initial, or an inch in size may be the key to identifying where the wearer is from.

Nurses caps have changed with the times, too. Typical is the development of Stanford's School of Nursing caps. The first uniform, worn from 1897 to 1902, included an organdy puff for a cap. The only trouble was, the cap wasn't washable! It had to be discarded and replaced by a new one periodically.

From 1903 to 1913, Stanford nurses tried a triangle, edged in lace, folded flat and worn like a hanky on top of the head.

World War I brought the present style, starched white cotton folded back. In 1929, a small red "S" was added to the left wing, to distinguish Stanford nurses from many others with similar styles. This cap is still worn, by student nurses as well as graduates. It is rather large, but has a built-in comb to keep it on.

-MORE-

Sometimes the position a cap is worn in is essential to identifying its school. For instance, some "mortarboard" styles must be worn flat on top, and some must perch on the back of the head. Their wearers must be expert with bobby pins or hat pins to hold the caps in the right position.

Almost all caps now are washable, but very few nurses do their own. They rely on the laundry to keep their caps in shape.

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31 May 1965

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Foothill College and the Palo Alto-Stanford Hospital Center are taking steps to alleviate the critical shortage of inhalation therapists by setting up the first specialized program in the country to train students in the care of patients who have difficulty in breathing.

Through funds made available by the Manpower Development and Training Act, the College and Hospital Center will offer a 52-week training course beginning June 21. A certificate will be awarded upon completion of the course.

In September, a two-year program will begin. For this program, the College offers an Associate in Arts degree.

Dr. Nathan H. Boortz, director of technical education at Foothill College in Los Altos, has been working with Dr. Grant Fletcher, medical director, and Mervin Green, chief inhalation therapist of the Hospital Center, to set up the curriculum.

Although the general education, related science and therapy portions of the program will be taught at the College, the Palo Alto-Stanford Hospital and Sequoia Hospital in Redwood City will provide supervised clinical experience for the students.

Inhalation therapists are in great demand because respiratory equipment is not only becoming more complicated, but is being used in a greater variety of situations. There are only 1,900 trained inhalation therapists in the United States.

Respiratory equipment is used to restore breathing in patients after surgery and also is applied to many patients who suffer from such diseases as emphysema and asthma which cause breathing problems.

The initial class will be limited to 20 students and applicants are being screened now.

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To qualify for acceptance in the course applicants must be 35 years old or under; must have a high school diploma; introductory courses in biology, chemistry, and algebra; qualifying scores on tests of college ability, and a personal interview.

Among the lecturers at the College will be Mr. Gilbert Davis, a well-known inhalation therapist from the University of Pittsburgh Health Center Hospitals.

At the Palo Alto-Stanford Hospital Center the students will be under the supervision of Dr. Grant Fletcher, Mervin Green, and Emile Cloutier, assistant chief inhalation therapist. At Sequoia Hospital the clinical instructor will be Mrs. Wilma Bright, chief inhalation therapist, under the direction of Dr. Robert Clark, chief of the anesthesia service.

Students will take both general and technical courses. Among the general courses required for the degree are effective writing and speaking, American government, and psychology. The scientific curriculum includes anatomy, physiology, physics, microbiology and health.

The clinical program will concentrate on inhalation therapy application and procedures on emergency, obstetric, pediatric, and surgical patients.

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(Mailed May 26, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

The election of Dr. Robert J. Glaser as a Fellow of the American Academy of Arts and Sciences has been announced in Boston. Dr. Glaser will become vice president for medical affairs and dean of the Stanford University School of Medicine July 1.

Currently, Dr. Glaser is president of the Affiliated Hospitals Center, Inc., in Boston and professor of social medicine at Harvard University.

Dr. Glaser was one of 140 leaders of scholarship, the professions, business and international affairs to be elected to membership in the Academy. Of the total, 120 Americans were elected to Fellowship while 20 distinguished persons from 14 other countries were elected to Foreign Honorary Membership.

The American Academy of Arts and Sciences, America's second oldest learned society, was founded in Boston in 1780 by John Adams and other revolutionary leaders of the Massachusetts Bay Colony. It was modeled after the learned societies of Europe, as the French Academy or the Royal Society of London.

Its other members from the Stanford University School of Medicine are Dr. Arthur Kornberg, professor and executive head of the department of biochemistry, Dr. Joshua Lederberg, professor and executive head of the department of genetics, and Dr. Karl H. Pribram, professor of psychiatry. In addition, 23 other faculty members of Stanford University are members of the Academy.

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(Mailed May 24, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Like many women who give up a career to raise a family, Mrs. John W. Bellville wanted to work again. A registered nurse, she felt uncomfortable about seeking employment after being away from the profession for nine years.

Her husband, an associate professor of anesthesia at the Stanford University School of Medicine, told her about a refresher course offered at the Palo Alto-Stanford Hospital Center to bring inactive nurses up-to-date on the exploding advances in treatments and medicine. He was planning to lecture on pharmacology concepts in the course.

Being her husband's pupil didn't put a damper on the idea. Mrs. Bellville took the 149-hour refresher course and is now working part time at the Hospital and managing a family of four boys.

Mrs. Bellville is one of 185 nurses who have completed the refresher course which has been offered by the Hospital as a community service since 1961. About one-third to one-half of the nurses are employed by hospitals, agencies and private offices in the Bay Area. About one-fifth are employed here.

"I never felt alone in my endeavor," Mrs. Bellville said, "because most of the women have been away from nursing from 10 to 20 years and felt they needed current information on nursing practices."

The course is divided into two types of learning situations. In the mornings the nurses are assigned to work in units with selected patients under supervision of the Hospital's nursing staff. In the afternoons they attend classes.

"I gained a lot of confidence by working on a surgical unit where I learned to operate many types of new equipment," said Mrs. Bellville.

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Part of their training is to keep a detailed record for patients cared for, including a brief history, the nursing problems presented, approaches and solutions to these problems and the nurses' conclusions.

Miss Marjorie L. Keys, assistant director of nursing service and director of inservice education, said the lectures and class discussions in the afternoons cover current procedures in nursing care, recent developments in medicine and new equipment.

Topics deal with the patient in the hospital, pharmacology, communicable disease concepts, rehabilitation, psychiatric concepts in nursing, medical-surgical nursing, the nurse's role in public health, and the legal aspects of nursing.

The Stanford University School of Nursing faculty, the Hospital nursing staff, doctors from the Medical School faculty, and members of the Palo Alto medical staff give of their time to teach the course.

The Hospital offers the course three times a year at convenient hours when children are in school. Each course has a limited enrollment of 12 qualified nurses who really want to work again.

Requirements for acceptance in the course are graduation from an accredited school of nursing, eligibility for current registration with the California State Board of Nurse Examiners, availability to commence and complete the course, and good health.

"There has been such a demand for the course that we have had to place some nurses on the waiting list," said Miss Keys.

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(Mailed May 12, 1965)

Editors: Photographs are available on request.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Dr. Robert J. Glaser, who will become dean of the Stanford University School of Medicine and vice president for medical affairs in July, will make his first public appearance at Stanford University on Friday, May 21, at the annual Medical Alumni-Faculty Reunion.

Dr. Glaser will be introduced by Dr. Sidney Raffel, acting dean of the Stanford University School of Medicine at the reunion beginning at 10 a.m. in Dinkelspiel Auditorium. Other honored guests will be Dr. Walter C. Alvarez and Dr. Roy H. Morris, members of the class of 1905 of Cooper Medical College.

At the morning session the major speakers will be Dr. F. Eugene Yates, acting head and associate professor of the department of physiology, and Dr. David A. Rytand, Bloomfield professor of medicine.

Dr. Yates will discuss "A Minority Report on Adrenal Cortical Function," and Dr. Rytand "A History of the Circus Movement Hypothesis."

Noon recess will be free for informal, individual or class luncheon activities.

In the afternoon three separate clinical sessions, running concurrently, will be held at the Stanford University School of Medicine. Twenty faculty members will take part in the sessions beginning at 2 p.m.

Presiding at these sessions, which will cover a wide range of medical subjects, will be Dr. Halsted R. Holman, professor and executive head of the department of medicine; Dr. Norman Kretchmer, professor and executive head of the department of pediatrics, and Dr. Robert A. Chase, professor and executive head of the department of surgery.

In the evening there will be an alumni-faculty dinner dance for all alumni and faculty at the Villa Hotel in San Mateo. Special reunions will be held for classes of 1905, 1910, 1915, 1920, 1925, 1930, 1935, 1940, 1945, 1950, 1955A, 1955B and 1960.

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(Mailed May 11, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Editors: Please add the following information to the release on the rededication program for the Palo Alto Hospital mailed May 10, 1965.

The Palo Alto city council voted Monday night to rename the Palo Alto Hospital the Herbert Hoover Pavilion.

The motion was made by councilman Robert Cooley who said, "Mr. Herbert Hoover was probably the most distinguished citizen of Palo Alto, a person of national and worldwide distinction. It seems most fitting that he should be honored in this way."

Herbert Hoover Pavilion will be dedicated at a public ceremony on Saturday, May 15 at 2:30 p.m. on the northeast lawn of the building, 350 El Camino Real, Palo Alto.

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(Mailed May 11, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

The Palo Alto Hospital, which has served thousands of Midpeninsulans for more than three decades, will be rededicated Saturday, May 15 at 2:30 p.m. during public ceremonies on the northeast lawn of the building.

The Hospital, located at 350 El Camino Real on the Stanford campus, will officially become a part of the Palo Alto-Stanford Hospital Center after a $1.3 million, 18-month renovation financed by the City.

After the ceremonies the public will be free to inspect the reconstructed areas and to view special exhibits on the first floor of the Hospital. Open house will also be held on Sunday from 2 to 6 p.m. On both days, staff members will conduct tours of the building.

Attending the ceremonies will be the Mayor and the Council of Palo Alto, civic leaders from the area, and others who were involved in establishing the Hospital in the 1930's and whose support has been important in making the renovation project possible.

Dr. Edward A. Barthold, Jr., chief of the Palo Alto medical staff, will introduce the Rev. Lynn P. Hunwick, president of the Palo Alto Ministerial Association, who will give the invocation. Mayor Bert Woodward, Jr. will make the presentation speech and Gordon P. Smith, president of the Palo Alto-Stanford Hospital Center board of directors, will then accept the renovated building from the City.

The four-story building provides accommodations for single and double rooms, wards, and a separate intensive care unit. There are 50 private rooms of the total 152 beds. In addition, there are five observation rooms and three solaria. The Hospital provides the following services: X-ray, electrocardiography, hematology and urinalysis laboratory, a blood banking area, and physical and occupational therapy. The Palo Alto-Stanford Hospital Center Auxiliary will run a gift shop.

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One of the many remodeled areas is the reception lobby which has been furnished in Danish modern furniture of orange and yellow upholstery. The walls, floors and ceilings in the corridors have been refinished and painted to give the appearance of a new building.

In patient rooms colonial beds from the 1930's rest underneath TV sets from 1965 in a contrast of eras. Modern light fixtures and new call signals for nurses have been installed in each room. The old, dark brown doors for each patient room have been refinished in a light birch shade.

Intensive care will be provided in a separate unit for 10 patients. The unit has three double cubicles for patient beds. Two private isolation rooms and one double occupancy isolation room with glass partitions face the nurses' station so any change in patients' condition can be seen instantly.

Some of the newest models of medical and hospital equipment worth $300,000 have been installed to give patients the best possible care.

In the dietary department three radar ranges bring food to the desired temperature for serving. Since the ranges heat foods so rapidly, they can be used as the trays are being assembled along the movable food tray line. Assembled trays are immediately put into movable food carts and brought to the patients.

The X-ray department is equipped with the latest overhead tube hangers which are mobile so film can be taken of different parts of the body. X-rays can be turned out in just six minutes by a new processing machine.

In the department of cardiology two EKG machines are set up. A dataphone is being set up on a trial basis which will make possible transmission of electrocardiograph impulses by telephone line from the Palo Alto Hospital to the cardiology laboratory at the Center where the tracing can be graphed, interpreted and filed.

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The Palo Alto Hospital was built and equipped in 1931 at a cost of about $500,000, more than half the cost of the present renovation. A $250,000 bond issue approved by Palo Alto citizens covered only about half the cost of erecting the 100-bed structure. The remaining money came from private contributions. In the campaign for funds, the Women's Auxiliary of the Palo Alto Hospital played an important role.

The Hospital was designed by Reed and Corlette, architects of Oakland, and built by the K. E. Parker Company of San Francisco. It was managed by Stanford University which also had furnished the site on lease to the City.

In 1939 a four-story wing was added to meet the needs of a growing community. At that time the 170-bed hospital was the largest on the Peninsula south of San Francisco.

It did not take long before the community began to outgrow it again. And after the war, plans were undertaken to construct the Palo Alto-Stanford Hospital Center three quarters of a mile near the foothills.

With the opening of the new Center in 1959, the City councilmen and Stanford officials agreed to discontinue use of the Hospital, at least temporarily.

It soon became apparent, however, that the 437 beds in the Center was insufficient to take care of the increasing patient population and steps were taken to remodel the Palo Alto Hospital.

Acting on the request of the Hospital Board, the Palo Alto City Council in 1962 approved funds for extensive renovation of the building.

The architectural firm of Stone, Marraccini and Patterson of San Francisco designed the project. Work was done by the Beacon Construction Company of San Francisco.

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(Mailed May 10, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Editors: Photographs are available on request.

"I want to help victims of accidents and crippling diseases return to an active life," said Walter Hapke, a student in physical therapy at Stanford Medical Center.

Hapke and 40 other students are out to prove that statement. One-half expect to graduate in September and start a full-time career in physical therapy.

Thinking back over the past months, however, these students could well be overwhelmed by the scope of the program. They must give patients moral support during trying times. They must master exercises for every muscle of the body. And the courses they take are tough. But through it all optimism runs high.

These students know that hospitals, crippled children schools, rehabilitation centers need them when they graduate. There is only one physical therapist for every 28,000 people. Stanford is one of 43 colleges and universities in the country with a physical therapy program. It is one of five in California.

The students also know they will be well prepared for a profession because they are now getting first-hand experience with patients who have a wide variety of illnesses and physical disabilities. Predominantly, patients include those with fractures, arthritis, cerebral vascular accidents, cerebral palsy and other conditions. Persons injured in industry, sports and traffic also require treatment.

Last fall the students started practicing therapeutic exercise on each other in a laboratory. This is part of the program to help them gain proficiency in the numerous techniques used to assist patients in restoring motor functions.

In the laboratory the students also learn to operate special equipment such as diathermy and microwave for heat treatments and the electrical stimulator for passive exercise. A therapeutic pool is available for certain exercises.

-MORE-

When a student becomes proficient in a procedure, he treats the patient under close supervision of a physical therapist in the Palo Alto-Stanford Hospital. Relating the theory from the text books and laboratory to an actual patient situation is the most important part of their training.

One student said, "I have seen patients overly anxious to recover. One, for instance, wanted to regain function of a right arm practically overnight. I watched the patient straighten out her fingers which before treatment had been held tightly in a fist. I tried to encourage her to be happy with this little improvement."

"Walking with the aid of a brace is much better than not walking at all," said another student.

"We teach the students to understand the psychological needs of the patients, as well as to cope with the physical problems," said Miss Lucille Daniels, director of the division of physical therapy of the Stanford University School of Medicine.

After the students finish the classes and part-time clinical experience, they are assigned full time to affiliated hospitals and treatment centers during the summer. After this experience they are eligible for a degree or a certificate.

The division offers curriculum leading to the B.A. degree for undergraduates or a certificate for persons who have a bachelor's degree but no major in physical therapy. The M.A. degree is also offered to students interested in administration, teaching and research. Those working in the field often return to school to bring themselves up-to-date.

Ninety percent of the students this year at Stanford are working toward a certificate or Master's degree, according to Miss Daniels.

To qualify for practice the students study anatomy, physiology, chemistry, psychology, clinic procedures, kinesiology and many other subjects.

"It's a demanding course," admits Miss Daniels. "But it is worth the effort when they enter a profession feeling confident that they have the background to help a patient recover."

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(Mailed May 6, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Eighteen single-bed rooms have been made available in the Palo Alto-Stanford Hospital to meet the requests from patients.

These rooms were temporarily converted into semi-private rooms last year to meet the growing demand for more beds. But the opening of additional accommodations in the Palo Alto Hospital helped ease the shortage, according to Mrs. Carol Profant, management analyst.

The Palo Alto-Stanford Hospital Center has a total of 60 single-bed rooms--39 in the Palo Alto-Stanford Hospital and 21 in the Palo Alto Hospital. There will be 50 private rooms in the Palo Alto Hospital when the renovation is completed this month.

The Palo Alto Hospital will be dedicated May 15.

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(Mailed May 5, 1965)

STANFORD CLINICAL CENTER NEWS
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

GONE ARE THE DAYS

Gone are the days when nurses had to shake down and clean patient temperature thermometers as Mrs. Irene T. Springer, nursing aide at the Palo Alto-Stanford Hospital Center is doing in the picture at the left. And gone are the days when nurses placed 12 thermometers at one time in an electric thermometer shaker as Miss Evelyn Bruyn, nursing aide, is doing in the center picture.

Replacing the old-fashioned methods is a centrifuge which shakes down 112 thermometers in one minute, a saving of about 100 minutes each day over the former method.

The Hospital's central service now dispenses disinfected, ready to use thermometers to each nursing station. After one use, nurses place the thermometers in receptacles and return them to central service for cleaning, disinfecting and packaging. Central service processes and shakes down about 1200 thermometers each day.

In the picture at the right Mrs. Annie Mitchell, central service aide, gathers clean thermometers to place in the centrifuge.

(Mailed June 23, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

Attention Editors: This may be of interest to travel editors.

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Dr. Joseph P. Kriss, professor of radiology at the Stanford University School of Medicine, and his family know exactly how to relax on a summer vacation.

He, his wife, Reggie, and their two boys, Eric, 16, and Mark, 12, are loading their four bicycles on an airplane and flying off on June 20 for a six-week cycling vacation through the countryside of France.

By deliberately biking off the beaten path, the Krisses of 735 Mayfield Dr., Stanford, hope to meet the French people, see the chateaux and cathedrals and learn about the specialties of the various quaint villages.

They are confident that their French bikes with 10 gears, which they used on vacations through Hawaii and New England, are sturdy enough to make the 1,000-mile trip.

To take care of any mishaps along the way, Dr. Kriss will carry a tool kit in a satchel on the back of his bike which is equipped with numerous handy gadgets. He learned from experience that it is not always possible to find a mechanic who can handle the technical problems of their racing bikes with alpine gears.

Before packing the Krisses considered the weight of tools, clothes, passports, travelers checks and Michelin maps. Since travelling light is essential for bike riding, each family member must limit himself to 10 pounds.

Each selected their limited wardrobe with a great deal of ingenuity. Mrs. Kriss is taking two short shifts with slits in the sides to wear while riding so her legs will become evenly tanned. The men are taking two pairs of bermuda shorts. A change of underwear, bathing suits and light-weight madras jackets complete their riding outfits.

They are also prepared to change into their only dress outfit after they have stopped for the night. Few people would be able to recognize the dusty bicyclers then.

The Krisses have not set up any overnight reservations, but are planning to stay in various places, such as hostels, inns and French homes.

"We like the sense of adventure of not knowing where we'll be next," Dr. Kriss said. "And in biking, each road or town has a special meaning as you slowly pedal along."

Many friends are wondering how they will manage to resist the French wine. The Krisses think it will be a temptation, but realize that wine drinking and bike riding don't mix during the day.

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(Mailed June 16, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

A new technique for measuring radiation dosage will be the subject of an International Conference on Luminescence Dosimetry at Stanford University June 21-23.

The method of measurement depends upon the fact that certain materials which have been exposed to ionizing radiation such as X-rays will subsequently give off visible light when they are heated or placed under ultraviolet light. The amount of light given off is directly related to the amount of radiation exposure.

Luminescent dosimeters cover a much wider range of exposure than electronic devices made so far. In addition, they are far more compact. A small capsule of material can take the place of a relatively large, easily damaged piece of equipment.

Dosimeters using luminescent materials have been devised for people who might be exposed to radiation in their occupations. Capsules are also being implanted in patients to measure dosage given in the course of radiation therapy, or in animals for experiments.

Identical capsules can be exposed at different locations and then processed at one facility. This provides standard readings so that the exact output of one X-ray machine or similar device may be very precisely compared with that anywhere else in the world. This is particularly important for investigators who wish to compare their results with those of other laboratories.

The conference at Stanford will attract 250 persons. Approximately 40 scientific reports will be presented by investigators from the United States, eight European nations, Japan, and India.

The meeting is being sponsored by the Stanford University School of Medicine's Department of Radiology, the U.S. Office of Naval Research, and the U.S. Atomic Energy Commission.

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(Mailed June 15, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

A 61-year-old bachelor who is deaf reported that he "heard" sounds in experiments in which two researchers from the Stanford University School of Medicine electrically stimulated his hearing nerve.

Anthony Vierra of San Jose, Calif. was a patient at the Veterans Administration Hospital in Palo Alto before he volunteered for the experiments last year.

In May 1964 Dr. F. Blair Simmons, assistant professor of surgery, and Dr. John M. Epley, a resident in otolaryngology, implanted six tiny wires into the man's auditory nerve. The auditory nerve is located in the inner ear, one of the three sections of the ear.

Normally, sounds come into the inner ear and, in a way not completely understood, trigger the nerve fibers of the auditory nerve. These fibers produce the electrochemical pulses that travel along the auditory nerve to the brain which interprets them as sounds.

In this experiment the two researchers stimulated the auditory nerve fibers directly by applying very small pulses of electrical current to an electrode or pairs of electrodes.

The electrodes led to a connector behind the right ear, where external contact could be made.

By stimulating the nerve fibers, the researchers produced a variety of sensations, covering a range of pitches between very low sounds like hums to very high sounds like violins.

"Although the range and variety was insufficient to reproduce speech for Vierra, he could tell speech from other sounds," Dr. Simmons said, "probably because of the difference and changes in rhythm or amplitude."

-MORE-

The researchers said that it was possible to play simple tunes such as "Jingle Bells" and "Mary Had a Little Lamb." Vierra was able to identify these tunes from what he remembered before he became deaf.

This is the first time that such extensive and discrete electrical stimulations of the auditory nerve have been carried out in man.

Dr. Simmons explained that the purpose of the study was to gain further knowledge about hearing and about the possibilities of implanting artificial hearing devices in deaf people. The results suggest that speech communication via direct nerve stimulation might be possible in the future. However, it would require more research and certainly more than six wires in the nerve.

"We were justified in conducting this clinical trial because our laboratory has had extensive experience in permanently placing electrodes within the ears of experimental animals for many years. Electrical stimulation of the brain has been shown technically feasible," Dr. Simmons said.

The study was reported in a recent issue of SCIENCE, weekly magazine of the American Association for the Advancement of Science. It was carried out in cooperation with other scientists at the Bell Telephone Laboratories in Murray Hill, New Jersey.

The cause of Vierra's deafness is not known, but researchers think it was probably associated with a condition called retinitis pigmentosa which is an inflammation of the eye. Vierra has apparently had the condition "in some degree" since childhood.

Because Vierra is partially blind, probably due to that condition, he is able to see written messages only in large block letters. And this is how the researchers communicated to him. The condition, however, has not affected his speech.

Vierra lives at home now. Transportation to and from the Stanford Medical Center is provided by the Veterans Administration Hospital in Palo Alto.

Dr. Simmons and Dr. Epley intend to continue to refine the techniques with the eventual long-term goal of learning about which types of "electrical sounds" can be eventually "understood" by a previously deaf person.

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(Mailed June 14, 1965)

ANTHONY VIERRA, a 61-year-old deaf man, "heard" two out of several tunes being used during an experiment in which Dr. F. Blair Simmons, assistant professor of surgery, and Dr. John M. Epley, a resident in otolaryngology of the Stanford University School of Medicine, stimulated his hearing nerve via electrodes connected behind his right ear. Because Vierra is partially blind, he can read messages only in large block letters.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

FOR RELEASE AFTER 11 A.M., SATURDAY, JUNE 12

Editors: Names of students receiving M.D. degrees in your area will be included in a story mailed from Stanford University on June 11. Home addresses of award winners are listed on page 2.

Stanford University School of Medicine will award 46 degrees June 13 to students in the second class to complete the new five-year curriculum inaugurated when the school moved from San Francisco to the Stanford campus.

Six outstanding students received awards at the convocation of the class of 1965 held at the Medical Center on Saturday, June 12.

John D. Johnson and Harvey Leon Ozer received the Borden Undergraduate Research Award of $250, given to each of them by The Borden Company Foundation, Inc. for "research during their undergraduate career deemed most meritorious."

The L. A. and Marian S. Hopkins Award of $100 went to senior student H. Wayne Tobin for outstanding work in dermatology.

Winners of the Harold K. Faber Pediatric Award of $200 were John D. Johnson and Bruce Malcolm Tune. This award is given to potential contributors to child health in recognition of accomplishments in pediatrics.

Daniel Page Stites won the Robert T. Legge Award, given by the Northern California Chapter of the American Industrial Hygiene Association to a senior student who shows the most aptitude and interest in the study of preventive occupational health. The award is $20 for a book of his choice.

Timothy Beveridge Coburn, a second-year student, was given the Roche Award of an engraved gold wrist watch as an "outstanding student of medicine who has successfully completed the first two years of medical school."

-MORE-

Dr. Sidney Raffel, acting dean of the Stanford University School of Medicine, welcomed the guests and presented the awards. Dr. Harold K. Faber, emeritus professor of pediatrics, presented the award named after him, the Harold K. Faber Pediatric Award. Dr. Halsted R. Holman, professor and executive head of the department of medicine, delivered the address, and Dr. C. Howard Hatcher, professor of surgery, administered the Hippocratic oath.

Students and their parents' names and addresses are listed below:

LOS ANGELES, CALIF.----------Bruce Malcolm Tune
Mr. & Mrs. Buford Tune, 2858 Motor Ave.

CRAWFORDSVILLE, IND.----------John D. Johnson
Dr. & Mrs. Willis H. Johnson, 1003 South Grant

DORCHESTER, MASS.----------Harvey Leon Ozer
Mr. & Mrs. Samuel L. Ozer, 11 Ashton St.

MARGATE, N. J.----------Daniel Page Stites
Mrs. Helen Stites, 13 North Exeter Ave.

BEDFORD VILLAGE, N. Y.--------Timothy Beveridge Coburn
Dr. & Mrs. Alvin S. Coburn, Rt. 22

BROOKLYN, N. Y.----------H. Wayne Tobin
Mr. & Mrs. George T. Tobin, 298 East 45th St.

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(Mailed June 10, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE FRIDAY, JUNE 11, 1965

A spontaneous mutation resulting in mice born without sebaceous glands, or oil glands, was reported today for the first time by two investigators from the Stanford University School of Medicine.

The new finding will enable researchers to study the normal function of the mysterious oil glands and their role in diseases of the skin.

The sebaceous glands are millions of tiny oil factories scattered over the body. Until now all that was known about their function was that they lubricate the hairs and skin, keeping them in a constant well-oiled state.

The discovery was reported by Dr. Allen H. Gates, assistant professor of obstetrics and gynecology, and Dr. Marvin Karasek, assistant professor of biochemistry and dermatology, in SCIENCE, weekly magazine of the American Association for the Advancement of Science.

According to their report, studies of the oil glands have been generally hampered by the lack of animals with this kind of skin abnormality. Spontaneous mutations, or variations in appearance of animal offspring due to a change in a gene, are rare in a laboratory. And artificially induced mutations in animals are frequently lethal.

Following their discovery, Dr. Gates and Dr. Karasek exchanged skin grafts between normal and mutant mice to determine the effects of the mutation and whether or not it was limited to the skin of the laboratory animals.

-MORE-

They found that the skin of the mutant mouse lost some of its scales and appeared normal when grown on the normal mouse. When normal skin was transplanted onto mutant host animals, it stimulated hair growth and normal skin development in regions adjacent to the normal skin.

These results, the researchers said, suggested that the mutation resulted in the loss of some chemical substance necessary for the normal growth of hair and skin, and that this substance was being supplied by the normal skin tissue.

In further studies to find the missing chemical, Dr. Karasek, and an associate, Dr. David I. Wilkinson, looked into the composition of fats in the skin of normal and mutant mice by the sensitive technique of gas chromatography. This technique permits researchers to analyze simultaneously different compounds present in one substance.

They observed that certain fatty acids present in the normal mice were lacking in the mutant animals.

The Stanford investigators plan to study further and identify this missing substance to determine if it plays a role in the development of the skin condition in these mice. By these observations they hope to understand better diseases of the oil glands such as acne which causes untold misery for many young people and for a smaller number of adults.

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(Mailed June 8, 1965)

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#2

#1 Dr. Marvin Karasek, assistant professor of biochemistry and dermatology at Stanford Medical School, displays mice that may help in studies of diseases of the skin. Mouse with darker skin, discovered by Dr. Allen H. Gates, also of Stanford, has no oil glands. The discovery will give researchers an opportunity to study the role of the mysterous oil glands.

#2 Normal mouse at left is contrasted to mouse without sebaceous glands or oil glands. The skin abnormality, a result of spontaneous mutation, was reported by Drs. Allen H. Gates and Marvin Karasek of Stanford University School of Medicine in a recent issue of SCIENCE.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Samuel Moffat (DA 1-5310)

Editors: This story was transmitted on Business Wire June 2, 1965

Dr. Lyman M. Stowe, former associate dean of Stanford University School of Medicine and one of the chief planners of its new 5-year curriculum, died early today of a heart attack. He was 51.

Since 1963 Dr. Stowe had served as the first dean of the University of Connecticut Medical School. He was stricken at his home in Farmington, Conn., and died two hours later.

"We on the faculty are all saddened by Lyman's death," Acting Dean Sidney Raffel of the Stanford medical school said. "He made a very large contribution to the school that exists today. We also were proud that he was building such a fine school in Connecticut."

Dr. Stowe joined the Stanford faculty in 1949 as assistant professor of obstetrics and gynecology. In 1955 he became associate professor and assistant dean. Three years later he was appointed associate dean. He received both his A.B. and M.D. degrees from Yale University.

In addition to serving as one of the principal architects for the Stanford curriculum, he also played a key role in planning the physical facilities for the medical school in the new Stanford Medical Center at Palo Alto.

Dr. Stowe is survived by his widow, Lois, and three sons, Maynard, 17, David, 14, and John, 13. There will be no funeral services.

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(Mailed June 2, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Associate director David B. Starkweather has resigned to pursue a career in teaching hospital and medical care administration, Dr. LeRoy E. Bates, director of the Palo Alto-Stanford Hospital Center, announced today.

Starkweather advised Dr. Bates of his desire to begin work this fall for his doctorate degree in medical care organization at the School of Public Health of the University of California at Los Angeles.

Expressing his personal regret at Starkweather's decision, Dr. Bates noted that "Mr. Starkweather has done an outstanding job as associate director and has provided new ideas and leadership to the staff during the Hospital Center's formative years. We know that all persons directly and indirectly associated with the Center share our best wishes to Mr. Starkweather for even greater success in the future."

Starkweather joined the Hospital staff in 1958. He served consecutively as assistant and associate administrator, and was acting administrator from January to July 1964. He holds a master's degree in Hospital Administration from Columbia University's School of Public Health.

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(Mailed July 21, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE MONDAY, JULY 19, 1965

A promising new treatment of the commonest killer of newborn babies was reported today by physicians from Stanford University School of Medicine.

The killer, called hyaline membrane disease or respiratory distress syndrome, affects 25,000 newborn babies in the United States.

The treatment consists of applying prolonged artificial respiration to these babies using a plastic breathing tube inserted into the windpipe through a nostril. Breathing is facilitated by a respirator which blows air or oxygen down the windpipe into the lungs.

Of 19 babies treated with artificial respiration, 12 survived. Length of treatment ranged from several hours to 28 days, the physicians said. Their report was published in the Journal of the American Medical Association.

The physicians are Dr. D. Vernon Thomas, associate professor of anesthesia, Dr. Grant Fletcher, assistant professor of anesthesia, Dr. Philip Sunshine, instructor in pediatrics, Dr. Irwin Shafer and Dr. Marshall H. Klaus, assistant professors of pediatrics.

"It must be realized that these babies getting respirator treatment are probably the 50 percent who would ordinarily die," Dr. Thomas said. "We treat the less severe cases with the usual methods and only when these simpler approaches are failing we resort to artificial respiration."

Although anesthesiologists use artificial respiration to save adult patients with breathing illnesses such as polio, tetanus and severe lung disease, the treatment has rarely been applied to babies suffering from the respiratory distress syndrome.

The reason is that in adult patients the plastic breathing tube usually must be inserted into the windpipe through a temporary surgical opening in front of the neck. When the illness is over the tube is removed and the opening heals over.

-MORE-

But in small babies there can be serious difficulty in removing the breathing tube.

"Often, even though the lungs have healed, a swelling develops inside the windpipe at the surgical opening and when the tube is removed the baby's breathing becomes obstructed," Dr. Thomas explained.

At first Dr. Thomas and his associates tested the application of prolonged artificial respiration to babies with a breathing tube inserted through the mouth, but the tube tended to slip out. The problem was solved by passing the tube into the windpipe through a nostril.

"Blood tests have shown that the respirator is consistently able to increase the abnormally low oxygen level and to reduce the excessively high carbon dioxide levels toward normal. Both these changes help open the blood vessels of the lungs and hasten healing," Dr. Thomas said.

According to a recent theory developed by Stanford and University of California pediatricians, hyaline membrane disease is caused by a failure of the protective reflex which shifts the newborn over to the task of breathing for himself.

At birth the pulmonary blood vessels dilate immediately, and a full supply of blood begins pumping into the lungs. But, if for any reason the blood of the fetus becomes low in oxygen, the protective reflex comes into play and cuts down on the supply of blood to the lungs and kidneys and increases the flow to the heart and brain.

Prolonged artificial respiration has been one way of counteracting this, Dr. Thomas said.

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(Mailed July 15, 1965)

Dr. Vermon Thomas, associate professor of anesthesia at Stanford University School of Medicine, has just finished placing a plastic breathing tube in a baby's windpipe to make sure air from a respirator will reach the infant's lungs. Dr. Thomas recently reported that prolonged artificial respiration showed promising results in the treatment of newborn babies suffering from the respiratory distress syndrome or hyaline membrane disease.

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Hyaline Membrane Disease

Please send me a glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Editors: Photographs are available on request.

Thirty-five students, six years younger than the usual Stanford medical students, set out on a treasure hunt in the Stanford Medical Center which was unlike any other -- to find bacteria.

Dressed in doctors' white coats they roamed through the cafeteria, kitchen, animal facilities, wash rooms, elevators and other places to collect bacteria samples in laboratory petri dishes.

Medical Center employees assisted them in their search.

"I thought they were medical students who were doing a study," gasped a head nurse.

Another employee said, "I thought they were staff members of the infectious disease laboratory."

After collecting bacteria samples, normally found in any environment, the students went back to the Fleischmann Laboratories of Stanford University School of Medicine to study them.

These students, at the end of their freshmen and sophomore years at Ravenswood High School, are performing the bacterial studies as part of a summer science program going on at the medical school from June 21 to July 30.

The program aims to expose them to the frontiers of biological science and medicine in a setting which gives them the opportunity to rub elbows with the people who make the Center tick.

The students are an interracial group selected from over 200 applicants on the basis of grades in science, math and English; science teachers' recommendations, and scores on tests of verbal and scientific ability.

- MORE -

Dr. Leonard A. Herzenberg, associate professor of genetics, is director of the program of lectures, discussions, laboratory work and field trips which is supported by a grant from the National Science Foundation.

He and about 30 members of the faculty and staff of the departments of biochemistry, genetics, medical microbiology, medicine, pediatrics, pharmacology, psychiatry, surgery and others helped organize the program and are giving their time to teach various sections of the course.

Also assisting in the program are three Stanford medical students, Fred Burbank, Ann Klompus and Mark Sapir, and a Ravenswood High School science teacher, Harvey Cole.

To make discoveries about genetics, cell biology, biological macromolecules or mammalian biology each student must do research on his own. Therefore, a major part of their activities are devoted to experiments, operating the latest equipment and searching for answers in available books.

But students are also discovering, as one student put it, that "it is very good to know that doctors have a sense of humor like we do."

Participating faculty members have found that the students are diving into the medical subjects with an astonishing intellectual interest. They ask questions which faculty members must answer bluntly that, "we just do not know. This is something your generation will have to answer."

To be effective teachers, the faculty must find out what motivates high school students and what they like. Dr. Herzenberg commented, "it is rewarding when students of varied educational backgrounds respond."

"Even more rewarding," he added, "is that some will continue to work in the Medical Center after the course ends."

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(Mailed July 15, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

"You look handsome," said the nurse as she saw Antonio Victorio for the first time after the boy's cleft lip and palate was corrected through a delicate operation.

The bright-eyed, 13-year-old teenager from Mexico was born with a gaping hole in his upper lip.

When Stanford University surgeons today removed the stitches from his mouth, Antonio's future suddenly looked bright.

It was not so several months ago. Antonio was being reared by his grandmother in the small village of La Azteca near San Luis Rio Colorado, Sonora. His parents live with six other children in a one-room house.

All his life Antonio's friends teased him mercilessly and he had dropped out of school.

Then Father James Poggi of St. Joseph Seminary in Mountain View, Calif., a volunteer with the Catholic Church's Latin American Mission Program, met Antonio.

He became interested in the boy's plight, and promised to see if he could help him when he got back in the San Francisco Bay Area.

Through friends, Dr. and Mrs. Edward Lynch of Mountain View, Father Poggi was introduced to Dr. Donald J. Prolo, a resident in surgery at Palo Alto-Stanford Hospital Center. Dr. Prolo in turn contacted Dr. Robert Chase, executive head of the department of surgery at Stanford University School of Medicine.

-MORE-

The Lynches assumed responsibility for Antonio and the boy was brought by Mr. and Mrs. Larry Rangle of Menlo Park who offered to drive him from Mexicali to the Peninsula.

The first operation to close the boy's lip was performed in February. The second operation to correct Antonio's cleft palate was done last week. Both operations were successful.

Dr. Chase said the surgery is rarely performed in this country on a child of Antonio's age. A cleft of the lip and palate usually is corrected in children by surgery between the ages of 6 months and 2 years.

Shy at first, Antonio now is a close friend of the Lynch children and the six children of Mr. and Mrs. Barney Cervantes of Mountain View, where he is staying.

Antonio is learning to speak a bit of English. Father Poggi describes him as friendly and very well-mannered. "He also is very generous," Father Poggi said. "He had some candy the other day and gave it all away to the other children."

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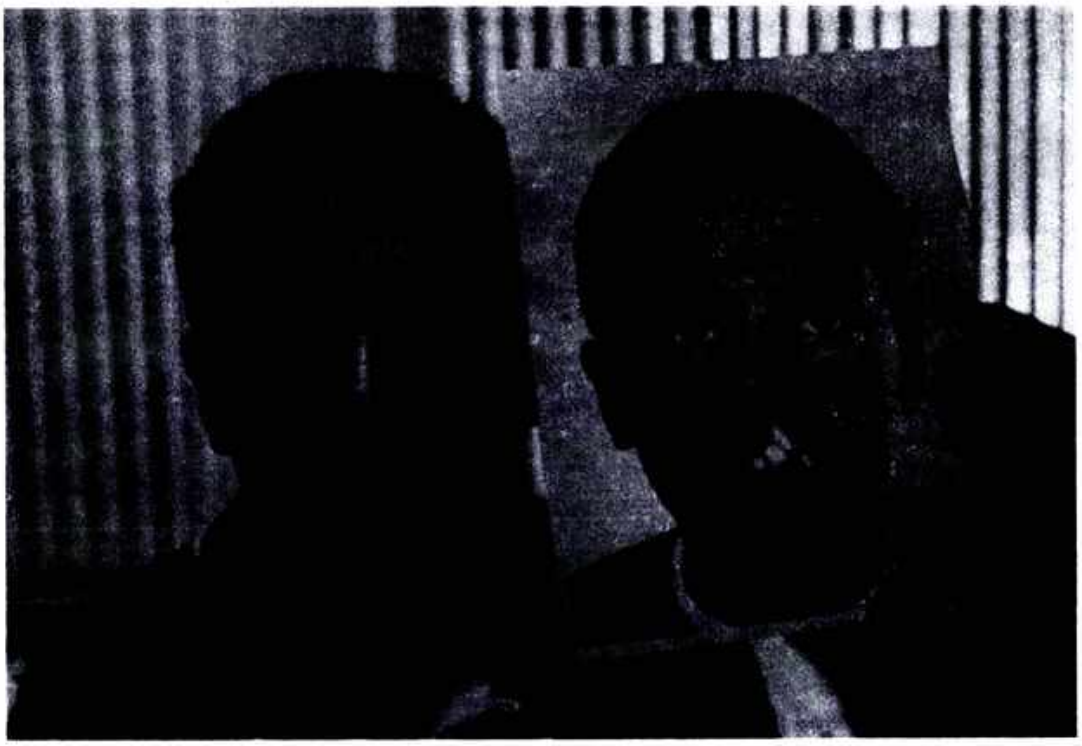
(Mailed September 30, 1965)



ANTONIO VICTORIO BEFORE AND AFTER
SURGERY

- -

TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Antonio Victoria

Please send me a glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A new method of relieving rigidity of taut muscles--a major obstacle to rehabilitation for some patients with strokes, cerebral palsy, and multiple sclerosis--was reported today by three investigators from Stanford University School of Medicine.

The new technique involves the treatment of taut muscles through injection of phenol, a common drug, into nerves and nerve roots.

The physicians are Dr. Daniel Feldman, associate professor of medicine in rehabilitation, Dr. Jordan Katz, assistant professor of anesthesia, and Dr. Leslie Knott, assistant professor of medicine in rehabilitation. They described recent preliminary clinical trials in the September 20 issue of the Journal of the American Medical Association.

One study involved 22 patients. Cause of muscle rigidity in those patients included strokes, spinal cord injuries, multiple sclerosis, cerebral palsy, brain injuries, and brain tumors.

Using a small dose of phenol in saline solution of water in quantities varying with nerve size, the Stanford researchers injected 56 nerves. The degree of rigidity, motion and other clinical criteria were evaluated by the investigators before and after treatment. Physical therapists recorded changes in the patients' responses to rehabilitation treatment.

Immediate relief of rigidity of 50 percent or more occurred in 31 of 56 nerve injections. "In seven of these, rigidity was practically eliminated and considerable increase in the range of joint motion was noted," the physicians said.

-MORE-

The three investigators agreed, however, that lack of uniform action and relatively short periods of relief of rigidity were major problems with phenol therapy. Relief lasted from three days to more than a year. In 22 of the 31 nerve injections, duration was three to four weeks. There were no apparent adverse effects.

"Despite short-term action, this method is particularly valuable in a number of patients because phenol appears to have a temporary effect on taut muscles, thus permitting evaluation of the possibility of physical therapy or surgery or both," the physicians pointed out.

The investigators described one cerebral palsy patient who was treated with this method. After nine weeks of marked, continuous relief of rigidity in finger and wrist muscles, the patient underwent surgery--transplantation of the wrist flexors to the wrist extensors. A year later the patient had greatly improved strength in wrist extension. Also there had been no evidence of recurrent rigidity in extensor or flexor muscles of the wrists and fingers.

The investigators stressed that more laboratory work is needed before more prolonged and consistent results with phenol injections can be obtained.

"After two years of experience our results indicate it is a benign technique helpful to a number of patients," they said. "Although it is hoped that a drug may be developed to eliminate rigidity entirely, this technique seems to be a potential rehabilitative method avoiding further nerve function destruction, and should be tried in those patients who do not respond to usual therapy."

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(Mailed September 28, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

The only postdoctoral program in the West for training veterinarians in laboratory animal medicine has been established at the Stanford University School of Medicine.

The program is one of seven in the country set up by a grant from the National Institutes of Health to help alleviate the shortage of veterinarians needed to direct animal research facilities and care for experimental animals.

"Professional care of laboratory animals is necessary to provide researchers with normal and healthy animals needed for medical research projects," said Dr. Orland A. Soave, assistant professor of preventive medicine and director of the animal care facility.

Under Dr. Soave's supervision veterinarians will receive three years of training in the care, diseases and use of laboratory animals in scientific research. They will also have the opportunity to earn an M.S. degree in a specialty of their choice.

The medical school's facility offers trainees nearly 50,000 animals for study and observation, a clinical and diagnostic laboratory and a research program in problems of animal care.

Requirements for appointment to the first year of the training program are graduation from an accredited school of veterinary medicine with a doctor's degree in veterinary medicine and qualification for admission to the Stanford University Graduate School.

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(Mailed September 28, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

A select group of 64 students with outstanding scholastic records have enrolled in the Stanford University School of Medicine to prepare themselves for careers in medicine.

The class of 1970 is composed of 58 men and six women who were chosen from over 700 applicants on the basis of aptitude and past records.

They come from 22 states and from Hong Kong. Twenty-five of the 64 are residents of California.

The new class represents 35 different undergraduate institutions in 14 states. Twelve of the students attended Stanford University.

EDITORS: Student names, and parents' names and addresses follow:

CALIF., ARCADIA - Virginia Frances Simson, Mr. and Mrs. Jerome Simson, 1020 So. First Ave.
BERKELEY - William Robert Roeske, Mr. and Mrs. William F. Roeske, 2221 Parker, Apt. 1.
Isao Jack Tsuji, Mr. and Mrs. Toshikaru Tsuji, 1421 Lincoln St.
CANOGA PARK - Charles George Maresh, Mr. and Mrs. Charles Maresh, 6635 DeSoto Ave., Apt. 32.
CHULA VISTA - David George Deneau, Mr. and Mrs. George E. Deneau, 542 Linda Ln.
CONCORD - Eugene Stanley Ogrod II, Mr. and Mrs. Eugene S. Ogrod Sr., 5122 Academy Rd.
FONTANA - William Harold Clewell, Mr. and Mrs. William H. Clewell, 17432 Paine St.
GLENDALE - Judy Lee Rees, Mr. and Mrs. Carl C. Rees, 1110 E. Chestnut.
LOS ALTOS - Paul Clemens Randau, Mrs. Beatrice Randau, 23225 Ravensburg Ave.
LOS ANGELES - William Jay Raskoff, Mr. and Mrs. Max L. Raskoff, Drexel Ave.
Arvid Eugen Underman, Mr. and Mrs. Arvid E. Underman, 5304 Sherbourne Dr.
MODESTO - Joe Ford Neal, Mr. and Mrs. Murnace H. Neal, 1550 College Ave.
PALO ALTO - Margaret Elaine Bayha, Mr. and Mrs. Walter G. Bayha, 1729 Middlefield Rd.
Jack Bennett Power Jr., Mr. and Mrs. Jack B. Power, 1892 Mark Twain.
PIEDMONT - Peaslee Frederick DuMont, Mr. and Mrs. Raymond P. DuMont, 212 Carmel Ave.
ROSS - James Ronald Fisher, Mr. and Mrs. James R. Fisher, Box 718.
SAN FRANCISCO - Maurice Brown, Dr. and Mrs. Maurice L. Brown, 1963-18th Ave.
William Benjamin Hawthorne Jr., Mr. and Mrs. William B. Hawthorne Sr., 477 Myra Way.
Steven Lawrence Solter, Dr. and Mrs. Nathan Solter, 656-18th Ave.
SAN JOSE - Charles Erick Ahlfers, Mr. and Mrs. Erick E. Ahlfors, 1199 Almaden Ave.
Richard Edmond Powers, Mr. and Mrs. Maurice L. Powers, 1305 Vernon Ave.
STANFORD - Marc Weissbluth, Dr. and Mrs. Mitchel Weissbluth, 820 Pine Hill Rd.
SARATOGA - Thomas Richard Deetz, Mr. and Mrs. Sterling W. Deetz, 20311 Craigen Circle.
UKIAH - Clifford Sheldon Beck, stepson of Mr. Claire Beck, 1142 North Oak St.
VISTA - Mrs. A. Martha Gilbert, Mr. and Mrs. Willard P. Steward, 426 E. Indian Rock Rd.

-MORE-

ARIZ., MARICOPA - Keith Ian Marton, Mr. and Mrs. Laurence B. Marton, 703 W. 3rd Pl.
PHOENIX - John William Fitzgerald, Mr. and Mrs. Lynn Warren Fitzgerald, 51 E. Hoover.
COLO., ENGLEWOOD - Gary Layton Newell, Mr. and Mrs. Thurlo Newell, 9 Cherry Vale Dr.
CONN., WATERBURY - Douglas Richard La Brecque, Dr. and Mrs. Frederick C. La Brecque, 132 Columbia Blvd.
WESTPORT - Douglas Daniel Richman, Dr. and Mrs. Daniel P. Richman, Darbrook Rd.
W. HARTFORD - David James Dorsey, Mr. and Mrs. James A. Dorsey, 44 Foxridge Rd.
ILL., CHICAGO - Michael Paul Alexander, Mr. and Mrs. Joel L. Alexander, 2621 W. Greenleaf Ave.
Michael Jay Schneider, Mr. and Mrs. Herman Schneider, 3430 N. Lake Shore Dr.
PARK FOREST - Jerome Mintz, Mr. and Mrs. George Mintz, 246 Mantua St.
ROCKFORD - Warren Le Roy Anderson, Mr. and Mrs. Harvey R. Anderson, 116 Robert Ave.
IND., HAMMOND - David Whitmore Teegarden, Dr. and Mrs. Joseph A. Teegarden, 7204 Woodmar Ave.
MASS., WENHAM - Nancy Lee Johnson, Mr. and Mrs. Robert L. Johnson, 167 Main St.
MINN., MINNEAPOLIS - John Andrew Hansen, Mr. and Mrs. Alfred M. Hansen, 109 Twentieth Ave. S.
W. ST. PAUL - Dieter Ernst Eckert, Prof. and Mrs. Ernst R. G. Eckert, 60 W. Wentworth Ave.
MO., COLUMBIA - Gordon Douglas McLaren, Dr. Arthur D. McLaren, c/o K. C. Jones RFD2.
KIRKWOOD - Bobbette Kraft Ranney, Mr. and Mrs. Robert C. Ranney Jr., 12531 Big Bend.
MONT., BILLINGS - Patrick Michael Sullivan, Mr. and Mrs. James J. Sullivan, 715 6th St. W.
NEV., MCGILL - Steven Jerry Culbert, Mr. and Mrs. William G. Culbert, 31 Third St.
N. J., PATERSON - Ivan I. Grossman, Mrs. Rose Sachs Grossman, 195 Wall Ave.
TEANECK - Michael Harry Klein, Mr. and Mrs. Sigmund Klein, 309 Frances St.
UNION CITY - Jay Robert Harris, Mr. and Mrs. Samuel Harris, 4522 Hudson Blvd.
N. M., ALBUQUERQUE - Clark McGuire Carr, Mr. and Mrs. Clark M. Carr, 903 Rio Grande, N.W.
G. Bruce Ferguson, Mr. and Mrs. Gordon Ferguson, 111 Marguette N.E.
N. Y., BROOKLYN - Franklin Gene Zweiman, Mr. and Mrs. Irving Zweiman, 525 Neptune Ave.
CEDARHURST - Michael Noel Koss, Mr. and Mrs. Leon Koss, 623 Central Ave.
LIDO BEACH - Richard Franklin Weiner, Mr. and Mrs. Walter Weiner, 291 Blackheath Rd.
LITTLE NECK - Michael Paul Volen, Mr. and Mrs. Irving Volen, 262 - 31 Grand Central Pkwy.
SCHENECTADY - Roland David Ciaranello, Mr. and Mrs. Roland V. Ciaranello, 1016 Fairlane Rd.
WHITE PLAINS - Sheldon Martin Zimerberg, Mr. and Mrs. Sidney Zimerberg, 45 Mitchell Pl.
OHIO, CANTON - Allan James Pilloff, Dr. and Mrs. Benjamin Pilloff, 3218 Market Ave., N.
PENN., EASTON - Robert Clark Aber, Mr. and Mrs. Donald C. Aber, 32 North 17th St.
PHILADELPHIA - Howard D. Arkans, Mr. and Mrs. Leonard S. Arkans, 5237 C St.
S.D., ABERDEEN - Paul Dennis Larsen, Mr. and Mrs. Stanley H. Larsen, 1316 N. First St.
TEX., DALLAS - Michael Clark Graves, Mr. and Mrs. Ben N. Graves, 709 S. Waverly.
UTAH, SALT LAKE CITY - Thomas James Metcalf, Mr. and Mrs. John W. Metcalf, 1819 Garfield Ave.
WISC., WAUSAU - James Michael Foerster, Dr. and Mrs. James M. Foerster, 3333 6th St.
WYO., LARAMIE - Lincoln David Russin, Mr. and Mrs. Robert I. Russin, 716 Ivinson Ave.
RAWLINS - Paul Edward McNamara, Mr. and Mrs. Edward W. McNamara, 521 First St., Box 585.
HONG KONG - Shu-Man Fu, Mr. and Mrs. Tak-Yu Fu, 15-C Nelson St. 4/F.

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(Mailed September 27, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Prof. Theodosius Dobzhansky of the Rockefeller Institute, a noted authority in the fields of genetics and evolution, will give the 34th course of Lane Medical Lectures at Stanford University School of Medicine.

He will speak on "The Genetic Load" October 11, 13, and 15 at 4:30 p.m. in Room M106. The lectures will also be shown on closed-circuit television in Rooms M104, M112 and M114.

Professor Dobzhansky is the author of two books, GENETICS AND THE ORIGIN OF SPECIES and MANKIND EVOLVING. The latter book was based on the Silliman Lectures which he delivered at Yale University in 1959, in honor of the Centennial of Charles Darwin's ON THE ORIGIN OF SPECIES.

In MANKIND EVOLVING, Professor Dobzhansky expressed the view that "evolution need no longer be a destiny imposed from without; it may conceivably be controlled by man, in accordance with his wisdom and values."

Professor Dobzhansky was born in Russia and came to the United States in 1927, after having served as a lecturer in genetics at the University of Leningrad. From 1927 to 1929 he was a fellow, with Professor T. H. Morgan, of the International Education Board of the Rockefeller Foundation. From 1929 to 1940 he served consecutively as assistant professor and professor of genetics at the California Institute of Technology. In 1940 he was appointed DaCosta professor of zoology at Columbia University.

He currently serves as adjunct professor of zoology at Columbia in addition to his responsibilities at the Rockefeller Institute.

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Professor Dobzhansky's scientific career is replete with honors. This year, on the other side of the Atlantic, he received the degree of Doctor Scientiarum Agronomicarum, Honoris Causa, from the University of Louvain, and in this country he was among 11 recipients of the National Medal of Science, awarded by President Johnson at the White House.

His professional affiliations are numerous. He has long been a member of the Genetics Society of America of which he is a past president. He has also been president of the American Society of Naturalists, the Society for the Study of Evolution, and the American Society of Zoologists. He is a member of the National Academy of Sciences, Royal Swedish Academy of Sciences, Royal Danish Academy of Sciences, and other distinguished societies in Brazil, Germany, and Italy.

The Lane Medical Lectures, founded in 1896 by Dr. Levi Cooper Lane, are given biennially on medical subjects. The lectures are open to the medical profession, students, teachers, and research workers in medicine and allied sciences.

Dr. Dobzhansky will also speak on "Man and Evolution" at the Tuesday Evening Series October 12 at 7:45 p.m. in Dinkelspiel Auditorium. The Series are sponsored by the committee on public exercises at Stanford University.

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(Mailed September 23, 1965)

STANFORD UNIVERSITY NEWS SERVICE
FOR INFORMATION CONTACT: Jeff Littleboy

STANFORD, CALIFORNIA
DAvenport 1-2300, Ext. 2558

Southern California editors may contact Stanford Regional Office, 621 S. Hope St., Los Angeles 17, MAdison 7-0653

FOR IMMEDIATE RELEASE

STANFORD - Stanford University students will open their "Stanford Jazz Year" with a concert by Louis Armstrong and his All-Stars in Frost Amphitheater at 2 p.m. Sunday, Oct. 10.

The famed "Satchmo," who needs little introduction to jazz fans or the general public, spans a career of 50 years in the entertainment world akin to the history of jazz itself.

Tickets for the Armstrong concert and a subsequent concert Oct. 31, featuring Ella Fitzgerald with Duke Ellington and his orchestra, may be obtained at the Tresidder Union box office at Stanford or by mail to P.O. Box 6508, Stanford.

Rick Bale, a senior psychology major from Tiburon, heads a committee of a dozen students who have been planning the nine-month jazz festival since last spring.

They have programmed a series of films, exhibits and lectures to parallel the concerts, which will be held in winter in the 1700-seat Memorial Auditorium and in the open-air amphitheater during the fall and spring.

Ralph J. Gleason, jazz editor of the San Francisco Chronicle and syndicated critic, opens the fall lecture series Oct. 4 with a discussion of "Jazz and American Society."

This and all other lectures of the series will be offered at 4:15 p.m. in Tresidder Union on successive Mondays. Admission is free, but limited seating allows admission only to students and members of the Stanford community.

The Oct. 11 talk will feature Marshall Stearns on "Origins and Definitions." Dr. Stearns is professor of English at Hunter College, New York, and the author of a classic work, "The Story of Jazz."

Philip F. Elwood, jazz critic of the San Francisco Examiner, jazz director of Station KPFA, and instructor at the Peralta Colleges in Alameda County, will speak Oct. 18 on "Jazz in the '20's: The Old Order Changes."

Veteran jazz promoter and impresario John Hays Hammond, executive producer at Columbia Records, will close the October lecture series on the 25th with a talk on "The Swing Era."

Negotiations are under way for several other well-known jazz artists to appear on campus.

Also scheduled during the year are lectures by Ira Gitler, former editor of "Downbeat"; John Lewis, leader of the Modern Jazz Quartet; Singer Jon Hendricks of the former Lambert-Hendricks-Ross trio; and Critics Leonard Feather and Nat Hentoff.

The display gallery on the second floor of Tresidder Union will be used for a variety of exhibits, including artifacts, photos of jazz greats, tapes of original recordings narrated by Philip Elwood, and a photo essary on the Southern origins of jazz. The display opens Sept. 27 and remains through Nov. 1.

The "Jazz Year" was conceived by a group of Stanford students and is sponsored by Tresidder Memorial Union.

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9/20/65

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos, DA 1-5310

Editors: This story was transmitted on Business Wire 9/20/65.

Stanford University today appointed a noted biochemist to the board of directors of the Palo Alto-Stanford Hospital Center.

He is Dr. Alejandro Zaffaroni, president of Syntex Laboratories in Palo Alto. Dr. Zaffaroni will fill the vacancy of Burton W. Roberts who resigned earlier this year to assume new duties in Minneapolis, Minn.

Two other board members were reappointed to three-year terms. They are Robert H. Klein of Portola Valley, and H. E. Robison of Atherton.

Announcement of the appointments was made by Stanford University President J.E. Wallace Sterling at the annual meeting of the Hospital corporation in Palo Alto. The Hospital Center is owned jointly by the City and the University.

Dr. Zaffaroni is noted for his work in the field of steroid biochemistry. He received his Ph.D degree in biochemistry from the University of Rochester in 1949 and worked at this institution until 1951 as a National Institutes of Health Research Fellow.

He joined Syntex in 1951 as associate director of biological research. He held consecutively the posts of director of biological and biochemical research, and director of research and development. In 1956 he was appointed executive vice president and in 1961 took over the direction of the United States subsidiary of Syntex Laboratories while continuing as director of its research division.

Dr. Zaffaroni lives with his wife and two children in Atherton..

Mailed 9/20/65

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR RELEASE SATURDAY, SEPTEMBER 18, 1965

TAHOE CITY--Patients blinded by detached retinas may some day be helped to see again by machines used to create artificial gravity, two Stanford University researchers reported today.

Professor Max Anliker, an aeronautical physicist, and Dr. Donald Hayashi, clinical instructor of surgery at Stanford University School of Medicine, said they were able to reattach a damaged retina by applying rotary vibration on a model of the human eyeball.

An accepted procedure in treating a detached retina is to keep the patient lying still. After several days, the retina usually falls into position by the force of normal gravity, but in most cases surgery is required to reattach it.

"Reattachment," the investigators reported, "was achieved consistently within approximately 5 to 20 minutes depending on the degree of initial detachment." Their findings were presented at the western section meeting of the Association for Research in Ophthalmology.

The model used in the experiments is a nine-inch plastic human eyeball with a rubber membrane simulating the light-sensitive retina on which the visual image is formed. In the real eye the retina is connected to the optic nerve which carries the image to the brain.

The model is filled with liquid simulating the vitreous humor within the human eyeball. The scientists experiment with small holes torn in the rubber membrane such as can occur to the human retina.

By vibrating the model eyeball at a force of normal gravity, Drs. Anliker and Hayashi have speeded up the settling of the retina. Once a human patient's torn retina has regained its position it can be painlessly "spot-welded" in place by a

MORE

laser beam.

Earlier this year, the Stanford investigators whirled the model eyeball on a centrifuge at a force of two G's--twice the force of normal gravity--and the detached retina fell back into place in 20 minutes.

The scientists consider the vibration results, "a small step further in their research." Eventually, they feel, a combination of motions--whirling, vibrating, or rocking--may prove the best way in treating a detached retina.

The idea for the experiments was born as a result of studies performed on dogs by other investigators. They showed that exposure of the animals to strong vibrations could result in retinal detachments.

"This fact," said the scientists, "suggested that mechanical processes involved in the formation of such retinal separation could be reversed under properly devised conditions.

Drs. Anliker and Hayashi soon plan to test animals in actual repair of detached retinas, and if the tests are successful, on human patients.

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(mailed 9/18/65)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos, DA1-5310

An oil portrait of Mrs. Emma Pfeiffer Merner, in whose name a teaching chair was established in the Stanford University School of Medicine, was presented Thursday to Stanford University.

The portrait was presented by her sons, Garfield D. Merner of San Francisco, and Paul M.P. Merner of Palo Alto. The chair honors the memory of Mrs. Merner, whose brother Gustavus and his wife established the Gustavus and Louise Pfeiffer Research Foundation of New York 23 years ago.

The Emma Pfeiffer Merner Professorship in anatomy was established in 1963 by a $500,000 grant from the Pfeiffer Foundation to help meet the crucial need for first quality medical teaching. Similar grants were made to three other institutions.

In accepting the portrait Stanford President Wallace Sterling commented, "The portrait, placed as it will be in the School of Medicine, will make apparent the long-evident concern of these families to be of service to mankind, not least of all through education and the healing arts of medicine."

Dr. Robert J. Glaser, vice president for medical affairs and dean of the Medical School, said that "The Merner Professorship will enable Stanford to attract to its faculty a distinguished teacher-scholar who will have a major role in the education of tomorrow's physicians--physicians who will be able to translate effectively the burgeoning knowledge in medical science to the benefit of the sick and suffering."

The Pfeiffer Foundation grants grew out of a survey of 87 medical schools, showing a total of more than 800 budgeted teaching posts which cannot be filled, to illustrate "how desperately medical teaching needs to be bolstered."

Mrs. Emma Louise Pfeiffer was born in Cedar Falls, Iowa in 1860, and lived there for 63 years. After the death of her husband, David C. Merner, a pharmacist to whom she was married in 1882, she moved to California in 1923 to be with her family in Palo Alto.

The Merner and Pfeiffer families have had Stanford connections extending over three generations. Mrs. Merner is described by those who knew her intimately as a gracious and lovable woman of strong influence in a family with long matriarchal and philanthropic tradition.

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Mailed September 10, 1965

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos, DA1-5310

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Mailed September 10, 1965

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A study of the mechanisms which control epileptic discharge in nerve cells of the brain has begun at Stanford University School of Medicine.

The investigation is conducted by Dr. David A. Prince, assistant professor of neurology, under a $6,875 grant from the Epilepsy Foundation.

Epilepsy is a symptom of brain disease which affects some two million Americans. Some epileptic attacks may be manifest by major convulsions with unconsciousness while others are accompanied by subtle changes in behavior.

"Patients with seizures, however, may have characteristic abnormalities on their brain wave recordings at times when attacks are completely controlled," Dr. Prince said. "This shows that there are mechanisms within the brain which tend to keep the abnormal discharge in check and prevent it from spreading to become a full-blown epileptic seizure."

By inducing epilepsy in laboratory animals, Dr. Prince is studying the mechanisms which limit the spread of the epileptic discharge. Recordings of the electrical activity from within single cells are made through glass tubes whose tips are so fine they cannot be seen with an ordinary microscope.

Such recordings made from normal nerve cells and those involved in the epileptic discharge will provide information about the normal physiology of nerve cells and how it is altered in epilepsy.

The long-term goal of the research is to gain a more detailed knowledge of the cellular processes which are involved in the production and control of epileptic discharge and to apply this knowledge to the problems of patients.

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(Mailed October 27, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: This story was transmitted on Business Wire Oct. 25, 1965

Dr. LeRoy Allen Pesch, 34, professor and chairman of the department of medicine at Rutgers Medical School, has been appointed associate dean and professor of medicine at the Stanford University School of Medicine. The appointment was announced today by Stanford University President J. E. Wallace Sterling.

Dr. Robert J. Glaser, vice president for medical affairs and dean of the medical school, said "Dr. Pesch's appointment represents an extremely important step forward in strengthening our over-all program in medical education. His experience in the problems of modern medical education will represent an invaluable asset to Stanford Medical School. As associate dean, Dr. Pesch will have major responsibility for all aspects of student affairs and will occupy an important liaison position between students and faculty."

Dr. Pesch was graduated from Iowa State University in 1952. He received his medical degree with honors from Washington University School of Medicine in 1956, and interned at The Barnes Hospital in St. Louis, Mo. He was assistant resident in medicine at Grace-New Haven Community Hospital from 1959 to 1960, and a clinical fellow in medicine at Yale University School of Medicine from 1960 to 1961. From 1961 to 1963, Dr. Pesch served as director of the Liver Study Unit and assistant professor of medicine at Yale University. In 1963, he joined the faculty of Rutgers Medical School.

His publications include more than 30 papers, most of them dealing with the influence of steroids on carbohydrate metabolism and with the mechanisms of liver damage.

Dr. Pesch is also physician-in-chief of Rutgers Medical Service at St. Peter's General Hospital, at New Brunswick, N.J., and consultant in internal medicine to the U.S. Veterans Administration at Lyons, N.J.

He holds memberships in the medical honorary society Alpha Omega Alpha, the Society of Sigma Xi, the American Association for the Study of Liver Diseases, American Federation for Clinical Research, and the American Society of Biological Chemists.

Dr. and Mrs. Pesch have three sons.

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(Mailed October 25, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

Dr. Samuel L. Kountz, who developed a new technique of detecting and treating rejection of kidney transplants at the Stanford University School of Medicine, will leave Oct. 29 for the United Arab Republic to become visiting professor of surgery at the University of Alexandria School of Medicine.

Dr. Kountz was invited to spend three months contributing knowledge on the immunology of renal transplantation under the Fulbright program of educational exchange between the United States and the United Arab Republic. The purpose of the program is to increase understanding between the two countries through the exchange of students, teachers, lecturers and research scholars.

Dr. Kountz currently serves as instructor of surgery at the School of Medicine. He was named the "Outstanding Young Investigator of 1964" by the American College of Cardiology for discovering that kidney transplant rejection begins in the tiny blood vessels known as capillaries. Physicians had previously thought damage began in the kidney cells.

A native of Lexa, Arkansas, Dr. Kountz obtained his B.S. degree in 1952 at Arkansas Agricultural, Mechanical and Normal College in Pine Bluff. He earned his M.S. degree in 1956 at the University of Arkansas in Fayetteville, and his M.D. degree in 1958 from the University's medical school in Little Rock.

Dr. Kountz interned at the Stanford University hospitals in San Francisco and then became an assistant resident and Bank of America Giannini Fellow in surgery at the Stanford Medical School. In 1962 he was a research fellow at the Postgraduate Medical School of London.

He and his wife, Gracie, and their two children reside at 2091 Camino de los Robles in Menlo Park.

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(Mailed October 25, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Dr. J. G. Scadding, professor of medicine in the University of London and a noted authority on diseases of the chest, will be the first James J. Waring Visiting Professor in the Stanford University School of Medicine.

The annual visiting professorship has been established by the Francis S. North Foundation of Chicago to honor the late Dr. James J. Waring, professor of medicine at the University of Colorado and chief of medicine at Colorado General Hospital for more than 20 years.

Dr. Robert J. Glaser, vice president for medical affairs and dean of the Stanford medical school, said that "the visiting professorship is an appropriate way to honor the memory of a superb clinician and a great teacher. The professorship will be awarded each year to a distinguished physician in the field of chest diseases. We believe that in this and future years the James J. Waring Visiting Professors will make significant contributions to Stanford's educational program in this important field of medicine."

Those named to the professorship will spend equal time at the University of Colorado School of Medicine, the length of service at each school depending on the wishes and schedule of the recipient.

Dr. Scadding will be in residence at Stanford from October 19 to 29. He will conduct ward rounds, work with medical students and house staff, and be available for staff consultations.

He will give a lecture Tuesday, October 19, at 8 p.m. on "Current Concepts of Sarcoidosis," a disease of unknown cause affecting mostly young adults, involving lymph glands, lungs, skin, bones, and other parts of the body. The lecture will be in Room M106 and is open to all physicians in the community.

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Dr. Scadding also will chair a panel at the postgraduate course on "The Evaluation of Pulmonary Function," Friday, October 29, at 9 a.m. in Room M106. The course is sponsored by the American Thoracic Society, Tuberculosis and Health Association of California, California Thoracic Society, and the schools of medicine of Stanford and University of California.

Dr. Scadding received his medical education at Middlesex Hospital Medical School in 1932. From 1935 to 1945 he served as first assistant in the department of medicine of the British Postgraduate Medical School of London, and as a senior lecturer from 1946 to 1962. He also served as dean of the Institute of Diseases of the Chest at Brompton Hospital in London from 1946 to 1960, and was its director of studies from 1950 to 1960.

He is a member of numerous learned societies including the Association of Physicians, Thoracic Society, Medical Research Society, and British Tuberculosis Association of which he is past president.

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(Mailed October 13, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Major gains toward understanding and control of psoriasis, the disfiguring skin disease which afflicts about 4 to 6 million Americans, were reported today by a medical research team from Stanford University.

The findings were contained in a progress report to the John A. Hartford Foundation of New York, which said it would extend the psoriasis probe at Stanford for another three years.

Ralph W. Burger, president of the Foundation, announced that the study would continue under a $299,650 grant to the School of Medicine. The research in psoriasis was launched at Stanford in 1959 and has been carried on with Foundation support totalling $789,571.

At present the cause of psoriasis is unknown. The disease produces reddened, scaly spots or patches. The patches usually occur over the elbows, knees, scalp and back; at times they may cover the entire body. The condition is not painful or severe enough to cause disability in many cases, but it can be unsightly and cause embarrassment, especially in women concerned about their skin.

Stanford researchers have studied 1,500 patients so far to learn more about the cause of the illness, what its specific characteristics are and how it relates to other diseases. New drugs and new ways of administering them have been tried.

The results show that there are influences in the incidence of psoriasis related to age, family, race, and locality, the investigators reported. They indicate specifically that:

. the incidence of the disease is slightly higher in women than men.

. psoriasis occurs more commonly in the white population and the incidence is much higher in Europe and the United States than in Africa.

. although psoriasis may be present at birth, its peak attacks on women occur between the ages of 21 and 25 years, and in men between 26 and 30 years of age.

. the disease appears less frequently in the American Negro and many of these cases occur in children of interracial marriages. It is absent in American Indians.

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. there are seasonal variations in the course of the disease, with most patients getting worse in the winter, and better in the summer with sun exposure, and

. thirty percent of the patients had relatives with psoriasis indicating a probable link through inheritance.

Dr. Eugene Farber, head of the department of dermatology and director of the study, said emotional factors figured prominently in aggravation of psoriasis. Thirty-nine percent of the patients stated that the disease appeared at times of worry and 37.2 percent said it worsened during stress.

The research also confirmed a strong link of psoriasis to arthritis. Of the patients studied, 24.5 percent had arthritis of various joints, and 58.9 percent said psoriasis had preceded arthritis.

Detailed information concerning the patients under study was obtained directly from patients seen in the Stanford University Clinics and through questionnaires filled by physicians of dermatological clinics across the country, Venezuela, and South Africa. Close contact was also established with medical services of the Division of Indian Health in South Dakota, New Mexico, Alaska, Montana, Oklahoma, Arizona, and Oregon.

In addition, the Stanford investigators conducted a study in the Fiji Islands, where groups of native islanders and English whites were compared. The results showed an incidence among the whites comparable to whites elsewhere while no cases of psoriasis were found in native Fijians.

The Stanford research team reported that crude coal tar applications and simultaneous exposure of the skin to ultraviolet light still represent the most satisfactory treatment for most cases of psoriasis.

Drugs, such as corticosteroids, given orally have a profoundly immediate beneficial effect, but when the drug is discontinued a large number of patients had a recurrence of psoriasis, far more extensive and severe than before treatment was started.

"We believe that potential basic advances coming from trials of many new agents so far as cure is concerned are limited," Dr. Farber said. "Therefore, our efforts are being concentrated in fundamental laboratory investigation. It is our hope that this approach will provide a sound basis toward ultimate cure of psoriasis."

Such efforts include laboratory studies using techniques of biophysics, physiology, immunology, electron microscopy, and growth of tissue in test tubes. Other areas of investigation concern aspects of skin physiology including skin temperature, studies of DNA synthesis and other biochemical mechanisms.

One of these concerns a specific amino acid, histidine. Stanford investigators have demonstrated histidine to be concentrated at the site of formation of the protective horny layer of the normal skin, a process that is defective in psoriasis.

Working with Dr. Farber are Dr. Alvin Cox, professor of pathology, and other specialists in biochemistry, physiology, genetics, chemistry, and rheumatology.

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(Mailed October 5, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Joan R. McGee (DA 1-5310)

The Palo Alto-Stanford Hospital Center was awarded a Certificate of Recognition for outstanding fire prevention practices for the year 1965.

The certificate was one of three presented by the Palo Alto Chamber of Commerce Fire Prevention Committee, in cooperation with the Palo Alto Fire Department Bureau of Fire Prevention. Other winners were Preformed Line Products Company and Fairchild Semiconductor Research and Development Division, both of Palo Alto.

This is the first year the Hospital Center has received the award.

"The certificate will give the Hospital Center added incentive to make every week fire prevention week," commented Hospital Director Dr. LeRoy E. Bates. "We look forward to working with the Palo Alto Fire Prevention Bureau in furthering our fire prevention program."

The certificate was awarded to the Hospital Center after the Fire Prevention Bureau inspected the entire Medical Center and reviewed the fire prevention program which was implemented this year by Frank R. Vitale, assistant administrator and fire marshal of the Hospital Center.

The survey showed that the Stanford Medical Center met the standards for thorough fire prevention measures. This is important in a hospital and medical school complex for patient safety and for meeting the state requirement for licensing.

This year, Hospital and Medical School personnel have taken part in a thorough program of fire prevention training. They have watched fire training films, taken part in fire drills, and attended classes on fire hazards and the use of fire extinguishers.

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(Mailed November 17, 1965)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR PM RELEASE TUESDAY, NOVEMBER 16, 1965

Patients who talk normally and rationally while under mild sedation and claim afterwards they "can't remember a thing" are probably telling the truth.

This was demonstrated by preliminary studies into the effects of a common barbiturate, thiopental, on learning and memory. Results of the tests were reported today by Dr. John Bunker, professor of anesthesia at Stanford University School of Medicine. He spoke at the fall symposium of the General Clinical Research Center.

"The fact that light doses of thiopental can produce memory deficits for events occurring under sedation was clearly demonstrated," Dr. Bunker said.

He said the study of thiopental was launched because not enough is known about the effect of drugs on the mind. The tests were conducted at Stanford by Miss Anne G. Osborn, now a graduate student at Harvard University, Dr. Ernest R. Hilgard, professor of psychology, Dr. Leslie M. Cooper, assistant professor of psychology, and Dr. Gilbert Frank, assistant professor of neurology.

The group completed studies on 22 volunteers who were given the barbiturate and given test material to read before and during the drug's influence.

While the effects of the drug varied, Dr. Bunker said, most of the volunteers suffered impairment of learning and memory while under sedation. Some could remember nothing and others remembered a great deal. Even hypnosis could not bring out all these events.

It was further shown, Dr. Bunker noted, that even with a small amount of barbiturate, a decrease in performance and judgment can be observed as long as 18 hours later.

Millions of persons innocently are going about their business--driving cars, flying airplanes, making decisions--unaware that the central nervous system may be impaired by these drugs.

One aspect of the work primarily concerns clinicians themselves--can the anesthetized patient recall what goes on in the operating room?

Thiopental commonly is used to put patients to sleep preliminary to deeper anesthesia for surgery, he said. Physicians have suggested that the conversations among surgeons and operating room personnel may penetrate the patient's consciousness.

Dr. Bunker considers it unlikely that the patient absorbs these remarks. He added that the use of thiopental to explore the mechanisms underlying learning and memory have successfully demonstrated several important points. "It can only be hoped that use of drugs to explore the mind will be widened and continued."

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(Mailed November 15, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Dr. William Dock, a prominent internist, pathologist, and cardiologist, will give the second John Kent Lewis Memorial Lecture at Stanford University School of Medicine.

He will speak on "Bedside Sound and Pulse Studies of Hearts and Blood Vessels" December 6 at 4:30 p.m. in Room M106.

Dr. Dock is professor of medicine at the State University of New York Downstate Medical Center, with offices in the affiliated Kings County Hospital, and the Veterans Administration Hospital in Brooklyn where he is chief of medical service.

Challenging time-worn concepts of medical practice is a dominant characteristic of Dr. Dock. "You can't pioneer in medicine without getting into trouble," he said once, "and it's no fun if you don't."

At an international symposium, for example, Dr. Dock took a shot at fellow doctors who neglected methylmethanol--also referred to as "MM" and only incidentally as alcohol--as medication. He argued for it as a "proved diuretic, a stimulant of gastric secretion and a dilator of blood vessels, but mainly as the best mind pacifier yet discovered."

At another meeting, Dr. Dock helped tumble the old theory that prolonged bed rest is essential in coronary and obstetric cases. "Man's perversions from normal mammalian and even simian behavior make him the scandal of the biologic world," Dr. Dock said. "He not only walks erect like birds and the anthropoids, but continues to drink milk all his life, to eat eggs, and to make love at all seasons. He uses drugs such as nicotine and caffeine daily, alcohol and cathartics almost as often, sometimes to great excess. . . ."

Finally Dr. Dock made his point: "Absolute bed rest kills more patients than anesthesia and all other drugs."

-MORE-

Dr. Dock spent his boyhood in St. Louis. Here he received a "superior" high school education meaning "no girls and no girl teachers to distract us." His premedical course at Washington University was interrupted by six months of ambulance driving in the French Army in World War I. He received his M.D. from Rush Medical College in Chicago in 1923. After two years as a house officer at Peter Bent Brigham Hospital in Boston, seven months in Vienna, and a year as a resident at Stanford Hospital in San Francisco, he began to move up in the academic world, becoming professor of pathology at Stanford University School of Medicine.

He took a similar post at Cornell University in 1941 and, in 1944, became professor of medicine at Long Island College of Medicine, which was absorbed into the new State University of New York Downstate Medical Center in Brooklyn.

Dr. Dock is the author of more than 160 papers, mostly dealing with cardiovascular disease. He is vice chairman of the committee on research of the American Medical Association, a diplomate of the American Board of Internal Medicine, a Fellow of the American College of Physicians, and member of the Society for Experimental Biology and Medicine, and the American Society for Clinical Investigation.

Still he finds time to pursue his particular interest--ballistocardiography, on which he has written a great deal. In the preface of his Porter Lectures, "Heart Sounds, Cardiac Pulsations, and Coronary Disease," Dr. Dock recalls his ancestors "who for over a century had constantly been ready to move over the hills to undeveloped lands" and concludes: "Thus conditioned not to accept the current dogma, I am unable to resist trying out new ideas and techniques."

The lectures are dedicated to the memory of Dr. John Kent Lewis who died in 1961. Dr. Lewis was professor of medicine and chief of the Stanford Medical Service at San Francisco General Hospital. With his Stanford professors, A. W. Hewlett and George D. Barnett, Dr. Lewis had published some of the early work on vascular sounds, exercise and respiration. He was one of the first to study thyroid hormone in relation to the heart. He was well known for his pioneering studies on heart sounds and cardiac arrhythmias.

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(Mailed November 15, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR PM RELEASE TUESDAY, NOVEMBER 16, 1965

A medical research team at Stanford University has found that medullary cystic disease, a rare but infrequently recognized kidney disease which kills its victims in their twenties, is inherited.

Dr. Thomas C. Merigan, Jr., assistant professor of medicine at Stanford University School of Medicine, said the disease has been traced in five generations of one family whose members live in California and in the Midwest.

"We have found clear evidence of genetic transmission of this condition, and we have been able to define many of its clinical and pathological features," Dr. Merigan said.

Dr. Merigan spoke at the fall symposium on current projects of the General Clinical Research Center at Stanford. His associates include Dr. Kenneth D. Gardner, Jr., assistant professor of medicine, Drs. Sidney M. Goldman and Samuel R. Walker, residents in medicine, and Joan M. C. Bull, a Stanford medical student.

The first evidence that a genetic influence may be involved in the development of the disease was obtained by a curious medical coincidence late in 1964. A 33-year-old man was admitted to the General Clinical Research Center for treatment. The patient was in the final stages of kidney failure, and subsequently a transplant was necessary to save his life. But two of his brothers also had died of kidney failure after short illnesses the year before.

Dr. Merigan and his associates were prompted by this to look further into the medical history of the two brothers. Because their deaths were puzzling to their own physicians, the hospitals in which they had died had preserved their kidneys. Microscopic sections of these kidneys were studied and medullary cystic disease was found.

Subsequently, the Stanford research team traced other members of the family and studied autopsy reports and their medical histories. In addition, the researchers were able to obtain kidney tissue on six diseased members of the family and performed biopsies on two living others who had been affected by the disease.

-MORE-

The pattern of inheritance of medullary cystic disease was traced back to a 32-year-old woman who died just before the turn of the century after a short illness.

"Of the 60 family members studied, 20 had the disease," Dr. Merigan said. "Six are still living. The condition has been recognized in members of the first five generations, and its incidence has followed a pattern of dominant inheritance. The number of affected persons in the first three generations was high. Both sexes were affected equally. One parent of each affected individual had kidney disease."

The average age in which the patients died was 24 years, and they had no symptoms of the disease until they reached an average age of 23, Dr. Merigan reported.

Medullary kidney disease was first described in 1962 by Dr. Maurice B. Strauss, an eminent authority on kidney diseases. He found 18 unrelated patients with the disease.

The disease is characterized by occurrence of anemia, frequent salt-wasting, and progressive failure of the kidney to put out the metabolic waste products. Cysts also are formed in the medulla, or inner zone of the kidney. Death usually occurs in the second decade of life.

There are other types of hereditary kidney disease but two of the most common are the classical polycystic disease and the hereditary nephritis. The former is characterized by large cysts throughout both kidneys, leading to death either in childhood or later in life. The latter is a diffuse inflammation of the kidney associated with the obstruction of the glomeruli, the kidney filters.

Medullary cystic disease, however, is hard to identify at an early age. One purpose of our studies, Dr. Merigan said, is to learn how one can diagnose it before affected persons can have children, and to provide proper genetic counseling.

The General Clinical Research Center, a 31-bed facility within the Stanford Medical Center, was established by a grant from the National Institutes of Health to the School of Medicine. It has its own staff, laboratories, and facilities to provide the best possible conditions for scientists from varied backgrounds to conduct rigidly controlled studies on specially selected patients.

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(Mailed November 12, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

New evidence for establishing an accurate diagnosis of a bleeding condition which accounts for heavy and prolonged menstruation in about 15 percent of women was presented today by two Stanford University obstetricians.

Women who bleed too heavily for six to 10 days beyond the normal five-day menstrual cycle may suffer from irregular or delayed shedding of the endometrium--the tissue lining the uterus, they reported.

Until recently it was widely thought that almost all of the endometrial tissue was shed during the days of bleeding and that healing began from cells in the innermost tissue layer in the uterus.

"Contrary to the prevalent view," the Stanford investigators said, "the tissue lining the uterus is not shed as completely as most people thought. However, despite this lack of shedding, the regrowth of a completely new surface occurs with amazing speed on the fourth day of normal menstruation. This validates the contention that evidence of lack of healing in the uterus after the normal menstrual cycle could establish a diagnosis of irregular shedding."

The investigators are Dr. Charles E. McLennan, professor and executive head of the department of Gynecology and Obstetrics at Stanford University School of Medicine, and Dr. Alf Rydell, now on the staff of the Letterman General Hospital in San Francisco. Their findings appear in the November issue of the journal, Obstetrics and Gynecology.

Drs. McLennan and Rydell said they studied more than 500 tissue samples collected from 76 women who had hysterectomies sometime between the first and sixth day of their menstrual cycle.

-MORE-

They observed that in normal menstruation the loss of tissue lining the uterus was less extensive than many believed it to be, yet a very appreciable fraction of the spongy layer above the innermost tissue in the uterus actually disintegrated and disappeared.

Healing of the uterus commonly occurred on the fourth day, and occasionally on the third day of the menstrual cycle from remaining cells of the spongy layer rather than from the innermost tissue as it was previously thought.

The ability of the uterus to heal itself so miraculously within hours is a tissue phenomenon that occurs nowhere else in the human body, Dr. McLennan said. Complete reorganization of tissue components was evident throughout the endometrial cavity on the fifth day.

Regeneration of the new tissue was found to be triggered by glands responsible for preparing the uterus for fertilization. The ability of these glands to regenerate tissue with great speed also explains the ultimate healing of the irregular shedding surfaces after a delay of several days, the researchers said.

When bleeding persists, the condition can be corrected by surgery, they added.

The research was supported by a grant from the National Institute of Child Health and Human Development.

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(Mailed November 9, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Multiple heart valve replacement--a rare surgical procedure five years ago--can now be accomplished safely in a single operation, a prominent heart surgeon said today.

Dr. Norman E. Shumway, professor of surgery at Stanford University School of Medicine, said in the past 18 months 28 patients have undergone multiple heart valve substitutions at the Palo Alto-Stanford Hospital Center. The patients ranged from 25 to 68 years of age.

Triple valve replacement was accomplished in three cases, and aortic and mitral valve substitution in 20 others. Four more patients had the mitral and tricuspid valves replaced, and in another the aortic and tricuspid valves were implanted. Of the 28 cases there was one death.

The tricuspid valve controls blood flow between the two chambers of the right side of the heart. The mitral valve lies between the two chambers of the left side of the heart, and the aortic valve lies at the juncture of the heart's main pumping chamber on the left side with the aorta, the body's main trunk artery.

Research at Stanford and other medical centers so far has shown that the tricuspid valve is more often involved in diseases of the heart valves than had previously been recognized. The fourth valve, the pulmonary valve, is seldom affected, Dr. Shumway said.

Dr. Shumway attributes the success of the operation on the methods of pre- and postoperative management of these patients and on the technique used in the operation.

-MORE-

"Basic laboratory studies, bed rest, administration of special medication, and preanesthetic evaluation form the major portion of the patient's preoperative stay in the hospital, usually lasting three and a half days," he said.

During the operation the patient is placed under light general anesthesia. The sequence of replacing the valves is designed to protect the heart muscle from being without blood supply too long. This is done by cross-clamping the aorta and--in the shortest possible time--fit, insert, and suture the aortic valve in position, and then unclamp to re-establish the circulation. Subsequently, the other valves are replaced.

Forty-eight hours after the operation, the patient is placed on anticoagulant drugs. Most patients can walk after the third day. Discharge from the hospital is usually on the 12th to the 14th postsurgical day.

"It has been possible to manage these patients on this basic plan," Dr. Shumway said. "Results have been quite satisfactory with reversal of heart failure and return of the patients to normal or near normal activity."

The artificial heart valve used in the operation consists of a plastic ball inside a metal cage. More than 10,000 patients are alive today with the aid of artificial heart valves, he said.

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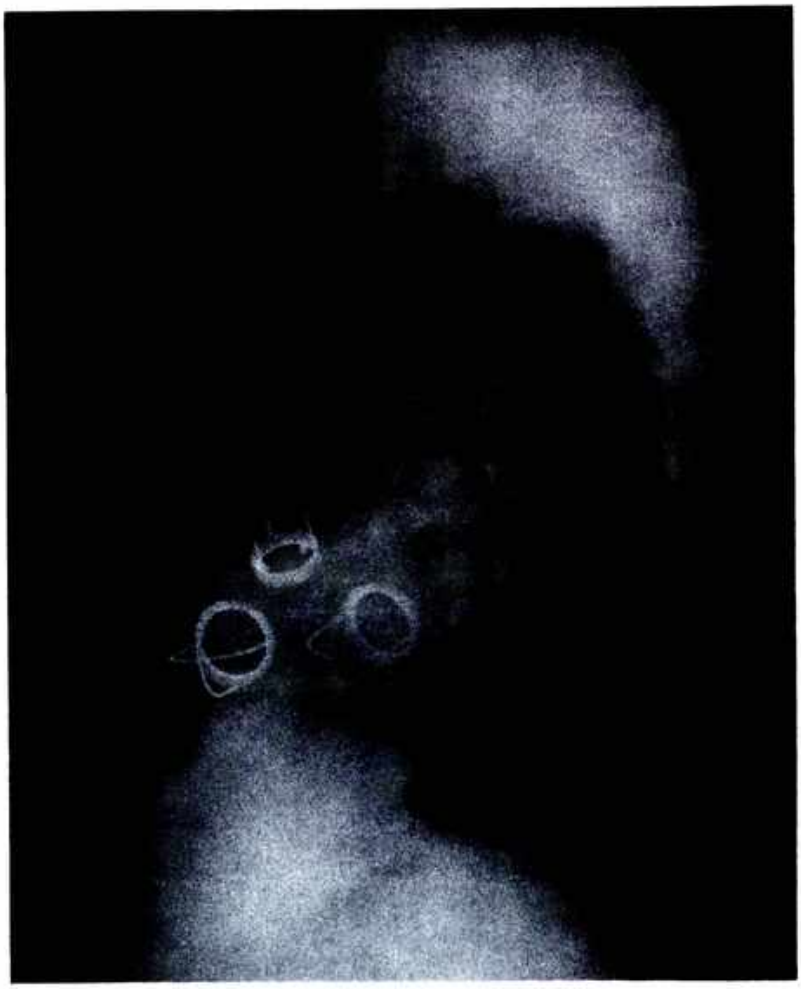
(Mailed November 9, 1965)



Three artificial valves--mitral, aortic and tricuspid--appear on patient's chest film. Stanford Medical School group has performed 28 multiple valve replacements in past 18 months, with one death.

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Heart Valve Replacement

Please send me an 8x10 glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

CITY EDITORS & SCIENCE WRITERS

On November 16 from 12 noon to 5 p.m. the Stanford University School of Medicine will sponsor a symposium on "Current Research Projects" conducted at the General Clinical Research Center. The meeting will be in Room M106 of the Medical School Building.

Among the participants will be Dr. Henry S. Kaplan, professor and executive head of the Department of Radiology, who will discuss progress in treatment of Hodgkin's Disease; Dr. Thomas C. Merigan, assistant professor of medicine, who will speak on Medulary Cystic Disease, a new form of hereditary kidney disease, and Dr. John P. Bunker, professor and executive head of the Department of Anesthesia, who will report on the effects of an anesthetic drug, thiopental, on learning and memory.

Dr. Robert J. Glaser, vice president for medical affairs and dean of the medical school, will make the introduction. Dr. John W. Farquhar, program director of the research center, will be the moderator.

Research reports also will be presented on kidney transplantation, aspects of pathophysiology of focal epilepsy, results of combined drug—radiation treatment for head and neck cancer, evidence for progression in the spread of Hodgkin's Disease, and problems of metabolism of a specific amino acid, tryptophan in phenylketonuria.

The General Clinical Research Center, a 31-bed facility in the Stanford Medical Center, was established by a grant from the National Institutes of Health to the Stanford University School of Medicine. It has its own staff, laboratories, and facilities to provide the best possible conditions for scientists from many disciplines to conduct rigidly controlled studies on specially selected patients.

Enclosed is a program, a map, and a return postcard to tell us if you plan to cover the meeting.

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(Mailed November 5, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A study to determine the difference between normal and abnormal brain cells in epilepsy is under way at Stanford University School of Medicine.

The investigation is conducted by Dr. Florry Proctor, a fellow in neurology, and Dr. Helene Rauch, research associate in medical microbiology, under a grant from the Epilepsy Foundation.

Epilepsy is caused by an abnormal electrical discharge in the injured brain. Its symptoms vary from major convulsions to seizures that can be so mild as to be imperceptible. The mechanisms responsible for seizures are not well defined.

Drs. Proctor and Rauch believe that epileptic seizures may be better understood if one studies the protein constituents of epileptic cells. If epileptic and normal brain cells differ, then this difference may be detected by immunologic methods.

The Stanford investigators have studied rabbits in which epilepsy is induced. The electrical activity in various areas of the brain is then recorded using an electroencephalograph (a brain wave machine) to localize the epileptic lesion.

Subsequently, normal and epileptic tissue is obtained surgically from the rabbits and is used to stimulate production of antibodies in other experimental animals. Antibodies are proteins produced by specialized cells of the body originally to fight off infections, but are also stimulated by injection of other proteins.

Antibodies are remarkable in that an antibody of one design will react with only one type of a protein and with no other. By studying how these antibodies react with normal and epileptic tissue, the Stanford researchers hope to understand the nature of epileptic cells.

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(Mailed November 4, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

In the words of a colleague, William L. Dauterman "wears a soft glove on a strong hand." Put it in another way, Dauterman's career has been characterized by his humanity and his determined devotion to helping the blind and the disabled.

And today, Dauterman, who lost his sight in an accident when he was 12, is closer to his goal than ever before.

His contribution is a new and simple intelligence test which may help blind persons discover their talents for new careers.

As chief of vocational services of the Division of Rehabilitation Medicine at Stanford University School of Medicine, Dauterman's task is to guide disabled persons toward an occupational adjustment. In working with the blind, he had to rely mainly on verbal tests to determine their ability for re-training and employment. His experience told him that verbal tests did not give an objective over-all picture of learning skills. A new test, based on tactile sense, was sorely needed to give precise information on the person.

Dauterman himself recalls a revealing experience he had as a boy after his accident. "I really got my hands involved when I lost my sight and had all that time to kill." As a result he developed hobbies and an unusual interest for manual arts.

"Verbal measurements," Dauterman says, "are entirely out of place for some blind persons, particularly the educationally deprived, those from socially impoverished backgrounds, and those with language barriers. Furthermore, some persons develop a pseudo-verbal facility which leads to questionably high scores on verbal tests while educational deprivation in others causes low scores."

Aided by research psychologist Richard M. Suinn, and research assistants Bernice Shapiro and Emily Garfield, Dauterman worked to find a test that could be especially adapted for adult blind persons. He studied available intelligence tests and found one particularly suited for his purpose. It was the Kohs Block Design Test developed at Stanford nearly 40 years ago by Samuel C. Kohs as a thesis for a doctorate in psychology. The test was subsequently published and has been widely used for measuring intelligence in non-disabled children. The test consists of colored cubes which have to be assembled to make a given design. It scores a person's mental level by testing his ability at problem-solving.

-MORE-

In 1958, a Japanese psychologist, Dr. Yoshikazu Ohwaki, modified the Kohs test for use with blind children. Using fabric instead of colors to make the cube designs distinctive to touch, he found the test to be a very useful clinical tool.

Encouraged by Dr. Kohs, who is now retired and living at Burlingame, and with a substantial grant from the Office of Vocational Rehabilitation Administration in Washington, Dauterman decided to test the Ohwaki-Kohs approach on blind adults. By adding his own refinements, he made the test less frustrating although equally challenging to the blind person and more suitable for a wider range of intellectual capacities than the Ohwaki-Kohs test had been.

For example, to make the cube designs more distinctive to touch, rubber tread was used instead of fabric; the basic designs which are copied by the blind person have been reproduced in relief form on plastic sheets; textures have been reduced to rough and smooth with two colors (black and white) employed for persons who are partially blind; a simpler design has been added for warmups by those who have difficulty grasping the nature of the test.

"So far," Dauterman reports, "more than 200 blind persons have been tested in the San Francisco Bay Area, Seattle, Wash., and Little Rock, Ark. Results of the Stanford and Owhaki-Kohs tests show a promising correlation which encourages us to believe the two tests will prove to have the same predictive value."

A major goal of the research is to relate the test results to the individual's actual progress toward educational and vocational success. "To achieve this purpose," Dauterman said, "blind persons are sought as volunteers to participate in the study."

Dauterman's personal tragedy and lifework have a striking parallelism. He attended the California School for the Blind at Berkeley and graduated from Burlingame High School. He entered San Mateo Junior College, and then Stanford University where he received his A.B. in economics and M.A. in sociology in 1948. After several employment experiences in industry, he went to Kansas to become training and placement counselor for the Division of Services for the Blind. He directed the Kansas Rehabilitation Center for the Blind until 1957 when he was appointed assistant professor at Texas Technological College. In 1960, he joined the Stanford Medical School.

Dauterman, his wife and 15-year-old son live at 2344 Thompson Court at Mountain View, Calif.

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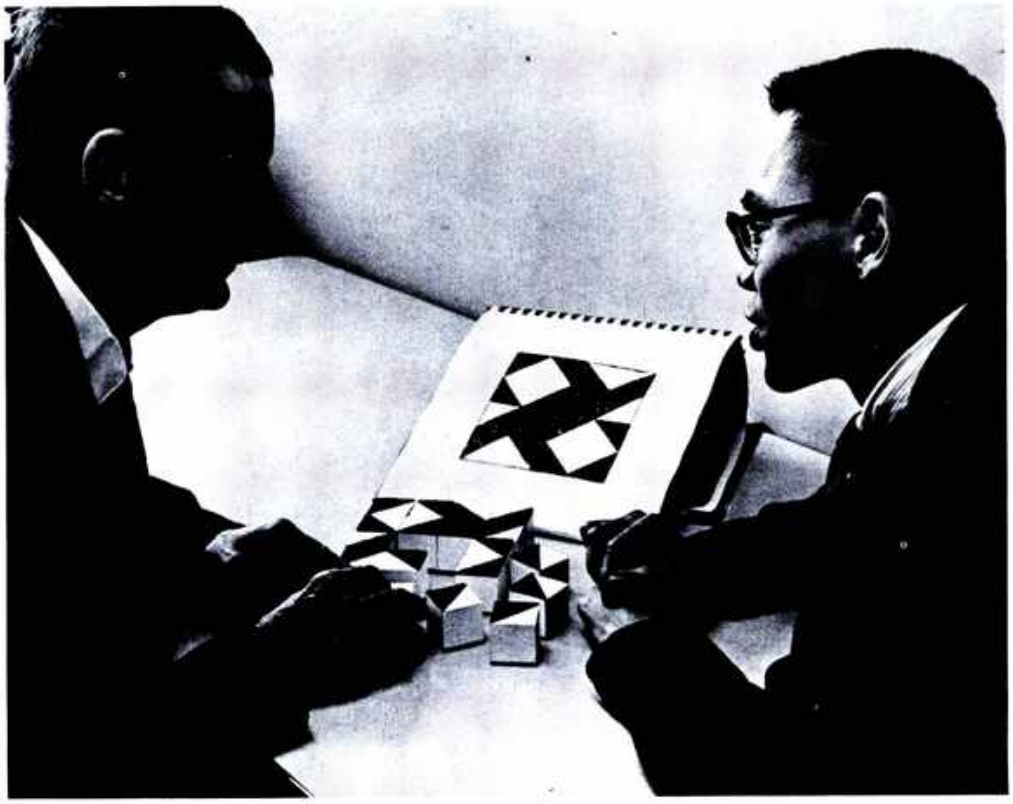
(Mailed November 2, 1965)



William L. Dauterman (left), chief of vocational services of the Division of Rehabilitation Medicine at Stanford Medical School, and psychologist Richard M. Suinn demonstrate new intelligence test for the blind.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

A combined course in housekeeping skills and English is the key to employability for 11 Spanish-speaking students enrolled in a new training program at the Palo Alto-Stanford Hospital Center.

Sponsored by the Manpower Development and Training Act, the program is coordinated through San Mateo College. It is designed to help unemployed and technologically disadvantaged persons develop marketable skills.

The 11 trainees at the Hospital Center are from Cuba, Mexico, Bolivia, and El Salvador. They range in age from 20 to 59, and their educational backgrounds vary from the third grade to college. One man was a tamale maker in Mexico and another was a teacher in Cuba.

The present class started November 15 and will complete its training January 7. A second class will begin January 24.

"The students are highly motivated and definitely employable. The only barriers are language and knowledge of a specific skill--and these will be removed by the MDTA hospital program," says John J. Graham, assistant housekeeper and supervisor of the program. Mrs. Alice Mild, executive housekeeper, and Mr. Ernest Hultman, her assistant, also are working with the trainees.

According to Graham, the students receive the same training as the Hospital's regular housekeeping staff. The program lasts 10 weeks and involves four hours of on-the-job instruction, five days a week.

The trainees learn safety rules and sanitary procedures; how to mop, dust, and clean hospital facilities; and how to use and take care of housekeeping equipment.

On-the-job training is followed by two hours of English each day. Miss Nancy Vogeley, instructor from San Mateo College, helps the students understand medical terminology as well as basic rules of grammar.

Three trainees have already been hired by the Hospital Center. "The MDTA program not only helps the students but also benefits the Hospital. We see the program as a source of well-trained employees," notes personnel manager, Jack H. Zuckswerth.

Two other hospitals in the area are conducting similar training programs, Mills Memorial Hospital and Peninsula Hospital.

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(Mailed December 30, 1965)

EDITORS: Photographs are available on request.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

An X-ray technician at the Palo Alto-Stanford Hospital Center has been selected to join the medical staff of the S.S. Hope on its 1966 goodwill voyage to Corinto, Nicaragua.

Chris Aparicio eagerly awaits the January 8 departure of the United States' famous "floating hospital." "I've always wanted to do something like this, she explains. "I admire what the S.S. Hope is doing and look forward to being part of it."

She also has a special interest in Spanish-speaking people and their culture. Her father was born in Spain, and she can speak Spanish.

The S.S. Hope, entirely supported by private donations, is making its fifth voyage. It has previously docked in Southeast Asia, the South Pacific, and South America.

The ship's staff includes a 30-member nursing and technical team which remains aboard ship for the year-long voyage, and a group of doctors who fly to the Hope for two to four month periods. About 18 doctors participate in the project at a time.

As one of four X-ray technicians, Miss Aparicio will work on board the Hope and in the clinics of Corinto, treating patients and teaching students how to use modern X-ray equipment.

"Teaching is the main purpose of the project," she emphasizes. "We will be giving practical on-the-job training to Nicaragua's medical personnel."

Preparing for the voyage, Miss Aparicio has packed personal supplies to last the year--including five extra large rolls of toothpaste, several bars of soap, and plenty of cosmetics. "Makeup and jewelry are scarce in Latin America, and the people love both, so I'm taking extra makeup and costume jewelry for gifts," she adds.

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(Mailed December 28, 1965)

Editors: Miss Aparicio's address is 380 Willow Road, Menlo Park, Calif.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

John C. Dumas, 39, of Minneapolis, Minn., has been appointed deputy director of the Palo Alto-Stanford Hospital Center.

The appointment was announced today by Dr. LeRoy E. Bates, executive vice president and director of the Hospital Center.

Dumas is now staff consultant to the firm of James A. Hamilton Associates of Minneapolis, and assistant professor in the program of hospital administration at the University of Minnesota. He will assume his new duties in February.

Dumas received his bachelor of arts degree from the University of Minnesota in 1949, and the master of hospital administration in 1955. From 1959 to 1963 he was administrator of Minneapolis General Hospital, a 417-bed general hospital with graduate and undergraduate teaching programs affiliated with the University of Minnesota Medical School. He held similar positions at the Hennepin County Mental Health Clinic, and University of Pittsburgh Falk Clinic.

In 1959, Dumas took a post as executive assistant to the vice chancellor of health professions of the University of Pittsburgh. He was responsible for the administration of university-operated hospital and clinics and related medical facilities and he coordinated the planning for a $20 million capital expansion program which included seven hospitals and clinics. He also was assistant professor of medical and hospital administration at the Graduate School of Public Health of the University of Pittsburgh.

He holds memberships in numerous societies including the American College of Hospital Administrators, American Hospital Association, Catholic Hospital Association, and the Hospital Council of Western Pennsylvania. He also serves on the board of directors of Minneapolis General Hospital Research Foundation, and the National Foundation.

For his services to the community, Dumas has received the Distinguished Service Award of the City of Minneapolis.

Dumas and his wife are the parents of five children.

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(Mailed December 23, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A new edition of a book dealing with congenital heart disease has been published by three faculty members of the Stanford University School of Medicine.

The authors are Dr. Saul J. Robinson of San Francisco, clinical associate professor of pediatrics; and Dr. Herbert L. Abrams and Dr. Henry S. Kaplan, professors of radiology.

The book, CONGENITAL HEART DISEASE, presents the three basic parts of clinical diagnosis of congenital heart disease--history and physical examination, electrocardiogram, and x-rays. The major feature of the book, according to the authors, is "its atlas-type format which summarizes a great deal of information regarding the clinical, electrocardiographic, and radiological manifestations of each cardiac abnormality on one page with appropriate illustrations."

The first edition was published in 1956. Since then the authors have added some 200 new illustrations, and chapters on electrocardiography, angiocardiography, and special procedures and treatment.

Keeping pace with the rapid advances in the field, the book covers the impact of surgery within the heart in recent years as well as new refinements in diagnosis of congenital heart disease. The authors also have contributed many personal ideas and clues about diagnosis and treatment resulting from their experience with cardiac cases.

In addition to his Stanford position, Dr. Robinson is chief of the Division of Pediatric Cardiology at Presbyterian Medical Center in San Francisco. Dr. Abrams is director of the Division of Diagnostic Radiology at Stanford, and Dr. Kaplan is executive head of the Department of Radiology.

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(Mailed December 22, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

FOR IMMEDIATE RELEASE

Dr. LeRoy E. Bates, executive vice president and director of the Palo Alto-Stanford Hospital Center, has been elected president of the Central Coast Hospital Conference.

He succeeds Edward Hawkins, administrator of the El Camino Hospital.

During the past year, Dr. Bates has served as chairman of the organization's cooperative laundry committee, and as a member of the personnel committee.

The Central Coast Hospital Conference, which includes 34 member hospitals from Monterey County to Burlingame, serves as a sounding board for problems affecting member hospitals.

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The promotion of Mrs. Carole E. Profant to assistant director of the Palo Alto-Stanford Hospital Center has been announced by Dr. LeRoy E. Bates, executive vice president and director.

Mrs. Profant has served as management analyst for the past year, assisting department heads and hospital administration in solving organizational problems. She has been responsible for instituting new admitting procedures for patients, and programs to improve record keeping, gathering of statistical information as well as procedures for better use of the hospital's bed complement by the two medical staffs.

Mrs. Profant is a graduate of Mt. Sinai School of Nursing in New York. She holds a B.S. degree from Teachers College in New York City, and a Master of Public Health degree from the School of Public Health at the University of California at Berkeley.

Her husband, Dr. Gene R. Profant, is currently in residency training in medicine at the Hospital Center. They reside at 819 University Avenue in Palo Alto.

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(Mailed December 13, 1965)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

NOTE TO EDITORS: Four photos from the display are available from the News Bureau. Prints of other photographs to be shown may be obtained from Michael Klein.

Michael Klein, fifth-year Stanford medical school student who went to Ethiopia last year to gain experience in tropical health, spent time on another project only indirectly related to medicine.

One of the results of this project--a photographic study of Ethiopian people--is on display in the student lounge of the Stanford University School of Medicine. The show will continue through December 20.

In Ethiopia, Klein performed many duties. Although he did not have an M.D., he was a house officer in the 50-bed Ethio-Swedish Pediatric Clinic in Addis Ababa, directed a Rickets specialty clinic, and did research in Rickets which he published in the Ethiopian Medical Journal.

"There is a great shortage of doctors in Ethiopia and the health problems of its citizens are immense, from gastrointestinal diseases to malnutrition," Klein said.

Twenty-five percent of the infants suffer from life-threatening Rickets with chest deformities, Klein said. Rickets is a bone disease resulting from deficiency of Vitamin D. The disease is prevalent because of cultural and anthropological reasons, Klein said. In some tribes, parents confine children indoors until they are able to walk to protect them from evil spirits. As a result they are not exposed to sunlight.

"It is a tremendous problem of health education," Klein said.

To solve it, the Ethiopian government has organized Mobile Child Health Centers manned by trained persons who visit the villages to educate the local people and to set up clinics.

-MORE-

Attendance in these clinics has been especially encouraged by the distribution of UNICEF milk, but the UNICEF milk quota to Ethiopia has been cut down lately and the whole health education program is threatened, he said.

Klein traveled some 10,000 miles in Ethiopia with the mobile health units. Because of his interest in anthropology he took pictures everywhere he went, ranging from his Imperial Highness Haile Selassie, emperor of Ethiopia, to Annuac tribesmen near Sudan.

Klein, whose interest is tropical pediatrics and public health, values his experience in Ethiopia very highly. "The only adverse thing about it," he commented, "is that you can't practice medicine in Africa too long. You are completely cut off from the rest of the profession, and you need frequent rejuvenation in places such as Stanford."

Klein's trip was financed by the Stanford department of pediatrics and the International Pediatric Fund. He supplemented his income by salary paid him by the Ethiopian government for his services.

Klein was accompanied on his trip by his wife, Irina, and the then 10-month-old baby Misha, who now can speak Amharic, the native language. Klein will receive his medical degree from Stanford in June.

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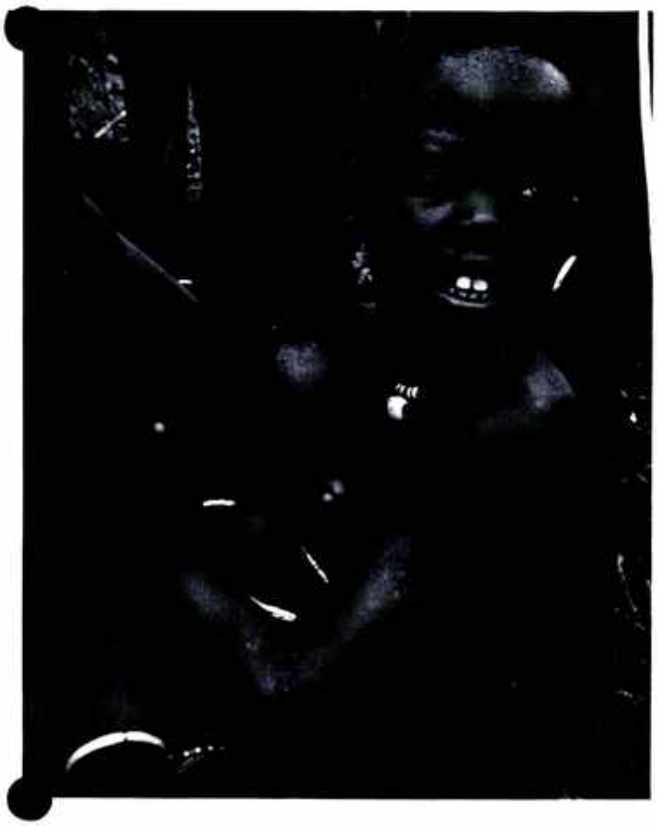
(Mailed December 8, 1965)



#1 Two Annuac children suffering from nutritional disease are typical of many seen by Ethio-Swedish Pediatric Clinic medical team.

#2 Amhara men and women receive UNICEF milk ration from Ethio-Swedish Pediatric Clinic Mobile Child Health team in Addis Ababa.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

"Community Mental Health: Comments on Social Consequences of Scientific Inquiry" will be the topic of the fourth lecture in the series PROGRESS IN MEDICINE at Stanford University.

The speaker will be Dr. Erich Lindemann of Harvard University and visiting professor of psychiatry at Stanford University School of Medicine. He will speak Wednesday at 8 p.m. in Room M106 of the Medical School building. The lecture is open to the public.

An experimental psychiatrist and psychologist, Dr. Lindemann has pioneered studies on how people react to loss and grief and developed a highly original approach to the origin of mental disease in the American community.

Dr. Lindemann's studies have shown that an essential component of emotional crises, such as bereavement, is the transition which is engendered by the change in the social system.

His interest in the changes in the social structure which affect a person's mental well-being began in 1942 when he was called on to aid victims of the Coconut Grove fire in Boston. Six years later, Dr. Lindemann was responsible for establishing the first community mental health center in the United States, the purpose of which was to study those community conditions conducive to mental breakdown. As director of the Wellesley Human Relations Service, a position he continues to hold, Dr. Lindemann focused the program on preventive psychiatry and preservation of mental and emotional health.

Dr. Lindemann also served as head of the West-End Research Project which studied the social and psychological effects of relocation on 2,600 families in the West-End area of Boston as a result of urban renewal.

Born in Whitten, Germany, Dr. Lindemann received his Ph.D. degree in 1922 and the M.D. degree in 1926 from the University of Giessen. In 1927 Dr. Lindemann was appointed research associate in psychology at the University of Iowa.

Prior to going to Harvard as a research fellow in neuropathology, Dr. Lindemann had been actively engaged in the diagnosis and management of severely mentally ill patients. It was during this period of research that he discovered the effects of sodium amytal on the mental functions of the depressed and schizophrenic patient. The popular use of barbiturates in the technique known as narcosynthesis (treatment of neuroses in which the patient recalls his suppressed memories and synthesizes his emotions) stems from his research work.

Since 1935 Dr. Lindemann has been associated with Harvard Medical School and the Massachusetts General Hospital. In 1954, he was appointed to his present position of professor of psychiatry at the medical school and chief of psychiatry at Massachusetts General Hospital.

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(Mailed January 31, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: This story was transmitted on Business Wire Jan. 27, 1966

Stanford University today proposed that negotiations begin immediately to pave the way for acquiring the City's share in the 437-bed Palo Alto-Stanford Hospital Center.

The proposal was contained in a faculty report transmitted by Stanford University President J. E. Wallace Sterling to Mayor Edward Arnold of Palo Alto and the Hospital Board of Directors. It urged that the University "enter into negotiations with the City Council for purposes of defining mutually acceptable terms whereby the University could acquire the Palo Alto-Stanford Hospital."

"The report represents and states the University's position and hopes," President Sterling wrote. "I hope it will indeed be possible for Stanford University to begin discussions with the City Council at the earliest possible date."

The report was prepared after a seven-month study by the Medical School administration and faculty, headed by Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine.

It stated that Stanford must have a University Hospital with 450 to 500 beds and the usual supporting facilities such as operating rooms and laboratories to support its major effort in medical education, patient care, and biomedical research.

"Both the Palo Alto and Stanford University services of the Hospital presently serve important roles as community health resources," the report went on. "The University is fully cognizant of the importance of assuring adequate beds for use by community physicians. Consequently, as a major and essential agenda item for the proposed negotiations, the University would include exploration of the way in which an outstanding community hospital facility could be assured."

-MORE-

The report noted that if the University did acquire the Hospital, volunteer faculty members, many of whom also serve on the present Palo Alto staff, would continue to have access to the University's facility for hospitalization of patients from the community.

Sterling's letter was in response to a request dated May 10, 1965, from the City, to define the University's interest in taking over the City's share of the Hospital.

A citizens' committee previously had recommended to the Council that "it get out of the hospital business" by leasing the Palo Alto Pavilion and Core portion of the Hospital to accommodate the expanding needs of the Stanford University School of Medicine.

At the same time, a joint owners' committee had recommended that the Hospital operating agreements be revised to give the Hospital Board greater authority in the operation of the Hospital. Last spring, President Sterling asked the City Council to postpone action on the operating agreements until the University could review its long range plans for the School of Medicine.

In his letter to the Hospital Board, Sterling wrote: "Stanford University is indebted to the directors of the Palo Alto-Stanford Hospital Center for their devoted service, and recognizes the difficulties presently faced by the directors in attempting to plan for the future."

The Palo Alto-Stanford Hospital was opened in 1959 when the Stanford University School of Medicine was moved from San Francisco to the Stanford campus. It was built jointly by the City and the University and organized as a nonprofit corporation under the direction of the Board of Directors consisting of 12 members, with the City and the University each appointing half of them.

Medical care in the Hospital is provided by two staffs--the Palo Alto Medical Staff, composed of community physicians many of whom hold faculty appointments, and the Stanford Medical Staff, composed of faculty members of the School of Medicine.

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(Mailed January 27, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

"Call Mrs. Rantz if you have any trouble finding housing."

These are familiar words of advice to new staff members at the Stanford Medical Center.

As housing coordinator for the Palo Alto-Stanford Hospital Center and Stanford University School of Medicine, Mrs. Helen H. Rantz is well known to arriving interns, residents, fellows, faculty and students. She sends housing information to them and answers all their questions.

"I sometimes feel like Dear Abbey," she admits. "In addition to inquiries about housing, their questions range from what to wear to whether or not they should bring their sail boat."

The Medical Housing Office was initiated by Mrs. Rantz's husband, the late Dr. Lowell A. Rantz, professor of medicine and associate dean of the Medical School. "When the new Medical Center was built in 1959, he anticipated the problem of moving an entire hospital staff from San Francisco to Stanford, and I was elected to do something about it," she explains.

Mrs. Rantz set up a temporary housing office which has now become a permanent and unique service. Her duties have even expanded to include "babysitting" a car, three violins and four microscopes left behind by medical staff and their families. "This is part of the fun," she says.

There is only one thing she regrets about her job--she now has a "neurotic" dog who barks whenever the phone rings. The neurosis can be traced to the early days of the housing office when Mrs. Rantz was working at home and receiving dozens of calls per day.

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(Mailed January 25, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

The division of infectious diseases of the Stanford University School of Medicine moved into the new Clinical Sciences Research Building January 3. This is the first Medical School unit to occupy the new building since construction began two years ago.

The Clinical Sciences Research Building is located between the Stanford Hospital Pavilion and the Medical School Building, on the side opposite the fountains.

"Complete occupancy of the new building is expected by the end of March and dedication ceremonies have been scheduled for May 26," reports Robert Shaffer, assistant business manager of the Medical School.

Still under construction, the $6 million building will contain facilities for investigation in anesthesia, genetics, medicine, obstetrics, pediatrics, preventive medicine, psychiatry, radiology and surgery.

It will also include the Lt. Joseph P. Kennedy, Jr., Laboratories for Molecular Medicine where basic research will be undertaken related to causes of mental retardation.

Part of the new building will house facilities supported by the National Aeronautics and Space Administration for research in the fields of space biology and biomedical instrumentation.

The new Clinical Sciences Research Building is the first major addition to the Stanford Medical Center since it was constructed in 1959. It is financed in part by Stanford University's PACE program and by government grants for research facilities.

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(Mailed January 24, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A serious bottleneck in modern surgery is the shortage of competent anesthesiologists, Dr. E. M. Papper, professor of anesthesiology at Columbia University, told a meeting today at Stanford University School of Medicine.

"With scarcely enough anesthesiologists for routine surgery," Dr. Papper added, complex operations like open heart surgery and brain surgery often require as many as three anesthesiologists, confining them to one operation for a period in which, normally, they would work with several patients."

Dr. Papper addressed a meeting of the committee on anesthesia of the research council of the National Academy of Sciences. The committee, chaired by Dr. LeRoy D. Vandam, clinical professor of anesthesia at Harvard Medical School, met to consider measures for solving the shortage of anesthesiologists in medical practice and research.

Compounding the problem, Dr. Papper said, is the fact that anesthesiologists are responsible for many aspects of patient care beyond the operating room.

These include the supervision of postoperative and other types of intensive care units in hospitals and clinics, long-term treatment in relief of pain suffered by chronically ill patients, prolonged control of respiration of accident victims and those suffering from neurological diseases, and of peripheral blood flow during such drastic therapy as kidney dialysis, and the therapeutic use of hypothermia.

Not only is there a dearth of physicians in the practice of anesthesiology, Dr. Papper said, but young scientists have not been attracted to research in this field.

"The shocking fact is that we don't know any more today about how anesthesia works than they did 120 years ago when Morton first demonstrated it," Dr. Papper said.

"In recent years a new hazard has been added to anesthesia because of the widespread use of drugs and various types of medication whose interaction with different anesthetic agents is not understood, though it is suspected, with some justification, that in some instances the interaction has been fatal.

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"Anesthesia is so taken for granted now that almost no patients and few scientists raise questions about it. But there are serious, basic questions and we must have scientists who not only ask these questions, but who will be able to find answers to them."

In his report to the committee, Dr. Papper, who now is serving as principal consultant to the Institute of General Medical Sciences of the National Institutes of Health, said a special NIH advisory committee is being established to assist the Institute in planning, program development, and the review of applications in the broad field of anesthesiology.

Another speaker, Dr. Arthur S. Keats, chairman of the department of anesthesiology at Baylor University College of Medicine, said there are 7,500 full and part time anesthesiologists available for the care of patients in more than 5,000 hospitals, many of which have more than one operating room. Over the past 10 years, 50 percent of all hospital admissions have been surgical, requiring the services of anesthesiologists. Projections for 1975 point to a growing gap between supply and demand for competent anesthesia care.

He added that some 80 medical colleges now exist. Most, but not yet all, have departments or divisions of anesthesiology. All, except perhaps a handful of these, now face critical personnel shortages. Yet, these are the institutions responsible for training more than half the practicing anesthesiologists and all the teachers and researchers in the field.

"The future of this entire area of medical science depends on strengthening these sources of our leadership in teaching and research," Dr. Keats said.

Among those attending the meeting Saturday were Dr. Michael E. DeBakey, chairman of the department of surgery of Baylor University College of Medicine in Houston; Dr. L. D. Vandam, professor of anesthesia at Harvard Medical School; Mrs. Florence McQuillen, executive director of the American Association of Nurse Anesthetists; Dr. Samuel F. Seeley of the division of medical sciences of the National Academy of Sciences, and Dr. J. R. Schofield, associate dean of Baylor University College of Medicine.

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(Mailed January 21, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Sex hormones administered to rats in infancy have altered their sexual behavior for a lifetime.

These experiments reported Wednesday by a Stanford medical school investigator, mark a fascinating new step in research to solve the puzzle of how hormones affect the maturation of the central nervous system.

Answers, when and if they come, might help humans learn why behavior is permanently affected by early experiences, or more specifically how the central nervous system regulates the pattern of behavior predominantly shown by an individual. They may even explain in part why one person develops a capacity to resist disease while another develops ulcers or migraine headaches under the pressures of living.

Scientists believe that hormones, present during critical periods of development, condition the organism's central nervous system to produce permanent changes in adulthood.

The study was described by Dr. Seymour Levine, associate professor of psychiatry, at a public lecture titled "Progress in Medicine" sponsored by the Stanford University School of Medicine.

"Rats at birth are sexually bipotential and physiologically capable of being either male or female," Dr. Levine said. "Thus far the evidence implicates testosterone, the male sex hormone, as the active substance organizing the sexual control system, both in terms of reproductive cycles and sexual behavior."

He explained that the newborn rat of either sex possesses a common, undifferentiated regulatory mechanism for the cyclic release of the gonadotrophic hormones from the pituitary gland. In the newborn female rat, this mechanism becomes fixed throughout life and controls the ovulation cycle. But in the male, the cycle is broken early in life by the secretions of male sex hormones from the infant testes.

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If the newborn male is castrated or the normal secretion of the testes blocked in some other way, the original cyclic pattern of ovulation is retained through adult life, Dr. Levine said. Conversely, if the newborn female receives male sex hormones during the critical period after birth, the original female reproductive cycle is changed into a male pattern.

He said that adult male rats, castrated soon after birth, have exhibited complete female sexual behavior when injected with low doses of female hormones or when an ovary was transplanted. Male rats, castrated in adulthood, showed no response to female hormones.

This lack of response, Dr. Levine explained, demonstrates that the critical period for affecting sexual development in those animals occurs after birth.

The studies, according to Dr. Levine, have well established that reproductive hormones exert a profound influence on the nervous system of the newborn rat. They cause the brain to be organized into a male or female pattern of hormone release. These patterns are part of the "hormonostat" of the central nervous system which controls the rate of hormone production and release or both.

The results are only the beginning of what will eventually be a long list of interactions among the neuroendocrine systems at all stages of animal and human development, Dr. Levine concluded.

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(Mailed January 20, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Dr. Karl Pribram, professor of psychiatry and psychology, will deliver the third public lecture on PROGRESS IN MEDICINE at Stanford University School of Medicine.

He will discuss "Brain as a Stabilizer of Behavior," Wednesday (January 26) from 8 to 9 p.m. in Room M106 of the Medical School Building.

Dr. Pribram, an authority in areas of research on brain function, will talk about how the brain controls its own input and how this control affects behavior. He has done extensive research on the so-called association areas of the cerebral cortex and on the limbic systems of the brain. He will also discuss his experiments on the regulation of emotions and of motivation by these brain structures.

Dr. Pribram is the co-author of "Plans and the Structure of Behavior," a book concerning the application of cybernetics, information and computer theory to the problem of analyzing behavior. The book reviews current understanding of the similarities between computers and the human brain.

He received his M.D. from the University of Chicago in 1941. Born in Vienna, Austria, Dr. Pribram was trained as a neurosurgeon, neuroanatomist, and neurophysiologist.

The Wednesday night medical lectures are presented as a public service by the Stanford University School of Medicine. Their purpose is to give the community an opportunity to develop informed perspective of the exciting developments in medicine being brought into being in laboratories and hospitals throughout the world.

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(Mailed January 19, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

"Studies in Sexual Differentiation" will be the topic of the second public lecture in the series titled PROGRESS IN MEDICINE at Stanford University School of Medicine.

The lecture will be presented by Dr. Seymour Levine, associate professor of psychiatry, Wednesday (January 19) from 8 to 9 p.m. in Room M106 of the Medical School Building.

Dr. Levine's research interests are in the areas of physiological and behavioral development, including stress, hormones, and varieties of infantile experience, as they affect adult behavior. He will report on his latest experiments showing how certain hormones administered to rats in infancy may alter patterns of sexual behavior for a lifetime.

Dr. Levine came to Stanford from the Institute of Psychiatry at Maudsley Hospital in London, England, where he was a fellow from 1960 to 1962. Before going to England he was an assistant professor at Ohio State University.

Receiving his B.A. in 1948 from the University of Denver, he earned M.A. and Ph.D. degrees from New York University in 1951 and 1952.

The medical lectures were initiated by Dr. Joshua Lederberg, Nobel Prize winning geneticist, "to give an opportunity to leaders in academic medicine to share their own insight and perspective with the community."

The lectures are given each Wednesday during the academic year. Dr. Karl Pribram, professor of psychiatry and psychology, will deliver the third lecture in the series January 26. His topic will be "Brain as a Stabilizer of Behavior."

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(Mailed January 17, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A Stanford University Medical School team reports successful use of the needle-sharp beam of a linear accelerator to destroy retinoblastoma in infant eyes without damage to the lens or other structures.

Dr. Malcolm A. Bagshaw, associate professor of radiology, and Dr. Henry S. Kaplan, professor and executive head of the Department of Radiology, said that 15 eyes in 10 children with retinoblastoma were treated with radiation from the Stanford medical linear accelerator and followed for 10 years. One of the patients was six years old. All but one child still have useful vision. No deaths have occurred, and no extensions of the tumor beyond the globe have been observed.

The Stanford investigators presented their findings at a recent meeting of the Radiological Society of North America in Chicago.

Retinoblastoma, a malignant tumor of the retina, occurs almost exclusively in children younger than 10. Treatment by photocoagulation has been successful when the lesion is small. The extensively affected eye, however, could not be treated and had to be removed. Radiation therapy is hazardous to the lens. But due to the sharpness of the accelerator beam, damage to the lens is avoided.

Drs. Bagshaw and Kaplan flatly challenged the prevailing practice of removing the eye:

"Given a precise technique of radiation therapy and utilizing a supervoltage device with its tissue-sparing action, it is possible to try at least once to cure the unilateral or even bilateral lesions without proceeding directly to enucleation."

In patients in which both eyes are involved and the tumor is small, the physician should make at least one attempt at radiation treatment before resorting to removal of the worst eye, they urged.

They pointed out only one of the 10 children treated had to undergo an operation for removal of the eyes.

Radiation to each affected eye, according to the Stanford radiologists, should be given at an optimum dose of 5,000 rads over five weeks. Some patients required more than one course of radiation to destroy the tumor.

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(Mailed January 13, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

A limited number of paid parking spaces for persons who want the extra convenience of a shorter walking distance has been set aside near the front entrance of the Palo Alto-Stanford Hospital Center.

The controlled parking program will go into effect Tuesday, January 11, Dr. LeRoy E. Bates, executive vice president and director of the Hospital Center, announced.

The paid parking lot involves 175 parking spaces. More than 1,000 stalls are still available at no charge.

The controlled lot is located northwest of the fountain area, adjacent to the Palo Alto Pavilion. The parking fee is 25 cents per hour.

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(Mailed January 10, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Dr. William Dement, associate professor of psychiatry and noted researcher in sleep psychophysiology, will inaugurate a continuing new series of public lectures at Stanford University School of Medicine beginning January 12.

Dr. Robert J. Glaser, vice president for medical affairs and dean of the medical school, said the lectures titled PROGRESS IN MEDICINE will feature outstanding members of the Stanford medical school faculty and distinguished visiting professors. They will be given each Wednesday during the academic year from 8 to 9 p.m. in Room M106 of the Medical School Building. Each department is scheduled to offer three to four lectures.

The topic of the first presentation will be "Sleep and Dreaming: The Second and Third States of Existence."

Although the lectures are offered primarily for the community as a public service, Stanford undergraduates may enroll for credit, Dr. Glaser said.

The lectures were initiated by Dr. Joshua Lederberg, Nobel Prize winning geneticist, in the hope of giving an opportunity for leaders in academic medicine to share their own insight and perspective with the community. Dr. Lederberg will present some of the lectures.

"The community has little opportunity to develop informed perspective of the exciting developments in medicine which are being brought into being in laboratories and hospitals throughout the world," Dr. Lederberg said. "Public understanding of these developments is of the utmost importance for intelligent participation in important social decisions.

"These have to do not only with personal and community health and with the public investment in medical research, but also with equally important long range problems such as the world population, the management of artificial and transplanted organs, and the applications of the new knowledge of cell biology and heredity."

Dr. Dement, 37, is regarded as one of the world's three leading investigators of sleep psychophysiology. He became one of the founders of this new and demanding field while he was still a medical student at the University of Chicago in ~~1935~~ 1953. He received his M.D. with honors in 1955 and went on to take a Ph.D. in neurophysiology in 1957. He then began to work independently, chiefly at the Mount Sinai Hospital in New York, and since 1963 at Stanford.

According to Dr. Dement, periods of violent nervous turmoil intimately connected with dreaming occur intermittently during everyone's sleep every night. The connection they may have with mental illness is now being studied at Stanford medical school.

In 1964 Dr. Dement received the $1,500 Hofheimer Prize of the American Psychiatric Association for outstanding research.

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(Mailed January 10, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

Dr. Charles S. Houston, special assistant to the director of the Peace Corps, will describe the Peace Corps volunteer doctor program Wednesday, January 12, at 4:30 p.m. in Room M114 of the Stanford Medical School.

Dr. Houston will also show slides of India taken while he was director of the Peace Corps there from September 1962 to December 1964.

Thursday morning from 8 to 10, he will hold informal conferences with interested individuals in the student lounge of the Medical School.

The Peace Corps expanded its call for doctors in 1964, and the first all-doctor program began last July. The new program makes it possible for married doctors with children to enter as volunteers.

Dr. Houston received his A.B. degree from Harvard, his M.D. from Columbia, and interned in medicine at Presbyterian Hospital, New York. He practiced as a family doctor in Colorado and New England before joining the Peace Corps staff.

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(Mailed January 6, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

Dr. Bruce Stocker, Guinness Professor of Microbiology at the University of London and specialist in the field of bacterial genetics, has been appointed professor of medical microbiology at the Stanford University School of Medicine. His appointment became effective January 1.

"Dr. Stocker's background and interests provide a felicitous combination for the teaching and research activities of the medical microbiology department," noted Dr. Robert J. Glaser, vice president for medical affairs and dean of the medical school.

Dr. Stocker attended King's College in London and received his medical degree in 1940 from Westminster Hospital Medical School of the University of London. After serving in the medical branch of the Royal Air Force, he lectured in the department of bacteriology at the London School of Hygiene until 1953, then became head of the Guinness-Lister Research Unit of the Lister Institute of Preventive Medicine. He was appointed professor of microbiology at the University of London in 1963.

For six months in 1961, Dr. Stocker was a visiting professor in the department of genetics at the Stanford medical school. He gave a series of lectures at Stanford on the relationship of bacterial genetics to infectious disease.

His research and publications have focused on the genetic control of the structure of bacteria, particularly the genus Salmonella, a type of germ that causes typhoid fever, food poisoning and other infections. His current study of the composition of the cell wall of Salmonella has a direct bearing on the capacity of these organisms to cause disease.

Last year Dr. Stocker became one of four "New Generation Ehrlich Prize Winners," an award made by the Ehrlich Foundation of Frankfurt, Germany, for excellence in scientific work in the field of Paul Ehrlich's interests.

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(Mailed January 5, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

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FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

Jack Zuckswerth, personnel manager for the Palo Alto-Stanford Hospital Center, has resigned to become wage and salary administrator of the Kaiser Medical Care Entities for the northern California region.

Kenneth Dunkle, employment manager, will be acting personnel manager, Dr. LeRoy E. Bates, executive vice president and director of the Hospital, has announced.

Zuckswerth has been working for the Hospital Center since January 1960 when he started as personnel assistant. He became personnel manager in November 1961.

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(Mailed January 5, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

"Babies, Bubbles, and Disease" will be the topic of the eighth lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

The speaker will be Dr. Marshall Klaus, assistant professor of pediatrics and program director of the Clinical Research Center for Premature Infants at Palo Alto-Stanford Hospital Center. The lecture will be Wednesday (March 2) at 8 p.m. in Room M106 of the Medical School Building. It is open to the public.

Dr. Klaus, an authority on pulmonary physiology in the newborn and the respiratory distress syndrome known as hyaline membrane disease, joined Stanford University School of Medicine in 1964.

Before that he was assistant professor of pediatrics at Western Reserve Medical School and director of pediatrics at Mt. Sinai Hospital at Cleveland, Ohio. He received his B.S. and M.D. degrees from Western Reserve University and his professional training at Babies and Children's Hospital in Cleveland. From 1956 to 1958 he was in private practice as a pediatrician.

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(Mailed February 28, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

Kenneth P. Dunkle has been appointed personnel manager for the Palo Alto-Stanford Hospital Center.

Dunkle joined the Hospital staff in 1963 as assistant credit manager and became employment manager in 1965.

A retired lieutenant colonel in the Marines, he received a bachelors degree in business from Northwestern University, Evanston, Ill., in 1941 and earned his masters of business administration at Jackson College in Honolulu in 1962.

Dunkle and his wife are the parents of five children. They live at 2762 Doverton Square in Mountain View.

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(Mailed February 24, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

The history and epidemiology of hepatitis, a liver disease of national importance, will be the subject of the seventh lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

Dr. LeRoy Allen Pesch, associate dean and professor of medicine, will discuss "Hepatitis: The Problem in a Clam Shell" Wednesday (February 23) at 8 p.m. in Room M106 of the Medical School Building. The lecture is open to the public.

Dr. Pesch, an expert in liver diseases, will report on recent outbreaks of hepatitis which have been associated with the eating of seafood, especially clams.

Before coming to Stanford in 1965, Dr. Pesch was chairman of the department of medicine at Rutgers Medical School in New Brunswick, N.J. He is presently continuing his studies of the mechanisms of liver metabolism and cell damage under a recent grant from the National Institutes of Health.

He received his bachelors degree from Iowa State University in 1952 and his M.D. from Washington University School of Medicine in 1956. From 1961 to 1963, Dr. Pesch served as director of the Liver Study Unit and assistant professor of medicine at Yale University.

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(Mailed February 21, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

Editors: Photo available on request.

For a delightful "bit of old England" the place to visit is the Radiotherapy Division of the Palo Alto-Stanford Hospital Center.

Eight of the Hospital Center's nine radiotherapy technicians are from the British Commonwealth: six from England, one from Scotland and one from Australia. The ninth technician, an American, has been trained by the British staff.

The British influence is easily explained. The United States has a shortage of trained radiotherapy technicians and Britain has a well-qualified supply.

A radiotherapy technician is trained in the use of X-rays and radioactive sources in the treatment of cancer.

According to chief technician Joyce Lawson, Britain has a long tradition of therapy training which is just beginning in the United States. "England has been producing therapy technicians for 50 years. The United States officially began three years ago."

British hospitals and medical schools, Miss Lawson adds, have always placed more emphasis on radiotherapy as a means of cancer treatment. "During the past 10 years, however, radiotherapy at Stanford has developed strongly and now enjoys a position of primary importance in the treatment of malignancy," she notes.

The British Society of Radiographers established a national qualifying examination for radiotherapy technicians about 1936. They made the examination mandatory in 1961.

The National Registry of Radiologic Technologists, sponsored by the American Medical Association, prepared a national examination for radiotherapy technicians in 1963. Although this examination is not yet nationally required, it is a significant step toward training more Americans in radiotherapy and standardizing skills. A few states have already made it mandatory.

Presently, most hospitals in the United States informally train nurses and diagnostic X-ray technicians to give radiotherapy treatments.

-MORE-

The Hospital Center's little British "colony" started nine years ago when Miss Lawson came from Scotland by way of Canada to run the new linear accelerator "cancer gun" at the Stanford Medical School in San Francisco.

At the same time, the newly formed Division of Radiotherapy hired Pat Steed from England as its dosimetrist. No one in this country was trained in dosimetry, which involves determining the appropriate method of radiotherapy treatment.

From then on the British influence snowballed. When the Hospital Center needed more technicians it recruited from Britain's radiotherapy schools.

"Recent graduates are eager to come to the United States, especially to California," Miss Lawson says. "Many of the girls have stayed a couple years, and then returned home, spreading the word about the Stanford Medical Center. The Radiotherapy Division now receives several applications a year."

Contacts in Britain also led to the hiring of physicist Angela Deubert who was working in the radiotherapy field in England. "In the United States, few physicists specialize in radiotherapy; they tend to go into industry or nuclear research," Angela explains.

In 1960, the Hospital Center decided to share its knowledge of radiotherapy with American nurses and X-ray technicians. Under a National Institutes of Health grant, the Medical School set up a year-long training program. Two girls have completed the program. One is now on the staff, and the other is aboard the S.S. Hope. A third technician is presently taking the program.

The trainees take special courses in physics, attend radiology lectures for medical students, are given materials to read and on-the-job training. "We eventually hope to give more lectures and train more students," Miss Lawson says.

On a recent trip to New York, Miss Lawson was surprised to find a similar training program at Mount Sinai Hospital--but then discovered it was organized by a technician who trained with her in Scotland.

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(Mailed February 21, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

One of the many peaceful facets of nuclear age--the application of its knowledge and products in the field of medicine--will be the topic of the sixth lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

The speaker is Dr. Joseph P. Kriss, professor of medicine and radiology and head of the division of Nuclear Medicine. He will speak on "Atoms in Search of Disease: 20 Years after Hiroshima" Wednesday (February 16) at 8 p.m. in Room M106 of the Medical School Building.

Dr. Kriss will tell some of the early history of the medical application of isotopes and will describe some of the latest developments in the field which pertain to diagnosis and treatment of disease.

These developments include improvement of radiation detection equipment, development of radioactive substances that concentrate in particular organs and tissues, and better understanding of the factors necessary to obtain clear pictures that can be interpreted by the physician.

Dr. Kriss received his M.D. from Yale University and has been a member of the Stanford medical school faculty since 1948. Endocrinology and nuclear medicine are among his special fields. He has also been a major contributor in the development of a new curriculum in the medical school.

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(Mailed February 14, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: Photos are available on request.

Sandy, an attractive, exuberant, 17-year-old girl, had collided with disaster last summer as a passenger on the back of a motorcycle that crashed into a ditch.

The crash had thrown her against a tree, breaking her neck. Prompt surgery could not reverse the injury to the spinal cord inside the shattered vertebrae. Most of the motor and sensory nerve function of her arms and legs was gone.

After her recovery from the injuries, Sandy spent eight months in the rehabilitation ward of the Palo Alto-Stanford Hospital Center learning, among other difficult lessons, to use substitutes for the muscles in her arms and legs.

Now 16 conferees in the division of rehabilitation medicine at Stanford University School of Medicine were weighing Sandy's ability to cope with the future. Physiatrists (doctors who specialize in the techniques of rehabilitation medicine), nurses, physical and occupational therapists, the social worker, the vocational counselor, and the neurologist and urologist called in as consultants were summing up their separate views of the patient to decide whether she was ready to leave the hospital.

"She needs a lighter wheelchair for traveling," the occupational therapist told the group, "so someone can help her get in and out of the car, and over the curb."

In the next hour, the medical team measured some of Sandy's problems against her ability to solve them, including her disappointment in a former boy friend, her teen-age acne, the emotional stability of her parents, the size of the doorways in her home (could they be enlarged to accommodate a wheelchair?), her questions about marriage, which one of the physiatrists had answered. Although devoid of sexual sensation, she could become pregnant and bear a healthy child.

Conferences held throughout the patient's rehabilitation are a vivid demonstration of the teamwork that is the basis of modern rehabilitation, says Dr. Daniel J. Feldman, director of the division of rehabilitation medicine. More than that, they show the extraordinary range of the rehabilitation team in meeting the problems of these patients.

Most patients are fighting their way back from a catastrophe--from a crippling accident, or from arthritis, stroke, cerebral palsy, multiple sclerosis, or some other disabling disease which has suddenly cut them off from their work and their place in society.

-MORE-

The rehabilitation specialist who accepts responsibility for the patient at this point, unlike the physician or surgeon who preceded him in the patient's care, is not treating the disease but its consequences, Dr. Feldman said. Physical restoration such as retraining muscles, and teaching the use of prosthetic devices, cannot be separated from other problems overwhelming the patient. How can he meet the staggering financial burden? What will his family do in the meantime? Does he have the mental agility and fortitude to make a different life for himself?

Dr. Feldman's comments reflect the dramatic change of opinion witnessed in the last 15 years by the medical profession about what doctors can do for the disabled.

"When I was in medical school in the late 1940's, we had a defeatist attitude toward these patients," recalled Dr. Harry R. Hahn, a former internist and now a postdoctoral fellow studying the new possibilities in rehabilitation medicine at Stanford. "They could survive a stroke or paralyzing auto accident, and then die of bronchial pneumonia--from lying in bed too long. Even the hip fracture patients could get pneumonia.

"We know now that a stroke patient may get return of function months after his stroke. In those days we didn't get much chance to find out."

The change began with the crusading work of Dr. Howard Rusk and his associates in New York's Institute of Physical Medicine and Rehabilitation, who showed that something could be done to help the irreversibly crippled. Dr. Feldman who worked with Dr. Rusk in New York is one of the converts who is spreading the doctrine that disability is treatable.

It is also significant that three of the five present postdoctoral fellows in rehabilitation at Stanford left careers in other fields of medicine to take up this new specialty, and that Dr. Leslie Knott, assistant professor of rehabilitation medicine, came to Stanford after retiring as chief of the division of chronic diseases in the U.S. Public Health Service.

A look at the rehabilitation rooms during the daytime hours provides evidence of the present attitude. Most of the patients, in wheelchairs, gurneys, or on crutches, are busy exercising and learning how to help themselves.

For instance, amputees and those whose legs are paralyzed (paraplegics) learn to strengthen their arms, so they can lift themselves into a wheelchair and from chair to crutches. Quadriplegics (with little or no voluntary movement in their arms and legs) learn to exercise shoulders, neck, or fingers, so they can use mechanical aids to movement. The goal is freedom to get around on their own.

"Our patient is no longer primarily sick--but different. That's a very subtle point--important for the patient and for the world at large," Dr. Feldman explained. "Because of his disability, he will never be normal. But if we treat him as sick, he will be continually waiting to get well."

Stanford's rehabilitation program is linked closely with other rehabilitation ervices in the community--the Stanford Children's Convalescent Hospital, the Palo Alto Veterans Administration Hospital, and the Crystal Springs Rehabilitation Center in San Mateo. Their directors are on the Stanford faculty, and residents earning certification in this specialty take a six-month tour of duty in each of the four hospitals. Another organization, the Children's Health Council in Palo Alto, cooperates with the division when patients need specialized rehabilitation care.

Because of this cooperation, disabled patients benefit by the sum of all the community resources for rehabilitation, Dr. Feldman said.

Perhaps the most remarkable service the rehabilitation division provides for the patient's future is guidance in seeking a job. Vocational rehabilitation counselor William L. Dauterman is a key member of the team.

The reason we are undertaking this responsibility, Dauterman explained, can be summed up from the disabled patient's viewpoint: "If he is going to live, what is he going to live for? What is he going to do with his restored abilities?"

If the patient is a lawyer, teacher, accountant, someone with professional and intellectual skills, he is likely to return to his former occupation, even if not on a full-time basis. Students can continue their studies with extension courses. But auterman's main concern is the patient who must find another occupation or change his way of doing his former work. The vocational counselor suggests alternatives.

To find out what the patient can do, the vocational counselor may send him to the division's Work Abilities Evaluation Laboratory, a unique testing workshop where the patient performs typical factory or clerical jobs. Recording devices wired to the machinery he uses indicate his speed, accuracy, smoothness of motion, his fatigue, physical difficulties, pain, if any, and boredom.

With the test scores, Dauterman is able to suggest the kind of job the patient should seek and the state agencies that will help him get retraining and employment.

Guided by these several counsels, most patients when they leave the hospital have a pretty good plan worked out. They go back into the world again to face a very different future.

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(Mailed February 14, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

Editors: Photos of presentation will be available on request.

Dr. Henry S. Kaplan, professor and executive head of the department of radiology at Stanford University School of Medicine, has been awarded the French Legion of Honor "in gratitude for his exceptional contribution to the development of Franco-American scientific relations and in esteem for his remarkable scientific work."

The citation and medal were presented on behalf of the French government by Consul General Claude Batault in ceremonies at the University's Faculty Club, Wednesday (February 9) afternoon.

Stanford University President J. E. Wallace Sterling, Dr. Robert J. Glaser, vice president for medical affairs and dean of the Medical School, and Michel Oriano, French cultural attache in San Francisco, were among guests attending the presentation.

The Legion of Honor was established by Napoleon as a military award in 1802. Under subsequent governments, it has often been granted to civilians for distinguished service to France. Within the last two years, it has again become a primarily military award, and civilian presentations are less frequent.

Dr. Kaplan has maintained a close working association with radiotherapy and cancer research groups in Paris and has invited several physicians and scientists to Stanford for additional study and training.

One of the visiting physicians recently organized the Association Medicale France-Amérique to improve relations in medical areas between France and the United States. This organization is sending a group of French physicians to the Medical Center in April.

Dr. Kaplan also has given several lectures in Paris. During his most recent trip last February, he described his research at an international symposium on Hodgkin's disease, a malignancy of the lymph glands.

French scientists are most familiar with his work in experimental radiobiology and radiation induced leukemia.

Dr. Kaplan received his B.S. degree from the University of Chicago in 1938, the M.D. degree from Rush Medical College in 1940, and the M.S. degree in radiology from the University of Minnesota in 1944.

He was a leading figure in the design and use of Stanford's linear accelerator "cancer gun" and is presently continuing work on this and related projects in high-energy radiation treatment of cancer.

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(Mailed February 8, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Dr. David A. Hamburg, professor and executive head of the Department of Psychiatry, will deliver the fifth lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

He will discuss "Genes, Hormones, and Stress" Wednesday (February 9) at 8 p.m. in Room M106 of the Medical School Building. The lecture is open to the public.

Dr. Hamburg's research has fallen in two major areas. He has investigated the effects of psychological stress on the function of the adrenal and thyroid glands. He has also studied human behavior under stress, especially the ways in which normal individuals cope with very difficult situations.

In 1965, Dr. Hamburg and his associates began a study which focuses on the female sex hormone, progesterone. There is evidence that progesterone and the corticosteroids (hormones secreted by the outer area or cortex of the adrenal glands) may play a significant role in causing the distresses of women during the menstrual cycle, pregnancy, and after childbirth. Other research also suggests many close links between the steroids, brain, and behavior.

Dr. Hamburg came to Stanford in 1961 from the National Institute of Mental Health in Bethesda, Md., where he was chief of its adult psychiatry branch. Before that he was assistant director, then associate director, of the Institute of Psychosomatic and Psychiatric Research and Training at Michael Reese Hospital in Chicago.

He received his A.B. and M.D. degrees from Indiana University and his professional training at Michael Reese Hospital, Yale University and the Institute for Psychoanalysis in Chicago.

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(Mailed February 7, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

Dr. Eugene M. Farber, professor and executive head of the department of dermatology at Stanford University School of Medicine, has been selected by the Israel Academy of Dermatology to give a series of lectures at medical schools in Jerusalem and Tel Aviv from February 11 to 25.

He will be the Academy's second annual Wershaw lecturer. Friends of the late Irving Wershaw, president of Dome Chemicals Company of New York, established a fund in 1965 to send one lecturer from the United States to Israel each year.

Dr. Farber's lectures will focus on laboratory aids and studies in the evaluation of cutaneous blood flow, and two skin diseases--pseudoxanthoma elasticum and psoriasis.

He will also address the medical societies of Jerusalem and Tel Aviv and visit the Psoriasis Care Center at Ein Bokek, near the Dead Sea.

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(Mailed February 7, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

The Palo Alto-Stanford Hospital Center recently honored seven Auxiliary members and six Red Cross Gray Ladies who have contributed 1,000 hours or more of service to the Hospital Center.

The volunteers were guests of the Board of Directors at a dinner preceding the January Board meeting.

Auxiliary members who were honored are: Mrs. Harold Hill, Miss Anne Ramsay, Mrs. Stanley Sharp and Mrs. Sheldon Riveroll of Palo Alto; Mrs. George Ogle and Mrs. Harold Ropers of Menlo Park, and Mrs. Harold Beaver of Los Altos Hills.

The six Gray Ladies are: Mrs. Richard Bridges, Miss Josephine Marshall and Mrs. John Roberts Jr. of Palo Alto; Mrs. John DePew and Mrs. Willard Walker of Menlo Park, and Mrs. Milton George of Los Altos.

More than 1,000 volunteers contribute their services to the Hospital Center including 950 Auxiliary and 80 Red Cross Gray Ladies.

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(Mailed February 3, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

The Palo Alto-Stanford Hospital Center will sponsor its third annual art show March 13 through 22.

The show will feature work by Hospital and Stanford medical school employees, medical staffs, students, and volunteers. The public is invited to visit the show which will be in the Hospital Core Building and Stanford Pavilion waiting areas on the first and second floors.

Paintings, sculpture, photographs, mosaics and prints will be included in the display. Ribbons will be awarded based on the popular vote of viewers.

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(Mailed February 3, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

The drastic changes in the care of the mentally sick which culminated in the development of community mental health centers have opened broad new vistas for the psychiatrist of the future, a prominent social psychiatrist said today.

Dr. Erich Lindemann, visiting professor of psychiatry at Stanford University School of Medicine, said that the success of community mental health centers has had two paradoxical consequences. One of these is the great increase in the number of those seeking help.

Many sufferers and others previously not considered amenable to psychiatric treatment began to seek it, Dr. Lindemann said. Couples in marital discord, confused school children whose potentialities were obviously greater than their achievement, misunderstood employees whose joy at work had become replaced with bitterness and inefficiency, clergymen and teachers dissatisfied and frustrated in their profession--all these began to come to the community mental health centers.

And although the psychiatrists have gradually surrounded themselves with many therapeutic assistants, treatment case loads continue to mount far more rapidly than additional psychiatrists can be trained.

Consequently, the success of psychiatry also aroused the long-cherished and wistfully protected notion of prevention, Dr. Lindemann said. Better than treatment would be to diminish the incidence of need. Not that psychiatrists expect the sorrow of life to disappear--aggressions will continue to erupt, wounds will continue to be inflicted. But might not something be done to mitigate the severity or the frequency of the severe reaction?

Psychiatrists plead the importance of security and affection in early mother-child relationships, better schools, better teachers, better playgrounds and more of them. But school board members still are inclined to regard such measures as too expensive or irrelevant, he said.

No one disputes the theoretical importance of stable family life, fidelity in marriage, kindness to children, but the public does not generally think of these things as basic to mental health. In the meantime, our divorce rate rises, the battered-child syndrome appears more frequently, racial intolerance increases, Dr. Lindemann commented.

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If these things we psychiatrists have been saying were known to all teachers, would our schools improve, Dr. Lindemann asked. If they were known to all our school board members, would our teachers improve? If they were known to all employers, would work losses recede and profits rise? If they were known to clergymen, would religion move into new roles of importance and meaning? Would this be an effective social approach to prevention?

No one really knows what a "total push" social reform of this kind might accomplish. But it would certainly receive the denunciation of people who consider such measures luxuries, he said.

"We have fairly good evidence now that social change, particularly rapid social change, arouses complicated responses," Dr. Lindemann said. At the individual and at the community level the most dramatic forms are seen in mourning and grieving, but processes resembling grief are seen in many forms of role transition which are required by voluntary or imposed social change.

"It is uncomfortable and often painful to abandon previous roles and to accept new ones which are untried and have different implications for social rewards."

The psychiatrist and his team are not immune to these reactions, Dr. Lindemann said. Our adaptation as we ourselves change from clinical psychiatry to community mental health practice is timely and necessary if we want to avoid the eventual loss of the most significant contributions the community mental health program can make.

He added the psychiatrist must be able from time to time to abandon his traditional leadership role to which he is accustomed and begin to compare notes with clergymen, teachers, politicians, and other community leaders responsible for mobilizing group effort for constructive goals.

Dr. Lindemann's talk was one in the series PROGRESS IN MEDICINE sponsored by the Stanford University School of Medicine.

As an experimental psychiatrist and psychologist, Dr. Lindemann has pioneered studies on how people react to loss and grief and developed an original approach to the origin of mental disease in an American community. He was responsible for establishing the first community mental health center in the United States, the purpose of which was to study those community conditions conducive to mental breakdown.

Dr. Lindemann also served as head of the West-End project, in which some 2,600 families in the West End area of Boston were forced to relocate by urban renewal. Dr. Lindemann and his colleagues conducted a systematic appraisal of the social and psychological stresses involved in relocation.

He is professor emeritus of psychiatry at Harvard Medical School and chief of psychiatry at the Massachusetts General Hospital.

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(Mailed February 2, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Dr. Bruce Stocker, professor of medical microbiology at Stanford University School of Medicine, has been elected a fellow of the Royal Society of London, Britain's leading scientific society.

Dr. Stocker was elected to the Royal Society for his work in bacterial genetics. He was one of 32 "scientists of distinction" named to the Society this year.

The Royal Society was founded in 1660 under the patronage of Charles II "for the improving of natural knowledge." It represents all physical and biological sciences, and serves as an advisor to the British government on scientific issues.

Dr. Stocker was Guinness Professor of Microbiology at the Lister Institute of Preventive Medicine, University of London, before coming to Stanford last January. He attended King's College in London and received his medical degree in 1940 from Westminster Hospital Medical School of the University of London.

His research has focused on the genetic control of the structure of bacteria, particularly the genus Salmonella which causes typhoid fever, food poisoning and other infections.

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(Mailed March 31, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Dr. Keith B. Taylor, specialist in diseases of the gastrointestinal tract, will give the tenth public lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

Dr. Taylor will speak on "Border Incidents: Intestinal Absorption and Malabsorption," Wednesday (March 30) at 8 p.m. in Room M106 of the Medical School Building.

He will discuss new research techniques which have increased understanding of the gastrointestinal tract and have suggested ways of effectively treating gastrointestinal disease.

Dr. Taylor is associate professor and head of the division of gastrointestinal medicine at the medical school. He received his M.D. degree at Oxford University, England, in 1955 and came to Stanford in 1963.

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(Mailed March 29, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

One of the Palo Alto-Stanford Hospital Center's many visiting doctors is Graciela Garoffalo, known as "Gigi" (G.G.) to her co-workers in the Department of Radiology.

"Gigi" is here on a grant from the Venezuelan government to study the latest techniques in radiotherapy treatment of cancer. She is on leave from the Oncologico Luis Razetti, the cancer hospital in Caracas, where she is assistant radiotherapist and supervisor of the children's division.

She has spent the last 10 months at the Stanford Medical Center and is leaving in April to spend six months in the chemotherapy division of the Memorial Hospital for Cancer and Allied Diseases in New York.

"Gigi" could speak very little English when she came, but "everyone has been a wonderful help," she says.

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(Mailed March 24, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Establishment of an artificial kidney unit at the Palo Alto-Stanford Hospital Center was approved Wednesday night by the board of directors.

The new unit will be made possible by a $17,000 gift from the Palo Alto-Stanford Hospital Center Auxiliary.

"It gave the Auxiliary board great pleasure to donate funds to this very much needed project which will benefit Hospital patients and the community as a whole," Mrs. Blake C. Wilbur, president of the Auxiliary commented.

In accepting the gift, Robert H. Klein, president of the Hospital board, praised the Auxiliary for its generous contribution and expressed the hope that others would be encouraged to help with the financial support of special hospital needs.

The Auxiliary contributes 6,000 hours of volunteer service to the Hospital each month. Funds for the artificial kidney program have been made possible through earnings from the Auxiliary's Gift Shop. During the past two years, the Auxiliary contributed $17,000 for the purchase of monitoring equipment for cardiac patients, and $30,000 for the establishment of a blood bank.

The artificial kidney unit will be located in the new Clinical Sciences Research Building of the Stanford University School of Medicine. The program will be under the direction of the urology service of the Stanford medical staff.

Dr. John B. Palmer, who will supervise the new program, said the surgery department of the Stanford medical staff is embarking on an active kidney transplantation program and that the artificial kidney is urgently needed to maintain patients in the best possible condition prior to surgery.

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An artificial kidney is a device that duplicates the continuous blood-cleansing action of healthy kidneys, a process called hemodialysis. This removes wastes and toxins that normally appear in the bloodstream and which could cause death if allowed to accumulate.

The artificial kidney, Dr. Palmer said, will be used for patients who are being prepared to receive a healthy kidney from a related donor; to sustain those who have no related donor prospects and need volunteer donors; and to provide interim care for patients with acute kidney failure due to inflammation or injury.

Until now the technique of peritoneal dialysis alone has been used at Stanford to prepare patients for kidney transplantation. The method consists of injecting a fluid solution into the peritoneum, the thin membrane lining the walls of the abdominal cavity. Impurities in the blood pass through the membrane and are then carried away.

This method is less efficient than the artificial kidney. It forces the patient to be in bed for 48 hours or longer during the dialysis, and the problem of infection of the abdominal cavity is a constant hazard, Dr. Palmer said.

The slower technique of peritoneal dialysis is not always applicable to emergencies involving poisonings when survival is related to the speed with which poison is removed from the body. This can be accomplished quickly with an artificial kidney and, therefore, the whole community will benefit by having the life-saving machine available, he added.

(Mailed March 24, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A drug related to cortisone but many times more powerful has proved useful in the treatment of mycosis fungoides, a type of skin cancer usually involving large areas of the body skin, a Stanford medical research team reported today.

Six patients with mycosis fungoides were treated with local application of fluocinolone acetonide, the researchers said. Treatment was effective in all cases and the degree of involvement was proportionately related to the amount of the drug used. No side effects were observed. Improvement was noted for as long as nine months when the ointment was applied on the skin regularly.

The ointment has been prepared for research and is more concentrated than previously used preparations for other skin diseases. It is not yet available for general use.

The researchers emphasized that the drug does not offer a permanent cure, but an effective method for the control of this form of skin cancer.

The report appears in the current issue of Cancer, the journal of the American Cancer Society. Its authors are Dr. Eugene M. Farber, professor and executive head of the department of dermatology at Stanford University School of Medicine, Dr. Alvin Cox, professor of pathology in the department of dermatology, Dr. Jack Steinberg, resident in dermatology, and Dr. Richard McClintock, a postdoctoral fellow in dermatology.

Until now the most effective method for treating mycosis fungoides has been radiation therapy. However, recurrences are the rule in this persistent disease and radiation treatment has its limitations for patients who have received extensive doses. In contrast, the ointment can be applied repeatedly, the investigators said.

Although steroid drugs have been known to inhibit mycosis fungoides when taken internally, the researchers made their discovery while studying ways of reducing the inflammation produced by electron-beam therapy in patients with this form of skin cancer.

We noted that several patients treated topically with a concentrated preparation of the drug exhibited unusually rapid regression of the cancerous lesions, they said. Following this lead, local treatment was given to six patients and improvement became apparent.

The researchers noted that treatment of each patient with the drug is an individual problem. Some patients may require highly concentrated drug preparations. Others may respond to weaker doses. After the skin's first response to the treatment, application of the ointment in selected areas once or twice weekly may suffice for the maintenance of improvement.

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(Mailed March 22, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

An oil portrait of Dr. Victor Richards, 47, a distinguished San Francisco surgeon and clinical professor surgery at Stanford University School of Medicine, was unveiled here recently.

The portrait, honoring Dr. Richards for his contributions to the School of Medicine, will be hung in the Lane Medical Library along with those of other distinguished Stanford medical school faculty members. Dr. Richards was professor and executive head of the department of surgery from 1955 to 1958, just before the School of Medicine was moved from San Francisco to the Stanford University campus. Dr. Richards is currently chief of surgery at Presbyterian Medical Center, and Children's Hospital in San Francisco.

The portrait was unveiled at a special ceremony at which Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine, presided. Among those attending was Dr. Loren R. Chandler of San Francisco, emeritus professor of surgery and former dean of the medical school, Dr. Emile Holman, emeritus professor of surgery and former executive head of the department, and many of Dr. Richards' colleagues and former associates.

Dr. Glaser paid tribute to Dr. Richards for his many contributions to Stanford and for his accomplishments as a gifted teacher, clinician, and investigator.

Another speaker, Dr. Robert A. Chase, professor and executive head of the department of surgery, said: "It seems entirely fitting that this portrait should hang in the transplanted Lane Library as a constant reminder that our strength comes not alone from the content of great literature but from people who are the foundation of Stanford's strength."

The portrait was made possible by a gift from Dr. Frederick Leet Reichert of Berkeley, emeritus professor of surgery to the Stanford University School of Medicine.

Dr. Richards is author of two books, and more than 100 papers in the fields of surgery, lung physiology, cancer immunology, hyperbaric oxygenation, and organ transplantation.

He was graduated from Stanford Medical School in 1939, and subsequently continued his education at Stanford in the field of general and thoracic surgery. He joined the Stanford faculty in 1943. He is a member of the American Board of Surgery, and more than 20 professional societies.

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(Mailed March 22, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

A unique 40 inch beeswax candle that will burn a lifetime is currently on display at the Palo Alto-Stanford Hospital Center.

The candle is one of 102 entries in the Hospital Center's third annual employee art show. The public is invited to attend the show which will be held through March 22.

Mrs. Star Carter, secretary in the department of anatomy of Stanford University School of Medicine, raised the bees and designed the candle from their wax. She says it took six years to become an expert on bees and develop the idea.

After observing and reading about the insects, she learned to extract honey and to make small candles. The first candles were so successful as Christmas gifts, she began selling them to friends. The next step was creating the 40 incher.

The length of the candle represents a breakthrough in candlemaking. Beeswax candles have previously been limited to 16 inches.

The problem is obtaining a larger sheet of beeswax without a seam. How did Mrs. Carter get her bees to produce a 40 inch sheet of wax? "That's my secret," she says. She hopes to keep it a secret, too, and has applied for a copyright.

To make the candle, she hand rolled six sheets of beeswax each 40 inches long to form a cylinder two inches in diameter. She mounted the candle on a redwood burl and frosted the natural honey color of the beeswax with sparkles of gold.

When the candle burns, it produces a faint honey fragrance and reveals the hexagonal shape of the honeycomb cell structure, forming a lacey pattern around the edge.

In addition, the candle is dripless. Due to its cellular structure, everything burns. "This is the reason a beeswax candle will burn about 400 percent longer than a regular wax candle," Mrs. Carter notes. "The 40 inch beeswax candle should last a lifetime, with normal use," she adds.

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Mrs. Carter calls the candle the "Empress" and envisions it as an elegant decorative accent beside fireplaces or entryways, for weddings, church decorations and various formal arrangements.

The candle was originally designed as a birthday present for her 15 year old daughter. "This is a perfect gift for those who think they have everything," she says.

When she entered the candle in the Hospital Center art show, she made her daughter a duplicate. The original is now selling for $125.

Mrs. Carter started raising bees six years ago. She began with one bee hive and now has ten, which she keeps in the Sacramento Valley. "Insurance rates are too high in the city," she explains.

The bees were kept in Portola Valley for two years with the help of Edward Scoles, assistant to the business manager in the Stanford University Office for Business Affairs, who arranged the lease of a few acres of University property.

"It is fun to have the bees near," she says. "I like to observe them everyday." She now visits the bees on weekends while living in Mountain View.

Her latest aspiration is to establish "rooftop beekeeping" in the city. She thinks a penthouse arrangement would be ideal. "This would eliminate the vandalism problem, which causes the high insurance rates," she says.

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(Mailed March 17, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A campaign, designed to teach high school students about the dangers of syphilis and gonorrhea as communicable diseases, has been launched in the Mid-Peninsula area by faculty members of the Stanford University School of Medicine.

The program, directed by Dr. Eugene Farber, professor and executive head of the Department of Dermatology, and Dr. Cleve B. Baker, instructor in dermatology, has been given at Woodside, San Carlos and Carlmont high schools. Two more high schools in the Sequoia district, Menlo-Atherton and Ravenswood, will introduce it this month.

Faculty members from the Department of Dermatology have addressed 7,000 students already and expect to reach several thousand more by the end of the current school year.

"In the 1940's and early 1950's venereal disease had declined steadily under the impact of public health measures and the use of penicillin," Dr. Farber explained. "By the end of the latter decade, however, public health officials began to note, with concern, that the diseases were holding their own and later increasing.

"The unfavorable trend has continued ever since. Millions of people have been growing up ignorant of VD, although there are 300,000 cases of syphilis and more than 1,000,000 cases of gonorrhea in the U.S. each year. Every day 10 babies are born with syphilis. One in every five VD patients is a teen-ager."

Antibiotics are still effective against most cases of the disease, Dr. Farber said. He attributes the continuing rise in case rates partly to complacency, ignorance, and changing moral standards. Studies have also shown that homosexual males are rapid disseminators of venereal disease.

Teen-agers are not getting any information from their parents, Dr. Farber said. When a Washington, D.C. public health specialist interviewed 25,000 teen-agers, he found that only one in 22 learned from parents about VD.

Local educators admit that VD was a "touchy area" they tended to shy away from. They hesitated to teach the facts of venereal disease to high school students because they were not sure of parental attitudes or because they felt they had no one qualified to teach the subject.

This concern was transformed into action a little over a year ago by Miss Marjorie Tubbs, the school nurse at Woodside High School. She had been trying to get information on VD into the curriculum, but no one in the administration and faculty felt qualified to teach it. Then Dr. Farber agreed to develop a program suitable for teen-agers.

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Miss Tubbs, in a report on the pilot program at Woodside, wrote that she advocated educating students about venereal disease because "teen-agers being seen in health department clinics for the first time often know nothing about the physical, social, and emotional significance of venereal disease," and that "teaching about venereal disease in high school is logical because this reaches the vulnerable group."

The program developed at Woodside has been followed closely at the other Sequoia district high schools. The presentation by Dr. Farber, Dr. Baker or other members of the Stanford dermatology staff is first made to the faculty and the PTA executive board for suggestions. At all schools where the program has been used, letters have been sent first to parents, either asking signed permission for their children to attend or giving them the opportunity to raise objections or exempt their children from the lecture. So far there have been no objections from parents.

Each doctor talks to a class of about 40 boys or girls. He shows slides of the symptoms of syphilis and gonorrhea in the primary stages of infection. He gives information on the bacteriological requirements of the spirochete (which causes syphilis) and the gonococcus (which causes gonorrhea), germs which multiply in the warm, moist areas of the body. Then he shows a 20-minute moving picture called "The Innocent Partner," produced several years ago by the Kansas State Board of Health.

This film is followed by a question and answer period. Groups are kept small so that every student who wants to ask a question will have the opportunity to do so. This makes the program much more time-consuming for the doctors than if they spoke only once to a large group, but the dermatologists agree that the effort is worth while.

Although the program was first limited to seniors at Woodside, it is now offered to juniors and sophomores and being considered for freshmen.

Dr. Baker commended the school administrators for adopting the program. "Our concern is that no boy or girl should risk health and future for lack of information and commonsense advice," he said. "We do not want to create fear about sex. We make it clear that sexual intercourse of itself does not produce disease. Rather VD is a complication of the misuse of sex. For those who have human values regarding sex, venereal disease causes anguish and tragedy."

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(Mailed March 16, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

Members of the Stanford Medical Student Association are sending medical equipment to South Vietnam to help a former president of the group administer medical aid to civilians.

Captain Eli Glatstein, a 1964 graduate of the Stanford University School of Medicine, requested a microscope and medical stains in a recent letter to the student association.

He is stationed in South Vietnam with a civil affairs company assigned to give medical care to refugees.

Captain Glatstein explained that the Army is prohibited by congressional law from using medical supplies for civilian population. He said he could get necessary drugs from U.S. AID (United States Agency for International Development), but "because of the incredible logistical problems involved," could not obtain diagnostic materials.

"The practice of medicine here remains unbelievably primitive," he wrote. "The pathology is astounding.

"Whether one agrees with our presence here or not, these people need medical help from us."

Phil Matin, fourth year student and vice president of the Stanford Medical Student Association, has organized the project of sending a microscope, accessories and medical stains to Captain Glatstein.

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(Mailed March 15, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Dr. Herbert L. Abrams, a noted radiologist and researcher, will give the ninth lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

Dr. Abrams will discuss "Fats, Rice, and Mystery: The Coronary Arteries in Man," Wednesday (March 9) at 8 p.m. in Room M106 of the Medical School Building. The lecture is open to the public.

One of the most notable of Dr. Abrams research activities is the development of multiplane motion picture diagnostic techniques for determining the nature of heart defects and the extent to which coronary arteries are narrowed thus increasing the chances of heart attacks.

Dr. Abrams is professor of radiology and director of the Division of X-Ray Diagnosis at the medical school. He received his medical degree from the Long Island College of Medicine in 1946 after graduating with the B.A. in 1941 from Cornell University. He joined the Stanford medical school faculty as an instructor in radiology in 1951, served a year as a special research fellow at the National Heart Institute, Lund School of Medicine in Sweden, and was promoted to his present rank at Stanford in 1962.

He is co-author of the book, "Congenital Heart Disease," with two other faculty members of the Stanford University School of Medicine, Drs. Saul J. Robinson, and Henry S. Kaplan; editor and a major contributor to a two-volume work on "Angiography;" and co-author with Dr. Kaplan of the book, "Angiocardiographic Interpretation in Congenital Heart Disease."

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(Mailed March 8, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)
J. A. Bereny, Optics Technology (327-6600)

Scientists at Optics Technology, Inc., of Palo Alto, the Stanford University School of Medicine, and Palo Alto Medical Research Foundation have developed a new method of measuring the oxygen in the blood of patients without taking a sample.

The procedure, according to the scientists, represents an important advance in the diagnosis and treatment of cardiac and lung disease where a quick and accurate determination of oxygen saturation of blood is needed.

Conventional techniques require the removal of blood samples from the patient and laboratory results are not immediately available.

Cardiologists often need to monitor oxygen saturation within the heart continuously to determine the presence of congenital cardiac abnormalities. Clinical physiologists also have been interested in recording oxygen saturation in patients with severe pulmonary disease in which several respiratory mechanisms must be regulated.

Researchers at Optics Technology have developed an instrument in which tiny fibers are built into a standard cardiac catheter. These transparent fibers of optical glasses allow light to travel, through an optical phenomenon known as total internal reflection, to the other end of the tube even when the fiber is curved many times.

The catheter is typically 125 centimeters long and 0.23 centimeter in diameter and contains about 100 fibers divided into three optical channels. One channel transmits light from the special source in the instrument to the opposite end of the catheter which is located in the heart, a blood vessel or the lung.

When the light enters the blood it is scattered by the red blood cells, illuminating an area of about three millimeters in diameter around the catheter tip. The two remaining channels in the catheter pick up and return the reflected light to the instrument, where it is detected at two wavelengths and converted into an electrical signal. The signal is amplified and fed into a recorder which computes the ratio and displays it on a chart calibrated directly in percent of oxygen saturation.

The method is based on the principle that chemical compounds absorb light at certain characteristic wavelengths. In blood there is one wavelength, 805 millimicrons, at which light is absorbed equally by the blood protein hemoglobin before and after it combines with oxygen. At another wavelength, 600 millimicrons, the absorption by oxygen-rich hemoglobin is markedly different. From the ratio of these two wavelengths, scientists can estimate how much oxygen is contained in the blood.

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The new instrument has been under development by Optics Technology for the past four years. Work for the first three years was supported by a grant from the National Institutes of Health to the Palo Alto Medical Research Foundation. During this period, clinical investigations have been initiated by researchers at the Stanford University School of Medicine.

Principal investigators are Dr. Narinder S. Kapany, president and director of research of Optics Technology, Inc., and Dr. Donald C. Harrison, assistant professor of medicine at Stanford University School of Medicine. Major contributors are Norman Silbertrust, and R. P. Drake of Optics Technology and Harry A. Miller, research assistant in cardiology at Stanford.

The investigators made studies in dogs in which the oxygen saturation of blood was controlled by subjecting animals to gas mixtures containing different amounts of oxygen. Blood samples were removed from these animals and the oxygen saturations were determined by conventional methods. Results showed a close correlation to those obtained with the fiber optics catheter when inserted in the cardiac chambers or blood vessels. The instrument was also used to determine oxygen saturation directly in the chambers of the dog's heart.

After the instrument was shown to be extremely sensitive, stable, and accurate, it was then used in nine patients with congenital cardiac disease, the investigators said.

It was possible to advance the fiber optics catheter through the venus system and into the heart for a continuous recording of oxygen saturation from the pulmonary artery, right ventricle (pumping chamber), right atrium (the collecting chamber on the right side of the heart), and vena cavae (the two main veins conveying blood to the heart), Drs. Kapany and Harrison said.

"Studies of the effects of breathing and various other respiratory functions were made and the oxygen saturation was measured continuously. In each of the eight patients, it was possible to localize the abnormality within the heart accurately. The diagnosis was confirmed by conventional methods in each case."

Other applications of this method have just begun to be explored by the Optics Technology-Stanford team.

It is possible, the investigators said, to determine the concentration of injected dyes within the cardiovascular system with this instrument and, thus, it can be used for continuously recording cardiac output.

The instrument may also be used for monitoring the oxygen input of critically ill patients over long period of time in coronary and intensive care units, and for determining certain chemical compounds within the bloodstream at remote areas of the body such as the kidney and liver.

"It is apparent from the studies made thus far that it is possible to develop a larger catheter with an illuminating system which would allow visualization of the inner surfaces of blood vessels and the heart," the investigators added.

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(Mailed March 8, 1966)

Dr. Narinder S. Kapany (left), president and director of research of Optics Technology, Ind. of Palo Alto, and Dr. Donald C. Harrison, assistant professor of medicine at Stanford University School of Medicine, demonstrate use of fiber optics catheter on model of the heart. The instrument can measure oxygen in the blood without taking a sample. The technique represents an important advance in the diagnosis and treatment of heart and lung disease where oxygen saturation must be measured quickly and accurately.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

Editors: This story was transmitted on Business Wire March 3, 1966.

Surgeons at the Palo Alto-Stanford Hospital Center today performed a kidney transplant operation on Mrs. Marilyn Mongelli, 33, of 3915 E. Hampton Way, Fresno.

Mrs. Mongelli, a victim of chronic kidney failure, received a healthy kidney from another Fresno woman. The donor was Mrs. Mary Louise Eisentrager, 28, of 3014 N. Spalding. Both donor and recipient are in satisfactory condition, the surgeons said.

Mrs. Mongelli is a patient in the General Clinical Research Center which is supported by the National Institutes of Health.

This was the first time the Hospital Center has performed a kidney transplant operation on human patients who are not related.

The operation was undertaken after detailed screening and testing of the donor, including careful cross-matching of her blood with that of the recipient.

Six other kidney transplants have been performed at the Hospital Center. The first, in 1960, was a transplant between identical twins, which is much simpler than a transplant between others.

The Stanford University surgeons have devised a method to treat the patient with lower and safer dosages of the powerful drugs that help prevent the rejection reaction.

All of their operations have been successful, and the patients have resumed normal activities.

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(Mailed March 3, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

Winners of the Palo Alto-Stanford Hospital Center's third annual art show were recently announced after tallying the votes of 400 viewers.

More than 100 employees, staff members, students and volunteers entered the Hospital Center's March show. First, second and third prize ribbons were awarded in the following categories: painting, photography, drawings, sculpture, mosaics and other.

Margaret Sullivan, staff nurse in the emergency room, won first prize in the painting category for her watercolor, "Woodside Autumn". Dr. Peter Samu, resident in radiology, won a blue ribbon for his color photograph of yellow wild flowers entitled "Dawn," and Mary Elizabeth Stone, research technician in cardiology, won first prize for her mosaic of a fish.

"Reflections of an Asian Nude," a felt pen and pencil sketch by Landrum S. Tucker, fifth year medical student, won first prize in the drawing category. A bronze sculpture by Dr. William B. Pratt, postdoctoral fellow in pharmacology, also won a blue ribbon. Dr. Pratt's entry was titled "Resignation."

For the second year, Dr. Raymond C. Stofer, research associate in surgery, was voted a first prize winner. His popular entry, "It's Raining," was a nickel silver-on-copper figure holding an umbrella.

Maria Carey, admitting clerk, was runner-up in the painting category with her "Mandarin Duck," a watercolor on silk. Other second prize winners include Dr. Richard Woodman, research associate in radiology, for his ink and crayon drawing, "Tripper's 1900;" Dr. Abraham Daniller, resident in surgery, for his terra cotta sculpture, "Barbara-2066;" Elizabeth H. Parker, admitting clerk, for her mosaic, "Spring Bouquet," and Mrs. Sheldon E. Riveroll, Auxiliary, for her "Pink Iris" in resin.

In photography, entries by Dr. Hewlett Lee, Palo Alto medical staff, placed second and third. "Heads Up," a color photograph of a mushroom pushing its head through the earth won second prize, and "Kookaburra Sits in the Old Gum Tree" won third.

Other third prize winners were: Marjorie Arnold, Auxiliary, for her oil "Portrait" of a young girl; Mary Kay Walker, research technician in the division of infectious diseases, for her pen and ink sketch, "California Oak;" Karen Mazik, candy striper, for her terra cotta sculpture, "Compassion," and Carol McGee, senior laboratory technologist in clinical chemistry, for her mobile of different shapes and kinds of woods.

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(Mailed April 5, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A patient whose transplanted kidney is rejected by the body's immune response can now be saved by a second graft when donors are available, two Stanford University surgeons said today.

An operation of this type was successfully performed at the Palo Alto-Stanford Hospital Center March 23 to save the life of Mrs. Marilyn Mongelli, a 33-year old Fresno housewife and mother of two. She was a patient in the General Clinical Research Center of the National Institutes of Health.

Mrs. Mongelli received a healthy kidney from Mrs. Dani Ferguson, 57, of Costa Mesa. The surgeons, who asked not to be identified, said Mrs. Mongelli is recovering smoothly from the second operation and the new kidney is functioning normally. They expect her to be out of the hospital within two weeks or possibly earlier.

Mrs. Ferguson, an office manager for a Santa Ana firm, said she volunteered her kidney to save Mrs. Mongelli's life after reading newspaper reports of the need for donors. "If my small contribution has furthered the knowledge of kidney transplants I am greatful for the opportunity to be of help to this cause", Mrs. Ferguson said. She was among 60 persons who offered to donate a kidney.

The first kidney was donated by Mrs. Mary Louise Eisentrager, 28, of Fresno. The kidney failed to function, however, due to extreme incompatibility between donor and recipient and was subsequently removed. In the past, rejection was frequently fatal.

The surgeons cautioned that compatibility between donor and recipient is still unpredictable and that new techniques of typing and cross matching donors are needed. It is possible, they explained, to develop methods for typing several thousand combinations of donor and recipient tissue, particulary for the 5 or 6 strong antigens, and to perform operations with the best matches.

(more)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Dr. Howard M. Cann, 37, assistant professor of pediatrics at Stanford University School of Medicine, has been awarded a $30,000 grant for teaching and research from the John and Mary R. Markle Foundation of New York.

He is one of 25 medical scientists in the United States and Canada to be appointed a 1966 Markle Scholar in Academic Medicine.

The grant pays $6,000 a year for five years to the medical school where each of the Scholars is a faculty member. It is to be used to supplement salary and aid research.

Markle Scholar grants were established to help relieve the faculty shortage in medical schools by giving support to teachers and investigators early in their careers. Since 1948, the Markle Foundation has appropriated more than $12,800,000 toward the support of 430 faculty members in 88 medical schools.

Dr. Cann is the seventh member of the present Stanford faculty to receive this award. The others are: Drs. Frederic Eldridge, associate professor of medicine and head of the division of pulmonary physiology; Herbert Hultgren, associate professor of medicine and head of the division of cardiology; Guy McKhann, associate professor of pediatrics and medicine; Stanley Schrier, associate professor of medicine; Herbert Schwartz, associate professor of pediatrics, and Francis Yates, associate professor and acting head of the department of physiology.

Before joining the Stanford faculty in 1963, Dr. Cann was a senior postdoctoral fellow in the Institute of Genetics at the University of Pavia in Italy. In 1956, he was a resident in pediatrics at the Stanford Medical School in San Francisco, and from 1960 to 1962 was a postdoctoral fellow in Stanford's Department of Genetics.

Dr. Cann received his B.A. in chemistry in 1950 and his M.D. in 1954, both from the University of Colorado.

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(Mailed April 7, 1966)

Editors: Dr. Cann and his wife and three children live at 31 Berenda Way, Menlo Park.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

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(Mailed April 5, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A patient whose transplanted kidney is rejected by the body's immune response can now be saved by a second graft when donors are available, two Stanford University surgeons said today.

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The surgeons cautioned that compatibility between donor and recipient is still unpredictable and that new techniques of typing and cross matching donors are needed. It is possible, they explained, to develop methods for typing several thousand combinations of donor and recipient tissue, particulary for the 5 or 6 strong antigens, and to perform operations with the best matches.

(more)

Until methods for tissue typing are developed, the use of several donors can make long-term survival of kidney patients possible. "We don't have to lose a patient because the kidney is rejected," the surgeons said.

At present tissue matching is by major blood groups. If a graft fails, another can be tried later. The patient has to be carried by a kidney machine until another kidney becomes available.

Anti-rejection therapy is based on drugs. A monitoring technique, developed at Stanford over a year ago, enables physicians to treat the patient with safer dosages than previously possible. Higher dosages of these drugs could result in severe infection because of the depressing effect on the bacteriological defenses of the body.

The Mongelli-Eisentrager-Ferguson transplants were the first done at the Center between unrelated patients. Six kidney transplants have been performed between relatives since 1964. All of them have been successful.

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Editors: Photos are available on request.

(Mailed April 5, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (321-5310)

Stanford University School of Medicine recently announced the appointment of John W. Hornback as resident architect.

Hornback joins the Stanford staff with four years experience as project architect for the University of California at Santa Cruz. He is presently coordinating final stages in the occupancy of the School of Medicine's new Clinical Sciences Research Building and planning the renovation of vacated areas.

Prior to his appointment at Santa Cruz, he was employed in the Office of Architects and Engineers at the University of California at Berkeley. He was graduated from the University of California at Berkeley with a master of arts degree in architecture in 1954 and became a licensed architect in 1960.

Hornback, his wife and four children are now living in Capitola. They plan to move to the Palo Alto area this summer.

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(Mailed May 31, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (321-5310)

Dr. Bernard W. Nelson, 30, has been named assistant dean for student affairs at Stanford University School of Medicine. The appointment was announced by Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine.

Dr. Nelson will concurrently occupy the position of instructor in basic medical sciences in the Max C. Fleischmann Laboratories. He joined the Stanford faculty in September 1965 as an acting instructor.

The new assistant dean received his A.B. degree with distinction in 1957 and his M.D. in 1961, both from Stanford University. He was a postdoctoral fellow in Stanford's Department of Medical Microbiology from 1961 to 1965 and is a member of the Alpha Omega Alpha honorary medical society.

Dr. and Mrs. Nelson and their three children live at 135 La Sandra Way, Menlo Park.

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(Mailed May 30, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Dr. George W. Thorn, a noted authority on endocrine disorders, will be the Charles D. Armstrong Visiting Lecturer at Stanford Medical Center June 2 through 7.

Dr. Thorn will participate in medical conferences and seminars during the visit and will give the annual Charles D. Armstrong Memorial Lecture Friday (June 3) at 8 p.m. in Room M106 of the Medical School Building.

His topic will be "The Approach to Patients with Adrenal Hyperfunction."

Dr. Thorn is Hersey professor of theory and practice of physic at Harvard Medical School and physician-in-chief of the department of medicine at Peter Bent Brigham Hospital in Boston. His book, "The Diagnosis and Treatment of Adrenal Insufficiency," is considered a classic in medical literature in enriching knowledge of the functioning of the adrenal glands and the chemical manifestation of endocrine disorders.

Dr. Thorn's career is replete with honors. He won twice the American Medical Association's Gold Medal, and is recipient of the Chancellor's Medal of the University of Buffalo, the U. S. Pharmaceutical Manufacturers Association Award and the Alvarenga Award. He is a Fellow of the American College of Physicians and member of numerous societies, including the American Society for Clinical Investigation, and the American Physiological and Endocrine societies.

He was graduated from the University of Buffalo School of Medicine in 1929.

His visit is sponsored by the Charles D. Armstrong Memorial Program of the Palo Alto medical staff and the department of medicine of the Stanford medical staff of the Palo Alto-Stanford Hospital Center. Dr. Armstrong was a co-founder of the Menlo Medical Clinic and chief of staff of the Palo Alto Hospital in 1956-57.

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(Mailed May 30, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FOR PM RELEASE, THURSDAY, MAY 26, 1966

The existence of private universities is threatened by ill-defined relationships with the government, and by competition from tax-supported institutions for private gifts, Tulane University President Herbert E. Longenecker warned here today.

Dr. Longenecker said that as a result of Medicare, Heart-Stroke-Cancer and other federal legislation "clear concepts of relationships between universities and the government will be needed."

He spoke at ceremonies marking the opening of the new $6 million Clinical Sciences Research Building at Stanford University School of Medicine. His topic was "Public and Private Partnership for Medical Progress."

"Expansion of the relationship to the extent forecast by legislation already enacted can mean only the inclusion of many more federal dollars in both the operating and the capital budgets of medical schools," Dr. Longenecker said.

"What must be kept in mind, however, is that federal dollars are available to the institution not only for its aid and encouragement but for the accomplishment of specific and mutually agreed on tasks. The additional fact is that most federal dollars require the assignment of precious and limited dollars procured elsewhere and available for general institutional purposes."

This requirement for the "matching" dollar has been in all the federal legislation related to facility funds, Dr. Longenecker said. In program support funds, however, governmental policy has vacillated.

"The executive branch of the federal government has repeatedly recognized the validity of the university's claim for reimbursement of all costs without gain or loss," he said.

-MORE-

"Congress, however, has seen fit at times to legislate arbitrary limitations on certain aspects of cost and most recently has directed a compulsory 'cost-sharing' approach which each agency of the government is trying to implement in an infinite variety of interpretations that add more unreimbursed cost to the university's expense."

President Longenecker implied that this policy puts the private university at a distinct disadvantage compared with the public universities.

For the private university, the matching dollars have come from essentially the same kind of sources that traditionally have founded them and nurtured their growth --namely private gifts of individuals, business firms, and foundations, he said. The publicly supported institutions have had access to state taxes, and in addition have accelerated their programs designed to increase their support from private sources.

Dr. Longenecker said while he is sympathetic with those state institutions whose funds from state taxes are held below their needs, the fact remains that the supply of private resources is not limitless. A great allocation of private dollars to support the public institution means just one thing--a lesser share for the private institution.

He expressed regret that in many quarters today only lip service is paid to the notion that the real strength of American higher education lies in the diversity of its institutions.

"If indeed there were conviction on this point we would scarcely be witnessing the enormous development of public institutions and the continued trend toward conversion of private colleges and universities to public status," Dr. Longenecker said.

He noted that only in the United States has private motivation to philanthropy been encouraged by public policy.

"Any public and private actions which in effect diminish the role of these private institutions can be expected to lead only to an ever expanding dependence upon the taxing power of government with all its limitations and competitive interests," he said.

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(Mailed May 25, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Man's search for life on other planets--and for an end to the tragic problem of mental retardation on earth.

These and other quests are combined in the new Clinical Sciences Research Building of the Stanford University School of Medicine scheduled to be dedicated at 2:30 p.m., Thursday, May 26.

The building, representing an investment of more than $6 million, will be devoted to research into yet unconquered illnesses, and will serve as an essential element in medical education at Stanford University, according to Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine.

It is the first major addition to the $22 million Stanford Medical Center since it was completed in 1959.

Stanford's medical curriculum emphasizes the unity of biology and the basic medical sciences and the interdependence of medicine with other university disciplines.

"The School of Medicine carries on a major portion of its comprehensive teaching program in the Palo Alto-Stanford Hospital Center and the Stanford University Clinics with exemplary patient care as a key objective," Dr. Glaser commented. "The new facility will enable the student, working side by side with the experienced scientist, to acquire the inductive investigatory technique he will utilize throughout his professional career.

"Whether he elects to serve society as a family physician in a small town, as a specialist in an urban center, or as an investigator seeking answers to yet unsolved problems, we hope he will remain 'a perpetual student' of medicine so as to give his best to society. Research experience is an invaluable part of the student's education.

"The completion of the new building is a major chapter in the history of the Stanford University School of Medicine, enabling the present faculty to carry forward the tradition of leadership established by its distinguished predecessors in the School's first half century." (See background story attached.)

Along with the creation of substantial new space, there has been supplied some of the finest modern scientific equipment, a requisite to modern biomedical research, Dr. Glaser said. Medical and graduate students will be enabled to pursue their studies in a modern and efficient setting with excellent laboratories and classrooms.

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The four-story structure--three floors and a basement--is located between the Stanford Hospital and Medical School wings. It encompasses 152,000 gross square feet of space and includes facilities for the investigative programs being carried on by the departments of anesthesia, genetics, medicine, obstetrics, pediatrics, preventive medicine, psychiatry, radiology, and surgery.

The building is connected by corridors with all floors of the existing Center. Among the attractive features are the landscaped courtyards created by the noted architect, Edward Durell Stone, who designed the medical complex. The research building has identical architecture, including the sandstone-shaded grillwork characteristic of the entire Center.

The third floor is occupied by the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine directed by Nobel Prize winner Dr. Joshua Lederberg and dedicated to an attack on the problem of mental retardation on a broad front.

In the Kennedy Laboratories, several Medical School departments will join in bringing their particular disciplines to bear on the investigation of disease processes that bring sorrow to untold numbers of families and economic waste of immense proportions.

Also housed in the building are laboratories made possible by the National Aeronautics and Space Administration for research in the fields of space biology and biomedical instrumentation.

According to Dr. Lederberg, who coined the word "exobiology" (the study of life beyond earth), the instruments developed there will analyze, by means of unmanned spacecraft missions to other planets of the solar system, the chemical evolution of these celestial bodies, thus enlarging our vision of biology. And they will have wide application in biological, chemical, and medical research at Stanford and elsewhere."

Research in the new building covers varied areas of investigation. In the obstetrics laboratory, for example, a tiny rabbit fetus is kept alive in an artificial uterus. The fetus, attached by umbilical cord to the placenta floating above it, gets oxygen from surrounding fluid. The experiment is being carried out by Dr. Robert C. Goodlin, assistant professor of gynecology and obstetrics, to provide a better understanding of the processes of reproduction and prenativity.

The Division of Infectious Diseases has been waging war against viruses. Under the direction of Dr. Thomas C. Merigan, investigators are studying Interferon, the cell-produced antiviral agent that may prove as effective as penicillin and the other antibiotics have been against bacteria.

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Studies of how hormones affect the maturation of the central nervous system are conducted by Dr. Seymour Levine, associate professor of psychiatry. Dr. Levine has demonstrated in rats that sex hormones, present during critical periods of development, condition the organism's central nervous system to produce permanent changes in adulthood.

In the Kennedy Laboratories, a noted biochemist from England, Dr. Eric Shooter, is conducting an extended study of proteins in the brain and red blood cells as part of the research in mental retardation.

Another investigator, Dr. Herbert Schwartz, a pediatric hematologist, is studying hemoglobin--the oxygen-carrying protein in red blood cells. The research is hoped to provide information relating to anemias and the chemistry of developing organisms, and greatly increase present knowledge of human genetics.

The Department of Anesthesia, under the direction of Dr. John Bunker, executive head and professor of anesthesia, is conducting a large-scale study of the pharmacology of anesthetics and related drugs. Knowledge of how drugs act on the body is still sketchy and more information is needed, according to Dr. Bunker.

Dr. Quentin M. Geiman, professor of preventive medicine and specialist in tropical diseases, heads a team studying human, simian and rodent malaria, a project of interest to the U.S. Army in Viet Nam.

In the field of diagnostic radiology, Dr. Herbert L. Abrams, professor of radiology and chief of the division, is conducting studies in congenital heart disease. Dr. Abrams' pioneering research has led to the development of multiplane motion picture techniques for determining the nature of heart defects and the extent to which coronary arteries are narrowed, thus increasing the danger of heart attacks.

Dr. Thomas Stamey, professor and chief of the Division of Urology, supervises studies of renal function which have added a great deal to the proper management of patients with renovascular hypertension. Dr. Stamey and his associates also have shown that cure of urinary infections is dependent upon the urinary level of the antibacterial agent, departing from the traditional approach based on serum sensitivity concentrations.

In the field of transplantation, Dr. Halsted Holman, Guggenhime professor of medicine, is working on the hypothesis that certain parts of donor cells can be used to induce tolerance of the recipient to transplanted organs. Isolation and characterization of these cell fractions is now under way and may result in an important "breakthrough" for overcoming the immunological barrier in kidney, liver, and other transplants.

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EDITORS: Photos available on request

(Mailed May 20, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

Editors: The following story details some of the contributions of the Stanford medical school faculty to medicine during the School's first half century. It is included for background in connection with the dedication of the Clinical Sciences Research Building May 26.

Stanford medical researchers are responsible for major steps in the treatment of diseases.

Their contributions to advances in medicine have included fields as varied as heart surgery, heredity, viruses and vision.

Among the big names in medicine at Stanford have been Dr. Emile F. Holman, emeritus professor of surgery, who performed the first "blue baby" operation in the West 19 years ago, and the late Dr. Thomas Addis, co-developer of a simple treatment for Bright's disease, a serious kidney ailment.

Other medical pioneers at Stanford have been:

The late Dr. Paul John Hanzlik, former head of the department of pharmacology, who produced an oral drug for treating syphilis. This drug and another developed earlier at Stanford were especially effective in combating the dangerous late stages of the disease when it attacks the brain and the nervous system.

Dr. Harold K. Faber, emeritus professor of pediatrics and former head of the department, who was one of the first researchers to alert surgeons about the danger of removing tonsils during the polio season. He later demonstrated the need for a "live" vaccine to assure complete polio immunity.

Findings of the late Dr. Ernest C. Dickson, professor of medicine, led to a revolution in the canning industry. His work showed that certain foods, likely to carry the bacteria which cause deadly botulism, must be cooked longer and at higher temperatures than other foods.

Dr. Charles H. Danforth, emeritus professor of anatomy, found in the 1930's that hormones and genes do not act independently in determining heredity but are intricately interrelated. His work, together with that of others elsewhere, changed the outlook of science on heredity.

Research by the late Dr. Frank W. Weymouth, professor of physiology, led to improved methods of testing pilots' vision. The tests were used in World War II for screening pilots.

A team of Stanford researchers discovered the cause of valley fever, which made countless soldiers ill at bases in arid sections of the country in World War II. The late Dr. Emmet Rixford and Dr. William Ophuls found that an airborne fungus spore spread the disease and could be curbed by dust control. Research was continued by Dr. Charles Edward Smith, now dean of the School of Public Health at the University of California, who developed a skin test for the disease.

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Another pioneer in medicine was the late Dr. John Kent Lewis who, with Stanford professors A. W. Hewlett and G. D. Barnett, published some of the early work on vascular sounds, exercise and respiration and was one of the first to study thyroid hormone in relation to the heart.

The late Dr. Lowell A. Rantz, professor of medicine and associate dean of the Medical School, was an authority on bacterial diseases and their treatment. During World War II, Dr. Rantz served as consultant and member of the U.S. Army Commission on Hemolytic Streptococcal Diseases and published a classical series of reports in which the relation between streptococcal infection and its complications, including rheumatic fever, was clearly demonstrated.

This impressive record of contributions in teaching, care of patients and research, established by earlier generations of Stanford Physicians, is being carried on today.

One of the leaders in research on transplantation of the heart is Dr. Norman E. Shumway, professor of surgery. He has developed many of the specific surgical techniques that are in widespread use and has been remarkably successful with heart transplantation in dogs.

Dr. Arthur Kornberg and his staff have isolated a natural catalyst that stimulates production of DNA, the complex chemical which determines heredity in animals, plants and bacteria. Using this catalyst they have produced DNA apparently like that found in nature. Such work would lead to a better understanding of heredity. For his work, Dr. Kornberg shared the Nobel Prize in medicine with Dr. Severo Ochoa of New York University in 1959.

Dr. Joshua Lederberg, one of the youngest Nobel Prize winners in recent years, did part of his award-winning work when he was 21. At Yale in 1946 he and former Stanford professor Edward L. Tatum discovered that bacteria, contrary to belief then, sometimes reproduce sexually. Dr. Lederberg also discovered "transduction", in which a virus carries a genetic fragment from one bacterium to another. Understanding of this process may lead to new findings about cancer.

Two recent contributions to the health field were made by Dr. John A. Luetscher, professor of medicine, and Dr. Judith Pool, senior research associate in medicine.

For many years, Dr. Luetscher has sought the causes of edematous states or what was known as dropsy. He has added greatly to our knowledge of disordered protein and hormone imbalances and to salt and water metabolism in the production of edema. He was the first to show that a hormonal factor, later called aldosterone, was involved in various edematous conditions.

Dr. Pool and her associates have found an encouraging treatment for hemophilia, the bleeder's disease. She has developed a simple and inexpensive way to concentrate antihemophilic globulin AHG, a protein substance lacking in the blood of hemophilia victims. Small amounts of AHG concentrate can end dangerous hemorrhages in hemophilia patients.

The achievements of these distinguished professors and scientists are highlights in a 53-year history of exceptional medical research and service at Stanford. The Medical School's outstanding reputation in the United States and abroad attracted these leaders in medicine who, in turn, have contributed to Stanford's continuing tradition of excellence.

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(Mailed May 20, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Dr. Emmet J. Lamb, 33, assistant professor of gynecology and obstetrics at Stanford University School of Medicine, has been awarded one of ten "Macy Faculty Fellowships in Obstetrics" by the Josiah Macy Jr. Foundation of New York.

The ten grants total $450,000 for three years and are designed to meet basic salaries of young staff members and encourage their commitment to academic obstetrics. The recipients were chosen from candidates submitted by 37 medical schools.

Dr. Lamb's major fields of research are gynecologic endocrinology and infertility in women. He is presently on a year's leave of absence as a U.S. Public Health Service postdoctoral fellow at the Hormone Laboratory of the Karolinska Institute in Sweden.

After receiving his M.D. degree from Northwestern University in 1957, Dr. Lamb served his internship at Los Angeles County General Hospital and his residency at Johns Hopkins Hospital and UCLA Medical Center. He joined the Stanford faculty as an assistant professor in 1963.

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(Mailed May 17, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Dr. Herbert E. Longenecker, president of Tulane University, and other noted speakers will highlight the dedication of the new $6 million Clinical Sciences Research Building at the Stanford University School of Medicine Thursday, May 26.

On hand also will be three eminent scientists, Dr. Leon Eisenberg, professor of child psychiatry at Johns Hopkins University School of Medicine; Dr. Seymour S. Kety, chief of the Laboratory of Clinical Science of the National Institute of Mental Health; and Dr. David H. Hubel, professor of neurophysiology at Harvard Medical School.

Among the invited guests are Mr. and Mrs. R. Sargent Shriver, executive director and executive vice president, respectively, of the Joseph P. Kennedy, Jr. Memorial Foundation, Mrs. Edward Kennedy, and other members of the Kennedy family, representatives from the National Institutes of Health and the National Aeronautics and Space Administration, members of the Stanford University Board of Trustees, faculty and university administration, alumni of the School of Medicine, and other dignitaries.

The public ceremony marking the official opening of the research building will be held at 2:30 p.m. on the lawn in front of the Medical School Building.

President Longenecker will discuss "Public and Private Partnership for Medical Progress." He will be introduced by Dr. Robert J. Glaser, vice president for medical affairs and dean of the Medical School.

Dr. Longenecker is a noted biochemist and was formerly vice president of the University of Illinois in charge of the Chicago Professional Services and dean of research in the natural sciences at the University of Pittsburgh.

Following the keynote address, Stanford University President J. E. Wallace Sterling will present the building to Richard E. Guggenhime, president of the University Board of Trustees.

An open house and tours for the public will be conducted following the dedication ceremonies.

To start off the day-long celebration, there will be a colloquium at 9:30 a.m. in Dinkelspiel Auditorium stressing the theme: "Development and Intellect." The colloquium, sponsored by the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine, will feature the following presentations:

(1) Dr. Eisenberg on "The Development of Intelligence"

(2) Dr. Kety on "Neurochemistry and Adaptive Behavior"

(3) Dr. Hubel on "Plasticity in the Immature Central Nervous System"

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Dr. Eisenberg is an authority in the field of child psychiatry and mental deficiency and is known for his pioneering studies of the effects of drugs in psychiatric disorders of children, and the neuropsychiatric aspects of reading disability. He also has written extensively on childhood problems in relation to the family and on preventive psychiatry.

Dr. Kety is known for his research in the fields of cerebral circulation and biological psychiatry, and for at least 150 articles on his work. In 1951, he became the first scientific director of the National Institute of Mental Health and the National Institute of Neurological Diseases and Blindness. In order to resume active research he left his post in 1956 to become chief of the Laboratory of Clinical Science in the National Institute of Mental Health. From 1961 to 1962 he was Henry Phipps Professor and chairman of psychiatry at Johns Hopkins University, but then he returned to the NIH.

Dr. Hubel is known best for his contributions to the physiology of the brain, particularly the processes involved in the transformation of information in the visual system. His fundamental investigations, set out in more than 50 papers, have contributed to a better understanding of the organization of the visual system at the single neuron level.

After the presentation, Nobel Prize winner Dr. Joshua Lederberg, head of the department of genetics and director of the Kennedy Laboratories, will make the concluding remarks.

The Clinical Sciences Research Building, located between the Stanford Hospital and Medical School wings, is the first major addition to the $22 million Stanford Medical Center since it was opened seven years ago. It was financed in part by the University's PACE Program (Plan of Action for a Challenging Era) and government grants.

These include gifts of $1 million each from the Rockefeller and Joseph P. Kennedy, Jr. foundations, a Health Research Facilities grant of more than $2 million from the National Institutes of Health, a grant of more than $500,000 from the National Aeronautics and Space Administration, and contributions from other private sources.

The four-story structure -- three floors and a basement -- covers 152,000 gross square feet of space and contains facilities for the departments of Anesthesia, Genetics, Medicine, Obstetrics, Pediatrics, Preventive Medicine, Psychiatry, Radiology, and Surgery. It also includes the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine which are dedicated to an attack on the problem of mental retardation on a broad front of scientific research.

Also housed in the building are facilities supported by NASA for research in the fields of space biology and biomedical instrumentation.

-MORE-

The new building was planned as part of the Medical Center, but funds were inadequate to finance it when construction began in the Center in 1957.

"The completion of the new building represents the result of a vigorous and continuing effort on the part of President Sterling, members of the Board of Trustees and the medical faculty -- an effort directed toward better health for mankind," Dr. Glaser commented.

"The concept of medical education at Stanford has included three major ideas: that medical students ought to be near other university departments so that they can be exposed to all fields of knowledge as they pursue the study of medicine; that, as a consequence, they will learn to treat 'not the disease but the man'; and that physicians must remain students of medicine all their lives if they are to give their best to society.

"The Clinical Sciences Research Building will facilitate research in such fields as cancer, heart disease, and mental retardation, research that heretofore has been carried on at Stanford under extremely cramped conditions. But it will be more than a birthplace for discovery; it will also provide a setting wherein the student, working side by side with seasoned scientists, will acquire the inductive investigatory techniques he will utilize throughout his professional career, be he family physician, specialist or research scientist."

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(Mailed May 16, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FOR PM RELEASE FRIDAY, MAY 13, 1966

Dr. Keith B. Taylor, a specialist in diseases of the gastrointestinal tract, has been named the George de Forest Barnett Professor of Medicine at Stanford University School of Medicine.

Announcement of the new professorship was made today by Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine, at the annual Stanford medical alumni-faculty reunion on the University campus.

Dr. Taylor is currently an associate professor of medicine and head of the Division of Gastrointestinal Medicine. He also is chief of gastrointestinal medicine of the Stanford medical staff at the Palo Alto-Stanford Hospital Center.

"The George de Forest Barnett Professorship honors a physician famed for his interest in both patients and students as human beings," Dr. Glaser commented. "Dr. Barnett was chief of the Stanford Medical Service at the San Francisco City and County Hospital for 25 years. Everyone recognized in him the presence of a great man and his opinion was respected without question. He loved the students; he knew them all well and discussed their problems in a practical and helpful way.

"As a teacher he was outstanding. The course in physical diagnosis was one of his particular interests and under his guidance it became widely recognized as outstanding."

Primarily responsible for the creation of the Barnett Professorship are members of the Stanford Medical Alumni Association who established the Barnett Memorial Fund in 1955 shortly after Dr. Barnett's death at the age of 71.

The University Board of Trustees has stipulated that the Barnett Professor should have "the highest possible competence as a stimulating teacher and advisor of students."

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"Dr. Taylor exemplifies in every way the emphasis at Stanford on the fact that medicine is both science and art, and that the latter requires the insight and compassion gained from a broad and deep cultural background," Dr. Glaser said.

Dr. Taylor has been a member of the Stanford medical school faculty since 1962. He was born in London, England, and holds degrees in physiology, biochemistry, and medicine from Oxford University. From 1954 to 1959 he was lecturer in medicine at Oxford University, and from 1959 to 1960 a visiting professor at the University of Chicago under a Rockefeller Travelling Fellowship.

Among his honors are the Radcliffe Prizes in Medicine and Pathology from Oxford University. Dr. Taylor is a member of several professional societies including the British Medical Research Society, American Gastroenterological Association, American Society for Clinical Investigation, and the British Society of Immunology.

Dr. and Mrs. Taylor and their five children live at 530 Melville in Palo Alto.

Dr. Barnett's widow, Dr. Anna F. Barnett, was graduated from Stanford University School of Medicine in 1924 and is an emeritus member of the clinical faculty. She resides on the Stanford campus. Dr. and Mrs. Barnett's daughter, the former Margaret Barnett, is also a graduate of the Stanford Medical School and is married to Dr. F. Eugene Yates, associate professor and acting executive head of the Department of Physiology.

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(Mailed May 12, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (321-5310)

Richard H. Lanzerotti and William G. Hayden, third year medical students, shared top honors for "The Outstanding Student Research Paper" at the sixth annual Medical Student Day held recently at Stanford University School of Medicine.

The two students split the $150 award presented each year by the Palo Alto Medical Clinic.

Lanzerotti's paper concerned immunization studies on mice, and Hayden's paper described research on the mechanism of disturbed heart rhythm known as atrial flutter. Seven other students presented papers based on their own research.

All participants were selected by a student-faculty committee, and papers were judged by Dr. Stanley Schrier, associate professor of medicine; Dr. LeRoy Pesch, associate dean and professor of medicine; Dr. Sidney Raffel, professor and executive head of the department of medical microbiology; Dr. Marcus A. Krupp, Palo Alto Medical Clinic, and Dr. Leland Blanchard, Stanford Medical Alumni Association.

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Editors: Lanzerotti is from Carlinville, Ill., and Hayden is from Olympia, Wash.

(Mailed May 10, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (321-5310)

Dr. Leo Eloesser, Stanford University's 20-year emeritus professor of surgery and tireless worker on world health projects, will be the featured speaker at Stanford's annual Medical Alumni-Faculty Reunion.

The Reunion will be held Friday, May 13, from 9:30 a.m. to 4:30 p.m. in Dinkelspiel Auditorium on campus.

Dr. Eloesser, now living in Tacambaro, Mexico, will speak on "Some Early American Chest Surgery."

The 85-year-old surgeon was a United Nations medical consultant from 1951 to 1953 and is well known for his humanitarian missions to Russia, Spain, South America and China before and during World War II. He was a member of the Stanford faculty from 1913 to 1946.

Dr. Herbert N. Hultgren, associate professor of medicine and head of the division of cardiology, will also address the conference. He will discuss "Lessons from High Altitude," based on his studies and medical observations in the Peruvian Andes. He is a 1943 graduate of the Stanford University School of Medicine.

Following the two speeches, the School of Medicine will host an informal luncheon for returning alumni and members of the faculty in the south courtyard of the new Clinical Sciences Research Building.

The annual Alpha Omega Alpha Lecture sponsored by the Stanford chapter of the AOA honorary medical society will highlight the afternoon program.

Dr. Belding H. Scribner, professor of medicine and head of the division of nephrology at the University of Washington School of Medicine, will speak on "The Conservative and Definitive Treatment of Chronic Uremia." Dr. Scribner is a 1945 graduate of the Stanford School of Medicine.

The program will conclude with a dinner-dance for all alumni and faculty at the Villa Hotel in San Mateo. The classes of 1916, 1921, 1926, 1931, 1936, 1941, 1946, 1951, 1956 and 1961 will be celebrating special reunions.

The Stanford Alumni Conferences for all Stanford graduates are being held on campus the following day, Saturday, May 14.

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(Mailed May 10, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

A new series of public lectures featuring outstanding leaders in the field of mental retardation will be presented by the Stanford University School of Medicine.

Dr. Joshua Lederberg, Nobel Prize winning geneticist and head of the department of genetics at the Medical School, will inaugurate the series titled "Progress in Mental Retardation" Wednesday (May 4) at 8 p.m. in Room M106 of the Medical School Building.

He will speak on the subject of "How Intellectual Performance is Distributed."

The five weekly lectures are being presented in conjunction with the forthcoming dedication of the new $6 million Clinical Sciences Research Building at Stanford Medical Center, May 26. The new building houses the Lt. Joseph P. Kennedy, Jr., Laboratories for Molecular Medicine which are directed by Dr. Lederberg.

The Laboratories, made possible by a $1,100,000 gift from the Joseph P. Kennedy, Jr., Memorial Foundation, are dedicated to an attack on the problem of mental retardation on a broad front of scientific and medical research.

Many disciplines are represented in the research program including biochemistry, genetics, pediatrics, obstetrics, neurology and psychiatry.

"Mental retardation is one of the most compelling challenges to the humanitarian and social instincts of medicine," says Dr. Lederberg. "It is also one of the most provocative challenges to investigative insight and experimentation across a broad frontier of scientific studies. It concerns the development of the most complex of biological functions, the most highly evolved organ of the body--the human brain."

The dates, topics, and lecturers who will take part in the presentation of this series are:

May 11, "The Developing Brain." Dr. Frank Morrell, professor and head of the division of neurology, Stanford University School of Medicine.

May 18, "Abnormalities of the Developing Brain: Mechanisms and Therapy." Dr. Guy M. McKhann, associate professor of pediatrics and medicine; Lt. Joseph P. Kennedy, Jr., senior research scholar in mental retardation, Stanford University School of Medicine.

May 25, "Sources of Failure in Intellectual Function as Demonstrated by the Problem of Reading Disability." Dr. Leon Eisenberg, professor of child psychiatry, Johns Hopkins University School of Medicine, Baltimore, Md.

June 1, "Genes, Chromosomes and Mental Retardation." Dr. Luigi Luzzatti, associate professor of pediatrics and preventive medicine, Stanford University School of Medicine.

All of the lectures will be presented at 8 p.m. in Room M106 of the Medical School Building.

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(Mailed May 2, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

The popular notion that exercise leads to longer and healthier life was assailed today by two Stanford Medical School specialists in rehabilitation.

Dr. Jose C. Montero, assistant professor of medicine, and Dr. Kenneth D. Smythe, a postdoctoral fellow in rehabilitation medicine, said that experts disagree on what physical activity can do besides making people tired.

"The term 'physical fitness' is now being bandied about by politicians, physicians and physical cultists as if it were the universal panacea," Drs. Montero and Smythe reported. "Lack of uniformity in the definition of terms, the different backgrounds and ambitions of the investigators, and the biases associated with this vital subject leave most of us more confused than enlightened."

Their conclusions appear in the June issue of the Journal for Physical and Mental Rehabilitation.

Drs. Montero and Smythe are unhappy with the present definition of fitness which considers only the person's physical ability to function. They believe that any good yardstick for measuring fitness should take into account other factors including environmental and cultural demands of the society.

"If we accept the definition of fitness as the ability to function comfortably in a specific environment," the physicians argued, "fitness becomes not a goal in itself, but rather an expression of anatomic, metabolic, and physiologic readiness to perform a task."

"The man in the gray flannel suit," they wrote, "is physically fit to stalk the asphalt jungle if he can imbibe three martinis before lunch and dance the Watusi with his client's wife. The primitive jungle dweller, on the other hand, stalks his prey with a cunning that depends more on a strong, well-coordinated body than a strong stomach. Yet each is considered physically fit to perform in his environment."

Obviously, a criterion of fitness for an individual cannot be ascertained without relating to his vocational, avocational, and cultural demands, Drs. Montero and Smythe said. Yet we measure stamina by assigning numerical values to physical factors--endurance, strength, coordination, and cardiovascular and metabolic states.

"Even if we carefully evaluate those factors," the physicians said, "there is still one more variable which must be analyzed before a true measurement of fitness can be made. Motivation, the will to perform, is the most powerful stimulant to purposeful activity known to man."

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While it is difficult to measure motivation, some facts are known, they said. For instance, some severely mentally ill patients are so lacking in their will to perform, yet their potential for normal physical activity may be completely unchanged. On the other hand, there have been frail individuals performing great feats of strength or endurance under severe stress.

The Stanford physicians cited the story of a fragile, middle-aged woman who lifted a 2000-pound car to free her son who was pinned under it as a dramatic example of human motivation.

Viewing fitness from the environmental standpoint has important implications for the treatment of disabled persons, Drs. Montero and Smythe believe.

When disease or accidents cause loss of fitness, there are two ways of attacking the problem. "We can either change the environment so that the loss is no longer significant or we can help the individual compensate for his loss so that he can function again in the same environment," they said. The latter can be accomplished by retraining of which the human body is capable.

Drs. Montero and Smythe said that while volumes have been written on the beneficial effects of activity and exercise, nobody seems to agree on the type and amount of activity that are necessary for the maintenance of health. Their findings from a scan of the literature show that:

* There is no conclusive evidence that physical activity contributes to longevity.

* Exercise does not prevent disease. (Persons involved in physically demanding activities visit the doctor as often as their more sedentary counterparts and the Russians have not escaped the Asian flu despite an all-out effort to improve physical fitness.)

* While exercise improves the collateral circulation of the heart and enhances recovery from surgical conditions, the amount of improvement is not always related to the intensity of the exercise. (Preliminary studies at Crystal Springs Rehabilitation Center in San Mateo, California, show some patients respond favorably to short periods of exercise while others with the same impairment need a more intensive program to achieve similar results.)

The physicians concluded that maintenance and improvement of fitness need serious study involving the fields of medicine, physiology, physical education, and the behavioral sciences.

To be simply enamored with one or another type of physical exercise is dangerous as well as misleading, they noted.

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(Mailed June 27, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

"The secret of establishing a warm, empathetic relation with an adolescent is to listen to him."

This common-sense advice to colleagues and parents alike appears in a new booklet "The Physician and the Adolescent," by Dr. Richard D. Cutter, Palo Alto pediatrician for almost 25 years.

Published posthumously by the Peninsula Volunteers, a charitable organization, the booklet reflects Dr. Cutter's pioneering views on the responsibility of the physician to the adolescent. It comprises a series of memoranda originally circulated to colleagues at the Palo Alto Medical Clinic.

"Most young people who come to a physician," Dr. Cutter wrote, "have been surfeited with fatherly advice. Parents, school authorities and youth counsellors have, in effect, repeatedly told him: 'You don't need to waste time telling me your side of your problem; just follow my good advice.' As soon as the adolescent realizes that his doctor is going to listen, the physician has got it made."

Dr. Cutter wrote the first of his 13 memoranda in November 1961, and the last in August 1964. He suffered his fatal heart attack on August 13, 1964 at the age of 55.

The publication of his papers was made possible through donations to the memorial fund of The Peninsula Volunteers, Inc., in which Dr. and Mrs. Cutter were active members.

The Peninsula Volunteers recently presented copies of the booklet and an $800 check to Dr. Robert H. Alway, professor and acting head of the department of pediatrics at Stanford University School of Medicine. Dr. Cutter was a member of the clinical faculty and an alumnus of the medical school.

The booklets will be placed in the Mary K. and Harold K. Faber Pediatric Library, a portion of which has been dedicated to Dr. Cutter, and the check will be used to purchase books on adolescent pediatrics.

Dr. Faber, emeritus professor of pediatrics at Stanford, and Mrs. Faber attended the informal ceremony. Dr. Cutter was one of Dr. Faber's students. Also present was Dr. Cutter's daughter and son-in-law, Mr. and Mrs. William Parker of San Francisco.

Mrs. Paul Reinhardt of Palo Alto, editor of the booklet, wrote in the introduction: "The personal loss to his boys and girls and to their parents, and to his many friends and colleagues, can never be replaced, but it is the hope of the Peninsula Volunteers that publication of these papers will illuminate and perpetuate his ideas."

Dr. Cutter's ideas covered a wide range of subjects from "How to Trap the Adolescent and Charm Him" to "The Problem of the Innocent Young Doctor vs. the Hip Adolescent."

-MORE-

Here are a few excerpts from the booklet:

On Adolescence: "Of the many definitions of adolescence, I prefer this one: the emergence from childhood to maturity. Like all emergences, whether of molten lava from the volcano or of a strip-teaser from her clothing, adolescence is made up of explosive and dramatic episodes."

On Growth: "This subject is of great concern to adolescents in the United States where the boys all want to be tall Texans and the girls all want to be petite, dainty and fragile (like a steel trap). Elsewhere, of course, things are different: in Russia, I understand, a girl isn't desirable unless she has the physique of a tractor mechanic; and in Italy I know for a fact that no youngster worries about stature (because they all know they'll be short)."

On Sex: "Parents keep asking their physicians to give their pubescent children 'a good fatherly talk' about sex. There's no such thing and even if there were, the youngsters probably wouldn't listen to it. But there are several good books and pamphlets that can be made casually available for the interested adolescent to read."

On "All That Jazz": "Very important to the adolescent who digs. And if the twist, frug, swim remain popular, they may solve the problem of lack of exercise which is at the bottom of so many adolescent obesity cases."

On the New Pediatrics: "The excitement of unravelling the complexities of family relations as one's contact with a family broadens from year to year; the challenge of dealing with parental concern about eating habits, bowel habits, too-tall daughters, too-short sons; the development of empathy with a rebellious adolescent; the sustaining of parental faith in their difficult children: all these facets of the New Pediatrics are, to an old pediatrician, the greatest things that have happened during a generation of practice."

On Advice to Parents: "The next time the adolescent in your home suddenly pulls the roof down on top of you, don't panic; remember your own youth. Judge and discipline him by adult standards if you must, but understand him by the standards of his--and your--adolescence. As they say today: He may not always dig, but he's hip."

On Advice to Physicians: "Keep faith with your adolescent patients, don't despair, hope for the best, and remember that Rome wasn't built in a day."

On Adolescent Problems: "The so-called problems of adolescence are nothing more than what should be expected to happen to any rapidly growing, active, cerebrating, self-propelled organism."

Copies of "The Physician and the Adolescent" are available on request at Little House, 800 Middle Avenue, Menlo Park.

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(Mailed June 20, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Palo Alto-Stanford Hospital Center and Foothill College will graduate the country's first academically trained inhalation therapists next Sunday, June 19.

Nine students have completed the joint hospital-college program established last year to train students in the care of patients who have difficulty breathing. They will receive certificates at the Foothill College graduation ceremonies.

The new program is the only one of its kind in the United States and has been fully approved by the American Medical Association. Other training programs in inhalation therapy are primarily hospital oriented.

In the joint program, Foothill offers general education and related science courses, and the Hospital Center provides supervised clinical experience.

Among the general courses are effective writing and speaking, American government and psychology. The scientific curriculum includes anatomy, physiology, physics and microbiology.

The clinical experience concentrates on the application of inhalation therapy procedures to emergency, obstetric, pediatric and surgical patients.

Six of the nine graduates will begin advanced training in inhalation therapy at the Palo Alto-Stanford Hospital Center. Another first of its kind, the Hospital Center's new postgraduate program will allow the student to specialize for one year in a particular area of inhalation therapy such as respiratory and cardiac emergencies, pulmonary function, or rehabilitation of chronic lung diseased patients.

Three graduates have accepted positions at other hospitals: two in California and one in Oregon.

The students' names and addresses are listed below:

ATHERTON - Marilyn Hoeffer, 85 Loyola Ave.
EAST PALO ALTO - Roberta E. Simmons, 2017 Clarke Ave.
MENLO PARK - Erika Furedi, 816 Arnold Way
- Collis Harris, 1103 Hollyburne Ave.
MONTA VISTA - David Knight, 10181 Lowe Ave.
MOUNTAIN VIEW - Douglas Bennett, 2200 California St., #6
- Thomas S. Bowman, 1870 Ednamary Way, #A
- Sandra Dunkle, 2762 Doverton Sq.
PALO ALTO - Pat Breach, 3129 Alma St.

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(Mailed June 15, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

The American Heart Association has presented Dr. Stanford Kroopf, Palo Alto physician, a bronze medal for distinguished service in the field of coronary care units and cardiac resuscitation.

He is the first cardiologist to receive the Heart Association's bronze medal in this field. The award was presented at the annual California Heart Association meeting in Los Angeles.

Dr. Kroopf was chairman of the committee which recommended and initiated the installation of a coronary care unit at the Palo Alto-Stanford Hospital Center. Construction of the Hospital Center's four-bed unit began this month.

Dr. Kroopf is a member of the Hospital Center's Palo Alto medical staff and clinical assistant professor of medicine at Stanford University School of Medicine. He lives at 87 Coghlan Lane, Atherton.

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(Mailed June 13, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FOR RELEASE AFTER 11 A.M., SATURDAY, JUNE 11

Editors: Names of students receiving M.D. degrees in your area will be included in a story mailed from Stanford University on June 10. Home addresses of award winners are listed on page 2.

Stanford University School of Medicine presented awards to six graduating students at the class convocation Saturday, June 11, in the courtyard of the new Clinical Sciences Research Building.

Degrees will be awarded June 12 to 45 men and nine women, members of the third class to complete Stanford's five-year medical curriculum. The five-year program was inaugurated when the school moved from San Francisco to the Stanford campus in 1959.

One degree will be awarded posthumously to Lucien Kabat, a 27-year-old senior who died of lung cancer late last month. Kabat had completed all requirements for his M.D. and would have received the degree with his class on Sunday.

At the convocation, the Harold K. Faber Pediatric Award of $200 was presented to Michael Charles Klein. This award is given to potential contributors to child health in recognition of accomplishments in pediatrics.

Robert Alan Marcus received the $500 Borden Undergraduate Research Award in Medicine, given by The Borden Company Foundation, Inc. to a senior student for research "meritorious in his class."

Gerald Rosen was presented the $250 National Foundation Merit Award for "outstanding research in the area of birth defects," and Laurence Joseph Sloss won the $200 Upjohn Achievement Award for outstanding clinical performance. The Dr. and Mrs. Joseph Fife Surgery Award of $500 was given to John Bordy.

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James Thomas Pappas was awarded the first Stanford Medical Alumni Association Scholarship of $400. The alumni scholarship was presented in recognition of high scholastic achievement and leadership.

Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine, welcomed the guests, and Dr. LeRoy A. Pesch, associate dean, presented the awards. Dr. Harold K. Faber, emeritus professor of pediatrics, announced the recipient of the award named in his honor.

Class president Irwin Jacobs presented the annual Arthur L. Bloomfield Award for excellence in the teaching of clinical medicine to Dr. Cleve B. Baker, instructor in dermatology.

Dr. Robert A. Chase, professor and executive head of the Department of Surgery, delivered the faculty address, and Dr. Glaser administered the Hippocratic Oath.

Students and their parents' names and addresses are listed below:

CALIF., LOS ANGELES - Robert Alan Marcus, Dr. & Mrs. Simson Marcus, 740 N. Kings Rd.

N.J., WANAQUE - Michael Charles Klein, Mr. & Mrs. Philip Klein, 24 Dale Rd.

N.Y., JAMAICA - Gerald Rosen, Mr. & Mrs. Nathan Rosen, 82-05 189th St.

ILL., RIVER FOREST - James Thomas Pappas, Mr. & Mrs. Thomas Constantine Pappas, 1306 Franklin Ave.

GLENCOE - Laurence Joseph Sloss, Prof. & Mrs. Laurence Sloss, 123 Euclid Ave.

ROMANIA - John Bordy, Mr. & Mrs. Joseph Bordy.

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(Mailed June 9, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (321-5310)

Dr. Edward Siegel has been appointed associate professor of radiology at Stanford University School of Medicine and radiation safety officer for the Palo Alto-Stanford Hospital Center.

In addition to teaching radiologic physics, Dr. Siegel will be associated with Dr. Joseph Kriss, director of the Division of Nuclear Medicine, in the development of techniques for the clinical application of radioisotopes.

As radiation safety officer, he will direct the Hospital Center's expanded safety program designed to protect patients and personnel from radiation hazards. He will have supervisory and advisory responsibility for all safety aspects involved in the Hospital's use of radioactive materials and radiation-producing machinery.

Dr. Siegel also plans to continue his research on cultured human cells to determine the mechanisms responsible for actions produced by hormones.

Before coming to the Stanford Medical Center, Dr. Siegel was a U.S. Public Health Service Special Fellow in cellular biophysics at the University of California at Berkeley. From 1948 to 1962, he was in charge of the Medical Physics Laboratory at Montefiore Hospital in New York.

He received his B.S. degree from the College of the City of New York and his Ph.D. in biophysics from the University of California at Berkeley.

Dr. Siegel and his wife recently moved from Berkeley to Portola Valley.

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(Mailed June 1, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Dr. Morgan Berthrong, director of laboratories at Penrose Hospital in Colorado Springs, has been appointed visiting professor and acting head of the department of pathology at Stanford University School of Medicine.

His additional appointment as acting pathologist-in-chief at the Palo Alto-Stanford Hospital Center was approved Wednesday night (July 27) at the monthly meeting of the Hospital Board of Directors.

Dr. Berthrong will assume his responsibilities September 1 and serve through June 30, 1967.

He succeeds Dr. Kenneth Weinbren who has returned to his teaching post at the Postgraduate Medical School of the University of London. Dr. Weinbren was acting head of the department of pathology and acting pathologist-in-chief for the 1965-66 academic year.

Dr. Berthrong has been a member of the staff at Penrose Hospital and on the faculty of the University of Colorado School of Medicine since 1954. Before becoming director of laboratories at Penrose, he was professor and chairman of the medical school's department of pathology from 1959 to 1961. He is presently a clinical professor of pathology.

He received his M.D. degree from Harvard University in 1943 and interned at Roosevelt Hospital in New York City. From 1946 to 1953 he was a resident physician and faculty member at Johns Hopkins Hospital and Medical School.

Dr. and Mrs. Berthrong are bringing their four youngest of six children to spend the year with them at Stanford.

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(Mailed July 28, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Editors: Photographs are available on request.

When Dr. Radha Pant returns to India next month she is prepared to tackle two of her country's biggest problems--malnutrition and economic depression.

With the assistance of the South Palo Alto Lions Club, Stanford University School of Medicine and the Palo Alto Medical Research Foundation, Dr. Pant is taking home $15,000 worth of surplus equipment to continue her research on the nutritive value of beans and the output of silk worms.

Dr. Pant is a research associate at Stanford on a year's leave of absence from the University of Allahabad. She began collecting supplies two months ago, when the Indian government offered to exempt its scientists from paying customs duty on professional and scientific equipment acquired abroad.

Several medical school departments and the Palo Alto Medical Research Foundation have given her materials and instruments ranging from chemicals to a large machine for measuring tissue respiration. She has purchased many additional items herself.

The South Palo Alto Lions Club donated $1,000 to cover shipment costs.

Dr. Pant came to Stanford last September to study the biochemistry of insects under Dr. Raymond B. Clayton, associate professor of biochemistry. She plans to extend this work to Indian silk worms, hoping to improve both the quality and quantity of silk produced.

Her primary concern, however, is the biological and nutritive value of beans and peas, traditional staples of the Indian diet.

India, she notes, is one of the world's largest producers of legumes, but many varieties grow wild and are inedible because of their unpleasant odor and toxic properties.

Dr. Pant intends to isolate protein from the waste legumes and incorporate it into the human diet. Her experiments may mark a significant breakthrough in the country's attempt to fight malnutrition.

-MORE-

"Most of the people in India suffer from protein deficiency," she explains. "They are either vegetarian by religious preference or tend toward vegetarianism because meat is expensive and vegetables are more readily available."

Dr. Pant's research reflects the determination and ability she has demonstrated throughout her life. After receiving her Ph.D. in biochemistry from the University of Bombay, she began a 20-year teaching career at the University of Allahabad, where she is an assistant professor and head of the division of biochemistry.

Her great desire is to see the biochemistry division established as an autonomous department rather than an adjunct to the department of chemistry, as it is now.

Before leaving for the United States, Dr. Pant visited India's President Sarvapalli Radhakrishnan, whom she has known since childhood, and asked him if he would help her establish a separate department. This month she received notice that a department of biochemistry has been included in India's next five-year plan and is scheduled to open in 1967.

Among the people of India eagerly awaiting Dr. Pant's return are her husband, a professor of botany at the University of Allahabad, and their three children--two daughters 17 and 12, and a son 15.

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(Mailed July 26, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Two years ago Ruth Bell of Sacramento was making medical history.

Today she swims if she feels like it and zips off from her home in West Sacramento to a downtown hospital where she works as a medical records secretary.

But in doing that she is still making medical history.

Mrs. Bell, a 24-year-old divorcee, was the subject of a pioneering operation at Palo Alto-Stanford Hospital Center in which she received a healthy kidney transplanted to her body from her mother, Mrs. Wilma Davis.

It was an important accomplishment for Stanford University surgeons who had long wondered how to overcome the human body's tendency to reject tissue not its own.

On the doctors' report Mrs. Bell's disease was listed as chronic kidney failure.

In her own memory the trouble came on slowly, a feeling of increasing tiredness beginning when she was 17.

Doctors made the diagnosis but kept Ruth going with drugs and a series of diets aimed at keeping a proper balance in her blood chemistry.

At one point, her menus consisted of fruit and rice and various liquids. Now she can eat what she pleases.

In July 1964 her kidneys failed, and her mother volunteered as a donor. "We knew kidney transplant surgery was experimental, and many of our friends tried to discourage us," her mother said. "But we had no choice. Now we are glad our decision was right."

Mrs. Bell was the first human patient at Palo Alto-Stanford Hospital Center on whom a new technique, previously tested successfully on dogs, was used.

The method, devised by a Stanford surgical research team, permits doctors to administer safely the powerful drugs that help prevent the body's natural antagonism to foreign tissue.

"The method is not a radical new approach," the team says, "but rather a more precise use of existing techniques."

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The key is the ability to predict rejection by measuring the kidney blood supply after transplantation. A fall in blood flow is the first detectable signal that the rejection mechanism is cranking up. When such a warning is flashed, the doctors inject drugs to suppress the threatened rejection by restoring blood flow.

Since Mrs. Bell's transplant, six such operations have been performed between relatives at Palo Alto-Stanford Hospital Center. An eighth transplant was performed between twin brothers seven years ago. All patients today lead normal lives.

It will be two years ago on July 31 that Mrs. Bell went home from the hospital. Physicians regard a two-year survival as something of a record, for only about 30 percent of all the kidney transplant patients are known to have lived that long.

Those who survive during the first two critical years may live for five or more, the physicians said, adding that in the meantime new and better drugs may become available and new knowledge developed about the immunity reaction.

Now back in Sacramento, Ruth works, takes care of her six-year-old daughter Kathryn, attends business school, and is active in the Mormon church.

Next month she will be taken off immuno-suppressive drugs which had the tendency to make her overweight.

"The doctors are crossing their fingers with me," she says, "I am their first experiment."

As to her own life, Ruth evaluates it as "completely normal."

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Editors: Mrs. Bell's home address is 913 Poplar Street, West Sacramento. She is employed by the Arcade General Hospital in Sacramento.

(Mailed July 18, 1966)

SHE IS A MEDICAL PIONEER--Miss Ruth Bell of Sacramento who underwent a kidney transplant operation at Stanford Medical Center in 1964 today leads a normal life. Physicians regard a two-year survival as a record for only 30 percent of such patients live that long. With new drugs and better techniques of monitoring the body's natural tendency to reject foreign tissue, physicians expect Mrs. Bell to do equally well in the future.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Stanford Medical School physicians searching for new methods of treatment for patients with acute respiratory problems have just received a three-year grant of $248,000 to continue their painstaking effort.

The grant to a team of anesthesiologists headed by Dr. John P. Bunker, professor and head of the Department of Anesthesia, comes from the John A. Hartford Foundation, Inc. of New York. It brings to more than half a million dollars the amount that Stanford has received from the foundation for research in the management of acute disturbances in respiration since 1963.

In a progress report on the research, Dr. Bunker said that scientists are finally beginning to understand some of the causes and the course of respiratory complications that follow disease, accidents, and surgery.

There are three general areas of investigation:

* Respiratory problems resulting from mechanical limitations of breathing--due to surgery of the upper abdomen, chest injuries, and such diseases as polio, tetanus, and myasthenia gravis.

* The effect of drugs and certain metabolic diseases on the brain's respiratory center.

* The course of infections that is a frequent complication of low-level lung ventilation --and the question whether the microorganisms are the patient's own or from other sources.

Dr. Grant Fletcher, assistant professor of anesthesia, is in direct charge of the program in the intensive care ward of the Palo Alto-Stanford Hospital Center where the clinical research is being conducted. The third member of the team is Dr. J. Weldon Bellville, professor of anesthesia, who is directing the research into the role of drugs and disease in the nervous system's control of breathing.

The research has been focused on respiratory problems caused by surgery of the upper abdomen. Concerned here chiefly, Dr. Fletcher explained, are operations in such areas as the stomach, gallbladder, the pancreas and the small bowel.

He added that this sort of surgery--particularly when performed on males--is notoriously associated with a high frequency of lung collapse.

He quoted studies showing that 50 percent of such surgical patients, if given no preventive treatment for pulmonary complications, will develop at least a minor degree of lung collapse. This disorder--revealed on X-ray films as areas of collapse throughout the lungs--is usually completely reversible if found early and causes no apparent lasting harm although it may delay recovery from surgery for several days.

-MORE-

This type of lung collapse, Dr. Fletcher said, is always potentially dangerous as the possible forerunner of pneumonia and even cardiac arrest and death. Postsurgical pain so far seems to be the most obvious cause of the condition although there may be other mechanisms or chemical changes involved.

"Typically, the postsurgical patient with pain is likely not to breathe deeply for fear of enhancing his pain," Dr. Fletcher said. "It would seem to be this shallow breathing that leads to atelectasis (lung collapse)."

The research team studied two methods of treating the condition--breathing treatments using a respirator, and pulmonary physiotherapy. Both treatments require about 20 minutes and are applied every four hours during the first two postsurgical days, the team reported.

The physiotherapist works with patients before surgery, teaching them the mechanics and value of proper breathing. After surgery she instructs patients how to position themselves in bed and how to hold themselves so that pain is reduced to a minimum when they cough or breathe deeply--or how to transfer the strain of breathing to other muscles.

Respirator treatment and physical therapy were given to two groups of selected patients after surgery. A third group received the normal type of nursing care. None of the patients had a previous history of lung disease.

"The patients who received respirator treatment and the patients who received physical therapy did not develop significant recognizable lung collapse," Dr. Fletcher said. "The patients who were given normal nursing care developed lung complications to the extent of 50 percent."

Drs. Bunker and Fletcher agreed that preventive treatments not only cut the incidence of lung collapse but also cut the length and cost of postoperative care.

To detect early very small degrees of lung collapse, not visible in routine X-rays, the investigators utilized a new method of analyzing blood for oxygen content. The method makes use of a small analyzer at the patient's bedside and measures blood oxygen in the patient's artery.

The research team also has completed studies of the performance of respirators--machines used to help patients who cannot breathe on their own.

"Patients," Dr. Fletcher said, "often require the support of these machines for weeks or months and it is important to know how each machine will work with the various degrees and types of lung ailment. The new studies have provided us with a much better basis for choosing the right respirator for the right patient."

Future studies will investigate the degree to which different methods of artificial respiration reduce a patient's breathing effort and need for oxygen.

The group will also study the sources of infection that so often lead to pneumonia in patients with breathing difficulties. The investigators are interested in checking their suspicion, based on earlier work, that faulty breathing creates an internal environment in which bacteria inside the body can cause disease.

"Meanwhile," they said, "we have learned how a few simple steps can affect a real improvement in hospital-born infections, especially the importance of using disposable sterile gloves and suction catheters."

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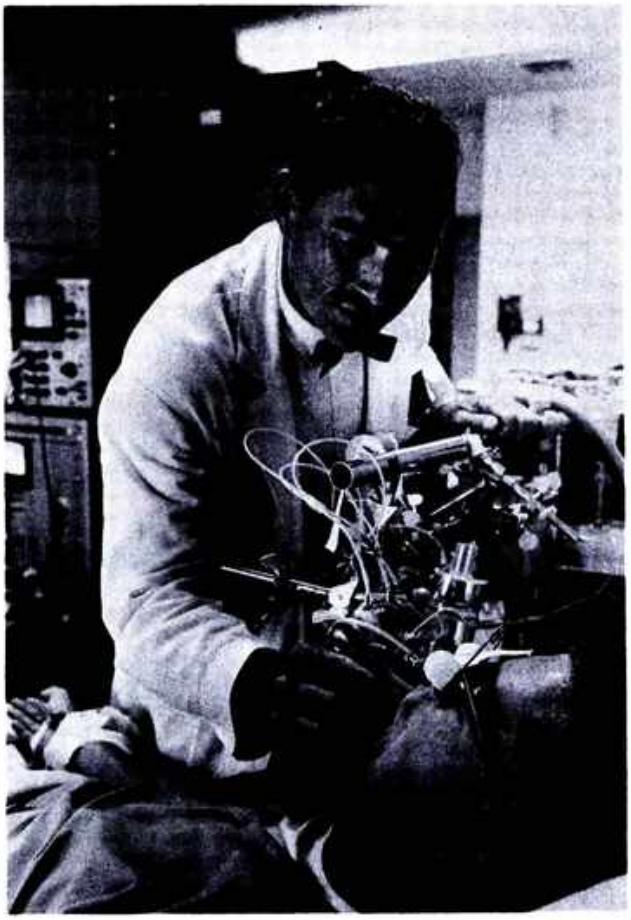
(Mailed July 12, 1966)



Dr. Grant Fletcher, assistant professor of anesthesia at Stanford Medical School, adjusts special monitoring device through which a patient's normal breathing patterns are being studied. The research is carried on in the intensive care ward of the Palo Alto-Stanford Hospital Center to determine new methods of treatment for patients with acute respiratory problems. The studies are supported by a grant from the John A. Hartford Foundation, Inc., of New York.

TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Disturbances in Respiration

Please send me an 8x10 glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Dr. Henry S. Kaplan, professor and executive head of the department of radiology at Stanford University School of Medicine, has been elected president of the American Association for Cancer Research, a scientific society with more than 1,000 members throughout North and South America.

Dr. Kaplan was elected president at the Association's annual meeting held recently in Denver, Colorado. He has been an active member since 1945, serving on the board of directors, as chairman of the program committee and vice president.

The group meets once a year to exchange information on new developments in cancer research and publishes the monthly journal Cancer Research. Membership is composed of scientists who have contributed original and significant research in a variety of biomedical fields.

Dr. Kaplan is well known for his research on Hodgkin's disease and was a leading figure in the design and use of Stanford's linear accelerator "cancer gun." He is presently continuing work with high-energy radiation treatment of cancer.

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(Mailed July 5, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FOR PM RELEASE SEPTEMBER 5, 1966

Editors: Story for p.m.'s September 5, coincides with publication of report in the Journal of the American Medical Association.

A special committee of the National Academy of Sciences-National Research Council today reported that halothane, implicated several years ago in rare cases of liver damage among surgical patients, is one of the safest anesthetics in general use.

The report, published in the current issue of the Journal of the American Medical Association, resulted from a four-year intensive national study of halothane in which the Stanford University School of Medicine played a key role.

The study was based on information from 856,000 patients who had surgery under general anesthesia in 34 hospitals from 1959 to 1962. Among institutions which took part were Peter Bent Brigham, the Mayo Clinic, and hospitals associated with the universities of Michigan, Miami, California, Iowa, Columbia, Duke, and UCLA.

According to the report, one-third of the patients studied had been given halothane, the rest other commonly used anesthetics. There were only nine cases of unexplained liver damage among these patients, but halothane could not be ruled out as a possible cause.

The main conclusions of the report are:

* Fatal liver damage following anesthesia and surgery is rare.

* Halothane, rather than being a dangerous anesthetic is as safe as or safer than other general anesthetics. Its safety is reflected in an overall mortality of 1.87 percent compared to an average for all anesthetic practices of 1.93 percent.

* There is no evidence to support the manufacturer's warning of halothane being dangerous to patients with known liver or gallbladder disease.

In the study, participating hospitals were required to report postoperative deaths that occurred in the hospital within six weeks of general anesthesia, and to abstract case records, categorizing them by the type of anesthetic used.

To provide information on the general population of patients from which the deaths were reported, each hospital was required to report the number of general anesthetics administered, categorized by types of anesthetics. All deaths suspected to have been caused by liver damage were reviewed by a panel of pathologists with a special interest in liver diseases.

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During the four-year period of study, approximately three-quarters of a million anesthetics were given to patients in the 34 participating hospitals. There were 16,840 deaths of various causes, and in 60.4 percent of these an autopsy was performed with particular attention to the abdomen.

The case history of each patient, including the type of anesthetic he received, and similar information on all the cases that were brought under scrutiny, was punched on data processing cards and forwarded to the computer center at Stanford University, where Dr. John P. Bunker, professor of anesthesia and chairman for the national halothane study, and Dr. William H. Forrest, Jr., assistant professor of anesthesia and coordinator of the study, directed the research. The computer compared each type of operation in an effort to detect any significant difference between patients receiving halothane and those receiving other anesthetics.

Other Stanford faculty members who participated in the study were Dr. Lincoln E. Moses, professor of statistics, and Drs. Ellis N. Cohen and J. Weldon Bellville, professors of anesthesia.

"One of the most important findings of the study is that we have no systematic methods for appraising new therapeutic techniques," Dr. Bunker commented in an interview.

"It is doubtful whether any drug was ever more extensively studied both before and after its introduction than halothane," he said. Prior to the national halothane study, halothane had been given to patients perhaps 10 million times, yet it was impossible to give firm, reliable answers to many basic questions about its effects."

Dr. Bunker explained that many drugs are being withdrawn or labeled "dangerous" by the Food and Drug Administration simply on the basis of poorly designed studies and insufficient clinical evidence.

To remedy the situation, the halothane study committee has recommended "the establishment of a cooperating group of institutions to serve as a panel-laboratory for the acquisition of trustworthy information on new drugs as they come into use."

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(Mailed August 29, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Dr. Philip R. Lee, assistant secretary for health and scientific affairs in the Department of Health, Education and Welfare, will give the keynote address at a Stanford University convocation on community health resources August 31 and September 1.

Dr. Lee, member of a famed Palo Alto medical family, will speak on "Health Programs for the Poor". His address is scheduled for 2:30 p.m. Thursday.

The two-day program will be held in Dinkelspiel Auditorium and is open to the public. Community leaders, educators and professionals in the health science field across the country have been invited to attend.

The convocation is the concluding event of a 10-week Student Health Project sponsored by the University of Southern California School of Medicine and supported by a demonstration grant from the Office of Economic Opportunity.

Under this project, 90 students of nursing, medicine, dentistry and social work have spent the summer studying community health problems in poverty areas of nine California counties. They have worked in county hospitals and health departments, in the offices of private physicians, and with community action programs such as Project Head-Start.

The students are from 40 health science institutions in 11 states. About half are from schools in California, including Stanford, the University of California, and the University of Southern California. At the convocation they will present papers on their findings, experiences and recommendations.

Stanford President J.E. Wallace Sterling and U.S.C. President Norman H. Topping are honorary chairmen of the event. Faculty co-chairmen are Dr. Roger O. Egeberg, dean of the U.S.C. School of Medicine, and Dr. Robert J. Glaser, vice president for medical affairs and dean of the Stanford School of Medicine.

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Appearing on the program are Dr. Paul F. Wehrle, faculty co-director of the project and chairman of the departments of pediatrics and communicable diseases at U.S.C.; Michael R. McGarvey, student co-director of the project and fourth year medical student at U.S.C.; Paul C. Ward, state administrator for health and welfare, and Dr. Paul F. O'Rourke, special assistant to the Governor of California for anti-poverty planning and director of the California Office of Economic Opportunity.

Other participants include Dr. Leopold J. Snyder, chairman of the California Medical Association Rural Health Committee; Dr. R. Bruce Jessup, coordinator of the anti-poverty program for the California State Department of Public Health, Edna J. Brandt, chief of the Bureau of Nursing for the California State Department of Public Health, and Dr. Max Schoen, dental surgeon in Los Angeles.

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(Mailed August 25, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Spyros G. Andreopoulos, 36, has been appointed information officer at Stanford University School of Medicine, and editor of Stanford M.D., the magazine of the Stanford Medical Alumni Association.

The appointment was announced by Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine.

Andreopoulos succeeds Samuel Moffat who resigned in August to devote full time to freelance writing.

Andreopoulos has been with Stanford since 1963. Before coming to Palo Alto, he was assistant director of information services at The Menninger Foundation in Topeka, Kansas, and editor of The Menninger Quarterly for nearly six years.

Prior to that he was associate editorial page editor for the Wichita (Kan.) Beacon, a writer with the United States Information Agency in Greece, and public information officer in Japan. He came to the United States from his native Greece in 1952 as a Fellow of the Institute of International Education. He became a U.S. citizen in 1959.

He obtained his B.A. from Wichita State University, and took the course in science writing at Northwestern University under the auspices of the National Science Foundation. He is a member of the National Association of Science Writers.

Andreopoulos, his wife, and daughter live at 882 Southampton Drive, Palo Alto.

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(Mailed August 22, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

A $7.50 increase in standard room rates was approved Tuesday night at a special meeting of the Palo Alto-Stanford Hospital Center board of directors.

New room rates starting immediately are $42.50 for ward beds, $47.50 for semi-private rooms, and $54.50 for private rooms.

Robert Klein, president of the hospital board, said the board hopes that the higher room rates would provide the necessary income to support the new salary scale agreed to by the hospital and the nurses Sunday, and to finance other wage increases.

Under the new agreement, 407 nurses will receive a 21.5 percent pay raise on top of a five percent increase they received last July.

In addition, the hospital board decided to increase salaries of other hospital personnel most of whom will receive 5 to 15 percent increases. These pay raises to other employees have been granted to maintain salary scales at realistic levels.

The cost of the new salary package is estimated at $1.3 million, a 13 percent increase in total hospital payroll.

The increased cost for nursing pay raises is 60 percent of the total pay increases. The remaining cost is for pay increases of non-nursing personnel and retroactive evening and night shift differentials.

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(Mailed August 17, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Editors: Story was transmitted by phone Aug. 14, 1966.

An agreement was reached Sunday night between the Palo Alto-Stanford Hospital Center and the 340 nurses who had threatened to resign over a salary dispute.

The new agreement, termed "unique" by both sides, sets a salary range of $481 to $782 a month maximum which can be reached after continued service of five years. The latter feature, according to the administration and the nurses, is to encourage career nurses for service at the bedside.

The nurses originally asked for a starting salary of $613 a month, and 15 and 17 percent differentials for evening and night shift work.

The new scale also provides 10 and 12 percent differentials for evening and night shift work and an annual bonus of 10 percent of one month's salary for nurses who have reached their maximum salary scale.

The starting salary of $481 is for nurses who have graduated from 2-year junior college programs. If they have previous experience it will count toward a higher starting salary, according to the agreement. The salary scale for diploma nurses is $530 to $676 a month, with a possible maximum of $782.

The nurses agreed that the salary scales will be effective for 13 months (August 8, 1966 through August 31, 1967), an arrangement unique among San Francisco and East Bay hospitals which have interim salary agreements with their nurses to December, 1966, subject to possible retroactive increases by fact-finding.

Meanwhile, the Hospital has lifted emergency measures taken during the week to reduce its occupancy and began to admit patients as usual.

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(Mailed Aug. 15, 1966)

PALO ALTO - STANFORD HOSPITAL CENTER

STAFF NURSE SALARY SCHEDULE

Staff Nurses are paid according to their experience, educational preparation, and ability. There are six groups into which they may be hired - depending upon their qualifications. Or, they may be promoted into succeeding groups as they progress professionally, through acquiring further experience, education, and proficiency.

	Range	Salary	A.A. Degree	Diploma	B.S. Degree	M.S. Degree
A.A. Degree	33	481-505	0-12 mos.exp.			
Staff I	35	530-676	12-18 mos.exp.	0-6 mos.exp.		
Staff II	36	556-710	18-24 mos.exp.	6-12 mos.exp.	0- 6 mos.exp.	
Staff III	37	584-745	24-36 mos.exp.	12-24 mos.exp.	6-12 mos.exp.	
Staff IV	38	613-782	36 mos.exp.	24 mos.exp.	12-24 mos.exp.	
Staff V (Clinical Associate)						
*Staff VI (Nurse Clinician)						

Each staff nurse is evaluated periodically to determine her eligibility for advancement into the succeeding groups. Advancement is a personal thing and dependent entirely upon the nurse and what she produces and brings as an individual to her position.

*Staff Nurse VI position is not currently open.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

Dr. Eugene M. Farber, professor and executive head of the department of dermatology at Stanford University School of Medicine, has been elected president of the Society for Investigative Dermatology, an international organization of scientists involved in skin research.

Dr. Farber was elected president at the society's annual meeting held recently in Chicago. He has been an active member since 1948, serving on the program committee and as vice president.

The society is composed of more than 1,000 members who exchange information on new developments in dermatologic research and publish the Journal of Investigative Dermatology.

For many years Dr. Farber and his associates have been engaged in extensive studies on psoriasis, a skin disease characterized by the formation of scaly red patches on the surfaces of the body.

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(Mailed Aug. 11, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

An old, rejected theory, which explains why the heart beats irregularly in certain heart disorders, and its proponents have been fully exonerated by a Stanford University physician.

New evidence, published in the current issue of the Annals of Internal Medicine, the journal of the American College of Physicians, is likely to revise present thinking about the heart and cause medical textbooks to be rewritten, according to the author, Dr. David Rytand, Bloomfield professor of medicine at Stanford University School of Medicine.

In an interview, Dr. Rytand said the evidence demonstrates beyond doubt the validity of the circus movement theory, formulated by clinical physiologist Sir Thomas Lewis in England almost half a century ago.

The circus movement theory sought to explain the mechanism of one of the most common heart irregularities, atrial fibrillation--and the less common but related one, flutter.

This condition refers to a quivering of the heart muscles that through disease have fallen out of their rhythmic action. A heart that beats in abnormal rhythm cannot pump blood properly to the blood vessels, and the result leads to disability in varying degrees, if the condition is left untreated.

It was Dr. Lewis' contention that the electricity which arises in the region of the upper heart chambers (atria) and regulates the heart beat was entrapped in a ring-like pathway around the great veins. The same impulse went around and around and made the atrial tissue flutter, a condition that sometimes precedes a full-blown fibrillation.

In the normal heart, the electric charge which causes muscles to contract spreads throughout the atrial tissue somewhat like a ripple from a pebble dropped in a still pond. Once it has done its job, the impulse fades out and a new one is generated.

The theory was discredited in the United States, Dr. Rytand contends, because doctors have simply misunderstood Dr. Lewis' hypothesis or overlooked the clinical evidence.

"Those who did study the theory and found the experimental evidence unsatisfactory were trapped by an optical illusion which caused them to misread their patient's electrocardiograms," Dr. Rytand said.

Twenty years before Dr. Lewis published his papers on the circus movement theory, Dr. Alfred G. Mayer, a physicist and marine biologist, demonstrated the existence of circus movement in the jellyfish.

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"If we cut off the marginal sense-organs of the scyphomedusa Cassiopea, the disk becomes paralyzed and does not pulsate in sea-water," Dr. Mayer wrote. "The disk will pulsate in sea-water, however, if we make either a single ring or a series of concentric broken-ring like cuts through the muscular tissue of the sub-umbrella. Then upon momentarily stimulating the disk in any manner, it suddenly springs into rapid, rhythmical pulsation so regular and sustained as to recall the movement of clock work."

Today most medical textbooks deny that there is a circus movement. A recent book, THE HEART, edited by Drs. J. Willis Hurst and R. Bruce Logue, says "there is no experimental evidence to date" in support of the circus movement theory.

The most accepted explanation suggests that irregular atrial action results from the inability of tissue to respond to a rapid rate of stimulation arising in a tiny, abnormally active region of atrial tissue.

But Dr. Rytand disagrees with this notion. After repeating the jellyfish and other animal experiments himself to confirm that they showed circus movement, he reviewed the evidence for and against the theory on both American and foreign journals.

He found experiments that have clearly shown the existence of an entrapped circuit wave in rings of living heart and other tissue cut from a variety of animals including mammals, in purely atrial rings, and also in inert iron wire and electronic computers.

"The favorable evidence was all there," he said, "but nobody was really looking at it. The evidence against Sir Thomas Lewis' point of view was very poor."

Dr. Rytand's previous belief in the circus movement was further supported by his own clinical observations on 40 patients, beginning with two cases in 1952. Both were women who had flutter at unusually slow atrial rates. Flutter which is closely related to fibrillation is a highly regular abnormal mechanism, and therefore lends itself to analysis, Dr. Rytand explained. He cautioned, however, that this type of flutter can only be detected in the electrocardiogram. It has nothing to do with the heart "flutter" many of us experience from time to time.

The atrial rate in the two patients ranged from 180 to 200 compared to the usual 300 cycles per minute. In both patients, Dr. Rytand noticed, the upper heart chambers were huge, one due to a congenital defect, the other due to a narrowing of the tricuspid valve.

He concluded that the slow rate was evidence of circus movement. "The electrical impulse in the atrial area had a long way to travel around. Longer cycles meant a slower rate per minute," he said.

The reason many investigators have failed to find satisfactory evidence in support of the circus movement can be traced not only to a misunderstanding of the theory, but also to an optical illusion in the electrocardiogram (EKG), Dr. Rytand believes.

In flutter each passage of the entrapped electricity around the great veins shows up in the EKG as a line with a downward slope. When the atrial rate is slow the angle of this slope is often reduced to such an extent that it resembles the flat line of paroxysmal atrial tachycardia, another heart irregularity not caused by circus movement.

Dr. Rytand and his colleagues discovered that the true appearance of this line can be restored by the use of a cylindrical lens to permit accurate reading of the EKG.

The same lens placed on the EKG enabled Dr. Rytand to observe circus movement on a patient's heart during open heart surgery, the first time this was ever accomplished, in 1961.

Dr. Rytand noted that although the circus movement has been rejected, ignored, and misunderstood, physicians had found a treatment for flutter by electroshock. Such a shock discharges the heart of its electricity and disrupts the ring-like circuit. It is only an irony of history that the understanding of the condition comes half a century later to aid in a better diagnosis of this heart abnormality.

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(Mailed Aug. 10, 1966)

Dr. David Rytand, Bloomfield professor of medicine at Stanford University School of Medicine, uses wire on heart model to demonstrate how circus movement theory works. Instead of spreading throughout the atrial tissue to cause muscles to contract, electricity which regulates heart beat is entrapped in a ring-like pathway around the great veins, causing muscle to flutter.

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Circus movement

Please send me an 8x10 glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet R. Runyan (DA 1-5310)

A prominent Spanish physician who underwent open heart surgery at the Palo Alto-Stanford Hospital Center is glad he took the advice of a friend, even though he had to travel over 4,400 miles to Palo Alto, Calif.

Dr. Antonio Cantos will return to his home in Seville, Spain next week after a successful heart valve operation at the hospital.

"A colleague at the University of Seville Medical Center insisted I come here for the operation, so I came, and I'm thankful," said Dr. Cantos, a practicing gynecologist and obstetrician.

The friend and colleague is Dr. Ramiro Rivera, a heart surgeon in Seville. Dr. Rivera was a postdoctoral fellow at Stanford University School of Medicine during the 1964-65 academic year. He studied under Dr. Norman E. Shumway, professor of surgery, who performed the delicate operation on Dr. Cantos.

Dr. Cantos, 46, had a calcified aortic valve. The aortic valve lies at the juncture of the heart's main pumping chamber and the aorta, the body's main trunk artery. Calcium deposits prevented the valve from functioning properly. The calcified valve was replaced with an artificial valve in a four-hour operation July 22.

Dr. Shumway has performed 500 aortic valve replacements at the Palo Alto-Stanford Hospital Center since March 1963.

Dr. Cantos was dismissed from the Hospital Center August 3 and will remain in the area about 15 days, until he is strong enough to travel. Then Dr. and Mrs. Cantos will fly directly home. Four children are awaiting their return, including a baby boy who was only two weeks old when they left.

Dr. and Mrs. Cantos are staying with Mr. and Mrs. Alexandre Drosdoff in Menlo Park, also the home of Dr. Rivera when he was at Stanford.

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(Mailed August 11, 1966)

Editors: Photographs are available on request.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

A $10,000 gift to the Stanford University School of Medicine for research in urology has been announced by the Norwich-Eaton Foundation, Norwich, New York.

The gift will make it possible to equip a laboratory for research in the treatment of urinary tract infections, one of the commonest bacterial infections in man.

The laboratory will be located in the newly dedicated Clinical Sciences Research Building. Investigations will be under the direction of Dr. Thomas Stamey, professor and head of the Division of Urology, and Dr. Duncan Govan, associate professor of surgery.

One of the problems which will be studied in the new laboratory concerns the effectiveness of drugs in the treatment of urinary tract infections, Dr. Stamey said. Another relates to finding out where bacterial infections come from. Once the infections can be localized then physicians can work at eliminating their recurrence and hopefully even preventing them entirely.

Many of the infectious bacteria are "normal" in human intestines, Dr. Stamey explained, but these tiny germs frequently invade the urinary tract, especially the bladder, where they multiply rapidly and sometimes lead to severe kidney ailments--kidney stones, kidney failure and even death.

"It is also apparent that the major problem in urinary tract infections is one of reinfection rather than failure to cure specific infections," Dr. Stamey said.

He added that urinary tract infections are 14 times more common in women than men suggesting that the cause of infection or reinfection may lie in the female anatomy. Studies across the country show that at least one percent of elementary school girls are afflicted with some form of urinary tract infection.

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(Mailed August 9, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Stanford University today made a formal offer of an estimated $5 million to purchase the City's interest in the Palo Alto-Stanford Hospital and said it would make additional land available contiguous to the Herbert Hoover Pavilion for expansion of a community hospital.

The proposal was contained in a letter to Mrs. Frances Dias, mayor of Palo Alto, from President J. E. Wallace Sterling.

It called on the City to join in negotiations with University representatives that would lead to a change in the present joint hospital ownership.

In response to a request by the City, the University last January indicated its interest in acquiring Palo Alto's ownership in the Hospital. University representatives have appeared before the finance committee of the City Council to outline the basis of Stanford's letter and the committee asked the University to make a specific offer.

"Accordingly, the University has carried forward its studies," President Sterling wrote, "and I am now authorized by the Board of Trustees to transmit to the City of Palo Alto a definitive proposal: The University is prepared to pay the City a sum of money equivalent to the fair market value of the City's share in the building and equipment of the Palo Alto-Stanford Hospital in order to acquire such share.

"Based on a very preliminary analysis, we estimate this sum to be of the order of $5 million; as soon as we have that figure refined, we shall inform you of it."

Palo Alto's original investment in the buildings and equipment of the joint Hospital was approximately $4.2 million.

Dr. Sterling added that if the City accepts the University's offer and joins in terminating the lease of land presently adjoining the Hospital Center, "the University will make available on equivalent terms additional land contiguous to the Hoover Pavilion for expansion of a hospital facility on that site."

An analysis made by an experienced hospital architect, employed as a consultant by the University, has shown that the Hoover Pavilion, with additional land at the site, can be expanded into an outstanding hospital that will serve the community well.

"If the City elects not to accept the University's offer," Dr. Sterling said, "Stanford will plan for the expansion of its own hospital facilities, and will in due course create the Stanford University Hospital as an independent unit, both administratively and functionally."

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In any event, Dr. Sterling said, both parties will be faced with "the necessity of reconsidering the legal agreements relating to the Hospital."

"We have always recognized," Dr. Sterling said, "that until additional beds are available in the community, no change in the present organization of the Palo Alto-Stanford Hospital can be made. Inasmuch as it will be some years until new construction can be completed, we believe that there is urgent need for an early decision."

Last January Stanford, acting on a request dated May 10, 1965 by the City, announced that it was interested in acquiring the City's share in the 437-bed Hospital. The decision was based on a report prepared by the Stanford Medical School administration and faculty, headed by Dr. Robert J. Glaser, vice president for medical affairs and dean of the medical school.

The faculty report stated that Stanford must have a University Hospital with 450 to 500 beds and the usual supporting facilities such as operating rooms and laboratories to support its major effort in medical education, patient care, and research.

The report noted that if the University did acquire the Hospital, members of the volunteer faculty, many of whom also serve on the Palo Alto medical staff, would continue to have access to the University's facility for hospitalization of patients from the community.

A citizens' committee previously had recommended to the Council "to determine through contact with Stanford University officials, the potential interest of the University in leasing the Palo Alto Pavilion and Core portion of the Palo Alto-Stanford Hospital to accommodate the expanding needs of the Stanford Medical School."

The citizens' committee report also stated that "as part of the negotiations with Stanford, (the City) obtain the release of the old Palo Alto Hospital facility (Hoover Pavilion) from the joint ownership agreement between the City and the University and conclude a new agreement concerning the old hospital site which would allow potential expansion ... under City auspices."

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(Mailed August 8, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Editors: Photographs are available on request.

Thirty-two students from Ravenswood High School are seeking answers to the question "What is Life?" in the third summer science program sponsored by Stanford University School of Medicine.

The students are exploring highlights of modern experimental biology and medicine in an intensive six weeks of lectures, discussions, films, field trips and laboratory work.

Dr. Leonard A. Herzenberg, associate professor of genetics and director of the program, describes the medical school project as an attempt to broaden the students' awareness of the opportunities and challenges in science by exposing them to the university environment.

"We hope to provide sufficient incentive, guidance and help to enable these students to prepare and qualify for college," he said.

Three medical students, Edward Bernstein, Michael Volen and Dieter Eckert, organized details of this year's curriculum and are working with the high school group as teaching assistants and counselors. Assisting them is Harvey Cole, a science teacher at Ravenswood.

The teaching staff consists of more than 60 faculty members from the medical school's clinical and research departments, as well as biologists from Stanford, San Francisco State and the University of California at Santa Cruz.

The program, which is supported by the National Science Foundation, began July 5 and will continue through August 12. Activities are centered in the medical school's Max C. Fleischmann Laboratories which are designed and equipped for medical student teaching.

During the first few weeks, the students traced the evolution of man and surveyed the behavioral sciences. This included a laboratory study of one-celled organisms, a film on child birth, and discussions on genetic and environmental aspects of intelligence, the effect of drugs on behavior, and sleep and dreaming.

They have examined the tide pools at Hopkins Marine Station in Monterey, toured the California Academy of Sciences in San Francisco, visited patients at the Veterans Administration Hospital, and observed the children at Stanford Children's Convalescent Hospital.

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Before the program is over, the young scientists will study some of the problems of tissue transplantation and perform their own experiments with skin grafting on mice. They will also collect and culture bacteria and isolate DNA, the chemical basis of life.

Despite their busy schedule, the students have plenty of free time for discussing and evaluating their experiences. They all agree that they like the program, especially the medical school atmosphere.

"It's not at all like high school," one girl explained, "you really feel like a medical student; we're treated with respect and our opinions are important."

Several students cited the discussions on psychiatry as being particularly helpful in giving them a better understanding of human problems which they can relate to their own high school experiences.

Others mentioned the opportunity to meet professors and medical students. "We have the chance to work with people we'd never know otherwise," commented one boy.

Dr. Herzenberg and his staff hope the students will continue their association with the medical school at the end of the six-week program. For the past two years, a number of students have been hired as laboratory assistants, a few have arranged tutorial programs with individual medical or graduate students, and some have requested faculty assistance in initiating laboratory experiments during the school year.

"Many of our young alumni are going to top colleges and universities," Dr. Herzenberg added, "including Reed, the University of California, the University of Santa Clara and Stanford."

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(Mailed August 5, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Stephen M. Baird of Glendale, Calif., has received a $1,575 tuition scholarship for one year at Stanford University School of Medicine from the Los Angeles County Medical Association. The award was announced by Dr. Joseph P. O'Connor, president of the board of directors of the medical association.

Baird is a 1966 graduate of Stanford University. He earned his A.B. degree in biology and was on the dean's list his sophomore, junior and senior years. He is a member of Alpha Tau Omicron fraternity and has served as a representative to Stanford's student legislature.

Last summer he worked at the U.C.L.A. Medical School in the laboratory of Dr. E. R. Arquilla, conducting research on the immunological properties of insulin. This experience, he says, helped him decide to go into medicine. He is particularly interested in neurophysiology and the behavioral sciences.

In addition to the tuition scholarship from the medical association, Baird received an $800 university scholarship to cover the cost of books, a microscope and supplies.

He is the son of Mrs. Lois M. Baird of 565 W. Stocker, Glendale, and Kenneth K. Baird of 2553 N. Lincoln, Burbank.

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(Mailed Aug. 1, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Dr. David E. Rogers, prominent educator and investigator in the area of infectious diseases, will give the third John Kent Lewis Memorial Lecture at Stanford University School of Medicine October 4.

He will speak on the "Clinical Spectrum of Histoplasmosis in Man" at 5 p.m. in Room M106. Histoplasmosis is a fungal disease affecting the liver, lungs and spleen. It produces chronic infection similar to certain forms of valley fever or tuberculosis.

Dr. Rogers is professor of medicine and chairman of the department of medicine at Vanderbilt University School of Medicine in Nashville, Tenn. He also serves as physician-in-chief at Vanderbilt University Hospital.

He is well known for his studies of staphylococcus, an organism which has become more resistant to antibiotic action in the last few years and produces the disease commonly referred to as staph infection.

Dr. Rogers was born in New York City, the son of the distinguished psychologist, Professor Carl R. Rogers. He obtained his undergraduate education at Ohio State University and graduated from Cornell University Medical College in 1948.

After completing his medical internship and residency at Johns Hopkins Hospital, Dr. Rogers served two years as an officer in the Naval Medical Corps. In 1954 he returned to Cornell as assistant professor of medicine and visiting investigator at the Rockefeller Institute for Medical Research. He joined the Vanderbilt faculty in 1959.

Dr. Rogers is the author of more than 75 papers, the majority dealing with infectious disease. He is a member of the United States Public Health Service advisory committee on influenza research and the committee on microbiology of the National Academy of Sciences-National Research Council.

In addition to his professional activities, he has been active in civic affairs and has served on the Tennessee State Advisory Committee of the United States Commission on Civil Rights. In 1961 he was designated one of the ten outstanding young men in the United States by the United States Junior Chamber of Commerce.

The annual lecture is dedicated to the memory of Dr. John Kent Lewis who died in 1961. Dr. Lewis was professor of medicine and chief of the Stanford Medical Service at San Francisco General Hospital. With Stanford professors A. W. Hewlett and George D. Barnett, he published some of the early work on vascular sounds, exercise and respiration.

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(Mailed September 29, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Dr. R. Morton Manson of Los Gatos has been named area chairman for the 1966 annual fund for the Stanford University School of Medicine.

With research grants, tuition and student fees meeting part of its operating budget, the Stanford Medical School must count on endowment earnings and private gifts for a significant share of its operating costs. The solicitation for the School is part of the Stanford Annual Fund, started 30 years ago to help provide such support.

This year the Stanford Annual Fund seeks to raise $1.4 million in unrestricted gifts to the University, including Medical School support.

Stanford medical alumni will be solicited personally in South Santa Clara County during the six-week campaign which begins Thursday (September 29).

Dr. Manson is a graduate of Stanford Medical School of the Class of 1945. He is assistant director of medical institutions at Santa Clara County and a clinical assistant professor of medicine at Stanford University School of Medicine. Dr. Manson is married to the former Margaret Roberts, a Stanford alumna. They have two children.

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(Mailed September 28, 1966)

STANFORD UNIVERSITY NEWS SERVICE
FOR INFORMATION CONTACT: Bob Beyers

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FILE COPY

EDITORS: The following story transmitted on Business Wire 9/1/66.

FOR IMMEDIATE RELEASE

STANFORD - Few states can match California in the "glaring discrepancy" between the medically rich and the medically poor--but none are doing more to close this gap, Assistant Secretary Philip R. Lee of the U.S. Department of Health, Education and Welfare indicated Thursday (SEPT. 1) at Stanford.

A Palo Alto physician and Stanford graduate, Dr. Lee said: "It is a tragedy--for which all of us must share in the responsibility--that the lives of millions of the poor could be improved quickly and dramatically without a single major addition to our knowledge of the science and practice of medicine. The barriers here have been barriers in delivery of services, in organization, in communications, in utilization."

In the future, he added, "We must have doctors who recognize that the high child mortality rate of a community can be just as ominous as the high temperature of a single child--that the squalor and frustration of a slum area can be just as dangerous as the constant tension in the pressure-ridden executive--that the continuous presence of poverty can be just as lethal to a community as the continuous presence of a clump of malignant cells."

While Palo Alto has "perhaps the best medical care in the world," he said "We should know that the poor...in Watts, in King City, in Hunters Point, in East Palo Alto--have more than their share of chronic disease, mental illness, mental retardation, orthopedic impairments, as well as other preventable and correctable conditions."

On the positive side, he praised the California Legislature, physicians and others for passage of the so-called Casey Bill, which provides slightly more than $500 million annually in medical assistance to the poor. He said this new act "will make possible what will probably be the most extensive and highest quality medical care ever made available to the poor and to public assistance beneficiaries in the United States."

He also praised "the recent interest in medical schools in developing community medicine" and this summer's Student Health Project for creating broader awareness and action in meeting the medical problems of impoverished families.

His audience included about 90 medical, dental, nursing, and social work students who worked with the project.

It is funded by a $204,000 demonstration grant from the Office of Economic Opportunity to the University of Southern California School of Medicine.

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9/1/66

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

"The Search for Animal Models of Human Disease" will be the subject of the next public lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

Dr. Keith F. Killam, associate professor of pharmacology, will speak Wednesday (Nov. 2) at 8 p.m. in Room M106 of the Medical School Building.

Dr. Killam will describe a new animal model for human epilepsy, the Papio papio baboon from Senegal. He studied the animal while on sabbatical leave last year at the Institute of Neurophysiology and Psychophysiology in Marseille, France.

The Senegal baboon, Dr. Killam says, is the first animal to possess neurological symptoms similar to those of a human disease. The baboon's response to flashing light closely resembles a human epileptic seizure.

Dr. Killam believes studies of the baboon will increase man's understanding of seizure activity and lead to further investigation of the genetic transmission of epilepsy.

"From the pharmacological standpoint," he adds, "the development of new drugs effective in treating and controlling epilepsy should be forthcoming."

Dr. Killam is a consultant to President Johnson's Advisory Commission on Narcotic and Drug Abuse and a member of the computer research study section of the National Institutes of Health. He also is a member of the research advisory committee of the State Department of Mental Hygiene.

He received his B.S. and M.S. degrees at Tufts College and his Ph.D. from the University of Illinois. He has been on the Stanford faculty since 1959.

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(Mailed October 31, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

A serious bottleneck in the development of programs to improve diagnosis and treatment of heart disease, cancer and stroke is the acute shortage of competent radiologists, a Stanford University physician warned today.

Dr. Herbert L. Abrams, professor and chief of the division of diagnostic radiology at Stanford University School of Medicine, said the day has passed when we could agree with the statement that one finger in the throat makes a good diagnostician.

"The demand for complicated medical diagnostic service has increased radically during the past decade, and continues to accelerate," Dr. Abrams said. "The national shortage of radiologists can only become more profound unless the immediate problems of strengthening academic radiology are approached with vigor and intelligence."

He cited figures showing that there are now about 7,000 radiologists in the United States and that 20,000 will be required by 1965. Five hundred are being trained yearly, with an overall loss of about 200 through death and retirement. Present training programs may be expected to produce only half of the radiologists needed by 1975.

Dr. Abrams expressed his views in an article in the current issue of the Journal of Medical Education, a publication of the Association of American Medical Colleges.

He said the diseases covered under the heart, cancer and stroke legislation will require a new breed of specialists in diagnostic radiology, trained in new techniques which have been made available only in recent years.

Radiology has made great gains recently in finding organic pathology, or disease, in the internal soft and fleshy tissues of the body, areas ordinarily invisible to x-rays, Dr. Abrams explained. There are new devices such as the TV-linked x-ray fluoroscope, and new techniques such as the passing of a plastic tube into arteries called catheterization.

Substances which are opaque to x-rays, can be placed into many parts of the body so as to reveal their outlines and shapes. Injected into a patient's aorta, the substances outline the network of arteries in the neck and shoulders and lead to the diagnosis of the cause and site of blocked circulation.

Some of the softest tissues in the body, the gastro-intestinal system, can produce the vaguest discomforts, sharpest pains, and most severe illnesses. Many of these can be seen via x-ray, thanks to barium preparations. A swallowed glass of chilled and slightly sweetened "barium cocktail" will lend its opacity to every indentation of the gastrointestinal tract.

-MORE-

The making of x-ray pictures of blood vessels, an area in which Dr. Abrams has pioneered at Stanford, has revolutionized radiology, and even the brain, one of the body's organs most invisible to x-rays, can be seen on angiograms. Arteries that have been shoved aside by growths, huge clots suffered during injury, and ballooned, burst or pinched arteries and veins can now be seen with the help of opaque solutions.

In a new form of angiography, called lymphangiography, opaque iodine compounds are seeped into the lymphatic system. Since some cancers may send their seeds through the lymph vessels, x-ray pictures of the lymphatic system can show whether an existing cancer has spread or not and, if so, where and to what extent.

"With medicare, many of the old people who could not afford involved radiologic examinations will have them more or less totally funded," Dr. Abrams said. "In the cancer patients, the number of procedures will almost certainly be far higher than in the younger segments of the population. Here, too, vessel disease abounds and vascular radiologic procedures will multiply.

"The heart, cancer and stroke centers, as they develop, can do no better than the quality of their radiologic diagnosis. They may well push facilities and personnel available for cerebral arteriography, angiocardiography, etc., far beyond their capacity."

How can the shortage of radiologists be alleviated? Medical students, Dr. Abrams suggested, "should be exposed early in the curriculum, and consistently throughout their years of medicine, to an intellectually advanced and stimulating faculty in radiology, participating in anatomy, physiology, pharmacology, pathology, and every segment of the clinical years."

The development of strong academic departments in radiology will require a new look at the organizational framework. "Ideally, diagnosis should be organized in the following subdivisions of radiology: cardiovascular, gastrointestinal, pediatric, neuroradiology, etc.," Dr. Abrams said.

"The proper objective should be balance," he said. "Some individuals may be involved in teaching and patient care for the bulk of the time. Some may be committed purely to research. The majority will participate equally in teaching, research, and patient care."

Dr. Abrams emphasized that a searching look at values is required. "The department must have strong university support and there should be a vast investment in teaching, over and above the 50 conference hours per week which are commonplace for any active university department of radiology," he said.

"The calendar of radiology has moved more slowly than the times; it must be brought up to date," he added.

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(Mailed October 27, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)
Editors: Photographs are available on request

A new school of medical technology opened this fall at the Palo Alto-Stanford Hospital Center. The school has a "pilot" class of three carefully selected college graduates with backgrounds in biology and chemistry.

The program consists of 12 months of lectures and practical training focused on clinical biochemistry, hematology, bacteriology and blood banking. Instruction is conducted on a full-time, 40 hours per week basis.

The students are learning to perform the basic blood, urine and tissue tests required by physicians for the diagnosis and treatment of patients. They also are trained to take electrocardiograms and to operate equipment used in pulmonary function and radioisotope studies.

The school was organized by the Department of Clinical Laboratories to help meet the current nationwide demand for medical technologists and training programs. It is supervised by Miss Kay Stevens, a Stanford graduate and medical technologist for six years.

The teaching staff includes five members of the Stanford medical school faculty, and students are encouraged to attend supplementary lectures and seminars offered by the medical school.

The new school has been approved by the State Department of Public Health and the American Society of Clinical Pathologists, a branch of the American Medical Association. This means the students will be eligible for state licensure and ASCP certification upon completion of the course.

The hospital plans to enlarge its program to include 12 students next year. Applicants must be graduates of an approved college or university and have completed certain science and math requirements.

Students in this year's "pilot" class are:

CHARLES BLANKENSHIP, 3227 Stockton Place, Palo Alto
VIRGINIA MAROVICH, 555 St. Claire Dr., Palo Alto
SUSAN WALLIS, 1376 Sierra, San Jose

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(Mailed October 26, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FOR AM RELEASE MONDAY OCTOBER 24, 1966

An opportunity to spend a year in Venezuela, an exotic nut tree, and the search for a drug against cancer--all of these combined to produce a unique laboratory detective story involving a Stanford University pharmacologist.

The story was described today by Dr. Lewis Aronow, associate professor of pharmacology at Stanford University School of Medicine, at the 9th International Cancer Congress in Tokyo, Japan.

Dr. Aronow's account did not tell of "breakthroughs" or "cures." It rather exposed an aspect of scientific life that is little known to the public: how scientific discoveries are made.

It all began in 1964 when Dr. Aronow arrived in Caracas to spend a year as a visiting professor at the Jose Vargas School of Medicine. Among items of local lore he picked up shortly after his arrival, one particularly caught his attention. It had to do with a tree called the Coco de Mono, or monkey nut tree.

The Coco de Mono bears a delicious nut, very much like a Brazil nut. Unfortunately, nuts from some of the trees are poisonous, and can cause violent nausea and vomiting, Dr. Aronow said. Occasionally someone dies after eating them. Those who survive are miserable enough without the most prominent and humiliating symptom of all--complete, if temporary, hair loss.

It was this symptom that Dr. Aronow particularly noted. There aren't many substances which make people lose their hair, he said. Of the handful that do, most are anticancer drugs. Hair loss occurs because the hair follicles are rapidly metabolizing cells, just like cancer cells. He reasoned that the Coco de Mono poison, whatever it was, might make a good candidate for a drug against cancer.

The Stanford pharmacologist set up his laboratory in Caracas and, working with Venezuelan colleagues, particularly Dr. Francisco Kerdel-Vegas, a dermatologist who first alerted him to Coco de Mono, he prepared various extracts from the nuts. He discovered that the water soluble portion contained a potent cell poison. Using standard chemical techniques he isolated a nearly pure form of the poison, which could be crystallized.

(This work was first reported in an article in the journal Nature in 1965 and Drs. Aronow and Kerdel-Vegas were awarded a gold medal and a cash prize by the Venezuelan Society of Dermatology, Venereology, and Leprology for their discovery.)

-MORE-

A group of chemists at Wyeth Laboratories identified the cell-destroying chemical as a selenium-containing amino acid, seleno-cystathionine, which turned out to have been previously isolated from poisonous weeds and cattle forage in parts of the western United States.

When Dr. Aronow returned to Stanford from Venezuela, he began to study the compound's effects on animal cells and its possible use as an anticancer drug. He found that an ordinary sulfur-containing amino acid, cystine, was an effective antidote for seleno-cystathionine poisoning. He also showed that cystine prevented the chemical's toxic action by inhibiting a certain enzyme which was necessary to convert the selenium-containing amino acid into an active form.

This work, Dr. Aronow explained, demonstrated that the compound is toxic only to those cells or organs that have this particular enzyme. If one could find some tumor specimens with this kind of enzyme activity, then the selenium-containing substance might be a useful drug for this type of tumor.

"Our results so far show that only liver tissue has high amounts of the enzyme and no tumors," Dr. Aronow reported. "Thus the material is highly toxic to the liver, and will in all likelihood not be a useful anticancer drug."

Still, Dr. Aronow regards the work as highly successful in spite of having shed no light on the sinister secrets of cancer. "It has increased our basic understanding of the role of the two elements, sulfur and selenium, in animal metabolism," he said.

In addition, the study has certain implications for Venezuelans. Cystine can be used as an antidote in cases of accidental poisoning and might be useful in livestock diseases due to selenium-containing compounds.

Dr. Aronow's story is an example of how scientific research works. The way to great discoveries is opened by many part answers to processes which man only partially understands.

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(Mailed October 20, 1966)

Dr. Lewis Aronow
(1)

Culprits from the monkey nut tree
(2)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

A powerful computer to help physicians and basic scientists cope with the explosively growing body of medical knowledge will be installed at the Stanford University School of Medicine.

The new project, whose applications will range from data analysis in biochemical research to acting as a superconsultant in the care of patients, was announced today by Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine.

"It will be one of the largest installations in a medical school," Dr. Glaser said, "with a memory almost equal to all computers now available at Stanford. Organized so that it will complement rather than duplicate existing services, the new computer will eventually provide a compendium of medical knowledge already far too great for any individual physician or researcher to keep in his mind."

The new program, which will be known as Advanced Computer for Medical Research, has been made possible by a grant of $445,000 for the first year from the division of research facilities and resources of the National Institutes of Health. A planning grant of $80,000 from the Josiah Macy Jr. Foundation of New York provided the impetus for the initial planning and staffing.

The computer was manufactured by International Business Machines Corporation. The computer program, far more ambitious than the other known undertakings in medical uses of computers, will be developed at Stanford.

The responsible investigator for the project is Dr. Joshua Lederberg, Nobel Prize winning geneticist and professor and head of the Department of Genetics. He will chair a committee of scientists from key Medical School departments and the Stanford Computation Center, who will coordinate the activities and use of the system.

The intent of Stanford's medical computer, Dr. Lederberg explained, is to develop techniques that will substantially increase and improve collection and analysis of results of many experiments from different laboratories simultaneously.

As new programs are put into the computer and their value tested, they will become available from the Stanford Computation Center, while the medical installation will be used for further systems research and other special applications.

Through the process of "time-sharing," the medical computer will constantly monitor scores of scientists' instruments, which will be located in the Medical Center and connected by cables to the machine. The system will permit a dialogue between doctor and computer during the experiments.

-MORE-

For example, Stanford anesthesiologists are now developing methods of direct connection between patient and computer while surgery is underway so that surgeons will almost have forewarning of heart failure and be able to act to head off the effects and save the patient.

Beyond this stage, the investigators see almost unlimited research possibilities for use of mathematical processes in diagnosing and treating heart disease.

One such method, developed by a Stanford researcher, will enable physicians to analyze electrocardiograms by mathematical accuracy greater than visual analysis which now might vary from doctor to doctor. Other uses of the medical computer will include:

--Studies of the mechanisms of normal breathing. When a person breathes, many events take place at once. It is possible to record each of these (such as rate of air intake and lung expansion, and changes in pressure intake within the chest) and analyze them by feeding the data into the computer.

--Behavioral studies related to brain function and mental development.

--Neurophysiological studies of the pattern of discharge in single nerve cells in the brain which may lead to a better understanding of sensory and learning processes; also research in the cellular processes which are involved in the production and control of abnormal electrical discharge in epileptic patients.

--Studies of the effects of a variety of environments such as polluted air on human breathing.

--A program, supported by the National Aeronautics and Space Administration, which will apply methods of medical research on proposed missions for the biological exploration of space.

Plans are also under way to develop a computerized medical reference library which will give physicians answers to basic decisions they must make by a process of ruling out everything that is not pertinent.

In addition, the computer has a great potential for medical education. Medical students, for example, eventually might use the computer system for training exercises with computer-simulated "patients" who could be assigned virtually any set of symptoms known to medicine.

Gio Wiederhold will be associate director of the advanced medical computer facility.

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(Mailed October 19, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

The Stanford University School of Medicine will inaugurate its second season of public lectures on "Progress in Medicine" Wednesday (October 26).

Dr. Avram Goldstein, professor and executive head of the Department of Pharmacology, will discuss "Drugs and How They Act" at 8 p.m. in Room M106 of the Medical School Building.

The lectures, featuring members of the Stanford medical school faculty and distinguished visiting professors, will be given each Wednesday during the academic year from 8 to 9 p.m. in the same location. Each department will offer three to four lectures.

Although the lectures are offered primarily for the community as a public service, Stanford undergraduates may enroll for credit, according to Dr. LeRoy A. Pesch, associate dean.

The lectures were initiated a year ago by Dr. Joshua Lederberg, Nobel Prize winning geneticist, "in the hope of giving an opportunity to leaders in academic medicine to share their own insight and perspective with the community." Again this year Dr. Lederberg will present some of the lectures.

"Today many exciting developments in medicine are being brought into being in laboratories and hospitals throughout the world," Dr. Lederberg said. "Public understanding of these developments is of the utmost importance for intelligent participation in important social decisions."

"Some of the decisions have to do not only with community health and with the public investment in medical research, but also with long range problems of world population, the management of artificial and transplanted organs, and the applications of the new knowledge of cell biology and heredity," Dr. Lederberg said.

Under Dr. Goldstein's direction the Department of Pharmacology conducts a broad program of research into the mechanism of action of drugs--anti-cancer agents, antibiotics, hormones and other substances that regulate metabolic activity, and drugs that affect the mind.

-MORE-

Stanford pharmacologists are also active in training predoctoral and postdoctoral students to meet the urgent national need for pharmacologists, at a time when the effects of drugs and environmental chemical agents are of increasing concern to society.

Dr. Goldstein's own research has been concerned with understanding the fundamental mechanisms of drug action upon enzymes, genes, and the synthesis of proteins and nucleic acids. His present research activities concern the biochemical changes underlying drug addiction and drug tolerance.

Dr. Goldstein came to Stanford in 1955 from Harvard Medical School where he served on the faculty. He received the A.B. from Harvard University in 1940 and the M.D. from Harvard Medical School in 1943. He is the author of numerous professional publications and editor of the international scientific journal "Molecular Pharmacology."

Other lectures in the series for November include:

November 2, "The Search for Animal Models of Human Disease," by Dr. Keith F. Killam, associate professor of pharmacology.

November 9, "The Case of the Venezuelan Nut," by Dr. Lewis Aronow, associate professor of pharmacology.

November 16, "The Use of Drugs in Population Control," by Dr. Sumner M. Kalman, associate professor of pharmacology.

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(Mailed October 19, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: John Dumas (321-1200, Ext. 5736)

The Palo Alto-Stanford Hospital Center announced today that Samuel S. Virts has been appointed assistant director. His initial responsibilities will include community, personnel and patient relations and hospital communications.

Mr. Virts received his Bachelor of Science degree from Northwestern University in 1947. For the past 11 years he served as assistant administrator of O'Connor Hospital in San Jose. Previously he was director of personnel at St. Mary's Hospital in San Francisco, and director of personnel and public relations, St. Mary's Hospital, Evansville, Indiana.

He has held the offices of president of the Hospital Council of Northern California, president of the Central Coast Hospital Conference, chairman of the committee on public education of the California Hospital Association and vice-chairman of the Hospital Commission of Santa Clara County.

An active member of numerous civic and service organizations, Mr. Virts has served as chairman of the San Jose Chapter, American Red Cross; chairman of Blood Donor Recruitment, Four County Regional Blood Center and secretary of the San Jose Branch of the American Cancer Society. He was named distinguished citizen of San Jose in 1958.

Mr. Virts resides at 982 Hilmar Street in Santa Clara with his wife and 5 children.

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(Mailed October 18, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FOR PM RELEASE FRIDAY OCTOBER 21, 1966

Two Stanford University surgeons today reported they revived and implanted successfully cadaver dog hearts in 10 canine patients.

The dogs lived from eight to 38 hours, the surgeons said, but were it not for the limited nature of the experiments, the transplanted hearts would have functioned longer on the basis of observations made during the survival periods.

Dr. Robert D. Wuerflein, postdoctoral fellow in surgery, and Dr. Norman E. Shumway, chief of the division of cardiovascular surgery at Stanford University School of Medicine, termed the research an important step in learning how to remove hearts from cadavers, "banking" them and then restoring them to function.

They reported their findings at the scientific sessions of the American Heart Association in New York City.

The Stanford scientists said that one of the experimental goals was to determine how long after death hearts might be resuscitated when a minimum effort is expended in protecting them.

Accordingly, no effort was made to cool the heart of the experimental animals used in the studies, or to provide them with oxygen for varying periods after death.

Even under these conditions, Drs. Wuerflein and Shumway reported, good function could be restored in four cases out of five one hour after death. After an hour and a half of such planned "neglect," the salvage rate was seven out of 10. After two hours, all salvage efforts were unsuccessful.

"While transplantation of the canine heart has been established as a technically feasible procedure," the Stanford surgeons explained, "the two major stumbling blocks for human application are immunological barriers (the rejection of the foreign organ by the body), and procurement and storage of the donor organ."

-MORE-

The surgeons noted that "except for rare circumstances at present the source of donor hearts for human application must be a cadaver. The first problem of procurement of the donor heart needs a precise definition of how long the heart, which normally requires large quantities of oxygen, can survive outside the body.

"The next stage is to determine the best method of resuscitation and storage and then to attempt transplantation of the stored heart."

The Stanford surgeons tried various approaches. One that proved successful was to remove the heart together with the lungs and trachea (windpipe) as a unit, followed by immersion of the entire ensemble in a special bath to keep it moist and at a constant temperature. Then the windpipe was connected to a mechanical respirator, which supplied oxygen-rich air, and the lungs started "breathing" again.

In 15 to 30 minutes, good heart function was restored. These heart-lung "preparations" were then maintained for periods of from six to 30 hours before an effort was made to perform the transplantation.

Ten hearts thus restored to good function were transplanted into healthy dogs where they proved able to take over circulation, the Stanford surgeons reported. Four transplants functioned adequately for 38 hours.

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(Mailed October 17, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Steve Kumagai (321-1200, Ext. 5734)

Editors: Photographs are available on request.

FOR PM RELEASE MONDAY OCTOBER 17.

A dedication ceremony held at Palo Alto-Stanford Hospital Center today marked the official opening of the new blood bank facilities which were made possible by a $30,000 gift from the Hospital Auxiliary.

Mrs. Alvin Cox, president of the Auxiliary, presented the blood bank facilities to the Hospital Center along with the first unit of blood drawn which was donated by Mrs. Donald Campbell, Auxiliary board member. This was Mrs. Campbell's first blood donation since World War II and she was "impressed with the speed and comfort of the process."

Mr. Robert Klein, president of the Hospital Board, complimented the Auxiliary members for the outstanding assistance they have provided the Hospital Center during the past year. In addition to the blood bank, they have also donated an artificial kidney unit and the coronary care unit recently put into service.

The blood bank, one of only 43 in California and one of the few operated by a hospital, is equipped to draw blood from donors, type, process and store it in temperature-controlled refrigerators until it is needed by sick or injured patients.

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(Mailed October 14, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Dr. Edmund J. Mahon, a San Francisco physician, has been named chairman of the 1966 Annual Fund Advance Gift Program for the Stanford University School of Medicine.

Under Dr. Mahon's direction, volunteers in San Francisco will solicit Stanford Medical Alumni during the six-week medical fund drive which begins October 18.

With research grants, tuition and student fees meeting part of its operating budget, the Stanford Medical School must count on endowment earnings and private gifts for a significant share of its operating costs. The fund drive for the School is part of the Stanford Annual Fund, started 30 years ago to help provide such support.

This year the Fund seeks to raise $1.4 million in unrestricted gifts to the University, including Medical School support.

Dr. Mahon was graduated from Stanford Medical School in 1930. He also served on the Medical School faculty from 1935 to 1955. He lives with his wife, Mary Anne, and daughter, Judith, at 39 Mirabel Avenue in Mill Valley, California.

The Stanford University School of Medicine, rated among the top nine medical schools in the United States, began modestly in San Francisco in 1882 as the Cooper Medical College. Today it occupies with its laboratories, hospital and clinics, the equivalent of two city blocks on the Stanford University campus.

The School has a full-time faculty of 300; a clinical faculty numbering 640; more than 300 men and women pursuing the course leading to the M.D.; 125 Ph.D. candidates; and 450 individuals pursuing advanced programs such as internships, residencies, and postdoctoral fellowships.

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Mailed October 11, 1966

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Editors: Photographs are available on request.

An automated blood analyzer that will perform 12 different chemical tests simultaneously is now in operation at the Palo Alto-Stanford Hospital Center.

The new $30,000 machine will speed up the processing of chemical laboratory tests and substantially reduce their cost to patients, according to Dr. Frederick A. Fox, director of clinical laboratories.

The machine can perform one battery of 12 tests every two minutes, Dr. Fox said. "Before the machine was available, it would have taken one medical technologist approximately four to six hours to perform the same 12 tests."

In addition, the 12 tests would normally cost $76, but now cost $18.

The tests are those most commonly ordered by physicians to assist them in the diagnosis and treatment of patients. Dr. Fox noted that within recent years there has been an increased use of such test batteries for health screening.

"When the tests are used in conjunction with annual physical examinations it is often possible to detect diseases before they become evident to the patient and thus allow for earlier treatment," he said.

Dr. Fox emphasized the need for automation of Palo Alto-Stanford's clinical laboratories to meet the increasing demand for blood chemistry tests and to compensate for the current nationwide shortage of medical technologists.

"Hopefully," he added, "such equipment will free technologists to perform more complicated tests and to participate in the development of new tests." One technologist can operate the new machine, although another is usually on hand for assistance if necessary.

-MORE-

The machine, known as an SMA-12, is fed samples of blood serum from plastic cups placed in a circular pick-up tray. The samples are pumped through an elaborate maze of plastic and glass tubing until they reach a programmed colorimeter which reads the final results.

The results of all 12 tests are automatically recorded on a single graph within 12 minutes after the sample enters the machine. Because of the sequential arrangement of the samples, six are in the system at any given time, allowing the machine to produce one battery of 12 tests every two minutes.

Dr. Fox and his staff tested the machine for six weeks before it was placed in operation. They found the machine's results were more accurate than those determined by manual methods and comparable to those produced by single channel automated equipment.

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(Mailed October 11, 1966)

Oct. 10

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STANFORD MEDICAL CENTER NEWS BUREAU

Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Dr. Richard B. Compton, a Pasadena surgeon, has been named regional chairman of the 1966 Annual Fund Advance Gift Program for the Stanford University School of Medicine.

Under his direction, volunteers in the Los Angeles area will solicit Stanford medical alumni during the six-week medical fund drive which begins October 17.

With research grants, tuition and student fees meeting part of its operating budget, the Stanford Medical School must count on endowment earnings and private gifts for a significant share of its operating costs. The fund drive for the School is part of the Stanford Annual Fund, started 30 years ago to help provide such support.

This year the Fund seeks to raise $1.4 million in unrestricted gifts to the University, including Medical School support.

According to Dr. Robert J. Glaser, vice president for medical affairs and dean of the Medical School, the School's budget has increased six-fold in the past 10 years, but most of the increase reflects grant support (chiefly from the National Institutes of Health). Important as this support has been the failure of private gift support to grow has created a serious "hard money" deficit..

"The private medical schools like Stanford," Dr. Glaser said, "have had a unique role of leadership in American medical education. This role has resulted from the independence and flexibility that has characterized the privately-supported institutions of higher learning. If we are to continue to lead--and in my view we must if we are to justify our existence to the fullest--then it is clear that gift resources have to be strengthened."

more

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Dr. Compton was graduated from the Stanford University School of Medicine in 1945. He has been active both as a PACE (Plan of Action for a Challenging Era) volunteer and medical class chairman. He is married to the former Patricia Adams, a Stanford alumna of the Class of 1942. They have two sons, Charles A., a senior student at Stanford, and Bruce R., now attending high school at San Marino. The Comptons live at 1164 Adair Street, San Marino, California.

The Stanford University School of Medicine, rated among the top nine medical schools in the country, began modestly in San Francisco in 1882 as the Cooper Medical College. Today it occupies, with its laboratories, hospital and clinics, the equivalent of two city blocks on the Stanford University campus.

The School has a full-time faculty of 300; a clinical faculty numbering 640; more than 300 men and women pursuing the course leading to the M.D.; 125 Ph.D. candidates; and 450 individuals pursuing advanced programs such as internships, residencies, and postdoctoral fellowships.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5810)

FILE COPY

Surgical procedures will be telecast live and in color from the Palo Alto-Stanford Hospital Center during the 52nd annual Clinical Congress of the Americal College of Surgeons in San Francisco Monday through Friday (October 10-14).

Produced and sponsored by Smith, Kline and French Laboratories in Philadelphia, this section of the five-day program is under the direction of Dr. Roy B. Cohn, professor of surgery at Stanford University School of Medicine, in association with Dr. Harris B. Shumacker of Indianapolis.

This is the second time that telecasts have originated at Palo Alto-Stanford Hospital Center, the first being in 1960.

A 23-member medical color television unit will televise surgeries performed at the Hospital to viewers in Polk Hall at the Civic Auditorium in San Francisco.

Fourteen operations will be performed by members of the Medical School faculty and surgeons from the Palo Alto community and will be discussed by special panels of surgeons at the meeting.

More than 12,000 members of the College and guests from many countries are expected to attend the meeting and review new surgical developments.

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(Mailed October 7, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Editors: Photographs are available on request.

A new blood bank to meet the Peninsula's growing needs for blood and blood products has just opened at the Palo Alto-Stanford Hospital Center.

Dedication ceremonies are planned for October 17 at 11:30 a.m., followed by an open house and tour.

The bank and related blood drawing facilities were made possible by a $30,000 gift from the Hospital Center Auxiliary. The money came from the profits of the Auxiliary's Gift Shop in the Hospital.

The laboratory facilities of the bank have been in use since early June, but blood could not be drawn there until the State Department of Public Health had inspected and licensed the unit.

The laboratory is used to crossmatch blood from donors and recipients. Every unit must be carefully typed to avoid a transfusion reaction in the recipient. Such a reaction may occur if a patient is given blood of a type different than his own.

Dr. Frederick A. Fox, who is in charge of the blood bank, said the Palo Alto-Stanford Hospital Center will use 11,000 units of blood this year. Just a year ago the total was only 8,500 units.

To help meet this rapidly growing need, the Hospital Center is cooperating with the newly formed Community Blood Reserve of Palo Alto. CBR is a blood assurance program which will guarantee a supply of blood for its members.

When CBR members are called upon for blood donations, they will give blood at the Hospital Center's blood bank. CBR is continuing to solicit members; the program officially went into effect with the licensing of the blood bank.

-MORE-

One of the reasons the demand for blood has increased so much is that there are now between 25 and 30 open heart operations in the Palo Alto-Stanford Hospital Center each month. Each open heart case requires from 10 to 18 units of blood. The blood must have been drawn within 24 hours of the operation as well.

Fresh blood is only one of the needs of the Hospital's patients. Because of the highly specialized medical and surgical services available, there are frequent calls for special types which are difficult to locate because only a small percent of the population has them. Many times some blood fraction is needed instead of whole blood. Such a fraction may contain only red blood cells, or platelets, or have the white cells removed, for instance.

The new blood bank includes a special area in which blood is drawn. There are two donor chairs, each shaped like contour chairs and equipped with a special device which keeps the blood mixed so it will not clot. The device also stops blood flow when one pint has been drawn.

The laboratory area includes refrigerators in which the donated blood is stored, centrifuges and other equipment for crossmatching, and provides space for three medical technologists.

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(Mailed October 6, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Dr. Ralph J. Spiegl, a Palo Alto specialist in internal medicine, has been named Mid-Peninsula chairman of the 1966 Annual Fund Advance Gift Program for the Stanford University School of Medicine.

With research grants, tuition and student fees meeting part of its operating budget, the Stanford Medical School must count on endowment earnings and private gifts for a significant share of its operating costs. The fund drive for the School is part of the Stanford Annual Fund, started 30 years ago to help provide such support.

This year the Fund seeks to raise $1.4 million in unrestricted gifts to the University, including Medical School support.

Stanford medical alumni from South San Francisco to Los Altos will be solicited personally during the six-week medical fund drive which begins Monday (October 10).

Dr. Spiegl was graduated from Stanford Medical School in 1948. He is a clinical assistant professor of medicine at Stanford, and a director of the Palo Alto Medical Research Foundation. He and his wife, Janice, and four children live at 53 Barry Lane, Atherton.

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(Mailed October 6, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- A series of six public lectures on recent advances in surgery will begin Wednesday (November 30) at Stanford University School of Medicine.

Dr. James M. Guernsey, instructor in surgery, will present the first lecture on "Advanced Tumors" at 8 p.m. in Room M106 of the Medical School Building.

Dr. Guernsey will describe various ways of treating cancer, specifically breast cancer and advanced head and neck cancers. He will illustrate his talk with slides and examples from case histories.

The lectures are part of the medical school's PROGRESS IN MEDICINE series initiated last year by Dr. Joshua Lederberg, Nobel Prize winning geneticist and head of the Department of Genetics. Each medical school department will present three to six lectures.

Although the lectures are offered primarily for the community as a public service, Stanford undergraduates may enroll for credit.

Dr. Guernsey has been a member of the Stanford faculty since 1965. He obtained both his undergraduate and M.D. degrees at Stanford and completed residency training at the medical school.

The Department of Surgery has announced the following schedule for the other five lectures:

DECEMBER 7: "Plastic and Reconstructive Surgery," by Dr. Robert A. Chase, professor and head of the Department of Surgery, and Dr. Donald R. Laub, instructor in surgery.

DECEMBER 14: "Why Doesn't the Stomach Digest Itself?," by Dr. Harry A. Oberhelman Jr., professor of surgery, and Dr. George R. Mason, instructor in surgery.

JANUARY 11: "The Artificial Kidney," by Dr. John M. Palmer, assistant professor of surgery.

JANUARY 18: "Heart Surgery," by Dr. Edward J. Hurley, assistant professor of surgery.

JANUARY 25: "Kidney Transplantation," by Dr. Roy B. Cohn, professor of surgery, and Dr. Samuel L. Kountz, assistant professor of surgery.

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(Mailed November 23, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Susan Heilmann (321-5311)

The Board of Directors of the Palo Alto-Stanford Hospital Center has awarded a $146,398 contract for construction of additional physicians' on-call quarters to Welch Construction Company of Menlo Park. Announcement of the contract award was made by Frank Vitale, Associate Director of the Hospital Center.

Lowest in a field of nine competitors, Welch won the bid for an expansion project which will more than double the lounge and sleeping facilities for residents and interns on duty at the hospital during the on-call hours of 5 p.m. to 8 a.m.

According to Vitale, plans call for the new quarters to be constructed atop the West Wing of the Hospital Center. The addition will cover 4,424 square feet and will contain 21 single rooms and two double rooms that have either patio or outside exposures. Facilities include a lounge with separate reading and television areas and room for ping pong or pool tables.

By constructing additional quarters for its on-call staff, the hospital hopes to improve and expand its on-call service. Present on-call quarters can accomodate only 17 of the 25 physicians assigned to nightly duty at Palo Alto-Stanford Hospital Center. The hospital also staffs an on-call complement of approximately 34 other medically-trained personnel to provide for round-the-clock specialists in 32 different fields.

Under the present set-up, severe limitations in sleeping space have often forced on-call personnel to use make-shift sleeping quarters set up in classrooms or other unoccupied areas.

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(Mailed November 18, 1966)

November 18, 1966

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Dr. David L. Bassett, 53, former professor of anatomy at Stanford University School of Medicine, died Thursday at the University of Washington Hospital in Seattle after a long illness.

Dr. Bassett, widely known for his pioneer work in developing photographic three-dimensional studies of human anatomy, was a professor of gross anatomy in the Department of Biological Structure of the University of Washington School of Medicine. He moved to Seattle from Stanford in 1959.

Dr. Bassett had taught at Stanford Medical School since 1939. With William B. Gruber of Sawyer's Inc., he authored in 1952 "A Stereoscopic Atlas of Human Anatomy," a unique four-book atlas of anatomy which makes use of stereoscopic color transparencies.

Last year the graduating class at the University of Washington School of Medicine named Dr. Bassett as "the outstanding teacher in basic sciences."

He received his B.S. degree in 1934 and M.D. degree in 1939 from Stanford. His father, Dr. Lee Emerson Bassett, who died in 1959, was professor emeritus of speech and drama. He had organized Stanford's Department of Speech and Drama and taught there for 35 years.

Dr. Bassett is survived by his wife, Lucille, a daughter, Roberta, and two sons, Lee and William.

Memorial services for Dr. Bassett will be held Saturday in Seattle, Wash.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- "Probably the most widely practiced form of birth control today is not a contraceptive method, but abortion," a Stanford University pharmacologist said Wednesday night.

Ironically, abortion is practiced at a time when new and effective birth control methods are available and more are being developed such as drugs that will induce temporary male sterilization and possibly, in the more distant future, a vaccine against pregnancy.

Dr. Sumner M. Kalman, associate professor of pharmacology at Stanford University School of Medicine, said "no government as far as I know advocates abortion as a desirable method of population control although it is legal in several countries."

But the number of abortions in Santiago, Chile, for example, is estimated at about half of the number of births, and abortion is illegal in Chile, he said.

In Japan in the late 1940's, there were a large number of illegal abortions, resulting in suffering and maternal death. Legislation which legalized abortion was not intended to control population increase, but to bring a public health problem under medical control.

The number of illegal abortions performed in the United States each year is not known, he said. Most estimates place it close to one million or one abortion for each six live births.

Yet birth control methods have been used in trials in the underdeveloped areas of the world, and are still made freely available where adequate facilities exist, Dr. Kalman said.

Of the devices tested, the contraceptive pill is potentially the most effective, Dr. Kalman said, mainly because it is simple, easy to take, and does not have to be used at the time of sexual intercourse.

"But the very impressive early results with this approach should not blind us to the need for other drugs and devices," he said.

"In Colombia, for instance, the pills failed simply because there is no place to keep them in the home, even if the somewhat complex schedule of taking the drug could be followed."

Dr. Kalman made his remarks at the "Progress in Medicine" lecture series, presented each Wednesday by faculty members of the School of Medicine for the public. His topic was "Use of Drugs in Population Control."

He cited estimates showing that contraceptive pills are gaining acceptance in the United States. About twenty-five percent of women of childbearing age who use contraception are using "the pill."

Oral contraceptives act through suppression of the pituitary gland so that the usual complex pattern of hormone secretion needed for ovulation is upset.

"Thus far no serious toxic effects have been demonstrated, and, at the present time, the drugs are considered safe," Dr. Kalman said.

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He noted that additional actions of the "pills" have been observed. For example, secretions in the cervix become thick and less rapidly penetrated by male sperm, and also the inner lining of the uterus is not properly prepared for implantation of the young embryo.

He cited results of a study done in Puerto Rico in which placebos ("dummy pills") and oral contraceptives were given to two groups of women. Annoying side effects such as nausea, headache were reported by both groups with no significant difference indicating perhaps that these side effects are partly due to fear of this novel contraceptive method.

Dr. Kalman said that in addition to the pills, there has been a renewed interest in intrauterine devices. "They are not as effective as the pills but they are acceptable to public health officials who want to see some effect on the birth rate," Dr. Kalman said.

The Stanford pharmacologist said that while the population of 3 billion in the world today will double in 45 years, it will increase only 50 percent in the more developed areas and by more than 100 percent in the underdeveloped countries. The per capita income for the poorer countries will decline, and their level of nutrition will become worse.

"We can help by providing expert help in both fields, by training people from the underdeveloped countries and by contributing money and food as they are needed," he said.

"But basic and applied research in reproductive physiology and pharmacology of contraception would pay far greater dividends than any other research the government could support. Not only new contraceptive techniques are needed, but also studies of motivation are completely lacking."

Some new approaches listed by Dr. Kalman included:

-- drugs which induce male sterility for fairly long periods of time, the effect being reversible.

-- a synthetic estrogen (sex hormone) that blocks release of pituitary hormones needed for ovulation to occur.

-- use of sex hormones to prevent fertilization after intercourse.

-- a vaccine that would prevent fertilization much in the same way as the body fights a virus.

It has been found, Dr. Kalman said, that a female guinea pig may be immunized so that fertilization by the male is reduced or does not occur. The immunizing agent was a suspension of male sperm cells injected into the female. It was possible to show that there are circulating antibodies in the female guinea pig and also reduction of pregnancies.

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(Mailed November 17, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

Editors: Photo available on request.

STANFORD -- A rare operation in which a physician donated his kidney to save a nurse dying of kidney failure was disclosed today by Stanford University surgeons.

The physician, Dr. Philip Avet, 30, a pathology resident at Louisiana State University School of Medicine, returned to New Orleans Tuesday, only a week after one of his healthy kidneys was removed and transplanted to his sister, Mrs. Marie W. Ooton, 28, of Mountain View, Calif.

"I feel perfectly healthy," said Mrs. Ooton. "I am gaining my strength back. I haven't felt better in years." Surgeons said her new kidney is functioning normally. Dr. Avet and Mrs. Ooton were patients at the Guggenhime General Clinical Research Center of the Stanford University School of Medicine.

On the day the transplant was performed at Stanford, Dr. Avet's wife, Marilyn, gave birth to a baby named Patrick at Charity Hospital in New Orleans. The Avets also have an 18-month-old daughter.

Mrs. Ooton, a registered nurse and former Medical Center employee, had suffered from fatal kidney disease since 1960. Unable to raise the $15,000 needed to buy a home artificial kidney machine, Mrs. Ooton and her physicians agreed that a kidney transplant was necessary to save her life.

Transplantation of kidneys from one human to another, however, is still highly experimental and the surgeons wanted to make sure that the donor and the recipient were familiar with the risk of the operation. Results so far have been encouraging in kidney transplants among relatives, but have been poor among unrelated persons, they explained. The carefully selected related patients, given intensive treatment to subdue the body's natural antagonism to foreign tissue, can now live longer with newer and more effective techniques.

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In spite of the risk of surgery, his wife's pregnancy, and the then unknown factors about his sister's disease, Dr. Avet decided to go ahead with the operation.

"I had no real difficulty deciding," he said. "When I was called to come to Palo Alto, my sister was dying. I always felt close to my sister and believed I owed her a fighting chance. Now I know I made the right choice."

The Stanford surgeons said they have used a slightly modified technique of controlling rejection of the kidney by the host body. The technique was reported last month at the International Congress of Nephrology in Washington, D.C. by members of the Department of Surgery.

The method consists of injecting immunosuppressive drugs via a catheter directly into the kidney. It enables the surgeons to reverse the rejection reaction at the site where it occurs in the transplanted organ. With previous techniques, drugs given orally suppressed the immunity of the entire body and the patient was susceptible to infection.

This was the 11th successful kidney transplant among relatives since the program began at Stanford more than two and a half years ago. It was the first transplant in which a physician was the donor and a nurse the recipient. All of the patients now live normal lives.

Mrs. Ooton lives with her husband, Thomas, a sanitation engineer, and their 20-month-old son, Timothy, at 891 Rengstorff in Mountain View.

The Avets live at 1900 Perdido Street in New Orleans, La.

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(Mailed November 15, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- Dr. Philip R. Lee, assistant secretary for Health and Scientific Affairs of the U.S. Department of Health, Education and Welfare at Washington, D.C., will be the principal speaker at the annual Big Game Get-Together of the Stanford Medical Alumni Association Friday (November 18).

Dr. Lee will speak on "Public-Private Partnership for Medical Care" at an alumni-faculty luncheon in the Cabana Hotel at Palo Alto.

The day-long meeting will begin with registration at 9:30 a.m. in the Medical School Courtyard, followed by combined Grand Rounds by the clinical departments of the School of Medicine in Room M106.

Presiding at the luncheon will be Dr. Henry Gibbons, III, of San Francisco, president of the Stanford Medical Alumni Association. He will introduce Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine, who will discuss "The State of the Medical School."

Dr. Lee was graduated from the Stanford Medical School in 1948 and is a specialist in internal medicine. He was on the Palo Alto Medical Clinic staff from 1956 to 1963 and is an assistant clinical professor of medicine at Stanford. Now on leave from the Clinic and from Stanford, he has been serving as the highest-ranking physician on the staff that administers the medicare program.

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(Mailed November 15, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

"The Use of Drugs in Population Control" will be the subject of the Wednesday (Nov. 16) public lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

Dr. Sumner M. Kalman, associate professor of pharmacology, will speak at 8 p.m. in Room M106. This is the last of four lectures presented by the Department of Pharmacology. The next six lectures, beginning November 30, will be sponsored by the Department of Surgery.

Dr. Kalman will discuss the problem of population growth in underdeveloped areas of the world, briefly review human reproductive physiology, and describe current research on population control.

The speaker's interest in population control is an outgrowth of several years study of sex hormones. He is currently conducting a seminar on the topic for Stanford students.

Dr. Kalman received his M.D. from Stanford in 1950 and has been a member of the faculty since 1954.

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(Mailed November 14, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 321-5310

FILE COPY

STANFORD-- Electric shock directly applied to the chest can successfully restore normal heart beat in patients with implanted artificial mitral valves, according to two Stanford University physicians.

Dr. Blaine Braniff, postdoctoral fellow in medicine, and Dr. Herbert N. Hultgren, associate professor and chief of the division of cardiology at the School of Medicine, reported that they were able to restore normal heart rhythm in 41 of 60 patients with atrial fibrillation in which the technique was used.

"After an average follow-up period of 10 months 24 of the patients treated still had a normal heart beat," the physicians said.

A major problem in mitral valve replacement was that many of these patients' heart beat would remain irregular after surgery. The condition, if left untreated, could lead to clot formation and strokes. There are more than 10,000 patients in the United States who are alive today with artificial valves.

Drs. Braniff and Hultgren said they had less success in restoring normal heart beat in patients who had irregular rhythm for more than five years before mitral valve replacement. These patients, they explained, develop a weak and enlarged left atrium or pumping chamber as a result of prolonged faulty valve function, and the abnormal rhythm that results is not as easily corrected.

The technique, known as cardioversion,is applied under anesthesia. Two electrodes are placed on the anterior chest and between the patient's shoulder blades. The electric shock, traveling through the heart between the two electrodes, stops it momentarily from beating and allows the normal pacemaker to resume activity.

Restoration of normal heart rhythm has been carried on previously with drugs, but the new technique is now uniformly accepted throughout the country.

Drs. Braniff and Hultgren presented their findings at the fall symposium of the Guggenhime Clinical Research Center at Stanford.

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(Mailed November 11, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Members of the South Palo Alto Lions Club today sent a 3,000 pound crate of medical equipment to India.

The equipment, valued at $5,000, is going to Dr. Radha Pant, assistant professor of biochemistry at the University of Allahabad and former research associate at Stanford University School of Medicine.

Mostly used and surplus items, the equipment was given to Dr. Pant by the medical school, the Palo Alto Medical Research Foundation, Calbiochem, Varian Associates and private donors. Dr. Pant requested the supplies to help further her research on the nutritive value of beans and the output of silk worms.

The Lions Club contributed $1,000 for transportation costs and made all packaging and shipping arrangements, with the assistance of the Palo Alto Transfer and Storage Company and the Oceanic Forwarding Company in San Francisco.

The crate will be shipped November 14 from Oakland aboard the Scandia Lines. It is expected to arrive in Calcutta January 7, and arrangements have been made with a Lions Club there to assure its safe delivery to Allahabad.

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(Mailed November 10, 1966)

FILE COPY

CALIFORNIA COMMITTEE ON REGIONAL MEDICAL PROGRAMS
HEART, CANCER AND STROKE

Temporary address:

Department of Chronic Diseases
Department of Public Health
2151 Berkeley Way
Berkeley, California

Editors: Story transmitted on Business Wire 11/10/66.

FOR FURTHER INFORMATION CONTACT: Nemat O. Borhani, M.D. (Area Code 415) 843-7900

A three-year grant has been awarded to the State of California from the National Institutes of Health to establish planning activities for the development of a Regional Medical Program to improve the level of diagnosis and treatment of heart disease, cancer, stroke and related diseases.

The program will be coordinated by the California Committee on Regional Medical Programs, a state-wide voluntary committee formed to assist medical schools and hospitals in the development of cooperative medical programs under the new federal legislation.

The announcement, made today by Committee Chairman Dr. Robert J. Glaser, vice-president for medical affairs and dean of the Stanford University School of Medicine, said that the grant for the first year is in the amount of $223,400. It is expected that the three-year planning program will be funded with a total of some $650,000.

The fiscal agent for the grant will be the California Medical Education and Research Foundation, a nonprofit organization of the California Medical Association.

The law under which the grant was made is administered by the Division of Regional Medical Programs of the National Institutes of Health. Its purpose is to give the medical profession and medical institutions, through cooperative arrangements, the opportunity to make available to their patients the latest advances in diagnosis and treatment of heart, cancer, and stroke and other major diseases.

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"We are delighted to acknowledge the grant award to the California region," said Dr. Robert Q. Marston, associate director of the National Institutes of Health and Director of the Division of Regional Medical Programs. "This grant makes another significant step toward one of the first goals of the legislation which established the regional programs. It brings another large and important region into the total effort to provide the entire country and all of its people with the opportunity to participate in the potential benefits inherent in the ultimate purposes of the Regional Medical Programs.

"It also reflects the intent of the law as a program is generated at the local level. In this way, all of the health professions of the region are brought together with the major health, research, service, and civic organizations and institutions."

The planning grant, according to Dr. Glaser, is to help the California Committee on Regional Medical Programs undertake:

--studies pertinent to coordinating regional programs,

--investigation of mortality trends, prevalence and incidence of heart disease, cancer and stroke.

--manpower studies to determine how medical care is now being provided to patients in California.

From these studies the California Committee will develop guidelines in the establishment of the regional programs throughout the state. The studies will be conducted by a full-time staff to be employed and located in San Francisco.

Dr. Glaser emphasized that each regional program planned and organized under local leadership will be developed independently by medical schools, research institutions and community hospitals. The committee, through its broad representation, will serve as a valuable resource in the development of regional programs. It will review and approve all institutional applications for heart, cancer, and stroke programs to prevent activities with conflicting purposes, duplication, and gaps.

In addition to Dr. Glaser, the officers of the state committee are Dr. Ralph C. Teall, California Medical Association, vice-chairman, and Mark Berke, California Hospital Association, secretary-treasurer. The committee has 19 members.

(Mailed Nov. 10, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FOR PM RELEASE THURSDAY, NOVEMBER 10, 1966

STANFORD -- Is hemophilia caused by accelerated destruction of the blood clotting protein in circulation or by body failure to synthesize enough of the substance?

This question has been a subject of prolonged debate among medical researchers, but today a Stanford Medical School investigator presented evidence supporting the latter view.

Dr. Judith G. Pool, senior research associate in medicine, told the fall symposium of the Guggenhime General Clinical Research Center that normal persons destroy antihemophilic globulin (AHG) in their circulation at least as rapidly as hemophilic patients.

"It is, therefore, certain that the disease is caused by a failure of the body to synthesize antihemophilic globulin," she said.

Dr. Pool reported studies on two normal volunteers who received transfusions of a large quantity of concentrated AHG prepared from their own plasma. Identical results on both individuals showed that AHG had a half-life of about two and a half hours in their circulation as compared to about 13 hours in hemophiliacs.

Although the decay rate of AHG in hemophilic patients had been determined before, this is the first time such a study was undertaken on normal persons. This was made possible because of the availability of concentrated AHG, an area in which Dr. Pool and her associates have pioneered.

The concentrated AHG permits the scientists to raise the blood clotting protein level in the normal individual without overloading his circulation with liquid normally contained in whole plasma. An overloading of the circulatory system creates a state of nonequilibrium from which it is difficult to measure accurately the decay rate of AHG.

Dr. Pool said the finding has important implications for developing an effective treatment for hemophilia. "We no longer need to be concerned about inhibiting the so-called rapid destruction of AHG because there isn't rapid destruction. What we now need to do is to determine the site of AHG synthesis in the body, find out why the tissue is not performing its job in hemophiliacs and then hopefully correct the condition at birth." She suggested that transplantation of normal tissue from mother to the baby is a distinct possibility.

Hemophilia is a rare hereditary condition found almost exclusively in males. Victims of it lack one of the nine or ten plasma proteins responsible for making blood clot. Patients are very susceptible to injury, but more often bleeding occurs spontaneously, particularly in the joints of the legs and arms. As a result, boys with the condition are often crippled by the time they reach adolescence.

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(Mailed November 9, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FOR PM RELEASE THURSDAY, NOVEMBER 10, 1966

STANFORD -- A Stanford University pediatric research team today reported a new finding that may lead to control of Hurler's disease or gargoylism, an inherited disorder which causes birth defects in one out of 10,000 babies in the United States.

The team, headed by Dr. Irwin A. Schafer, assistant professor of pediatrics at the School of Medicine, studied cultured cells from patients with Hurler's disease and found that vitamin C increased the production of sulfate mucopolysaccharides.

Mucopolysaccharides are chemical substances found in almost all tissue cells in the body. In Hurler's disease abnormally large amounts of these compounds are made by the cells and deposited in tissue, producing blindness, dwarfism, bone, spleen and liver abnormalities, heart defects and mental retardation.

Because of the patient's appearance the term gargoylism has been applied to the condition in the past. The compounds can be detected in urine samples from which a diagnosis of the disease is made. An affected child usually appears normal at birth and, in most cases, by the sixth month shows clinical signs of the disorder.

"When vitamin C was added to the cell cultures, the Hurler's cells produced an abnormally large quantity of mucopolysaccharides," Dr. Schafer said. "This suggests that vitamin C might be specifically involved in the synthesis of these compounds."

more

The research findings published recently in SCIENCE, the journal of the American Association for the Advancement of Science, show that vitamin C stimulated the synthesis of dermatan sulfate, the principal mucopolysaccharide found in excess in children with Hurler's disease.

Dr. Schafer reported on the research at the fall symposium of the Guggenhime General Clinical Research Center at Stanford. The research team included Dr. Julia C. Sullivan, research associate in pediatrics; Drs. Jiri Svejcar and Jorge Kofoed, postdoctoral fellows; and Dr. William van B. Robertson, professor of biochemistry in the Department of Pediatrics.

The study was supported in part by grants from the John A. Hartford Foundation of New York, the National Foundation, and the National Institutes of Health.

The Stanford researchers suggested it might be possible to control the disease by giving patients a diet devoid of vitamin C. They reported clinical studies of a seven and a half month-old baby who has been on such a diet for the past five months.

"The patient is doing well and shows normal growth and development", Dr. Schafer said, "but she continues to excrete the same amount of mucopolysaccharides in her urine. Because of the natural history of the disease, it will take at least another year of study before the results of the treatment are definitely known.

"We are puzzled by this child's response to a diet devoid of vitamin C. By chemical standards she is vitamin C deficient, yet shows no signs of scurvy. It is conceivable that patients with Hurler's disease have a unique metabolism for vitamin C which plays a role in this disorder."

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Mailed November 8, 1966

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (DA 1-5310)

CITY EDITORS AND SCIENCE WRITERS

On November 10 from 12 noon to 5 p.m. the Stanford University School of Medicine will sponsor a symposium on research activities at the Guggenhime General Clinical Research Center. The meeting will be in Room M106 of the Medical School Building

Among the participants will be Dr. Judith Pool, senior research associate in the department of medicine, who will discuss a new finding explaining how hemophiliacs destroy the blood fraction in the circulatory system, which is needed to prevent bleeding, Dr. Irwin A. Schafer, assistant professor of pediatrics, who will speak on a new treatment for controlling Hurler's disease, an inherited disorder which causes birth defects, and Dr. Henry Kaplan, professor of radiology, who will report on immunologic resistance in the treatment of Hodgkin's disease.

Research reports also will be presented on cardiovascular hypertension, epilepsy, and surgery for heart valve replacement.

The Guggenhime General Clinical Research Center is a 31-bed facility in the Stanford Medical Center. It has its own staff, laboratories, and facilities to provide the best possible conditions for scientists from many specialties to conduct rigidly controlled studies on specially selected patients. The work of the Center is supported by a continuing grant from the National Institutes of Health.

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Mailed November 7, 1966

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

The search for an anticancer drug among the nuts of the Coco de Mono tree in Venezuela will be the subject of the Wednesday (Nov. 9) public lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

Dr. Lewis Aronow, associate professor of pharmacology, will speak on "The Case of the Venezuelan Nut", at 8 p.m. in Room M106 of the Medical School Building.

Dr. Aronow will describe his research which began three years ago in Venezuela and is continuing at Stanford.

The Coco de Mono bears a delicious nut, very much like a Brazil nut. However, nuts from some of the trees are poisonous and occasionally fatal. Those who eat them and survive suffer complete, if temporary, hair loss.

It was this symptom that Dr. Aronow particularly noted. Of the handful of substances which make people lose their hair, most are anticancer drugs.

Although subsequent investigation has shed no light on the treatment of cancer, Dr. Aronow's work has furthered scientific understanding in other areas and has produced an antidote for accidental poisoning.

Dr. Aronow has been a member of the Stanford faculty since 1956. He received his B.S. from the City College of New York, his M.S. from Georgetown University and his Ph.D. from Harvard University.

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(Mailed November 7, 1966)

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Sam Virts (321-5311)

To ensure that patients hospitalized Election Day, Tuesday, November 8, can still register their voices at the polls, the Palo Alto-Stanford Hospital Center, in cooperation with its auxiliary and the Palo Alto and Sequoia chapters of the American Red Cross, has devised a special absentee ballot voting program.

Aided by auxiliary and Red Cross volunteers, the hospital plans to make absentee ballot request forms available to all registered voters of Santa Clara and San Mateo counties who enter the hospital by 9 o'clock ~~Monday~~ Tuesday morning.

Plans call for auxiliary members to collect the ballot request forms at the hospital. Red Cross drivers will then take these forms to the county clerk offices in Santa Clara or San Mateo counties and be given absentee ballot forms for the patients to use. On Tuesday, after Hospital Center patients have had the opportunity to vote, the completed ballots will be returned to the court houses for tabulating.

Provision for this type of absentee voting procedure is made in Section 14800 of the State Elections Code.

In addition to receiving the absentee ballot request form, all patients will also be given a covering letter from Dr. LeRoy E. Bates, Director of the Hospital Center. The letter explains the arrangements the Hospital Center has made for its local registered voters and concludes by stating that: "The right to vote is a precious heritage; the hospital is pleased to be able to help you exercise that right."

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Sam Virts (321-5311)

CAPTION

STILL VOTING Although hospitalized at the Palo Alto-Stanford Hospital Center, Stratoon Wynkoop, 1021 Ramona Street, Palo Alto, still plans to vote on Election Day. With assistance from its auxiliary and the Palo Alto and Sequoia chapters of the American Red Cross, the hospital will offer registered voters of Santa Clara and San Mateo counties a special absentee voter service. Part of the team of volunteers who will help patients get their votes to the polls are, from left,

STANFORD UNIVERSITY · SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FOR A.M. RELEASE THURSDAY, DEC. 29, 1966

FILE COPY

WASHINGTON, D.C. - The American Association for the Advancement of Science Wednesday night announced that the 1966 Newcomb Cleveland Prize has been awarded to Dr. David S. Hogness, 41, professor of biochemistry at the Stanford University School of Medicine, for his contribution to the understanding of gene function in viruses and bacteria.

The $1,000 award and bronze medal were presented to Dr. Hogness at the 133rd AAAS annual meeting here for his paper "The Structure and Function of the DNA from Bacteriophage Lambda."

The paper described methods for isolating and studying genes in DNA from bacterial viruses. DNA or deoxyribonucleic acid is the storehouse of genetic information. It is found in the chromosomes of all cells and in many viruses. DNA plays the important role of transmitting the genes from generation to generation through its ability to produce exact replicas of itself.

One gene follows another in the very long thin virus DNA molecule or chromosome. By breaking up this chromosome into smaller fragments and studying the genes in each fragment, Dr. Hogness and his associates have determined the order in which genes occur in the DNA itself.

The information contained in each gene is read by the cell machinery in one direction or the other along the length of the DNA. Dr. Hogness reported experiments in which this direction was determined. Such studies may lead to a better understanding of the processes by which genes are switched on and off to give rise to the variety of different types of cells found in humans and other higher organisms.

A fuller understanding of gene interactions may lead to more basic knowledge of how the human body grows and develops, and how diseases affect these processes. A striking example of the genetic system's getting out of control is the rapid and unregulated cell growth in cancer.

The Newcomb Cleveland Prize is the senior award of the AAAS and was established in 1923 by Mr. Newcomb Cleveland of New York. It is awarded annually to the author of a noteworthy paper representing an outstanding contribution to science. The winner is selected by a committee of judges appointed by the AAAS board of directors.

A native of Oakland, California, Dr. Hogness is a graduate of the California Institute of Technology with a Ph.D. in chemistry. He came to Stanford in 1959 from Washington University in St.Louis, Mo., where he served as assistant professor in the Department of Microbiology. From 1952 to 1954 he worked as a postdoctoral fellow at the Pasteur Institute in Paris under Dr. Jacques Monod who won the Nobel Prize in 1965 for his theories of gene operation in DNA.

Dr. Hogness is the author of numerous papers in the fields of nucleic acids, protein synthesis, and genetics. He is a member of the American Society of Biological Chemists, Genetics Society of America, and a former member of the Advisory Panel on Molecular Biology of the National Science Foundation.

Dr. Hogness, his wife Judith, and two sons, Peter and Christopher, live on campus.

END ADVANCE FOR RELEASE TO A.M.'S THURSDAY, DEC. 29, 1966. ### 12/27/66

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Susan Heilmann (321-5311)

When demand goes up and supply goes down, somebody does without. You can use that principle to talk about automobiles, but not about human blood. Faced with an annual decrease in the number of blood donors and a predictable increase in need, officials at Palo Alto-Stanford Hospital Center are now entering "ulcer season."

Social activities and financial pressures take an annual holiday toll on ulcer-prone individuals. At the same time of year that their need for blood increases, automobile accidents mount and elective surgery goes on an upswing. It's easy to see why "ulcer season" means ulcers for blood bank officials as well.

Almost every local blood shortage can be related to a low rate of blood replacement. The friends or relatives of a patient who draws blood often fail to recognize their responsibility to replace that blood. But local citizens are also lax about building up a blood supply for the future. One hospital official blames this condition on the comparative affluence of the area. "Most people would just rather pay for blood when they need it than donate some now for a future emergency."

Around Christmastime, even the small number of regular donors tends to decrease. "We can't turn money into blood," blood bank officials will tell you. "We do, of course, charge a patient when the blood he uses isn't replaced by donations from his friends and relatives. But when the blood supply runs out, there just isn't any more blood available."

The Palo Alto-Stanford Hospital Center gets most of the blood it uses from either Peninsula Blood Bank in Burlingame, Irwin Memorial in San Francisco, or the Four County Regional Blood Center operated by the Red Cross in San Jose. Its own newly-established hospital blood bank supplies some fresh blood and blood for emergency situations. When a hospital's blood supply gets low, it can usually count on other hospitals in the area to lend a helping hand. But when every hospital's blood supply is low, as is the case every holiday season, the well-being of every patient and potential patient is endangered.

How can the average citizen help? By donating blood at any of the local blood-drawing facilities.

As blood bank officials enter their annual "ulcer season," they feel that the finest Christmas present anyone could give would be a gift of blood. ### 12/22/66

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310) FILE COPY

STANFORD -- The diagnosis and treatment of peptic ulcer will be the subject of the next public lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine.

Dr. Harry A. Oberhelman Jr., professor of surgery, and Dr. Robert Mason, instructor in surgery, will speak Wednesday (Dec. 14) at 8 p.m. in Room M106 of the Medical School Building. The title of their lecture is "Why Doesn't the Stomach Digest Itself?"

The two surgeons will describe the basic physiology of peptic ulcer, which may develop on the wall of the esophagus, stomach or small intestine. They will also discuss some of the recent advances in the surgical treatment of ulcers.

Dr. Oberhelman, a specialist in gastrointestinal surgery, has been a member of the Stanford faculty since 1960 and is the author of numerous publications on gastric secretion and peptic ulceration. Dr. Mason joined the faculty in 1965 after serving his residency in surgery at Stanford.

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(Mailed Dec. 12, 1966)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Susan Heilmann (321-5311) COPY

Blood donors are badly needed for a Redwood City man stricken with a rare bleeding disease, physicians at Palo Alto-Stanford Hospital Center reported today.

Technologists at the Hospital Center blood bank report that their supply of Type-O positive blood has been exhausted, and they have issued an urgent call for anyone who will donate blood.

The patient, Piet Van den Ende, 44, has used more than 100 pints of blood in the past month fighting internal bleeding from the small blood vessels in his stomach and intestines. He suffers from hemorrhagic telangiectasia, commonly known as Osler's disease.

A native of the Netherlands, Van den Ende has lived on the Peninsula for the past 24 years, and was employed by the Western Pacific Railroad before being stricken by the bleeding condition. Described by doctors as "a very courageous person," he has been hospitalized numerous times during the past two years, and during that time has received nearly 500 pints of whole blood.

Because he can lose up to 20 pints, or twice his total body blood supply, in a 24-hour period, it has been impossible for Van den Ende to find enough donors to replace the blood he has drawn.

Hospital Center technologists explained that although Van den Ende's blood type is Type-O positive, a blood donation of any type can be credited to Mr. Van den Ende. Donations may be made at Peninsula Blood Bank in Burlingame, Irwin Memorial in San Francisco, the mobile bloodmobile, or at the Hospital Center.

During the past month, 1,047 pints of blood were needed by patients at Palo Alto-Stanford Hospital Center. In that same period only 100 pints were donated to the Center's blood bank. As one official stated, "The Peninsula chronically suffers from a shortage of blood. Now, with the approach of the holiday season and a predictable increase in the number of automobile accidents, our shortage is especially acute."

(Mailed December 6, 1966)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Stanford University has awarded a $39,120 contract for construction of special housing for the medical research computer to Harrod and Williams, Inc., general contractors of Sunnyvale.

The powerful and versatile computer--an IBM 360/50--is being installed at the Stanford University School of Medicine to help doctors diagnose disease and explore new avenues of medical computer research.

The computer will be located in an 1,800 sq. ft. glass enclosure in the breezeway between the Medical School and the Clinical Sciences Research Building, and will be easily visible to visitors while in operation. The enclosure will be equipped with acoustic tile, and special ventilating and air conditioning system.

When it has been fully developed after three years and a cost of about $1.5 million, the computer will provide a compendium of medical knowledge far too great for any individual physician or researcher to keep in his mind, according to Dr. Robert J. Glaser, vice president for medical affairs and Dean of the School of Medicine.

The computer will analyze many experimental results from many different laboratories simultaneously. It will also process data from medical instruments hooked up to patients, enabling doctors to monitor critical body functions more accurately during surgery or acute illness.

Dr. Joshua Lederberg, Nobel prize winning geneticist and professor and head of the Department of Genetics, is the responsible investigator. He heads a committee of scientists from key Medical School departments and the Stanford Computation Center.

The new computer is being financed by grants from the National Institutes of Health and was planned with funds from the Josiah Macy, Jr. Foundation.

Architect for the project is Milton T. Pflueger of San Francisco.

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(Mailed December 6, 1966)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310) FILE COPY

STANFORD -- A baboon from West Africa may lead scientists to a more effective treatment for human epilepsy, predicts a pharmacologist at Stanford University School of Medicine.

The baboon is a new animal model for human epilepsy, which for the first time has symptoms that both match the disease rather closely and appear to be a species characteristic, reports Dr. Keith F. Killam, associate professor of pharmacology.

Epilepsy, a disease of the nervous system, causes sudden loss of consciousness usually accompanied by convulsive motions of the muscles. It is traditionally studied by inducing seizure activity in laboratory animals either through electrical, chemical or surgical means. However, these approaches have not produced models close enough to the human disease.

The new animal model was accidentally discovered last year by Dr. Killam, his wife, Dr. Eva King Killam, and Dr. Robert Naquet, a specialist in human epilepsy at the Institute of Neurophysiology and Psychophysiology in Marseille, France. Dr. Killam and his wife, while on sabbatical leave from Stanford, were studying the effect of drugs on cats, primates and man in the laboratory of Dr. Naquet.

"As part of our routine testing of the primates," Dr. Killam said, "we flashed light at the animals. Much to our surprise four out of 10 went into convulsions. These were the first cases in which normal animals responded with convulsive seizures to flashing light. From then on our entire course of study changed."

Light sensitivity is characteristic of 60 to 70 percent of all epileptic patients. For about 80 percent of this group, flashing light will trigger a full-blown seizure.

All 10 primates tested were baboons of the Papio papio species from the Casamance region of Senegal. In order to determine whether or not their response to flashing light was related to age, diet, stress or other variables, the investigators decided to examine the animals in their native habitat.

They tested 60 Papio papios in the city of Dakar and 40 in the interior of Senegal. Seventy percent of the animals exhibited a positive response. The response was shown to be independent of site of testing, as well as sex, age, diet, length of capture and degree of handling.

Two other species of monkeys from the same geographic region were also examined and found to be negative.

Returning to Marseille, the scientists tested 40 more Papio papios and compared their responses symptom for symptom to those of epileptic patients. They found a close similarity between brain wave patterns, sleeping records and reactions to certain drugs.

-MORE-

In fact, Dr. Killam noted, the only significant difference was the frequency of light which triggered a seizure. The baboon seizure was triggered at about 25 cycles per second, the human seizure at about 15 cycles per second.

(The research team's findings are reported in the current issue of Epilepsia and will soon appear in the journal of Electroencephalography and Clinical Neurophysiology.)

Dr. Killam and his wife are continuing their studies at Stanford with 10 baboons they brought back from Senegal. Eight of these are Papio papios and two are Papio anubis. Four of the Papio papios show maximum seizure response to flashing light, two show no response and two respond only under certain conditions. The Papio anubis are negative.

The researchers have also tested the chimpanzee population at Holloman Air Force Base in New Mexico and the baboon colony at the Southwest Foundation for Research and Education at San Antonio, Texas. At San Antonio, they examined Papio papios and two other genetic variants of baboon also from West Africa, the Papio anubis and the Papio cynocephalus.

Seven of the 12 Papio papios, two of the 10 Papio anubis and one of the 12 Papio cynocephalus exhibited a positive response. All the chimpanzees were negative.

From these tests, Dr. Killam concludes the Papio papio's sensitivity to light is a species characteristic. He predicts this finding will lead to further research on the genetic transmission of human epilepsy and the possible biochemical differences in the epileptic brain.

"From a pharmacological standpoint," he adds, "the discovery of the new animal model will open a whole new field of drug development."

Most of the time, Dr. Killam explains, a neurologist treats a patient after he has had an attack; he has no way of studying how the first attack might be avoided. "With an animal species that shows such a high percentage of naturally occurring epilepsy, we can now approach this problem experimentally. When we know more about the origin of seizure activity, then the development of new drugs effective in preventing as well as controlling epilepsy should be forthcoming."

Dr. Killam's work is supported by a grant from the National Institute of Mental Health of the U.S. Public Health Service.

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(Mailed December 6, 1966)

One of the Papio papio baboons helping scientists in the study of human epilepsy. This is an adolescent, about three years old.

(1)

Light sensitive baboon from West Africa sits comfortably in special testing chair during studies conducted by Dr. Keith F. Killam at Stanford University School of Medicine. The framework of the chair is designed at an angle to prevent the collar from irritating the animal's neck, and the seat may be adjusted to different sizes.

(2)

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Baboon Model for Human Epilepsy

Please send me 8x10 glossy prints of (1)_____ and (2)_____ above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310) FILE COPY

Advances in the field of plastic and reconstructive surgery will be the subject of a public lecture next Wednesday night (Dec. 7) at Stanford University School of Medicine.

Dr. Robert A. Chase, professor and executive head of the Department of Surgery, and Dr. Donald R. Laub, instructor in surgery, will speak at 8 p.m. in Room M106 of the Medical School Building. Their talk will be the second in a series of six public lectures on surgery sponsored by the medical school.

Drs. Chase and Laub are primarily interested in surgery as it relates to the rehabilitation of patients both functionally and socially. They will discuss new developments in restorative surgical procedures such as skin grafting, cosmetic surgery, hand surgery, and the reconstruction of missing parts.

They will also describe current research on the transplantation of kidneys in rats, which requires microscopic surgery on tiny blood vessels.

Dr. Chase has been a member of the Stanford faculty and head of the Department of Surgery since 1963. Dr. Laub joined the medical school faculty in July.

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(Mailed Dec. 2, 1966)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)
Editors: Photos available on request.

Four months ago Mr. and Mrs. William Ward of Bremerton, Wash., were told their 9-year-old daughter Renee would die before Christmas if she did not have a kidney transplant operation.

Today Renee has the hope of leading a normal life. In an operation performed at Palo Alto-Stanford Hospital Center November 29, she received a healthy kidney donated by her mother, Marjorie Ward, 29. Stanford surgeons report Renee's new kidney is functioning normally.

"Many of our friends asked us why we wanted to do this when kidney transplants are still experimental," Mrs. Ward said, "but the operation was the only chance we had. We had no trouble making the decision."

Renee was born with cystinosis, a rare genetic disease that causes crystals to build up in the kidneys and other body tissues. The crystals gradually destroy the kidneys until they eventually stop functioning. The normal life span for victims of the disease is about 10 years.

Renee felt well until last June, her mother said, then she became increasingly tired. She began attending school on a half-day basis in September and finally had to stop in November.

Physicians at the University of Washington School of Medicine sent Renee and her parents to the Palo Alto-Stanford Hospital Center. The University Hospital in Seattle does not perform transplants, although it does treat kidney disease patients with the use of an artificial kidney unit. The unit duplicates the essential blood-cleansing process of healthy kidneys, but it can not remove cystine crystals.

The Stanford surgeons believe Renee's operation will lead to further understanding of the disease itself, in addition to saving her life. Little is known about cystinosis, they said. It may be either a kidney disease or a general metabolic disorder.

The surgeons describe the case as significant because surgery has been used to correct an inborn error in metabolism. This is the first time a kidney transplant has been performed on a patient with cystinosis.

The first obvious improvement after the operation, the surgeons reported, was the complete elimination of photophobia, an inability to tolerate light, caused by the accumulation of cystine crystals in the cornea. Renee no longer squints in the sunshine or cries when the lights are on, the surgeons said.

This was the 12th successful kidney transplant among relatives since the program began at Stanford more than two and a half years ago. Renee is the youngest of the patients to undergo the operation at the Hospital Center. All the patients today lead normal lives.

Renee has two brothers Danny, 10, and Mark, 6, who have been staying with their grandparents Mr. and Mrs. B. L. Miller, 2207 E. 24th, Bremerton. The Wards live at 3021 Nipsic Ave., Bremerton.

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(Mailed Dec. 19, 1966)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- "A New Look at Skin Diseases" will be the subject of the next public lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine Wednesday (Feb. 1).

Dr. Eugene Farber, professor and executive head of the Department of Dermatology, will speak at 8 p.m. in Room M106 of the Medical School Building.

Dr. Farber will describe some of the laboratory techniques used to determine the cause and treatment of skin disease. He will also discuss recent research on hair, blistering disorders of the skin, and the effects of smoking on the skin. Several patients will be present.

This is the first of two lectures on advances in the field of dermatology. Dr. Alvin J. Cox Jr., professor of pathology in the Department of Dermatology, will speak on "The Skin as a Mirror of Internal Disease," February 8.

Dr. Farber has been a member of the Stanford faculty since 1948. He is currently president of the Society for Investigative Dermatology, an international organization of scientists involved in skin research.

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(Mailed January 30, 1967)

PALO ALTO-STANFORD HOSPITAL CENTER
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Susan Heilmann (321-5311)

FILE COPY

"What is it like at the hospital?" a child wants to know.

To answer this question, and to help children anticipate what a hospital stay entails, Palo Alto-Stanford Hospital Center, Palo Alto, California, has begun to make a special illustrated reader part of every pediatric patient's orientation.

Entitled "What is it Like at the Hospital?", the 17-page booklet is being presented to all youngsters admitted to the Hospital Center. Plans are being made to distribute copies to local physicians as well.

Fully-illustrated and set in large, easy-to-read type, the publication offers concrete information about the pediatric ward, its facilities, staff and routine. It answers such questions as "Why Must I Go to the Hospital?", "What Do Children Do All Day in the Hospital?", and "What is it Like to Have an Operation?".

Written by Mrs. Henry Smith of Palo Alto, the booklet is geared to a second-grade reading level. It is also designed to serve as a source of information for parents and a pictorial means of explaining the hospital to pre-school youngsters.

"What is it Like at the Hospital?" came about in connection with the author's preparations for a doctorate in elementary education. While doing graduate work at Stanford University, Mrs. Smith learned that children often have exaggerated notions about the hospital and hospital procedures. She felt that part of the problem might be due to a lack of suitable reading materials, for public libraries have very little access to booklets which can help parents explain the hospital to their children. Furthermore, practically no material pertaining to hospital procedures is written for a child's level of understanding.

Mrs. Smith decided, therefore, to research a booklet which would help familiarize children with the hospital. When her manuscript was completed, she offered it to officials at Palo Alto-Stanford Hospital Center. Working with Mrs. Smith and medical staff pediatricians, the hospital immediately began plans for the booklet's publication.

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Mailed January 25, 1967

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Dr. Roy Cohn, professor of surgery and researcher in organ transplantation, will give the next public lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine, Wednesday (Jan. 25).

Dr. Cohn will speak at 8 p.m. in Room M106 of the Medical School Building. He will discuss the historical, social and ethical aspects of kidney transplantation.

According to Dr. Cohn, the success rate of kidney and other transplantations would be increased if certain legal barriers were resolved, particularly in regard to the use of cadaver kidneys and the definition of death.

Stanford surgeons have performed 20 successful kidney transplants between relatives. Kidney transplants are still regarded as highly experimental, although approximately 1,100 have been performed throughout the world.

Dr. Cohn is a 1933 graduate of Stanford medical school. He was appointed to the Stanford faculty in 1938.

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(Mailed January 23, 1967)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Editors: Story released simultaneously by Harvard Medical School.

A Stanford diagnostic radiologist and specialist in the study of the cardiovascular system has been appointed the Philip H. Cook Professor and chairman of the Department of Radiology at Harvard Medical School. He will serve simultaneously as radiologist-in-chief at the Peter Bent Brigham Hospital in Boston.

The radiologist, Dr. Herbert L. Abrams, is currently professor and head of the Division of Diagnostic Radiology at Stanford University School of Medicine.

Dr. Abrams' academic and hospital appointments have been announced respectively by Harvard University and Peter Bent Brigham Hospital. He will assume his new appointments in late summer, 1967.

At Stanford, where he served since 1948, Dr. Abrams is held in high regard by his colleagues as an outstanding diagnostician, a teacher and investigator.

At Harvard, Dr. Abrams will be responsible for both undergraduate and postgraduate teaching in diagnostic radiology.

A native of New York City, Dr. Abrams received the A.B. degree from Cornell University in 1941 and the M.D. degree from the State University of Medicine in New York in 1946. He received his residency training in medicine at Montefiore Hospital in New York, and in radiology at the Stanford University Hospital in San Francisco.

Dr. Abrams is a co-author (with Dr. H.S. Kaplan) of "Angiocardiographic Interpretation of Congenital Heart Disease," a textbook published in 1956, the editor of a two-volume work, "Angiography," published in 1961, and also a co-author (with Dr. S.J. Robinson and Dr. H. S. Kaplan) of "Congenital Heart Disease," published in 1965.

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(Mailed January 20, 1967)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Heart surgery will be the subject of the next public lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine, Wednesday (Jan. 18).

Dr. Edward J. Hurley, assistant professor of surgery, will speak at 8 p.m. in Room M106 of the Medical School Building.

He will discuss the function of the heart, the use of the heart-lung machine, methods of treating congenital heart disease, and prosthetic valve replacement. He will also show slides and part of a movie on the insertion of an artificial valve.

Dr. Hurley received his M.D. degree from Stanford in 1957. He joined the faculty as an instructor in surgery in 1963 and was promoted to assistant professor in 1964.

In addition to his Stanford appointment, Dr. Hurley is assistant chief of surgery and chief of cardiac and thoracic surgery at the Veterans Administration Hospital. He is an Established Investigator for the American Heart Association and is a member of the board of directors of the Santa Clara County Heart Association.

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(Mailed Jan. 16, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Two Stanford medical alumni have been named to administrative posts at the Stanford University School of Medicine, Dr. Robert J. Glaser, vice president for medical affairs and dean of the Medical School, announced today.

Dr. Thomas A. Gonda, 45, professor of psychiatry, has been named associate dean, and Dr. Gunther W. Nagel, 72, of San Francisco, emeritus clinical professor of surgery, will serve as director of alumni relations.

Dr. Gonda will have a major responsibility for clinical affairs, including relationships between the Medical School and its affiliated hospitals. He will also be concerned with graduate and postgraduate programs.

Dr. Nagel, first occupant of a newly created post, will work on a part-time basis with the Medical School administration to aid in the continuing development of medical school alumni relationships. Dr. Nagel, who became emeritus in 1959, has continued to be active in medical school and alumni affairs.

Dr. Gonda received the A.B., in 1942, and the M.D., in 1945, from Stanford University. He joined the Stanford faculty in 1953 as a clinical instructor in medicine (neuropsychiatry) and advanced through the academic ranks to become full professor of psychiatry in 1965. From 1958 to 1961, Dr. Gonda was acting head of the Department of Psychiatry, and played an important role in arranging the move of the School of Medicine from San Francisco to the campus in Palo Alto.

He was awarded a special fellowship in 1961 by the National Institutes of Health to do research at Oxford University in England. His special field of interest is the study of alterations in behavior associated with changes in the nervous system. Since 1962, he has been director of the psychiatric residency program at Stanford.

Dr. Nagel received the A.B., in 1917, and the M.D., in 1921, from Stanford University. He was a Fellow at the Mayo Clinic in Rochester, Minnesota for six years and during this time he was awarded an M.S. degree in surgery from the University of Minnesota. He practiced surgery in San Francisco and taught many classes of Stanford medical students from 1929 until his retirement.

Dr. Nagel has published numerous scientific papers dealing with gastrointestinal surgery and most recently a book, THE MAYO LEGACY.

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(Mailed January 16, 1967)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- The function and use of the artificial kidney machine will be the subject of the fourth public lecture on surgery in the series PROGRESS IN MEDICINE at Stanford University School of Medicine, Wednesday (Jan. 11).

Dr. John M. Palmer, assistant professor of surgery and director of the artificial kidney unit at the Palo Alto-Stanford Hospital Center, will speak at 8 p.m. in Room M106 of the Medical School Building.

The artificial kidney is a device that duplicates the continuous blood-cleansing action of healthy kidneys. The machine removes wastes and toxins that normally appear in the bloodstream and could cause death if allowed to accumulate.

Dr. Palmer will describe the history and development of the machine, how it is used, and the economical aspects of its use. He will also show slides on the construction and operation of the machine.

A 1960 graduate of Stanford medical school, Dr. Palmer joined the faculty in 1965 as an instructor in surgery. He was promoted to assistant professor in September 1966.

The artificial kidney unit was donated to the hospital by the Palo Alto-Stanford Hospital Center Auxiliary in March 1966.

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(Mailed January 9, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

STANFORD -- "The Control of Pain" will be the subject of the next public lecture in the series PROGRESS IN MEDICINE at Stanford University School of Medicine Wednesday (March 1).

Dr. Jordan Katz, assistant professor of anesthesia, will speak at 8 p.m. in Room M106 of the Medical School Building.

Dr. Katz will describe three current methods of treating pain: 1) eliminating the source of pain by means of surgery or radiotherapy, 2) stopping pain from reaching the brain with local or regional anesthetics and neurosurgery, and 3) modifying pain once it reaches the brain by using general anesthetics, narcotics, tranquilizers or hypnosis.

He will also discuss the historical development of the control of pain and possibilities for future treatment.

A 1957 graduate of Chicago Medical School, Dr. Katz has been a member of the Stanford faculty since 1963.

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(Mailed February 27, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

STANFORD -- A four-bed pediatric research unit for the study of childhood diseases has been established by Stanford University School of Medicine. Construction of the unit was made possible by a $30,000 gift from The Gillette Company of Boston, Mass.

The pediatric unit is an addition to the medical school's Guggenhime General Clinical Research Center, a 31-bed specialized facility supported by the National Institutes of Health for the intensive study of man and his diseases.

Stanford's clinical research center is the largest and most comprehensive in the United States. It occupies the third floor of the Stanford Pavilion of the Palo Alto-Stanford Hospital Center and includes a special unit for the study of premature infants.

The research center has its own staff, laboratories and facilities to provide the best possible setting for scientists to conduct rigidly controlled studies on carefully selected patients. Faculty members from many departments of the medical school participate in the studies.

Several major diseases will be studied in the new unit, among them:

-- Diabetes; the incidence of diabetes in children is high relative to other metabolic diseases. Researchers are seeking more information about the relationship of the carbohydrate metabolism to insulin secretion in the prediabetic child. The pediatric research unit will provide an opportunity to study the diabetic child before he is given insulin.

-- Hypoglycemia, a condition in which the blood sugar is too low. When hypoglycemia is present in early life, the incidence of mental retardation is high. Investigators hope to develop standard diagnostic procedures that will result in earlier detection of the disease.

-- Convulsive disorders, their origin, control and social consequences.

-- Osteogenesis imperfecta, a disease characterized by brittle bones that fracture easily, leading to deformities and progressive disability in the child. Fluoride therapy may help these children, but its use must be critically evaluated, and the necessary observations can only be made in a controlled research environment.

-- Hurler's Syndrome, an inherited disorder characterized by mental retardation, enlargement of the head and body organs, and early death. Researchers intend to study the relationship between vitamin C and the synthesis of mucopolysaccharides, chemical substances produced in abnormally large amounts in children with the disease.

-- Anemia; children with severe iron deficiency anemia lose excessive protein by their excreta. Investigators wish to examine the role of nutrition as it applies to this disease and others. The special diet kitchen in the pediatric unit will be an essential working tool for them.

-- Congenital heart disease in children.

-- Liver disease; basic scientists are developing more accurate laboratory methods for analyzing enzymes in the blood. These methods will enable more exact correlation of enzyme blood levels with liver disease than is presently possible.

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(Mailed February 23, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- The Stanford Medical Faculty Wives organization has established a scholarship fund for a medical student at Stanford University School of Medicine.

Mrs. Hadley Kirkman, president of the group, recently presented a $500 check to Dr. LeRoy A. Pesch, associate dean. The money represents an accumulation of dues over the six year period of the group's existence.

"We wanted to do something more to help the medical school," Mrs. Kirkman said. "We hope the gift will grow in following years and be of lasting assistance."

The group was organized in 1961 "to promote school-wide interdepartmental acquaintance" and "to assist in medical school affairs as needed." Wives of all members of the full-time faculty and the clinical faculty are invited to join. The group has about 300 active members.

Mrs. Kirkman is the wife of Dr. Hadley Kirkman, professor emeritus of anatomy. She has assisted her husband for several years as a laboratory research technician in the Department of Anatomy.

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(Mailed February 20, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

STANFORD -- The common view that one form of cancer--Hodgkin's disease--is incurable and hopeless is statistically unwarranted and should be vigorously challenged, two leading cancer investigators believe.

Drs. Henry S. Kaplan and Saul A. Rosenberg of the Stanford University School of Medicine, have challenged the pessimistic views that, they feel, stem from outdated experience with "crude diagnostic methods and primitive radiation equipment."

Proponents of these "deeply pessimistic" views, based on observations in the first half of this century, have held that Hodgkin's disease is incurable, according to the Stanford researchers, because it recurs in treated areas, spreads in a disconcertingly unpredictable manner, seems systemically distributed from its inception, and instances of apparent cure may be discounted as errors in diagnosis.

Hodgkin's disease is malignancy of lymph nodes, part of an important infection-fighting system in the body. The disease kills about 3,500 persons in the United States each year. Several groups, including the National Cancer Institute, the American Cancer Society, and individual scientists have attempted to make known the possibilities of prompt and proper treatment for this disease.

In recent speeches and publications, Drs. Kaplan and Rosenberg have repeatedly stated their belief that the death rate from Hodgkin's disease could probably be cut sharply if more physicians and their patients knew what they should about this form of cancer. And they add that many failures in treating the disease with radiation are due to the "low energy x-ray beams" used, with which it is difficult or impossible to deliver curative doses.

"Recent analysis of data from a number of radiotherapeutic centers," Drs. Kaplan and Rosenberg said, "reveals a striking inverse relationship between recurrence rate and radiotherapeutic dose." The pooled data of various studies have shown that x-ray therapy with low dosage levels offers no chance of cure except among those few patients who have very early, localized disease.

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As radiation dose increases the recurrence rate falls rapidly and approaches almost zero at a dose level of 4,000 rads (the rad is a standard unit of radiation dose). This high dosage may be localized to avoid vital structures, they explained, and can be given safely if delivered in divided doses.

According to the calculations of the Stanford investigators, 80 to 90 percent of patients with only a few lymph nodes affected by Hodgkin's disease "can be offered apparently permanent cure" with intensive radiation.

The Stanford investigators dispute the general impression that Hodgkin's disease spreads randomly and unpredictably. If this were true, treated patients with "apparently localized disease" would eventually show activity in other sites, and long term survival free of disease would be extremely rare.

But Drs. Kaplan and Rosenberg have found that a high proportion of patients survive five years after intensive radiotherapy for localized disease, and many survive 10 or 15 years or longer. Most survivors had no recurrence after the initial treatment, and several patients who later died of other disease, at autopsy had no trace of Hodgkin's disease in the treated sites or elsewhere.

The investigators emphasize that effective treatment of Hodgkin's disease "is inextricably linked to the meticulous and thorough evaluation of the extent of disease in each patient prior to treatment. Unless all areas of disease that can possibly be detected by present methods are identified and treated intensively, it is not reasonable to expect treatment to be successful."

The best results, they said, can be expected only when decisions regarding diagnostic evaluation and treatment in each case are reached jointly by the patient's physician, an experienced radiotherapist, and an internist qualified in cancer chemotherapy.

"Under such circumstances," Drs. Kaplan and Rosenberg said, "a very considerable proportion of all patients with regionally localized disease can be offered a chance of permanent cure with radiotherapy, and patients with more advanced disease can be offered prolonged periods of comfortable and productive life with use of drugs and radiotherapy."

They added that Hodgkin's disease will continue to challenge researchers as it has in the past. Information from such varied sources as epidemiological studies, routine application of the newest diagnostic techniques, controlled clinical studies, and immunological research gives promise that a better understanding of Hodgkin's disease will lead to further improvements in cure rates.

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(Mailed February 20, 1967)

Science writers: A paper, THE TREATMENT OF HODGKIN'S DISEASE, by Drs. Kaplan and Rosenberg, published in Vol. 50 of The Medical Clinics of North America, is available on request.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Dr. David M. Kaplan, director of the psychiatric social service division of the University of Colorado Medical Center, has been appointed associate professor of preventive medicine and head of the division of clinical social work at the Stanford University School of Medicine.

He will also serve as director of social service for the Palo Alto-Stanford Hospital Center.

Dr. Kaplan, 48, will join the Stanford faculty July 1. He succeeds Dr. Daniel O'Keefe who resigned last year to become dean of the School of Social Work at Michigan State University.

According to Dr. Robert J. Glaser, vice president for medical affairs and dean of the school of medicine, the appointment follows a comprehensive study of Stanford's needs in the area of social service. As a result of the study, the division of clinical social work has been reorganized as part of the Department of Preventive Medicine.

In his new position, Dr. Kaplan will have responsibility for expanding the contribution of social work to patient care, teaching and research. He will supervise a group of about 30 professional personnel.

Dr. Kaplan has been a member of the faculty and director of the social service division of the Department of Psychiatry at the University of Colorado Medical Center since 1962. He is also a faculty member at the University of Denver School of Social Work.

For the past three years he has been co-director of a five-year National Institute of Mental Health project entitled "The Family Concept and Comprehensive Psychiatric Care."

Prior to his appointment at the University of Colorado, Dr. Kaplan was an instructor in mental health and an associate in social work at the Harvard School of Public Health. He has had four years experience as a caseworker in New York City and Cleveland, Ohio.

Dr. Kaplan received his B.S. degree in 1939 from the College of the City of New York, his M.S. degree in 1947 from the New York School of Social Work, and his Ph.D. in 1961 from the University of Minnesota.

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(Mailed February 16, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

By using an experimental drug, two Stanford University researchers have pinpointed a specific brain center which regulates the production of the male sex hormones.

The drug, Cyproterone, a potent antimale hormone, normally suppresses masculine sexual function when it circulates in the blood and does not reach the brain in large amounts. But when it was implanted inside the brain of male rats, the drug stimulated sexual function by increasing secretion of gonadotropic hormones.

The researchers found that a particular brain center in the hypothalamus called the "median eminence" is specifically involved in activating the mechanisms that produce gonadotropin secretion.

The researchers, George J. Bloch, a graduate student in physiology, and Dr. Julian M. Davidson, assistant professor of physiology at Stanford University School of Medicine, reported their findings in the current issue of SCIENCE, the journal of the American Association for the Advancement of Science.

Normally, when there is a deficiency of the male hormone, the pituitary produces gonadotropic hormone which, in turn, stimulates the testes to produce male hormone.

The receptor area in the organism responsible for stimulating gonadotropin release from the pituitary gland in response to male hormone deficiency was not precisely known. By implanting the drug in the form of slowly dissolving crystals inside the brain of male rats, the Stanford researchers observed that it triggered a chain of processes ending in increased male hormone production and enlargement of the animals' testes and prostates.

This meant that the drug prevented access of the male hormone to receptors in the brain area where the drug had been implanted. The brain, in turn, sensing the apparent decrease in male hormone, activated the mechanism that stimulates the male reproductive system.

The researchers said that in earlier experiments they implanted crystals of male hormone in the brain's median eminence. Sensing the presence of too much of the male hormone, the brain gave signals to shut down male hormone production.

More recent studies on implantation of Cyproterone in the pituitary gland showed no effects on sexual function of the animal. Thus the pituitary gland itself is not sensitive to variations in sex hormone levels in the blood but depends on signals from the receptor in the brain, the researchers said.

The research is supported by a grant from the National Institute of Child Health and Human Development of the National Institutes of Health.

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(Mailed February 14, 1967)

Editors: Photos available on request.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Dr. Grant Fletcher, assistant professor of anesthesia, will discuss "What's New in Inhalation Therapy," at Stanford University School of Medicine Wednesday (Feb. 15).

Dr. Fletcher will speak at 8 p.m. in Room M106 of the Medical School Building. He will describe new methods of treatment for patients with acute respiratory problems.

A 1946 graduate of Stanford University School of Medicine, Dr. Fletcher has been a member of the Stanford faculty since 1963. He also serves as medical director for the inhalation therapy service of the Palo Alto-Stanford Hospital Center.

The program is the first of two sponsored by the Department of Anesthesia as part of Stanford's series of public lectures on PROGRESS IN MEDICINE. Dr. Jordan Katz, assistant professor of anesthesia, will speak on "The Control of Pain," March 1.

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(Mailed February 13, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- "The Skin as a Mirror of Internal Disease" will be the subject of the next public lecture in the PROGRESS IN MEDICINE series at Stanford University School of Medicine, Wednesday (Feb. 8).

Dr. Alvin J. Cox Jr., professor of pathology in the Department of Dermatology, and Dr. William M. Gould, acting instructor in dermatology, will speak at 8 p.m. in Room M106 of the Medical School Building.

The two physicians will explain how changes in the skin may reflect disease or a drug reaction in the body. Symptoms of the body's general response to disease are often first recognized in the skin.

As a pathologist in the Department of Dermatology, Dr. Cox helps analyze skin disease by performing laboratory tests and conducting research on skin problems. Dr. Gould, as a practicing dermatologist, works with the patient to treat the disease.

Dr. Cox is a 1931 graduate of the Stanford University School of Medicine and has been a member of the faculty since 1933. Dr. Gould, also chief of the dermatology service at the Veterans Administration Hospital, joined the Stanford faculty in 1964.

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(Mailed February 6, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

Editors: Copies of STANFORD TODAY are available on request.

STANFORD -- New organs for old will be commonplace some day, but researchers working to perfect surgical techniques also must hurdle such human factors as public sentiment and legal terminology.

Such is the opinion of Dr. Roy Cohn, professor of surgery at the Stanford University School of Medicine.

Writing in the current issue of STANFORD TODAY, the university's quarterly magazine, Dr. Cohn says that human organs--most effectively the kidney--can be transplanted. But the problems which now loom largest are economic, legal, sociological, ethical, and moral in nature.

"The success rate in kidney and other transplantation would be increased if we had a new definition of death, permitting the removal of organs at a more optimal time," Dr. Cohn wrote. "Physicians would prefer that the cessation of brain function for 48 hours (as indicated by an absence of waves in the electroencephalogram), rather than cessation of the heart beat, be considered as death. It is possible for the heart to go on beating for days after the brain has passed beyond possible recovery."

Dr. Cohn explained that transplantation is best done with tissue from living donors, but obviously this is not always possible. So far methods of organ preservation have yielded meager results. It is not possible to maintain a "bank" except for the inert structural type of organ such as the cornea, bone, and arteries.

Surgeons have used cadavers as a source of kidneys, but experience shows they must be used within a short time, maximally about three hours, or they will not function. "The success rate where this source has been used the most is about 40 percent," Dr. Cohn wrote. "This success rate could be increased were it not for the legal barrier to obtaining the cadaver kidney promptly."

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He said that although statutes vary in different states, the practical situation is that permission of the next of kin must be obtained after death before an organ can be removed from the body. This can be true if the deceased has willed the organ.

Dr. Cohn cited the case of a man who was offered to the Stanford Medical Center as a donor by his family. The man had been accidentally shot in the head and his brain was destroyed. "The uncertainties of the law in regard to the right of the family to make this offer as well as the responsibilities of the physicians in accepting this patient whose heart was beating normally, whose breathing had been taken over by a mechanical respirator, and whose kidneys were functioning normally were so indefinite that those priceless kidneys could not be used," he said. The patient was pronounced dead several days later.

Another problem concerned with kidney transplantation is cost. Hospitalization alone costs somewhere between $6,000 and $30,000 depending upon complications, Dr. Cohn pointed out. This figure does not include medical fees and expenses for drugs which are needed after the patient leaves the hospital.

Patients at Stanford are supported by grants from the National Institutes of Health which also cover the cost of the enormous number of observations before and after the operation.

There are sociological and psychiatric problems concerned with the future of the donor in kidney operations. Life insurance statistics indicate that a healthy person with one kidney has a very small decrease in life expectancy compared to the same individual with two kidneys. "Yet the donor as a person cannot be compared in terms of statistics," Dr. Cohn wrote. "The fact remains that he is giving away something which someday he may need just as desperately as the intended recipient. There are problems here for the psychiatrist, not only in dealing with the donor but also with his family."

Is transplantation justified on any basis? "There are those who feel that the whole procedure is morally wrong," Dr. Cohn said. "As others in the medical profession besides myself have pointed out, more than ever before in the present stage of our knowledge, the referring physician and the surgeon must look to their respective consciences and heed the words of Matthew, "'Whatsoever ye would that men should do to you, do ye even so unto them.'"

Dr. Cohn said the fact that 3,500 kidney patients die every year for lack of treatment indicates the enormous amount of work that lies ahead. "But the time may be shorter than we think," he added. "Surgeons are far advanced in the techniques of transplantation, and work is being actively pressed in many laboratories toward a reliable method of circumventing the rejection process."

He expressed hope that many others besides physicians--lawyers, sociologists, theologians--will be able to give an increasing amount of study to their aspects of the problem.

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(Mailed March 27, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- The untrained but "properly supervised" volunteer is a useful answer to the shortage of mental health workers, a Stanford psychiatrist believes.

Addressing the annual meeting of the American Orthopsychiatric Association in Washington, D.C. (March 22), Dr. John F. Belz, assistant professor of psychiatry, described a six-year experimental program with volunteers in the Peninsula Children's Center, a day treatment center for emotionally disturbed children, in Menlo Park.

The Peninsula Children's Center is used as a training and research facility for the Stanford University psychiatry and psychology departments. It accommodates 18 children aged 4 to 18 years. Dr. Belz serves as medical director.

The center's small staff--a child psychiatrist, the executive director, a psychiatric social worker, four teachers and a music therapist--considered the use of volunteers as a temporary expedient, Dr. Belz said.

"But now the volunteers, one for each of the children, constitute a highly integrated purposeful part of the treatment program."

The volunteers may be young college girls or women with grown children. They maintain a regular schedule, coming in once a week.

"The major objective is for the volunteers to relate to the patients in a personal way," Dr. Belz explained. "Emphasis is placed on helping a child enter the world of reality. The volunteer may utilize paints, blocks, music or other media."

It is equally important, he added, for the volunteer to be able to sit with a child through rages, walk with him or her, or in any other acceptable way lend strength, warmth and affection.

The trial period for volunteers usually lasts one month. When a new volunteer becomes intrigued with a particular child, he begins to seek guidance from the staff member primarily responsible for the child, as well as from the parents' therapist. Volunteers also participate in record keeping and staff conferences in a deliberate intermingling with the permanent staff.

"Parents are astounded that people who don't really have to, spend time with their disturbed child," Dr. Belz noted. "Mothers and fathers are thus helped to look at their children differently."

Since volunteers work only one day a week, they also maintain "a freshness and a high level of interest that we doubt could be sustained by the same group of workers who meet the same children day after day," he said.

"The volunteers provide an economical source of compassionate child caretakers. And in some instances, college-age volunteers have eventually decided to enter the mental health field."

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(Mailed March 24, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Dr. Henry G. Kunkel, noted immunologist, will deliver the twentieth course of Herzstein Medical Lectures sponsored by the medical schools of Stanford University and the University of California.

Dr. Kunkel, professor at Rockefeller University and senior physician at Rockefeller Hospital in New York, will speak on March 27, 29 and 31 at 8 p.m. in the Medical Sciences Auditorium of the University of California San Francisco Medical Center.

His three lectures are: Monday, March 27, "Recent Developments in the Field of Immune Globulins;" Wednesday, March 29, "Mechanisms of Renal Injury in Systemic Lupus Erythematosus," and Friday, March 31, "Immunological Aspects of Rheumatoid Arthritis." The lectures are open to the public as well as to the medical profession.

Dr. Kunkel is known for his outstanding contributions to the understanding of serum protein metabolism and for his recent work on human antibodies and immunological aspects of disease.

The Herzstein Medical Lectures were established in 1929 by the late Dr. Morris Herzstein of San Francisco.

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(Mailed March 23, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

STANFORD -- The Stanford University School of Medicine today received approval from the University Board of Trustees to develop a master plan to build and finance new facilities for several basic science departments and a new hospital and ambulatory care center.

Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine, termed the action "as a major step in moving forward toward meeting the School's critical educational needs and alleviating the serious bed shortage that exists in the community."

He indicated that the first step in implementing the Trustees' action would be the appointment of a team of experts to develop the master plan and a program to achieve the necessary funding. The timetable for completion of the new facilities will be about four years.

"To achieve its full potential in patient care, teaching and research, the School of Medicine needs a University hospital with an adequate number of beds and the necessary supporting administrative organization," Dr. Glaser said. "It also needs an an ambulatory care center to provide more effectively for patient care and teaching in the field of comprehensive medicine."

The new Basic Science Building will house the departments of Anatomy, Physiology and Medical Microbiology, none of which were provided for in the Medical Center when it was constructed in 1959. These departments are now in scattered locations on the campus. The Department of Pathology, as well as others occupying space in the present Center, will have additional facilities in the proposed Basic Sciences addition, Dr. Glaser said.

"These basic science departments are vital to medical education," Dr. Glaser said, "and none of them presently has adequate facilities."

The present Palo Alto-Stanford Hospital is jointly owned by the City and the University. Dr. Glaser said it would be necessary at a later date for the University to enter into negotiations altering the present joint ownership agreement with the City of Palo Alto.

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During the past year, Stanford University and the City of Palo Alto have engaged in negotiations to change the present unwieldy ownership structure.

Dr. Glaser emphasized that the School of Medicine is not lessening its community responsibility but rather is moving to develop facilities to enable the School to contribute more effectively to the education of the physicians and medical scientists necessary to meet the community's and the nation's health needs. He repeated an earlier statement that members of the Medical School's volunteer faculty, many of whom are now on the Palo Alto medical staff, would continue to participate in the Stanford educational and patient care programs.

The development of an ambulatory care center as part of the proposed new University hospital complex has been termed by Dr. Glaser as "one of the most important challenges before us." In contrast to acute and limited care beds in the new hospital, the ambulatory care center will provide for comprehensive care for patients who do not need to be hospitalized. Such a unit will function in place of the traditional outpatient clinic, and also will make possible new innovations in the education of physicians.

"Care in such a center should serve better the patient's needs and should make for significant economies," Dr. Glaser said. "It will also enhance our programs for the education of outstanding physicians for the coming decade."

There are about 200 beds now available to the Stanford University School of Medicine in the 437-bed Hospital. These beds, now fully occupied, according to Dr. Glaser, are inadequate to meet the School's present patient care, education and research needs. The School of Medicine has stated it needs 400 to 500 beds.

In July, 1966, at the request of the City Council, Stanford submitted a proposal to purchase Palo Alto's interest in the Hospital and offered to make available additional land contiguous to the Hoover Pavilion (former Palo Alto Hospital) for the expansion of a community hospital on that site.

The Council rejected the Stanford proposal. Consequently, the University announced it would plan new hospital facilities and would "in due course, create the Stanford University Hospital as an independent unit, both administratively and functionally."

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(Mailed March 21, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- "Babies, Seals and Milk" will be the subject of a public lecture at Stanford University School of Medicine Wednesday (March 22).

Dr. Philip Sunshine, assistant professor of pediatrics, will speak at 8 p.m. in Room M106 of the Medical School Building.

He will describe the problem of lactose malabsorption, an abnormality in which the body lacks a certain enzyme responsible for the absorption of the primary sugar in milk. Children with lactose malabsorption suffer from diarrhea and poor weight gain.

By studying sea lion pups, which also lack the necessary enzyme, scientists are now able to more clearly understand and diagnose the problem.

Dr. Sunshine will show slides, including pictures of the sea lions he studied on the Coronado Islands off the coast of Baja California.

This is the first of four lectures on pediatrics in the medical school's PROGRESS IN MEDICINE series. The others are scheduled as follows:

APRIL 5: "German Measles in Pregnancy and Its Effect on the Newborn," by Dr. Jordan Wilbur, assistant professor of pediatrics.

APRIL 12: "Diseases of Metabolism in Children," by Dr. Robert E. Greenberg, associate professor of pediatrics.

APRIL 19: "Pediatrics in a University Setting," by Dr. Norman Kretchmer, professor and executive head of the Department of Pediatrics.

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(Mailed March 20, 1967)

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Dr. Charles H. Stuart-Harris, professor of medicine at the University of Sheffield, England, has been named the second James J. Waring Visiting Professor at Stanford University School of Medicine.

The professorship, awarded each year to a distinguished physician in the field of chest diseases, was established by the Francis S. North Foundation of Chicago. It honors the late Dr. James J. Waring, professor of medicine at the University of Colorado and chief of medicine at Colorado General Hospital for more than 20 years.

Those named to the professorship spend equal time at Stanford and the University of Colorado School of Medicine.

Professor Stuart-Harris will be in residence at Stanford from March 20 to 25. He will conduct ward rounds, work with medical students and house staff, and be available for staff consultations.

He will give a lecture Thursday (March 23) at 5 p.m. on "The Role of Infection in Chronic Respiratory Disease" in Room M106 of the Medical School Building. He will also participate in a day-long postgraduate symposium on lung tumors beginning at 8:30 a.m. Saturday (March 25) in Room M104. Both events are open to physicians and medical students in the community.

In addition to his position on the faculty of the University of Sheffield, Professor Stuart-Harris is a consultant physician to the United Sheffield Hospitals. He has been a Foulerton Research Fellow of the Royal Society, a research fellow at the Rockefeller Institute for Medical Research and a visiting professor of medicine at Albany Medical College, Albany, New York. He received his M.D. degree at the University of London in 1934.

Professor Stuart-Harris is the author of numerous publications and articles, chiefly relating to the fields of chest disease and virology.

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(Mailed March 16, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- "The Laser in the Treatment of Eye Diseases" will be the subject of a public lecture at Stanford University School of Medicine Wednesday (March 15) at 8 p.m.

Dr. H. Christian Zweng, clinical assistant professor of surgery, will speak in Room M106 of the Medical School Building. His lecture is part of the medical school's PROGRESS IN MEDICINE series.

Dr. Zweng is presently studying the biological effects of laser energy on eye tissue in an attempt to determine its usefulness in the treatment and prevention of eye diseases that lead to blindness. He is a member of a research team composed of scientists from the medical school and Stanford Research Institute.

In addition to his position on Stanford's clinical faculty, Dr. Zweng is an eye physician and surgeon at the Palo Alto Medical Clinic.

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(Mailed March 13, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

A television camera is placed in the premature nursery to demonstrate a procedure to a group of students in a nearby classroom.

A professor video tapes his lecture and in the privacy of his office, analyzes his performance as a teacher.

A researcher uses a camera to record the responses of an animal in a test situation.

A psychiatrist televises a patient interview to aid him in diagnosis.

These are some of the many ways closed circuit television is revolutionizing medical teaching, research and patient care throughout the country. Since last fall, Stanford University School of Medicine has been experimenting with a new $57,000 television system, which is now ready for full operation.

Six permanently mounted 25-inch television monitors have been installed in two classrooms in the medical school. In addition, a single 25-inch monitor on a rolling stand can be used in any of the rooms in the Stanford Medical Center.

The remainder of the television system includes three cameras, two connected to a large console and a small one for auxiliary use; a variety of lenses; a two-way audio system, and a video tape recorder with an audio channel.

To date, the medical school's television equipment has primarily been used for three types of programs:

-- A "live" remote demonstration in which a program is televised some place in the medical center and simultaneously relayed to the monitors in a classroom. Several weeks ago students in a classroom were able to watch researchers in the Respiratory Function Laboratory obtain information on the respiratory processes of a young man riding a bicycle. The two-way audio system allowed questions and discussions between the laboratory personnel and the class.

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-- A "live" demonstration in the classroom. A group of 150 students recently watched a televised demonstration of a kidney operation on a rat. A magnified view of the operation was projected onto the 25-inch monitors, enabling the last five rows to see as well as those standing two feet away.

-- A demonstration for future use. Dr. Keith Killam, associate professor of pharmacology, has taped a program explaining a laboratory assignment to students. The assignment involves an experiment to test the effect of certain drugs on the brain of a cat. The program was televised in two separate laboratories. In one, Dr. Killam uses diagrams and charts to explain the experiment, and in the other, the animal is shown in the actual test situation. Using a special effects generator, it was possible to obtain split screen and cornering effects, allowing the charts and test situation to be televised simultaneously.

Tapes such as Dr. Killam's will conserve time for both faculty and students. The professor will no longer have to explain assignments several times to different classes, and the tapes can be edited or updated for use the following year. The student will eventually be able to check out tapes from a library for preview or review of class assignments and demonstrations.

The purchase of the closed circuit television system was initiated by Dr. Lewis Aronow, associate professor of pharmacology, and financed by gifts to the medical school.

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(Mailed March 13, 1967)

Editors: Photos available on request.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

Editors: Copies of Stanford M.D. are available on request.

STANFORD -- South Vietnam faces serious health problems intensified by a shortage of physicians and supplies, inadequate hospital facilities and the tragedy of war, according to a specialist in tropical diseases who spent two months in the besieged Mekong Delta.

Dr. Mark T. Hoekenga said that the hospital at Can Tho where he served as a civilian doctor has 450 beds, but often as many as 650 patients. And this hospital is typical of other provincial hospitals in South Vietnam.

"I found that two to three patients to a bed was a common occurrence," Dr. Hoekenga said. "The wards were hot and crowded, frequently ripe with odors of sweat and urine. Open sewers sometimes added to the pungency.

"Except in the intensive care and postoperative wards, patients slept on sleeping mats placed on top of board frames. They wore their own clothes, the ones they were wearing when they were injured or took sick. Family members stayed with the patients to assist in feeding and nursing them, sleeping on or under the bed as space and time permitted."

Dr. Hoekenga, a Stanford Medical School alumnus and scientific director of William S. Merrell Company in Cincinnati, went to Can Tho under the American Medical Association's program "Volunteer Physicians for Vietnam." His report appears in the current issue of STANFORD M.D., the quarterly magazine of the Stanford Medical Alumni Association.

"Our days as physicians were long," Dr. Hoekenga wrote. "Speaking a little French, but more often using Vietnamese interpreters, I saw 50 to 80 or more outpatients and attended an equal number of hospitalized ones.

"All of the usual temperate climate diseases are prevalent in Vietnam--the respiratory, cardiovascular, gastrointestinal, and genitourinary ailments that one sees everywhere in the world. But, in addition, tuberculosis, infectious hepatitis, and typhoid fever are rampant. Cholera, malaria and parasites are fairly common, and even bubonic plague and leprosy and other exotic diseases are encountered.

-more-

"Often during my tour of duty, essential supplies were short. The equipment was inadequate. Always there was the horror and sorrow of the war around us, the evidence of vicious (Viet Cong) attacks on civilians with small arms fire, mortars and Claymore mines, accounting for 40 percent of the surgery done on civilians.

"Plague is a serious health problem in Vietnam. A total of 4,453 cases with 253 deaths have been reported by the Ministry of Health in 1965 (the latest statistics available). Because of the high rat population and a lack of flea control, many locations in the highlands as well as in Saigon will continue to be involved."

Dr. Hoekenga said that fleas in Vietnam are resistant to DDT and warned that transportation of such resistant fleas in exported cereal grains could have serious international consequences.

Although the United States and other free nations have moved rapidly to fill the physician shortage and have improved the medical care of South Vietnamese, the ratio of physicians to population remains a most unfavorable one, Dr. Hoekenga reported. Of the 1,100 Vietnamese physicians, some 700 are in the army, and approximately 100 more are not in practice because of political activity. This leaves 300 physicians to treat 15,000,000 civilians in the country.

Dr. Hoekenga related the story of two Viet Cong prisoners in his care. Both of them were handcuffed to their beds, and a guard was posted outside the door. "What a paradox!" Dr. Hoekenga wrote, "Yesterday our side tried to kill them. Today, as doctors, we try to save their lives. It is particularly strange to see how unimpressed the other patients and their families are. One might think that a patriotic nationalist would try to knife them, or at least cut the intravenous infusion tube. But they all seem to have lived with war so long that this, too, they take in stride."

Now and then there is a sign of human warmth and kindness--of hope for the future. "Last night," Dr. Hoekenga wrote, "Father Campbell, the Catholic Chaplain for the IV Corps region, came back to chat awhile. He started to talk about a project that obviously is dear to his heart--the providing of shelter and school for a large group of orphans 10 to 15 years old who shift for themselves under lean-tos or on shelves near the river. He isn't having much success with shelter and school, but meanwhile is keeping them clean and fed.

"Each evening he goes down to the river with a fresh bar of soap and throws it to the boys. Only those who lather thoroughly, rinse, lather, and rinse again will get a ration of food that he then doles out."

Dr. Hoekenga said no one here in Can Tho has any answers to the problem in Vietnam. "The only certain aspect is that being on the scene makes one think deeply about the significance of it all."

"My present feeling is based on two premises," Dr. Hoekenga wrote. "The first is that international communism is an evil thing that threatens our own democratic system of government and must therefore be fought. The second premise is that overwhelming majority of intelligent South Vietnamese do want to help in resisting it. If these premises are true, we have no alternative but to get on with the job with vigor and dispatch."

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(Mailed March 8, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Cancer research at the Stanford University School of Medicine received a substantial boost today in the form of a $400,000 gift from a California businessman.

Sam G. Willson of Oakland, a retired contractor, made the gift to establish the Jack and Lulu Willson Fund for Cancer Research in honor of his parents.

"It is my fond hope," Willson said, "that by providing some assistance to those who seek more knowledge about cancer, medical science may develop methods of prevention and control of the disease."

In announcing the gift, Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, commented: "The Jack and Lulu Willson Fund for Cancer Research will stand in the years to come as an example of the generosity and dedication of a fine citizen to the development of medical knowledge. Nothing would please us more than for the Willson Fund to be the means whereby a new and important breakthrough in the understanding of cancer can be attained."

The Stanford University School of Medicine conducts cancer research on a broad front. It encompasses research ranging from the development of new and more effective techniques in radiation treatment to basic studies which may lead to a better understanding of what causes rapid and unregulated cell growth in cancer. An increasing knowledge of the biological behavior of cancer cells and of the action of radiation on cells may lead to techniques by which cancer may be more easily and selectively eradicated.

Income from the Willson Fund will be applied to the support of investigators whose studies are not funded by Federal grants, Dr. Glaser said.

Willson comes from a pioneering California family. His father, Alfred John Willson, who was known affectionately as "Jack," came to California from Fordham, England, as a young man. For more than 40 years he was associated with the Hercules Powder Company at Pinole, Calif. until his death in 1929.

Willson's mother, Lulu Nicholl Willson, was the daughter of John Nicholl, who came to California from New York in the 1850's and was one of the first settlers and founders of the City of Richmond on the San Francisco Bay.

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(Mailed March 8, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- Scientists at the Stanford University School of Medicine and the Stanford Research Institute in Menlo Park, California, are taking a new look at the remarkable laser to determine its usefulness in the treatment and prevention of eye diseases that lead to blindness.

Aided by a $246,000 grant from the National Institutes of Health to the School of Medicine, the researchers are studying the biological effects of laser energy on eye tissue and are making plans for developing a laser that would be "clinically superior" to conventional photocoagulators.

The researchers plan to study several applications, among them:

* the effects of different laser wavelengths on eye tissue through high-speed cinematography (up to 9,000 frames per second) and microscopic studies of eye tissues.

* the amount of light energy needed to produce curative results on eye tissue.

* laser treatment of eye tumors.

* the effects of laser treatment in certain eye complications of diabetes.

* use of the laser to burn a hole in the iris of the eye to restore vision. The iris, which makes the pupil and controls the amount of light entering the eye, is often closed or seriously deformed as a result of disease.

* laser treatment of glaucoma, a condition responsible for a large proportion of blindness today. Glaucoma is a disease manifested by an increase of pressure inside the eye. The pressure is caused because the blood that comes into the eye to nourish it is blocked. A laser, according to the investigators, could be used to destroy the tissue that blocks the outflow and perhaps prevent rapid degeneration of vision.

The research team from the School of Medicine includes Dr. H. Christian Zweng, clinical assistant professor of surgery, Dr. Milton Flocks, clinical associate professor of surgery, Dr. Robert Peabody, senior resident in ophthalmology, and Dr. Robert C. Rosan, assistant professor of pathology.

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The engineering team responsible for laser instrumentation includes Dr. Richard C. Honey, Dr. Arthur Vassiliades, Norman Peppers and Zev Pressman of the Electromagnetic Techniques Laboratory at the Stanford Research Institute.

"The potential value of lasers has been recognized," Drs. Zweng and Flocks commented. "However, their use has been limited to the treatment of certain retinal defects. The best way of applying laser radiation to eye disorders is still imperfectly understood. Studies to date indicate that lasers probably will prove to be clinically superior to conventional photocoagulators."

Unlike the laser, the old-fashioned photocoagulator which is presently used by ophthalmologists to treat eye diseases utilizes visible light from a xenon arc. It is bulky and must remain in a fixed position when in use. It produces large scars compared to the pin point lesions produced by the laser. And often anesthesia is used to prevent the patient from blinking his eyes when they are exposed for long periods to the bright light.

In the laser, light output is monochromatic, coherent and extremely intense. These unique properties make the laser an ideal source for photocoagulation since high heat intensity can be obtained with a low amount of energy, the researchers said. The heat can be focused directly to the tissue being treated and minimize damage to adjacent tissues.

It was in the summer of 1963 that ophthalmologists Zweng and Flocks beamed a laser light from a small hand-held device into the eye of a patient who was losing vision because of a detached retina in one eye. The beam passed through transparent tissue and liquid in front of the eye, reached the retina in back and spot-welded it back in place.

The treatment was over so fast that the patient did not even feel it. No anesthesia was needed and no hospitalization either.

Before applying the laser on human patients, Drs. Zweng and Flocks studied its use on rabbits, cats, and monkeys. From these studies, the ophthalmologists determined the energy levels that could be used safely on patients. They subsequently treated 175 patients with a variety of retinal defects with no known complications.

This early research took two years and was carried on cooperatively by the Stanford University School of Medicine, the Palo Alto Medical Research Foundation and Optics Technology, Inc., of Palo Alto which developed the laser instrument. Other firms, the American Optical Company of Southbridge, Mass., and Keeler Optical Company in London, are producing laser photocoagulators commercially.

Drs. Zweng and Flocks emphasized that they have no interest in overseeing the construction of such a clinical instrument on a production basis. However, doing the research necessary to determine what such instrument should be is one of the purposes of the research effort. As practicing ophthalmologists, they would like to see the laser photocoagulator become available to practitioners. They hope that their research will be published and will contribute to the eventual creation of a usable device.

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(Mailed March 7, 1967)

#1

#2

1. Monkey aids medical researchers at Stanford Research Institute laboratories in Menlo Park, California. Here a laser light is beamed into the eye of the animal to determine its effects on diseases that cause blindness.

2. Dr. H. Christian Zweng (right), clinical assistant professor of surgery at Stanford University School of Medicine, focuses fundus camera on monkey's eye to record laser beam effects on tissue. He is assisted by Earl Scribner (left), Miss Ann Hammond, Norman Peppers, and Dr. Arthur Vassiliades, a Stanford Research Institute team which is responsible for the laser instrumentation. Purpose of the joint study is to determine the usefulness of laser energy in the treatment of eye diseases.

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Laser Photocoagulator

Please send me 8x10 glossy prints of (1)_____ and (2)_____ above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Dr. J. Garrott Allen, internationally known for his research on blood and hepatitis, will give a public lecture at Stanford University School of Medicine Wednesday (March 8) at 8 p.m.

He will speak on "Delusion, Confusion and the Single Transfusion" in Room M106 of the Medical School Building. The lecture is part of the medical school's PROGRESS IN MEDICINE series.

Dr. Allen will discuss the seriousness of serum hepatitis, caused by blood transfusions from carriers of the virus, and possibilities for preventing the disease.

He believes the most practical methods for reducing the hazard of serum hepatitis are to limit the use of blood by giving fewer transfusions, and by excluding, if possible, all high-risk donors.

A 1938 graduate of Harvard Medical School, Dr. Allen has been a professor of surgery at Stanford since 1959.

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(Mailed March 6, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- The Stanford University School of Medicine and four other schools that have made sweeping curricular changes in recent years are today's leaders in medical education, according to a member of the Royal Commission reviewing the future of medical training in Great Britain.

"Yale, Stanford, U.C.L.A., and Duke universities are, in my opinion, blazing a trail which the rest of us are likely to follow sooner or later," said Dr. G. Morris Carstairs, professor and head of the department of psychiatry at the University of Edinburgh. Another institution that has made recent curriculum reforms in medicine is the University of Indiana.

Dr. Carstairs came to the United States in 1961 on a fact-finding mission and visited more than a dozen medical schools noted for their quality. He revisited several of them in intervening years and in 1966, when he was a fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford.

His findings are presented in the current issue of PHAROS, the quarterly magazine of Alpha Omega Alpha, the honor medical society.

The five medical schools have had, in Dr. Carstairs' words, "the courage to realize that medical education in the future must be less comprehensive and more diversified.

"Elective study serves two ends: it enables students to go more deeply into some of the sciences related to medicine, and it teaches them techniques of self-education which will be of value to them throughout their careers."

Dr. Carstairs said that while some British medical schools have made some "strenuous efforts at curricular change, none of these changes has been as bold as those which one finds in Yale, Stanford, the University of California at Los Angeles, Duke and Indiana universities."

Yale, Stanford and Duke, Dr. Carstairs noted, are private institutions with a staff-pupil ratio unattainable by ordinary schools. Indiana and U.C.L.A. are state-supported.

"What they all have in common," he said, "is a willingness to sacrifice completeness of coverage, both in the preclinical and clinical years, in favor of stimulating the students' comprehension of the scientific approach to each different aspect of medicine, and showing the students how to find out things for themselves."

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For several years, Yale has allowed its students one whole semester of elective study. It is now proposed to double this, so that one year out of four will be spent in approved elective work.

The Stanford University School of Medicine has a five-year program, during which 40 percent of the students' time (two years) is devoted to elective study. The new curriculum's success at Stanford is demonstrated by the performance of students in national examinations. For three consecutive years the classes that took the first and second part of the tests (covering their knowledge of basic sciences and clinical medicine) have attained grades averaging above the honors score.

Stanford has also been in the forefront in designing and maintaining laboratories for integrated teaching in the basic medical sciences. It was in the vanguard of medical schools in establishing a department of genetics, and was successful in achieving an unusually effective integration between the humanities and sciences and the pre-clinical sciences.

The new curriculum at the University of California at Los Angeles has involved an overall reduction of teaching time by 10 percent in order to provide generous periods of elective study, according to Dr. Carstairs. Duke University, whose example was followed in 1967 by Indiana University, has made the radical change of compressing the preliminary preclinical instruction into one-year course, followed by a 16-month stretch of clinical and applied-science teaching and clerkship; after this students can choose electives from a range of alternatives in medical science, basic sciences or in clinical fields.

"I have come away from this exposure to the ferment of curriculum reform which is taking place in American medicine today with the conviction that most of our teaching, on both sides of the Atlantic, is still subject to the basic criticisms of the Goodenough Report," Dr. Carstairs said. "It is overloaded with factual content and does not sufficiently encourage the students to think for themselves."

(The Goodenough committee was established by the British government during World War II to review existing medical schools and postwar needs.)

"In the intervening quarter century," Dr. Carstairs said "the rate of accretion of scientific knowledge has enormously increased, so that these criticisms have still greater force today than in 1944."

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(Mailed March 2, 1967)

PALO ALTO-STANFORD HOSPITAL CENTER
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Dr. Donald C. Harrison, assistant professor of medicine, has been appointed head of the division of cardiology at Stanford University School of Medicine.

The appointment was announced by Dr. Robert J. Glaser, vice president for medical affairs and dean of the school of medicine, and became effective February 1.

Dr. Harrison succeeds Dr. Herbert N. Hultgren who is on sabbatical leave at Dartmouth Medical School until September, when he will resume his teaching responsibilities at Stanford.

A member of the Stanford faculty since 1964, Dr. Harrison has been a research fellow at Harvard Medical School and a clinical and research associate at the National Heart Institute in Bethesda, Md. He received his B.S. degree in 1954 from Birmingham Southern College and his M.D. degree in 1958 from the Medical College of Alabama.

Dr. Harrison is interested in clinical and basic research in cardiac pharmacology, particularly relating to antiarrhythmic drugs, which are given to patients after a heart attack or heart surgery to restore normal cardiac rhythm, and adrenergic drugs, which block part of the nervous system as it controls the heart.

He is presently a member of the board of directors of the Santa Clara County Heart Association.

Dr. Harrison and his wife, Laura, and their three children live at 151 Mountain View Ave., Los Altos.

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(Mailed March 1, 1967)

PALO ALTO-STANFORD HOSPITAL CENTER
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Stanford University today appointed a newspaper publisher and civic leader to the board of directors of the Palo Alto-Stanford Hospital Center.

Joseph Cannon Houghteling, 43, of Atherton, will fill the unexpired term of Eric M. Stanford who resigned for personal reasons. Stanford, an executive vice-president and director of I. Magnin and Co., was appointed in 1963 to fill the unexpired term of James Duprau and was reappointed to a full three-year term the following year. Stanford's term would have expired in December, 1967.

In announcing the new appointment, President J. E. Wallace Sterling expressed the University's "abundant and abiding thanks" for Stanford's services on the Hospital Board.

Houghteling is president of the corporations which publish the Los Gatos Times-Saratoga Observer, the Gilroy Evening Dispatch, the Pleasanton Times, and Nevada County Nugget. From 1956 to 1965 he was editor and publisher of the Sunnyvale Daily Standard and allied publications. He is also a director of the Diablo Press of Berkeley.

He has served as chairman of the California Park Commission, vice-chairman of the San Francisco Bay Study Commission, and was a member of the California Highway Commission from 1964 to 1967.

Houghteling was born in San Francisco and is a graduate of Yale University.

He has been active in the Democratic Party and has served on county, state and numerous committees. He was a delegate to the Democratic national conventions in 1956 and 1960, and was active in various campaigns in organizational and finance roles.

Houghteling lives with his three daughters Anne, Elizabeth and Mary at 5 Fenwood Drive in Atherton. His wife, the former Frances Fisher, died in 1963.

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(Mailed March 1, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

Editors: This story is being released simultaneously by the Bank of America-Giannini Foundation

STANFORD -- Dr. Edmond D. Butler Jr., chief resident in urology at Santa Clara County General Hospital, has been awarded a $7,500 research fellowship by the Bank of America-Giannini Foundation. The fellowship will begin July 1.

Dr. Butler plans to use the award at Stanford University School of Medicine, where he has been appointed an instructor in surgery for the 1967-68 academic year.

His research project involves the use of computer techniques in the study of urinary infection, bladder physiology and kidney function.

The fellowship program was established in 1945 by the late A.P. Giannini, founder of Bank of America. The purpose of the program is "to support individual projects of unusual originality in medical research." The awards are intended to help young post-doctoral investigators in the early stages of their careers.

The fellowships are granted annually to six California doctors. The other recipients this year are from the University of California School of Medicine in San Francisco, UCLA School of Medicine and Loma Linda University School of Medicine.

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(Mailed April 28, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- "The Emphysema Epidemic...A Population at Increased Risk?" will be the subject of a public lecture at Stanford University School of Medicine Wednesday (April 26).

Dr. Karlman Wasserman, assistant professor of medicine, will speak at 8 p.m. in Room M106 of the Medical School Building. His lecture is part of the medical school's PROGRESS IN MEDICINE series.

Emphysema is a disorder of the respiratory system that causes shortness of breath with activity. A recent report from the National Health Survey indicates that the number of new cases of emphysema has been doubling every three years since 1950.

Dr. Wasserman will discuss possible explanations for the increasing occurrence of the disease, including improved diagnostic techniques and the effects of air pollution. He will also describe some of the experimental studies conducted on emphysema.

In addition to his position on the Stanford faculty, Dr. Wasserman is director of the Respiratory Function Laboratory for the Palo Alto-Stanford Hospital Center.

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(Mailed April 24, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- The Stanford University School of Medicine today received a $59,273 grant from the Office of Economic Opportunity to conduct a full-scale Upward Bound program this summer.

The program will accommodate a maximum of 46 students for eight weeks during the summer and one day a week during the coming academic year. Funds from the program will support salaries for high school teachers, tutor-counselors and a small coordinating staff. Faculty members from the Stanford University School of Medicine and five assistants will teach the science and laboratory courses.

The program also will pay a $10 stipend per student a week during the summer and $10 a month during the academic year. A morning snack, lunch and dinner will be provided five days a week on the campus.

The program will differ this year in that it does not provide for overnight housing for students on campus. "Ideally, we support the residence program," said Dr. LeRoy A. Pesch, associate dean. "We have been forced to balance the advantages of a residence program for fewer students than 40 against a nonresidence program for 46, and feel that the latter choice is far preferable. A 15 percent increase is much better than losing ground in the number of students reached."

Dr. Pesch said that a rented campus residence will provide a center for the students, a place for relaxation and meetings, tutoring and special interest activities. "Thus the decision not to house the students overnight will not deprive them of any essential aspect of the Upward Bound experience," he added.

Stanford's original Upward Bound program began in the summer of 1965 with 20 students who attended classes on a nonresidential basis. Last year it was expanded to 40 students who lived in University residences.

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University faculty members at first had hoped to double the program size to 80 students, then scaled their aims down to 60 students when they were informed that federal support would not be increased as much as originally planned. Finally, they voted to withdraw from the program because of inadequate financial support.

The School of Medicine, however, whose faculty members have carried on a limited program parallel to Upward Bound, funded by the National Science Foundation, offered as an alternative to continue the high school student program under OEO auspices. They said the program was successful, pointing to the many students who were motivated to continue their education in top colleges and universities.

Dr. Pesch said the purpose of the program is to broaden the student's awareness of the opportunities and challenges of science and medicine. "We hope to provide sufficient incentive, guidance and help to enable highly able students, who for economic, cultural or educational reasons would not otherwise do so, prepare and qualify for a college and professional education."

The students will be selected from San Mateo County high schools within commuting distance with preference given to those achieving below expectations as indicated by school counselors and their teachers. The selection procedure will guarantee an interracial composition of the student group.

The teaching will include courses in English, writing, mathematics, science, and laboratory demonstrations to stimulate students toward professional careers in the sciences and humanities.

The Upward Bound program has received some opposition from members of the Community Action Council in East Palo Alto. Their demands consist of nine points contained in a "Petition by Upward Bound Students." Stanford has agreed to the first six in principle.

The other points in the petition--a demand for a $50 stipend per student a month, a compulsory donation of faculty time, control over appointments to the teaching faculty by the local advisory committee, and a designation of a board of directors to guide Upward Bound policy, have been ruled out by Richard Frost, director of Upward Bound in Washington, D.C. In a letter to Mrs. Everlyn Wallace, chairman of the Community Action Council, Frost wrote the demands were in violation of the program's guidelines.

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"The (Stanford) proposal received here was judged, on program terms, to be a good one," Frost wrote. "The site-visit reports we have from consultants who inspected the program in the summer and academic year of 1966-67 are, on the whole good reports. No program is perfect anywhere in America. Stanford's compared to the hundreds elsewhere, is a good one."

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(Mailed April 21, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

STANFORD -- William G. Hayden, fourth year medical student at Stanford University School of Medicine, has received an award from the Roche pharmaceutical company as "an outstanding student of medicine."

The Roche Award, an engraved gold wrist watch, is presented each year to a student who has completed three years of medical school at Stanford. According to Dr. LeRoy A. Pesch, associate dean, Hayden was selected for the award on the basis of his academic excellence and research.

Hayden has been conducting research on the mechanism of abnormal heart rhythm known as atrial flutter. His findings will appear in the May issue of CIRCULATION RESEARCH, the monthly publication of the American Heart Association. He plans to specialize in cardiovascular surgery.

Hayden is vice president of the Stanford Medical Student Association and president of the fourth year class. He received his A.B. degree from Stanford in 1963.

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(Mailed April 20, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Advances in the treatment of child health problems will be discussed in a public lecture at Stanford University School of Medicine Wednesday (April 19) at 8 p.m.

Dr. Norman Kretchmer, professor and executive head of the Department of Pediatrics, will speak on "Pediatrics in a University Setting" in Room M106 of the Medical School Building. He will focus on Stanford's approach to pediatrics and the relationship of the department to the community.

Dr. Kretchmer will summarize current research and patient care programs in the areas of mental retardation, sensory defects, chronic disease, behavioral problems and the major causes of death of children.

This is the last of four public lectures on pediatrics sponsored by the medical school as part of its PROGRESS IN MEDICINE series. On April 26 Dr. Karlman Wasserman, assistant professor of medicine, will speak on "The Emphysema Epidemic: A Population at Increased Risk?"

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(Mailed April 17, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Dr. Samuel L. Kountz, 36, assistant professor of surgery at Stanford University School of Medicine, has received a $21,390 grant from the Lederle Medical Faculty Awards Program.

The award will be used to supplement his salary and professional expenses over a period of three years.

Dr. Kountz has played an active role in the kidney transplantation program at Stanford. Under the award he plans to continue his investigations to detect early kidney rejection and to pinpoint the exact time large doses of immunosuppressive drugs must be given to reverse a rejection. He hopes to extend his studies to methods of tissue typing and to apply this to organ transplantation.

In addition to his research, Dr. Kountz is a full-time member of the medical school's teaching faculty and is involved in the development of a curriculum for medical students in surgery.

The Lederle Medical Faculty Awards are supported by Lederle Laboratories, a pharmaceutical firm, which is a division of American Cyanamid Company with headquarters in Pearl River, New York.

Lederle Laboratories allocates $250,000 annually for grants to approximately a dozen young medical educators who give promise of continuing in full-time teaching and medical research.

Dr. Kountz obtained his M.D. at the University of Arkansas School of Medicine in 1958. He served his internship and residency at Stanford, and became a member of the faculty in 1965.

He received the Young Investigator's Award from the American College of Cardiology in 1964 and was a Fulbright Professor to the United Arab Republic for three months in 1966.

Dr. Kountz and his wife, Grace, and their two sons live at 2091 Camino de las Robles in Menlo Park.

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(Mailed April 11, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- The screening of newborn babies to detect genetic diseases will be discussed in a public lecture at Stanford University School of Medicine Wednesday (April 12) at 8 p.m.

Dr. Robert E. Greenberg, associate professor of pediatrics, will speak on "Diseases of Metabolism in Children" in Room M106 of the Medical School Building. The lecture is part of the medical school's PROGRESS IN MEDICINE series.

Dr. Greenberg will focus on the disease phenylketonuria (PKU), a rare inborn error of metabolism that causes mental retardation. He will discuss the significance of recent California legislation calling for PKU blood tests of all newborn babies.

Next Wednesday evening (April 19) Dr. Norman Kretchmer, professor and executive head of the Department of Pediatrics, will present the final lecture in a series of five on pediatrics. His topic will be "Pediatrics in a University Setting."

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(Mailed April 10, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

STANFORD -- The seventh annual Stanford Medical Student Day will be held Saturday, April 8, in the Physics Lecture Hall on the Stanford campus.

The day-long event, beginning at 9 a.m., will feature the second Lowell A. Rantz Memorial Lecture. Dr. Robert W. Berliner, director of intramural research for the National Heart Institute of the National Institutes of Health in Bethesda, Md., will speak on "The Regulation of Sodium Excretion."

The lecture was established in memory of the late Dr. Lowell A. Rantz who was associate dean, professor of medicine and head of the Division of Infectious Diseases. He was also an alumnus of the medical school.

In addition to the lecture, six students selected by a student-faculty committee will present original research papers. Each of the six participants will receive an award from the Stanford Medical Alumni Association.

Following the papers, Dr. Berliner will lead a clinical pathological conference. The program will conclude with a reception at the University Club of Palo Alto.

Student Day is sponsored by the Stanford Medical Student Association and the Stanford Medical Alumni Association. Conference chairman is Kai Haber, fourth year medical student.

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(Mailed April 4, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

STANFORD -- "German Measles in Pregnancy and Its Effect on the Newborn" will be the subject of a public lecture at Stanford University School of Medicine Wednesday (April 5).

Dr. Jordan R. Wilbur, assistant professor of pediatrics, will speak at 8 p.m. in Room M106 of the Medical School Building. His lecture is part of the medical school's PROGRESS IN MEDICINE series.

German measles contracted during pregnancy can retard the development of the newborn child and cause physical deformities, especially in the heart. It can also lead to cataracts, hearing loss, skin hemorrhage, mental retardation and chronic problems with other internal organs.

Dr. Wilbur is a 1961 graduate of the Stanford medical school and has been a member of the faculty since 1965.

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(Mailed April 3, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- Dr. Robert M. Shelton, of Pasadena, is the new president of the Stanford Medical Alumni Association, and Dr. William H. Clark, of Palo Alto, is its new president-elect.

Dr. Shelton, a specialist in internal medicine, succeeds Dr. Henry Gibbons III, of San Francisco. He will serve as president of the Association through June, 1968. Dr. Shelton received the A.B. from Pomona College in 1932, and the M.D. from the Stanford University School of Medicine in 1937. He is past president of the Pasadena Medical Society and past chairman of the medical economics committee of the California Medical Association. He is a director and member of the executive committee of Blue Cross of Southern California and a member of the visiting committee of the Stanford University School of Medicine.

Dr. Clark is also an internist and a partner in the Palo Alto Medical Clinic. He is also a clinical associate professor of medicine in the Stanford University School of Medicine, and a Palo Alto City Councilman. Dr. Clark ~~is a graduate of the University of California and of Stanford, Class of 1944.~~ holds an A.B from Stanford and an M.D. from Stanford University School of Medicine, Class 1944.

Others elected to the board of governors of the alumni association are Dr. Robert E. Berner, of Palo Alto, and Winston W. Benner, of Oakland. Dr. David A. Rytand, of Atherton, Bloomfield professor of medicine at the Stanford University School of Medicine, was re-elected secretary-treasurer.

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(Mailed May 29, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

EDITORS: Story is mailed simultaneously with the release from Commonwealth Fund of New York. Release date set by Commonwealth Fund.

FILE COPY

FOR A.M. RELEASE THURSDAY, JUNE 1, 1967

STANFORD -- The Stanford University School of Medicine has received a $500,000 grant from the Commonwealth Fund of New York to initiate planning for a new hospital and ambulatory care center and to advance fundamental reforms in the patterns of hospital services and education in the health professions.

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, said the Commonwealth Fund's generous grant will assist Stanford to undertake "a creative enterprise that will encompass physically a new concept in hospital construction and the delivery of comprehensive health services."

He said the planning studies to be undertaken by the School of Medicine are directed toward a solution of the widespread national problem of the escalating scale of hospital costs, fast becoming a foremost issue in health financing.

A chief factor in the problem is the relative inefficiency, in terms of the health-care return on the dollars expended, of prevailing hospital designs and patterns of utilizing staff, space, and equipment. Stanford is taking advantage of its need for a new hospital to plan a facility that will assure a superior standard of care and, at the same time, incorporate features to limit costs.

The planning project will extend for a period of two years. The Commonwealth Fund's grant will be used chiefly toward the costs of a small planning staff and consultants in such fields as architectural design, management systems, computer technology, and automation processes and equipment. These experts will collaborate with the medical faculty and scholars in relevant nonmedical departments and schools of the University--for example, economics, sociology, and engineering--in the design of both the physical structure and operational system of the new hospital and ambulatory care center.

The proposed health facilities are part of the Medical School's master plan now under development, which also envisions construction of a new basic science building for the departments of Anatomy, Physiology, Pathology, and Medical Microbiology.

Dr. Glaser said the planning studies will constitute a fundamental examination of the hospital as a service system, with emphasis on the application of modern managerial techniques and engineering technology in achieving optimum use of available resources. The studies will seek to determine how staff should be trained and deployed to serve the hospital patient-care responsibilities most advantageously, what aspects can be automated, and what design concepts would be most suitable.

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"The operating patterns of the nation's large hospitals, with multi-million-dollar budgets, have not been subjected to the kind of scrutiny that is employed in industry," Dr. Glaser said. "For example, most hospitals have very large nonprofessional staffs, with high turnover rates. As a result extraordinarily high costs are incurred. No multi-million-dollar enterprise in the competitive world would prosper under such circumstances."

Dr. Glaser said the new hospital design will embody two objectives. First, facilities will be related to the specific stage of care required by the patient, from those needing minimal supervision to patients requiring round-the-clock intensive care. In contrast, most hospital patients now tend to be treated in facilities that assume identical seriousness of illness and involve the same cost to the patient and the hospital. Second, a comprehensive-care service, stressing ambulatory, or outpatient care, will be an integral part of this multi-stage hospital concept.

"Nationwide, there is a serious lack of innovative planning for hospitals," Dr. Glaser commented. "We need to show the way for vitalizing obsolete hospitals and to articulate a program for research and demonstration projects that would help find new and improved ways of organizing and delivering health services. This would raise the quality of care, increase the efficiency of operation and render hospitals more suitable as centers for research and training."

Dr. Glaser said that Stanford's new plans will make it necessary for the City and the University, joint owners of the present 437-bed Palo Alto-Stanford Hospital, to alter their present relationships. "The Medical School's diverse research, education, and patient care needs have made all the more apparent the necessity of an independent University-controlled hospital."

Stanford has about 200 beds in the present hospital. The School of Medicine has stated it needs 400 to 500 beds to carry out its mission.

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(Mailed May 26, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

STANFORD -- "New Treatments for Infertility" will be the subject of a public lecture at Stanford University School of Medicine Wednesday (May 31).

Dr. Emmet J. Lamb, assistant professor of gynecology and obstetrics, will speak at 8 p.m. in Room M106 of the Medical School Building.

Dr. Lamb will discuss recent advances in the treatment of infertility, particularly the use of drugs to stimulate ovulation, new techniques for diagnosing and treating the blockage of Fallopian tubes resulting from infection, and the practical application of tests for immunological causes of infertility.

A member of the Stanford faculty since 1963, Dr. Lamb also is director of the Infertility and Gynecologic Endocrinology Clinic at the medical center.

This is the final lecture in the medical school's PROGRESS IN MEDICINE series for the 1966-67 academic year. The series will be resumed next fall.

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(Mailed May 26, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- Almost two months ago Cecelia Bebek, a San Jose secretary, suffered shortness of breath, fatigue, lack of sleep and other serious symptoms of heart disease.

Today, thanks to the miracle of open-heart surgery and a heart valve from an unknown benefactor, Miss Bebek is on her way to recovery and normal life.

The new aortic valve (the valve through which blood emerges to supply her body) comes from a young man who died in an automobile accident. Miss Bebek will never know his name. Nor will she know his parents who let their son's aortic valve be used to save her life.

Her heart problem started a year ago following an infection. Miss Bebek had been born with an aortic valve deformity. The infection damaged her deformed valve and brought on her difficulties.

On March 31, Miss Bebek was wheeled into the operating room of the Palo Alto-Stanford Hospital Center for open-heart surgery. There, while a heart-lung machine took over the functions of her heart and lungs, a Stanford Medical School surgical team replaced her damaged valve with the young man's.

Miss Bebek has a tremendous enthusiasm for life. Since her own life was laid on the line last March, she said that she feels each day is a gift to be lived to the fullest. Her breathing is normal now, her appetite has returned, and she has gained weight.

Miss Bebek owes her life in part to a new system which allows Stanford surgeons to obtain fresh cadaver valves for transplantation in heart patients.

Operated like a "bank" such as is now used for storage of eye corneas, it makes fresh cadaver valves available <u>where</u> they are needed and <u>when</u> they are needed, according to Dr. Norman E. Shumway, professor and head of the division of cardiovascular surgery. It also permits researchers to improve methods of heart valve storage.

-more-

It works this way: the admitting office, nursing service, and emergency room at the Center are alerted to notify the cardiac surgeon on duty when a patient dies. The surgeon immediately contacts the patient's family and secures permission to use the heart valves for transplant surgery. Valves from cancer patients or from patients who have died of infectious diseases are not suitable. So far many families have responded favorably.

The new procedure has these advantages, Dr. Shumway said. Fresh valves are available, a heart patient does not have to wait two or three weeks for the transplant operation, and the procedure is much less expensive. Fresh valves--obtained no later than 12 hours after death and less than five days old--are vital to the success of a cadaver valve transplant.

"Presently much of this valuable tissue is wasted because the public is not aware of the progress made in the field of open-heart surgery," Dr. Shumway commented. "If relatives of patients who die knew they could make a heart valve donation, hundreds of other patients suffering from incurable heart disease could be saved."

He said results from animal studies over a two-year period, and a series of valve replacements on 12 heart patients at the Palo Alto-Stanford Hospital Center indicate "fresh cadaver valves are very satisfactory for the replacement of diseased heart valves."

Although at present these transplants are limited to the aortic valve, like Miss Bebek's operation, laboratory evidence favors cadaver valves for mitral valve replacement as well, he added. This work, however, is not yet ready for human application.

The transplanted valves apparently are "privileged tissue," like corneas, so that a valve homograft is not promptly rejected as are other transplants. "The patient needs no special drugs to suppress the immune reaction or to prevent blood clotting," Dr. Shumway said. "Fresh valves are also superior to preserved valve tissue due to the significant incidence of leakage around the latter after human implantation.

"The valves are impressive in their ability to function for extended periods and show no apparent fatigue or disintegration," he added.

Residents in the area who desire to will their heart valves or to make a heart valve donation from a deceased relative may contact the Division of Cardiovascular Surgery at the Stanford University School of Medicine, telephone 321-1200, Ext. 5771.

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(Mailed May 22, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- "Emergency Psychiatry and Suicide Prevention" will be the topic of a public lecture at Stanford University School of Medicine Wednesday (May 24).

Dr. Alfred E. Weisz, chief resident in psychiatry, will speak at 8 p.m. in Room M106 of the Medical School Building. His lecture is part of the medical school's PROGRESS IN MEDICINE series.

Dr. Weisz will discuss the extent of the suicide problem in the United States and will trace the historical development of suicide prevention programs, focusing on current research and training projects.

He will also discuss religious and legal views of suicide and the significance of various sociological and psychological factors affecting suicide potential.

Dr. Weisz is in his third year of residency and is presently serving as acting instructor in psychiatry.

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(Mailed May 22, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

Editors: Copies of STANFORD M.D. available on request.

STANFORD -- Skiers and hikers ascending from such low-lying areas as San Francisco Bay to 9,000-foot or higher mountains can suffer fatal altitude sickness if they ignore the warning symptoms, a Stanford cardiologist said today.

Knowledge of symptoms and remedies can be the difference between a disaster and a pleasurable outing, according to Dr. Herbert N. Hultgren, professor of medicine at the Stanford University School of Medicine.

He presented his warning in an article titled "Lessons from High Altitude" in the May issue of STANFORD M.D., the quarterly magazine of the Stanford Medical Alumni Association.

Dr. Hultgren based his article on research that he and his colleagues have been conducting since 1958 in the Peruvian mining community of La Oroya, 12,200 feet high in the Andes.

The Peru research project, he said, has revealed that altitude sickness generally involves acute pulmonary edema rather than heart malfunction. Pulmonary edema is the movement of fluid from the blood into the air sacs of the lungs. The fluid acts like a salt-water and egg-white mixture. It froths when the patient breathes and quickly "drowns" him.

The symptoms of pulmonary edema--a persistent cough, shortness of breath after the slightest exertion, a gurgling noise in the chest, coughing up of blood-streaked sputum, and vomiting--usually do not appear until six to 36 hours after arrival in a high-altitude area, Dr. Hultgren wrote.

These signs resemble those of pneumonia, but without chills or fever. When the danger signals occur, the patient should be quickly brought to lower altitude and given absolute bed rest with oxygen continuously administered. Recovery is usually complete in three days.

-MORE-

"A similar clinical picture is seen in mountaineers," Dr. Hultgren wrote, "but because of the frequent unavailabililty of oxygen and the long time required for evacuation to a lower altitude, the edema may be severe and frequently fatal. Many deaths previously ascribed to pneumonia may have been high-altitude pulmonary edema, uncomplicated by infection.

Acute high-altitude pulmonary edema occurs most frequently in persons who travel within a day or two to elevations of over 9,000 feet, Dr. Hultgren explained. But acclimatized mountain residents who visit a low altitude for one to two weeks and then return to a higher elevation also seem susceptible.

Since this condition can be fatal, Dr. Hultgren offers these words of advice:

· methods of prevention and treatment should be emphasized to anyone traveling to an altitude of over 9,000 feet. Mountaineers should be especially aware of the syndrome because of the frequent lack of available oxygen and difficulty of prompt removal of the victim to a lower elevation.

· acclimatized persons returning to high elevations and persons who have had previous attacks of altitude sickness should be informed of preventive measures and methods of treatment.

· adequate time should be taken in gradual ascent to permit full acclimatization. After arrival at a high altitude area, a period of rest and inactivity for one to two days should be observed.

· cough, shortness of breath, noisy breathing or blood-streaked sputum are indications of prompt medical attention.

· all mountaineering parties bivouacking above 10,000 feet should have available emergency oxygen and appropriate tools and spare parts should be provided to utilize additional oxygen if dropped by plane.

Dr. Hultgren said that further studies of the causes of high-altitude pulmonary edema are being pursued in the cardiology laboratory at Stanford since it is apparent that it may have many features in common with pulmonary edema occurring in other conditions of heart disease.

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(Mailed May 16, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- More than 400 medical alumni and their wives will attend the Stanford Medical Alumni-Faculty Reunion Friday (May 19) at the Stanford University School of Medicine.

The theme of the day-long program will be "A New Look at an Old Art," featuring aspects of the medical school's teaching program in the morning, and topics of broad clinical interest in the afternoon.

Speakers at the morning sessions will be Dr. Robert Chase, professor and head of the Department of Surgery; Dr. Halsted R. Holman, Berthold and Belle N. Guggenhime professor of medicine and head of the Department of Medicine; Dr. Arthur Kornberg, Nobel Prize winning biochemist and head of the Department of Biochemistry; and Dr. Norman Kretchmer, professor and head of the Department of Pediatrics. The sessions will begin at 9:45 a.m. in Room M106 of the Medical School Building.

A special program for wives will feature a panel discussion on "Drugs and the College Student" at 9:45 a.m. in Tresidder Memorial Union. Panelists are Joel Smith, associate provost and dean of students; Dr. Avram Goldstein, professor and executive head of the Department of Pharmacology; Dr. B. Davie Napier, dean of the chapel and professor of religion; William Keogh, former associate dean of the School of Law; and James A. Paulsen, psychiatrist-in-chief, Cowell Student Health Center.

Afternoon program for wives includes a bus tour of new building additions on the campus and a guided tour of the Leland Stanford Jr. Museum by Dr. Lorenz Eitner, professor of art history and executive head of the Department of Art and Architecture.

Medical alumni day will be concluded with reunions for the classes of 1917, 1922, 1927, 1932, 1937, 1942, 1947, 1952, 1957, and 1962.

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(Mailed May 16, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- Scientists can now detect tiny traces of metals in a single human cell or part of a cell by making it go up in a puff of smoke.

It is done through a new application of the laser--an optical device that produces a thin beam of light of tremendously high energy.

The laser beam is focused through a microscope on a minute piece of tissue. The tissue is vaporized at a temperature of about 18,000 degrees over a period of a few millionths of a second.

The light from the minute brilliant cloud, which is a hundredth of an inch high, is made up of many wavelengths that produce a spectrum of the cell's chemical composition. The intensity of the color at each wavelength depends on the quantity of a particular metal present in the original sample. The intensity is measured by a very sensitive photoelectric tube attached to a spectograph. The electric current from the phototube can be recorded directly in terms of metal amount in the sample and compared with samples of known metal content.

The new laser application is being developed at the Stanford University School of Medicine by Dr. David Glick, professor of pathology, and Drs. Edwin S. Beatrice and I. Harding-Barlow, research associates. Their work is supported by the National Institutes of Health.

In recent experiments, the Stanford research team has succeeded in detecting metals like iron and zinc in single human red and white blood cells, sperm cells, and liver and kidney cells.

Metals necessary for human life as well as those which could possibly be dangerous to health can now be identified as a result of the new technique, the investigators said. Among more than a dozen of these essential minerals or "trace metals" in the human body are iron, zinc, and copper.

-MORE-

"The human body contains enough of these metals to make a two-inch iron, a one-inch zinc and one-fourth of an inch copper nail," the researchers explained. "But since the importance of these metals lies in their use within the cell, we are confronted with two problems. First, the size of the average human cell is about 1/20 the diameter of a human hair or the size of a single pollen grain. Second, the trace metals constitute only a millionth or, more often, a billionth part of the entire cell.

"The problem then is one of measuring a few million trillionths of an ounce of metal in a sample the size of a very fine pollen grain."

Until now the same analysis done with conventional test-tube methods was difficult or required considerable time for each element in the cell, the researchers emphasized.

Although the present research is aimed at studying chemical substances in body tissues that are of interest to biologists and medical scientists, Dr. Glick foresees a future application of the technique in clinical laboratories.

"Single drops of blood or other body fluids (instead of the large quantities now required) could be used to furnish rapid, simultaneous analysis of a number of elements," Dr. Glick said. "The advantage of requiring only a one-drop sample (actually, less would suffice) from each patient, the ability to store the dried samples indefinitely, the ease of mailing such samples, and the fact that laser analysis could be automated and the data computerized--all offer considerable possibilities."

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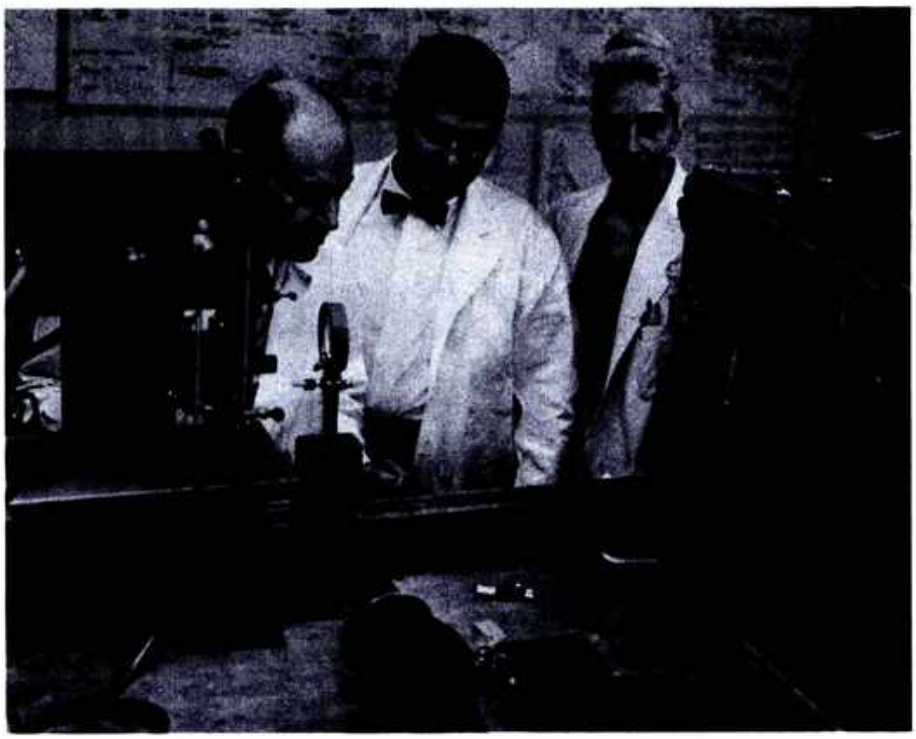
(Mailed May 15, 1967)



Drs. David Glick (left), Edwin S. Beatrice, and I. Harding-Barlow of Stanford's department of pathology, display laser apparatus used to detect minute quantities of metals in a human cell or even a portion of a cell. With a single burst of intense light, tissue under microscope at left is turned into a puff of smoke. Light brilliant cloud is analyzed by spectograph at right, which separates the light into its many colors or wavelengths. Intensity of color at each wavelength reveals quantity of a particular metal in original sample which can be measured by sensitive equipment.

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Laser Spectroscopy

Please send me 8x10 glossy prints of above picture.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

STANFORD -- The use of drugs in the prevention and treatment of heart attacks will be the subject of a public lecture at Stanford University School of Medicine Wednesday (May 17) at 8 p.m.

Dr. Donald C. Harrison, assistant professor of medicine and chief of the Division of Cardiology, will speak on "New Drugs for Survival After a Heart Attack" in Room M106 of the Medical School Building. The lecture is part of the medical school's PROGRESS IN MEDICINE series.

Dr. Harrison will discuss the various kinds of heart attacks, their symptoms and causes. He will specifically describe his research on the effects of lidocaine and propranolol on acute cardiac arrhythmia, a disturbance of the normal heart beat, which frequently accompanies a heart attack.

According to Dr. Harrison, 40 per cent of all early deaths from heart attacks are caused by acute arrhythmias. He believes the majority of these deaths, about 200,000 per year, can be prevented with early detection of the arrhythmias and the use of drugs.

In addition to his position on the Stanford faculty, Dr. Harrison is chief of cardiology for the Palo Alto-Stanford Hospital Center. He also is a member of the board of directors of the Santa Clara County Heart Association.

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(Mailed May 15, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Women and their diseases will be the subject of a public lecture at Stanford University School of Medicine Wednesday (May 10).

Dr. John McLean Morris, visiting professor of gynecology and obstetrics, will speak at 8 p.m. in Room M106 of the Medical School Building. His lecture, entitled "Women," is part of the medical school's PROGRESS IN MEDICINE series.

Dr. Morris will discuss the historical origins of the specialty of gynecology and current research on the detection and treatment of cancer in women. He will also cover the biological and psychological aspects of sex differentiation, human reproduction and the effects of contraception on sexual behavior.

Professor of gynecology at Yale University School of Medicine, Dr. Morris was appointed a visiting professor at Stanford for the 1966-67 academic year.

The following three lectures will conclude the PROGRESS IN MEDICINE series for the academic year. The series will be resumed next fall.

MAY 17: "New Drugs for Survival After a Heart Attack," by Dr. Donald C. Harrison, assistant professor of medicine and chief of the Division of Cardiology.

MAY 24: "Emergency Psychiatry and Suicide Prevention," by Dr. Alfred E. Weisz, chief resident in psychiatry.

MAY 31: "New Treatments for Infertility," by Dr. Emmet J. Lamb, assistant professor of gynecology and obstetrics.

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(Mailed May 8, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- Two fourth year medical students at Stanford University School of Medicine have been elected to Alpha Omega Alpha, the national honor medical society.

The two students are Ronald Levy and William G. Hayden.

Earlier this year, six fifth year students were also elected to the society. They are: M. Jan Dray, Samuel D. Hellis, Edgar K. Marcuse, Richard G. Offutt, William M. Palmer and Peter W. Wright.

Medical students are elected to Alpha Omega Alpha on the basis of scholarship and potential leadership. To qualify, they must be fourth or fifth year students in the upper 25 per cent of their class.

Students and their parents' names and addresses are listed below:

CALIF., DOWNEY - Richard Offutt, Mr. and Mrs. W.V. Offutt, 8523 E. 11th St.

EL CAJON - William Palmer, Mr. and Mrs. Morris H. Palmer, 1721 Vista Way

MENLO PARK - Samuel Hellis, Mr. and Mrs. H. Dean Hellis, 294 Waverley, Apt. 4

PALO ALTO - Ronald Levy, Mr. and Mrs. Herman H. Levy, 420 Hale

CONN., WILTON - Peter Wright, Mr. and Mrs. Robert Wright, 489 Danbury Rd.

N.Y., N.Y. - Edgar Marcuse, Mr. and Mrs. J.E. Marcuse, 1125 Park Ave.

PENN., DUSHORE - William Hayden, nephew of Mrs. Agnes Hochberg (parents deceased)

WASH., SEATTLE - M. Jan Dray, Mr. and Mrs. M.H. Dray, 11541 Third N.W.

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(Mailed May 4, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- "Man's Disorientation in Space: from hangovers to...SCUBA diving" will be the subject of a public lecture at Stanford University School of Medicine Wednesday (May 3).

Dr. F. Blair Simmons, associate professor of surgery and head of the Division of Otolaryngology, will speak at 8 p.m. in Room M106 of the Medical School Building. His lecture is part of the medical school's PROGRESS IN MEDICINE series.

Dr. Simmons will discuss the symptoms and physical effects of spatial disorientation, usually called dizziness. He will also describe current methods of diagnosing the problem, particularly the technique of recording eye motion electrically.

Dr. Simmons has been a member of the Stanford faculty since 1961. He is a specialist in middle and inner ear surgery.

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(Mailed May 1, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- A Tracy, Calif., man recently became the first patient to receive a mitral valve from someone else's heart, Stanford University surgeons have disclosed.

Rhoder E. Cundiff, 66, received a "fresh" mitral heart valve from a recently deceased person in an open-heart operation performed at the Palo Alto-Stanford Hospital Center.

Until this new technique was perfected (and even now) most patients received plastic heart valves to substitute for their own damaged valves.

Cundiff underwent open heart surgery last month and is now back home in Tracy. He is able to be up most of the day, watching television and rooting for the Giants.

"That's the best sounding valve I ever heard," Dr. Norman E. Shumway, professor and head of the division of cardiovascular surgery, told Cundiff after a recent examination.

Dr. Shumway and his associates have pioneered in transplanting both "fresh" mitral and aortic valves from persons dead not more than 12 hours. Seventeen aortic valve transplants have been reported by the Stanford University School of Medicine in recent weeks. But, Cundiff's was the first "fresh" mitral valve transplant.

The mitral valve guards the opening between the left auricle and ventricle, keeping blood in the ventricle from returning to the auricle.

Cundiff's valve had apparently been ruptured for some time. He had always worked hard physically, being labor foreman for a construction company. He knew something was wrong, but he did not know what.

"I was just short of breath. I did not know whether I could get across the yard or not," is how Cundiff described his awareness that all was not well.

The fresh heart valves used at Stanford are carefully selected. Donors cannot have suffered from infectious diseases or cancer. Cundiff and others receiving the fresh valves never know who their benefactors are.

Cundiff has improved so much that the doctors have taken him off the salt-free diet prescribed for many heart patients. In weight he is now to his normal 165 pounds (he was up to 189 before the operation).

Stanford Medical Center operates a heart valve "bank," but the supply is far too small for the need. It would welcome inquiries from persons who want to will their valves or who might make a donation from a family member who has just died. The bank's phone is 321-1200, extension 5771.

(Mailed June 28, 1967) #####

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- The Stanford University School of Medicine today announced that Bertrand Goldberg Associates of Chicago will be the architectural consultants for its proposed hospital-ambulatory care center and new basic science building.

Goldberg, a leading architect who designed the famous Marina City in Chicago, will work with the medical faculty and other experts in the planning of the facilities. Ultimately his role will be to translate the emerging plan into a physical structure with maximum flexibility.

"Mr. Goldberg is an architect with an imaginative and scholarly approach to the problems of design, who is not wedded to the past," commented Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine. "Under his expert guidance we hope to apply new concepts of construction to the delivery of comprehensive health services that can be emulated throughout the nation."

The School of Medicine recently received a $500,000 planning grant from the Commonwealth Fund of New York to initiate studies toward a solution of the widespread national problem of escalating medical care costs. A chief factor in the problem is the relative inefficiency of architectural designs that limit patterns of utilizing staff, space, and equipment.

Stanford is taking advantage of its need for medical facilities to plan new ones that will continue to assume a superior standard of care and, at the same time, incorporate features to limit costs, Dr. Glaser said.

Goldberg, whose buildings are known for their "outer space image and inner space reality," has been responsible for structural innovations, based chiefly on recent advances in structural theory, mathematics and computer technology. By combining technological advances with studies of behavior patterns he has produced standards for shaping space more sophisticated than simple geometry.

-MORE-

In his Marina City project, Goldberg departed from the convention of rectilinear, post-and-beam design ("A nation that is attempting to reach the moon cannot go on building like that," he was quoted as saying), and used the vertical concrete shell as a structural core for the high-rise twin towers. The core received all horizontal and vertical loads from cantilevered floor slabs. With this approach, Goldberg achieved greater structural rigidity than conventional steel-framed towers at no greater cost. His choice of a circular building gave all apartments in Marina City sweeping views.

Goldberg's innovations have been incorporated in a score of educational, commercial, and residential buildings in several states. Among them, he designed the master plan for Affiliated Hospitals, Inc. in Boston, which includes a 750-bed general hospital that will serve as a major teaching and research facility for Harvard Medical School; a 176-bed clinical facility for Elgin State Hospital at Elgin, Illinois; and the State University of New York Health Sciences Campus.

He holds degrees from Harvard, the Illinois Institute of Technology, and Bauhaus. The latter is the architectural school of Walter Gropius, founded in Germany in 1919, which became known for its adaptation of science and technology to the field of art and architecture.

Stanford's proposed health facilities, which include a 400 to 500-bed hospital will embody two objectives. Facilities will be related to the specific stage of care required by the patient, from those needing minimal supervision to patients requiring round-the-clock intensive care. Comprehensive-care service, stressing ambulatory, or outpatient care, will be an integral part of this concept.

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Mailed June 27, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

STANFORD -- You climb the steps and ring the bell of the white bungalow, and a little girl of perhaps two years rushes to the door. Batting her unbelievably long eyelashes, she says, "Hi. I am Laura Lyn."

When you ask to see mother, Laura Lyn beams forth an enchanting smile. With all that brightness radiating from the tiny face, the visitor doesn't see at first that the auburn-curled girl is perched on a sort of saddle raised over a small wheeled platform or "dolly." She has no arms and only one leg. You wonder what can there possibly be for this child to smile about.

Incredibly, there seems to be a great deal that Laura Lyn finds to smile about. Her story begins at the Birth Defects Study Center at Stanford University School of Medicine and its affiliated Stanford Children's Convalescent Hospital in Palo Alto, where a major portion of her rehabilitation treatment is carried out.

Laura Lyn Kratzer, two years old, goes to the Stanford Center three times a week to receive both physical and occupational therapy and for a check of the little chest harness she wears. Her two artificial arms are attached to this harness while another prosthetic device anchored around her waist provides her with a left leg, knee and foot. These prostheses function by means of muscle motion and pressure.

At the Center and the Convalescent Hospital Laura Lyn receives "integrated care." This means that a number of medical specialties are needed for her care and training--a pediatrician, an orthopedist, a prosthetist, an engineer, a physical and sometimes an occupational therapist, a psychiatrist or psychologist, a medical social worker, sometimes other specialists.

In 1963 a grant from the National Foundation helped establish the Birth Defects Center in the department of pediatrics of the Stanford Medical School. Its purpose is to train medical personnel in treatment, diagnosis, and recognition of the problems of patients with birth defects. A second and equally important objective of the Center is to do research, both in the clinic and the laboratory, to find ways of preventing birth defects.

Laura Lyn is surrounded by outstanding skills and ministered to with deep concern and affection. Everyone is wide-eyed over the child's progress--bringing a cookie to her mouth by her toes, combing her doll's hair or picture-drawing in the same way. Everyone watches breathlessly when, as a sort of third-act curtain when the consultation ends, she walks down the hospital corridor <u>alone</u> and without crutches(though the physical therapist is nearby ready to catch her if she totters).

Dr. Irwin A. Schafer, assistant professor of pediatrics at the School of Medicine and medical director of the Birth Defects Center, emphasizes Laura Lyn's high intelligence as factor in her rehabilitation.

-MORE-

"Laura Lyn is above average intelligence, an extremely bright, perceptive and sensitive child," he explains. "Before she was nine months of age she was fitted with her first prosthesis. She has just grown up to these devices, and she takes them in stride as she goes along. Learning how to use them is not simple, at any age.

"Of course, she will have many, many problems as she grows up. But because of her superior intelligence, and that of her fine parents, she should overcome many handicaps. A major factor in her remarkable progress is that, aside from the loving care of her father and mother, she has been under the constant study here of people who are intensely interested in and devoted to her."

In their home at Alviso, Calif., Gerald and Shirley Kratzer, her parents, are quite certain why Laura Lyn smiles.

"Laura Lyn very much wants to do things on her own," her mother says. "And though she is not yet two years old, it's difficult to do things for her. She lets me attach her little artificial arms and leg and take them off at night, but precious little else.

"Of course, there are some things for which Laura Lyn must depend on her father and mother." She doesn't talk yet in grown-up words, but she and her parents have a language of their own--call it intuition, if you like.

"So, much of the time we know what she wants and needs. Months ago, in her own secret way, she told us she wanted to look like her brother and her three sisters, who have all of their own legs and arms."

As Laura Lyn toot-toots on a flute, plays an auto-harp with a leather pluck held between her toes or turns on the stereo tape recorder, her father says that "Laura Lyn has the gift of appreciating music. We want to take advantage of that gift. If the occupational therapists at the Birth Defects Center give their approval, we would like in time to work up a little combo, made up of these children amputees, playing the xylophone, drums, flute, and so on."

When mealtime approaches, mother fastens on the little arms, and Laura Lyn practices with the fork and spoon (the child wears the prostheses now only at mealtimes but must soon begin wearing them all day).

Shirley Kratzer, who bequeathed her red hair to Laura Lyn, makes a point:

"Laura Lyn will be taught a vocation. You don't have security of any kind, including emotional security, without an occupation--even when you have all your arms and legs. Maybe in time she'll play in a band, or even sing, or perhaps write. Whatever it is, she will learn to do something professional."

The Kratzers were shattered when the child was born with the congenital disorder known as amelia, or complete absence of arms and legs, one or all of them. They experienced overwhelming feelings of guilt, of bewilderment over why fate had dealt them this severe blow, made all the more puzzling because their other four children were normal in every way. Moreover, so far as the parents could ascertain, there was no history of birth defects in either family.

Soon after their initial despair, Gerald and Shirley were invited to the first of several meetings with the staff of the Stanford Center. In addition, social workers called upon them at home. And slowly the parents began to understand, through sympathetic guidance, that (1) the tragedy was no fault of theirs, (2) that today rehabilitative medicine could achieve incredible feats in giving Laura mobility through prostheses, and (3) that in Laura Lyn they had someone most rare to cherish.

Would they face the challenge?

Seen in the light, Gerald and Shirley did not hesitate. They met the challenge with remarkable intelligence and accepted it almost with eagerness. In less than two years the result has been an extraordinary case of rehabilitation, both of the child and her parents.

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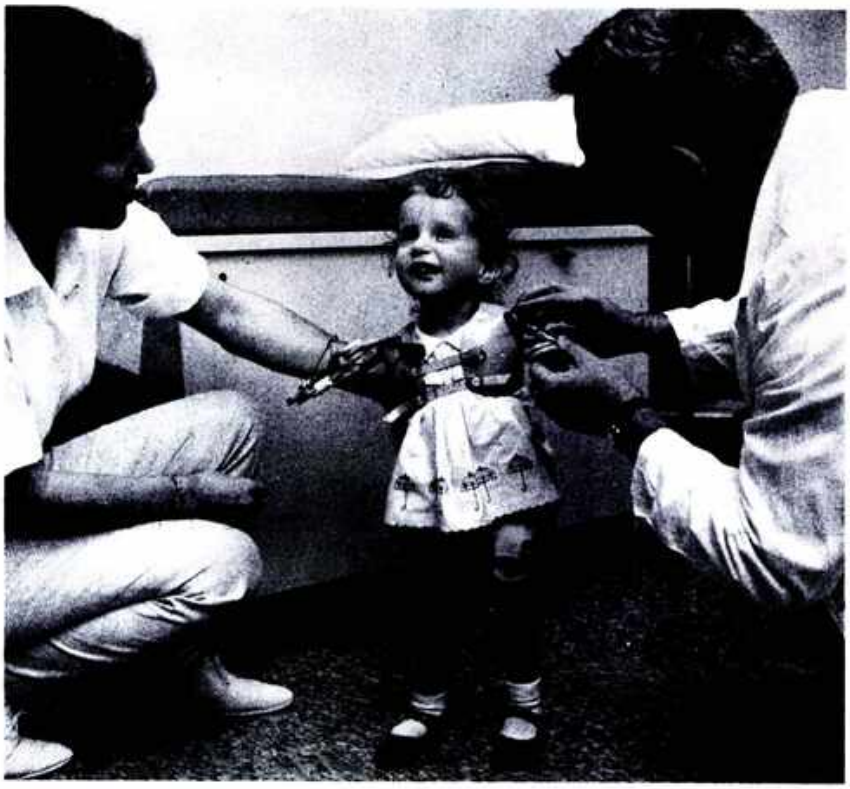
(Mailed June 26, 1967)



"Laura Lyn wanted to look like her brother and sisters who have all their own legs and arms." Here Dr. William M. Gilmore, chief of physical medicine and rehabilitation at Stanford Children's Convalescent Hospital, and clinical assistant professor of pediatrics at Stanford, fastens on the little arms with help from Mrs. Marguerite Dilley, chief outpatient physical therapist.

- -

TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Birth Defects

Please send me a 8x10 glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Science Writers: Story is based on papers to be presented at meetings of International Society of Transplantation in Paris, France, and the Society of Nuclear Medicine in Seattle, Washington.

FOR PM RELEASE THURSDAY, JUNE 22, 1967

STANFORD--Newer scientific advances have improved the success rate for kidney transplantation and have paved the way for transplants between unrelated persons, a Stanford University surgical research team reported today.

Early results of studies using the new methods were given simultaneously at scientific meetings in Paris, France, and in Seattle, Washington. The studies are supported by grants from the National Institutes of Health.

Each of the techniques reported focuses its attack on the problem of administering safely and at the optimum time the powerful drugs that control the rejection of foreign tissues by the body.

In Paris, Dr.Samuel L. Kountz, assistant professor of surgery, and Dr. Roy B. Cohn, professor of surgery at the Stanford University School of Medicine, told the meeting of the International Society of Transplantation about their technique which has successfully produced superior early kidney transplant function than drug treatments given orally or intravenously. Successful treatment of the first rejection is important for the long-term survival of the graft.

They reported that controlling the body's rejection factor through drugs injected directly into the kidney improves the success rate for kidney transplantation.

The technique consists of inserting a teflon catheter into the transplanted renal (kidney) artery for administration of immunosuppressive drugs locally. The drugs act on the site of the rejection usually detected by a decline in kidney blood flow. Successful treatment of early rejection is marked by an immediate return of blood flow toward normal.

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The surgeons said the technique has advantages over oral drug treatment because it allows smaller doses to be given. Thus the tendency of these powerful drugs to suppress the body's immunity and render patients susceptible to infection is minimized.

"Of 20 animals treated by this technique, all have exhibited prolonged survival," the surgeons reported. "There were no rejection crises for 20 days after transplantation had taken place. All of the grafts showed excellent initial function."

The Stanford researchers reported similar results in 18 patients. Seventeen of the kidney transplants were between relatives, and one between unrelated persons. Only one death occurred after three months from infection in a mother-to-daughter transplant.

"All of these grafts showed excellent initial function with less toxicity compared to the nine transplants performed earlier using conventional techniques," the surgeons said.

In Seattle at the meeting of the Society of Nuclear Medicine, Dr. Shin Hwa Yeh and Dr. Joseph P. Kriss of Stanford's Division of Nuclear Medicine, reported their discovery of a fast-decaying radioactive compound (Technetium-99 (V)-citrate complex) which was found to be excreted rapidly by the kidney.

Physiological studies by Drs. Cohn and Kountz showed that the compound was excreted in animals at the same rate the kidney filters out waste products. The new drug is now used to measure kidney function and to monitor rejection of transplants more accurately than was previously possible.

These advances, coupled with improved methods of tissue-typing and cross-matching developed by Dr. Rose O. Payne at Stanford, have paved the way for transplants between unrelated persons, the surgeons said.

The first such operation was performed two weeks ago at the Palo Alto-Stanford Hospital Center. Mrs. Ralph Aceves, 37, of San Jose, California, and a mother of three children, received a healthy kidney from an unrelated donor.

Mrs. Aceves became ill a year ago of an inherited kidney disease. Both her brother and mother had died of the disease. About 15 relatives and friends volunteered to donate a kidney to save her life.

The donor selected to be the most compatible was James Weighill, a 25-year-old truck driver and father of four from Santa Barbara, California, who is married to Mrs. Aceves' niece.

Both recipient and donor are reported in good condition and have returned to their homes.

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(Mailed June 21, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- Dr. Robert J. Glaser, vice-president for medical affairs and dean of the Stanford University School of Medicine, has been appointed to a 15-member national advisory committee on higher education to explore the relationship between colleges, universities and the Federal government.

The committee, appointed by John W. Gardner, secretary of Health, Education and Welfare, will report to him in July 1968.

"The growing partnership between the Federal government and the universities must be a relationship in which neither side exploits the other," Secretary Gardner said. "If we are to reap the benefits and avoid the dangers in the relationship, we shall have to understand it far better than we do now."

In the current fiscal year, the Federal investment in higher education is estimated at $4.6 billion. In 1962 the figure was $1.6 billion.

The committee will examine the present quality of relationships between higher education and the Department of Health, Education, and Welfare. The overall relationships of colleges and universities with the Federal government also will be reviewed. The committee will identify the problems which exist and make proposals for their solution.

The advisory committee membership represents both large and small colleges and universities, junior colleges, foundations and public and private institutions. Dr. Charles Hitch, vice-president of the university for administration at the University of California at Berkeley, also is a member.

Dr. Glaser was president of Affiliated Hospitals Center, Inc. and professor of social medicine at Harvard Medical School prior to coming to Stanford. Earlier he served as vice-president for medical affairs and dean of the School of Medicine at the University of Colorado.

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(Mailed June 19, 1967)

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STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

"I SWEAR BY APOLLO THE PHYSICIAN..."

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the Stanford University School of Medicine, administers the Hippocratic oath to 48 graduating medical students at a convocation held at the Medical School earlier this week. This is the fourth class to complete Stanford's five-year medical curriculum. Beginning July 1, the new Stanford physicians will begin their internships at 43 hospitals in 20 states.

The average age of the graduating physicians is 27. Of the 48, seven are women. Twenty-three of the students are married and have a total of 21 children, 11 born during the last five years. Dr. James E. Hayes, the class president, quoted the figures to show that "our class members have not neglected certain social responsibilities during their five-year study of medicine at Stanford."

In addition to support from their parents, the graduating class members received $250,000 in financial aid from the Dean's office--about $5,200 per student during their five years of training. The 303 full-time faculty members gave approximately 4,700 hours of instruction to each student, excluding the time class members have spent in gaining additional degrees and in research.

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(Mailed June 16, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

FOR AM RELEASE SUNDAY, JUNE 18, 1967

ATLANTIC CITY -- Psoriasis, the stubborn skin disorder that brings anxiety, embarrassment or pain to four million Americans, remains a mystery in spite of determined efforts to conquer it.

But some progress was reported today.

After seven years of research, supported by the John A. Hartford Foundation, Inc., of New York, these facts clearly emerge:

· Psoriasis, which is marked by disfiguring, scaly spots and patches on many parts of the body, is initiated by a kind of local chemical alteration of the skin. With all the assembled knowledge of this reaction, scientists still cannot explain its basic nature. Studies suggest that the basic abnormality lies not in the fundamental nature of growing cells, but in a defect in the mechanism which controls growth of the epidermis, the outer layer of the skin.

· So far, skin from patients with psoriasis shows no chemical peculiarities when compared with normal skin. Researchers, however, think that some significant chemical change may still be at work, possibly related to hormones.

· Although no real "cure" for psoriasis can be claimed, in 38.5 per cent of the patients the disease may temporarily disappear either spontaneously or with known treatments.

The report was presented at the annual meeting of the Society for Investigative Dermatology by Dr. Eugene M. Farber, professor and head of the Department of Dermatology, and Dr. Alvin J. Cox, Jr., professor of pathology, at the Stanford University School of Medicine. Dr. Farber is also president of the Society.

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The Stanford researchers described detailed studies of the natural history of psoriasis conducted among patients in the United States, with cooperation from practicing dermatologists. The studies show:

- Inheritance figures prominently in the incidence of the disease. Eighteen per cent of the patients who took part in the questionnaire reported a parent with psoriasis, 11 per cent reported a brother or sister, and 13 per cent identified more distant affected relatives.

- For patients with a genetic predisposition, skin injury may trigger psoriasis. Fourteen per cent of the patients said their psoriasis began at a site of an injury.

- Climate is a factor in the disease. Of the patients studied, 77 per cent reported their skin improved in hot weather and 88 per cent noted it was worse in cold weather. Seventy-eight per cent stated sunlight caused improvement, and 15 per cent reported their skin got worse on exposure to sunlight.

- There is a relationship between psoriasis and arthritis, but there are no clues as to the reason for this relationship.

- Emotional factors were thought to have aggravated the disease in 40 per cent of the patients.

Drs. Farber and Cox said that failure of any therapy to effect a permanent cure indicates that known drugs achieve their temporary success by inhibiting growth of the outer skin layer and not by removing the predisposition of the skin to psoriasis.

They emphasized that making accurate measurements of tissues and fluids from psoriasis patients is difficult with present laboratory methods. This raises questions about the validity of much research work today.

An example of the difficulties influencing psoriasis research are studies of skin lipids (fats). Many workers have attributed special significance to various changes that they identified in studies of skin lipids and have connected them to psoriasis, Drs. Farber and Cox said. Work conducted at Stanford by Dr. David I. Wilkinson has demonstrated beyond any doubt that errors relating to the collection of skin lipids have been responsible for erroneous conclusions.

Lack of adequate laboratory methods for cultivating some viruses has hampered efforts to rule out a viral cause for psoriasis. For this reason the researchers are reluctant to conclude that viruses do not play a role in this disease even though there is no specific reason to suspect a virous as a cause.

"As more sophisticated approaches become available from the massive screening programs currently used for the possible viral cause of leukemia, another and more extensive search should be made in psoriasis applying these new techniques," the researchers recommended.

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(mailed June 14, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- A noted Stanford cancer researcher Sunday urged medical school graduates to make their influence "strongly felt in reshaping the organizational framework of medicine, which for too many years has been dominated by men who have responded to the need for change by a policy of denial and negativism."

"Our county, state and national medical societies must become responsible and constructive instruments for dealing with the increasingly numerous and complex problems of medicine and public policy," said Dr. Henry S. Kaplan, professor and head of the department of radiology at the Stanford University School of Medicine. He spoke at a convocation for 48 graduating medical students, attended by 500 parents and faculty members at the medical school.

Dr. Kaplan said that all of the developments of the past few years reflect "an intense interest in health and desire for absolutely first class medical care on the part of the American people, who have shown themselves to be quite prepared to pay the bill for expanded medical research, hospital construction, tax-subsidized health insurance for the aged and indigent, and very recently for subsidization of medical education."

"It is imperative that we physicians remember that these things are happening because society wants them and feels a need for them, not because some politician or demagogue is selling grandiose schemes. There is a danger that, as physicians, we may tend to forget that we are servants of society," he said.

Dr. Kaplan suggested that the medical profession take the initiative in planning creatively and wisely for the health care needs of society. "Failure to do so will only mean that others less qualified will make such decisions for us," he said.

He said academic medicine is emerging as a "third force" in shaping medical practice patterns of the future.

"The medical school has long since cast off its former image as the 'ivory tower' and is now a bustling, extremely complex institution in which the education of undergraduate medical students is only a part," he said. "The rest of the program comprises patient care, medical education at the residency and fellowship levels, training programs for an increasing variety of paramedical personnel and a broad spectrum of basic and clinical research."

These changes in the nature and scope of the medical school have essentially created enormous stresses and strains for the faculty, students, and the administration, Dr. Kaplan said. As the role of the medical center expands, it becomes increasingly difficult to recruit adequate numbers of faculty members who can fulfill the classical expectation that they excel in teaching, patient care, and research.

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"It is clear," he said, "that we must re-think the problem, perhaps along the lines of creating a new category of para-faculty medical staff to deal with our expanding patient care and postgraduate teaching responsibilities, thus freeing the faculty to do a more effective job of undergraduate teaching and research."

Dr. Kaplan predicted that the new regional programs for heart, cancer and stroke will thrust enormous additional responsibilities on the overburdened medical schools. However, they also present the schools with some new and challenging opportunities. Among them are:

· regional networks of affiliated hospitals utilizing computer data storage and retrieval systems, which, for the first time, will provide accurate information about the quality of medical care at the grassroots level and open new approaches to quality control.

· closed-circuit TV links between hospitals in such regional networks will permit the creation of a new kind of continuing post-graduate medical education program on a nationwide level, and will enable the medical schools to keep the level of education high during the physicians' practice.

· regional affiliations will greatly expedite and accentuate the dissemination of new discoveries to the smaller community hospitals throughout the nation.

He said medical research has had an enormous impact on medical education and medical practice. The medical curriculum has placed much emphasis on the basic sciences and on education rather than "training," so that every doctor emerging from medical school today "must be able to assimilate and evaluate for himself the tremendous body of new information and new discovery that will come forth in the next 25 years."

Some of the things to come, Dr. Kaplan said, are new vaccines against viruses, elimination of major insect and parasitic infections, and proof that the cause of certain human cancers, probably leukemias and related lymphomas, is due to viruses and development of specific vaccines for prevention.

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(Mailed June 12, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

FOR RELEASE MONDAY, JUNE 12

Editors: Names of students receiving M.D. degrees in your area will be included in a story mailed from Stanford University June 16. Home addresses of award winners are listed on page 2.

STANFORD -- Stanford University School of Medicine presented awards to seven graduating students at the annual senior class convocation Sunday (June 11).

Degrees will be awarded June 18 to 41 men and seven women, members of the fourth class to complete Stanford's five-year medical curriculum. The five-year program was inaugurated when the medical school moved from San Francisco to the Stanford campus in 1959.

At the convocation, John D. Minna received the Dr. and Mrs. Joseph Fife Surgery Award of $200 and the Stanford Medical Alumni Scholarship Award of $400. The Fife Award is given to an outstanding student in surgery, and the Alumni Award is in recognition of high scholastic achievement and leadership.

Richard G. Offutt received the Robert H. Alway Book Award, the L.A. and Marian S. Hopkins Award in Dermatology and the Lowell A. Rantz Memorial Award.

The Book Award, named in honor of Dr. Alway, dean of the medical school from 1958 to 1964, is given to a student who has "availed himself especially well of the Stanford five-year plan." The Hopkins Award, $100, is given to an outstanding senior medical student in dermatology and the Rantz Memorial Award, $125, to the student who has distinguished himself in the field of infectious diseases.

The Harold K. Faber Pediatric Award, $200 each, was presented to Helen Cheng-shan Li and Edgar K. Marcuse. This award honors potential contributors to child health in recognition of accomplishments in pediatrics.

Peter W. Wright received the $500 Borden Undergraduate Research Award in Medicine, given by The Borden Company Foundation, Inc., to the senior student who has completed the "most meritorious" research during his medical training.

-more-

David M. Treiman was presented the $250 National Foundation Merit Award for outstanding research in the area of birth defects, and Thomas D. Lindell received the $200 Upjohn Achievement Award for outstanding clinical performance.

Dr. Bernard W. Nelson, assistant dean for student affairs, presented the awards, and Dr. Harold K. Faber, emeritus professor of pediatrics, announced the recipient of the award named in his honor.

Class president James E. Hays presented the annual Arthur L. Bloomfield Award for excellence in the teaching of clinical medicine to Dr. Leon Cohen, assistant professor of medicine (neurology).

Dr. Henry S. Kaplan, professor and executive head of the department of radiology, delivered the faculty address, and Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, administered the Hippocratic Oath.

A special feature of the program was a performance by the Shawm Band, a group of five musicians who play medieval woodwind instruments.

Award winners and their parents' names and addresses are listed below:

CALIF., DOWNEY - Richard G. Offutt, Mr. and Mrs. W.V. Offutt, 8523 E. 11th St.

LOS ANGELES - David M. Treiman, Mr. and Mrs. A.A. Treiman, 1519 Easterly Terrace

SAN DIEGO - John D. Minna, Dr. and Mrs. John B. Minna, 1859 Fort Stockton

CONN., WILTON - Peter W. Wright, Mr. and Mrs. Robert Wright, 489 Danbury Rd.

HONG KONG, HAPPY VALLEY - Helen Cheng-shan Li, Mr. and Mrs. Tsun-kai Li, 49 Village Rd.

NEW YORK, N.Y. - Edgar K. Marcuse, Mr. and Mrs. J.E. Marcuse, 1125 Park Ave.

OREGON, ROSEBURG - Thomas D. Lindell, Mr. and Mrs. E. Lindell, 358 S.E. Claire St.

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(Mailed June 9, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

FILE COPY

STANFORD -- The study of tropical diseases is not as far removed from practical medical education as Californians might think.

Dr. Quentin M. Geiman, professor of preventive medicine at Stanford University School of Medicine, says he has seen more tropical or parasitic infections in California in one year than he saw in 10 years in New England.

During the past year, Dr. Geiman reports, he has identified 83 positive parasitic infections, including eight cases of malaria and several cases of amoebic dysentery and worm infestations.

Dr. Geiman believes the increasing incidence of parasitic infections can be traced to military personnel returning from Vietnam, peace corps returnees, representatives of the diplomatic service, widely travelled Californians and the large number of foreign born individuals who settle here.

He also calls California "a jumping off place" to Asia, Mexico, Central and South America. The state, he says, is in an excellent geographical position to concern itself with tropical health.

"Tropical diseases are not simply something you read about in books," Dr. Geiman emphasizes. "We have so many of our own medical problems in this country, it is easy to ignore problems of international health. But they are not as far removed as we might think."

Dr. Geiman was on the faculty of the Harvard School of Public Health for 20 years before coming to Stanford in 1955. In addition to his teaching responsibilities at the medical school, he heads the Palo Alto-Stanford Hospital Center diagnostic laboratory for the detection of animal parasites.

He also directs the medical school's Tropical Health Training Program, which awards travelling fellowships to students interested in obtaining clinical experience in a developing country. Since the program was organized eight years ago, 39 students have used vacation and free time to study in Mexico, Central and South America, Jamaica, Africa and the island of Martinique in the West Indies.

The purpose of the program, Dr. Geiman explains, is to provide instruction in the diagnosis, treatment, control and prevention of human diseases in subtropical and tropical climates.

The program is designed to encourage and maintain the interest of students in public health and to give them more experience with acute illness. "Problems of medical care in a developing country are basically similar to our own," Dr. Geiman adds, "but they are more clear-cut and subject to decisive control. Experience in solving them is good preparation for the study of public health in this country." -more-

To qualify for a travelling fellowship, the student must complete an elective course in tropical health and have a working knowledge of the language of the country to which he is assigned. Organizational and travel costs are paid under a training grant from the National Institutes of Health.

Dr. Geiman personally visits each of the countries to set up the program for the students. He works with government officials, medical school faculties and ministers of health.

This year a third year medical student is spending a travelling fellowship in Martinique and a fourth year student is in Ethiopia. Two others have recently returned from Jamaica, Costa Rica and Mexico.

The program in Martinique is one of the most unusual. It was organized by fifth year student Richard Offutt, who spent the summer of 1964 on a travelling fellowship to the island. During his stay, Offutt set up a work-study plan with the director of the Leprosarium in the Martinique Hospital.

Although the clinical experience in Martinique focuses on the treatment of leprosy, the visiting student also has the opportunity to study the general diseases of the people. Of the 1,000 lepers on the island, Offutt explains, only about 200 are hospitalized at any one time, and these have acute complications usually not related to leprosy.

Offutt also took a leave of absence to study medical problems in Africa. He spent four months in the Union of South Africa and four months in Uganda, East Africa.

He stresses that the majority of diseases in Africa and Martinique are the same as those found in the United States. The only difference, he says, is that diseases in tropical countries are usually of longer duration and more severe.

"An African with diabetes will come to the hospital in a coma, while diabetes in an American is usually detected in a mild form at an early age."

Thus, Offutt concludes, the learning experience in a tropical country is directly transferable to this country--"with the added challenge of studying another culture and way of life."

Because of the growing student support of the Tropical Health Training Program, Dr. Geiman and other interested faculty members are now exploring ways to expand the medical school's curriculum to cover the broader field of international health.

"Today's students have a great desire to travel and to improve the world," Dr. Geiman says, and he strongly believes "this type of student interest deserves to be nurtured."

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(Mailed June 6, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- The Stanford University School of Medicine Monday dedicated the Valerie and Harry Corvin Clinic for Diseases of the Skin and announced in conjunction a gift of $120,000 to support the work of the Department of Dermatology.

The gift is from Mr. and Mrs. Harry Corvin of San Francisco. Corvin was born in Boston and came to San Francisco in 1908. He is an attorney who has specialized in corporation law and estate planning.

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, praised Mr. and Mrs. Corvin for their "public-spirited support. Their gift is a boon to the School of Medicine, to patients who seek care here and to those who teach and do research. It is a gratifying manifestation of the encouraging support Stanford receives from enlightened citizens of the San Francisco Bay area, and it will be very valuable in the development, research and teaching of dermatology."

The Corvin Clinic contains examining rooms, a laboratory and X-ray room, and facilities for minor surgery. It is a part of the Stanford University Clinics.

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(Mailed June 5, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

CAPTION (Photographs available per attached photocopies.)

This whimsical copper and bronze sculpture of a scene in the operating room won top honors in the annual employee art show at Palo Alto-Stanford Hospital Center. The sculpture, entitled "The Operation," depicts two surgeons working on a body-shaped sheet on the operating table, while the patient sits behind the ether shield playing cards with the anesthesiologist. In front of the table, a nurse steps on the doctor's gown as she tries to help him into it, to the back another nurse tries to sort out a tangle of sutures, and at the far right, two interns fight over who gets to hold the retractor (an absurdity because no one wants to hold the retractor). The artist is Dr. Raymond Stofer, research associate in surgery at Stanford University School of Medicine. He spent about 11 months working on the sculpture. Each piece was individually shaped in copper, then assembled and brazed with a bronze coating to harden the surface.

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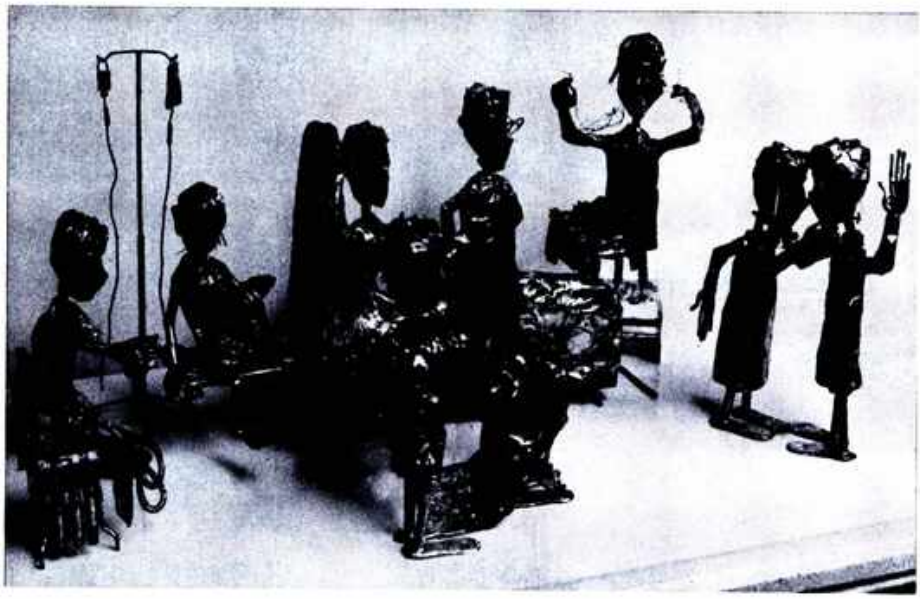
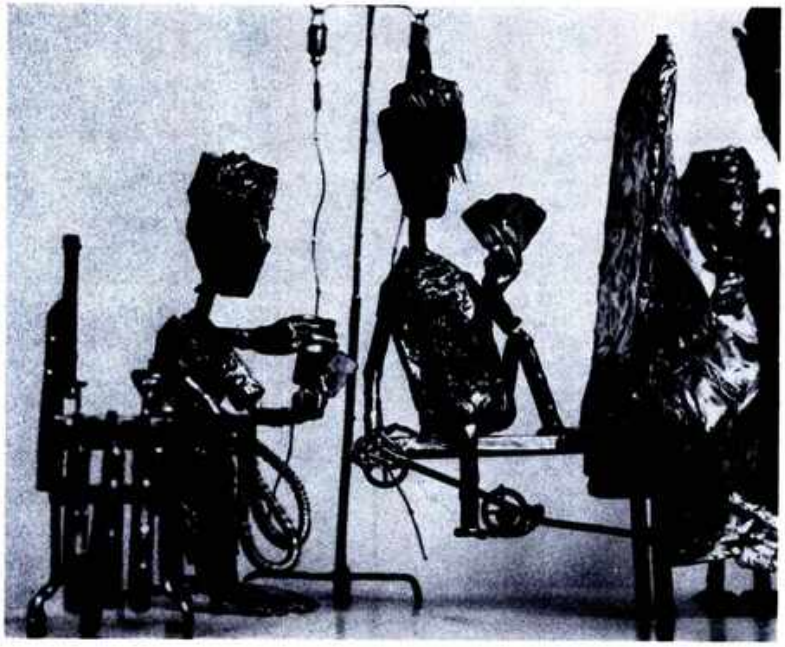
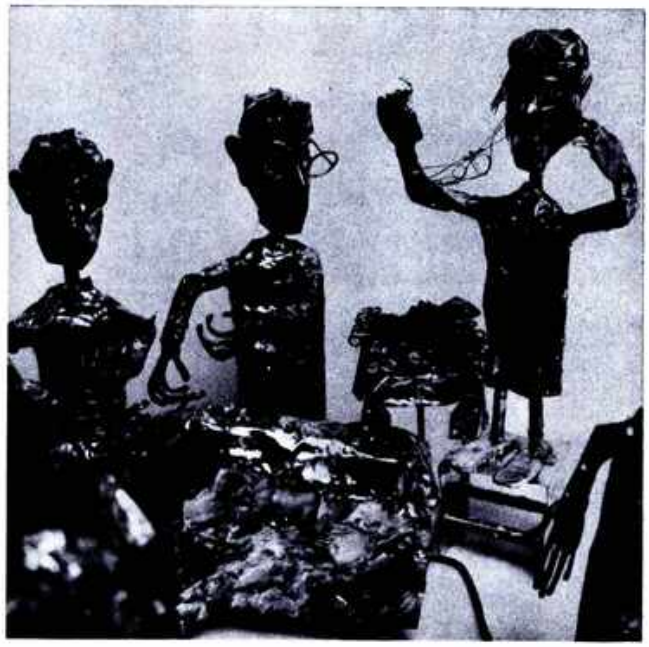
(Mailed June 5, 1967)



#1. General view of sculpture



#2. Close-up of patient and anesthesiologist



#3. Close-up of surgeon

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Sculpture, "The Operation"

Please send me 8x10 glossy prints of (1)_____, (2)_____, and (3)_____ above.

NAME:_____ PUBLICATION_____

ADDRESS:_____ CITY, STATE_____

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

EDITORS: Story is mailed simultaneously with the release from Commonwealth Fund of New York. Release date set by Commonwealth Fund.

FOR A.M. RELEASE THURSDAY, JUNE 1, 1967

STANFORD -- The Stanford University School of Medicine has received a $500,000 grant from the Commonwealth Fund of New York to initiate planning for a new hospital and ambulatory care center and to advance fundamental reforms in the patterns of hospital services and education in the health professions.

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, said the Commonwealth Fund's generous grant will assist Stanford to undertake "a creative enterprise that will encompass physically a new concept in hospital construction and the delivery of comprehensive health services."

He said the planning studies to be undertaken by the School of Medicine are directed toward a solution of the widespread national problem of the escalating scale of hospital costs, fast becoming a foremost issue in health financing.

A chief factor in the problem is the relative inefficiency, in terms of the health-care return on the dollars expended, of prevailing hospital designs and patterns of utilizing staff, space, and equipment. Stanford is taking advantage of its need for a new hospital to plan a facility that will assure a superior standard of care and, at the same time, incorporate features to limit costs.

The planning project will extend for a period of two years. The Commonwealth Fund's grant will be used chiefly toward the costs of a small planning staff and consultants in such fields as architectural design, management systems, computer technology, and automation processes and equipment. These experts will collaborate with the medical faculty and scholars in relevant nonmedical departments and schools of the University--for example, economics, sociology, and engineering--in the design of both the physical structure and operational system of the new hospital and ambulatory care center.

The proposed health facilities are part of the Medical School's master plan now under development, which also envisions construction of a new basic science building for the departments of Anatomy, Physiology, Pathology, and Medical Microbiology.

Dr. Glaser said the planning studies will constitute a fundamental examination of the hospital as a service system, with emphasis on the application of modern managerial techniques and engineering technology in achieving optimum use of available resources. The studies will seek to determine how staff should be trained and deployed to serve the hospital patient-care responsibilities most advantageously, what aspects can be automated, and what design concepts would be most suitable.

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"The operating patterns of the nation's large hospitals, with multi-million-dollar budgets, have not been subjected to the kind of scrutiny that is employed in industry," Dr. Glaser said. "For example, most hospitals have very large nonprofessional staffs, with high turnover rates. As a result extraordinarily high costs are incurred. No multi-million-dollar enterprise in the competitive world would prosper under such circumstances."

Dr. Glaser said the new hospital design will embody two objectives. First, facilities will be related to the specific stage of care required by the patient, from those needing minimal supervision to patients requiring round-the-clock intensive care. In contrast, most hospital patients now tend to be treated in facilities that assume identical seriousness of illness and involve the same cost to the patient and the hospital. Second, a comprehensive-care service, stressing ambulatory, or outpatient care, will be an integral part of this multi-stage hospital concept.

"Nationwide, there is a serious lack of innovative planning for hospitals," Dr. Glaser commented. "We need to show the way for vitalizing obsolete hospitals and to articulate a program for research and demonstration projects that would help find new and improved ways of organizing and delivering health services. This would raise the quality of care, increase the efficiency of operation and render hospitals more suitable as centers for research and training."

Dr. Glaser said that Stanford's new plans will make it necessary for the City and the University, joint owners of the present 437-bed Palo Alto-Stanford Hospital, to alter their present relationships. "The Medical School's diverse research, education, and patient care needs have made all the more apparent the necessity of an independent University-controlled hospital."

Stanford has about 200 beds in the present hospital. The School of Medicine has stated it needs 400 to 500 beds to carry out its mission.

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(Mailed May 26, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff (321-5310)

STANFORD -- Dr. Hayes A. Newby, professor and director of the division of speech pathology and audiology at Stanford University School of Medicine, has been appointed a professor in the department of communication arts and sciences at Queens College of the City, University of New York (CUNY).

At Queens College, Dr. Newby will teach audiology and will head the area of communicative disorders within the department. He will also be a member of the committee that is responsible for the doctoral program offered by CUNY.

Dr. Newby has been associated with the University's department of speech and drama since 1947. He joined the medical school faculty in 1957 and was appointed director of the division of speech pathology and audiology in 1963.

Dr. Earl D. Schubert will succeed Dr. Newby as acting director of the division.

Dr. Newby received his B.A. at Ohio Wesleyan University in 1935 and his M.A. (1939) and Ph.D. (1947) from the University of Iowa.

He is a past president of the American Speech and Hearing Association and the American Boards of Examiners in Speech Pathology and Audiology, a branch of ASHA. For the past seven years, Dr. Newby has served as moderator of the weekly television show "Doctors News Conference" which appears on Channel 2, Oakland.

Dr. and Mrs. Newby will move to the East Coast next month.

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STANFORD -- Dr. C. J. Karzmark of the Stanford University School of Medicine has been awarded a $22,000 grant for research in radiologic physics and radiotherapy at M.D. Anderson Hospital and Tumor Institute in Houston, Texas.

The grant, one of nine to California scientists for cancer research, was announced today by the California Division of the American Cancer Society.

Dr. Karzmark, an associate professor in the Department of Radiology, will take a leave of absence beginning in September. In 1962 he took a leave of absence to be in residence at the University of London on a U.S. Public Health Service fellowship program. He has been associated with the School of Medicine since 1955.

An authority in radiologic physics, Dr. Karzmark did undergraduate work at Yale, Harvard, Massachusetts Institute of Technology and the University of North Dakota, where he received his B.S. degree, with honors, in 1947. He received his M.S. in 1948 and a Ph.D., summa cum laude, in 1952 from Indiana University.

Over 1.5 million dollars in research grants have been awarded by state and national organizations of the American Cancer Society to California Institutions since September 1966.

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(Mailed July 31, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff (321-5310)

STANFORD -- The Stanford University School of Medicine has received a $281,000 matching grant from the National Institutes of Health for construction of an Animal Research Center, proposed to be one of the most advanced of its kind in the nation.

The announcement was made today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine.

The center will be located on Stanford land in the foothills just southwest of the main campus. The proposed buildings will contain approximately 14,000 square feet of space with an additional 4,000 square feet of outdoor pens and kennels.

According to Dr. Orland Soave, director of the Animal Care Facilities and clinical associate professor of medical microbiology, the Center will provide better animal care than is possible under present conditions and will provide room for expansion of research and teaching programs for the future.

Dr. Soave currently heads a staff of 35 who provide care for the over 65,000 animals housed each year by the medical school and used by nearly half of the faculty and staff for research.

"An important factor contributing to the over-taxing of present facilities has been the almost 300 per cent increase in medical school faculty--from 115 in 1957 to 310 today--and the concomitant growth of research," Dr. Soave points out.

Design features of the new Center will include outdoor exercise areas as well as excellent indoor housing, radiant heating where necessary, automatic flushing of pens, and automatic watering devices.

The central facility, a single story building of reinforced concrete, will provide laboratories for the study of animal diseases, operating rooms, research laboratories and support facilities.

"The laboratory animal is sensitive to environment changes, and it is vital to provide the highest level of care so that the animals will be maintained in a healthy state, as near to normal as possible," says Dr. Soave.

"The use of animals for biomedical research is essential for the advancement of knowledge related to our ability to conquer disease and elevate the standards of health throughout the world," he says. "However, we must use them in a humane way and care for them in a manner consistent with today's knowledge of animal husbandry and veterinary medicine.

"In addition," Dr. Soave stresses, "is the fact that animal research often benefits animals as much as it does man. The vast majority of our knowledge concerning the treatment of animal diseases has resulted from their use in the study of human ailments. Such knowledge is then adapted to animal care." -more-

The new Animal Research Center will:

--permit optimum care for the animals used in biomedical investigation.

--serve as a holding area for animals that must be quarantined and conditioned prior to research use.

--house large domestic animals, i.e., cows, horses, sheep, pigs, that require an outdoor environment, and those long-term research animals that require only infrequent testing or observation.

--permit the study of animal diseases, both natural and induced, that will be of value to physicians and veterinarians.

--provide professional consultation for the diagnosis and treatment of diseases in animals, research on laboratory animal problems, and training in animal care and medicine. (This will include an expansion of Stanford's postdoctoral training of veterinarians in the field of laboratory animal medicine, under the direction of Dr. Soave.)

--provide for the maintenance of highly inbred strains of animals, such as mice, in an isolated environment in order to minimize contamination.

--provide housing for wild or exotic species from anywhere in the world that exhibit clinical diseases or abnormalities worthy of investigation.

One of the major research programs requiring the additional facilities which the new Center will provide is the newly initiated program in comparative medicine.

This effort relates to the study of natural-occurring diseases of animals that are either similar, identical, or closely related to human ills. In such instances, the disease process can be observed from birth to death and every phase of its development studied. Animals so afflicted can be inbred to determine the effect of selective breeding on disease and further, since the life span of animals is usually much shorter than that of man, the natural history of diseases can be better defined.

"In spite of the tremendous advances in medicine in the past 50 years, there are still many unknowns--cures for cancer, diseases of the heart and circulation, and the problems of aging and mental retardation. Undoubtedly, animal research will play an important role in research directed toward the solution of these problems in the future," says Dr. Soave.

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(Mailed July 27, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Science Writers: Story release date is set to coincide with presentation of scientific paper by Dr. Karasek at International Congress of Dermatology in Munich, West Germany. In Munich Dr. Karasek can be reached at Pension Roschlein Luisenstrasse 55.

FOR AM RELEASE MONDAY, JULY 31, 1967

MUNICH -- A Stanford University biochemist today reported that the outer layers of skin can be successfully reconstructed from cells grown in a test tube.

Dr. Marvin A. Karasek told the 13th International Congress of Dermatology here that cells taken from a rabbit and cultured for 14 days in a test tube grew normally when transplanted back to the host animal and that the grafted cells formed a new epidermis, the outer layer of skin.

Dr. Karasek said the transplanted cells and newly-formed epidermis survived for as long as five weeks after grafting, and the cells maintained their potential for growth and differentiation during this period.

The finding runs counter to the common belief that cultured adult skin cells have no ability to form a specific tissue. "When placed in an appropriate physiologic environment, the cultured adult epithelial cell again resumes its normal growth and differentiation," Dr. Karasek said. Although cells have been transplanted before by others, this is the first time cells have been successfully grown after culture in a synthetic medium.

Dr. Karasek is an assistant professor of biochemistry in the department of dermatology of the Stanford University School of Medicine. One of his chief interests is learning more about the complicated biochemical reactions that lead to uncontrolled growth of cells in patients with skin diseases. The work is supported by grants from the John A. Hartford Foundation, Inc. of New York, and the National Institutes of Health.

-more-

He said the use of cultured skin cells for studies of wound healing has been an attractive possibility since the development of cell culture techniques, but that the behavior of such cells after transplantation has never been established. One of the difficulties has been the interference with grafts by the normal wound healing reactions. For his studies, Dr. Karasek developed a silicone rubber chamber that blocks normal wound healing and permits only transplanted cell growth.

Dr. Karasek reported these observations from the rabbit transplant experiments:

· One week after transplantation of the cells to the prepared graft site, the epithelial cells multiplied to form a cell layer over the entire wound site that was three cells in thickness.

· Two weeks later the cells had formed an epidermis that was 5 to 10 cells in thickness. Keratinization, the formation of the corneous or horny outer normal skin layer, also appeared during this period.

· After three weeks, the newly-formed epidermis became extra-thick because of an abnormal increase in the number of cells.

· Five weeks later the new epidermis began to show deterioration signs and to flake off.

"We are not sure why this skin is not permanent," Dr. Karasek reported. "It is possibly due to some unexplained immunologic mechanism or because we have not yet achieved the proper physiologic environment for these cultured cells to survive for a longer period."

He added, however, that from a biological viewpoint, this development represents a "rare opportunity to test the changes that occur when a cell is grown in a foreign environment. The explanation of the changes that take place is one of the most challenging and important areas in cell biology."

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Mailed July 24, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff (321-5310)

STANFORD -- Dr. George R. Murray Jr., an expert in system analysis, has been appointed director of the Stanford Medical Facilities Planning Group.

The announcement was made today by Dr. Robert J. Glaser, vice-president of medical affairs and dean of the School of Medicine.

Dr. Murray, 36, and a staff of nine specialists will collaborate with the medical faculty and experts in relevant nonmedical departments and schools of the University in the design of both the physician structure and operational system of the proposed new hospital and ambulatory care center.

Staff members, from such fields as system analysis, economics, hospital management and computer technology, include Chief System Analyst Dr. Richard D. Smallwood, assistant professor of engineering-economic systems at Stanford, and his staff, Fred L. Offensend, Daniel D. Silva and Edward J. Sondik.

James Stanford, currently assistant to the financial vice-president of General Mills, Inc., will join the planning group next month. Other staff members will be selected by fall.

Dr. Murray and his staff will work with Bertrand Goldberg Associates of Chicago, recently named as architectural consultants for the proposed expansion.

"Medical science to date has focused on specific techniques of diagnosis and treatment," says Dr. Murray. "Relatively little thought has been devoted to the total system by which health care is administered.

"Stanford is unique in having on one campus both a major medical school and a department of engineering-economic systems devoted to the design of complex technical-economic systems."

-more-

"Our study will concentrate specifically on patient care and the teaching function of a medical school hospital. I regard this as an example of interaction between medicine, technology and engineering that can lead us to more effective and less costly health care systems," Dr. Murray comments.

The School of Medicine recently received a $500,000 planning grant from the Commonwealth Fund of New York to initiate studies toward a solution of the widespread national problem of escalating medical care costs.

During the study, Dr. Murray will take a leave of absence from the department of engineering-economic systems at Stanford where he has been an associate professor since 1965.

Before joining the University faculty, Dr. Murray had six years of industrial systems analysis experience as a member of the operations research staff of Arthur D. Little, Inc., and as a research associate at the operations research center at Massachusetts Institute of Technology. He has also served as a consultant for General Electric Co. and Stanford Research Institute.

Dr. Murray received his B.A. degree from Harvard in 1952 and a Ph.D. from M.I.T. in 1956.

Stanford's proposed health facilities, which will include a 400 to 500-bed hospital, will embody two objectives. Facilities will be related to the specific stages of care required by the patient, from those needing minimal supervision to patients requiring intensive care. Comprehensive-care service, stressing ambulatory, or outpatient care, will be an integral part of this concept.

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(Mailed July 25, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Editors: Story released simultaneously by the National Foundation.

The Stanford University School of Medicine has received a grant of $69,403 from the National Foundation-March of Dimes to continue its search into the causes, treatment and prevention of birth defects.

The grant was announced jointly today by Robert J. Glaser, vice-president for medical affairs and dean of the medical school, and Basil O'Connor, president of the Foundation.

Stanford operates a birth defects study center as a unit of its department of pediatrics. The center, established by the National Foundation in 1963, is directed by Dr. Norman Kretchmer, professor and executive head of the department.

Among investigations under way at the center is a study of the role played by Vitamin C in Hurler's disease (gargoylism). An estimated one in 10,000 infants is born with Hurler's disease. They look normal at birth. But during the first two years of life, the head enlarges, the features thicken and growth is stunted to the point that the children resemble medieval gargoyles. Their brains are often affected and sometimes they have difficulty in learning to speak or walk. The victims usually die at an early age from enlargement of the heart, liver or spleen.

Though the body chemicals causing this inherited disease have been identified, the Stanford researchers feel that another look at the way body cells produce these chemicals may offer better understanding of the disease. They are also looking into the possibility that Vitamin C, commonly found in fruit juices, may be implicated.

Taking a tiny piece of skin from Hurler disease victims and a similar culture from normal subjects, the Palo Alto team added Vitamin C to both. There was no significant change in the normal cultures. With Hurler's, however, Vitamin C increased a chemical reaction, which occurs to excess in these patients, and is thought to cause the thickening of various body parts.

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(Mailed July 25, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff (321-5310)

STANFORD -- A $21,000 grant has been awarded to the Stanford University School of Medicine to increase the number of physicians training in anesthesiology, and to upgrade the quality of the training program.

The new program, supported by the National Institutes of Health, is part of a national effort to improve patient care by expanding anesthesiology training.

Dr. Ellis N. Cohen, professor of anesthesia, will direct the program.

"The increased complexity of today's medical care has opened many new areas in which the anesthetist is now concerned, and expanded training programs are required to meet these additional needs," Dr. Cohen points out.

"The scholarly environment in a teaching hospital such as ours is an essential element to the training of highly qualified clinical anesthesiologists," he says. "Our clinical and teaching faculty can provide a high level of training in both the basic and the clinical sciences."

Two candidates will be chosen from present applicants or from residents currently in the anesthesiology residency program. Initial training will begin this fall. Plans call for a third trainee to be selected for next year, and two additional trainees in 1969-70.

The curriculum will incorporate the present two-year program in anesthesiology and provides an additional year of special training. One of the two trainees will direct his third year towards the anesthetic management of the patient for cardiac surgery, and the second trainee will spend his third year in acute medical care.

The Stanford grant is part of a million dollars awarded to 30 teaching hospitals in 21 states and in Puerto Rico for anesthesiology training programs.

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(Mailed July 20, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

Editors: Story released simultaneously by the National Foundation.

Children born with the defect known as myelodysplasia (open spine) usually cannot control their bladders naturally, but Stanford University scientists hope to develop an electrical device to do the job artificially.

The research project will be conducted by a Stanford University School of Medicine team headed by Dr. Duncan E. Govan, associate professor of surgery, with the help of a $69,492 grant from the National Foundation-March of Dimes.

The grant award was announced today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school, and Basil O'Connor, president of the National Foundation. With this grant March of Dimes support for medical research and professional education at Stanford now enters its 30th year and totals more than $2,000,000.

Dr. Govan hopes to develop an electrical device through which a child can control his bladder much as the artificial pacemaker regulates the speed of the human heart.

When a child is born with an open spine, Dr. Govan explained, the nerve connections, through which the brain controls the bladder, are either weak or completely absent. The device that Dr. Govan hopes to perfect would eliminate bladder incontinence and its emotional consequences. Bladder self control would also help to reduce the constant threat of bladder infection and kidney damage so common among children with myelodysplasia (open spine).

The project is part of a broad clinical and experimental research conducted by the Division of Urology of the Stanford University School of Medicine. It is designed to study all aspects of bladder dysfunction due to bladder nerve damage.

The work of Dr. Govan and his associates promises to be a vital part of the nationwide effort of the March of Dimes to help victims of "open spine" lead a normal life.

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(Mailed July 18, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff (321-5310)

STANFORD -- A special fund to financially assist medical students has been established in the name of Paul Edward McNamara, according to Dr. LeRoy A. Pesch, associate dean of Stanford University School of Medicine.

"Generous gifts continue to be received," he notes.

The memorial fund, founded in cooperation with Mr. McNamara's parents after the 23-year-old medical student's death, will provide for student needs in the form of loans or grants, explains Dr. Pesch. It will be administered, beginning in the fall, by the School of Medicine.

Preference for money from the fund will be given to needy members of the Class of 1970 of which Mr. McNamara was a member.

Mr. McNamara, son of Dr. and Mrs. P.E. McNamara, 521 First St., drowned while scuba diving in rough seas near Carmel, Calif. last March.

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(Mailed July 14, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Janet Runyan (321-5310)

STANFORD -- A research team at Stanford University School of Medicine has developed an electronic monitoring system to prevent mortality and brain damage in premature infants suffering from respiratory disorder.

The monitoring system is used to detect sudden cessation of breathing, a condition known as apnea. Apnea occurs in approximately 30 per cent of all infants weighing less than 5½ pounds.

Dr. William J. Daily, assistant professor of pediatrics and principal investigator, Dr. H. Belton Meyer, postdoctoral fellow in pediatrics, and Dr. Marshall Klaus, assistant professor of pediatrics, worked with engineers at Beckman Medical Instruments and Industrial Medical Instruments to develop the apnea monitor. It was tested in the Clinical Research Center for Premature Infants at Palo Alto-Stanford Hospital Center.

According to Dr. Daily, the purpose of the monitoring system is to detect apnea early enough to prevent death and possible brain damage in the developing premature. Once detected, treatment is usually an easy process. The nurse may simply "tickle" the child or in some other gentle way "remind him that he is here."

"The sudden and silent onset of apnea requires that the infants be watched constantly," Dr. Daily said. Even though the research center usually has one nurse for every two premature infants, the physicians felt surveillance could be improved.

The new device incorporates a warning alarm system based on fluctuations in electric current between electrodes attached to the infant's chest. When the infant stops breathing, the variations in electric current cease. An alarm is activated 20 seconds later to alert the nursing staff.

Thirty seconds after breathing stops, the nurse gently rubs the infant's skin. If breathing is not quickly re-established, she administers bag and mask oxygen resuscitation.

The researchers monitored 22 normal prematures for periods varying from five to 16 days. A total of 540 apneic episodes of 20 seconds or longer was observed in 13 of the 22 infants.

In 35 per cent of the 540 episodes breathing began spontaneously prior to skin stimulation. In an additional 55 per cent, breathing was re-established in association with stimulation and in 10 per cent, bag and mask resuscitation was necessary.

"The infants requiring resuscitation were, in essence, in a state of shock, unconscious, unresponsive, limp, hypoxic and had a bluish skin tone," Dr. Daily said. "We presume brain damage may occur under these circumstances, but this will require further study."

-more-

Hypoxia (insufficient blood oxygen) following prolonged apnea has been suggested as one cause of brain damage in small premature infants, he explained. "If apneic hypoxia is responsible for neurologic abnormality, it should be preventable using an appropriate warning system and early resuscitative measures."

Only one of the 13 infants with apnea died, Dr. Daily reported, and the death was not attributable to apnea. Ten years ago approximately 50 to 60 per cent of infants with prolonged apnea died.

Although the researchers primarily focused on detection of the disorder, Dr. Daily foresees varied applications of their findings. They discovered, for example, that a warmer environment increases the number of apneic episodes.

The abdominal skin temperature of the premature is usually kept between 35.8 and 37.2°C. Within this temperature zone, metabolic processes and oxygen requirements are thought to be at a minimum. When the abdominal skin temperature of five infants with apnea was increased from 36 to 36.8°C, the number of apneic episodes more than doubled.

The Stanford pediatricians believe this finding will increase interest in temperature as a significant determinant in breathing control mechanisms. It has further implications, they said, for the specifications of incubators.

They also found that certain changes in the heart rate and breathing pattern of infants with prolonged apnea resemble the adaptations of diving mammals. Current research on diving mammals, such as seals, may give scientists a better understanding of the effects of apnea.

Even more important, such new electronic devices may lead to the development of a one-unit incubator and monitoring system for the continuous surveillance of all premature infants.

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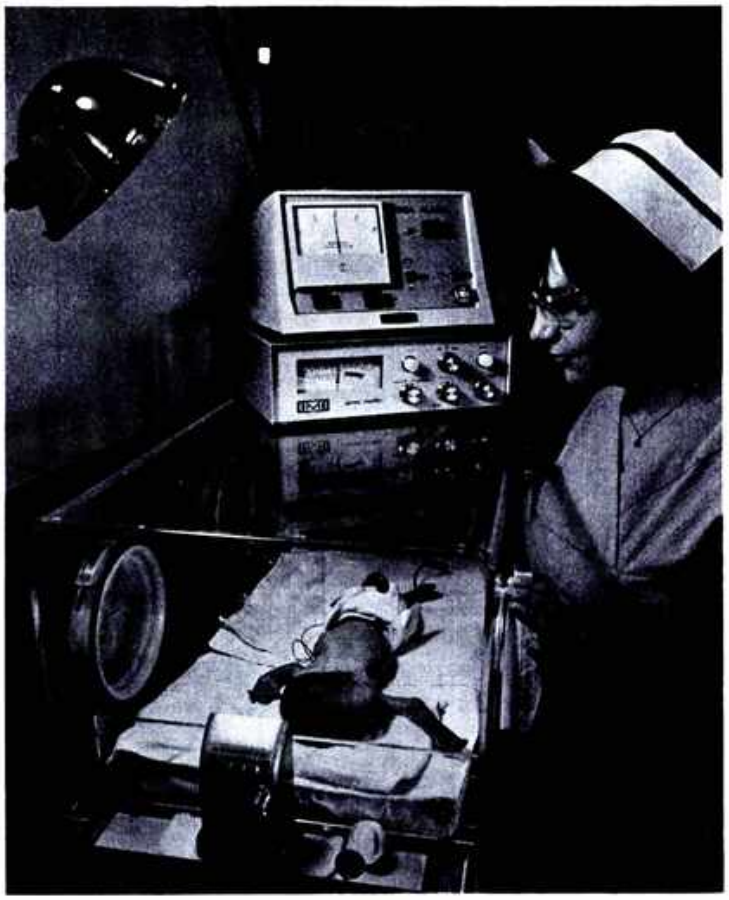
(Mailed July 13, 1967)

Staff nurse Jerelyn Burroughs watches new electronic devices monitor breathing of newborn baby in Clinical Research Center for Premature Infants at Palo Alto-Stanford Hospital Center. The electronic monitoring system was developed by a Stanford research team in cooperation with two Bay Area electronic firms. It was designed to prevent mortality and brain damage in premature infants suffering from respiratory disorder.

Staff nurse Jerelyn Burroughs watches new electronic devices monitor breathing of newborn baby in Clinical Research Center for Premature Infants at Palo Alto-Stanford Hospital Center. The electronic monitoring system was developed by a Stanford research team in cooperation with two Bay Area electronic firms. It was designed to prevent mortality and brain damage in premature infants suffering from respiratory disorder.



Staff nurse Jerelyn Burroughs watches new electronic devices monitor breathing of newborn baby in Clinical Research Center for Premature Infants at Palo Alto-Stanford Hospital Center. The electronic monitoring system was developed by a Stanford research team in cooperation with two Bay Area electronic firms. It was designed to prevent mortality and brain damage in premature infants suffering from respiratory disorder.

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TO NEWS BUREAU, STANFORD MEDICAL CENTER, PALO ALTO, CALIF.

Subject: Apnea Monitor

Please send me a 8x10 glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415: 321-5310)

Attention science writers (transmitted on Business Wire 8/30/67):

Approximately 500 geneticists from the United States and abroad will attend the annual meeting of the Genetics Society of America at Stanford University Thursday through Saturday (Aug. 31 - Sept. 2).

Among participants will be four eminent geneticists from the Soviet Union, headed by Professor B. L. Astaurov, president of the Genetics and Selection Society of the U.S.S.R.

Three concurrent sessions on "Population and Quantitative Genetics," Molecular Genetics and Gene Action," and "Cytogenetics," will be held Thursday and Friday from 9 a.m. to 12 noon.

Dr. Joshua Lederberg, professor and executive head of the Department of Genetics at the Stanford University School of Medicine, will address the meeting Thursday at 8 p.m. at Dinkelspiel Auditorium. He will speak on "Experimental Genetics and Human Evolution." Chairman for the evening session will be Dr. E. B. Lewis of the California Institute of Technology and president of the Genetics Society.

Dr. David Hogness, professor of biochemistry at the Stanford University School of Medicine, will give the Friday evening lecture at 8 p.m. in Dinkelspiel Auditorium. He will speak on "The Arrangement and Regulation of Genes in Viral Chromosomes."

Other topics to be covered at the sessions include radiation genetics, genetics and metabolism, and recombination.

Details and programs for the sessions can be obtained from Mr. Fred Kettelkamp at the Society's headquarters, Wilbur Hall. Telephone (Area Code 415) 323-2300, Ext. 4144.

Mailed August 30, 1967.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

FILE COPY

STANFORD -- Dr. David Korn, a pathologist and senior investigator in the National Institutes of Health at Bethesda, Md., has been appointed professor and executive head of the department of pathology of the Stanford University School of Medicine.

His appointment, culminating a two-year nationwide search by a faculty committee, was announced today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine. Dr. Korn's appointment will be effective June 1, 1968.

Dr. Korn, whose interests lie beyond the field of pathology into fundamental areas of biochemistry and mechanisms of life processes, is a senior staff member at the Laboratory of Biochemical Pharmacology of the National Institute of Arthritis and Metabolic Diseases, and an assistant pathologist at the National Institutes of Health. His published research includes 22 papers in the field of pathology and biochemistry, the latter dealing with studies of the basic mechanisms controlling the functions and development of bacterial viruses.

Dr. Glaser praised Dr. Korn as "an outstanding pathologist who understands what is happening in modern biomedical science and who promises to bring a new kind of leadership to Stanford and to academic pathology in general."

Among Dr. Korn's first responsibilities will be to plan for an expanded quarters for the department of pathology in Stanford's proposed basic science building that will be compatible with the demands of modern medicine and new approaches to the study of disease.

The department of pathology has been without a permanent executive since Dr. Alvin J. Cox, Jr., professor of pathology, resigned in 1964 after 23 years of active leadership to devote time to research in dermatology.

Dr. Korn was graduated with honors from Harvard University in 1954 and from the Harvard Medical School in 1959, and received his training in pathology at the Massachusetts General Hospital in Boston. Subsequently, he taught at Harvard Medical School.

In 1961, Dr. Korn became research associate in the Laboratory of Biochemistry and Metabolism of the National Institute of Arthritis and Metabolic Diseases advancing to his present post. He is a member of the American Society for Cell Biology, American Society for Experimental Pathology, and International Academy of Pathology. Among his honors, Dr. Korn includes the Detur Prize and the Soma Weiss Prize.

Dr. and Mrs. Korn are the parents of three children.

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(Mailed Aug. 21, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff (321-5310)

STANFORD--Dr. F. Frank Zboralske has been appointed associate professor of radiology and head of the division of diagnostic roentgenology at the Stanford University School of Medicine.

The announcement was made today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school.

He succeeds Dr. Herbert L. Abrams who has been named professor and chairman of the department of diagnostic roentgenology at Harvard Medical School.

Dr. Zboralske, who will assume his new position next month, has been an assistant professor of radiology at the University of California Medical Center in San Francisco since 1965. At the medical center he also was director of the experimental radiology laboratory, chief of the section of gastrointestinal radiology, and co-director of a research training grant in diagnostic radiology from the National Institutes of Health.

Prior to his association with the UC Medical Center, Dr. Zboralske was an instructor and assistant professor of radiology at Marquette University School of Medicine in Milwaukee, Wis., and served as a radiologist at Milwaukee County General Hospital.

Dr. Zboralske was awarded his M.D. degree in 1958 from Marquette University School of Medicine. He was named as a James Picker Foundation scholar in radiological research in 1962.

Dr. and Mrs. Zboralske have four children.

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Mailed August 14, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD--Aided by computers, Stanford University medical researchers can now measure the slightest hearing loss in the youngest infants.

The disclosure was made today by Dr. F. Blair Simmons, associate professor and head of the Division of Otolaryngology, as he described how a hearing test via a computer helped in the adoption of a six-month-old infant by a Redwood City, Calif. couple.

Mr. and Mrs. John P. Watney were anxious to adopt a baby named Jacqueline. But a serious question about the baby's hearing ability was raised casting a shadow on their plans.

"The usual hearing tests were inconclusive, as is often the case with young infants," related Dr. Simmons. "Until recently, the prospective parents, the adoption agency, and the physicians simply had to wait until a baby grew older before a health report, required before any adoption, could be completed."

Jacqueline was brought to Stanford's Ear, Nose and Throat Clinic one day and slept through her test period. Dr. Simmons said within an hour it was established that her hearing acuity was within normal limits, a happy ending for all concerned.

The new technique, called EEG audiometry, uses information gained from picking up the brain's electrical responses to sound, Dr. Simmons explained. With the baby mildly sedated and asleep, EEG-type electrodes are pasted on the infant's scalp to monitor brain electrical activity before, during and after the test is given.

Although use of the EEG (electroencephalograph) for hearing tests dates back to more than 35 years, the technique has seldom been employed in infants because their electrical responses to sound are indistinguishable from the random brain noise.

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It is here where the computer goes to work. In a soundproof room, Dr. Simmons, Dr. F. Mark Rafaty, a resident in otolaryngology and one of the chief organizers of the project, and their associates take repeated samplings of the patient's brain electrical activity under conditions of absolute calm and also under auditory stimulation provided by a series of clicks of very low intensity fed through a loudspeaker.

"During this period," said Dr. Simmons, "the memory of the computer stores the auditory signals presented to it, remembering and displaying mathematically the sum of voltages in sequence. The unwanted background noise, being random in occurrence is thus cancelled out while the evoked responses, occurring precisely time-locked to the delivery of stimulus, are exaggerated."

Because the technique requires no verbal involvement, it can be used to test hearing loss in brain-damaged or mentally retarded children, stroke victims, and even in persons who deliberately try to fake a hearing loss, he said.

A research tool for many years, the technique has only recently been applied to clinical problems, Dr. Simmons said.

The work is supported by grants from the National Institutes of Health.

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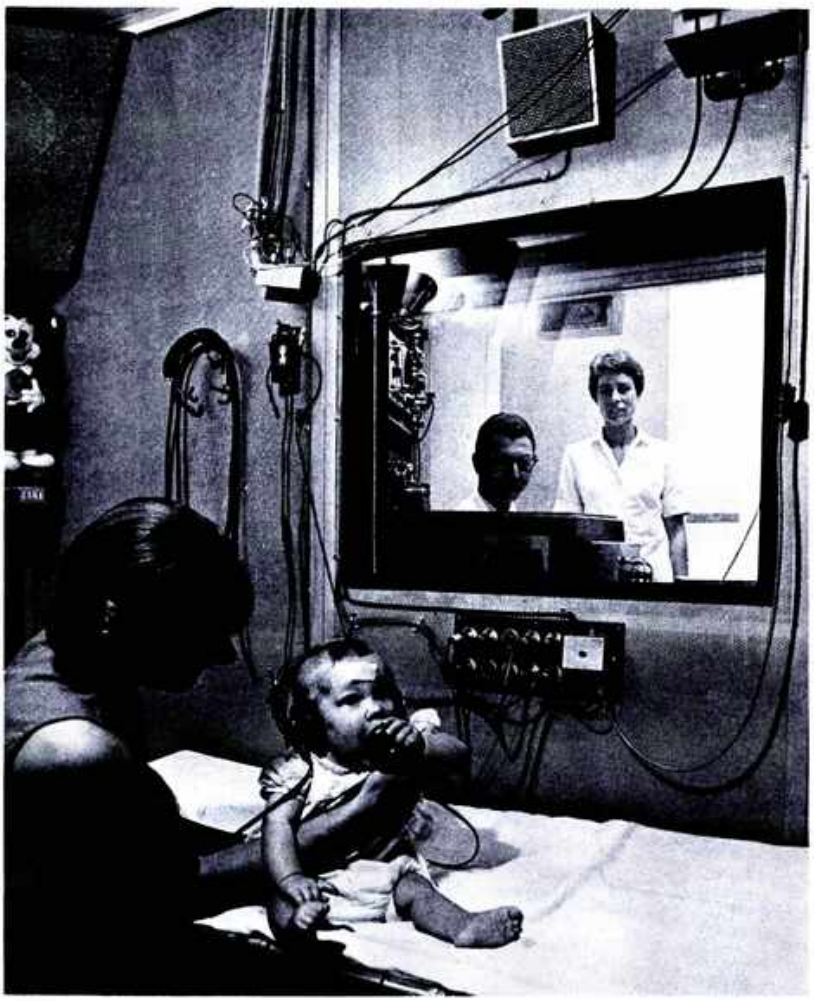
Editors: Mr. and Mrs. John P. Watney's address is 1124 - 5th Avenue, Redwood City, California.

Mailed August 8, 1967



Mrs. John P. Watney of Redwood City keeps Jacqueline preoccupied while Dr. Mark Rafaty, resident in otolaryngology, and nurse Johan Baker check equipment before hearing test. Aided by computers, Stanford University medical researchers can now measure the slightest hearing loss in the youngest infants.

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STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff (321-5310)

STANFORD---Dr. Angelos Dellaporta has been appointed associate professor of surgery and head of the division of ophthalmology at Stanford University School of Medicine.

The announcement was made today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school.

He succeeds Dr. Frank C. Winter, who has been acting head of the division since 1959. Dr. Winter is a practicing ophthalmologist in Palo Alto, and clinical associate professor of surgery at Stanford.

Dr. Dellaporta has been associated with the School of Medicine since 1957 when he joined the faculty as a research associate and instructor in the Division of Ophthalmology. In 1961 he was appointed as assistant clinical professor and in 1966 as an associate clinical professor in the division.

Prior to joining the Stanford faculty, Dr. Dellaporta was director of research at Buffalo (New York) Eye Bank and Research Laboratory at the University of Buffalo for four years. He also spent six months on a special fellowship at the Eye Institute of Columbia University.

Dr. Dellaporta, a native of Greece, received his M.D. degree in 1939 from the University of Freiburg, Germany. In 1950 he received a Doctor of Science degree in ophthalmology from the University of Vienna (Austria) where he was also senior attending physician in the 1st Eye Department from 1943 to 1952.

Dr. and Mrs. Dellaporta and their four children live in Atherton.

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(Mailed August 7, 1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (321-5310)

STANFORD -- The problems of children with chronic disease or disability will be studied intensively for the next three years at Stanford University School of Medicine under a research grant from The John A. Hartford Foundation, Inc., of New York.

Announcement of the $244,175 award for investigations of hereditary and developmental aspects of disease involving mesenchymal tissue was made jointly by Ralph W. Burger, Foundation president, and Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine. The mesenchyme, a structure of connective tissue, regulates the flow of nutrients, metabolites, hormones and drugs.

The research team of physicians and biochemists will be headed by Dr. Norman Kretchmer, professor and executive head of the Department of Pediatrics, and Dr. William van B. Robertson, professor of biochemistry in the Department of Pediatrics, co-principal investigators. The three-year study will begin September 1.

Others cooperating in this research are Dr. Norman J. Sissman, associate professor of pediatrics, Dr. Vincent A. Marinkovich, assistant professor of pediatrics, Dr. John J. Miller III, clinical instructor in pediatrics, Dr. Merton R. Bernfield, assistant professor of pediatrics, Dr. Noreen Eldredge, research associate, and Dr. Daisy Lee, research fellow.

"A significant fraction of the chronic diseases or disabilities of children involve tissues of mesenchymal origin," Dr. Kretchmer said. "Our understanding of this complex structure and how it is changed in disease will determine the extent to which we are able to interfere therapeutically to treat or prevent disability."

Experimental programs have already been developed to find more effective and more economical ways of handling the problems of care and adjustment presented by children with chronic disability, Dr. Kretchmer pointed out.

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"These are certainly necessary," he said, "but the real breakthroughs in treatment and prevention will come only when attacks are directed at specific disease processes. This means we have to gain a greater knowledge of the tissue constituents involved and their interactions."

Among the diseases to be studied are:

--juvenile rheumatoid arthritis, a crippling disease of joints. Neither the cause nor the fundamental nature of the disorder is known, nor is definitive therapy available.

--hereditary abnormalities such as gargoylism, osteogenesis imperfecta and achondroplasias. In all of these, genetic defects in the metabolism of a chemical component of connective tissue lead to severe crippling often associated with mental deficiency. Although any one of these diseases is relatively rare, together they represent a significant percentage of birth defects.

--congenital heart disease. The Children's Bureau has reported that 25,000 babies are born in the United States each year with congenital heart disease and of these about 7,000 die in the first year of life. The identification of the mechanisms of normal cardiac development using quantitative techniques is necessary for further progress in this area.

--asthma, a respiratory disease affecting more than 100,000 children in the United States. Not only does the chronic stress of impaired breathing lead to permanent damage of the pulmonary mesenchyme, but it now appears that interactions between immune organisms and a connective tissue may be involved in the acute attack.

The major portion of this research will be carried out at the Stanford Children's Convalescent Hospital, the chronic disease service of the Department of Pediatrics.

The study is an outgrowth of previous research in this general area of medicine supported by the Hartford Foundation since 1960 with grants totaling more than $700,000.

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(Mailed August 2,1967)

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Investigators from the Stanford University School of Medicine and the California State Department of Public Health have linked the virus that causes common measles to an invariably fatal form of encephalitis that affects as many as 200 children and young adults in the United States each year.

Research findings using modern techniques of electron microscopy and immunology point toward the measles virus as the cause of the disease, the investigators believe. Their studies have revealed the presence of viral particles within the nuclei of brain cells. Evidence pointing to measles has also come from other laboratories around the world. But the scientists acknowledge that final proof still is lacking until the virus itself can be successfully isolated in victims of the rare disease.

The disease is commonly known to physicians as Dawson's subacute inclusion-body encephalitis, after its discovery, in 1933, by Dr. James Dawson, now of the University of Minnesota. It hits young persons between 5 and 20. Symptoms include involuntary movements of the limbs, and profound mental changes. The blood of the victims also shows an unusually high prevalence of antibodies to the measles virus.

The Stanford and Berkeley investigators have postulated that the disease may be a consequence of a latent or chronic infection with a measles virus that has been reactivated. If their theory is correct, viruses from other diseases left over in the body may be the cause of some of man's most puzzling ailments. Among the ailments are multiple sclerosis, amyotrophic lateral sclerosis (Lou Gehrig's Disease) and certain leukemias.

These findings have been reported by Drs. Robert M. Herndon, John M. Freeman, Guy McKhann and Lucien J. Rubinstein of Stanford University, and Drs. Edwin H. Lennette and Robert L. Magoffin of the Viral Rickettsial Disease Laboratory at Berkeley. They were presented in part at the American Pediatric Society meetings earlier this year, in The Lancet, a British medical journal, and at a special conference held recently by the National Institute of Neurological Diseases and Blindness at Bethesda, Md.

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The patients studied by the California group have all had measles in the past. The initial measles infection was usually uncomplicated and had occurred as many as eight years before the appearance of Dawson's encephalitis. All patients have had significantly higher levels of antibodies to the measles virus than do normal individuals, the investigators said.

In two children studied, gradual deterioration of personality and intellect spanned a nine-month and a one-year period, and was followed by more rapid and ominous deterioration for about a month. Both patients also had abnormal EEG (brain wave) patterns. Recently two more cases have been brought to the investigators' attention. One of these was "discovered early by an especially astute pediatrician," who had read of the earlier cases.

He linked minor personality changes, some loss of intellect, and muscle spasms with EEG abnormalities and referred the child to the Palo Alto group for study and therapy. "She is the least severely affected and still functioning child," the researchers said.

The Stanford physicians are treating the disease with antiviral drugs. Although they have been cautious to point out that treatment is "highly experimental," results so far are promising.

In 1964 another group of Stanford researchers (Drs. Rubinstein, Lloyd Silverman, and Carlton E. Schwerdt) successfully demonstrated viral organisms to be responsible for a rare degenerative and fatal disease in adults, called progressive multifocal leucoencephalopathy. Identical findings were reported simultaneously by a group of researchers at the University of Wisconsin. The condition results from the replication of a hitherto unsuspected viral agent in the nuclei of brain cells responsible for the formation and maintenance of nerve fiber sheaths.

Dr. Rubinstein, a neuropathologist, is professor and acting head of the Department of Pathology at Stanford. His associates include members of the Division of Neurology, and the Departments of Medicine, Pediatrics and Medical Microbiology. Their line of investigation has included electron microscope studies of brain biopsies from selected patients, to determine their fine structure and biochemical changes.

An important purpose of these studies is also to isolate and culture the suspected viruses and to develop rational and effective methods of treatment, Dr. Rubinstein said.

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Mailed 9-28-67.

FILE COPY

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Robert G. Lindee, assistant dean for administration and assistant to the vice-president for medical affairs at Stanford University School of Medicine, has taken a short leave of absence from the medical school to serve as a special consultant to the division of regional medical programs (Heart-Cancer-Stroke Program) of the National Institutes of Health in Bethesda, Md.

He will work in association with Dr. Robert Marston, associate director of NIH and head of the division, in developing policies and guidelines from the standpoint of the grant recipients.

Mr. and Mrs. Lindee and their children will return to Stanford in November.

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Mailed September 21, 1967

Original to Dr. Robert J. Glaser, M121
copies to: Editors, P.A. TIMES
SAN JOSE MERCURY
FILES

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A two-year planning grant has been awarded to the Stanford University School of Medicine by the National Institutes of Health to develop a cooperative medical program for improving the level of diagnosis and treatment of heart disease, cancer, stroke and related diseases.

The planning studies will serve to define the medical school's role as a coordinator of health agencies in helping community physicians and other health workers make the most effective use of scientific knowledge for the benefit of patients. The grant will be administered through the California Committee on Regional Medical Programs.

One important aspect of the study will be to determine how cooperative medical programs related to heart disease, cancer and stroke might optimally be developed in the area for which Stanford University School of Medicine has primary responsibility for coordination. This area includes the San Francisco Peninsula and Alameda, Monterey, Merced, Santa Cruz, Stanislaus, and Tuolumne Counties.

The announcement, made jointly by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, and Dr. Robert Q. Marston, associate director of NIH and director of the Division of Regional Medical Programs, said that the grant for the first year is in the amount of $294,495. It is expected that the two-year planning effort will be funded with a total of $586,000.

A citizens' advisory group representing industry, the health professions, and the public will be active in assisting the Stanford faculty. They will work to put together a broad picture of health activities in the eight-county area in an attempt to describe the conditions under which the health services are delivered to patients.

According to Dr. Glaser, Stanford's role will be primarily educational, aimed at improving patient services throughout the geographical area. These may include Stanford-based educational programs for subspecialties covered by the heart, cancer, stroke legislation in which serious manpower shortages exist; continuing education, including specific demonstration programs of patient care for physicians in private practice; and coordination of services between a centralized training, research, and care facility at Stanford and local patient care centers from which patients are ordinarily referred.

Other programs to be considered include:

--A centralized facility to educate both medical and paramedical personnel in coronary care.

-MORE-

--The rapid dissemination of information regarding monitoring of heart patients and the application of new treatment concepts to patients in both present coronary care facilities and those which will be built in the future.

--A diagnostic center to evaluate patients for predisposing factors of heart disease.

--A central organization with clinical, biochemical, genetic, and computer-oriented personnel to work in a program of mass prevention of coronary heart disease.

In addition, the Stanford faculty will direct its attention to present diagnostic and treatment practices for cancer, and stroke patients, the amount of continuing education available to community physicians about cancer, stroke and related disabilities, and the facilities needed to improve neurological care in all major communities.

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Editors: Members of the citizens' advisory group from cities in your county are listed below:

ATHERTON: Mrs. Edward H. Heller, member, Board of Regents, University of California; Board member, Mills College; member Board of Directors, Palo Alto-Stanford Hospital. Joseph Houghteling, publisher; member, Palo Alto-Stanford Hospital Board of Directors.

CARMEL: Francis Heisler, attorney, Lincoln and 8th Avenue.

FRESNO: Clifton Linville, administrator, Fresno Community Hospital.

MENLO PARK: Mrs. Samuel Kountz, elementary school teacher, 2091 Camino Los Robles.

MODESTO: Mrs. Kathryn I. Gilliam, social worker, 704 Woodrow Street.

MOUNTAIN VIEW: Richard Cabrera, Director, Area Service Center 9, Economic Opportunity Commission.

OAKDALE: F. John Hogg, representative, Stanislaus County Medical Society.

PALO ALTO: Lowell Like, director, Palo Alto Veterans Administration Hospital.
Dr. LeRoy Lucas, practicing dentist, representative N.A.A.C.P.
Dr. Edward Ginston, president and chairman of the board, Varian Associates.
Dr. Alejandro Zaffaroni, president, Syntex Laboratories, member of the Board of Directors, Palo Alto-Stanford Hospital.

SAN FRANCISCO: Francis C. Barnes, vice-president, Crown Zellerbach Corporation.
Forrest M. Willett, medical director, American Cancer Society, California Division.

SAN JOSE: Lino M. Lopez, director, Mexican-American Community Services Agency.
Dr. Norman Nelson, director, Department of Medical Institutions of Santa Clara County. Joseph Ridder, publisher, San Jose Mercury.

SAN MATEO: Harold D. Chope, M.D., director, San Mateo County Department of Public Health and Welfare.
Dr. Charles Guttas, representative, American Heart Association, Calif. Div.

STOCKTON: Mary Ann Wood, social worker, 531 Glendora Avenue.

WATSONVILLE: Evelyn Craig, R.N., administrator, Watsonville Community Hospital.

WOODSIDE: Henry R. Hayes, Jr., airline pilot, 560 Old La Honda Road.

Mailed September 19, 1967.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Copies of STANFORD M.D. are available on request.

STANFORD--The physician who substitutes friendliness for knowledge in treating patients is in reality denying the critical assistance patients need, a Stanford University physician and medical educator said today.

"The average physician of the future must clearly embody both characteristics, because his heightened powers will deepen and make even more important the relationship between him and the patient," said Dr. Halsted R. Holman.

Dr. Holman, Guggenhime professor of medicine and head of the Department of Medicine at the Stanford University School of Medicine, presented his views in the October issue of STANFORD M.D., the quarterly magazine of the Stanford Medical Alumni Association.

As the complexity of medicine increases and the intrusion of technology becomes greater, Dr. Holman writes, it is commonplace for some people to see a contradiction between science and medicine and to yearn for the return to a simpler situation of nonscientific medicine. In particular, science is viewed as being cold and impersonal and the same characteristics are attributed to scientific medicine.

"The conceptual and technical aspects of medicine are distinct from the compassion and sensitivity required of the physician in dealing with the discomfort, fears and worries of the patient," Dr. Holman argues. "There have always been different types of physicians, some unsympathetic and cold and some warm and understanding. To ascribe to the science of medicine the human shortcomings of certain physicians is quite to miss the point."

Because of the rapid evolution of knowledge, the physician of the future, according to Dr. Holman "must be able to comprehend and interpret scientific advance as it occurs, reorganize his concepts of medicine, and institute new practices in caring for the patient virtually continuously." Dr. Holman cites these examples:

--There are now drugs which affect the function of the brain, though physicians barely understand their mechanism of action. Physicians are able, however, to study brain function at the cellular level. It is possible that in a short time physicians will possess substantial capacity to alter brain function directly.

-MORE-

--Transplantation of organs has long been technically feasible. It is probable that physicians will soon be able to inhibit the immune response of a potential recipient solely to the transplantation antigens of the potential donor and consequently be able to graft organs which are not rejected.

--Physicians, through use of miniaturized sensing devices and computation techniques, can now make exquisite physiological measurements on man. They are no longer, therefore, at the mercy of nature in dealing with the individual in shock or in whom a major organ such as the heart or lung has been temporarily incapacitated. It is possible now to monitor such patients precisely, determine instantly the effects of drugs, and permit recovery in a way hitherto impossible. But very sophisticated knowledge is required of the physician who wishes to accomplish this end.

--It is now clear that certain hormones act by influencing the expression of genes within the cell. It will not be long presumably until physicians can mimic nature and perhaps suppress or activate certain types of genes at will, resulting in substantial changes in the body of the patient.

--In the future, the treatment of malignancies may not be restricted to radiotherapy or extirpation but may involve the use of chemicals which will alter the growth patterns of cells and hence, properly used, correct the uncontrolled growth of the malignant tissue.

"Compared to what we can do for patients today, the therapeutic armamentarium of the physician perhaps merely a decade from now may become infinitely larger and more complex," Dr. Holman said. "Yet a decade from now is but the time our current students will be in the early stages of their practice."

These developments place major demands upon the medical educator and increased service obligations upon the practicing physician. To share in the growth of medicine and partake of its intellectual rewards, the practicing physician must have time to think, read and exchange ideas with his colleagues, according to Dr. Holman. This may require changes in the patterns of practice and certainly more profound relationships with his colleagues in medical schools and medical centers. Occasional courses and conferences will not suffice.

"The physician who substitutes friendliness toward the patient for knowledge which might decisively help the patient and which the physician is either unwilling or unable to obtain, is in reality denying the patient the critical assistance which he needs," Dr. Holman said.

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Mailed 10-31-67.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. Robert J. Glaser, vice-president for medical affairs and dean of Stanford University School of Medicine, is the new president-elect of the Association of American Medical Colleges.

His election was announced today in New York where the Association is holding its 78th annual meeting. Dr. Glaser will assume his duties in October 1968.

Dr. Glaser is the third Stanford medical school dean to serve as president of the Association. The first was Dr. Ray Lyman Wilbur in 1924-25 and the second Dr. Loren "Yank" Chandler who served in 1941-42.

A graduate of Harvard College and the Harvard Medical School, Dr. Glaser has been a leading progressive force in the development of medical education. He has always had strong ideas about the general practice of medicine, deeming exceedingly important the "concept of integrating the efforts of various disciplines into better patient care."

An outspoken critic of hospital designs and current patterns of staff utilization and equipment, Dr. Glaser has proposed an examination of the present system, with emphasis on the application of modern managerial techniques and engineering technology to achieve optimum use of hospitals and cut cost to the patient.

Dr. Glaser assumed his present post at Stanford in July 1965. Prior to this, he was president of Affiliated Hospitals Center and professor of social medicine at Harvard Medical School, where he completed the preliminary steps toward affecting the merger of six Harvard teaching hospitals into a $50-million medical school-hospital complex. From 1957 to 1963, he was vice-president for medical affairs and dean of the University of Colorado School of Medicine, where he played an instrumental part in the completion of its medical center complex.

A man of varied interests, Dr. Glaser has also been concerned with research in the area of streptococcal infections and rheumatic fever.

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Transmitted on Business Wire 10-30-67.

Mailed 10-30-67.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Dr. Robert H. Alway, professor of pediatrics and former dean of Stanford University School of Medicine, has taken a year's leave of absence from the faculty to direct a study in Palo Alto of sub-baccalaureate medical laboratory technical personnel training and certification.

The study, financed by the Carnegie Corporation of New York, will also include the areas of curricula, facilities, accreditation of schools training such personnel, and related areas affecting both present and future performance of clinical laboratories.

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STANFORD--Dr. Leland B. Blanchard, clinical faculty member of the Stanford University School of Medicine, has been appointed assistant director of the department of undergraduate medical education of the American Medical Association.

He will also serve as secretary of the Committee on Family Practice of the AMA Council on Medical Education.

Among other duties, Dr. Blanchard will be involved in developing plans for implementing the recommendations of the AMA Ad Hoc Committee on Education for Family Practice. The responsibility for planning the implementation of the recommendations has been assigned to the Committee on Family Practice.

Dr. Blanchard is a 1937 graduate of the Stanford Medical School where he holds an appointment as clinical assistant professor of medicine. He also maintains a private family practice in San Jose.

This year, Dr. Blanchard is serving as general chairman for the 1967-68 medical alumni Annual Fund campaign.

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Mailed October 30, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD - Dr. Donald S. Fredrickson, director of the National Heart Institute at the National Institutes of Health, will deliver the fourth John Kent Lewis Lecture at Stanford University School of Medicine Oct. 31.

He will speak on "Fat Transport in Man: Mechanisms and Mutations" at 4:45 p.m. in Room M106.

Dr. Fredrickson is an internationally recognized authority on fat transport in the circulation and on the diseases of lipid metabolism. As a senior research staff member of the Laboratory of Cellular Physiology and Metabolism, he participated in a series of studies from 1955-61 that resulted in fundamental contributions to scientific knowledge of mechanisms whereby fats and fatlike substances are transported, synthesized, and broken down by the body.

These studies also investigated the effectiveness and mode of action of various drugs that reduce blood levels of cholesterol and other lipids.

Subsequently, first with the Laboratory of Metabolism, then as chief of the Laboratory of Molecular Diseases, Dr. Fredrickson conducted and directed laboratory and clinical research on the structure of plasma lipoproteins, their role in fat transport, and on genetic factors that regulate lipoprotein metabolism. His studies of hereditary diseases of fat storage and metabolism included discovery of the lipoprotein deficiency state, Tangier disease, and establishment of its mode of inheritance.

In 1955, Dr. Fredrickson and his colleagues introduced a new system for using plasma lipoprotein patterns to identify and classify excess of blood cholesterol and other fats. With it they have demonstrated several new syndromes not previously recognized as separate diseases. This system is now in use in a number of laboratories in this country and abroad.

Dr. Fredrickson is a native of Canon City, Colo. He received the A.B. in 1946 and the M.D. degree in 1949 from the University of Michigan and did postgraduate work at the Peter Bent Brigham Hospital, the Massachusetts General Hospital, and the Harvard Medical School before joining the NIH scientific staff as a clinical associate in 1953. Prior to assuming his present position in 1966, Dr. Fredrickson served five years as clinical director for the National Heart Institute, with responsibility for all research involving patients and normal volunteers.

In addition to his duties as director, Dr. Fredrickson remains chief of the Laboratory of Molecular Diseases where he continues his research work.

Dr. Fredrickson's lecture is dedicated to the memory of Dr. John Kent Lewis, professor of medicine and chief of the Stanford Medical Service in San Francisco who died in 1961. Dr. Lewis, with Stanford professors A.W. Hewlett and George D. Barnett, published some of the early work on vascular sounds, exercise, and respiration.

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10/25/67

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--A new experimental training program in investigative medicine will be initiated by the Stanford University School of Medicine.

Announcement of the program, which will be funded by a $143,000 grant from the National Institutes of Health, was made today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school.

Dr. Halsted R. Holman, Guggenhime professor and executive head of the Department of Medicine, will direct the program for medical students and postdoctoral fellows. He will be assisted by Dr. Thomas Merigan, associate professor of medicine and head of the Division of Infectious Diseases, and Dr. Hugh McDevitt, assistant professor of medicine.

"Investigative medicine increasingly requires a proficiency of clinical analysis and management of individual patients and a detailed, imaginative use of experimental biological techniques in studying problems presented by the patient," says Dr. Holman.

"It is our hope," he notes "that the new program will meet this requirement--training physicians for careers in academic internal medicine and enabling them to function as investigators, teachers, and clinical specialists."

Currently, most physicians who ultimately undertake an academic career obtain both their clinical and investigative training, requiring from five to ten years, after graduation from medical school. It is hoped that the new training program will permit a significant number of students to develop independent investigative capabilities while still medical students, thus eliminating several years of additional training.

-MORE-

The five-year curriculum of the Stanford Medical School is particularly adaptive to the objectives of the new training program, Dr. Holman points out. Presently half of the three-year preclinical science training is free for elective work as are 12 months of the last two clinical years.

"This curriculum attracts many students already interested in research and contemplating an academic career. Members of the faculty have found that undergraduate medical students are often fully as capable and dedicated to rigorous investigative work as their postgraduate colleagues," Dr. Holman says.

"By making students an integral part of this training program in which they will experience both laboratory and, to some extent, clinical activities, we hope to identify and develop trainees at an early stage in their medical education and and simultaneously provide them with a broad training experience.

For postdoctoral trainees, the program will seek to develop an independent investigative capability while providing some continuous clinical experience in depth.

"At the present time, post graduate physicians considering a career in investigative medicine face a major dilemma, namely, that training in investigation is usually divorced from training in clinical medicine in terms of both location and teachers," Dr. Holman says.

"The proposed program seeks to resolve this problem by combining in one program the faculty, fellows and students of four divisions of the Department of Medicine (infectious diseases, oncology, immunology, and human genetics) whose clinical and investigative interest coalesce and complement one another. At any one time, some members of each division will be free of most clinical obligations. Fellows and students will be in continuous geographical and intellectual contact with one another and the faculty."

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Mailed October 19, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Dr. Harry R. Lusignan, Monterey physician, has been named area chairman for the 1967-68 Advance Gifts Personal Solicitation Program for the Stanford University School of Medicine.

With research grants, tuition and student fees meeting part of its operating budget, the Stanford Medical School must count on endowment earnings and private gifts for a significant share of its operating costs. The solicitation for the School is part of the Stanford Annual Fund, started 30 years ago to help provide such support.

This year the Stanford Annual Fund seeks to raise $1.8 million in unrestricted gifts to the University, including Medical School support.

Stanford medical alumni will be solicited personally in the Monterey area during the six-week campaign which begins Thursday (OCT. 12).

Dr. Lusignan, a pediatrician, graduated from the Stanford Medical School in 1929. He has two sons.

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Mailed October 9, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Dr. Robert L. Smith, San Francisco physician, has been named area chairman for the 1967-68 Advance Gifts Personal Solicitation Program for the Stanford University School of Medicine.

Vice-Chairmen are Drs. George B. Robson and Victor Richards, both of San Francisco.

With research grants, tuition and student fees meeting part of its operating budget, the Stanford Medical School must count on endowment earnings and private gifts for a significant share of its operating costs. The soliciation for the School is part of the Stanford Annual Fund, started 30 years ago to help provide such support.

This year the Stanford Annual fund seeks to raise $1.8 million in unrestricted gifts for the University, including Medical School support.

Stanford medical alumni will be solicited personally in San Francisco during the six-week campaign which begins Thursday (OCT. 12).

Dr. Smith is a 1937 graduate of the Stanford Medical School. He and his wife, Elizabeth, have two daughters.

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Mailed October 9, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Dr. William F. Weeden, Oakland physician, has been named East Bay chairman for the 1967-68 annual fund drive for the Stanford University School of Medicine.

With research grants, tuition and student fees meeting part of its operating budget, the Stanford Medical School must count on endowment earnings and private gifts for a significant share of its operating costs. The solicitation for the School is part of the Stanford Annual Fund, started 30 years ago to help provide such support.

This year the Stanford Annual Fund seeks to raise $1.8 million in unrestricted gifts to the University, including Medical School support.

Stanford medical alumni in the East Bay area will be solicited personally during the six-week campaign which begins Thursday (OCT. 12).

Dr. Weeden is a graduate of Stanford Medical School of the Class of 1945. He served as chief of medicine at Samuel Merritt Hospital from 1963-66 and is president-elect of the Alameda County Heart Association.

Dr. Weeden is married to the former Patricia Cubbuck, a Stanford alumna. They have four children.

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Mailed October 9, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Human reproductive physiology, contraceptives, and the world population problem are among the topics being discussed in a unique course offered this fall to biology teachers of Santa Clara County.

The course, Human Reproductive Physiology and Problems of Population Control, is being offered by the department of pharmacology at Stanford University School of Medicine in association with other University departments and the Santa Clara Valley Science Teachers Association (SCVSTA). Members of the departments of gynecology and obstetrics, and biology at Stanford will participate in the course.

Dr. Sumner M. Kalman, professor of pharmacology who spearheaded organization of the course, stresses that the course is being offered as a public service by the Medical School.

"It will enable the teachers to answer questions and present relevant material in their classes with greater knowledge of a most important subject area," he says.

Larry Flammer of San Jose, who is handling registration and attendance for the course for the SCVSTA, notes that there has been a great need for a course encompassing the planned subject matter.

"Although each teacher will incorporate the course work into his own teaching in various ways, all will be provided with background information in depth on material which they can teach with some degree of authority," he says.

Flammer and Dr. Kalman held preliminary discussions on the possibilities of the workshop seminar last spring. Following a highly favorable survey of area science teachers for interest in the proposed course, final plans were made.

The topic of Monday night's (OCT. 2) opening lecture by Stanford biology professor, Paul R. Ehrlich, was "Biology of Population Growth." Future subjects to be covered include venereal diseases and its prevention and treatment, abortion, and heterosexual relationships among teenagers.

More than 70 teachers are expected to attend the classes which are being held on Monday evenings at 7:30 p.m. in Room M114 of the Medical School. The two-hour classes will be held through Dec. 4. ### ---Mailed October 3, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Study of the body's immune system, quietly but steadily growing in the past decade, has suddenly burst forth as a scientific field with important clinical application in the treatment of patients.

Immunology is one bridge between the basic and clinical sciences that promises an ever-increasing impact on both treatment and research in areas such as cancer and the rheumatic diseases.

In accord with these developments, Stanford University School of Medicine, in conjunction with the Palo Alto-Stanford Hospital, has established its first Clinical Immunology Laboratory under the supervision of Dr. Gordon Sharp, assistant professor of medicine.

"New knowledge in immunology has increased the number and reliability of our tests for immunologic abnormalities," Dr. Sharp says. "We are currently conducting four basic tests as well as some promising research work."

One of two tests which relates most specifically to the rheumatic diseases, has proved very useful in diagnosing systemic lupus erythematosus (SLE), a serious inflammatory disorder affecting many organ systems of the body, commonly known as "lupus."

"It has been known for some time that patients with lupus have a factor in their serum which, in a test situation, results in a peculiar reaction where degenerating cell nuclei are ingested by white blood cells. This is known as the LE cell phenomenon."

The test for diagnosis of lupus now being done in the new Stanford laboratory which involves a technique called complement fixation, grew out of research on the mechanism of the LE cell phenomenon by Dr. Halsted R. Holman, Guggenhime professor and executive head of the Department of Medicine. Studies by Dr. Holman and others showed that the LE factor was only one of a whole spectrum of anti-nuclear factors, antibodies directed against various portions of the cell nucleus, that are found in the blood serum of patients with lupus.

"The test we are using," declares Dr. Sharp, "will reveal cases of lupus that might have been missed by the standard LE cell test being done in many other laboratories. Not only will it detect almost all of the anti-nuclear factors, but it is highly specific, having very infrequent positive findings in normal individuals or patients with unrelated diseases."

-MORE-

"Use of this test has been found by the hospital and the medical community to be so successful in the diagnosis of lupus that increased demand and use were partially responsible for the establishment of the new laboratory," according to Dr. Sharp.

The other test used in the diagnosis of rheumatic diseases measures the level of serum gamma globulin or antibody-containing fraction of the blood.

"An increase or decrease of the gamma globulin level has certain diagnostic usefulness," Dr. Sharp says. "Those patients with a low level are often susceptible to infections and may benefit by receiving gamma globulin injections. Lupus patients and others with certain rheumatic diseases characteristically have a high gamma globulin level which usually returns to normal as they respond to therapy."

The immunology laboratory has also been performing two other tests: immunoelectrophoresis (IEP) and thyroid antibody.

The IEP test aids in detecting cases of a form of cancer called multiple-myeloma which is a plasma cell tumor frequently associated with a large amount of abnormal circulating protein.

"By IEP we can frequently detect and characterize this abnormal protein and thereby make an early diagnosis of the presence of a tumor," Dr. Sharp points out. "Often this protein might not have been detected by the standard laboratory tests which have been performed over a number of years."

Use of the thyroid antibody test has grown out of a research interest in experimental thyroiditis, which is an animal model of an inflammatory disease of the human thyroid gland, according to Dr. Sharp. "We are now testing for thyroid antibodies in patients with thyroiditis and the finding of such antibodies assists in diagnosing the disease.

"In addition to our regular testing," Dr. Sharp notes, "we have been conducting studies in the laboratory to improve and enlarge the services we can offer in the area of immunology."

"We have developed another anti-nuclear test which involves a technique called hemagglutination that is more sensitive than the one presently being used. It specifically measures the antibody to DNA (deoxyribonucleic acid), one constituent of the cell nucleus. The presence of this antibody seems to have a very close correlation with the seriousness of the lupus disease."

Dr. Sharp also points out that the new test has great specificity. "We have examined over 200 control patients and only rarely have found a positive test in normal people or patients with other diseases.

Although studies on the new test are still in the developmental stage, we hope to be able to add it soon to the clinical tests which are available, he says.

Mailed 11/27/67 ###

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Two leaders in the field of medicine from Stanford University have been named by the National Academy of Sciences to a Board of Medicine to find ways of speeding the benefits of medical research and practice to the public.

They are Dr. Robert J. Glaser, vice-president for medical affairs and dean of Stanford University School of Medicine, and Dr. Dwight L. Wilbur, clinical professor of medicine and president-elect of the American Medical Association.

Dr. Glaser, who last month was elected president of the Association of American Medical Colleges, and Dr. Wilbur join 19 other board members from both medical and non-medical fields.

Formation of the high-level group represents growing concern by the academy, the medical profession and Federal agencies that the increase in biomedical knowledge is outstripping its application to "critical human needs," Dr. Frederick Seitz, the academy's president said.

Questions to be considered by the board include the ethical and legal implications of experimenting with human beings; the role of medical schools and other biomedical institutions in attacking rural and urban slum problems; how to improve the quality and delivery of medical care; how to shorten the time between the acquisition of new knowledge and its application; and how medical knowledge is used, refreshed and taught.

Dr. Seitz said that the board had been asked to "range broadly in identifying urgent problems, to be imaginative in seeking solutions, and innovative in recommending public policy."

Chairman of the new Board of Medicine will be Dr. Walsh McDermott, professor and head of the department of public health at Cornell University Medical College.

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Mailed 11-17-67

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FOR PM RELEASE MONDAY, NOVEMBER 20, 1967

STANFORD--A Stanford University cardiovascular surgeon said today that some of the technical problems standing in the way of transplanting a healthy heart to replace a diseased one have been solved and "the way is clear for human trial."

Dr. Norman E. Shumway, professor and head of the division of cardiovascular surgery at Stanford University School of Medicine, expressed this view in an interview appearing in the November 20 issue of the Journal of the American Medical Association.

"We have achieved a degree of experience with heart transplantation in the laboratory and we feel confident we can take appropriate care of the patient with a cardiac transplant," Dr. Shumway said.

"Although animal work should and will continue, we are nonetheless at the threshhold of clinical application," he added.

Making such heart transplant possible requires that an ideal donor and recipient be available at the same time. "Thus far, the two requirements have not coincided," Dr. Shumway said.

In fact the major problem, the pioneer surgeon said, is choosing an appropriate recipient for a heart transplant. "Even in the patient with advanced coronary artery disease, who is incapacitated to a great degree, the surgeon would hesitate to remove an organ which is, after all, supporting the life of that individual," he said.

He predicted that the first clinical transplant in human patients will probably be confined to recipients who are unable to sustain their own circulation. The most likely candidate would be a patient undergoing open-heart surgery whose normal heart beat cannot be restored when he is taken off the heart-lung machine.

Other possible recipients are children with congenital abnormalities for which there is no corrective surgical therapy and for whom the various life-sustaining measures available are not satisfactory.

Dr. Shumway said the ideal donor would obviously be a relatively young patient dying of causes unconnected with heart disease.

Experimental evidence shows that if the heart can be removed from the donor within a half hour after death it can be resuscitated without suffering damage, Dr. Shumway explained. The time span during which a donor heart remains available for transplantation can be lengthened somewhat by immersing the heart in cold saline solution. Dog hearts have been successfully transplanted at Stanford after immersion in cold saline up to seven hours.

-MORE-

Dr. Shumway and his colleagues also have implanted the dog heart in a temporary host for up to four days before final transplantation in a recipient.

Resuscitated dog cadaver hearts have been maintained by a heart-lung machine for periods of up to 30 hours. Techniques for extended preservation of whole organs, however, are rudimentary.

"It may be possible to maintain a heart for short periods by cross-circulation with a third party or with a heart-lung preparation, but at the moment we are depending upon the coincident situation in which the donor and recipient are immediately available," Dr. Shumway said.

This means that as long as heart transplantation in the human is confined to emergency situations, its use will depend upon the chance availability of a suitable donor at the time of critical need. The situation differs from that of a patient awaiting a cadaver kidney transplant who can be maintained for a prolonged period by an artificial kidney.

Heart transplantation then is not likely to receive widespread use until methods are found for long-term preservation of the organ or until experience indicates that it can be used as an elective as well as an emergency procedure, Dr. Shumway commented.

He said the surgical technique of transplantation has been thoroughly worked out in the laboratory and technical difficulties are not anticipated in clinical application. In fact, transplantation in the human probably will be less difficult technically than it is in the dog, where the fragile nature of the canine organ presents a problem and is a challenge to any surgeon's skill.

Dr. Shumway added the rejection reaction of the recipient to a heart transplant is expected to be the same as that associated with kidney transplants. However, laboratory findings suggest that a heart transplant patient might not be able to tolerate the level of drug therapy used to treat kidney transplant patients.

This has led to an extensive search for an indicator of cardiac rejection in the hope that drug dosage could be adjusted to afford maximum protection with minimum use. It was found that a reliable indicator of rejection is provided by the electrocardiogram. Using the electrocardiogram as a guide, Dr. Shumway and his associates, have placed dogs with transplanted hearts on schedules in which the drugs were administered only during the rejection crisis.

"This has worked very well and enabled us to get our first survivals into durations of months instead of weeks," Dr. Shumway said. The longest dog survival has been one year.

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Mailed 11-17-67.

STANFORD UNIVERSITY NEWS SERVICE

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FOR INFORMATION CONTACT: Jan Studebaker

FILE COPY

FOR IMMEDIATE RELEASE

STANFORD-A team of Stanford students preparing a new plan for Concord will meet with city officials, Chamber of Commerce members, and interested residents Tuesday at 8 p.m. Nov. 21, in the Concord City Council chambers.

It will be the first formal presentation by the students participating in the current "Concord 70" project. Another presentation will be made in March and a final presentation in June.

The Stanford team is made up of 20 students in architecture, law, engineering, business, communications, geology and history. The plan will emphasize the downtown area and will pay particular attention to the potential of BART, the lakes, the plaza area, the civic center and the Sun Valley and Park and Shop centers.

The students in charge of Tuesday's presentation are Robert Basile, 192 Hudson River Road, Waterford, N.Y.; Sam Sperry, Galesburg, Ill., Robert Cox, 5858 Pennswood Ave., Lakewood Ted Vian, Stanford, and Joe Ritchey, 1088 Los Gatos Hwy, Santa Cruz, Calif.

Tuesday's meeting will be a program presentation, stressing what students intend to do more than what they have done, and procedures more than proposals. Members of the audience will be asked to respond to a questionnaire probing their attitudes toward planning in Concord.

During October, the students spent a weekend in Concord staying at the Concord Inn and collecting information and impressions of Concord. They were guests of Bart Lytton, board chairman of Lytton Savings and Loan Association and a guest professor for the course. They also met with members of a Chamber of Commerce committee serving as liason between the students and Concord.

Between presentations, the students will post progress reports of the project on a contemporary kiosk which they have erected in the plaza near Willow Pass Rd.

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11/17/67

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

Editors: The press is invited to hear Dr. Wilbur's remarks. Text will not be available in advance.

STANFORD--Dr. Dwight L. Wilbur, president-elect of the American Medical Association, will be principal speaker at the Stanford Medical Alumni Association's annual get-together Friday (NOV. 17).

Dr. Wilbur will speak on "Medicine and the Government" during the afternoon program to be held at the Cabaña Hotel in Palo Alto.

The new AMA president, who completed his undergraduate work at Stanford in 1923, is a clinical professor of medicine at the medical school. Dr. Wilbur received his M.D. degree from the University of Pennsylvania in 1926 and an M.S. in medicine at the University of Minnesota in 1933. He also was a Fellow and later a consulting physician at the Mayo Clinic before entering private practice in San Francisco in 1937.

Scheduled at 9:45 a.m., following registration and welcoming remarks at the medical school, are combined grand rounds of the clinical departments. A presentation on "Infection in the Impaired Host" by members of the faculty is also planned. This will be followed at 11 a.m. by a presentation on the "Controversies Regarding Diagnosis and Treatment of Coronary Artery Disease."

The ladies' program consists of a guided tour of the Stanford Linear Accelerator Center, leaving the medical school at 9:30 a.m. and returning at noon.

The noon program includes luncheon at 12:30 p.m. for the alumni, wives, faculty and friends at the Cabaña Hotel.

A report on the state of the medical school by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, will lead off the afternoon program at 1:30 p.m. Remarks by Dr. Wilbur will conclude the day's activities.

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Mailed November 13, 1967.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

ADVANCE FOR RELEASE IN AFTERNOON PAPERS WEDNESDAY, NOVEMBER 15.

(ADVANCE) WASHINGTON, D.C.--The incidence of fatal altitude sickness and other problems of exposure to high altitudes will continue to grow as increasing numbers of people live or travel in high altitude areas, a Stanford cardiologist said today.

"Knowledge of symptoms and remedies can prevent disaster," according to Dr. Herbert N. Hultgren, professor of medicine at Stanford University School of Medicine.

Dr. Hultgren presented his views this morning (NOV. 15) at an international conference on man and high altitude being held here this week under sponsorship of the National Academy of Sciences and the Pan American and World Health Organizations.

Dr. Hultgren cited research that he and his colleagues have been conducting since 1958 in the Peruvian mining community of La Oroya, 12,200 feet high in the Andes.

The Peru research project, he said, has revealed that altitude sickness generally involves acute pulmonary edema rather than heart malfunction. Pulmonary edema is the movement of fluid from the blood into the air sacs of the lungs. The fluid acts like a salt-water and egg-white mixture. It froths when the patient breathes and quickly "drowns" him.

The symptoms of pulmonary edema--a persistent cough, shortness of breath after the slightest exertion, a gurgling noise in the chest, coughing up of blood-streaked sputum, and vomiting--usually do not appear until six to 36 hours after arrival in a high-altitude area, Dr. Hultgren said.

These signs resemble those of pneumonia, but without chills or fever. When the danger signals occur, the patient should be quickly brought to lower altitude and given absolute bed rest with oxygen continuously administered. Recovery is usually complete in three days.

-MORE-

"A similar clinical picture is seen in mountaineers," Dr. Hultgren noted, "but because of the frequent unavailability of oxygen and the long time required for evacuation to a lower altitude, the edema may be severe and frequently fatal. Many deaths previously ascribed to pneumonia may have been high-altitude pulmonary edema, uncomplicated by infection.

Acute high-altitude pulmonary edema occurs most frequently in persons who travel within a day or two to elevations of over 9,000 feet, Dr. Hultgren explained. But acclimatized mountain residents who visit a low altitude for one to two weeks and then return to a higher elevation also seem susceptible.

Since this condition can be fatal, Dr. Hultgren offers these words of advice:

-- methods of prevention and treatment should be emphasized to anyone traveling to an altitude of over 9,000 feet. Mountaineers should be especially aware of the syndrome because of the frequent lack of available oxygen and difficulty of prompt removal of the victim to a lower elevation.

-- acclimatized persons returning to high elevations and persons who have had previous attacks of altitude sickness should be informed of preventive measures and methods of treatment.

-- adequate time should be taken in gradual ascent to permit full acclimatization. After arrival at a high altitude area, a period of rest and inactivity for one to two days should be observed.

-- cough, shortness of breath, noisy breathing or blood-streaked sputum are indications of prompt medical attention.

-- all mountaineering parties bivouacking above 10,000 feet should have available emergency oxygen and appropriate tools and spare parts should be provided to utilize additional oxygen if dropped by plane.

Dr. Hultgren said that further studies of the causes of high-altitude pulmonary edema are being pursued in the cardiology laboratory at Stanford since it is apparent that it may have many features in common with pulmonary edema occurring in other conditions of heart disease.

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END OF ADVANCE FOR RELEASE IN AFTERNOON PAPERS, WEDNESDAY, NOVEMBER 15. Mailed 11-9-67.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Stanford University School of Medicine has announced the appointment of Dr. Lawrence M. Klainer as assistant dean for clinical affairs and medical director of the Stanford University Clinics.

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine said that Dr. Klainer is expected to "assume a significant role in the hospital planning study currently underway at Stanford and to begin development of experimental approaches to health care that can be tested in our facilities."

Dr. Klainer, who also holds an appointment as assistant professor of medicine and preventive medicine, was commissioned as a U.S. Public Health Service officer in 1963. For the past year he has served as assistant to the dean at Harvard Medical School.

Prior to joining Harvard's administrative staff, Dr. Klainer was a special assistant to Dr. Philip Lee, assistant secretary for health and scientific affairs in the Department of Health, Education and Welfare. While in Washington, D.C., Dr. Klainer, was instrumental in the development of the Health Professions Education section of the White House Conference on Health. He also worked in the areas of international health on joint health programs of the Department of Health, Education and Welfare and the Office of Economic Opportunity.

This spring Dr. Klainer worked on the development of program content for the National Conference on Medical Costs and on the preliminary plans for the National Center for Health Service Research and Development.

In his new position, Dr. Klainer will work closely with the Medical Facilities Planning Group at Stanford on the hospital planning study. His particular interest will be in developing ambulatory care facilities.

Dr. Klainer received his B.A. degree in economics from Antioch College in 1957 and worked for both the U.S. Bureaus of Labor Statistics and Census before entering medical school. He was awarded the M.D. degree in 1961 from Western Reserve University where he was also elected to Alpha Omega Alpha medical honorary society. His internship and residence training was served at the Columbia-Presbyterian Medical Center in New York and at the Massachusetts General Hospital in Boston.

Dr. and Mrs. Klainer and their two daughters are living in Palo Alto.

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Mailed December 26, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

Science Writers: Following is a statement by Dr. Arthur Kornberg on the significance of viral DNA synthesis that was mailed with earlier story for release Friday, December 15, 1967. There are also some helpful answers to questions addressed by this writer in an interview with Dr. Kornberg this morning.

Spyros Andreopoulos

STATEMENT BY DR. ARTHUR KORNBERG

In our research we try to explain heredity in chemical terms. As you know, heredity resides in our genes. Our genes are, in turn, composed of complex molecules called DNA. About 10 years ago we learned how to synthesize DNA in the test tube with the use of specific cellular enzymes. The DNA we synthesized had the chemical and physical characteristics of natural DNA but it lacked the genetic properties. Recently we have been able to synthesize DNA which has the full genetic activity of natural DNA. In this work we chose one of the simplest creatures, a virus which has only 6 genes. Human cells by comparison have many thousands of genes. Dr. Goulian and I were able to synthesize DNA which had the chemical and physical properties of the DNA obtained from the virus itself.

We asked Dr. Sinsheimer at Caltech to test the biologic activites of our synthetic DNA. He found that the DNA was infective: it was able to enter cells and produce new viruses just as efficiently as DNA from natural viruses. I've mentioned the complexity of DNA molecules. In this case one molecule of viral DNA contains 6,000 building blocks in a very precise sequence; each building block in turn has 35 atoms. The incorrect placement of just one of the 6,000 building blocks can make a DNA molecule biologically inactive. By demonstrating that the synthetic DNA is a fully infective molecule, we can conclude that no such mistakes were made in assembling the 200,000 atoms that make up the DNA molecule synthesized in the test tube.

END OF STATEMENT

QUESTIONS

Q: Have you created life in the test tube?

A: It is really impossible to define the word "life" or "living" to the satisfaction of both laymen and scientists. Most everyone would agree that bacteria are living. But there is a wide difference among the attitudes of scientists as to whether viruses are living. Yet there is no sharp line separating the simplest bacteria and the most complex virus. We know that the viral DNA molecule which we have synthesized can reproduce itself inside a cell and generate new viruses. I believe that it will be possible before too long to circumvent the need for an intact cell for reproduction of the virus. Future research should make it possible to supply all the necessary cellular components. With the reservations I've mentioned, it becomes reasonable to think of the viral DNA as a simple or primitive form of life.

Q: Can you describe the steps involved in the laboratory synthesis of viral DNA?

A: To synthesize any form of DNA, three things are required:

-MORE-

1) Pre-existing DNA to serve as a template to be copied.

2) The four building blocks, or nucleotides, which make up DNA. These are known as A, T, G, and C, the alphabet of the DNA message.

3) An enzyme, called DNA polymerase, which selects the building blocks, according to directions from the DNA template, and then links these building blocks together to form the DNA chain.

To synthesize the viral DNA, one additional component was required. The viral DNA we worked with is circular in form and loses its infectivity when the circle is broken. In synthesizing this viral DNA it was essential that we provide an enzyme which could join the two ends of the chain which had been synthesized. It was crucial to the success of this work that this joining enzyme was discovered just one year ago. As one of several laboratory teams that independently discovered this enzyme, we were able to use it to complete the synthesis of the circular viral DNA.

Q: What do you believe is the significance of this work?

A: I would cite four things:

First-- This work increases the range of our ability to synthesize genetic material. We are reassured that the enzymes and building blocks we use can carry out the error-free synthesis of small chromosomes which contain several genes. We can now look forward to the synthesis of the larger chromosomes of more complex viruses and animal cells.

Secondly--We can produce modified forms of DNA in the test tube by fooling the enzyme into using building blocks which are similar to, but not identical to, the natural ones. Such modified genes when introduced into cells have entirely new properties. Eventually it should be possible to modify the gene in specific ways to produce specific biologic changes.

Thirdly--The polyoma virus produces a variety of cancers in animals. The DNA of this virus is of the same size and complexity as that of the bacterial virus we have been studying. We expect that it should be feasible now to synthesize modified forms of the polyoma viral DNA and determine how to alter its cancer-producing genes.

Fourthly--With advances in genetic chemistry we can look forward to separating and identifying various genes and reproducing them in the test tube. It may be possible then to attach a particular gene to a harmless viral DNA and use this virus as a vehicle for delivering this gene to the cells of a patient. In this way a person may be cured of an hereditary defect.

Q: What is the next step in your research?

A: Our research is taking two general directions:

One direction is to understand in finer chemical detail the structure of the enzyme catalyst, called DNA polymerase, which assembles the DNA chain. This enzyme synthesizes DNA with an accuracy that the finest chemists cannot yet emulate.

-MORE-

If we are to understand how this enzyme works in the cell, in health or disease, during growth or aging, we must first figure out how it works in the simpler and more accessible test tube system.

The other direction of our work is to understand what regulates DNA synthesis in the cell. When growth stops in a mature person, DNA synthesis in his liver cells also stops. However if a portion of the liver is removed at surgery, then DNA synthesis starts up again within 24 hours. Similarly when liver cells turn cancerous, DNA synthesis proceeds rapidly as it does in the young growing liver. We are at a loss to understand the forces that keep liver DNA synthesis in check in the normal adult and what agents provoke DNA synthesis in cancer growth.

Q: What influence will your work have on human evolution?

A: I hope in a way that would have relatively little influence in our lifetime. I say "relatively little" because there is vastly more we can and must do to further human cultural evolution by political and social means. I see the greatest rewards of genetic chemistry to human welfare in the cure of disease and ultimately in a better understanding of human behavior when explained in terms of chemistry.

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Mailed 12-14-67

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Science writers: Release date set by the National Academy of Sciences. A press conference has been scheduled with Dr. Arthur Kornberg on Thursday, December 14 at 3:30 p.m. in Room 270, Tresidder Memorial Union on the Stanford campus. Please notify the Stanford Medical Center News Bureau if you plan to attend. Texts of the scientific paper are available on request.

(ADVANCE) FOR RELEASE FRIDAY, DECEMBER 15, 1967

(ADVANCE) STANFORD--Biochemists at Stanford University School of Medicine have succeeded for the first time in manufacturing a synthetic DNA which displays the full biological activity of the natural molecule in living organisms.

The team, which may have come closest yet to creating life in the laboratory, includes Dr. Mehran Goulian, formerly a postdoctoral fellow at Stanford and now on the faculty of the University of Chicago, and Dr. Arthur Kornberg, professor and executive head of the Department of Biochemistry at Stanford. A third important contributor to the study is Cal Tech scientist Dr. Robert L. Sinsheimer who tested the synthetic material and confirmed its virulence.

Drs. Goulian and Kornberg have synthesized a fully infectious DNA virus, representing 5 to 6 genes. The test-tube product, when taken up by its bacterial host, orders the production of exact replicas of itself and the synthesis of all the components of the complete infectious virus.

The scientists reported their results in the December issue of the Proceedings of the National Academy of Sciences. Their work, culminating nearly eleven years of studies of DNA synthesis in the test tube, was made possible by grants from the National Institutes of Health and the National Science Foundation.

It was in 1959 that Dr. Kornberg won the Nobel Prize by turning a mixture of inert chemicals in a test tube into man-made DNA (deoxyribonucleic acid), the material that controls heredity. This early synthetic DNA possessed the physical and chemical properties of DNA found in nature, but it was biologically inactive.

Since then several research groups have reported attempts to synthesize an active form of the substance but the results have been equivocal. One explanation for this lack of activity was found in the enzyme DNA polymerase, which is used to promote formation of DNA. It contained enzymes, called nucleases, which produced breaks in the DNA. The smallest traces of these other enzymes in the DNA polymerase destroyed biological activity. Work by Dr. Kornberg and his associates has led to further purification of polymerase and the elimination of these nucleases.

-MORE-

This is an over-simplified account of the pioneer research that led to the synthesis of viral DNA. Drs. Goulian and Kornberg prepared a test-tube copy of DNA from a fully active DNA virus. Then using a variety of specialized laboratory techniques, they separated the synthetic material from the original DNA and used the synthetic DNA as a template or mold for a second round of replication.

They found it produced a fully synthetic DNA virus resembling the original in every detail. The process could be repeated many times with the new synthetic material, indicating no mistakes were made in the test-tube synthesis, according to the researchers.

In an interview today, Dr. Kornberg said the research represents an important step forward in understanding how viruses are duplicated when they enter cells and how DNA polymerase or similar enzymes make new DNA.

"If we know how to use this enzyme to copy this particular virus then we can copy other viruses," Dr. Kornberg said. "And we can copy them in ways in which we can modify their structure by putting in alternative or fraudulent building blocks to create new forms of the virus. We can then use the synthetic virus to infect cells and produce altered responses."

One possible future application is controlling certain forms of cancer, according to Dr. Kornberg. For example, DNA found in polyoma virus produces a variety of cancers in many animals. "I think it is reasonable to expect that the polyoma viral DNA will be synthesized by an enzyme system. With such a synthetic system we should be on our way toward figuring out what genes in the virus are responsible for the cancer response," he said.

Another possibility in the far-distant future might be the careful manipulation of laboratory synthesis of DNA as a means of modifying genes in a directed way.

DNA consists mainly of four building blocks which biochemists refer to as the genetic alphabet: A, T, G, and C. DNA has two major functions. It specifies in the many thousands of genes that make up an animal chromosome the complete chemical detail of the many thousands of enzymes required for the machinery and fabric of the cell. A gene is a stretch of DNA which contains about 1,000 building blocks. When this genetic alphabet is formed into a sentence, just as in any other language, the sequence spells out the recipe for a given genetic trait. The second function of DNA is to serve as a template or mold for the production of an exact copy of itself so that the cell may endow an offspring with identical information.

The Stanford research produced a fully active synthetic virus containing at least 5 to 6 genes, with a total of 5,000 to 6,000 letters. "I think the action of the enzyme in the test tube is impressive if you consider that a single copying mistake in the entire sequence would result in a garbled message and, therefore, in biologically inactive DNA," Dr. Kornberg said.

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END OF ADVANCE FOR RELEASE FRIDAY, DECEMBER 15, 1967. Mailed December 11, 1967.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

BIOGRAPHICAL INFORMATION

MEHRAN GOULIAN, M.D.

Dr. Mehran Goulian joined the faculty of The University of Chicago September 1, 1967, as an Associate Professor of Medicine and a Research Associate in Biochemistry.

A native of Weehawken, New Jersey, he received an A.B. degree in 1950 from Columbia University and an M.D. degree in 1954 from Columbia College of Physicians and Surgeons. He served his internship at Barnes Hospital in St. Louis, Missouri, and residency in internal medicine at Massachusetts General Hospital in Boston.

Dr. Goulian was a clinical associate at the National Cancer Institute of the U.S. Public Health Service from 1955 to 1957 and did additional volunteer medical work in African mission hospitals in 1957-58.

He is a member of Phi Beta Kappa and Alpha Omega Alpha honorary societies and is a diplomate of the American Board of Internal Medicine.

He was a fellow in medicine (hematology) at Yale University in 1959-60, then was at Harvard University from 1962-1965 as a research fellow in medicine and later as an instructor in medicine.

He was at Stanford University as a postdoctoral fellow in biochemistry from 1965 until September, when he came to Chicago.

Dr. Goulian's major fields of interest are hematology and DNA synthesis. He currently is doing independent research in the latter.

He and his wife, the former Susan Hook of New York, are the parents of two sons. They live at 5301 South University Avenue, Chicago.

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December 14, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

Science Writers: Following is additional background for the story on first synthesis of biologically active viral DNA by Dr. Kornberg and his associates at Stanford University. It relates to the virus Phi X174 first discovered by Caltech biophysicist Robert L. Sinsheimer, one of the collaborators in the study.

ABOUT THE VIRUS PHI X174

Each DNA molecule, life's basic hereditary material, is usually described as a long, double strand of atoms. The strands are intertwined. It is believed that when a cell divides, the two DNA strands pull apart, each serving as a template upon which a complementary strand is assembled.

Scientists have been seeking in the chemistry of these pairs of strands the answers of how heredity works.

In 1959, Dr. Robert L. Sinsheimer of Caltech found that the DNA of the dwarf virus, named Phi X174, does not consist of two strands, but only one. Thus the little virus might be described as a simpler form of life. It consists of a single strand of DNA wrapped n a skin of protein. Dr. Arthur Kornberg and his associates have used the DNA of this virus as a template to produce a synthetic copy.

Phi X's mission in life is to infect and destroy bacteria which inhabit the human intestinal tract and also abounds in sewage. The virus is only about one-hundred-thousandth as large as its bacterial host. And its DNA content is only one-twentieth to one-seventieth that of other viruses which attack these bacteria.

It appears that Phi X's DNA chain is built on much the same pattern as the usual double-stranded chains. That is, the strand consists of "beads" of nucleotides. There are only four different kinds of these nucleotides. It is the sequence with which they are strung together that determines what hereditary characteristics they will impart.

Dr. Sinsheimer found that soon after the single-stranded DNA of the virus entered the cell it was copied to produce a double-stranded structure and some twenty minutes after invading the cell, the virus had directed the cell to manufacture about several hundred of the Phi X viruses, each capable of infecting a new cell.

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December 11, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

BIOGRAPHICAL INFORMATION

ARTHUR KORNBERG, M.D.

With neither dismay nor bravado, Dr. Arthur Kornberg compares his research in DNA (deoxyribonucleic acid) with "spilling all the letters in an encyclopedia out on a table and then re-forming them into an ordered array."

The quiet, gently smiling professor and head of the Department of Biochemistry at Stanford University School of Medicine, won in 1959 a Nobel Prize by turning a mixture of inert chemicals in a test tube into DNA. To queries about producing life in a test tube, however, he has a Socratic sort of answer: "If you'd first care to define life."

The man trying to delve into the mysteries of nucleic acids, the core of living matter and the enzyme systems which maintain life, was born in Brooklyn in 1918. As a medical student at the University of Rochester, he turned a bout with hepatitis into his first published paper, "The Occurrence of Jaundice in Otherwise Normal Medical Students." After internship, he joined the National Institute of Arthritis and Metabolic Diseases, becoming chief of the enzyme and metabolism section in 1947. The reason for his concentration on basic biochemical research is an elegantly simple explanation of what makes a good scientist tick: "I just got tired of seeing something go in one end of an animal and come out the other without knowing what went on in between."

His research took him to Washington University in St. Louis, where he headed the Department of Microbiology during 1953-59. There he did the work that brought him the Nobel Prize, but Stanford University reaped the reflected glory, since Dr. Kornberg had just become executive head of the Department of Biochemistry at Stanford.

Since doing the original experiments, Dr. Kornberg and his associates have learned how to make many different types of DNA using different templates, including DNA from several bacteria, from various viruses, from the thymus gland of the calf and from the salmon sperm. This DNA, however, was biologically inactive. On December 15, 1967, after 11 years of intensive work, Dr. Kornberg and his associates reported in the Proceedings of the National Academy of Sciences that they had synthesized for the first time a totally synthetic copy of fully infectious viral DNA. This accomplishment has brought the obvious dream--the manipulation of nucleotides to produce tailor-made DNA as a means of controlling cancer and virus diseases--closer to reality.

Dr. Kornberg is a member of the National Academy of Sciences and a consultant to many private and public medical research programs in the United States and abroad. He is also the recipient of a number of honors and awards.

Dr. and Mrs. Kornberg and their three children live in Portola Valley on the San Francisco Peninsula. Mrs. Kornberg is also a biochemist with close appreciation of her husband's work.

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December 11, 1967

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

(ADVANCE) FOR RELEASE Thursday, DECEMBER 14, 1967

(ADVANCE) STANFORD--Scientists have found a synthetic plastic which powerfully stimulates production of human interferon, a natural antiviral substance that holds promise as an approach to control of a wide range of virus infections.

Work by Dr. Thomas C. Merigan at the Stanford University School of Medicine and by Dr. William Regelson, formerly of Roswell Park Memorial Institute in Buffalo and now at the Medical College of Virginia, has shown that pyran copolymer, a plastic manufactured by Hercules Company of Wilmington, Delaware, is taken up by the body's reticulo-endothelial system, which is the source of native interferon.

Interferon is a protein which is normally produced by cells in the body to limit the spread of virus infection.

Drs. Merigan and Regelson have shown pyran to be active against a leukemia-producing virus in mice and to have a potent and prolonged antiviral effect against a polio-like virus in mice. A single injection had a protective effect for two months, they reported.

The two investigators also confirmed that pyran had induced interferon in cancer patients participating in a cooperative study conducted by several hospitals on the East Coast. In this study, sponsored by the U.S. Public Health Service, other researchers are testing the polyanion pyran as a possible anticancer agent, independently of its interferon-inducing qualities. Drs. Merigan and Regelson have examined the serum of these patients and found pyran-induced interferon in levels similar to those obtained from patients with known virus infections.

"The studies demonstrate the ability of man to respond to nonviral agents like pyran with circulating interferon," Dr. Merigan stated in an editorial in the December issue of the American Journal of Medicine, and in a detailed report co-authored with Dr. Regelson in the December 14 issue of the New England Journal of Medicine.

"We stand on the threshold of an era that may see chemotherapeutic and other non-immunologic methods for control of virus infections in humans become as commonplace as the use of antibiotics against bacterial infections," Dr. Merigan predicted.

Ever since its discovery by Drs. Alick Isaacs and Jean Lindemann at the National Institute of Medical Research in London in 1957, interferon has been considered to have potential value in the control of virus disease in man, ranging from the most deadly virus infections to the common cold, for which no vaccines or chemical weapons are presently available.

Researchers had hoped that relatively harmless viruses could purposefully be introduced in patients to stimulate interferon production, or else that interferon might be purified from animal tissues for clinical use. -MORE-

Unfortunately hopes for its wide use were dashed by the finding that interferon from one species will not work except in cells of the same or closely related species. No practical way for purifying human interferon in clinically useful quantities is presently available and it is difficult to synthesize it because of its large size (molecular weight 30,000 compared to 6,000 for insulin).

Researchers, therefore, have turned their attention to agents that might behave like viruses in inducing treated cells to synthesize their own interferon. Last summer a research team from Merck Institute for Therapeutic Research reported that certain types of RNA (ribonucleic acid) were efficient interferon inducers in animals. Pyran and RNA are roughly similar in certain features of molecular structure.

At present pyran has certain drawbacks because it is not easily broken down by the body and accumulates in body tissues at certain dosages. Another of its side-effects is high fever. It is, therefore, not appropriate for widespread clinical use.

But Drs. Merigan and Regelson are hopeful their discovery will lead to joint efforts by interferon workers and polymer chemists to devise forms of the material which are more rapidly eliminated by the body and thus more suitable for use in man.

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END ADVANCE FOR RELEASE Thursday, DECEMBER 14, 1967

Mailed December 5, 1967

Heart transplant / First Stanford Univ.

FILE COPY

A Stanford University medical school team led by Dr. Norman E. Shumway, Professor of Surgery, performed its first human heart transplant tonight.

The recipient was a 54-year-old steelworker whose cardiac disability caused him to retire eighteen months ago. His disease, chronic viral myocarditis, was far advanced. The patient had severe and irreversible heart disease.

The donor was a 43-year-old housewife who had suffered a massive brain hemorrhage. She had been in coma for almost 24 hours and had been supported with artificial respiration.

Dr. Shumway described the patient's postoperative condition as satisfactory but pointed out that he will be considered critical for the next several weeks. "This is only the first step," he said. "Now the real work and concern begin."

The operation was performed one month after Dr. Shumway had stated in an interview at the JAMA that his experimental work with animals during the last 7 years had shown transplantation of the heart to be feasible and that he and the Stanford team were ready for a human trial.

The operation began at 5 p.m. and lasted approximately four and a half hours.

A news conference with further details will be held at 1 p.m. Sunday in Room M106 in the Medical School.

FILE COPY

NEWS BUREAU
STANFORD MEDICAL CENTER

About a week ago, Virginia and Bill White were talking with friends about heart transplant operations.

"How marvelous," she said, "to be able to give someone else a chance to live."

Last Thursday night, Jan. 4, she and Bill celebrated their 22nd wedding anniversary. They were high school sweethearts.

The next night, at 6 p.m., Virginia White, 43, who never had had a serious illness, suffered a massive brain hemorrhage. In less than 24 hours, she was dead.

Shortly thereafter, a team of Stanford Medical School surgeons began the heart transplant operation.

"Knowing that she is helping another is easing our grief," said Bill White, who gave permission for the transplant. "She was the type who would want to do this. I've got two of the proudest children you ever knew. They think it's great."

White lives at 723 Valley Road, Santa Clara, with their children, Judy, 18, and Rickey, 12.

Judy, a freshman at West Valley Junior College, plans to be a dental hygienist, but is thinking strongly of Vista, the Federal Government's domestic Peace Corps. Rickey attends Curtis Junior High School.

White needed less than 30 minutes to reach a decision to give permission for the transplantation of his wife's heart.

"When I look back on it," said White, "I guess it really began Nov. 3, when I lost a dear friend to cancer. His wife urged that any contributions be given in his memory to the Stanford Medical School, and that seemed to me to be a magnificent thought.

"After my wife was hospitalized, our family doctor and the neurosurgeon told us there was no hope. I asked them if there was any type of research going on relating to what had happened to her, something where she could help.

--MORE--

"They said they didn't know.

"But a few hours later, Dr. Shumway, whom I've never met, phoned me and explained the possibility of a heart transplant. I asked for time to talk it over with the children and my wife's mother. They all said yes, and when I talked with Dr. Shumway about 30 minutes later, I said yes."

Mrs. White was an avid camper and an expert water skier, as are her husband and two children. The Whites helped form a bow-and-arrow club in the Santa Clara Valley, and she devoted her spare time at home to mosaics and flower arrangements.

With all this, she worked full time for the past six years with Philco-Ford on Fabian Way, Palo Alto, most recently as a junior programmer with the firm's space re-entry group.

The Whites, both born in Des Moines, met in 1940 in East High School, in a salesmanship and merchandising class. Both graduated in 1942, and were married four years later.

Her brother a pressman for Meredith Publishing Co., lives at 2248 SW First St., Des Moines. Her mother, Mrs. Nell Grubb, who now lives near the Whites, worked for 35 years in Meredith's bindery.

Mrs. White worked for a while after high school as a key punch operator for the Iowa Liquor Commission in Des Moines.

The Whites have lived in California for more than 20 years, the last 15 in Santa Clara County.

"We haven't done anything," said White. "She has. All we've tried to do is say it for her."

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(Written by Harry Press)

Sunday, January 7, 1968

FILE COPY

[illegible]

STANFORD UNIVERSITY SCHOOL OF MEDICINE

STANFORD - Members of the surgical team which performed the heart transp[illegible] were Dr. Norman E. Shumway, professor and head of the Division of Cardiovascular Surgery; Dr. Edward Skinner, a postdoctoral fellow in surgery at Stanford; Dr. Pat Daily, a resident in surgery; and Dr. Brewer Nelson, a resident in surgery.

On the heart-lung machine team were Dr. Ray Stofer, a resident associate at the Medical Center; and E. Stevens. The anesthetist was Dr. Charles [illegible], senior attending physician in cardiac anesthesia.

Nurses assisting with the transplant operation were Peggy Martin, Mrs. Bernie Hartman, and Mary Fabian.

The surgical team which removed the heart of Mrs. Veronica Mc[illegible] included Dr. William Angell, a postdoctoral fellow in surgery at Stanford; Dr. Albert [illegible], associate professor of surgery; Dr. True Pillsbury, clinical instructor in surgery; and Dr. Thomas Smith, a resident in surgery.

Included on the heart-lung machine team was David A. Sechuser, senior perfusion technician in cardiovascular surgery at the Medical Center. The chief anesthetist was Dr. Kenneth M. Jenis, an acting instructor of anesthesia.

[illegible]

FOR IMMEDIATE RELEASE [illegible]

[illegible] Mercy [illegible] of Mercy-Line performed [illegible] first human heart transplant [illegible]

The recipient was a [illegible]-year-old [illegible], Mike [illegible]

The heart was taken from the body of Mrs. Virginia [illegible], [illegible] Santa Clara, Calif. Mrs. [illegible] was married to [illegible], [illegible] of San Jose. He is the father of two children. [illegible] died [illegible] brain hemorrhage. She had been in a coma for about 24 [illegible] supported with artificial respiration.

Kasperak, the heart recipient, was forced to retire from his job [illegible] Republic Steel Corp. at Cleveland, Ohio, because of his [illegible] health [illegible] wife moved to California in January 1967.

His wife, Verne, is a switchboard operator now [illegible] Redwood City. During World War II he served as an ambulance [illegible]

Kasperak was admitted to the Palo Alto-Stanford Hospital [illegible] suffering a severe heart attack. He was referred to the [illegible] cardiophysician, Dr. Martin Kaplitzen of the San Jose [illegible] A fellow in cardiology at Stanford, who present during [illegible] the donor to the recipient.

-end-

1-7-68

Medical Center News Bureau
Stanford University School of Medicine
January, 1968

FILE COPY

"Go ahead, don't waste any time. I want you alive and with me," Mrs. Ferne Kasperak said to her husband when he told her he was ready to consent to a heart transplant operation at the Stanford Medical Center.

Because of his condition, doctors had asked Mike Kasperak if he would consent to the operation--an operation which is technically feasible but involves high risk to any patient because of the natural tendency of the body to reject foreign tissue.

Mr. and Mrs. Kasperak were told of the uniqueness and the danger of the operation, but they were also told that the 54-year-old steelworker would not live much longer without it. He had suffered from a chronic heart infection, a condition which had turned his heart muscle into fibrous tissue and had weakened its pumping capacity.

Kasperak, according to his wife, agreed without hesitation. The donor was Mrs. Virginia Mae White, a 43-year-old Santa Clara housewife who had suffered a massive brain hemorrhage. She had been in a coma at the hospital for almost 24 hours and had been supported with artificial respiration.

Kasperak was forced to retire by his heart condition 18 month ago and move to East Palo Alto. He was an employee of the Laughlin Steel Corp., Cleveland, Ohio, for 30 years.

Mrs. Kasperak, a switchboard operator now on leave from Ampex Corp. at Redwood City, describes her husband as a "quiet, easy-going, lovable man with a lot of confidence in himself."

The Kasperaks have no children of their own. Mrs. Kasperak has a son in Cleveland, Harvey S. Glasener, 25, by a former marriage.

Kasperak was born in Lorain, Ohio. During World War II he served as an ambulance driver in Africa and in Italy.

He was referred to Dr. Donald L. Harrison, assistant professor of medicine and chief of Stanford's Division of Cardiology by his family physician, Dr. Martin Robinson of the San Jose Medical Clinic. Dr. Robinson, a former fellow in cardiology at Stanford, was present during the actual heart transfer from donor to recipient.

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FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos, 415: 321-2300, ext. 5311.

Stanford University
Medical Center News Bureau

Friday, January 12, 1968 10:30 a.m

Mr. Mike Kasperak's condition remains unchanged since yesterday. He is still on the critical list. His blood pressure, pulse, and temperature are normal, but the patient continues to have liver and kidney function abnormalities. His physicians report that dialysis may be reinstituted in spite of apparently adequate urine volume, and are concerned about his lack of progress with respect to the liver and kidney functions.

The patient continues to be fed intravenously and to be assisted in his breathing by artificial respiration part of the time.

Last night, with the help of nurses, Mr. Kasperak sat on a chair for 15 minutes during Mrs. Kasperak's visit in the intensive care unit.

The next progress report will be issued at 10 a.m tomorrow morning unless there is a major change in the patient's condition.

FILE COPY

Stanford University
Medical Center News Bureau

Saturday January 13, 1968 11:00 a.m.

Despite his excellent heart condition, Mike Kasperak, the nation's first adult heart transplant patient, has suffered what his physicians termed a "serious setback" this morning because of poor liver function. He is on the critical list.

Kasperak is presently described as "semi-comatose," attributed by his physicians to excessive accumulation of bilirubin in his blood. Bilirubin is a product of hemoglobin, the oxygen-carrying protein in the blood. Bilirubin must be removed from the blood by the liver. When the liver is functioning poorly bilrrubin builds up in the blood. Physicians believe this condition may be ~~is~~ aggravating the semi-cometose condition of the patient.

The physicians said that a large blood exchange transfusion will be done later in the day. They explained there is no bleeding and that the special transfusion is being done particularly to remove impurities in the patient's blood.

Kasperak's blood pressure and cardiac function are normal.

Peritoneal dialysis was re-instituted late yesterday to assist his kidney in spite of apparently adequate urine volume. (Peritoneal dialysis consists of injecting fluid into the peritoneum, the thin membrane lining the walls of the abdominal cavity. Impurities in the blood pass through the membrane and are then carried away.)

The patient continues to be fed intravenously and to be assisted in his breathing by artificial respiration part of the time.

The next progress report will be issued at 10 a.m. Sunday, unless there is a major change in the patient's condition. ~~Information throughout the day may be obtained through the Palo Alto Stanford Hospital's Nursing Service, 321-1200, Ext. 5181.~~

FILE COPY

Stanford University
Medical Center News Bureau
Stanford University School of Medicine

Mike Kasperak, America's first adult heart transplant patient, underwent a three-hour blood exchange transfusion today. But he remains on the critical list in semi-conscious condition at the Stanford Medical Center.

The transfusion was done primarily to remove impurities in his blood. Doctors used 10 units of blood. Earlier in the day, his physicians reported Kasperak had suffered a serious setback because of poor liver function.

His heart, transplanted last Saturday, is reported in excellent condition, with normal blood pressure and cardiac function.

Saturday 8 p.m. 1/13/68
Andreopoulos

FILE COPY

Bulletin #14
Medical Center News Bureau
Stanford University School of Medicine

January 14, 1968 10:00 a.m.

In a medical bulletin issued this morning, doctors say Mike Kasperak's condition remains unchanged. His heart remains in good condition but he is semi-conscious.

During the night an enlargement of his gall bladder was noted, which was drained of fluid. (The gall bladder is a pear-shaped sac sitting under the liver just to the right of the stomach. Its job is to store and concentrate bile, an alkaline liquid manufactured in the liver. The gall bladder releases bile into the intestine where it helps to digest fats in foods and to neutralize acids that come from the stomach.)

Doctors suspect that an aggregation of blood and bile is blocking the duct or tube carrying bile from the liver into the small intestine and the gall bladder. For this reason, Kasperak will undergo drainage of the common duct at 10:30 this morning. The operation usually lasts 40 minutes. Doctors say this condition is correctable.

Kasperak yesterday received a large blood exchange transfusion to remove impurities in his blood and a slight improvement of his jaundiced condition was noted.

His heart is reported in excellent condition, with normal blood pressure and cardiac function this morning.

The next progress report will be made at 12 noon today.

FILE COPY

Bulletin #16

Medical Center News Bureau

Stanford University School of Medicine

January 15, 1968 10:30 a.m.

In a report issued this morning, doctors said Mike Kasperak's crisis with his liver may be over. They said the patient has moderately improved since Sunday following removal of his gall bladder and drainage of the duct which carries bile away from the liver into the intestine. Doctors emphasized, however, that Kasperak's condition remains critical and that problems of rejection of his transplanted heart still lie ahead.

Doctors said Kasperak still suffers from short periods of semi-consciousness but this state also appears to be slowly improving.

His liver function is also returning ~~xxxxx~~ slowly to normal. Dialysis, a method of aiding the kidney, is being continued although his kidney function is much improved.

Kasperak's heart function continues to be satisfactory.

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SA:sc

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

Stanford University surgeons tonight said the kidney transplanted to Mrs. Annabel Mann, 51, of Reno, Nevada, was not accepted by her body and was removed.

The half-hour operation was completed at the Palo Alto-Stanford Hospital at 8 p.m. The patient is being treated in the intensive care unit and is in satisfactory condition. She will be on peritoneal dialysis until a new donor is found and the patient recovers from the present operation, the surgeons said.

Peritoneal dialysis is a substitute method for kidney function. It consists of injecting a fluid solution into the peritoneum, the thin membrane lining the walls of the abdominal cavity. Impurities in the blood pass through the membrane and are then carried away.

The surgeons said general experience with kidney transplants has shown that failure of the recipient to accept a graft does not compromise the patient's ability to accept a graft from another donor later on.

Mrs. Mann had received a new kidney from the body of Mrs. Virginia Mae White, of Santa Clara, Saturday, who also was the donor for Mike Kasperak's heart transplant.

Meanwhile, Kasperak , the first adult heart transplant patient in the United States, continues to make progress although he is still on the critical list.

For the second straight day, Kasperak sat up on the side of his bed, dangling his legs over the side to maintain circulation. He was visited by his wife, Ferne, and wrote, "I love you," to her. A tracheotomy prevents him from talking.

His blood pressure is normal and his liver function shows some improvement, the physicians reported. I

January 10, 1968 9:00 p.m.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Jane Duff 321-5310

FILE COPY

STANFORD--Dr. Christian Barnard, South Africa's heart transplant surgeon, was among 400 cardiologists who attended an afternoon clinic at Stanford Medical Center Wednesday. The clinic was conducted by members of the faculty of Stanford's Division of Cardiology:

Dr. Barnard toured the facilities of the medical center, the laboratories of the Division of Cardiovascular Surgery, and met briefly with Dr. Norman E. Shumway, professor of surgery. The meeting between the two surgeons took place in the operating room where Dr. Shumway was performing an operation on a 20-year-old patient with a congenital atrial septal defect (a hole in the septum--the dividing wall between the two chambers of the heart).

The meeting was private. Dr. Harrison said the conversations with Dr. Barnard were extensive enough to provide us with information from his experience with heart transplants that will be of value to later cases that may be done at Stanford.

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Delivered by telephone

February 29, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A rare chronic lung disease in humans has been linked to California's giant redwood trees (Sequoia sempervirens) by researchers at Stanford University School of Medicine and Palo Alto Veterans Administration Hospital.

The disease has an appropriate name--sequoiosis.

The cause of the lung condition has been traced to fungi in redwood sawdust. The condition was first identified in a 38-year-old sawmill worker with a four-year history of unexplained lung disease. The patient suffered shortness of breath, coughed intensely, and had lost 40 pounds. There was also an inflammation in both lungs. The patient had worked in the sawmill for 17 years.

Researchers believe the lung condition is caused by a reaction of the immune system of certain individuals to the redwood dust or fungal particles. Wood dust has not been reported previously as a factor in lung disease. But some respiratory ailments encountered frequently among farm workers are known to be caused by breathing of organic dust. The most well-known of these is a farmer's lung disease, associated with moldy hay.

The Stanford researchers are Drs. Herbert I. Cohen, Thomas C. Merigan, Jon Kosek, and Frederick Eldridge. Their findings were reported recently in the American Journal of Medicine. The work was supported in part by the National Institutes of Health, National Institute of Allergy and Infectious Diseases.

Tests have shown that inhaled redwood sawdust found its way into the alveoli, the tiny air sacs in the lungs. There the minute needle-shaped or irregular sawdust particles provoked a tissue reaction identical to that which occurs in patients who have breathed dust from maple bark, moldy hay, mushrooms, and other known organic substances, the researchers said.

These dusts of vegetable origin, added the researchers, contain fungi and the lung disease is a result of an allergic reaction to the fungal particles.

Further studies showed the patient's serum contained more antibodies--germ fighting substances--against redwood fungus extracts than did the serum of similarly exposed workers or a hospital patient control group. The patient's antibodies were directed against two types of fungi in the redwood, the physicians said.

Studies also confirmed that the immunologic reactions, seen in the sawmill worker, did occur in laboratory animals that were exposed to redwood sawdust.

The physicians said the patient's condition improved when he was removed from the environment of the sawmill.

No such fungus or antigenic particles could be demonstrated in pine, fir or beech sawdusts or in the redwood bark in contrast to the wood itself. However, cedar, mahogany, and ash contained material almost identical to the redwood sawdust fungus, the physicians said.

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Mailed 2-27-68

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 321-1200, Ext 5311

SHANGHAI--Double honors have recently been awarded Dr. Jon Eisenson, professor of speech and hearing sciences at Stanford University School of Medicine and director of the Scottish Rite Institute for Childhood Aphasia in Palo Alto.

Dr. Eisenson has been a[illegible] international research committee on dyslexia and world illiteracy for the World Federation of Neurology. The first meeting of the committee will be held April 3-5 in Dallas, Texas.

He was also awarded Honors of the American Speech and Hearing Association convention recently in Chicago. The award was given in recognition of Dr. Eisenson's contributions in teaching and research, and particularly for his significant writing for the profession.

Dr. Eisenson, an internationally known authority on aphasia, assumed directorship of the Scottish Rite Institute of Childhood Aphasia when it was opened in 1962. He and staff members study and treat aphasic children who are unable to speak or learn to read and write as a result of brain damage.

The service function of the Institute, according to Dr. Eisenson, is supported by a continuing grant from the California Scottish Rite Foundation, headed by Henry Gluckson, in San Francisco. Research activities are funded by a grant from the National Institute of Neurological Diseases and Blindness.

The Institute is a unit of the speech and hearing science section at the medical school.

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Mailed February 26, 1969.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--A movable cart for the treatment of patients suffering from shock has been developed at Stanford University School of Medicine.

The "shock cart," as it is known, was the brainchild of Dr. Donald C. Harrison, head of the Division of Cardiology at Stanford. He was assisted by Dr. Mark Perlroth, instructor in medicine, Dr. Robert DeBusk, postdoctoral fellow in cardiology, Harry Miller, cardiology laboratory coordinator, and Tom Metcalf, a third-year medical student.

"We've been interested in studying shock for many years," says Dr. Harrison. "Since there is not a major unit or ward for patients suffering from shock in the Stanford Medical Center, we decided to design a portable unit which we could move to the bedside of any room in the hospital."

The cart, which is specially equipped, "can provide enough information to intelligently treat the complex physiologic abnormalities of shock," he says.

"Shock was once thought to represent only low blood pressure. This doctors have been able to determine directly," according to Dr. Harrison. "Now we know that low blood pressure results in a decreased perfusion of blood containing oxygen and other vital substances to the organs. Until now this information on tissue perfusion was only indirectly available."

Acute heart attacks are the primary cause of shock in patients.

"On a national level, 500,000 Americans suffer heart attacks each year, with 20 per cent of this total going into shock," Dr. Harrison notes.

"While patients suffering from other heart ailments have been helped considerably by new drugs and electronic heart monitors, the outlook for the patient in shock following a heart attack is not good. There is an 80 per cent mortality rate among these patients whose hearts fail to beat strongly enough to keep them alive and on whom attempts to strengthen the heart with drugs often fail," he says.

Another cause of shock is bacterial infection in the blood stream. This condition is usually associated with other diseases such as cancer or certain types of treatments such as massive irradiation or use of drugs to treat cancer or immunologic disorders.

Equipment on the shock cart includes transducer systems for measuring blood flow and blood pressure in several locations of the body. The transducers convert the measurements into an electrical signal which can be amplified and recorded.

-MORE-

A retractable arm on the top of the cart is designed to hold three transducers. "These can be placed beside the patient's arm or near his heart--wherever we want to record the pressures after the specific catheters and tubes have been placed into the blood vessels of the patient," Dr. Harrison points out.

Another feature of the mobile unit is the facility for recording electrocardiograms (EKG).

"Once it's in use, there is a rapid developing mechanism for processing the pressure and EKG recordings so that they are instantaneously available for study," he says.

A digital clock on the cart accurately times the data on the shock patient as it is collected and recorded.

"Once we have obtained and analyzed all the extra information made available to us by the shock cart, we can develop a physiologic plan for managing the patient," Dr. Harrison says.

"We would like to increase our study of shock and are gradually seeing additional patients as doctors recognize the importance of the essential information which the shock cart can provide," Dr. Harrison points out. "In fact, we foresee the time in the near future when everyone having a patient of this type will want to have these kinds of studies done."

At present, one shock cart is in use at the Stanford Medical Center. This prototype model was built by Honeywell, Incorporated which will produce the cart commercially. Dr. Harrison and his associates worked six months with representatives and engineers of Honeywell on its design and construction.

An additional cart is being used in the cardiology unit of the Veterans Administration Hospital in Palo Alto and the University of California Medical Center has placed an order for the new shock cart.

Dr. Harrison expects that the mobile cart will be widely used for studying patients with shock in a number of other hospitals in this area and perhaps in other areas of the country.

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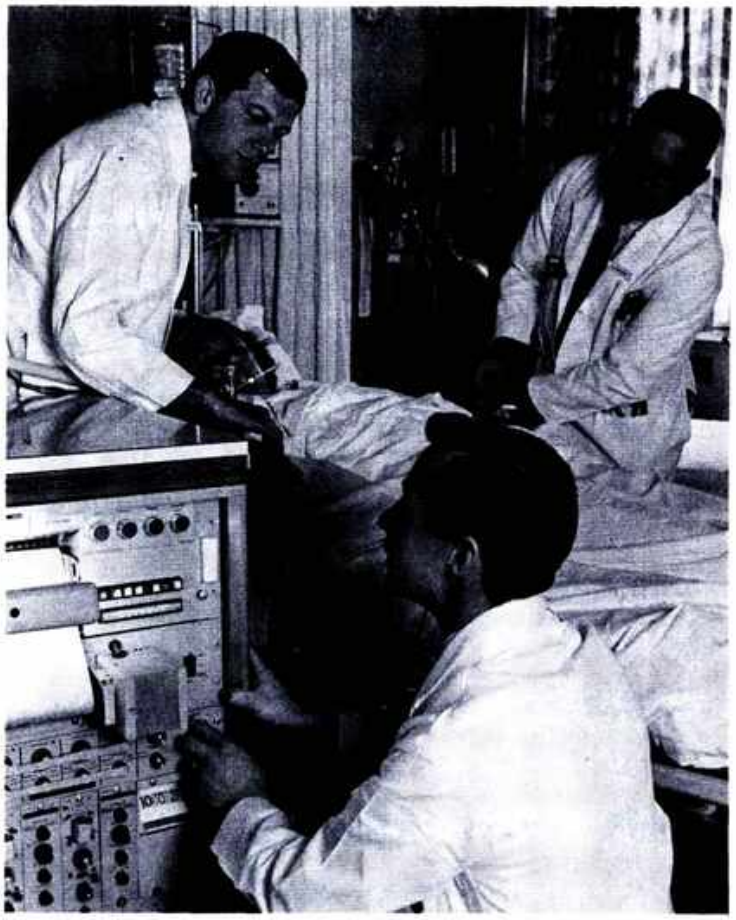
Mailed February 21, 1968.



SHOCK CART--A portable unit for the treatment of patients suffering from shock has been developed at Stanford University School of Medicine. Demonstrating use of the shock cart are, from left, Dr. Mark Perlroth, instructor in medicine, Harry Miller, cardiology laboratory coordinator, and Dr. Donald C. Harrison, head of the Division of Cardiology at Stanford. All three were instrumental in the conception and design of the specially equipped cart.

To: News Bureau, Stanford Medical Center, Palo Alto, California 94304

Subject: Shock Cart

Please send me an 8x10 glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 321-5310

FILE COPY

(ADVANCE) FOR P.M. RELEASE MONDAY, FEBRUARY 19, 1968

STANFORD--Surgeons at the Stanford University School of Medicine have replaced defective aortic heart valves in 40 patients with transplants from human donors who have died.

Thirty-five patients have received the new valves successfully. There were five postoperative deaths, none of which was related to valve dysfunction. Of the 40 patients, 28 were men and 12 women. All patients were severely limited by their valve disease and four of them were near death prior to the valve replacement operation. The patients are leading normal lives.

Drs. Edward B. Stinson, William W. Angell, Albert B. Iben, and Norman E. Shumway reported their results with the graft technique today at the Pacific Coast Surgical Association meeting in Honolulu.

For some time researchers have been seeking a way to use human heart valves in replacement surgery instead of plastic ones. Surgeons have known that if a heart valve is removed from a donor soon after death, and transplanted into a patient within five days, it will function effectively. The same technique has been used widely in England, New Zealand, the Mayo Clinic, the Medical College of Virginia, and the University of Washington.

"We believe," the surgeons said, "that the experience reported here and other published reports justify the current enthusiasm over the use of aortic valve homografts. That these valves may function satisfactorily over long periods of time, up to eight years...has been proven." (The aortic valve controls the flow of blood from the heart into the body's main artery).

The main advantages of the graft technique is that patients are not required to take anticoagulant drugs to prevent clotting and the danger of late infection is minimized, the surgeons reported.

The surgeons said "no instance of deterioration of the implanted valves has appeared in up to 10 months of observation" in their patients and immune rejection of the transplanted valves has not been a problem.

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END OF ADVANCE FOR P.M. RELEASE MONDAY, FEBRUARY 19, 1968

Mailed February 16, 1968

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Because of concern for the welfare of their patients, pediatricians at the Stanford University School of Medicine have not and will not report cases of LSD and other hallucinatory drugs to the police.

A statement, issued today by the full-time faculty of the Department of Pediatrics, noted that use of these drugs can have adverse medical consequences. The physicians emphasized their principal concern is the medical problem--not its legal ramifications.

The pediatricians' statement was prompted by a recent alleged case of two preschool-age boys in San Mateo County who were accidentally given LSD and the subsequent trial of their father. An erroneous report attributed the evidence given to the police to staff members of the Palo Alto-Stanford Hospital Center.

"The case has highlighted a medical problem of growing concern," the pediatricians said. "It is fervently hoped that these comments will encourage those faced with acute problems of this type to seek whatever professional help may be necessary free from fear that their requests to help will be more baneful than beneficial."

"From a legal point of view," the pediatricians said, "it is true that LSD is included in the list of 'dangerous drugs.' Its possession or use is a misdemeanor under the laws of the state. These comments in no way imply any judgment on the justice or desirability of the law.

"However, it should also be emphasized that according to legal experts physicians are under no obligation to report violations of this or any other drug law which may come to their attention in the course of their practices. Such action or lack of it is entirely up to the discretion of the individual doctor.

"It is our strong conviction the great majority of physicians take the view that the welfare of their patients demands assurance to the patients that their doctors' sole concern will be with the medical problem."

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The author of the statement, Dr. Norman Sissman, associate professor of pediatrics, wrote that contrary to press reports, the Palo Alto-Stanford Hospital Center did not report the San Mateo incident to the police. "No employee of the hospital or member of the faculty of the Stanford University School of Medicine initiated any contact with the police."

"More important than this inaccuracy," Dr. Sissman added,"is the fear which the incident appears to have engendered in the minds of many Bay Area citizens as to the consequences of seeking medical help for the treatment of adverse reactions following the ingestion of drugs with 'mind-altering' properties.

"Many people have concluded that calling a physician under such circumstances can result in notoriety, legal prosecution, and even imprisonment. Pediatricians at the Medical Center feel strongly that this is an unfounded fear and are concerned about the possible results of such an attitude."

The pediatricians warned that since drugs can now be obtained only illegally, there is no assurance the dosage of any pill, capsule or fluid preparation corresponds to what it was claimed to be, nor is there any reliable way to determine if additional chemical compounds have been added. Furthermore, observations have shown reactions produced by known amounts of these drugs depend to a large extent not only on the background and personality of the user, but also on the circumstances under which the drug was taken. Thus ingestion of psychedelic drugs may result in an adverse reaction or a "bad trip," characterized by symptoms such as anxiety or panic, and possible profound psychological changes.

"In recent years, medical institutions and physicians have successfully treated such problems," the Stanford pediatricians commented. "Their primary and sole concern has been the well-being of those who come to them. That such confidence and rapport should be placed in jeopardy by misinformation surrounding this isolated case is medically deplorable and potentially dangerous to many people."

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Mailed February 13, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Dr. John A. Luetscher, Jr., professor of medicine and head of the division of metabolic diseases and endocrinology at Stanford University School of Medicine, has been presented the Mayo H. Soley Award of the Western Society for Clinical Research.

The award, which was established shortly after the death of Dr. Soley in 1949, is presented for "outstanding research work to a worthy investigator of the West." Dr. Luetscher is the first recipient of the honor which was presented at the Society's annual meeting in Carmel Feb. 2.

Dr. Soley was an active investigator at the University of California Medical School where he was professor of medicine and assistant dean. He was instrumental in the founding of the Western Society for Clinical Research and served as its second president.

Dr. Luetscher, who has been an active member of the Society for 18 years, was cited for his "truly great research accomplishments which have had impact throughout the medical world."

Dr. Luetscher is noted for his research of the causes of edematous states. Commonly known as dropsy, edema is an excessive accumulation of fluid in the tissues. While seeking the causes of dropsy, Dr. Luetscher was first to show that a hormonal factor, later called aldosterone, was involved in various edematous conditions. He has also contributed greatly to the knowledge of salt and water metabolism in the production of edema.

In 1963, Dr. Luetscher received the John Phillips Memorial Award from the American College of Physicians for his outstanding metabolic research.

Dr. Luetscher received his M.D. degree in 1937 from Johns Hopkins. He joined the Stanford faculty in 1948.

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Mailed February 7, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

CONTACT: Spyros Andreopoulos
FOR FURTHER INFORMATION 415: 321-5310

ADVANCE FOR P.M. RELEASE FRIDAY, MARCH 22, 1968

FILE COPY

WASHINGTON, D.C. -- A Stanford University cardiovascular surgeon told a Senate subcommittee today that he welcomes federal efforts at educating the public about health research and such areas as heart transplants.

But he emphasized that there is more at stake than heart transplants. Liver, kidney, pancreas, even bowel and lung grafts are and will be feasible. "We are on the threshold of a wondrous new era in medicine, and doctors will need help to realize fully its potential," Dr. Norman E. Shumway told the senate group.

He noted that, while artificial heart devices may someday be effective in adults, clinical trials of heart transplants are worth pursuing because only transplants appear to have any future in infants and children. The transplant alone would appear to offer hope for congenital heart disorders that cannot be treated by present methods, he said.

Dr. Shumway, professor of cardiovascular surgery at Stanford University School of Medicine, is the surgeon who transplanted the heart of a 43-year-old housewife into the body of a 54-year-old steelworker at Stanford Medical Center. The patient died of other complications 15 days after his initial surgery.

Dr. Shumway appeared before the Senate Subcommittee on Government Research to comment on a resolution proposed by Minnesota's U.S. Senator Walter Mondale. The resolution calls for the creation of a national commission on the ethical and social implications of health science research and development.

"I feel much can be done if such a commission investigates and educates," Dr. Shumway said. "Transplantation of the heart, fortunately or unfortunately, cannot be done without public notice and public support. Criteria are evolving with respect to donors and recipients which must be discussed in the light of the new technology."

One of the critical areas in which surgeons are asking lawmakers for help is a workable definition of death. The surgeons would prefer brain death to be that criterion.

It may seem revolutionary, said Dr. Shumway, to suggest that the physician is no longer bound by the heart beat as the primary criterion of life. Yet, every day in hospitals all over the world the heart is intentionally stopped to facilitate open heart surgery. No one would consider these patients dead.

He suggested that death be defined in terms of organs which cannot be transplanted. "Sensitivity of the brain to oxygen deprivation, the irreversible nature of important brain injury, and the idiosyncrasies of neuroanatomy certainly preclude brain transplantation at this moment," Dr. Shumway said.

Selection of the ideal recipient for a heart transplant is more of a problem than definition of the perfect donor, the surgeon said. Heart transplantation cannot be termed therapy, at least not yet, therefore the recipient must be one whose death appears imminent or whose life is so unbearable that he qualifies for this kind of clinical trial. (more)

The donor cannot be dead in the conventional or time-honored sense. He must be dead in the sense that the brain is irreversibly and completely destroyed. This condition can be clearly and unmistakably diagnosed.

Only acute donors have been utilized in transplants performed thus far, said Dr. Shumway, but the door is open for use of chronic donors, patients who know they are dying of diseases unrelated directly to the heart, who wish to donate their organs for transplantation.

Consent for organ usage may be granted by the chronic patient himself, Dr. Shumway said, but the fact the next of kin controls disposition of the body after death and may decide not to honor the request, can create difficulties. Here legal reform may be necessary.

Dr. Shumway developed the basic techniques used in heart transplants with Dr. Richard R. Lower of the Medical College of Virginia. Replying indirectly to critics that heart transplants are premature, Dr. Shumway said the three primary goals have been achieved in the laboratory. These are 1) a feasible surgical method, 2) physiological performance of the transplanted heart after separation from the central nervous system and, 3) control of the immune reaction.

Each development was published in medical and surgical journals. Financial support was provided by the National Institutes of Health and the American Heart Association for fellowship stipends as well as for research. While these discoveries were being made in the laboratory, transplantation of unpaired organs and cadaver kidneys was gaining clinical acceptance. The medical and social climate seemed appropriate for clinical application of heart transplantation.

Commenting on the problem of immune reaction, Dr. Shumway explained that early trials utilized drug treatment similar to that used in kidney grafts. Although rejection was held in check, no real prolongation of life was affected in animals.

The conclusion was inescapable that heart tansplants required special treatment, Dr. Shumway said. After considerable trial and error the concept of demand or intermittent therapy was evolved. Dogs were living up to one year when chemotherapy was administered in accordance with certain specific but easily identifiable indicators of rejection in the electrocardiogram.

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END ADVANCE P.M. RELEASE FRIDAY, MARCH 22, 1968.

MAILED March 20, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Eighteen months ago, Paul Bissinger, Sr., prominent San Francisco businessman, was told he had cancer.

"My first thought was that I had an incurable disease," he recalls.

Today, following an intensive program of radiation therapy at Stanford University School of Medicine, Bissinger has returned to a full and normal life as husband, father of two sons and a daughter, and president of Bissinger & Co. He also serves on the board of directors of Wells Fargo Bank in San Francisco, United Air Lines, the San Francisco Symphony, and the World Affairs Council.

For Bissinger the trouble began with a small cyst behind his ear. "Although to me it seemed to be simply a matter of having the growth removed, my physician in San Francisco immediately foresaw the danger," he says. A biopsy showed the cyst to be malignant.

"I remember asking 'Is there any hope for treatment? Where?,'" Bissinger relates.

He was referred to the Division of Radiation Therapy at Stanford where doctors found cancer of the lymph node system, or lymphosarcoma. The lymphatic system, a network of small "glands" ranging from the size of a pinhead to that of an almond, is part of the infection-fighting mechanism of the body. It also acts as a partial filter system to stop the spread of malignancies throughout the body although the system itself is susceptible to cancer.

For six months, Bissinger received intensive treatment four times a week. The radiation therapy was conducted on a medical linear accelerator at Stanford which produces high-energy X rays for treatment of cancer.

To say that Bissinger is grateful for the treatment available at Stanford is an understatement. His feelings, plus those of other former patients of radiation therapy, whom Bissinger describes as "pretty darn healthy," go much deeper.

The former patients and interested associates, with Bissinger as spokesman, have launched a fund raising campaign. These "Friends of Radiology" hope to raise over $300,000 to expand the facilities of Stanford's Division of Radiation Therapy.

"People who have not been touched by cancer cannot imagine the despair of those afflicted with the disease. Nor can they experience the exhilaration I have felt in knowing I have been cured," Bissinger says.

"It is only because I spent hours, with scores of other patients in the busy, cramped quarters at Stanford that I realize how very fortunate I was to have been treated. If we are able to financially help with the expansion of facilities at Stanford, thus giving more cancer victims the chance we were given, perhaps our debt of gratitude will partially have been paid.

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222 There is little doubt but that the present radiation therapy facilities are overtaxed. Over 1,300 new patients are treated each year, a dramatic increase from the 250 new patients seen in 1956 when the first accelerator was adapted for medical use in the fight against cancer by Dr. Henry S. Kaplan, professor and executive head at the Department of Radiology. This accelerator, designed and built by Stanford physicists, is still heavily used today. A second accelerator was installed in 1962.

Nearly 2,400 treatments for various types of cancer are given each month with existing equipment and personnel operating on a 10-hour basis each day. This figure marks a 300 per cent increase over the number of treatments given per month in 1960. The daily patient load averages 141 persons.

"Cancer is a whole spectrum of diseases, depending on its location and its aggressiveness in spreading," according to Dr. Malcolm A. Bagshaw, head of the Division of Radiation Therapy. "Radiation therapy can be used to treat certain types of cancer--Hodgkin's disease, cancer of the cervix, mouth, vocal cords, throat, skin, lip, eye and some brain cancers. Unfortunately, there are other types of the disease which are very difficult, and in many cases impossible, to treat with radiation--leukemia, cancer of the bone, stomach and lung."

Continuing research, supported by the government, promises new methods of fighting cancer with radiation therapy, but funds are badly needed to bring these advances from the research laboratory to the clinics for application in the treatment of patients. Paul Bissinger and the "Friends of Radiology" strongly feel that this is an area where the private sector business, can be of immeasurable assistance.

"We've simply reached a saturation level,"Dr. Bagshaw says. At present new patients must make an appointment three to four weeks in advance. Paul Bissinger remembers this waiting as "endless and demoralizing." Because of the lack of facilities, about 10 per cent of those desiring treatment must be turned away or sent elsewhere.

Expanded facilities would allow for the treatment of 25 to 30 per cent more patients.

"Our initial plans call for the installation of a third accelerator, plus replacement of the older model in use now,"according to Dr. Bagshaw. Support facilities such as additional examining and dressing rooms are also needed.

Equally important, if not more so, is the need for an increased staff of radiation therapists and technicians. "You can have all the machines in the world, but without highly trained personnel, very little is accomplished," Dr. Bagshaw stresses.

Stanford, because of the exceptional stature of the Department of Radiology, does not suffer from a shortage of doctors specializing in radiation therapy as does the rest of the country in general. At present there are only 50 radiation therapists being trained in the entire country. Nine of these are at Stanford.

Additional funds in the future could be used for such items as financial support for those who need radiation therapy but cannot afford it or providing education and recreational programs for those patients from other parts of the country who often spend months living in a motel while undergoing treatment.

There is little question as to the success of radiation therapy in the treatment of cancer. It can best be exemplified in the relaxed smile of Paul Bissinger and the sparkle in his eyes. Although he still appears at Stanford every two months for a checkup, there has been no recurrence of the cancer. ### Mailed March 19, 1968

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Medicine and Modern Warfare is the topic of a series of discussions planned this spring under sponsorship of Physicians for Social Responsibility.

"Biological Warfare, National Defense and International Controls," will be the subject of the first lecture March 14 by Prof. Chauncey Leake, professor of pharmacology at the University of California School of Medicine.

Topics to be covered in April include "Preventive Medicine and Modern Warfare," April 2; "Chemical Warfare--The Agents," April 11; "Biological Warfare--The Agents," April 18.

Two discussions are scheduled for May--"Medical Ethics and Modern Warfare--The Issues," date undetermined; and "Civilians in Time of War--A Psychiatric Viewpoint," May 16.

All of the lectures will be held in Room M-110 of the Stanford Medical Center at 7:30 p.m. They are open to the public.

Physicians for Social Responsibility is an independent, national organization, headquartered in Boston. The local chapter has been formed this year with members from the medical profession throughout the Bay Area, including members of the faculty of Stanford University School of Medicine. The organization has no formal ties with the University.

When the national organization was formed in 1961, its initial concern was the medical consequences of nuclear warfare. This has since been expanded to include chemical and biological warfare also.

"The increasing evidence of the development and production of these weapons makes it urgent that the physician concern himself with their medical and moral implications to mankind," says Dr. K. D. Beernink, spokesman for the local group. Dr. Beernink is a postdoctoral fellow in microbiology at Stanford.

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Mailed March 12, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

FOR P.M. RELEASE FRIDAY, MARCH 8, 1968

WASHINGTON, D.C.--A Nobel Prize-winning biochemist today suggested that human beings may soon look forward to correcting hereditary defects and to curing diseases by the introduction of new genes into their bodies.

The biochemist, Dr. Arthur Kornberg, of Stanford University School of Medicine, speculated further that it might be possible to use harmless viruses as vehicles for delivering genetic information into cells where it is needed.

Dr. Kornberg is the scientist who, with Dr. Mehran Goulian of the University of Chicago, and Dr. Robert Sinsheimer of Caltech, produced a completely artificial copy of the inner core of a virus (deoxyribonucleic acid) and demonstrated it to be as infectious as the original. Their research was reported in December in the Proceedings of the National Academy of Sciences.

Dr. Kornberg presented his views in testimony before the Senate Subcommittee on Government Research. The Senate group is holding hearings on a resolution proposed by Minnesota's U.S. Senator Walter Mondale. The resolution calls for the creation of a national "Commission on the Ethical and Social Implications of Health Science Research and Development."

Dr. Kornberg said he was in essential agreement with the opinions expressed by Stanford's Nobel Prize-winning geneticist, Dr. Joshua Lederberg, also testifying before the Senate subcommittee. Dr. Lederberg said he opposed formation of a national commission charged with making substantive prescriptions, after one year's study, about the biological policy of the human species. Rather a commission should be formed "to make recommendations on the best ways to educate the public and its political representatives on the impact of science, on how to reach informed decisions on biological policy consistent with our democratic ideals."

"The commission's report," Dr. Lederberg said, "might be the first step in the educational process by helping to air the most pressing questions and weigh their priority against other challenges. He observed that clear thinking and rational decision on biological change is hardly helped by invoking slogans like "genocide," "who decides on life and death," or "genetic tampering."

"What really startles and intrigues people is that genetics or heredity is simply chemistry," Dr. Kornberg told the committee. "It is a young and difficult branch of chemistry. After 20 years of work on DNA in laboratories throughout the world, we can begin to reconstruct some of the very simplest patterns of DNA duplication in the test tube. In the next 20 years this work must be made more precise, varied and extensive. Genetic engineering would then come more into prospect.

-MORE-

"What will genetic engineering bring? We can look forward to the correction of genetic defects, the cure of diseases due to defective or missing genes. At some future date, it should be possible to cure a patient with anemia due to defective hemoglobin. Current treatments consist only of blood transfusions and cannot cure disease."

Dr. Kornberg suggested that when the gene for human hemoglobin is identified, separated and reproduced in quantity in the test tube at some unspecified future date, it would be possible to include this gene in one of the many harmless viruses and use it as a vehicle for delivering genetic information into cells where it is needed.

Viruses are tiny biological agents that contain small bundles of genes. A virus particle attaches itself to a cell and, like a tiny hypodermic needle, squirts its genetic material through the cell wall. This mechanism could be used to counteract anemia.

"Our problem in this branch of science today, and for the foreseeable future, is not too much but too little knowledge," said Dr. Kornberg. "I see no ethical or moral problems that are different in kind or quantity that face us today with this new knowledge of genes and gene action. I do see the need for congressional action, to mobilize the talent and resources throughout the world to exploit the opportunities to expand our knowledge of the molecular mechanics of man.

"We have been and continue to be the objects of nature's genetic engineering. Often we are its victims."

Dr. Kornberg explained a single building block in any gene in the DNA is altered either by an agent such as X rays, by radioactive fallout or by an error in the cell's copying process. "The chances are 1,000 to 1 that any alteration in the gene will make the highly refined and evolved cell defective," Dr. Kornberg said. "In the case of human hemoglobin we have recognized over a dozen distinct blood disorders which are due to a single alteration in the gene which carries the message for hemoglobin."

Despite the promising leads and insights into gene structure, Dr. Kornberg had bitter words for the present state of knowledge of genetic chemistry which he termed "pitifully weak."

"Scandalously little support or encouragement is given to chemists who work in this area," he said. "We know that molecules determine what we are as men and how we behave. Yet we know less about the molecules of our chromosomes and our brain than we do about the molecules in Australian wool. This is because the Australian wool growers have for many years recognized the value of basic research in the composition and chemical properties of wool."

Dr. Kornberg urged the subcommittee to help "expand our research into the molecules, genes and cells of man. This is the soundest investment I know of to bring us closer to a deeper understanding of growth and aging, of our nervous system and behavior."

-MORE-

He pointed out that support for nucleic acid chemistry and other areas of basic research, never adequate, has in 1968 dropped below the critical point. "For the investigators who want to work in this field, this is discouraging and frustrating," he said. "For the medical practitioner who hopes one day to have the advantage of fundamental findings in his clinical practice, the implications are tragic."

Dr. Lederberg agreed with Dr. Kornberg. "The replication of DNA and the transplantation of the human heart have dramatized the advance in biological science," he said. "But they are only the most visible signposts of a deeper revolution. This is the understanding that human intelligence and industry, expressed in science, have brought the species to a new level of mastery. There is no enterprise consistent with the laws of physics and chemistry that is beyond human reach. But, of course, we reach nowhere without the concert of human will, without effective social decision on the priority of our commitments."

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Mailed March 7, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--A two-fold program to develop both a new concept in the management of patients with leukemia and a joint interdisciplinary teaching program in the study of malignant diseases has been initiated at Stanford University School of Medicine.

The program will be funded by an initial grant of $24,890 from the Alexander and Margaret Stewart Trust of Washington, D.C. which was created under the will of Mary E. Stewart. Announcement of the grant was made today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine.

"Not only will the program allow for the rigorous, controlled treatment of leukemia patients, but it will serve as a model of cooperative practice between a segment of the Medical School faculty and the community," according to Dr. Glaser. "The interdisciplinary teaching program by the divisions of oncology, immunology, genetics and infectious diseases of the Department of Medicine will also provide a special learning experience for postdoctoral fellows, house officers, and students in training."

"The cohesion of this diversified group and the pooling of their ideas, knowledge, and skill could produce new ideas which might prove fruitful in the understanding and management of malignant diseases," Dr. Glaser said.

Although chemical treatment of leukemia in most cases has proven unsuccessful, it has been known for some time that certain forms of the disease are more amenable to therapy than others. Also, certain unusual aspects of the cancer have been identified which provide clues for future investigation. These include relationships to virus infections, to certain rheumatic diseases, and to diseases of the immune system such as cancer of the bone marrow.

The new program will pool the experience and effort of hematologists on the Medical School faculty with a group in the surrounding community. All leukemia patients and their treatment will be evaluated jointly.

Advantages to the cooperative approach are:

--The identification of patterns of leukemia in the community with more rigorous diagnosis than is usual;

--A pooling of experience in treatment so that uniform appraisal of drugs and their effectiveness will be possible;

--The opportunity to select from the total group of patients those with unusual manifestations who might benefit from evaluation by other groups within the Stanford Medical Center.

The patient management and joint teaching program will provide medical students and house officers with training in the care of patients while simultaneously engaged in investigative work in various subjects relevant to oncology.

Mailed March 6, 1968.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Jane Duff 321-5310

STANFORD -- Dr. Carl V. Moore, Busch Professor and head of the Department of Medicine at Washington University in St. Louis, Mo., will deliver the third annual Lowell Rantz Memorial Lecture April 27 at Stanford University School of Medicine.

His talk, entitled "Iron Nutrition and Deficiencies--A World Wide Problem," is scheduled for 2:00 p.m. in Room M 106 of the medical school. It will highlight the eighth annual Stanford Medical Student Day, sponsored by the Stanford Medical Student Association with support from the Stanford Medical Alumni Association and a gift from the Palo Alto Medical Clinic.

Dr. Moore, former dean of Washington University School of Medicine, is a past president of the American Society of Hematology, the American Society for Clinical Investigation, and the Central Society for Clinical Research. In 1959 he received the Joseph Goldberger Award in Clinical Nutrition from the American Medical Association.

Dr. Moore received both his A.B. (1928) and M.D. (1932) degrees from Washington iversity . He has headed the Department of Medicine since 1955.

"The main purpose of Medical Student Day is to provide students with an opportunity to report on research projects and other accomplishments," according to Ronald Adler, fourth-year student and chairman of the day's events. "It also enhances communication between the medical students, faculty members, alumni, and local physicians.

Several student reports will be given from 1:15 to 2:00 p.m. and from 3:00 to 4:15 p.m. Abstracts of all papers will be included in the program. Other activities include presentation of awards by the alumni association, and a social gathering following the afternoon session.

The afternoon program is open to alumni, medical students, medical school faculty, Palo Alto physicians, nursing students, and personnel of the Palo Alto-Stanford Hospital Center.

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Mailed April 23, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415:321-5310

FILE COPY

EDITORS: The following story transmitted on Business Wire 4/19/68

STANFORD -- Terms of a proposed agreement on the future of the Palo Alto-Stanford Hospital were disclosed today by Stanford University and the City of Palo Alto.

The agreement will enable the University to own and operate the hospital for both community and medical school patients. The documents will require approval by both hospital owners.

Terms agreed upon by City and University negotiators were based on a proposal submitted to the City by University President Wallace Sterling last January. The chief negotiators were City Manager George Morgan and Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine.

Morgan said the suggested agreement "contains commitments for hospital services to the residents and physicians of the community in accordance with those put forth by President Sterling, and in some areas exceeding the original proposal.

"For the Palo Alto resident to be the beneficiary of these services free of a tax burden for a period of 40 years must be recognized as being of a very substantial value."

Dr. Glaser called the agreement "a very fair transaction that will strengthen the basic spirit of cooperation between the Medical School and the City, and will ensure continued high quality care for Palo Alto residents."

The main points of the agreement are the guarantees it provides to the City in meeting its objectives with respect to health care of its citizens. It also guarantees continued access to hospital facilities for all community physicians now on the staff.

Palo Alto-Stanford Hospital is owned jointly by the City and the University. Palo Alto has access to 220 beds in the main 420-bed hospital and 150 beds in the nearby Hoover Pavilion. The City also leases 32 acres of land from the University on which the facilities are located.

The City has expressed the desire "to get out of the hospital business." Stanford feels that a single ownership would enable its medical school to develop a true university hospital that is responsive to the emerging needs of medical education.

Under the terms of the agreement, Stanford will acquire Palo Alto's holdings and will operate the hospital, including the Hoover Pavilion. The University will grant staff privileges to all community physicians presently on the hospital staff for the remainder of their professional careers. A total of 370 beds now used by patients of community physicians will continue to be available to them. Palo Alto residents will be given admission priorities in non-emergency cases. In addition, community doctors will have access to new facilities that will be built by the Medical School.

-more-

The University has agreed to meet the payment schedule for the City's hospital construction bonds totalling $3.5 million in principal and interest over a 19-year period. In addition, Stanford would pay the City $500,000 in cash.

If Hoover Pavilion is closed because of the availability of 150 beds elsewhere in the community, provided by an agency other than Stanford, another $500,000 will be paid to the City.

The proposed agreement envisions a unified medical staff. Presently, the hospital has two medical staffs -- Palo Alto and Stanford -- each operating under its own rules and by-laws.

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Mailed April 19, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Dr. Daniel J. Feldman, associate professor and head of the Division of Rehabilitation Medicine at Stanford University School of Medicine, has been appointed professor and chairman of the Department of Rehabilitation Medicine at the Medical College of Ohio at Toledo.

He will join the faculty of the College September 1, 1968.

Dr. Feldman assumed responsibility for the rehabilitation division at Stanford in 1960, and since that time has developed a program which has been praised by authorities in his field. The division which receives more than 17,000 patient visits yearly has helped many residents in the community -- amputees, blind or permanently crippled -- to return to meaningful lives once more. He was also responsible for developing demonstration programs for treating the disabled in California's rural areas and aiding local physicians in bearing the responsibility for rehabilitation of such patients.

Dr. Feldman came to Stanford from the New York University School of Medicine, Institute of Physical Medicine and Rehabilitation. He is a graduate of Columbia University and New York School of Medicine. He is a member of numerous professional organizations and a consultant to the Palo Alto Veterans Administration Hospital, Crystal Springs Rehabilitation Center at San Mateo, and Stanford Children's Convalescent Hospital in Palo Alto.

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Mailed April 10, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

STANFORD -- Major changes in curriculum to allow students to become physicians in the flexible atmosphere of a graduate school have been approved by the faculty of the Stanford University School of Medicine.

The changes are outlined in a document made public today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school. Proposed initially by the committee on medical education, the report calls for efforts "to provide students with greater opportunities for studying medicine in the context of their own needs, abilities, and ambitions than is now possible."

Specifically, the report recommends: 1) redefining the present "core" curriculum with increased elective opportunities for satisfying requirements in subject areas, 2) allowing students to develop highly individualized study plans and, 3) establishing an appropriate faculty body to implement the curriculum proposals by September, 1968.

The new plan, prepared by the committee under the chairmanship of Dr. LeRoy A. Pesch, associate dean, is considered likely to draw wide attention in medical circles, where Stanford's curriculum is already regarded as more flexible than most.

In 1959, the Stanford medical curriculum was completely rebuilt to improve the education of the future doctor by spreading his studies over five years instead of four, teaching him principles rather than mastery of specific detail, and emphasizing the essential unity of biology and basic medical sciences, and the interdependence of medicine with other fields.

One of the key elements of the initial Stanford Plan of Medical Education was the recognition that there has to be independence and flexibility in the scheme of medical education. These two ingredients were provided by the establishment of a "core" curriculum, which includes essential instruction for every medical student, with "free" time for electives.

However, after nearly eight years of experience, the faculty concluded that "the curriculum as now implemented did not completely achieve its objectives as a true graduate experience." The report considers the present plan too uniform to be suitable for the great variety of students who enter Stanford medical school.

For example, Dr. Glaser explained, the curriculum made no allowance for the fact that a student who majored in biology and another who studied liberal arts during his undergraduate years should be given substantially different courses of study in their professional school.

Despite the adoption of a rather unusual curriculum, the students' contact with patients was generally delayed until the third year and the beginning of the clinical studies. This, in Dr. Glaser's view, has perpetuated the isolation which some students feel from clinical medicine and has hampered the emergence of a clear inter-relationship between medical science and medical practice in the experience of the student.

-MORE-

Dr. Glaser stressed that a "core" curriculum to provide the essential common ground of information in the biological, behavioral, and clinical sciences would still be required of all future physicians. But the student will have elective options or different ways of meeting these requirements.

The "core" would be made a coordinated teaching exercise under conditions of surveillance by an appropriate body of the faculty so that the focus of teaching can be kept on topics that are pertinent to the education of physicians. Duplication as well as over- or underemphasis in certain areas will be held in check. The medical school is now using computers to study the present input in the education of medical students. Thus, much tediousness and repetition might be eliminated by alternative courses of study, each with considerable flexibility designed for the needs of different medical careers.

"Greater flexibility," Dr. Glaser said, "is necessary because of the undeniable upgrading in the quality of the entering student. Not only do we attract academically gifted students, but they arrive with considerably better preparation and more sophistication in the sciences than did the entering student of 8 to 10 years ago."

Presently at Stanford there are more than 300 young men and women studying to become physicians, and nearly 700 are in advanced programs such as internships, residencies, and postdoctoral fellowships.

Under the flexible plan, students will be admitted to Stanford medical school as candidates for the M.D. degree. The traditional classification of first, second, third, fourth, and fifth-year student will be abolished. Each student's study plans will be developed in consultation with faculty advisors.

This approach, the faculty expects, will help some students define their specialty interests early and shorten the length of their professional education. On the other hand, the plan will not interfere with the choice of those who prefer a standard course of medical education or those who desire early contact with patients.

The plan also recognizes the needs of medical students with respect to having a greater say about their school curriculum, Dr. Glaser said. Student representatives will be members of the faculty body responsible for curriculum review and development.

"Our faculty," he said, "welcomes the new intellectual restlessness. There are pressures on medical schools to educate more physicians. But increasing the number of doctors in training is not enough. We feel innovations are in order both in medical education and in the delivery of medical services."

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Mailed April 4, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Three new faculty appointments in the Department of Pathology have been announced by Stanford University School of Medicine.

The appointments, effective July 1, include Dr. Klaus G. Bensch, professor of pathology; Dr. Ronald F. Dorfman and Dr. Richard L. Kempson, both associate professors of pathology.

The appointment of the three new faculty members in pathology follows the selection of Dr. David Korn as professor and executive head of that department. The appointment of Dr. Korn, a pathologist and senior investigator in the National Institutes of Health, was announced last August and is also effective July 1.

Dr. Bensch received his M.D. degree in 1953 from Friedrich-Alexander University in Erlangen, Germany where he also served his internship. His residency in pathology was served at the University of Texas, where he was a Fulbright Fellow, and at Yale University School of Medicine.

Dr. Bensch has been a member of the Yale faculty since 1958 where he has been an associate professor of pathology since 1964.

Dr. Kempson received his medical education at Tulane University School of Medicine, graduating in 1955. Following his internship and residency, he was a National Institutes of Health fellow in surgical pathology at Washington University School of Medicine. He has remained on the faculty of that institution since 1963.

Dr. Kempson is a member of the American College of Pathology and the American Association for the Advancement of Science.

Dr. Dorfman received his medical education at the University of Witwatersrand Medical School in Johannesburg, South Africa and at the Post Graduate Medical School of London.

He was an intern and resident physician at Johannesburg General Hospital from 1949-50 and a senior resident physician at the Royal Victoria Hospital in Edinburgh, Scotland in 1952. He took additional training in clinical pathology at St. Mary Abbott's Group Laboratories in London for a year.

From 1955 to 1962, Dr. Dorfman served as a pathologist at the South African Institute for Medical Research.

He has been associated with Washington University School of Medicine since 1963, where he has been an assistant professor of pathology in the Division of Surgical Pathology since 1964.

Dr. Dorfman is a member of the International Academy of Pathology and the American Association of Pathologist and Bacteriologists.

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Mailed May 28, 1968

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD -- Stanford University will become sole owner of the present Palo Alto-Stanford Hospital July 1 under the terms of a revised agreement approved Thursday night (MAY 23) by the Palo Alto City Council in an 8-1 vote.

Adopted earlier by the Stanford Board of Trustees, the agreement will enable the University to own and operate the hospital for both community and Medical School patients. It also guarantees continued access to hospital facilities for all community physicians now on the staff.

The Mayor of Palo Alto and the President of Stanford's Board of Trustees still must sign a formal agreement to complete the transaction.

Under the terms approved by the City Council, Stanford will pay $1 million in cash, and assume $3.5 million worth of hospital construction bond payments over the next 20 years, and guarantee specified community hospital services for the next 40 years.

Besides increasing the initial cash payment from $500,000 to $1,000,000 and providing for arbitration, the revised agreement includes amendments requested by the City on a definition of hospital care to be provided, privileges for oral surgeons on the Palo Alto Medical Staff, and "courtesy staff" provisions for hospital departments.

In pledging the University's concern for the maintenance of patient care of the highest order, Dr. Robert J. Glaser, vice president for medical affairs and dean of the Medical School said: "We look forward to a productive and rewarding relationship between community physicians and faculty of the Medical School in providing superior health care for Palo Alto residents and others who seek the services of the new University hospital.

"We will move promptly to establish joint committees to deal with professional aspects of hospital operations and planning."

Terms agreed upon by the City and the University were based on a proposal submitted by University President Wallace Sterling last January.

Following several months of negotiations by represtatives of the City and the University, a proposal for the hospital sale was presented to the City Council April 22. The City Council amended the proposal and submitted it to the University Board of Trustees for approval.

The main points of the agreement are the guarantees it provides to the City in meeting its objectives with respect to health care of its citizens.

Palo Alto-Stanford Hospital has been owned jointly by the City and the University. Palo Alto has had access to 220 beds in the main 420-bed hospital and 150 beds in the nearby Hoover Pavilion. The City also has leased 32 acres of land from the University on which the facilities are located.

The City had expressed the desire "to get out of the hospital business." Stanford feels that a single ownership will enable its medical school to develop a true university hospital that is responsive to the emerging needs of medical education.

Under the terms of the agreement, Stanford will acquire Palo Alto's holdings and will operate the hospital, including the Hoover Pavilion. The University will grant staff privileges to all community physicians presently on the hospital staff for the remainder of their professional careers. A total of 370 beds now used by patients of community physicians will continue to be available to them. Palo Alto residents will be given admission priorities in non-emergency cases. In addition, community doctors will have access to new facilities that will be built by the Medical School. ### Mailed May 24, 1968.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Jane Duff 321-5310 FILE COPY

STANFORD -- Mrs. Annabel Mann, 51, of Reno, Nevada, died early this morning at Palo-Alto Stanford Hospital from complications following a second kidney transplant by Stanford University surgeons.

Doctors said this morning that because of the high dose of immunosuppressives necessary to prevent rejection of the kidney, Mrs. Mann developed a variety of infections caused by organisms which normally would be suppressed by a healthy individual.

Mrs. Mann, who suffered chronic kidney failure, first received a kidney January 6 from Mrs. Virginia Mae White, who also was the donor in the heart transplant operation of Mike Kasperak. That kidney was not accepted by Mrs. Mann's body and was removed January 10.

On March 28, Mrs. Mann underwent surgery again for transplantation of a kidney from her sister, Mary Gibson, Chico. She had been a patient at the hospital since that time.

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MXXX JBD:sc

Phoned to Associated Press
a.m. May 1, 1968

brief statement

At noon today surgeons completed a four and a half-hour transplant operation at the Palo Alto-Stanford Hospital.

The recipient is Joseph Rizor, a 40-year-old carpenter from Salinas, California.

The heart donor was a 43-year-old man who suffered irreversible brain damage. The donor's family has specified that his name remain anonymous.

Mr. Rizor was referred to Stanford by his family physician in March. He had suffered a serious heart condition for the past seven years.

Dr. Norman E. Shumway who headed the heart transplant team reported this afternoon that the patient's condition is fair, but that he is assisted in his breathing by artificial respiration because of a lung condition.

~~The Rizors~~

Bulletins ~~xxxxxxxxxxxx~~ on the patient's condition will be issued at 10:30 each morning or as the needx arises.

May 2, 1968

10:00 a.m.

Bulletin #1
Medical Center News Bureau
Stanford University School of Medicine

Spokesmen at Palo Alto-Stanford Hospital disclosed this morning that a heart transplant is being performed by a team of surgeons from Stanford University School of Medicine, headed by Dr. Norman E. Shumway.

The recipient of the heart is a 40-year-old male and the donor is a 43-year-old male who suffered irreversible brain damage.

Further details will be issued by the medical center news bureau early this afternoon.

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 FILE COPY

BULLETIN #2 Medical Center News Bureau, Stanford University

Surgeons at Palo Alto - Stanford Hospital today performed a heart transplant operation on a 40-year-old carpenter from Salinas, California.

The patient, Joseph Rizor, had suffered serious heart disease since 1961. He had three heart attacks and had developed irreparable heart muscle damage, doctors said. He is in fair condition. The patient has a lung condition and is assisted in his breathing by a respirator.

The new heart was transplanted in a four and a half hour operation from an anonymous donor who suffered irreversible brain damage, doctors said.

Rizor was referred to Stanford by his family physician for consideration as a potential recipient last March.

The operation was performed by a Stanford medical school surgical team headed by Dr. Norman E. Shumway.

Dr. Shumway who, with Dr. Richard Lower of the Medical College of Virginia, developed the techniques now used in heart transplantation, performed a transplant on Mike Kasperak January 6. Kasperak died 15 days later from what was described as "a galaxy of complications." His new heart functioned normally till the time of death.

At that time Dr. Shumway stated that these clinical trials would continue and that he hoped he would perform a series of transplants during the year.

He added that "heart transplantation cannot be termed therapy, at least not yet, therefore the recipient must be one whose death appears imminent or whole life so unbearable that he qualifies for this kind of clinical trial."

"It never entered my mind that Joe would be selected for a heart transplant," Mrs. Eileen Rizor said in an interview today.

"I remember his commenting, 'I wish that were me,' following the first heart transplant by Dr. Barnard in South Africa," Mrs. Rizor said. "At first I was shocked by the idea but time and the knowledge of how desperately my husband wanted to undergo that operation have made me realize that this may be his only chance to live."

Mrs. Rizor described her husband as an "outgoing, active and happy man" who had been immobilized by his heart ailment requiring that he remain in bed most of the time. A carpenter, who can "make anything" according to his wife, Rizor has been unable to work for the past two years.

Mr. and Mrs. Rizor will have been married 20 years in June. They have four children, Mark, 15, Michelle, 13, Judy, 7 and Christopher, 3.

Rizor was born in Belleveron, Pennsylvania. He has one sister, Mrs. William J. Belan of Cleveland, Ohio.

The Rizors have lived in Salinas for the past eight years. He is a member of the American Legion in Prunedale.

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May 3, 1968
10:30 a.m.

BULLETIN #3
Medical Center News Bureau
Stanford University School of Medicine

EDITORS: The following story is moved with the permission of the Anderson family, which requests no further interviews.

STANFORD: -- Rudy F. Anderson, an avid athlete, who was in excellent health and ran two miles every morning to stay that way at age 43, was the heart donor in Thursday's (May 2) transplant operation at the Palo Alto-Stanford Hospital. Mr. Anderson, a Pacific Telephone executive of 236 Bayview Dr., San Carlos, California, suffered a massive brain hemorrhage Monday night and died early Thursday morning.

Shortly thereafter, Stanford surgeons transplanted his heart into the body of Joseph Rizor, 40, of Salinas, California.

"Rudy took such good care of himself," said his wife, Margard (sq) (Maggie). I know he'd be very proud right now of what's happening at Stanford." He believed so in life."

The Andersons have two sons, Mark, 14, and Kurt, 10.

Mrs. Anderson said her husband was phoning a friend Monday night about 10 p.m. when he suddenly slumped to the floor. After their family doctor, Richard Carlson, and the neurosurgeon, Daniel Moub, told her there was no hope for her husband, and suggested a heart transplant, she gave her consent.

"Rudy bowled every week in the phone company league and had a 170 average," Mrs. Anderson said. "He was a fine swimmer and loved to hike. He loved everything outdoors and was a great competitor in everything he did. And every morning at 5:30 a.m. he got up to run two miles around the Carlmont High School track."

In addition to his personal enjoyment of good physical conditioning, Mr. Anderson, who "loved working with kids," had been a Little League manager for five years.

He was born in Oakland, and in Roosevelt and Fremont High Schools short played football, basketball, and was a hurdler and captain of the track team. At Hamilton Junior High School he had been student body president.

World War II interrupted his college plans, and he served in the Coast Guard, then in the merchant marine for a short time.

Other than a few years as a San Mateo fireman, Mr. Anderson had been with Pacific Telephone since 1949, serving in Palo Alto, Redwood City, San Jose (where he was manager of the business office), and in San Francisco since 1963. His most recent position was a results analyst in the commercial department.

He was a Mason, Scottish Rite, and Shriner.

SA:sc

BULLETIN #5

Medical Center News Bureau

Stanford University School of Medicine

May 4, 1968

10:30 a.m.

Heart transplant patient Joseph Rizer continues to be in fair condition this morning. His lung condition, however, which has been a source of concern to Stanford doctors remains unchanged. Because of his long-standing heart condition, Mr. Rizer has severe lung disease which makes it difficult for his blood to pick up enough oxygen as it travels through the lungs. The patient is assisted in breathing by a respirator.

His new heart continues to react very well, doctors say. His blood pressure, pulse, and heart output are normal. The patient is awake and alert. Mrs. Rizer visited him this morning.

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SA:sc

10:30 a.m.

Nov. 6, 1968

BULLETIN NO.

A Great Center Cove Medical
Stanford University School of Medicine

The heart transplant patient, Mr. Blair, continues to be in fair condition this morning. With the exception of his lung condition, vital readings unchanged. He is [illegible] complications. He cannot be to be assisted in his breathing by [illegible]. The lung condition is a result of his longstanding heavy [illegible] and is [illegible] in heart surgery cases.

He is alert, communicating well, has eyes and hands. Mrs. Blair was allowed by his side last evening. He rested comfortably during the night. He is being fed by an intravenous drip.

Urine, and blood pressure are normal.

Incision drained again this [illegible] time at 11:00 [illegible] to look upon the operation as a success. The patient is still [illegible] critical period ahead.

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SAfac

BULLETIN #6

Medical Center News Bureau
Stanford University School of Medicine

May 5, 1968

10:30 a.m.

The lung condition which has been a source of concern to doctors treating heart transplant patient Joseph Rizzo has improved slightly this morning. Doctors at Stanford are encouraged by his progress. The patient continues to be in fair condition. He is still being aided in breathing by a respirator. His new heart continues to function normally.

For a brief period this morning, when Mr. Rizzo was off the respirator, he joked with doctors and expressed a desire for something "stronger than apple juice" to drink. He is now on a liquid diet of soups and juices. He was visited by his wife yesterday afternoon and this morning.

The next bulletin will be issued Monday at 10:30 a.m.

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SA:sc

BULLETIN #7

Medical Center News Bureau
Stanford University School of Medicine

Sunday

May 5, 1968

6:00 p.m.

Heart transplant patient Joseph Rizor suffered a major setback at 2:00 p.m. today, Sunday, May 5th, when his new heart suddenly stopped for a few minutes because of a lung complication.

Doctors restarted the heart but his condition is critical.

The heart stoppage was caused by a lack of oxygen. Because of Rizor's severe lung disease, doctors explained, he is getting only 10 per cent of a normal oxygen requirement. Since the transplant May 2, Rizor's condition has been listed as fair, with the exception of his lung disease which has been a continuing source of concern.

Rizor, a 40-year-old carpenter from Salinas, received a new heart from Rudolph F. Anderson, a 43-year-old Pacific Telephone executive who died from a massive brain hemorrhage.

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SA:sc

BULLETIN #8

Medical Center News Bureau
Stanford University School of Medicine

Sunday
May 5, 1968
840p

Joseph Rizor, who received a new heart at Palo Alto-Stanford Hospital last Thursday, died at 8:30 p.m. PST today because his heart was not getting enough oxygen.

Rizor suffered a major setback at 2 p.m. when his heart, which had been beating strongly, suddenly stopped for a few minutes because of a lung complication.

Doctors restarted the heart, but death came 6½ hours later.

Because of Rizor's severe lung disease, doctors explained, he was getting only about 10 per cent of a normal oxygen requirement. Since the transplant May 2, his condition had been listed as fair, with the exception of the lung disease, which was a continuing source of concern.

Twenty-four hours after the operation, Dr. Norman E. Shumway, head of the surgical team which performed the transplant, said "for the next few days we can say that his condition will be critical until we can see some change in the level of oxygen tension in his arterial blood."

Rizor, 40, of Salinas, Calif., received his new heart last Thursday from Rudolph F. Anderson, 43, of San Carlos, Calif.

Rizor is survived by his wife, Eileen, four children, and a sister, Mrs. William J. Belan of Cleveland, Ohio.

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BULLETIN #9

Medical Center News Bureau
Stanford University School of Medicine

Monday
May 6, 1968
2:30 p.m.

STANFORD -- An autopsy report released today has confirmed that heart transplant patient Joseph Rizor died of complications from severe lung disease.

The preliminary post-mortem finding show that the 40-year-old Salinas (Calif.) carpenter had severe patchy sclerosis (hardening) of both main pulmonary arteries extending well down into the minor pulmonary arterial system.

Resistance caused by the hardening of these arteries made blood travel through the lungs without picking up normal amounts of oxygen.

The condition of the lungs, doctors explained, is a common result of prolonged heart failure. Rizor first developed heart failure in 1961.

The post-mortem findings show no signs of graft rejection, doctors said. They added, however, that because the patient survived only 3-1/2 days, no signs of rejection were expected.

Asked if the recent transplant has caused him to revise his views on selection of potential recipients, Dr. Norman E. Shumway, head of the surgical team, noted that "with a wider usage of heart transplants, the procedure will be extended to a group of patients who are not as far advanced in the course of their disease as those we have seen."

"At present we are dealing with patients who face certain death if nothing is done and, therefore, there is a justification for this kind of attempt," Dr. Shumway said.

He added the program at Stanford will continue "as we see other types of patients who qualify as heart recipients."

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SA:sc

May 2, 1968

10:00 a.m.

Bulletin #1
Medical Center News Bureau
Stanford University School of Medicine

Spokesmen at Palo Alto-Stanford Hospital disclosed this morning that a heart transplant is being performed by a team of surgeons from Stanford University School of Medicine, headed by Dr. Norman E. Shumway.

The recipient of the heart is a 40-year-old male and the donor is a 43-year-old male who suffered irreversible brain damage.

Further details will be issued by the medical center news bureau early this afternoon.

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STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Members of the department of psychiatry at Stanford University School of Medicine today announced the formation of a Committee on Violence.

"It is imperative," said the co-chairmen, Dr. David N. Daniels and Dr. Frank M. Ochberg, "for psychiatrists to contribute to the solution of the crisis issue of violence in America."

The committee's purpose, they said, is to review intensively the various aspects of violence relating to behavioral issues, and to prepare a report that would be relevant to the President's Commission on Violence and to concerned lawmakers, citizens, organizations, and other professional groups within the mental health field.

Six different aspects of violence will be reviewed: (1) mental illness and violence, (2) mass media and violence and the American character, (3) conflict resolution and the choice of violence, (4) the phenomenon of assassination, (5) firearms and violence, and (6) resistance and counter-arguments to gun control.

A report by the committee will be issued within the next two months. It will include pertinent background information as well as specific proposals and recommendations for action and further long-range study.

"We would welcome contact with other groups interested in the crisis of violence," the co-chairmen said. Drs. Daniels and Ochberg can be contacted at the department of psychiatry at the Medical School.

Other faculty members, residents and fellows from the psychiatry department on the committee are Dr. John Adams, Dr. Peter Bourne, Dr. Paxton Cady, Dr. J. Chris Gillin, Dr. Marshall Gilula, Dr. George Gulevich, Dr. Beatrix Hamburg, Dr. Jon Heiser, Dr. Frederic Ilfeld, Dr. Jay Jackman, Dr. P. Herbert Leiderman, Dr. Walton T. Roth, Dr. Alberta Siegel, Dr. Robert Taylor, Dr. Jered Tinklenberg, Dr. E. Fuller Torrey, Dr. Ed Trickett, and Dr. Alfred Weisz.

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Mailed June 24, 1968

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415:321-5310

STANFORD -- Stanford University School of Medicine presented awards to eight graduating students at the annual senior class convocation Sunday (JUNE 15).

Degrees were presented to 55 men and 6 women, members of the fifth class to complete Stanford's five-year medical curriculum. The five-year program was inaugurated when the Medical School moved from San Francisco to the Stanford campus in 1959.

At the convocation, Michael B. Marchildon received the Dr. and Mrs. Joseph Fife Surgery Award, given annually to the outstanding student in surgery.

Receiving the Robert H. Alway Book Award was Fred H. Burbank. The Book Award, named in honor of Dr. Alway, Dean of the Medical School from 1958 to 1964, is given to a student who has "availed himself especially well of the Stanford five-year plan."

Paul R. Bergstresser received the L. A. and Marian S. Hopkins Award in Dermatology. Receiving the Lowell A. Rantz Memorial Award to the student "who has distinguished himself in the field of infectious diseases" was Carl O'Neal Page, Jr.

The Harold K. Faber Pediatric Award was presented to Douglas P. Tustin. This award honors potential contributors to child health in recognition of accomplishments in pediatrics.

Richard H. Lanzerotti received the Borden Undergraduate Research Award in Medicine, given by The Borden Company Foundation, Inc., to the senior student who has completed the "most meritorious" research during his medical training.

Receiving the National Foundation Merit Award for outstanding research in the area of birth defects was Ronald Levy, and William G. Hayden received the Upjohn Achievement Award for outstanding clinical performance.

Dr. LeRoy A. Pesch, associate dean for student affairs and professor of medicine, presented the awards, and Dr. Harold K. Faber, emeritus professor of pediatrics, announced the recipients of the award named in his honor.

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Class President William G. Hayden presented the annual Arthur L. Bloomfield Award for excellence in the teaching of clinical medicine to Dr. Allen B. Barbour, assistant professor of medicine and head of the division of ambulatory medicine.

Dr. Halsted R. Holman, Guggenhime Professor and executive head of the department of medicine, delivered the faculty address, and Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, administered the Hippocratic Oath and presented diplomas to the Class of 1968.

Award winners and their parents' names and addresses are listed below:

CALIF., LA JOLLA--Fred H. Burbank, Mr. and Mrs. Forrest Burbank, 1365 W. Muirlands Dr.

PALO ALTO--Ronald Levy, Mr. and Mrs. Herman Levy, 420 Hale St.

PEBBLE BEACH--Douglas P. Tustin, Mrs. Margaret Miller, Box 2069.

ILL., CARLINVILLE--Richard H. Lanzerotti, Mr. and Mrs. Emanuel Lanzerotti, 801 High St.

WEST FRANKFORT--Michael B. Marchildon, Mr. and Mrs. C. A. Marchildon, 606 E. St. Louis St.

NEW MEX., LOS ALAMOS--Paul R. Bergstresser, Mr. and Mrs. Karl Bergstresser, 739-42nd St.

PENN., DUSHORE--William Hayden, nephew of Mrs. Agnes Hochberg (parents deceased).

S.C., CHESNEE--Carl O'Neal Page, Jr., Rev. and Mrs. Carl O. Page, Route 2.

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Mailed June 19, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Dr. Jack D. Barchas, assistant professor of psychiatry at Stanford University School of Medicine, has been awarded first place honors in the 1968 A.E. Bennett Neuropsychiatric Research Foundation contest for his study on the formation and metabolism of adrenalin in the brain of mammals.

Announcement of the award was made today (JUNE 14) at the convention and scientific meeting of the Society of Biological Psychiatry, sponsors of the contest, in Washington, D.C.

Co-authors of the two-year study on rats and sharing the award with Dr. Barchas were Roland Ciaranello of Schenectady, New York, and Alan M. Steinman of Los Angeles, third and second year medical students, respectively, at Stanford.

The awards by the Society are made to young investigators under the age of 35 "to stimulate the entrance of young scientists into research in psychiatry and related fields."

"It has been known for some time that small amounts of adrenalin are present in the brain," Dr. Barchas says. Our research on rats has shown that while some adrenalin is pumped to the brain in the blood supply, there is an additional amount produced independently of the adrenal gland by an enzyme in the brain. This production is localized in certain, basal areas of the brain which control emotional and physiological processes."

"We also found that the brain metabolizes and utilizes adrenalin very quickly--in around three hours," he says.

"These facts indicate that adrenalin may have a role in abnormal or normal functioning of the brain and in behavior," according to Dr. Barchas.

Dr. Barchas received his M.D. degree in 1961 from Yale Medical School. He served his internship at the University of Chicago. After completing his residency at Stanford in 1967, he joined the faculty here.

Ciaranello received a B.S. degree from Union College in 1965. Steinman was awarded a S.B. degree from M.I.T. in 1966.

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Mailed June 14, 1968

6-11-68

FILE COPY

Lives of three Santa Clara County residents and a 10-year old boy from Salinas are being sustained on a new hemodialysis unit at Stanford University School of Medicine while they await kidney transplants.

Opening of the unit marks the continuing expansion of the kidney transplant program at Stanford although members of the Department of Surgery are concerned about the program's future.

"The very existence and expansion of the kidney transplant program at Stanford depends both on public support in donating organs and on cooperation from public officials, who must give permission for the transplant even after consent has been obtained from the donor's family," Dr.Roy Cohn, professor of surgery and head of the renal transplant programs, says. "This applies equally to the transplantation of other organs--the heart, liver and cornea."

Dr. Cohn, his associate, Dr. Zoltan Lucas, assistant professor of surgery, and Dr. John Palmer, assistant professor of surgery, spoke this morning at the opening of the new dialysis unit at the Medical School.

"We can continue temporarily to substitute the function of the kidney in cleansing these patient's systems of wastes and poisons by dialysis," Dr. Palmer, who heads the dialysis unit, said. "But whether they will live or die depends on the donation of a kidney by individuals unrelated to the patients or donation of a cadaver kidney by members of a deceased person's family."

None of the Santa Clara county residents or the young boy now at Stanford has a relative who is able or suitable for donation of a kidney. All have been waiting several months for kidney transplant.

The problem of public support and understanding seems less difficult than that of cooperation from public officials.

Dr. Cohn pointed out that Stanford has faced consistent difficulties in obtaining not only cadaver kidneys but also heart valves and corneas for transplant from the Coroner's Office in Santa Clara County.

Twice in recent weeks the Coroner's Office has refused to allow use of a

donor's kidneys. In both instances families of the fatally injured individuals had requested that kidneys be donated to save the lives of others.

"The problem appears to be one of jurisdiction and interpretation of the state law by this county's Coroner's Office as opposed to other counties. "Dr. Cohn said. "It is also illustrative of the difficulties faced by both patients and doctors because of differences of opinion among county coroners."

He pointed out that both UC and UCLA have active cadaver kidney transplant programs. The Coroner's Office in the respective counties of these two medical centers are governed by the same law as that of Santa Clara County.

"If nothing is done to bring about a more enlightened attitude, our cadaver kidney transplant program may have to be dropped," Dr. Cohn said.

One of those awaiting kidney transplantation at Stanford is a blond, freckled, 10-year old boy, Clifton Henry, Jr. of Salinas. He is the son of Mr. and Mrs. Clifton Henry.

According to Dr. Lucas, the boy suffers from a rare condition called anti-glomerular basement membrane disease. There are only two recorded cases in medical literature. The disease appears after a strep throat infection.

Cliff received a healthy kidney from his father five months ago at Stanford, but it too developed the disease that damaged the boy's own kidney one month after the transplant. Since then, the patient has been on an artificial kidney machine.

"By an accident of nature," Dr. Lucas explained, "the antibody produced by the body against strep bacteria is the same antibody which destroyed the boy's kidney and his first transplant. We need to know now if this antibody is still present in his circulation before we attempt another transplant."

Surgeons plan to learn if a second transplant on Clifton is possible by using a donated kidney to test his circulation for anti-kidney antibody.

The test is done by connecting the kidney outside the patient's body in place of the artificial kidney. After the patient's blood circulates through the kidney for 48 hours, it is removed and examined under the microscope. Absence of tissue damage indicates that antibody is no longer present.

"We then would be able to perform a second transplant on Clifford to save his life," Dr. Lucas said.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415:321-5310

STANFORD--Seven fifth-year and two fourth-year medical students at Stanford University School of Medicine have been elected to Alpha Omega Alpha, the national honor medical society.

New members from the fifth year class are Stephen C. Adler, Thomas H. Brzozowski, Carl David Erickson, John W. Griffin, Michael B. Marchildon, Carl O'Neal Page, Jr., and Maria V. Smith. Elected from the fourth-year class were Ronald D. Adler and Virginia J. Borson.

Medical students are elected to Alpha Omega Alpha on the basis of scholarship and potential leadership. To qualify, they must be fourth or fifth year students.

Also selected to membership in the Society was Dr. Gunther W. Nagel, clinical professor of surgery emeritus, and director of alumni relations at the Medical School.

The charter of Alpha Omega Alpha allows for the election to membership of physicians who, although not students, have made significant contributions to the profession.

Dr. Nagel received his A.B. (1917) and M.D. (1921) degrees from Stanford University. He was a Fellow at the Mayo Clinic in Rochester, Minn. for six years and during this time he was awarded an M.S. degree in surgery from the University of Minnesota. He practiced surgery in Francisco and taught many classes of Stanford medical students from 1929 until his retirement.

Dr. Nagel has published numerous scientific papers dealing with gastrointestinal surgery and most recently a book, THE MAYO LEGACY.

Students and their parents' names and addresses are listed below:

CALIF., Berkeley -- Virginia J. Borson, Dr. and Mrs. H. J. Borson, 244 Alvarado Rd.
Los Altos --Ronald D. Adler, Mr. and Mrs. Hans G. Adler, 23156 Payne Ct.
Oakland -- Maria Viola Smith, Mr. and Mrs. Vito Viola, 12669 Skyline Blvd.
Pasadena -- Carl David Erickson, Mr. and Mrs. Carl A. Erickson, 1371 Inverness Dr.

ILL., West Frankfort -- Michael B. Marchildon, Mr. and Mrs. C. A. Marchildon, 606 E. St. Louis St.

NEB., Lincoln -- John W. Griffin, Mr. and Mrs. A. W. Griffin, 4627 "A" St.

N.Y., Gouverneur -- Stephen C. Adler, Dr. and Mrs. Ernest L. Adler, 209 E. Main St.

S.C., Chesnee -- Carl O'Neal Page, Jr., Rev. and Mrs. Carl O. Page, Route 2.

WYO., Laramie -- Thomas H. Brozozowski, Mr. and Mrs. Joseph S. Brozozowski, 200 Grays Gables Rd., #30.

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Mailed June 4, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Dr. William H. Clark of Palo Alto is the new president of the Stanford Medical Alumni Association, and Dr. Lawrence E. Heiges of Lompoc is its new president-elect.

Dr. Clark, a specialist in internal medicine, succeeds Dr. Robert M. Shelton of Pasadena. He will serve as president of the Association through June, 1969.

Dr. Clark holds both A.B. and M.D. degrees from Stanford, graduating from the Medical School with the Class of 1944. A partner in the Palo Alto Medical Clinic, Dr. Clark is also a clinical associate professor of medicine at Stanford University School of Medicine and has served as chief of the Palo Alto Medical Staff. He is a member of the Santa Clara County Medical Society and has been a delegate to the California Medical Association meeting since 1958.

The new president has also been active in civic affairs. He is a past-president of the Palo Alto Rotary Club and served on the board of directors for the Chamber of Commerce. Other interests include United Crusade and Boy Scout activities. Dr. Clark is presently serving on the Palo Alto City Council.

Dr. Heiges has been in general practice in Lompoc since his graduation from Stanford University School of Medicine in 1933. He also received an A.B. from Stanford in 1929.

Dr. Heiges has devoted considerable time to the blood bank program in California. A past-president of the Santa Barbara County Medical Society, he was instrumental in the establishment of the Tri-County Blood Bank for Santa Barbara, Ventura, and San Luis Obispo counties. He has also served on the board of directors for both the California Blood Bank System and the American Association of Blood Banks. Other activities include past-president of the Lompoc Rotary Club and a member of the board of directors of both the Lompoc Boys' Club and Boy Scout programs.

Other newly elected members of the board of governors of the alumni association are Dr. Paul Campbell, '49, Portland; Dr. Robert E. Berner, '44, Palo Alto; Dr. Howard B. Kirtland, Jr., '44, San Diego; Dr. George J. Laird, '40, Burlingame; and Dr. Leo Nannini, '38, Reno.

Dr. David A. Rytand of Atherton, Bloomfield professor of medicine at Stanford University School of Medicine, was re-elected secretary-treasurer.

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Mailed June 3, 1968

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

Dr. LeRoy A. Pesch has resigned as associate dean at Stanford University School of Medicine, to become dean of the School of Medicine and director of University Hospitals at the State University of Buffalo.

Dr. Pesch has been professor of medicine and associate dean at Stanford since 1966. He headed the admissions committee and served as chairman of the committee on medical education which developed a further revision to the Stanford curriculum. The proposed elective curriculum will allow each medical student to develop a study program that will meet his individual objectives in the field of medicine.

The 37-year-old physician was also involved in the Stanford program in community health. He worked with a faculty committee to develop neighborhood health centers in East Palo Alto and Alviso.

Dr. Pesch is a graduate of Iowa State University and the Washington University School of Medicine, St. Louis, Mo. He was an assistant professor of medicine at Yale University. He spent several years as a research associate in biochemistry at the National Institute of Arthritis and Metabolic Diseases, Bethesda, Md., and helped establish a new School of Medicine at Rutgers University. He is known for significant research contributions in the field of liver diseases.

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Mailed July 24, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. John L. Wilson, 54, has been appointed associate dean and director of Regional Medical Programs at Stanford University School of Medicine. He will also serve as professor of surgery.

He will plan the groundwork for cooperative medical programs related to heart disease, cancer, and stroke in Stanford's assigned region. This includes the counties of Calaveras, Mariposa, Merced, Monterey, San Benito, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Stanislaus, and Tuolumne.

Dr. Wilson has served as dean of the Faculties of Medical Sciences at the American University of Beirut since 1966. He was also professor and chairman of the Department of Surgery there since 1953. As an associate clinical professor of surgery at the University of California Medical Center in 1958, Dr. Wilson served a two-year stint as chief of the Surgical Service at San Francisco Veterans Administration Hospital.

His appointment, announced today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, is effective immediately.

Dr. Glaser also announced the appointments of two associate directors for the regional medical program, Dr. R. L. Scotte Doggett, 37, assistant professor of radiology, and Dr. William C. Fowkes, 38, assistant professor of medicine.

Dr. Doggett has been on the Stanford faculty since 1964. Dr. Fowkes has been on the volunteer faculty since 1965 and has been associated with the El Camino Internal Medical Group. Both are Stanford medical school graduates and have received their specialty training at Stanford University Hospital. Dr. Doggett will serve as program coordinator for cancer programs, and Dr. Fowkes will be coordinator for programs in cardiology.

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The group's initial work will be to determine how the Stanford region can realize the humanitarian and scientific potential of the concepts embodied in Public Law 89-239 for Regional Medical Programs for "Heart Disease, Cancer, Stroke and Related Diseases."

The planning effort is funded for two years by a $586,000 grant from the National Institutes of Health and is administered through the California Committee on Regional Medical Programs.

Stanford's role, according to Dr. Glaser, will be primarily educational. For doctors, nurses, and other health care personnel, the medical programs will emphasize continuing education in advanced techniques. Also stressed will be better communication and more cooperation between doctors, the Stanford University Medical Center, and community hospitals in the eleven-county area. The objective of all this is to shorten the gap between medical science and medical service and bring excellent care within the reach of all citizens.

Dr. Wilson, a native of Sturgis, Kentucky, received the B.A. from Vanderbilt University in 1935, and the M.D. from Harvard Medical School in 1939. He interned at Massachusetts General Hospital in Boston where he also specialized in thoracic surgery. He has held academic appointments at Stanford University School of Medicine (1949-52) and Washington University School of Medicine in St. Louis, Mo. (1952-53).

He is a member of numerous professional and honor societies including Alpha Omega Alpha, the national honor medical society. He is recipient of the Order of Merit of the Republic of Lebanon (1955), and Superior Performance Award of the U.S. Veterans Administration Hospital (1960).

Dr. and Mrs. Wilson have four sons and a daughter.

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Mailed July 23, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Dr. Keith F. Killam, Jr., professor of pharmacology at Stanford University School of Medicine, has been appointed chairman of the department of pharmacology at the University of California at Davis.

A former special consultant to the President's Advisory Commission on Narcotic and Drug Abuse, Dr. Killam is noted for his research on the effect of depressants, stimulants, hallucinogens and psychotherapeutic agents on the central nervous system. He is also actively involved in studies of an animal model of human epilepsy to further understanding of the disease process and to search for new therapeutic agents in treating the disease.

He has also served as a consultant to the U.S. Air Force and the National Science Foundation and has been a member of the advisory committee for the California State Department of Mental Hygiene Research.

Dr. Killam received a B.S. degree in 1948 from Tufts College. He was awarded an M.S. degree in 1952 and a Ph.D. degree in 1954, both in pharmacology, from the University of Illinois Graduate Professional Colleges. He is a member of numerous professional organizations.

Dr. Killam has been a member of the Stanford Faculty since 1959. He and his wife and their three children will move to Davis in August.

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Mailed July 16, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff or William Hogarty 415: 321-5310

FILE COPY

STANFORD--Stanford University School of Medicine has been awarded a five-year grant totaling $500,000 to expand and strengthen its program of medical education and teaching.

The grant is part of $10 million awarded to 30 private medical schools in the country by the Richard King Mellon Charitable Trusts. Ten of the schools, including Stanford, will receive $100,000 each year for the next five years. Twenty others will receive $50,000 each year for the same period.

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, said that the grant "will enable us to meet a critical need in academic medicine today--that of increasing the number and enhancing the caliber of junior faculty members."

"It is of paramount importance to attract qualified young men and women to enter full-time careers in teaching. This addition to our existing funds will help us to recruit and support promising young physicians and medical scientists."

In announcing the $10 million grant, the board of trustees of the Richard King Mellon Charitable Trusts said:

"One of the most serious problems in our medical schools today is the need for money with which to pay adequate salaries for competent teachers on permanent faculty staffs.... The trustees hope that the grants will enable the 30 schools to maintain and improve the quality of their faculties...."

The $10 million grant makes a total of more than $57 million that has been contributed to medicine through grants and gifts by Lieutenant General and Mrs. Richard King Mellon since 1945. General Mellon, Pittsburgh, Pa. financier, is a governor and president of T. Mellon & Sons, investment management firm.

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Mailed July 10, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff or William Hogarty, (415) 321-5310

STANFORD--Major improvements in wage and fringe benefits for employees of Stanford University Hospital and upward adjustments of some hospital charges were endorsed by the Hospital board at its first meeting Monday (JULY 8).

In a letter to all Hospital employees, Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine pointed out that increased wage scales and shift differentials have been put into effect. The Hospital will also provide for increased health and dental insurance benefits during the year.

Dr. Glaser pointed out that the wage and benefit improvements "are based on the realities of today's economy and take into account the high standard of excellence established by Stanford University Hospital personnel."

Also approved by the Board were increases in the Hospital's daily service charges, on the order of $3 to $4 a day for medical and surgical patients. The new rates will go into effect Aug. 1.

"The continual rise in the cost of materials and employee compensation and the pressing need for major equipment items have made an increase in operating revenues necessary," Dr. Glaser said. "We are vigorously involved in research aimed at developing operating and administrative innovations which, we anticipate, will lead the way to a slowing of the hospital-cost spiral."

The rate increase approved by the new Board is less than the $4-$5 increase projected earlier as necessary.

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Mailed July 10, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff or William Hogarty, 415: 321-5310

FILE COPY

STANFORD--Dr. Thomas A. Gonda, associate dean of Stanford University School of Medicine, has been appointed acting director of Stanford University Hospital.

Announcement of Dr. Gonda's appointment was made by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, following the first meeting Monday (JULY 8) of the new board of the University Hospital. Also announced were the appointments of Courtney S. Jones as acting deputy director and James H. Stanford as associate director of the Hospital.

Dr. LeRoy E. Bates, former director of the Palo Alto-Stanford Hospital Center, will serve as a consultant to the new hospital on administrative matters and special projects.

According to Dr. Gonda, other members of the administrative team of the Palo Alto-Stanford Hospital Center will continue to carry out their former duties and responsibilities.

Dr. Gonda expressed pleasure that the distinguished citizens appointed to the new hospital board had agreed to serve. "The experience and dedication of the board members will be important to operation of the new University Hospital," he said.

Dr. Gonda, in addition to his administrative offices, is also a professor of psychiatry, having joined the Medical School faculty in 1954. He received both his A.B. (1942) and M.D. (1945) degrees from Stanford.

Jones, acting deputy director of the University Hospital, is director of business and fiscal affairs at the Medical School. Former assistant controller and associate director of the University's computation center, he received his Bachelor's degree in mathematics from Brown University and his Master's degree in business administration from Stanford.

Stanford, an expert in administrative systems, comes to the Hospital staff from the Medical Facilities Planning Group of the Medical School. Prior to joining the University staff last fall, he served as assistant to the financial vice-president of General Mills, Inc. Stanford received an A.B. degree from Stanford as well as a Master's degree in business administration.

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Mailed July 10, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--The search for the cause and cure of psoriasis, the disfiguring skin disease that afflicts four to six million Americans, will be continued at Stanford University School of Medicine under a three-year grant of $225,824 from the John A. Hartford Foundation, Inc., of New York City.

Announcement of the grant was made jointly today by Ralph W. Burger, president of the Foundation, and Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine. Psoriasis research at Stanford has been supported by the Foundation since 1959.

Investigation at Stanford of psoriasis, which produces reddened, scaly spots or patches on many parts of the body, indicates that onset of the disease is initiated by a kind of local chemical alteration of the skin. With all the assembled knowledge of this reaction, scientists still cannot explain its basic nature.

"Our studies suggest that the basic abnormality lies not in the fundamental nature of growing cells, but in a defect in the mechanism which controls growth of the epidermis, the outer layer of the skin," says Dr. Eugene M. Farber, professor and executive head of the Department of Dermatology. "We believe that the degree of growth alteration may be different in different psoriatic lesions."

"The grant from the Hartford Foundation will enable us to continue this important and promising area of research," he said.

Research will also continue in the use of new drugs and other forms of treatment for psoriasis. Although no real "cure" for psoriasis can be claimed, in 38.5 per cent of the patients, the disease may temporarily disappear spontaneously or with known therapy.

"The failure of any therapy to effect a permanent cure indicates that known drugs achieve their temporary success by inhibiting growth of the outer skin layer, but not by removing the predisposition of the skin to psoriasis," Dr. Farber stresses.

Stanford researchers have studied over 2100 cases of psoriasis through a patient questionnaire to learn more about the cause of the illness, what its specific characteristics are, and how it relates to other diseases.

Computerized results of the survey show that there are influences in the incidence of psoriasis related to age, family, race, and locality. They indicate specifically that:

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--Inheritance figures prominently in the incidence of the disease. Eighteen per cent of the patients who took part in the questionnaire reported a parent with psoriasis, 11 per cent reported a brother or sister, and 13 per cent identified more distantly affected relatives.

--For patients with a genetic predisposition, skin injury may trigger psoriasis. Fourteen per cent of the patients said their psoriasis began at a site of an injury.

--Climate is a factor in the disease. Of the patients studied, 77 per cent reported their skin improved in hot weather and 88 per cent noted it was worse in cold weather. Seventy-eight per cent stated sunlight caused improvement, and 15 per cent reported their skin got worse on exposure to sunlight.

--Emotional factors were thought to have aggravated the disease in 40 per cent of the patients.

Research has also confirmed a strong link between psoriasis and arthritis. Of the patients studied, 25 per cent had arthritis of various joints, and 65 per cent said psoriasis had preceded arthritis.

"Investigation of the relationship between these two diseases, plus the familial aspects of psoriasis will be continued," according to Dr. Farber, "as well as study of the possible effects which psoriasis has on other systems of the body."

The grant money will also be used to establish an international information and coordination center at Stanford for the study of psoriasis.

"Since centers of interest in psoriasis are scattered throughout the world, it is very difficult for any investigator to keep abreast of both positive and negative results of research going on elsewhere," Dr. Farber said. "A center for the accumulation, coordination and distribution of detailed information on all research activity relative to psoriasis throughout the world will do much to eliminate this problem."

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Mailed July 9, 1968.

STANFORD UNIVERSITY NEWS SERVICE
FOR INFORMATION CONTACT: Bob Beyers

Zip 94305. Telex 348-445
(A/C 415) 321-2300, Ext. 2558

Southern California editors may contact Stanford Regional Office, 624 S. Grand Street, Los Angeles Zip 90017, (213) 627-0653

FILL UPS

FOR IMMEDIATE RELEASE

STANFORD - Dr. Robert J. Glaser, 49, vice president for medical affairs and dean of the Stanford University School of Medicine, Tuesday (JULY 8) was named acting president of the University.

His selection was announced by W. Parmer Fuller III, president of the Board of Trustees. The appointment is effective Sept. 1, 1968, upon the retirement of President J.E. Wallace Sterling. Last year, Sterling announced his intention to retire not later than Sept. 1, following 19 years service in the University's top administrative post.

Dr. Glaser will be assisted in his new assignment by Vice President and Provost Richard W. Lyman, who will continue as chief academic officer under the president, as well as by other members of the president's staff.

Former president of the Affiliated Hospitals Center in Boston and professor of social medicine at Harvard Medical School, Dr. Glaser came to Stanford as vice president in 1965.

He has headed the University's complex and lengthy negotiations for purchase of the City of Palo Alto's share of Palo Alto-Stanford Hospital, completed earlier this month.

President-elect of the Association of American Medical Colleges, Dr. Glaser was appointed to a 15-man National Advisory Committee on Higher Education last year to explore relationships between colleges, universities, and the federal government.

He also is a member of a 21-man Board of Medicine established by the National Academy of Sciences last year to speed the benefits of medical research and practice to the public.

Under his leadership, the School has received a two-year planning grant of more than $500,000 from the National Institutes of Health to develop a cooperative program for improving the diagnosis and treatment of heart disease, cancer, stroke, and related diseases.

It also has received a $500,000 grant from the Commonwealth Fund of New York to initiate planning for a new hospital and ambulatory care center to advance fundamental reforms in hospital services and education in the health professions.

Earlier this year, Dr. Glaser announced faculty approval of major changes in the Medical School curriculum to allow students to become physicians in the flexible atmosphere of a graduate school. He has tought freshman seminars for undergraduates at the University.

While serving as acting president, he will continue to devote a part of his time to Medical Center affairs.

Educated in the public schools of St. Louis and University City, Mo., Dr. Glaser received his S.B. degree at Harvard in 1940 and his M.D. magna cum laude there in 1943.

After serving his internship and residency at the Barnes Hospital and the Peter Bent Brigham Hospital, he rose steadily through the ranks at Washington University, St.Louis, where he served as associate dean of the Medical School from 1955 to 1957.

He then moved to the University of Colorado as dean of the School of Medicine, becoming vice president for medical affairs before returning to Boston in 1963.

He is married to the former Helen L. Hofsommer (M.D.). They have three children: Sally Louise (born 9/5/50), Joseph II (1/22/52), and Robert Joy Jr. (8/1/53). ### 7/8/68

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Stanford University President Wallace Sterling and Palo Alto Mayor Frances Dias today signed final legal documents for the sale of the City's share of the Palo Alto-Stanford Hospital Center to the University.

The documents were signed in a brief ceremony held at the Stanford University School of Medicine.

President Sterling also announced the appointment of nine distinguished citizens of the area to the Board of the Stanford University Hospital, the new name for the combined hospital unit.

They are: Mrs. Edward Heller, Atherton, long active in area cultural, educational, and community activities and currently vice-chairman of the Board of Regents of the University of California; Kirk Jeffrey, Palo Alto, president of the Stanford Bank; Robert Klein, Portola Valley, a financial consultant; John A. Minor, Menlo Park, superintendent for Ravenswood City School District; James E. O'Brien, Palo Alto, vice-president and general counsel, Standard Oil Company of California; Raymond F. Rohrs, Palo Alto, a former Palo Alto city councilman and owner of The Clothes Closet; John Santana, Jr., Palo Alto, vice-president of the Peninsula Creamery; John A. Stern, Palo Alto, an executive of United Air Lines; and Dr. Alejandro Zaffaroni, Atherton, president of Alza Corporation, an outgrowth of Syntex Corporation of which Dr. Zaffaroni was formerly president.

Mrs. Heller, Jeffrey, Klein, O'Brien, Santana, Stern, and Zaffaroni have been members of the current Palo Alto-Stanford Hospital Board of Directors. Rohrs served on the hospital board in 1960-61.

President Sterling pointed out that the incorporation of a number of board members of the Palo Alto-Stanford Hospital into the new Board will "lend continuity to the organization of the new Board and the operation of the new University Hospital."

Sale of the Hospital to Stanford culminates several years of discussion between the City and the University. The terms that form the basis of the final agreement were orginally presented in a letter to the City by President Sterling in January 1968. After prolonged negotiations, agreement was reached and accepted by the Palo Alto City Council in May.

The University's Board of Trustees has authorized the designation of the entire Hospital Center, including both the Hospital and the Medical School, as the Stanford University Medical Center.

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Mailed July 1, 1968.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

8-31-68

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos or Jane Duff 415: 321-5310

STANFORD - - A 51-year-old Palo Alto engineer Saturday became the fourth patient to receive a new heart at Stanford University Hospital.

The recipient, Robert O. McKee of 3980 El Camino Real, received his new heart in a 4½ hour operation by a team of surgeons led by Dr. Norman E. Shumway, professor and head of the division of cardiovascular surgery at Stanford University School of Medicine. The operation was completed at 12 noon.

McKee is listed in satisfactory condition.

The heart donor, Dr. William Sample, 39, of 2101 Harkins, Menlo Park, was chief psychiatric social worker and acting director of the Children's Health Council in Palo Alto. He died this morning at Stanford University Hospital of a massive brain hemhorrage he suffered Friday evening.

Dr. Sample was born in Bixby, Oklahoma and held the M.A. and Ph.D. degrees in social work from the University of Chicago. He had been with the Children's Health Council since 1966. Dr. Sample is survived by his wife, Elizabeth of Menlo Park, his mother, Mrs. Dora Cantner of Bixby, and three sisters.

McKee was employed in the Spinco Division of Beckman Instruments, Palo Alto, as a manufacturing methods engineer until he resigned 10 months ago because of ill health. He had suffered from chronic heart failure as a result of severe coronary artery disease for the past three years.

McKee has four children--three from a previous marriage. Mrs. McKee is in seclusion and was unavailable for comment.

Meanwhile, Leonard Drake, the 42-year-old retired postal clerk from Eugene, Oregon, who received a new heart at Stanford eight days ago, was reported recovering satisfactorily this morning. Drake spent most of the day yesterday out of bed, doing exercises from time to time to keep his muscles and lungs in full use. His heart function is reported normal.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Stanford heart transplant patient William Karraker, 50, of Stockton, died unexpectedly early this morning at St. Joseph's Hospital in Stockton.

Mr. Karraker, who received a transplanted heart Nov. 22, 1968, was admitted to St. Joseph's Hospital Friday for observation when his pulse rate became irregular.

Cause of death is undetermined, pending an autopsy.

Mr. Karraker is survived by his wife, Marty, and four children, ValRae, 23, Perry, 21, Mendy, 15, and Katherine, 11.

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AUGUST 30, 1969.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Talks on transplant procedures began Wednesday between Stanford University representatives and Santa Clara County officials.

In a joint statement today, County Executive Howard W. Campen, and Dr. Thomas Gonda, associate dean and acting director of Stanford University Hospital, said the meeting was intended to discuss suggested procedures to be followed in certain kinds of transplants as they involve the coroner's office.

In addition to Campen and Dr. Gonda, taking part in the discussions were Dr. John Houser, county medical examiner-coroner, William Siegel, County Counsel's office, Robert M. Brown, general legal council of the University, and other representatives of the Medical School.

###

Aug 22, 1968

FILE COPY

Transplant #3 8-22-68

Stanford University surgeons have began their third heart transplant operation at 9:30 p.m. Thursday night.

The four and a half hour operation is expected to be completed at 2 a.m. PDT when further details will be disclosed.

The surgical team is headed by Dr. Norman E. Shumway, professor of surgery, who performed Stanford's two earlier heart transplant operations.

Condition reports are not expected until 10 a.m. Friday.

###

Drake / Smith

Aug 23, 1968

(2)

III

Surgeons at Stanford University Hospital Thursday night transplanted the heart of a Marine coporal into the chest of Leonard Drake, a 42-year-old retired postal clerk from Eugene, Oregon.

The donor, Cpl. Larry B. Smith, 20, of Stockton, California, suffered irreversible brain damage in an automobile accident August 14, at Stockton.

He was on leave from Camp Pendleton, visiting his parents Mr. and Mrs. Robert A. Smith of 2557 Bacon Street, Stockton. He was scheduled to leave for Vietnam following his leave.

Drake suffered heart disease for the past 12 years. He had retired from the post office job because of ill health and for the past year and a half had worked as bailiff for the Lane County District Court in Eugene.

Prior to his referral to Stanford, Drake had been under the care of a Eugene cardiologist and had been treated at the University of Oregon Medical School.

Mrs. Drake said Oregon doctors had told him a transplant was the only thing that could save his life and Drake had clung to this hope.

Since his transfer to Stanford in June he has remained under close medical supervision awaiting a suitable donor.

Corporal Smith is the youngest of 12 children of Mr. and Mrs. Smith, eight of whom are living. He attended Franklin High School at Stockton and he enlisted in the U.S. Marine Corps in May, 1966.

His parents said Smith volunteered three times to go to Vietnam. "Offering his heart to save the life of another person is something he would be proud of," said Mr. and Mrs. Smith. It was Smith's oldest brother, Gene, who suggested Larry's "strong heart be donated to give someone else a chance to live."

The Drakes have two children, Vicky, 11, and Jimmy, 10.

###

August 23, 1968

3 A

III

Mr. Drake, Stanford's third heart transplant recipient, is in satisfactory condition this morning.

His blood pressure and respiration are normal.

The patient is alert, awake, and was visited by his wife early this morning--about seven hours after the operation.

The patient is given breathing therapy to keep his lungs in full use--a normal procedure following such major surgery. (There is no tracheotomy as was in the case of previous heart transplant patients who had serious lung complications).

We have been asked to compare Mr. Drake's case with previous heart transplant recipients at Stanford.

Mr. Drake's coronary artery disease, which necessitated the transplant, was more severe than the heart condition of the previous patients. But his liver and lungs are in good condition.

Another question was if there was any difference in surgical technique. Dr. Shumway used the same techniques that he developed with his associates at Stanford University School of Medicine.

Stanford University surgeons also performed two kidney transplants from the body of the same donor. The patients' conditions are satisfactory.

###

III

(3b)

8/23/68

Statement on donor

The patient was transferred to Stanford University Hospital at 5 p.m. Thursday when those concerned with his care concluded that he had suffered permanent brain death or irreversible coma.

The criteria include irreversible brain damage, lack of spontaneous breathing, and absence or reflexes and other neurological signs that confirm the brain destruction. The donor selection and death pronouncement was made by an independent group of physicians not associated with the heart transplant team.

III

Mr. Drake is described as steadily improving this morning and doctors are satisfied with his progress.

His blood pressure and pulse remain normal. Mr. Drake has been sitting on the side of his bed. He is on a liquid diet.

Mrs. Drake visited her husband last night and this morning. She says that her husband has inquired about members of the Drake family in Eugene. Mrs. Drake said that her husband "looks good and is very confident." She is keeping him informed on the many get well wishes he has received from across the country.

August 25, 1968

(5)

III

Mr. Drake, Stanford's heart transplant recipient, continues to progress satisfactorily today, three days after the operation. His blood pressure, pulse, and cardiac output are normal.

The patient was out of bed this morning. He sat in a chair for a breakfast of solid foods. Doctors report that he asked for and received a second helping of warm cereal.

Mrs. Drake visited her husband again last night and this morning. She said that her husband is very anxious to have their two children fly to Stanford from Eugene as soon as they can see him. "The children are very excited about the trip," she said.

###

Kidney transplants —

1. Nora Enriquez — She is Mrs. Austin Enriquez from Milpedas
Age 44

2. Mrs. Dallas Gray (Ericka) - from Mesa, Arizona
Age 40

both are in satisfactory condition

DAILY BULLETIN---August 26, 1968

III

Heart transplant patient Leonard Drake continues to show steady improvement today at Stanford University Hospital. Doctors are pleased with his progress. His condition remains satisfactory.

Mr. Drake is spending short periods of time sitting up out of bed. He ate a breakfast this morning of cereal, eggs, and toast.

Mrs. Drake continues to visit her husband periodically.

###

III

(7)

DAILY BULLETIN--August 29, 1968

Mr. Drake remains in satisfactory condition today and doctors continue to be pleased with his progress. He is spending the majority of each day out of bed, and is performing mild exercises.

(8)

III

DAILY BULLETIN---August 30, 1968

Mr. Drake continues to improve today, and doctors are satisfied with his progress. The hospital will issue no further bulletins unless there is a change in his condition. Condition reports may be obtained by calling the hospital switchboard.

###

III

Condition report on heart transplant recipient Leonard Drake

August 31, 1968

Leonard Drake, Stanford's third heart transplant recipient, continues to be in satisfactory condition--eight days after a new heart was implanted in his chest from the body of a 20-year-old Marine. Doctors are satisfied with his progress. His heart function is reported normal. Mr. Drake spent most of the day yesterday out of bed. He is also doing exercises to keep his muscles and lungs in full use.

Besides condition reports at 10 a.m., each morning, no further bulletins will be issued about Mr. Drake during the Labor Holiday Weekend.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD - - When three-year-old Damian Pickering of Berkeley, California, was admitted to Stanford University Medical Center a few months ago his case appeared anything but hopeful.

His right eye was afflicted by retinoblastoma, a lethal tumor which is estimated to affect 1 in 30,000 children of his age in the United States.

This was Damian's second encounter with eye cancer. When he was eleven months-old his mother, Mrs. Michael Pickering, noticed a tiny white spot in the pupil of his left eye. She took the boy to a San Francisco ophthalmologist who diagnosed retinoblastoma. Because the tumor was too advanced to be treated with radiation, Damian's eye had to be removed to save his life.

The doctor also noticed another tiny tumor in the remaining eye, and referred Damian to Stanford for radiation treatment.

Radiotherapy has been used successfully at Stanford in the past 10 years for treating patients with retinoblastoma. Nine out of 10 patients respond well to treatment, said Dr. Frank C. Winter, clinical associate professor of surgery at Stanford University School of Medicine and Palo Alto practicing ophthalmologist.

At this point, it seemed as though Damian would recover normally. But in spite of receiving all the radiation his tiny eye could tolerate, the tumor's growth continued. By last February Dr. Winter and his associates feared they might not be able to save Damian's eye. Soon they would be battling to save the boy's life.

Yet today Damian Pickering is healthy. For thanks to an exciting new medical tool called cryosurgery, doctors were able to preserve his remaining eyesight and pull him back from the brink of death.

Cryosurgery is a method of treating body tissues particularly sensitive to extreme low temperatures (minus 100 to 140 degrees centigrade). Originally developed for highly sensitive brain surgery, the technique was applied for the first time in treatment of eye tumors by Dr. Harvey Lincoff of Cornell University. Damian is believed to be the first eye patient on the west coast on whom the method was used.

Although only about 10 retinoblastoma patients in the U.S. have been treated by the new approach, with varying degrees of success, Dr. Winter is optimistic about cryosurgery's future in the treatment of certain eye tumors.

"There is a significant number of patients who do not respond to radiation treatment," he said. "The only other life-saving approach now available is removal of the eye. Cryosurgery offers a third alternative in both saving lives and preserving eyesight."

-more-

In cryosurgery, tissues are frozen by liquid nitrogen which circulates through a miniscule probe made of platinum or other temperature conductive material.

When the probe tip touches the desired spot on the eye, ice crystals form inside the tumor cells. As they expand, the crystals begin to act like tiny sharp razor blades on tumor cell walls. By repeated freezing and thawing, tumor cells are lacerated and destroyed.

"Damian's treatment required six applications in one day under general anesthesia," Dr. Winter explained. "The tumor shrunk down to about one-third of its original size. By the time of his last treatment in June, the tumor had disappeared completely."

Unlike radiation treatment which is limited by the body's ability to absorb a certain amount of X-rays at a given time, cryosurgery can be used repeatedly without loss of effectiveness, Dr. Winter said.

Dr. Winter is now working with engineers at Union Carbide to develop a special probe suited for eye tumors. Such a tool, he believes, would greatly increase the effectiveness of the new treatment.

Retinoblastoma is a rare but life-threatening tumor of childhood. Two thirds of the cases appear before the end of the third year; rare cases have been reported at almost every age. It affects both eyes in about 30 per cent of the cases.

There is evidence the disease in inherited. Persons who have been cured of retinoblastoma are told they will have children with a 50 per cent chance of having the disease. Retinoblastoma usually develops inside the pupil of the eye. Growth involves development of many smaller tumors which gradually fill the eye and extend through the optic nerve to the brain.

Retinoblastoma usually remains unnoticed, said Dr. Winter, until it has advanced far enough to produce a white pupil. He recommends that parents who notice such a development report it promptly to their doctor.

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Mailed August 20, 1968

I CAN SEE YOU, TOO, DOCTOR! -- Three-year-old Damian Pickering of Berkeley is in playful mood as his mother, Mrs. Michael Pickering, tries to hold him still during examination by Dr. Frank C. Winter of the Stanford University School of Medicine. Damian, who has been wearing a glass eye since his own was removed to save him from cancer, has undergone successful treatment for cancer in the right eye using a new technique.

- -

TO NEWS BUREAU, STANFORD MEDICAL CENTER, STANFORD, CALIFORNIA 94305

Subject: Cryosurgery

Please send me a 8X10 glossy print of photo above.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY&STATE_____

STANFORD UNIVERSITY NEWS SERVICE

STANFORD, CALIFORNIA
ZIP 94305. TELEX 348-445
(A/C 415) 321-2300, Ext. 2558

Southern California editors may contact Stanford Regional Office, 621 S. Hope Street, Los Angeles Zip 90017. (213) 627-0653

FOR INFORMATION CONTACT: Spyros Andreopoulos ext. 5311

FILE COPY

FOR IMMEDIATE RELEASE

STANFORD--"A Lot of People Who Think for a Living Think the Next President Should Be Humphrey," read the bold headline of a full-page advertisement in the Aug. 4 issue of the New York Times. It was followed by a list of college and university faculty members endorsing the vice president.

One of the supposed supporters of Hubert Humphrey listed in the adverstisement was Dr. Felix Bloch, Max H. Stein Professor of Physics at Stanford University. Prof. Bloch, a Nobel laureate, has and continues to support the candidacy of Senator Eugene McCarthy.

Another alleged endorser of Humphrey was a Max H. Stein of Stanford University. The late Max H. Stein, who endowed the professorial chair held by Prof. Bloch, was a Southern California philanthropist who died in 1958.

Prof. Bloch, who has been deluged with questions as to why he seems to have changed horses in the middle of the stream, points out that this is certainly not the case.

"I state emphatically that I remain among the Scientists for McCarthy whom I greatly admire for his fearless approach to our foreign policy," he wrote in a letter to the Editor of the New York Times.

On July 1 Prof. Bloch received a telegram from the National Headquarters of "Citizens for Humphrey" in Washington, D. C., which asked him to join as a founding member of Scientists and Engineers for Humphrey. The telegram was signed by Robert Short, co-chairman of the group.

Prof. Bloch immediately wired Short that "Humphrey's record shows strong backing of U.S. involvement in Vietnam which did great harm to the country including its scientific development. Cannot support his candidacy unless he clearly commits himself to the change in foreign policy advocated by McCarthy."

Yet on Aug. 1, Prof. Bloch was advised by Robert P. Parker, executive director of "Citizens for Humphrey" that his name would appear as an endorsement of Humphrey in the New York Times. Prof. Bloch immediately called Parker and received due apologies and Parker's promise that all would be done to correct their mistake.

"I can only assume that it was too late to delete my name from the advertisement which appeared," he says.

# # # #

8/8/68

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: WILLIAM R. HOGARTY (415) 328-7466

A postgraduate course in operating room nursing will begin October 14 at Stanford University Hospital.

This will be the second time the course has been offered by the Hospital. Three registered nurses enrolled in the first session will complete their training in mid-August. They are Sandra Juracich, R.N., a graduate of the College of San Mateo School of Nursing in San Mateo, Calif.; Dolores Torrez, R.N., Texas Western University and Hotel Dien School of Nursing in El Paso, Tex.; and Ruth Barron, R.N., University of Wisconsin and St. Mary's Hospital School of Nursing in Madison, Wis.

Aimed at giving qualified R.N.'s a basic background in operating room procedures, the eight-month course includes instruction by experienced operating room nurses and lectures by surgeons and anesthesiologists, both community physicians and faculty members of the Stanford University School of Medicine.

Instruction stressing asepsis, anatomy, physiology and related subjects, in addition to practical aspects of operating room nursing, will cover eight hours a day, five days a week.

To give each participant individual attention, the course is limited to four registered nurses who will be selected on the basis of educational background and working experience, following a personal interview. The Hospital will pay a stipend to each nurse accepted for the program.

Interested applicants should contact Mrs. Ludmila Davis, R.N., director of Operating Rooms, in Room C-205A at Stanford University Hospital, Stanford, California 94305.

"Operating room nursing has become a highly technical field which demands specialized training," Mrs. Davis said. "New surgical procedures require skills that are not taught in the average professional school of nursing. We believe that post-graduate training courses are essential to avoid a shortage of qualified operating room nurses."

Mailed August 5, 1968

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Dee Clem 415: 321-5310

Robert G. Lindee has been promoted to associate dean for administration of the Stanford University School of Medicine. He will also continue to be assistant to the vice-president for medical affairs of the University.

The announcement was made by Dr. Robert J. Glaser, acting Stanford University president.

For the past three years, Lindee has been assistant dean for administration and assistant to the vice-president for medical affairs at the School of Medicine. He has been active on the California Committee on Regional Medical Programs and was also on leave to Washington D.C. where he served as a consultant to the director of the Division of Regional Medical Programs at the National Institutes of Health. He also serves as administrative consultant to various NIH health councils, and is a member of the California Ad Hoc Committee on Teaching and County Hospitals.

Prior to coming to Stanford in 1965, Lindee was associated for two years with Dr. Glaser when he was president of Affiliated Hospitals at Harvard Medical School. From 1959 to 1963, he served as an executive assistant to the vice-president for medical affairs and dean of the University of Colorado Medical School in Denver.

He holds bachelor of arts degrees in psychology and in school administration from the University of Colorado in Boulder. In 1952, he became assistant personnel director at the University of Colorado Medical Center and served in that capacity until 1959, with the exception of two years' leave for military duty.

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Mailed September 30, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Two years ago the life of Mrs. Marie Ooton of Mountain View was saved by a kidney transplant at Stanford University Hospital.

This summer she again entered the hospital but for a more joyous occasion--the birth of a six pound son, Shannon, on July 8.

At the time of the kidney transplant, Stanford doctors had cautioned Mrs. Ooton and her husband, Tom, a teamster with a Palo Alto construction and excavation firm, against having any more children. It was the pregnancy of their older son, Timothy, which had aggravated Mrs. Ooton's kidney failure, eventually resulting in the need for a transplant.

When Mrs. Ooton discovered she was pregnant again, physicians warned her that the pregnancy might possibly endanger her own life. After careful thought and deliberation with her doctors and her husband, Mrs. Ooton decided to have her baby.

"When I hold Shannon in my arms and care for him each day, I know I made the right decision," Mrs. Ooton says. She describes the pregnancy as "extremely easy and uneventful."

Throughout her pregnancy, Mrs. Ooton, a registered nurse and former employee of Stanford University Medical Center, remained under the constant and watchful eye of Stanford obstetricians.

The incidence of successful pregnancy for cases like Mrs. Ooton's is quite rare. While there have been reportings of full-term pregnancies in women who received a transplanted kidney from an identical twin, there are believed to be only three other cases in women who received kidneys from donors other than identical twins.

Donor of Mrs. Ooton's kidney was her older brother, Dr. Philip Avet, chief resident in pathology at Charity Hospital in New Orleans. The operation was performed Nov. 7, 1966, and Dr. Avet returned to New Orleans a week later.

-more-

At the time of the transplant Dr. Avet said he had had no difficulty in deciding to donate one of his kidneys to his sister. "When I was called to come to Palo Alto, my sister was dying," he said. "I've always felt close to Marie, and I believed I owed her a fighting chance."

Mrs. Ooton visited her brother last winter but did not tell him she was expecting another child. "Knowing the dangers involved, he would have been extremely worried," she says. Dr. Avet was informed that he had a new nephew on the day that Shannon was born.

Today both mother and child are doing well. Mrs. Ooton's transplanted kidney continues to function well as it did throughout her pregnancy.

As a kidney transplant patient, Mrs. Ooton still remains in close contact with Stanford physicians. She continues to be given small amounts of immunosuppressive drugs to counteract any rejection of her transplanted organ.

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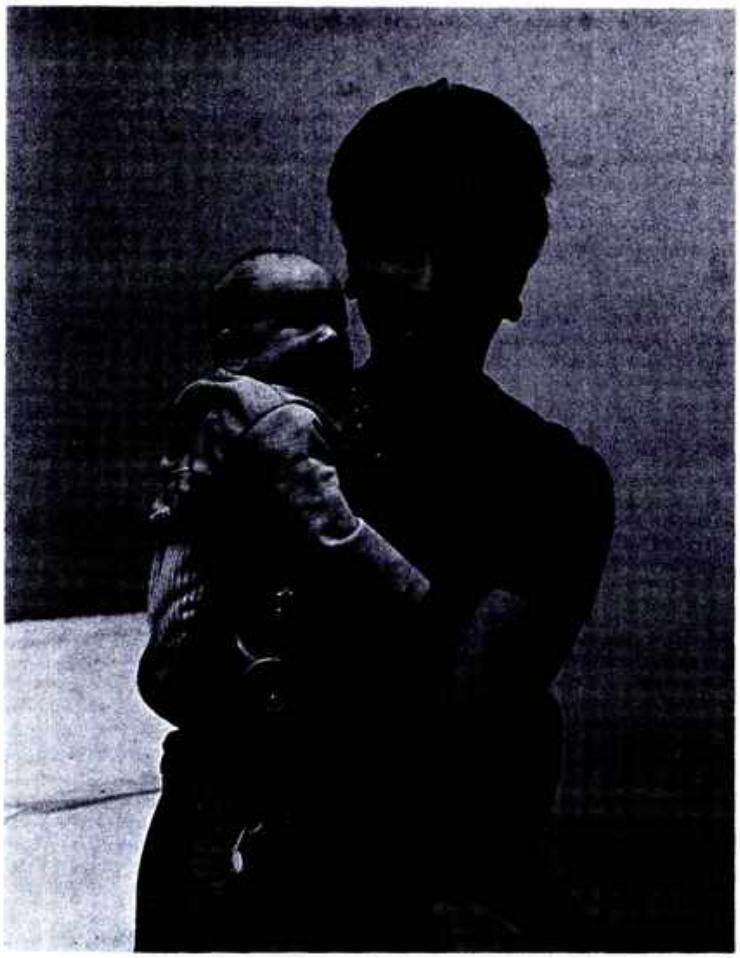
Mailed September 18, 1968.



Mrs. Marie Ooton of Mountain View, who received a kidney transplant two years ago at Stanford University Hospital, was cautioned at that time against having any more children. When she discovered she was pregnant again, knowing that the pregnancy might endanger her own life, she decided to have her baby. On July 8, 1968, Mrs. Ooton gave birth to a healthy six pound son, Shannon. Both mother and child are doing well. The incidence of successful pregnancy in women with transplanted kidneys is quite rare.

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STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Fourteen scientists from 12 countries have gathered at Stanford University School of Medicine for an intensive course in the use of computers for biomedical research.

Utilizing the facilities of Stanford's Advanced Computer for Medical Research (ACME), the international trainees are learning the art and language of programming, developing new techniques in computer use, and evaluating the various possibilities for application of computers for research in their respective countries.

The two-week training course is sponsored by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and one of its divisions, the International Cell Research Organization. Scientists attending the course are from South Korea, France, Spain, England, Israel, Norway, Austria, Australia, Czechoslovakia, Nigeria, Italy, and Thailand.

Coordinating the program for the visiting trainees in Dr. Joshua Lederberg, Stanford Nobel Prize-winning geneticist who was instrumental in the conception and development of the ACME project.

"The increasing sophistication of medical research, both in the United States and abroad, has made it necessary to be able to both record and retrieve large volumes of information for statistical and diagnostic studies," Gio Wiederhold, who directs the ACME project at the Medical School, points out. "Until recently the capability to provide this information has lagged considerably in comparison to demand."

ACME, with financial support from the National Institutes of Health and the Josiah Macy Jr. Foundation of New York, was developed to meet this demand. Now utilized on a regular basis by almost 50 per cent of the faculty and staff of the Medical School, the ACME system has important application not only for medical research but also for the actual care of patients and the development of new concepts in health care systems.

- more -

Among those medical tasks being tackled by computers at Stanford are:

--Studying the structure of molecules which define our genetic makeup.

--Monitoring patients during surgery to warn of possible cardiac failure.

--Analyzing with mathematical accuracy complex data from electrocardiograms.

--Matching donors and recipients for kidney transplants.

--Studying what happens when a person breathes--rate and amount of air intake, changes in lung and rib cage pressure.

--Plotting the pathway of single nerve cell discharges to the brain in both normal and epileptic subjects.

--Predicting effects of smog and other polluted environments on human cells and function.

The system, which began routine operation in January, 1967, utilized IBM 360-50 and IBM 1800 computers plus ancillary equipment. Data flows to and from the main unit through 60 terminals located throughout the Medical School and on the main Stanford Campus nearby.

"The presence of these terminals enables direct connection between the laboratory instrumentation and the computer and allows collection and analysis of experimental results from many different laboratories," Wiederhold says. "It also makes it possible for the investigator to have full control over the instructions and data fed to the computer and over the procedures executed by the system."

The ACME system also allows for "real-time processing," enabling the analysis of data during the actual time of experiments. Another concept built into the system is that of "timesharing" so that the attention and memory of the system can be divided according to the varying needs and problems of many researchers at the same time.

"The ACME system can fulfill the requests of a dozen users within one second," according to Wiederhold.

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Mailed September 12, 1968

Sept. 9, 1968

FILE COPY

Transplant #5 Asche/Anonymous

A housewife from Los Altos Hills became the fifth heart transplant patient today at Stanford University Hospital.

The recipient is Mrs. Virginia Asche, 48, who received a new heart in a 4½ hour operation by a team of surgeons headed by Dr. Norman E. Shumway, professor and head of the division of cardiovascular surgery at Stanford University School of Medicine.

Mrs. Asche is the first woman to undergo heart transplant surgery at Stanford. Her condition is listed as satisfactory.

The new heart came from an anonymous donor who suffered irreversible brain damage and died at Stanford University Hospital this morning.

Mrs. Asche, whose husband, Charles, is a financial and real estate consultant, has had several heart attacks and has suffered heart failure for the past two years.

Mr. Asche noted this morning that the development of heart transplantation "has given my wife a chance to live." The Asches have lived in Los Altos Hills for the past six years.

Also at Stanford two other heart transplant patients continue to make steady progress. Leonard Drake, 42, from Eugene, Ore., received a new heart on Aug. 22 and Robert O. McKee, 51, a Palo Alto engineer, underwent heart transplant surgery on Aug. 31.

####

September 10, 1968

Mrs. Virginia Asche, the first woman to receive a heart transplant at Stanford University Hospital, continues to be in satisfactory condition this morning.

Mrs. Asche is awake and alert. Her blood pressure and pulse are normal. She is on a liquid diet.

Mr. Asche visited his wife last evening.

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Sept 11, 1968

Mrs. Virginia Asche continues to make steady progress today at Stanford University Hospital following her heart transplant operation Monday. She had breadfast this morning seated in a chair in her room. Mr. Asche visits his wife frequently.

Robert O. McKee who received a new heart at Stanford on Aug. 31, is being treated for what physicians describe as a "rejection episode." He is being given increased amounts of immunosuppressive drugs to counteract the bodies natural tendency to reject foreign tissue.

Doctors report that Mckee spent a comfortable night.

Leonard Drake continues to make steady progress. He received a transplanted heart on Aug. 22.

####

September 12, 1968

Robert O. McKee continues to be treated for rejection of his transplanted heart and is reported slightly improved today at Stanford University Hospital. He remains in satisfactory condition. McKee is not confined to his bed and was up and about today following breakfast.

Mrs. Virginia Asche is described as making steady progress today. She is also out of bed for brief periods and is on a normal diet.

Leonard Drake continues to make steady progress each day. He has been moved from the Intensive Care Unit to a private room.

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Virginia Asche
Dead January 14, 1969

Virginia Asche, the 48-year-old Los Altos Hills housewife who underwent a heart transplant operation last September 9, died today at Stanford University Medical Center.

Mrs. Asche died of hepatitus after re-entering the hospital a week ago.

She was the first woman and the fifth person to undergo heart transplant surgery at Stanford.

The wife of Charles Asche, Palo Alto real estate broker, Mrs. Asche had sufficiently recovered from the transplant operation to return to her home on October 12 and was leading what was described as a normal life until she was stricken with hepatitis.

In addition to her husband, Mrs. Asche is survived by her mother.

Ten heart transplant operations have been performed at Stanford University Medical Center by a team headed by Dr. Norman E. Shumway.

Two of these were performed on the same patient, and of the nine individuals receiving new hearts at Stanford, only three survive.

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STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415:321-5310

Science Writers: The following story is based on a paper by Dr. Norman E. Shumway prepared for presentation at the Second International Congress of the Transplantation Society in New York City.

FOR AM RELEASE SUNDAY, SEPTEMBER 8, 1968

NEW YORK -- Patients with long-standing heart failure whose neighboring organs have undergone significant adaptive changes are high risk candidates for heart transplantation, Dr. Norman E. Shumway, Stanford's pioneering cardiovascular surgeon, said today.

In his remarks, prepared for delivery Sunday at the Second International Congress of the Transplantation Society in New York, Dr. Shumway compared the cases of Mike Kasperak, 54, and Joseph Rizor, 40, who died following heart transplants at Stanford earlier this year, to two recent heart transplant patients who are living.

Co-authors of the report are members of Dr. Shumway's heart transplant team, Drs. Edward Stinson, and Eugene Dong, Jr.

"Death of our first heart transplant recipient appeared to substantiate the theory that transplantation of the heart offers little to the patient whose death is imminent from the effects of chronic heart failure on other organs," Dr. Shumway said. "The history of our second case almost certainly converts this theory to fact."

Kasperak died 15 days after the operation from what Dr. Shumway termed "a galaxy of complications" involving the lungs, liver, and kidneys. Rizor died three and a half days after receiving a new heart because his sick lungs were unable to oxygenate his blood.

Dr. Shumway said the second case illustrates the need for transplantation of the heart and one or both lungs. He emphasized that "patients with long-standing cardiac failure whose neighboring organ systems have undergone significant adaptive changes are high risk candidates for transplantation of the heart."

- more -

"The third and fourth heart transplant recipients have done remarkably well in the early postoperative phases," Dr. Shumway reported.

Stanford's newest transplant patients, Leonard Drake, a 42-year-old retired postal clerk from Eugene, Ore., and Robert O. McKee, a 51-year-old Palo Alto engineer, are doing well following heart transplant operations 18 and 9 days ago respectively.

Although both patients had suffered from acute coronary artery disease requiring transplants, neither had irreversible damage in such important organs as the lungs and liver, Dr. Shumway said. Patients in acute heart failure are suitable candidates for transplantation because the secondary effect on other organs is completely reversible.

Drake is up walking, eating well, and requires no pain medication in marked contrast to his condition before the operation. McKee is improving normally.

"There have been no clinical or laboratory signs of rejection," Dr. Shumway said. Both patients, however, are receiving small daily doses of immunosuppresive drugs including antilymphocyte globulin.

Dr. Shumway said that neither of the first and second Stanford heart transplant patients showed any clinical evidence of rejection. He added, however, that testing of tissue compatibility prior to the operation and the diagnosis of early rejection after the operation "remain crucial areas for further clinical and laboratory investigation."

He predicted that eventually "heart transplantation should achieve the same clinical status as kidney and liver transplants."

Dr. Shumway's work is supported by grants from the National Institutes of Health.

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Mailed September 6, 1968

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Interferon, a natural antiviral substance produced by the cells and considered to have potential value in the control of virus disease in man, has been found to protect cells against toxoplasmosis.

The finding, reported by researchers from Stanford University School of Medicine, suggests a role for interferon with organisms higher than viruses including those responsible for such diseases as malaria and sleeping sickness.

Viruses such as those causing the flu, polio or the common cold are simpler than the parasite which causes toxoplasmosis. Toxoplasma, being protozoa, are much larger and more complicated than viruses and have apparatus capable of self-reproduction in their structure. Certain protozoa even reproduce themselves outside of cells. Viruses can only reproduce themselves inside body cells.

Toxoplasmosis in the newborn can be a serious illness, killing some if its victims in infancy, blinding, crippling, or producing deafness or mental retardation in others. The parasite, evidently, is extremely common throughout the world. Large numbers of people appear to have antibodies against it, indicating they have been infected at least once.

The discovery of interferon's power against toxoplasma and possibly more complex organisms was reported in a recent issue of SCIENCE, the journal of the American Association for the Advancement of Science. The studies were carried out by Dr. Jack S. Remington, assistant professor of medicine at Stanford and director of the Division of Infectious Disease at Palo Alto Medical Research Foundation, in collaboration with Dr. Thomas C. Merigan, associate professor and head of the Division of Infectious Diseases at the medical school.

Their work was supported by a grant from the National Institutes of Health.

- more -

Independent confirmation of the Stanford investigators' report on the infection-controlling range of interferon has come from New York University researchers. They found agents that promote interferon production can prevent or delay fatal malaria infection in mice. The New York University research was conducted by Dr. Rene I. Jahile and his associates.

The Stanford researchers treated chick and mouse cells with interferon and exposed the cells to toxoplasma germs. They found the cells "were significantly protected from destruction by the toxoplasma."

Interferon is a protein which is normally produced by the cells in the body to limit the spread of virus infection. Ever since its discovery by Drs. Alick Isaacs and Jean Lindermann at the National Institute of Medical Research in London in 1957, interferon has been considered to have potential value in the control of virus disease in man, ranging from the most deadly virus infections to the common cold, for which no vaccines or chemical weapons are presently available.

Researchers in several medical centers throughout the world have been working to develop drugs which stimulate interferon production in the cells to protect populations from infection during epidemics.

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Mailed September 4, 1968

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Jan Klein of the Czechoslovak Academy of Sciences Institute of Experimental Biology in Prague is visiting Stanford University as a research associate in the Department of Genetics from August 30 to January 31, 1969.

The 32-year-old scientist will work with Dr. Leonard Herzenberg, professor of genetics at Stanford University School of Medicine. Dr. Klein, a well-known authority in the field of transplantation genetics, has worked at Stanford before from February 1, 1966 to March 7, 1967.

Dr. Klein arrived in the United States on August 30 after attending the 12th International congress of Genetics in Tokyo, Japan. Dr. Klein's visit was arranged seven months ago. He will be at the University under Stanford's exchange visitors program.

Following his visit at Stanford, Dr. Klein will go to the University of Michigan for further research work before returning to Prague.

STATEMENT RELEASED TO THE PRESS ABOUT DR. JAN KLEIN

September 3, 1968

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

STANFORD--A critically important measure, which will permit nonprofit California hospitals to keep pace with the demands placed upon them by the state's burgeoning growth, has been endorsed by a local group of leading citizens.

Dr. Russel V. Lee, founder of the Palo Alto Medical Clinic; Stanford University Hospital board members James E. O'Brien, Mrs. Edward H. Heller, Robert H. Klein, John M. Santana, Jr., and Raymond Rohrs; City Councilwoman Frances Dias, and Drs. James I. Ball, Walter L. Arons, and Edward A. Barthold are members of the local group of Californians for Modern Hospitals urging passage of Proposition 5.

Placed on the November ballot by a nearly unanimous vote of the State Legislature, the measure would amend the State Constitution to permit the state to guarantee loans made by banks and other financial institutions to nonprofit and public agencies for the construction of hospital facilities.

The plan would work like existing federal and state home loan programs. As long as the hospital repays its loan on time, the state will contribute nothing. But if the hospital is unable to meet payments, the state will pay off the loan.

Hospitals, according to the California Hospital Association, find it difficult to obtain private financing at the present time because few banks are willing to foreclose on a hospital. Therefore, lending institutions are unwilling to accept hospital property as security.

Passage of the measure, authored by State Sen. Stephen P. Teale, would permit the state to substitute the insured loan program for the direct grants it has been making to match federal Hill-Burton contributions to hospital construction programs.

State appropriations for matching hospital funds have run from $15 to $20 million a year. But the Hill-Burton Act may expire next year and Gov. Ronald Reagan has said the state will not be able to make direct grants to hospital construction after this fiscal year.

The local backers of Proposition 5 say State Department of Public Health figures indicate California now faces a shortage of 21,523 modern hospital beds. The problem will become more acute as the nation's most populous state continues to grow.

They pointed out that North Santa Clara County has faced a serious shortage of hospital beds for several years. Stanford University Hospital facilities, which serve both the faculty and community physicians, will be falling seriously behind community needs as construction costs soar and medical technology brings more and more citizens in the mainstream of health care.

"We urge a 'Yes' vote on Proposition 5 as a measure critical to the effectiveness of the community's health care programs," the committee said.

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Mailed October 30, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Science Writers: Dr. Kornberg's remarks will be made in connection with his acceptance of the 1968 Borden Award of the Association of American Medical Colleges. It will be presented at the awards dinner Saturday, November 2, as part of the Association's annual meeting in the Shamrock Hilton Hotel in Houston.

FOR RELEASE SUNDAY, NOVEMBER 3, 1968

HOUSTON, TEXAS--Sharp cutbacks in federal support threaten the very foundation of American research enterprise, the nation's medical educators were told here Saturday.

The warning was issued by Dr. Arthur Kornberg, Stanford University's Nobel Prize-winning biochemist, as he accepted the 1968 Borden Award of the Association of American Medical Colleges "for outstanding research in medicine."

"Research is the lifeline of medicine," Dr. Kornberg said. "It is an enterprise requiring men, money and momentum. Don't believe that it resembles a steel furnace that can be banked temporarily and then fired up when needed."

"The miracle of the American research enterprise of the last two decades can vanish as mysteriously as it arose. Please don't let it happen," Dr. Kornberg added.

A generation ago, when research support was meager, most research workers had a deep drive to do research. Some did great things. Some didn't, Dr. Kornberg related. In recent years the nation has supported more than ten times as many research workers as a generation ago. But some of their contributions are outstanding and most of what they do adds to the foundation and techniques of modern science.

"I believe the absolutely phenomenal advances in basic medical sciences in the past two decades are not the achievements of a few geniuses but the massive effort of a large number of people. These people were judged by their peers to be well-trained and competent and were awarded research grants," he said.

But research support has been cut back, Dr. Kornberg said, and at this moment administrators and research workers all over the country are arguing among themselves how to apportion this cut.

Should the cut be apportioned evenly among grantees or should ratings be assigned, eliminating researchers progressively from the bottom of such list? he asked.

Dr. Kornberg stressed that to follow either course "is a disaster for the progress of science. To curtail the efforts of highly gifted, productive groups at the peak of their creativity is unconscionable."

He doubted, he said, that there is a crystal ball that could help a dean, a department head, or a committee of experts to pinpoint the "pedestrian" work that can be dispensed with.

-more-

"Next month three biochemists will receive the Nobel Prize in medicine for the extraordinary research that disclosed the genetic code," Dr. Kornberg said. "Had there been a cut of 40 per cent of a grantee list at the time their research was starting 10, 15, 20 years ago, I doubt that all of their projects would have survived it."

Dr. Kornberg's remarks were made at the award banquet at the Shamrock Hilton Hotel as part of the Association's 79th annual meeting.

In addition to a medal, the Borden Award carries a prize of $1,000.

In 1959, Dr. Kornberg was named a Nobel Laureate in recognition of his discovery of the enzyme DNA polymerase, a discovery that made possible further probing of the mechanisms of nucleic acid biochemistry. He and his associates only recently announced the synthesis of infective viral DNA (deoxyribonucleic acid).

"It is for this work especially," read the award citation "that he is receiving the Borden Award--an accomplishment that has been termed a major event in the Twentieth Century and one of enormous significance to research in biochemical genetics."

The Borden Award was established in 1947 by the Borden Company Foundation. It is presented in recognition of outstanding clinical or laboratory research by a faculty member of a medical school which is a member of the Association of American Medical Colleges.

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Mailed October 30, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

STANFORD--A new program for training workers from racial minorities as laboratory assistants and technicians has been inaugurated by the Stanford University School of Medicine.

The program, which will provide intensified training in laboratory procedures for four months, began in October with seven students from East Palo Alto, Palo Alto, Mountain View and Milpitas. The students' backgrounds range from 7 to 12 years of formal education.

Trainees enrolled in the program receive a salary during their training. For the first six weeks, they will be exposed to formal lectures, films and laboratory exercises. For the remainder of their training, the students will work in selected laboratories in the Medical School while attending classes one afternoon a week. After their training is over, the trainees will become regular employees at the Medical Center.

The new program is the brainchild of Moses A. Thomas, 30-year-old laboratory coordinator in the Department of Genetics of the Medical School. Thomas lives with his wife and three children in East Palo Alto. He is also past executive chairman of the East Palo Alto NAACP branch.

Thomas found that most beginning laboratory technicians with a college degree in biology and no experience in a research laboratory are at once overtrained and undertrained.

"They are overtrained," he said, "in the sense that they have been given a great deal of theoretical knowledge out of context and they are generally not able to apply very much of it to the specific research problems of the laboratory. They are undertrained in that they have not been rigorously schooled in handling even the simplest laboratory tools such as pipets, and modern balances."

He concluded that a person with less theoretical experience, but well grounded in laboratory techniques would be a desirable laboratory assistant, especially in laboratories which require several assistants.

Thomas had plans for a more ambitious program for minorities which would accommodate 20 instead of seven students. "Unfortunately," he explained, "it had to be limited because of recent cuts in federal research support which have affected the University budget. I worked very hard in getting this program implemented, along with some faculty and staff members and the support of the dean."

Dr. Thomas Merigan, associate professor and head of the Division of Infectious Diseases, is chairman of the faculty committee for the program.

-more-

"We are taking minorities presently employed in an unskilled field and giving them a chance to function in a different atmosphere," Thomas said. One student, for example, was a lab dishwasher, another was employed in the hospital food service.

Cliff Jenkins, senior research assistant in the Department of Psychiatry, has volunteered to teach students methods of measurement in laboratories.

"He is a very patient and understanding instructor and has done a remarkable job in teaching," Thomas said.

Students are taught how to handle data, read and construct graphs, and to utilize common mathematical equations. They are getting a thorough knowledge of exponential notation along with a reasonable understanding of the slide rule. Other subjects include instruction in international atomic weight charts, elements, symbols, atomic numbers, and teaching a basic understanding of volume, distance, mass and the metric system.

Students are also acquiring practical experience in the use of the chemical balance and a variety of volumetric techniques. Special emphasis is placed on accuracy and critical analyses of data. The students are preparing solutions and buffers, and some time is spent learning basic skills useful in chemical analysis, including procedures of radioactive assay.

Thomas described the first three weeks of the program as gratifying. "We are now beginning elementary laboratory experiments with great success," he said.

Students in the program are Mrs. Gladys Braud, Mrs. Johnnye Jennings, and Mrs. Lois Johnson, all of East Palo Alto; Mrs. Jackie Faison and Eddie Padilla of Mountain View; Lyman Whitman of Palo Alto; and John Miller of Milpitas.

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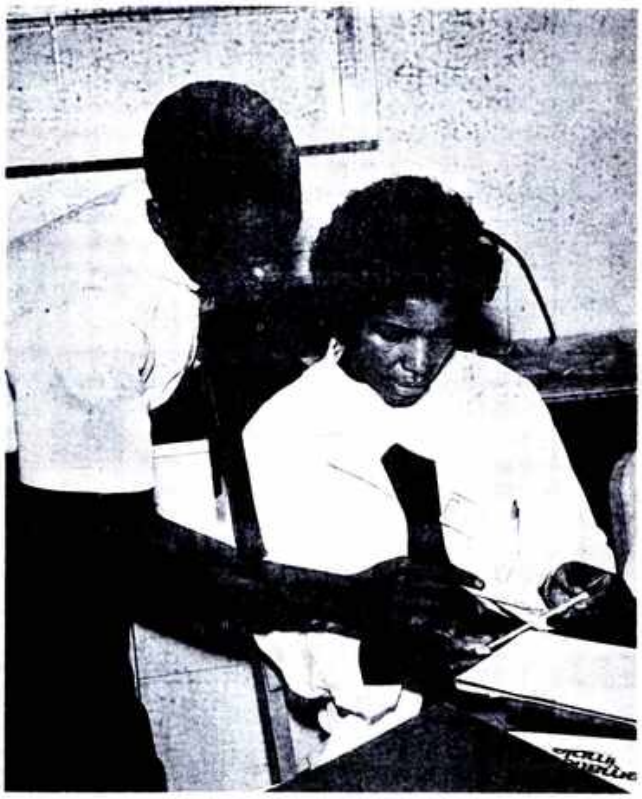
Mailed October 28, 1968.



#1 Moses A. Thomas, program coordinator for Stanford medical school's new training program for minority workers, discusses problem with Mrs. Jackie Faison, a student from Mountain View. Students are trained as laboratory assistants and technicians.

#2 Instructor Cliff Jenkins of the Stanford University School of Medicine teaches laboratory mathematics to students enrolled in training program for laboratory assistants. The program instituted by the School is designed for minority workers. The students are Mrs. Gladys Braud of East Palo Alto, Eddie Padilla of Mountain View, and John Miller of Milpitas.

TO: NEWS BUREAU, STANFORD MEDICAL CENTER, STANFORD, CALIFORNIA 94305

Minority Lab Training

Please send me an 8x10" glossy print of photo #1___and #2___.

NAME_____ PUBLICATION_____

ADDRESS_____ CITY, STATE_____

ZIP CODE_____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415;321-5310

STANFORD--Stanford University Medical Center today announced a major drive to increase the number of workers from racial minorities in the School of Medicine and Hospital.

The program calls for steps to improve representation of minorities in the Center, and for creation of on-the-job training programs and opportunities for promotion and placement.

The program was announced by Dr. Thomas A. Gonda, associate dean of the School of Medicine and acting director of Stanford University Hospital.

Also announced was the appointment of two minority relations representatives, Moses A. Thomas, 30, and William Stone, 29, both of East Palo Alto.

Thomas, a laboratory coordinator in the Department of Genetics, will be responsible for medical school programs. Stone will be responsible for Hospital programs. They will explore within their respective areas where training programs for minority employees might be initiated and they will work with personnel officers to see that all new positions are advertised.

A committee on minority employment at the Medical Center has also been formed to review proposals and to assist and advise the minority relations representatives as well as the administration in setting up needed programs. It will also function as a grievance committee for minorities. Harry H. Ball of Milpitas, mail room supervisor at the Hospital, is committee chairman.

Thomas directs a program now in operation at the Medical School for training minority workers as laboratory assistants. The six-week intensive course is in its second week with seven students. Thomas attended Southern University in Baton Rouge, La., and the College of San Mateo. He is also past executive chairman of East Palo Alto NAACP branch.

Stone attended the College of San Mateo, Foothill and San Jose State Colleges. He also worked as a teaching assistant at Green Oaks Junior High at East Palo Alto. Since leaving this job he returned to Foothill and joined the Stanford hospital as assistant mail room supervisor.

-more-

Ball joined the Hospital following his retirement from the U.S. Postal Service in 1966 after 30 years of service. He was general delivery clerk at Stanford Branch Post Office. He attended the University of Iowa in Iowa City, and Howard University in Washington, D.C.

The new program for minorities incorporates proposals of the committee on minority employment and recommendations of a task force of hospital supervisory personnel. The groups met several times since August to develop recommendations for minority employment and training practices at the Hospital.

The committee has proposed that initial steps for promotion and placement of minorities be directed at hospital areas where on-the-job training can be accomplished. It suggested that three departments in the Hospital be given a priority for the project.

These departments would be picked on the basis of size and number of male workers they could accommodate. "Priority should be given to upgrading male or female workers who represent the bread winner," said the committee. "The need for immediate action dictates that we move in those areas which do not entail long-range planning."

Other proposals call for designation of training officers in Hospital departments and for review procedures of trainees' progress. Problems arising during an employee's training may be reviewed by the minority relations representative or by the minority relations committee.

The committee includes Alvin Anglin and James Boyd, housekeeping; Harry Ball and William Stone, mail room; James Cheatham, inhalation therapy; David Edwards, messenger service; Ray Scoggins, cast room; Moses Thomas, department of genetics; Robert Peterson, stores; Mel Barries, physical therapy; Mrs. Lovie Lewis, Hoover pavilion; and Mark Steward, department of pathology.

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Mailed October 24, 1968.

RELEASE FILE 10-23-68

FILE COPY

Ronald Bush was transferred Monday afternoon to Stanford University Hospital as a potential donor after Stanford physicians had been contacted by Oroville doctors. He was suffering from a gunshot wound in the head. Bush's parents had given permission for donating of their son's heart after they had been told nothing could be done to save his life.

Bush was admitted to the Hospital for tests and the Santa Clara County Medical Examiner Coroner's Office was notified as prescribed by present guidelines regarding transplantation. The Coroner's Office contacted Oroville officials. It was told that Bush's wound was self-inflicted. On the basis of this information, Santa Clara County Coroner's office cleared the case for tests and possible transplantation. No surgery, however, had been scheduled.

At 11 p.m. Monday, Butte County officials notified the Santa Clara County Coroner's office that a possible murder was involved in the fatal shooting of Bush. Tests were then halted at the request of the Coroner pending further investigation.

Bush died at the hospital Tuesday afternoon at 4:40 p.m. His body has been turned over to the Santa Clara County Coroner for an autopsy.

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FILE COPY

October 26, 1968

HEART TRANSPLANT #7

BULLETIN # 1

STANFORD — Carl P. Sheaffer, 54, of Winchester Bay, Oregon, became Stanford University Hospital's seventh heart transplant patient today.

Donor of the new heart was David Brewer, 20, son of Mr. and Mrs. John C. Brewer of Campbell, California. He died at 8 a.m. Saturday at the Stanford hospital of a gun shot wound in the head.

Brewer was transferred to Stanford from Santa Clara Valley Medical Center where he had been hospitalized since Friday ~~following an apparent suicide attempt at his home.~~

Sheaffer, the heart recipient, is a retired plumber and father of five children. He suffered from arteriosclerotic heart disease which progressed since his first heart attack in 1963. He retired in 1964 as a result of his illness.

The operation, which began at 9 a.m. was performed by a surgical team under the direction of Dr. Norman E. Shumway, professor and head of the Division of Cardiovascular Surgery.

Also at Stanford this morning, another surgical team transplanted one of Brewer's healthy kidneys in Martin L. Paduck, a 43-year-old retired army sergeant from Salinas, California. Paduck is the father of three children.

Both patients were reported in satisfactory condition after their operations.

Another heart transplant patient at Stanford was reported making satisfactory progress today. She is Mrs. Georgette Larson, 54-year-old San Jose housewife, who received a new heart October 5. Two other patients have left the hospital since they received new hearts August 31 and September 9. They are, however, required to report to the hospital daily for checkups.

Sheaffer's children are Mrs. Dorothy Jane Buffington of Los Angeles; Mrs. George Buffington and Carl F. Sheaffer Jr., of Franklintown, Pa.; and Ronald E. and William E. Sheaffer of Winchester Bay, Ore.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

STANFORD--Heart transplant patient Robert O. McKee of Palo Alto expressed deep gratitude to members of the Stanford University Medical Center staff Friday as he prepared to go home.

McKee is the first Stanford heart transplant patient to be released from the hospital. He received a new heart on Aug. 31 in an operation performed by Dr. Norman Shumway, professor and head of the division of cardiovascular surgery at Stanford.

Donor of McKee's new heart was Dr. William Sample, 39, of Menlo Park. Dr. Sample was chief psychiatric social worker and acting director of the Children's Health Council in Palo Alto. He died of a massive brain hemorrhage.

"I feel very humble," McKee stated Friday afternoon as he said goodbye to doctors and nurses at Stanford. "It would take a poet to express my feelings and gratutude about what has happened to me in the last six weeks. Simply saying 'thank you' does not seem adequate."

McKee, a manufacturing methods engineer, said he hopes to return to work, although he has no specific plans at this time. A former supervisor for Beckman Instruments in Palo Alto, he had resigned last year because of his heart condition.

"I can breathe once more and I feel like living again," McKee said. "I want to return to society and participate as a useful and productive citizen. I realize that it is going to take effort on my part, but the desire is there."

"I also hope to prove that heart transplantation can return a man such as myself who was physically disabled by heart disease to a normal life again."

McKee will visit the hospital briefly several times a week for tests and checkups.

He has also requested that he not be contacted by members of the news media at this time.

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Mailed October 12, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415/ 321-5310

FILE COPY

EDITORS: Transmitted on Business Wire 10/11/68.

STANFORD--Guidelines aimed at clearing legal obstacles regarding potential donors in life-saving heart transplant operations have been agreed upon by Santa Clara County officials and representatives of the Stanford University School of Medicine.

The guidelines clarify the circumstances under which hearts, kidneys, and other organs and human tissues may be donated for medical purposes from dead persons who legally are under the jurisdiction of the Medical Examiner-Coroner's office.

Agreement on the new procedures was announced today in a joint statement by Dr. John Hauser, Santa Clara County medical examiner-coroner, and Dr. Thomas A. Gonda, associate dean and acting director of the Stanford University Hospital.

"The guidelines are designed to assist in making cases where an autopsy is necessary--generally violent deaths--available as transplant donors. The guidelines could become a model for adoption throughout California," Drs. Hauser and Gonda said.

"Persons dying of violence or by unnatural means come immediately under the jurisdiction of the medical examiner-coroner at the time of death," the statement said. "Many such cases are medically ideal for use as transplant donors. The stringent time limits for the removal of organs immediately after death of the donor, however, ordinarily make it difficult for the medical examiner-coroner to make an adequate investigation as required by law."

The new guidelines include the following provisions:

--The medical examiner-coroner will be notified before death in all instances where cases legally under his jurisdiction are proposed as transplant donors.

--The medical examiner-coroner will make an investigation into the circumstances of the death to satisfy his legal responsibilities. Each case will be decided individually and will be released as a donor of specified organs..

--If the medical examiner-coroner believes that a case must not be used as a donor, the responsible physician will be notified and the body will not be disturbed, regardless of whether or not a consent of next of kin has been obtained.

The guidelines also provide that certain categories of violent deaths will not be used as transplant donors. These include known or suspected homicides, known industrial accidents, and cases with serious suspicion of poisoning.

Except for unusual circumstances the coroner will not allow use of victims of automobile and motorcycle accidents or apparent suicide in which more than one person is involved.

The guidelines require that death of the donor must be determined by a minimum of three physicians other than those on the transplant team, including--if available--the donor's personal physician.

In addition to Drs. Hauser and Gonda, those involved in the development of the guidelines included Robert M. Brown, general legal counsel of the University, Howard W. Campen, county executive, and William Siegel, county counsel's office.

Mailed October 11, 1968.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Richard F. O'Brien, 47, has been appointed to a newly created position of Secretary of the Stanford University Medical Center.

His appointment was disclosed today by Acting University President Robert J. Glaser. Former director of development at Stanford, O'Brien has served as assistant to the president since July, 1967.

"In his new capacity, Mr. O'Brien will coordinate all fund raising for the two components of the Medical Center--the School of Medicine and the Stanford University Hospital and Clinics," Dr. Glaser said. "I am delighted that he will now direct his efforts toward helping us meet some of our pressing financial needs."

Dr. Glaser also announced that Peter E. Pratt, formerly director of Medical School development has assumed new responsibilities in the office of the General Secretary, staffing the University's special gifts committees on the East Coast. Mr. Pratt will continue, however, to direct the Medical School Annual Fund and to coordinate Medical School Alumni activities.

Stanford University, which recently acquired ownership of Palo Alto's interest in the former Palo Alto-Stanford Hospital, is contemplating a major expansion of its Medical Center in the near future. Planning efforts envision the development of additional facilities for the basic sciences, and a teaching hospital and ambulatory care center which will make feasible new approaches to patient care, teaching and research, and permit rigid control of costs.

O'Brien played a key role as director of Stanford's $100 million PACE campaign, which set a new high in capital gifts to an American university. From 1964 to 1967, he served as vice-president for planning and development at The University of Chicago where he planned and launched a $160 million capital campaign being successfully concluded this year.

Holder of two Stanford degrees (A.M. 1947, Ed.D. 1950), he has been associated with the University almost continuously from 1946 to 1964, both as a student and a staff member.

Starting as a resident counselor in student living units, he held several posts in the Dean of Students office and School of Education before being named associate general secretary of the University in 1954. He became director of development five years later.

A graduate of the University of California at Santa Barbara (A.B. 1943), he married the former Doris May Kirsten of Santa Barbara in 1943. They have three daughters: Mrs. Jon M. Cretarolo, Cynthia Ann, and Sally Jane.

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Mailed October 10, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Physicians at Stanford University Medical Center are now using computers to evaluate and diagnose heart disease and often to help in the evaluation of prospective heart transplant recipients.

This is the latest example of the use of computer technology in medical care, developed after two years of study and trial. Dr. Donald Harrison, associate professor of medicine and head of the division of cardiology at Stanford University School of Medicine, describes the use of computers as "an important tool which provides vital information for treating patients with heart disorders."

The facilities of the medical school's Advanced Computer for Medical Research are being used daily in the cardiac catheterization laboratory where detailed studies of heart function are performed.

In this, like other applications, information gathering and analysis is basic--and information processing is the computer's reason for existence. A computer is first of all a calculating machine of incredible speed. Its power to manipulate facts can be linked to memory units that give it access to vast amounts of data. But the computer's real value resides in its ability to carry out man's instructions--to make thousands of comparisons between incoming data and information in its memory and then to make predetermined choices based on those comparisons--all in a fraction of a second.

"Catheterization is carried out on all patients being considered for open heart surgery," Dr. Harrison cites as an example. "The procedure is instrumental in evaluating what the cardiac disorder is, the extent, location, and size of it, and how well the muscle of the patient's heart is functioning as a pump at the time of the study," he says. "It is also valuable postoperatively to insure that the heart malfunction has been corrected."

When a patient is catheterized, small, hollow tubing is painlessly inserted through the venous system of the arms or legs to the various chambers of the heart which are to be studied. The catheter takes blood samples and various pressure readings. By exacting mathematical calculations, physicians can determine if the heart's function and output of blood are normal, and if not, why not.

Before Stanford cardiologists began using a computer to analyze the catheterization data, it took often four to six hours to make the necessary calculations in evaluating a patient. Results of studies done on a patient early in the morning would not be available until late that day or even the next day.

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"The computer enables us to have the catheterization material instantaneously," Dr. Harrison points out. "We can have the information analyzed and back in our hands while a procedure is still underway, thus making it possible for modifications to be made when necessary."

The computer can also analyze data which could not be calculated by hand because of the large number of data components. It has also proved to be more accurate in some cases than the calculations done in the traditional manner.

"We now have a more complete and efficient evaluation of our patients' heart function than we have had before," Dr. Harrison says.

The value of the computer in analysis will increase in the future. As data on the heart function of more and more patients are stored in the computer, physicians, when studying new patients, will automatically be able to compare the new information with that of previous patients with the same cardiac disorder.

Dr. Harrison and his associates, Walter Henry, a fifth-year medical student at Stanford, Dr. Robert Stenson, a postdoctoral fellow in cardiology, and Linda Crouse from the computer center, are exploring the possibility of making the programming techniques and facilities at Stanford available to other cardiologists. It would be possible, Dr. Harrison explains, for physicians throughout California to send their data over telephone lines to the Stanford computer center for rapid and accurate analysis.

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Mailed October 9, 1968.

COMPUTER STUDIES HEART DISORDERS--Stanford cardiologists, Dr. Donald Harrison and Dr. Robert Stenson (in white coats) check data on patient's heart function being recorded for computer analysis at Stanford University Medical Center. A computer is being used routinely at Stanford to provide what Dr. Harrison describes as "a more comprehensive evaluation of heart disorders than has been possible before." Assisting Dr. Harrison and Dr. Stenson are Dr. Ralph Gianelly and Dr. John Hamilton.

TO: NEWS BUREAU, STANFORD MEDICAL CENTER, STANFORD, CALIFORNIA 94305

Computer Evaluation of Heart Disorder

Please send me an 8x10 glossy print of photo above.

NAME _____ PUBLICATION _____

ADDRESS _____ CITY, STATE _____

ZIP CODE _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos, 415: 321-5310

EDITORS: Transmitted on Business Wire 10/7/68.

STANFORD--The faculty senate of the Stanford University School of Medicine Saturday gave its unanimous approval to proposals for increasing minority student enrollment in the School of Medicine.

In a statement issued today, the faculty senate reiterated its concern over the problem of increasing minority student enrollment and noted that for the past six months, on the initiative of the dean and Medical School executive committee, faculty and students have been considering mechanisms for accomplishing this goal.

Dr. Robert J. Glaser, acting University President, said the administration of the Medical School is very pleased by the faculty action.

A statement issued by the Black Student Union at the University said:

"The BSU and the Medical School have reached a tentative agreement on a program to increase minority enrollment starting September, 1969. Although 10 places are being held for minority students, this will not act as a limiting quota. The BSU and the faculty senate will meet in the coming week to work out the details of the program. We of the BSU would like to commend the Medical School for their prompt and constructive response."

These are the proposals adopted by the faculty senate:

--The increased minority enrollment will begin with the class of students entering September, 1969.

--Minority students be defined as students of educationally deprived racial or cultural groups in the United States.

--Ten places in the entering class be reserved for minority group students and if 10 students are not found for this special program, any unfilled places would open to regular applicants.

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--All students admitted, regardless of the method used, will be required to complete the same requirements for individual course completion and graduation.

The faculty senate statement said that a quota system of admission is undesirable as a mechanism for the routine handling of applications. The designation of 10 places in the class is done in the spirit of an experiment in medical admissions policy for a specified purpose and it is the ultimate aim to eliminate all quotas.

The senate further recommended that this program for minority recruitment should be further strengthened by the development of a tutoring program specifically designed to assist minority group students, on request, with their studies and course work.

Earlier this year a Medical School committee on minority student problems noted that lack of representation of minority groups in the medical profession is not only a Stanford problem but a problem common to all medical schools in the nation. The number of minority students enrolled in medical schools is less than 2 per cent of the total enrollment and is getting smaller.

Contributing factors to the perpetuation of this social problem, the committee said, were high education costs, the poor quality of the undergraduate education afforded minorities, and the fact that medicine is not identified by the disadvantaged minorities as appropriate or realistically possible career.

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Mailed October 7, 1968.

FILE COPY

BULLETIN/ DRAKE October 7, 1968

Leonard Drake, who received a new heart August 22, died Monday evening of pneumonia at Stanford University Hospital. Death occurred at 5:45 p.m. PDT.

The 42-year-old postal clerk from Eugene, Ore., had made a normal postoperative recovery until September 21, when he suffered a rejection episode. He contracted pneumonia and his condition became critical October 5 (Saturday). He was being treated with drugs used to suppress the body's natural tendency to reject foreign tissue. One of the major problems of organ transplantation at present, doctors explained, is that these powerful drugs also suppress the body's tendency to fight off germs, thus making patients succeptible to infections.

Drake is survived by his wife, Wanda, two children, Jimmy and Vicky, a sister, MRS. Virginia Sebring and his parents Mr. and Mrs. Albert Drake, all of Eugene.

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Stanford's other heart transplant patients, Mrs. Georgette Larson of San Jose; Mrs. Virginia Asche of Los Altos; and Robert McKee of Palo Alto, continue to do well.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--A bright blue shirt may have played an important part in taking Glenn Battle, night supervisor of the clinical laboratories at Stanford University Medical Center, from the test tubes and microscopes of his laboratory work to the glitter of the silver screen in Hollywood.

Battle, a frequent performer in productions at the Manhattan Playhouse in East Palo Alto and the Menlo Players Guild, recently played a prominent role in a new movie, "Take the Money and Run," written and directed by, and starring comedian Woody Allen. As a result of his part, Battle will be introduced as a new actor in the film when it is released later this fall.

When he heard that "Take the Money and Run" was being filmed on location at an old labor camp near Tracy in the East Bay, Battle decided to visit the set.

"If you want to be an actor," he says with a sparkle in his eyes, "you spend a great deal of time 'hanging around' in hopes of getting some big break."

For Battle the big break may have come.

One of the five principle actors on a Georgia chain gang with Woody Allen failed to appear as shooting was ready to begin. Those in charge of casting were trying to decide how to fill the vacant role. Battle was standing with scores of other would-be actors on the set.

"Suddenly this man pointed at me and said 'You there in the blue shirt, come here'," Battle recalls. "I looked around and saw I was the only one with a blue shirt on."

Filming of the chain gang scenes took three weeks, longer than expected. Woody Allen thought the scenes were so funny that he kept giving them a larger and larger part of the movie. Nothing could have pleased Battle more.

He is now confident that his part in "Take the Money and Run" will lead to other acting jobs and possibly to a long-term contract in Hollywood after the movie is release.

In the meantime, the actor-technologist continues to dash between the Medical Center and San Francisco where several other movies including "Daddy Goes A-Hunting" in which Battle plays a policeman, are being filmed. His role in "Take the Money and Run" has also led to possible parts in a movie and television series in Hawaii.

Battle attended Howard University for three years and graduated from North Carolina College in 1959 with a B.S. degree in chemistry and a minor in drama. After graduation he headed for New York where he acted in a repertory company in Greenwich Village. He also has done community theater and been an extra in movies in Los Angeles.

Battle came north to Stanford in 1962.

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Mailed October 7, 1968.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--The faculty senate of the Stanford University School of Medicine Saturday gave its unanimous approval to proposals for increasing minority student enrollment in the School of Medicine.

In a statement issued today, the Faculty senate reiterated its concern over the problem of increasing minority student enrollment and noted that for the past six months, on the initiative of the dean and the Medical School executive committee, faculty and students have been considering mechanisms for accomplishing this goal.

Dr. Robert J. Glaser, acting president of the University, said the administration of the Medical School is very pleased by the faculty action.

A statement issued by the Black Student Union said:

"The BSU and the Medical School have reached a tentative agreement on a program to increase minority enrollment starting September, 1969. Althogh 10 places are being held for minority students, this will not act as a limiting quota. The BSU and the faculty senate will meet in the coming week to work out the details of the program. We of the BSU would like to commend the Medical School for their prompt and constructive response."

Specifically, the faculty senate adopted the following proposals:

--that a special program for increasing the enrollment of minority group students be inaugurated in the School of Medicine.

--that the program begin with the class of students entering in September, 1969.

--that minority students be defined as students of educationally deprived racial or cultural groups in this country.

--that 10 places in the entering class be reserved for minority group students.

--that if 10 students are not found for this special program, any unfilled places may be offered to students from the regular applicant pool to the Medical School.

--that all students admitted, whether by special admissions policy or regular policy shall have the same requirements for individual course completion and graduation.

The faculty senate statement said that a quota system of admission is undesirable as a mechanism for the routine handling of applications and that the designation of 10 places in the class is done in the spirit of an experiment in medical admissions policy for a specified purpose and it is the ultimate aim to eliminate all quotas.

The senate further recommended that this program for minority recruitment should be further strengthened by the development of a tutoring program specifically designed to assist minority group students, on request, with their studies and course work.

Mailed October 5, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Dr. Richard Gorlin, director of Harvard Medical School's cardiovascular unit at the Peter Bent Brigham Hospital in Boston, will deliver the fifth John Kent Lewis Lecture at Stanford University School of Medicine Oct. 8.

He will speak on "Therapy of Coronary Heart Disease: Rationale and Evaluation" at 4:45 p.m. in Room M 106.

Dr. Gorlin, whose scientific contributions over the past 15 years have ranged through many branches of cardiology, pioneered in the introduction of hydraulics to the study of diseased heart valves. His research has included studies of the physiology and pharmacology of the coronary circulation, studies of the function of the normal and diseased heart muscle, and definition of the factors which tax blood flow to the heart.

His research has also led to new ways of evaluating the success of surgical procedures to bring blood supply into the heart.

A native of Jersey City, New Jersey, Dr. Gorlin received the M.D. degree in 1948 from Harvard Medical School and did postgraduate work at the Peter Bent Brigham Hospital and additional study in England before becoming a medical officer in the U.S. Marine Corps. He has been on the faculty at Harvard since 1956.

Dr. Gorlin is a member of the major national professional and academic societies and past president of the New England Cardiovascular Society. He received the Cummings Humanitarian Award in 1963.

Dr. Gorlin's lecture is dedicated to the memory of Dr. John Kent Lewis, professor of medicine and chief of the Stanford Medical Service in San Francisco who died in 1961. Dr. Lewis, with Stanford professors A. W. Hewlett and George D. Barnett, published some of the early work on vascular sounds, exercise and respiration.

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Mailed October 3, 1968.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Paintings by Dr. Joseph P. Kriss, professor of medicine and radiology and director of the Division of Nuclear Medicine at Stanford University School of Medicine, will be exhibited next month at the Los Robles Gallery in Palo Alto.

The exhibit of 14 canvases and 12 drawings will run from Oct. 7 to Nov. 5.

This is the fourth one-man show by Dr. Kriss and represents his work over the past two years. Dr. Kriss has previously exhibited at the Stanford Art Gallery in 1963, and at the Los Robles Gallery and the Encina Gallery on the Stanford campus in 1966.

A self-taught artist, Dr. Kriss has been painting for over 25 years. His works, done in oil pigments, range from realistic to abstract and tend to be large in size. He describes the stimuli for his abstractions as both real and imaginary scenes or events and objects of nature.

Many of Dr. Kriss's paintings are in private collections in the Bay Area, New York, Philadelphia, and Baltimore. Two of his largest abstractions are owned and displayed by Syntex Laboratories.

In addition to his painting Dr. Kriss is noted for his research contributions in the fields of nuclear medicine and radiation therapy. He has been associated with the School of Medicine since 1948.

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MAILED October 2, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415:321-5310

Editors: Copies of STANFORD, M.D. are available on request.

STANFORD--Young women medical students say they have found the atmosphere free of anti-feminine discrimination at Stanford University.

Comments from women in the second-year class, the class which has the largest percentage of women in the history of the University's School of Medicine, are the subject of a feature story in a current issue of STANFORD, M.D., magazine of the Stanford Medical Alumni Association.

Some of the women said that, on applying, they had feared anti-feminine bias from the admissions committee, but were reassured by the equal chance they were given on the basis of their accomplishments and potential. Patty Tackabury, a California girl who did her undergraduate work at Stanford University as well, thought bias from male students might affect her once she entered the School of Medicine. But she has decided,". . .student relationships are natural and untainted by prejudice or competition."

Assessing the attitudes of faculty members toward the lady doctors-to-be, Nora Stephens, who has a doctor husband and one child, says "A few instructors look down on women and single them out for occasional baiting, but in general they assume that our intelligence and seriousness of purpose is equal to that of the men."

To say that the picture for women in medicine hasn't always been so rosy would be the understatement of the year.

In tandem with "Young Women in Medicine," STANFORD, M.D. carries an article which has a slightly different flavor. It is a personal memoir of her career by San Francisco woman doctor Ann Purdy, an emeritus Stanford clinical professor of pediatrics.

When Dr. Purdy applied for admission to McGill Medical School fifty years ago, she was promptly refused. "Scuttlebutt from Montreal Women's Club had it that the medical faculty had threatened mass resignations if a woman was admitted," she says in the magazine.

She tells of going instead to Johns Hopkins, "into which women had been bought on a ten percent quota by a wealthy Baltimore woman for half a million dollars when the Medical School was hard up."

Dr. Purdy is well known in medical circles for the Pediatric Cardiac Clinic she conducted at Stanford University from 1931 to 1952. Her work made possible the earliest successful West Coast heart operations on children.

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These days, one of the major reasons girls give for choosing Stanford University Medical School is that its new curriculum allows a flexible timetable for obtaining the M.D. degree. Students can suit themselves in planning the number of years they will spend completing the required courses.

Highly specialized work in a particular medical field is usually reserved for the internship-residency period after the M.D.; but, meanwhile, there is more free time to pursue other academic interests.

In reply to the "why Stanford for you?" question, Texas-born Barbara Anne Carroll said "the extensive and liberal concepts of medical education" had attracted her. Since becoming a medical student, she has taken advantage of nonscientific courses and lectures on the campus, has spent time writing, and is training her black Arabian horse! She is also involved in hematology research.

But having chunks of free time available during student days is no guarantee of enough time to do everything later on, when the trick will be to handle what the magazine calls "the triple role of doctor, wife and mother."

What are the girls' views about being able to play all three parts?

Barbara Manroe, another Texan, who comes from a family of five generations of doctors, put forth her feelings clearly. "For any career woman who wants her marriage to be meaningful and successful, the priorities must be . . . husband and family first, and occupation second. Any woman in medicine faces a very difficult decision . . . . . if she believes that the only way to be a good doctor is to hold it as more valuable than anything else, then she should choose not to marry . . . . . (but) if I ever come to feel that I cannot be a good doctor and a successful mother and wife, then I will give up medical school."

Virtually all of the girls were optimistic about managing the three roles, however. And their optimism is probably a natural outgrowth of the fact that they already have numerous activities in widely ranging fields. Margaret Keenan, married to a doctor, majored in English literature at the University of Minnesota and minored in chemistry. Her extra time now is spent on courses in modern dance and psychiatry, and more literature courses. She has also worked on a study of suicide attempts.

"The roles of wife, mother, and doctor need not be conflicting;" says Mrs. Keenan, "A woman in medicine must maintain the flexibility to be able to respond to the unique demands of each role as it is necessary."

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Mailed November 26, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Dr. Sherman M. Mellinkoff, dean of the University of California School of Medicine at Los Angeles, will be the featured speaker at the Stanford Medical Alumni Association's annual Big Game meeting Friday (NOV. 22).

He will speak on "The Meanings of Medical Student Unrest" during the afternoon program which will be held at the Fremont Hills Country Club in Los Altos Hills.

Dr. Mellinkoff, who received both his A.B. (1941) and M.D. (1944) degrees from Stanford University, has been dean and professor of medicine at UCLA since 1962. A noted gastroenterologist and teacher, Dr. Mellinkoff has more than 100 publications to his credit in his specialty field and in medical education.

Following registration and welcoming remarks at the Medical School, clinical presentation will be given by members of the faculty, beginning at 9:45 a.m. in Room M106. Scheduled are "Facial Signs of System Disease," by Dr. Eugene M. Farber, professor and head of the Department of Dermatology; "Dr. Jekyll and Mr. Hyde in the Sleep Lab," by Dr. William C. Dement, professor of psychiatry; and "The Prevention of People: A Study in Clinical Pharmacology," by Dr. Sumner M. Kalman, professor of pharmacology.

The ladies' program will feature a guided tour of the Hoover Institution and Memorial Church, leaving the Medical School at 9:30 a.m. and returning at noon.

Luncheon for alumni, wives, and faculty will be held at 12:30 p.m. at the Fremont Hills Country Club.

A report on the state of the Medical School by Acting University President Dr. Robert J. Glaser will lead off the afternoon program at 1:30 p.m. Remarks by Dr. Mellinkoff will conclude the day's activities.

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Mailed 11-18-68.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

Science Writers: Copies of papers presented at the symposium on violence will be available at the Stanford University Medical Center News Bureau. The symposium will be held Saturday, November 16, from 9 a.m. to 5:30 p.m. in Room M106 of the Medical School.

(ADVANCE FOR PM RELEASE SATURDAY, NOVEMBER 16, 1968)

STANFORD--For thirty years, a clear majority of the American people have supported legislation not merely banning the mail-order sale of guns but requiring that they be registered, a Stanford psychiatrist reported today.

Dr. Edison Trickett, speaking at a violence symposium at Stanford University School of Medicine, cited Gallup Polls since 1938, which indicate that "for three decades at least two-thirds, and more often about 75 per cent, of the American people have favored more stringent requirements of registration or licensing of guns or gun owners."

The 25 to 30 per cent of the American people who oppose stricter gun control are "politically, psychologically, and demographically a 'mixed bag,' " said Dr. Trickett, a postdoctoral fellow in psychiatry.

"Thus in the black ghetto, the Black Panthers see guns as necessary for survival and registration or licensing tantamount to surrender or acquiescence to what they feel is an intolerably unjust situation. In Dearborn, Michigan, where many middle and upper-middle-class housewives have reportedly been arming themselves, protection against potential rioting and looting is also the issue.

"But the most powerful and easily identifiable organized group consistently opposing the enactment of legislation--especially that referring to registration or licensing--is the National Rifle Association," Dr. Trickett said.

He said opponents of increased gun controls argue that such controls would infringe upon our constitutional right to bear arms.

"This is essentially an ideological argument. One of the questions worthy of investigation is the symbolic meaning of 'liberty' and 'rights' as they are linked with gun legislation and what appears to be concern that we are losing control over our destiny."

"The gun is often seen as personal protection and security against life-threatening or property-threatening dangers and destructive evil forces," Dr. Trickett said. "It is reasonable to assume that this argument against stricter gun laws may be contingent on feelings of mistrust, helplessness, and a lack of external support in the face of possible danger."

One point that merits serious study is the potential cost of such individualized protection as gun ownership, he said. Such costs include harm to innocent bystanders, the tragedy of accidental shootings, and the increased danger of impulsive violence which currently accounts for over 90 per cent of all homicides, most of which are committed among family and friends.

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"An ironic twist in the killing of Robert Kennedy is instructive," Dr. Trickett said. "The allegedly used by Sirhan Sirhan was originally purchased by a white man for protection after the Watts riots of 1965. In time the gun passed through other hands on the way to Sirhan.

"In this way the instrument of one man's presumed defenses became the very instrument for killing another American."

Another question that needs critical evaluation is whether or not gun control legislation is effective in reducing crime and violence, he said. Associated with this question is the advocacy of stronger and even cruel punishment of criminals who have used guns in their crimes.

"The assumption that more severe punishment would serve as a deterrent remains undocumented," Dr. Trickett stressed. "In fact the evidence that more than 75 per cent of the homicides and 66 per cent of the criminal assaults occur among family and friends suggests the assumption that only hardened criminals commit crimes involving guns is questionable."

A considerable amount of the opposition to stricter gun laws comes from those concerned about being restricted and deprived of hunting and gun collecting privileges, "While a law requiring registration would indeed represent an inconvenience, it would deprive no one of the hunting life unless he was a convicted felon, addict, or other person specifically excluded by the most recent law," Dr. Trickett pointed out.

Another issue is that stricter gun legislation would diminish the revenue collected from ting license fees and sales taxes on guns and ammunition.

"Economic arguments seem to be a factor," the Stanford psychiatrist said. "Such antagonists of gun legislation as the National Rifle Association and the National Shooting and Sports Foundation are supported extensively by gun and ammunition manufacturers."

"If effective and mutually satisfactory resolution of the gun problem is to occur, opposing groups need to bring the hidden issues into the open, sort out the rational and irrational components of arguments, and provide each other with a means of reducing distortions and increasing trust. As the situation is now, both sides of the controversy damage their arguments by selected and distorted use of statistics," Dr. Trickett concluded.

Another speaker at the symposium, Dr. J. Chris Gillin, reported that the Committee on Violence at Stanford recommended the registration of all guns.

He said: "Since guns are involved in so many deaths and crimes, clearly the practical thing is to control guns and see if this legislation reduces death or crime rates. Registration of guns would enable proper studies to be done. Registration of guns should not be discriminatory against gun owners; it offers the opportunity for education about the risks of gun ownership."

"Just as we advertise the dangers of drinking and driving, we need to alert the public to possible dangers of gun ownership."

In comparing deaths due to firearms in the United States with those in other advanced nations, this country leads not only in homicides but suicides and accidents, Dr. Gillin pointed . Last year guns were involved in the death of over 21,000 civilians in the United States--00 homicides, 11,000 suicides, and 2,800 accidents.

"Our homicide-by-gun rates is 35 times that of Germany, Denmark and England and 7 times that of Canada and France," he noted.

Co-author of Dr. Gillin's presentation was Dr. Frank M. Ochberg. Co-authors of the report by Dr. Trickett were Dr. David M. Daniels, Dr. Jared R. Tinklenberg, and Dr. Jay Jackman.

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END OF ADVANCE FOR PM RELEASE SATURDAY, NOVEMBER 16, 1968. Mailed 11-14-68.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Science Writers: Copies of papers presented at the symposium on violence will be available at the Stanford University Medical Center News Bureau. The symposium will be held Saturday, November 16, from 9 a.m. to 5:30 p.m. in Room M106 of the Medical School.

(ADVANCE FOR PM RELEASE SATURDAY, NOVEMBER 16, 1968)

STANFORD--Two Stanford University psychiatrists today recommended that presidents and presidential candidates be prohibited by law from close contact with large crowds when their presence has been publicly announced in advance.

The psychiatrists, Dr. Robert L. Taylor and Dr. Alfred E. Weisz, told a symposium on violence at Stanford University School of Medicine that "unnecessary exposure of presidents and presidential candidates creates a situation in which the inadequate, delusional would-be assassin should have relatively little difficulty in carrying out his task."

"Mixing with the people is a strongly embedded concept in the political tradition of the United States," they said, "but it has also proved to be an accomplice to assassination.

"More effective use of mass media represents a partial solution to the unprotected exposure of political figures. But protection is virtually impossible without the cooperation the man to be protected."

Drs. Taylor and Weisz explained they are not arguing "for a reverse paranoia that results in the fear of an assassin at every street corner nor for the advisability of restricting public figures only to electronic communication. We do suggest that presidents and presidential candidates be prohibited by law from close contact with large crowds in places when their presence has been publicly announced in advance."

In discussing the history of presidential assassination in the United States, Drs. Taylor and Weisz emphasized the striking, fatalistic stance of victims such as Lincoln, Garfield and both Kennedys.

Robert Kennedy stated a view common to these four men, the psychiatrists said. They quoted the late senator as having said: "There is no sense in worrying about those things. If they want you, they can get you."

On another occasion Kennedy was quoted as having said, "I play Russian roulette every time I get up in the morning. But I just don't care. There is nothing I could do about it anyway."

This fatalistic speculation may paradoxically be a personally comforting defense against the real danger involved in being a controversial political leader, Drs. Taylor and Weisz —d. "It is as though being aware of the threat and consistently pointing it out reduces the danger."

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The psychiatrists said that nine men have been involved in the eight known attempts on [illegible]es of American presidents. They were all Caucasian males ranging in age from 24 to 40. All were smaller than average in stature. With the exception of John W. Booth, Lincoln's assassin, they were unknowns, coming out of obscurity to attempt political murder.

"Each of these men had some cause or grievance that appeared obsessional, if not delusional, in intensity," the Stanford psychiatrists said.

Richard Lawrence, the first man to attempt the assassination of an American president, had suffered striking personality changes marked by unprovoked fits of laughing, crying and violence. By the time of the attempt, Lawrence's world had become a delusional one in which he was Richard III of England to whom the United States owed large sums of money. He held Andrew Jackson personally responsible for this debt.

John Booth came from a distinguished theatrical family in which the symptoms of manic-depressive illness occurred frequently. Charles Guiteau, who shot and killed President Garfield, described himself as the employee of Jesus Christ and Company. Leon Czolgosz had developed a delusion that people were trying to poison him three years before he shot McKinley.

Joseph Zangara, who made an unsuccessful attempt on Franklin D. Roosevelt's life, was a solitary bachelor who often rented two adjoining rooms to avoid others moving in. He had a fear of cold night air and was plagued by chronic stomach complaints for which doctors could [illegible]d no cause.

Lee Harvey Oswald was examined at the age of 13 by a psychiatrist at the request of the Bronx Children's Court for a truancy violation. The psychiatric report characterized Oswald as guarded, secluded, suspicious. His diagnosis was incipient schizophrenia with strong paranoid overtones and potential dangerousness.

"The inadequacy and distractability that have characterized the assassins suggests that establishing certain administrative blocks would be one reasonable approach to the problem of prevention," Drs. Taylor and Weisz said.

One such block, for example, is to require a waiting period between a citizen's announced intention to own and the actual possession of lethal weapons.

Another approach is to study the attitudes toward presidential protection to clarify the role of the victim in assassination.

"French President Charles de Gaulle has survived three assassination attempts over the past few years," they pointed out. "What are the various protection systems employed? Answers to these questions might add useful information bearing on the protection of American presidents."

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END ADVANCE FOR PM RELEASE SATURDAY, 11-16-68.

Mailed 11-14-68.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

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(ADVANCE FOR PM RELEASE SATURDAY, NOVEMBER 16, 1968)

STANFORD--Nonviolence or "soul power" is an effective alternative to violence because instead of stimulating the adversary to fight back, it inhibits and demoralizes him, a Stanford University psychiatrist believes.

"The dynamism of nonviolence consists in its appeal to the opponent's conscience," Dr. Frederick W. Ilfeld, Jr. told a symposium on violence Saturday at the Stanford University School of Medicine.

The symposium was sponsored by the committee on violence of the Department of Psychiatry formed after the assassination of Sen. Robert F. Kennedy "in the hope of contributing to the understanding and reduction of violence in America."

He listed the key psychological ingredients in the nonviolent process--conscience, incompatible response, release of aggressive energy and masculinity.

"Nonviolence liquidates the nonviolent person's guilt feelings while at the same time activating the opponent's guilt," said Dr. Ilfeld. "To the degree that the nonviolent person acts toward the opponent in a caring, respectful manner, not only has he brought the other's guilt to consciousness, but he has made him accept this guilt."

He explained that the term "incompatible response" refers to nonviolent behavior which by its very nature inhibits a violent response.

"It is innately hard to attack someone who refuses to fight back but instead voices his concern for the attacker," he said.

He also said nonviolence provides an outlet for aggression for "it is a highly active process for the participant and monopolizes...much of his aggressive energy. It is an aggressive act but it is not an act of physical aggression."

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"The practice of nonviolence," said Dr. Ilfeld, "has broken the psychological link between masculinity and violence. Participants have shown to gain a heightened feeling of manliness, a sense of moral superiority over their opponents, and increased self-respect."

He called nonviolence "a strategy which can claim all the benefits of violence without any of its limitations."

These include achieving manliness without corrupting oneself or harming others; engendering group solidarity without alienating the outsider; providing a "danger signal" to society without the stimulation of further opposition or oppression; and most important, producing meaningful social change.

In discussing strategies for bringing about social change, Dr. Ilfeld suggested:

--increasing government responsiveness to citizen needs.

--supporting the right of people to choose their government.

--establishing effective grievance mechanisms to facilitate communication between people and the government.

--preventing stagnation of the political system by enforcing retirement or office rotation of politicians.

"Rigid systems which suppress dissent are more prone to the emergence of radical cleavages and violent forms of conflict," Dr. Ilfeld said. "We must develop ways of utilizing social protest for meaningful social change, rather than suppressing or ignoring it and risking the inevitable explosive consequences."

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END ADVANCE FOR PM RELEASE SATURDAY, NOVEMBER 16, 1968.

Mailed 11-14-68.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

Science Writers: Copies of the papers presented at the symposium on violence will be available at the Stanford University Medical Center News Bureau. The symposium, presented by the committee on violence of the Department of Psychiatry, Stanford University School of Medicine, will be held Saturday, November 16, from 9 a.m. to 5:30 p.m. in Room M106 of the Medical School. The sessions are open to the press and public.

(ADVANCE) FOR PM RELEASE SATURDAY, NOVEMBER 16, 1968

STANFORD--Every American adult, teenager, and child today is attending a "school of violence," a Stanford University psychologist said today.

Dr. Alberta E. Siegel told a symposium on violence at Stanford University School of Medicine that violence is widely portrayed on television and in the movies, both in fictional dramas and in news reports, and these media thereby "provide a school of violence for Americans."

She reminded her audience that social learning occurs not only through reward and punishment, but also by observation and imitation.

"Like other primates, man learns by watching," Dr. Siegel said. "People watch not only the social behavior of other people around them, but also the behavior of individuals portrayed in the mass media--especially movies and TV."

Color movies and television are especially compelling, noted the Stanford psychologist, because they appeal to man's two keenest senses, vision and audition, the senses through which he learns most efficiently.

"To the extent that television and film viewers accept as authentic the presentations they witness on the mass media," said Dr. Siegel, "they incorporate the behavior learned into their own repertoire of behavior, available to be performed if the relevant situations arise in their own lives.

"The distinction between fiction and reality on TV is a difficult one for normal adults to maintain, and is even more difficult for disturbed, deprived or unsophisticated adults."

"For young children, the distinction may not exist at all," she added.

Dr. Siegel is an associate professor of psychology in the department of psychiatry of the medical school. Her remarks were made at an all-day symposium on violence which highlighted reports of the committee on violence of the department of psychiatry.

The committee, chaired by Drs. David N. Daniels and Frank M. Ochberg, was formed after the assassination of Sen. Robert F. Kennedy "in the hope that as scientists, the committee members could contribute to the understanding and reduction of violence in America."

The findings will be made available to the President's Commission on Violence and to the public in a book to be published in the fall, 1969.

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END ADVANCE RELEASE FOR 11-16-68.

Mailed 11-14-68.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

Science Writers: Copies of the papers presented at the symposium on violence will be available at the Stanford University Medical Center News Bureau. The symposium, presented by the committee on violence of the Department of Psychiatry, Stanford University School of Medicine, will be held Saturday, November 16, from 9 a.m. to 5:30 p.m. in Room M106 of the Medical School. The sessions are open to the press and public.

(ADVANCE FOR PM RELEASE SATURDAY, NOVEMBER 16, 1968)

STANFORD--The collective violence of recent urban Negro riots was caused primarily by males who tend to be the young and better educated Negroes, a Stanford University psychiatrist said today.

The rioters lack confidence that years of educational effort on their parts will pay off in terms of good jobs and fast upward mobility, and they attribute their condition to white racism, he said.

Dr. Thomas E. Bittker based his remarks on studies done since the big racial flare-ups of last year. He spoke at an all-day Stanford Medical Center Symposium on violence.

He said that collective violence apparently was chosen as a tactic in those instances, because the alternatives, non-violent and non-group tactics, "have become increasingly tedious and disillusioning for a sizable minority, currently about 15 percent of the black community."

The studies also indicate, said Dr. Bittker, that violence provides a sense of competence to the agitators which they do not experience with other forms of self-expression, and that violent tactics may make them feel more masculine and self-respecting. Hence an ideology, or romance, of violence has emerged, which, by rewarding violence, may lower the threshold of provocation.

"...we can suspect that violent gestures as they are practiced become learned; and as they become learned, they become increasingly relied upon in subsequent encounters. Thus, the most unfortunate repercussion of collective violence is the continuation of the violent process itself," he said.

However, he cited the existence of a desire in the Negro community for cultural identity. "While it (the desire) sometimes occurs in forms which seem impractical, on the whole it appears to be a positive impulse...which may, in the long run, contribute substantially to a more genuinely equal relationship between the races," he said.

Although he emphasized the shortcomings of collective violence, he also said that as a "catalyst to inter-group dialogue," it may contribute to society by awakening a "previously inattentive establishment to the needs of an aggrieved group."

He added that conclusions about a developing trend toward violence could be incorrect. "Rather than a trend toward violence, what we might be observing is the increased susceptibility of youth to novelty," he said.

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END ADVANCE FOR PM RELEASE FOR 11-16-68.

Mailed 11-14-68

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

EDITOR'S NOTE: Members of the press from the Bay Area are asked to indicate on the enclosed self-addressed post card if they plan to attend the violence symposium. A press conference with participants of the symposium will be held at 12:15 p.m. in Room M112 of the School of Medicine.

Violence will be the topic for an all-day symposium Saturday, Nov. 16, at Stanford University School of Medicine.

The symposium, presented by the Committee on Violence of the Department of Psychiatry at Stanford, will begin at 9 a.m. in Room M106 of the Medical School. It is open to the public. Co-chairmen are Dr. David N. Daniels, assistant professor of psychiatry, and Dr. Frank M. Ochberg, a resident in psychiatry.

"The Committee on Violence was formed after the assassination of Senator Robert F. Kennedy in the hope that as scientists, the committee members could contribute to the understanding and reduction of violence in America," Drs. Daniels and Ochberg said.

Reports and recommendations to be presented at the symposium will be submitted to the Commission on the Causes and Prevention of Violence appointed by President Lyndon B. Johnson and headed by Dr. Milton Eisenhower.

The morning session will be opened with a welcome by Dr. David M. Hamburg, professor and executive head of the Department of Psychiatry. Presentations to follow include:

9:10 Mass Media and Violence by Dr. Alberta E. Siegel, associate professor of psychology in psychiatry, with discussion by Dr. Albert Bandura, professor of psychology.

9:55 Biological Aspects of Violence by Dr. R. Charles Boelkins, research associate, with discussion by Dr. Sherwood L. Washburn, professor of anthropology at the University of California, Berkeley.

11:00 Firearms Control and Violence by Dr. J. Chris Gillin, resident in psychiatry.

11:20 The Gun Law Controversy by Dr. Edison Trickett, postdoctoral fellow, with discussion by Professor John Kaplan from the Stanford Law School.

The afternoon presentations will begin at 1 p.m. with a report on The Phenomenon of Assassination by Dr. Robert Taylor, resident in psychiatry. Also scheduled for the afternoon are:

1:40 The Choice of Violence for Resolution of Conflict by Drs. Frederick W. Ilfeld and Thomas Bittker, residents in psychiatry.

2:30 Mental Illness and Violence by Dr. George D. Gulevich, assistant professor of psychiatry.

Following the reports, a summary of the presentations and recommendations will be given by Dr. Thomas A. Gonda, professor of psychiatry and associate dean of the Medical School, and acting director of Stanford University Hospital.

At 4:30 p.m., small group discussions will be held to further explore the various aspects of violence discussed during the day. The audience will be invited to participate.

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Mailed 11-11-68.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415:321-5810

FILE COPY

City Editors: Please, check with the local faculty member listed below to confirm Dr. Aguilar's visit time on the campus.

ALBUQUERQUE, N.M.--Edicational opportunities for Mexican-Americans at Stanford University School of Medicine will be discussed Saturday afternoon (December 21) on the University of New Mexico campus in Albuquerque by a Stanford University neurosurgeon.

Dr. Jose Aguilar, assistant professor of surgery and chairman of the minority search committee at Stanford University School of Medicine, Stanford, Calif., will discuss a new Stanford program which will enable students with disadvantaged educational backgrounds to attend medical school.

The program will go into effect September, 1969, and Stanford is now conducting a search to identify deserving candidates from minority groups for admission to its medical school.

"The faculty senate of the School of Medicine," said Dr. Aguilar, "has created an unusual opportunity for undergraduate students from the population of Mexican-Americans in the Southwest to attend medical school.

"It is incumbent upon leaders in the community and also universities in the Southwest to help us in our search for students wishing to take advantage of this opportunity to become physicians."

Dr. Aguilar said that financial assistance will be provided these students to enable them to complete their studies at Stanford.

Students wishing to learn more about educational opportunities in medicine at Stanford University are urged to make an appointment with Dr. Aguilar by contacting Dr. Robert S. Stone, dean, School of Medicine, University of New Mexico, Tel. 277-2321.

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Mailed December 17, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

City Editors: Please, check with the local faculty member listed below to confirm Dr. Aguilar's visit time on the campus.

LAS CRUCES, N.M.--Educational opportunities for Mexican-Americans at Stanford University School of Medicine will be discussed Saturday morning (December 28) at the New Mexico State University campus, University Park, N.M., by a Stanford University neurosurgeon.

Dr. Jose Aguilar, assistant professor of surgery and chairman of the minority search committee at Stanford University School of Medicine, Stanford, Calif., will be on the campus to interview prospective candidates for a new program for students from disadvantaged minorities who wish to become physicians.

The program will go into effect September, 1969, and Stanford is now conducting a search to identify deserving candidates from minority groups for admission to its medical school.

"The faculty senate of the School of Medicine," said Dr. Aguilar, "has created an unusual opportunity for undergraduate students from the population of Mexican-Americans in the Southwest to attend medical school.

"It is incumbent upon leaders in the community and also universities in the Southwest to help us in our search for students wishing to take advantage of this opportunity to become physicians."

Dr. Aguilar said that financial assistance will be provided these students to enable them to complete their studies at Stanford.

Students wishing to learn more about educational opportunities in medicine at Stanford University are urged to make an appointment with Dr. Aguilar by contacting Dr. William Dick-Peddie, head of the Department of Biology, New Mexico State University, University Park, N.M., Tel. 646-3611.

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Mailed December 17, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

City Editors: Please, check with the local faculty member listed below to confirm Dr. Aguilar's visit time on the campus.

LAS VEGAS, N.M.--Educational opportunities for Mexican-Americans at Stanford University School of Medicine will be discussed Monday morning (December 23) at New Mexico Highlands University by a Stanford University neurosurgeon.

Dr. Jose Aguilar, assistant professor of surgery and chairman of the minority search committee at Stanford University School of Medicine, Stanford, Calif., will be on the campus to interview prospective candidates for a new program for students from disadvantaged minorities who wish to become physicians.

The program will go into effect September, 1969, and Stanford is now conducting a search to identify deserving candidates from minority groups for admission to its medical school.

"The faculty senate of the School of Medicine," said Dr. Aguilar, "has created an unusual opportunity for undergraduate students from the population of Mexican-Americans in the Southwest to attend medical school.

"It is incumbent upon leaders in the community and also universities in the Southwest to help us in our search for students wishing to take advantage of this opportunity to become physicians."

Dr. Aguilar said that financial assistance will be provided these students to enable them to complete their studies at Stanford.

Students wishing to learn more about educational opportunities in medicine at Stanford University are urged to make an appointment with Dr. Aguilar by contacting Dr. Lora Shields, pre-med advisor, New Mexico Highlands University, Tel. 425-7511.

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Mailed December 17, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

City Editors: Please, check with the local faculty member listed below to confirm Dr. Aguilar's visit time on the campus.

EL PASO, TEXAS--Educational opportunities for Mexican-Americans at Stanford University School of Medicine will be discussed Friday afternoon (December 27) on the University of Texas campus by a Stanford University neurosurgeon.

Dr. Jose Aguilar, assistant professor of surgery and chairman of the minority search committee at Stanford University School of Medicine, Stanford, Calif., will be on the campus to interview prospective candidates for a new program for students from disadvantaged minorities who wish to become physicians.

The program will go into effect September, 1969, and Stanford is now conducting a search to identify deserving candidates from minority groups for admission to its medical school.

"The faculty senate of the School of Medicine," said Dr. Aguilar, "has created an unusual opportunity for undergraduate students from the population of Mexican-Americans in the Southwest to attend medical school.

"It is incumbent upon leaders in the community and also universities in the Southwest to help us in our search for students wishing to take advantage of this opportunity to become physicians."

Dr. Aguilar said that financial assistance will be provided these students to enable them to complete their studies at Stanford.

Students wishing to learn more about educational opportunities in medicine at Stanford University are urged to make an appointment with Dr. Aguilar by contacting Dr. James Reeves, pre-med advisor, University of Texas, El Paso, Tel. 542-5629.

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Mailed December 17, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Dr. Paul L. Wolf has been appointed associate professor of pathology at Stanford University School of Medicine and director of the Clinical Laboratories at the Medical Center.

He comes to Stanford University from Wayne State University, where he was professor of pathology, and chief of the clinical pathology course and the clinical laboratory. He also served as director of experimental pathology for the Detroit Institute of Cancer Research.

Dr. Wolf is a native of Michigan. He obtained the B.S. there at Wayne State in 1948, and the M.D. from the University of Michigan in 1952.

He and his wife have three children. They are living in Stanford.

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Mailed December 12, 1968.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--At Stanford University School of Medicine the office for Student Affairs will be headed by two associate deans.

Dr. Bernard W. Nelson has been promoted to associate dean in that office, and Dr. William P. Creger, formerly head of the Division of Hematology, is joining him.

Dr. Nelson has responsibility for the administrative aspects of implementing the new curriculum and for financial assistance to medical students, and he also serves as chairman of the admissions committee. He is concurrently assistant professor of medical microbiology.

Dr. Nelson replaces Dr. LeRoy A. Pesch, who left to become dean of the School of Medicine and director of University Hospitals at the State University of Buffalo.

Dr. Creger's area of responsibility, as outlined by Dr. Robert J. Glaser, vice-president for medical affairs at Stanford University and dean of the School of Medicine, lies in "strengthening the advising of students in regard to their clinical training, with special emphasis on internships."

This will be a half-time appointment for Dr. Creger, as he will continue clinical teaching in medicine and hematology.

Dr. Nelson has been a member of the Stanford University School of Medicine faculty since 1965, and Dr. Creger since 1949.

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Mailed 12-11-68.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 321-5310

FILE COPY

STANFORD--Heart transplant patient Georgette Larson, 54, of San Jose, died Monday at 10:29 p.m. at Stanford University Hospital.

Mrs. Larson, who received a transplanted heart on Oct. 5, was being treated for a liver infection. Her condition became critical over the weekend when she contracted pneumonia.

Mrs. Larson is survived by her husband, Otto, and a daughter, Mrs. John Thielmann of San Jose.

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12-10-68

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

(ADVANCE) FOR RELEASE THURSDAY, JANUARY 30, 1969

CARMEL, CALIFORNIA -- Early experience with heart transplants suggests that adequate function can be maintained in the new heart and that heart failure due to acute rejection can be reversed, a Stanford University research team reported today.

The team's report stressed the following points:

--a transplanted human heart responds to the need for more blood during exercise as does a normal heart;

--in addition to the electrocardiogram, there are other sensitive methods for detecting early rejection;

--rejection detected early can be reversed before there is damage to the transplanted heart;

--one of the major problems now being tackled is how to obtain maximum effectiveness from immunosuppressive drugs without altering the patient's resistance to infection.

The Stanford report, titled "Hemodynamic Findings after Cardiac Transplantation," was presented by Dr. John S. Schroeder at the 22nd Annual Meeting of the Western Society for Clinical Research in Carmel. Co-authors of the report are Drs. Edward G. Stinson, Eugene Dong, Jr., Norman E. Shumway, and Donald C. Harrison.

Their work was supported by the Division of Research Facilities and Resources of the National Institutes of Health.

"Evidence obtained from studies of four patients demonstrates that the transplanted heart functions adequately to support the circulation during mild and moderate exercise," said Dr. Schroeder. "Cardiac outputs were measured on four patients in the postoperative period and were found to be within normal limits."

He stressed that acute rejection can now be detected at an early stage. In addition to the changes in the voltage on the electrocardiogram, changes in the electrical axis of the heart and the occurrence of atrial arrhythmias also predict early rejection.

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Dr. Schroeder revealed that Stanford heart specialists are using indirect methods to detect changes in the stiffness of the wall of the heart.

"These changes in stiffness occur early and correspond quite well to acute rejection," he said. "In essence, it is possible now by a number of methods to detect the occurrence of early rejection in the transplanted heart."

He explained that a theory has been developed regarding the mechanism of early rejection which can be detected by the phonocardiogram.

According to the theory, during early acute rejection episodes the wall of the heart is infiltrated with edema fluid and round cells. This accounts for the stiffness of the wall which can be recorded from the pulses and phonocardiograms.

"Unfortunately," Dr. Schroeder said, "it is not possible to detect other changes in heart function by indirect means at the time rejection occurs. It seems likely that during early rejection the heart continues to function quite well in pumping blood supply to the body."

Detection and treatment of early acute rejection is considered important in beginning immunosuppressive drug treatment at the optimum time to prevent host antibodies from destroying the graft.

Since no reliable method has been available to monitor rejection in the human patient, surgeons have walked a tightrope between too much immunosuppressive drug treatment and not enough. The former leads to controllable or difficult-to-control infections. Not enough leads to rejection.

It is hoped that if the proper immunosuppressive drug is introduced in sufficient quantity before the first full-blown rejection episode and in later crises, long-term survival of the patient may be achieved, he said.

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END ADVANCE FOR RELEASE THURSDAY, JANUARY 30, 1969.

MAILED JANUARY 28, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

(ADVANCE) FOR RELEASE WEDNESDAY, JANUARY 29, 1969

CARMEL, CALIFORNIA -- An important technical advance that will expedite diagnosis of heart disease was reported today by a Stanford University internist and specialist in nuclear medicine.

The new diagnostic tool, known as radioisotopic angiocardiography, utilizes a scintillation camera and accessories which enable one to record and display photographically the movement of radioactive material as it flows through the heart and lungs. The radioactive drug is given to the patient by intravenous injection. There is an audio-video tape recorder which stores the camera information for subsequent replay.

Optimal images of the heart can be obtained by playing back the video-taped pictures at selected time intervals and adjusting controls on the television monitor and on a Polaroid camera which records on film the final result from the monitor.

"The new technique," said Dr. Joseph P. Kriss, "is less traumatic to the patient than conventional methods, does not require hospitalization, can be performed in two to three minutes and involves a low radiation dose to the patient.

"It has applicability as a diagnostic screening procedure for patients with known or suspected heart disease.

"At present we regard the new procedure as a complement to existing diagnostic tools, but we anticipate that in the future in some cases the need to perform the more complex diagnostic procedures will be eliminated. We are particularly interested in exploring its applicability in children."

Conventional angiocardiography permits X-ray viewing of the heart and requires that radio-opaque material be injected through a catheter (a long, thin tube) which has been passed into one of the chambers of the heart. This procedure requires more time, and the patient is usually hospitalized.

The radioactive drug used in the new procedure is 99^m Tc-pertechnetate, which has a short half-life of six hours.

-more-

"Because of the rapid decay rate of the drug, the radiation dose to which the patient is exposed is less than that incurred by common X-ray procedures," Dr. Kriss explained.

The development of the new method was reported by Dr. Kriss and his associate, Dr. Philip Matin, at the 14th annual meeting of the Western Association of Physicians in Carmel. Dr. Kriss is professor of radiology and medicine, and head of the Division of Nuclear Medicine at Stanford University School of Medicine. Dr. Matin is a fellow in nuclear medicine.

His collaborators in the development and modification of the equipment are Dr. William A. Bonner, research associate, Department of Genetics, and Dr. Elliott Levinthal, senior scientist and director of the Department of Genetics Biomedical Instrumentation Laboratory.

Dr. Kriss' work was financed by the John A. McCarthy Foundation of Los Angeles, and a gift from an anonymous San Francisco donor. Additional funding came from the National Aeronautics and Space Administration which supports the work of the Biomedical Instrumentation Laboratory.

Dr. Kriss reported the diagnosis of a variety of different cardiac abnormalities with the new technique. In two cases unexpected metastatic heart tumors were diagnosed.

Other diagnosed heart abnormalities include septal defects (defects of the dividing walls of heart chambers), insufficiency of mitral and tricuspid valves, aortic and ventricular aneurysms, chamber enlargement, congestive heart failure, and pericardial effusion (presence of fluid in the thin membrane surrounding the heart).

"We can anticipate," Dr. Kriss said, "that the basic method will be applied for diagnostic purposes to other organs--the brain, liver, and kidneys."

Dr. Kriss is a native of Pennsylvania and holds the M.D. degree from Yale. He has been a member of the Stanford medical school faculty since 1948. His work includes numerous contributions to the field of internal medicine and nuclear medicine, particularly studies on the cause, diagnosis, and treatment of thyroid disorders, and use of radioisotopes in diagnosis and treatment of cancer and heart disease.

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END ADVANCE FOR RELEASE WEDNESDAY, JANUARY 29, 1969.

Mailed Monday, January 27, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 321-5310

FILE COPY

STANFORD--Nurseries at Stanford University Hospital have been temporarily closed to new babies because of sporadic instances of mild diarrhea contracted by a few infants in the nursery areas.

Dr. Thomas A. Gonda, acting director of the hospital, said the closing of the nurseries was taken as a voluntary precautionary measure and that the Hospital is working with state health department officials to isolate the cause of the problem.

He said that no babies have been seriously ill. The premature and intensive care nurseries have not been affected by the shut-down.

Cooperative arrangements have been made with Sequoia and El Camino Hospitals to care for Stanford community and physicians' obstetric patients. Stanford will provide house staff services at Sequoia to augment the Sequoia staff as necessary.

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Released
(Telephoned) 1-27-69

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--An award of $4,000 has been presented to the Cardiac Surgery Research Fund at Stanford University School of Medicine by employees of Lockheed Missile and Space Company.

The money was donated from the employees' Bucks-of-the-Month Club, a fund of voluntary weekly payroll deductions. The Club has previously supported birth defects research at Stanford.

Dr. Eugene Dong, assistant professor of surgery and head of the cardiovascular surgical research laboratories said that the funds will be used to aid in the development of antilymphocyte globulin (ALG), a powerful medication which has been used to suppress the body's natural tendency to reject foreign tissue such as a transplanted organ. A centrifuge will be purchased for use in the research project.

"Investigation of the human immune system will have implications not only for heart transplants, but for transplantation of other organs as well as other medical problems such as arthritis," he said.

In accepting the Lockheed employees' award, Dr. Dong pointed out that "contributions from the private sector of our economy have always been of great importance. These contributions are of even greater significance because of the current reduction in federal support for medical research."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

FILE COPY

STANFORD--Stanford University heart surgeons say that Lizeta Guerrero is the littlest baby they have ever performed heart surgery on.

She weighs only one pound, five ounces.

The tiny infant is reported doing well after a delicate operation on Tuesday, January 21, to correct a heart disorder known as patent ductus arteriosus, which affects some premature infants.

Lizeta, daughter of Isaac and Carmen Guerrero of San Jose, was born December 27, two and a half months before her "estimated time of arrival." She was delivered at the Kaiser Foundation Hospital in Santa Clara and brought to Stanford's premature research center the same day. There, physicians determined that the duct between her aorta and her pulmonary artery had failed to close automatically at birth, as it usually does in full-term babies.

In the fetus, this duct allows the blood, already oxygenated by the mother's body, to bypass the lungs. But at birth a change in pressure takes place, causing the lungs to receive the blood. Lizeta's lungs were receiving too much blood because the duct was still open, and she developed congestive heart failure. The duct had to be closed surgically to take the overload off her lungs.

The operation was performed by Dr. Patrick Daily, a member of the cardiovascular surgery team at Stanford.

Chest X rays now show that her lungs can do their work properly. And her pediatrician, Dr. William Gill, says she is doing well in every other respect.

Still, she has a long pull to make--even "regular premies" aren't allowed to go home until they are five pounds and gaining.

Mrs. Guerrero has three other daughters, all of whom weighed in at birth in the eight to nine pound range.

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Mailed January 23, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD - If any kind of treatment can save her little son's eyesight, Mrs. Angela Savino of Italy is willing to try it.

Courage, and the active support of her family and the Italian people have brought her and her three-year-old, Roberto, all the way from the village of Santa Maria a Vico, in the province of Caserta, Italy, to Stanford University Medical Center. The boy has retinoblastoma, a cancer of the eye which affects 1 child in 30,000.

At Stanford, Roberto is under the care of Dr. Frank C. Winter, the ophthalmologist whose experimental treatment of a Berkeley, Calif., child for the same disease was the subject of an article carried in newspapers around the world in September of last year.

An Italian journalist who knows the Savino family noted the similarity between the two cases and pointed it out to Luigi Savino, Roberto's father. By the end of September, the Italian press was in the midst of a campaign to raise the funds necessary to send the boy to the U.S.

The Savino family, and those who sent them money, hoped Dr. Winter could use cryosurgery on Roberto's right, and only sighted, eye. (His left eye had to be removed due to retinoblastoma when he was 19 months old.)

But cryosurgery, a process of repeated freezing of the tumor cells using a tiny probe containing liquid nitrogen, couldn't be employed when the boy arrived at Stanford in late October, because the tumor in his remaining eye had grown too large.

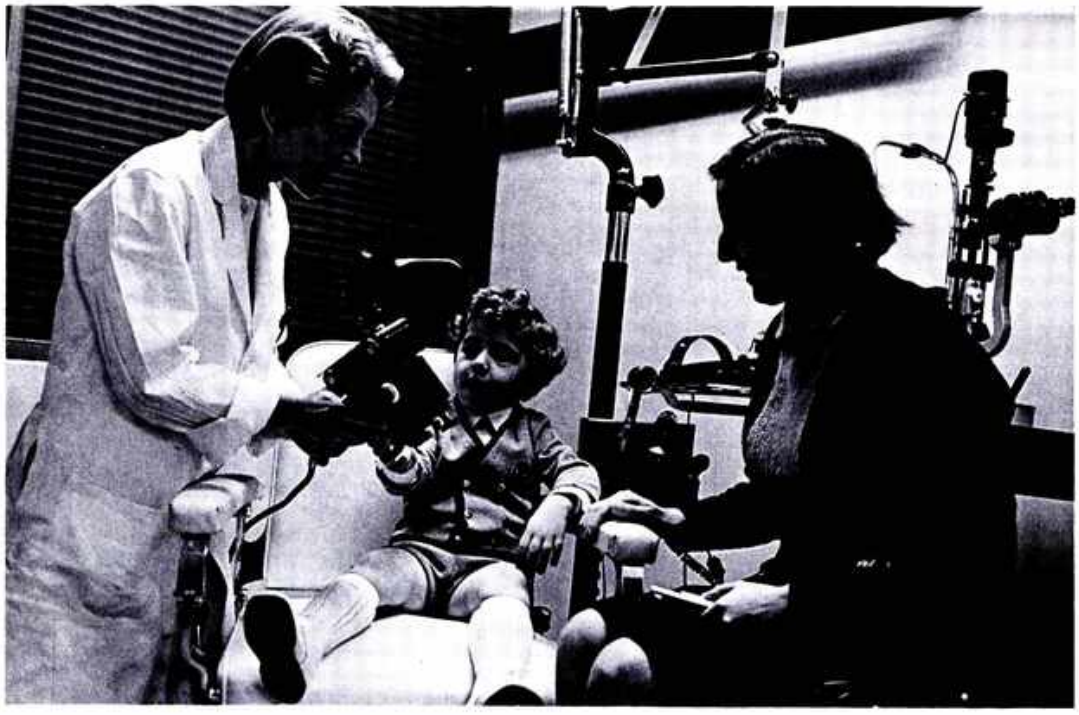
Instead, he had to be treated with the Stanford medical linear accelerator in the hope that radiation would shrink the tumor enough so that cryosurgery could be tried.

By the third week of January, Dr. Winter was able to tell Mrs. Savino that the tumor was about 50 percent smaller, but that it might be as long as two months before he would know whether the tumor had shrunk enough for cryosurgery.

The mother is bravely waiting out the weeks, which have already seen her in a strange country over the Christmas holidays and may keep her far from her husband and two older sons right through Roberto's fourth birthday, Mar. 25. She and the boy are cared for by members of the Italian American community while they are staying in the Palo Alto area. Mrs. Gina Daniel, formerly on the staff of the Italian Consul General of San Francisco, heads up the volunteers who are helping Mrs. Savino with transportation and interpretation.

Roberto entertains himself with the toys well-wishers have given him, including an electric train with a conductor who walks through the cars shouting for tickets. The blond, curly-haired boy is too young to understand all that is happening to him, but his lively personality helps to sustain this major effort in his behalf.

Dr. Winter, who cannot estimate the chance for success with the boy at this time, says, however, "At least now there is some hope, whereas there was no hope before." ### 1/22/69



Suited Italian style, little Roberto Savino reaches out to touch the fundus camera used by technician Gisela Goetsche in his examinations at Stanford University Hospital. The boy's mother, Mrs. Angela Savino, is at the right.

TO: NEWS BUREAU, ROOM C003, STANFORD MEDICAL CENTER, STANFORD, CALIFORNIA 94305

Please send me an 8"x10" glossy print of Roberto Savino.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

FILE COPY

STANFORD--A new complex of three separate temporary buildings is providing needed office space at Stanford University Medical Center.

Housed in the buildings are the School of Nursing, the Division of Physical Therapy, Medical Photography and ACME (Advanced Computer for Medical Research) personnel. The new facilities were opened late last fall.

"The critical space shortages in many departments made it apparent early in 1968 that additional space had to be provided at the Medical Center," says John W. Hornback, resident architect for the School of Medicine. "The problem had to be solved as quickly and as efficiently as possible. The solution was to construct a temporary, yet well constructed facility using prefabricated modules. To minimize expenses, the space was planned for basically non-laboratory departments that do not require elaborate facilities."

It is expected that the buildings, located just south of the Center, will remain for a period of about five years. By that time, the new Basic Sciences Building and the new Stanford University Hospital addition should be constructed, permitting the occupants of the temporary buildings to relocate to permanent quarters.

The total area of the three units, designated Temporary Buildings A, B and C, is approximately 11,200 square feet. This does not include the wooden decking which surrounds the entire complex and connects the three units. Total cost of the project was estimated at $275,000.

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Mailed January 22, 1969.

Picture enclosed.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--The Louis B. Mayer Foundation of Los Angeles has made a gift of $125,000 to the Stanford University School of Medicine to expand its cancer treatment facilities.

Benjamin H. Swig, a foundation trustee and chairman of the Fairmont Hotel Corporation, made the announcement and check presentation earlier this week at Stanford University Medical Center.

The Mayer gift brings the total raised for expansion of Stanford's radiation treatment facilities to $870,000, still short of the $955,000 goal.

When complete, the fund will enable the Medical School to treat the influx of cancer patients now on waiting lists at the Medical Center.

Planned are installation of a third medical linear accelerator, replacement of an old model, and addition of support facilities such as examining and dressing rooms.

"Because of lack of facilities, new patients must often wait four weeks for their first appointment and some people desiring treatment must be sent elsewhere," said Dr. Robert J. Glaser, vice-president for medical affairs and dean of the Medical School.

" Expanded facilities," he added, "would allow for the treatment of 25 to 30 per cent more cancer patients."

Stanford's original radiotherapy facilities were built in 1959 around an experimental high-energy physics device, the linear accelerator. Under the leadership of Dr. Henry S. Kaplan, professor and chairman of the Department of Radiology, Stanford radiologists adapted the supervoltage device for medical application in the treatment of malignant disease.

Today nearly 2,800 treatments for various types of cancer are given each month with existing equipment and personnel operating on a 10-hour basis each day, according to Dr. Kaplan.

The fund drive for the project began last March under the direction of Paul A. Bissinger, Sr., prominent San Francisco businessman.

-more-

Bissinger, a former cancer patient himself who says he owes his life to the treatment he received at Stanford, organized the "Friends of Radiology" in hope of raising funds needed for expansion of the cancer treatment center.

"It is only because I spent hours with scores of other patients in the busy, cramped quarters at Stanford that I realize how fortunate I was to have been treated," he said at the beginning of the fund drive. "If we are able to financially help with the expansion of facilities at Stanford, to give more cancer victims the chance we were given, perhaps our debt of gratitude will partially have been paid."

The Mayer Foundation, founded in 1947, was endowed by Louis B. Mayer of the Metro-Goldwyn-Mayer Corporation. Mr. Mayer, who died in 1957, was a patient of the late Dr. Arthur Bloomfield, a Stanford professor of medicine and one of the most distinguished internists in America.

In recent years the Foundation has aided numerous Stanford medical students through the Louis B. Mayer fellowships and scholarships. Other officers of the foundation are Daniel Mayer Selznick, vice president, of New York, and Myron S. Fox, secretary-treasurer, of Los Angeles.

Bissinger said there have been more than 500 donors to the campaign, with some of the largest gifts ranging from $2,500 to $21,000.

Major donors including Bissinger are: ATHERTON, Jack S. Euphrat; BEVERLY HILLS, Mrs. Carl Naumann; CHICAGO, Allen Grawoig Foundation; FRESNO, Gilbra Corporation; LIVERMORE, Ernest A. and Karl L. Wente; PEBBLE BEACH, Mrs. Ethel M. Clark; SAN FRANCISCO, Robert Minge Brown, The Mervyn L. Brenner Foundation, Carrie Baum Browning Trust, William G. Irwin Charity Foundation, Ralph K. Davies, Mrs. H. N. Kuechler, Jr., Jacob Gould Schurman III, and Lucie Stern Trust; SAN JOSE, Dr. Thomas L. Blanchard and Stella B. Gross Charitable Trust; WHEELING, WEST VIRGINIA, Dr. Joseph L. Farr.

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Mailed January 22, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--A graduate student at Stanford University sees medicine's success as growing increasingly contingent on its ability to utilize technology.

Stockton-born William R. Brody, 25, preparing for that day, is studying for a doctoral degree in electrical engineering as well as a medical degree.

"Until we have people who are trained in both fields, we are going to have a hard time bringing powerful engineering techniques to bear on clinical medicine," he says. But his guess is that more and more engineering students will enter medical school. "There may be fewer people now who want to go out and build bombs," he says.

Technology's most valuable tool, the computer, is beginning to be "brought to bear," he explains, in at least three areas of medicine: basic medical research, patient monitoring and more efficient delivery of hospital care. Other applications, including the use of computers to educate doctors, may be just over the horizon.

Bill doesn't know yet which area interests him most.

An example of the computer applied to research is the work going on in a Stanford University School of Medicine neurology lab. There, the computer is doing laborious analyses in a study of how body movements are controlled. The study may someday contribute to better therapy for correcting abnormal limb movements caused by neurological diseases.

"Patient monitoring, such as that done in intensive care units, can be automated to the extent that computers will be able to provide around-the-clock surveillance and alert the medical staff as soon as an abnormality occurs," says Bill. "And computers will be able to help the hospitals of the future run wards, locate medical information and tabulate test results."

Bill started his college education at MIT, where he took the S.B. in electrical engineering in 1965 and the S.M. in 1966. A summer job between his junior and senior years at Stagg High School in Stockton played an important part in his choice of schools; he worked alongside a graduate of the famed institute on a National Science Foundation grant.

-more-

Three summers later, with two years of MIT under his belt, another summer job, this time on a California Heart Association Fellowship, brought him into the medical camp. "I worked under a pediatric surgeon at Children's Hospital in San Francisco," says Bill, "and the exposure to physicians was the key factor in my decision to go to medical school."

His father, an ophthalmologist, had encouraged him since boyhood to "work at whatever I wanted." It turned out that Bill wanted, and excelled at, biology and math and physics, so he has opted for the double doctorate.

The winner of the 1964 Scott Foundation Leadership Award as the most outstanding student in his class at MIT, Bill also received the Hewlett-Packard Biomedical Engineering Fellowship at Stanford in 1967. He currently holds a Life Insurance Medical Research Foundation Fellowship.

He admits to thriving on being busy, squeezes in a game of water polo whenever he can.

"I don't have such a thing as a 'typical schedule,'" he says, "every day is different."

His heavy schedule is workable, because Stanford University School of Medicine offers a flexible timetable with free hours to pursue other academic interests.

But the days of as many as seven finals in one week are behind him--on the engineering side he is now in the early stages of his doctoral thesis.

He is married to the former Wendy Hull of Stockton.

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Mailed January 14, 1969.

"The systems approach used by electrical engineers has great potential for solving certain classes of medical problems," says Bill Brody, third year medical student and engineering doctoral candidate at Stanford University. Here he is on a working visit to ACME, the University's Advanced Computer for Medical Research.

TO: NEWS BUREAU, ROOM C003, STANFORD MEDICAL CENTER, STANFORD, CALIFORNIA 94305

Please send me an 8"x10" glossy print of William R. Brody.

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STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

An urgent appeal for blood was issued today by Stanford University Medical Center.

"The situation is critical," according to Dr. Paul L. Wolf, director of the clinical laboratories at the Medical Center. "We are experiencing an average shortage of 50 units a day, particularly in the A-positive, A-negative, and O-negative blood types."

Dr. Wolf pointed out that some elective surgical procedures have had to be cancelled because of the blood shortage and said that Stanford is "barely able to keep up with emergency needs."

Over 50 operations are performed on an average day at Stanford with from six to twelve emergencies expected daily. Approximately 1200 units of blood are required each month. As an example, an open heart operation requires sixteen units of blood. An average of 30 open heart surgeries are performed each month at Stanford.

Dr. Wolf said the blood shortage, which is prevalent at all hospitals in the area, can be attributed to the holiday season when many usual donors are too busy to give blood, the increase of accidents during the holiday season, and the spreading incidence of flu in the area. He pointed out that people wishing to donate blood must be free of infection for two weeks following an illness such as the flu.

Those able to donate blood are urged to contact Irwin Memorial Blood Bank in San Francisco, Peninsula Blood Bank in Burlingame, the American Red Cross in San Jose, or the Community Blood Reserve in Palo Alto. The blood bank at Stanford University Medical Center is able to draw blood on a limited basis from 18 persons each day, a majority of whom are being drawn temporarily from the Community Blood Reserve.

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Released January 7, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros G. Andreopoulos 415: 321-5310

STANFORD--A new course, designed to make future doctors aware of the legal issues and procedures in their field, will be offered by the Stanford University School of Medicine during the winter quarter.

The course, titled "370--Seminar in Medical Jurisprudence" in the current medical school catalog, will be offered as an elective for credit to interested medical students by members of the Santa Clara County Bar Association.

Ten lectures will be given weekly Tuesday at 7:30 p.m. in Room M112 at the Medical school beginning January 7 and ending March 11, 1969.

Faculty, Stanford University hospital professional personnel, and community physicians may also audit the lectures, according to Dr. Bernard W. Nelson, associate dean. The sessions, however, will be focused on the student participants.

The seminar is under the direction of Charles G. Schulz, a Palo Alto attorney and member of the Santa Clara County Bar Association's Medical-Legal Liaison Committee.

Subjects for discussion will range from problems of medical care over the patient's objection to "hangups" of poverty medical care, psychiatry and the law, the role of the doctor in court, drugs and society, and legal problems of tissue transplantation.

It was the Medical-Legal Liaison Committee, according to Schulz, which provided the impetus for the new course while searching for ways in which doctors might gain a better understanding of the law and lawyers.

"We recognized," he said, "that most practicing physicians are so busy they would not take the time to attend a series of meetings. It seemed desirable to reach the doctors at an earlier stage of their training."

-more-

He added the medical school environment also seemed ripe for the introduction of the course since Stanford has recently liberalized its medical curriculum and has attempted to offer more courses from which students can select their own programs of study.

Dr. Nelson said the faculty is enthusiastic about the new course taught by practicing lawyers. He feels medical students are inadequately prepared on legal aspects of medicine. Extra-curricular lectures on this subject in the past have not been sufficient to meet the need, he said.

Each of the 10 lectures, said Schulz, will be given by an individual who is well qualified to lead the discussion of the particular subject. One session will be led by Dr. Stanley A. Skillicorn, past president of the Santa Clara County Medical Society and past president of the Economic Opportunity Commission of Santa Clara County. He will discuss various institutional responses--government and private--to medical care for the disadvantaged.

"One of the functions of the course is to consider how legal decisions are made," Schulz said. "Hopefully, the physicians will then appreciate some of the limitations inherent in the legal system and why specific answers cannot be given. In turn, the lawyers will receive some impression of how their field looks to a critical outsider."

In addition to Schulz and Dr. Skillicorn, other lecturers for the course include Nordin F. Blacker, William A. Ingram, Norman W. Saucedo, John E. Lehman, David W. Leahy, Professor John Kaplan, George H. Norton, Professor Aidan R. Gough, and Ralph J. Gampell.

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Mailed January 2, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Dr. Judith Pool, senior research associate in the division of hematology at Stanford University Medical Center, has been honored with the Dr. Murray Thelin Award of the National Hemophilia Foundation.

She received the award for her "outstanding achievements which have contributed so much to the health, comfort and hope of hemophiliacs."

Hemophilia is the hereditary ailment which causes excessive bleeding. It appears only in males, and is estimated to afflict 1 in 10,000.

Dr. Pool discovered a simple method of isolating the blood's antihemophilic factor (AHF) in 1965. She froze fresh plasma, then thawed it in the cold and centrifuged it, producing a concentrate of the clotting factor which can be easily made by blood banks.

Dr. Murray Thelin, who was a hemophiliac himself, went on to produce a highly effective powder form of this AHF in 1966. He benefited from his own AHF research, but died of a heart attack late the same year.

Current research is aimed at preventing waste of the limited blood supply. "By separating blood into its five major components, and administering only the component needed by each particular kind of patient (for instance, not only hemophiliacs, but transplant patients, other surgery patients, mothers in childbirth)," says Dr. Pool, "we hope to someday assure maximum utilization of donated blood."

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Mailed February 19, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--A system for monitoring babies while they are being born could help alleviate infant mortality and permanent brain damage in newborns, says a Stanford obstetrician.

"A significant portion of stillborn births can be attributed to complications encountered by the fetus while it moves down the birth canal prior to delivery," according to Dr. Robert Goodlin, associate professor of gynecology and obstetrics at Stanford University School of Medicine. "A system for monitoring the fetus during this crucial period can alert the physician to potential problems and enable him to begin procedures to ensure the delivery of a healthy baby."

The monitoring device under design and modification by Dr. Goodlin is simple and painless to mother and child. A small suction cup is attached to the head of the fetus for the five to eight hours that the expectant mother is in labor. Wires from the attachment lead to a console which records and analyzes the rate and function of the fetal heart. Physicians and nurses continually check the recorded data for any indications of an abnormality in the birth process.

"As high as 15 per cent of all babies demonstrate some degree of fetal distress before delivery," Dr. Goodlin says, "but the problem is recognized as truly serious for only 2 per cent."

The causes of the distress are varied. During the period of time when the fetus begins to move down the birth canal, the umbilical cord may be constricted by the fetus, cutting off its circulation; the mother may go into shock, thus depleting the oxygen and blood supply to the fetus; or the placenta, the organ which transfers nutrients to the fetus through the umbilical cord, may separate too early from the mother, choking the blood and oxygen supply to the baby.

"If these complications are sustained by the fetus for any length of time without detection and corrective procedures, the risk is very great that the baby will be stillborn or suffer permanent brain damage," Dr. Goodlin stresses.

-more-

Fetal distress may be of a minor nature, necessitating only that the position of the mother be changed. More serious problems may indicate the need to augment the delivery, to perform a caesarean section, or to administer oxygen to the mother to increase the supply to the fetus.

Stanford's monitoring system is complemented by a compact laboratory within arm's reach of the attending physician and staff in the labor room. Here analysis of blood samples taken, if necessary, from the scalp of the fetus may further aid the physicians in determining the cause and seriousness of the fetal distress. The specially equipped labor room was provided by Mr. and Mrs. Marron Kendrick of Atherton.

The Kendricks, parents of four grown children, lost five other infants because of miscarriage or premature birth.

"When such a tragedy strikes a young couple, they ask 'Why'?" Mrs. Kendrick says "No answer truly helps to ease the grief and anxiety. Because we had suffered these same feelings, my husband and I decided to financially support medical research aimed at understanding and combating these problems of infant mortality."

At present the monitoring system is used on a voluntary basis by mothers delivering babies at Stanford University Hospital.

Ideally, and if adequate financial support were available, Dr. Goodlin envisions all labor and delivery rooms being equipped to monitor fetal distress. The recorded data would be fed into a central console unit attended on a 24-hour basis by a technician who would alert the staff to any problems.

"It is then that we would begin to see a reduction in stillborn births and brain damage that result from complications just prior to delivery of babies," Dr. Goodlin says. "At present, implementation of such a program has been hampered by recent cutbacks in federal support."

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Mailed February 26, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

NEW YORK--Using ultrasound, a new technique similar to naval sonar, Stanford University researchers can now detect heart changes that lead to early rejection in heart transplant patients.

The high frequency sound waves are an addition to other sophisticated techniques being used to detect rejection early enough to reverse it before the transplanted heart suffers serious damage, the researchers said.

Early rejection is the crisis that most often proves fatal in the heart transplant operations so far attempted. More than 100 operations have been performed in the world over the past year, with approximately 20 to 30 per cent survival for three months or longer.

During early rejection the heart cells fill with fluid and the heart muscle walls swell and stiffen. These danger signals can be detected by ultrasound signals bounced against the stiffening muscles.

"The changes detected by this ultrasound method correlate very well with the signs of rejection obtained by other available methods," the researchers reported.

Danger signals for early rejection can be obtained by watching for changes in the strength of the voltage signaled by the electrocardiogram, changes in the heart's electrical activity and in the rhythm of its contractions, and by careful listening via a "phonocardiogram" to the sounds of blood flowing from veins into the stiffened heart.

The new technique was described at the annual meeting of the American College of Cardiology here Thursday (Feb. 27) by Dr. John S. Schroeder, a postdoctoral fellow in cardiology at Stanford University School of Medicine. Co-authors of the report are Drs. Edward B. Stinson, Eugene Dong, Jr., Norman E. Shumway, and Donald C. Harrison.

The adaptation of ultrasound to diagnosis of early rejection in heart transplants was made by Dr. Richard Popp, a Stanford postdoctoral fellow in cardiology. Prior to coming to Stanford, Dr. Popp had worked as a trainee of the National Heart Institute with Indiana University's Dr. Harvey Feigenbau, a pioneer in diagnostic ultrasound.

Ultrasound recordings on heart transplant patients are made by using a commercially available machine which emits and receives high frequency sound waves. As the sonic impulses bounce against the heart wall, they are recorded and converted into electrical signals which can be displayed on a television screen.

Patients are monitored daily for changes in heart size which alerts physicians to watch for rejection.

When the crisis of early rejection is detected, the Stanford physicians begin the difficult job of administering the precise doses of drugs needed to suppress the body's immune mechanism.

"Many methods to detect early rejection are being investigaged," Dr. Schroeder said, "so that aggressive treatment for the rejection process can begin at an earlier stage before irreversible heart damage has occurred." ### Mailed February 26, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Science Writers: Copies of STANFORD M.D. available on request.

STANFORD--A Stanford University neurophysiologist reports that studies of dreaming cats lend support to a tempting theory that schizophrenia is the result of a biochemical defect in the patient.

Dr. William C. Dement, professor of psychiatry and pioneer in sleep and dream research, believes that an abnormality in the function of an essential brain chemical called serotonin gives rise to abnormal behavior by allowing patients to dream while awake.

Using a new drug which prevents the brain from producing serotonin, Dr. Dement causes cats to hallucinate, attack other cats, and behave with the curious mixture of normality and abnormality observed in persons with severe mental illness.

Brain wave recordings of the cats show the electrical pattern during the abnormal behavior to be identical to that of cats which are dreaming while asleep.

Although Dr. Dement is cautious about the new finding, he feels that dream and sleep research has moved a step closer to understanding psychotic illnesses in human beings.

"After a long and tortuous climb, we appear to have emerged upon high ground, and before us extends a wide vista in which our research goals...are clearly visible," he reports in the current issue of STANFORD M.D., the magazine of the Stanford Medical Alumni Association.

Dr. Dement and other researchers have previously shown that dreaming in humans and animals occurs during a particular stage of sleep which appears in humans with monotonous regularity every 90 minutes throughout the night.

During these dreaming periods the sleeper seems to shift his eyes to view or scan the unfolding panorama of his dream world in much the same way that he would examine situations in the real world. This nocturnal phenomenon, called rapid eye movement or REM sleep, is believed by researchers to be essential to well being.

Past studies by Dr. Dement have shown that depriving a person of REM sleep can cause mental changes similar to those of severe mental illness. The studies have also established that normal persons deprived of REM sleep for a number of consecutive nights will spend practically the whole time dreaming when they are allowed to sleep without interruption.

This is called a rebound effect and it is believed to be the mechanism which allows the body to compensate for loss of the essential dreaming or REM sleep.

Dr. Dement's most recent discovery with administering the drug to cats is that the animals do not rebound when they are deprived of REM sleep. He believes this is because their need to dream is satisfied by their dreaming while awake as expressed by hallucinations and abnormal behavior.

Still another dramatic finding reported last year in the Archives of General Psychiatry reinforces Dr. Dement's theory. -more-

A Stanford study, conducted by Drs. Vincent Zarcone, George Gulevich, Kazuo Azumi, and Terry Pivik, showed that actively ill schizophrenic patients failed to show the rebound effect when deprived of dreaming.

"In all our years of studying the effect of REM sleep deprivation in normal human volunteers, cats, rats, and mice, and even a monkey or two we had never failed to observe this compensatory elevation or rebound in REM sleep," writes Dr. Dement.

The important finding was confirmed by further studies of actively ill schizophrenics and, moreover, it was demonstrated that if the same patients were deprived of dreaming when they were not actively psychotic, then the deprivation was followed by a substantial compensatory rebound as in normal persons.

These findings, according to Dr. Dement, suggest that failure of the body to confine dream activity to normal sleeping periods might be the basic abnormality in the psychotic behavior.

"When the discovery of REM sleep made it possible to demonstrate that dreaming had its own biochemical regulatory mechanism," says Dr. Dement, "one could then point to a specific brain process which, given only a slight malfunction, could account for many of the puzzling attributes of the psychotic state.

"Every human brain houses a structure and mechanism that produces hallucinations, delusions, thought disorders for a substantial portion of time merely in carrying on its normal everyday activities.

"The only change that would be necessary for this structure to render its owner completely psychotic would be for it to remain turned on in the waking state."

Presently under a grant from the National Institute of Mental Health, Dr. Dement and his associates are engaged in studies to clarify and extend their observations.

"Our working hypothesis," Dr. Dement writes, "includes the possibility that there is a special nerve cell system in the brain which ordinarily functions as a drive system 'energizing' the so-called motivational behaviors.

"Dreaming or REM sleep periods provide a safety valve for this drive system by allowing it to discharge harmlessly...which may, in turn, be what gives rise to dreaming.

"The serotonin nerve cells in the brain are assumed to inhibit and regulate both aspects of this drive discharge (dreaming or behavior). If they fail to perform their function, the result is a disorganized and uncontrolled occurrence of REM activities and drive behaviors in the waking state.

"This could easily account for all attributes of the psychotic illnesses in human beings."

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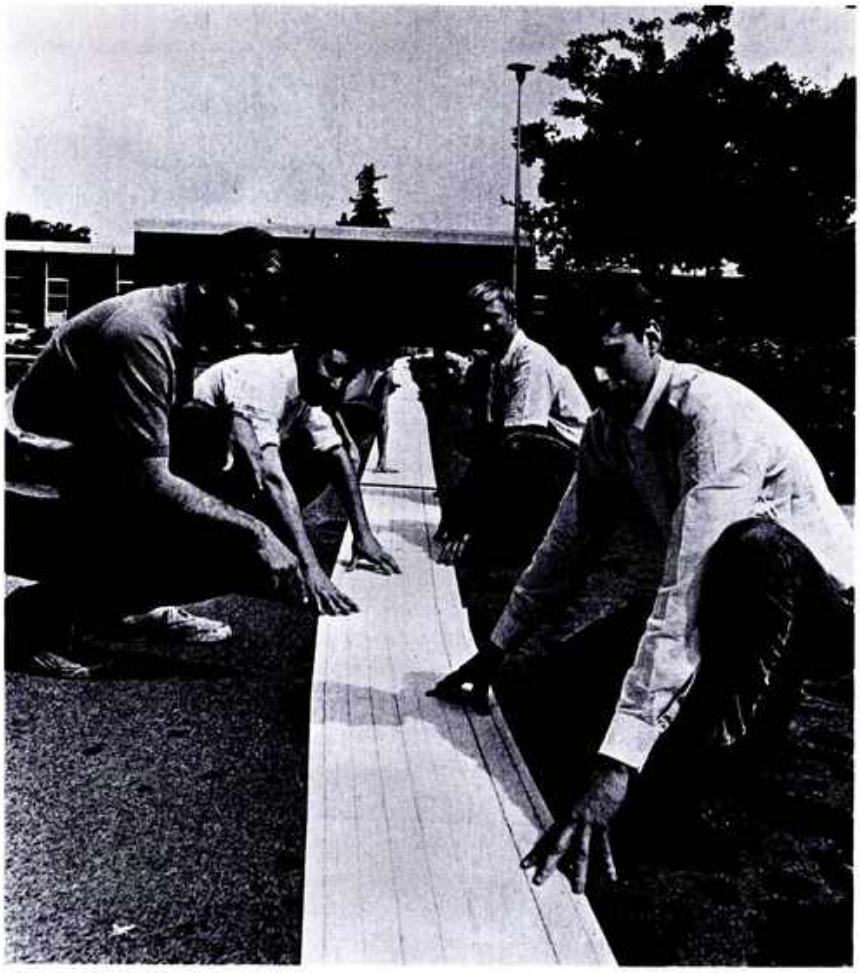
Mailed February 20, 1969.



Studying literally miles of records of brain wave activity of lab animals is an important part of dream and sleep research. Here, in the parking lot of their Menlo Park laboratory, Dr. William C. Dement (left) and his associates, Dr. Harry B. Cohen, Kathy McGarr, Anne Sauer, Steven Henriksen, and James Ferguson, give a demonstration of the amount of work needed to analyze results of sleep research.

TO: NEWS BUREAU, ROOM C003, STANFORD MEDICAL CENTER, STANFORD, CALIFORNIA 94305

SLEEP RESEARCH 2/69

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Room C003
(415) 321-5310

Douglas Allan

Death Announcement, February 25, 1969

FILE COPY

Stanford heart transplant patient Douglas Allan, a 55-year-old insurance broker from Menlo Park, died this afternoon at 3:35 p.m. at Stanford University Hospital. The cause of death is undetermined, pending an autopsy although Mr. Allan was being treated for acute rejection.

Mr. Allan received his transplanted heart on Feb. 15 from an anonymous donor. He was the 11th transplant patient at Stanford. Four others are alive.

Mr. Allen is survived by his wife, Virginia, a son, Douglas Gordon Allan, Jr., and a brother, Keith, of Santa Rosa.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Two department chairmen of the Stanford University School of Medicine have asked to be relieved of their administrative responsibilities to return to full-time teaching and research, effective next year.

They are Dr. Arthur Kornberg, 50, professor and chairman of the department of biochemistry, and Dr. Norman Kretchmer, 46, professor and chairman of the department of pediatrics and human development.

Both men have served on the administrative posts for the past 10 years. They assumed their responsibilities at the time when the Medical School was moved from San Francisco to the Stanford campus.

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school, made the announcement and praised Dr. Kornberg and Dr. Kretchmer for "providing the leadership necessary to launch the new programs of the transplanted medical school in their respective fields."

He added that the two men "have brought to Stanford and their departments national and international distinction."

Dr. Kornberg is recipient of the 1959 Nobel Prize in medicine for synthesizing deoxyribonucleic acid (DNA), the chemical substance that is believed to determine the heredity of living things. Last year, he and his associates reported for the first time the synthesis of fully infectious viral DNA, an accomplishment which opens the way to important progress in the study of genetics, the study of virus infections, and the nature of certain forms of cancer.

Dr. Kretchmer is internationally known for pediatric research, and for basic research in biochemistry, particularly porphyrin metabolism. He is responsible for expanding the scope of Stanford pediatric programs by focusing work on the molecular, physiologic, and behavioral aspects of growth and development. He obtained the first award from the National Institutes of Health for construction at Stanford of a Clinical Research Center for Premature Infants.

He also established a major research and training program in the field of developmental biochemistry. This is a new field which unites clinical and research efforts directed toward a biochemical understanding of congenital defects, metabolic diseases, and mental retardation.

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Mailed February 19, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Stanford University has received a bequest of $5 million from Mrs. Katharine Dexter McCormick to aid in programs at the School of Medicine, President Kenneth S. Pitzer announced today.

The gift was made in memory of her late husband, Stanley McCormick, whose father's company, McCormick Reaper, later became the International Harvester Co.

Mrs. McCormick, who died in 1967 at the age of 92, was a quiet but strong supporter of women's rights all her life. She was a founder with Carrie Chapman Catt of the League of Women Voters and served as its first vice-president.

In bequeathing the money to Stanford, Mrs. McCormick specified that it be used for the benefit of the Stanford University School of Medicine. She also expressed her hope that if the School deemed it necessary, funds could also be used "for the encouragement and assistance of women in pursuing the study of medicine, in teaching medicine, and in engaging in medical research."

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, gratefully acknowledged the gift from Mrs. McCormick and said that every consideration will be given her desire to further the role of women in medicine. He pointed out that the percentage of women presently enrolled in Stanford's medical school exceeds the national average.

Mrs. McCormick had doggedly pursued her own education at a time when it wasn't fashionable for women to do so. She attended Massachusetts Institute of Technology for three years as a special student to prepare for the entrance exams. Then she attended for another four years and received her degree in biology in 1904.

Her marriage in 1906 was shattered two years later when her husband became ill and until his death in 1947 was under constant care in their Santa Barbara estate.

During those many lonely decades, Mrs. McCormick devoted her energies and resources to programs designed to help women strengthen their roles in life.

She was always eager to support unpopular causes, as well as popular ones, in her work and charitable giving. Her assistance was very instrumental in the development of the birth control pill.

"She spent endless hours to make sure the ultimate result would be a fitting memorial to Stanley," according to a close friend.

Mrs. McCormick's great-grandfather Samuel Dexter, a lawyer, was a U.S. Senator and Secretary of War under John Adams, and later Secretary of the Treasury. Her grandfather established the town of Dexter near Ann Arbor, Mich., and helped found University of Michigan. Her father, who practiced law in Chicago, is listed in "Great American Lawyers" as one of the nation's all-time outstanding attorneys.

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Mailed February 13, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Science Writers: Copies of STANFORD M.D. available on request.

STANFORD -- "The fate of a drug in the body is a personal affair, as peculiar in a way as a personality trait," says a Stanford University pharmacologist.

Yet physicians today prescribe drugs as if all of their patients were the same. As a result patients are subjected to one of the most bizzare types of human experimentation, notes Dr. Sumner M. Kalman, professor of pharmacology at Stanford University School of Medicine and co-author of a new book, PRINCIPLES OF DRUG ACTION: THE BASIS OF PHARMACOLOGY.

Writing in the Winter issue of STANFORD M.D., the magazine of the Stanford Medical Alumni Association, Dr. Kalman says that "drug therapy should not resemble a plan for nuclear warfare called 'overkill.'"

"There are certain cases where we can get away with'overkill,'" he writes. "Penicillin is perhaps used in large excess, but there is almost no dose-related toxicity. The excess drug is simply wasted.

"There are other cases where the drug is being used at doses too low to have any therapeutic effect. And there are cases where a drug is used at doses that are too high for a particular individual."

Dr. Kalman cites studies by researchers at the National Institutes of Health noting the differences between fraternal twins and identical twins in the rate of metabolism of a pain-relieving drug.

"There is a three-fold variation in the biological half-time among certain pairs of fraternal twins," he states. "The most extreme variation among nine sets of identical twins was 10 per cent and most of them showed an almost identical rate of metabolism for this drug."

He says it is quite proper to assume that the degree of variation seen among fraternal twins is probably larger among unrelated persons. He quotes research done in Sweden which bears this out--a study of 11 patients maintained on the same dose of desmethylimipramine (DMI), a drug used in the treatment of depression.

There was a 30-fold range of drug concentration among these patients after they had been given the same dose for about two weeks, Dr. Kalman says.

Although an outspoken advocate of population control, the Stanford pharmacologist devotes a major part of his indictment of drug-testing and drug-prescription practices to the oral contraceptives.

"A healthy population of women in the child-bearing years, eight million women in this country alone, now serve as human guinea pigs, where a few carefully monitored subjects would have been sufficient," he writes.

-more-

He cites studies, both in England and the United States, which render oral contraceptives highly suspect as a cause of death due to deep vein thrombosis and cerebral thrombosis among some women.

The risk of death due to pulmonary embolism or cerebral thrombosis among users of oral contraceptives amounts to 1.5 per 100,000 women aged 20-34 years compared to 0.2 for a comparable control group, according to the studies. For users of oral contraceptives 35-44 years old, the risk rises to 3.9 per 100,000 compared to a death rate of 0.5 for nonusers.

Dr. Kalman feels that the side-effects of oral contraceptives are dose-related. He states that when oral contraceptives were first introduced, the first form contained about 10 milligrams of the drug. After several years this was reduced to 5 or 2 mg., and more recently to 1 mg.

"This means," says Dr. Kalman "that a very large population of women were exposed to high doses of steroids unnecessarily. Many of the women who dropped out of treatment groups here and abroad were probably distressed by annoying side actions of these hormones because high doses were used."

(Asked by this writer if he would prescribe the pill to patients, Dr. Kalman said he would provided that patients were warned of the risks. He would also do extensive follow-up of patients for signs of side-effects. "Most of the side reactions of these drugs are reversible, if diagnosed early," he said.)

"Whenever a treatment appears to be 100 per cent effective we must ask ourselves whether it is completely benign," says Dr. Kalman. "It should have been possible and it is not too late to develop guides for rational dosage-scheduling of drugs.

"Doses should be fitted to individual needs. There is no average man who always needs 400 mg of drug A or 100 mg of drug B on a certain daily schedule."

Dr. Kalman proposes that the following things be done:

. Development of techniques for measuring plasma levels of oral contraceptives and other drugs in patients, instead of reliance on conventional clues such as evidence of ovulation. "Measurement of plasma levels of hormones is not far away," he says. "It is now possible to detect as little as 1 microgram of estradiol per liter of plasma with a precision of about 5 per cent using the most advanced, modern instrumentation."

. Follow-up of individual patients more carefully. "As a patient's health changes, or other drugs are used, the plasma level of an important drug may change," he writes. "Phenobarbital and other barbiturates speed up the metabolism of other drugs. Patients generally get too many drugs. Some of these can be harmful in themselves or by causing changes in the blood level of an important drug."

. Adopting an extremely conservative attitude toward new drugs. "We need to ask ourselves," he says, "whether each new drug presents so many advantages over an established one that we must use it before we really know its hazards. It seems to me that society looks to new drugs for solutions to so many problems that the checks and balances are overwhelmed."

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Mailed February 13, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

(ADVANCE) FOR P.M. RELEASE FRIDAY, FEBRUARY 14, 1969.

SAN FRANCISCO--A link between the use of oral contraceptives and hypertension (high blood pressure) has been established by a medical research team at Stanford University Medical Center.

In a group of 100 patients with high blood pressure, Stanford physicians found 14 women who were taking birth control pills. All of the women developed high blood pressure after they had begun taking the pills.

When oral contraceptive medication was stopped for three months, all 14 patients began to get better.

"Seven patients had normal blood pressure, four no longer required medication to control their condition, and three patients required much less medication than previously," the physicians reported.

The physicians presented their findings at the Northern California and Nevada regional meeting of the American College of Physicians in the St. Francis Hotel.

They are Dr. Myron H. Weinberger and Dr. R. Dennis Collins, postdoctoral fellows in medicine, and Dr. John A. Luetscher, professor and head of the Division of Metabolic Diseases at Stanford University School of Medicine. Their studies were conducted in the metabolic research unit of the Guggenhime Clinical Research Center supported by the National Institutes of Health.

The Stanford report corroborates observations by other investigators pointing to oral contraceptives as the most likely cause of high blood pressure among women taking such medication.

"The incidence with which hypertension develops in the normal population receiving birth control pills is not known, but is probably very small," Dr. Weinberger said.

However, a sizable number of women predisposed to high blood pressure may be taking such medication. "Withdrawal of birth control pills may represent a method of treating or curing the high blood pressure in these patients," he added.

-more-

Dr. Weinberger described Stanford studies which documented the biochemical changes in women taking oral contraceptive medication.

These are related to changes in the amount of certain hormones from the kidney (renin) and from the adrenal gland (aldosterone) which are responsible for constriction of blood vessels and handling of sodium (salt) and water.

"These changes return to normal along with the blood pressure after three months of discontinuation of the birth control pills," Dr. Weinberger said.

He noted that the factors that make some women susceptible to high blood pressure during oral contraceptive therapy are unclear.

"It is possible that various diseases of the kidneys may make patients less resistant to the changes described," Dr. Weinberger reported.

The practical message of the Stanford report is this:

. Physicians who prescribe oral contraceptives to their patients should be aware of the risk of high blood pressure.

. Patients with pre-existing hypertension may get worse after taking oral contraceptives.

. Biochemical changes in patients who take birth control pills may make diagnosis of high blood pressure difficult.

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END ADVANCE FOR P.M. RELEASE FRIDAY, FEBRUARY 14, 1969.

MAILED February 11, 1969.

STANFORD--A free lance writer from Los Angeles is recovering normally this morning following a heart transplant operation at Stanford University Hospital Saturday evening.

The recipient is 43-year-old Sasha Gilien. Gilien received his new heart from an anonymous donor in an operation performed by Dr. Norman Shumway, head of cardiovascular surgery and heart transplant pioneer.

Mr. Gilien was transferred to Stanford Jan. 30 from Los Angeles, where he suffered a massive heart attack on Jan. 20. He was accompanied to Stanford by his wife, Nancy.

The patient has lived in Los Angeles most of his life. The Gilien's have an 18-month-old daughter, Thea.

As a writer, Gilien is most recently noted for scripts for the television series "Big Valley," which he co-authored with Mel Goldberg. He is also co-author with Myron Roberts and Lincoln Haynes of a new book, "Begatting of a President."

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February ~~10~~ 8, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--A three-year grant totalling $150,000 has been awarded to Stanford University School of Medicine by the Donald E. Baxter Foundation of Los Angeles.

The foundation stipulated that 20 percent of the funds be used for the medical student aid program at Stanford with the balance being available for general medical research.

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, expressed gratitude to the Baxter Foundation today and stressed that "private support of medical education and research is especially timely because of recent cutbacks in Federal aid."

"It is ironic," he said, "that medical schools are feeling the pinch of these cutbacks at a time when society is putting pressure on them to produce more doctors and to provide better health care for every citizen in this country.

"Without increased funding, both from the private sector and the Federal government, Stanford's medical school and other medical schools across the land will not be able to do the quality job they want to do and that is being demanded of them.

"We are particularly appreciative of the unrestricted nature of the Baxter Foundation Grant. This will enable us to designate funds in those areas of research most urgently in need of financial assistance," Dr. Glaser said.

The Baxter Foundation was established in 1959 in honor of Dr. Donald E. Baxter, a distinguished physician who was a leader in the development of high-quality production of solutions for mass intravenous therapy and associated medical equipment.

Dr. Baxter died in 1935. His widow, Mrs. Delia B. Baxter, resides in Atherton.

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Mailed February 6, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Kidney transplantation received a major boost at Stanford University Medical Center recently when a new renal care unit went into operation.

The new unit is self-contained, with five beds, a nurses' station, doctors' consultation room and set-up room where the artificial kidney machine accessories are assembled. Also, new intensive care equipment has been installed so that patients can come directly into the renal care unit from surgery.

The new facilities and equipment will enable the Medical Center to provide 100 dialysis treatments each month to pre- and postoperative kidney transplant patients. Each patient requires three or more treatments a week, with each treatment taking eight hours. On the average, two kidney transplants a month are performed at Stanford.

Dr. Roy Cohn, professor of surgery and head of the renal transplant program, acknowledges that the new unit will double the Medical Center's capacity to care for kidney transplant patients. But he notes that projections indicate that by 1970 "the demand for dialysis treatments will increase another three-fold."

Dialysis with the artificial kidney duplicates the continuous blood-cleansing action of healthy kidneys, removing wastes and toxins which could cause death if allowed to accumulate.

In addition to augmenting patient care, the new renal care unit will also enhance kidney transplantation research, particularly in the use of cadaver organs.

"The number of potential transplant recipients far surpasses the number of appropriate live donors," Dr. Cohn says. "This situation makes the ability to use kidneys of dead persons very important."

Working with Dr. Cohn on the kidney transplant program are Dr. Zoltan J. Lucas, Dr. John M. Palmer and Dr. Joshua Miller, assistant professors of surgery; and Dr. Norman Coplon, a postdoctoral fellow in internal medicine.

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Mailed February 5, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Visiting hours at Stanford University Hospital have been made more flexible to meet the needs of patients and their families.

Starting Feb. 1, the Hospital initiated semi-open visiting hours which begin in the early morning and conclude at 9 p.m. The nurse in charge of each patient care unit in the Hospital will be responsible for exercising proper controls for the welfare and proper care of each patient in her unit.

Previously general visiting hours at the Hospital were from 2 to 4 p.m. and 7 to 8:30 p.m. daily.

Certain regulations will continue to be maintained in special care units of the Hospital.

Patients in the Intensive or Coronary Care Units may be visited by members of their immediate family or the clergy for 10 minutes each hour. Parents of patients in the pediatric ward will have unlimited visiting privileges. Other visitors in pediatrics will be permitted at the discretion of the nurse in charge.

The State Department of Public Health has established visiting regulations in the maternity and nursery areas of the Hospital. Visitors are asked to leave the areas for an hour while infants are being fed at 9:15 a.m., 1:15 p.m. and 5:15 p.m.; children under 16 years of age may not visit in the areas; and no more than two visitors per maternity patient are permitted at any one time.

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Mailed February 5, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Nurseries at Stanford University Hospital were reopened this morning. Hospital officials said that the cause of the mild infection which necessitated closure of the nurseries two weeks ago was never determined. Indications are that closure and complete sterilization of the nursery areas have eradicated the problem.

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Mailed February 3, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

Science Writers: Dr. Bourne will deliver his paper Wednesday morning at a symposium of the American Orthopsychiatric Association in New York. Copies of the paper are available from the Stanford University Medical Center News Bureau.

FILE COPY

ADVANCE FOR PM RELEASE WEDNESDAY, APRIL 2, 1969

NEW YORK -- Basic training in the Army acts to ensure the perpetuation of the military, a Stanford University psychiatrist believes.

Dr. Peter G. Bourne, addressing the annual meeting of the American Orthopsychiatric Association today, said that the basic training experience amounts to a "critical transition" in the life of an adolescent. Our society, and the recruits, view basic training as an equivalent of a "manhood initiation rite," he added.

Plunged into an environment which is hostile and conveys the message that he is unworthy and inadequate, the inductee finds, Dr. Bourne said, that "acquiescence to the omnipotence and omniscience of the organization" is the only path to success.

The soldier thus becomes convinced of the unassailable authority of the military in its own domain, and of the wisdom of unquestioning acceptance of military objectives, the psychiatrist said.

Later on, when soldiers have returned to civilian life, they encourage "a posture of special concession towards the military" in our society, "making the military's power and influence largely immune from the criticism that plagues other government organizations."

Dr. Bourne, who has served a stint with the U.S. Army in Viet Nam, did his study of basic training while he was associated with the Walter Reed Institute of Research in Washington, D.C. Data for the study was obtained from platoons passing through their eight-week training periods at Ft. Dix, New Jersey.

Tests showed, he said, that entering the Army was an environmental shock to the young men, representing "the single most destructive threat to their adaptive capacity that they have had to endure."

"Each recruit is reminded that nothing he brought with him from civilian life means anything in the military. But for all he relinquishes he (initially) receives nothing in return," Dr. Bourne continued. "The Army has made him understand that he has no value in its society except to become a soldier, yet it does not reciprocate. For weeks he remains an outsider."

Anger and depression in the platoons reached a peak at about the fourth week of the training, Dr. Bourne reported. A "turning point" didn't come until the recruits began to acquire military skills -- hand-to-hand combat, use of the bayonet, and particularly firing the rifle.

"There is laughter and euphoria in the barracks on the night of 'record fire,' " Dr. Bourne said. "The very fact that the recruit is being tested on his ability with a rifle implies that at last the Army recognizes that he some inherent worth . . . . . For each accomplishment, he now receives ample reward from the system; his shattered self-esteem is bolstered."

Later on, said the psychiatrist, the veteran retains an element of identification with the organization which once bestowed his manly status, "perceiving any limitation of military power as an incursion of his own influence."

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END ADVANCE FOR PM RELEASE WEDNESDAY, APRIL 2, 1969

Mailed March 31, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane B. Duff 415: 321-5310

STANFORD--Dr. G. Robert Mason, assistant professor of surgery at Stanford University School of Medicine, has been named a Markle Scholar in Academic Medicine, the John and Mary R. Markle Foundation of New York announced today.

Dr. Mason is one of 25 young medical scientists in the United States and Canada chosen for the honor. As part of the Markle Scholar Program, the Foundation awards a five-year stipend totaling $30,000 to Stanford to "assist in the development of the Scholar as a teacher, investigator, or administrator."

Mason has been a member of the Stanford faculty since 1966. He received his B.A. (1955) from Oberlin College, his M.D. (1957) from the University of Chicago, and his Ph.D. (1968) from Stanford.

The Markle Scholar grants have been made annually since 1948 to support young medical school teachers and investigators early in their careers. The Foundation was established in 1927 by the late John Markle, a Pennsylvania coal operator.

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STANFORD--"The Challenge of the Community to the Medical Center" will be the topic of a special lecture Thursday afternoon at Stanford University School of Medicine.

Guest speaker will be Dr. Count D. Gibson Jr., chairman and professor of the Department of Preventive Medicine at Tufts University School of Medicine. He will speak at 4 p.m. in Room M112 of the Medical School. His lecture is open to the public.

Dr. Gibson, a noted authority on community health care, is co-director of Tufts' Comprehensive Community Health Action Program. The program was created in 1965 to study means of providing comprehensive health services in deprived areas through community health centers. The centers encourage maximum participation by the community in meeting its own health needs and aid in the training of local residents as health assistants. Initial studies are being conducted in two communities, a low-income housing development in downtown Boston and an almost exclusively Black rural county in Mississippi.

Dr. Gibson received his B. S. (1942) and M.D. (1944) degrees from Emory University. He joined the Tufts' faculty in 1958.

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3/31/69

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane B. Duff 415: 321-5310

FILE COPY

STANFORD--A 42-year old trucker from Crescent City, California is reported in satisfactory condition today following a heart transplant operation Saturday morning at Stanford University Hospital.

The recipient is Glen Campbell. He received his new heart from an anonymous donor in a 4 1/2 hour operation performed by a team of surgeons headed by Dr. Norman E. Shumway.

Campbell has suffered a rapid deterioration of the heart muscle for the past six months. He was referred to Stanford March 14. Campbell's family includes his wife, Betty, and two sons, Steve, 17, and Harley, 15.

Campbell is Stanford's 12th heart transplant patient. Four others survive.

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3-29-69

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415/ 321-5310
EDITORS: Photographs available upon request.

STANFORD -- "I somehow remember being at the hospital, sinking. There was something said about a donor and then I was in surgery. It's all a very fragmentary, dreamlike sensation."

These are the sketchy details recalled by Sasha Gilien, a free lance writer from Los Angeles, who received a transplanted heart at Stanford University Medical Center last month.

"It all began on Monday morning, Jan. 20, when I got this peculiar sensation in my chest," Gilien recalls. "I knew something terrible was happening and told my wife, Nancy, to call an ambulance. I remember arriving at the emergency entrance to Mt. Sinai Hospital and then everything goes blank."

"It's almost uncanny that a physical examination earlier in January had revealed that I was a prime candidate for a heart attack," the 43-year old writer says. Gilien's private physician had found him to be overweight with a cholesterol count and blood pressure that were "sky-high", and in need of regular exercise. His family history is also dotted with heart disease.

"For me the warning came too late," Gilien says.

On Jan. 29, physicians in Los Angeles told Mrs. Gilien that her husband would not recover from the massive heart attack he had suffered.

"I was told that the only possible alternative was a heart transplant," recalls Mrs. Gilien, a registered nurse. "At first I was stunned. Although Sasha and I had followed the transplants being done last year, it was difficult to believe that it could be happening to us. Once this shock had passed, there was no question but to go ahead."

Later that day the Giliens were flown to Stanford by air-ambulance. At the same time Stanford heart surgeons began to look for a suitable heart donor. The search took until Feb. 8.

"The first week or so after the operation is pretty hazy," Gilien says. "I remember asking my wife to get me a huge calendar and chatting with my nurses.

"My first thought about the operation was that of all the billions of people in the world, I am one of the few that has a transplanted heart," Gilien recalls. "It really fascinates me that after my heart attack I was in the right place at the right time for all of this to have happened."

-more-

"I also have no doubt but that the transplant saved my life. My brother Ted died of a heart attack two years ago, before transplants were being done. I've been given a chance which he never had."

Stanford physicians are also optimistic about Gilien's recovery. Dr. Edward Stinson, who directs the postoperative care of the transplant patients, says he thinks Gilien "is capable of being fully restored to a productive life."

"Since the operation was performed six weeks ago, Gilien's convalescence has been uncomplicated and his activity and strength have increased daily," according to Dr. Stinson. "He has been treated for apparent mild rejection episodes on three occasions but in each case the rejection was completely reversed."

A plus in Gilien's favor is that prior to his severe heart attack, he had no history of disease in other vital organs such as the liver or lungs. The healthy condition of these organs is thought to be a major consideration in the recovery of three other Stanford heart transplant patients who are now living at home.

Today the pecking of typewriter keys can be heard drifting from Gilien's room where he has again taken up his writing career. He has been in contact with his agent about new writing assignments and is already working on a television script idea. Gilien has co-authored scripts for the series "The Big Valley," and also co-authored a book, "Begatting of a President."

Other parts of his day are spent visiting with his wife, chatting with other patients and staff, and following the exercise program prescribed by his physicians.

"I'm getting very anxious to be released from the hospital and to resume a normal life with my wife and our baby," Gilien says. "We plan to make a new home in the Stanford area and are looking forward to it."

Stanford physicians hope to discharge Gilien by the end of the month.

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Mailed March 25, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- A cat who missed a lot of cat naps, helping man to gain a better understanding of mental illness, has stepped back into the leisure class after two years of service for science.

His name is Isch and he used to work for a Stanford University medical team as an experimental subject in sleep and dream research. Now he is a pet, but several tiny electric wires had to be removed from his head before he could return to normal life.

After a painless operation, Isch has gone to live with Kathy McGarr, a research assistant in the sleep laboratory, and her husband Bill, a graduate student in business at Stanford. Kathy says when she first took Isch home he was afraid to go more than five feet from the front door. "But now," she says, "he's not so dependent on human company. In fact, I think he is majoring in 'neighborhood exploration,' and minoring in 'sniffing'."

"He sniffs absolutely everything," she adds.

Isch and several other cats participated in studies which have led Stanford neurophysiologist William C. Dement and his team to a new discovery about the nature of mental illness and its relationship to sleep and dreaming.

The cats furnished the brain wave data which have provided clues that a defect in the function of an essential brain chemical gives rise to abnormal behavior, and seems to induce hallucinations, or dreaming, during wakefulness.

Given a drug which depleted the brain's supply of a substance known as serotonin, the cats displayed abnormal behavior while awake. Their brain wave patterns during these episodes were similar to dreaming patterns, suggesting that the animals were dreaming while awake.

"After this series of experiments, we felt that Isch had served us well, and we decided to retire him," says Dr. Harry B. Cohen, a physiological psychologist and member of Dr. Dement's research team. The medical team rehabilitated Isch, as they do most of the research animals, by performing the operation, and caring for him at the laboratory until he was ready to go home with Kathy.

Now Isch, the sniffy cat, is free to play all day. If he can stay awake.

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Mailed March 25, 1969.

ISCH THE CAT FINDS FELINE FELICITY. Kathy McGarr, a research assistant in the Stanford University sleep and dream research laboratory where Isch served as an experimental subject for two years, wanted him as her pet "because he kept his playfulness into adulthood."

TO: NEWS BUREAU, ROOM C-003, STANFORD MEDICAL CENTER, STANFORD, CALIFORNIA 94305

ISCH THE CAT

Please send me an 8x10" glossy print of Isch.

NAME _____ PUBLICATION _____

ADDRESS _____ CITY _____

3/69 _____ STATE, ZIP CODE _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

SCIENCE WRITERS: Dr. Opler will present his paper at 5:15 p.m. Sunday, March 23, in the San Francisco Hilton.

(ADVANCE) FOR AM RELEASE MONDAY, MARCH 24, 1969.

The human body's own defenses may hold the key to survival in some breast cancers, a Stanford University researcher reported today.

Dr. Stanley R. Opler of the Stanford University School of Medicine, said he made a detailed study of long- and short-term survivors with breast cancer and demonstrated that the defense mechanism of the former had been mobilized to slow down their own cancer cells or contain them after they had established a beachhead.

"This defense mechanism may be seen at the time of diagnostic surgery in some individuals and can be evaluated by examination of the tumor and its surrounding tissue and associated lymph nodes," Dr. Opler said.

"Ways of enhancing the body's defense against cancer by stimulating the system that produces these sensitive white cells are being studied," Dr. Opler said.

He described his findings at the meeting of the American Association for Cancer Research at the San Francisco Hilton Hotel.

Dr. Opler said his study was undertaken because of the "curious finding that some patients with widespread cancer were able to survive for long periods of time without any obvious explanation while others with comparable tumors failed to survive as long."

In many of these individuals, Dr. Opler found white cells surrounding their cancer cells and a stimulated immune system was seen in their lymph nodes.

"The tumors themselves proved to be similar," Dr. Opler reported, "but these studies revealed further protective factors in the long-surviving cases which appeared to be the response of the host's white cells and lymph nodes."

Dr. Opler said these findings are in accord with the possibility that the human body's immune system may be important in keeping the cancer patient alive when the disease has become clinically evident and has spread beyond the confines of local treatment.

The so-called "killer lymphocytes," white cells sensitized against the host's cancer cells, may home in, destroying some malignant target cells.

These cancer patients' lymph nodes also have important reactive changes that were shown to be significantly associated with long-term survival and are therefore expressions of host-resistance.

Studies on the role of the immune mechanism in cancer are under investigation, he said.

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END ADVANCE FOR AM RELEASE MONDAY, MARCH 24, 1969.

Mailed March 20, 1969.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

Telephone: 415: 321-5310

March 20, 1969

Paper, FASEB Atlantic City Meeting, April 13-18, 1969

Subject	A New Unique Histochemical Method for the Demonstration of Ribonuclease
Author.	Paul L. Wolf, M.D.
Address	Director of the Clinical Laboratories, Stanford University Medical Center, Stanford, California 94305
Time.	9:30 a.m., Friday, April 18, 1969
Place	Traymore Hotel, Belvedere Room, Atlantic City, New Jersey
Program	Enzymes
Convention Address.	Columbus Hotel

We have recently directed our endeavors toward developing new techniques and substrates for the demonstration of enzymes in tissues, peripheral blood, sera, and bacterial cultures. Previously we have described the application of the indigogenic principle to the histochemical demonstration of leucine aminopeptidase, beta-glucosidase, beta-galactosidase, N-acetyl glucosaminidase, alkaline and acid phosphatase, sulfatase, beta-xylosidase, endo- and exo-nucleases (phosphodiesterases), and serum alkaline and acid phosphatase, by disk electrophoresis. We have recently synthesized 5-bromo-4-chloro-3-indolyl-thymidine-5'-phosphate and 5-bromo-4-chloro-3-indolyl-thymidine-3'-phosphate, and have utilized these substrates to localize intracellular DNase. The principle of the reaction is that the nuclease enzyme cleaves the substrate at the site of attachment of the indolyl ring to the thymidine-3'-phosphate. A highly insoluble blue-green indigo is deposited at the site of the enzyme.

Recent studies in our laboratory have led to a new indigogenic histochemical technique for the demonstration of ribonuclease which plays an important role in protein synthesis. A majority of former techniques are indirect coupling procedures or fluorescent antibody methods. A specific substrate for ribonuclease, 5-bromo-4-chloro-3-indolyl uridine 2' (3') phosphate was synthesized, modeled after the technique for the indolyl substrates for the DNases. This substrate offers the advantage of precise enzyme localization with no diffusion. The method is simple and direct, and there is no need for a coupling reaction. The biochemical principle is that ribonuclease cleaves the substrate to yield a green-blue highly insoluble indigo. Animal tissues were incubated in the indolyl uridine substrate at various pHs. The histochemical reaction time for alkaline RNase II was ten minutes at pH 7.6 and for acid RNase II two hours at pH 5.5. The enzyme localization was only cytoplasmic. Fresh frozen sections were inferior to fixed tissue sections for localization and intensity of reaction. Alkaline RNase II was found primarily in the liver and kidney, while acid RNase II was present in pancreas and other tissues. The new substrate should facilitate the evaluation of ribonuclease.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- If you have any secrets, be careful! Your face may give them away. You may have considered your face as serving only to give you a window on the world. But now a Stanford University dermatologist says your face also gives a window on your entire body.

The view afforded is startlingly clear.

By looking at your face, a curious, skilled, and intuitive diagnostician can discern changes and markings which provide a tip-off to scores of internal diseases, says Dr. Eugene M. Farber of the Stanford University School of Medicine.

"For example," asks Dr. Farber, "what would one make of a patient who appeared with what Shakespeare describes in speaking of Cassius, as 'a lean and hungry look'?

"One would not normally suspect such a patient of contemplated regicide, but he could be suffering from tuberculosis. He might be a victim of the malabsorption syndrome, a failure of the system to allow digested foods to be absorbed through the intestinal walls into the blood stream. Or the physician might suspect ulcers, or even anorexia nervosa, a severe nervous condition resulting in loss of appetite."

It might be, of course, Dr. Farber adds, that the "lean and hungry" looking patient simply has not been able to afford a square meal in some time. In that case it would seem appropriate for the doctor to check the patient's finances as well as his health.

The idea of the face as a window through which one can look inside the body is not new, Dr. Farber explains. The little noted and not often used diagnostic art is called pathognomy (from the Greek, pathos, plus gnome -- a means of knowing).

"Like Sherlock Holmes," Dr. Farber says, "a dermatologist can reconstruct a whole chain of events from a few details which the casual observer would miss entirely."

Dr. Farber, who is professor and head of the Department of Dermatology, has a special interest in this aspect of medicine and has published a number of papers about the skin manifestations of internal disease. He discussed his interest in the current issue of STANFORD M.D., the quarterly magazine of the Stanford Medical Alumni Association.

The well-worn expression, "You don't look well," often has for the doctor a more meaningful connotation than that of its ordinary use, Dr. Farber writes.

For example, the patient with generalized, nonspecific heart disease may tip off the ervant physician almost immediately because of a complex of facial clues: an anxious expression with bright, watery staring eyes, a tensely-held mouth, and a face that appears to be somewhat shrunken. As might be expected, this group of facial signs is known as cardiac facies.

-more-

On the other hand, the patient whose cheeks are notably shrunken, with pale and sallow complexion and the sclera (outermost coat of the eyeball) pale or bluish, may well be suffering from a heart condition known as aortic insufficiency.

A condition involving another part of the heart, disease of the mitral valve, may be tipped off by rosy, flushed cheeks and dilated capillaries.

If a patient has yellow patches, like small deposits of tallow, under the eyes or on the eyelids, chances are about fifty-fifty that he has arteriosclerosis; that his blood is thick with cholesterol or other lipids.

Many other facial clues to disease are somewhat rare, but nonetheless interesting to the physician. One might look at some of them, Dr. Farber writes, remembering what "a lady" says to Macbeth in the first act of that play:

"Your face, my thane, is as a book where men may read strange matters."

The patient whose face has a silvery sheen should be suspected of argyria, a condition resulting from the long-continued use of silver salts, as from argyrol eye or nose drops.

If a patient presents himself with freckle-like markings of the mucous membrane on the lips or inside of the mouth, it is a sure bet that he also has benign polyps of the small intestines.

"In seeing children," Dr. Farber says, "one ought not to assume that young Johnny is simply as dumb as he looks. That open-mouthed, stupid look may, instead, be a sign calling for the removal of excess adenoid tissue."

Facies hepatica includes a thin face with sunken eyeballs, a sallow complexion and yellowish eyelids. These are signs of chronic disorders of the liver.

Hives, often assumed to be a disease entity, is actually only a sign of something wrong elsewhere. These hives or wheal-like lesions, with their intense itching, may have a number of underlying causes -- sensitivity to drugs, foods or other things, or chronic infections in teeth or elsewhere.

If a patient is seen with gray or slate-blue skin, he may well have hemochromatosis, an inborn error of metabolism which results in pigmentation due to an abnormal amount of melanin in the skin.

Despite all this emphasis on the face's use as a diagnostic aid, it should not be forgotten that people do undergo facial changes which have nothing to do with disease, according to Dr. Farber.

"The man who appears to be developing an elongated face may, in fact, only be suffering the ravages of balding," Dr. Farber points out. "And it is no secret that a woman's face does not always present the clear source of clues it might. Much can be hidden from the physician's eye by pancake makeup, or even simple powder and paint."

Dr. Farber concludes with this thought: "Disease is not all. In the human face, friendship and love are good things to look for, too."

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Mailed March 19, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

PATIENT AND FUZZY FRIEND BOTH A-OK. Seven-year-old Sharon Vinick of Sunnyvale, Calif. checks "heart beat" of her most prized possession, a stuffed toy named George. Sharon underwent open heart surgery at Stanford University Hospital recently to correct a congenital heart defect. She requested that George go to surgery with her and after the operation found that Stanford heart surgeons had "operated" on George also--complete with sutures and bandage. Sharon, daughter of Mr. and Mrs. Raymond Vinick, and George were both discharged from the hospital Tuesday.

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Mailed March 12, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Dr. Thomas A. Gonda, professor of psychiatry, has been appointed director of Stanford University Hospital.

News of his appointment came Wednesday (MARCH 12) in a joint announcement by Dr. Robert J. Glaser, Stanford University vice-president for medical affairs and dean of the School of Medicine, and James E. O'Brien, president of the Hospital's board of directors. They also announced the appointment of Courtney S. Jones as deputy director of the Hospital.

Dr. Gonda and Jones had been serving in an acting capacity since July of 1968, when the University purchased the City of Palo Alto's hospital holdings and created a new entity, the Stanford University Medical Center.

In addition to the directorship, Dr. Gonda will continue as an associate dean of the School of Medicine. He joined the Stanford faculty in 1953 as a clinical instructor in medicine (neuropsychiatry), and advanced through the academic ranks, becoming professor of psychiatry in 1965. Both his A.B. (1942) and M.D. (1945) were obtained at Stanford.

Jones was formerly director of business and fiscal affairs for the School of Medicine. He joined the administrative staff of the Stanford Linear Accelerator Center in 1962, and was assistant controller and associate director of the University's computation center before joining the administrative staff of the School of Medicine. He obtained the A.B. from Brown University (1957), and the M.B.A. from Stanford (1962).

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Mailed March 11, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Science Writers: Dr. Opler will present his paper at 2 p.m. Wednesday, March 12, in the San Francisco Hilton.

Photos are available on request.

(ADVANCE) FOR AM RELEASE THURSDAY, MARCH 13, 1969

SAN FRANCISCO--Studies of guinea pigs may provide a model for the long-sought key to more successful treatment and remission of a certain form of human leukemia, a Stanford University pathologist reported today.

Speaking at a meeting of the International Academy of Pathology, Dr. Stanley R. Opler, clinical associate professor of pathology at Stanford University School of Medicine, said he infected guinea pigs by feeding them orally with spleen cells containing the leukemia virus that he originally described as being associated with this disease.

The guinea pigs developed acute lymphatic leukemia, a form of blood cancer which is rapidly fatal in children and young adults.

When the guinea pigs died of the disease, Dr. Opler removed their livers and studied them under the light and electron microscope, then compared the results to liver tissue obtained from human leukemia victims.

"The pattern of acute leukemia in the liver as seen in our study of human leukemia and in the guinea pig model was striking similar," Dr. Opler said.

"The findings have two important implications for cancer research," Dr. Opler stated in an interview. "First, the ability to produce acute leukemia with a virus in the guinea pig adds to speculation of whether the disease in humans might be caused by a virus.

"Second, one can use the guinea pig model to test new forms of therapy against leukemia which might ultimately be used in human disease because of similarity of organ involvement and clinical evolution."

-more-

Present methods of treating leukemic patients with cytotoxic drugs (drugs that kill cells directly) may lead eventually to the demise of the patient, not because they fail to destroy numerous cancer cells but because they destroy normal tissue such as liver and bone marrow, Dr. Opler explained. These drugs also suppress the body's ability to fight infections by destroying immune white cells.

"Therefore, there is a need to experiment with normal metabolites or growth inhibitors which act not by killing the cell directly but by turning off the biochemical mechanism that produces the uncontrolled proliferation of leukemic cells," he said.

"The ability to readily find viral particles in leukemic guinea pigs and to produce the leukemia orally or with the injection of the virus is a rather striking experimental demonstration of the infectious nature of the disease in the guinea pig," Dr. Opler commented.

Other animal systems that have furnished valuable leads for leukemia studies are the chicken and the mouse. But unlike the other experimental systems, Dr. Opler added, the virus has never been seen in the absence of leukemia in the guinea pig.

Although the role of a virus remains unproven in human leukemia, Dr. Opler reminded his colleagues that the studies are not without historical precedent.

"With regard to comparative pathology, the guinea pig has many similarities to man as has been demonstrated in studies relating to brucellosis, diptheria, tuberculosis and polio," he said.

Dr. Opler discovered the new virus and described its unique structure seen by the electron microscope three years ago. Recently he has published the results of experiments proving it is a cancer-producing virus.

These findings have created interest among cancer researchers because the leukemia found in the guinea pigs is pathologically indistinguishable from that seen in humans. Currently others have confirmed the presence of the Opler virus in studies with leukemic guinea pigs.

The guinea pig, however, may prove to be a significant model for human leukemia studies due to its past relevance to human disease, Dr. Opler said.

(END ADVANCE) FOR AM RELEASE THURSDAY, MARCH 13, 1969

Mailed March 10, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

(ADVANCE) FOR RELEASE SUNDAY, MARCH 9, 1969

SAN FRANCISCO--A Stanford University pathologist today cautioned surgeons to avoid prolonged surgery on jaundiced patients because it can lead to kidney damage.

Dr. Paul Wolf, associate professor of pathology and director of Clinical Laboratories at Stanford University Hospital, pointed out that his investigation has demonstrated a relationship between jaundice and lack of oxygen or low blood pressure, which combine to produce prominent cell damage in the small tubules and filter chambers of the kidney.

He added that neither liver disease or lack of oxygen alone were capable of inducing the histochemical changes found with the combination of both conditions.

A drop in blood pressure during surgery reduces sharply the oxygen supply necessary for the kidney to survive. It is the combination of jaundice and lack of oxygen that causes the damage.

Dr. Wolf presented his findings at the meeting of the American Association of Pathologists and Bacteriologists in San Francisco.

He said the clinical significance of the study is that "one must prevent renal anoxia (insufficient supply of oxygen to the kidney) in jaundiced patients. Surgery in those patients should not be prolonged. Hypotension (diminished blood pressure) in patients with liver disease should be quickly corrected."

"Furthermore," Dr. Wolf added, "conditions such as excessive blood loss, and heart failure which may lead to renal anoxia in jaundiced patients should be quickly treated."

Dr. Wolf explained that kidney damage may be a common phenomenon in patients who have liver disease. The association of kidney failure with liver disease is known medically as "hepatorenal syndrome." The nature of the disease, first described in patients who developed kidney impairment soon after surgery of the bile duct, has been a matter of considerable controversy.

"The manner in which kidney tubules are injured in jaundiced individuals is not clear," said Dr. Wolf. But he theorized that bilirubin, one of the blood clotting proteins, may injure the kidney cells under certain conditions.

He said that bile salts may also be toxic to cells. Recent studies have indicated that abnormal amounts of amino acids, products of proteins, are present in the blood stream of patients with severe liver disease. These amino acids may damage the kidney tubules, he said.

For his studies, Dr. Wolf used three groups of animals (rabbits and dogs). In one group, the animals' renal arteries were clipped to cut off blood circulation and thus the oxygen supply to the kidneys. In the second group jaundice was induced by tying the common bile duct. A third group consisted of animals with induced lack of oxygen or low blood pressure and jaundice.

Only the third group of animals developed severe kidney damage, he said.

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END ADVANCE FOR RELEASE SUNDAY, MARCH 9, 1969 Mailed March 5, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Mrs. Ludmila Davis, R.N., director of the operating room and emergency room at Stanford University Hospital, won the top writing award at the national congress of the American Operating Room Nurses Association held last week in Cincinnati.

The award, which carries a $300 prize, was given for the best article of the year in AORN Journal, the association's monthly magazine.

Her article, entitled "Reflections on Heart Transplantation," described the feelings of the operating room nurses at the time of the first heart transplant operation at Stanford (January 6, 1968) and paid tribute to the support the nurses gave surgeon Norman B. Shumway and the members of his heart transplant team as they made the historic step forward.

Mrs. Davis joined the Stanford University Hospital staff as director of the operating room in 1965.

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Mailed March 6, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Science Writers: Dr. Wolf will present his paper at 8:30 a.m., Wednesday, March 12 in Ballroom 7, San Francisco Hilton Hotel.

FILE COPY

(ADVANCE) FOR RELEASE WEDNESDAY, MARCH 12, 1969.

STANFORD--Two Stanford University medical researchers now are experimenting with animals to determine if electric shock may be the answer to quickly raising and maintaining a patient's white blood cell level count to combat infections.

They are studying collie dogs which have cyclic neutropenia, an inherited blood disease marked by abnormally low levels of white blood cells. The dogs die usually from infections during acute stages of the disease.

One reason for the study is to determine the effect of electric shock on white blood cell levels as well as the amounts of shock needed for the white cells to rise.

The researchers are Dr. Paul L. Wolf, associate professor of pathology and director of clinical laboratories at Stanford University Medical Center, and Dr. John Lund, instructor in pathology and veterinary pathologist. Dr. Wolf described the study today at the annual meeting of the International Academy of Pathology at the San Francisco Hilton Hotel.

"If a way were found to stimulate white cell production sufficiently through safe electric shock, then the tedious requirement for transfusing white cells to patients would be eliminated," Dr. Wolf said.

White blood cells are the body's infection fighters. Some white cells called lymphocytes act selectively to combat virus infections as the common cold. Other cells combat bacterial infections such as bacterial pneumonia. These are called neutrophilic cells and comprise 50 to 60 per cent of the white cells in human blood.

"The study has a particular clinical interest at this time," said Dr. Wolf, "because infections--pneumonia among them--have been blamed as a cause of death for kidney and heart transplant patients despite massive white cell transfusions. This is because drugs used to combat rejection of foreign tissue also lower the white blood cell count in patients, rendering them susceptible to infections." -more-

The fact that electric shock causes an increase in the white cell count of patients came to Dr. Wolf's attention two years ago, when he was on the faculty of Wayne State University in Michigan.

He said he studied a young fireman whose white blood cell count showed an unusually high elevation after being struck by a falling high voltage electrical wire during the Detroit riots.

Observations made during the first week showed the fireman's white blood cell count shot up to 32,000 to 45,000, to 57,000, and then to 117,000 per cubic millimeter, Dr. Wolf reported. A count of up to 11,000 is normal.

"We felt that the electric shock was the direct cause for the white cell increase," Dr. Wolf said.

"We are certainly aware that such a reaction may result from extensive burns, severe infection, hemorrhage, and other conditions," he added, "but none of these were present, and it was thus the clinical impression that the electric shock produced the white cell increase."

Subsequently, Dr. Wolf studied variations in white blood cells of 24 psychiatric patients who were receiving electroshock for therapeutic reasons.

By measuring their white blood cell count before and after mild electric shock was given, he found that 75 per cent of the patients had developed an increase in white (neutrophilic) blood cells. The level of increase ranged from 50 to 100 per cent over the level prior to electric shock.

This unusually high blood cell count, developed within 2 to 4 hours after the electric shock, persisted for 12 to 24 hours. In 20 per cent of the patients, the white blood cell rise ranged from 25 to 50 per cent above the base level and persisted for about 12 to 16 hours.

Five per cent of the patients showed no occurrence of the blood condition. This is an anticipated response, Dr. Wolf explained, since a small percentage in any population does not react to certain forms of treatment or medication.

Dr. Wolf noted that the mechanism for the white blood cell response to electroshock is not well defined. But, he added, "direct stimulation of the pituitary-adrenal system by electric shock is known to release cortisone or adrenalin which may be responsible. Other factors may also be involved."

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END ADVANCE FOR RELEASE WEDNESDAY, MARCH 12, 1969.

Mailed March 4, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310
Stanford University Medical Center
or
Mrs. Joseph E. Levine
Lila Motley Cancer Foundation 212: 759-4245

NEW YORK -- Dr. Henry S. Kaplan, professor and chairman, Department of Radiology at Stanford University School of Medicine, is the 1969 recipient of the Lila Motley Award and Shahbanou Medal. Announcement of the award was made today by the Lila Motley Cancer Foundation.

As part of the award, Dr. Kaplan will make a trip to Iran to conduct seminars and visit clinics in an exchange of ideas in the fight against cancer.

Dr. Kaplan will receive the award and the Iranian gold medal at the Foundation's Peacock Ball in New York this Saturday, May 3. The Ambassador to the United Nations from Iran, Mehdi Vakil, will present the Shahbanou Medal on behalf of Empress Farah of Iran.

This award to Dr. Kaplan comes on the heels of another major honor: earlier this week he was named an Atoms for Peace Award winner for his achievements in the peaceful uses of atomic energy.

The Lila Motley Cancer Foundation was organized by a group of New York women in honor of Lila Motley, who was a victim of cancer. In addition to supporting activities which contribute to the dissemination of cancer research results to physicians in other countries, the Foundation sponsors cancer-related projects at New York University Medical Center.

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Mailed April 30, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310
or
Atoms for Peace Awards, Inc. 617: 864-9870

Editors: Story released simultaneously with announcement to be made Tuesday, April 29 by Atoms for Peace Awards, Inc., Cambridge, Mass.

(ADVANCE) FOR AM RELEASE TUESDAY, APRIL 29, 1969

STANFORD -- Dr. Henry S. Kaplan, a pioneer in radiobiology and the application of supervoltage and electron beam therapy in cancer, was named today a recipient of the Atoms for Peace Award.

He is one of seven scientists from four countries selected to receive Atoms for Peace Awards for pioneering work in peaceful uses of atomic energy in the last decade.

These awards, and the previously announced award to the late Dwight D. Eisenhower, will be presented May 14 in Washington, D.C. They will conclude a program begun 14 years ago to recognize distinguished contributors to the peaceful uses of the atom.

In addition to Dr. Kaplan, other award recipients announced today include Aage N. Bohr and Ben R. Mottelson of Denmark; Floyd L. Culler, Jr., and Anthony L. Turkevich of the United States; M. S. Ioffe of the Soviet Union; and Compton A. Rennie of England.

In announcing this group of awards, Dr. James R. Killian, Jr., chairman of the Atoms for Peace Awards trustees and chairman of the Massachusetts Institute of Technology, said that the intention of the trustees is "to recognize a relatively younger group of scientists and engineers whose recent achievements illustrate some exciting ways in which we are putting atomic energy to peaceful work and to show how widespread these efforts are throughout the world."

Dr. Killian said the trustees "hope that this recognition will stimulate the scientific and political communities to find more ways to use the atom to extend our knowledge and the control of the physical world, and to alleviate some of the problems in attaining the full life for all men."

Counting today's recipients, 22 people from eight nations have been named to receive the Atoms for Peace Awards. The seven recipients announced today will each receive a gold medallion symbolizing the award, and each will also receive an honorarium of $15,000.

Dr. Kaplan was cited for research which has contributed to understanding how radiation induces leukemia in mice, and for the development of the "cancer gun" at Stanford University Medical Center. He was also cited for his introduction of radiation biology into clinical radiation therapy training programs.

When Dr. Kaplan organized the Department of Radiology at Stanford 20 years ago, he felt that early work in radiology had been done by physicians whose prime orientation was toward pathological anatomy, perpetuating an emphasis on static images. "It was clear to me that the stature of the field depended upon research," he told an interviewer recently.

-more-

He founded the department with two points of research emphasis. The first was encouragement of the study of motion--blood flow and valve action--in diagnostic radiology, which represented a movement into applied physiology. The other point, in radiation therapy, was an effort to understand radiation biology.

After graduating from Rush Medical School in 1940, Dr. Kaplan served his internship and residency at Michael Reese Hospital. He then went on to the University of Minnesota, Yale, and the Public Health Service before coming to Stanford in 1948.

Three years later he asked the Stanford physics department to investigate the possibility of adapting a new high-energy physics device, the linear accelerator, for medical application. After helping design the necessary apparatus, he set standards for its use.

"It was like getting a new high-powered rifle," Dr. Kaplan recalls. "You couldn't go out and use it like an old shotgun."

The linear accelerator technically liberated Dr. Kaplan and his associates to further work on Hodgkin's disease and other malignant cancers.

With the megavoltage beam, he was able to irradiate a larger area and consequently developed "the mantle technique," which allowed irradiation of all the lymph nodes of the neck and thorax at one time. As a result, he records an 80 to 90 per cent cure rate for early stages of Hodgkin's disease, and more recently succeeded in obtaining five-year survivals in advanced cases as well.

Dr. Kaplan has also dispelled the theory that, in leukemia, X rays and chemical agents mutate the cells so they behave as cancer. In his work with mice, he has shown an indirect induction mechanism whereby irradiation or a chemical trigger a latent virus.

He has been able to pinpoint the target cells for the leukemia virus in mice and has been able to define the mechanism by which bone marrow inhibits the development of leukemia unless irradiated.

Dr. Kaplan also has shed much light on the fundamental biologic effects of radiation. He and others have gathered overwhelming evidence that DNA (the cell's hereditary material), is the target molecule in the cell for radiation effects. With this information, Dr. Kaplan has been developing drugs which are picked up by the DNA and increase radiation sensitivity. He has now moved some of these studies to the clinical stage.

At the Award ceremony, which will be held at the National Academy of Sciences, the trustees will also present posthumously to the late Dwight D. Eisenhower the Atoms for Peace Award announced March 20.

The Atoms for Peace Awards program was established as a memorial to Henry Ford and his son, Edsel, in 1955, when the Ford Motor Company donated $1 million to support the presentation of annual awards for the advancement of the science of atomic energy for peaceful purposes. Atoms for Peace Awards, Inc. at Cambridge, Mass. was created as a nonprofit corporation to receive and administer the funds.

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Editors: For further information on research achievements of other award recipients, consult advance release mailed simultaneously by Atoms for Peace Awards, Inc.

END ADVANCE FOR AM RELEASE TUESDAY, APRIL 29.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

ADVANCE FOR RELEASE THURSDAY, APRIL 17, 1969

ATLANTIC CITY -- A naturally occurring body chemical, dopamine, has been found to restore normal heart function in dogs after an acute heart attack.

The finding, reported today by a Stanford University medical research team, was termed "encouraging" and may represent a new approach to treating patients with extensive heart damage.

The Stanford researchers first tested the drug for its circulatory effects on 17 dogs with normal hearts. They found that dopamine enhanced overall blood circulation and heart performance.

Then the researchers gave the drug to the same dogs after they had suffered heart attacks induced surgically. The technique used to produce heart attacks allowed the exact estimation of the size of muscle damage which averaged 37 per cent of the heart.

The drug, according to the researchers, reversed all the abnormalities in circulation caused by the heart attacks in the animals. It increased the strength of their heartbeats, and the capacity of the damaged muscle to pump blood to near-normal levels, and eliminated all signs of heart failure.

The new finding was reported at the meeting of the Federation of American Societies for Experimental Biology. The researchers are Bruce U. Wintroub, Dr. John S. Schroeder, Dr. Marianne Schroll, Mrs. Sherilyn Robison, and Dr. Donald C. Harrison. Their work was done with grant support from the National Institutes of Health.

Dopamine's circulatory effects have been known for some time. The drug has been used successfully in the treatment of shock. It is a precursor in the synthesis of the compound norepinephrine, associated with the regulation of blood pressure in the heart.

This is believed to be the first controlled animal study of the drug's effects in the treatment of acute heart attack (myocardial infarction), according to the researchers.

The studies, the researchers said, have shown that dopamine "may be of extreme value in treating patients with extensive cardiac damage. It appears to increase the function of the heart in a manner which makes it superior to other agents now available."

This premise, however, needs to be tested in a large patient population with acute myocardial infarction, they added.

Clinical tests of the drug in patients with acute myocardial infarction are now under way at Stanford University Hospital.

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END ADVANCE FOR RELEASE THURSDAY, APRIL 17, 1969

Mailed April 14, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310
or
Peter Waller, NASA Ames Research Center 415: 961-1111

Story released jointly by Ames Research Center and Stanford University School of Medicine.

FILE COPY

FOR AM RELEASE THURSDAY, APRIL 17, 1969

STANFORD--The possibility that stroke, which ranks third among the leading causes of death in the United States, can be predicted and prevented is suggested by a research team from NASA Ames Research Center and Stanford University School of Medicine.

Working under grants from the National Aeronautics and Space Administration and the National Heart Institute, the researchers have now developed a technique which may identify stroke-prone patients.

The researchers are Donald L. Ciffone of NASA Ames Research Center at Moffett Field, California; John W. Gamel, a Stanford medical student; Dr. William H. Marshall, Jr., assistant professor of radiology; and Dr. Leo A. Sapirstein, professor of physiology in Stanford's department of radiology. Their work was described today at the meeting of American Societies for Experimental Biology in Atlantic City.

The new technique consists of injecting a radioactive drug (Technetium Tc^{99m}) into the blood stream and then measuring its flow rate as it passes through the patient's brain.

The records obtained by a scintillation detector and accessory equipment are analyzed by computers, which calculate the pattern of blood-flow rate through the brain.

"An indication of a low blood-flow rate might be the result of a hardening and narrowing of the arteries of the brain," the researchers explained. "In such a case, it is expected that the blood-flow pattern will display the characteristics of a stroke-prone patient."

The cerebral stroke, an interruption of the normal blood supply to the brain, is usually a result of arterial deterioration.

When a stroke candidate is identified, his physician may prescribe medical treatment to prevent a stroke. Surgery to remove the arterial obstruction, or use of anticoagulant drugs are among the most common preventive measures used.

The researchers described their technique as "simple," and "safe." "This test does not cause any more discomfort to the patient than that which he would experience if a simple blood sample were drawn for any other type of analysis," they said.

Ciffone and Gamel developed the analytical methods which interpret and analyze the isotope measurements, and a fluid mechanical model which simulates the blood-flow characteristics through vessels to allow verification of the technique.

Measurements to establish normal brain blood-flow rates and patterns, as well as deviations from these in disease have been made at Stanford University Medical Center by Drs. Marshall and Sapirstein.

The researchers predicted that, although not routine, the technique may have a wide clinical application and may aid significantly in reducing the incidence of stroke.

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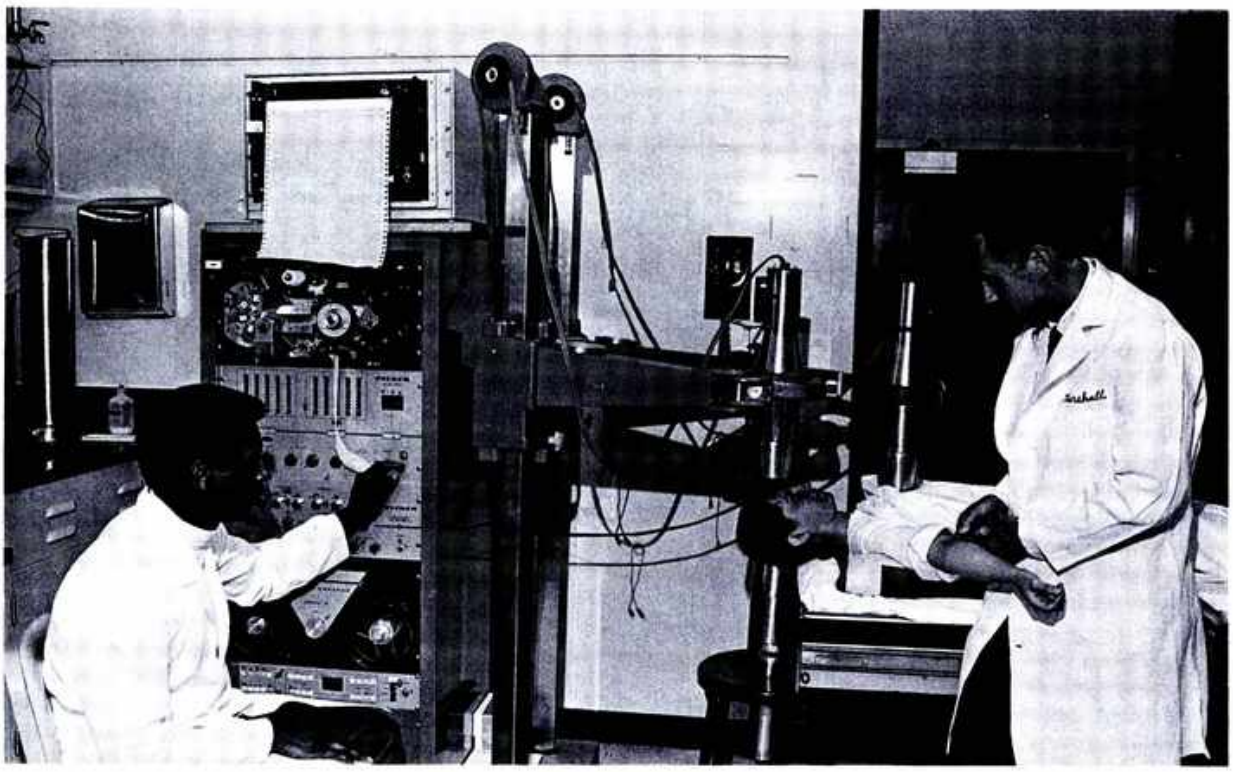
Mailed 4/15/69.

END OF RELEASE FOR AM THURSDAY 4/17/69.



Aided by laboratory assistant James Bradley, Dr. William H. Marshall, Jr. of the Stanford University School of Medicine, demonstrates new test used in diagnosis of stroke. Miss Louise Lyman, a laboratory technician posing as a patient, "receives" injection of radioactive drug which permits physicians to record and calculate patterns of blood-flow rate through the brain. A low blood-flow rate means that patient may be suffering from hardening or narrowing of the arteries--a danger signal. The technique was developed by scientists at Stanford and NASA Ames Research Center.

TO: NEWS BUREAU, ROOM C003, STANFORD MEDICAL CENTER, STANFORD, CALIF. 94305

STROKE DIAGNOSIS

Please send me an 8x10" glossy print.

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4/69

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- A 58-year-old man from Bakersfield, California became the 13th heart transplant patient Sunday at Stanford University Hospital.

The recipient is James E. Pounds. He received his new heart in a 4-1/2 hour operation performed by a team of surgeons headed by Dr. Norman E. Shumway.

Donor of the heart was 21-year-old Gary Ostrom of Palo Alto, who suffered irreversible brain damage in an auto accident Friday. Ostrom, father of a 4-month-old son, Gary Allen, Jr., died Sunday morning at the Hospital. He is survived by his wife, Carol, his son, his mother, Mrs. Grace Ostrom, two sisters, Mrs. Nancy Driskell of Mt. View and Mrs. Yvonne Brawner of Redwood City, and a brother, Daniel C. of Eugene, Oregon.

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Telephone release 4/14/69.

STANFORD UNIVERSITY NEWS SERVICE
FOR INFORMATION CONTACT: Bob Beyers

Zip 94305. Telex [illegible]
(A/C 415) 321-2300, Ext. 2558

Southern California editors may contact Stanford Regional Office, 621 S. Hope Street, Los Angeles Zip 90017. (213) 627-0653

FILE COPY

EDITORS: The following story written by Spyros Andreopoulos of the Stanford Medical Center News Bureau. Smith may be contacted directly at 325-3305 or 321-1200, ext. 5811.

FOR IMMEDIATE RELEASE

STANFORD - "How do nerve gases work?" "Why are viruses so deadly?" "What are the effects of massive defoliation programs on human, plant and animal life?"

These and related questions will be discussed Thursday (APRIL 10) at a science fair organized by a group of Stanford University graduate students "to dramatize the perils and implications of chemical and biological warfare research on living things."

Exhibits ranging from how to grow deadly bacteria to delivery systems of lethal gases and other chemical and biological warfare weapons will be open for the public at 7:30 p.m. in Tresidder Memorial Union, and will be followed by informal discussions led by students.

The event, organized by Andy Smith, a graduate student in neurological sciences and a member of the Chemical-Biological Warfare Study Group at Stanford, is sponsored by the Stanford Research Institute Coalition, a group of students and faculty members favoring stricter University control of Stanford Research Institute programs.

Smith said there is a need to educate the layman about the nature of research done on chemical and biological warfare. "By bringing together graduate students with specialized experience in such fields as neurochemistry, virology, and plant physiology, I hope these questions can be answered," he said.

At the same time, Smith added, actual demonstrations of such work would allow students to understand chemical and biological warfare research far better than if they merely listened to lectures on the subject.

Smith, who is a member of the SRI Coalition, said another purpose of the fair is to bring closer to home SRI's role in classified research.

"Basically we feel that SRI, as a University-related institution, should not be allowed to conduct research designed to harm people," Smith explained. "At present, most of this research is classified.

"We feel that if SRI were made a more official part of Stanford University, it would be possible to insure that no classified projects be undertaken by the Institute.

"Then, with full knowledge of what was being studied, the Stanford-SRI community could judge whether such research were in line with the statement from the SRI charter, 'for peace and prosperity of mankind.'"

Topics at the science fair and graduate students presenting them include nerve gases, Andy Smith (neurosciences); defoliation-herbicides, Terry Chapin (biology); bacteria, George Johnson (biology); viruses, Dale Hattis (genetics); distribution of CBW agents, Mel Kronik (physics).

In addition, Dr. Robert Karpf of the Santa Clara Valley Medical Center, will discuss chemical and biological warfare agents from a medical standpoint. His lecture will be on "Problems in Detection, Protection, and Treatment."

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4/7/69

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

FILE COPY

A pearl ring, a copper sculpture of the figures from the painting "American Gothic," and a black and white photograph of an old codger on a New York City sidewalk were among the winners of this year's art show at Stanford University Medical Center.

The recent show was the most successful ever held at the Medical Center, with a record 209 entries. Students, faculty, personnel and volunteers were eligible to participate.

Nursing supervisor Lois Perry of Los Altos crafted the ring, which consists of two cultured pearls mounted on a delicate silver band.

The copper sculpture, entitled "Grant Wood U.S.A.," was done by Research Associate in surgery Dr. Raymond Stofer of Woodside, who has won top prizes five of the six years the show has been held.

In the black and white photo, fourth year medical student Eugene Altman of Palo Alto had captured reflections of New York apartment buildings glinting off the glasses of his unshaven subject.

Other first prize winners were graduate student in biochemistry Thomas Broker of Menlo Park, for his color photograph "Processional," a title extrapolated from the view of Bridal Veil Falls; Dr. R. Wesley Wright of Atherton for his oil painting "Coast House," nursing clerk Judy Pantages of Los Altos for her drawing "Self Portrait 1966-1967;" Dr. Wright again for his watercolor "Monterey Wharf;" Dr. A. M. Gottleib of Menlo Park for an abstract oil painting "Stained Glass Window;" and Dr. Arnold Starr of Palo Alto for "Isenberg Ranch," an acrylic.

Professional judges made the choices, awarding 25 prizes and 14 honorable mentions.

The judges were Mrs. Dagmar Dern of Redwood City, a member of Peninsula Stitchery Guild and Bay Area Arts and Crafts; Ray Lorenzato and Gilbert Steed of San Mateo, both art teachers at the College of San Mateo; Mrs. Lyman Page of Palo Alto, a member of the Palo Alto Art Club and Paul Engelcke of Palo Alto, a member of the Palo Alto Camera Club.

Mrs. Alice B. Mild of Portola Valley, head of the Medical Center's housekeeping department, was chairman of the ten-member committee which organized the show.

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Mailed May 28, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415 321-5310

STANFORD -- Dr. Norman Kretchmer has been chosen as the 1969 recipient of the Alumni Medallion for Distinguished Service to American Medicine, by his alma mater, the College of Medicine of the State University of New York.

A 1952 alumnus, Dr. Kretchmer is professor and chairman of the Department of Pediatrics at Stanford University School of Medicine.

The medallion will be presented at Downstate Medical Center Commencement ceremonies Thursday, June 5 at 8 p.m. in the Walt Whitman Auditorium of Brooklyn College.

Dr. Kretchmer is internationally known for pediatric research, and for basic research in biochemistry. He is responsible for expanding the scope of Stanford pediatric programs by focusing work on the molecular, physiologic and behavioral aspects of growth and development. He obtained the first award from the National Institutes of Health for construction at Stanford of a clinical research center for premature infants.

He also established a major research and training program in the field of developmental biochemistry. This is a new field which unites clinical and research efforts directed toward a biochemical understanding of congenital defects, metabolic diseases, and mental retardation.

The Stanford professor recently announced he will relinquish the Department chairmanship in the fall of 1970 to return to full-time teaching and research. He has held the administrative post since 1959.

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Mailed May 27, 1969.

Transplant #14 RALPH
May 22, 1969 TROUT, III

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- A 33-year-old professional organist became the 14th heart transplant patient at Stanford University Hospital today.

The recipient is Ralph Trout III, 1625 Diel Dr., Milpitas. He received his new heart from an anonymous donor in an operation performed by a team of cardiovascular surgeons headed by Dr. Norman E. Shumway. Trout is reported in satisfactory condition.

Trout, who has also worked as an organ salesman, has suffered a series of heart attacks in the past four years. His family includes his father, Ralph Trout of El Sobrante, and a brother, Charles, of Milpitas.

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May 22, 1969.

Read by phone
Palo Alto Times

San Jose Mercury

Associated Press

United Press International

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Two guest lecturers and nine medical students will give talks at the Ninth Annual Stanford Medical Student Day, Saturday May 24.

Dr. Philip R. Lee, chancellor of the University of California Medical Center in San Francisco, will deliver the Fourth Annual Lowell Rantz Memorial Lecture, the highlight of Student Day.

Dr. Lee, a 1948 graduate of Stanford University School of Medicine, was assistant secretary of Health, Education and Welfare before he was named to the University of California post.

Congressman Allard K. Lowenstein (Dem. - N.Y.) has also been invited to address the gathering of students, alumni and faculty. Recently Inter-Fraternity Guest-in-Residence at Stanford, Lowenstein will speak on "Social and Political Implications of Medical Education."

Student Day Chairman Robert C. Aber, fourth year medical student, will make the opening remarks when the Day's program begins at 12:30 Saturday in Room M106. Dr. Robert J. Glaser will give the Dean's welcome, and Dr. William H. Clark, president of the Stanford Medical Alumni Association, will give the welcome for the Alumni Association and present awards to the nine student speakers. Dr. Clark will also present the Association's Alumni Scholar Awards to Michael P. Alexander of the fourth year class and Ronald D. Adler of the fifth year class. Topics of student papers this year range from psychology to biochemistry to social issues, Aber said. The papers which are being given were selected by a committee of five students headed by M. Eric Gershwin, a member of the third year class.

Following the afternoon's program, the students will hold a reception and a dance.

Student Day is supported by the Stanford Medical Student Association, the Stanford Medical Alumni Association and the Palo Alto Clinic.

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Mailed:
May 20, 1969.

Palo Alto Times

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415-321-5310

STANFORD -- Dr. Kenneth D. Gardner, assistant professor of medicine, is resigning from the Stanford faculty to join the faculty of the University of Hawaii School of Medicine on July 1.

His appointment was announced by Dr. Windsor Cutting, dean of the University of Hawaii School of Medicine. Dr. Cutting was formerly professor and chairman of the department of pharmacology and dean (1953-1957) at Stanford Medical School.

Currently a two-year program, medical education at Hawaii is expected to be expanded to a full four-year program in the early 1970's. Dr. Cutting was instrumental in establishing the School, which admitted its first class in 1967.

The 50th State's interracial and tropical aspects make it an excellent setting for specialization in genetics and tropical medicine, commented Dr. Gardner.

At the University of Hawaii, he will be professor of medicine, chief of the renal division of the Department of Medicine, chairman of the admissions committee of the School of Medicine and a consultant in medical education for the Regional Medical Program of Hawaii.

The last mentioned assignment is a particularly exciting prospect to him, because the Hawaii RMP area takes in the United States Trust Territories of the Pacific, including the Marshall and Solomon Islands and American Samoa. "This remote area of the world offers a unique challenge for the education of the nurses, technicians and physicians needed to care for its people, as well as providing an excellent laboratory for field work in the delivery of medical care," Dr. Gardner said.

Two of Dr. Gardner's major research projects at Stanford have been: first, a six-year study, done in collaboration with Dr. Roy H. Maffly, on the permeability of the distal nephron (the functional unit of the kidney) to urea; and second, a study(which he will continue in Hawaii) of a genetically transmitted and unusual form of kidney disease known as cystic disease of the renal medulla.

While on the Stanford faculty, Dr. Gardner was named an "outstanding teacher" by the medical students of the classes of 1971 and 1972.

He is a native of San Francisco, and received both the B.M.S. (1951) and M.D. (1955) from Stanford. He served his internship and residency at the Hospital of the University of Pennsylvania, and returned to Stanford as a research fellow in 1961, joining the faculty as an instructor in 1963. He has been assistant professor since 1964.

When the Gardners (Mrs. Gardner is the former Dorothy Rowe of Palo Alto and a 1953 Stanford graduate), move to the Islands, they will make their home in Kailua on Oahu. They have four daughters, ranging in age from two to 13 years.

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May 10, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

ADVANCE FOR PM RELEASE WEDNESDAY, MAY 7, 1969

BAL HARBOUR, FLA.--Psychiatric complications resulting from the trauma of major surgery and anti-rejection drugs are not uncommon in heart transplant patients, a Stanford University psychiatrist said today.

Dr. Donald Lunde, speaking at the annual meeting of the American Psychiatric Association, said that while in the majority of cases the psychiatric complications have been temporary and of short duration, three patients did develop serious psychiatric problems postoperatively.

His remarks were based on observations during the last 18 months as psychiatric consultant on Dr. Norman Shumway's heart transplant team at Stanford University Medical Center.

"The personality changes which we have seen are not surprising," Dr. Lunde said. "It is well documented that patients on steroid drugs often have temporary psychotic reactions. It is also known that these reactions occur in patients who have been on a heart-lung machine as is necessary in open heart or heart transplant surgery or who have been confined for lengthy periods in an intensive care unit.

"The heart transplant patient is subject to all three of these conditions," he pointed out.

"There are usually changes in the patient's perception of himself following the operation," according to Dr. Lunde. "The patient who has previously been an invalid suddenly, and in some cases very dramatically, is rather healthy and has a significantly increased exercise tolerance. Patients who had been bedridden and could not walk across a room can walk up and down the hospital corridors a week after the transplant operation.

"Some of the patients have also felt that by receiving the heart of another person they might take on some of the personality characteristics of the donor. One patient, who knew the background of the heart donor, said he felt he had an obligation to live up to the standards set by the man whose heart he had received."

Dr. Lunde said that psychiatric evaluation of potential heart transplant recipients prior to the operation is important.

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"In addition to the medical criteria of accepting only those patients who have severe and incapacitating heart disease, they are also screened for any evidence of psychosis or severe depression," the Stanford psychiatrist said.

"It is vitally important that the potential heart transplant patient be fully capable of understanding the risk of known complications as well as the possibility that unforeseen problems may arise at any time after the operation," Dr. Lunde said. "An individual suffering from a mental disorder which prevents him from realistically evaluating these risks and giving an informed consent for the operation has been considered an unsuitable candidate for this procedure."

At least two potential candidates have been ruled out for such reasons, he said. The three patients who developed psychoses postoperatively had manifested no evidence of psychiatric problems before the operation.

Another consideration is the quality of life that the heart transplant will enable the potential recipient to lead.

"Most of the recipients selected for transplant are people who have lived very active lives and who have been very frustrated whenever they have been in bed for even a few days," Dr. Lunde said. "These individuals would rather, in their own words, 'take a chance' on a heart transplant than face the rest of their lives as a bedridden cardiac invalid.

"For such people, the possibility of being active again, even for a brief period, outweighs their concern about longevity," he explained.

In concluding Dr. Lunde said that "as surgery now considered radical becomes more common and as more vital organs are exchanged, distortions of personality can be expected since personality and self-image are so closely tied to body-image. We will simply have to be prepared to deal with the increase of psychiatric complications."

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END ADVANCE FOR PM RELEASE WEDNESDAY, MAY 7, 1969

Mailed May 5, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415 321-5310

FILE COPY

STANFORD -- The students, staff and volunteers of Stanford University Medical Center will hold their sixth annual art sbow May 11-21, the opening week coinciding with National Hospital Week.

The public is invited to visit the show, which will be set up in the first floor waiting areas of Stanford University Hospital.

Works will include oils, watercolors, acrylics, collages, drawings, sketches, prints, photographs, sculpture and crafts.

Five professional judges will select award winners in the various categories. The judges are Mrs. Dagmar Dern of Redwood City, a member of Peninsula Stitchery Guild and Bay Area Arts and Crafts; Ray Lorenzato and Gilbert Steed of San Mateo, both art teachers at the College of San Mateo; Mrs. Lyman Page of Palo Alto, a member of the Palo Alto Art Club; and Paul Engelcke of Palo Alto, a member of the Palo Alto Camera Club.

A "Most Popular" entry of the show will be chosen by Medical Center personnel.

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Mailed May 1, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Four faculty members of Stanford University School of Medicine were awarded Henry J. Kaiser Memorial Awards for excellence in teaching during graduation ceremonies yesterday at the Medical School.

The recipients are Dr. Paul Berg, professor of biochemistry; Dr. A. Kent Christensen, associate professor of anatomy; Dr. William P. Creger, associate professor of medicine and associate dean for student affairs; and Dr. Kenneth D. Gardner, Jr., assistant professor of medicine. Dr. Gardner has recently been appointed professor of medicine at the University of Hawaii School of Medicine.

Each of the award winners will receive a $600 prize.

The Henry J. Kaiser Memorial Fund was established in 1968. All medical students have the opportunity to vote for those faculty members whom they feel have outstanding teaching abilities. Final selection of those to be honored is made by a joint committee that includes both faculty and students.

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Mailed June 16, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FOR RELEASE MONDAY, JUNE 23, 1969

STANFORD -- A report by a Stanford University medical research team that Bright's disease, an inflammation of the filtering system of the kidneys, is caused by an immune reaction, brings every hope that useful treatment may be forthcoming.

The report, presented Monday at the International Congress of Nephrology in Stockholm, Sweden, described studies in rats showing that the kidney disease is caused by an antibody directed against the specific protein of a strain of streptococcus which has been associated with the disease in humans.

In earlier studies, the Stanford investigators had demonstrated that of nine streptococcal strains used to infect animals, only the strain that contained the specific protein caused Bright's disease or glomerulonephritis.

The fact that an immune reaction might cause the kidney inflammation has been suspected for some time. Just how the streptococci could account for the disease was poorly understood. It was clear that the streptococci did not cause it by direct infection.

Now that the disease is known to be caused by an immune reaction directed at the specific protein, it would be possible to synthesize that protein and use it as a vaccine to stimulate antibody response to prevent the disease. This, however, is a step that will require further research, the investigators said.

The report was presented by Dr. Kenneth L. Vosti, associate professor of medicine at the Stanford University School of Medicine. His collaborators included Dr. Lois H. Lindberg, a research associate, Dr. John C. Kosek, assistant professor of pathology, and Dr. Sidney Raffel, professor and chairman of the Department of Medical Microbiology. Their work was supported in part by grants from the National Institute of Allergy and Infectious Diseases of the National Institutes of Health.

In the past, Dr. Vosti said, it had been difficult to study the disease because observations were limited to patients who had already developed all the clinical symptoms of glomerulonephritis.

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The use of the rat as an experimental model, which fulfilled many of the epidemiological, clinical, and laboratory features of Bright's disease, has made it possible to examine to a degree not previously described the mechanisms that may be operative in various stages of the disease, he added.

The Stanford researchers infected rats with streptococci isolated from the pharynx of a 12-year-old boy with acute kidney disease. Another group of rats was exposed to a different strain of streptococci removed from the excised tonsil of a child with no history of kidney disease.

Only the rats infected by the streptococcal strain removed from the patient with nephritis developed the disease. The clinical and immunopathological features of the disease in the animal model were identical to those in man, Dr. Vosti said.

The animals began to excrete protein in their urine and antibodies to the specific protein of the streptococcal strain were detected in the glomerular filtering apparatus of the kidney before being excreted in the urine.

The presence of these materials, analyzed through a series of highly sophisticated and elegant experiments described by Dr. Vosti, provide strong support for an immunologic disease.

It has been suggested that the immunologic disease may be brought about by two possible mechanisms, Dr. Vosti explained in an interview.

It is possible that the protein settles in the glomerular filtering apparatus of the kidney, and that a specific antibody reacts with it to form a toxic immune complex. Or the protein reacts with the antibody in the bloodstream to form the toxic complex which then settles in the kidney's filtering apparatus and blocks it. As the kidney eventually loses its filtering efficiency, the patient may die of uremic poisoning.

Bright's disease is a major cause of illness among children. About 10 per cent of those affected become chronic kidney patients, eventually requiring dialysis treatment or kidney transplants.

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Mailed June 20, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Concerned that the proposed ban on DDT for home use by 1970 may result in further contamination of the environment, two Stanford University pharmacologists have urged the director of the California Department of Agriculture to issue specific guidelines for the disposal of DDT and related chemicals.

In a letter to Governor Ronald Reagan and the director of the California Department of Agriculture, Dr. Sumner M. Kalman and Dr. Robert H. Dreisbach of the Stanford University School of Medicine, have suggested that the State Department of Agriculture be made responsible for collecting and disposing of these chemicals.

Both pharmacologists support the proposed ban of chlorinated hydrocarbons pesticides for home use, announced recently by the director of the California Department of Agriculture.

"We are concerned about the problem of disposal," Drs. Kalman and Dreisbach wrote.

"Many householders will want to get rid of chlorinated hydrocarbons. It is a job for experts. These compounds have to be destroyed by chemical oxidation or by combustion at extremely high temperatures in sealed containers.

"This cannot be done at home. The chlorinated hydrocarbons should not be disposed of by washing down the sink, toilet, sewer, septic tank, or by burial, by placing them into garbage or trash cans, or by introduction into any body of water.

"Such action will contribute to a further contamination of our environment."

The chemicals which concern the Stanford pharmacologists include DDT, DDD, dieldrin, aldrin, chlordane, heptachlor, benzene hexachloride, lindane, toxaphene, endrin, isodrin, mirex, kepone, thiodan, tedion, prolan, and bulan. All of them are hard chemicals known for their slow decay rate.

"We suggest that persons wishing to dispose of these hazardous materials (be directed) to take them to...representatives designated by the director of the Department of Agriculture," the pharmacologists said.

FILE COPY

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Mailed June 25, 1969.

EDITORS: Story relayed by phone June 24, 6:00 p.m.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--The Clinical Sciences Research Building at Stanford University School of Medicine was named Friday (JUNE 20) in honor of the late Joseph Donohoe Grant, one of San Francisco's most distinguished sons and a lifetime member of the University Board of Trustees.

Honored guests at the afternoon ceremonies in the courtyard of the Joseph D. Grant Building for Research in the Clinical Sciences were Mr. Grant's daughters, Mrs. Josephine Grant McCreery of San Jose and San Francisco and Mrs. Edith Grant Ordway of Los Altos, and many long-time friends of the Grant family.

Speakers introduced by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, were W. Parmer Fuller III, president of the Board of Trustees and Dr. Loren Chandler, former dean of the School of Medicine and a personal friend of Mr. Grant.

Mr. Grant, a leading California industrialist, financier and merchant, served as a lifetime member of the University Board of Trustees for 51 years. He was appointed to the board by Senator Stanford in 1891 at the age of 33.

The late Dr. Ray Lyman Wilbur, former president and chancellor of the University, wrote at the time of Mr. Grant's death in 1942 that "He was a dependable, faithful, loyal, and devoted Trustee--always available and always ready...he was interested in advancing the University and was never contented with considering his trusteeship as a mere custodianship."

Joseph D. Grant was born in San Francisco in 1858, the son of pioneer parents. After his attendance at the University of California, he entered Murphy, Grant & Company, the wholesale drygoods concern of which his father was a founder, and became president of the Company in 1904. The business was sold in 1912.

Mr. Grant was a leader and pioneer in three important fields of western industry--petroleum, steel, and hydro-electric power. He was first vice-president of the General Petroleum Corporation, president of the Columbia Steel Corporation, and chairman of the board of California-Oregon Power Co.

The public cause in which Mr. Grant was most active was the Save-the-Redwoods League where he served for 21 years as chairman of the board of directors. The J. D. Grant Grove in the Del Norte coast region is one lasting token of his enthusiasm for this movement.

The Joseph D. Grant Building for Research in the Clinical Sciences, located between the Hospital and School of Medicine wings of the Stanford University Medical Center, was dedicated in 1966. The six-million dollar building was financed in part by the University's PACE Program (Plan of Action for a Challenging Era) and government grants.

The four-story structure--three floors and a basement--covers 152,000 gross square feet of space and contains research facilities for the departments of Anesthesia, Genetics, Medicine, Obstetrics, Pediatrics, Preventive Medicine, Psychiatry, Radiology, and Surgery. It also includes the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine, which are dedicated to an attack on the problems of mental retardation on a broad front of scientific research, and facilities supported by NASA for research in the fields of space biology and biomedical instrumentation.

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Mailed June 20, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

THOMAS CHARLES MERIGAN, JR., M.D.
BIOGRAPHICAL INFORMATION

At 35, Dr. Thomas C. Merigan is regarded as one of the leading investigators in animal and human interferon. He joined the Stanford medical school faculty in 1963, and became an associate professor of medicine and head of the division of infectious diseases two years later.

One of his most recent scientific accomplishments* was the discovery of a new approach to increasing the effectiveness of interferon inducers, the experimental drugs which may someday be used in humans to stimulate the body's defenses against disease.

In collaboration with Dr. Erik de Clercq, a Stanford postdoctoral research fellow, and a West German scientist, Dr. Fritz Eckstein of the Max Planck Institute for Experimental Medicine in Göttingen, Dr. Merigan demonstrated that the potency of RNA inducers could be enhanced substantially by making a change in their molecular structure.

Although Dr. Merigan emphasizes that the "efficacy of the modified substances has yet to be proved in experimental animals," the basic finding is believed to lead to the development of better drugs to make cells produce more interferon when needed, and hence to increase protection against viruses.

"It is not unusual for Dr. Merigan to be cautious and to understate his case when it comes to scientific matters," says a colleague who regards him as "an energetic man, extremely bright, and a living reference book on viral diseases."

Dr. Merigan, on the other hand, insists that one can never be sure about anything in scientific research, and he tells a story to prove his point.

Five years ago, according to the story, Dr. Merigan and his associates reported they had noted human interferon in the serum of children after a live-virus measles vaccination. They found that the children were resistant to primary smallpox vaccination in the period during which circulating interferon was present.

"It was later called to our attention," says Dr. Merigan, "that this observation was made by Erasmus Darwin in 1803 when he noted that cowpox failed to infect patients with measles."

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*Reported to the New York Academy of Sciences, June 18, 1969.

-more-

Darwin, of course, did not mention interferon. It took more than 150 years for the cell protein to be discovered. But Darwin made an astute observation when he wrote that, "The contagion of the measles, if it be taken in sufficient time before the variolous fever comes on, stops the progress of the smallpox in the inoculated wound and delays it until the measles fever has finished its career."

In 1967, Dr. Merigan in collaboration with Dr. William Regelson of the Medical College of Virginia, found that pyran, a synthetic plastic substance, was a powerful interferon inducer, but it was not yet suitable for widespread clinical use because of its side effects.

A prolific writer and researcher, Dr. Merigan has numerous contributions to his credit in the fields of molecular biology, virology, and human genetics.

In 1966, working with Drs. Kenneth Gardner, Sidney M. Goldman, Samuel R. Walker, and Joan M. C. Bull, he showed that medullary cystic disease, a rare but infrequently recognized fatal kidney disease, was inherited.

Dr. Merigan is a native of San Francisco and a graduate of the University of California (B.A. with honors 1955 and M.D. 1958).

Before joining Stanford, he was a clinical associate at the National Heart Institute, Bethesda, Md. For a two-year period (1963-65) Dr. Merigan worked at the Palo Alto Veterans Administration Hospital where, with Dr. Peter Rowley, he established a division of human genetics.

Dr. Merigan is married and has one child born in 1964.

Presently he continues his work in studying and developing derivatives of the known synthetic interferon inducers and experimental antiviral agents at his Stanford laboratory.

"My experience leads me to be cautious in predicting the immediate clinical future for interferon treatment," wrote Dr. Merigan in a recent issue of Hospital Practice. Nevertheless, the latest findings are more encouraging than any of us had expected. Limited clinical trials will probably be under way within the next year or two. They should make important contributions to our understanding of the role of interferon mechanism in human disease.

"At present I feel there are enough unresolved problems with systemic induction of interferon to limit initial human experiments to patients with severe infections carrying a high morbidity or mortality. Diseases in this category would include encephalitis, hepatitis, and overwhelming vaccinia, variola, varicella or herpes disease.

"Under such circumstances patients would have much to gain, and the benefit would outweigh any possible danger from the inducer. If such tests showed that the inducer was safe to administer, then the approach could be extended to more benign ailments of the respiratory tract or intestines.

"Patients with tumors, neurological diseases, autoimmune conditions that may be of viral etiology could also be early candidates for interferon therapy.

"We stand on the threshhold of an era that should see chemotherapeutic and other nonimmunologic methods for control of virus infections in humans become as commonplace as the use of antibiotics against bacterial infections."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

ERIK DE CLERCQ, M.D.

BIOGRAPHICAL INFORMATION

FILE COPY

Dr. Erik de Clercq, 28, is a postdoctoral research fellow in medicine at the Stanford University School of Medicine. A native of Belgium and a 1966 graduate of the University of Leuven Medical School, he joined the Stanford division of infectious diseases in 1968 to pursue his fundamental research in interferon induction under Dr. Thomas C. Merigan, Jr., one of the nationally known researchers in animal and human interferon.

Dr. de Clercq, who is in the United States under the sponsorship of the Belgian government and an Eli Lilly International Fellowship, began to investigate interferon inducers in 1965 under Prof. P. de Somer at the Rega Institute for Medical Research of the University Leuven. At Stanford these studies are now being extended to new, more potent derivatives of known synthetic interferon-inducing drugs and tests of their efficacy against viral diseases. (See earlier Stanford release dated 6-18-69.)

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Mailed June 18, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415- 321-5310
FILE COPY
(ADVANCE) FOR P.M RELEASE WEDNESDAY, JUNE 18, 1969

NEW YORK -- Two Stanford University medical researchers in collaboration with a West German scientist have discovered a new approach to increasing the effectiveness of interferon inducers, the experimental drugs which may someday be used in humans to stimulate the body's defenses against disease.

The researchers told the meeting of the New York Academy of Sciences today that changes in the molecular structure of available interferon-inducing chemicals could produce greater antiviral protection than now possible.

Interferon is a complex protein manufactured in the body in response to infection and believed to hold the key to protection against a host of diseases ranging from measles and hepatitis to the common cold. Though the body produces the substance as a natural defense against infections, often it is not available rapidly enough or in large enough quantities to halt the spread of disease. Scientists are studying chemicals to prime the body's production of interferon.

The Stanford researchers said they used a synthetic form of a double-stranded ribonucleic acid (RNA), a genetic material found in living cells, and tested its effectiveness by comparing it before and after it was modified chemically.

From a relatively inactive chemical, the substance produced a significant increase in antiviral activity when it was modified and tested in laboratory human cell cultures, the Stanford researchers said.

Although the efficacy of the substance has yet to be proved in experimental animals, the basic finding is believed to pave the way to important progress in molecular pharmacology in terms of man's ability to modify interferon-inducing drugs in a favorable way to get the most useful therapeutic effect.

Presently, one of the problems with almost all types of double-stranded RNA interferon inducers is that they are broken down by the cell's enzymatic machinery too rapidly to have a prolonged therapeutic result.

The Stanford researchers are Dr. Erik de Clercq, postdoctoral research fellow from the University of Leuven, Belgium, and Dr. Thomas C. Merigan, associate professor and head of the Division of Infectious Diseases at Stanford University School of Medicine. Their work was supported by the National Institutes of Health.

The chemical used by the Stanford investigators is designated as poly r ASUS (a thiophosphate analogue of poly r AU which is a copolymer of riboadenylic acid and ribouridylic acid). It was developed for other purposes by Dr. Fritz Eckstein of the Max Planck Institute for Experimental Medicine in Göttingen, West Germany.

Dr. Merigan became interested in the chemical because of its reported resistance to cell enzymes. He suggested to Dr. Eckstein that the chemical might have potent interferon-inducing properties, and the German investigator agreed to ship a quantity of the drug to Stanford for the laboratory experiments.

-more-

The key difference in the strength of the modified chemical lies in the substitution of sulphur atoms in the place of oxygen atoms. This crucial change makes the compound more resistant to degradation by cellular enzymes, Dr. de Clercq explained.

Cells, treated with the modified drug, became 100 to 10,000 times more resistant to viruses compared to cells treated with the parent compound, and there was a 2- to 20-fold increase in interferon production.

The modified substance, Dr. de Clercq said, proved to be equal or better than the most active synthetic interferon-stimulating RNA available today. This RNA is a combination of polyriboinosinic and polyribocytidylic acids. Its interferon-inducing properties were discovered by scientists at the Merck Institute for Therapeutic Research in West Point, Penn.

"The tremendous increase in activity of a modestly active interferon-inducing compound by chemical modification is an encouraging development," Dr. de Clercq commented. "We believe we can achieve even better results when we study modifications of the most active compounds currently available."

Dr. Merigan agreed that one could make the same kind of molecular change in the most active materials available that should increase their interferon-inducing activity several orders of magnitude.

Asked if he would anticipate side effects with the modified drugs, Dr. Merigan said that this is an area that would require investigation.

"Effects such as toxicity as well as the therapeutic ratio (the practically effective dosage related to toxic dosage) will have to be determined," he said. "But we are very enthusiastic about going ahead with studies in animals to see if these modified RNA's have a better antiviral activity and therapeutic ratio than other currently studied experimental drugs."

He said that this kind of a rationally conceived pharmacological manipulation represented a new attack on the problems of interferon research.

"We believe that having alternative methods in interferon induction is tremendously important as it is likely that each clinical problem--in man or animals--will differ and, therefore, it will be critical to have drugs that will give some patients long-lasting protection and others high-level but transient protection," Dr. Merigan said.

Interferon was discovered a little more than a decade ago by the late Alick Isaacs and Jean Lindenmann, working at the National Institute of Medical Research in England. Although Isaacs immediately saw its great potential as a weapon against virus infections, it took several years of research work by investigators in many laboratories all over the world before clinical studies became possible.

Today interferon's natural role in defeating viruses is well documented and, now with the latest Stanford research finding, its application to human medicine has been moved a step closer.

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END ADVANCE FOR PM RELEASE WEDNESDAY, JUNE 18, 1969.

Mailed June 16, 1969. Transmitted on Business Wire June 17, 1969.

SCIENCE WRITERS: Dr. de Clercq and Dr. Merigan can be reached at the Waldorf Astoria Hotel in New York. Their paper will be presented at 8:30 a.m. (EDT) in the Starlight Roof Room.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

FILE COPY

STANFORD--Stanford University School of Medicine presented awards to seven graduating students at the annual senior class convocation Sunday evening (JUNE 15).

Diplomas were presented to 54 men and 5 women, members of the sixth class to complete Stanford's medical curriculum, which was inaugurated when the Medical School moved from San Francisco to the Stanford campus in 1959.

The diploma of William B. Ross, member of the class who was killed April 28 while on a mountain climbing expedition in Nepal, was accepted by his sister, Miss Vieno Ross of Malibu, California.

At the convocation, Frank West Bertram received the Dr. and Mrs. Joseph Fife Surgery Award, given annually to the outstanding student in surgery.

Walter Leroy Henry received the Robert H. Alway Book Award. Named in honor of Dr. Alway, dean of the Medical School from 1958 to 1964, the Book Award is given to a student who has "availed himself especially well of the Stanford five-year plan."

Gil Drake Tolan received the L. A. and Marian S. Hopkins Award in Dermatology.

The winner of the Lowell A. Rantz Memorial Award "to the student who has distinguished himself in the field of infectious diseases" was Rudolph Harvey Johnson.

The Harold K. Faber Pediatric Award was presented to Daniel Wohl Rosenn. This award is in recognition of outstanding accomplishments in pediatrics and of potential as a contributor to child health.

Henry Fredric Epstein received the Borden Undergraduate Research Award in Medicine given by the Borden Company Foundation, Inc., to the senior student who has completed the "most meritorious" research during his medical training.

Dr. Bernard W. Nelson, associate dean for student affairs, presented the awards, and Dr. Harold K. Faber, emeritus professor of pediatrics, announced the recipient of the award named in his honor.

Virginia Josephine ("Soo") Borson Wright received the Upjohn Achievement Award, given by the Upjohn Company to the senior exhibiting "outstanding clinical performance."

Miss Wright, who is president of the class, presented the annual Arthur L. Bloomfield Award for excellence in the teaching of clinical medicine to Dr. Allen B. Barbour, assistant professor of medicine and head of the division of ambulatory medicine, who had also received the award last year.

The faculty address was delivered by Dr. Barbour, and, following his address, Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, administered the Declaration of Geneva and presented the diplomas.

Award winners and their parents' names and addresses are listed below:

CALIFORNIA -- Torrance: Rudolph Harvey Johnson, Mr. and Mrs. Harvey Russell Johnson
4114 West 177th Street

-- Berkeley: Virginia Josephine Borson Wright, Dr. and Mrs. Harry J. Borson
244 Alvarado Road

-more-

MARYLAND -- Cumberland: Walter Leroy Henry, Mr. Walter Henry, 205 South Street
NEW YORK -- Bronx: Henry Frederic Epstein, Mr. and Mrs. Kenneth A. Epstein
55 Knolls Crescent
OREGON -- Astoria: Gil Drake Tolan, Dr. and Mrs. William Burget, 25 W. Kensington
PENNSYLVANIA -- Kingston: Daniel Wohl Rosenn, Mr. and Mrs. Max Rosenn, 177 James Street
TEXAS -- Austin: Frank West Bertram, Mrs. Frank Bertram, 2302 Bonita.

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FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

The 59 members of the graduating class of Stanford University School of Medicine did not "swear by Apollo the physician, by Aesculapius, Hygeia and Panacea and take to witness all the gods and all the goddesses" when they received their diplomas this year.

They did take the Hippocratic Oath, but in its most recent form, that adopted in 1948 at a general assembly of the Organization Mondiale de la Sante, meeting in Geneva.

In taking the modernized ethical promise, each young M.D. said, in part: "I will solemnly pledge myself to consecrate my life to the service of humanity....I will practice my profession with conscience and dignity; the health of my patient will be my first consideration....I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient....' even under threat I will not use my medical knowledge contrary to the laws of humanity...."

Class President, Soo Borson Wright, who was the winner of the Upjohn Achievement Award for "outstanding clinical performance," explained why she chose the newer oath: "In clear language it unmistakably dedicates you to service. It is something I can take seriously, particularly because portions of the ancient oath which sound foolish in the context of modern medicine have been omitted, and political and social considerations which are relevant today have been included."

"Besides," she added, "it seems to me that among medical students there is very little interest in tradition for tradition's sake anymore.

But the taking of any oath at all was the carrying on of tradition, and in choosing the Declaration of Geneva, the Class of 1969 started what may become a new tradition.

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Mailed June 16, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD--Dr. Count D. Gibson, Jr., a nationally recognized leader in community health program administration, has been appointed professor and chairman of the Department of Community and Preventive Medicine at Stanford University School of Medicine.

Announcement of Dr. Gibson's appointment was made today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school.

Dr. Gibson joins the Stanford faculty following 11 years as professor and chairman of the Department of Preventive Medicine at Tufts University School of Medicine in Boston. At Tufts he was co-director of that school's Comprehensive Community Health Action Program, a project oriented toward maximum participation of various communities in meeting the health needs of their impoverished people. Pilot project sites for the program, which was initiated in 1965, were Columbia Point, a low-income housing development in Boston, which Dr. Gibson directed, and an almost exclusively Negro rural county in Mississippi.

In announcing Dr. Gibson's appointment, Dr. Glaser noted that the new department chairman "has clearly demonstrated that he is a leader in his ability to work with a disadvantaged community in developing effective medical care programs and to do so in a way that permits these programs to be used to learn more about the problems of administering health care to disadvantaged people. His organization and direction of the Columbia Point project is without equal.

"Under Dr. Gibson's leadership, the area of preventive medicine at Stanford will be expanded to meet new responsibilities in the community health field."

Prior to its expansion the Department of Preventive Medicine was headed by Dr. Rodney R. Beard, professor of preventive medicine. Dr. Beard will continue to play an important role in the department and will head the division of preventive medicine within the larger department. Other divisions and their heads are: Division of Biostatistics, Byron W. Brown, Ph.D.; Division of Clinical Social Work, David M. Kaplan, Ph.D.; Division of Community Medicine, Dr. Gibson.

Dr. Gibson is a native of Georgia where he received both his B.S. (1942) and M.D. (1944) degrees from Emory University in Atlanta. His internship and residency were served at Columbia-Presbyterian Medical Center in New York. He also served with the U.S. Army medical corps for two years.

While at Tufts, Dr. Gibson has been active on the Governor's advisory board for the Massachusetts Welfare Department and the review committee of the Massachusetts Department of Comprehensive Health Planning. He also served as a delegate to the White House Conference on Health in 1965.

Dr. Gibson is a member of many professional societies including Phi Beta Kappa and Alpha Omega Alpha, the American Board of Internal Medicine, the American College of Physicians, and the American Public Health Association.

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Mailed June 16, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

FILE COPY

STANFORD -- Eight fifth-year and three fourth-year medical students at Stanford University School of Medicine have been elected to Alpha Omega Alpha, the national honor medical society.

The new members, who were formally presented at the annual senior class convocation (June 15) by Dr. Roy H. Cohn, professor of surgery at Stanford, are: Frank West Bertram, Jack Greene Copeland III, Walter Leroy Henry, David Clifford Hueter, Daniel Carlyle Ihde, Alan Lee Rosenblum, Daniel Wohl Rosenn and Paul James Schunke of the fifth-year class; and Robert Clark Aber, Michael Paul Alexander and Bobbette Kraft Ranney of the fourth-year class.

Students and their parents' names and addresses are listed below:

CALIFORNIA	--	Los Angeles:	Alan Lee Rosenblum, Mr. and Mrs. Gordon Rosenblum 1423 N. Doheny Dr.
		Sacramento:	Paul James Schunke, Dr. and Mrs. Gustave B. Schunke, 6515 Greenbrae Rd.
ILLINOIS	--	Chicago:	Michael Paul Alexander, Mr. and Mrs. Joel L. Alexander 2147 West Farwell Ave.
MARYLAND	--	Cumberland:	Walter Leroy Henry, Mr. Walter Henry 205 South Street
MISSOURI	--	Kirkwood:	Bobbette Kraft Ranney, Mr. and Mrs. Robert Ranney, Jr. 434 N. Harrison Ave.
NEW HAMP.	--	North Hampton:	David Clifford Hueter, Mr. and Mrs. Clifford D. Hueter 60 Woodland Road
NEW MEXICO	--	Portales:	Daniel Carlyle Ihde, Mr. and Mrs. Ira Ihde 1131 S. Ave. G
PENNSYLVANIA	-	Easton:	Robert Clark Aber, Mr. and Mrs. Donald Aber 32 North 17th St.
	--	Kingston:	Daniel Wohl Rosenn, Mr. and Mrs. Max Rosenn 177 James St.
	--	West Chester:	Jack Greene Copeland, III, Mr. and Mrs. Jack Greene Copeland, Jr. Westtown - Thornton Rd., R.D. #5
TEXAS	--	Austin:	Frank West Bertram, Mrs. Frank Bertram 2302 Bonita.

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Mailed June 16, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Dr. Larry E. Heiges, Jr. of Lompoc is the new president of the Stanford Medical Alumni Association and Dr. Howard B. Kirtland, Jr. of San Diego is the new president-elect.

Dr. Heiges, who has been in general practice in Lompoc for 35 years, succeeds Dr. William H. Clark of Palo Alto. He will serve as president of the Association through June, 1970.

Dr. Heiges holds both the A.B. and M.D. degrees from Stanford University. He was graduated from the School of Medicine in 1933.

The new president has been active for many years in the blood bank program in California. A past president of the Santa Barbara County Medical Society, he was instrumental in the establishment of the Tri-County Blood Bank for Santa Barbara, Ventura, and San Luis Obispo counties. He has also served on the board of directors for both the California Blood Bank System and the American Association of Blood Banks.

Dr. Heiges has also been active in civic affairs. He is a past president of the Lompoc Rotary Club and is a member of the board of directors of both the Lompoc Boys' Club and the Boy Scout programs.

Re-elected for a three-year term on the Board of Governors of the alumni association were Dr. Winston W. Benner, '44, Oakland; Dr. Wilbur B. Hurlbut, '38, New York; Dr. Theodore W. Loring, '46, Eureka; Dr. Robert H. Quillinan, '42, Sacramento; and Dr. Victor Richards, '39, San Francisco.

Dr. Joseph W. St. Geme, Jr. of Palos Verdes was also elected to the Board of Governors, replacing Dr. Kirtland, '44, the new president-elect. Secretary-treasurer of the Association is Dr. David A. Rytand of Atherton, Bloomfield professor of medicine at Stanford.

At the recent annual medical alumni meeting, those members of the Class of 1919 who received 50-year awards were Dr. E. Forrest Boyd, Los Angeles; Dr. Thomas A. Card, Riverside; and Dr. Oscar F. Johnson, Sacramento.

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FOR INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine at Stanford University, has been elected to the Board of Directors of the National Fund for Medical Education.

The National Fund, which is headquartered in New York, was organized in 1949 under the sponsorship of a group of university presidents, the American Medical Association and the Association of American Medical Colleges. Its purpose is to mobilize sources of voluntary support for the nation's medical schools. Since 1951 it has awarded over $44 million in unrestricted, teaching and research grants to the schools.

Dr. Glaser has been dean of Stanford University School of Medicine since 1965. He is currently serving as chairman of the Executive Council and Assembly of the Association of American Medical Colleges.

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Mailed June 5, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Copies of "Stanford M.D." available on request.

FILE COPY

STANFORD -- Collective violence in the United States may have achieved some social gains, but its use is now evoking counterviolence from opposition groups, causing greater tensions, divisiveness, and more violence, a special committee at Stanford University reported today.

Present conditions in this country favor collective violence, the committee warned. "We may anticipate even more of it unless we act both individually and collectively to end it."

The Stanford committee, chaired by Drs. David N. Daniels and Frank M. Ochberg, was formed after the assassination of Senator Robert F. Kennedy a year ago to study the causes of violence and prescribe cures.

Six task groups from the department of psychiatry of the Stanford University School of Medicine were formed to explore various areas--mass media violence, firearms control and violence, mental illness and violence, the phenomenon of assassination, crisis resolution and choice of violence, and the gun law controversy.

The committee's findings are presented in the current issue of "Stanford M.D.," the quarterly journal of the Stanford Medical Alumni Association.

The psychiatrists gave their diagnosis and these prescriptions on how the crisis of violence can be met:

--Americans must give up their ambivalent attitudes and make violence unacceptable. Our society, the psychiatrists believe, is mixed up. It condemns some forms of killing but it encourages war, capital punishment, and other collectively sanctioned eye-for-an-eye behavior. "As long as a nation values violence as an effective coping strategy, violent behavior will continue."

--Survival of American society lies not so much in conserving old values as in learning how to handle change and control its evolution, the committee feels. "Our primitive forms of aggression, our violence, bellicosity, and inclination to fight in a time of emergency work against our survival. We are now seeing an unprecedented acceleration of man-made changes, which call for accompanying changes in man, which we are having difficulty in making." Our crude efforts to contain violence is a reflection "of our preagricultural -age mentality straining to cope with an industrial-age environment."

--Americans have to shift the priorities of their lives. They must respond to groups having different views and needs. "Frustration plays a major role in engendering violence," the committee said. "The goals of personal dignity, self-respect, and self-determination for minority groups and communities in our society must become realistically attainable."

--Our politicians need to establish a better machinery for the expression of political grievances. The committee found that despite formalized feedback by periodic elections and our court system, the feeling of alienation between the people and our government still is significant. As a possible solution it recommends the addition of an ombudsman to the American political scene. The function of the office would be to impose a highly respected public official with investigatory powers between government bureaucracy and the public. Such a person might counter a growing feeling among dissenters and minorities that they are powerless to have their grievances dealt with by the establishment.

-more-

-- Police and judges should eliminate cruel social controls and punishment, and shift their emphasis on violence prevention through effective rehabilitation programs. "New therapeutic settings are necessary to approach the problems of violent offenders," the psychiatrists said. "Individual therapy specifically geared to the needs of such offenders, as well as group therapy techniques, must be further developed." Efforts should also focus on educational programs to reduce the frequency of damaging childhood experiences, and early detection and treatment of violent behavior.

--Parents must eliminate excessively punitive discipline for their children. "Parents who violently punish children for violent acts are teaching them how and in what circumstances violence can be performed with impunity."

--Americans must learn about the potential hazards of overpopulation and its contribution to violent behavior. Studies show that instigation of aggression in animals derives from conditions of high population density. Probably all species have an inherent level of tolerance for physical and psychological closeness to other members of their species. "We must consider the merits of personal family planning, and limiting the size of our families," the committee said.

--Guns account for most homicides and suicides in the United States, which leads all other industrialized countries in deaths by firearms. "Challenges of the complex urban society in which we live cannot be met with old frontier means of survival--every man protecting himself," the psychiatrists said. "More effective and uniform gun legislation can keep guns out of the hands of those who are likely to act impulsively."

--The mass media, especially movies and television, are powerful instruments for social learning in man. By their depiction of violence, these media have become a "school for violence" for Americans of all ages. With respect to children "evidence is accumulating that shakes any complacency one might feel about the child's ability to separate what he observes in TV fantasies from what he enacts in his own social behavior." The committee believes that reducing violence portrayal in the mass media, and promoting programming about the limits of violence and potential of nonviolent behavior, would be helpful along with possible federal regulation. One committee member commented: "Although the American child spends as many hours in front of the TV tube as he spends in school, we do not elect a board of TV education to approve the TV curriculum and to employ the superintendent of TV instruction. There is no code of ethics for the broadcaster comparable to the ethical code governing the classroom teacher."

The committee concluded that the maladaptive aspects of violence overshadow any possible adaptive ones in our society. "Our recommendations represent important steps that can and must be taken. The essential point is that each of us can take part in decreasing violence," the committee said.

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Mailed June 4, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

DOUBLE TROUBLE IN THE HEARTS of identical twins, Carrie (left) and Sherrie (right) Dodd is no longer a problem following surgery at Stanford University Hospital. The nine-year old twins, daughters of Mr. and Mrs. Harold Dodd of Aromas, Calif., had identical heart defects which were corrected by open heart surgery. They were discharged from the Hospital today (June 4), dragging their six-foot serpents behind them.

Mailed June 3, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Stanford University Medical Center Auxiliary has donated over $20,000 to expand coronary care facilities at Stanford University Hospital, it was announced today.

Robert Murch, associate director of the Hospital, said the gift will be used to purchase and install a centralized bedside monitoring service for a 28-bed area. This will permit the area to function when necessary as a cardiac surveillance unit.

The cardiac surveillance unit is adjacent to the coronary care unit in the Hospital. Patients in the area are those admitted to the hospital with minor heart disorders or those who have recovered sufficiently from more acute problems and no longer require intensive treatment in the coronary care unit.

The Auxiliary gift will be used to remodel the nursing station with paneling and instrumentation for a centralized monitoring unit and to add monitoring equipment. It is expected that the remodeling will be completed by late summer.

In expressing gratitude to the Auxiliary for the gift, Murch praised the group's "constant concern for the needs of the Hospital in providing the best possible patient care." He pointed out that the Auxiliary has also given $7,000 this year to buy new draperies and curtains for the entire pediatric area of the Hospital.

Since the Medical Center was opened in 1959, the Auxiliary has given over $125,000 to the Hospital. Other projects include equipment for the intensive and coronary care units, the Hospital blood bank, and artificial kidney unit.

Each year the 1100 Auxiliary members give 75,000 hours of volunteer service to the Medical Center.

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Mailed June 2, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

DOUBLE TROUBLE IN THE HEARTS of identical twins, Carrie (left) and Sherrie (right) Dodd is no longer a problem following surgery at Stanford University Hospital. The nine-year old twins, daughters of Mr. and Mrs. Harold Dodd of Aromas, Calif., had identical heart defects which were corrected by open heart surgery. They were discharged from the Hospital today (June 4), dragging their six-foot serpents behind them.

Mailed June 3, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Stanford University School of Medicine is one of five medical schools which will collaborate on a new program aimed at improving the methods and content of graduate and continuing education of physicians, and strengthening ties between medical schools and communities.

The program will be supported by a two-year $548,000 grant from the Commonwealth Fund, and Carnegie Foundation of New York to be shared by the five medical schools--Stanford, Duke, Case Western Reserve, Johns Hopkins, and McGill.

Each of the schools will experiment with new methods of specialty training, development of closer relationships between physicians in practice and medical schools, and programs of continuing education for practicing physicians through their professional careers.

"Because our overall objective is to increase the quality of clinical medicine, we think that collaboration among schools is particularly valuable," says Dr. Halsted R. Holman, chairman of the Department of Medicine at Stanford. "This way, the results will incorporate experiences gained in five communities where medical care is organized differently." Dr. Holman will direct the program at Stanford.

Specifically, three areas of postgraduate education will receive attention:

--Clinical teaching in medical school, internship and residency will be given a critical review. Form, content, and time elements will be examined with regard to improving and reducing time and training, increasing opportunities for diversification, and improving the quality of teaching.

--A number of physicians at the residency level will be trained as "clinical scholars." They will develop skills in the principles and techniques of medical education, in statistical analysis as it applies to the study of natural history of disease and clinical investigation, and in research in such areas as clinical pharmacology, effectiveness of clinical practice methods in the community, and the economics and sociology of medical care. Later, these scholar-physicians will take positions on medical faculties to teach in the areas mentioned above, or they will join the staffs of community hospitals where they will conduct research, design and supervise internship and residency programs, and direct continuing education for community physicians.

--A physician-in-residence program will also be conducted at the five schools. It will enable private practitioners to return to university and community hospitals for one month each year to study the latest advances in clinical medicine.

"To share in the growth of medicine the practicing physician must have time to think, read and exchange ideas with his colleagues. This annual intellectual refurbishment will give him the opportunity to pursue those objectives and will help to break the isolation many physicians now suffer," Dr. Holman said.

Present efforts for continuing education of community physicians take the form of short-term lectures, demonstrations and scientific conferences. Most medical educators agree that these methods have been inadequate, and that adequate alternatives have not yet been developed.

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Mailed July 28, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Stanford University researchers will participate in a key phase of lunar soil analysis work assigned to NASA's Ames Research Center in Mountain View, California.

Stanford scientists Dr. Berthold Halpern, of the Department of Genetics, and Dr. Gordon Hodgson, geochemist at both Stanford University Medical Center and Ames, will test their portion of the hard-won samples of the moon's soil for the presence of porphyrin, the pigment which in animal life allows hemoglobin to capture and carry oxygen, and in plant life allows chlorophyll to capture light energy for the synthesis of sugars.

They will carry out this work in the specially equipped Lunar Laboratory at Ames as part of a consortium of sixteen scientists headed by Ames exobiologist Dr. Cyril Ponnamperuma.

If porphyrin compounds are found, they will have to be investigated further to determine the nature of their origin.

"While porphyrin compounds are a basis of life, not all porphyrins are biogenically formed," explained Dr. Hodgson. "They are composed of carbon, hydrogen and nitrogen, very abundant and ubiquitous elements.

"We think porphyrins can form as a result of energy shots in the atmospheres of carbon stars, and we have shown that they can arise under certain heat and lighting conditions on primitive planets.

"So we will have to look closely at the structure of any lunar porphyrins we do find," Dr. Hodgson continued. "Living organisms use a specific type of structure we can identify through induced optical activity. This is done by placing the (dissolved) material in a very intense magnetic field and observing the behavior of light which is passed through the solution."

There may be one other clue that the lunar porphyrins, if any, are indicators of extraterrestial life. This clue will be furnished if proteins, or fragments of proteins accompany the porphyrins, Dr. Hodgson said.

Proteins, however, are far less stable than porphyrins, which have been found on earth to be as old as 3.4 billion years.

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Mailed July 24, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD---Birth control pills seem to do more than just prevent pregnancies.

According to a Stanford University pathologist, contraceptive pills give the blood a greenish tint. As a result, a doctor can get false readings which might point to a disease a patient or a blood donor does not have.

Green plasma in a unit of donated blood usually indicates a bacterial infection of the blood and cannot be used in patients who need transfusions.

But now "green plasma should no longer suggest solely the presence of a pseudomonas organism producing a green pigment," writes Dr. Paul L. Wolf in the current issue of the New England Journal of Medicine.

"A prominent elevation in the blue-green plasma protein in many units of donated blood has been correlated with the usage of oral contraceptive pills," he says.

Dr. Wolf is an associate professor of pathology and director of clinical laboratories at Stanford University Medical Center. Co-authors of his report are Derek Enlander, Joanne Dalziel, and Janelle Swanson.

He believes the green color in the blood of women who take birth control pills is due to an increase in estrogen or female hormone. Estrogens are known to elevate green plasma protein in pregnant women, he says. Similarly, the oral contraceptive pills containing estrogen cause an increase in the copper-containing protein giving the green plasma color.

Because of this finding, Dr. Wolf suggests that blood banks subject green plasma to further tests before discarding it as infected.

"We believe that green plasma from blood donors who take contraceptive pills is suitable for transfusion usage," Dr. Wolf writes. "No untoward acute effects nor transfusion reactions have resulted from the utilization of these green plasma units from our blood bank."

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Mailed July 22, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane B. Duff 415: 321-5310

FILE COPY

STANFORD--All facilities of the Stanford University Hospital and Clinics will remain open on Monday, it was announced today.

Ken Dunkle, associate director for personnel of the Hospital, said that while he knew all employees will share in the excitement of the historic landing of Apollo 11 on the moon, it is essential that full medical services be maintained for the Palo Alto community.

Dunkle also said that the short notice of President Nixon's proclamation precluded the making of appropriate alternative arrangements.

President Nixon, in his statement Wednesday, acknowledged the need for organizations providing service to the public to remain open.

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Mailed July 18, 1969.

NEWS BUREAU
STANFORD UNIVERSITY MEDICAL CENTER
STANFORD, CALIFORNIA 94305

November 29, 1969

FILE COPY

Room C003
(415) 321-5310

Wagenveld, Death Notice

Stanford University heart transplant patient Elton R. Wagenveld, 52, of Pleasanton, died suddenly this morning (SATURDAY, NOV. 29) at Stanford University Hospital. Mr. Wagenveld had been discharged from the Hospital three weeks ago but had been readmitted Friday for treatment of rejection. The exact cause of death is undetermined, pending an autopsy.

Mr. Wagenveld, a retired air traffic controller at Oakland Internation Airport, received his new heart July 16. He is survived by his wife, Ethel, two children, Vicky and Lester, and a brother.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine at Stanford University, has been elected to the Board of Directors of The Commonwealth Fund, a philanthropic foundation based in New York.

The announcement is being made simultaneously in the Fund's New York office today.

Founded in 1918, The Commonwealth Fund works largely in the field of medical education and community health.

Dr. Glaser currently serves as chairman of the executive council and assembly of the Association of American Medical Colleges, and is a member of the Board on Medicine of the National Academy of Sciences.

###

STANFORD--Patients at the Stanford University Hospital will be able to have wine with their noon and evening meals, with the approval of their physicians, beginning about the middle of August. The new choice on the menu was recently approved by the hospital board of directors after endorsement by the hospital medical board.

"For the patient whose condition permits, and who has his physician's approval, it has been shown that a small amount of wine not only adds satisfaction, but has an excellent therapeutic effect," said associate director of the hospital Robert W. Murch.

###

STANFORD--The Stanford University School of Medicine has named its dean's office conference room the J. E. Wallace Sterling Room in honor of Stanford's fifth president. The honor was bestowed in appreciation of Dr. Wallace Sterling's key role in bringing the School of Medicine to the University campus.

The move of the School of Medicine from San Francisco to the campus was accomplished in 1959, halfway through Dr. Sterling's 19-year presidency. He is now Chancellor of the University.

###

Mailed July 15, 1969.

STANFORD MEDICAL CENTER NEWS BUREAU
Palo Alto, California

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A major change in compensation policy for Stanford University Hospital employees was announced today by Dr. Thomas A. Gonda, director of the hospital.

The new policy, approved Saturday by the hospital board of directors, sets the hospital minimum wage for full-time employees at $450 a month, and calls for a standard increase of $40 a month for all other full-time hospital employees.

In addition, it provides the framework for other wage adjustments based on merit, promotion, and competition to enable the hospital to attract and retain outstanding employees at all levels, Dr. Gonda said.

The policy also contains many special fringe benefits.

This is the first major change in the hospital's direct compensation policy since Stanford University bought the former Palo Alto-Stanford Hospital and assumed responsibility for its management a year ago.

The wage policy will take effect retroactive to July 7, Dr. Gonda said.

Establishment of a higher minimum wage represents a 20 per cent increase over the current level of $376 a month. It is expected to have its greatest impact on more than 500 of the hospital's 1,600 full-time employees, some of them in the unskilled category.

Dr. Gonda said that at the former level "many of our workers had been forced to take more than one job to support their families."

"We believe it is essential to raise our minimum pay as rapidly and as high as possible to allow these employees to become more effective personally and occupationally," Dr. Gonda added.

The standard raise by a specific dollar amount is a departure from past hospital policy of annual percentage increases across the board.

"The raise is designed to give maximum benefit to employees at lower echelons. Increasing living costs for necessities have greater impact on them than on employees earning higher pay," Dr. Gonda commented.

In addition, the new policy contains key provisions for increases through promotion and merit.

"Merit can be individual, group, or institutional. And rewards for meritorious service are possible for each of these," Dr. Gonda said.

He stressed that the hospital "intends increasingly to use competitive pay primarily to retain outstanding people at all levels."

Dr. Gonda pledged that the hospital will increase its efforts to define better criteria for rewarding meritorious service than now available. He added that "a promotion policy that is fair to all employees must be worked out where it does not exist and will be continued where it does exist."

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Mailed July 14, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--An increase in daily service rates beginning Tuesday (July 15) was announced today by the Stanford University Hospital.

"To meet increased costs of operation that reflect the continuing rise in costs of material and employee compensation, we find it necessary to increase our daily service rate," said Dr. Thomas A. Gonda, director of the hospital.

The daily rates, approved Saturday by the hospital board of directors, will be increased on the average of $7.50 for semi-private rooms for medical and surgical patients.

The new basic rates are: ward $55, semi-private $60, and private $68.50.

Dr. Gonda said that the hospital is attempting to reduce the time a patient spends in the hospital, and in some cases this will help offset some of the impact of the rate increase.

He said many physicians are taking advantage of the new pretesting program in which the hospital participates. This program enables certain patients to complete their medical tests at the hospital before being admitted. Such pretesting alone has reduced the length of hospitalization.

"The fact the Stanford University Hospital is highly specialized also enables us to take care of comparably serious illnesses in a shorter time," Dr. Gonda said. "We have statistics which show that our hospital compares favorably with other teaching hospitals in terms of length of time patients remain hospitalized."

The figures, compiled by the American Hospital Association, show that medical and surgical patients stay at the Stanford University Hospital an average 9.28 days compared to similar patients of 70 teaching hospitals, whose average stay is 11.37 days.

This was the first rate increase in Stanford University Hospital rates since fiscal 1967-68, when rates went up on the average of $6.50 a day.

###

Mailed July 14, 1969.

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 321-5310

STANFORD--Cigarette sales will be banned at Stanford University Hospital within a month.

The ruling came Saturday when a resolution to stop the sale of cigarettes was approved by the Stanford University Hospital board of directors.

The ban of cigarettes at the hospital was recommended by the hospital medical board. The resolution said that "in the medical opinion of the board cigarette smoking is hazardous to health."

The ban will affect sales throughout the hospital, gift shop, and all vending machines.

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Mailed July 14, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

EDITORS: Photos available on request.

(ADVANCE) FOR PM RELEASE SATURDAY, JULY 12, 1969

NEW YORK--Actual reconstruction of human skin by tissue grown under artificial conditions outside a living organism was reported here today by a Stanford University medical research team.

Dr. William T. Summerlin of the Stanford University School of Medicine told the meeting of the Society for Investigative Dermatology that skin grown in laboratory cultures for periods up to six weeks acted as a source of new skin cells in ulcerated or burn wounds.

Eight patients at Stanford University Hospital have been studied with the new experimental technique and have grown normal skin after receiving skin grafts grown in test tubes.

Four days after implantation of the cultured skin, epithelial cells had multiplied and formed a layer over the wound sites. On the third week, the cells in the transplant area had organized into a typical wound-healing type of epidermis with normal cells and structure. By the sixth week the patients' wounds had healed and were covered by normal skin.

"We have shown conclusively that epidermal cells can be maintained in tissue culture for periods up to six weeks and that they can be transplanted successfully," Dr. Summerlin said.

"The successful transplantation of cultured skin back to the original host demonstrates that epithelial cells retain their ability to differentiate," he said. "Many other kinds of cells rapidly become undifferentiated when they are grown in culture, forming a nonspecific cell type. But the epithelial cell keeps many of its natural qualities when it is maintained in the test tube."

The Stanford study was supported by grants from the National Institute of Arthritis and Metabolic Diseases of the National Institutes of Health. Dr. Summerlin's collaborators are Dr. Marvin A. Karasek, associate professor of biochemistry and research dermatology, and Miss Mary Ellen Charlton, senior research assistant.

It was Dr. Karasek's basic work that has led to the limited clinical application. In 1967, he demonstrated that cells taken from a rabbit and cultured for 14 days in a test tube grew normally when transplanted to the host animal. Dr. Karasek's finding ran counter to the belief among dermatologists that cultured adult skin cells had no ability to form a specific tissue. -more-

Until that time it was thought that skin would not survive for more than 14 days even under the common methods of preservation by refrigeration.

"The physiology of the cultured transplanted skin in the human patients is remarkably like that of any fresh skin grafts," Dr. Summerlin said. The newly formed skin has tolerated friction and other trauma, and has also shown perspiration signs.

He said that the Stanford patients have been studied for a period of 4 to 15 months after grafting, with no evidence of any abnormality in the graft sites.

Dr. Summerlin cautioned that "no widespread therapeutic uses can be suggested at this time," but noted that the potential clinical applications of the technique "are real and might come to pass after more patients are studied."

When it is certain that no basic changes are induced by long-term maintenance of skin in organ culture, then "banks" of cultured skin may become practical.

He noted that the technique should be considered as an additional approach to present methods of skin grafting. It may prove especially useful in severely burned patients whose own supply of fresh skin for grafting is limited.

The studies were conducted in the Guggenhime Clinical Research Center of the Stanford University Hospital which is supported by the NIH. Dr. Summerlin is at Stanford as a teaching and training fellow of the U.S. Public Health Service.

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END ADVANCE FOR RELEASE SATURDAY, JULY 12, 1969.

Mailed July 10, 1969.

EDITORS: Drs. Karasek and Summerlin can be reached at the New York Hilton Hotel.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Stanford University Hospital is planning an increase in daily service rates beginning July 15, Dr. Thomas A. Gonda, director of the hospital, announced today.

The announcement is contained in a letter distributed to all patients scheduled for admission to the hospital.

The letter does not mention a specific amount. The amount of increase has yet to be determined by the hospital board of directors, Dr. Gonda said. He declined to comment on the proposed amount.

"In order to meet increased costs of operation that reflect the continuing rise in costs of material and employee compensation, we find it necessary to increase our daily service rate, effective July 15, the letter said.

"If you are still hospitalized on July 15, you will be informed by that time of the specific amount of increase in your daily service charge."

Daily service charges cover not only the usual hotel-type service such as room, linen, maintenance, housekeeping, and reservations, but also the many other services that are a routine part of hospital care.

Some of these are:

- round-the-clock general nursing services, including administration of medications, and special treatments.
- dietary services, including special meals, nourishments, therapeutic diets, or formulas ordered by the physician.
- a portion of the cost of services rendered by interns and residents.
- medical clerical services and preparation of medical records.

The hospital increased its daily service charges in fiscal 1967-68 on the average of $6.50 a day for semi-private rooms for medical and surgical patients. Present rates are: ward $55.50, semi-private $60, and private $67.50.

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Mailed July 2, 1969.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Stanford University provided more detailed plans today of its proposed Animal Research Center on Coyote Hill behind the Stanford campus.

Information about the Center was presented at the meeting of the Palo Alto Planning Commission last night. The Commission formally approved a request by the University Board of Trustees to divide the land area into parcels on which the Center will be built. The application next goes to the City Council for its approval.

The new facility will be constructed, owned, and managed by the University. Funds for the Center will be provided by a $281,000 grant from the National Institutes of Health to the School of Medicine and from Syntex Corporation.

Since its inception two years ago, the Animal Research Center has been planned as a joint project with the buildings of the University and of Syntex integrated and designed as a single facility.

Originally, the buildings for Syntex's use were to be built on land adjacent to the Stanford portion of the project and leased from the University. In reviewing the application to the Planning Commission, it was discovered that the project design, with the two facilities adjacent to each other, was not in strict compliance with the zoning ordinance. In order to comply, Stanford would have had to ask for a number of different variance approvals in order to accommodate the project design. Instead, the University and Syntex decided to change their own arrangements to insure that the plot plan for the Animal Research Center was in absolute compliance with the strictest legal interpretation of the ordinance.

"Plans and drawings of the new Center affirm the University's intention to maintain the rural atmosphere of the hill area," said Dr. Robert J. Glaser, vice-president for medical affairs and dean of the Medical School.

Buildings of the new facility have purposefully been designed as small, low-rise structures to avoid excessive grading and destruction of the natural contours. Earthy color tones planned for the exteriors of the buildings will enable them to blend well with the surrounding area.

The new Center will be built among existing trees, most of which are being preserved, on approximately five of the 37 acres comprising the Coyote Hill area. The buildings and parking areas will take up only 6.28 per cent of the total square footage of the 37-acre plot. The remainder of the land will be maintained as rural property and will provide a grazing area for animals to be housed at the Center.

The site plan indicates the planting of numerous additional trees and the provision of ground cover and shrubs to conceal the roadway leading to the Center from below.

Architects for the Animal Research Center are Hawley and Peterson of Palo Alto.

-more-

Major components of the new facility will be a Primate Unit for behavioral science studies and a Mouse Unit for the raising of in-bred mice. The Central facility will provide examining rooms for the reception and treatment of animals, laboratories for the study of animal diseases, medical and research laboratories and support facilities. Other components will be quarantine and holding units.

Syntex will rent space from the University for small animal quarters, two laboratory buildings, and a housing unit for large animals. Syntex will utilize the Center exclusively for the testing of drugs and development of animal health products.

Director of the Animal Research Center will be Dr. Orland Soave, clinical associate professor of medical microbiology, and head of Stanford's present Animal Care Facilities.

"The use of animals for biomedical research is essential for the advancement of our ability to conquer diseases and elevate the standards of health throughout the world," Dr. Glaser says. "However, we must use them in a humane way and care for them in a manner consistent with today's knowledge of animal husbandry and veterinary medicine. The indoor-outdoor environmental design of the new facilities will enable us to house and treat animals in surroundings similar to their natural habitat.

"In addition," he stresses, "is the fact that animal research often benefits animals as much as it does man. The vast majority of our knowledge concerning the treatment of animal disease has resulted from their use in the study of human ailments. Such knowledge is then adapted to animal care."

One of the major research programs at Stanford requiring the additional facilities which the new Center will provide is the newly initiated program in comparative medicine.

This effort relates to the study of naturally-occurring diseases of animals that are similar, identical, or closely related to human ills. In such instances, the disease process can be observed from birth to death and every phase of its development studied. Animals so afflicted can be in-bred to determine the effect of selective breeding on the disease, and further, since the life span of animals is usually much shorter than that of man, the natural history of the diseases can be better defined.

"In spite of the tremendous advances in medicine in the past 50 years, there are still many unknowns--cures for cancer, diseases of the heart and circulation, and the problems of aging and mental retardation. Undoubtedly, animal research will play an important role in research directed toward the solution of these problems in the future," Dr. Glaser says.

"The new Animal Research Center should help us contribute significantly to this research," he says. "The cooperation of the University and Syntex in this project also provides a unique example of private industry and the academic community working side by side to benefit world health."

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Mailed August 27, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--The National Multiple Sclerosis Society has announced grants to three Stanford University medical scientists to support research aimed at fighting the dread crippling disease.

Frank Casarella, chairman of the Board of Trustees of the Santa Clara County Multiple Sclerosis Society, presented a two-year postdoctoral fellowship of $16,720 to Dr. James R. Bamburg, a one-year fellowship of $12,500 to Dr. Jean-Jacques Vanderhaeghen, and an 18-month research grant of $4,995 to Dr. Marion E. Smith, who is a research biochemist and instructor in medicine at Stanford.

Dr. Bamburg, who comes to Stanford from the department of physiological chemistry at the University of Wisconsin, will take his advanced training under Dr. Eric M. Shooter, professor of genetics and biochemistry, and will study the structure and mechanism of nerve growth factor, a protein which stimulates growth and differentiation in nerve cells.

Dr. Vanderhaeghen, who received the M.D. and advanced degrees in neurology and pathology at the Free University of Brussels, Belgium, and who has been a visiting lecturer and research associate at Stanford for the past year, will study changes in nerve tissue that precede or follow an attack of multiple sclerosis. Specifically, he will be concerned with the nerve-insulating substance called myelin, whose destruction is a striking feature of the disease.

Dr. Smith will conduct a study of how cyanide induces loss of myelin, which it is hoped will throw more light on the loss of myelin through multiple sclerosis.

Multiple sclerosis is a chronic crippler affecting the brain and spinal cord. It usually strikes between the ages of 20 and 40. At the present time, an estimated 500,000 Americans suffer from it and related diseases.

Since the National Multiple Sclerosis Society was founded in 1946, it has granted over $11.5 million to support advanced research all over the world.

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Mailed August 25, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--A new radioisotopic technique which provides sensitivity and specificity in the diagnosis of blood clots of the lungs has been developed by specialists in Nuclear Medicine at Stanford University School of Medicine.

Diagnosis of these clots, known to physicians as pulmonary embolism, has been hampered in the past, says Dr. Gerald DeNardo of Stanford, because earlier techniques were not sensitive enough, or involved some risk to the patient.

"This was unfortunate because pulmonary embolism accounts for 10 to 25 per cent of deaths of hospitalized patients," says Dr. DeNardo. "A safe, simple, accurate method for making this diagnosis was needed."

The new technique Dr. DeNardo and his associates have developed meets these requirements.

The new radioisotopic method provides photographs of the regions of the lung, showing, by means of two separate tests, how well each region is supplied by blood (perfusion) and air (ventilation). The perfusion test is performed by injecting radioactive particles into a vein and photographing their accumulation in the various regions of the lungs with a scintillation camera. In the ventilation test, the patient breathes radioactive xenon to obtain a photograph of the air flow to various regions of the lungs.

The perfusion test alone has proved to be a very sensitive means of detecting blood clots, but perfusion may also be abnormal in many diseases, such as pneumonia, emphysema, and asthma. With a ventilation test, the causes of the abnormal blood flow can be distinguished. "In embolism, ventilation is normal or nearly so, whereas, in other diseases of the lungs, ventilation is abnormal," explains Dr. DeNardo. "It is this combination of tests which assures early, accurate diagnosis. Accuracy and speed are important because effective, but widely differing, treatment can be prescribed once a diagnosis is established."

Neither test carries risks for the patient. "These tests produce approximately the same radiation as a standard chest X-ray," commented Dr. DeNardo.

His associates in developing the clinically practical technique are Dr. David Goodwin, assistant professor of nuclear medicine; Dr. Peter Dietrich, postdoctoral fellow in radiology; and Mrs. Beverly Bradley, a research assistant in the Division of Nuclear Medicine. The group is continuing to apply radioisotopic techniques to the study of lung function in an effort to expand their knowledge of the normal and abnormal physiology of the lung.

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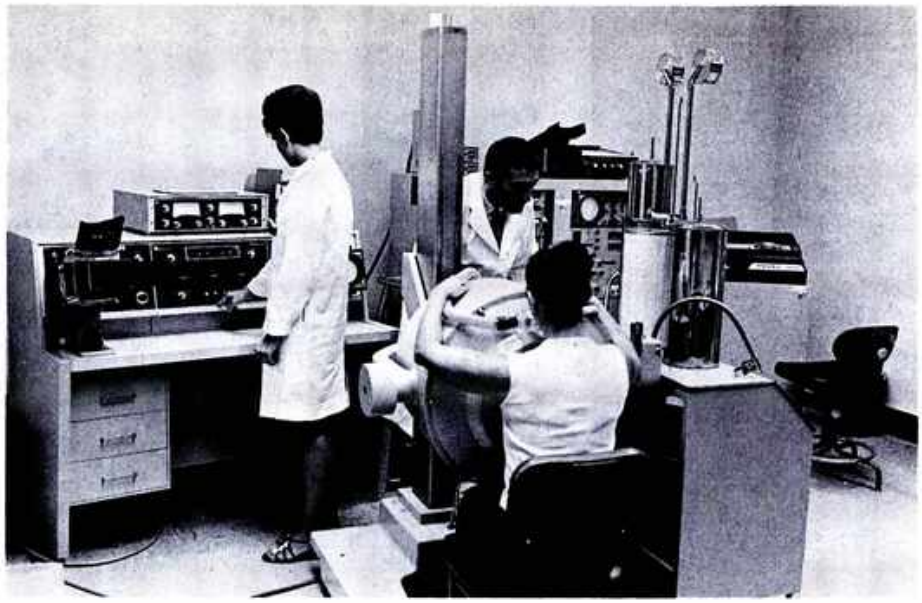
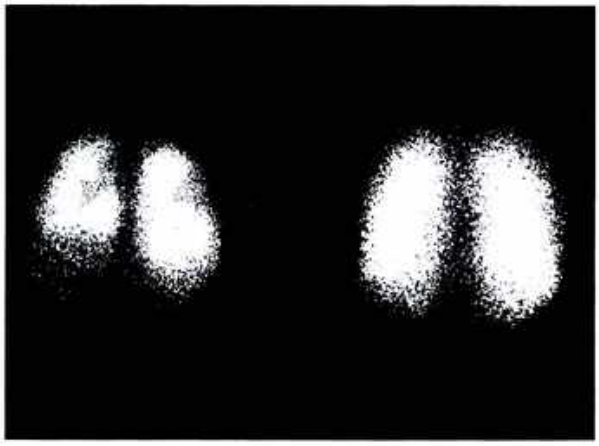
Mailed August 18, 1969.



#1

New ventilation test with radioactive xenon confirms or denies diagnosis of blood clot of the lung. Dr. Gerald DeNardo of Stanford University Medical Center watches tracing which tells him that patient (radioisotope technician Jeanni Page poses here) is receiving proper mixture of air and xenon, while research assistant Beverly Bradley records regional data and pictures with scintillation camera system.



#2 Blood flow study (at left) is abnormal (note areas of lesser intensity), whereas ventilation study (at right) reveals normal distribution of air flow. Normal blood flow and abnormal air flow confirm diagnosis of pulmonary embolism.

TO: NEWS BUREAU, ROOM C003, STANFORD UNIVERSITY MEDICAL CENTER
STANFORD, CALIFORNIA 94305

DIAGNOSIS OF PULMONARY EMBOLISM

Please send me an 8x10" glossy print of #1 and/or #2.

NAME _____ PUBLICATION _____

ADDRESS _____ CITY _____

_____ STATE, ZIP CODE _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

JANE DUFF 415: 321-5310

STANFORD--A 54-year old man from Detroit, Michigan became the 16th heart transplant patient tonight at Stanford University Hospital.

The recipient is Herman Scales, a negro. He received his new heart from an anonymous donor in a 4-1/2 hour operation performed by a team of surgeons headed by Dr. Norman E. Shumway.

Scales is in fair condition.

Scales has suffered from congestive heart failure for the past 10 years. He and his wife, Theresa, owned and operated Scales Nursing Home in Detroit for 12 years before his heart condition forced Scales to retire. Mr. and Mrs. Scales have lived in Phoenix, Ariz. at 5434 E. Palomino Rd. for the past year and a half. The patient's mother, Mrs. Sadie Hodge, lives in Nashville, Tenn.

He was referred to Stanford the end of May.

In addition to Scales, Stanford has seven other surviving heart transplant patients.

Released by telephone
August 16, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mrs. Jane Duff 415: 321-5310

FILE COPY

STANFORD--Herman Scales, who received a transplanted heart at Stanford University Hospital last night, died this morning at 7 a.m. Doctors said that death was due to heart failure and high blood pressure in the pulmonary arteries. The high blood pressure in Mr. Scales' lungs was a result of his long-standing heart disease, and did not allow the body to receive sufficient oxygen.

Mr. Scales, 54, was the first negro recipient of a transplanted heart at Stanford.

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Mailed August 17, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

SCIENCE WRITERS: Miss Luke's paper will be presented at 2:15 p.m. today at the Denver Hilton Hotel.

ADVANCE FOR P.M. RELEASE MONDAY, AUGUST 18, 1969.

STANFORD--A Stanford University medical technologist has demonstrated that a heat test is a reliable method of determining whether elevation of an enzyme in the blood is due to bone disease or liver disease.

The technologist, Miss Deirdre Luke, presented a report on her experiments of heat application to the enzyme alkaline phosphatase at a meeting of the American Association of Clinical Chemists in Denver. Her evaluation of the heat technique was conducted under the supervision of Dr. Paul L. Wolf, associate professor of pathology and director of the clinical laboratories at Stanford University Medical Center.

The Stanford scientists found that when a blood serum sample containing high alkaline phosphatas is heated to 56° C. for ten minutes the enzyme will become more than two-thirds inactivated if it is coming from a bone source. Bone diseases which commonly cause an enzyme increase are tumors originating in the bone, or cancers which have spread from another area to bone, and metabolic bone disease due to parathyroid conditions.

When liver disease is present, the alkaline phosphatase does not become inactivated as a result of heat treatment. The disease of the liver which most often causes a high level of the enzyme is ar obstruction of bile flow. Others are hepatitis, and cancer which has traveled to the liver.

The new test is simple, and because it is rapid, aids in the prescription of proper treatment, comments Dr. Wolf.

Miss Luke also described studies of a new chemical procedure for determining total alkaline phosphatase levels. The procedure would lend itself well to automation, suffers minimally from interference by other chemicals such as bile in blood, and is precise. Knowing the extent of serum alkaline phosphatase is important to diagnosis of many diseases.

Also, elevation of the enzyme does not necessarily indicate the presence of disease, says Dr. Wolf. It is natural for pregnant women and growing children to exhibit a high blood level of the enzyme, he explains.

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Mailed August 14, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Dr. Norman Kretchmer, professor of pediatrics at Stanford University School of Medicine, will receive the 1969 Borden Award of the American Academy of Pediatrics.

The Award, which will be presented at the Academy's annual meeting (Oct. 18-23) in Chicago, is given for outstanding achievement in research relating to nutrition and/or development of infants and children. Dr. Kretchmer will be honored for contributing to the understanding of biochemical processes which form the basis of distinctive cell differentiation in growth and development.

Specifically, Dr. Kretchmer and his co-workers at Stanford have demonstrated the changing patterns of enzyme activity during growth and development. He has also succeeded in clarifying the nature and intracellular localization of intestinal enzymes which assist the digestion and absorption of sugars in the intestinal tract. This discovery has been vitally important in treating children who cannot absorb food properly.

Dr. Kretchmer received the Ph.D. in physiological chemistry at the University of Minnesota in 1947, and the M.D. from the State University of New York College of Medicine in 1952. He recently returned to full-time teaching and research after ten years as Chairman of the Department of Pediatrics at Stanford.

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Mailed August 13, 1969.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Investigators from the Stanford University School of Medicine and the California State Department of Public Health have linked the virus that causes common measles to an invariably fatal form of encephalitis that affects as many as 200 children and young adults in the United States each year.

Research findings using modern techniques of electron microscopy and immunology point toward the measles virus as the cause of the disease, the investigators believe. Their studies have revealed the presence of viral particles within the nuclei of brain cells. Evidence pointing to measles has also come from other laboratories around the world. But the scientists acknowledge that final proof still is lacking until the virus itself can be successfully isolated in victims of the rare disease.

The disease is commonly known to physicians as Dawson's subacute inclusion-body encephalitis, after its discovery, in 1933, by Dr. James Dawson, now of the University of Minnesota. It hits young persons between 5 and 20. Symptoms include involuntary movements of the limbs, and profound mental changes. The blood of the victims also shows an unusually high prevalence of antibodies to the measles virus.

The Stanford and Berkeley investigators have postulated that the disease may be a consequence of a latent or chronic infection with a measles virus that has been reactivated. If their theory is correct, viruses from other diseases left over in the body may be the cause of some of man's most puzzling ailments. Among the ailments are multiple sclerosis, amyotrophic lateral sclerosis (Lou Gehrig's Disease) and certain leukemias.

These findings have been reported by Drs. Robert M. Herndon, John M. Freeman, Guy McKhann and Lucien J. Rubinstein of Stanford University, and Drs. Edwin H. Lennette and Robert L. Magoffin of the Viral Rickettsial Disease Laboratory at Berkeley. They were presented in part at the American Pediatric Society meetings earlier this year, in The Lancet, a British medical journal, and at a special conference held recently by the National Institute of Neurological Diseases and Blindness at Bethesda, Md.

-MORE-

The patients studied by the California group have all had measles in the past. The initial measles infection was usually uncomplicated and had occurred as many as eight years before the appearance of Dawson's encephalitis. All patients have had significantly higher levels of antibodies to the measles virus than do normal individuals, the investigators said.

In two children studied, gradual deterioration of personality and intellect spanned a nine-month and a one-year period, and was followed by more rapid and ominous deterioration for about a month. Both patients also had abnormal EEG (brain wave) patterns. Recently two more cases have been brought to the investigators' attention. One of these was "discovered early by an especially astute pediatrician," who had read of the earlier cases.

He linked minor personality changes, some loss of intellect, and muscle spasms with EEG abnormalities and referred the child to the Palo Alto group for study and therapy. "She is the least severely affected and still functioning child," the researchers said.

The Stanford physicians are treating the disease with antiviral drugs. Although they have been cautious to point out that treatment is "highly experimental," results so far are promising.

In 1964 another group of Stanford researchers (Drs. Rubinstein, Lloyd Silverman, and Carlton E. Schwerdt) successfully demonstrated viral organisms to be responsible for a rare degenerative and fatal disease in adults, called progressive multifocal leucoencephalopathy. Identical findings were reported simultaneously by a group of researchers at the University of Wisconsin. The condition results from the replication of a hitherto unsuspected viral agent in the nuclei of brain cells responsible for the formation and maintenance of nerve fiber sheaths.

Dr. Rubinstein, a neuropathologist, is professor and acting head of the Department of Pathology at Stanford. His associates include members of the Division of Neurology, and the Departments of Medicine, Pediatrics and Medical Microbiology. Their line of investigation has included electron microscope studies of brain biopsies from selected patients, to determine their fine structure and biochemical changes.

An important purpose of these studies is also to isolate and culture the suspected viruses and to develop rational and effective methods of treatment, Dr. Rubinstein said.

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Mailed 9-28-67.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A study of the patient with leukemia and the impact of the fatal disease on his immediate family will be launched by the Stanford University School of Medicine under a $23,265 grant from the American Cancer Society.

Purpose of the study is to improve clinical services currently offered to leukemic patients and their families by social workers at the Stanford University Medical Center, and elsewhere.

The project will be directed by Dr. David Kaplan, associate professor and head of the Division of Clinical Social Work. Participants will include Dr. Stanley Fischmann, assistant professor of psychiatry and pediatrics, who will study the reaction of the leukemic child to the illness. Other faculty members from the Department of Pediatrics and the Division of Social Work will assist.

Dr. Kaplan has a special interest in the subject and has co-authored with Dr. Donald G. Langley of the UC Medical School at Davis, the recent book "The Treatment of Families in Crisis."

"While medical progress has extended the lives of leukemic children, the illness is fatal and often has a devastating impact on their families," Dr. Kaplan said.

"The stress attending the illness is overwhelming as evidenced by high rates of divorce, suicide, mental illness, and the neglect of other members within the family."

Dr. Kaplan commented that previous studies by other workers have stressed the hospital experience of the child and his family, not the total impact of the illness. "Observations in the home have been neglected," he said. "As a result, the effectiveness of services offered by social workers to these struggling families is seriously limited."

The Stanford researchers will make careful observations of family reactions in the clinic, on the ward, in the home, and in the child's school. They hope to develop reliable criteria which will enable social workers to predict reactions as these families attempt to handle problems during the critical phases of the child's illness.

"The data will enable health workers to intervene effectively to protect all family members against the multiple stresses associated with chronic illness," Dr. Kaplan said. "The findings should also have broad application to families attempting to cope with other terminal illnesses."

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Mailed September 25, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. Roger O. Egeberg, the newly appointed assistant secretary for Health and Scientific Affairs of the Department of Health Education and Welfare, will speak at the Stanford University School of Medicine Thursday (September 25).

Dr. Egeberg's topic will be "From Crisis to Crisis: The Federal Role in Health Research Education." It is his first major speech given at a medical school since Dr. Egeberg assumed the federal post earlier this summer.

The talk will be given at 4 p.m. in Room M106 of the Medical School. It is open to members of the local medical community, and the public.

Later in the evening, Dr. Egeberg is scheduled to address a joint dinner meeting of the Santa Clara and San Mateo County Medical Societies, and bring to local physicians up-to- date information on HEW plans for the future of health care. The joint dinner will be at 6:30 p.m. in the Cabana-Hyatt Hotel in Palo Alto.

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Mailed September 19, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane B. Duff 415: 321-5310

STANFORD--The Mid-Peninsula Kidney Foundation has presented a gift of $1500 to Stanford University Medical Center for the establishment of a library of current literature on kidney diseases.

Announcement of the gift was made today by Mrs. Delano Large, foundation president of Palo Alto.

"Research is vitally important to the solving of the problems of kidney disease," Mrs. Large said. "This donation to Stanford will make the latest information on the advances being made in the treatment of kidney diseases available to all community physicians."

Funds of the local chapter of the kidney foundation are raised through local memberships, memorials, and profits from an annual Halloween "Trick-or-Treat" Candy Sale.

"It is gratifying and appropriate that patients in this community should benefit directly from contributions made by the community," Mrs. Large said.

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Mailed September 15, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

ADVANCE FOR PM RELEASE WEDNESDAY, SEPTEMBER 17, 1969

Editors: Dr. Paul Wolf will present his paper at 5:45 p.m., Wednesday at the Palmer House in Chicago.

STANFORD--The effectiveness of a relatively new test, developed to detect infectious mononucleosis, "the kissing disease," was challenged today by a Stanford University pathologist.

The spot test, tried recently in two Stanford patients, indicated a positive diagnosis of infectious mononucleosis. But on further investigation, the two patients, both college-age males, turned out to have a more serious disease--lymphoma, cancer of the lymph gland tissue.

In another case, what appeared with the spot test to be mononucleosis was actually viral hepatitis.

Speaking at the meeting of the American Society of Clinical Pathologists in Chicago, Dr. Paul Wolf said "the test is too sensitive and other diseases can cause a positive result, leading to the wrong diagnosis."

Dr. Wolf is associate professor of pathology and director of the clinical laboratories at Stanford University School of Medicine. Co-authors of the paper he presented are Dr. Ronald Dorfman, co-director of surgical pathology at Stanford; Dr. James McClenahan, director of the student health service; and Frances Collins, a medical technologist at Stanford.

The test in question has been widely used by pathologists throughout the United States. It uses horse cells, and takes only two minutes to perform.

Dr. Wolf recommended that when a positive mononucleosis diagnosis is indicated, several other factors should also be taken into account: a careful medical history of the patient, physical examination results, the total "blood picture," and results of the more lengthy sheep cell test for infectious mononucleosis.

Dr. Wolf commented on recent studies which offer evidence of a relationship between infectious mononucleosis and lymphoma. A virus known as EB virus, and EB virus antibodies are found in both conditions. Both of the patients Dr. Wolf cited were tested for EB virus antibodies and had them.

The cause of infectious mononucleosis is not established for sure, but EB virus is suspected. Mono is called the kissing disease because it is sometimes transmitted that way. Contaminated drinking containers and food utensils is another way. It usually occurs where large groups of 15-to-25 year-olds associate, such as on college campuses.

"We don't know what kind of a relationship exists between mono and lymphoma," said Dr. Wolf. "One possibility is that young people get EB virus infection and turn it off by antibody production. Others do not build up enough antibodies and the infection becomes full blown, with malignant lymphomas resulting.

"But this is not at all clear," he said.

In an effort to learn more about the relationship, spot test results are being correlated with clinical findings and data from blood tests.

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Mailed September 15, 1969

FILE COPY 11-13-69

Stanford heart transplant patient Herman Joslyn, 64, died this afternoon at Stanford University Hospital. The cause of death is undetermined, pending an autopsy although Mr. Joslyn was being treated for a lung infection.

Mr. Joslyn, a retired airline pilot from Seattle, received his transplanted heart from an anonymous donor on Sept. 14. He was the 18th person to receive a transplanted heart at Stanford. Seven other patients survive, six of whom has been discharged from the hospital.

Mr. Joslyn is survived by his wife and a daughter, both of Seattle.

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane B. Duff 415: 321-5310

STANFORD--Stanford University Medical Center Auxiliary has made a gift of $13,500 to the Hospital for purchase of a fetal monitoring unit for the delivery room.

Announcement of the gift was made today by Auxiliary President Mrs. George E. Boyd, Los Altos.

The portable unit is similar to other methods of patient monitoring and records the rate and function of the heart of the fetus as it moves down the birth canal just prior to delivery. The recordings are taken by an external microphone and by scalp electrodes attached painlessly to the head of the fetus. This information is then fed to a central monitoring unit at the nurses station, enabling both doctors and nurses to detect any possible abnormality in the birth process. If signs of fetal distress are evident, the staff can begin procedures to ensure delivery of a healthy baby.

According the Dr. Robert C. Goodlin, associate professor of obstetrics and gynecology, and Dr. Philip Sunshine, associate professor of pediatrics, the use of this research facility will hopefully reduce the incidence of infant mortality and brain damage in newborns.

The auxiliary's gift will enable Stanford University Hospital to be one of the few hospitals in the West to offer the use of fetal monitoring to prospective mothers.

Mailed September 8, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

LIVINGSTON, CALIFORNIA--The Stanford University Medical Center is, by any yardstick, one of the finest in the country. Yet, like similar centers elsewhere, its facilities, until recently, have been available only to those lucky enough to live in the vicinity or wealthy enough to travel there.

To Wells Shoemaker, a second-year medical student, this is not enough. This outspoken and energetic young man and four other Stanford medical students have long been conscious that every rural corner of the country harbors scores of patients suffering because of inadequate medical care.

In Merced County, an area of 108,000 inhabitants, there is one doctor for every 1,750 people. This critical manpower shortage and long distances from farms and towns to hospitals and clinics in the larger cities seriously restrict health care delivery. Overworked doctors attempt to see as many as 60 patients a day, to say nothing of emergencies. The county has only one pediatrician to care for families with as many as 13 children. The understaffed public health system cannot manage all patients who need to be treated.

This was the challenge that moved Shoemaker and his fellow medical students into action early this summer. If the patients could not be brought to Stanford, he reasoned, then the medical center must be moved to the patient, leaving behind it a better informed people, and a medical faculty aroused to the problem.

Shoemaker gained the support of Dr. A. Frank Brewer, the Merced County health officer, and the local county medical society, and a physician's office was found in Livingston (pop. 3,000) to open a free clinic for migrant workers and low income persons living in the area. Dr. Brewer had been planning a night clinic for Livingston for several years, but has so far run into funding difficulties.

The office belongs to Dr. J. J. Wolohan, a 52-year-old general practitioner and the only doctor in Livingston for the past 23 years. Dr. Wolohan has let the students use his x-ray facilities, and laboratory three nights a week when the clinic normally operates. He is also one of several volunteer physicians from Merced, Turlock, Modesto, and the Stanford University School of Medicine who supervise the student's work.

The free clinic has seen more than 80 patients a week, with increasing loads expected during the peak of the harvest season. The Stanford students conduct interviews, give physical examinations, participate in immunization and screening programs, and treat patients under supervision of the licensed physicians. (Part of the student's work will count toward a Stanford ambulatory medicine requirement for clinical year students.)

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Some patients, according to Shoemaker, receive extensive followup care and consultation. For example, a 10-month-old boy was picked up on routine check with severe anemia. Referred to the Livingston clinic, the baby was seen by a medical student and a professor of pediatrics. The anemia had no easy explanation, and the pediatrician took several blood smears back to a pediatric hematologist at Stanford. The blood specialist made a diagnosis of a rare hemoglobin defect. The child will be followed up at Stanford. Other patients have been seen by eminent specialists on gastrointestinal, cardiological, and neurological problems.

The students are assisted in their work by three bilingual community aides employed for the project by Office of Economic Opportunity funds through Central California Action Associates. They are Inez Acosta and Cecilia Montoya of Livingston, and Alice McWaters of Atwater.

Miss Acosta has been a licensed visiting nurse, and will enter formal nurses' training at Merced Hospital this fall. Miss Montoya was formerly employed in a medical office as a secretary and interpreter. Mrs. McWaters has had no formal training experience but has worked with many low-income persons who visit the clinic.

The three women, who received a crash course in community aide work by Miss Faustina Solis, director of the California Farm Workers Health Service, have become a vital part of the Livingston clinic. "They have become familiar with the kind of questions doctors ask, and make the history taking a smooth process," Shoemaker said. "They can recognize a patient's dissatisfaction, help him overcome his nervousness, and explain procedures professionally and gently."

Since the clinic got underway in June, it has been gaining recognition from Merced health authorities. Physicians and public health nurses are now referring patients to the Livingston clinic, especially pediatric patients because OEO-funded health programs in migrant camps do not cover babies under two.

"These are remarkable students," said Dr. Wolohan. "They are intelligent, have considerable knowledge of medicine, and are very mature particularly in dealing with people. Certainly, they know more about medicine than we did at the same stage of our training."

The community response has been positive, too, Dr. Wolohan added. "The people are interested in these young men and feel proud they have come to Livingston. There is a good community reaction all around."

Dr. Wolohan attributes this success to the student's skills of organization and sensitivity to community feelings. The students have arranged so that the clinic program is controlled by a local committee. The group is composed of members from the local Neighborhood Service Center, and the Livingston Community Action Council, Inc., which represents low income families.

The committee, according to Shoemaker, serves as a clearing house for improving the program and a sounding board for community reaction and complaints so that development of the clinic can progress in an orderly and professional manner. The group also gives guidance to health education efforts in the community and the family camps located near Livingston.

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With the help of the California Farm Workers Service, the students are preparing a handbook, to be printed in Spanish and English, giving information about health care, immunization, and legal resources in the county. "We found that migrant workers are bombarded with a lot of confusing information from different agencies," said Hans J. Dankers, a Stanford premedical student from Woodside. "Many families often are eligible for medical care but are unaware of it. We think the handbook would be helpful to them."

The students are living in a ricketty, 100-year-old former schoolhouse near Livingston which rents for $50 a month. They receive a small stipend from the medical school and a $15-a-week food allowance from the Central California Action Associates. The program was started with a $250 budget for operating expenses, some of which was used to buy drugs and laboratory supplies. Pharmaceutical companies also contributed drugs.

In addition to Shoemaker and Dankers, students contributing their skills to the project are Joe Neal, Larry Crapo, and Patrick Sullivan. Miss Betsy Anderson, a graduate of the Stanford School of Nursing, worked at the clinic earlier this summer, before joining the staff of the Stanford University Hospital. Other medical students have travelled from Stanford to Livingston to assist.

Neal, a fifth-year student and the most experienced in the group, is a versatile former Stanford lineman who distinguished himself during the 1962-64 football seasons. In 1966 Neal went to Vietnam with the International Voluntary Service to obtain a personal view of public health in underprivileged areas.

"You don't have to go to Vietnam to see that we, too, have areas of real medical poverty," Neal said. "The main thrust of medicine has been along basic research lines. There has been a certain amount of neglect for people in the process. But this is changing and the impetus has come not from the medical profession but from students."

Dr. Reo Campbell, assistant public health officer for Merced County, commented: "The Stanford students have shown a real desire to do something constructive and people appreciate it. The experience will be beneficial to the students, too, because it gives them early exposure to the practice of medicine outside the esoteric and sometimes stilted university hospital environment."

He expressed hope that with more programs of this type, students may see the need for medical services in small communities and perhaps return there after their training.

"There is a real need for community practice because many patients in the rural areas are being neglected," Dr. Campbell said.

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Mailed September 4, 1969.

EDITORS: Photos available upon request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--A 45-year-old housewife from Logan, Utah became the 17th heart transplant patient today at Stanford University Hospital.

The recipient is Betty Johnson. Mrs. Johnson received her new heart from an anonymous donor in a 4-1/2 hour operation performed by a team of surgeons headed by Dr. Norman E. Shumway.

The patient is in satisfactory condition.

Mrs. Johnson has suffered deterioration of the heart muscle for the past two and a half years. She was referred to Stanford Aug. 12.

Mrs. Johnson and her husband, Homer, have four children, Jay 23, Jeff, 19, Jim, 16, and Jarid, 11. Mr. Johnson is chairman of the Department of Educational Administration at Utah State University. The Johnsons are natives of Tacoma, Washington.

In addition to Mrs. Johnson, Stanford has six other surviving heart transplant patients.

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Mailed 9/3/69.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

STANFORD--The Stanford University School of Medicine today announced it has extended its deadline to end its affiliation with the San Mateo County General Hospital to June 30, 1970.

In a letter to Robert B. St. Clair, chairman of the San Mateo County Board of Supervisors, Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, said that the decision to maintain resident physician coverage until June at the County Hospital was taken in the interest of patients.

"I would like to emphasize that our sole reason for extending our program is to provide you with adequate time to make other arrangements for physician coverage of those patients who are admitted to your institution," Dr. Glaser wrote.

"It is our direct concern for the welfare of your patients that has led us to the extension."

Earlier, the medical school had announced it would pull its residency training programs out of County General by December 31.

"The decision to disaffiliate was reached reluctantly," Dr. Glaser said, "and was based on our considered view that it would not be possible to maintain satisfactory house staff and student programs because of the major change in your patient population.

"Despite the necessity to terminate the present arrangement, we stand ready in the future to review any proposals that you wish to make."

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Telephoned to Business Wire
October 28, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Two Nobel prize-winning scientists have been named to endowed professorships at Stanford University School of Medicine.

They are Dr. Arthur Kornberg, Emma Pfeiffer Merner Professor of Biochemistry, and Dr. Joshua Lederberg, Joseph D. Grant Professor of Genetics. The two endowed chairs were made possible by a gift from the Gustavus and Louise Pfeiffer Research Foundation of New York and a bequest from the estate of Joseph D. Grant.

"I take particular pleasure in announcing these two appointments," Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, said today. "Dr. Kornberg and Dr. Lederberg are and will continue to be leaders on the frontiers of medical knowledge and understanding in the basic medical sciences. It is especially fitting, therefore, that they should be named to endowed chairs bearing the distinguished names of Emma Pfeiffer Merner and Joseph D. Grant."

Dr. Kornberg received the Nobel Prize in 1959 for synthesizing DNA (deoxyribonucleic acid), the genetic material believed to determine the heredity of all living things. Dr. Lederberg was awarded the Nobel Prize in 1958 for his work in bacterial genetics.

Emma Louise Pfeiffer was born in Cedar Falls, Iowa in 1860 and lived there for 63 years. After the death of her husband, David C. Merner, a pharmacist, she moved to California to be with her family in Palo Alto. Her brother, Gustavus, and his wife established the Pfeiffer Research Foundation of New York 27 years ago. The Merner and Pfeiffer families have had ties with Stanford for over three generations. Mrs. Merner is described by those who know her intimately as a gracious and lovable woman of strong influence in a family with long matriarchal and philanthropic traditions.

The Joseph D. Grant Professorship in Genetics honors one of San Francisco's most distinguished sons. Mr. Grant, a leading California industrialist, financier and merchant, served as a lifetime member of the University Board of Trustees for 51 years. He was appointed to the board by Senator Stanford in 1891 at the age of 33.

Earlier this year the Clinical Sciences Research Building at the School of Medicine was named in honor of Mr. Grant. Attending the ceremonies were his daughters, Mrs. Josephine Grant McCreery of San Jose and San Francisco, and Mrs. Edith Grant Ordway of Los Altos.

Joseph D. Grant was born in San Francisco in 1858, the son of pioneer parents. After his attendance at the University of California, he entered Murphy, Grant & Company, the wholesale drygoods concern of which his father was a founder, and became president of the Company in 1904. The business was sold in 1912.

Mr. Grant was a leader and pioneer in three important fields of western industry--petroleum, steel, and hydroelectric power. He was first vice-president of the General Petroleum Corporation, president of the Columbia Steel Corporation, and chairman of the board of California-Oregon Power Co.

The public cause in which Mr. Grant was most active was the Save-the-Redwoods League where he served for 21 years as chairman of the board of directors. The J. D. Grant Grove in the Del Norte coast region is one lasting token of his dedication to this movement.

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Mailed October 29, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Alcohol is a dangerous drug, not only in its acute effects on behavior, but in its tendency to cause addiction, a Stanford pharmacologist said last night.

"The so-called Establishment is uptight about drugs these days, but they're thinking of drugs that are new in our culture--heroin, marijuana, LSD," Dr. Dora B. Goldstein told a class at Stanford University School of Medicine. "They shouldn't forget about alcohol."

"Alcohol should not only be included in the roster of drugs to worry about, but by all accounts, it should be at the top of the list. The estimates for the number of alcoholics in this country run about 100 times higher than for heroin addicts--about 60,000 for heroin and 6 million for alcoholics."

Dr. Goldstein addressed a group of school administrators and science teachers attending a class on drug abuse. The class is being presented as a public service by the Department of Pharmacology at Stanford and the Santa Clara Valley Science Teachers Association.

"I do not think it at all feasible or desirable to try to stop people from drinking, but adult and child alike should be aware of the factors that increase the probability of alcohol abuse," Dr. Goldstein pointed out.

All the effects of alcohol on behavior are a result of depression of brain function, the speaker said. Alcohol knocks out different parts of the brain in order, and the ones that go first are the self control circuits--the parts of the brain that damp down behavior and prevent over-reaction.

"This is why the person who is tipsy appears elated and stimulated. As the concentration of alcohol in the blood becomes higher, depression is obvious."

"To avoid dangerous alcohol blood levels it is important to know about the rates of onset and disappearance of the behavioral effects of alcohol," Dr. Goldstein explained.

"The rate of onset is determined by how fast the drug gets from the stomach to the brain. The peak concentration of alcohol in the blood is seen about 30 minutes after drinking if the stomach is empty. If food is taken before or with the alcohol, this peak is not reached for two hours and then, because it is being broken down in the body during those two hours, it will not reach the high blood concentration of the alcohol consumed on an empty stomach."

"A cocktail before dinner is the way to get the most out of a given amount of alcohol," she continued. "It is also the most damaging way to drink."

A given amount of alcohol affects small people more than larger ones, she pointed out. The smaller person has a smaller volume of body water, so although he is carrying the same amount of alcohol as someone larger, its concentration is higher. The smaller person also has a smaller liver and so he has less capacity to oxidize alcohol and its effects wear off more slowly.

Another chronic effect of alcohol in humans is malnutrition, Dr. Goldstein pointed out.

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"Alcohol is a source of calories and it is taken in amounts comparable to those of other foods. So people who drink heavily eat very little."

"Vitamin deficiency diseases, which have become very rare in this affluent country, are still seen in alcoholics. Most of the degenerative effects of alcohol on the brain and perhaps those of the liver are due to malnutrition rather than to alcohol directly."

Dr. Goldstein said that the stages through which an incipient alcoholic passes are recognizable and predictable. She pointed out the danger signals--frequent drunkenness, preoccupation with alcohol, black-outs, morning drinking and solitary drinking.

"All these signs indicate that the individual is unwilling or unable to keep his alcohol intake down to harmless levels," she said.

"Alcohol can very probably be used in moderation without any harm. But alcoholism is a disease we do not know how to cure so we had better learn to prevent it," Dr. Goldstein said. "I think the best hope for this is to learn how to get pleasure from alcohol without getting drunk. People should know how much alcohol they can safely drink and how long its effects will last and should be watchful for signs of dependence on and preoccupation with alcohol."

"We should also try to modify the attitudes of ourselves and others so we don't glorify drinking or urge people to drink more than is good for them," she concluded.

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Mailed October 27, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Interns and residents at Stanford University Hospital will meet with hospital and medical school officials Monday night (Oct. 27) to discuss proposals seeking salary increases and improved benefits.

No figures have been disclosed, but the Stanford University Hospital House Staff Association has suggested substantial annual salary increases across the board and improved fringe benefits for all interns and residents, according to Stephen I. Marglin, president of the group.

In addition, the Association has been seeking extension of benefits to cover certain postdoctoral fellows at the medical center. The group is also asking that salary increases become retroactive to July 1.

Dr. Thomas A. Gonda, director of the Hospital, said the hospital is wholly dependent on patient revenue, and it recently has increased its daily rates to meet rising labor costs.

In addition, the sharp cutbacks in federal support for medical education and research, have put a tremendous fiscal burden on the Stanford University School of Medicine which supports a significant portion of the house staff salaries, he said.

Stanford's 140 interns and residents already received increases in July. Their new stipend schedule provided an annual increase of $700 for interns and annual increases of up to $1,000 for residents.

Interns and beginning residents also received a new benefit--a $500 annual allowance per dependent child up to a maximum of $1,000.

The salary schedule adopted in July was based on proposals submitted to the Hospital by the House Staff Association. The proposal that was agreed upon was believed to provide the most equitable distribution of available funds in the current hospital budget, Dr. Gonda said.

Present intern base salaries after the July increase are $6,000 per year before dependency allowances are added. Annual salaries for resident physicians are: first-year, $6,500; second-year, $7,000; third-year, $7,500; fourth-year, $8,000; and fifth-year, $8,500. Allowances for their dependents are also additional.

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Telephoned to Business Wire, Palo Alto Times
October 27, 1969 a.m.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The California Chapter of the Myasthenia Gravis Foundation has made a grant of $1,000 to Dr. William W. Hofmann of Stanford University School of Medicine for continued research with the serious disease which weakens muscles used in breathing and swallowing.

Current investigation into myasthenia gravis, a disorder in the transmission of impulses from the nerves to the muscles, suggests "that possibly because of an abnormality in the thymus gland, some cells of the body manufacture substances which work against the muscles and also against a process of neuromuscular transmission," explains Dr. Hofmann.

The Foundation has contributed toward his work since the late 1950's; he will use the current gift for patient care and for partial support of a research fellow.

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Mailed October 27, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

Noted biophysicist and biologist Dr. Oleg Jardetzky has joined the faculty of Stanford University School of Medicine as professor of pharmacology.

He comes to Stanford from the Merck Institute for Therapeutic Research in Rahway, New Jersey, where he had been executive director since 1968. Prior to that he served as director of the department of biophysics and pharmacology in the Merck Sharp and Dohme Research Laboratories.

Most of Dr. Jardetzky's research has been in the area of biological application of nuclear magnetic resonance, a method which permits detailed study of interactions between drugs and receptors. In 1964 he was chairman of the First International Conference on Magnetic Resonance in Biological Systems, held in Boston. From 1959 to 1966 he was an assistant professor at Harvard Medical School and a Senior Fellow of the United States Public Health Service. This year he was chairman of the first Gordon Conference on molecular pharmacology. He received his degrees from Macalester College (B.A. 1950) and the University of Minnesota (M.D. 1954 and Ph.D. 1956).

Dr. Jardetzky is married to the former Norma Wade of Virginia. They are making their home in Palo Alto.

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October 21, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415 321-5310

FILE COPY

Editors: Copies of "Stanford M.D." are available on request.

STANFORD---In the past the Stanford University School of Medicine, like most of America's prestige schools, has been content to wait for applications from qualified black and brown students.

Few applied. Even fewer were admitted.

As a result blacks, and students of Mexican-American or American-Indian ancestry became solitary figures in the medical school's classrooms and laboratories.

For example, of the 300 medical students enrolled in the school in 1968-69, only three were blacks and one of them was from Nigeria.

This year the Stanford picture has changed drastically. After extensive recruiting, 12 students (7 blacks and 5 Mexican-Americans) have entered medical training at the school. Ten of the students are part of a special program designed for minorities. Two others have been admitted to the school through the regular channels.

The group represents the largest number of minority students in the school's history.

To facilitate development of the special program, the medical school increased its entering class size from 64 to 74 students, with 10 places available each year to minorities, said Dr. Bernard W. Nelson, associate dean for student affairs.

In addition, the faculty has decided that minority applicants will be evaluated by criteria more relevant to their needs and background. Their selection will be made by a committee on minority admission composed of minority group representatives and faculty.

The medical school has pledged to provide funds to aid minority students who are unable to finance their education and tutoring help for those who need it.

Dr. Nelson explained that minorities are caught in the vise of insufficient funds and inadequate secondary education and that recruitment and assistance in medical school must be directed to an easing of these pressures. His comments appear in an interview in "Stanford M.D.," the quarterly magazine of the Stanford Medical Alumni Association.

"We have come to realize," he said, "that in selecting minority applicants we must consider other factors than just Medical College Admission Test scores.

"It is widely recognized that a student's accomplishment in medical school is principally determined by his own ability, knowledge, and motivation. Although grade point averages and test scores generally reflect these qualities, they may be inaccurate in indicating the basic ability and motivation of a minority student where social, financial, and regional barriers must be considered."

In general then, black and brown students cannot, at the present time, be measured by the same standards, Dr. Nelson said. Until the educational handicaps are removed, beginning from the elementary level, minority students will always be at a disadvantage in a competitive sense. But this does not mean that they cannot qualify for admission nor that they will not become great doctors.

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Cost of the special program will be approximately $50,000 for the first year, Dr. Nelson estimates. (Tuition expenses, room and board, and other contingencies come to $4,845 per student for nine months of study.) By the time there are enough minority students in all five classes of the school, costs will jump to $400,000 annually.

"We are searching for funds to run the program," Dr. Nelson said. "Minority students admitted this year have all required financial assistance. For the first year, we are using reserve funds to make the program go. But foundations, which often in the past have been interested in sponsoring programs for minority students, have not been willing to fund them."

Many of the students this year were recruited by a special minority search committee. Dr. Jose Aguilar, committee chairman, traveled through the Southwest and arranged for several Mexican-American students to visit Stanford. Members of the Mexican-American Students Confederation assisted him in interviewing applicants from their minority group.

Another committee member, Paul Williams, a second-year medical student and member of the Black Students Union, talked with black applicants who visited the campus, and contacted and counseled by telephone those he could not meet personally.

In screening applicants other BSU members assisted, including Dr. Cyril Fabio, a dentist from East Palo Alto. Some applicants who visited Stanford took lodging at the homes of minority search committee members, allowing them to become personally acquainted with the candidates.

Finally, minority representatives ranked the applicants for recommendation of admission. Guidelines used by the search committee in its selections included:

. Evidence of academic achievement and promise of further attainment.

. Motivation for medicine.

. Consideration of how far the candidate had journeyed to reach a decision to apply to medical school.

. Evidence of humane concern for the existing problems in the student's minority group community.

Dr. Aguilar noted that as a result of publicity and recruitment efforts, 63 minority students applied for admission to the medical school this year. By contrast, during the previous year, when Stanford had no formal program, only 9 candidates applied.

"Minorities have not shown much interest in entering professional schools, because past promises have never amounted to anything," Dr. Aguilar said. "Our program for the first time spells out exactly what the opportunity consists of in terms of positions promised, and what the support will be.

"The fact that we have a program will undoubtedly have an impact on the educational system farther down the line. It will point out the inadequacies of education at the grade and high school levels and the failure to produce the talent medical schools require."

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Mailed October 20, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--"Hunger, Poverty and Parasites in the U.S." will be the topic of a public lecture at 4 p.m. Monday (Oct. 20) in Room M106 of the Stanford University School of Medicine.

The lecture, sponsored by the department of community and preventive medicine, will feature Dr. Donald E. Gatch, a South Carolina country doctor who works among the poor in Beaufort County.

Dr. Gatch was among the first to point out that hunger was a daily fact of life among black families and to discover in South Carolina diseases related to malnutrition never thought to exist in developed countries.

After he charged publicly that he had seen children dying of starvation, that most black children in the area were infested with worms, and that families were living in hovels, he began losing his white patients. Every doctor in the county signed a statement deploring his "unsubstantiated allegations," and the local newspaper, the Beaufort Gazette, accused him of "running his mouth."

Ostracized by both colleagues and white patients, Dr. Gatch closed his office at Beaufort and moved to Bluffton to open a clinic for the poor.

Subsequently a survey, conducted by researchers from the University of South Carolina, the Meharry Medical College, and Vanderbilt University, substantiated Dr. Gatch's charges.

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EDITORS: Advance text of Dr. Gatch's talk not available.

Mailed October 17, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

STANFORD--Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine at Stanford University, has been appointed member of a Federal Task Force on Science Policy.

The 11-man task force, which includes prominent individuals from business, industry, and academic institutions, was created by President Richard Nixon to review the Federal Government's present science policy and make recommendations as to its future and scope of direction.

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Mailed 10-15-69.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

ADVANCE FOR A.M. RELEASE MONDAY, OCTOBER 13, 1969.

NOTE: Parents of Children with Neurological Defects will meet Tuesday evening October 14 at 7:30 p.m. in Room A335, the Pediatrics Conference Room, of Stanford University Medical Center. Speakers will be Mr. and Mrs. Arthur Tollkuhn of Parents and Friends of the Child Development Center, San Jose, who will talk about how their group united to work for a special cause.

STANFORD--The impersonal fact that a defective child could be born is easy to accept. But news that a child of yours has been born with a severe defect is a much more difficult matter to wrestle with.

In fact, the impact probably lasts for years. Learning to cope with the problems of defective children is not simple, nor is it automatic. But parents have found that they can learn from each other.

An example in the Mid-Peninsula is a group known as Parents of Children with Neurological Defects. Their children were born with myelomeningocele and in some cases hydrocephalus.

Organized around a core of parents whose children have been referred to the National Foundation March of Dimes Birth Defects Center at Stanford University Medical Center, the group welcomes new members and is eager to make itself available to Bay Area parents in the same situation. Their monthly meetings are usually held at Stanford.

Myelomeningocele is a condition in which the vertebral arches in the spinal column have failed to close during fetal development. There is an outpouching at some point along the spine, usually at the base of the spine, containing membranes and sometimes spinal cord tissue. Various children have varying degrees of motor and sensory impairment in the lower half of the body, including impairment of bowel and bladder functions.

In hydrocephalus, which is often associated with myelomeningocele, an abnormal amount of fluid builds up in the ventricles of the brain. Resultant pressure can enlarge the head and damage the brain. Fortunately, the defect can be corrected by a procedure known as shunting--a tube is inserted in the ventricles to drain the fluid elsewhere so that it can be circulated and eliminated.

Mr. and Mrs. Roger Cummings of San Jose were charter members when Parents of Children with Neurological Defects was started in 1968. By that time their son Russell was two years old and had already had operations for myelomeningocele and hydrocephalus.

They only wish the parents group had been in existence in 1966. "We wouldn't have felt so alone," says Roger Cummings.

"Now we have, and can help give, moral support," says Esther Cummings. "We know that others have faced similar situations and have lived through them. Also, it's encouraging to hear of any progress the other children make," she adds.

But the beginning was rugged. Right after Russell's birth the Cummings were told that there was no hope for the life of the child. Russell was not brought to his mother, and the Cummings were also told that he must be cared for 24 hours a day in the hospital. Further, they were informed that if he should survive, his mental abilities, as well as physical, would be minimal.

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For the Cummings family, particularly for the mother, the news was almost devastating. Shaken, she returned home, where fortunately three older, lively sons awaited her.

The family authorized surgery for Russell when he was ten days old, but had no contact with him except that his father secretly went to visit him each day. Peering wistfully through the glass at his tiny son, Roger Cummings hoped the hopes of a parent, and wondered what was going to happen.

Suddenly one day when Russell was about a month old there was a change in the medical climate. Tests were performed. A doctor put in a call to Mrs. Cummings. Apparently, he said, the baby had a chance for healthy mental development.

Mrs. Cummings called her husband at work and together they literally ran to the hospital. They questioned the doctor for hours and hours--there were absolutely no guarantees. None at all. But they could take Russell home if they wanted him. They wanted him.

The mother saw and held her baby for the first time. And she was able to take him home to meet his brothers, Roger, now 13, Robert now 9, and Richard, who is now 7.

The ensuing years have been, as the Cummings knew they would be, a continuing uphill fight for Russell's well-being. Repeated surgeries and numerous visits to an array of pediatric specialists take a toll in time and emotion.

But Russell has responded well. And now, with their new friends in the parents group, they have a more positive sense of making progress.

"We don't get together to bleed," says Esther Cummings.

The parents meet to learn and to get to know one another.

The group has become a forum where family experiences can be shared, personal worries and fears can be expressed, and educational talks by various specialists can be presented. Topics on the programs have included orthopedic procedures and rehabilitation; neurosurgery; other corrective surgery; special schools, medical services and financial aid available to their children; and how to deal with urologic problems. There have also been purely social evenings.

The organization's success has also benefitted the doctors. "Through the group we are able to arrive at a far better understanding of what is bothering parents than we can when they visit the clinic," says pediatrician Dr. Luigi Luzzatti of the Birth Defects Center at Stanford. "And since clinic visits, in turn, offer very limited opportunities for educating parents, the talks presented at the group meetings are proving to be a valuable way of increasing understanding.

"As parental understanding increases, so does confidence and ability in handling the children," says Dr. Luzzatti.

As an example of one of the practical lessons the parents have learned in making the best use of time which must be spent with the special child in the family, Roger Cummings mentioned the exercises done for the child's legs. "We had been doing the exercising with a mind toward strengthening the muscles until we were enlightened that the real purpose is to prevent fixed contraction of the muscles," he said. "Just knowing this little fact prevents wasted time and useless expectations."

The best feature of Parents of Children with Neurological Defects is just being able to relax and talk with people who fully understand the problems, the Cummings agree. They welcome new members and would be happy to supply any information about the group. Mrs. Cummings can be reached by telephone at 258-6788, or by letter at 10180 Torrance Avenue, San Jose, 95127.

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EDITORS: Photos available on request.

October 9, 1969.

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--"It is time the teenager, our greatest natural resource, should receive the prime attention of the government and private philanthropy," a Stanford physician said last night.

"The pollution of our youth by drugs deserves as much attention as the problems of culturally disadvantage minorities," Dr. Stanford Rossiter told a class of science teachers and school administrators taking a new course on the problems of drug abuse at the Stanford University Medical Center.

Breaking teenage drug abusers into two groups, regular and occasional users, Dr. Rossiter, a clinical assistant professor of radiology at Stanford, noted that the regular users are a more complex or disturbed group of youngsters. "Herein are found psychotic and prepsychotic types, the emotionally disturbed, the inadequate personalities, criminal types and the rebellious kids and 'losers,'" he said. "Within this group are those who use any and every drug and these obviously are the ones most likely to have had experience with heroin.

"The losers, criminals and psychotics are very expensive to our society and drug abuse tends to enhance their socially undesirable qualities," the speaker pointed out. "Efforts to curtail their drug habits justify the full application of law enforcement against both users and sellers.

"The relatively large numbers of occasional users are an entirely different problem," Dr. Rossiter told the audience of 100 attending the lecture.

"These users are basically normal adolescents who use drugs for a variety of reasons, most of which involve a social experience in the sense of 'being where the action is' or being 'in'. Experimentation or satisfaction of natural curiosity motivates many of these teenagers.

"The principal harm in drug use by this group is not necessarily in the drug itself but in the constant perpetration of the illegal act of using the drug. This activity appears to deaden the social conscience, making other types of illegal conduct more readily conceivable," Dr. Rossiter stressed.

"The social organizations centering around drug abuse tend not to have the more customary social experiences of normal adolescent cultures. The attitudes toward police and other types of civil authority become hostile and the dangers of felony convictions may be taken lightly," he said.

"The full realization of damage to future opportunities and status resulting from criminal records has not been awakened in these youngsters," he continued.

A second problem with occasional drug use is the harm to performance in school, the speaker pointed out. "Grades drop, social contacts tend to wither and participation in school extracurricular programs is replaced by the subculture of drug abuse. A polarization develops that separates the users from others wham they may admire or respect initially, but whom they later come to envy, resent, or suspect as informers."

Speaking on the origin of drug abuse, Dr. Rossiter pointed out that the entire cultural and psychological environment of the teenagerhas undergone significant changes in one generation.

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"The automobile permits a teenager to exist essentially aloof from parental or community supervision. Nearly every teenager has access to a car or to someone who does," he said.

"Leisure time is uncommitted and non-productive. Family unity has been severely strained by distractions such as television, working mothers, and replacement of home chores by automation and modern conveniences. Former sources of teenage recreation are drying up rapidly--the vacant lot to play in, places to ride a bicycle, uncrowded beaches or parks. The cost of most conventional ntertainments, such as movies, is becoming formidable.

"Because of the high cost and inaccessability of areas for legitimate entertainment, it is literally cheaper for teenagers to smoke pot together on a weekend than to take a date to a jazz festival or even to a drive-in movie ," Dr. Rossiter said.

"Information on chemicals and drugs, particularly those which affect mental behavior, has not been presented properly to children--nor for that matter even to adults. It is best that schools accept the responsibility of teaching what is good about these agents and wherein their dangers lie," he said.

"It should be obvious that education concerning the dangers of drug abuse and protection of the public against exploitation by criminal elements should be a prime objective of society.

"Legislation must be devised to control illegal drug traffic, to support research education, and to adjust our social structure to meet the problem of the teenager," Dr. Rossiter stressed.

"Teenagers themselves deserve support in their own efforts to salvage the dropouts, the social outcast, and the confused and frustrated drug users in their own subculture. Organizations such as teen drop-in centers are fully deserving of emergency funds to help them survive. Adult institutions should tuck these fledgling social creations under their protective wings and give them sanction as well as protection from undeserved criticism," he concluded.

Dr. Rossiter's lecture was the first in a series of nine being held weekly at Stanford. The course, sponsored by the Santa Clara Valley Science Teachers Association, is being presented as a public service by members of the Stanford faculty. Director of the program is Dr. Sumner Kalman, professor of pharmacology. Enrollment for the class is closed.

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Mailed October 6, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Funeral services were held Tuesday in Palo Alto for Dr. Leo A. Sapirstein, an internationally known cardiovascular physiologist at Stanford University School of Medicine.

Dr. Sapirstein, professor of physiology in the Department of Radiology, died Sunday (November 16) at his home. He was 50.

Born in New York City October 6, 1919, Dr. Sapirstein was a product of New York public schools. He had an almost immeasurable IQ and entered City College at the age of 13.

At 17 he became a graduate student at the University of California, from which he received an M.A. degree in physiology in 1940. It was during this period that Dr. Sapirstein conducted his pioneering research in the role of the hormone renin on the circulation of the blood. His effectiveness both as a researcher and teacher led to his appointment as instructor in physiology at UC after he received his doctorate.

About the time he made his major contribution to the field of the physiology of the circulation of the blood, he began postgraduate work at UC. Following a period at the Public Health Corps, he received his Ph.D. in 1944. While continuing to pursue his scientific research, Dr. Sapirstein entered the University of California Medical School, receiving the M.D. in 1946.

He served on the faculty of the University of Southern California in 1950, and joined the faculty of Ohio State University in 1951 as associate professor, moving up through the ranks and becoming professor of physiology in 1955 at the age of 36. At Ohio State, his teaching and scientific efforts earned him the distinction of Man of the Year on three occasions, and his voluminous studies on the problems of regional blood flow and the mathematical methods for its analysis, won him international acclaim.

Dr. Sapirstein came to Stanford in 1961 as a visiting professor of physiology, becoming acting professor in 1963, and full professor in 1965, when he joined the research team in the Division of Diagnostic Radiology.

At his death he had contributed more than 80 papers to his field, and had completed a draft of a textbook of physiology.

He belonged to numerous learned societies and received many awards and distinctions for his work. He was particularly proud of a prize presented to him by Stanford medical students of the first-year class of 1963, for his ability "to present, organize, stimulate and challenge."

Apart from physiology, Dr. Sapirstein had an abiding interest in the beauty of the English language in which he was an accomplished stylist, parodist, and unpublished poet.

Dr. Sapirstein is survived by his two sons, Julian, 20, and Jonathan, 18, both Stanford students; his parents Mr. and Mrs. Simon Sapirstein of New York City; and a sister, Mrs. Rhoda Smith of Berkeley.

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Mailed November 20, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

City Desks: Announcement of Dr. Glaser's new appointment is being made simultaneously in the Commonwealth Fund's New York office today.

Transmitted on Business Wire 11/19/69.

STANFORD -- Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school at Stanford University, has been elected vice-president of the Commonwealth Fund, the New York-based philanthropic foundation announced today.

Dr. Glaser will resign his Stanford post to join the Fund's staff September 1, 1970. He has been a member of the Fund's Board of Directors since May.

Expressing his personal regrets at the dean's decision, Stanford University President Kenneth Pitzer noted that Dr. Glaser had demonstrated outstanding leadership in dealing with the principal problems facing the medical school at the time he accepted the post in 1965.

These included the University's complex and lengthy negotiations for purchase of the City of Palo Alto's share in the Palo Alto-Stanford Hospital, the adoption of a new flexible medical curriculum, the creation of a program to increase minority enrollment, and the appointments of key faculty members.

"Under his leadership, the School of Medicine continued to advance its standing as a foremost center of research, educational innovation, and experimentation in health care," President Pitzer said.

For example, Stanford has initiated planning for a new hospital and ambulatory care center intended both to limit costs and improve patient care.

In announcing Dr. Glaser's appointment in New York, Quigg Newton, Commonwealth Fund president said: "Dr. Glaser brings to the Fund a background of exceptional leadership and accomplishment. His experience and insights, together with his imagination and energy, are certain to enhance the Fund's potential for dealing helpfully with the grave crisis confronting the country's health and medical enterprise."

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The Fund is one of the country's principal foundations concerned with strengthening health opportunity in American life. Since its establishment in 1918, it has appropriated nearly $160 million for this purpose.

President Pitzer said he would consult appropriate groups immediately concerning the search for Dr. Glaser's successor.

He indicated he was appointing an administrative council to advise the vice-president for medical affairs and dean of the medical school for the remainder of his term, and to serve until a new dean is selected.

Administrative council members will be Dr. Robert A. Chase, professor and chairman, Department of Surgery; Dr. David Hamburg, professor and chairman, Department of Psychiatry; Dr. Halsted Holman, professor and chairman, Department of Medicine; and Nobel Laureate Dr. Joshua Lederberg, professor and chairman, Department of Genetics. Another faculty member being asked to serve is Dr. Paul Berg, professor and acting chairman, Department of Biochemistry, who is presently in Europe.

Dr. Glaser served as acting University president in summer and fall, 1968, and was praised by the Associated Students of Stanford University for his "outstanding administration" and for meeting student involvement "with human understanding, deep personal concern, and prompt action."

In 1968-69, Dr. Glaser served as president of the Association of American Medical Colleges, and is a member of the Board of Medicine of the National Academy of Sciences. Most recently, he was appointed to the Task Force on Science Policy, established by President Nixon, to prepare recommendations for the future development of the federal government's role in science affairs.

Dr. Glaser, 51, was educated in the public schools of St. Louis and University City, Missouri. He received his A.B. degree at Harvard in 1940, and his M.D. magna cum laude there in 1943.

After serving his internship and residency at the Barnes Hospital and the Peter Bent Brigham Hospital, he rose steadily through the ranks at Washington University in St. Louis where he served as associate dean of the Medical School from 1955 to 1957.

He then moved to the University of Colorado as dean of the School of Medicine, becoming vice-president for medical affairs before moving to Boston to become President of the Affiliated Hospitals Center and professor of social medicine at Harvard Medical School.

He is married to the former Helen L. Hofsommer, M.D. They have three children: Sally Louise (born 9/5/50), Joseph II (1/22/52), and Robert Joy, Jr. (8/1/53).

Mailed November 19, 1969.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The Stanford University Medical Center Auxiliary has voted to donate $25,000 to Stanford University Hospital for the building of plastic and reconstructive surgery suites at the Hospital's Hoover Pavilion.

Auxiliary president, Mrs. George E. Boyd of Los Altos Hills, announced the gift today, saying that the volunteer organization intends to make two additional gifts of $25,000 or more for the project in 1970 and 1971.

Expressing appreciation, hospital director Dr. Thomas A. Gonda said "We are deeply indebted to the Medical Center Auxiliary for this gift which will enable us to again use Hoover Pavilion as a surgical unit of the hospital.

"The Hoover Pavilion is well suited to care for patients who need short term acute admissions for procedures that do not require general anesthesia. A number of these patients are orthopedic and burn patients, so we also plan to develop extensive physical and occupational therapy facilities there to provide excellent rehabilitation care," he said.

The plastic and reconstructive surgery suites at Hoover will include related facilities such as nursing stations and on-call quarters for a plastic surgeon and a general house doctor.

The Auxiliary has served the Medical Center since the Center opened in 1959. It raises its money solely through the gift shops it operates and staffs at the hospital.

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Mailed November 18, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Children who are scheduled to be patients at Stanford University Hospital can now take a pre-admission tour if they wish.

The tour, given each Sunday afternoon at 1 o'clock, is planned as a familiarization experience for pediatric patients and also their parents so that the Hospital won't seem such a strange place when the child is actually admitted and medical procedures begin.

"We're doing this to help the child conquer his fears about being hospitalized," says pediatric nursing supervisor Joyce Smith. "The hospital represents a complete unknown to him. When he enters he will be concerned about being separated from his parents. If he is placed in a totally new environment, it may add to the tension. But by bringing him here in advance we can show him what to expect."

Among the things the children see on their tour: hospital beds, buzzers which summon the nurse to the bedside, Identaband bracelets, and other children. The prospective patients are intrigued to find other children romping around a playroom where there is a life-size doll house. Games and crafts go on in the playroom, and movies are shown there on certain evenings.

On the tour, the pediatric nurse explains that each child may bring his own pajamas or sleep in some belonging to the Hospital. She does definitely suggest bringing slippers and a robe. A favorite toy is fine, too.

The child is told that a number of people will be concerned about his welfare during the stay in the hospital -- doctors, nurses wearing gaily colored aprons, girls in candy-striped dresses who are about as old as the family babysitter, a recreation director, and for bigger children, a schoolteacher. It's a long list, too long to remember, but the lasting impression for the child is that he will not be left alone.

In fact, he learns, his mother and father may come and see him anytime, because at Stanford University Hospital, visiting hours in the pediatrics ward are unlimited. This policy reassures parents as much as it does children.

The pre-admission tours are a help to the nurses, too. "By getting a chance to talk with each child we learn something about him as an individual, and are that much better prepared to help him adjust when he arrives," comments Miss Smith.

The invitation to the tour is included in the pre-admission information packet sent out by the Hospital.

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Mailed November 10, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

EDITORS: On Thursday, November 6, 1969, we have arranged a press conference with Dr. Robert H. Dreisbach to announce the results of his study of the environment of the San Francisco Bay Area Region. The study is believed to be one of the most detailed reports of human ecology of the region ever put together, and it is Dr. Dreisbach's hope that it may assist local communities in their future course and planning. A major part of the 576-page report, titled "Handbook of the San Francisco Region," relates to the quality of the air we breathe, which is within the area of the author's competence as a toxicologist and professor of pharmacology at the School of Medicine. But the report also contains many innovative ideas about planning, taxation, and related areas. The solution to the Bay Area's regional problems may lie in what Dr. Dreisbach regards as "obvious, but apparently unthinkable answers." Several stories, based on the report are enclosed in advance, and we are hopeful that advance copies in galley form will be available at the conference. The press conference will be at 9:30 a.m. in Room W001, adjacent to the News Bureau, in the Stanford University Medical Center. Please notify us if you plan to attend.

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ADVANCE MAILED NOVEMBER 4 FOR RELEASE PM, THURSDAY, NOVEMBER 6

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: This is the first of a series of seven articles dealing with the deterioration of the environment of the San Francisco Bay Area. The articles are based on a forthcoming book on the ecology of the Bay Region by Stanford University pharmacology professor, Dr. Robert H. Dreisbach. The articles have been prepared by the Stanford Medical Center News Bureau, in cooperation with the author. A press conference has been scheduled with Dr. Dreisbach on Thursday, November 6 at 9:30 a.m. in Room W001, adjacent to the News Bureau in the Medical Center. Please notify the New Bureau if you plan to attend.

(ADVANCE) FOR PM RELEASE THURSDAY, NOVEMBER 6, 1969

STANFORD-- A grim warning that the San Francisco Bay Area Region either start to clean up its precious environment or face burial under its own garbage was sounded today by a Stanford University pharmacologist.

Dr. Robert H. Dreisbach, professor of pharmacology at the Stanford University School of Medicine, said:

"The San Francisco Bay Region serves as a prime example of ecological imbalance. It is increasing its population and, at the same time, is unwilling to pay the price to control sewage and garbage disposal, air pollution, crime, and traffic congestion.

"If man continues to exist without destroying himself in the next century, future generations will look upon us as ecological primitives.

"We sneer at stone-age man, considering him primitive and not worth our attention. At least he was in equilibrium with his environment. If man is to survive, the essential key is equilibrium."

The Stanford professor who specializes in toxicology made his remarks in a 576-page ecological report, titled "Handbook of the San Francisco Region," to be published November 17.

"San Francisco, queen of the cities, is equal to the rest of the Bay Region communities in ecological idiocy," Dr. Dreisbach wrote.

He explained that the city is piling office buildings and apartments higher and higher in a desperate attempt to get into balance with expenses. At the same time, the city is unwilling to pay the price for its sewage disposal, and dumps garbage in the Bay, where all who pass may see.

Dr. Dreisbach added:

"We think that the ocean will tolerate our wastes, proposing to dump inadequately treated sewage and compressed garbage miles at sea without thought to ecological consequences.

"At the same time we think the ocean will be able to feed untold billions of people. We make this contention in the face of declining production of fish from pesticide contamination."

Dr. Dreisbach blames the destruction of the Bay Area environment to these factors:

- The automobile has made possible the widespread subdivision of agricultural land. Some cities even advertise with pride that they still have agricultural land to subdivide.
- Developers and builders want to profit from inexpensive agricultural land.

-more-

. City administrators want to get as much tax income as possible.

. Lax home building regulations allow cheap construction.

. Rapid population growth in the remainder of the country supplies a mobile population to move to the Bay Area.

The idea of an ever-expanding tax base, so enthusiastically supported by most local governments, is a myth, the pharmacologist said.

"Why should we be trying desperately to fill open space? Open space has no inherent cost of operation. It does not need sewers, classrooms, administration buildings, police," Dr. Dreisbach said.

He cited the city by the Golden Gate as an example of the tax myth.

"San Francisco has more jobs than residents but is still unable to pay the cost of its operation and must tax commuters," he said. "They must build higher and higher office buildings in a never-ending spiral of increasing costs as population density rises."

To halt the destruction of the Bay Area, Dr. Dreisbach recommended what he regards as "obvious, but apparently unthinkable, answers."

First, the Bay Area Region must control its growth rate.

Second, it must ban the individual automobile and develop mass transportation.

"The need of cities for more tax revenue forces them to convert all open land to houses and industry," he said. "However, cities fail to consider that costs of government do not stem from open space but from people and their needs."

He said one approach to discourage cities from expanding is to put all tax money into a common statewide pool that would be redistributed to cities according to population.

"Communities would seek to stay small since costs per person go up in relation to population density," Dr. Dreisbach explained. "Cities would be relieved of the pressure to subdivide open space, and the distribution of tax wealth would be equalized."

He suggested that remaining open space and agricultural land in the Bay Area be freed from taxation or purchased. Public ownership would allow planning and development of the land in a manner that is compatible with the needs of Bay Region communities.

Dr. Dreisbach said that outright purchase of desirable land for parks and agriculture might cost $3 to $10 billion. The money might come by taxing affluence and those things that have the most destructive effect on the environment.

One of these is the automobile, which accounts for more than half of the air pollution of the Bay Area.

"The cost of the automobile to the individual and to society is totally unjustified in relation to the benefits derived," Dr. Dreisbach commented. "The enormous amount of money and effort now going into the automobile could begin to search for solutions to many of the pressing problems of our cities.

"The automobile has always been sacrosanct, like the sacred cows of India, but is there a valid reason for the sanctity? Its main justification is an economic crutch because we are unable to create a stable economy in any other way. -more-

"The automobile is the single most destructive element to living quality, and as such it should be taxed."

He said the damage caused by the automobile to society, including its use of a disproportionate share of the world's resources, could justify taxation of at least 50 cents per mile. A tax of 10 to 20 cents per mile would be an appropriate beginning.

The Stanford pharmacologist added that with increasing taxation of the automobile, public transportation would come into demand, and this could be supplied at not less than cost.

Turning to the issue of waste disposal, Dr. Dreisbach said that in 1960 the nine Bay Area counties generated 2,607,000 tons of refuse. Estimated at about 4 pounds per person a day, the same cities today dump 4,560,000 tons of garbage into the Bay annually. This would be enough to build a wall 36 feet wide by 30 feet high from San Francisco to San Jose.

"The harmful effects of disposing wastes by covering them under layers of dirt include reduction of the Bay and consequently reduction in tidal currents and oxygenation of water," he said. Continued filling, coupled with excessive escape of organic matter, would suffocate fish and other wildlife."

Reduction of the Bay would increase the likelihood of temperature inversions. This in turn would increase the concentration of pollutants, which may reach that of Los Angeles, he said.

An alternative to filling the Bay, Dr. Dreisbach said, would be to collect wet garbage and sewage solids at the source, treat them to make them bacteriologically safe and odorless, and use them for agriculture.

Cans could be recovered for their metal content, and paper could be used almost indefinitely, he added. As for disposable items, he urged that they be banned altogether.

(Tomorrow: California marine life being studied to death.)

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END ADVANCE FOR RELEASE PM THURSDAY, NOVEMBER 6

Mailed November 4, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: This is the second of seven articles on the deterioration of the environment of the San Francisco Bay Area.

(ADVANCE) FOR PM RELEASE THURSDAY, NOVEMBER 6, 1969

STANFORD--Marine life which thrives in the tide pools along California's 1,200-mile coast line is in danger of being studied to death, a Stanford University pharmacologist reports.

"Increasing numbers of tourists and students, laden with buckets, jars, and plastic bags, are swarming over state beaches by the thousands, collecting anything and everything in sight," writes Dr. Robert H. Dreisbach, professor of pharmacology at the Stanford University School of Medicine.

His comments appear in an ecological report about the San Francisco Bay Region to be published this month.

Dr. Dreisbach said that flights by state aircraft have observed 59 buses on one day, parked at access areas from Tomales Bay to Natural Bridges State Park, and large groups of collectors. On another beach as many as 400 children were observed collecting at one time.

On a single day at Moss Beach in San Mateo County, a warden counted 12 busloads of students collecting specimens. Three days later, another 12 busloads of students arrived.

Another warden reported 30 schoolbuses in the Duxberry-Agate Beach of Marin County on a single day. All the children were collecting marine specimens.

In Santa Cruz County nearly 7,000 visits of collectors annually have been recorded by wardens in the Elkhorn Slough area. The collectors are students from five state colleges.

There is clear evidence that uncontrolled collecting of marine specimens is common throughout the California coast, Dr. Dreisbach said.

Collecting is poorly supervised by parents and teachers, he said. Students turn every loose rock in the area and leave it upside down, with little or no regard for the welfare of the marine organisms. Some students pick up more specimens than they need, and dump them in the parking lots before they leave.

"The result of such activity is that starfish, gastropods, limpets, and chitons are becoming scarce," Dr. Dreisbach said.

He added:

"The waste of marine life by unthinking persons is deplorable. And even the legitimate uses of collecting for scientific and educational purposes can seriously deplete marine life species in tide pools, if the activity is not regulated."

Dr. Dreisbach said that threatened depletion of marine life at Bodega, Tomales and Bolinas, prompted the director of the Pacific Marine Station at Dillon's Beach to develop a study program in marine environment for teachers and students.

He said that possible steps to prevent extinction of marine life should include establishment of marine reserves where collecting would be prohibited, enabling legislation that would give a state agency authority to regulate collecting (at present no single agency is responsible), and programs to train teachers in proper collecting philosophy and techniques.

(Tomorrow: Smog is worse than people realize.)

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END ADVANCE FOR RELEASE PM THURSDAY, NOVEMBER 6. Mailed November 4, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310
EDITORS: This is the third of seven articles on the quality of the environment of the San Francisco Bay Region and what must be done to avert its deterioration from continued pollution.
FOR PM RELEASE THURSDAY, NOVEMBER 6, 1969

(ADVANCE) STANFORD - People would be appalled if they knew how their welfare is being trifled with because of failure of San Francisco Bay Area cities to come to grips with air pollution, a Stanford University pharmacologist contends.

"We are conscious of air pollutants only when they restrict visibility," comments Dr. Robert H. Dreisbach, professor of pharmacology at the Stanford University School of Medicine, in his new book, "Handbook of the San Francisco Region."

However, only 210 tons or 2 percent of the 10,215 tons of injurious pollutants emitted daily are visibility limiting," he writes. One of these is ozone which is not emitted as such, but is generated by the action of light and other pollutants and oxygen, he said. Colorless, gaseous pollutants, such as carbon monoxide, ozone, and hydrocarbons and other organic compounds are as transparent to visible light as the normal constituents of air.

Only nitrogen dioxide absorbs in the visible range of light and contributes a brown color to the atmosphere, he explained. "If all pollutants were as visibility limiting as the particulate matters, our range of vision would be limited to only a few hundred feet instead of a mile or two during our worst air pollution episodes," Dr. Dreisbach said.

He questioned the validity of standards for air quality proposed for adoption by the California Air Resources Board last June. The standards prescribe the levels of air pollutants which humans can inhale without danger to health.

There is no evidence to indicate that these standards are completely harmless," Dr. Dreisbach said. "The levels are determined, in part, by the possibility of being (technologically) able to control emissions in the foreseeable future. At present, recommendations for oxidant, nitrogen, and dioxide visibility are frequently exceeded," he added.

The Stanford pharmacologist called for a series of bold experiments to determine the source of air pollution that would indicate the guilty unequivocally. The experiments would be run every second weekend. First, every possible source of air pollution would be shut down--automobiles, trucks, buses, aircraft, ships, trains, factories, backyard and agricultural burning. On succeeding weekends, polluters would be permitted to operate in succession--buses, trucks, aircraft, trains, industry, agricultural burning, automobiles and so forth.

The series would be repeated often to obtain convincing data. During each experiment, visual range would be monitored carefully, along with other measurements of air pollution already being taken by the Bay Area Air Pollution Control District. Dr. Dreisbach acknowledges that the cost of such an experiment would be high, but he feels it is more than justified.

He said that the Los Angeles Air Pollution Control District has instituted a program that now excuses some two million students through high schools from strenuous activities on days of high smog readings.

He added: "How long before the same happens in the San Francisco Region? Do we really care more for polluters than we do for our children?" (Tomorrow: Automobile vs environment--is the cost justified?)

END ADVANCE FOR RELEASE PM THURSDAY, NOVEMBER 6, 1969. ### 11/4/69

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: This is the fourth of seven articles discussing the causes for the deterioration of the San Francisco Bay Area environment.

(ADVANCE) FOR PM RELEASE THURSDAY, NOVEMBER 6, 1969

STANFORD -- Have you ever kept track of how much it costs to own a car?

A Stanford University pharmacologist has figured it out. He contends that your investment, at the end of two years, to own and operate an automobile, is exactly $7,273.

If you didn't buy a car, but instead chose to put the money into savings, your account would have added up to $204,119 in 45 years, he said.

Here is how Dr. Robert H. Dreisbach, professor of pharmacology at Stanford University School of Medicine, arrived at this figure for a station wagon with some extras:

Price with taxes and license is	$ 4,000	
The first year of expenses are:		
gasoline: 1,000 gallons x 36.9 cents	369	
garage rent	600	
lubrication	100	
insurance	150	
parking and bridge tolls	50	
interest on investment	263	
Total investment at end of first year		$ 5,532
The second year of operating costs are	1,269	
new tires	125	
interest	347	
Total investment at end of second year		$ 7,273

The Stanford pharmacologist calculated that a monthly saving of $100 at 5.25 per cent interest, compounded daily, would add up to $204,119 in 45 years if all interest were retained.

Dr. Dreisbach, author of a new book on the ecology of the San Francisco Bay Region, used the figures to prove his contention that the cost of the automobile to the individual and to society is totally unjustified in relation to its benefits.

He estimated that Highway 101, in Palo Alto, carried 4,761 automobiles and 5,614 passengers in three northbound lanes during peak traffic in one morning.

If these automobiles had been buses, he said, they could have carried 230,000 passengers.

The cost of transportation is determined by load factor and time. Of all available modes of transportation the bus has the lowest operating cost, he added.

Dr. Dreisbach said that the enormous amount of space now needed for transportation is made necessary by total reliance on individual automobiles. (He rides a bike to work each day.) (more)

In the last nine years, the amount of space taken over by automotive transportation in the Bay Area amounts to 15 square miles. "How long will it take to turn the area into an asphalt desert?" he asked.

"Automotive transportation is so destructive to general living quality that a 10-year moratorium on further road construction would be justified to study ways to make the 10 billion square feet already paved more effective," Dr. Dreisbach said.

"The tangible costs of operating an automobile (highways, fuel, traffic control, accidents, insurance, court expenses) amount to more than 50 cents per mile," he said. "To this must be added the intangible costs which cannot be easily measured--air pollution, sound pollution, water runoff from streets and highways, crime, and the impairment of mental health which often occurs when freeways are built with no consideration for nearby residents."

Dr. Dreisbach gave an example of what he regards as one of the little considered costs of automotive transportation--oil spillage.

"If one looks during a rainstorm the streets are dotted with patches of irridescent colors indicating oil spills," he said. "These are carried on the wet surface to gutters which carry a noticeable film of oil to storm drains and end up on the surface of the Bay.

"If each vehicle spills one pint of oil per year, this can contribute 20 drops per day and a total of 1,400 tons of oil annually for all vehicles in the Bay Region.

"Since each milligram of oil will cover 10 square feet of water surface, the amount spilled daily is more than enough to cover the entire Bay with a film of oil."

When it is not raining, the oil mixes with dust on the street and is repeatedly ground by the passage of cars until some of the particles become small enough to be dispersed into the air we breathe.

"Run your finger over an exposed surface. Part of the black oily deposit comes from spilled oil," Dr. Dreisbach said.

The answer to the problem, both in terms of air pollution and safety, is the development of mass public transportation in the Bay Area Region, the pharmacologist said.

To bring about a demand for public transportation, Dr. Dreisbach recommended taxing the individual automobile out of existence.

"If other forms of consumption, such as land ownership and nonfood purchases are taxed, why not taxation of the automobile in some reasonable relationship to its injurious effect on the environment?" he asked.

(Tomorrow: Fill may destroy Bay's natural air conditioning.)

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END ADVANCE FOR RELEASE PM THURSDAY, NOVEMBER 6.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: This is the fifth of seven articles on the quality of the environment of the Bay Area Region.

(ADVANCE) FOR PM RELEASE THURSDAY, NOVEMBER 6, 1969

STANFORD -- Smog levels in the San Francisco Bay Area may reach those of Los Angeles if Bay filling is allowed to continue, a Stanford University pharmacologist predicts.

Dr. Robert H. Dreisbach, professor of pharmacology at Stanford University School of Medicine explained:

"The mild climate of the San Francisco Bay Area is not wholly an unmixed blessing.

"The domination of the semipermanent high pressure over the eastern Pacific Ocean that causes rainless summers and infrequent winter precipitation is also responsible for a stable stratification of the air which makes the region prone to air contamination.

"The condition of warm, dry air, riding above cool marine air, persists along the California coast during almost the entire summer and during some periods in the winter.

"A temperature inversion caps the marine air over the San Francisco Bay Area during practically of the summer and about 15 per cent of the time in winter. The practical result is that the volume of air into which contaminants can be dispersed is severely limited."

Dr. Dreisbach made his analysis of weather conditions in his "Handbook of the San Francisco Region," a compendium of the ecology of the region being published this month.

He said temperature inversions in the Bay Region also occur from other causes which complicate the smog picture. On clear nights with low humidity, the earth's surface loses heat rapidly. The energy loss is especially large during the winter.

As the ground cools, the air in contact also cools, producing a temperature inversion in the atmosphere, Dr. Dreisbach explained. Depending on the wind speed, the base of this "radiation inversion" can be located at the ground or several hundred feet above. Once formed, it behaves like any other inversion as far as its effect on capping the air below is concerned.

"Radiation inversions occur more frequently over land than over water," the pharmacologist said. "The filling of the Bay can increase the incidence and intensity of radiation inversions. This in turn will increase the concentration of pollutants.

"With the additional emission of pollutants from expansion onto a filled Bay, the frequency of occasions with dangerously high concentration of pollutants may reach that of the Los Angeles area."

(Tomorrow: The destruction of agriculture in the Bay Area.)

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END ADVANCE FOR RELEASE PM THURSDAY, NOVEMBER 6.

Mailed November 4, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: This is the sixth of seven articles on the deterioration of the environment of the San Francisco Bay Region.

(ADVANCE) FOR RELEASE THURSDAY, NOVEMBER 6, 1969

STANFORD -- "One of our most precious assets is agricultural land, yet land is fast disappearing in the San Francisco Bay Region, with disastrous effects for the future."

This is the opinion of Dr. Robert H. Dreisbach, professor of pharmacology at the Stanford University School of Medicine.

In his study of the Bay Region to be published this month, Dr. Dreisbach contends that the disappearance of agricultural land in Santa Clara County has had an effect on food import markets abroad.

Although the effect was barely visible, the pharmacologist believes it was a warning of worse things to come, if valuable agricultural land continues to be diverted to other uses.

In 1945 Santa Clara County raised 31 per cent of the apricots in the state, according to Dr. Dreisbach, but in 1964 the fraction had fallen to 24 per cent.

In 1940, Santa Clara raised 32 per cent of the total state crop of plums and prunes, but in 1964 this fraction had fallen to 21 per cent.

"This change was even noticeable in Europe," Dr. Dreisbach said. "In 1960, dried apricots were imported to several European countries from Santa Clara County. By 1964 these were not available."

In another example, San Mateo County raised quantities of row crops both near the Bay and near the ocean. Now these lands have been converted almost entirely to houses, and the remaining agricultural land is being subdivided rapidly.

"One would think that agricultural land would be protected above all to prolong the day when food will be in short supply, Dr. Dreisbach commented.

If this is not done, we must expect that the first foods to disappear in the chain leading to shortage would be the variety fruits and exotic vegetables, he said.

"Apricots and artichokes that grow only in restricted areas are fast disappearing from the market," Dr. Dreisbach explained, adding that this is another reason why these special lands must be preserved for the future.

Outright purchase of the desirable land by public agencies to guarantee retention for agriculture might cost $3 to $10 billion, but the pharmacologist believes the need for this land would justify such action, and communities could probably afford it.

The remaining agricultural and forest land still open in the 10 counties of the Bay Area amounts to less than half of an area of 4.7 million acres.

-more-

"People in these counties spend one-half billion dollars annually on malt liquor, cigarettes, soft drinks, coffee and toiletries. They spend another $3 billion on automobiles," he said.

If the land were acquired by public agencies, Dr. Dreisbach said, much of the cost would be recovered by long-term lease rights for agriculture, not excluding, of course, the home building and limited industrial development that would be compatible with the needs of recreation.

Dr. Dreisbach believes that the money for such land purchase could come from taxing affluence, and taxing those things that have the most destructive effect on the environment of the region--pavement, garbage, and pollution.

He also suggests that taxes be removed from land which is agriculturally productive.

Unless we take these bold steps, Dr. Dreisbach believes, "we will never be able to return our land to agricultural production when population pressures cause food shortages."

"In Europe," he said, "diversion of food-producing land has not been possible because all food is needed for consumption or export."

(Tomorrow: Bay's recreation potential only slightly realized.)

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END ADVANCE FOR RELEASE THURSDAY PM, NOVEMBER 6

Mailed November 4, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

EDITORS: This is the last of seven articles dealing with the destruction of the environment of the San Francisco Bay Area Region.

FOR PM RELEASE THURSDAY, NOVEMBER 6, 1969

(ADVANCE) STANFORD - The San Francisco Bay has enormous recreation potential so far only slightly realized.

Water temperature, south of Coyote Point, is above 70 degrees for three months in summer, and south of Dumbarton Bridge, the water temperature reaches 75 degrees for part of the time, reports Dr. Robert H. Dreisbach of the Stanford University School of Medicine. He said:

"Yet, water-contact sports in this warmest part of the Bay are denied the public for health reasons."

He added that if ways were found to clean the polluted water, swimming and other forms of recreation would become one of the best things the Bay Region could offer. This, however, is not the case because all evidence shows that the Bay's water quality is not getting better.

"Boating on the Bay is minimal," Dr. Dreisbach said. "No attention has been given to finding ways to provide boating without requiring ownership. Almost the only public facilities on the Bay are marinas to satisfy the need to store privately-owned boats that are used, at most, a few hours a week.

"Emphasis on private ownership bars a large segment of the population from this enjoyable recreation."

Dr. Dreisbach is professor of pharmacology in the Medical School. His remarks appear in a 576-page report of the ecology of the area being published in November.

The shoreline of the Bay Region is 276 miles long. Yet, only five miles of Bay shoreline are actually open to the public, Dr. Dreisbach said.

He continued: "In 1850, the total area of the Bay system to the confluence of Sacramento and San Joaquin rivers was nearly 700 square miles. Of these, 568 square miles were shallow enough to fill. Up to 1958, 243 square miles had been filled or diked, leaving only 78 square miles of marsh.

"Since that time, filling has continued at about four square miles per year, and the water surface is now estimated at 435 square miles. Filling and diking has reduced the surface area oxygenating capacity by 40 percent and the tidal exchange by about 100,000 acre feet.

"Once abundant sea otters have been exterminated.

"A shell-fish industry, formerly worth over $1 million annually, has been wiped out.

"Erosion silt enters the Bay at a rate of eight million tons per year, requiring an estimated 8.5 million tons of dredging annually, much of which is redeposited elsewhere on the Bay shoreline.

"Solid wastes, most of which are used as Bay fill, are deposited at a rate of 4.5 million tons annually.

"At least one billion gallons per day of industrial and domestic wastes are discharged into the Bay."

Dr. Dreisbach noted that the deterioration of the Bay Area Region environment shows that the answers cannot be left to single city councils, or board of supervisors. It will require the utmost involvement of informed citizens to arrive at the most beneficial solutions.

END ADVANCE FOR RELEASE PM THURSDAY, NOVEMBER 6, 1969. ###

(End of Series) 11/4/69

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILL COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Stanford University heart transplant patients can now monitor their own hearts for signs of rejection.

Each of the five patients who has been discharged from the hospital to resume normal living, wears a small portable tape recorder for a period of 10 hours, two days a month. Leading into the recorder, which hangs at the patient's side from a neck strap, are three electrode wires that are taped to the patient's chest and provide a continuous, 10-hour electrocardiogram (EKG) recording for evaluation by Stanford physicians.

"With the data provided by the EKG recording over a substantial period of time, our ability to study the overall function of transplanted hearts and to detect heart arrhythmia, or an irregular heart beat, is greatly increased," said Dr. David Clark, a cardiologist on the Stanford heart transplant team. "The presence of arrhythmias may be an indicator of chronic rejection."

Previously, the patients' heart function was monitored only for a brief period of several minutes during their weekly or bi-weekly visits to the Stanford University Clinics.

"The chance of detecting an arrhythmia during this time was quite slim," Dr. Clark said. "Now we can get continuous EKG readings during periods of varying physical activity and sleep and can take steps if necessary to combat the rejection process in its earliest stages.

"To date our success in diagnosis and treatment of rejection has been very encouraging. This additional tool will further our capability to cope with this problem."

Chronic rejection, Dr. Clark explained, appears to take place slowly over a long period of time. It results in an accumulation of tissue deposits on the walls of arteries in the heart. If severe, this accumulation can eventually cut off the blood supply to the conduction center, or natural pacemaker, of the heart.

"The heart's own pacemaker is a small mass of specialized cells in the upper right chamber of the heart which initiates the electrical impulses that cause the heart to contract," Dr. Clark said. "When the blood supply to this area is insufficient because of gradual blockage of the artery, the heart may beat irregularly.

"This condition can be relieved by implantation of a man-made, battery-operated pacemaker which will control the beating of the heart by releasing a series of rhythmic electrical discharges whenever the heart rate slows," he pointed out.

The decision as to when or if to use a pacemaker is made by the physicians after review of the EKG data. Special equipment converts the tape to electrical impulses which are shown on a TV-like screen. All 10 hours of recorded information can be viewed in 10 minutes, and if an irregularity is detected, a stop-action device permits close scrutiny of the arrhythmia.

The recorder and screening equipment have been loaned to Stanford temporarily by the Palo Alto Medical Clinic.

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Mailed November 3, 1969.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Bobbette K. Ranney, a fifth year student at Stanford University School of Medicine, is this year's Stanford recipient of the Pfizer Laboratories Medical Scholarship.

The scholarship, in the amount of $1,000, was awarded on the basis of Miss Ranney's outstanding scholastic record. She has been commended on fourteen separate occasions for honors performance in medical school.

The daughter of Mr. and Mrs. Robert C. Ranney, Jr. of Kirkwood, Missouri, Miss Ranney plans to take her internship training in pediatrics.

Pfizer Laboratories makes scholarship awards at all the medical schools in the United States.

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Mailed December 30, 1969.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Peter Waller 961-1111, Ext. 2671
or
Spyros Andreopoulos 321-5310

Editors: The following story released jointly by Stanford University School of Medicine and the NASA-Ames Public Affairs Office. Photographs of Mrs. Phillips have been supplied to San Francisco wire service offices.

ADVANCE FOR RELEASE FRIDAY, DECEMBER 26, 1969.

STANFORD-- A young woman in Sunnyvale, Calif. is alive and active this holiday season all because she spent 10 hours in a pressure suit made for test pilots.

The life of Mrs. Mary Phillips, 25, was saved by the efforts of a team of doctors and researchers from the Stanford University Hospital and the National Aeronautics and Space Administration.

The NASA-Ames Research Center, Mt. View, Calif, reacted quickly when the hospital's chief resident surgeon explained the critical condition of Mrs. Phillips, whose internal bleeding could not be halted by established procedures. The pressure suit, or G-Suit, did the trick.

Doctors reported today that the pressure suit procedure, which took place last Sept. 23, appears to have been a complete success. Examination shows no further bleeding, and the patient has resumed her normal activity.

Prior to application of the pilot's G-Suit, Mrs. Phillips had undergone nine operative procedures. All had failed to stop the difficult abdominal hemorrhaging. She had received 46 pints of whole blood and 64 units of plasma in a five-week period.

The G-Suit is worn by pilots to avoid blacking out during high-speed maneuvers. It applies pressure to counter draining of the blood from the brain and upper body. Such a suit was provided by researchers from the Biotechnology Division of the National Aeronautics and Space Administration's Ames Research Center, Mountain View, Calif. Ames is now studying further medical applications of pressure suits.

Fitted to Mrs. Phillips at Stanford University Hospital, the G-Suit arrested abdominal bleeding overnight, during the ten hours in which it was applied.

The patient had entered the hospital to undergo a minor operation. Surgical exploration to determine the cause of bleeding following this initial surgery showed an apparent slow oozing of blood within the pelvic area, but with no evidence of active arterial bleeding.

Subsequent attempts to control this diffuse bleeding included pelvic packing, hypograstric artery ligation (tying off arteries supplying blood to the area of bleeding), and other surgery.

Following these measures, the patient was transferred to Stanford Hospital where Dr. Robert Mason, Assistant Professor of Surgery, recalled a reference in the surgical literature to blood-flow stoppage by a pressure garment. This idea grew out of early brain surgery work and research by Dr. W. James Gardner of the Cleveland Clinic, Ohio.

-more-

Dr. H. Ward Trueblood, Chief Resident in Surgery at the hospital, then telephoned Ames researchers Dr. Alan Chambers, Hubert Vykukal, and Richard Gallant. He outlined to them the seriousness of the patient's growing hematoma (blood clot) and the failure of all known methods to stop the bleeding.

The Ames group studied the problem and decided a G-Suit could provide the kind of pressure required. Within three and a half hours, they had modified the suit and delivered it to the hospital where it was put on Mrs. Phillips immediately. NASA people had provided the suit with new hoses, couplers, and two pressure regulators to allow a range of pressures, and inflation of the suit by the hospital's gas pressure cylinders.

According to Dr. Ralph Pelligra, Chief of the Medical Services Branch of the Ames' Simulation Sciences Division, the suit apparently reduced the difference in pressure between the blood within the arteries and the tissue outside them. This relatively small reduction of pressure difference apparently was sufficient to allow the blood to coagulate in the normal way.

Dr. Pelligra is studying applications of the pressure suit technique to other clinical problems.

A G-Suit is an adjustable nylon garment containing inflatable layers, located around the pelvic, abdominal, and leg areas. The suit was inflated to a pressure of 30 mm of mercury for ten hours. This is about a quarter of normal blood pressure for most people.

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END ADVANCE FOR RELEASE FRIDAY, DEC. 26, 1969.

Mailed 12/23/69

NEWS BUREAU
STANFORD UNIVERSITY MEDICAL CENTER
STANFORD, CALIFORNIA 94305

BULLETIN #2 Kulhanek, Dr. Leslie

Room C003
(415) 321-5310

December 20, 1969 11:00 a.m.

Dr. Leslie James Kulhanek, 29, who was shot and seriously wounded by an unknown assailant in the Stanford University School of Medicine student lounge Friday night, died this morning at Stanford University Hospital.

Dr. Kulhanek of 225 Wilton Avenue, Palo Alto, a first-year resident in medicine, and his wife Janet, were attending a Christmas party, given annually by the Department of Medicine, when the shooting took place at 8:15 p.m.

Witnesses at the party reported that the assailant approached the victim, and after what appeared to be a brief verbal exchange, fired three shots at Dr. Kulhanek's chest, and then fled.

Dr. Kulhanek was given artificial respiration and taken to surgery where an attempt was made by a team of surgeons to repair tears caused by the bullets in the great vessels of the heart.

Immediately after the incident, more than 100 faculty members, medical school and hospital personnel responded to a call for type 0 blood at the center's blood bank. Forty-five pints of blood were used. The surgery was completed at 2:30 a.m.

Palo Alto police are investigating the incident, and are reported to have a suspect in custody.

Dr. Kulhanek was described by his professors and associates as one of the outstanding medical residents this year. He was a graduate of the University of Colorado Medical School. He came to Stanford for internship training in 1968. In addition to his wife, he is survived by his parents, Mr. and Mrs. Leslie Kulhanek of 5511 Pine, Boulder, Colorado.

An autopsy is being conducted by the Santa Clara County Coroner's Office. Funeral arrangements are pending.

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Bulletin/ December 19, 1969

A 29-year-Old resident physician was shot and seriously wounded by an unknown assailant at Stanford University School of Medicine student lounge Friday night.

The victim was identified as Dr. Leslie Kulhanek of Palo Alto. Dr. Kulhanek and his wife were attending a Christmas party, given annually by the Department of Medicine, when the incident took place.

Participants at the party reported that the assailant entered the lounge, and after what appeared to be a brief verbal exchange, fired three shots at Dr. Kulhanek, and then fled.

Dr. Kulhanek was given artificial respiration and taken to emergency room, and then surgery where an attempt is being made to remove the bullets.

Immediately after the incident, many faculty members, and hospital employees responded to a call for blood at the center's blood bank.

Palo Alto police are presently investigating the incident, but no suspects have been named.

Dr. Kulhanek is a first-year resident in medicine. He is a graduate of the University of Colorado. He came to Stanford in 1968 where he completed his medical internship.

NOT FOR RELEASE
UNLESS MAN FORMALLY CHARGED BY POLICE

12-20-69

Background on Rudolph Grey, 25

Address: 2274 Ralmar Avenue, East Palo Alto

December 8 was to begin working full time at Stanford medical school ~~computer~~ computer center.

Graduate: Thomas Jefferson High-- 1963

One year: Los Angeles City College

entered ACME training program during summer of 1968 and became a computer attendant.

Married: Wife Margaret Grey--

Previous jobs: Mail Clerk, Geological Survey, Menlo Park in 1967?
Post Office, Army Street Terminal early 1966

Interested in music, gardening,

Reported to have been a good worker.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

STANFORD -- A public health warning was issued today by Stanford University Medical Center following the illegal removal of an extremely dangerous experimental drug from its premises.

The drug, labeled M99-Etorphine, is contained in five glass vials, each containing 1/2 ounce in a crystaline form. It was locked in a safe along with money and other narcotics, all of which were stolen sometime between last Wednesday and this morning.

Officials stressed that the drug can be absorbed through the skin and the simple act of breaking the vial in which it is contained would be fatal. The drug has a potency of 5,000 to 8,000 times that of morphine and causes immediate cessation of respiration.

Police, who are investigating the theft along with University officials, urged whomever has the M99 to deposit the vial or the unopened safe at a certain location, and then notify police.

The light brown safe measures 14x14x12 inches, and weighs approximately 300 pounds.

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Phoned to wires services

Palo Alto Times

12-16-69

add one 12-16-59

statement/ Dr. Bunker

Dr. John Bunker, chairman of the Department of Anesthesia at Stanford University School of Medicine, said the drug was planned to be used as part of a series of studies of drug addiction in animals. The studies were to be done under the auspices of the National Research Council committee on drug dependence.

The drug is manufactured by American Cyanamid Company of Princeton, New Jersey.

Dr. Bunker said there is no published work about the use of the drug in humans and its potency is not known.

M99 is a thebaine derivative chemically related to morphine. By definition, it is considered a narcotic. The synthesis of M99 was the result of a systematic chemical effort to produce a material with analgesic (pain-relieving) propertiesx similar to morphine but without the unwanted side affects.

Among safety procedures recommended by the manufacturer is that no individual work with the drug alone in the laboratory. There should be at least two people ~~xxxxxxx~~ together at all times.

~~Instructions further stipulate that workers should were rubber gloves~~

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. William C. Dement, professor of psychiatry and pioneer in sleep and dream research at Stanford University School of Medicine, has been named Thomas William Salmon lecturer by the New York Academy of Medicine.

Dr. Dement was selected for his outstanding contributions to his specialty. In his work with dreaming cats, and psychiatric patients, Dr. Dement has uncovered clues that lend support to a tempting theory that schizophrenia may be the result of a biochemical defect in the patient.

He believes that an abnormality in the function of an essential brain chemical called serotonin gives rise to abnormal behavior by allowing patients to dream while awake.

Dr. Dement presented his findings in a two-part lecture given Wednesday at the New York Academy of Medicine.

The lectureship honoring the late Dr. Thomas William Salmon, a New York physician and leader in the field of psychiatry, was established to recognize each year the specialist in the field of psychiatry, neurology or mental hygiene, in this country and abroad, who has made an outstanding contribution to his specialty.

Dr. Dement who is also a recipient of the Hofheimer Prize of the American Psychiatric Association, is currently working under a grant from the National Institute of Mental Health on the combined physiological-neuropharmacological and biochemical investigation of the basic mechanism of dreams and sleep. He is the co-founder of the Association for the Psychophysiological study of sleep, and he is the author of more than 80 scientific papers on the subject of sleep and dreams.

The Salmon lectures will be published by the New York Academy of Medicine in book form.

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Mailed December 4, 1969

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Dr. George E. Burch, one of the nation's leading cardiologists, will deliver the sixth John Kent Lewis Lecture at Stanford University School of Medicine Dec. 8.

He will speak on "Viral Valvulitis" at 4:15 p.m. in Room M106 of the medical school.

Dr. Burch, professor and chairman of the department of medicine at Tulane University School of Medicine in New Orleans, La., has made scientific contributions to the field of cardiology for 30 years. These are covered in over 500 publications and 12 books on cardiology and electrocardiography.

In addition to his research on the effects of viruses on the heart, Dr. Burch is noted for his studies of the effects of climate on the cardiovascular system of man, heat and water loss from the skin and lungs, the aging process and electron microscopic studies of heart muscle and valves.

Dr. Burch is a past president (1968) of the American College of Cardiology. In 1961, he founded the Association of University Cardiologists and at present he is editor of the American Heart Journal. Last year he was named a Master of the American College of Physicians.

A native of Louisiana, Dr. Burch was born in Edgard and received the M.D. degree from Tulane University School of Medicine in 1933. He joined the faculty there after interning at Charity Hospital in New Orleans where he also received his advanced clinical training. He also was a postdoctoral fellow at the Hospital of the Rockefeller Institute for Medical Research from 1939-41. Dr. Burch was appointed to his present position at Tulane in 1947.

Dr. Burch's lecture is dedicated to the memory of Dr. John Kent Lewis, professor of medicine and chief of the Stanford Medical Service in San Francisco who died in 1961. Dr. Lewis, with Stanford professors A. W. Hewlett and George D. Barnett, published some of the early work on vascular sounds, exercise and respiration. The lecture is open to members of the medical community and public.

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Mailed December 3, 1969.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Folksinger Joan Baez Harris gave birth to a baby boy Tuesday night at Stanford University Hospital. The baby arrived at 9:13 p.m. weighing 7 pounds 4 ounces.

Both the mother and baby are reported in excellent condition.

Joan, who is 28, said she and the baby hope to visit her husband David Harris in Arizona on Christmas. Harris, 23 is serving a prison term at the Safford, Arizona, Federal Prison Camp for refusing induction into the army.

The couple have named the baby Gabriel Earl Harris.

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Telephoned to wires 12/2/69

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

ADVANCE FOR P.M. RELEASE WEDNESDAY, DECEMBER 3, 1969

Stanford -- A new and highly sensitive test to rule out the possibility of acute rejection in kidney transplants has been developed by Stanford University scientists.

"By using this test, which determines whether the potential kidney transplant recipient has developed antibodies in his blood which will fight a newly transplanted kidney, we are now able to know which patients have the best chance of having a successful transplant," Dr. Zoltan Lucas, assistant professor of surgery at Stanford University School of Medicine said today (DEC. 3). Dr. Lucas spoke at a transplant symposium during the 51st Annual Meeting of the American Society of Oral Surgeons in San Francisco.

"Correlation of data from the new test has shown that the possibility of a patient acquiring these antibodies is directly related to the length of time the patient has been maintained on an artificial kidney machine (hemodialysis)," Dr. Lucas stressed.

A study by Stanford physicians has shown that 7 patients on dialysis less than three months, who received markedly mismatched kidneys from dead donors, did better than 15 patients who received better tissue matched kidneys but had been on the artificial kidney for longer than three months. The latter patients had developed antibodies which killed the kidneys within the first week.

"It is better to transplant a kidney into a recipient as soon as possible, regardless of the tissue match, than it is to search and search for the 'perfect' match, sometimes for years, while keeping the patient on dialysis, building up antibodies that will probably cause rejection of the kidney when it finally is transplanted," Dr. Lucas said.

He explained that the normal kidney performs two bodily functions. One is to remove poisonous wastes from the body in the urine, and the other is to manufacture certain hormones. Patients who have lost the function of their own kidneys are kept alive until a donor kidney is available by removing the poisons by dialysis.

However, the artificial kidney cannot make the necessary hormones, Dr. Lucas pointed out. One such hormone, erythropoietin, simulates the bone marrow to produce red blood cells. Therefore, the patient on dialysis requires frequent blood transfusions to give him the red cells not being produced by his body.

"Through many blood transfusions, the body tends to develop harmful antibodies against foreign organs, including the transplanted kidney and heart," the surgeon said. Therefore, the longer an individual is on the artificial kidney, the more often he needs blood; the more blood he receives, the more his body will tend to reject, through antibodies, any transplanted tissues or organs."

"At present, there is no method of preventing this type of rejection once the antibody level is too high," according to Dr. Lucas. "If a patient has developed these antibodies, it is better that he not have a transplant, but remain on dialysis from then on."

-more-

Dr. Lucas pointed out that the most successful type of kidney transplant is that in which a patient receives a kidney from a parent or brother or sister whose body tissue is similar to his, thus reducing the possibility of rejection.

"Very often, however, it is impossible to obtain a kidney from a relative," he said. "Often members of a family of a kidney transplant patient also have some kind of kidney disease or have other illnesses or family obligations, that rule them out as donors."

In this situation surgeons then must rely on kidneys from cadavers and have traditionally laid major importance on tests to be sure that the tissue of the donor matches closely the tissue of the potential recipient. Some patients may have to wait for years for a well-matched kidney and in the meantime, be kept alive by the artificial kidney.

"While the closeness of the tissue match between donor and recipient is important and preferable when possible, our studies have shown that this importance diminishes after the recipient has been maintained by the artificial kidney for longer than three to six months," Dr. Lucas believes.

Dr. Lucas's work has been supported by a grant to the General Clinical Research Center at Stanford from the National Institutes of Health and by private contributions to Stanford's Renal Transplantation Research Fund.

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END ADVANCE FOR RELEASE P.M. WEDNESDAY, DECEMBER 3, 1969.

MAILED December 1, 1969.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--The California Water Plan, a key issue of pollution control, will be discussed at the quarterly meeting of the San Francisco Bay Area Medical Societies' pollution control group Tuesday (February 3) at 8 p.m. in Room M112 of the Medical School.

Harvey Banks, consulting engineer and board chairman of Leeds, Hill and Jewett Inc., and former director of the State Water Resources Board will speak at the meeting which is open to the public.

"Mr. Banks is exceptionally well informed on this issue, and is a student critic, rather than the advocate of a particular viewpoint," Said Dr. Rodney Beard, professor and head of the division of preventive medicine at the Stanford University School of Medicine.

The regular business meeting of the group will follow Banks' presentation and discussion.

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Mailed January 29, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Elwood Pierce has been appointed assistant controller of the Medical School. The appointment is effective immediately on a part-time basis and it will be full-time as soon as Pierce can be replaced in his current position as assistant research administrator in the University Research Administration Office.

His primary responsibility at the Medical School will be managing the fiscal aspects of the Regional Medical Program, working closely with Medical School controller William B. Rowland and associate dean John L. Wilson.

Pierce joined the University staff in 1964 as assistant accounting manager in the Controller's Office. He became assistant research administrator in 1967. Before coming to Stanford he had 12 years of experience in business.

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January 27, 1970.

To: Stanley Wilson
CAMPUS REPORT

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- A new expansion of facilities to treat cancer patients at Stanford University School of Medicine will be named in honor of the late Paul A. Bissinger, Sr., prominent San Francisco businessman and civic leader.

To be known as the Paul A. Bissinger Center for Radiation Therapy, the expansion, which is under construction, brings to fruition Mr. Bissinger's desire to enable more people to receive radiation therapy for cancer at Stanford.

Mr. Bissinger, who died of a stroke in London in October, had been successfully treated for cancer of the lymph node system at Stanford in 1967. Following his therapy in the crowded, overtaxed facilities, he contacted other former cancer patients and interested associates and organized "The Friends of Radiology" to raise funds needed to expand the therapy program.

At the time the Friends of Radiology was formed, Mr. Bissinger said "If we are able to financially help with the expansion of facilities at Stanford, thus giving more cancer victims the chance we were given, perhaps our debt of gratitude will partially have been paid."

The group raised nearly $500,000 which has been matched by State and Federal funds. The expansion includes a new building which will house administrative offices and personnel and patient support facilities such as examining rooms. The present quarters of the Division of Radiation Therapy are being remodeled to accommodate two new medical linear accelerators which produce high-energy X rays for treatment of cancer. One of the new models will replace an older prototype accelerator which has been in use since 1956, when it was first adapted for medical use by Dr. Henry S. Kaplan, professor and chairman of the Department of Radiology at Stanford.

The new building and equipment will allow for the treatment of 25 to 30 per cent more patients. At present 2,400 treatments for various types of cancer are given monthly at Stanford with existing equipment and personnel operating 10 hours each day. The daily patient load averages 141 persons and over 1,300 new patients are treated each year.

Mr. Bissinger was a member of the San Francisco Police Commission, serving as president in 1960 and 1962. He also was a past president of the San Francisco Chamber of Commerce.

Among his other activities were as vice president of the San Francisco Musical Association and a former president of the Society for Asian Art. He also was a member of the board of trustees of the World Affairs Council of Northern California and a director of the National Conference of Christians and Jews.

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Mailed January 20, 1970.

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

A 49-year-old man from Mountain View became the 20th heart transplant patient today at Stanford University Hospital.

He is James A. Marshall, 1438 Phyllis Ave. Marshall, an interior decorator, received his new heart from an anonymous donor in a 4-1/2 hour operation performed by the Stanford heart transplant team. Marshall is reported in satisfactory condition.

The patient had suffered from deterioration of the heart muscle following a massive heart attack in August. He and his wife, Mildred, have four daughters, Mrs. Eleanor Swicegood, 29, Martinez; Mrs. Carrie Hart, 27, Seattle; Mrs. Nancy Young, 23, Sunnyvale; and Mrs. Liz Sooter, 20, Mt. View. Marshall's parents, Mr. and Mrs. F. E. Marshall, live in Sunnyvale.

Before moving to California nine years ago, the Marshalls lived in Salem, Oregon for 15 years.

In addition to Marshall, Stanford has seven other surviving heart transplant patients, six of whom have been discharged from the hospital to resume a normal life.

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Telephoned January 16, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

ADVANCE FOR RELEASE THURSDAY, JANUARY 15, 1970 FILE COPY

STANFORD -- A Stanford University anesthesiologist says the United States has too many surgeons.

He poses the question of whether or not an excessive number of surgical operations is performed, implying a variation in the theme of Parkinson's Law: where there are too many surgeons they will fill their time by doing too many operations.

Dr. John P. Bunker says he is concerned about the problem because the United States has an excessive number of physicians in some specialties and not enough in others.

He wonders if the country provides "luxury" surgery for the well-to-do while failing to provide proper care for the poor.

Dr. Bunker is professor and chairman of the department of anesthesia at Stanford University School of Medicine. His views appear in the January 15 issue of the New England Journal of Medicine.

He draws his conclusions from a comparative study of operations and surgeons in the United States and in England and Wales.

"The American surgeon is more aggressive," he writes. "He appears to hold higher expectations of what surgery can offer in the treatment of disease, whereas the British surgeon is more modest in his expectations, possibly more realistic, but also possibly missing opportunities for surgical care."

American surgeons operate nearly twice as often as the English and Welsh, Dr. Bunker reports, and offers statistics to support his thesis.

He finds that the number of elective operations (much higher in the U.S.) reflects in part the philosophical differences of U.S. and British surgeons.

For example the rate for radical mastectomy (operation for cancer of the breast) for the U.S., which is twice that reported in England and Wales, presumably reflects the difference in enthusiasm for this procedure in the respective countries.

"Given the choice of administering or withholding therapy, whether the therapy is prescribing drugs or performing an operation, the American physician appears likely to choose active therapy," Dr. Bunker says. "The British surgeon, faced with the same choice and carrying a heavier work load, is apt to avoid surgery if the indication is in question."

Dr. Bunker shows that socioeconomic considerations, method of payment and organization of medical services also may account for fewer operations in Great Britain.

Under the British National Health Service, "the surgeon is a true consultant," Dr. Bunker explains. "He sees patients only as they are referred to him by the general practitioner or internist, and he is hospital based.

"The American surgeon, by contrast, may function as consultant exactly as his British counterpart, but he may also accept patients without referral, or he may be the primary physician-general practitioner, referring the patient to himself for surgery, and thus creating his own demand."

-more-

Dr. Bunker thinks that the question of referral is important in patient care because surgeons and nonsurgeons are apt to have very different ideas about indications of surgery.

"This is inherent in their specialty training," he comments, "and is reflected at its worst when surgeon and internist isolate themselves from each other. The internist often sees himself as the patient's protector against surgery. But when two different points of view are brought to bear on the problems of a single patient, it is very much to the patient's advantage."

Dr. Bunker offers this example of the effects of consultation in the United States. When a plan for reimbursement of surgical fees was offered to the United Mine Workers some years ago, the number of surgical bills increased . The Mine Workers Fund was concerned with the large amount of what appeared to be unnecessary surgery, namely gynecologic operations and appendectomies.

When a requirement was added that all operations be endorsed by preoperative specialist consultation, the number of operations fell by as much as 75 per cent for hysterectomies, 60 per cent for appendectomies, and 35 per cent for hemorrhoidectomies.

Dr. Bunker is not the only physician to question surgical practices in recent months. Dr. Charles E. Lewis of the Harvard Center for Community Health and Medical Care raised similar questions in an article in the October 16 issue of the New England Journal of Medicine.

Dr. Lewis analyzed records of the Kansas Blue Cross and found three-to four-fold variations in regional rates for the performance of six common surgical procedures. These included tonsillectomies and procedures with more definite indications for surgery such as appendectomies.

"The results," Dr. Lewis concluded, "might be interpreted as supporting a medical variation of Parkinson's Law: patient admissions for surgery expand to fill beds, operating suites, and surgeon's time."

Dr. Bunker believes that group practice (whether privately organized in the United States or as a single large service in Great Britain) is a system that incorporates the wide use of consultation, and encourages a greater emphasis on office care.

"There is evidence," he states, "that these elements lead to improved public health, which in turn leads to a decreased need for hospitalization, including a decreased need for surgery.

"Group practice also provides the opportunity for the more efficient use of medical (and surgical) manpower."

He adds that the method of payment appears to play an important, if unmeasured part. Surgical fees in the United States are much greater than those in other areas of medicine, and the opportunity for large incomes may lure a disproportionate number of physicians into the practice of surgery.

The Stanford anesthesiologist stresses that his findings do not necessarily lead to the conclusion that American surgeons operate more often as the public health might justify. The direct measurement of the quality of medical care is exceedingly difficult, he says.

A more plausible explanation could be that the United States may simply be affording the luxury of surgical procedures that are desirable but not essential.

-more-

Response to Dr. Bunker's study is expected to be wide and varied. An early reaction in the form of an editorial comes from Dr. Francis D. Moore, a prominent Harvard University surgeon.

Writing in the same issue of the Journal, Dr. Moore says that differences in the patterns of surgical practice in the two countries do not indicate a qualitative judgment about which is superior.

"Could there be similar excess of operative dentistry in the United States as compared with England--more fillings, extractions or crowns?" Dr. Moore asks. "What about American pediatrics? The British pediatrician is a relative rarity and acts largely as a consultant to the physician for unusual illness. One might conclude that American pediatrics was grossly overexpanded.

"We need more information on the extent to which surgical perfection is achieved in either, neither or both systems."

Dr. Bunker also emphasizes the need for additional data. But this does not alter his conclusion that while U.S. physicians provide the last word in medical care to the wealthy, they have failed to provide basic medical care to the poor.

Decisions on how many surgeons are needed in the United States must be based on a judgment of how much operative treatment the public requires, he asserts.

These decisions must also take into account the limited manpower pool. "More surgeons may mean fewer doctors for other needier medical specialties."

Such evaluation and planning are needed, Dr. Bunker concludes, "to reverse the paradox of a country that provides 'luxury' care for the well-to-do but cannot provide basic medical care for the indigent."

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END ADVANCE FOR RELEASE THURSDAY, JANUARY 15.

MAILED Monday, January 12, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Dr. Norman E. Shumway, professor and head of the division of cardiovascular surgery at Stanford University School of Medicine, has received a 1970 Award for Distinguished Achievement from Modern Medicine Magazine, a national professional journal.

The magazine honored Dr. Shumway for his "painstaking development of cardiac surgery techniques influencing the advent of heart transplantation." He is among 10 men nominated by the medical profession to receive the awards this year.

In December, 1959, Dr. Shumway reported to the medical profession that he and a colleague, Dr. Richard Lower, now on the faculty of the Medical College of Virginia, had performed a heart transplant on a dog, using a new surgical technique. The technique differed from other previously reported methods in that a portion of the recipient heart, containing all the veins leading to that organ, was left in place. The technique, which now is being used in human heart transplantation, was easier technically and shortened the operating time because surgeons only have to suture the heart tissue and arteries.

Dr. Shumway performed the first adult human heart transplant in the United States in January, 1968. Since that time 18 other patients have received new hearts at Stanford. Seven patients survive, six of whom have been discharged from the hospital to resume a normal life.

Dr. Shumway, 46, is a native of Kalamazoo, Mich. He received his medical degree from Vanderbilt University in 1949, and his Ph.D. in surgery from the University of Minnesota. He joined the Stanford faculty in 1958.

Another recipient of the 1970 Award for Distinguished Achievement was a Stanford alumnus, Dr. Jean Oliver. Dr. Oliver, an emeritus professor of pathology at the State University of New York Downstate Medical Center, was cited for his landmark research leading to greater understanding of kidney structure and function. He received the A.B. (1911) and the M.D. (1914) degrees from Stanford.

The Modern Medicine awards are presented annually to men and women selected for their significant contributions to the medical profession. Nominations are made by doctors, deans of medical schools, leaders in medical organizations, and physician members of the magazine's editorial board.

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Mailed January 15, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--A new program to provide training and job opportunity for disadvantaged groups and to increase the supply of paramedical personnel will be initiated at Stanford University Medical Center.

Implementation of the first phase of the three-fold Intergraded Assistant Program and planning of the second phase will be funded by a $65,000 grant to the Medical Center from the Carnegie Corporation of New York. Awarding of the grant was announced today by the Carnegie Corporation. Long range funding for Phases II and III is still being sought from federal and private sources.

Dr. Thomas A. Gonda, director of Stanford University Hospital, who will administer the new program, said that it is "very imaginative and may well become the prototype for a nationwide effort to train personnel in the paraprofessional areas of medicine." The program was proposed by William R. Stone and Moses Thomas of East Palo Alto, director and assistant director, respectively, of the department of minority relations at the Medical Center.

Using the latest innovative techniques in teaching by computer, the new program is designed to remove one of the major obstacles responsible for exclusion of some individuals from the paramedical fields--the lack of basic education.

Initially participants will be instructed in the basic areas of language, writing, reading and mathematics. They will be granted time off to work at one of four proposed instructional terminals located in the Medical Center. These terminals will handle 240 lessons a day.

Each student will drill by means of the standard teletype keyboard. He will type his name which the computer will acknowledge and then send him the lesson tailored to his ability, which it has previously recorded in its "memory." The computer also on command will provide information on all students' class standing, ability and progress.

Utilization of the computer will be under the direction of Max German, a member of the staff of Dr. Patrick Suppes, professor of statistics at Stanford and a pioneer in the field of computer-assisted instruction. Dr. Suppes and his staff have successfully operated the same type of programs over the past few years in schools of East Palo Alto, Cupertino, San Diego, and Kentucky.

The educational courses provided by the computer will be sufficient to allow students, after completion to be tested through a local district and receive their high school diplomas.

With their basic education requirements completed, interested participants will be able to enter Phases II and III of the Intergraded Assistant Program which will provide training in a variety of paramedical fields. These fields range from laboratory assistant and technician programs, requiring eight weeks of instruction and on-the-job training, to physician assistant programs which have more extensive training requirements.

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Mailed January 14, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A search committee to seek a successor for Dr. Robert J. Glaser has been appointed by Stanford University President Kenneth Pitzer.

Dr. Glaser, vice-president for medical affairs and dean of the School of Medicine, announced last fall that he would leave Stanford August 31, 1970 to accept the post of vice-president of the Commonwealth Fund, a philanthropic foundation based in New York.

The search committee will be chaired by Dr. Pitzer. Dr. Eric M. Shooter, professor of genetics will be its vice-chairman.

Members include Drs. Paul Berg, biochemistry; Carl Djerassi, chemistry; Count Gibson, community health and preventive medicine; David Korn, pathology; G. Robert Mason, surgery; Keith B. Taylor, medicine; and two medical students and one member of the house staff yet to be named.

"The search committee will meet very shortly to begin its task and would welcome any suggestions about possible candidates for this important and crucial position in the Medical School," Dr. Pitzer wrote in a letter distributed today to medical school faculty, and members of the medical community associated with Stanford University Medical Center.

These include Stanford medical alumni officers, the Stanford University Hospital board of directors, the Palo Alto Medical Clinic and Palo Alto Medical Research Foundation, the three Neighborhood Health Centers in East Palo Alto, Alviso, and King City, the Menlo Medical Clinic, Santa Clara Valley Medical Center, and Palo Alto Veterans Administration Hospital.

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Mailed January 7, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane B. Duff 415: 321-5310

FILE COPY

Transplant #19 January 3, 1970

A 40-year-old man from Mill Valley is in satisfactory condition today after receiving a transplanted heart last night (January 3) at Stanford University Hospital.

He is William Van Buuren of 112 E. Strawberry. Van Buuren received his new heart from an anonymous donor in a 4-1/2 hour operation performed by a team of surgeons headed by Dr. Norman E. Shumway.

Van Buuren, a builder's hardware estimator, has suffered heart disease for the past 16 months. He and his wife, Corry, have three children, Caroline 8, Martina, 10, and Robert, 13.

Van Buuren is the 19th heart transplant patient at Stanford. Six other patients survive, all of whom have been discharged from the hospital to resume normal lives.

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Telephoned January 4, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Stanford University Medical Center and the Epilepsy Foundation of America will co-sponsor a two-day conference on epilepsy Friday and Saturday, February 27 and 28 at Rickeys Hyatt House in Palo Alto.

The Saturday sessions will be open to the public. Parents of epileptic children, psychologists, social workers, physicians, speech and physical therapists, and others with a special interest in epilepsy will be welcome to attend, according to conference chairman Dr. Barry R. Tharp, assistant professor of neurology at Stanford.

Saturday morning's program, beginning at 9 a.m., will include behavioral and personality aspects of epilepsy, and recent developments in the care of the epileptic.

At one of the Friday afternoon sessions, L.S. Sampson, Executive Director of the Vancouver Neurological Center, Vancouver, British Columbia, will describe the educational program that the Center offers parents. The program's objective is to weld parents and physicians into a team which can achieve a wholesome environment for the child, enabling him to be accepted for himself, not as a medical oddity.

Saturday morning's speakers will be Dr. Douglas Crowther of the University of California School of Medicine at San Francisco, who will talk about the Northern California Epilepsy Program; Dr. J. William Knox, also of UCSF, whose topic is "The Borderlands of Epilepsy;" Dr. Mardi Horowitz of San Francisco's Mt. Zion Hospital and Medical Center, who will talk on "Epilepsy and Personality;" and Dr. Leon Oettinger, Jr. of San Marino, California, speaking on "Behavioral Problems in Epilepsy."

The conference's purpose is to disseminate information on experimental, social, and rehabilitative advances in the care of epileptics, and to open channels of communication between lay and professional groups working toward the same goals, Dr. Tharp said.

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Mailed February 26, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310
or
Peter Waller, NASA-Ames Research Center 415: 961-1111, Ext. 2671

FILE COPY

Editors: The following story is released jointly by Stanford University School of Medicine and NASA-Ames Research Center. Photographs available on request.

ADVANCE FOR P.M. RELEASE FRIDAY, FEBRUARY 27, 1970.

STANFORD -- Scientists from the Stanford University School of Medicine and NASA's Ames Research Center have teamed up and successfully tested a new application of sonar (often called ultrasound) that can pry out secrets about the functioning of the human heart.

The new use of sonar, reported today at the meeting of the American College of Cardiology in New Orleans, can provide fundamentals of the heart beat and blood circulation heretofore unobtainable without passing a catheter (a long thin tube) into one of the heart chambers.

That procedure, known as cardiac catheterization, requires many hours and the patient is usually hospitalized. Additional laborious procedures involve the taking of X rays, and blood samplings.

By contrast, ultrasound studies of the heart can be done by a well-trained person in the physician's office or at the patient's bedside in a matter of minutes. The technique can be applied as a screening procedure for patients with known or suspected heart disease. And it can be used to monitor precisely the heart's healing process in patients recovering from open heart surgery or from a heart attack.

Unlike standard monitoring devices, sonar measures precisely the amount of blood which is pumped out of the heart at each contraction of the heart muscle. It also measures heart size and the backward flow of blood which indicates that the patient has a defective heart valve.

The Stanford-NASA researchers conducted sonar studies in 51 patients undergoing standard catheterization. Their finding, obtained by ultrasound, correlated "reasonably well" with the degree of heart disease detected by the standard method, they reported.

The work began as a result of interest by NASA in ultrasonics as one of several techniques for using external instrumentation for medical research during manned space flights, and coincided with interest in ultrasonics at Stanford.

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The new use of sonar was described by Dr. Richard L. Popp, a postdoctoral fellow in cardiology at the Stanford University School of Medicine, and Dr. Donald C. Harrison, associate professor and chief of cardiology at Stanford. Working with them on the project is Dr. Harold Sandler, chief of the biomedical research branch at the Ames Center, Mountain View, California.

The Stanford work is supported by grants from NASA-Ames, the National Institutes of Health, and the American Heart Association.

NASA is seeking devices to collect and record information on human heart action during space flights, according to Dr. Harrison, the principal investigator.

Now that the use of sonar in heart monitoring has proved its value, work will begin to build ultrasound devices that are small enough to be carried in orbiting space laboratories.

In addition, scientists will study the use of computers for storage, retrieval, and instant interpretation of ultrasound recordings received on earth.

The instrumentation work will be done by researchers at Ames. Testing of the new devices in human patients will be conducted by Dr. Harrison and his associates at Stanford.

The sonar recordings on heart patients in the recent Stanford study were made by using a commercially available machine which emits and receives high-frequency sound waves.

As sonic impulses were bounced against front and rear walls of the heart, they were recorded and converted into electrical signals which were displayed on a television screen.

From the patterns of ultrasonic echoes, taken when the heart is relaxed and when it contracts, the researchers developed a formula enabling them to calculate precisely the volume of blood ejected by the heart, and also determine the presence of abnormalities.

Dr. Harrison said that from a medical standpoint the technique is promising and warrants further investigation to refine it "because it is painless, simpler, and safer, and less costly to the patient than present methods."

Ultrasound is also being used at Stanford to detect heart changes that lead to early rejection in heart transplant patients.

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END RELEASE FOR P.M. FRIDAY, FEBRUARY 27, 1970.

Mailed February 25, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

ADVANCE FOR P.M. RELEASE SATURDAY, FEB. 28, 1970.

STANFORD -- Long-term evaluation has shown that the transplanted human heart functions well and that rejection of the graft can be detected and controlled in most cases, a Stanford University cardiologist said today.

Dr. David Clark, a member of the heart transplant team at Stanford University Medical Center, explained the thorough follow-up of patients after discharge from the hospital. He spoke today, (SATURDAY, FEB. 28) at the American College of Cardiology meeting in New Orleans.

"Twenty patients have received transplanted hearts at Stanford with eight presently surviving," according to Dr. Clark. "Of the eight surviving patients, seven have been discharged from the hospital and lead near-normal lives."

"Three of the survivors were transplanted over a year ago and our longest survivor is now a year and a half post-transplant," he said. "In addition, seven have survived six months and 11 patients lived at least three months with their new hearts."

"Our experience has shown that chronic rejection is the important factor in late postoperative survival and in determining the functional capacity of the heart," Dr. Clark said. Chronic rejection, he explained, appears to take place slowly over a long period of time. It results in an accumulation of tissue deposits on the walls of arteries in the heart. If severe, this accumulation can eventually cut off the blood supply to areas of the heart including the conduction system and natural pacemaker of the heart.

"Our follow-up of these patients has been directed toward detection of signs of chronic rejection and toward the diagnosis and treatment of late acute rejection which directly damages the heart muscle," he said.

"After discharge from the hospital, we examine the patients twice weekly for at least six months and at weekly intervals thereafter," Dr. Clark explained. "Clinical examinations consist of appropriate history and physical examinations. Electrocardiograms (EKG) are taken also during periods of both rest and exercise on a stationary bicycle."

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Dr. David Clark/control of rejection

"Using this close and continuous monitoring, we have been able to diagnose and treat seven episodes of acute rejection in the late postoperative period," the cardiologist said. "The treatment proved successful in six of the episodes although one was unresponsive to therapy and was responsible for the death of the patient."

To aid in the detection of chronic rejection, the Stanford physicians are using a small portable tape recorder which supplies them with a continuous, 10-hour electrocardiogram recorded during periods of rest and activity. Each patient wears the recorder two days a month.

"With the data provided by the EKG recording over a substantial period of time, our ability to study the overall function of the transplanted heart and to detect heart arrhythmia, or an irregular heart beat, is greatly increased," Dr. Clark said. "The presence of arrhythmias may be an indicator of chronic rejection."

One patient whose EKG did indicate an irregular beat had a battery-operated pacemaker implanted to stabilize his heart rate and has continued to lead a normal, vigorous life.

"A regular schedule of physical exercise may play an important role in determining the functional response of the transplanted heart to stress," Dr. Clark said.

He cited the case of one patient who regularly exercised for 10 months after his heart transplant. Then a job change caused him to lead a more sedentary life and to neglect his exercise program.

"Our testing of the physical stamina of this patient during the time when he was not exercising regularly found him to have difficulty breathing and excessive perspiration. The same test, given when the patient was exercising regularly, found that the physical exertion was easily tolerated," Dr. Clark pointed out.

Three of the Stanford patients have undergone cardiac catheterization one year after their operation. In this procedure, a long thin tube is passed through an arm vein to the chambers of the heart. The patients participate in exercise which gives precise information on the heart function during periods of both rest and activity.

"Catheterization has shown that all three patients have normal blood flow and pressures in the various chambers of the heart and that the heart size is within normal range," Dr. Clark said.

"Another purpose of this procedure has been to check for reinervation between the transplanted heart and the central nervous system of the patients," Dr. Clark said. "Our data indicate that this has not taken place."

"The transplanted heart is able to respond to increased demands for cardiac output during exercise through substances circulating in the blood, but the maximum rate is attained more slowly and the return to resting heart rate is likewise more gradual than in the normal individual," Dr. Clark concluded.

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END ADVANCE FOR RELEASE P.M. SATURDAY, FEB. 28, 1970.

MAILED February 25, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Stanford University School of Medicine will offer tutoring help to foreign medical graduates who wish to apply for a California state license.

The tutorial program will get underway at Stanford the first week of March, according to Dr. Barbara Arons, coordinator of the Study of Women in Medicine at Stanford.

The first group to enroll will be 12 women doctors who were recently located through a Stanford survey. Purpose of the survey, supported by a Macy Foundation grant, was to study the lives and professional activities of women M.D.'s.

Tutorial help will not be limited to women, Dr. Arons said. She will welcome inquiries from men physicians as well.

As a first step toward licensure, physicians must take the Federal Licensing Examination, or FLEX, adopted in California last year, which is an objective type test rather than the essay type most foreign graduates are used to taking. The tutoring program is designed to familiarize the foreign graduates with the professional standards required by the State, and update their clinical skills and knowledge of basic science.

One or two years of internship, plus an oral examination, complete the requirements for full licensure in California.

The tutorials will be individual, one-to-one hourly sessions once a week with teachers who will direct the medical graduates' reading and test them on their progress.

The first group will aim toward a FLEX testing date of next December, Dr. Arons said.

Nationalities represented in the group are: Mexican, British, Indian, Czechoslovakian, Venezuelan, German, Phillippine, Korean and Swiss. The women have specialties in gynecology and obstetrics, pediatrics, anesthesiology, internal medicine and psychiatry. Most of them immigrated to the U.S. because their husbands were attracted by career opportunities here.

Foreign medical school graduates constitute about 18% of the annual addition of physicians to the medical profession in this country.

"At a time when there is a critical shortage of physicians, we view this tutorial program as a major contribution to meeting the nation's medical manpower needs as well as an educational opportunity for the individual physicians involved," says Dr. Arons.

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Mailed February 24, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Herbert C. Schwartz, 44, has been named chairman of the department of pediatrics at the Stanford University School of Medicine.

His appointment, effective immediately, was announced today by Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine.

Dr. Schwartz succeeds Dr. Norman Kretchmer, who resigned a year ago as department chairman to return to full-time teaching and research in human biology.

Dr. Schwartz is professor of pediatrics and has been a member of the Stanford medical school faculty since 1960.

A native of Hamden, Conn., he received his A.B. degree from Yale University in 1948 and his M.D. degree from the State University of New York College of Medicine in 1952. He served part of his residency at Stanford in 1954-55.

His special field is pediatric hematology, with emphasis on the care of children with leukemia. His major area of research is the synthesis of hemoglobin during human development, particularly as it relates to causes of anemia.

His is also a Markle Scholar in Academic Medicine.

Dr. and Mrs. Schwartz live in Palo Alto. They have a son and two daughters.

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Mailed February 20, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A Stanford University surgeon says that 90 per cent of deadly hepatitis from blood transfusions can be traced to the use of commercial blood, and urges federal action to stop its use.

Dr. J. Garrott Allen, professor of surgery at the Stanford University School of Medicine, wants the Division of Biologics Standards of the U.S. Public Health Service to take steps to remove commercial blood from the market or to label it as a "high-risk product" if its use must continue.

"This action is essential to protect the consumer," Dr. Allen said. "If the blood carries a warning, the patient's doctor can make a reasonable choice."

At present there is no federal requirement to distinguish commercial from volunteer blood. (Donors of commercial blood receive a payment from a commercial blood establishment. Volunteer blood is given without payment to community blood banks.)

And there is no reliable test which can detect those capable of transmitting the hepatitis virus from donors who cannot, he said. Dr. Allen is internationally known for his research in blood and hepatitis.

He said in the past 10 years, his laboratory has published overwhelming evidence pointing the enormous differences in the safety of volunteer and commercial bloods.

Two recent reports by researchers at the University of Washington School of Medicine in Seattle, and the National Institutes of Health* have indicated that hepatitis is more prevalent when sources of blood used in open heart surgery include a substantial number of "skid row" donors.

"These data strikingly illustrate my previous observations in which the risk of hepatitis was 10 to 25 times greater for commercial blood than for voluntary blood," Dr. Allen said. "Yet there has been little action--official or unofficial--to protect the public."

Dr. Allen estimates that more than 5,000 cases of infectious hepatitis are being caused in California alone each year by transfusions of blood from paid donors.

He believes that use of volunteer blood exclusively could eliminate 90 per cent of the cases of hepatitis in patients who receive transfusions, and he is conducting a one-man campaign to bring the problem to public attention.

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* One study, published in the Annals of Surgery in 1969 by the Seattle group, found no cases of hepatitis after open heart surgery when blood transfusions were from volunteers. In cases in which commercial blood was used, the attack rate of hepatitis was 31 per cent.

The NIH study, published in the Journal of the American Medical Association last month, found 51 per cent of hepatitis in recipients of commercial blood, and none among a group receiving blood from volunteers.

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" If the public were aware of these differences in risk, they would be more willing to participate in a volunteer program than they have in the past," he said.

"It is shocking," he added, "that in the United States only three per cent of our population provides the estimated 7 million units of blood that are given annually."

Deficits of blood are presently made up by purchase of blood from high-risk population--prison donors, skid-row volunteers, and hippie addicts, Dr. Allen explained.

He said a physician working with the Haight-Ashbury Free Medical Clinic told him recently that "the sale of blood is a well known and not infrequently used means of obtaining income by these young people who are often in difficult economic circumstances."

Their economic needs, according to Dr. Allen, are such that they are willing to give blood for a little as $4 to $6 a unit compared to donors who receive as much as $25 a unit in some establishments.

"It is evident," he said, "that the usual questions asked of donors and the physical examination required by commercial blood banks, do not exclude enough of this high-risk population to reduce the rate of hepatitis among patients who receive the blood."

The practice of making up blood deficits from high-risk donors poses a serious ethical question, if not a legal one, Dr. Allen said. This is the assurance that a volunteer blood donor, contributing to his blood club or to his community blood bank, will in turn receive blood from a similarly low-risk carrier population, if he needs blood later.

"Volunteer donors who do not receive such a guarantee should refuse to give blood," he said.

"Under most circumstances today, blood replacement by relatives and friends of patients is not required," Dr. Allen explained. "To provide enough volunteer blood for everyone, such a requirement would be a first step."

He believes that change must come through "a conscious, sustained public effort to promote volunteer blood giving at the community level."

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Mailed February 12, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

STANFORD -- The John A. Hartford Foundation, Inc. of New York has made a three-year grant of $140,544 to the Stanford University School of Medicine to improve methods for the diagnosis and study of Hodgkin's disease.

The award was announced jointly today by the Foundation's president, Harry B. George, and Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine.

Purpose of the project is to utilize electron microscopy and other sophisticated basic science techniques to study the natural history of the disease, and to use these methods to increase the accuracy of diagnosis. The project is under the direction of the Department of Pathology.

Dr. Ronald F. Dorfman, associate professor of pathology, is the principal investigator. He will be assisted by Dr. Richard L. Kempson, associate professor of pathology, and Dr. Charles P. Bieber, a postdoctoral fellow in pathology. Mrs. Dede Rice and Mrs. Ann Mitchell, senior research assistants, will also be associated with the project.

Hodgkin's disease is a form of cancer affecting the lymph glands and tissues which play a part in the body's ability to fight infection.

Treatment of the disease with radiotherapy and drugs has become increasingly successful in recent years, but evaluation of the response to therapy depends a great deal on diagnostic precision.

"Presently, the accurate diagnosis of Hodgkin's disease depends more on the pathologist's experience than on scientific method," Dr. Dorfman said.

He cited a British study in which a significantly high number of diagnostic errors were disclosed on reviewing cases diagnosed as Hodgkin's disease.

To make a diagnosis, the pathologist examines a piece of the suspected tissue in the light microscope. He must look for the presence of Reed-Sternberg cells, an aberrant cell without which the diagnosis of Hodgkin's disease cannot be made.

The pathologist must base his opinion not only on the presence of these cells, but also on observations of the environment in which they are found, and on certain cellular patterns.

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Using these criteria, he makes a diagnosis of Hodgkin's disease as distinct from other forms of lymphoid cancer. The procedure often involves two or three pathologists for considerable periods of time, searching microscopic slides for Reed-Sternberg cells.

"This is a very difficult problem for pathologists who do not see a large number of bippsies from patients with Hodgkin's disease," Dr. Dorfman explained. "At Stanford and other medical centers which treat large numbers of patients with this disease, pathologists are developing greater expertise. Still this does not eliminate the problem of subjectivity in diagnosis."

Making a precise diagnosis is further complicated by other diseases which simulate Hodgkin's disease, Dr. Dorfman continued.

In patients with infectious mononucleosis, for example, cells have been found which resemble Reed-Sternberg cells. Anticonvulsive drugs and the smallpox vaccine may also produce pathologic changes resembling Hodgkin's disease in lymph glands.

Dr. Dorfman said that Stanford University Medical Center possesses well-established and renowned radiotherapy and oncology services which treat large numbers of patients with Hodgkin's disease and other malignant tumors. These services provide an abundant source of pathologic material for both diagnostic and investigative studies.

Stanford's area of investigation will include:

. Application of electron microscopy to better define the structure of aberrant cells found in Hodgkin's disease, and their response to various forms of therapy.

. Development of effective labeling methods using new cell-staining techniques.

. Tissue culture studies, including use of radioactive tracers, to observe growth patterns of abnormal lymphoid cells.

. Chromosome studies to define the genetic makeup of malignant cells.

. Immunologic studies to determine if serum from patients with Hodgkin's disease contains tumor-specific antibodies. The presence of a specific antibody might provide a new method for making an accurate diagnosis and provide further clues as to the nature of the disease.

"Development of a truly scientific approach for accurate diagnosis will mean a great deal to the patient," Dr. Dorfman said. "Incorrect diagnosis prejudices the patient's chances of receiving treatment for cure."

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Mailed February 10, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415/ 321-5310

FILE COPY

STANFORD -- "Struggling beginning skiers are the most prone to injury and the greatest risk period for them is the first day of skiing," says a Stanford University orthopedic surgeon.

"Poor judgment is an evident correlation of most accidents," according to Dr. Richard Spademan. "If one considers that less than five per cent of reported injuries involve faulty equipment, unexpected release of bindings, obstacles or collisions, responsibility for injury must be placed with the skier whose judgment of conditions is impaired or ignored."

Dr. Spademan has spent the past four winters photographing falls and interviewing injured skiers at Squaw Valley, Calif.

"Perhaps the greatest problem relative to these accidents is the skier's opinion about his own competence and the necessary preparations for safe skiing," the physician said. "Many skiers also suffer from a 'sense of indestructability' so prevalent in the late teenage years."

He found a greater incidence of injury was evident in the younger age group. "While 23 was the mean age of all skiers interviewed, over 50 per cent of the injuries were sustained by those less than 21 years of age," Dr. Spademan reported.

While there is a substantial reduction of injuries after one year of experience, Dr. Spademan pointed out that there are also problems which impair the judgment of the more advanced skiers.

"The past 10 years have brought an escalation of medical problems for this group because advances in equipment and technique have been oriented toward racing with a disregard for the factors that limit the recreational skier's efficiency. The stability and durability of skis, bindings and boots allow the development of speeds and perilous situations that cannot be sufficiently controlled by human reactions," he said.

An ardent skier himself, Dr. Spademan said that in comparing the relationship of ski binding release to injury, 55 per cent of the injured group said that their bindings had failed to release. Another 35 per cent reported that their bindings had released, with three per cent noting accidental release. (No information was available in six per cent of the cases.)

"It is evident that in most instances the injury was sustained before the ski boot and ski assumed a position that would allow release of the boot from the ski," Dr. Spademan said. "We also found that release of the boot from the ski is dependent upon the sex and competence of the skier."

"Binding release occurred more frequently among males and as the level of competence increased," he said. "Women may sustain injury more readily because the force required to disengage the ski boot from the binding tends to overcome their injury threshold."

In the Squaw Valley surveys, 46 per cent of the injured skiers were female although they constituted only 42 per cent of the skiing population.

Dr. Spademan has developed a revolutionary new binding that does away with the conventional toe piece except for a small pad that levels the boot. This enables the boot to slide off in almost any direction, especially forward, without becoming tangled.

"With a 20 per cent growth rate in the number of beginning skiers each year, education, including a greater effort toward organized ski instruction is needed to reverse the injury trend," Dr. Spademan concluded.

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Mailed February 9, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Nobel Laureate Joshua Lederberg, professor of genetics at the Stanford University School of Medicine, will join three other prominent scientists in a panel discussion on radioactive pollution Friday (February 13).

The panel discussion, entitled "Environmental Radiation Hazards and Nuclear Energy," will be at 8 p.m. in Bishop Auditorium of the Graduate School of Business. The meeting is open to the public.

Sponsor of the event is the newly formed Stanford Committee for Environmental Information, chaired by Dr. John W. Farquhar, associate professor of medicine.

Appearing with Dr. Lederberg on the panel will be Dr. Daniel B. Luten who will discuss "Energy in the Future;" Dr. John W. Gofman who will talk about "Health Hazards;" and Dr. Dean E. Abrahamson who will speak on "Waste Releases--Economics and Politics."

Dr. Luten is a lecturer in geography at the University of California at Berkeley.

Dr. Gofman, who recently created a controversy by suggesting a 10-fold reduction in present radiation exposure guidelines for the population at large, is professor of medical physics at the University of California.

Dr. Abrahamson, assistant professor of anatomy at the University of Minnesota, is one of the concerned scientists who recently laid down a barrage of criticisms in the press, in public meetings and in Congress, against Atomic Energy Commission regulations to cope with radioactive wastes from nuclear power reactors.

Specifically, Dr. Abrahamson, who is also president of the Minnesota Committee for Environmental Information, charged that a nuclear generating plant now under construction near Monticello (Minn.), some 33 miles upstream on the Mississippi River from St. Paul and Minneapolis, might exceed the AEC's effluent standards; that AEC standards are too lax anyway; and that plans for monitoring the plant's contribution to environmental radioactivity are inadequate.

As a result of this effort by Dr. Abrahamson and his group, the Minnesota Pollution Control Agency has limited radioactive discharges from nuclear reactors to levels considerably below those currently allowed by the AEC. If the proposed state restrictions survive a pending court test, the action taken by Minnesota could serve as a precedent for further efforts to crack down on radioactive contamination at the state level.

Dr. Farquhar said the Stanford Committee has chosen the topic of radiation standards because it should concern every citizen interested in the preservation of a healthy environment. By 1990, more than 100 nuclear plants are scheduled to be built in the United States to meet increasing demand for generating capacity.

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Mailed February 9, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

FILE COPY

STANFORD - Concerned about a "lack of direct communication with medical students," the Council (governing board) of the Santa Clara County Medical Society has begun proceedings to open membership in the Society to students at Stanford University School of Medicine.

Disclosure of the proposals to involve students in Medical Society affairs was made today by Dr. R.Hewlett Lee of Palo Alto, president of the Society and a Stanford medical alumnus.

Approval will hinge on ratification of a change in the organization's by-laws by a majority of the Society's members.

The Council also submitted proposals that would allow students to be appointed to Society committees, to have a student-elected representative as a voting member of the Council, and to publish their opinions in the Society's newsletter.

So that better communications can flow both ways, the physicians, in turn, would increase their teaching activities, hold noon seminars, and include the students on the newsletter mailing list.

The proposals are the outgrowth of dialogue which began a year ago, Dr. Lee said. A liaison committee composed of members of both groups worked out the details.

The liaison committee chairman, Dr. Joseph Ignatius of Los Altos, commented that the relationship had been entered into "seriously." He said an active role on the Society's committees "will allow students to participate in a meaningful way, not in a token way, because it is the committees that formulate and carry out policy."

Dr. Lee said the students can offer new ideas and talent in the areas "where the action is." He noted that the scope of committee activities includes representing the local group at state and national meetings, studying health care for the poor, recommending changes in the law, enforcing professional medical standards among the members, planning a weekly educational TV show for doctors in the county, and conducting public health studies such as a current one on environmental planning.

Aware that the chance to inject youthful voices could lead to substantive changes in organized medicine's viewpoint, Dave Sachs, third-year medical student at Stanford and president of the local chapter of SAMA (Student American Medical Association) said: "Our very presence changes the (AMA's) tenor."

He added the County Society has been generous in supporting SAMA activities "chipping in to send delegates to regional meetings, and so forth" but predicted that student participation in the AMA at the local level "and on up" would have "an even greater impact than feedback from SAMA conferences."

The Stanford chapter of SAMA withdrew from national SAMA four years ago "reflecting student disenchantment at being a baby AMA," Sachs said. "But we re-affiliated this year after SAMA's interests changed drastically and it became independent from AMA control."

Jeff Brown, also a third-year student, is president of the Stanford medical student government organization. He sees the new involvement with the County Medical Society as "our chance to do something constructive."

"The ultimate issue," he said, "is what the students of today are going to do with, about or without organized medicine." 2/5/70 ### 2/5/70

STANFORD UNIVERSITY SCHOOL OF MEDICINE
News Bureau Palo Alto, California 94304

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

FILE COPY

STANFORD -- Parents of Children with Neurological Defects will meet at 7:30 p.m., Tuesday, February 10 in Room A335 of Stanford University Medical Center. The speaker will be Rose Grobstein, acting chief pediatrics social worker at Stanford University Hospital.

Children of parents in this group were born with myelomeningocele and in some cases hydrocephalus. The group welcomes new members and is eager to make itself available to other Bay Area parents in the same situation.

Parents who cannot attend the meeting, but would like information about the group may call Mrs. Roger Cummings at 258-6788 in San Jose.

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Mailed to:
Lou Calvert, City Desk, San Jose Mercury
Family Leisure Section, Palo Alto Times

February 5, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The Children's Health Council of the Midpeninsula and the Stanford University School of Medicine today announced they have established an affiliation to further common objectives in diagnosis and treatment of handicapped children.

Announcement of the agreement was made by William J. Swanson, board president of the Children's Health Council, and Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school.

A joint statement by the two institutions said that they are developing a closer relationship:

. to take advantage of an increased information exchange regarding diagnostic techniques in the treatment of children with mental, emotional, and neurological problems.

. to enable staff members and trainees to participate in educational opportunities offered by the two institutions.

. to explore more fully research opportunities into a better understanding of handicapped children and their treatment.

Under the agreement, the Children's Health Council board of directors will continue to set policy governing programs and be responsible for the Council's operations. Staff appointments at the M.D. and Ph.D. levels will be made by the Council from candidates acceptable to the Medical School for either voluntary or full-time faculty appointment.

Some of the future training and research projects will be developed jointly by the two institutions.

Dr. Albert C. Fremont, director of Children's Health Council, termed the agreement "an important step" in establishing an increasing collaboration between the two institutions.

"We are confident that it will help foster new and better training and research programs and will result in the provision of improved services to handicapped children in the community," he commented.

The Children's Health Council of the Midpeninsula is a private, nonprofit organization of professional and volunteer workers who help children with mental, physical, and behavioral problems. It was founded in 1953 by Dr. Esther B. Clark, a prominent Palo Alto pediatrician and Stanford Medical School alumna.

The Council has a clinical and administrative staff of about 30 persons, including pediatricians, neurologists, psychiatrists, psychologists, speech and hearing specialists, physical therapists, occupational therapists, pre-school teachers and social workers. The Council's facilities are located near the Stanford University Medical Center on land leased from Stanford University.

The new agreement brings to five the number of institutions presently associated with the Stanford University School of Medicine. The others include the Palo Alto Veterans Administration Hospital, the Santa Clara Valley Medical Center, the San Mateo County General Hospital and the Stanford Children's Convalescent Hospital.

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Mailed February 4, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

"Can smog be eliminated?"

This and related questions will be discussed by Dr. Arie J. Haagen-Smit in his talk, "The Battle for Clean Air," Monday (April 6) at Stanford University .

The talk, sponsored by the Stanford Committee for Environmental Information, will be at 8 p.m. in the Physics Tank. The public is invited free of charge.

The Stanford Committee for Environmental Information, chaired by Dr. John W. Farquhar, is a newly formed group of scientists providing analytical reviews of public issues concerning the impact of technology on our environment.

Dr. Haagen-Smit is chairman of the California Air Resources Control Board and chairman of President Nixon's task force on air pollution. He is also professor of bio-organic chemistry at the California Institute of Technology, and has made scientific contributions to the studies of plant growth through the isolation of various plant hormones, and other biologically important substances.

In 1948, Dr. Haagen-Smit studied the irritating air of Los Angeles and found that it contained organic material--mostly hydrocarbons--that were released into the air by automobiles and oil refineries. Although these substances were known to be products of incomplete combusion, they had never before been reported as significant air pollutants.

As a result of further work, Dr. Haagen-Smit concluded that organic material was oxidized through the combined action of oxides of nitrogen and sunlight. In these reactions plant-damaging, eye-irritating, and rubber-cracking materials are formed.

His discovery opened up a whole new field of research into the problem of smog and programs for control of the auto exhaust.

Dr. Haagen-Smit participates as a consultant to many civic and government organizations such as federal, state and county health services, and the Atomic Energy Commission.

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Mailed March 31, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- A light-weight bed with a space-age name is providing Stanford University scientists with new information on drugs that affect the heart and heart transplant rejection.

Called a ballistocardiogram (BCG), the apparatus enables the measurement, literally, of the hurling or ejection of blood from the heart, according to Dr. N. Ty Smith, assistant professor of anesthesia at Stanford University School of Medicine and director of the BCG research project. Dr. Smith's work is supported by the National Institutes of Health.

"The first thing that goes wrong with the heart is not its ability to put out a certain amount of blood, but its ability to accelerate the blood into the aorta," Dr. Smith says. "Therefore, the measurement of this ability is a good indicator of the heart's overall function."

He compares good or bad heart function with two cars. While both may be able to eventually travel between two points or at a certain speed, it is the car with "get-up-and-go" from the stop light that performs better.

To record the BCG, a patient simply lies on a cot-like bed weighing four pounds that is delicately suspended from eight 9-1/2 foot wires that extend through the ceiling of the BCG laboratory. The apparatus works on the principle of a pendulum, with the long suspension wires giving the BCG bed a natural swinging frequency that is lower than the natural heart beat of the subjects to be studied.

"This design, with the bed so lightly coupled to earth, enables us to measure the movements of the body caused by acceleration of blood in the body," Dr. Smith points out. The movement is measured by a highly sensitive accelerometer, a direct spin-off of the space program, which is attached to the foot of the bed. This information is converted to an electrical signal which is recorded, amplified and printed out on paper for the doctors to study.

Using volunteer subjects with normal heart function, Dr. Smith and his associates, Dr. Thomas Shakespeare and Dr. Jack Reitan, postdoctoral fellows in anesthesiology, have used the BCG extensively to study the effects of drugs, particularly anesthetic agents, that depress heart function."

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"We have also investigated drugs that raise the blood pressure," Dr. Smith noted. "Some drugs, using more conventional monitoring devices, may indicate on paper that they raise blood pressure, thus increasing the blood flow to vital organs of the body. Using the BCG we have found that in fact these drugs do not stimulate the heart to pump more blood, but instead raise the pressure by constricting the blood vessels and thus further decrease blood flow."

"A major advantage of the ballistocardiogram is that the studies on drugs and heart transplant rejection can be done with minimal risk and no pain or discomfort to the patient," Dr. Smith stresses. "The subject simply lies on the bed. There is no invasion into his body by a catheter or surgery which other studies of heart function often require."

In heart transplantation, the BCG is another valuable tool used to detect rejection. Coupled with other devices such as the electrocardiogram, which measures the electrical properties of the heart, by BCG, by measuring the mechanical function, is able to tell if the heart's pumping ability has been affected by rejection. This additional information aids the physicians to decide if rejection is or is not occurring and if treatment is effective.

"No single device can be relied upon," Dr. Smith says. "If the electrocardiogram voltage is low, possibly indicating rejection, but the BCG shows that the heart function is normal or improving, we would recommend that treatment of rejection is not advisable. We also have indications that the BCG may be more sensitive in detecting chronic rejection than the electrocardiogram."

"The principle of the BCG is not new, with crude uses of it reported in the late 1800's," Dr. Smith says. ."But all of its use until recently was a hit-and-miss proposition. It is only in the last several years, with the interest and input of engineers and physicists that the BCG has been refined into a precise science."

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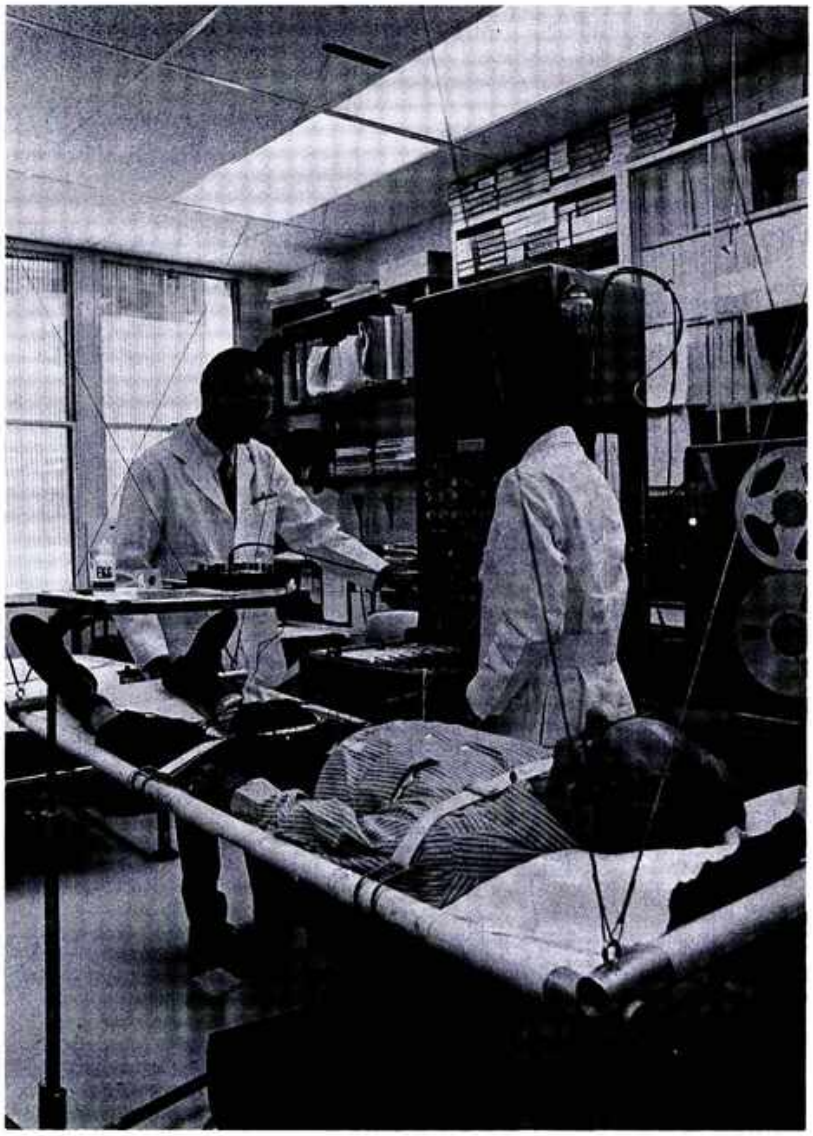
Mailed March 30, 1970.



HEART FUNCTION MONITORED -- Stanford University scientists are using a highly sensitive device to provide information on drugs that affect the heart and heart transplant rejection. Called a ballistocardiogram (BCG), the light-weight bed suspended on long wires, measures the hurling or ejection of blood from the heart. The ability of the heart to accelerate blood from the heart into the aorta is a good indicator of the heart's overall function. Taking BCG reading from heart transplant patient Jim Pounds of Bakersfield, are Dr. N. Ty Smith, assistant professor of anesthesia and head of the BCG research project, and Jacquelyn Smith, laboratory technician. 3/30/70.

TO: NEWS BUREAU, ROOM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

Heart Function Monitored

Please send me an 8x10" glossy print.

NAME _____ PUBLICATION _____

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The place and the times of the Lane Lectures being presented by Stanford University School of Medicine next week have changed. Originally slated for Cummings Art Building Auditorium, the lectures will now be held in Room M-106 of the Medical School.

Nobel Laureate George Wald, who is noted for his work on the biochemistry of vision, is now scheduled to give the lectures at 4:30 on Monday and Tuesday afternoons (March 30 and 31), and at 4:00 on Thursday afternoon (April 2).

Topics of the talks are: Monday - "The Molecular Basis of Visual Excitation," Tuesday - "Human Vision," and Thursday - "Ontogeny and Phylogeny at the Molecular Level."

The Lane Lectures were established by Dr. Levi Cooper Lane, one of the founders of the Medical School, in 1896. They are open to the public free of charge.

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Mailed March 24, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Elliott Levinthal, 48, has been appointed associate dean for research affairs at the Stanford University School of Medicine.

"In his new position, Dr. Levinthal will assist the School in areas of nonmedical science and technology," said Dr. Robert J. Glaser, vice-president for medical affairs and dean of the Medical School.

Included will be research activities that interface with other schools of the University--computer science, biomedical engineering, and health care systems studies. He will also be responsible for advising the dean on the planning of technological facilities and services that will have value to multiple departments within the Medical School.

Dr. Levinthal's deanship will be part-time. He will devote the remainder of his time to carrying on his present responsibilities as director of the Instrumentation Research Laboratory of the Department of Genetics.

Dr. Levinthal took the B.A. at Columbia University, 1942, and M.S. at Massachusetts Institute of Technology, 1943; then worked for Sperry Gyroscope. He received the Ph.D. at Stanford in nuclear physics, 1949. He was research director for Varian Associates, and formed his own company in 1953. Informal discussions with Dr. Joshua Lederberg led to his joining Stanford's Department of Genetics in 1961, broadening his field from electronics and physics into chemistry and biology.

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Mailed March 23, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Dr. Lewis Aronow, associate professor of pharmacology at Stanford University School of Medicine, has been awarded an American Cancer Society--Eleanor Roosevelt International Cancer Fellowship.

The Fellowship was awarded to Dr. Aronow by the International Union Against Cancer and is supported by funds granted by the American Cancer Society to the UICC. The UICC is an international organization of cancer societies.

Dr. Aronow will take a sabbatical leave for a year, beginning in September, to study at the University of Cambridge, England. His research will concentrate on the understanding of the physical-chemical nature of the interaction of certain drugs with DNA (deoxyribonucleic acid), the core of living matter which determines heredity. It is related to the problem of cancer because some of the more effective anti-cancer agents are thought to act by effects on DNA.

Another research interest of Dr. Aronow's is the study of how steroid drugs combine with the protein molecules of a cell and regulate or inhibit the growth of the cell. For this research, Dr. Aronow was recently awarded an $11,000 grant by the California Division of the American Cancer Society.

Dr. Aronow joined the Stanford faculty in 1956 after receiving his Ph.D. in pharmacology from Harvard University. He received his B.S. degree (1950) from City College of New York and the M.S. degree in chemistry (1952) from Georgetown University.

STANFORD -- The final report and recommendations of the National Commission for the Study of Nursing and Nursing Education will be discussed at a regional conference March 26 at Stanford University.

Approximately 200 people involved in the delivery of health care in the Far West states of California, Oregon, Washington, Alaska and Hawaii are expected to attend. The conference will be held in Room 100 of the Physics Lecture Hall from 10 a.m. to 4 p.m.

Invited to participate in the conference are representatives of state governments and state nursing boards and associations, medical societies, hospital associations, health insurers, planning agencies, deans and directors of schools of nursing and directors of hospital nursing services in the Far West.

The National Commission for the Study of Nursing and Nursing Education is an independent corporation established in 1967 to implement the recommendations proposed in 1963 by the Surgeon General's Consultant Group in Nursing. Its work has been supported by grants from the Avalon and W. K. Kellogg foundations and by funds from an anonymous donor.

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Mailed March 18, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

Editors: Story is released jointly by Burroughs Wellcome Fund of Tuckahoe, New York and Stanford University School of Medicine.

STANFORD -- Stanford University School of Medicine has received the Burroughs Wellcome Award in Clinical Pharmacology for 1970. This competitive Award of $125,000 has been made on behalf of Dr. Stanley N. Cohen to assist him and the Medical School to establish and develop a Division of Clinical Pharmacology. Dr. Cohen is the eighteenth Burroughs Wellcome Scholar in Clinical Pharmacology.

The Award from the Burroughs Wellcome Fund, Tuckahoe, New York, was announced today by William N. Creasy, president of the Fund, and Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine at Stanford.

"The purpose of the Burroughs Wellcome Clinical Pharmacology Award," Mr. Creasy said, "is to assist medical schools in setting up and developing programs where students can learn under a first-class scientist and teacher to apply scientific knowledge and techniques to the mechanism of action and proper therapeutic use of drugs."

The Burroughs Wellcome Fund is a nonprofit agency established in 1955 by Burroughs Wellcome & Co. (U.S.A.) Inc., a well known pharmaceutical company. In 1959 the directors of the Fund decided to support an annual competitive award in an effort to further teaching, training and research in clinical pharmacology. Since the Award's inception $1,950,000 has been awarded to eighteen medical schools in support of their developing sections of clinical pharmacology.

The clinical pharmacology program being developed at Stanford under Dr. Cohen's direction is a combined effort of the Departments of Medicine and Pharmacology. Among its major goals, Dr. Cohen explained, is "teaching a rational approach to drug therapy based on an understanding of the fundamental pharmacology of the drugs used. Such an approach requires consideration of the effects of disease on the action of drugs, since sicknesses themselves often affect the ways in which drugs work."

The teaching program will include lectures for students and house officers, postgraduate medical education conferences for practicing physicians, and a consultation service at Stanford University Hospital to deal with medical problems relating to the clinical use of drugs.

Areas of research in clinical pharmacology at Stanford will include investigation of the effects of environmental and genetic factors on drug metabolism, and of interactions between concomitantly administered drugs. A computer-based drug interaction program is currently being developed at Stanford which will alert physicians when undesirable drug combinations are being prescribed.

In addition, Dr. Cohen will continue his present research into mechanisms of resistance to antibiotics in infectious bacteria. Specifically, he and his associates have been studying the molecular nature of drug resistance and investigating methods of preventing drug-resistant populations of bacteria from arising.

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Dr. Cohen is a graduate of Rutgers University and received his M.D. degree from the University of Pennsylvania in 1960. He served on the staff of the National Institutes of Health and was a member of the Department of Developmental Biology at the Albert Einstein College of Medicine prior to joining the medical faculty at Stanford in 1968. He is a recipient of a Research Career Development Award from the U.S. Public Health Service and is a member of the American Society of Biological Chemists, the American Society for Microbiology and other scientific organizations.

The medical scientists who become Burroughs Wellcome Scholars in Clinical Pharmacology are selected by a distinguished scientific advisory committee, composed of Dr. A. McGehee Harvey, chairman, professor of medicine at Johns Hopkins University of Medicine; Dr. Paul B. Beeson, Nuffield professor of clinical medicine, Oxford University; Dr. Julius H. Comroe, Jr., director of the Cardiovascular Research Institute at the University of California Medical Center, San Francisco; Dr. Alfred Gilman, professor of pharmacology, Albert Einstein College of Medicine; Dr. Carl V. Moore, Busch professor of medicine, Washington University, St. Louis, Missouri; and Dr. C. Gordon Zubrod, scientific director for chemotherapy, National Cancer Institute.

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Mailed March 16, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A new concept of laser-light treatment has been used successfully by Stanford Research Institute and Stanford University scientists to treat eye diseases that can result in blindness.

Research carried on at the Stanford Research Institute in Menlo Park, the Stanford University School of Medicine, and the Palo Alto Medical Clinic showed that the intense, blue-green light of the argon gas laser is particularly suited for the treatment of certain eye diseases, because it is absorbed by the red blood pigment.

Laser stands for Light Amplification by Stimulated Emission of Radiation. Absorbed light turns into intense heat. The color of the argon laser is effectively absorbed by the blood in vessels of the eye. Thus diseases of vessels can now be treated with this laser.

Between June and December of last year, the Stanford researchers treated 176 eyes with the argon laser for 11 different eye diseases.

These were treatments for diseases of the retina, especially those occurring in diabetes, Eales' disease, in which eye blood vessels grow abnormally and bleed easily, sickle-cell disease which produces sludging of blood in peripheral eye vessels, and several congenital conditions.

"Treatment of some of these diseases has been considered futile in the past," said Dr. H. Christian Zweng, principal investigator and clinical associate professor of surgery in the Medical School.

"No general ill effects have occurred in any of the patients treated with this technique," Dr. Zweng added. The Stanford research was reported during the past year at several scientific meetings and in technical journals.

"While investigation to assess the advantages of the technique must continue, our experiences to date suggest that certain eye diseases are best treated early by argon laser photocoagulation," Dr. Zweng commented.

The work was initiated by a $246,000 grant and is continuing under a $165,000 grant from the National Institutes of Health to the Stanford medical school and Stanford Research Institute. The Medical School provides the medical experts while Stanford Research Institute contributes the physics and engineering talents in this interdisciplinary work. Medical collaborators include Dr. Hunter L. Little, clinical assistant professor of surgery, and Dr. Robert R. Peabody, clinical instructor in surgery.

Project leader at Stanford Research Institute is Dr. Arthur Vassiliadis. The team includes Norman Peppers, Dr. Richard C. Honey, Miss Ann H. Hammond, and Lloyd Alterton.

The photocoagulation instrument was designed, constructed, and tested at Stanford Research Institute.

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The instrument makes use of a slit lamp by means of which the laser light is projected into the eye. Errors of refraction are reduced by a contact lens, through which the light is passed and brought into focus on the retina. The instrument offers an excellent illumination, three-dimensional viewing and high magnification so that the laser light can be aimed accurately at the lesion sites.

Power levels and the time of exposure are adjustable, and there is also a safety feature that gives warning if the aiming beam becomes too bright. The instrument also permits the taking of stereoscopic photographs of the eye.

An earlier method of light treatment, using a ruby laser, has been used by ophthalmologists for the past seven years to prevent detachment of the retina.

The ruby laser proved its value in treating retinal detachment, and it has also been effective in treatment of certain eye diseases. However, because of its red color it is not very effective in treatment of vascular diseases, Dr. Zweng said.

The effectiveness of photocoagulation or light treatment from any light source depends on the absorption of the light by pigmented tissue. In the process of absorption, the light energy is changed into heat energy, and a thermal effect, a burn, is produced.

Laser treatment, according to Dr. Zweng, has been used in ophthalmology for several clinical purposes: to prevent retinal detachment, to coagulate abnormal blood vessels, and to burn a hole in the iris of the eye when disease has closed the pupil or optical opening.

Instruments for light treatment have included the conventional photocoagulator which uses a high-pressure zenon gas tube as a source of white light. The instrument is bulky, must remain in a fixed position when in use, produces large scars compared to the pinpoint lesions produced by the laser, and introduces much energy into the eye.

Since conventional photocoagulators demonstrated both problems and dangers, ophthalmologists have been interested in exploring possible applications of the laser light in their field.

Before applying the new technique in humans, Dr. Zweng and his associates studied its use on Rhesus monkeys and rabbits in extensive experiments carried on at Stanford Research Institute. From these studies they determined the energy levels that could be used safely on patients, and evaluated the effectiveness of the argon laser in vessel interactions.

A model of Stanford's argon-laser photocoagulator is currently being displayed as part of a scientific exhibit at the Smithsonian Institution in Washington, D.C.

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Mailed March 10, 1970.
Picture page attached.

Dr. H. Christian Zweng of Stanford University School of Medicine aims beam of intense light from argon gas laser into the eye of patient being treated for a disease of the retina. The technical assistant is Miss Ann Hammond of the Stanford Research Institute in Menlo Park. The concept of using the blue-green light of the argon gas laser was developed jointly by scientists at Stanford University School of Medicine and Stanford Research Institute. It represents an advance over ruby lasers because the blue-green light it emits is absorbed by the red blood pigment. March, 1970.

TO: NEWS BUREAU, ROOM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

SUBJECT: Dr. H. Christian Zweng/argon gas laser, 3/70

Please send me an 8x10 glossy print of photo above.

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PUBLICATION _____ CITY, STATE, ZIP _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5311
or
Vito Cangemi 408: 297-1636
Santa Clara County Public Health Dept. Ext. 221

FILE COPY

Editors: The Stanford University School of Medicine and the Santa Clara County Public Health Department will hold a joint press conference Wednesday, March 11, 1970 to announce the establishment of a methadone treatment program for heroin addicts in Santa Clara County. Available to answer questions will be Robert Campos and Dr. Kenneth Meinhardt of the Santa Clara County Health Department, and Dr. Avram Goldstein of Stanford University. The press conference will be in Room 147 (Multipurpose Room) of the Mental Health Center, Santa Clara County Health Department, 645 South Bascom Avenue, San Jose, at 9:30 a.m.

(ADVANCE) FOR PM RELEASE WEDNESDAY, MARCH 11, 1970

SAN JOSE -- The Santa Clara County Public Health Department and the Stanford University School of Medicine have joined forces to bring several hundred heroin addicts into a new program in which methadone is used to treat narcotics addiction.

The drug, methadone, is said to end the addict's craving for heroin and other opiates and to block their effects, if he takes them. It does this without creating the sense of euphoria, the addict's "high", that interferes with normal functioning.

A joint statement by Dr. Elwyn W. Turner, director of the Santa Clara County Health Department, and Dr. Avram Goldstein, professor and chairman of the department of pharmacology at Stanford, said:

"On the basis of present research findings about methadone, we thought it would be well to initiate such a program in Santa Clara County.

"We estimate there are more than 500 addicts in the County and the number is growing. We have been personally disenchanted with the usual methods of treating heroin addiction. This is the first program that has come along that makes any sense to us in terms of objective measures of success."

New York's five-year methadone program, pioneered by Dr. Vincent P. Dole, has claimed to have treated addicts with 83 per cent success. Oregon reports to have gotten almost all its 400 addicts off heroin by using the chemical methadone as a substitute. Chicago's program has been equally rewarding in terms of salvaging human lives and reducing costly crimes.

Drs. Turner and Goldstein stressed that initially Santa Clara County's methadone program would have to grow slowly to permit controlled studies into several aspects of the drug. The long-term goal, however, is to extend methadone treatment to all heroin addicts in the County.

California law restricts methadone to research only. A bill by Assemblyman John Vasconcellos (D-Santa Clara) would remove those limitations and authorize full use under control of local health authorities. In addition to Santa Clara County, the only other programs presently approved in Northern California are in San Francisco and in Tulare County.

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The new program will be under the administrative direction of Robert Campos, coordinator of the Drug Abuse Clinic of the Santa Clara County Health Department. Dr. Don Lowe, a psychiatrist, will be interim medical director, and Dr. Goldstein will direct the research aspects of the program. Others include Dr. Michael F. Cohen, a clinical psychologist; Mrs. Marian Morgan, psychiatric nurse; Miss Rosalie Adam, a public health nurse; Serapio Ortiz and Jose Espinoza, public servic aides.

A citizen's advisory committee, representing a broad spectrum of the San Jose community and the County, will guide methadone program operations. Included on the 35-member panel are representatives of the Mexican-American community, city and police, physicians, lawyers, clergymen, businessmen, educators, and two state assemblymen.

The program is not suitable for persons addicted to drugs other than opiates, Campos explained. It is not for young people who have been experimenting with drugs of the sedative-hypnotic type such as barbiturates and minor tranquilizers. These persons can be rehabilitated by other programs since they may not yet be addicted.

Twelve addicts are now being treated under the program which got its start in January, Campos disclosed. Each morning on the way to work, they stop at the Drug Abuse Clinic at 2320 Moorpark Avenue in San Jose, and take a carefully measured dose of methadone diluted in fruit juice. Addicts, selected at random, give urine samples for analysis to check if they are taking heroin at the same time.

"Even though these addicts have been under methadone treatment for a short time, their desire for heroin has simply dissipated," Campos and Dr. Goldstein stated.

Three of the addicts, interviewed at the Clinic, apparently agree that methadone is the answer to their problem.

"I can live a decent life taking methadone or I can live like an animal taking heroin," said a 40-year-old salesman and father of two. He said he was often forced to steal to feed his $100-a-day habit.

A 37-year-old warehouse worker and father of three children said he entered the program because "I wanted to feel normal again so that I could go to work." After three weeks of methadone treatment, his craving for heroin vanished, he added.

"I feel really good for the first time in my life," was the comment of a 38-year-old San Jose woman who has taken heroin since she was 19. She said she has not been "on dope" since beginning methadone treatments. And she recently refused to "have another fix" when tempted by a company of addict friends.

Dr. Goldstein said that Santa Clara County's program will emphasize research in aspects of methadone treatment and heroin addiction that are presently poorly understood.

"I do not feel that everyone in California should jump onto the methadone bandwagon and set up programs that may not be of the best kind," he said.

Some aspects of treatment to be studied include: methadone dosage levels, blood studies to determine differences in drug metabolism among addicts, and how methadone interacts when taken in conjunction with other medication. Other studies will focus on the effects of group psychotherapy and vocational rehabilitation of addicts in the methadone program.

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"We are unquestionably dealing with some biochemical need in the brain for narcotic drugs," Dr. Goldstein explained. "How some individuals develop this need--whether it is self-induced or was present before the person turned to drugs--remains one of the fundamental questions about heroin addiction."

But methadone presents a problem. It is itself habit-forming--meaning that the user may have to rely on it for life. Asked to comment on this point, often used as an argument by critics of methadone programs, Campos and Dr. Goldstein replied:

"We look at drug addiction as a disease, similar in some respects to diabetes. If you have a diabetic on insulin every day for the rest of his life, would it ever occur to someone to say that he is bad because he is hooked on insulin?

"Insulin is a respectable drug for treating a disease that we understand, and no one considers it immoral."

Dr. Goldstein said that to a pharmacologist "there is no such thing as moral and immoral molecules. These chemicals are just drugs that do certain things," he said. "The worst thing about heroin addiction has to do with the consequences of its use.

"Since heroin is so expensive, addicts turn to crime to pay for their drug abuse. Thus, if the methadone experiment proves successful, the crime rate will be lowered, too."

He pointed out that methadone, which is pharmacologically different from heroin, is long-lasting, stable, can be taken by mouth, and costs only a few cents a day per patient.

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Mailed March 9, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

FILE COPY

STANFORD -- Parents of Children with Neurological Defects will meet at 7:30 p.m., Tuesday, March 10 in Room A335 of Stanford University Medical Center. Rose Grobstein, acting chief pediatrics social worker at Stanford University Hospital, will moderate a program on "The Effect of the Handicapped Child in the Home."

Children of parents in this group were born with myelomeningocele and in some cases hydrocephalus. The group welcomes new members and is eager to make itself available to other Bay Area parents in the same situation.

Parents who cannot attend the meeting, but would like information about the group may call Mrs. Roger Cummings at 258-6788 in San Jose.

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Mailed March 5, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- A new laboratory for rapid and accurate diagnosis of virus infections has been established at Stanford University Hospital.

The diagnostic virology laboratory, designed to work with state facilities in Berkeley, is able to provide service for numerous hospitals, clinics and physicians in the Bay Area. The State public health facilities will be used as a back-up for the Stanford laboratory, confirming certain test results and assisting with processing that cannot be done here.

"It will no longer be necessary for Stanford and other local medical facilities to send all specimens to Berkeley for the diagnosis of a particular viral infection," says Dr. Thomas C. Merigan, associate professor of medicine and director of the laboratory. "We will now have many test results in 24 hours and thus be able to select and begin proper treatment of the infection sooner. This will be a direct benefit to patients."

"The accuracy of the test results will also be improved," Dr. Merigan says. "Viruses are quite fragile. Previously we have had to freeze all samples and ship them to Berkeley, increasing the possibility that the viruses might be damaged or completely destroyed and thus distort test results."

The initial focus of the laboratory will be on those viruses which cause severe infections and diseases such as viral hepatitis, rubella (German measles), shingles, which attack nerves, and encephalitis, an inflammation of the brain. The scope of the laboratory will be expanded later to include viral infections which attack children such as mumps and polio, as well as those which attack the respiratory system.

"The prevention and cure of viral infections has been difficult," according to Dr. Merigan. "The opening of this special facility indicates the importance and scientific progress that has been made in understanding these microorganisms."

"We know that a virus replicates by infecting a healthy cell. The mechanism of virus growth within cells is similar to the cell's own growth mechanism. Therefore, it is very difficult to find selective drug treatments, which will attack only the virus and not the cell itself."

"The most common approach to fighting viral diseases has been immunization which has been highly successful against diseases such as smallpox, measles, and polio," Dr. Merigan points out. However, this approach does not work with all viruses. Certain newer antiviral drugs are under clinical investigation and as treatment becomes available, the rapid and exact diagnosis of viral diseases which our laboratory can provide will become increasingly important."

"It is our hope that a concentrated attack on viral diseases in our new laboratory will not only be of great value to patients throughout the community, but will also provide us with important data for continuing research into the understanding and prevention of viral infections," Dr. Merigan says.

Associated with Dr. Merigan in supervising the new facility is Dr. William S. Robinson, assistant professor of medicine. Two medical technologists, Dorothy Conklin and Mary Butera, are staffing the laboratory.

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Mailed March 2, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Stanford University today announced it has received a gift of approximately 100 acres of land on the Monterey Peninsula.

The gift, made to the University by N. J. D'Ambrogio of Carmel, will be used to create a fitting memorial to his daughter, Maureen, who died of cancer in Berkeley on March 8, 1967.

The Maureen Lyles D'Ambrogio Memorial Fund will maintain a professorship in the Stanford University School of Medicine to be known as the Maureen Lyles D'Ambrogio Professorship, according to Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School.

The Professorship will be held by a faculty member engaged in cancer research.

The property donated to Stanford is known as Kent Manor. It overlooks the Pacific Ocean, on Highway 1, about three miles south of Carmel. Local publications have described it "as a choice spot located in the heart of California's most scenic coastal areas."

The estate was named after John H. Kent, executive vice-president and treasurer of the Eastman-Kodak Company during the early part of the century. His daughter, Ada Howe Kent, lived on the estate for many years with Margaret Kilpatrick, a life-long friend and companion.

When D'Ambrogio bought the property in 1950, it was part of the estate of Admiral Kenneth Kilpatrick, Mrs. Kilpatrick's son.

Mr. and Mrs. D'Ambrogio are keeping the residential compound of Kent Manor which consists of approximately 3 acres. Sometime later, D'Ambrogio said, he hopes that proceeds from this portion will form the basis for establishing a Medical Scholarship Fund at Stanford as a memorial to Mary L. Lyles of Flushing, Long Island, New York.

Miss Lyles, principal of the Murray Hill School in the early 1900's, was the only person who took an interest in D'Ambrogio when he was a boy of ten, after the death of his father.

D'Ambrogio is a Stanford University alumnus of the Class of 1917. Following his graduation and a brief academic career, he entered the field of financial consulting and became an authority on sugar production and consumption.

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Mailed April 28, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Paul Berg has been appointed chairman of the department of biochemistry at the Stanford University School of Medicine.

He succeeds Dr. Arthur Kornberg, professor of biochemistry, who resigned as department chairman last year to return to full-time teaching and research.

Dr. Berg, 44, came to Stanford as associate professor in 1959 from Washington University School of Medicine in St. Louis, Mo., where he held a similar post. He became professor of biochemistry at Stanford in 1960.

In 1964 he was named California Scientist of the Year by the California Museum of Science and Industry for work concerned with decoding the genetic messages or patterns which determine how living cells make proteins.

Presently, Dr. Berg is engaged in research in how viral genes alter the growth properties of a cell and make it cancerous.

A native of New York City, Dr. Berg obtained the B.S. degree from Pennsylvania State University in 1948, the Ph.D. degree from Western Reserve University in 1952, and his postdoctoral training at the Institute of Cytophysiology in Copenhagen and at Washington University.

Dr. Berg's academic career is replete with honors. In 1959, he received the Eli Lilly Award in biochemistry. He was elected to the National Academy of Sciences and the American Academy of Arts and Sciences in 1966. Last year he received the Henry J. Kaiser Award for excellence in teaching.

Dr. Berg with his wife Mildred and son John live at 838 Santa Fe Avenue on the Stanford campus.

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Mailed April 28, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

ADVANCE FOR P.M. RELEASE MONDAY, APRIL 27, 1970

STANFORD -- Dr. A. Dale Kaiser, professor of biochemistry at Stanford University School of Medicine has been awarded the U.S. Steel Foundation Award in Molecular Biology by the National Academy of Sciences.

The award, which was presented at the Academy's annual meeting today in Washington, D.C., cited Dr. Kaiser's "outstanding contributions in the field of bacterial viral genetics." It is presented for a recent notable discovery in molecular biology by a young scientist.

Dr. Kaiser and his colleagues have discovered that DNA (deoxyribonucleic acid) from a particular virus that attacks bacteria can infect susceptible bacterial cells and reproduce itself. This finding opened the way to a correlative analysis between the genetic and chemical structures on the DNA molecule. DNA is the material that controls heredity.

His research was supported by the National Institutes of Health and the National Science Foundation.

Dr. Kaiser received the B.S. degree in 1950 from Purdue University and a Ph.D. degree in Biology in 1954 from the California Institute of Technology. He joined the Stanford faculty in 1959.

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END ADVANCE FOR MONDAY, APRIL 27, 1970

Mailed April 24, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Dr. John A. Sbarbaro, medical coordinator of the Denver Neighborhood Health Program, will speak on "Community Health in the Political Arena," at 4 p.m. Friday at a health colloquium at Stanford University School of Medicine. He is sponsored by the Department of Community and Preventive Medicine and the local chapter of the Student American Medical Association.

Health care, its availability, accessibility and quality, has become an increasingly political issue. The speaker, who is noted for developing an entirely new system of health care delivery for a major American city, will discuss the involvement of government in the delivery of personalized health services.

The talk, in Room M-114 of the Medical School, is open to the public.

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Mailed April 22, 1970

Violence

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Violence can be ended as soon as Americans realize that, for the first time in history, they are the masters of their own evolution, according to a study published by the committee on violence of the Stanford University School of Medicine.

The study, conducted by the Department of Psychiatry, says that Americans are panicked into destructive actions because they change conditions necessary for their survival much faster than they can adapt to the changes they make.

The Stanford committee builds its case on adaptation theory, arguing that much of man's behavior can be explained as a struggle to adapt to his environment.

Man lives in a technological era, but his true mentality is still that of a nomadic hunter who had to use violence for survival. This is no longer necessary, the committee says, because the nature of human adaptation has changed. The threats now facing man are more social, cultural, and psychological than physical.

In a short time, man's energies produced an unprecedented age of technology, and the old, slow evolutionary process--the behavioral and biological fit between the species and the environment--is out of balance.

"Our primitive forms of aggression, our violence, bellicosity and inclination to fight in a time of emergency increasingly work against our survival," the committee explains. Under today's different stresses those old tools of aggression that our ancestors used are not always adaptive.

"Thus America's current violence threatens our existence, not because we are more violent than ever before--but because violence makes it difficult for us to cope with our changing world," the committee states.

The committee's conclusions are offered in a 451-page book, VIOLENCE AND THE STRUGGLE FOR EXISTENCE, just published by Little-Brown and Company, Boston. The book is edited by Drs. David N. Daniels, Marshall F. Gilula and Frank Ochberg who were instrumental in forming a 23-member committee on violence after the assassination of Sen. Robert F. Kennedy to study aggression and its roots. The book includes chapters on the biological, psychodynamic, cybernetic and environmental bases of violence; effects of mass media on violence, assassination, gun legislation, the relationship of mental illness to violence, collective violence by minority groups, and the relationship of drugs to violence.

Conceding that there may be positive functions to violence--it may, for example, dramatize grievances and bring them to public attention--the committee warns current advocates of the politics of violence that violent methods tend to overwhelm the end for which they are employed. "Collective violence is, first of all, a polarizing tactic that...increases hostility and suspicion among groups. Once employed the possibility of restraint or reconciliation is considerably reduced.

"Finally, as violent behaviors are practiced, they become learned, and increasingly relied upon.... Thus the most unfortunate repercussion of violence is the continuation of the violent process itself."

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The committee report calls for "a moratorium on violence" so that destructive energy can be channeled into more constructive solutions, and offers this message of hope:

. Violence is not an inherited trait. It can be understood and controlled.

. Man can now, for the first time in history, take charge of his own evolution. His destiny need not be imposed from without. Once man performs the revolutionary, but simple act of deciding that he can truly change, the era of violence can be ended.

To bridge the evolutionary gap, to adapt to their own age, and survive, the committee report insists that Americans must now alter their behavior as individuals and as a society. Americans must learn how to handle change fast. They must learn how to control evolution.

"We have marvelous adaptive abilities for coping with varying, even extreme situations," the committee says.

From the Stanford report here are specific proposals for individual action to change American society into an "adaptive" system:

. Stop being inconsistent about standards of behavior surrounding violence. A society that condemns some forms of violence but encourages others--war, capital punishment, and other collectively sanctioned violent behaviors--is breeding confusion.

. Learn about the potential hazards of overpopulation and its contribution to violent behavior, consider the merits of family planning, and limit the size of American families.

. Eliminate excessively punitive discipline for children and substitute nonviolent discipline and positive rewards. Parents who punish children by violent means teach them violence.

. Urge schools to develop curricula in the nonviolent resolution of conflict. Most books present the past as a procession of wars. Are students guided to draw the appropriate conclusions from the facts? Is their meaning for the present isolated and elaborated?

. Write to professions in the mass media urging them to emphasize that violence is destructive rather than glamorous, and to sponsor educational programs that teach nonviolent means for solving problems.

. Open channels of communication among members of different groups having different views and needs.

. Encourage legislators to enact strong firearms control laws and to establish a more effective legal machinery for the expression of grievances.

. Urge legislators, law enforcement officials, and judges to eliminate cruel social controls and penalties and to emphasize rehabilitation.

The Stanford report says "these recommendations are only a portion of the possible individual actions that can and must be taken. The essential point is that individual citizens are not helpless to act--each of us can take part in decreasing violence."

The future safety of the human species lies not so much on conserving old values as in learning how to hook onto the currents of change and ride them, the committee says. Americans must get serious about studying how change happens, to welcome it, to be stimulated by it instead of becoming terrified. The report sums up:

"Our outmoded adaptive behavior--our violent aggression keeps us from doing so. Our world has changed, yet we have not sufficiently changed with it, nor have we determined the shape of changes for tomorrow.

"If the gap between our behavior yesterday and the reality of today's demands grows too great, our continued dependence on violence may destroy us all, despite our great potential of being the masters, not the victims of our destiny."

Mailed April 21, 1970.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Television censors who eliminate the ugly consequences of violence from news and fictional presentations are doing more harm than good, according to a study published by a committee of psychiatrists at Stanford University School of Medicine.

Without its gory aspects, violence is depicted as a good, often quick way to get things done, says the committee on violence of the Department of Psychiatry.

"Ironically, the viewer is deprived of the one aspect of violence that might discourage violence," the committee states. "The censor cuts out the ugly consequences, the victim's pain and agony, and the wanton destruction of life.

"This restricts the viewer from determining the value of violent acts, since the full impact and range of consequences are not presented for appraisal."

The psychiatrists' findings appear in a new book, VIOLENCE AND THE STRUGGLE FOR EXISTENCE, published by Little-Brown and Co., Boston. The 451-page book is the result of an extensive examination of violence and its roots by the committee which was formed after the assassination of Sen. Robert F. Kennedy. The book, edited by Drs. David N. Daniels, Marshall F. Gilula, and Frank Ochberg, examines topics ranging from the biological, psychodynamic, and environmental bases of violence to relationships of violence to mental illness, drugs and lack of gun controls.

"Nowhere is violence as a sanctioned coping strategy more evident than in mass media portrayals of violence, especially on television," the psychiatrists write. "The media foster the image of the Violent American armed with gun, ignorance, and frustration, ruthlessly pursuing good and evil alike.

"Television, radio, and newspapers project a repetitive, staccato beat of violence, showing us that violence is valued, necessary, wanted, and even enjoyed."

One report cited by the Stanford psychiatrists indicates that a single television station showed 334 completed or attempted killings in one week. About 50 per cent of prime time programs feature violence and crime.

"The average American child from ages 3 through 16 spends more of his waking hours watching television than attending school. There is no question, no doubt whatever, of this constant flow of violent fare on TV and other media and its observation," the psychiatrists said.

What of the effect of this violent fare on viewers and readers?

"Although all mass media have appeal and impact, television has the most powerful impact," the psychiatrists said. "It effortlessly teaches pupils where they are, in the way humans learn best: through simultaneous presentations to the visual and auditory senses.

"For the young in particular learning involves observing, imitating, and then observing once again. Furthermore, television by virtue of its nearly real simulation of life, its inherent authenticity, blurs the line between reality and fantasy.

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"The television industry knows this and so do advertisers. If TV can teach people to buy things, that is to alter their behavior, it also can teach people violence."

The psychiatrists show data suggesting a definite tendency for television programs to project content in which socially approved goals are most frequently achieved by methods that are not socially approved.

One study revealed that violence is used about one-third of the time as a means to various objectives. For programs most frequently watched by children, violence represented the solution 47 per cent of the time.

"Part of the tragedy is that television and mass media in general could be our most powerful tools for dealing with today's violence," the committee concludes. "Television could effectively promote adaptive alternatives to violence, and stress the many nonviolent ways to resolve conflict.

"It could encourage, if not induce, desired culture modification and intergroup understanding, but not while the lesson, the accepted cultural tradition, remains that violence, especially when disguised by the cloak of history, fantasy or rightness, is an effective, acceptable way to cope."

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Mailed April 21, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- "The Hospitalized Child, His Family, and His Community" will be the theme of the annual meeting of the American Association for Child Care in the Hospital, to be held at the Sheraton-Palace Hotel in San Francisco, California, April 22-25, 1970.

Guest speakers will include Robert A. Aldrich, M.D., Professor and Director of Human Ecology, University of Washington, Seattle, and David A. Hamburg, M.D., Professor and Chairman of the Department of Psychiatry, Stanford University School of Medicine. Roger O. Egeberg, M.D., Assistant Secretary for Health and Scientific Affairs, Department of Health, Education and Welfare, will address a session to be held jointly with the California League for Nursing.

Sponsors of the conference are: Stanford Children's Convalescent Hospital, University of California Medical Center, and Stanford University Medical Center.

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Mailed April 20, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Failures of American Medicine, in rural America and in the country's urban ghettos, will be the focus of Student Day at Stanford University School of Medicine, April 25.

An all-day program devoted to a single issue is an innovation. Traditionally, medical students have presented research papers and guest speakers have delivered talks on divergent topics. This year the students have moved the program from the Medical School to Bishop Auditorium in the Graduate School of Business so that more people can attend. It is open to the public.

"Our objective," says Chairman Les Cordes, "is simply to make Student Day 1970 more significant."

He has planned the program as a way of increasing understanding of problems on the current medical scene, and of solutions to those problems that are now being attempted.

"Most of us are aware in a general way of the lack of adequate health care in rural areas and city ghettos," he says, "but we may not have been exposed to specifics. Our speakers face the problems every day and are actually involved in large- and small-scale efforts to correct them".

Los Angeles health workers Mrs. Marion Grindell and Roy Evans will talk at the morning session, which begins at Bishop at 9:30.

Mrs. Grindell, who is on the Narcotics and Dangerous Drugs Commission in Los Angeles, will speak on "Failures of Health Services in the (south) Los Angeles Ghetto," the area which takes in Watts

Evans was addicted to drugs for seventeen years until he committed himself to rehabilitative training four years ago. His talk "Ghetto Psychology and Establishment Medicine" is based on his experiences working on several of Los Angeles' most active delinquency and drug abuse prevention projects since that time. Currently Evans is a district project coordinator in Narcotics Information in the L.A. Department of Community Services, and he is executive director of a project called Bridge Back, Inc.

The early afternoon's emphasis will be on the rural scene. Dr. Gerald Bassett, assistant professor of preventive medicine at the University of Washington and a 1959 Stanford medical alumnus, will talk about rural health in the State of Washington and other states.

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John Hatch, M.S.W. and assistant professor of preventive medicine at Tufts University Medical School, will describe the Tufts-Delta Project at Mound Bayou, Mississippi. Started three years ago, the project is a working model of comprehensive health care in a rural district.

After these presentations, a panel of Stanford professors, resident physicians and medical students will discuss community health care from both a national and a local point of view. Panel members will be Dr. Count Gibson, Chairman of the Department of Community and Preventive Medicine at Stanford; Dr. Norton Kalishman, Stanford resident in pediatrics and a founder of the People's Medical Center; Miss Kate Lorig, training coordinator at the Alviso Community Service Organization Family Health Center; Don Williams, a first-year medical student who was instrumental in setting up the Black Man's Free Clinic in San Francisco; and Bob Korns, a third-year medical student who has served a clerkship at the Southern Monterey County Medical Group Rural Health Project, King City.

Dr. John Sbarbaro, director of the Denver Neighborhood Health Center, will conclude the Day's program with "Summary and Impressions."

Dr. Sbarbaro will also speak on the Stanford campus Friday, April 24, on "Community Health in the Political Arena" at a Health Colloquium at 4 p.m. in Room M114 of the Medical School.

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Mailed Monday, April 20, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Dr. Abner M. Harvey, head of the Department of Medicine at Johns Hopkins School of Medicine, will discuss the health care system of a new model city on the East Coast on Saturday at Stanford University School of Medicine.

Dr. Harvey, the first Louis and Dorothy Kovitz Visiting Professor at Stanford, will speak at 9:30 a.m. in Room M-112 of the medical school. The meeting is open to the public.

He will discuss the planning and implementation of the Columbia Project, a new model retirement city being built halfway between Washington, D.C. and Baltimore, Md. Johns Hopkins School of Medicine is responsible for the health care system of the project.

Dr. Harvey will also participate in medical grand rounds at the Palo Alto Veterans Administration Hospital early Thursday morning and give the clinical pathologic conference at 11 a.m. Thursday in Room M-106 of the medical school.

Dr. Harvey received the A.B. (1930) and D.Sc. (1949) degrees from Washington and Lee University and the M.D. degree (1934) from Johns Hopkins. He has headed the department of medicine and served as physician-in-chief of Johns Hopkins Hospital since 1946.

The Louis and Dorothy Kovitz Visiting Professorship was established last year by Dr. and Mrs. Louis Kovitz of Los Altos.

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Mailed April 15, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Dr. Søndergaard can be reached at the Traymore Hotel or Room 13, Convention Hall Hotel, Atlantic City.

FOR PM RELEASE TUESDAY, APRIL 14, 1970

ATLANTIC CITY -- Eczema, probably one of the most frequent skin disorders of medical significance, results in an estimated 8 million visits to physicians each year in the United States, with less than half that total to dermatologists.

Although women may comprise a majority of patients, the disorder is also common among men.

Despite the antiquity and extent of the disease, its cause is not fully understood and its therapy remains empiric. One authority on the subject has observed that he knows of no other chronic disease so capable of humbling the learned physician more than a stubborn skin eruption.

Eczema's symptoms are redness, itching, small blisters, and discharge from the skin of a fluid that tends to dry into scales and crusts. For many years physicians have suspected that eczema has an immunologic origin and may be caused by unknown agents either inside or outside the body.

A paper presented Tuesday at the 54th annual meeting of the Federation of American Societies r Experimental Biology in Atlantic City has given further basis to this belief.

A dermatologist, Dr. Jørgen Søndergaard of Denmark, working with Dr. Malcolm W. Greaves of University Department of Dermatology, Newcastle-upon-Tyne, England, reported that they had isolated an unknown pharmacological substance previously unrecognized in allergic contact eczema. Dr. Søndergaard is now doing related work as a research associate in histochemistry and dermatology at Stanford University School of Medicine.

Using a special perfusion method, which permits direct analysis of pharmacological substances released in inflamed skin, Drs. Søndergaard and Greaves found the substance in 21 of 30 patients with eczema, but failed to find it in 18 volunteers with normal skin.

Further studies in patients known to be susceptible to immediate-type reactions -- insect bites or drugs -- failed to produce the chemical agent.

The substance, tentatively identified as a smooth muscle-contracting agent (SMCA) has turned out to be a fatty acid that can be easily extracted with organic solvents, the investigators said.

Dr. Søndergaard said that work is now under way in Dr. Greaves' laboratory in England to define the chemical composition of the SMCA substance suspected to be related to agents called prostaglandins. The other possibility is that the substance may turn out to be an entirely new agent.

Once identified, the SMCA agent could be injected in the skin of volunteers to see if it would produce eczema, Dr. Søndergaard explained.

He added it is quite likely that the SMCA substance is one of many complex chemical mediators which cause skin eruption. Identifying these and finding ways to block their action could hopefully lead to control of eczema.

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Mailed April 9, 1970. END ADVANCE FOR RELEASE APRIL 14, 1970

NEWS BUREAU
STANFORD UNIVERSITY MEDICAL CENTER
STANFORD, CALIFORNIA 94305

Room C003
(415) 321-5310

FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY
54th ANNUAL MEETING

SUBJECT..... "Recovery of a Pharmacologically Active Fatty Acid from Human Allergic Contact Eczema Using a Skin Perfusion Method"

AUTHORS..... Jørgen Søndergaard, M.D.;
Malcolm W. Greaves, M.D., Ph.D., M.R.C.P., University Department of Dermatology, Newcastle upon Tyne 1, England;
Research Associate, Stanford University School of Medicine, Department of Pathology, Division of Histochemistry, Stanford, California 94305.

TIME..... 9:00 a.m., Tuesday, April 14, 1970

PLACE..... Room 13, Convention Hall Hotel, Atlantic City, New Jersey

PROGRAM..... Immunopharmacology

CONVENTION
ADDRESS..... Dennis Hotel RELEASE TIME April 14, p.m.

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Histamine, bradykinin, 5-hydroxytryptamine and the prostaglandins are known to be highly vasoactive in human skin but direct evidence that these agents participate in human allergic contact eczema is lacking. A method of continuous in vivo perfusion with warm Tyrode solution has been developed which permits direct analysis of pharmacological agents released in inflamed human skin. Using this method a pharmacological substance (SMCA), previously unrecognized in allergic contact eczema has been recovered. This substance, obtained from eczematous skin in 21 of 30 patients was neither due to histamine, kinins, 5-hydroxytryptamine nor acetyl choline. Its solubility in ethyl acetate at pH 3 indicates that it is a fatty acid of the prostaglandin type. Histamine was found in 7. Kinin activity was recovered in 12 of the 30 subjects, but these results did not differ significantly from those obtained in the normal skin of 18 control subjects. No histamine, 5-hydroxytryptamine or SMCA was found in the control group.

Both perfusion and assay techniques have been described by us in detail in an earlier paper. Two wide-bore needles with 8 holes perforated along the shaft were inserted immediately subdermally in parallel 10 mm apart in opposite directions along the flexor aspect of the forearm. Warm sterile Tyrode solution was infused through one needle and recovered through the other into siliconised glass tubes in an ice packed fraction collector. Recovery was assisted by confining the area of perfusion with elastic bands and by applying gentle suction with a peristaltic pump. Perfusate was collected in successive 15 min aliquots. Histamine was assayed biologically against the atropinised guinea pig ileum, its presence being confirmed using the specific antagonist pyrilamine. Kinin activity was assayed by using the oestrus rat uterus and rat duodenum mounted in a single organ bath. 5-hydroxytryptamine was assayed fluorometrically.

Allergic contact eczema is a form of sustained inflammation due to cell-mediated delayed hypersensitivity. A group of 30 patients with contact eczema was studied. Fourteen were allergic to nickel, five to chromate, three to rubber, two to primula, two to cobalt and one each to formalin, colophony, neomycin and benzocaine. These patients had only minor skin involvement at the time of investigation, and the arms were clinically unaffected in all cases. Patch tests 6 cm^2 area were applied to the flexor surface of the forearm and perfusion of duration 90 minutes was carried out on the inflamed skin 48 hours later.

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Eighteen control subjects were studied. These were patients with localized non-inflammatory lesions such as naevi, virus warts, alopecia and neoplasms. Univolved skin was perfused in each case. In two of these who had negative patch tests to nickel, a 6 cm^2 patch test was applied to the forearm and perfusion of the underlying skin was carried out 48 hours later. No histamine was found in the 18 subjects during perfusion varying in duration from 15 to 90 minutes. Kinin activity was detected in 6 subjects. This was of low concentration ranging from 0.1-4 ng/ml. No hydroxytryptamine or SMCA was detected in any of the experiments.

In 21 of the 30 patients with contact eczema an unidentified smooth muscle-contracting agent (SMCA) was found. This was an agent which contracted the guinea pig ileum, but was not histamine, 5-hydroxytryptamine or acetyl choline, since it was not inhibited by the corresponding competitive antagonists. It was not a kinin, since although it contracted the rat uterus, it also contracted the rat duodenum, whereas kinins relax the duodenum.

Of the 30 patients, histamine was found in only 7, kinin in 12 and 5-hydroxytryptamine not at all. However, the possibility that these agents may be regularly released in contact eczema is not excluded. Failure to recover them may be due to rapid degradation, dilution by the Tyrode solution or depletion by tissue diffusion.

Experiments designed to characterize SMCA are at present incomplete. The activity is clearly not due to Slow Reacting Substance (SRS-A) since SRS-A does not contract the rat uterus. A Lymph Node Permeability Factor has been recovered from lesions of contact dermatitis in the guinea pig, but it is inactive against the guinea pig ileum and rat uterus.

Prostaglandins are widely distributed among human tissues and are highly vasoactive in human skin. The possibility that prostaglandin-like fatty acids may be responsible for the smooth muscle-contracting activity in perfusates obtained from contact dermatitis in the present study was raised by the following observations. Perfusates from four patients with contact dermatitis which contained the unknown substance were extracted by partition between ethyl acetate and water at pH 3. In each case the activity was found in the ethyl acetate fraction since after evaporation the redissolved residue would contract the guinea pig colon and rat uterus, whereas the waterphase contained no activity. The response of the isolated rat uterus and duodenum to extracted SMCA and extracted standard prostaglandin E_1 were then compared. Both extracted SMCA and extracted prostaglandin E_1 gave a biphasic response with the rat uterus and a contraction of the duodenum.

Since pharmacological activity resembling SMCA has recently been detected by us in inflammation due to ultraviolet radiation, using a similar method, but not in short-lived whealing inflammatory reactions the possibility arises that this activity may be a characteristic of human sustained inflammation in general.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- "Code 66"

Those ominous words, meaning "cardiac arrest," are not unfamiliar to employees of Stanford University Medical Center. But when they echoed down the halls on the morning of April 1, something was different. This arrest was not in a patient room but out in front of the Medical Center near the outpatient clinics.

It began shortly before 9 a.m. when Mr. and Mrs. Jesse Wing of Salinas, late for Mrs. Wing's clinic appointment, dashed from a parking lot toward the main entrance. Suddenly Mr. Wing collapsed.

A man walking out a door saw Mr. Wing fall and notified Mary Gall, medical center coordinator. "I knew by looking at him that he hadn't just fallen and was not going to get up," Mrs. Gall remembers. She sent word out to Mrs. Wing that help was on the way and then ran to the medical clinic where she found Dr. David Clark, a postdoctoral fellow in cardiology.

"All I said was 'STAT', a man has fallen in front of the clinics,' and Dr. Clark was on his way," Mrs. Gall says. While he began external cardiac massage, and mouth-to-mouth resuscitation, Mrs. Gall took Mrs. Wing inside, put a "Code 66" on the public address system, and told Barbara Gamberg, orthopedic clinic nurse, to get an emergency tray and gurney.

The response was immediate from all corners of the Medical Center--inhalation therapy, emergency room, nursing service, security, anesthesiology. From that moment on, everything was clockwork.

Mr. Wing, 71, was placed on a gurney and quickly transported across the front of the Medical Center to the elevator and emergency room. Riding the gurney and straddling Mr. Wing was Dr. James Rushing, an intern in medicine. He never missed a stroke of cardiac massage. Dr. Dennis Fung, a resident in anesthesiology, ran along side, providing ventilation with a resuscitation bag.

Once in the emergency room, an electrocardiogram showed that Mr. Wing was in ventricular fibrillation, when the large chambers of the heart lose their rhythmic pumping action. Electric shock and other medications were given to stabilize his heart beat and he was shortly taken to the Coronary Care Unit. By noon, Mr. Wing's EKG was stable and he was sitting up and talking with CCU personnel. Today he is on the road to recovery.

There is little doubt but that the fast work by Dr. Clark and the efficient, rapid response to the "Code 66" in the crucial minutes after Mr. Wing collapsed, did save his life. As his wife said, "If it was going to happen, we could not have been in a better place."

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led April 7, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Dr. Howard B. Kirtland of San Diego is the new president of the Stanford Medical Alumni Association, and Dr. George J. Laird of Burlingame is the new president-elect.

Dr. Kirtland, a surgeon, succeeds Dr. Larry E. Heiges, Jr. of Lompoc. He will serve as president of the Association through June, 1971.

The new president, who received his M.D. degree from Stanford in 1944, also serves on the clinical faculty of the University of California at San Diego Medical School and is a consultant in vascular surgery at the U.S. Naval Hospital in San Diego. He is also a member of the board of directors of the Comprehensive Health Planning Association for San Diego and the Imperial Valley counties. Dr. Kirtland is also chairman of the committee for continuing education of physicians, under the Area VII California Regional Medical Programs.

Dr. Laird, a general surgeon, received his M.D. degree from Stanford in 1940.

Elected for three-year terms on the board of governors of the Association were Dr. Henry F. Davis, '62, Carson City, Nevada; Dr. James A. Clever, '62, Tiburon; and Dr. John M. Palmer, '60, Davis. Dr. Charles D. Miller, '47, Redding, and Dr. George V. Webster, '37, Pasadena, were re-elected for three-year terms. Secretary-treasurer of the Association is Dr. David A. Rytand, '33, Atherton, Bloomfield professor of medicine at Stanford.

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Mailed May 28, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Seven weeks ago, Cecil Upshaw, ace relief pitcher for the Atlanta Braves, thought his baseball career had come to an end. Today, physicians at Stanford University Medical Center are optimistic that Upshaw may be back in the bullpen by the end of the season.

April 8th started out as a "great day in sunny California," Upshaw recalls, with the Braves emerging victorious over the San Diego Padres. It ended as a nightmare.

Walking back to the hotel with two teammates, Upshaw jumped into the air, demonstrating a basketball shot he made in college. Unexpectedly his college classring on his right hand hooked on a metal awning ; shearing off the soft tissue and severing the two small arteries of his finger.

"At first, I thought it wasn't very serious," Upshaw says. But after a doctor in San Diego examined the injury, Upshaw was told that the finger might have to be amputated. The doctor recommended examination and treatment by hand specialists at Stanford University.

"I was ready to do anything," the six foot six inch pitcher recalls. "All that kept going through my mind was that the years of training and work, since I was a kid, through near starvation in the minor leagues and finally to the major leagues, were going to go down the drain."

Surgeons at Stanford reconnected one of the severed arteries of Upshaw's finger on the morning of April 9 after he was flown by chartered plane from San Diego to Palo Alto. Subsequently, he received daily treatments to augment the supply of blood and oxygen to the injury through the tiny blood vessels of the finger.

"They watched and waited and so did I," Upshaw says. "Each day I'd look at the blackened finger tip and try to prepare myself for the worst. On the other hand, if the doctors just smiled at me, I'd become optimistic.

Today Upshaw's finger has normal coloring and doctors have said that the finger will be retained. Presently Upshaw is undergoing skin grafting to close the finger's wounds and physical therapy to restore finger motion.

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Cecil Upshaw

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"If it's a question of mind over matter, I'm going to be at least throwing a baseball by the end of the season," Upshaw says. Last year he had the second best relief pitching record in the National League with 27 saves, six wins and only four losses.

Upshaw has been playing baseball as long as he can remember. He was first approached by a big league scout at the age of 13. Two years later he was voted the most valuable player at a national baseball tournament sponsored by the Veterans of Foreign Wars.

"I was a 'whiz kid' then because I was bigger and more coordinated than most kids my age," Upshaw says. "After that the others caught up with me and I really had to learn to pitch."

While attending Centenary College in his hometown of Shreveport, La., where he graduated in 1965, Upshaw was approached with contracts from all but one of the teams of both the National and American Leagues. He signed with the Braves, then of Milwaukee, in 1964.

During the off season, Upshaw works on the business staff of an Atlanta minor league team in Shreveport, coaches a 7th grade basketball team, and writes a sports column for the Shreveport Times. He and his wife, Jeannie, have two children, Cecil III, 3, and a daughter, Carole, 6.

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Mailed May 27, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The staff and students of Stanford University Medical Center today closed their seventh annual art show, one which drew 206 entries, the second largest number since the show was first staged in 1964.

The artwork, exhibited in the Hospital for 10 days, was awarded 29 prizes and 17 honorable mentions from a panel of professional judges, and a special "Most Popular" award determined by personnel at the Center.

One of the most unusual entries to receive a blue ribbon from the judges was a felt and velvet vest made by Bonnie Weil of Palo Alto. Miss Weil, an administrative assistant at the Center, works extensively in the medium she calls "stuffware" designing and creating pillows as well as wearing apparel.

Thomas Hohn of Menlo Park, a postdoctoral fellow in biochemistry, won a first award for an unusual black and white photograph of a bleak mountain swirled in snow. Dr. Abraham M. Gottlieb, who was a winner in the oils category last year, won a first award this year for a nostalgic watercolor called "Sand and Shadows." Dr. Gottlieb resides in Menlo Park, is director of the Palo Alto Veterans Administration Hospital.

Dr. Raymond Stofer of Woodside, research associate in surgery, won a blue ribbon for a metal sculpture, "My Thing." Dr. Stofer's sculptures consistently impress judges--he has won six times in the seven-year history of the show.

Other top winners were: nurse Marilyn Landgraf of Palo Alto for an untitled abstract acrylic; Flora Noel of Palo Alto, lab technician in biochemistry, for her oil "Washoe Valley;" nurse Doris Sandiford of Palo Alto for her lilting color photo "Flying a Kite;" Darrell Tank of Sunnyvale, orderly at Stanford University Hospital, for a pencil drawing "Portrait of a Boy;" fourth-year medical student Anne Osborn for a batik wall hanging trimmed in orange fringe; and substitute nurse Helen Delkos of Palo Alto for "Madonna," a decoupage.

The popular vote went to Ras Donald Bel, III, for his oil "Find the Little Lamb with Two Horns."

Chairman of the show was Phyllis Marrion of Palo Alto, a secretary at Stanford University Hospital. Judges were June Bangham of Palo Alto, Gil Clark of Stanford's Escondido Village, Gordon Holler of Los Altos, Doris Hoover of Palo Alto, and Dr. Robert Kantor of Atherton.

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Mailed May 27, 1970

Editors: Photo enclosed.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

EDITORS: Photos available upon request.

STANFORD -- A new centralized monitoring console is keeping simultaneous watch over eight patients at one time in the cardiac surveillance unit at Stanford University Hospital.

All 28 beds of the unit are equipped with monitoring capabilities. Any eight of the beds can be connected to the main console in the nursing station at one time.

"The installation of this equipment provides us with increased flexibility," according to Dr. Alfred Spivack, director of the coronary care unit at the Hospital. "Patients who need monitoring, particularly in an emergency situation, will no longer have to be moved from regular beds to those with bedside monitoring equipment."

The new console has 16 channels to monitor the electrocardiograms of eight patients plus one additional psysiologic measurement such as the blood pressure. The electrocardiograms are displayed visually on an oscilloscope at the nursing station. An alarm system automatically alerts nurses to any irregularity in the patient's heart beat. When the alarm system is triggered, the console immediately begins a printout on paper of the EKG for study by the doctors.

Another feature of the new equipment is a tape recording system where physicians can record observations and treatment for later review and evaluation.

Funds for the new equipment were donated by a $20,000 gift from the Stanford University Medical Center Auxiliary.

"The new equipment on this unit is a logical extension of the smaller, coronary care unit adjacent to it where patients require more intensive treatment," Dr. Spivack says. "It is also consistent with our philosophy of a graded care system, based on what the patient needs to make a smooth and gradual transition back to normal life."

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Monitoring Console

222

The average patient stay in the Coronary Care Unit is five days. Most have been stricken with a heart attack, heart block, rheumatic heart disease or severe heart failure of other causes, all which can require intensive observation and possible emergency resuscitation. Once a patient's condition has been stabilized, he can be moved to the cardiac surveillance area.

"The fact that a patient is moved from the Coronary Care Unit does not mean that it is the end of his heart problem," Dr. Spivack says. "In the surveillance unit, there is a program of gradual and continuing healing and phasing back into normal activity."

An important feature of the cardiac rehabilitation program is a regimen of exercises designed to prevent loss of a patient's cardiovascular reflexes. The tone of blood vessels is often lost during prolonged bed rest. The exercises are organized and prescribed so that specific muscles are utilized, yet do not require the patient to expend any more energy than he would by simply rolling over in bed.

Nurses play an important role on the cardiac surveillance area. They are instrumental in the rehabilitation and education of both the patient and his family by helping them to understand the nature of the heart disease and to cope with the emotional stresses of the disorder.

Members of the house staff at the Hospital, in conjunction with the Division of Cardiology, provide continuing care on a 24-hour basis in the cardiac surveillance area.

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Mailed May 25, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Stanford University School of Medicine today announced the establishment of an endowed professorship in the Department of Pediatrics in honor of Dr. Harold K. Faber, emeritus professor and head of the department of pediatrics at Stanford for 26 years before his retirement in 1949.

Announcement of the endowed chair was made by Dr. Robert J. Glaser, vice president for medical affairs and dean of the School of Medicine, during dedication ceremonies of the Dr. Harold K. Faber Auditorium at the Stanford Children's Convalescent Hospital in Palo Alto. Dr. Faber served as medical director of the Hospital from 1919 until 1956.

"Dr. Faber's contribution to pediatrics at Stanford, and in a broader sense, to world pediatrics, are without equal," Dr. Glaser said. "The honor implied by an endowed professorship in his name is one which he richly deserves."

Dr. Faber is internationally known for his polio research as well as for his teaching and clinical skills. He is a former president of the American Pediatric Society and received the Society's Howland Medal and Award in 1956 for his extensive contributions to his profession.

After acquiring an A.B. degree (1906) from Harvard and an M.D. degree (1911) from the University of Michigan, Dr. Faber joined the Stanford faculty in 1915 as an assistant professor of pediatrics. At that time, pediatrics was a division of the department of medicine. After 18 months in the Army Medical Corps in 1918-19, he returned to Stanford as an associate professor and head of the division of pediatrics. Dr. Faber was appointed as a Professor of Pediatrics in 1923, and in 1927 succeeded in having Pediatrics made a separate department of the Medical School.

Dr. Faber and his wife reside in San Francisco.

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Mailed May 22, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Transmitted on Business Wire 5/21/70

STANFORD -- A medical education task force, headed by Associate Dean Bernard W. Nelson of Stanford University School of Medicine, today proposed a series of steps through which the number of students from America's minority groups in medical degree programs could be increased from the present 2.8 per cent to 12 per cent by 1975.

The report, released by the Association of American Medical Colleges in Washington, D.C., is an analysis and a series of recommendations made by the task force to an Association committee representing physicians, hospitals, minority groups, and medical colleges.

Dr. John A. D. Cooper, president of the AAMC, said: "This analysis shows how and where we have failed to attract or to keep in the medical education system those minority students who are fully qualified to become physicians. It gives us some new information to help us with the critical problem of choice--how to select wisely from among qualified applicants."

The report sets the following targets for minority student representation in medical school:

Academic Year	#of Minority Studens Entering Medical School	% Minority Students of Total Students
1970 - 71	660	3.9%
1971 - 72	1,000	5.3
1972 - 73	1,200	7.1
1973 - 74	1,400	8.9
1974 - 75	1,600	10.6
1975 - 76	1,800	11.9

Principal conclusions of the report are:

. the most important factors in retention of students during premedical education are the availability of financial aid at the college level and the student's perception if its availability at the medical school level.

. the main barrier today for minority students in attending medical school is the inadequacy of financial aid. Coincident with increasing enrollment of minority students in medical schools, Federal government and other sources of funds have been decreasing.

. counseling should be directed to those efforts which will help the student to fully realize his potential and to gain the confidence needed to pursue a career in medicine.

. existing medical school class size represents the major obstacle for increased production of physicians with the result that many capable students are not permitted to study medicine. Increases in class sizes are needed.

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Based on these conclusions, the task force has recommended a two-part financing program, a short-term solution being a single national organization which would act as a central coordinating body for the multiple sources of financial aid, and as a possible long-term solution, the task force endorsed the concept of an educational opportunity bank.

The latter would provide loans to all qualified medical students to enable them to finance completely their educational costs at the medical school of their choice, repayment to commence when the student enters his professional career, based on an agreed percentage of income.

The task force also recommended that a network of regional centers be established to provide factual and personal information about career opportunities for minority students in the health professions.

Another information source for prospective medical students would result from a recommended expansion of the AAMC Office for Minority Student Affairs.

The report emphasized that this will not be an action program until various institutions make decisions and go to work to make things happen.

"We need action and we will need funds," said Dr. Cooper. "This report is only a blueprint--it tells us how to build. We need more physicians in America and we need them to represent a democratic cross-section of the qualified persons in various parts of our society."

The study was financed by the Alfred P. Sloan Foundation and directed by Dr. Nelson. Working with him were representatives from AAMC's Washington Office, minority groups, and a dozen institutions engaged in education in the health professions. Consultants to the task force were Richard A. Bird and Gilbert M. Rodgers, graduate students in systems engineering at Stanford.

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Mailed May 21, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- A 50-year old man from Atherton became the 24th heart transplant patient today at Stanford University Hospital.

The recipient, Frank McMahon, 1 Lilac Dr., is in satisfactory condition. He received his new heart from an anonymous donor in a 4 1/2 hour operation performed by a team of surgeons headed by Dr. Norman E. Shumway.

McMahon, a retired businessman, has suffered from heart disease for the past four years. He and his wife, Rita, have two children, Judy, 20, and Frank Jr., 22.

In addition to McMahon, Stanford has nine other surviving heart transplant patients, seven of whom have been discharged from the hospital to resume normal lives.

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Mailed May 21, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415; 321-5310

STANFORD -- A retired Locksmith from San Francisco became the 23rd heart transplant patient today at Stanford University Hospital.

The recipient, Irwin Donald Louderback, 49, is in satisfactory condition. He received his new heart from an anonymous donor in a 4 1/2 hour operation performed by a team of surgeons headed by Dr. Norman E. Shumway.

Louderback has been disabled by heart disease since last October. He and his wife, Crystal, live at 2686 22nd Ave. They have no children.

In addition to Louderback, Stanford has eight other surviving heart transplant patients, seven of whom have been discharged from the hospital to resume normal lives.

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Mailed May 19, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

LIVINGSTON, CALIFORNIA -- Stirred into action by the knowledge that the city's only physician will soon be leaving, citizens of this small Merced County community Monday night endorsed a plan that would provide medical services to the people in the area in partnership with the Stanford University School of Medicine.

The plan, developed by a citizens committee representing a cross-section of Livingston's ethnic, social, and economic groups, was described at a meeting attended by 250 persons in Livingston High School Auditorium.

Under the proposal, two doctors would be serving Livingston with 24-hour medical care. Clinic facilities, now owned by Dr. J.J. Wolohan, Livingston's only family physician for more than 25 years, could be leased and operated by the community through a nonprofit corporation.

The physicians--a specialist in internal medicine and a pediatrician--would live in Livingston, and in addition to their clinical duties, will teach medical and nursing students and residents who will commute from Stanford to augment the Clinic staff. The physicians will be faculty members of the Medical School.

Staff appointments at the M.D. level will be made by the Clinic's board of directors from candidates acceptable to the Medical School for full-time faculty appointments. The board, composed of representatives from more than 20 local organizations, will guide Clinic operations and set policy.

The clinic will be self-supporting--it will charge fees for services rendered, according to Keith Winton, a local businessman and member of the committee that developed the proposal.

To help the project get started, Area III of the California Regional Medical Programs will provide funds for the developmental phase of the program. The local board plans to initiate a fund drive in Livingston to raise an additional $25,000 needed, Winton said.

Clinic operations are expected to begin in July, with assistance from Stanford faculty, and students. Dr. Wolohan, presently a resident in psychiatry at St. Mary's Hospital in San Francisco, will continue to commute to Livingston to see patients as long as the community remains without a doctor, according to Winton.

The community will assume responsibility for the Clinic September 1, and a committee will soon begin work on financial and legal aspects of the transition of the health clinic from a private to a community operation by a nonprofit corporation.

Dr. Count Gibson, professor and chairman of the Department of Community and Preventive Medicine, told the audience that the Livingston project will lead "to the kind of partnership that university medical centers have not thought of achieving in the past."

-more-

may 19, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Three Stanford University medical students were named Alumni Scholars during proceedings at Medical Alumni Day Saturday (May 16). Each received a scholarship award of $500.

Dr. Larry Heiges of Lompoc, president of the Stanford Medical Alumni Association, presented the awards to Robert Clark Aber of the fifth-year class; David K. Edwards, III, of the fourth-year class; and John M. Vierling of the third-year class.

They were chosen on the basis of high academic achievement, leadership, excellence of character and "promise of becoming a doctor who will render superior service to his fellow men."

Others who were honored by being chosen as candidates for the awards are: fifth-year students Douglas R. LaBreque and Bobbette K. Ranney; fourth-year students Layton F. Rikkers and Joel D. Ohlsen; and third-year students F. Wells Shoemaker, Jr., and Bruce M. Mermuth. As a recognition award, the candidates each received a copy of the newly published book A Stanford Heritage, by Dr. Gunther W. Nagel, emeritus professor of surgery and director of alumni relations at the School of Medicine.

The Alumni Scholars and their parents' names and addresses are listed below:

CALIFORNIA - Los Angeles: John M. Vierling, Dr. and Mrs. Lester H. Vierling, 439 Catalina Drive

- Van Nuys: David K. Edwards III, Mr. and Mrs. David K. Edwards II, 15235 Lorne Street

PENNSYLVANIA - Easton: Robert Clark Aber, Mr. and Mrs. Donald C. Aber, 32 North 17th Street

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Mailed May 19, 1970

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 451: 321-5310

Stanford's longest surviving heart transplant patient, Robert O. McKee of Palo Alto, died last night at Stanford University Hospital. He was 52.

Death came at 5 p.m. Sunday, May 17. The cause of death is undetermined, pending an autopsy.

Mr. McKee, who was the world's second longest surviving heart transplant, received his new heart on Aug. 31, 1968. For the past 21 months, Mr. McKee had returned to work selling real estate, swimming, golfing, bowling and fishing, none of which he had been able to do in the three years preceding his transplant operation.

Mr. McKee is survived by two sons and a brother.

There are eight other surviving transplant patients at Stanford, seven of whom are discharged from the hospital and are leading normal lives.

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Mailed May 18, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Distribution patterns of blood and air flow in the lungs, and how they influence the efficiency of breathing, will be studied by a Stanford University medical research team under a grant of $193,363 from the John A. Hartford Foundation of New York.

The purpose of the study is to discover how the distribution is normally regulated, and how it is disturbed in patients in acute respiratory distress.

The grant, the third from the Foundation to Stanford in support of research on respiratory problems, was announced today by the Foundation's president Harry B. George, and Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine at Stanford University.

The research will be directed by Dr. Grant Fletcher, associate professor of anesthesia.

"In the last few years we have learned to sustain breathing, in terms of volume of air intake, in patients with respiratory complications," Dr. Fletcher said. "But if the blood is not distributed to the same areas and in the same proportions as the air, the exchange of carbon dioxide and oxygen is inadequate. For instance, investigations in the Premature Research Center at Stanford have shown that in the respiratory distress syndrome in premature infants, abnormal blood flow in the lungs is one of the main contributing factors."

Many patients with lung disease develop severe heart disorders, particularly right-sided heart failure. The reverse is also true--many heart disease patients develop lung diseases, including pulmonary edema, which is accumulation of fluid in the lungs.

Dr. Fletcher's team will investigate the factors in blood and the lungs which combine to cause pulmonary edema, and why edema occurs in some patients and not in others who appear to be in like condition.

Dr. Eugene Robin, who is now at the University of Pittsburgh, will join the research team in July, coming to the University as professor of medicine and physiology. His excellent background in heart and lung diseases will be particularly valuable in the work under the new grant, Dr. Fletcher said.

Under previous grants his team has studied mechanical limitations of breathing due to surgery, chest injuries and other diseases; respiratory distress syndrome in premature infants; effects of drugs and certain metabolic diseases on the brain's respiratory center; and infections that frequently complicate low-level osygenation.

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Mailed May 18, 1970

Hoover Pavilion - Psychiatric unit

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford University Hospital today announced the opening of a new 20-bed psychiatric unit in the Herbert Hoover Pavilion, the hospital's annex on the corner of Palm Drive and El Camino Real.

The opening climaxes an eight-month, $328,000 renovation job of a 6,000 sq. ft. area on the ground floor, formerly housing laundry facilities, and an 8,000 sq. ft. outdoor patio and recreation area.

The new unit, which operates on the concept of an open Therapeutic Community, will free space in the main Medical Center for an additional 15 adult medical and surgical beds, according to Dr. Thomas A. Gonda, director of the hospital.

Dr. George D. Gulevich, assistant professor of psychiatry and director of the Therapeutic Community, said the "unit is designed to create an atmosphere that promotes a sense of community life in a homelike setting."

A lounge area, decorated with comfortable living room type furnishings, is the core of the unit with pleasant sleeping quarters around it.

Kitchen and laundry facilities, interview rooms, and group and occupational therapy areas are other improved features. A nicely landscaped patio area outside the unit provides a site for recreational activities.

"The Therapeutic Community is an open unit where a small group of people help each other learn, change and grow," Dr. Gulevich said. "It is designed, both in governing philosoply and physical facilities, as a small-scale representation of the society from which its members come with similar responsibilities and opportunities. In such a setting, many kinds of therapy can be undertaken and the doctor-patient relationship can be broadened."

The therapy program, Dr. Gulevich added, is short term and designed to help patients resume social living outside the hospital as soon as possible.

The unit was designed by Stone, Marraccini, and Patterson, and work was done by Welch Construction, Inc. of Menlo Park.

Hoover Pavilion, which houses the new psychiatric unit, has served thousands of Peninsulans for four decades. In 1965, it was remodeled by the City of Palo Alto at the cost of $1.3 million and reopened as part of the Palo Alto-Stanford Hospital, then jointly owned by the City and Stanford University. In 1968, the City sold its hospital holdings to the University, and Hoover Pavilion became part of the medical complex renamed Stanford University Medical Center.

Laundry facilities located on the ground floor of Hoover were phased out in Spring, 1968, when the Medical Center joined with other area hospitals and built a cooperative laundry facility in San Carlos.

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Mailed May 15, 1970

EDITORS: Photographs available on request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The executive committee of the Stanford University School of Medicine today issued a statement condemning what it termed as "violent and destructive acts against black people in this country."

The action, taken in the aftermath of two student killings on the campus of Jackson State College, Mississippi, was unprecedented for the 22-member committee which has never spoken out on a political issue as a group.

The committee consists of department chairmen of the School. A resolution passed by the committee read:

"On the basis of news reports it appears that the deaths of two black students and the wounding of 10 more at Jackson State College, Mississippi, last night is only the latest in a long history of violent and destructive acts against black people in this country.

"The white community experienced a little of such tactics in the tragic deaths of four Kent State students last week. However, the Jackson State deaths occurred not in the heat of a confrontation, but in a fusillade pumped into a dormitory. It recalls the massacre at Orangeburg State College, South Carolina, two years ago. We also learn today that the six black residents of Augusta, Georgia, killed two days ago, were all shot in the back.

"It is idle to demand that our country get out of Indochina as long as violent racism flourishes in this country. Therefore, we the members of the executive committee of the Stanford Medical School faculty, unanimously extend our profound sympathy to the black community and call upon the President of the United States and the Attorney General to take necessary steps for the protection of all our citizens and to compel the accountability and responsibility of all our law enforcement agencies."

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Mailed May 15, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- A 62-year old man from Menlo Park became the 22nd heart transplant patient last night at Stanford University Hospital.

The recipient is Eric Wainwright, 445 Oak Grove Ave. He received his new heart from an anonymous donor in a four and 1/2 hour operation performed by a team of surgeons headed by Dr. Edward Stinson. Wainwright is in satisfactory condition.

Wainwright who owns a janitorial service and manages the Monte Claire Apts. has suffered from serious heart disease for the past 8 months. He and his wife, Norah, have two grown children, Rodney who is a student in England, and Mrs. Ann Myers, who lives near Oxford, England, where her husband is stationed with the U.S. Air Force. The Wainwrights immigrated to the U.S. from England five years ago.

In addition to Wainwright, Stanford has eight other transplant patients who have been discharged from the hospital to resume normal lives.

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Mailed May 14, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- More than 450 practicing physicians from the Midpeninsula have added their voice to the growing number of citizens protesting America's involvement in Vietnam, and more particularly the new thrust into Cambodia.

Another 917 signatures "condemning the continuation and expansion of this tragic war" have been obtained from faculty members, students, and staff of the Stanford University Medical Center.

The statements against U.S. involvement in Southeast Asia are being initiated and circulated by the medical communications committee of the Stanford Medical Community for Peace.

Sixty per cent of the 450 signatures came from doctors outside the medical center, according to Dr. Robert E. Greenberg, and Dr. Naomi Remen, members of the medical communications committee.

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FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford University medical students have received the endorsement of the governing board of the Santa Clara County Medical Society for working to present their anti-war sentiment through established political institutions.

The endorsement was in the form of a resolution passed by the council of the Medical Society Monday night. It said:

"The council of the Santa Clara Medical Society endorses the approach of the Stanford medical students and commends them on their commitment to pursue a nonviolent role in having their views presented and in working through the established political institutions to influence changes in this nation's policy."

The resolution praised the students "on being dedicated to interfere in no way with the operation of the Stanford Medical Center nor to compromise patient care."

"We urge others," said the council, "to support their approach since these students represent the previously uncommitted nonviolent majority of medical students who now hope to take and hold leadership from the militants and to pursue a constructive course."

Stanford medical students and faculty have organized the "Stanford Medical Community for Peace" to carry out a "rational dialogue between students and the community and convince the latter of the need for a change in national policy in Southeast Asia."

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Mailed May 12, 1970
Transmitted on Business Wire May 12, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Sen. George McGovern will go on prime time network television tonight to appeal for public support of a nonpartisan amendment that would cut all funds for the Indochinese war by June, the Senator's office announced today in Washington.

Gordon Weil, press secretary to McGovern, said the 30-minute program will be aired at 7:30 p.m. (PDT) on NBC-TV which sold the time to McGovern backers for $70,000. (The program will be on KRON-TV, Channel 4, San Francisco).

Appearing with McGovern will be Senators Mark Hatfield, Harold Hughes, Frank Church, and Charles Goodell.

Among supporters of the McGovern-Hatfield amendment is the Stanford Medical Community for Peace. The group created a special committee to affect a change in national policy by working through established democratic channels. According to Drs. Oleg Jardetzky and David Hogness, committee members, the group has been responsible for more than 3,000 letters mailed from the Palo Alto-Stanford area in favor of the McGovern-Hatfield amendment.

Professor Hogness who has been in close touch with Senator McGovern's office said today that the number of senators now co-sponsoring the amendment has risen from 8 to 21.

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Mailed May 12, 1970

Corrected Copy

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Heart valve disease and its common clinical manifestations will be the topic of a day-long postgraduate symposium Friday, May 15, at Palo Alto Veterans Administration Hospital.

The symposium, open to interested physicians in the community, is sponsored by the Stanford University School of Medicine, Palo Alto VA Hospital, and Area III, California Regional Medical Programs. It will begin at 8:30 a.m.

Topics to be discussed during the meeting include physical signs of heart valve disease, interpretation of the electrocardiogram and other studies, and selection of patients for open heart surgery. During this program each participating physician will examine selected patients and review their laboratory data for discussion in the afternoon session.

Faculty members for the program include Drs. William Angell, assistant professor of surgery; William C. Fowkes, assistant professor of medicine; E. William Hancock, associate professor of medicine; Herbert N. Hultgren, professor of medicine; David Rytand, Arthur L. Bloomfield, professor of medicine; and Bernard Treister, instructor in medicine.

Dr. Richard P. Lewis of Ohio State University Medical School, Columbus, and Dr. James Pfeiffer of Pacific Medical Center, San Francisco, will take part as guest lecturers.

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Mailed May 11, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

Lloyd Beam of Richmond, Calif., died Sunday morning at Stanford University Hospital while undergoing heart transplant surgery. He was 41.

Death came at 12:35 a.m. as a result of lung complications.

Beam, a retired businessman, had suffered from heart disease for the past 3 1/2 years. He is survived by his wife, Jane, and his mother, Mrs. Orua Beam, Sacramento.

Beam was Stanford's 21st heart transplant recipient. Eight other patients who have received new hearts have been discharged from the hospital to resume normal lives.

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Mailed May 10, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A rumor verification center has been established at Stanford University under the sponsorship of the committee on violence of the Department of Psychiatry.

Purpose of the nonpartisan center is to track down rumors throughout the Stanford and Palo Alto area and determine if they are true or not. It is staffed by volunteers representing faculty, staff, and students.

Citizens, who are concerned about a rumor, should call 329-0220 any time, day or night. Incoming calls are logged on a data sheet and then attempts are made to validate, confirm, or negate them through cooperating agencies and field workers, and independent agencies.

The center was established because of the tense situation that has prevailed on the campus during the week, in the hope of preventing future violent incidents caused by false rumors.

Mary M. Griffith 415: 321-5310

STANFORD -- An ad hoc group of minority employees at Stanford University Medical Center today renounced the war in Southeast Asia as hypocrisy and said they "support all efforts" to end it.

The group, called "Minority Employees of the Stanford Medical Center," issued the following statement:

"Be it resolved that because of the racist and imperialistic war in Southeast Asia, and because of the exploitation of the poor and minorities in this country, we renounce the hypocrisy of the government with regard to the aforementioned issues and support all efforts to terminate this hypocrisy."

Stanford medical center faculty, students, and staff have in the past week redirected many of the regular activities of the Medical School to efforts to end the war in Vietnam. This is the first time minority employees have spoken out as a group on the issue..

Minority members make up approximately one-fourth of the Medical Center's 3,000 total employees.

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Mailed May 8, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The concern of the medical community and many segments of society is the resolution of the war in Southeast Asia, a Stanford medical educator said Friday.

"Once that is achieved, it will be possible for us to redirect the resources of the nation to correct the other ills that beset our society," said Dr. Robert J. Glaser, vice-president for medical affairs and dean of the Stanford University School of Medicine.

"Until we decrease the huge committment of our resources to the military, we cannot deal effectively with the health needs of our fellow citizens," he continued. "We cannot provide educational opportunities for all, we cannot revitilize our cities, and we cannot make social justice a meaningful concept for all people."

Dr. Glaser made his remarks at a convocation of about 800 medical students, faculty, and staff at the Medical School courtyard. The convocation was organized by the Stanford Medical Community for Peace.

He said the war was extended precipitously, at a time when "we were led to expect its early termination. We must now find a rational way to bring about a change in national policy.

"We can be encouraged by what has taken place here at the Medical Center. We also gain strength from the efforts of colleagues in other Universities which are making their views known to Congress and the executive branch."

Dr. Glaser said he is pleased by the degree of cooperation among faculty, students, and staff, and the direction of their activities.

"But, he added, "we have certain responsibilities. All segments of our community are agreed that patient care in the Hospital and the Clinics must go forward without interruption, in order to fullfill our obligations to patients.

"Communications between the faculty, staff, and students must be frequent and to be effective must utilize established channels. Of particular importance is the need to provide accurate information. Great caution must be exercised to insure that rumors and misinformation are not spread.

"Working together we have the best opportunity for success in seeking the goal to peace."

During the past week, members of the Stanford medical community organized groups to protest the war and to work to effect its ending. Many classes were cancelled and some were held with small attendance. Medical School activities related to patient care were not affected.

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Mailed May 8, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310
or
Norv Ritchey, U. of O. 503: 342-1411

STANFORD -- Donald Kirsch, head baseball coach at the University of Oregon, died Thursday at the Stanford University Hospital. He was 49.

Mr. Kirsch was found unconscious in the patio area of the Hoover Pavillion at 3:20 p.m. He apparently fell from a second-story window. He died at 4:20 p.m. in the emergency roon.

He had been admitted to the Hospital April 13 for treatment of Parkinson's disease.

The Santa Clara County Coroner's office is investigating the cause of death.

Kirsch, the dean of the University's coaching staff for 23 years, is survived by his wife, Donna, 2463 Lariat Meadow, Eugene, Oregon.

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Transmitted by Phone 7 p.m. 5/7/70

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The faculty senate of the Stanford University School of Medicine passed a resolution at a noon meeting today condemning President Nixon's action as unwise, immoral and harmful.

"The decision of President Nixon on April 30, 1970 to commit American ground combat forces to action on Cambodian territory is deeply exacerbating the distrust of Stanford students and faculty in the U.S. government," the resoltuion read.

It continued: "Therefore, we 1) condemn President Nixon's action as unwise, immoral and harmful; 2) urge the use of every legal means to resist the implementation of this decision; and 3) commit ourselves to pursuing non-violent means of rescinding this decision."

In other action, the faculty senate resolved that "As teachers, physicians and research workers dedicated to the preservation of human life and the amelioration of human suffering, we wish to register our grave concern about the growing evidence of deepening dissension and mounting acts of past violence both on our campus and in and beyond our nation, which are obviously interrelated.

"We deplore the use of violent means to register protest on this campus and deplore the escalation of the war in Indochina recently manifested by the invasion of Combodia. We urge that everyone in the Stanford Medical Community work in a constructive and peaceful manner towards the solution of both our immediate and underlying problems."

The two resolutions of the faculty senate have been disseminated to the representative governing faculty badies of all American medical schools, to the Stanford Medical Community for Peace, the chairman of the Stanford Academis Senate and to all faculty members of the medical school.

The senate action was unprecedented because some senators believe the faculty body should be apolitical. Tuesday the senate met but was unable to agree on an appropriate response to the situation in Cambodia.

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Mailed May 6, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford medical school faculty, staff and students are organizing action groups to persuade community leaders and others of the need for a change in U.S. government policy in Southeast Asia.

The ad hoc group of 350 members Monday night voted to support the general University-wide strike so that classroom activities and other functions of the Medical School could be redirected to this educational effort.

The group, called "Stanford Community for Peace," issued a statement Wednesday morning arguing that its "action is taken out of a profound concern for all humanity, and with the expressed intent not to disrupt health care and necessary research activities of the Stanford Medical Center.

"We want to emphasize to the community that the strike does not mean that the medical school is 'shut down.' Insofar as the University is the rational dialogue between students and faculty, we insist that the University is now more open than ever before."

The group said it is organizing the large number of concerned faculty, staff and students into specific action groups to convince the community of the need to change the government's policy in Southeast Asia.

The group plans to provide speakers, organize panel discussions, "and other activities to present our views in greater detail, and to provoke a hopefully productive discussion and democratic action."

In other developments, members of the Stanford Nursing School faculty and students sent telegrams to local and state representatives at the annual American Nursing Association Convention in Miami, Florida, urging that they support a resolution in opposition to the conflict in Southeast Asia, and the violence that has occurred in past weeks in the United States.

The group is also circulating petitions against the war among nurses of the Stanford and El Camino Hospitals.

Another group of students, faculty and staff has formed a national strike committee to spread the idea of a national general strike through cooperation with labor organizations, teachers and others.

The medical students have set up a "nerve center" in the Medical School building to coordinate their activities, press relations, and publications.

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Mailed May 6, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Doctors must take a serious interest in political and social questions--including the Vietnam war--because their lives are increasingly in danger of becoming "a mere mockery," a noted Stanford University cancer researcher said Monday night.

Speaking before a convocation of 1,000 persons in the Stanford Medical School courtyard, Dr. Henry S. Kaplan cited what he termed "the ultimate irony of the position of the physician today--more people killed in Vietnam in one week than he would hope to cure in a lifetime."

Dr. Kaplan is chairman of the Department of Radiology in the School. In 1969 he received the Atoms for Peace Prize for his contributions to cancer research, including work on Hodgkin's disease, a cancer of the lymphoid tissues.

He reminded his audience that 40 years ago, the five-year survival rate for patients with Hodgkin's disease was 12 per cent. Largely as a consequence of work at Stanford the five-year survival rate today is 73 per cent.

"In another era that would have been the most heartening achievement," Dr. Kaplan commented. 'A man would have been proud of it and feel a sense of accomplishment.

"And yet today I am confronted with the irony that more prople are being killed in Vietnam in a week than I can ever hope to save in a lifetime."

He said that one of the many contributions of pediatricians in recent years was the reduction in infant mortality in this nation and less advanced countries in the world.

"They succeeded in eradicating infant mortality in these nations but population increases have far more wiped out the social gains," he said.

Although pediatricians introduced their treatments because they were humanitarian, they have been criticized by social scientists as "being blunderers and ignorant individuals" tampering with something they did not understand, according to Dr. Kaplan.

"Today the population explosion is upon us," he said. "We as doctors who are concerned about saving lives are increasingly being forced to wonder whether our actions in so doing are not actually anti-social. This is an ironic twist, indeed."

He said that many physicians are facing with an increasing sense of despair the knowledge that in ghettos there are health problems, poor sanitation, malnutrition, and other social conditions.

"These problems are preventing even the most rudimentary application of things we knew about medicine 25 years ago," Dr. Kaplan said.

He added: "These are few of the reasons why I feel a sense of irrelevance-- a sense that we as physicians are not able to contribute through our life's work that which we had hoped to contribute.

-more-

Dr. Kaplan
222 May 5, 1970

"We feel increasingly that our entire lives are being made meaningless by all that is transpiring around us and it is for this reason that physicians, medical students, and staff must take a serious, continuing, and meaningful interest in political and social questions in the world that surrounds us.

"Because without political involvement on our part, our entire lives today are increasingly in danger of becoming a mere mockery."

Dr. Kaplan's talk was preceded by other speakers who condemned the Vietnam war and the government policy to expand the war into Cambodia.

Dr. Robert B. Textor, professor of education and anthropology, who lived in Southeast Asia for several years, said that he "sees no reason for President Nixon's gamble to succeed."

Citing that four years ago, on May 4, he held his first Stanford "teach-in" on Vietnam, Dr. Textor explained; "At that point we thought we could win. There was light at the end of the tunnel. The years went by, the bombs were dropped, and today there is no more hope of winning a military solution than there was then."

He added there is a need for citizens to be reasonably informed on the issues surrounding Vietnam and to make their views known to their congressmen who can deny the military of necessary funds.

Other speakers included Banning Garrett, political science graduate student from Brandeis University, Alan Strain, senior counselor in the office of the Dean of Students, and Dr. Robert Chase, professor and chairman of the Department of Surgery.

The convocation in the Medical School, organized by students to discuss Cambodia and its implications, was peaceful. Later in the evening, an ad hoc group of students, faculty and others passed a resolution to work for a general strike to emphasize their concern over events in Southeast Asia.

In addition, the resolution called for educational efforts to reach the public and government for the purpose of changing U.S. policy in Southeast Asia. The statement said that Medical School activities related to the care of patients or those considered necessary by each individual will not be affected.

Tuesday's classes in the Medical School were held as usual, with 25 per cent attendance.

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Mailed May 5, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith (office: 321-5310
home: 948-4694

STANFORD/A Black who spent 17 years of his life in crime and dope addiction offered some insights on confrontation when he addressed the gathering at Stanford Medical Student Day recently.

Roy Evans, who volunteered himself for rehabilitative treatment four years ago and who is now district coordinator for the Narcotics Information Service in the Los Angeles Department of Community Services, says he does not advise anyone without experience to "confront the Establishment cold bloodedly."

He told his audience: "Don't waste your energies, your ammunition. Try to utilize it where it will do the most good and be the most effective."

Throughout his talk, Evans referred to attitude change as the only effective way to bring about changes in the community.

Evans scored those who "jump up and march all the way down to city hall, and don't accomplish anything.

"Whitey just doesn't play the game. Whitey just sits back and listens. Soon we are all on our way back to Watts talking about 'Boy, didn't I tell'em!'"

"We have the same thing with students," Evans went on. "Breaking out windows, knocking down doors, taking old buildings and in the final analysis we have, in a very small and immature way, flexed our muscles.

"Confrontation, in my opinion, takes experience. There are qualified, experienced people that you can get to sit down with you and help you begin to learn to confront each other first... they can also help you learn how to confront the faculty...and help the administration learn how to confront you," he recommended in a not-too-explicit reference to encounter therapy.

"They are as afraid of you as you are of them," he said. "Where fear exists, we have to be concerned -- (or) it can easily develop into an explosive kind of a situation, where nobody wins."

-more-

Ironically, Evans' remarks on Medical Student Day were coming near the close of one of the most turbulent months in Stanford's history.

Attitude change can come when people do not feel threatened, when people feel they can let their hair down, he said.

He found fault with the basic beliefs he says now form the foundations for attitudes in our society, saying, "most of us today are deeply committed to the symbols of authority, achievement or affluence. This is our basic commitment and yet, intellectually or consciously, we know that these are not the most important things in the world. But how do we operate? This is something that we have to look at -- Now!

"I'm not concerned with trying to convince you about what is happening in the ghetto, about what is being done to poor us, so to speak. I am much more concerned that you look at what is being done to you."

Evans pointed out that our present family system is a "poor and shattering one," based on the quest for food, clothing and shelter. "For me," he said, "That is a false sense of motivation. It is not the basic kind--it is still something that is motivating an individual from outside himself. I am saying that now that we have reached a point where this is no longer a primary concern, we must build motivation from within."

"I am a firm believer, Evans said, "that what you are doing to you is very much related to what you're doing to me, and if you get yourself together, then I don't have to worry about how you are going to treat me."

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Mailed May 1, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary Margaret Griffith 415: 321-5310

STANFORD -- Medical alumni of Stanford University will hold their annual meeting and reunion at the School of Medicine Saturday May 16.

Scientific programs will be held throughout the morning and during part of the afternoon. Dr. Gunther W. Nagel, director of alumni relations for the School, will preside over the morning session "Surgical Correction of Disability."

In the afternoon, president of the Medical Alumni Association Dr. Larry Heiges, Jr. of Lompoc will preside over the Association's short annual meeting.

The afternoon sessions will be held on "Anesthesia, Clinical Physiology and Clinical Pharmacology," and "Anesthesia and Biomedical Engineering," moderated by Drs. John P. Bunker, professor and chairman of the Department of Anesthesia, and J. Weldon Bellville, professor of anesthesia, respectively.

At the end of the afternoon a representative of the medical student body will discuss anti-war protest activities in the Medical School.

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Mailed May 13, 1970

STANFORD UNIVERSITY NEWS SERVICE, STANFORD, CALIFORNIA 94305

FOR INFORMATION CONTACT: Bob Beyers, 321-2300, ext. 2558

FOR IMMEDIATE RELEASE

STANFORD--By majority vote, Stanford trustees have decided to abstain from voting the University's proxies on proposals to expand the General Motors board of directors and to create a shareholders committee for corporate responsibility.

The University owns about 24,000 shares of GM stock. The two proposals were advanced by associates of Ralph Nader.

On all other issues before the May 22 GM shareholders meeting, the Stanford proxy will, in keeping with general practice, be given to GM management.

The trustee action was based on a report and recommendations from an ad hoc committee created by the board last month. The report noted that: "According to past policy the Stanford Board would give to management the proxy covering the University's General Motors stock, including the power to vote on the Project of Corporate Responsibility proposals.

"However, the trustees note the strong Stanford student and faculty views on these proposals, and recognize the sincerity with which they are held. Indeed, trustees individually share the view that our society needs to take more effective steps to protect our environment by assuring both cleaner air and clearer water.

"The proposals present new problems to institutional stockholders. In the urgent press of events at Stanford during the past several weeks, the current ad hoc committee has been unable to investigate and consider adequately the issues involved in these new problems."

Headed by Ernest C. Arbuckle, former Business School dean and chairman of Wells Fargo Bank, the committee included: W. Parmer Fuller, president of the Board of Trustees and vice president of PPG Industries; Fred H. Merrill, chairman of Fireman's Fund American Insurance Company; Prof. G. L. Bach of the Stanford Graduate School of Business, nationally prominent business economist; and Robert Grant, member of the Associated Students Council of Presidents. Bach and Grant are both members of the Trustee Committee on Finance.

In late April, students voting in a campus referendum supported both of the so-called Nader proxy proposals by margins of about 5-to-1. The vote to expand the board of directors was 3,849 to 786 among 10,000 students, while the support for the shareholders committee was 3,967 to 786.

According to The Chronicle of Higher Education, an independent weekly, the University of Pennsylvania has given the chairman of its investment committee "authority and discretion" to vote their 29,000 share proxy for the Nader proposals, but did not bind him to support these measures.

Antioch College, which owns 1,000 shares, is expected to support the proposals. Governing boards which have rejected the proposals include the Universities of California (100,000 shares), Michigan (29,000 shares) and Texas (66,000 shares). Institutions still studying their position include MIT (291,000 shares). Harvard (287,000 shares) and Yale (86,000 shares).

Because of conditions on campus, the Stanford trustee meeting was held in San Francisco this month. About 20 demonstrators supporting the student strike appeared in the hallway outside the board offices. They were met by University Relations Director Lyle Nelson and Controller Kenneth D. Creighton, who indicated the board heard student views through students on its committees but that individual trustees might talk with them after the meeting. Several did so. ####

5/12/70

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

Stanford heart transplant patient Eric Wainwright, 445 Oak Grove Avenue, Menlo Park, died this morning at Stanford University Hospital.

Mr. Wainwright, 62, died at 4:50 a.m. The cause of death is undetermined pending an autopsy.

Mr. Wainwright received a heart transplant on May 13. He is survived by his wife, Norah, and two grown children.

Stanford has 9 other surviving heart transplant patients, 7 of whom have been discharged from the hospital to resume normal lives.

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Telephoned June 29, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- An increase in daily service rates beginning Wednesday, July 1, was announced today by Stanford University Hospital.

The daily rates, approved Monday (June 22) by the hospital board of directors, will be increased $4.50 for ward and $5 for semi-private community medical and surgical patients.

The new basic rates are: ward, $61; semi-private, $66.50; and private, $75.

"The continuing rise in the cost of materials and employee compensation has made an increase in operating revenues necessary," according to Dr. Thomas A. Gonda, director of the hospital. "We are vigorously involved in programs aimed at developing operating and administrative innovations which can help to slow the hospital-cost spiral."

He pointed out that the $5.50 average increase in daily rates announced today is less than the $7.50 average increase necessary last year.

Dr. Gonda said that the hospital is also attempting to reduce the time a patient spends in the hospital, and in some cases this will help offset some of the impact of the rate increase. He said that the pre-admission testing program which began at the hospital last year was initiated as a move to reduce the length of hospitalization. This program enables certain patients to complete their medical tests at the hospital as outpatients before being admitted.

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Mailed June 29, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The School of Medical Technology at Stanford University Hospital last night (June 25) graduated its fourth class of medical technologists.

A full year of training in the clinical laboratory and the classroom has prepared the class of ten for licensure by the State, and for certification by the Registry of the Medical Technologists of the American Society of Clinical Pathologists (ASCP).

The new technologists will work in laboratories in hospitals, clinics, and medical research firms. Their specialized training includes instruction in ten fields, with emphasis on biochemistry, hematology and microbiology.

On July 1, the school will accept a new twelve-member class. Entrants must have a bachelor's degree. Most have majored in biology, chemistry or microbiology.

Dr. Paul L. Wolf is director of the School of Medical Technology, and Miss Lisa von der Muehll is teaching supervisor.

The 1970 graduates are:

Miss Donna Jean Brunni, a 1969 graduate of Washington State University, daughter of Mr. and Mrs. Donald Brunni, Route 6, Box 6336, Bainbridge Island, Washington.

Miss Cynthea Ann Chan, a 1969 graduate of the University of California at Berkeley, daughter of Mr. and Mrs. Sun Chan, 584-46th Avenue, San Francisco, California.

Miss Dee Evans, a 1969 graduate of San Jose State College, daughter of Mrs. Maralyn Evans, 415 South Murphy, Sunnyvale, California.

Mrs. Mary Kathryn French, a 1969 graduate of California State Polytechnic College, wife of Mr. Jim French and daughter of Dr. and Mrs. Laverne Bucy, 115 La Entrada, San Luis Obispo, California.

Miss Carol Glenn, a 1969 graduate of the University of New Mexico, daughter of Mr. and Mrs. Rolland Glenn, 1416 Tomasita St., Albuquerque, New Mexico.

Mrs. Mary Ann Cheung Ho, a 1966 graduate of Dominican College, the wife of Mr. Yuan Ho, 3102 David Avenue, Palo Alto, and daughter of Mr. and Mrs. Philip Cheung, 1125 Balclutha St., Foster City, California.

Miss Lorraine Ishizu, a 1969 graduate of the University of California, Berkeley, the daughter of Mr. and Mrs. Tatsuo Ishizu, 8313 Josard Road, San Gabriel, California.

Mrs. Carolyn Ann Iskra Olds, a 1967 graduate of Humboldt State College, the wife of Mr. DuWayne Olds, 475 - 24th St., Arcata, and the daughter of Mrs. Holly Ann Iskra, 1336 B St., Arcata, California.

Mr. James Thangels, a 1969 graduate of California State College, Hayward, the husband of Mrs. Carol Thangels of Menlo Park, and son of Mr. and Mrs. James Thangels, 70 Amherst, Oakland, California.

Miss Alexa Schindler, a 1969 graduate of the University of California at Davis, the daughter of Mr. and Mrs. Arnold Schindler, 3322 Freeman Rd., Walnut Creek, California.

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Mailed June 26, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Members of organized labor and of the University community will join in an all-day symposium to discuss domestic problems resulting from the war in Indochina this Saturday (June 27) on the campus.

The symposium, which is co-sponsored by the Stanford Medical Community for Peace and the Santa Clara Central Labor Council, begins at 9 a.m. Saturday in the Physics Lecture Hall, Room 100. It is open to the public and there is no registration fee.

Speakers at the morning session will be Harris Martin, assistant professor of Asian studies at San Jose State College, who will speak on "The War in Southeast Asia;" Douglas Korty, research economist at the Pacific Studies Center, on "The Impact of the War on the Economy;" and Einar Mohn, Western director of the Teamsters, whose topic is "The War and Organized Labor."

California Assemblyman John Burton, co-chairman of the State Legislature's joint committee on conversion to a peacetime economy, will also appear at the morning session.

At 11 a.m. Dwight Simpson, professor of political science at San Francisco State College, will moderate a panel discussion on "The University and the War." Panel members will be Alan S. Manne, professor of economics at Stanford; Norm Goodman, student in political science; and Art Carter, secretary-treasurer of the Contra Costa Central Labor Council.

In the afternoon, workshops will focus on the areas of health care services, political strategies and tactics, problems of conversion to a peacetime economy, and a labor/student coalition for a progressive society.

The workshops will be conducted by Dr. Halsted Holman, chairman of the Department of Medicine at Stanford; Sidney Roger, labor commentator for radio station KPFA; Richard Groul, executive secretary of the Alameda Central Labor Council; Leo Stodolsky, physicist at Stanford Linear Accelerator Center; Tim Coburn, graduate student; Les Chilton of Boilermakers, No. 6; William Ferguson, president of the Metal Trades Council; James P. McLoughlin, secretary of the Santa Clara Central Labor Council; and Gary Feldman, medical student.

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Mailed June 23, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

Attention: Science Writers.

STANFORD -- The chemistry of the brain will be the topic of an all-day conference Friday, June 26 at Stanford University School of Medicine.

The symposium, "The Pharmacology and Physiology of Monoamines in the Central Nervous System," will begin at 9 a.m. in Room M104 of the Medical School. It is sponsored by the Department of Neurology at Stanford and Eaton Laboratories of Norwich, N.Y.

"Monoamines are a group of chemical substances which can act as transmitters of information between nerve cells in the brain," according to Dr. William W. Hofmann, a Stanford neurologist and co-chairman of the symposium. "It is only recently that we have begun to identify these individual substances and understand the specific roles they may play in both mental and neurological diseases."

Dr. Oleh Hornykiewicz of the Department of Pharmacology and the Clarke Institute of Psychiatry at the University of Toronto, is chairman of the conference and will be a featured speaker. In 1961 Dr. Hornykiewicz reported that persons suffering from Parkinson's disease had lower amounts of these monoamines, specifically dopamine, in their brains.

"This was the first definite correlation between the disease process and measured amounts of these compounds," Dr. Hofmann says. Subsequently, it was discovered that a new drug, L-Dopa, was broken down by the body into dopamine, thus increasing the deficient supply in the brain and relieving the symptoms of Parkinson's disease in many patients.

Another speaker at the conference will be Dr. Seymour Kety of the Department of Psychiatry at Harvard Medical School. He will discuss the role of monoamines in mental processes.

The meeting at Stanford is the third in a series of conferences sponsored by Eaton Laboratories to extend the knowledge of the role of monoamines, such as the dopamine-Parkinson's disease correlation, to other areas of brain function. Leading neurologist and neuropharmacologists from throughout the nation are expected to attend.

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Mailed June 22, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary Margaret Griffith 415: 321-5310

STANFORD--Eleven graduating medical students at Stanford University School of Medicine have been elected to Alpha Omega Alpha, the national honor medical society.

The new members are Howard D. Arkans, son of Mr. and Mrs. Leonard Arkans, 9120 SW 45th St., Miami, Florida; William H. Clewell, son of Mr. and Mrs. William H. Clewell, 17432 Paine St., Fontana, California; Nancy Lee Johnson Harris, daughter of Mr. and Mrs. Robert L. Johnson, 7 Esquire Ct., Novato, California; Douglas R. LaBrecque, son of Dr. and Mrs. Frederick C. LaBrecque, 132 Columbia Blvd., Waterbury, Connecticut; Keith I. Marton, son of Mr. and Mrs. Lawrence B. Marton, 703 West 3rd Place, Mesa, Arizona; Joe F. Neal, son of Mr. and Mrs. M. Hiram Neal, 1348 Clark Road, Modesto, California; William J. Raskoff, son of Mr. and Mrs. Max L. Raskoff, 6630 Drexel Ave., Los Angeles, California; and Douglas D. Richman, son of Dr. and Mrs. Daniel P. Richman, Darbrook Road, Westport, Connecticut.

Three of the graduating medical students were chosen for the honor society in their fourth year. They are Robert C. Aber, son of Mr. and Mrs. Donald C. Aber, 2 South 11th St., Easton, Pennsylvania; Michael P. Alexander, son of Mr. and Mrs. Joel Alexander, 420 South Blvd., Evanston, Illinois; and Bobbette K. Ranney, daughter of Mr. and Mrs. Robert C. Ranney, Jr., 434 N. Harrison Avenue, Kirkwood, Missouri.

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Mailed June 22, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

EDITORS: Photos available at request.

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD--Six years ago, Mrs. Ruth Bell of Placerville underwent what was then described as an "highly experimental" operation at Stanford University Medical Center. It was a kidney transplant, only the second in the Medical Center's history and significantly different from the first because the donor and recipient were not identical twins.

Today (Friday, June 19), Mrs. Bell, 28, and her mother, Mrs. Wilma Davis, who donated one of her kidneys to her daughter, were honored at a gathering at Stanford and presented with certificates of appreciation for their contributions to the field of organ transplantation.

"Mrs. Bell's operation was important in several aspects," according to Dr. Roy Cohn, professor of surgery and key developer of the kidney transplant program at Stanford. "It definitely proved to us that transplants between non-identical recipient and donor were technically feasible."

"It also provided us with vital information on the phenomena of tissue rejection," Dr. Cohn said. "Mrs. Bell's case was the cornerstone for clinical research and development of the now sophisticated means of detecting the rejection reaction and providing treatment to reverse and control it."

"I should also add that both Mrs. Bell and her mother were excellent and cooperative patients," Dr. Cohn noted. "Without the understanding and willingness of Mrs. Davis to be an organ donor, the transplant would not have been possible."

Just prior to Mrs. Bell's transplant in July, 1964, Stanford researchers reported at the American Medical Association convention that in animals they had found a reliable method to indicate when drugs should be administered to suppress the rejection mechanism. By administering radioactive tracer drugs, the investigators were able to obtain measurements of the transplanted kidney's blood supply. They found a fall in the blood flow to the kidney was the first detectable signal that rejection was taking place.

Mrs. Bell's transplant was the first time the method was used on a human patient. Physicians did detect and successfully treat Mrs. Bell's kidney for rejection and she still takes very small dossages of anti-rejection drugs. Her kidney function has remained stable for the past 4 1/2 years.

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Dr. Samuel L. Kountz, who served as a surgery resident on the transplant team in 1964 and now heads the kidney transplant program at the University of California Medical Center, expressed his appreciation to Mrs. Bell and her mother and also said that Dr. Cohn should be commended for his pioneering work in organ transplantation.

"This case is particularly important because every indication is that certain transplants may be expected to survive indefinitely and will not require retransplantation after three to five years as we thought might be necessary," Dr. Kountz said. "This places kidney transplantation beyond the realm of research, making it a truly therapeutic procedure."

After her transplant operation, Mrs. Bell and her young daughter moved to Placerville in 1966 where she attended American River College for two years. She is presently attending Sacramento State College and has a 3.5 grade point average. She will receive a degree in education next year.

"It is impossible for me to express my gratitude," Mrs. Bell said Friday. "Before the transplant, I had been told my condition was hopeless. Now I've returned to a completely normal life."

"It is rewarding to know that those things which were learned from my operation have been applied in saving the lives of others," she said.

Since Mrs. Bell's operation, almost 100 other kidney transplants have been performed at Stanford University Medical Center.

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Mailed June 19, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- A distinguished surgeon and a noted biochemist have been named as the first occupants of two new endowed chairs at Stanford University School of Medicine.

They are Dr. Roy B. Cohn, Walter Clifford Chidester and Elsa Rooney Chidester Professor of Surgery, and Dr. Paul Berg, Jack, Lulu and Sam Willson Professor of Biochemistry.

"It is especially fitting that the honor associated with an endowed professorship be accorded Dr. Cohn and Dr. Berg," Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, said today. "Both have served the University with distinction and made significant contributions to their respective fields."

Dr. Cohn, a nationally recognized leader in the field of surgery, was the key figure in developing the kidney transplantation program at Stanford. He also innovated many surgical techniques including the original experimental method of closing defective holes in the heart. He joined the faculty in 1938 after serving as a resident at Massachusetts General Hospital for six years and from 1939-41, as a Tata Fellow in cancer research, was co-chief of surgery service at Tata Memorial Hospital in Bombay, India. From 1942-46, Dr. Cohn served with the U.S. Army in the European theater during World War 11. He returned to Stanford following his military service and was named a professor of surgery in 1959.

Dr. Berg, a distinguished biochemist, received the B.S. degree (1948) from Pennsylvania State University and the Ph.D. (1952) from Western Reserve University. From 1952-54 he was a postdoctoral research fellow and a Scholar in Cancer Research of the American Cancer Society at the Institute of Cytophysiology in Copenhagen and at Washington University School of Medicine in St. Louis. After serving on the Washington University faculty for four years, he came to Stanford in 1959. In 1963 he was named California Scientist of the Year by the California Museum of Science and Industry for work concerned with decoding the genetic messages which determine how living cells make proteins.

Dr. Berg was named chairman of the Department of Biochemistry at Stanford last month. His research interest is in the role of viruses in the induction of cancer.

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Two new endowed chairs

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Funds for the Chidester endowed professorship were donated by John Hartman Chidester, the only son of Dr. Walter Clifford Chidester and Elsa Rooney Chidester. Mr. Chidester died in 1968.

Dr. Chidester supervised the construction and activation of Mills Memorial Hospital in San Mateo and until the time of his death was Chief of Staff. Mrs. Chidester, who still resides in the family home in Hillsborough, graduated in 1906 from the Lane Hospital Training School for Nurses conducted by Cooper Medical College, later to become the Stanford University School of Medicine.

The Jack, Lulu and Sam Willson Professorship bears the name of a prominent California family. Alfred John Willson, who was known affectionately as "Jack," came to California from England as a young man. For more than 40 years he was associated with the Hercules Powder Company at Pinole, Calif. Mrs. Willson, the former Lulu Nicholl, was the daughter of John Nicholl, who came to California from New York in the 1850's and was one of the founders of the City of Richmond.

Their son, Sam G. Willson of Oakland, a retired contractor, donated the funds to Stanford.

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Mailed June 16, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Three Palo Altans have been appointed to the Board of Directors of Stanford University Hospital, University President Kenneth S. Pitzer announced today.

They are Conrad F. Gullixson, Mrs. O. Meredith Wilson and Frank H. Roberts.

Another Palo Altan, Kirk Jeffrey, who has served on the Board since 1968, was named president of the Hospital governing body.

Gullixson and Roberts are attorneys, and Mrs. Wilson is the wife of the Director of the Center for Advanced Study in the Behavioral Sciences. Jeffrey is president of the Stanford Bank. Gullixson had previously been on the Board from 1962 to 1968, when he left to serve on the Palo Alto City Council.

Stanford University Board of Trustees appointed the new members to replace three long-time members the Board who are resigning. They are James E. O'Brien of Palo Alto, Mrs. Edward H. Heller of Atherton and John Stern of Palo Alto. The resigning members have been Directors since the early Sixties, when the Hospital was jointly owned by the University and the City of Palo Alto, and all were reappointed in 1968 when the City's portion was bought by the University.

Other officers on the Hospital Board are Dr. Alejandro Zaffaroni of Atherton, who is president of Alza Corporation, as vice-president; and John Santana Jr. of Palo Alto, who is vice-president of Peninsula Creamery, as secretary-treasurer.

Three others continue on the nine-member Board: Robert H. Klein of Portola Valley, John A. Minor of Menlo Park, and Raymond F. Rohrs of Palo Alto.

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Mailed June 16, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Stanford University School of Medicine presented awards to eight graduating students at the annual senior class convocation Sunday evening(JUNE 14).

Diplomas were presented to 60 men and 8 women medical graduates. The School also presented six master's degrees, to four men and two women; and 21 Ph.D's, to eighteen men and three women.

At the convocation, William R. Brody received the Dr. and Mrs. Joseph Fife Surgery Award, given annually to the outstanding student in surgery.

Joe Ford Neal received the Robert H. Alway Book Award. Named in honor of Dr. Alway, dean of the Medical School from 1958 to 1964, the Book Award is given to a student who has "availed himself especially well of the Stanford five-year plan."

David G. Deneau received the L.A. and Marian S. Hopkins Award in Dermatology.

The winner of the Lowell A. Rantz Memorial Award "to the student who has distinguished himself in the field of infectious diseases" was Douglas D. Richman.

The Harold K. Faber Pediatric Award was shared by Howard D. Arkans and Bobbette K. Ranney recognition of outstanding accomplishments in pediatrics and of potential as a contributor to child health. Miss Ranney also received the Janet M. Glasgow Award of Achievement from the American Medical Women's Association.

Douglas R. LaBrecque received the Borden Undergraduate Research Award in Medicine given by the Borden Company Foundation, Inc., to the senior student who has completed the "most meritorious" research during his medical training.

Dr. James B.D. Mark, professor of surgery and acting associate dean for student affairs, presented the awards.

Michael Paul Alexander received the Upjohn Achievement Award, given by the Upjohn Company to the senior exhibiting "outstanding clinical performance."

Patrick Michael Sullivan, representing the class, presented the annual Arthur L. Bloomfield Award for excellence in the teaching of clinical medicine to Dr. Mark G. Perlroth, assistant professor of medicine, cardiology.

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Four Henry J. Kaiser Awards for excellence in teaching were presented--recipients were Drs. Roy H. Maffly, associate professor of medicine; William B. Pratt, assistant professor of pharmacology; Allen B. Barbour, associate professor of clinical medicine and head of the division of ambulatory medicine; and Saul A. Rosenberg, associate professor of medicine and radiology.

The faculty address was delivered by Dr. Norman E. Shumway, professor of surgery and head of the division of cardiovascular surgery. Following his address, Dr. Robert J. Glaser, vice-president for medical affairs and dean of the School of Medicine, administered the Hippocractic Oath and presented the diplomas.

Award winners and their parents' names and addresses are listed below:

CALIFORNIA--	Daly City:	David G. Deneau, Mr. and Mrs. George E. Deneau, 125 Coronado
	Modesto:	Joe F. Neal, Mr. and Mrs. M. Hiram Neal, 1348 Clark Road
	Stockton:	William R. Brody, Dr. and Mrs. Yale Brody 726 Rose Street
CONNECTICUT--	Waterbury:	Douglas R. La Brecque, Dr. and Mrs. Frederick C. LaBrecque 132 Columbia Boulevard
	Westport:	Douglas D. Richman, Dr. and Mrs. Daniel P. Richman Darbrook Road
FLORIDA --	Miami:	Howard D. Arkans, Mr. and Mrs. Leonard Arkans 9120 S.W. 45th Street
ILLINOIS--	Evanston:	Michael P. Alexander, Mr. and Mrs. Joel Alexander 420 South Boulevard
MISSOURI--	Kirkwood:	Bobbette K. Ranney, Mr. and Mrs. Robert C. Ranney, Jr. 434 N. Harrison Avenue

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Mailed June 15, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- Dr. John L. Wilson has been named acting dean of the Stanford University School of Medicine.

The appointment of the 55-year-old surgeon, announced Monday by Stanford University President Kenneth Pitzer, will be effective September 1.

Dr. Wilson will succeed Dr. Robert J. Glaser, vice-president for medical affairs and dean of the medical school, who will leave Stanford at the end of the academic year to become vice-president of the Commonwealth Fund of New York.

The new acting dean joined the Stanford medical faculty in 1968 as a professor of surgery, an associate dean, and director of Area 111, Regional Medical Programs. In his latter capacity he planned the groundwork for cooperative medical programs related to heart disease, cancer and stroke under a grant of $586,000 from the National Institutes of Health.

Prior to coming to Stanford, Dr. Wilson had served as dean of the Faculties of Medical Sciences at the American University of Beirut, Lebanon.

Dr. Wilson was born in Sturgis, Kentucky, and received his M.D. degree from Harvard Medical School in 1939. He is a specialist in thoracic surgery. He has held academic appointments at Stanford medical school (1949-52), Washington University School of Medicine, St. Louis, Mo. (1952-53), and the University of California, San Francisco (1958-60).

In 1955 Dr. Wilson received the Order of Merit of the Republic of Lebanon.

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Mailed June 15, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

On Mondays and Thursdays around noon two casually dressed white-haired men stride into the Stanford University Medical Center.

Barney Brandt and Col. Edward Joseph, U.S. Army (Ret.) of Palo Alto, are coming for a visit with patients.

When Brandt and Colonel Joseph retired several years ago (Brandt from a successful insurance agency business), they did not retire from productivity. They turned their energies to realms where energies are really needed.

One of those realms is the day patient services section of the Stanford University Medical Center Auxiliary. There are three men in the 1,000-member organization.

"I've been a very sick man at various times during my life," Barney says. "I'm not a churchgoer, but I'm grateful for my blessings. Too many people take and never give. If there is something I can do to help out here, I'm glad to do it."

A similar sentiment is voiced by Colonel Joseph, who joined the Auxiliary when his wife became a member four months ago. He admits he is not as experienced as Barney who has worked as a volunteer since 1963. "But I am becoming more useful as I get to know my way around the Medical Center. Obviously, I am here because I wanted to contribute something after my retirement," he says.

So the two men come to the Medical Center to see people, "bringing a breath of fresh air from the outside," and talk about things remote from hospitalization.

Pick up something from the gift shop for the fellow on the third floor. Do an errand at the post office. Relay word about a special need to the people who can fill it. Some afternoons they visit as many as 45 patients. A few remember their names; most just know that the two men volunteers have remembered them.

Then, they are off, bound for other activities. In the following week, Brandt and Colonel Joseph will be back, bringing a special warmth which would be very, very hard to replace.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: photos available upon request.

STANFORD -- Who in a busy hospital can spare time to meet every patient, take him to his room, and then escort him out of the hospital when he is ready to leave?

Who will read books to someone recovering from an eye operation, or entertain half a dozen children in the pediatric ward?

Who can run errands for stationery or curlers--and even set a woman's hair?

Who? No one else but the volunteers.

The Stanford University Medical Center Auxiliary has more than 1,000 members, and each month more than 600 women (not to mention a few men as well) work in the Hospital. They contribute nearly 7,000 hours of work monthly in almost two dozen services. To match that amount of time, the Hospital would need 175 additional full-time employees.

There is no typical volunteer. The Auxiliary counts among its members teen-agers as well as women in their eighties. There are numerous mother-daughter combinations, and at one time there were two families in which grandmother, mother, and daughter were all volunteers. Membership of the Auxiliary even includes a group of airline stewardesses who spend their days off helping patients in the hospital.

"The common denominator all these people share is the desire to help others," says Mrs. Frances C. Boyd of Los Altos Hills, Auxiliary president. "They make that extra effort time and time again."

Perhaps the best measure of the impact of volunteers comes from the patients and their families. You only have to accompany a volunteer on her rounds to begin feeling this impact. Maybe you are a Pink Lady or her 16- to 17-year-old counterpart, a Candy Striper, who is delivering flowers to a patient's room. A woman who cannot sit up because of a cast girdling her midsection finds a willing pair of hands ready to feed her for lunch or dinner.

In another room, a man who has read all the magazines in the ward rejoices finding a book he wanted to read in the Pink Ladies' book cart. Another patient is chauffered on a wheel chair out from the floor to one of the patios of the Medical Center.

Next you go to the playroom. Several children sit next to a flannel board while an Auxiliary member tells fables and illustrates them with figures of the characters. The children's interest lights their faces.

And so you move throughout the Hospital--to an orthopedic ward, where a patient thanks a Pink Lady for bringing him a magazine. "I could have walked to the Gift Shop, but it would have worn me out." Or to the maternity ward where half a dozen mothers have flocked about the shopping cart.

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Being a Hospital volunteer requires physical stamina. Mrs. John Winterburn of Menlo Park, used to wear a pedometer when she first began in Escort Service. On a typical four-hour tour of duty Mrs. Winterburn logged three and a half or four miles. Escort women transport many patients to appointments in departments such as X ray and physical therapy. They also take specimens from nursing stations to laboratories, pick up prescriptions at the Hospital Pharmacy, and take discharged patients to the main entrance when they are ready to leave the Hospital.

From a woman's point of view, one of the most satisfying places to help out at the Center is Pediatrics. The Pink Ladies' two domains are the playrooms in the Hospital and the outpatient clinic where many mothers leave their children during visits.

Volunteers are equally attentive to visitors. They act as guides for public tours, serve coffee in the emergency room, and help friends and relatives during patient visiting hours.

Not all of the work of the volunteers goes on where it is readily visible. Much of it, of necessity, must go on behind the scenes.

Some work is administrative. Scheduling, maintaining address lists, getting replacements--all this consumes time. New members are trained and given orientation in hospital procedures. Another area where training goes on, but with a different purpose in mind, is at the nursing stations. Candy Stripers who have a strong interest in health careers are given a chance to serve as volunteer nursing clerks. Thus they get a closer view of what it is like to work as a professional in a hospital.

Other volunteers contribute in a different way. Mrs. James J. Saitta of Palo Alto, for instance, makes Pinky Puppets. These are hand puppets dressed either in the Auxiliary's pinafore pink, or as white-capped nurses. Pink Ladies give these to children and other patients. They have distributed 10,292 puppets in the past 10 years.

Another behind-the-scenes effort goes on each morning before the Auxiliary's Gift Shop opens. The previous day's receipts must be tallied and so a small group of money counters assembles to get the job done. The Gift Shop, the major source of Auxiliary income, netted $38,000 last year.

The surplus is used for good works in two major areas: contributions for Hospital programs and equipment, and loans for patients, interns and residents.

The Auxiliary recently donated $25,000 to the Hospital to renovate space in its annex, the Hoover Pavilion, for reconstructive surgery. It has also pledged $50,000 more for the project for the next 3 years. Another $20,000 was donated to buy bedside monitoring units for the Coronary Care Unit.

A report just issued to commemorate the Tenth Anniversary of the Stanford Hospital Auxiliary shows that since 1960 the volunteer organization has contributed $205,792 in gifts to the Stanford University Hospital. In addition, volunteers have recorded 731,000 hours of service.

Dr. Thomas A. Gonda, hospital director, says volunteers represent "a tremendous community investment in the Medical Center. They provide the 'personal touch' to the delivery of health care at Stanford."

Much of what volunteers do goes unnoticed except by those involved. A patient is cheered, a lost visitor is guided on her way, and the world goes about its business. The thanks come in helping, and that is the way the volunteers like it.

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Members of the community who wish more information about the opportunities for volunteer service at the Stanford University Medical Center may call 321-1200, Extension 5103, between 9:30 a.m. and 4 p.m. weekdays. Since many of the adult volunteers are on vacation during the summer months, the Auxiliary is especially interested in recruiting young people to serve as Candy Stripers.

Mailed June 15, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

WASHINGTON -- By continuing to reduce expenditures for medical research and education, the federal government is tampering with the health of future generations, a Stanford University medical scientist said Thursday, (JUNE 11).

Dr. Halsted R. Holman, professor and chairman of the department of medicine, said he finds the proposed federal budget in the area of health "very disturbing."

"Medical care of high calibre cannot be achieved without a firm foundation in medical teaching, in an efficient, comprehensive mechanism for the delivery of care and in medical research," he said.

Dr. Holman testified in his capacity as president of the American Society for Clinical Investigation before the House Appropriations subcommittee. The subcommitteee is holding hearings concerning the 1971 budget of the Department of Health, Education, and Welfare.

He said the proposed support of health programs for the coming year is substantially inadequate. Research expenditures are to be cut below the level for 1965 with no correction for inflation. He made these points:

. U.S. medical schools now graduate 9,000 medical students a year. To eradicate the deficit in physicians, the number of annual graduates must be increased to about 15,000. This requires enlarging classes and construction of new medical schools. However, funds for construction of teaching facilities will be further reduced below the 1970 level and no funds are included for construction of research facilities.

. Nearly 12,000 faculty members for medical schools and continuing education programs will be needed by 1975. Yet training programs for these medical teachers will be reduced because of lack of funds.

. Medical schools wish they could attract as many capable young people into medicine as possible. But medical education is costly and beyond the reach of many students. Most students come from upper income families. Only 2.8 per cent of medical students come from minority groups though minorities comprise more than 12 per cent of the population. Nonetheless, student loan and scholarship funds will be reduced to levels below those of 1970, which were already only one-third of the amount needed.

. Under the proposed federal health budget, medical schools will find it increasingly difficult to experiment with programs of delivery of medical care.

Dr. Holman said present amounts devoted to these programs comprise considerably less than one-half of 1 per cent of the gross national product, and are not more than 4 per cent of total health expenditures.

"The programs themselves are not the cause of inflation and curtailing their support will hardly cure inflation," he said. "It will exact a toll in the health of the nation in the years to come.

"Funds for programs of the National Institutes of Health and related agencies are a cornerstone of medical education. There is no alternative source of support," he said.

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Mailed June 10, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

City Editors: Dr. Lederberg is scheduled to deliver his testimony at 10 a.m., Wednesday (June 10) in Room H164, Capitol Building, Washington, D.C.

ADVANCE FOR RELEASE WEDNESDAY, JUNE 10, 1970

WASHINGTON, D.C. -- A Stanford University Nobel Laureate Wednesday proposed formation of a national Genetics Task Force to coordinate genetics research, to identify areas of imminent clinical application, and to set priorities for federal support.

Dr. Joshua Lederberg, professor of genetics, said the task force would consist of an advisory group of experts in genetics or related research with the coordinating panel appointed by the National Institutes of Health from its various institutes and divisions.

Dr. Lederberg made the proposal in testimony before the House Appropriations subcommittee, chaired by Rep. Daniel J. Flood (D-Pennsylvania). He spoke on behalf of the National Cystic Fibrosis Research Foundation.

The noted geneticist told the subcommittee that 15 newborn babies out of every 100 each year can expect at some time in their lives to manifest an inherited disorder. But American medicine today is totally unaware that a genetic disease problem of such dimensions exists and has no coordinated program for dealing with it.

He detailed the functions of the Task Force as follows:

- It would serve as a clearing house for communications concerning research progress in genetics.
- It would identify areas of research of potentially high and imminent pay-off, and provide useful guidance in funding.
- It would work out a model of research strategy for progress in the new biochemical-genetic medicine.

Dr. Lederberg also urged that $10 million in additional funds be appropriated for fiscal 1971 to support genetic research projects. The allocation of funds, over and above the normal NIH budget, would make possible genetics-related research "without penalty to other important areas of health research," he said.

With antibiotics to cure bacterial infections and the promise soon of broad-spectrum drugs against viral infections, the geneticist said a larger and larger proportion of the country's health burden is invested in hereditary diseases.

And, noting that at least 25 per cent of all hospital beds and of all institutional places for the handicapped are occupied by persons suffering some degree of genetic disease, Dr. Lederberg observed:

"Some authorities expect the nation's health burden attributable to genetic diseases to double in the next five years."

He said an increasingly complicated environment--with a growing number of drugs, food additives and environmental pollutants--raises the possibility that some new environmental factors may cause mutations that would result in either new or more genetic diseases, or both.

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Dr. Lederberg predicted that development of genetic therapy will probably have consequences far beyond the range of purely hereditary diseases because many other major health problems--cancer, heart disease, schizophrenia, and many forms of mental retardation--have underlying hereditary causes.

He said up to now there has been little hope for coming to grips with the genetic disease problem because of the immense complexity, lack of appropriate knowledge and medical technology.

But Dr. Lederberg added, "Developments in the fields of molecular biology and biochemical genetics within the past few years and months now, for the first time, give us reason to expect that we shall soon be able to treat and perhaps even cure many of these disorders."

It was four years ago, he said, that scientists deciphered the genetic code, the so-called "Dictionary of language of life," according to which chemical instructions are written in the molecular structure of the genetic material for determining the form and function of all living things.

"Now, however, I can tell you that, quite unexpectedly, scientists at the National Heart and Lung Institute of the National Institutes of Health are hoping soon to apply the knowledge of the code--and particularly, the chemistry that was developed in the course of deciphering it--for the first time to the treatment of human disease, a fatal blood disease of children, called beta thalassemia."

Additional progress, said Dr. Lederberg, has been made in the identification of the hereditary nature of nearly 2,000 human diseases. Understanding of the genetic basis of these diseases is enabling physicians to detect carriers, or probable carriers, of defective genes and to counsel prospective parents on their chances for having defective children.

His major point, Dr. Lederberg told the subcommittee, was that "the grandest predictions made for the fields of molecular biology and biochemical genetics have had a way of being battered by reality in less than the allotted time.

"I can see no reason why this remarkable record cannot be improved upon, even more for the benefit of humanity, if the moment were seized and given guidance by developing a strategy for progress in the new biochemical-genetic medicine."

He pointed out further that the advances made up to now in genetic medicine came about, not by any systematic plan of governmental support for this research, but as a result of the scientists' resourcefulness.

As proof of his assertion he cited that scientists "have been forced to 'bootleg' biochemical-genetic and molecular-biological research under the guise of projects on infectious, chronic, allergic or degenerative diseases, organ transplantation and the like."

Dr. Lederberg remarked: "It is important to realize that, without such bootlegging, we would probably not yet have deciphered the genetic code, if, indeed, we would know for sure, even now, that one existed."

Turning to the question of research fund cutbacks, Dr. Lederberg said they threaten not only to forestall development and delivery of new medical technologies to the sick, but reduce the number of competent men and women who will continue this vital work.

He argued that grant applications for genetics research are scattered diffusely among so many study groups at NIH that there is no direct way of finding out the actual backlog. The backlog, he explained, is made up of grants which have been evaluated by independent experts, deemed deserving of pursuit, and approved, but have not been funded. The NIH-wide backlog of approved but unfunded projects for all medical research has risen lately to approximately 30 to 40 per cent of all approved grants, he said.

"The inability of this system to give an accurate overview of all genetics-related research is significant," Dr. Lederberg said, "because work in this area lacks the continuity that is so necessary for developing a strategy for the most effective planning, funding, and coordination."

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END ADVANCE FOR RELEASE JUNE 10, 1970.
Mailed June 9, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Transmitted on Business Wire, June 3, 1970

Editors: The following is sent in response to a number of local queries concerning Stanford's role in the work leading to the synthesis of a man-made gene by Wisconsin scientists.

STANFORD -- Technology developed by a Stanford University biochemist played a major role in making possible the synthesis of a man-made gene by University of Wisconsin scientists, Dr. Paul Berg, professor and chairman of the department of biochemistry, said Wednesday.

Asked for comment about the synthesis of a man-made gene by the Wisconsin team headed by Nobel Laureate H. Gobind Khorana, Dr. Berg called it "an extraordinary achievement in the field of genetic chemistry. Although a first step, I see the greatest reward from this accomplishment to human welfare in the cure of disease."

Dr. Berg said that man's scientific achievement is always built on the work of others who have pioneered independently in chemical work.

He mentioned specifically Dr. Robert I. Lehman, professor of biochemistry at the Stanford University School of Medicine, and Dr. Charles C. Richardson, now of Harvard University. In 1967 they discovered an enzyme called DNA ligase or "joining enzyme," which provided one of the tools in Professor Khorana's work.

Since a gene consists of some 100 nucleotides or chemical building blocks, it is difficult to synthesize it all at once. Dr. Khorana used the chemical trick of making shorter pieces of the gene of about 10 nucleotides each; then used the DNA ligase to "stitch" them into one segment.

The DNA ligase was also one of the tools used in 1967 by Stanford's Dr. Arthur Kornberg in synthesizing the biologically active genetic material of a simple virus.

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Mailed June 3, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

EDITORS: Photos available on request.

STANFORD -- Stanford University scientists are applying man's most advanced tool, the computer, in heart replacement research.

Dr. Eugene Dong, Jr., assistant professor of cardiovascular surgery, is using a small, general purpose computer to design a prototype control system for an artificial heart and to look for techniques which will pinpoint the first evidence of rejection of a transplanted heart.

In the continued search for sure ways to detect the first hints of rejection, Dr. Dong and his research team are seeking greater efficiency in the care of heart transplant patients, as well as longer lives for them. Dr. Dong has been associated with Dr. Norman E. Shumway in heart replacement research since 1960.

"Many of our heart transplant patients have encountered acute or chronic rejection," says Dr. Dong. In acute rejection, the heart muscle itself is the target of the immunologic process. In chronic rejection, the arteries which serve the heart tissue are clogged and eventually choked off, cutting the heart's own supply of oxygen and nourishment.

"We hope to be able to manage both the recovery period and outpatient surveillance much more effectively," says the 37-year-old researcher. "Drug therapy will be more precise, thereby reducing the incidence of complications of therapy." The complications he is referring to are infections due to weakened immunity.

In the past two and a half years, 25 heart transplant operations have been done at Stanford. Eight of the patients presently survive.

Dr. Dong explains that two factors enabling the intensive search for early detection methods are the availability of data on human patients and the computer's capabilities to handle the data.

"Our primary laboratory tools in the assessment of whether heart muscle or vessels are being damaged are the electrocardiogram, ultrasound and the phonocardiogram," he says. "These give us, respectively, measurements of the electrical activity, the mechanical aspects (rate of motion, chamber size, and wall thickness), and heart sounds.

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"The computer can deal with the huge amounts of data generated by these tools," he says. "Its powers to reduce, standardize and organize the data, calculate rapidly and reproduce experiments exactly are an immense help to us in this work."

Running parallel to the rejection research is the development of a method to control an artificial heart. Artificial hearts, Dr. Dong believes, will not supersede transplanted hearts. Instead, the procedures will go hand-in-hand. "Together they make up a complementary effort to achieve the common goal of treatment for patients with irreversible heart disease," he says.

Inserted in the body and powered by its own source, the artificial heart could maintain a steady lub dub pumping action, but by itself could not respond in exigent situations. For instance, alone it could not speed up when the body had an immediate increased need for blood.

The natural heart's rate is regulated by nerve signals from the brain and chemical changes in the blood. Transplanted human hearts have not reinnervated thus far in the history of transplantation, but are responsive to chemical changes in the blood. An artificial heart by itself would not be able to react to either nerve signals or chemical changes, and so would have to be allied with a mini-mini computer, also to be placed inside the body.

The Stanford scientists are in the very earliest design stage of the tiny control instrument.

"At present, the laboratory computer is helping us just to establish principles which will determine our guidelines," Dr. Dong says. "First we learned all we could about the responses of the natural heart to a specific group of stimuli. Now we are studying the responses of the transplanted heart to the same group of stimuli, because the transplanted heart, in common with the artificial heart, is not controlled by the central nervous system."

The initial control system, Dr. Dong predicts, will simulate the natural heart's regulatory mechanisms. "We will adapt those natural mechanisms we can to the requirements of the artificial heart," he says, "because the natural mechanisms are demonstrably efficient."

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Mailed July 29, 1970.

"The computer can deal with the huge amounts of data generated by these tools," he says. "Its powers to reduce, standardize and organize the data, calculate rapidly and reproduce experiments exactly are an immense help to us in this work."

Running parallel to the rejection research is the development of a method to control an artificial heart. Artificial hearts, Dr. Dong believes, will not supersede transplanted hearts. Instead, the procedures will go hand-in-hand. "Together they make up a complementary effort to achieve the common goal of treatment for patients with irreversible heart disease," he says.

Inserted in the body and powered by its own source, the artificial heart could maintain a steady lub dub pumping action, but by itself could not respond in exigent situations. For instance, alone it could not speed up when the body had an immediate increased need for blood.

The natural heart's rate is regulated by nerve signals from the brain and chemical changes in the blood. Transplanted human hearts have not reinnervated thus far in the history of transplantation, but are responsive to chemical changes in the blood. An artificial heart by itself would not be able to react to either nerve signals or chemical changes, and so would have to be allied with a mini-mini computer, also to be placed inside the body.

The Stanford scientists are in the very earliest design stage of the tiny control instrument.

"At present, the laboratory computer is helping us just to establish principles which will determine our guidelines," Dr. Dong says. "First we learned all we could about the responses of the natural heart to a specific group of stimuli. Now we are studying the responses of the transplanted heart to the same group of stimuli, because the transplanted heart, in common with the artificial heart, is not controlled by the central nervous system."

The initial control system, Dr. Dong predicts, will simulate the natural heart's regulatory mechanisms. "We will adapt those natural mechanisms we can to the requirements of the artificial heart," he says, "because the natural mechanisms are demonstrably efficient."

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Mailed July 29, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The level of lead concentration in air may already be too high in the Bay Area and Los Angeles, a Stanford University pharmacologist warned at State Senate hearings in Sacramento Wednesday (July 29).

Dr. Sumner M. Kalman, professor of pharmacology at Stanford University School of Medicine, testified before the Senate Committee on Health and Welfare in support of a bill by Nicholas Petris (Dem. - 11th District), which calls for phasing out use of leaded gasoline in California.

Dr. Kalman said that estimates of the upper safe level of lead concentration in the air may be too high, and average levels measured in the two state metropolitan areas are approaching the upper limit, causing a hazardous situation.

"Most maximum allowable concentrations for toxic substances in air provide a large safety factor, usually 10-fold or more. If we are currently near the upper limit for a safe concentration of lead in air, we do not have an adequate safety factor," he testified.

When the human body is exposed to higher and higher levels of lead, controls increase the body's level of input and output. But at a certain level, the control mechanism is rendered ineffective by the body's finite capacity to excrete, the pharmacologist explained.

He stressed a wide range of differences in the population in individual responses to levels of exposure and other dangers. He cited subnormal kidney function, and metabolic variances, which can lead to harmful effects to the red blood cells of some individuals. Dr. Kalman estimates the number of people in the United States with inherited metabolic differences at one to two million. "Any insult with certain drugs or chemicals, including lead, would be expected to have adverse effects in red blood cells among these people," he said.

Scientists now have strong evidence that lead reduces the activity of an enzyme involved in the production of red blood cells, as well as damaging existing red cells, he reported.

Dr. Kalman said that he cannot arrive at any "threshold" level of lead exposure below which no metabolic effects are detectable. He noted the variances in the population, and the "extraordinary efficiency of absorption of lead through the respiratory system." In conclusion, he recommended using our power to control the intake of lead by removing it from gasoline.

Dr. Kalman testified on behalf of the Stanford Committee for Environmental Information, a group of medical scientists, ecologists, physicists and engineers, formed to provide analytical reviews of public issues concerning the impact of technology on environment.

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EDITORS: Transmitted on Business Wire.

Mailed July 29, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

THERE'S NOTHING TO IT -- Six-year-old Heide Pirtle of Belmont shows 16-month-old Tyrone Davis of Palo Alto that he need not be frightened of the gaily decorated, "humanized" respirator in the Pediatrics ward of Stanford University Hospital. Heidi received treatments on the machine following open heart surgery. She is the daughter of Mr. and Mrs. LeRoy Pirtle, 104 Alameda. Tyrone is the son of Mr. and Mrs. Clyde Davis, 135 Azalea Drive. Staff members decorated the respirator as part of the Hospital's play therapy program. The latter includes activities designed to allay a child's fears about hospital procedures.

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Mailed July 29, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

EDITORS: Transmitted on Business Wire 7-23-70. Story released simultaneously by the National Cystic Fibrosis Research Foundation, New York.

WASHINGTON, D.C. -- The proposal by the National Cystic Fibrosis Research Foundation for establishment of a national task force in genetics has been adopted by the House of Representatives which Thursday (July 23) voted an appropriation bill providing $10 million for the study group.

The House acted in accordance with a recommendation made on behalf of the foundation last month by Dr. Joshua Lederberg, Nobel Laureate of Stanford University, in testimony before an appropriations subcommittee.

The House bill now requires confirmation by the Senate.

The task force would be composed of leading scientists in genetics research backed up by a coordinating panel representing the 10 national institutes of health and responsible to the overall director of the Institutes.

Dr. Lederberg urged formation of the task force as necessary to meet the growing challenge of the human genetic diseases, some 2,000 of which have come to be recognized in recent years. Relatively little is known regarding most of these maladies which are transmitted from parents to children by abnormalities in the hereditary material of cells, genes and chromosomes.

Cystic fibrosis is one of the most common of genetic diseases occurring once in approximately every 1,000 births. It causes irreversible lung damage and takes a high toll in lives among infants, children and young adults. One person in 20 is believed to carry the gene for cystic fibrosis.

Dr. Lederberg asserted that with the rapid pace of discovery in genetics laboratories, mankind stands on the threshhold of a new era in which hereditary disease, now incurable, may yield to "genetic medicine."

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Mailed July 23, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- The Supersonic Transport Program is one area where available facts, or lack of facts, should be carefully weighed before any decision for further funding is made, a group of Stanford scientists urged today.

In a letter to California senators Alan Cranston and George Murphy and members of the U.S. Senate Subcommittee on Transportation, Dr. John Farquhar, associate professor of medicine and chairman of the Stanford Committee for Environmental Information, urged that the subcommittee consider the following issues:

- The sonic boom represents a hazard to health and property
- There will be a serious airport noise problem
- Air pollution and depletion of the world's fossil fuel reserves will be increased
- The SST will be more dangerous than present commercial aircraft

"Present proposals are to restrict supersonic flight to ocean areas," Dr. Farquhar said. "However, since this will severely limit the marketability and economic success of the plane, it is reasonable to assume that pressure will be brought to bear to allow flight over land.

"Even if limited to the oceans, the booms would cause some problems with shipping, island population and perhaps oceanic life," he said. "On land the booms would cause widespread damage to structures and would very likely have important deleterious effects on human health."

He pointed out that because of these problems such countries as Britain, Canada, the Netherlands, West Germany, Norway, Sweden and Switzerland have banned or are considering banning supersonic overflights.

In regard to serious airport noise problems caused by the SST, Dr. Farquhar said the greatest concern is the anticipated greater lateral spread of noise on takeoff than is the case with present subsonic jets. "Communities in the vicinity of airports would therefore be exposed to increased amounts of noise despite growing scientific evidence for possible harm to human health that may result from noise levels of a lesser degree," he pointed out.

"The SST consumes enormous quantities of fuel, about 2.5 times as much per passenger mile as the jumbo jets at flight altitudes," Dr. Farquhar noted. "During takeoff about one ton of fuel will be consumed per minute. Switching to SST would therefore accelerate depletion of the world's fossil fuel reserves and increase air pollution."

"Air pollution in the vicinity of airports is an increasing problem and would be measurably worsened by the SST's outputs of nitrogen oxides, carbon monoxide, particular matter, unburned hydrocarbons and water vapor. The high fuel consumption at high altitude means that large amounts of water vapor and other combustion products will be exhausted into the very thin, cold upper atmosphere," Dr. Farquhar said.

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"The meterological research done on this issue is clearly inadequate, particularly in the colder areas of the upper stratosphere," he stresses. "Many unknowns exist. For example, we believe that excessive cloud formation and changes in the earth's temperature could ensue if SST programs succeed in their anticipated frequency of flights."

In the letter to the subcommittee, Dr. Farquhar pointed out that the SST will be more dangerous in many respects than present commercial aircraft: 1) Loss of cabin pressure in lower altitude aircraft is serious but can be compensated for with oxygen masks; in the SST such loss of pressure would be catastrophic, 2) Inability to land at destination may be a major problem because the high fuel consumption permits only a very limited holding time, 3) SST landing and takeoff speeds are high and this subjects other aircraft to the hazards of wake turbulence and to differences in aircraft speeds within airport control zones, 4) Radiation exposure per aircraft mile would be greater than in present jets and the potential hazard of this needs further assessment.

An operational SST would be an extraordinary technological development requiring innovations greater than ever taken before in commercial aircraft," Dr. Farquhar said. "Comparable innovations in military aircraft are often accompanied by enormous cost overruns, failure to meet specifications and high accident rates in initial stages."

"Our committee was set up to disseminate information on environmental problems in the belief that public officials and the public will take appropriate actions on such matters when they know the facts," Dr. Farquhar said. "We feel that the SST program is one area where the available facts, or lack of facts, should be carefully weighed before any decision for further funding is made.

"We hope you will find out view of help in your decision as we believe the SST an important example of priority setting in allocation of our national resources," he concluded.

The Stanford Committee for Environmental Information is a group of medical scientists, ecologists, physicists and engineers. It was formed to provide analytical reviews of public issues concerning the impact of technology on our environment.

Vice chairman of the Committee is H. Russell Hulett, Ph.D., research associate, department of genetics.

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Mailed July 21, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

FILE COPY

STANFORD -- Stanford University School of Medicine has received a $243,000 grant from the National Institutes of Health for clinical research in heart transplantation.

The grant is the largest award of its kind in the area of heart transplant research, according to NIH officials.

"While clinical research in this field has been conducted at Stanford during the past two years, it was sustained on a limited basis from a few sources," according to Dr. Eugene Dong, Jr., assistant professor of surgery and principle investigator for the new research grant. "This federal funding which is scheduled to be renewed for two additional years will enable us to implement a longer-term, comprehensive study.

"The primary goal of our program will be a multi-discipline assessment of the therapeutic value of heart transplantation for humans," says Dr. Dong. "It will be conducted with the cooperation of a limited group of patients with advanced, irreparable heart disease."

Specific areas to be studied include:

- those types of cardiac patients who might benefit from transplantation;
- the role of tissue matching and its significance in long-term survival;
- early and late detection of cardiac rejection;
- immunosuppressive therapy and its complications;
- the characterization, management and prevention of infectious complications.

"Rejection remains a critical problem in heart transplantation," the surgeon says. "Patient survival is dependent on the early detection and treatment of this phenomena. — non !!

"Our experience to date has provided us with increasingly sophisticated means of detecting rejection episodes," he says. "We also have evidence indicating that those episodes treated earlier are reversed more easily during shorter periods of therapy and require smaller total amounts of drugs.

"Additional clinical experience is needed to confirm these important points," Dr. Dong says.

"Another goal of our program is to study important biological and physiological problems in heart transplantation," the surgeon notes. "We need increased understanding of how the human cardiovascular system is controlled and of the functional capacity of the transplanted heart.

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"Sociological aspects of this procedure will also be studied," according to Dr. Dong. "Heart transplantation at Stanford has reached the stage where survival of the patient is not the only consideration. We plan to document that this procedure can return a person crippled by heart disease to a normal and productive life.

"This extensive project will also provide experience, both in research and patient care, to a diverse group of physicians in training at Stanford," Dr. Dong notes.

Co-investigator with Dr. Dong in the research will be Dr. Norman E. Shumway, professor and head of the division of cardiovascular surgery at Stanford and a pioneer in the field of heart transplantation.

In 1959, Dr. Shumway and a colleague, Dr. Richard Lower, now at the Medical College of Virginia, announced perfection of the surgical technique developed in animal research which is the basic technique used in human heart transplantation today. The succeeding nine years were spent by Dr. Dong and Dr. Shumway studying the immunologic problem of rejection and how to recognize and treat it.

The first human heart transplant at Stanford was performed in January, 1968. Since that time a total of 25 persons have received new hearts at Stanford. Eight of the patients survive today, seven of whom have been discharged from the hospital to resume normal lives. Four of the ten received their new hearts over a year ago with the longest survivor having lived 21 months to date.

"Stanford, by history, is committed to the study of this procedure and all its ramifications," Dr. Dong says. "Our experience thus far indicates that heart transplantation does have therapeutic value for certain patients, but that there are many unsolved and unexplored problems."

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Mailed July 13, 1970.

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Mailed July 13, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Heart Transplant Deaths #23 and 24

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

Two heart transplant patients died over the weekend at Stanford University Hospital.

They were Francis J. McMahon, 50, 1 Lilac Drive, Atherton, and Irwin Donald Louderback, 49, 2686 - 22nd Avenue, San Francisco.

Mr. McMahon, who received a new heart May 21, died at 7 p.m. Saturday. He is survived by his wife, Rita and two children, Judy, 20, and Francis Jr., 22.

Mr. Louderback, who received his new heart May 19, died at 2:25 a.m. Sunday. He is survived by his wife, Crystal.

Causes of death in both patients are undetermined pending an autopsy.

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Telephoned locally July 13, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

#25 July 4, 1970

FILE COPY

FOR FURTHER INFORMATION CONTACT: Jane Duff 415: 321-5310

STANFORD -- A retired major in the U.S. Air Force is reported in satisfactory condition today following a heart transplant operation Saturday night at Stanford University Hospital.

The recipient is Carlyle Townswick, 48. He received his new heart from an anonymous donor in a 4-1/2 hour operation performed by a team of surgeons headed by Dr. Norman E. Shumway.

Townswick and his wife, Margaret, live at 361 North West Street in Vacaville. They have two children, Carlynn, 15, and Robert, 22. Townswick, who retired from the Air Force in 1960, has suffered from heart disease for the past 8 years. He worked at the California Medical Facility in Vacaville until ill health forced him to quit in 1965.

In addition to Townswick, Stanford has nine other surviving heart transplant patients, seven of whom have been discharged from the hospital to resume normal lives.

Townswick is the 25th heart transplant patient at Stanford.

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July 6, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Dr. Avram Goldstein of Stanford University School of Medicine will appear in an interview on NBC television's show "First Tuesday" tomorrow night (July 7) at 9 p.m.

The show reports on the use of the drug methadone to treat heroin addiction, and Dr. Goldstein, professor and chairman of the Department of Pharmacology, describes a methadone treatment program currently being conducted in Santa Clara County.

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Mailed July 6, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305
FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The Scottish Rite Institute for Childhood Aphasia, an internationally known center for training and treatment of children with speech disorders, has been moved to a new home.

The Institute has been relocated to a recently reconstructed building on the grounds of the Children's Hospital at Stanford (formerly known as Stanford Children's Convalescent Hospital).

The move will give the Institute the needed space to expand its training, treatment, and research programs, according to Dr. Jon Eisenson, the Institute's director.

A part of the Stanford University School of Medicine, the Institute has been in operation for nearly nine years. For the past three years it was located in rented space at 1691 El Camino Real, Palo Alto.

The new building constitutes two interconnected prefabricated modules of about 4,000 square feet. They house the Institute's offices, observation rooms, and special equipment used to train aphasic children to perceive and comprehend speech and to learn to speak.

Aphasia is a disorder which impairs a child's ability in language functioning. This includes spoken as well as written language. There are thousands of children in the U.S. with aphasic language disorders.

The Institute serves as a referral center for patients from the San Francisco Bay Area, other states, as well as from foreign countries. As a unit of the Hearing and Speech Sciences Section of Stanford's Otolaryngology Division, the Institute treats severe cases of aphasia, does research to develop new techniques, and trains personnel to understand and work with the many manifestations and problems presented by aphasic children. Another of its functions is to counsel parents since family emotional problems are often bound up with the basic illness.

Treatment consists initially of teaching aphasic youngsters to appreciate the nature of symbols, particularly the symbols of the language code. This may be done by training children to match objects or pictures with written words, and to make them alert and eager to respond to instruction. Once some means of communication has been established with a child, clinicians launch into the long and arduous job of teaching him to discriminate between speech sounds and combinations of sounds, and eventually to speak and understand his native language.

Dr. Eisenson, who is also professor in hearing and speech science, directs the program, augmented by a staff including a pediatric neurologist, a psychologist and speech and hearing specialists. The research staff includes a linguist and a psycholinguist. The work of the Institute is supported by grants from the California Scottish Rite Foundation, and the National Institute of Neurological Diseases and Stroke.

Dr. Eisenson said the Institute was relocated "because our clinical and research work and the developing interests of the Children's Hospital are interrelated." He said he looks forward to increased cooperation between the Medical School, the Children's Hospital, and the Children's Health Council, Inc. Both of the latter are independent institutions associated with the Medical School and located on Stanford land near the Stanford University Medical Center.

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In describing the research at the Institute, Dr. Eisenson said that all evidence needed to explain the severe delay of speech in aphasic children is unfortunately not yet available.

"What evidence we do have strongly suggests that aphasic children are lacking in the basic capacities to receive and decode speech--therefore they cannot make the necessary integrations for normal speech development," he said.

Dr. Eisenson cited children treated at the Institute at age five, who were found to have speech processing capacities of two-year-olds.

But the same children could respond to nonspeech sounds--music, noise, and animal sounds--in a normal way.

This observation, in Dr. Eisenson's opinion, supports a speculation that the left and the right hemispheres of the human brain are functionally different in regard to the kinds of sounds each processes.

"Scientists have known for a long time that the left part of the human brain is for talking and for listening," Dr. Eisenson explained. "But recent findings reported by the Haskins Laboratory in New York have shown that perception of nonspeech sounds such as musical tones and tonal patterns may depend more on the right hemisphere than it does on the left part of the brain."

This new evidence is particularly relevant for aphasic children whose perception of things appears to exclude speech, he said.

Noting that, although it is often diagnosed as mental retardation or deafness, aphasia usually implies no intellectual impairment. Dr. Eisenson said that if they are diagnosed sufficiently early, and the proper procedures and training initiated, aphasic children can often enter public schools as normal children at age six. Of the aphasic youngsters seen at the Institute, only one-third of them have confirmed brain damage. Almost all of them, however, do have perceptual disturbances for speech.

"Another thing we have found," he said, "is that emotional reactions of aphasic children seem to result from their aphasia--their inability to communicate--rather than being the cause of it, as was thought."

"Perhaps aphasic children are not prewired as well as they should be to integrate what they need, to be proficient receivers and senders of sound signals," Dr. Eisenson said. "They may be slower in their central nervous system maturation than our normal speakers or our even mentally subnormal speakers. They may develop perceptual defenses because of demands made on their system which are beyond their capabilities at the time they are made."

The Institute's new headquarters was designed by the resident architect's office of the Medical School, and Design Facilities Corporation of Newark, California. Total cost of the project was approximately $80,000.

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Mailed August 27, 1970.

EDITORS: Pictures available on request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

EDITORS: Story transmitted on Business Wire 8/26/70. Dr. Nair will not be available at Stanford for interviews. He had to leave for Chicago where he can be reached. Phone 321: 791-3913. His report was prepared for delivery at the meeting of the Am. Soc. for Pharmacology and Experimental Therapeutics at Stanford.

(ADVANCE) FOR PM RELEASE THURSDAY, AUGUST 27, 1970.

STANFORD -- LSD fed to pregnant rats has caused biochemical defects in their offspring, a Chicago Medical School pharmacologist reported Thursday (Aug. 27).

The scientist, Dr. Velayudhan Nair, said that he observed no gross malformations or chromosomal damage in the offspring of rats exposed to LSD during pregnancy as has been reported by other investigators.

"However, most important and sinister are the subtle impairments in the development of biochemical systems in brain and liver noted in these animals," Dr. Nair continued.

The most significant damage appeared to be the suppression of the essential brain chemical, serotonin, he said. Another effect was LSD's apparent inhibitory effect on the development of liver enzymes which are responsible for neutralizing poisons before they take effect.

LSD's effect on serotonin in the brains of baby rats appears to be a significant finding, Dr. Nair said, because of the chemical's association with behavior disorders. These include sleep abnormalities and hypersexuality.

(NOTE: Several studies by neurophysiologists in recent years, including Stanford's Dr. William Dement, have shown that depletion of serotonin in animals has led to bizarre behavior.)

In another study, Dr. Nair fed chlorpromazine, an antipsychotic drug, to pregnant rats. Although this drug is chemically different and is known to block LSD's effectiveness when given in combined doses, it produced similar biochemical defects in the brain and liver of rat offspring.

Dr. Nair cautioned that one could draw no conclusions from the animal studies that could be applicable to humans.

"Functional implications of these findings related to such factors as behavior, drug action, and toxicity remain to be studied," he commented.

Dr. Nair presented his findings at the fall meeting of the American Society for Pharmacology and Experimental Therapeutics at Stanford University. He is director of therapeutic research at Michael Reese Hospital and Psychiatric Institute and professor of pharmacology at the Chicago Medical School. Co-authors of the report are Drs. David Bau, and Steven Siegel. Their work was supported by the State of Illinois Department of Mental Health.

The Chicago research team, according to Dr. Nair, has begun a study of the effects of LSD and other drugs on the biochemical and functional development of offspring in a variety of animal species.

"Much of the previous work in this area has been concerned with obvious birth defects," Dr. Nair said. "Unlike the gross abnormalities and malformations, biochemical changes are not readily evident and may be revealed only by specific tests. Biochemical or molecular defects may remain dormant and manifest themselves later in life as a functional impairment, a behavioral disorder, or abnormal reaction to drugs."

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END ADVANCE FOR RELEASE THURSDAY, AUGUST 27.

Mailed August 27, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

EDITORS: Transmitted on Business Wire 8/25/70.

STANFORD -- Aspirin, used in conjunction with another anti-inflammatory drug in the treatment of arthritis, could reduce the effectiveness of that drug, two pharmacologists reported here Tuesday.

The scientists said they induced arthritis in rats, and then treated it with Indicin, a drug commonly used in arthritis treatment.

Next, the researchers treated the arthritic rats with Indicin combined with aspirin.

Even though the aspirin dosage was less than the amount needed to have a therapeutic value, it blocked the effect of the anti-inflammatory drug, the researchers said.

The report was presented by Drs. C. G. Van Arman and George W. Nuss of the Merck Institute for Therapeutic Research, West Point, Va. They spoke at the meeting of the American Society for Pharmacology and Experimental Therapeutics at Stanford University.

The researchers pointed out the phenomenon observed in the rats may not be true in man. "These findings are merely a warning," they said.

"But the implications of the entire study is that one should be extremely wary in clinical practice to suspect unfavorable interactions among drugs. One should take nothing for granted," Dr. Van Arman added.

He noted that in addition to aspirin, other drugs which are useful when used alone, have been known to interact in a similar fashion.

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Mailed August 25, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

EDITORS: Transmitted on Business Wire 8/24/70.

STANFORD -- Pharmacologists who want to do something about drug abuse must begin by teaching pharmacology to college undergraduates.

This is the opinion of Dr. Lloyd J. Roth, chairman of the Department of Pharmacology of the University of Chicago.

"We have been buried in our labs too long, doing research and teaching medical students," Dr. Roth commented.

"But college students are as much entitled to know about pharmacology principles as they are about learning chemistry and Russian."

The Chicago scientist said pharmacologists have been "derelict" in not teaching pharmacology as part of the undergraduate curriculum. Pharmacology, one of the basic biomedical sciences, is concerned with the effects of chemicals in the living organisms.

"You have to teach the fundamental principles of pharmacology before you talk to students about drug addiction," Dr. Roth said.

In addition to college undergraduates, Dr. Roth included high school teachers among those who should take pharmacology. He said he did not expect his idea to solve immediately the present drug crisis in the U.S., but it should be a part of any long-range solution to the problems.

Dr. Roth was in the audience when he made his remarks (Sunday night Aug. 23) at the opening of the fall meeting of the American Society for Pharmacology and Experimental Therapeutics (ASPET) at Stanford University. The session, sponsored by ASPET's public affairs committee, examined the role of the pharmacologist in drug abuse education.

Committee chairman Dr. Keith Killam of the University of California at Davis, noted the vast increase of the use of drugs in recent years has made the pharmacologist's role of central importance to society.

But the pharmacologist today has little or nothing to say about drug education, he argued. The drug education role is mainly played by television, public relations men, and Madison Avenue. These make no secret of their intention "to teach us how to live and seek a better life through chemistry."

School children get their education from street people, police departments, and former drug addicts.

"This is propaganda, not education," Dr. Killam said. "Pharmacologists have to be concerned with public education whether it has to do with cortisone, diuretics, or pot."

Another pharmacologist, Dr. Lowell M. Greenbaum of Columbia University, said his profession is woefully unprepared to deal with the drug abuse problem. We do not know why young people take drugs, and we are unprepared to deal with the reactions of the community, he said.

Dr. Killam said ASPET's public affairs committee plans to contact leading pharmacologists throughout the U.S. to continue discussions about the direction the Society should take in the area of public education.

One participant suggested the Society also look into the problem of physicians who prescribe drugs. "Over 50 per cent of them have had very little or no pharmacological training," he noted.

Mailed August 24, 1970.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

CITY EDITORS AND SCIENCE WRITERS

More than 1,500 pharmacologists are expected to attend the Fall meeting of the American Society for Pharmacology and Experimental Therapeutics at Stanford University August 23 through 27. Nearly 600 scientific papers, ranging from studies of alcohol to toxins, will be presented at the meeting, sponsored by the Department of Pharmacology of the Stanford University School of Medicine.

"Pharmacologists and Drug Abuse Education," is the first topic on the agenda. The meeting will be Sunday, August 23 at 8 p.m. in Tresidder Memorial Union, Room 270, followed by a teaching institute on "Pharmacology in the Changing Medical Curriculum," Monday, August 24 at 9 a.m. at Dinkelspiel Auditorium.

"Experimental Approaches to the Treatment of Alcoholism," will be discussed at a special workshop Tuesday, August 25 at 1:30 p.m. in the McCullough Building, Room 127; and a session titled, "Marijuana," will examine various pharmacological actions of the drug in humans and animals. The meeting will be Wednesday, August 26 at 9 a.m. in the Physical Sciences Building, Room 370.

In addition to these sessions, there will be two symposia of general interest in Dinkelspiel Auditorium: "The Pharmacology of Sleep," Thursday, August 27 at 9 a.m.; and "Developmental Pharmacology," Wednesday, August 26 at 9 a.m. The latter includes papers dealing with the general area of the effects of drugs on developing organisms.

The Press Office for the meeting will be located in Tresidder Memorial Union, Room 205 (ASSU Office). Programs and abstracts of all the scientific papers will be available at the Press Office.

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Mailed August 18, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--"It was going to be a big summer for us," says April Saas, "our first baby and our first house."

But the summer had barely begun when April and her architect husband Fred Saas of Menlo Park, were hit head-on by a speeding car, in an auto crash June 6 on Foothill Road. When they came to, they were in Stanford University Hospital with numerous broken bones and some misgivings about the welfare of their unborn child.

Suddenly for the young couple, the summer panorama had dwindled to the confines of a long season in the hospital. The clouds didn't break until the birth July 23 of a healthy baby, Shawnee Elizabeth.

"We are sorry she had to find us in such adverse conditions," April says. The new mother seemed to be commenting about the girl she and her husband had been hoping and waiting for, as well as the actual baby girl who arrived. April hadn't even had a chance to select the baby's layette. But the couple had completed a Palo Alto High School evening course on childbirth and child care.

Fred Saas insisted on being present for the delivery, and because the traction apparatus associated with his bed is too extensive to permit wheeling him into the delivery room, a labor room at the hospital was specially equipped for the procedure. The unique arrangements which were made have occasioned some kidding for Fred from his Stanford physicians. One told Fred that he had helped the hospital to set a new standard of humane treatment.

The husband is welcome during delivery in many cases, but it was most ususual for the husband to be a patient.

Now April and Fred are sharing a room on the maternity floor of Stanford University Hospital. Looking out across the treetops they can see the cupola of the old Stanford Barn. Inside, the room is filled with flowers, baby presents, nurses and a steady stream of callers.

-more-

April's parents are on a prolonged visit to the West Coast from Pittsburgh, Fred is starting to see his architectural clients again, and Shawnee puts in intermittent appearances for love and nourishment.

Sometimes the crush of visitors in the hospital room seems almost too much, but April is in sympathy with Fred's lively interest in his business.

She spoke about the house they had just begun construction on for themselves: "When my husband asked me what I wanted, I told him simply that it had to be romantic," she says, "with window seats, stairways, fireplaces and views."

Fred designed it along the New England barn idea, with brick for the first story, wood on top. Mainly, it's going to be a house that's fun for people, he says.

He is a graduate of Cooper Union School of architecture in New York City, worked on the Stanford University staff for two years before going into business for himself in Palo Alto in 1968. While at Stanford, he was involved in design projects for the University Press, Stanford Coffeehouse, and the Placement Service.

His wife attended Smith College and graduated from Sarah Lawrence, where she majored in choreography. They met after both had come to live in San Francisco.

Both are vivacious, and their love of activity makes the long confinement difficult. But their friends and many people they didn't even know have helped to make it more comfortable. They are deeply touched by the kindness people have shown them. "It makes us very humble," they say.

Shawnee's antics amuse them, and life is taking on some aspects of normality again, although it will be several weeks to months until dismissal from the hospital. April says most of all she wants to get out into the sun.

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Mailed August 5, 1970

EDITORS: Photo available on request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

(ADVANCE) FOR PM RELEASE MONDAY, AUGUST 3, 1970

ATLANTA, GEORGIA -- Infections, which have caused formidable problems in all organ transplant patients in the past, can now be successfully treated and controlled, a Stanford University specialist in infectious diseases said Monday.

Successful treatment of postoperative infections has significantly contributed to the survival of heart transplant patients at Stanford University Medical Center, said Dr. Jack S. Remington.

Speaking at the International Conference on Hospital Infections at the National Communicable Disease Center in Atlanta, he reviewed the past experience of various medical teams in kidney, liver, and lung transplantation, and reported what has been learned recently about heart transplant infections.

Twenty-five heart transplant operations have been performed at the Stanford University Medical Center since 1968. Eight patients are alive and live near-normal lives. Dr. Remington and his colleagues studied the first 20 patients and reported these findings:

- Of the 20 patients, 12 died. In five of them infection was considered to have directly contributed to death. There has been a 35 per cent survival of one year for the patients studied--the longest survival being 20 months.
- Six of the patients who lived beyond six months suffered a total of 16 separate infections from bacterial, viral, protozoal, and fungal organisms. Their infections were treated successfully with antibiotics.
- A total of 63 per cent of the infections in the heart transplant patients involved the lungs.

Dr. Remington emphasized that "successful diagnosis and treatment of infection contributed significantly to the survival rate of 35 per cent in our first heart transplant cases."

He attributed the success to careful studies which made possible the recognizing of infection early, and to the use of new methods to detect the specific infectious organisms in the patients.

They have proven life-saving in a number of instances, he said.

Dr. Remington is an associate professor of medicine at the Stanford University School of Medicine, and chief of Allergy and Infectious Diseases at the Palo Alto Medical Research Foundation. His associates are Drs. Edward Stinson, Charles Bieber, and Norman E. Shumway. Their study, the first of its kind on heart transplant infections, was supported by the National Institutes of Health, and the John A. Hartford Foundation, Inc. of New York.

-more-

"Infection among heart transplant patients is common," Dr. Remington explained. "It seems to stem mainly from the powerful drugs which must be given to prevent rejection of the new heart."

These drugs are known to suppress the body's ability to fight disease organisms. Dr. Remington noted that infection in all but one of the patients occurred four or more weeks after the heart transplant operation, and after each of the patients had been given a high dose of anti-rejection drugs.

Although infections may be related to other causes, drugs seem to be the critical factor in predisposing these patients to infection, Dr. Remington said.

Identifying infectious organisms early is important, according to Dr. Remington, because there is effective therapy for most of them. Prevention and treatment of all infections is not now possible because adequate drugs against certain organisms have yet to be found.

He suggested that better methods of cross-matching donor and recipient tissue might be one way to reduce the incidence of infection. Transplants between patients of similar genetic makeup require less drastic treatment with anti-rejection drugs. Such an approach would give heart transplant patients added protection against infections because their immunological system would be partially intact to fight disease organisms.

Dr. Remington urged that it is important to keep communication lines open among various transplant teams. He emphasized the need for continued support for investigations directed toward determining more effective means of diagnosis, treatment, and prevention of infections in not only heart transplant patients, but cancer patients and others who are treated with steroid and other anti-rejection drugs.

"Such diseases of 'medical progress' could be prevented or at least controlled," he said.

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(END ADVANCE FOR PM RELEASE MONDAY, AUGUST 3, 1970.)

Mailed July 31, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford University medical researchers have introduced a new weapon in the battle against disease -- a computer to keep tab on dangerous bacteria and help to select which antibiotic drugs should be used to treat infections.

This new computer application includes a program of quality control, developed by scientists at the Stanford University Medical Center, to improve antibiotic sensitivity testing of organisms isolated from patients. These include the germs of staphylococcus, the pseudomonas, intestinal bacteria and others.

Knowing which of the different antibiotics are active or inactive against various micro-organisms helps doctors prescribe the right treatment for patients.

Unfortunately, standard tests for antibiotic sensitivity have not been completely accurate because present laboratory techniques can be influenced by many variables including human error, according to the researchers.

"Computer quality control improves the reliability of such tests," they emphasized, "and results in improved diagnosis, timelier treatment, and far less medical paper work."

The computer monitors results with all the commonly encountered bacteria in the hospital and reports changes in their resistance to specific antibiotics. By giving doctors this information periodicall appropriate treatment can begin as soon as the organism is identified.

The new adaptation of the computer is described in the current issue of the New England Journal of Medicine. Authors of the report are Dr. John Petralli, research associate; Edward Russell, Jr., a fourth-year medical student; Miss Adrienne Kataoka, medical technologist; and Dr. Thomas C. Merigan, Jr., associate professor and head of the Division of Infectious Diseases at the School of Medicine. Their work was supported by a grant from the National Institutes of Health.

The program utilizes a teletypewriter station in the infectious disease laboratory, connected to the Medical Center's Advanced Computer for Medical Research, an IBM 360/50 located at a distant site.

As laboratory findings are fed to the computer, it compares them with the data in its memory, immediately detects and challenges unusual results, and directs the technician to repeat the study of the organism in question.

When the work is done, the computer prints the organism's "antibiotic profile" for distribution to the physician.

In the past 10 months that the quality control program has been in operation, it has corrected 16 errors in each 100 organisms screened before results were issued to physicians, Dr. Petralli reported.

These have included 43 errors in identification of micro-organisms, and 551 changes in sensitivity categories.

-more-

Computer quality control for antibiotic sensitivity testing
222

To check dangerous bacteria isolated from hospital patients, laboratory technicians perform a standard test of growing bacteria cultures in small dishes, and exposing them to 12 antibiotics in each dish.

A day later, after the drugs have begun to work, the cloudy appearance caused by bacterial growth in the dish is replaced by a clear ring around each of the antibiotics tested. The rings, which differ in size, represent each drug's "inhibition zone."

Sensitivity of an organism to the antibiotics is determined by measuring the diameter of these "zones" and comparing them to a standard reference stored in the computer's memory bank. The computer then performs a quality control check by comparing the zone measurements with similar information obtained for each organism and antibiotic in the previous six months.

"It is in this respect that quality control has been most helpful," Dr. Petralli explained. "The computer has completely eliminated errors in conversion from zone size to sensitivity, which otherwise occur once in every 12 reports."

He noted that test results challenged by the computer had a 64 per cent probability of correction after restudy.

"The majority of these errors might have been clinically important, contingent on the specific situation," he said.

Differences in the quality of results emanating from clinical microbiology laboratories have been a cause of concern among physicians in the past, Dr. Petralli commented. Similar concern has led to a recent decision by the Food and Drug Administration to regulate drugs used in antibiotic sensitivity testing.

To give the computer its critical judgment, its programmers labored for two years. They studied, analyzed, and stored in its memory bank, data on more than 19,000 organisms isolated from patients at the Stanford University Hospital. From this, they instructed the computer to recognize and challenge antibiotic sensitivity results on 25 of the most commonly encountered bacteria.

The system is flexible, and information can be retrieved easily. Terminal rental, computer time, and data storage approximate the salary of one microbiology technologist. Each quality control check requires less than 10 seconds and it costs 5 cents per organism.

Other hospital laboratories in the area that cannot afford their own computers can also use the quality control system, Dr. Petralli said. A terminal connected by telephone lines to the Stanford computer can easily be installed to utilize the accuracy and speed of the program.

In addition to improving the accuracy of laboratory results for the benefit of patients, the computer has proved valuable in checking the work of laboratory technicians and students undergoing training.

Further use of the computer for basic research -- to study when and why organisms become resistant to antibiotics -- is contemplated by the Stanford research team.

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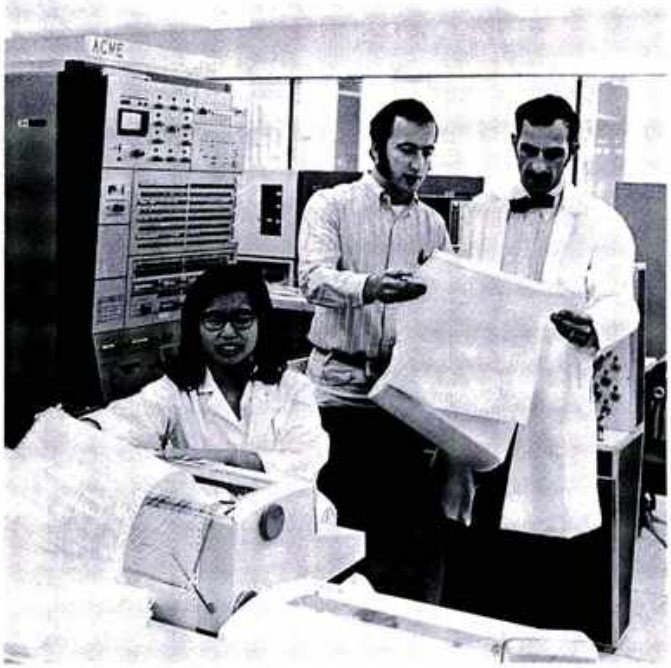
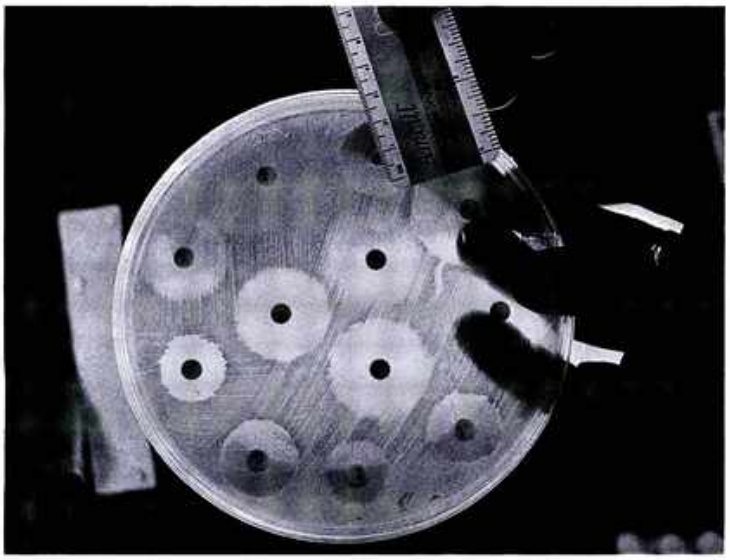
Mailed September 30, 1970.



#1 Computer at Stanford University Medical Center keeps tab on dangerous bacteria, monitors changes in their resistence to antibiotics, and helps facilitate therapeutic decisions. Here Miss Adrienne Kataoka, a medical technologist, carries on dialogue with the machine, while Edward Russell, Jr., a medical student, and Dr. John Petralli, a research associate, review report. The new application of the computer is expected to improve reliability of antibiotic sensitivity testing, and to contribute to improved diagnosis, timelier treatment, and far less medical paper work. 9/70



#2 Antibiotics (small dots) added to bacteria culture will produce a clear ring or inhibition zone. By measuring the diameters of these rings, technicians determine the effectiveness of each of the antibiotics against the micro-organism in question. This standard technique, which requires precision, is now subjected to quality control by a computer which has eliminated errors occurring frequently in the past. The computer application is part of a new program at Stanford University Medical Center to give doctors reliable information about which antibiotics they should use to treat specific infections in their patients. 9/70

TO: NEWS BUREAU, RM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

Antibiotic Sensitivity Testing

Please send me (#1) and/or (#2) glossy prints.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FOR IMMEDIATE RELEASE

CHICAGO -- A Stanford University medical research team has linked a widely used anesthetic with a high incidence of postoperative kidney disturbance.

The anesthetic is methoxyflurane, a pleasant-smelling nonexplosive vapor, sold in the United States under the trade name Penthrane.

In half of the patients, studied by the researchers, the kidney disturbance was severe enough to produce clinical symptoms. In the remaining patients it could be detected only by biochemical tests, they said.

Despite the difficulties this anesthetic appears to have caused in the postoperative management of the acutely affected cases, all patients eventually recovered.

This is not the first time that the anesthetic (by some estimates administered to as many as two million patients per year) has been reported to cause problems in kidney function.

In 1966, similar findings were reported in the journal Anesthesiology by a research team of the Veterans Administration Hospital in White River, Vt. The findings at that time were duly noted but several questions remained unresolved. Other reports of the same phenomenon have been published in other journals from time to time, but the Stanford work is, perhaps, the first well controlled and continuing study, according to the researchers.

The study was carried out at the Palo Alto Veterans Administration Hospital by Dr. Richard I. Mazze and Dr. Stephen H. Jackson, both assistant professors at the Stanford University School of Medicine. They reported their findings at the fall meeting of the American Society for Pharmacology and Experimental Therapeutics held recently at Stanford. A report of that presentation appears in the September 21 issue of the Journal of the American Medical Association.

In the study, 22 patients receiving mostly abdominal surgery were randomly given two different anesthetics. Ten of the patients were given halothane and 12 methoxyflurane. None of the patients had a history of previous kidney disease, and the groups were comparable in sex, weight, and age range.

According to Dr. Mazze, patients who received halothane had a normal postoperative course.

In contrast, all patients who had been given methoxyflurane showed signs of kidney disturbance.

The six patients, who became more seriously ill than the rest, had the greatest biochemical abnormalities, suffered dehydration and weight loss, and took as long as two months to recover completely, Dr. Mazze reported.

"The findings are cause for concern, and additional evaluations of methoxyflurane are underway," he added.

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Mailed September 18, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos or 415: 321-5310
San Joaquin Medical Society 209: 466-9535, Ext. 34

STOCKTON -- When migrant farm workers and their families in San Joaquin County go for a health checkup, they go to a fiesta.

The fiesta is one example, among many, of community involvement designed to attract people who will not go too far out of their way to seek preventive medical care.

All across the county people are responding to operation "San Joaquin Health Checkup" conceived by the San Joaquin Medical Society and Foundation for Medical Care and local poverty area leaders. It is funded by the California Regional Medical Programs.

The program is intended to help bring the benefits of medical care to poor urban families and migrant farm workers in the county, and to combat health ignorance by involving people in active project participation.

"One of the most serious deficiencies in the present health system is absence of a sense of participation or control of their fate by patients seeking health care," program officials are quick to point out.

Not all health checkups, however, are organized in connection with fiestas. The program depends on improvisation for effectiveness, and in the case of urban poor families, health examinations are being provided in connection with church services.

Goal of the health checkup is to screen 3,000 persons annually for the next three years as the initial step to bringing them into the local health care system.

San Joaquin County is part of California Regional Medical Programs, (CRMP), Area III, which covers 11 counties extending from the coast to the crest of the Sierra in mid-California. Stanford University School of Medicine coordinates CRMP for Area III which has a population of 2.5 million and about 3,600 physicians, 14,000 registered nurses, and 75 registered hospitals. Area III provides a study in contrasts--economic affluence and plethora of health personnel and facilities in some locations and sizable pockets of rural and urban poor in migrant camps and major cities.

The project provides multiphasic screening and follow-up care, long considered the backbone, but often the lacking ingredient, of preventive health care efforts. Activities are planned through committees in poverty communities so that multiphasic screening can become a natural component of social planning, according to the program coordinators. The program also relies on local health organizers familiar with each community, who become natural messengers for community participation.

The program had its trial run in August, when health checkups were given to residents at Matthews Road and Harney Lane labor camps near Stockton. Accompanied by the sounds of Mariachi bands, refreshments, and food--provided by the local communities--the health checkups attracted large crowds, and some 400 persons benefitted from them medically.

-more-

Dr. William C. Fowkes, assistant professor of medicine and Area III Regional Medical Programs acting coordinator, terms the favorable response "a result of tailoring health services to the life styles of those who receive them."

Multiphasic screening employs tests by which patients are screened for more than one disease or abnormality at a single visit. Tests are carried out by a staff of bilingual doctors, registered nurses, and technicians in a mobile unit made up of three trailers, usually parked inside the camps or near neighborhoods.

Patients receive tests for lung function, blood pressure, visual acuity, heart function, X ray, and blood and urine. Women get routine "Pap" tests for detection of cervical cancer.

When the testing is over, persons who need medical attention, are sent to doctors in the medical community for follow-up diagnosis and care.

The entire battery of tests costs about $34 per patient, covered by a grant from the Division of Regional Medical Programs of the Department of Health, Education and Welfare.

Facilities and personnel for the actual testing and organization of the program are provided, under contract, by the Health Facilities Foundation-Health Testing Services of Berkeley, a nonprofit organization with previous experience in screening programs for cannery workers in the valley.

The proposal to set up a program of multiphasic screening stems from the long-standing concern of San Joaquin County doctors with the problem of bringing medical care to residents of migrant camps and the "poverty pockets" of south Stockton.

Nearly 20 per cent of Stockton's population lives in neighborhoods where family income is at the poverty or near poverty level, according to Regional Medical Programs figures. These neighborhoods are only partially involved in organized community activity, and are burdened by inequities and inadequacies in the delivery and distribution of health care services.

"We want to reach the disadvantaged on a professional basis before they come to us under the pressure of crisis of illness," said a San Joaquin Medical Society spokesman.

"We have been involved for several years in the operation of migrant camp clinics, but we need a method to evaluate the health needs of all camp residents in a way that will bring them to care more effectively, making better use of services that our physicians are willing to provide."

Health problems among the urban poor require a different assessment, according to the Medical Society official. Their health is interwoven with problems of housing and employment, which create a climate of frustration that must erupt, bringing with it demands that are then met in a fragmented, hurried, costly and ineffectual manner.

"The poverty community is, of course, acutely aware of these existing problems, and we have met with their representatives to develop a cooperative action program," he said.

Organizations which helped formulate the model program included the Black Unity Conference, the San Joaquin County Health Department, San Joaquin General Hospital, the Stockton Community Action Council, the Stockton Chamber of Commerce, Mexican-American Political Association, South Stockton Parish, Stockton Unified School District, and many others.

Project proponents hope that mobile multiphasic screening will demonstrate techniques adaptable to other communities and populations inside and outside California. But they are also cautious to point out that it may not solve the health problems of south Stockton or of the agricultural migrants. In fact, it may highlight them by pointing to unmet needs and by increasing the demand for services.

Said Michael S. Muldavin, director of the Health Facilities Foundation: "Preventive care demands an aggressive program of education in the value of early detection of disorders that may develop into cancer or other disease.

"But for the most part, people will not go too far out of their way to seek preventive care.

"The climate of the ghetto or the migrant camp does not call for lectures on medical care. It does call for an opportunity to become involved in group action--to learn about preventive medicine and continuing care by doing something about it." And this is the exciting part of the entire San Joaquin Health Checkup.

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Mailed September 14, 1970.

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#2

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#4

SAN JOAQUIN HEALTH CHECKUP -- (1) Miss Jutta von Wedel takes patient's blood pressure in mobile multiphasic screening unit laboratory while (2) Mariachi band attracts attention of young and old alike outside. (3) Workers register for health checkup at desk and receive information about procedures by health personnel. (4) Miss Sylvia Miranda administers eye examination. All health personnel are members of Health Facilities Foundation-Health Testing Services, Berkeley. Photos taken at Harney Lane Labor Camp near Stockton. 9/10/70

TO: NEWS BUREAU, ROOM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

San Joaquin Health Checkup 9/10/70

Please send me an 8x10" glossy print of Nos. 1, 2, 3, and/or 4.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310
Editors: Transmitted via Western Union on Saturday, 9/12/70.

STANFORD --The linear accelerator was credited Saturday for having liberated medical scientists to further work in radiotherapy and to develop life-saving treatment methods for cancer patients.

One of the most dramatic gains, made by the adaptation of the accelerator for medical use, has come against the malignant lymphomas, particularly the formerly fatal Hodgkin's disease.

Since 1962, according to Dr. Henry S. Kaplan, professor and chairman of the Department of Radiology at the Stanford University School of Medicine, 74 per cent of all patients with various stages of Hodgkin's disease treated at Stanford have lived five years or more. The figure nationally was 36 per cent in 1960 before the advent of the medical linear accelerator developed simultaneously by research teams at Stanford and in England.

"The figures do not tell the full story," Dr. Kaplan said. "In the past three years further improvements in technique have been introduced which give strong indication we will push those survival figures in most stages of Hodgkin's disease into the 80 to 90 per cent bracket within a short time."

Dr. Kaplan made the prediction at the dedication of the $1 million Paul A. Bissinger Radiation Therapy Center at Stanford University Medical Center. Dr. Kaplan, a 1969 Atoms for Peace prize winner, has pioneered in the development of the medical linear accelerator.

He said the medical linear accelerator has now become the "work horse" of modern major radiation therapy centers, and the achievements which it has made possible have completely altered the image of radiation therapy once thought by many doctors as having essentially no curative potential.

"Radiotherapy now stands right alongside surgery as the major method for the permanent cure of many kinds of cancer," Dr. Kaplan said. "And at least 50 per cent of all cancer cases, including those in advanced stages referred to modern radiotherapy centers, have a substantial chance for permanent cure."

Major credit for the progress, according to Dr. Kaplan, can be claimed by physicists who developed the linear accelerator.

"We feel they are to be congratulated on this occasion for the very major contribution they have made to medicine," Dr. Kaplan said. -more-

It was Dr. Kaplan who met with three other Stanford men, who formed the Microwave Laboratory Committee in the early 1950's, to look into the possibility of adapting the linear accelerator for use in radiation therapy. The committee members were Drs. Frederick E. Terman, Leonard I. Schiff, and Edward Ginzton, then laboratory director and presently board chairman of Varian Associates in Palo Alto. Work on the actual design and construction of the first medical linear accelerator was undertaken by Dr. Ginzton.

With funds from the National Cancer Institute, the American Cancer Society, and the Office of Naval Research, the new machine was completed and was installed for clinical use in January, 1956 in the old Stanford hospital in San Francisco. It was the first such device in the western hemisphere.

In addition to Hodgkin's disease, Dr. Kaplan cited other types of cancer, previously beyond the scope of the radiotherapist, which can now be treated by application of the accelerator:

Cancer of the prostate: "One of the deep-seated tumors radiotherapists thought it was difficult to treat has turned out to be a pleasant surprise. Results to date show a five-year survival for 55 to 60 per cent of the Stanford cases. These results have made the technique widely accepted as a method of achieving cure, and in many cases, long-term control of the disease."

Cancer of the urinary bladder: "A very prevalent and important kind of cancer, it was virtually untreatable because standard X-ray techniques caused severe skin reaction that made the treatment at appropriate doses intolerable. Today, with the aid of accelerator beams, cure rates of five years in 25 to 35 per cent of the cases have been achieved."

Retinoblastoma: "A rare type of eye tumor, it has often been treated surgically by removal of the eye. Today in early cases, it is no longer necessary to remove the eye because the results of radiotherapy are excellent."

Ovarian Cancer: "Numerically, cancer of the ovary is very important in women. Techniques developed through use of the linear accelerator for the first time offer hope of cure for patients with primary inoperable types of ovarian cancer.

"The same can be said for cancers of the testes that have spread to lymph nodes in the abdomen and beyond into the thorax and neck. Five-year survivals of 75 to 95 per cent have been recorded for such patients."

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Mailed September 14, 1970.

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Transmitted on Business Wire, 9/11/70.

(ADVANCE) FOR PM RELEASE SATURDAY, SEPTEMBER 12, 1970

STANFORD -- The Stanford University School of Medicine Saturday announced it is investigating a new cancer weapon, potentially more effective than conventional radiation therapy methods.

Disclosure of the new research was made by Drs. Malcolm A. Bagshaw and Henry S. Kaplan at the dedication of the new $1 million Paul A. Bissinger Center for Radiation Therapy at Stanford University Medical Center.

The new project has grown out of low-temperature physics investigations by Stanford Physics Professors H. Alan Schwettman and William M. Fairbanks. It will be aided by the construction of a new large-scale superconducting linear accelerator for electrons, the first of its kind, now near completion at Stanford's High Energy Physics Laboratory.

The new machine, according to Dr. Bagshaw, produces a stream of negative subnuclear particles called pi mesons which, if directed at cancer tumors, should theoretically be 6 to 12 times more effective for treatment than other types of radiation, including X rays and gamma rays.

Dr. Bagshaw made the disclosure in his talk on the future work in cancer therapy at Stanford. He is professor and head of the Division of Radiation Therapy. Dr. Kaplan, professor and chairman of the Department of Radiology, has pioneered in the development of linear accelerators for medical uses.

The immediate plan, according to Dr. Bagshaw, is to utilize the High Energy Physics Laboratory superconducting accelerator to produce pi mesons, and to study methods that will permit the adaptation of the device for clinical application in cancer patients.

Based on this work, a prototype of a superconducting linear accelerator for hospital use will be built, he said.

Dr. Bagshaw explained how pi meson radiation works: "When a negative pi meson penetrates into tissue and comes to rest, new phenomena occur which have no counterpart with more conventional types of radiation. These phenomena are primarily responsible for the attractiveness of negative pi meson treatment for cancer."

The negative pi meson is an unstable particle, and when it reaches the end of its path in tissue its negative charge is captured by a nucleus of a carbon, nitrogen, or oxygen atom, which are normal constitutents of all tissue.

When captured, part of the extremely high energy of the pi meson appears in the form of alpha particles and protons of very short range and high ionization density.

The pi meson produces little ionization, or tissue damage, on the way in. But when the pi mesor stops and is abosrbed in the tumor, it deposits a great deal of destructive energy in the tumor mass, Dr. Bagshaw said.

Getting the pi mesons to stop in the tumor will be done by altering the entering kinetic energy of the mesons, either through computer-controlled machine adjustment or by using shielding which slows the pi mesons to the desired entrance velocity.

In addition, the radiation produced by the destructive energy of pi mesons in the tumor area can be readily "seen" by gamma ray detectors. This should permit doctors to pinpoint the region in the patient in which the cancer's destruction will occur.

Accelerator energies of about 500 million electron volts are needed to produce the 100-million-volt mesons needed for cancer therapy. These have so far been available only from extremely large and expensive machines such as the $55 million meson factory built at Los Alamos, which is planning extensive clinical use of its facility.

The new Stanford superconducting accelerator suggests the possibility of much smaller machines costing about one-tenth as much, which could be built into hospitals and medical centers.

"Radiotherapy is on the threshhold of a general movement into the utilization of different types of penetrating energy such as neutrons, protons, and negative pi mesons for the treatment of cancer," Dr. Bagshaw said.

The cost of these new radiation sources will be 10 to 20 times greater than those currently in use, but their ultimate payoff in improvement of cancer cure rates should more than justify the expenditure, he added.

Dr. Bagshaw emphasized that the possible medical use of pi mesons is still in the preliminary stage, and that further development will depend on allocation of federal funds now being sought.

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END (ADVANCE) FOR PM RELEASE, SATURDAY, SEPTEMBER 12, 1970

Mailed September 11, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Research papers by Stanford University psychiatrists and psychologists won two major awards at the American Psychological Association Convention, which met in Miami this week.

The awards, presented by the Association's Division of Psychopharmacology, carried research grant funds and cash prizes totalling $1,000 and $800. The papers won on the basis of the quality of the research done.

Dr. H. Keith H. Brodie, assistant professor of psychiatry, delivered the first-place paper, which dealt with a study at the National Institute of Mental Health on drug therapy for the severely depressed patient. In 86 patients hospitalized because of depression, Dr. Brodie and co-authors Drs. William E. Bunney, Dennis L. Murphy, and Frederick K. Goodwin of the NIMH, found that the drug of choice for depressed patients with a history of mania (periods of grandiosity, euphoria and extreme elation), is lithium carbonate. For depressed patients without a history of mania, imipramine, the researchers found, is the drug of choice.

Dopa, a third drug tried, caused depressed patients who had had manic states to worsen. It had no effect at all on strictly depressive patients. Imipramine also caused sometime-manic patients to worsen, although the effective drug for them, lithium carbonate, like dopa, had no effect on strictly depressive patients.

The second paper was delivered by Dr. Harry B. Cohen, acting assistant professor of psychiatry, and co-authored by medical student James M. Ferguson, doctoral candidate Steve Henriksen, and Drs. Jon M. Stolk, Vincent P. Zarcone, Jack D. Barchas and William C. Dement.

Their paper dealt with a study of the role of a brain chemical called serotonin in the sleeping pattern of cats.

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Mailed September 10, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Jesse L. Steinfeld, surgeon general of the United States, and other noted speakers will highlight the dedication of the new $1 million Paul A. Bissinger Center for Radiation Therapy at Stanford University Medical Center, Saturday, September 12.

The public ceremony marking the official opening of the expanded radiotherapy facility will be held at 10 a.m. in the Cooper Courtyard of the Medical School.

Dr. Steinfeld will discuss "Progress and Prospect in Cancer Research." A noted expert in cancer chemotherapy, and former professor of medicine at the University of Southern California School of Medicine, Dr. Steinfeld entered government service in 1968 as associate program director of the National Cancer Institute. He became deputy director the following year, and then deputy assistant secretary for health and scientific affairs of the Department of Health, Education, and Welfare.

The U.S. surgeon general will be preceded by Dr. J. E. Wallace Sterling, chancellor of Stanford University, who will discuss "Reflections on Radiology's First Accelerator."

Reports of achievements of the past 15 years and on future work in cancer therapy at Stanford will be presented by Dr. Henry S. Kaplan, professor and chairman of the Department of Radiology (who conceived the use of the linear accelerator for medical purposes) and Dr. Malcolm A. Bagshaw, professor and director of the Radiation Therapy Division.

Following the talks, Dr. John L. Wilson, acting dean of the Medical School will present the building to W. Parmer Fuller, III, president of the University's Board of Trustees.

An open house for the public will be conducted after the dedication ceremonies.

The new building has been named in honor of the late Paul A. Bissinger, Sr., prominent San Francisco businessman and civic leader.

Mr. Bissinger, who died of a stroke in London October, 1969, had been successfully treated for cancer of the lymph node system at Stanford in 1967. Following his therapy in the crowded, overtaxed facilities, he contacted other former cancer patients and interested associates and organized "The Friends of Radiology" to raise funds needed to expand the therapy program.

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At the time The Friends of Radiology group was formed, Mr. Bissinger said, "If we are able to help financially with the expansion of facilities at Stanford, thus giving more cancer victims the chance we were given, perhaps our debt of gratitude will partially have been paid."

The group raised nearly $450,000 which has been matched by State and Federal funds. The expansion includes a new building which houses administrative offices and personnel and patient support facilities such as examining rooms. The present quarters of the Radiotherapy Division have been remodeled to accomodate two new medical linear accelerators, bringing to three the number of such machines in the department which produce high-energy X rays for treatment of cancer.

One of the new models will replace an older prototype accelerator which has been in use since 1956, when it was first adapted for medical use by Dr. Kaplan.

The new building and equipment will allow for treatment of 25 to 30 per cent more patients. At present 2,400 treatments for various types of cancer are given monthly at Stanford with existing equipment and personnel operating 10 hours each day. The daily patient load averages 141 persons and over 1,400 new patients are treated each year.

The new facility will also enhance Stanford's training programs in radiotherapy. The National Institutes of Health have established in the Department of Radiology one of the first comprehensive programs for the training of fully qualified radiotherapists. Approximately 10 per cent of all residents in radiotherapy in the United States are trained at Stanford.

Architect for the project was the firm of Howard A. Friedman and Associates of San Francisco. Morris Daly of Burlingame was the general contractor.

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Mailed September 9, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

(ADVANCE) FOR PM RELEASE FRIDAY, OCTOBER 30, 1970

STANFORD -- A computerized blood bank system, which can give medical personnel instant access to information about donors and related clinical data, has been designed by Stanford University scientists.

The computer, on command by a blood bank clerk, can scan the list of available donors, choose those with just the right blood type, and print out the names of people to be contacted in an emergency or when the blood bank's inventory is low.

Presently many blood banks use computers for similar storage and retrieval of information. But all of these systems must be operated by persons with extensive computer experience and training.

The Stanford system, based on a new computer language called DIRAC (DIRect ACcess), can be operated, updated or expanded by anyone without previous experience in computer programming.

Development of the computerized blood bank system was announced Friday at the annual meeting of the American Association of Blood Banks at the San Francisco Hilton Hotel. Authors of the report included Dr. Paul Wolf, associate professor of pathology and director of clinical laboratories and the blood bank at Stanford University Medical Center; and Drs. Herbert R. Ludwig and Jacques Vallee of the Stanford Computation Center.

Dr. Wolf stated that "use of this system developed by Stanford's Computation Center, has made it possible to conceive a program of considerably lower cost than currently available in other implementations across the nation."

He said the computer is expected to reduce the paper work in the blood bank, and improve inventory control.

"Such control is a serious nationwide problem in the blood bank field," Dr. Wolf said. According to the San Jose American Red Cross, 18 per cent of the blood supply in banks becomes outdated before it is used.

The figure is 10 per cent in the small Stanford blood bank, but the use of the computer in keeping accurate inventory is expected to reduce the loss to less than five per cent. This could be done by keeping a reasonable supply on hand, and making a call for donors only when new blood is really needed, he added.

Another area in which the new system will be truly useful has to do with preparing the many fractions of blood that are used for patients--platelet concentrates, packed red cells, plasma, cryoprecipitate for hemophilia, white cell poor blood, and other components.

And there is the problem of crossmatching blood, only the first step in transfusion. If the patient has a common antibody that most donors' blood will react against, only a handful of donors may be useful. Who are these people and how may they be contacted quickly?

"The computer can identify specifically matched donors and recipients, thus increasing the chances for survival of the patient," Dr. Wolf said. Dr. Wolf hopes the new computer system to be operational in the Stanford hospital blood bank before the end of this year. ###

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- A new pilot program to relieve the doctor shortage is underway at Stanford University Medical Center. It will prepare registered nurses to aid physicians in providing for family care in areas where it is not available, and will allow for a better distribution of the physician's time.

The program is one of the first in the nation to focus on training nurses to give primary care to families as a whole. Other nurses programs concentrate on training for specialized areas, such as in pediatrics and anesthesia.

The project will provide one answer for communities where a physician is often many miles away, or in urban areas where the demand far exceeds the available supply of doctors.

Each nurse studying in the program comes from communities where medical care is in short supply. She comes with strong community support behind her. She has been selected by the community or health center where she is already working and they are paying her way. A return place is assured for her. Stanford provides no funds for any part of the project, but doctors and nurses at the Medical Center contribute teaching time.

The women, who are all registered nurses, are already functioning in these communities in much the same role that they will return to; the program will give them additional skills or knowledge to let them act as extensions of physicians.

The program will help the nurses identify the limits of what they can appropriately handle and when the doctor must be reached immediately. (For example: does the patient have acute appendicitis, or is the trouble more routine?) Whatever the difficulty, the nurse can go ahead with the preliminary findings or treatment, order the lab work done, describe the urgency to the physician, make referrals and in general deal with the problem at hand.

In other situations she will continue the care of the patient. She will actively share in delivery of babies, geriatrics and pediatrics, in giving emergency treatment, whether in the patient's home or in the office, as well as routine patient visits with general practitioners in community health centers or offices.

The program began September 28, with five nurses in training. It is of four months duration at Stanford with a one year follow-up after the nurses return to their home position. The first three months are a swift-paced combination of classes and practical clinical experience at Stanford University Hospital, the Palo Alto Veterans Administration Hospital, the Valley Medical Center, the East Palo Alto Neighborhood Health Center, the Palo Alto Clinic, as well as facilities of various public health agencies.

There is one month of field placement, which will duplicate as closely as possible the situation that the nurses will be returning to. Here, each nurse will work under a doctor's supervision and direction.

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The project, set up on a feasibility study basis, is a joint venture of the Department of Community and Preventive Medicine and the Area III, California Regional Medical Programs. Stanford University School of Medicine administers the Regional Medical Program in 11 counties in mid-California.

Mrs. Jeanne LeBrun, associate coordinator for Area III of the California Regional Medical Programs, and clinical lecturer, Department of Community and Preventive Medicine, directs this project. Also closely involved in the program's development is Mrs. Mary Alderson, R.N., Area III's nurse coordinator, Dr. William Fowkes, Area III acting coordinator, and Mrs. Ludmila Davis, R.N., director of the operating and emergency rooms at the Hospital. It is their hope that a strong, continuing program will emerge as one answer to what Stanford can do toward alleviating the doctor shortage.

What these nurses are to be called, however, has met with a variety of views. "Nurse Practitioner" seems to have the most approval at the present time, although "Nurse Physician's Assistant" is a close runner. As one nurse commented, "People tend to expect a different type of leadership when a person has a new title."

Development of the program has been aided by a new California law allowing the State Board of Medical Examiners to set standards for medical assistants.

One of the five women in the program is Comfort Ekpunobi from Biafra. She is also an English-trained midwife, in addition to being a registered nurse. She has most recently been at the East Palo Alto Neighborhood Health Center, and will return there.

Kay Ortman and Jane Curtis are from rural Idaho and will return to work under the supervision of two physicians who function out of Council, Idaho, but whose territory covers over 100 miles. Mrs. Ortman, married to a forester, has done community mental health counseling and general staff nursing. Cambridge, Idaho is in the process of building the area's first professional clinic in which she will work. Mrs. Curtis has been director of nursing in the community hospital in Council. She is the wife of the superintendent of schools there.

Lois Sykes has been working in Livingston, California. Her training here is sponsored by the new health center set up by the entire Livingston community, with the help of Stanford University Medical Center's Department of Community and Preventive Medicine. Livingston is in Merced County, where there is roughly one physician for 2,000 people, She will return to the Livingston Clinic.

A nurse from the Stanford Hospital operating room, Ann Keeler, is the fifth student enrolled in the course. She also functions as a liaison person to aid the students in orientation to the Medical Center.

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Mailed October 28, 1970.

Editors: Two pictures available on request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Carl P. Sheaffer, a Stanford University heart transplant patient, Monday (Oct.26) celebrated the second anniversary of the operation that returned him to a vigorous life.

In 1968, Sheaffer, who is now 56, was the seventh person to become a recipient in a series of heart transplant operations at Stanford which now numbers 26. He is the first of Stanford's heart transplant patients to reach the two-year survival mark.

Eight other Stanford patients besides Sheaffer are now surviving, seven of them out of the Hospital. Their survivals range from 20 months to 11 days. The latter is a patient who received a new heart Oct. 15, 1970.

Monday the other surviving patients gave a party at the Hospital for Sheaffer and his wife Effie to celebrate the anniversary.

The event contrasted sharply with the life Sheaffer led in the decade prior to 1968, when severe heart disease forced him to retire and give up even mildly strenuous activity.

Sheaffer was a plumber by trade and a fisherman and hunter.

In 1959, he moved his family from Dillsburg, Pa., to Winchester Bay, Ore., mainly because Oregon's waters and forests have much to offer an outdoorsman. But his failing heart prohibited him from taking full advantage of the new environment.

All this changed after the transplant operation. For the past year and a half, Sheaffer has been making frequent trips back to Oregon from the San Francisco Bay Area where he and his wife now live. Last spring's expedition "up the Umpqua River for steelhead" lasted six weeks. "You have to go for a long time to get results," he explains.

Summer and early fall trips are for Chinook salmon. These usually weigh from 10 to more often 30 or 32 pounds. Late fall is for elk, and Sheaffer is preparing now to leave for Scottsburg, where he will join his friend and hunting partner, Howard Rubin for the season.

Grateful to be restored to the activities he most enjoys, Sheaffer says it's just like "really living" again.

The fisherman cures the salmon himself. He gives them away to friends because smoked fish are too salty for a heart transplant patient's diet, which is restricted in animal fats as well as sodium, and sometimes in calories.

Exercise is the other half of the prescription for all the patients. Sheaffer works out (swimming, weight lifting, biking) for two to three hours each day when he is in this area, and he follows a regular regimen of walking and biking when he is in Oregon, to supplement "the good exercise you get when a fish is on the line."

The Sheaffers, who have been married 37 years and have five children and nine grandchildren, attended the wedding of their youngest child in July. He is a son, William E. of Reedsport, Ore. The others are Dorothy Jane Buffington of North Hollywood, Calif.; Shirley May Buffington of Franklintown, Pa.; Carl F. of Franklintown; and Ronald E. of New Cumberland, Pa.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- A fresh approach is being taken at the Stanford University Medical Center on the question of physician assistants training, which medical experts believe to be one of the most far reaching and fastest growing concepts in medical care delivery to come along in decades.

The new program to start in January, is directly aimed at increasing and upgrading paramedical aides -- a concern that is receiving increasing attention from both the Government and hospitals all over the country.

This program grew out of two earlier ones. It is committed to involving minorities, as was one of the previous programs, which had details worked out by William R. Stone and Moses Thomas of the Medical Center's minority relations office.

Another tack had been pursued by Dr. Donald Laub, chief of plastic and reconstructive surgery, who planned to get a program underway involving the use of medical corpsmen.

Dr. Michael Dennis, a surgeon, is now heading up the projected physician assistants program. A Harvard graduate in 1964, with an M.D. from the University of Florida in 1968, the 28-year-old Dr. Dennis says that he has been concerned since his college days with the problems of delivery of health care.

New impetus was also given with the passage of a state law authorizing the State Board of Medical Examiners to set up training programs and standards for physician assistants. This new law puts California in the vanguard of a nationwide effort to meet the growing doctor shortage. The law will be very helpful, if not crucial, to the efficient use of the graduates of the Stanford program.

Dennis feels strongly physicians themselves should take a more active leadership role in setting up programs designed to extend this care. "Otherwise, the problems -- and the demands from all sides -- are only to get worse."

He is designing the program to have two self-contained phases, the first being the equivalent of medical corpsman training. Drawing heavily on manuals and methods already set up for turning out medical corpsmen, the aim is to create in a 12-month period a civilian medical corpsman who can be allowed to handle a number of situations, particularly in the emergency room.

The candidates for this course, which will be "tough and realistic," can be high school graduates or with some additional training or college, who score satisfactorily on a battery of tests, have good recommendations, and who demonstrate a real motivation to be directly involved in the delivery of health care.

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Dennis noted the availability of candidates for both phases. "There are a lot of bright, dedicated men who have had medical corpsmen training, but because of the structure of medical education, they just haven't been able to continue their medical career, and with the younger fellows, financial difficulties and continuing discrimination have put up real entrance barriers to their even getting started." He noted also that there are a number of nurses who are eager for more responsibility who have already applied. In both phases there are, accordingly, many qualified candidates, Dennis stressed.

He also sees the initial phase as a two-way testing ground -- a chance for a young man to really learn what the practice of medicine is all about, and a chance for the staff to observe his potential.

The second phase of the program is conceived of as a 15-month course: four months of formal teaching, and 11 months of practical application and learning, working with doctors. Prerequisite for the course would be completion of the program's initial phase or the equivalent of medical corpsman or nursing training.

The classes, which will be at Stanford, are aimed at developing "competency" in recognizing and aiding in the treatment of about 50 of the most common diseases. The aim for the remaining period is for these men to work with doctors in surrounding communities or in other hospitals throughout northern and central California. Dennis noted the potential for this kind of cooperation looks very promising.

He said he has already sent out a questionnaire to a sample 1600 doctors, asking them if they could use such an assistant, and if they would be willing to train these men on a "preceptor" basis. (A preceptor works something like the old idea of apprenticeship, except that as a preceptor, the doctor always remains in charge. It would be up to both the doctor and his charge to develop "excellence." The expectation is that the doctors would continue to use these assistants as their aides after the training has ended.)

The response from the doctors has been great, Dennis said. "The majority of them are writing in that they'll be glad to help." He noted the doctors are general practitioners and that an additional benefit from the program will be to bring them into contact with Stanford. In turn, he feels Stanford will benefit from having an involvement with general family medicine practitioners which it does not now have.

The California Board of Medical Examiners will set up guidelines to determine what the graduates of the course can actually be allowed to do.

However, Dr. Dennis hopes that these aides will eventually be able to assist in the delivery of babies and to cover for doctors in nursing homes by making some rounds with the chronically ill patients and so keeping the doctor informed of all developments in their care.

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Dennis also believes that graduates should be directed toward areas where they are most needed, such as East Palo Alto and rural communities in California where patient needs far exceed doctor supply. "This program isn't for the San Francisco doctor," Dr. Dennis allowed. He expects to work with the Department of Community and Preventive Medicine, chaired by Dr. Count D. Gibson, Jr., in placing the graduates in needed areas.

Dennis sees the whole program as having several goals: the primary one is to expand the delivery of family health care. Other aims are to give qualified minority people real upward mobility in an area where they are greatly needed and where they haven't been able to enter, and to determine if the rapid learning military corpsman situation can be duplicated in a civilian setting.

The entire program is an expensive one, both because of the training involved and because stipends are needed, especially for those in the second phase. Current candidates are older men and most of them have families, so a liveable stipend is crucial.

There are already 210 applications for this group, of which only a maximum of 30 will be chosen. If new funding plans fail, only eight will be selected for the initial January class.

The first phase -- that of the civilian corpsman -- has not been funded. However, an overall package for the two programs is being sought. Dr. Dennis expressed a cautious hope that both programs will get underway after the first of the year.

He projects an ideal of $11,290 per person for both phases. This figure reflects a total budget of administrative expenses, teaching consultants, space, material, transportation, communication and stipends. He expects this initial high to decrease after the program is in progress.

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Mailed October 19, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Transmitted on Business Wire by telephone Heart Transplant #26 October 15, 1970

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Richard J. Cope, a 45-year-old retired engineer from East Patchogue, Long Island, New York, received a transplanted heart in an operation performed by Dr. Norman E. Shumway and his team today at Stanford University Medical Center.

The patient is accompanied on the West Coast by his wife, Adelaide, and her mother, Mrs. Adelaide Carlson. The Copes have a son, Richard.

Cope becomes the 26th heart transplant patient at Stanford. Of the nine who are surviving, eight have been dismissed from the hospital and are living essentially normal lives. One patient, Carl Sheaffer from Winchester Bay, Oregon, will mark the second anniversary of his transplant operation on Oct. 26.

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cc: files
Polly Downing
Spyros Andreopoulos
Mary M. Griffith

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Dr. Howard Bertram Burchell, professor of medicine and chief of cardiology at the University of Minnesota Hospitals in Minneapolis, will give the seventh annual John Kent Lewis Memorial Lecture Monday, October 19, at Stanford University School of Medicine.

His talk, "An Inquiry into Some Cardiologic Taboos," will begin at 4:15 p.m. in Room M-106 of the medical school.

Dr. Burchell has devoted his professional life to the study of the heart and circulation. Beginning with "Adjustments in Coronary Circulation After Experimental Coronary Occlusion," his Ph.D. thesis at the University of Minnesota in 1940, Dr. Burchell has published numerous papers on applied hemodynamics and electrocardiographic studies.

He has been editor-in-chief of the highly respected medical journal, Circulation, since 1965, and is a past chairman of the research committee of the American Heart Association. In 1958 he received the AHA's Award of Merit for his contributions to cardiology and services to cardiologic research.

A native of Athens, Ontario, Canada, Dr. Burchell received the M.D. degree from the University of Toronto in 1932. Before assuming his present academic post in 1968, he was for many years a consultant and member of the faculty of the Mayo Foundation.

The John Kent Lewis Lectures at Stanford are dedicated to the memory of a 1922 medical alumnus who became chief of the Stanford Medical Service at San Francisco General Hospital in 1949, and was a noted pioneer in research on the heart. He died in 1961.

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Mailed October 15, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The Palo Alto City Council has granted Stanford University Hospital a permit to build a heliport for emergency arrivals. The request was approved by the Council last night (Tuesday, Oct. 13).

The Hospital plans to construct a helicopter pad 700 feet north of the emergency room entrance, on a site providing direct line ambulance access.

Premature infants being rushed to Stanford to be cared for at the Premature Infants Research Center will be among the primary beneficiaries.

Currently, infants are transported long distance by ambulance, or can come only part of the way by helicopter, with a great deal of time lost in transit.

The heliport will complete the link to the hospital, and "cut down not only actual travel time, but the total time involved, because auxiliary vehicles will not have to travel so far to and from connecting points," says Frank R. Vitale, associate director of the hospital.

Dr. Philip Sunshine, associate professor of pediatrics and director of the Premature Infants Research Center, explained that when an infant is being admitted on an emergency basis, a pediatrician usually goes to pick up the child, taking a portable incubator, and other equipment in case respiratory help, fluids, or drugs are needed en route. Since this means a round trip, the closer to the hospital the pediatrician can be picked up, the faster the infant can be admitted.

"These emergencies happen only occasionally, added Dr. Sunshine, "but we want to be ready when they do occur."

The sooner a doctor can reach a tiny infant with portable equipment and get him hospitalized, the less likely the chance of serious damage.

The heliport will also open the way for state patrolmen to bring critically injured victims of highway crashes directly to the Stanford Hospital, if need be, from remote spots.

Design for the landing pad and plans for its use must meet FAA and California Board of Aeronautics requirements.

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Mailed October 14, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Traffic accidents--why they happen and how deaths and injuries result from them--are being studied by a multidisciplinary team at Stanford University.

Over the course of six months, these professionals, including orthopedic surgeons, pathologists, psychologists, and engineering specialists, will visit the scenes of a minimum of 25 accidents in the Bay Area. The first accident investigated by the team was the Golden Gate Bridge approach crash which killed ten people.

From their study the team wants to determine, more precisely than is known now: the elements in nine specific facets of each accident, namely pre-crash-, crash-, and post-crash-phase details relating to human (s), vehicles (s) and environment.

Mainly accidents involving at least one 1968 or later model vehicle will be investigated.

The project is under the direction of David N. Schmidt, engineering physicist. Principal investigator is Dr. Donald A. Nagel, who is professor and head of the Division of Orthopedic Surgery at Stanford University School of Medicine.

The study is supported by the U.S. Department of Transportation. The team will turn in reports and evaluations to the Department's National Highway Safety Bureau, which sets vehicle safety standards.

After examining damaged vehicles at engineering laboratories or storage areas, team engineers will determine not only whether mechanical failure contributed to each accident, but also how effective safety features are in lessening the extent of human injuries and property damage.

A list of safety features now in use includes: the high penetration resistance windshield, collapsible steering column, recessed control knobs, steel reinforcing beams in doors, head restraints, locking seat backs in two-door cars, three-point (attachment) belts, infant seats, interior padding and dual braking systems.

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222--Traffic Accidents

Vehicle dynamics and occupant kinematics will be important considerations in the study. The engineering specialists will "reconstruct" each accident, using the elementary laws of physics to describe the dynamics of the crash. Occupant kinematics refers to how the victims moved or were restrained from moving in relation to the vehicle, and also to occupant-vehicle impacts.

On the medical side, the physicians will be concerned with the nature, extent and cost of injuries sustained in accidents. Dr. Nagel, who brings to the study a background in the physics of injuries, has measured the forces needed to injure bones, and also human tolerance to impacts.

Correlation of his results with the impact forces calculated by the engineers will enable the team to assess present safety requirements and recommend changes. Researchers in previous studies sponsored by the Department of Transportation produced ideas for features which are now in use, such as reinforcing beams for doors, as well as ideas now under consideration, such as air bags to provide cushioning on impact, and fuel containment to the reduce the occurance of post-crash fires.

Dr. Nagel will obtain estimates of the long-term costs of injuries and deaths, to families and to society. "We need to have a look at what two and a half million injury-producing accidents a year mean to us as a nation," the Stanford orthopedist says. "We are trying to understand what happens, and why it happens, so that improvements can be made, not only in vehicles, but in people who drive, and the environments they drive in."

The element of highway design is of major import to the local team. Seeking solutions to design problems in the Bay Area will be one of their primary efforts, according to project director Schmidt. Construction of a median barrier in the approach area of the Golden Gate Bridge was recommended after the crash, he said.

In addition to the specialists mentioned above, psychiatrists, neurosurgeons, plastic surgeons mathematicians, highway designers, traffic engineers and sociologists will also participate.

The Department of Transportation is sponsoring concurrent studies by 15 field teams in other locales around the country.

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Mailed 10/14/70

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The Stanford Medical Students Association will be host to the West Coast Regional Conference of the Student American Medical Association this coming weekend, Oct. 16-18.

Title of the conference is "Medicine For/Against Society."

Registration will be held Friday from 10 to 12 a.m. in the student lounge of the Stanford University School of Medicine. Those in health professions and other interested persons in the community are welcome to attend. There is no charge, but everyone who attends is asked to register.

The weekend meeting begins with a panel discussion Friday afternoon at 1 p.m. Moderated by Stanford medical student body president John Battista, a third-year student, the panel will discuss "Motivation for Change."

Workshops dealing with population, industrial medicine and ecology, problems of rural and urban community medicine, legislative alternatives to the draft, motivation for change, and peace politics make up the schedule for Saturday morning.

Principal speaker Dr. Robert Cooke, who is chairman of the Department of Pediatrics at Johns Hopkins Medical Center, will talk at 2 p.m. Saturday in Bishop Auditorium on "Acceptability versus Efficiency versus Economy in the Delivery of Health Care."

Dr. Count Gibson, professor and chairman of the Department of Community and Preventive Medicine at Stanford, will speak later Saturday afternoon on "The Medical Center as an Institution for Initiating Changes in Medicine."

Charles Payton, national president of the Student American Medical Association and a student at the University of California Medical Center at San Francisco, will also speak at the conference. It concludes Sunday with reports from each of the workshop chairmen in the morning, and tours of Bay Area medical clinics in the afternoon.

Medical students at Stanford had not been participating in the national organization for three years prior to last spring, when they voted to reinstitute a SAMA chapter, and actually to fuse it with the medical student body, an association composed of everyone enrolled in the school. John Battista, and fourth-year student Bob Korns serve as co-presidents of the now double organization.

National SAMA is the sponsor of several community projects in the United States and last summer two Stanford medical students participated in projects in Kentucky and Alabama. ### Mailed 10/13/70.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- Staff changes for two Stanford University physicians and teachers have just been announced by Dr. John L. Wilson, acting dean of the School of Medicine.

Dr. Robert T. Schimke, professor of pharmacology and biology, will become chairman of the Department of Pharmacology, while Dr. David A. Prince, associate professor of neurology, will be acting chairman of the Department of Neurology. Their appointments are effective immediately.

Neurology has been a division of the Department of Medicine. It was recently established as a separate department at the Medical School. This change points up the growth of neurology as a separate discipline, and reflects the increase in neurological research activities.

The 37-year-old Dr. Schimke succeeds Dr. Avram Goldstein who has been chairman of the Department of Pharmacology since 1955. Dr. Goldstein plans to devote more of his time to research and teaching, and also directs the research aspects of a new methadone treatment program for heroin addicts in Santa Clara County.

Dr. Schimke's special field is in developmental and regulatory biology--in particular, synthesis and degradation of specific proteins in animal cells. He has been the recipient of a number of awards and honors including the Charles Pfizer Award in Enzyme Chemistry of the American Chemical Society. He has been associated with the Stanford Medical School since 1966. He graduated in 1954 from Stanford, with an M.D. degree in 1958.

Dr. Prince, 38, received his medical degree in 1956 from the University of Pennsylvania and his training in clinical neurology at the Mt. Sinai Hospital in New York City. His major research interests are in neurophysiology and experimental epilepsy. At Stanford since 1962, he has studied the cellular mechanisms which generate and control epileptic discharge in the brain.

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Mailed October 5, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FILE COPY

Editors: Copies of STANFORD M.D. available on request if not included with story.

STANFORD -- East San Jose's Chicano community gets little benefit from mental health services it helps support, according to a Stanford University study made public Monday (Nov. 30).

The study was made to find out how relevant are mental health services for urban Mexican-Americans.

It concludes that psychiatric services are "hopelessly inadequate" in meeting the needs of Chicanos in San Jose, and by implication, of many ethnic segments of the American population.

Paradoxically, the study shows traditional psychiatric services do exist, but Mexican-Americans in San Jose prefer their own indigenous therapists to whom they turn with their problems.

"As things now stand, tax funds are being used to build and maintain health services that are irrelevant for Mexican-Americans," the report states. "Residents in East San Jose are having to help pay for mental health services...and get nothing in return."

The study recommends that control for services be turned over to the Chicano community.

Author of the report is Dr. E. Fuller Torrey, formerly of the department of psychiatry at Stanford Medical School and now a special assistant to the director for international activities at the National Institute of Mental Health in Washington, D.C. The report appears in the fall issue of STANFORD M.D., the quarterly magazine of the Stanford Medical Alumni Association.

Dr. Torrey found that the Community Mental Health Center complex in San Jose is more than adequate in terms of meeting specifications set by Washington.

"It is well above average," he writes. "But in terms of fulfilling the needs of a significant minority of its constituents it is hopelessly inadequate."

Mexican-Americans in San Jose constitute 10 per cent of a population of 1 million.

Traditional psychiatric services in Santa Clara County are provided by 150 psychiatrists and psychologists in private practice, general hospitals, Agnews State Hospital, and the Community Mental Health Center complex in San Jose.

The last opened its main center and four satellite health facilities in 1966. Two years later, a fifth facility was opened. Though called the "East Valley" Center, this is a misnomer, Dr. Torrey says, because it is in downtown San Jose and not in the East Valley.

The study shows that of the total visits to the main center in 1968 only four per cent were Mexican-American, under half of what would be expected.

Even the East Valley Center, opened specifically to improve services for Chicanos, had only 11 per cent of patient visits by them during the first nine months.

"Based on need, one would expect Mexican-Americans to overutilize mental health services," Dr. Torrey states. "Their need is indicated by such stress factors as the number of juvenile delinquent referrals, welfare recipients, and dependent children--all of which are disproportionately high for the Mexican-American parts of San Jose. -more-

Dr. Torrey argues that Chicanos cannot use the mental health facilities because they are inaccessible.

There is no way to explain, he writes, why a mental health facility has not been opened on the east side of the city. It is widely understood to have the greatest needs, and the fewest medical psychiatric, and social facilities of all kinds.

"Most of this was known when the location of the satellite centers was decided upon," the psychiatrist claims. "It was also known that the East Valley expected the largest population growth in the county. Yet the centers were placed in more affluent areas."

Dr. Torrey says political considerations, bickering between county and city health departments, and certain members of the Board of Supervisors deliberately blocked allocation of a satellite center to the area where it was most needed.

Language barriers are cited as another reason why more Chicano patients are not treated at the mental health centers. "If a Mexican-American wants to use the facilities, he had better speak good English," Dr. Torrey comments. Of the 120 psychiatrists, psychologists and social workers, only five of them spoke Spanish when the study was done.

In addition there is suspicion among many Chicanos that psychiatry is used to perpetuate Anglos as the ruling class. Cultural differences also exist as to what constitutes mental illness between those who provide care and those who receive it.

"A widely circulated story in the Mexican-American community," Dr. Torrey relates, "concerns the fate of three Mexican-American county employees who went to Washington for the Poor People's March. Upon their return they were ordered to have psychiatric examinations by their superiors."

Dr. Torrey shows that the two mental health resources now used by the Mexican-American community are the "curanderos" (the traditional healers of Mexico and Latin America), and a group of highly respected Chicano community leaders in San Jose to whom people turn with their problems.

There are about 20 such "mental health ombudsmen" in East San Jose, most with regular jobs, who supply mental health services during their off hours. "None of them would consider accepting payment for his services," writes Dr. Torrey. "Many of them are aware that what they are doing is 'psychotherapy' in the Anglo frame of reference. Most of them tend to specialize in certain types of problems except for psychoses."

Dr. Torrey stresses that his study is not meant as an attack on San Jose and Santa Clara County. "The problem began at a higher level," he explains, "when the idea of the Community Mental Health Centers evolved." Its architects perpetuated the dominant-class, dominant-culture, dominant-caste model of mental health services as The Model.

"This works as long as the mental health centers are serving Wellesley or White Plains or Palo Alto. But it is irrelevant when they are to serve Roxbury or the South Bronx or East San Jose," he says.

Dr. Torrey points out that by 1970 some 500 mental health centers will be funded by the federal government. By 1980 the number will be 2,000.

"It is imperative that we learn from our early experiences and modify the model to make it relevant," he comments.

What kinds of changes are needed? Dr. Torrey recommends that control and money for mental health services should be in the hands of a board from the Mexican-American community.

Mexican-Americans may develop and deliver mental health services quite differently than we are accustomed to, he writes. For instance, they might fuse them with social, educational, legal and public health services. They may decide to merge them with services under the model cities program. Or they may decide to place the emphasis on the problem of police relations.

"We should encourage them to conceive mental health services in whatever way it makes sense to them", Dr. Torrey concludes.

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Mailed November 30, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos 321-5310

FOR IMMEDIATE RELEASE

STANFORD - A Stanford University cancer researcher said Wednesday there is reason to believe guinea pig leukemia may be more related to acute lymphatic leukemia in humans than other animal models.

"This link," Dr. Stanley R. Opler said, "may bear directly on a recent disclosure by the American Cancer Society of a successful vaccination of animals against a specific leukemia virus.

The American Cancer Society stressed the discovery had no present application to human cancers.

But Dr. Opler said new evidence of a link between human leukemia and the blood cancer found in a guinea pig strain has emerged from drug studies at Stanford University School of Medicine and the Stanford Research Institute.

"They have shown guinea pig leukemia responds in a similar fashion to drugs presently used for treatment of leukemic patients," he said.

In addition, pathology studies have indicated that the pattern of acute leukemia as seen in studies of human leukemia and the guinea pig model was strikingly similar.

The results of drug treatment and the similarity of organ involvement and clinical evolution of the disease in humans and the animal model were "intriguing," Dr. Opler said.

Dr. Opler reported his findings last August at the 13th International Congress of Hematology in Munich, West Germany.

In 1969, speaking at an International Symposium on Laboratory Animals, Dr. Opler reported successful vaccination of guinea pigs against leukemia. A report on the symposium will be published shortly by the National Academy of Sciences.

Dr. Opler greeted the recent announcement by the American Cancer Society as providing independent confirmation of the early work.

He discovered the virus which causes leukemia in guinea pigs, and described its unique structure in 1966.

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11/25/70

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

SAN FRANCISCO -- Adoption of a stringent air quality standard -- one that would reduce the level of lead by a factor of three -- was proposed Thursday by a Stanford University Nobel prize-winning geneticist.

Such a standard is the one effective method of protecting the public interest in the face of a poverty of information about lead's effects on health, said Dr. Joshua Lederberg.

"All we know for certain is that lead burdens about three times higher than seen in most urbanites are dangerous threats to life," he said. "Just because intermediate levels of lead are so prevalent, it is impossible to draw firm conclusions about their health effects on the general population.

"We do know that the life expectancy trends in industrialized countries have reached a plateau, and sometimes a small downturn in recent years, and most authorities attribute at least part of this to environmental pollutions."

Dr. Lederberg is professor of genetics. He testified at a hearing on air quality standard for lead held by the California Air Resources Board in San Francisco.

Dr. Lederberg said several other approaches to resolve this issue might be considered. To illustrate his point he suggested that laws might be enacted which would compel the lead industry to insure itself against possible damages that might be claimed in the future by many citizens.

"The industry is gambling that lead additives are harmless," said Dr. Lederberg. "But they will lose very little if they were touting the wrong bet."

He later elaborated that this was not a serious proposal but an example of measures that can be taken toward an equitable resolution.

Dr. Lederberg noted the economic advantages of the use of lead additives averages out to about $5 per capita per year. Most of it is achieved with the first 20 per cent of the lead actually used.

"Our problem is to balance the unknown, but potentially enormous, long-term health hazards against the calculable short-term economic advantages," he said.

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Mailed November 20, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The Stanford University School of Medicine (SAT., Nov. 14) dedicated its new Crossland Laboratory for Audiovisual Learning in Dermatology.

The unique laboratory provides medical students and dermatology residents with teaching machines for studying basic dermatology, including slide facilities, sound on slide, and movie presentations. Portable equipment can be taken into carrels in the laboratory for individual use.

The laboratory was established in appreciation of Dr. Paul M. Crossland, who was a prominent Santa Rosa, California, skin specialist and a dedicated teacher on the clinical faculty at Stanford. Donations from the dermatologist and his wife, his patients and their friends, paid for the laboratory.

Key speaker at the dedication was Dr. Eugene M. Farber, professor and chairman of the Department of Dermatology at Stanford.

Mrs. Harriet Kent Crossland, who painted the portrait of her husband which hangs in the laboratory, attended the ceremonies.

Dr. Crossland had served with the U.S. Navy Medical Corps from 1930 to 1948, a period which included a tour as medical officer in charge on Russell Island, north of Guadalcanal, during World War II. In 1948 he retired from the Navy with the rank of captain and entered medical practice in Santa Rosa.

He entered the specialty of dermatology, and after completing his residency training at Stanford University School of Medicine, joined the School's clinical faculty as a lecturer in 1951. He became a full clinical professor in 1965, and taught until his death at the age of 64 in 1968.

Dr. Crossland was noted as a leading authority on radiation therapy in dermatology. A frequent contributor to the periodical literature in his field, he was also co-author with Dr. Anthony C. Cipollaro of the textbook "X-Rays and Radium in the Treatment of Diseases of the Skin," published in 1967.

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Mailed November 18, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Luigi L. Cavalli-Sforza, an internationally known expert in population genetics, has been appointed professor of genetics at the Stanford University School of Medicine.

The 48-year-old Italian scientist will assume his new duties at Stanford in February. He currently serves as director of the Institute of Genetics at the University of Pavia, Italy.

Commenting on the appointment, Professor Joshua Lederberg, chairman of the Department of Genetics, said: "Dr. Cavalli-Sforza is Italy's most eminent geneticist. Together with another colleague, Dr. Adriano Buzzati-Traverso, he is largely responsible for introducing modern molecular biology into Italian science."

At Stanford, Dr. Cavalli-Sforza will develop an expanded program for research and teaching human population genetics, Dr. Lederberg said. This subject is focal not only to the general course in genetics for medical students, but also for the University's new interdisciplinary program in human biology.

Dr. Cavalli-Sforza's research has been in two main areas--bacterial genetics, and human population genetics. The earlier work laid the foundation for a better understanding of the genetics of drug resistence in bacteria.

His work in population genetics has focused on the role of chance in determining human evolution, and the development of models and methods for the study of evolutionary relationships between different human populations.

Dr. Cavalli-Sforza has collaborated with Dr. Walter Bodmer, formerly of Stanford, on a new book, "The Genetics of Human Populations," to be published by W. H. Freeman.

Recently, Dr. Cavalli-Sforza has been studying one of the few remaining primitive populations--the pygmies of the central African rain forests.

The Italian geneticist has been a visiting professor at Stanford on several occasions in the past. He was born in Genoa. He received the M.D. degree with honors from the University of Pavia in 1944, and was a research fellow and assistant in genetics at the University of Cambridge (1948-50). In 1954 he went to the University of Wisconsin as a Rockefeller Fellow in genetics. Prior to becoming a professor at Pavia, Dr. Cavalli-Sforza was on the faculty of the University of Pavia, acting director of the International Biophysics Laboratory at Naples, and director of research in microbiology at Istituto Sieroterapico Milanese.

Dr. and Mrs. Cavalli-Sforza are the parents of four children.

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Mailed November 16, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- A chance to find out about a nursing career and an opportunity to be hired by local hospitals and extended care facilities is being offered through a new adult education course already underway at Cubberley High School in Palo Alto.

The course, worked out in close cooperation with Stanford University Hospital, El Camino Hospital, the Palo Alto Veterans Administration Hospital, and Palo Alto Unified School District will not give credit, but will provide a semester's worth of training for prospective nurses aides.

Those passing the course are not guaranteed a job, but area hospitals are eager for such trained people, states Marjorie Keys, assistant director, Nursing Service, at Stanford University Hospital.

Of additional value is the fact Dr. Ralph Mason, principal of Cubberley Adult School, has initiated a meeting with the state licensing officials in the field and is fairly certain that students completing the course will be licensed as home nursing aides.

The course is offered Tuesday and Thursday nights, and Saturday mornings, which enables the students to hold down a full-time job, while they are being trained. The course meets Stanford Hospital's requirements and graduates of it, if put on the Hospital staff, will have their in-service training period shortened.

There will be lectures, guest speakers and actual supervised work in medical, surgical and orthopedic wards. Currently, El Camino Hospital facilites are being used; Stanford Hospital will be used for the February term.

The course is taught by Mrs. Florene Poyadue, a registered nurse, who assisted in setting it up. Ability to read and write at a 10th grade level, or a high school diploma if the applicant is under 18 is required.

The actual hospital job that the course leads into will involve assisting nurses in a variety of duties, including giving baths to patients, taking temperatures and blood pressures, admitting and dismissing patients, and performing certain kinds of treatments such as the application of hot and cold compresses. Through it all, the aides will get a good idea of what nursing is all about and if they want to continue in the nursing profession, Miss Keys said.

Possibilities for an additional course that can give credit toward a licensed practical nurse degree are being explored in one of the district colleges.

The current course at Cubberley costs $6 with a $7 text extra. Two uniforms, low-heeled white oxford shoes and a watch with a second hand are the only other expenses.

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Mailed November 16, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- Stanford University engineers and physicians are combining their specialties in a unique demonstration project designed to ultimately give one anesthesiologist the capability of monitoring several surgical patients at the same time.

Full application of the new approach is still some time away, but implications are so far reaching that the entire practice of anesthesia may be altered in the opinion of one of the project directors, Dr. J. Weldon Bellville.

A computer system, already at work, takes data directly from the anesthetized patient in the operating room, instantly processes the required information, and returns it to the operating room for use by the attending anesthesiologist.

Use of this modern information processing system is creating an opportunity to attack the principal current problems in anesthesia--the manpower shortage and the need for greater depth and perception in monitoring physiological variables.

The project is a joint undertaking of the Stanford University School of Medicine, and the School of Engineering. It is headed by Dr. Bellville, professor of anesthesia and Dr. Gene Franklin, professor of electrical engineering.

The ultimate goal of the project will be to open up new insights into the entire practice of anesthesia. The result will be the probable emergence of a new type of anesthesiologist--one who not only understands the basic physiology and pharmacology relating to patient care, but also one who uses and understands information processing techniques, Dr. Bellville said.

Eventually, the system may also serve as a model for monitoring approaches in intensive and coronary care, obstetrics, and in the recovery room.

According to Dr. Bellville, the monitoring will enable doctors to know more about patients by remote control than they now know, sitting at the bedside with fingers on the unconscious patient's pulse. The computer will be directed to recognize any disturbance or minute change far more accurately than any other tools currently at hand--which are primarily the anesthesiologist's own ear and eye, stethoscope and blood pressure cuff.

The anesthesiologist's role today is enormously and increasingly important, but without the computer aid, he is still working with tools of another age, Dr. Bellville stated. The anesthesiologists control the vital functions of sensation, consciousness, respiration, circulation, neuromuscular action and metabolism, all under the adverse conditions of preceding disease or malfunction, and immediate surgery.

In effect, the life processes of the patient are under the anesthesiologist's control prior to, during and after surgery, and he must not only anticipate the surgeon's actions and decisions, but also detect changes in the patient and control them, often in a matter of seconds.

-more-

With the new system this crucial role will be backed up and assisted by the computer which processes all physiological information that is being sent in.

The operating room anesthesiologist can ask for one of 16 different computer displays of information; also there is an automatic alarm system and cross checking logic that will instantly indicate sudden change in the patient's condition or any equipment difficulty.

To evaluate the impact of computer monitoring on patient care, cameras are mounted in the operating room. A motion picture camera is adjusted to take one-per-second frame shots of the operating procedures and the anesthetist so that a detailed record is kept.

The detailed pictures will be used for a variety of later studies and to assist in developing new computer programs.

The immediate incoming physiologic data will go by cable to the Sigma 5 computer in the Durand Building, will be processed there and returned in fractions of seconds.

Computer programs have already been developed to process information from various physiologic subsystems--electrocardiograms, analysis of blood pressure and vascular resistance measurements, respiratory mechanics, concentrations of inhaled and exhaled gases and the level of activity of the central nervous system.

Several research associates in the Engineering School have been responsible for this phase of the project. The programming is based on techniques developed in the Department of Anesthesia for computer processing of electrocardiograms by Professor Jobst Von der Groeben.

Anything other than the essential monitoring equipment will be either in a specially constructed control room adjoining the operating room or at the computer center; the operating room equipment will eventually hardly be seen.

Under a separate grant and unrelated project, Dr. James Meindle of the Engineering School is developing integrated circuits for medicine. However, it is expected that through the results of this project, lead wires on the anesthetized patient will soon be replaced by radio transmitters an eighth of an inch square, molded onto the sensors attached to the patient.

At the present time, it is expected that two operations a week will have the computer back-up.

The project is supported by a grant from the National Institutes of Health.

Mailed November 16, 1970

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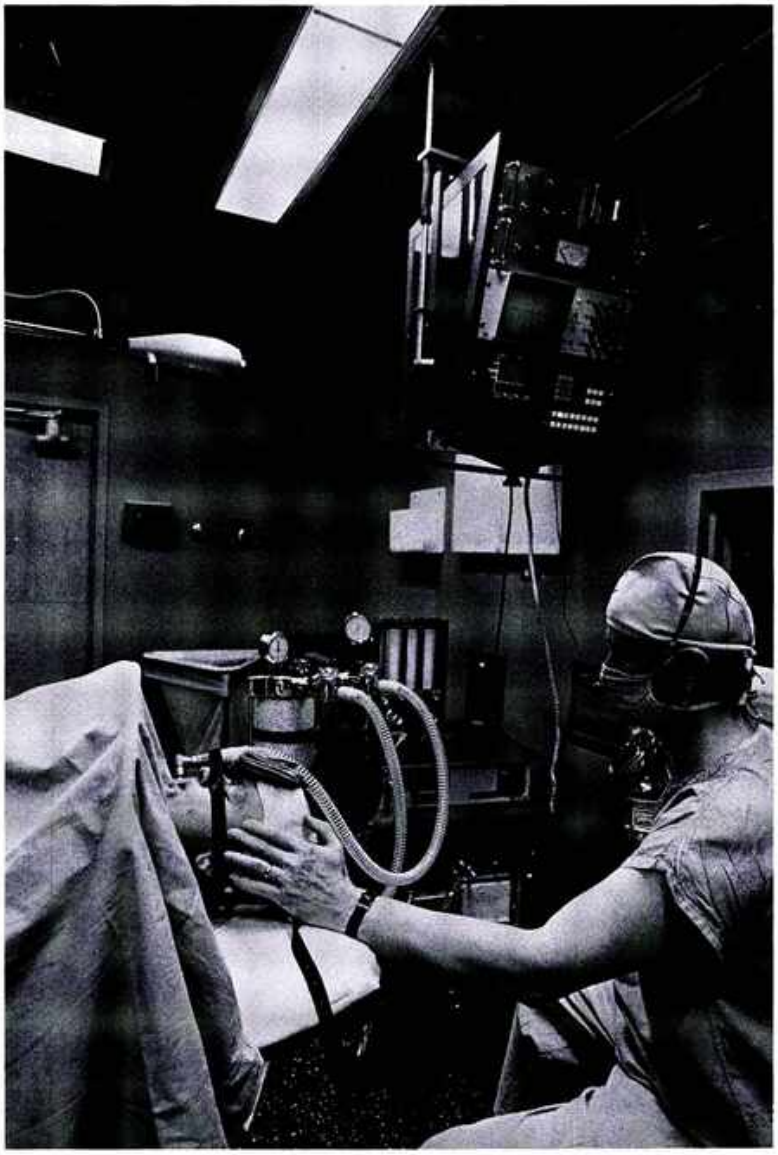

The anesthesia machine, center, attached to patient is sending data directly to the computer; the display screen, upper right, makes the returned data instantly accessible to Dr. J. Weldon Bellville, anesthesiologist and co-director of the project. November 17, 1970.

TO: NEWS BUREAU, ROOM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

Computer Back-up for Anesthesiologists

Please send me an 8x10" glossy print.

NAME _____ PUBLICATION _____

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--In the belief that new mothers need substantial time to rest and to become acquainted with handling their infants, Stanford University Hospital is restricting maternity visiting hours to two periods a day--an hour and a half in the afternoon, and an hour and a half in the evening.

The general visiting hours of the hospital had been expanded last year for greater flexibility, but the hospital has found that these hours are not in the best interests of maternity patients, explains Miss Lois Williams, assistant director of nursing service.

So, starting this week, maternity visiting hours will be 3:00 to 4:30 p.m., and 7:00 to 8:30 p.m. However, the babies' fathers are not subject to these restrictions and may visit anytime.

Liberal visiting hours will remain in effect for general medical and surgical patients at the hospital. These are, with certain limits which can be set by patients' nurses, from early morning until 9 p.m. at night.

Stanford's Coronary Care, Intensive Care and Pediatric units have their own visiting hours, not related to the general hours or maternity's special restrictions.

Parents of pediatric patients may see their children at any time. Intensive Care Unit visitors are limited to four fifteen-minute periods a day: 10:15 to 10:30 a.m., 1:15 to 1:30 p.m., 5:15 to 5:30 p.m. and 9:15 to 9:30 p.m. Visitors to the Coronary Care Unit may spend 10 minutes of each hour with the patient.

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Mailed November 14, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- A small but intense drama of survival is being played in the Stanford University Hospital. The key to its successful outcome is needed from the only people in the world who can help--nursing mothers.

Two babies are making a major fight for their lives in the hospital. In spite of all the excellent care they are getting, they might not survive if they cannot receive human milk, doctors say.

The babies cannot tolerate any formula the hospital can devise, said Dr. Philip Sunshine, associate professor of pediatrics. The only thing they are thriving on at all is the familiar, down-through-the-ages mother's nourishment and the available supply at the hospital is rapidly being used up.

One of the babies, Jason, is five months old. He weighs about nine pounds, which was his initial birth weight. He has had a major intestinal operation, and the blood supply to his intestines is limited. Jason lies in his crib with a bright mobile over it, as though he were in his own nursery room, but he is surrounded by doctors and nurses who know that breast milk is the only thing that will keep him going right now.

Tommy is also five months old, but except for his eyes, which are bright, clear and watchful, he looks newborn. He weighs six and one-half pounds, although he was a full-term five and one-half pound baby. He was born with a major gastrointestinal allergy. He is currently being fed a glucose-amino acid solution through a vein in his neck. Just recently, he has been getting a dilute solution of human milk which is the only food that he has been able to tolerate. Tommy, like Jason, needs a nursing mother's lifeline of help right now.

Dr. Sunshine stressed that the milk donated can be frozen to be used as needed.

However, the problem of keeping a supply of milk on hand is a continuing one, because there aren't ever enough donations, Sunshine said. "We always have babies who have to have this kind of help. Right now it's Tommy and Jason. But it could be any baby at any time. Mothers' milk donations are needed and used constantly."

Mothers who wish to help may contact Barbara Eickworth in the Premature Infants Research Center, Stanford University Hospital, 415: 321-1200, extension 5445. She will give specific instructions as to what to do.

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Mailed November 9, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- James H. Stanford, an associate director of Stanford University Hospital, has been named finance director of San Jose Hospitals and Health Center, Inc.

He will assume responsibility for the financial systems of the 728-bed community hospital in downtown San Jose on Dec. 30.

Stanford, 32, came to the Medical School Facilities planning staff in 1967 from General Mills, Inc., in Minneapolis, where he had been assistant to the financial vice president. He was active in the negotiations which led to the University's purchase of the City of Palo Alto's interest in the Hospital, and in July 1968 was one of three top administrators installed when the University assumed management of the Hospital.

He holds A.B. and M.B.A. degrees from Stanford University. He is currently serving as a vice president and director of Big Brothers of America on the Peninsula, and is an active Big Brother. He and his wife and two daughters live in Menlo Park.

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Mailed December 29, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Basic research aimed at eventual prevention of abnormalities of the bones and the other supportive and connective tissues of the body will be conducted in a one-year study at Stanford University Medical Center.

Announcement of a $99,809 research award for the study from the John A. Hartford Foundation was made jointly today (Mon., Dec. 28) by Harry B. George, president of the Foundation, and Dr. John L. Wilson, acting dean of Stanford University School of Medicine.

Principal investigators in the study will be Dr. William van B. Robertson, professor of biochemistry in the Department of Pediatrics, and Dr. Norman Kretchmer, professor of pediatrics and head of the Division of Developmental Biology at Stanford.

Their research group will undertake investigations of the complex biological processes of the mesenchyme, the tissue in the embryo which gives rise to the connective tissues of the body.

Malfunctions of the mesenchyme during fetal development may lay the groundwork for diseases in infancy, childhood or adulthood, such as congenital heart disease, rheumatoid arthritis, Hurler's Syndrome (in which there is an abnormal accumulation of connective tissue constituents, resulting in blindness, and respiratory and heart troubles), osteoporosis (a condition in which the bones become rarefied -- extremely thin), and others.

A concept already appreciated by scientists is that the mesenchyme interacts with the ectodermal (outer) tissue layers during fetal development, regulating the flow of metabolites, nutrients, hormones and drugs. (The ectoderm gives rise to the "functional" cells, such as those of the liver, pancreas, skin and other organs.) By studying the metabolic relationship of the two layers of developing tissue, Dr. Merton R. Bernfield, a pediatrician participating in the research, explains, the group hopes to learn how the mesenchyme affects the complex structure of various organs.

Two constitutents of the mesenchyme, a protein known as collagen, and a group of complex carbohydrates known as muccopolysaccarides,direct the eventual overall shape of organs. Abnormal metabolism in these constituents during the early stages of life may lead to their over-accumulation, deficiency, or distortion later. Collagen is the chief fibrous protein in the body.

The Stanford researchers will direct another portion of their study at examination of the role of ascorbic acid (Vitamin C) in the synthesis and subsequent breakdown of collagen and some of the muccopolysaccarides. "This vitamin occupies a central and unique position in maintaining the integrity of supporting tissues," Dr. Robertson says. "And ascorbic acid deficiency offers the uncommon advantage that it can be turned off and on at will."

A third portion of the research will concern achieving a better understanding of the interactions of steroid hormones and muccopolysaccarides. Steroid drug therapy for many human ailments can cause unfortunate side effects. Knowledge of how these drugs interact with various tissue constituents may be a first step toward creation of steroid drugs with a minimum of bad side effects.

Findings of the Hartford Foundation-sponsored research which have therapeutic value will be applied, whenever possible, to children who are patients at Stanford University Hospital and the Children's Hospital at Stanford. "We hope someday, through this research, to learn how to prevent these disabilities altogether," Dr. Kretchmer said. ###

Mailed December 28, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Stanford University's 100th kidney transplant patient will be spending Christmas at home in San Jose with her parents and three younger sisters.

She is Lola Yutze, a dark-eyed, supremely happy 18-year-old, daughter of Mr. and Mrs. Dennis E. Nelson of San Jose.

Not only is Lola safely ensconced with her family for the holidays, she is jubilant about the fact that the outlook for the new year includes rejoining her class, the 1971 seniors at Branham High School, and graduating on time with them next spring.

Hit with serious illness two years ago (her sophomore year), she was told this past summer by Stanford doctors that a kidney transplant operation was necessary to save her life. In August she entered Stanford University Hospital for the transplant operation, which was performed by a team headed by Drs. Roy B. Cohn and Zoltan J. Lucas. She is Stanford's 100th kidney recipient. The procedure has been done there since 1964.

Lola was dismissed from the hospital in November, and is now back to a pattern of normal activity. She has been out in the stores merrily shopping for Christmas gifts, and, she says, eyeing the variety of teenage fashions. "I look at all the clothes," she says, "I never tire of it."

Above and beyond the enchantment that clothes hold for most girls, there is a practical reason for her big interest: she is back up to a healthy weight and needs to collect an almost entirely new wardrobe. To help the cause, her aunts and uncles and cousins gave her a gift of money for clothes when they came to celebrate her 18th birthday on Dec. 12.

Lola's favorite subject of the four she is taking (through tutors who come to her home) this semester, is art. She thinks interior decorating is a likely choice for a career, something she is actively considering now that all of her interests are picking up again. "Now that I'm feeling really good," she says.

Her family is taking the prospect of her recovery one step at a time. Primarily they are thankful to be reunited with her this holiday. "It's beautiful," says her mother.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- Ever think of the most precious gifts to give or to get this time of year? Oh, you've thought of them all, but money's a little too tight this year?

Well, there is one gift that you probably haven't thought of. And it is certainly one of the most valuable ever--both to give and to get. It is also very cheap to give, although it is enormously valuable to receive. It is also always needed, and at this time of year, more than ever.

It is the gift of blood. Donations decline sharply during holiday time. Consequently, major shortages can result. The blood usually needs to be fresh and on hand at all times, according to Dr. Paul Wolf, medical director of the Stanford University Hospital Blood Bank.

The results of a low blood supply in area hospitals could include postponement of all but the most urgent surgery at a time when accident rates rise, noted Dr. Wolf.

What's more, in the mid-Peninsula area, there is a Community Blood Reserve (CBR). If you are a member, it provides whatever amount of blood needed by you or your family in times of illness, accident or surgery.

For a $2 enrollment fee and an agreement to donate on call no more than one pint of blood once a year to the Stanford University Hospital Blood Bank, with few limitations, all members in a family are covered if they have a need for blood, whether at Stanford or any other hospital.

(This does not pay charges associated with giving a transfusion, or crossmatching tests, which most health insurance plans cover, but works somewhat like a bank account--the blood given is insurance that it will be there for members and their families when it is needed, and at the same time will provide the community with fresh blood at all times.)

For more information about the program, call the Stanford University Hospital, 321-1200, extension 5979. It is sponsored by the Junior League of Palo Alto.

Blood donations can also be made, by appointment, with Stanford Blood Bank, Red Cross in San Jose, Peninsula Blood Bank, Burlingame, and Irwin Memorial Blood Bank in San Francisco.

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Mailed December 22, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A Stanford University psychiatrist says encounter groups can be risky, especially when the leader is aggressive, intrusive, and has a charismatic personality.

Dr. Irvin D. Yalom reports he reached this conclusion after studies showed a nine per cent casualty rate for students taking part in encounter groups. This rate is unusually high by psychiatric standards.

A total of 210 Stanford students were enrolled in encounter groups surveyed by Dr. Yalom. Of the 170 students who finished the study, 16 were termed "casualties" in that they were adversely affected by the group sessions.

Casualties ranged in severity from three students who developed psychoses and severe depression to students who felt their self-esteem had been destroyed.

One student in the test committed suicide, but Dr. Yalom stressed the act could not be blamed on the test encounter group. The patient, who obviously was searching many avenues for help, at the same time had received personal psychiatric attention, and was participating in several other group therapy sessions.

Dr. Yalom, an associate professor of psychiatry, reported on the research Wednesday at a symposium in the Stanford University School of Medicine. Yalom also heads a task force of the American Psychiatric Association studying recent developments in the use of small groups, their dangers and promise.

Seventeen different encounter groups were used for the Stanford study, each led by recognized people in the field. Sessions continued for 30 hours, some on a marathon basis and some on a weekly basis.

Encounter groups have been one of the most rapidly growing movements in the United States, reaching epidemic proportions in the west. These groups attempt to encourage openness,honesty, total self-disclosure among participants. The experience is not labeled "therapy," but the groups strive to increase inner awareness and modify behavior.

In the Stanford study, a cross section of encounter group techniques were used. Included were Gestalt therapy, psychodrama, personal growth, Synanon, and nonverbal.

But the type of leader rather than the ideology, determined how the group functioned, Dr. Yalom found.

Students in groups led by individuals with an aggressive, stimulating approach, with a charismatic personality and sense of mission, were enthusiastic at the immediate conclusion of sessions, Dr. Yalom noted. But the results quickly evaporated. These groups also produced the most casualties.

On the other hand, the long-term followups showed more benefits from encounter groups led by leaders using a low-key or unstructured approach.

Some of these sessions had been so dull that observers fell asleep, but after six months, students felt they benefited, he said.

In the groups with a laissez fair approach, it seems the leaders did not interfere with the development of group feeling. Some were able to enhance and develop it. But the aggressive leaders did not allow it to happen, because they were intruding their own needs on the group, the psychiatrist commented.

Dr. Yalom explained the casualties in the groups were tracked down by questioning the leaders, the students themselves, and by checking with dropouts, and with students who sought psychiatric help.

The leaders were the least sensitive to problems, he said, and often were not aware of the casualties in their group.

Many students enter encounter groups with unrealistic expectations, Dr. Yalom believes. They are lonely, isolated and alienated, and come to the encounter sessions vowing to be different. But it is impossible to get the help they need from a group, and so they become even more discouraged. ### 12/18/70

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD--Dr. Kathryn M. Smith, dean of the University of Colorado School of Nursing, will spend the coming year assisting Stanford University School of Medicine to draft plans for the future of nursing at Stanford.

She has been appointed a visiting professor of nursing at Stanford for a year-long study to develop short- and long-range goals for the School of Nursing.

The study is part of the continuing examination of all activities and programs within the Medical School.

The current nursing program at Stanford offers a basic undergraduate nursing program. Some of the questions to be raised in the study are: Should this program be expanded to include a graduate level? Should there be both graduate and undergraduate programs or is one more appropriate than the other in a university? Which then, and at what length? What are the future roles of nurses and what preparation is required? What special contribution can a university make to the education of nurses?

The Department of Health, Education and Welfare has given Stanford a one-year grant to make this study. The San Francisco Foundation has provided a grant of $25,000 for each of three years to augment and implement the study.

Dean Smith will work in collaboration with Dr. John L. Wilson, acting dean of the School of Medicine, and Miss Grace Ringressy, director of the School of Nursing.

Dr. Smith has been dean of the University of Colorado Nursing School since 1965. She is a 1944 graduate of the University of Minnesota and obtained the Doctor of Education degree from Stanford University in 1964. She served as assistant dean of the University of California School of Nursing in San Francisco 1947-64.

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Mailed December 10, 1970

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

(ADVANCE) FOR PM RELEASE MONDAY, DECEMBER 7, 1970

SAN JUAN, PUERTO RICO –

Evidence that acute leukemia in humans may be evaluated by comparing normal and leukemic regulatory mechanisms of white cells grown in the laboratory was presented Monday, Dec. 7, by a Stanford University medical research team.

The finding is another piece in the puzzle of what mechanisms are involved in the clinical evolution of the fatal disease, which originates in the bone marrow.

The two cell mechanisms used for measurement are called CFC (colony forming capacity) and CSA (colony stimulating activity). Both are essential for the development of normal bone marrow.

In healthy persons CSA stimulates bone marrow cells to grow into colonies of many normal white cells.

But in 15 patients with acute leukemia, studied by the Stanford researchers, bone marrow cells were found to have both impaired CSA and abnormal CFC. In short, the patients had defective bone marrow.

When these patients were treated and temporarily returned to good health, their CSA and CFC became normal, and the marrow began to produce normal cells again, the researchers reported.

The researchers are Dr. Peter L. Greenberg, a postdoctoral fellow in medicine; William Nichols, a medical student; and Dr. Stanley L. Schrier, associate professor and head of the division of hematology at Stanford University School of Medicine. They presented their findings at the meeting of the American Society of Hematology in San Juan, Puerto Rico.

Acute leukemia [the adult type] is a cancer of the bone marrow and lymph nodes where blood cells are manufactured. The disease sends millions of abnormal white cells flooding into the blood stream. It infiltrates and ruins vital organs, and leaves its victims almost defenseless against infection and hemorrhage. The disease is incurable although there are treatments that provide temporary relief.

In their studies, which used newly developed tissue culture techniques, the Stanford investigators have also turned up other significant findings:

–After the sickest leukemic patients entered a drug induced remission, normal marrow cells emerged. It was previously thought normal marrow cells in such patients were completely wiped out. Their presence, according to the scientists, may have implications for treatment.

–The extent of change of CFC and CSA to normal may be useful in defining more precisely the leukemic patient's clinical improvement after treatment.

–Defective CFC and CSA were found in the marrow of preleukemic patients [patients with certain conditions which develop into leukemia over a long period.] Detection of the defective marrow growth and CSA in this system, the Stanford researchers believe, may help in diagnosing leukemia before it is clinically apparent.

However, bone marrow abnormalities due to CFC and CSA deficiency do not fully explain why leukemia in preleukemic patients develops slowly. One speculation is that the body holds the disease in check.

The Stanford researchers have cautioned that a great deal of painstaking observation will be needed before questions raised by their study can be fully answered.

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END ADVANCE FOR PM RELEASE MONDAY, DECEMBER 7, 1970. 12/3/70

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- A new approach to provide aid for stroke patients is underway at Stanford University Hospital and Palo Alto Veterans Administration Hospital.

The programs, which are separate, are both assisted by Area III, California Regional Medical Programs, administered by the Stanford University School of Medicine. The Stanford program's emphasis will be on a coordinated team approach that will have long-range implications for treatment of other disabilities, according to its planners.

Evaluation and aid for all stroke patients at Stanford University Hospital can be put in motion by the simple notation, "Stroke Program," written on the patient's order chart at the request of the attending physician.

Immediately, each patient is evaluated by all the units that will assist in his care. These units involve nurses, doctors, social workers, physical, occupational and speech therapists as well as public health nurses for post-hospital needs. Also important in this effort is consideration of the family's own needs, and its part in the patient's recovery.

This program has been a year in the planning by a University Hospital Stroke Committee, with the help of Regional Medical Programs.

A special stroke coordinator nurse is now on hand to see to it that a comprehensive program for each patient is worked out. Dr. Paul B. Eckman is committee chairman. He is a neurologist at the Palo Alto Medical Clinic and an assistant clinical professor of neurology at Stanford University School of Medicine.

Previously, evaluation and therapy for stroke patients has been variable. A thoroughly planned rehabilitation program has not been automatic. Stroke management seems to have been a continuing problem at the national as well as the local level, although stroke remains one of the top killers and cripplers in the country, according to Dr. Eckman.

The nurse coordinator, Mrs. LaVerne Westerlund, must work with the staff of whatever unit in the hospital that the stroke patient is admitted to, in order to arrange details for each person's care. Such care ranges from teaching the stroke patient how to handle himself to the best of his capacity, to family counseling.

The program is similar to other Regional Medical Programs already underway at Community Hospital of Santa Cruz, and Valley Medical Center in Santa Clara. Other hospitals and colleges in the area are also working out programs to increase training in stroke care, under a new RMP grant.

The Palo Alto Veterans Administration Hospital stroke program will also utilize a team approach but with emphasis on specialized treatment of patients who have predisposing symptoms of stroke, said Dr. William Hofmann, of the VA Neurology Department and associate professor of neurology at Stanford.

The patients, referred by private physicians, will be studied and returned quickly to the referring doctors for follow-up care. The data taken from these patients will also help in a long-range study of strokes.

Non-veterans can now be admitted to certain services of the VA Hospital, under a sharing agreement which became law some time ago. Unfortunately this provision for non-veteran use of VA facilities remains largely unused, Dr. Hofmann noted.

He pointed out the VA Hospital in Palo Alto, with its first-class facilities and Stanford Medical Center staff, operates with some beds empty most of the time and these could be used by the community. Local physicians, however, have not begun to take advantage of this type of an area-wide referral center.

Dr. Hofmann believes that the VA Hospital should and can become a major resource for stroke treatment and training. He points out that the daily cost is less than the cost of similar care elsewhere, and that at least our local county is using the VA Hospital to refer indigent non-veteran patients.

In addition, he states the Palo Alto VA facilities are more elaborate than those in many of the smaller community hospitals in the 11 counties in Central California that are served by the Regional Medical Programs and could well be used as a "back up" resource for special studies. In this way, Hofmann points out, Federal tax dollars which help support the VA hospitals could actually come back directly to the community in the form of services. The whole concept opens up exciting possibilities for over-all quality care, Hofmann is convinced.

In addition, the VA has a training program that will give licensed practical nurses additional skills in the management of stroke patients in nursing homes and extended care facilities.

The VA also hopes to train doctors from neighboring community hospitals in the use of new techniques and equipment in stroke management.

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Mailed December 2, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- Dr. Paul H. Jacobs, Stanford Medical Center dermatologist, was presented on December 1 with an award for notable work in clinical dermatology.

Dr. Jacobs, associate professor of clinical dermatology and director of the dermatology clinic, is a recently retired Army Colonel. He was awarded the James Clarke White award, which is given each year to a doctor for outstanding work performed in clinical or research dermatology while employed by the U.S. Government.

The award consists of a plaque and $500 honorarium. It honors Dr. James White, who is regarded as the father of American dermatology. Dr. White, a teacher, writer and clinician, was the first American professor of dermatology when Harvard University established such a chair in 1871.

Dr. Jacobs received the award in Washington, D.C. at a meeting of the Association of Military Surgeons.

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Mailed December 1, 1970.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

Electronic implants may someday replace conventional hearing aids, a Stanford University ear, nose and throat specialist predicts.

The know-how for developing electronic hearing implants is now available, Dr. Richard Goode said, but more animal research is required to evaluate their performance before the devices can be routinely implanted in humans.

So advanced, in fact, is the technology of electronic implants that Stanford University School of Medicine recently sponsored a conference on the subject. Present were doctors, electronic engineers, audiologists and physiologists, an increasingly common association of experts in dealing with many of the problems and approaches of such implants.

These men consider themselves as a kind of avant garde in the study of hearing problems. That present hearing aids are "abominable" was the consesus held by many who attended the Stanford conference.

"We're about where the pacemaker people were 15 years ago," said Rollin Denniston, a Minneapolis engineer who has invented one electronic hearing device. "We're all at about the same place in our research--and now we're after the breakthrough--where people with badly impaired hearing will be able to hear and communicate normally."

Goode pointed out that researchers are now finding out more and more what takes place when sounds are received in the ear and transformed into the neurological impluses that travel to the brain. (The brain then translates these impluses into "recognizable" interpretations--speech, singing, music, etc.)

"The catch" said Dr. Good, "is to use a device that will electronically trick the brain into thinking it has received 'normal' sound waves."

The researchers fall into two categories--those who are attempting to stimulate the hearing nerve (or the inner ear) itself, and a second group whose aim is to stimulate the ear drum, or ear bones into movement. The first group is concerned with the problem of total deafness--where the patient cannot hear; and the second group takes aim at creating a better amplifier for those with impaired hearing.

One such device for hearing improvement is being explored by Dr. Goode and Dr. Theodore Glattke, also of Stanford.

-more-

222--Hearing device

It utilizes, as do conventional hearing aids, a basic concept of electrical engineering, whereby electomagnetic waves are converted into sound waves. In this case however, a magnet is implanted on the ear drum or ear bones. A tiny amplifier with a microphone is worn behind the ear, but instead of an earphone, only a small output coil is used. Amplified electromagnetic waves then radiate from this encased coil to the implanted magnet. As a result, the magnet moves, driving the bones and ear drum, thus producing the sensation of sound.

Total implantation--including the amplifier--is not possible at this time, because of the relatively brief life of batteries, Dr. Goode noted. However, he adds that nuclear power supply will ultimately provide the answer and when that concept is workable, total implantation will be done.

Goode points out that this device has a number of advantages over hearing aides currently in use, including improved fidelity of sound reproduction and also that the customary tight fitting ear mold can be eliminated. This elimination alone offers many advantages: any residual hearing left to the patient can now be utilized since the ear is open. Also important for cosmetic purposes, the wearer's handicap is not as apparent.

Denniston, the engineer, noted that the electronic technique itself was so highly developed that all sounds were coming through with "remarkable" fidelity. He felt that the problem of distortion which has plagued hearing aid users up until now could be considerably improved by the implants.

The remaining problems facing the investigators are centering around such questions as exactly where the implant should be, how long the apparatus will work, how long the device can remain implanted and best methods of getting power through the intact skin to the implant. (The long-term use of wires passing through the skin is of course unsatisfactory because of irritation and infection.)

As of now, there have been very limited experiences with humans to answer these questions, Dr. Goode stressed.

Another Stanford researcher, Dr. F. Blair Simmons, who is working on the delicate and complicated problem of implants for the cochlea, or inner ear, said his work with animals was so far along that "there weren't too many more questions we can ask of the cats."

However, he warned the implant method probably will not work in patients whose hearing nerve is defective. He noted that in some cases, a variety of sounds were received, after electronic stimulation, but speech itself as an "understandable language" remains extremely problematical.

Dr. Goode cautioned that routine application of any electronic hearing implants in humans is at least several years away.

Research at Stanford is being financed through the National Institutes of Health and Veterans Administration grants.

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January 20, 1971.

EDITORS: Pictures available upon request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- A new program of comprehensive care for hemophiliacs has been established at the Children's Hospital at Stanford.

The program is under the direction of the Department of Pediatrics of the Stanford University School of Medicine. Children's Hospital, which specializes in the care of children with chronic disorders, is affiliated with the medical school.

A key element in the program is that the boys are taught to administer their own intravenous infusions of cryoprecipitate, the component of blood which contains a specific clotting factor they lack. Once they learn the technique of giving themselves intravenous infusions at home, there are fewer trips to the hospital. Parents and boys are saved countless hours, and medical costs are brought down.

Coordination of all aspects of the boys' health is achieved through consultation among many specialists, an approach which was arrived at "to prevent patients and their families from getting lost in the various subspecialties," says Dr. Jack Lazerson, assistant professor of pediatrics and director of the hemophilia program.

The boys have Classic Hemophilia A, the type of the disorder characterized by an abnormality of a protein in blood known as Factor VIII, which is essential for coagulation. This form of the disorder affects 1 in 10,000 mailes in the United States. (Another form, Hemophilia B, which is not treated with cryoprecipitate, affects 1 in 100,000 males, and there is also a very rare form, Hemophilia C, which affects males and females. In Classic Hemophilia A, the disorder is "carried" by mothers, but appears only in their sons.)

"Before we started making use of a team, parents of these children in the Bay Area had no alternative but to seek help on each separate phase of the problem as it presented itself in the life of the child. They were almost always unprepared for the next difficulty and in general were losing ground in the battle for the boy's well-being," Dr. Lazerson says.

A major difference now is that from the boys' infancy on, parents are fully aware that hemophilia is a complex disorder which can be expected to manifest itself in a number of ways. The parents learn that the separate phases of the problem will be fitted into the comprehensive program and will be closely watched by the cooperating specialists.

Very early in each child's life, the parents come to Children's Hospital at Stanford for a consultation. A social worker meets with them to assist on the financial side of the problem, referring them to local agencies for aid if need be, and telling them about a plan which will enable them to accumulate blood credits.

In the past, Dr. Lazerson explains, the high cost of cryoprecipitate amounted to a major problem for parents, becoming almost prohibitive. Through the comprehensive care program, parents are advised to build up a large credit account by getting regular blood donors far in advance of the time when big quantities of cryoprecipitate may be needed. -more-

Later on, the social worker may be called on to arrange counseling for the boy, the family, or both.

Through private conferences, and in group meetings, parents are thoroughly educated about the disorder--its physiology, how it is affecting their child, and how the genetics of the problem could affect the family in the future.

In addition to pediatricians and pediatric hematologists at the Hospital, the medical team will probably include a physical therapist, nurse, orthopedist and the family's own doctor.

Curiously enough, a process known as "fractionation" paved the way for the downfall of the "fragmentation" of medical care which used to amount to a very unsatisfactory way of life for hemophiliacs and their families.

For them and their doctors, fractionation is a word with a highly positive connotation. It refers to the separation of whole blood into four major components: red cells, platelets, plasma and cryoprecipitate.

The components play separate roles in the body, and are needed only as components by patients with differing needs. For instance, patients with anemia need only the red cells. Patients with platelet disorders need only platelets. Patients with leukemia may at some times need only red cells, and at other times need only platelets. Plasma is provided for patients who have lost blood volume and do not need the cellular components.

Patients with Classic Hemophilia A need the component of normal blood which contains a high concentration of Factor VIII -- cryoprecipitate.

In 1964, a simple method of extracting this component was developed by a physiologist at Stanford, Dr. Judith G. Pool. The technique, which can be carried out at any blood bank without elaborate equipment, involves separating the plasma from whole blood by centrifugation and freezing it within six hours after it is collected, then centrifuging the precipitate formed by the gradual thawing of the plasma.

Last September (1970) the National Institutes of Health licensed cryoprecipitate for commercial production throughout the United States.

Both the technology and the more recent licensure have been important steps in advancing the treatment of hemophilia, and in offering hemophiliacs a much more optimistic view for the future, Dr. Lazerson says.

Blood banks are encouraged to fractionate blood, donors are aware that fractionation means maximal utilization of the blood they donate, and the greater availability of cryoprecipitate has now enabled effective treatment for hemophiliacs, he points out.

Boys who are taking cryoprecipitate on a preventive basis to avoid bleeding episodes (some take it only as symptoms arise) give themselves an infusion at home every 48 hours. They also administer a shot just before sports activity or physical therapy. Internal bleeding, rather than external bleeding, constitutes the biggest threat. The bleeding may occur as a result of a bump, but more often it occurs spontaneously, usually into the joints. Before the use of cryoprecipitate, this bleeding caused the crippling and swelling which so often meant abnormal lives for boys with the bleeding disorder.

Through the comprehensive program, and the use of prophylactic treatment, Dr. Lazerson sees abnormal lives for hemophiliacs becoming more and more a thing of the past: "Already we can see the boys' attendance at school approaching normal and none has been hospitalized in the past year. At the same time, we can see that the more active they are, the better their general health is going to be, so we expect things to improve even more in the near future," he comments.

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Mailed February 8, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Announcement of two new gifts to Stanford University Medical Center came today from Mrs. George E. Boyd, president of the Center's 900-member Auxiliary.

A gift of $10,000 from the Auxiliary will be applied toward the purchase of a pho/gamma scintillation camera system for the Center, and the volunteer group has donated $2,402 to buy a cardiac resuscitation unit for the emergency room of Stanford University Hospital, she said.

Two scintillation camera systems, utilized in diagnostic work in nuclear medicine, are already in use at Stanford. "The addition of a third camera will make it possible for us to greatly extend our diagnostic capabilities," Dr. Joseph P. Kriss, head of the Division of Nuclear Medicine, commented.

In 1968, Dr. Kriss, together with Dr. Elliott Levinthal and William Bonner, members of the Instrumentation Research Laboratory at the School of Medicine, designed and developed accessory equipment to the camera system for radioisotopic angiocardiography, an advanced technique used in diagnosis of heart disease.

During the radioisotopic angiocardiographic procedure, which involves the patient for less than three minutes, the camera displays the movement of injected radioactive material as it flows through the heart and lungs, storing the photographic data on video tape for subsequent replay.

Radioisotopic angiocardiography has proved to be a valuable tool in diagnosis of many kinds of heart ailments, including congenital defects occurring in children, Dr. Kriss commented. He said that with the new camera, specialists at Stanford will be able to take advantage of the added potential the technique offers, both as a tool employed in conjunction with radiologic methods of diagnosis, and for the examination of a larger number of patients.

Mrs. Sharon Rowland, head nurse in the emergency room, said that the addition of a cardiac resuscitation unit means that equipment of this type is now standardized throughout Stanford University Hospital.

The unit incorporates an EKG monitor, heart rate monitor, and an automated alarm which sounds if the patient's heart rate goes above or below normal. A fourth instrument, which completes the unit, is the synchronous defibrillator, a highly refined device which enables an error in the heart's electrical pattern to be corrected at precisely the right point in the pattern, thus restoring the heart to an effective beat.

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Filed February 19, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Heart Transplant #27 ALBERT RUPP

STANFORD -- Albert Rupp, 27th heart transplant patient at Stanford, died Feb. 18 at Stanford University Hospital. He was 36.

He had undergone the transplant operation Jan. 5.

Rupp, whose home was at 5232 Roeder Road, San Jose, is survived by his wife Mary and their four sons.

Of a total of 28 Stanford heart transplant patients, 10 are now alive. Two patients have lived for more than two years.

February 22, 1971

Called to the Wire Services 2/22/71

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- New information being discovered about aphasic children may have far-reaching implications for urban ghetto children with learning difficulties, a leading expert on childhood aphasia believes.

Dr. Jon Eisenson said that studies of aphasic children have led him to think that there may be some connection between them and ghetto children who continue to have learning difficulties.

If this can be proven, special learning situations, different from current classrooms, will have to be developed to adequately treat these children.

He cited evidence from recent HEW studies which show that many urban ghetto conditions such as malnutrition and frequent lack of good prenatal and medical care in the delivery of babies create a higher potential for prenatal defects or birth injuries. These defects or injuries may be minimal and so go unnoticed, but they also may be enough to damage the brain's learning capacity.

Eisenson made his comments in an interview Tuesday. He is director of the Scottish Rite Institute for Childhood Aphasia at the Stanford University School of Medicine and a professor of speech and hearing sciences.

"As our research bears out our theories," Eisenson said, "giving us something really tangible to go on, we have found out a very fascinating thing--the left brain or hemisphere is for language listening and therefore for talking. The left brain seems to have a special capacity for processing speech signals as well as for formulation and translation of what is received into sequences of sound--in other words, to hear and make sentences. The left brain also seems to keep or to sort the sounds heard into some kind of order. In contrast, the right brain seems to have control over non-language sounds, such as music and animal noises," he explained.

He reflected: "Everyone can snarl or coo with his right brain in or out of control, but when we calm down, we need the left to explain why we were driven to snarling or cooing. We need our left brain for intellectual and communicative purposes."

"About one-third of the children we've studied at the Aphasia Institute have clear or 'hard' signs of neurological impairment and we are finding out that it is often on the left side of the brain. Another one-third have what we call 'soft' signs of neurological damage--the disturbance is not so marked, and does not show up too clearly on neurological tests."

"Then there is a whole other third group where no neurological impairment at all shows up with the equipment now available. Still, these children have all the learning and speaking difficulties of the more markedly aphasic child. So we are treating them the same way--and getting the same good results." Eisenson believes that the majority of all these children may well have some form of minimal brain damage.

Extrapolating from this evidence is the basis for Eisenson's belief that more ghetto children, born under less than optimal conditions, may also have a higher incidence of such minimal brain damage. "This may be one unconsidered factor in working with these children," he said.

One of the promising techniques in making determination of brain damage is a simple test called 'dichotic listening.' Different speech signals such as digits are presented simultaneously to both listener's ears, and the subject is required to report all that he can recall. The usual finding is for normal right-handed persons to have a statistically greater recall for the digits presented to the right ear than those presented to the left. The same is true for a majority of left-handed persons, indicating that for them, too, the left brain is controlling language function, since we know that the left temporal lobe is processing what the right ear has received. -more-

"The test shows us, then, that brain hemisphere dominance has been established. But aphasic children don't show a differentiation for ear preference on such a test."

"Early indications are that these children are slower than their peers in establishing such dominance. The Institute is now studying the implications of these findings," Eisenson said.

"But we believe the dichotic listening technique--where the questions are aimed directly at the nervous system itself--may be a very good way of getting at the crucial point--is this child able to process speech or not."

The whole aim of diagnosing and treating aphasic children, he said, is to get these children to process the language system faster and more accurately--in other words to get them closer to normal speech.

Eisenson urged that pediatricians and those dealing with all children be alert to the major characteristics of childhood aphasia. He also warns that the reaction of an aphasic child--who hears language as a meaningless jumble of sounds--is often to "tune out": consequently, many behavioral and emotional problems stem from this action. In other words, emotional disturbance only follows the initial fact of neurological weakness or imperfection. In many cases, behavior becomes the "fall guy" while the initial difficulty remains undiagnosed and untreated.

He stressed the importance of early treatment, before emotional defenses against the frustrations of not understanding speech could be set up.

"How many times I have heard a distraught family tell me that the child clearly hears the doorbell or the cat's meow, but isn't paying any attention to what we say, and that consequently, they cannot manage the child at all."

"Yet, this left brain disturbance, which seems to have control over language, explains this inconsistency. The child really can't understand clearly what his mother or teacher is saying. However, his right hemisphere permits him to understand the environmental noises that his family reports he responds to."

Asked about differences between normal and aphasic children, Eisenson noted that among the differences, the aphasic child physically is not able to store and recall language sounds as well as normal children, and also he lacks some ability to generalize about language, while other children use this generalizing ability intuitively in helping them learn to speak.

He also cannot pick up clearly or distinguish word patterns and he is slow to combine words into even primitive sentences. Then, he continues on this same primitive sentence level far longer than do other children his age.

While there is also sometimes an auditory impairment, tests show that the amount of hearing loss is not sufficient to explain the severity of the language difficulty, Eisenson noted.

How do we know, then, they are not mentally retarded, Eisenson was asked. He noted that mentally retarded children actually have a greater language facility than aphasic children. The difference comes in the mentally retarded's difficulty in making abstractions or handling complexity of thought and they also have difficulty in non-language tests, while the aphasic children generally do considerably better on them. While childhood aphasia was medically recognized 20 years ago, these children continue to be badly misdiagnosed by psychiatrists as well as pediatricians, Eisenson said.

It is in this regard, he continued, that there may be many more aphasic-like children in our schools than has been realized. And because of the high risk for prenatal or birth defects to children born into ghetto conditions, these children who have major learning difficulties deserve specialized attention, especially in the nursery school and primary grades, Eisenson said. ###Mailed Feb. 23,1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

Heart Transplant #29 Harry Knudsen

STANFORD -- Harry Knudsen is in satisfactory condition today at Stanford University Hospital after a heart transplant operation February 22.

Knudsen, 47, of Pleasant Hill, California, retired because of his failing heart, was previously in charge of the ski department in a large sporting goods store in Berkeley.

He wife, Inez, is a registered nurse. They have a son Jim, 22.

The donor was Jack Nye, 26, of San Jose who died from a motorcycle accident late Saturday, February 20. His kidneys were also used in two unrelated kidney transplant operations February 22. Nye is survived by his mother and stepfather, Mr. and Mrs. Donald Monahan of San Jose.

Knudsen's transplant operation was performed by a team headed by Dr. Norman E. Shumway.

He is the 29th heart recipient in operations performed at Stanford. Of these patients, 11 are surviving, including Mr. Knudsen.

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Telephoned to:

Palo Alto Times, AP, UPI,

Berkeley Gazette

February 23, 1971/Polly Downing

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

Editors: Photo available upon request.

STANFORD -- Meet Sean.

He's 15, he's bright, athletic and he's strong on ecology.

The other week, he went with fellow Ecology Club members from John Muir School in San Jose to help clean up the beach from the oil spill.

The only catch is that Sean couldn't have gone if he hadn't had eight units of cryoprecipitate (cryo), the blood component containing the antihemophiliac factor, the night before.

Sean is a hemophiliac and without constant infusions of cryo, he might be an invalid, unable to walk, much less go to school or help to clean up the beaches. And Sean is quick to understand and appreciate that his own tie to his fellow man is an illustration of an exceptionally close human ecology link.

"It is a contribution to the life and health of another for which there can be no substitute," Dr. Paul Wolf, medical director of the Stanford Blood Bank, said.

Yet every week many hundreds of patients in Northern California need blood, but only five per cent of the people in the area who can give blood actually do, Dr. Wolf added.

In Sean's own case, donations in his name to the Stanford University Hospital Blood Bank will literally fill a double bill. The Blood Bank will have the blood on hand for Sean, or whoever needs it, and a major hospital bill will be paid at the same time.

Sean has used thousands of dollars in blood, but if there are 42 new whole blood donations in his name, one particular hospital debt of $1051 will be wiped out. In addition, the other blood components will be used for patients with different needs. (Whole blood can now be separated into four parts -- platelets, red cells, plasma and cryoprecipitate, all of which are needed and go for different patients, Dr. Wolf explained.)

-more-

Sean's $1051 bill ran up when he was brought to the Stanford Hospital's Emergency Room on many previous occasions and when he was hospitalized for some months in 1970.

The outlook is brighter for Sean now because he is under a new preventive program underway at Children's Hospital at Stanford. The program is under the direction of the department of pediatrics at the Stanford University School of Medicine, and is headed by Dr. Jack Lazerson. At Children's Hospital, which is affiliated with the medical school, Sean is taught how to infuse the cryo at home, three times weekly as a preventive measure. He can also treat himself if he has been hurt in any way. All injuries or bruises will always go very hard on Sean; internal bleeding starts immediately and tissues are damaged enough to cripple him, if he does not receive a prompt cryo infusion. Formerly, Sean had to receive blood on an emergency basis in the hospital.

"Being on the new preventive program has made all the difference in our lives", Sean's mother commented.

"But Blood Banks never have enough blood", Dr. Wolf warned. An official from the Irwin Blood Bank in San Francisco noted recently, in the same tone, "People must start accepting the responsibility for making blood donations in advance of need and replacing blood used with blood itself."

Dr. Wolf pointed out that for ecology-minded Sean and many others, they need what is actually readily available, but cannot be bought or made except by another human being -- the continuing, prized gift of blood. "It becomes life itself to those who need it," Dr. Wolf stressed.

The Stanford University Blood Bank urges people to call for appointments, however, because it is not currently equipped to handle more than two donors at one time.

The number is 321-1200, extension 6111.

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Mailed February 23, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

PALO ALTO--The Stanford University Medical Center Auxiliary today (Wed., Feb. 24) elected Mrs. R. Gordon Gould of Stanford its 1971 president.

Mrs. Gould will succeed Mrs. George E. Boyd of Los Altos Hills, who has served as the 900-member organization's top officer for the past two years, on April 1.

During Mrs. Boyd's two terms Mrs. Gould has held the office of first vice-president, and the appointed job of chairman of volunteer services.

The wife of a specialist in metabolic diseases and endocrinology at the School of Medicine (Dr. Gould is associate professor of biochemistry in the Department of Medicine), and mother of a son and daughter both pursuing doctoral degrees, Mrs. Gould has been a volunteer at the Medical Center since 1960. From 1963 to 1966 she was staffing chairman for the hospital gift shop. Through this enterprise, and the baby photo service at the Hospital, the Auxiliary raises the money it donates to the Medical Center.

She was elected at the organization's annual meeting, held at Ming's Restaurant.

Other new officers are: Mrs. John Bohler of Atherton, first vice-president; Mrs. Robert Bush of Palo Alto, second vice-president; Mrs. Robert Anderson of Los Altos, corresponding secretary; Mrs. Charles Frost of Palo Alto, recording secretary; Mrs. Harold Hjelm of Menlo Park, treasurer; and Mrs. Arthur Gleim of Los Altos Hills, assistant treasurer.

Newly elected to the Board of Directors are: Mrs. Oliver Whitby of Los Altos Hills, who is Auxiliary membership chairman; Mrs. Frost and Mrs. Gleim.

Mrs. Glenn Hitchcock of Menlo Park, Miss Anne Ramsay of Palo Alto and Mrs. Daniel Williams of Palo Alto were re-elected to the Board.

New members of the nominating committee are: Mrs. Hitchcock, Mrs. Williams, Mrs. Bush, Mrs. Reece Dorr of Menlo Park and Mrs. John Dusterberry of Palo Alto.

The volunteer organization, under various names, has been continuous since 1929, when it was founded as the Palo Alto Hospital Auxiliary.

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Mailed February 24, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The National Science Foundation has awarded Stanford University a $375,000 grant to design and construct a hospital prototype of a pion facility for cancer treatment.

The prototype will be built at Stanford's High-Energy Physics Laboratory and preliminary tests of the system will be undertaken there. It will be installed in a special facility in the Stanford University Hospital, if initial experiments prove that a superconducting linear electron accelerator can provide a beam of negative pions of sufficient intensity to be practical for cancer therapy.

Pions or pi mesons are negatively charged subatomic particles hitherto unused in radiation treatment of human cancer. This is because accelerators capable of generating pi mesons adequate for cancer therapy have thus far been available only from extremely large and expensive machines. Such a machine is the $56 million, half-a-mile linear proton accelerator in Los Alamos, New Mexico.

But Stanford physicists H. Alan Schwettman and William M. Fairbank believe that through advances in the field of low temperature physics they can now construct a smaller, 50-foot accelerator. This machine would generate streams of pi mesons for cancer therapy for about one-tenth the cost of the large machines.

Moreover, the physicists feel they can build a pion channel or collection system that would be 100 times more efficient than that of Los Alamos. A pion channel is a device with powerful magnets for capturing the pi mesons as they are generated by the accelerator for delivery to the patient. Accelerator energies of about 500 million electron volts are needed to produce 100-million-volt mesons for cancer therapy.

The project is under the direction of Dr. Schwettman and Dr. Henry S. Kaplan, professor and chairman of the Department of Radiology at the School of Medicine.

The investigators said if initial experiments prove that a pion facility is feasible, then for a construction cost of approximately $5 million, one might hope to treat 1,000 patients a year. The proposed concept would include the accelerator itself, four pion channels for treatment, and a variety of support services in an underground building attached to the hospital.

"Fifty such facilities across the country could have a major impact in the treatment of cancer, and over a period of 10 years the construction cost of these per patient would be small," the researchers said.

To test the practicality of pi meson treatment, the researchers will use a new superconducting linear accelerator just built on the Stanford campus strictly for basic physics research under the auspices of the Office of Naval Research and the National Science Foundation.

This 500-foot, powerful atom smasher, maintained in a supercooled state in a bath of liquid helium, is able to generate negative pi mesons by interaction of its electron beam with an appropriate target.

-more-

The medical-physics team will construct one pion channel as a hospital prototype that will be operated in connection with this linear accelerator. The pion channel will collect by means of magnets the negative pi mesons as they emanate from the target and deliver them by computer-controlled adjustment to the desired area in the body.

With this system and under simulated hospital conditions, the scientists will make the necessary studies to develop standards for the most effective use of pi mesons in cancer patients.

If all goes well, the researchers anticipate planning and building a pi meson facility in the Stanford University Hospital for the purpose of controlled clinical trials. Such construction, however, is at least five years away.

The theoretical existence of the negative pi meson was predicted by physicists 35 years ago, and its physical demonstration took place 10 years later. The reason, however, these subatomic particles interested radiotherapists is because they produce a microscopic atomic detonation within the tumor area when they collide with atoms of oxygen, carbon, or nitrogen of target cancer cells. But while they deposit great destructive energy in the tumor mass, pi mesons do not harm healthy tissue on the way in.

For this reason, Dr. Kaplan and his colleagues believe the powerful pi mesons may well prove to be the most ideal source of radiotherapy of human cancer.

Cures are governed by the injury to normal tissue, and pi mesons promise less injury than any other particle, he noted.

Increased accuracy through use of pi mesons would extend treatment to other elusive and rapidly spreading forms of cancer which cannot be treated with conventional accelerators, he said.

It is estimated that of the half a million cancers occurring annually in the United States, 50 per cent receive radiation therapy for cure or alleviation of pain. Improvements in radiotherapy techniques in the past 20 years have already resulted in dramatic increase in survival rates, notably among patients suffering from Hodgkin's disease.

Other scientists associated with the joint physics-radiology project are Dr. Malcolm A. Bagshaw, professor of radiology; Dr. Douglas P. Boyd, research associate at High-Energy Physics Laboratory; Dr. Robert F. Kallman, and Dr. Clarence J. Karzmark, both associate professors of radiology.

In the mid-1950's, a similar cooperation between Stanford's radiology and physics groups resulted in the development of the first electron beam linear accelerator for cancer therapy in the Western hemisphere.

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Mailed March 29, 1971.

Editors: Pictures available on request, if not included with story.

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Stanford University Hospital will offer nurses a six-month course in operating room techniques beginning June 7.

Applications are currently being accepted, and should be in by May 1, according to Mrs. Ludmila Davis, R.N., director of the operating room at the hospital.

Applicants must be graduates of accredited schools of nursing, and be currently registered with the California State Board of Nurse Examiners. They should also be in good health and have a definite interest in surgery, Mrs. Davis said.

One of the program's objectives is to develop a clear understanding of surgical procedures.

A moderate monthly stipend will be paid during the six-month (full-time) course.

Interested nurses should telephone the operating room at 321-1200, Extension 5620.

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Mailed March 29, 1971.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A $1,000 grant for research in eye disease has been awarded to Stanford University School of Medicine by the Northern California Society for the Prevention of Blindness, Inc.

The grant will enable Dr. Gerald L. Portney, assistant professor and director of the Stanford Glaucoma Service, to investigate the effect of various drugs on glaucoma. Glaucoma is an eye disease that is characterized by greater than normal pressure within the eyeball, and interferes with the field of vision.

The National Society for the Prevention of Blindness, founded in 1908, is a voluntary agency engaged in the prevention of blindess through community service, public and professional education, and research.

STANFORD -- Dr. Thomas A. Stamey, professor and head of the Division of Urology at Stanford University, has been appointed member of the scientific advisory board of the National Kidney Foundation.

Dr. Stamey is an authority on kidney physiology, urinary tract infections, and hypertension. He is also author of a book about the methods of studying kidney conditions in man which lead to high blood pressure.

STANFORD -- Dr. John J. Miller, III, assistant professor of pediatrics, has received a $30,000 grant to study the relationship of drugs to the lupus syndrome. The grant has been awarded by the Pharmaceutical Manufacturers Association Foundation, Inc. Lupus is a serious inflammatory disorder affecting many organ systems of the body.

STANFORD -- Two scientists from the Stanford University School of Medicine have received research grants totalling $101,528 from the American Cancer Society.

A two-year grant of $64,028 will go to Dr. Thomas E. Schroeder, assistant professor of anatomy, for work in clarifying the mechanism of cell division as an aid to better understanding uncontrollable growth in cancer cells.

Dr. Robert T. Schimke, professor and chairman of the Department of Pharmacology, received a $37,500 grant for studies in protein control and the formation and utilization of enzyme animal tissues.

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Mailed March 26, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- Student interest in "relevance" is being put to test and to practical use in helping emotionally disturbed children in Palo Alto.

The students are volunteering at Peninsula Children's Hospital, a day care facility for disturbed children, whose staff members say they are glad for all the help they can get.

The students are from Stanford University and Medical School, Foothill and other area colleges.

"It is a trip inward, coming to deal with your own emotional reactions in the face of major difficulties in establishing any kind of a relationship with these children."

"A sometimes overwhelming but moving experience to find out how human we all are--whether sane or disturbed--to learn that none of us is so separate."

"The work is demanding but it excites intellectual interest--the students can read the theories later with more understanding."

This is a sampling of the diverse--although by no means contradictory--depth of impression coming from the director and students who are working at the Peninsula Children's Center.

The director is Dr. E. David Burk, assistant professor of psychiatry at the Stanford University School of Medicine.

Burk firmly believes that to be successful and to maintain an interest in the mental health programs (for which there is such a continuing and urgent need for personnel) the volunteer needs to be an essential part of the overall treatment. Therefore, volunteers at PCC learn first hand how these children are treated by working with the children themselves. Their main task is to help the children relate more to the outside world.

Starting next quarter, both med students and undergraduates can also get academic credit for their efforts. Three courses will be offered out of the Department of Psychiatry and will use the PCC as a practical learning laboratory, under Dr. Burk's close direction.

As an additional benefit, the students see at first hand how the various specialists at the Center work with the children--the same children that they themselves may have been working with a short time before. The field is wide open for observation, comparison and learning.

"You get a chance to see how different therapists and diverse styles can still be effective. Then, you learn how to better express your own intuitive response to these children," noted Jim Corby, a fourth year medical student, who plans to go into psychiatry.

The children at the Center are severely schizophrenic or autistic and probably could not function except in a state hospital, if it were not for the Center with its dedicated professional staff and volunteers.

Many of the children have a very high IQ, but it is short circuited or so locked inside of them that very little use can be made of it. "It is as though these children have small islands of normality, or even of genius, and right now, the best we can do is enlarge these islands, if we can, in their relation to the outside world," noted Dr. Burk. -more-

It is in this area that the volunteers are particularly effective. "Their spontaneity, their own outlook which is often fresh and imaginative, and their willingness to give of themselves are wonderful assets," Dr. Burk said.

One characteristic of these disturbed children is that they often treat other human beings as objects, acting unaware of their very existence. Therefore, it is often extraordinarily difficult to relate to them. In addition, their attention span is short, although sometimes their perception of people and events can be correspondingly swift and acute.

All the student agreed that "incredibly" personal relations between themselves and the children developed, but the rewards were minimal if they were looking for major improvement in the children's behavior. But the improvements noted, while often minute, were very real and exciting, both Dr. Burk and the students agreed.

For instance, a child came darting over to a visitor, the doctor and a volunteer. The child swiftly touched everyone and ran off. "Yes," said Dr. Burk to the child, "It's fine to touch, not to hit." He added that the child was just learning to make this distinction. "He used to run up and pound on anybody he saw," Burk said. Both therapy with the professional staff and the patience and interest of volunteers in working with this child have played a major part in helping him, he continued.

The students put it this way: "You get no reinforcement of your own emotions as you do with normal kids, but all the relations with these children are moving and interesting. It hurts, though, when you think you can reach them and then you see that nothing has really changed in their attitudes. But they're still very human children. Endlessly, I learn about life from them and my own responses to them."

"It is depressing at first, but you begin to see that with their amazing alertness and with your own input you can help them. It is a tremendous challenge to try and set up situations that are more advantageous both to yourself and to the children."

A visitor at the Center could see first hand the students' own lack of fear, sturdiness and spontaneous--but controlled--involvement. One held a screaming child, unanxiously paying no attention to his writhing; another watched a husky older boy furiously kicking a wall, intervening, it seemed at just the right moment with a cool, "Hey, cut it out now. Come and help us fix this kite," which the boy promptly did; another talked to a child about the clouds, the sky and the astronauts in an earnest discussion, visibly interested in what the child had to say, but including at the same time another child who kept repeating, "I don't want to listen to what you are saying," but who was listening nevertheless. (Volunteers have learned that it is a common characteristic of these children to give two simultaneous but opposite messages, such as yes/no or want/don't want.)

"These children are part of life--they cannot and should not be walled off. They are everyone's concern," Jim observed.

And Errol Dendy, another fourth year medical student said, "These children's fears, pleasures and other feelings are often a highly exaggerated version of what we all feel at times. But it takes a great effort to work with them."

Errol continued, "The real story should be about the staff and the volunteers who work with them full time. We students go back to our own studies and other interests often with a sense of humility and sometimes, relief. The learning for us is fantastic."

And from Jon Sterngold, another med student, "You get as much as you are able to put into it, but sometimes what we learn from the children is more than we can give to them."

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Mailed March 25, 1971.

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A. Betsy Marshall, a Stanford undergraduate, watches and comforts a young patient searching to put the peg in its right place.

B. "I don't want to listen. I don't want you to come any closer," says the patient to the doctors, Dr. E. David Burk, director of the Peninsula Children's Center and Dr. Patricia Waldron of Stanford Hospital who is doing some of her residency in pediatrics at the Center. The doctors, however, are including the child in their conversation and her responses showed that she was listening carefully. (A common characteristic of these disturbed children is that they give two simultaneous but opposite messages, such as yes/no or want/don't want.)

C. Errol Dendy, a fourth year medical student at Stanford, encourages a young patient who is responding well to all the therapy and care he is getting at Peninsula Children's Center.

TO: NEWS BUREAU, ROOM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

Volunteers Help Disturbed Children

Please send me 8 x 10" glossy prints (March, 1971)

NAME _____ PUBLICATION _____

ADDRESS _____ CITY, STATE _____

_____ ZIP CODE _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Heart Transplant #30

STANFORD -- Frank J. Losole, a 36-year-old former mechanic, is reported in satisfactory condition today at Stanford University Medical Center after undergoing a heart transplant operation Monday evening (MAR 22).

Losole is from Southgate, California, a suburb of Los Angeles.

He is the 30th patient in the series of heart transplant operations performed at Stanford by Dr. Norman Shumway and his team beginning in January, 1968. There are 12 (twelve) survivors.

March 23, 1971

AP

UPI

PA TIMES

SAN JOSE MERCURY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- A hopeful new rehabilitation program for heart patients is underway at the Palo Alto YMCA. It consists of an exercise plan under a doctor's supervision.

The program is open only to those who have a history of coronary artery disease and who are referred by their doctors.

Several recent studies have shown that consistent endurance exercise has lowered the death rate of patients with heart disease. One of the aims of the program, says Dr. Gary Fry, the cardiologist in charge, is to show that longer lives do result for such patients. Dr. Fry is on the staffs of the Palo Alto Medical Clinic and the Stanford University Hospital.

Also, he noted, it is well known, and documented by psychological testing that there is frequently an element of depression among coronary patients. "But other tests show clearly that such patients on a conditioning program have less depression. We are finding out that there is a correlation between exercise and a more optimistic outlook, which in turn may also have some direct beneficial effect on the patient's general health."

When a patient starts this program, he is given an electrocardiogram while working out on a stationary bike. From the reading obtained of the heart's activity, an exercise "prescription" is made up, showing just how much each patient can and cannot do. New tests are given at six months and at the end of a year.

Patients who have suffered a heart attack can also be admitted into the program, but only after three months have elapsed from onset of the attack.

These individual programs are watched over by Rob Pierson, physical director at the YMCA and are also supervised by Dr. Fry who exercises along with the patients. He says that he is glad for consistent workouts himself.

The patients meet as a class for three or four sessions a week, from 5 to 6 p.m. The expectation is that they should stay in the class for at least a year. "Sporadic and unsupervised exercise may actually be detrimental to patients. By having them with us a year or more, we can keep a closely supervised, graded control over them," Dr. Fry explained.

The hour program has a warm-up period of calisthenics (which loosen the body, eliminating the hazards stemming from tight joints and muscles); 35 to 40 minutes of walking and jogging (all done inside the gym), based on exactly how much the patient can be allowed; and 5 to 10 minutes of a cooling down period of light exercise. "This last is very important because it lowers the blood pressure in a gradual way. Conversely, it can be very harmful to simply stop peak exercise activity without any time to taper off," says Dr. Fry.

Funds for the patients' initial testing are provided by Area III, Regional Medical Programs, (RMP) which is active in promoting activity in heart, cancer and stroke treatment and prevention. The Stanford Medical Center administers RMP in 11 counties in central California.

The class fee itself is paid for by the patients: $100 for 26 weeks, $200 for the recommended one-year program. The classes are open for new patients at any time.

While patients are accepted only on their doctor's referral, more information can be sent to them or their doctor by calling the Cardiac Rehabilitation Program at the Palo Alto Medical Clinic, 321-4121.

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Mailed March 17, 1971.

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A. July, 1970--John Fearing, 43, after a heart attack, in the Coronary Care Unit at Stanford University Hospital. He is being checked by Dr. Gary Fry, who notes that Fearing is overweight, smokes cigarettes and has gotten little exercise.

B. January, 1971--Recovered, trim and off cigarettes Fearing enters the Cardiac Rehabilitation Program. He is being tested on a stationary bike by Dr. Noel Thompson and technician Cay Fotopolos of the Palo Alto Medical Clinic to determine the level of regular supervised exercise he should do.

C. March, 1971--Fearing (left) "warms up" in the exercise class, under the direction of Rob Pierson (front), physical director at the Palo Alto YMCA. Dr. Fry (right), medical director of the program, takes the same exercises. Fearing says "I feel better than I have in years."

TO: NEWS BUREAU, ROOM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

Exercise Prescription for Heart Patients

Please send me 8 x 10" glossy prints.

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ADDRESS _____ CITY, STATE _____

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Proposed creation of a new federal agency to fight cancer would be a mistake, Dr. Joshua Lederberg of Stanford University said Tuesday (MAR. 16, 1971).

The Nobel Laureate in genetics said that "all health research should be knit together within a single agency, specifically an augmented and strengthened National Institutes of Health."

Lederberg said that when a separate agency to lead a national crusade against cancer was proposed, he publicly favored it. This was because he thought a new organization might be a way to avoid traditional bureaucratic restraints and inconsistency that have hampered health research in the past several years.

Since then, however, developments have led him to conclude that a separate agency for cancer is not the best choice.

Among the new developments Lederberg listed:

. President Nixon's new public commitment to health research in general, and cancer in particular.

. evidence of a new balance, consistency and efficiency in administration of the Department of Health, Education and Welfare under Secretary Elliot Richardson's leadership.

. statements by President Nixon's science adviser Edward David on the integrity of basic scientific work in the health field, and the disadvantages of extracting cancer work from the NIH.

Lederberg expressed his views in a letter to the subcommittee on health of the Senate's Committee on Labor and Public Welfare. The subcommittee is conducting public hearings in Washington on a bill which would remove the National Cancer Institute from the NIH and move it to an authority that would report directly to the President.

Proponents of the bill claim that a national crusade against cancer would be seriously handicapped by the present administrative set-up because of delays in decision-making, overlapping functions, and most important, competition for funds.

The separation of cancer research from the rest of biomedical research, now under the umbrella of the National Institutes of Health, is regarded a serious managerial error by the Nixon administration.

"The country would be better served by reinvigorating the NIH as an integral unit than by inventing new streamlined procedures for the benefit of an excised and transplanted cancer authority," Lederberg wrote.

Earlier in an article in the Washington Post, Lederberg said that any authority which is established to pursue a "cure for cancer" as a national goal, must fix a consistency of purpose.

"Health research policy has been flawed for the past several years because of frequent changes in outlook on what constitutes a federal responsibility in this area," he said.

- more -

Lederberg also called for broadening the base for research on human cancer, and cautioned that a crusade against cancer is an oversimplification, with a potential for backfiring if unachievable hopes are aroused.

"I believe that 'Cure Cancer' is a misleading slogan," he wrote, "but only because cancer prevention is a far more promising approach than the cure of the disease once established. Prevention also offers the most incisive channels for exploiting basic molecular and cell biology."

Lederberg admitted that prevention is not as glamorous as cure by surgery or radiation, and a citizen who may balk at another dollar's outlay for preventive public health will spend a fortune to root out his own cancer after the fact.

"Human nature, however, still does not exclude the eventual use of rational intelligence to help decide among policy alternatives," the Stanford geneticist said.

Lederberg said earlier diagnosis of certain cancers, and new treatments in surgery, radiotherapy, and drugs have reduced the inevitability of dying from cancer, once detected.

"Nevertheless, the aggregate rate of death from cancer is still rising, mainly because of lung cancer cases attributable to cigarette smoking and air pollution," he said.

Lederberg stressed that cancer treatment, now available in the nation's best-staffed centers, should be available to more people, but he added: "We simply do not have the basic knowledge to do more than gain time with many cancers after they have reached a certain state of development."

At present about one person in six dies of cancer, Lederberg said, and the best available and costly treatments probably could not improve that figure below one in ten.

"This would be a notable achievement," he said, "but it would buy fewer lives per dollar spent than many other unmet opportunities. For really important progress we must acquire and use new knowledge for the prevention of cancer."

The greatest promise for eradication of cancer according to the Stanford geneticist, comes from the great leaps in basic biological knowledge of the last decade, many in studies of DNA, the genetic material in viruses.

"These have so far given only a few answers centrally connected with human cancer," Dr. Lederberg commented, "but we are now able to formulate sensible questions about the nature of the cancer cell and the origin of its deadly differences from the normal."

Lederberg said that changes in cancer incidence in different eras and in different occupations and geographical areas, give the strongest hopes for preventive measures.

"They speak to the importance of specific environmental factors rather than letting us acquiese ignorantly to cancer as an inevitable lighting bolt," he said.

Many forms of cancer, the geneticist wrote, will be found to be related to known environmental hazards--chemicals to which people are exposed at work and home, and chemicals used as food additives or drugs. This area, more than any other, needs only money to give prompt returns in reducing environmental cancers.

Lederberg said he expects important advances in control of cancer to come from the field of immunology. Recent work has thrown light on the role of the immune system hitherto thought of mainly in connection with infectious diseases like smallpox, polio, and diphtheria.

He said immunologists now believe that many incipient cancers are normally eliminated in the healthy body. However, a weakening of the immune system may allow a cancer seed to escape this surveillance and grow.

When the immune factor in cancer is clarified, scientists hope to be able to develop specific vaccines.

Lederberg's own view, however, is that scientists are more likely to learn how to protect the overall health of the immune system as a bulwark against cancer.

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Mailed March 16, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--A precision tool, expected to have a major impact on the care of children with birth defects and on genetic counseling for their families, has been installed in the clinical laboratory of the Stanford University Hospital.

The new tool--an amino acid analyzer--can give doctors an exact quantitative picture on paper of the levels of amino acids contained in body fluids.

Amino acids are the substances used in the formation of proteins, the building blocks of body tissues. Abnormal elevations of amino acids in body fluids are associated with genetically-directed errors in metabolism, the processes by which foodstuffs are broken down and tissues are built up.

When these errors cause interruptions in metabolic processes, amino acids are not being utilized correctly in protein formation. The result is that they increase in blood and "spill" into urine.

"In one run of a very small sample, we can test for the absence or presence, and the level, of 40 different amino acids," explains Dr. Klara Efron, who is in charge of the new amino acid program at the hospital laboratory.

A pediatrician who has been researching amino acid metabolism for the past 10 years at Stanford, Dr. Efron collaborated with Sondell Scientific Instruments of Palo Alto in the adaptation of the analyzer to clinical use.

She said, "The instrument will help the doctor to see where the defect lies."

Defects in body chemistry cause mental retardation, convulsions and eczema in phenylketonurea (PKU); cirrhosis of the liver, kidney damage, and loss of intellect in Wilson's Disease; or numerous muscular difficulties and mental retardation in the condition known as Maple Syrup Urine Disease. There are many other defects associated with abnormal amino acid metabolism.

Some birth defects are treatable (controllable, not curable) with drugs or diet; for others no treatment is presently known. PKU, for example, is controllable with a special diet. A drug known as D-penicillamine can slow down the course of Wilson's Disease.

As yet, little can be done for babies affected by Hurler's Syndrome (bone, liver and spleen damage, blindness, and mental retardation). But if the condition is diagnosed early in the life of a child, the parents can be advised to prevent the birth of another defective baby.

Other advantageous features of the new analyzer are its relative speed--one run takes five and a half hours compared with twice as long in other systems, and its ability to test for all the amino acids in one run, which makes for less chance of error.

Dr. Efron explains that no chemicals are added to the sample. It is prepared for analysis by a process known as ultrafiltration, which produces a solution free of any substances which would interfere with the test.

Currently, Dr. Efron is establishing normal ranges of amino acid content for adults and for children of different ages.

Target date for putting the analyzer into general use is May. 3-11-71

EDITORS: Photo available on request. ### 3/11/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Dr. Morris Fishbein, noted author, lecturer, and columnist for Medical World News, will speak at Stanford University School of Medicine Wednesday afternoon (March 17) on "Today and Tomorrow in Medicine."

His talk, which is sponsored by the Department of Dermatology, will be given at 4:30 p.m. in Room M-106 of the Medical School.

Perhaps best known as editor of the Modern Home Medical Adviser, he is the editor of 15 other books and author of 25. He served as assistant editor of the Journal of the American Medical Association from 1913 to 1924, and as its editor from 1924 to 1950.

A resident of Chicago, Dr. Fishbein is a board member of several medical and civic groups in that city, including the Environmental Control Appeal Board, which he was appointed to last year.

He received the M.D. from Rush Medical College in 1912, and is an emeritus professor at the University of Chicago and the University of Illinois College of Medicine.

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Mailed, March 12, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD--New positions for Courtney Jones and Frank Vitale, both long associated with Stanford University Medical Center, have just been announced.

Courtney Jones, former deputy director of Stanford University Hospital, has been named director of fiscal affairs for Stanford University Medical Center, and Vitale has been named deputy director of the Hospital. The new appointments were announced today by Dr. John L. Wilson, acting dean and executive officer of the Medical Center, and Dr. Thomas A. Gonda, director of the Hospital.

Jones, 35, becomes responsible for all financial affairs of the Medical Center, including budgeting and long-term financial planning. He will recommend fiscal policy and will correlate this policy with that of the University. His appointment is part of the continuing steps to unify the structure of the Medical Center, Dr. Gonda noted.

Closely identified with the University and the Hospital since receiving his MBA in Business Administration from Stanford in 1962, Jones was with the Controller's Office at Stanford for five years. He came to the Medical Center in 1967 to a newly established post, director of business and finance, but was soon transferred to the Hospital as deputy director, to assist in the reorganization of the Hospital administration.

Currently, in view of the complexity and scope of fiscal operations which involve the Medical School, the Hospital, Clinics and the University itself, the post of director of fiscal affairs has been established.

His professional affiliations include the financial management committee of the California Hospital Association. Jones is also an officer and member of the Community Blood Reserve. He and his wife and their three children reside in Menlo Park.

Frank Vitale, former associate director of the Hospital, becomes deputy director, reporting directly to Dr. Thomas A. Gonda, Hospital chief.

Vitale is a specialist in medical facilities engineering and management. As associate director he has been in charge of the Medical Center's services, which have included engineering and maintenance, fire and safety and industrial engineering. He has been at the Stanford University Hospital since 1961, when he was appointed plant engineer, soon rising to assistant, associate, and now, deputy director.

He is also an advisor to a national hospital consulting group, founded by doctors, which has built over 450 hospitals across the country.

Vitale, 41, was graduated in 1949 from the U.S. Merchant Marine Academy with a B.S. degree in engineering.

He is married, with two children and resides in Menlo Park.

His professional affiliations include membership in the American Hospital Association, the American College of Hospital Administrators and the National Association of Power Engineers.

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Mailed January 13, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

Heart Transplant #28
1/11/71

STANFORD -- Mrs. Ianza Kingsley is in satisfactory condition at Stanford University Hospital after a heart transplant operation Monday morning, January 11.

Mrs. Kingsley, 48, of Sacramento, California, has been disabled since a massive heart attack in September, 1970. Up until the day before her heart attack, she had worked as a stitcher operator at California Pine Box, a Sacramento factory.

She has three grown children: Carolyn, Loretta and David, and one grandson, Michael.

Mrs. Kingsley becomes the 28th heart transplant recipient in operations performed at Stanford. She is the third woman to undergo such an operation here.

The donor is anonymous.

The 27th patient, Albert Rupp, who received a new heart on January 5, is also reported to be in satisfactory condition.

Both operations were performed by a team headed by Dr. Norman E. Shumway.

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Phoned to AP, UPI,
PA TIMES, SAN JOSE MERCURY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Stanford University Hospital now assigns a personal representative to each patient who is admitted.

Joining the cast of uniformed personnel at the hospital, the patient representatives are distinctive in stylish green and white outfits which can be worn as a suit, skirt and blouse, or jacket dress.

Their role is to individually provide the patient and his family with continuity on all financial matters related to the hospital stay. Before the new system was put into effect, patients or family members had to contact several people regarding financial information and arrangements.

Now all the business details of admitting, credit checking, insurance coverage, deposits, eligibility and certifications for state and federal health insurance, and transferring to another hospital or convalescent home are handled centrally.

A thoroughgoing training program at the hospital last year prepared the nine patient representatives for the new job. In addition to instruction in the range of business procedures, their course included talks by members of the hsopital's social service, nursing, and (post-hospital) placement staffs.

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Mailed January 12, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- An old portrait belonging to the Lane Medical Library of Stanford University has been restored to excellent condition, but a puzzle has shown up in the process.

University archivist Ralph Hansen has told the Library that the distinguished looking nineteenth century gentleman is not Timothy Hopkins, after all. Just who he really is, is what the Library wants to find out, and they will be grateful for any clues which could help in the identification process.

Miss Clara Manson, chief medical librarian, found the painting over 20 years ago in the attic of the old Lane Medical Library Building in San Francisco.

"I was told then," she says, "and it never occurred to me to doubt, that it was a portrait of Timothy Hopkins, friend of the Leland Stanford family and later a benefactor to Lane Library.

"After it was sent to the art restoration department, the archivist told us that Hopkins was only 25 years of age in 1880, the year the portrait was done. This gentleman is obviously quite a bit older than 25."

The artist was Frank M. Pebbles, a well known painter in the United States during that era.

"We are seeking help from anyone who can put us on the right track toward the correct identification," Miss Manson said.

Telephone calls regarding the painting may be directed to Miss Manson at Lane Library, 321-1200, Extension 5111; or Mrs. Charlene Levering at the Art Restoration Department, 321-1200, Extension 5225.

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January 11, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Photos available upon request if not included with story.

STANFORD -- Knowledge gained from nearly two decades of sleep research is now being applied by Stanford University physicians to the treatment of insomniacs and other patients with sleep disturbances.

A Sleep Disorders Clinic, opened recently at Stanford University Medical Center, offers diagnosis and treatment of insomnia, narcolepsy, hyperinsomnia, bed wetting, nightmares, sleep walking, and other afflictions involving the nighttime portion of man's existence.

The new clinic, one of three in the country, is directed by Dr. William C. Dement, a neurophysiologist and leading sleep researcher. Dr. Dement entered the field of sleep research in the early fifties. A that time, the subject was essentially a scientific curiosity pursued by a handful of persistent, sleepy-eyed young men who stayed awake at night to observe others sleep, and to study their brain wave recordings on miles of polygraph paper.

"This research, which has been done with generous federal support, has been well worth it," said Dr. Dement in a recent interview.

"Not only do we have a vastly expanded body of knowledge pertaining to normal sleep in man and animals, but we are able to make accurate and precise diagnoses and initiate effective treatment," he added. "This includes both primary and secondary sleep disturbances, not to mention having a handle on a major portion of the drug abuse problem--sleeping pills and pep pills."

One important early observation made by Dr. Dement and his colleagues is that dreaming in humans and animals occurs mostly during a stage of sleep which appears in humans with monotonous regularity every 90 minutes throughout the night. During these dreaming periods, the sleeper shifts his eyes as if to scan the unfolding panorama of his dream world.

This nocturnal phenomenon, called rapid eye movement or REM sleep, is believed to be essential to well being. Past studies by Dr. Dement have shown that depriving a person of REM sleep can cause sleep abnormalities and mental changes.

Sleep disorders constitute a health problem of some consequence in the United States, Dr. Dement stated. A few years ago it was estimated that Americans were spending in excess of $100 million a year for sleep-inducing prescription drugs. The figure has undoubtedly gone up since then, and it does not include over-the-counter preparations.

Independent research as well as his own studies of over-the-counter drugs raise serious doubts about their effectiveness, he said.

The problem is further complicated by the fact that the science of sleep research is relatively new, and many practicing physicians are not well informed on the subject. As a result, Dr. Dement said, some sleep disorders encountered by doctors are often misdiagnosed and mistreated.

-more-

The story of several young mothers who had experienced postpartum insomnia was cited as a case in point. "A normal condition for many mothers after childbirth, such insomnia is probably nature's way of making sure the mother hears the baby at night," said Dr. Dement.

However, these patients were treated with barbiturates prescribed by their physicians, he related. Soon the mothers developed drug tolerance and the dose was gradually increased. When they came to the sleep clinic, the patients were hooked on barbiturates and complained of acute insomnia. At the clinic, the patients were simply placed on a program of gradual drug withdrawal. After that they slept normally.

The case of the young mothers is of more than passing clinical interest because sleep researchers now know that some sleeping drugs suppress REM sleep while others do not, and the dependency on sleeping pills occurs most readily in the REM-suppressive compounds.

"This is why insomniacs who are given drugs for prolonged periods should be given one of those drugs which produce normal sleep rather than medications which suppress or eliminate the REM phase," Dr. Dement explained.

One of the tasks of the new sleep clinic is to find a precise definition of insomnia. "The term is easily understood in a general sort of way," Dr. Dement said. "But when we attempt to bring some precision into our understanding of the condition, we find it is peculiarly elusive."

He noted the most tangible insomnia which does not qualify as an illness is the sleeplessness induced by an emergency, some duty, noise, or other outside reason.

Dr. Dement believes many people diagnosed as insomniacs are not insomniacs at all. "We must keep in mind the possibility that some patients might be 'cured' if confronted with their own sleep recordings which show they are not having problems with sleep," he said. "Generally such insomniacs will sleep longer in the laboratory than they claim to sleep at home."

True insomniacs who are of special interest to the clinic are people who cannot fall asleep, cannot remain asleep, and cannot get enough sleep, he said.

When patients are referred to the clinic, they are interviewed by Dr. Dement and his staff to determine if their sleep problems are related to mental or physical illness. It is known, for example, that patients with emphysema, heart disease, and ulcers often experience insomnia as a result of their condition.

Patients admitted to the clinic may come in the evening to sleep in the laboratory. To study their patterns of sleep or lack of it, the sleep researchers tape tiny discs to each patient's head that are attached to an electroencephalograph. Tracings on miles of graph paper record brain waves, eye movements, as well as body temperature and heart rate. When drugs are prescribed to improve the patient's sleep, precautions are taken to insure that drug effects are specified.

"One of the first things we try to ascertain is whether or not the patient is going to bed too early," Dr. Dement explained. This can be done by temperature measurement with a special thermometer.

-more-

"It is easier to go to sleep when the body temperature is on the downward phase of the daily cycle--98° or lower," he continued. "That is a sign that the body is at its most inactive state and ready for sleep. It is likely that some insomniacs may improve their sleeping habits by delaying their bedtime."

While insomnia is by far the most common sleep disorder encountered at the clinic, Dr. Dement thinks some headway is also being made in the understanding and treatment of narcolepsy. This condition causes irresistible sleep attacks of relatively short duration, usually less than 15 minutes. It is thought to be a rare disorder although no figures are available on how many people are affected.

"Because we showed that narcoleptic attacks were actually attacks of REM sleep, we were able to predict that drugs such as Tofranil which inhibit REM periods, would be effective treatment," Dr. Dement said.

The case, however, is not entirely clear-cut. Drugs which alleviate the sleep attacks in some narcoleptics fail in others, a finding which revealed that there are two types of narcolepsy--one associated with REM sleep, and another with normal sleep, he said.

While sleep researchers continue to attack the problem of the cause and treatment of narcolepsy, certain things can be done to help these patients, Dr. Dement stressed.

One is distribution of information about the disorder. "Failure to diagnose it properly results in inadequate treatment," he said. "A failure of employers to understand that narcoleptics suffer from uncontrollable sleep results in the firing of seemingly lazy or irresponsible employees who would perform very adequately if they were granted one or two naps a day."

Dr. Dement feels in most instances untreated narcoleptics should not be allowed to drive. Studies have shown that more than 10 per cent of these patients are involved in automobile accidents as a result of dozing off while driving.

One of the strangest parts of the illness in patients suffering from REM-type narcolepsy is the condition known as cataplexy, he said. This consists of brief attacks of muscular paralysis and falling precipitated most often by laughing or becoming angry.

Dr. Dement said it is important for narcoleptics themselves to understand the nature of their apparently strange illness. "Our own patients have been tremendously relieved to learn that they suffer from sleep attacks and not from serious mental or physical illness," he commented.

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Mailed on January 11, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- The Herbert Hoover Pavilion of Stanford University Hospital reopens its operating rooms this week, to handle primarily plastic surgery, and eye surgery.

A donation of $75,000 from the hospital's 900-member Auxiliary is helping to pay for extensive modernization of the Pavilion's operating facilities.

The kinds of surgery to be done initially in the Pavilion's newly remodeled and equipped surgical suite require only local anesthesia. For the present, all operations requiring general anesthesia will continue to be done at Stanford University Hospital's main center.

When the overall surgery caseload is heavy, minor surgeries contribute to an overcrowded schedule at the University Hospital. (Although the patient census at the hospital has been unusually low in the past few months, the demand for operating room time is increasing.)

Surgery has not been done at Hoover Pavilion, formerly named the Palo Alto Hospital, since Stanford University built a medical center on the campus in 1959. In that year the older hospital, which was built in 1931, closed, and all its personnel and services moved to the new hospital at the main center.

In 1965, the older building was remodeled, the Palo Alto City Council gave it the name of the University's famed alumnus and the area's most widely honored resident, and it was reopened as a pavilion of the new hospital. But its operating rooms were not reactivated at that time.

Three years later in 1968, the hospital of which Hoover Pavilion is a part also received a new name. "Palo Alto-Stanford Hospital Center" was changed to "Stanford University Hospital" when the University purchased the portion owned by the City.

An important feature of patient care at the Pavilion will be that many plastic surgery patients will be outpatients. That is, instead of being hospitalized overnight, they will rest in bed under nursing surveillance in a holding facility for as long as medically necessary, then will be allowed to go home.

Some plastic surgery patients will, however, need overnight or even long-term hospitalization.

Patients admitted for eye surgery will be at Hoover on an inpatient basis. Ophthalmologists will have access to the newest type of cryotherapy unit, for treatment of cataracts and retinal detachments. Cryotherapy is a freezing technique which employs liquid nitrogen.

The way was cleared for reactivation of surgery at Hoover when business offices of the hospital which had been occupying operating room support space were moved to the new Financial Offices Building on Quarry Road in 1969. Support space has also been remodeled and provides an eye examining room, surgical treatment room, an office for the surgical resident, doctors' on-call quarters, and physical and occupational therapy facilities including a Hubbard Tank. The surgical suite itself incorporates two operating rooms, doctors' and nurses' lounges, sterilizing room and storage areas.

The two new operating rooms bring the hospital's complement to a total of 16.

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Mailed January 8, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Heart Transplant #27, done January 5, 1971

STANFORD -- Albert Rupp, 36, of San Jose, is in critical condition today after a heart transplant operation last night at Stanford University Hospital.

Rupp, whose home is at 5232 Roeder Road, had to retire from his burglar alarm installation business last summer after a severe heart attack in August.

He and his wife Mary have four sons. They are William, 16; Michael, 13; Philip, 12; and Bryan, 4.

Rupp is Stanford's 27th heart transplant patient. Of the first 26, nine are surviving.

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January 6, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Dr. Edwin William Schultz, professor emeritus of bacteriology and experimental pathology at Stanford University School of Medicine, died today after a long illness. He was 83.

Funeral services will be held at Memorial Church, Stanford, at 11 a.m. Monday.

Dr. Schultz was a member of the Stanford faculty for 34 years, from 1919, to 1953. Noted as a careful teacher, he was also prominent in the field of virology, particularly in some of the preliminary studies of poliomyelitis. He was a charter member of the Stanford chapter of Alpha Omega Alpha (the national medical honor society), served on the American Board of Pathology from 1946 to 1952, and was elected to the presidency of the American Association of Pathologists and Bacteriologists in 1956, taking time out briefly from an assignment abroad to attend the association's annual meeting.

After his retirement from the University in 1953, he was asked to direct an internationally sponsored medical training project at the University of Indonesia at Jakarta, where he served for seven years. This project was established by the University of California, the University of Indonesia at Jakarta and the U.S. International Cooperation Administration, who recruited faculty members from various U.S. universities to work toward alleviating the shortage of doctors in the young republic. Dr. Schultz came as director through the auspices of the China Medical Board of New York, an affiliate of the Rockefeller Foundation.

The help given by the American medical team earned Indonesia's praise and gratitude. The medical school at Jakarta was modernized and greatly expanded, and had tripled the size of its graduating classes by 1960, when Dr. Schultz returned to the United States.

Later he undertook another new assignment, two years as a visiting senior scientist directing the pathology laboratory of the Regional Primate Research Center at Beaverton Oregon. (This, the first of the Regional Primate Research Centers established by the National Institutes of Health, was co-sponsored by the University of Oregon.) He stayed in this post until his final retirement in 1964.

The Stanford emeritus professor was a 1913 graduate of Winona College of Agriculture in Indiana, and held the A.B. degree from the University of Michigan (1914) and the M.D. degree from Johns Hopkins University (1917).

-more-

222--Dr. Edwin William Schultz

He met his wife, the former Anna Francel Roberts, during their student days at Winona College. They were married in 1914. Mrs. Schultz, who lives in Palo Alto, survives her husband.

Dr. Schultz was a member of the Army Medical Corps in France in 1917-18. He spent a year with the American Red Cross, serving in Paris and in Poland prior to joining Stanford.

He was an administrator during 33 of his 34 years on the Stanford faculty, serving as chairman of the Department of Bacteriology and Experimental Pathology (now known as Medical Microbiology) from 1920 on.

In addition to his wife, Dr. Schultz is survived by two sons, Edwin Jr. of Anaheim, California, and Robert Schultz, M.D., of Ft. Myers, Florida, and three grandchildren.

The family request that no flowers be sent. Donations may be made to the Edwin William Schultz Memorial Lectureship in Medical Microbiology being created at Stanford University School of Medicine.

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Mailed January 2, 1971

file release

FIRST BABY OF THE YEAR, 1971

FACT SHEET

file: release file (Mary Margaret Griffith's story)

Phoned to the PA Times
no green sheet. see scrapbk for story

Released January 1, 1971 to the Palo Alto Times, San Jose, Mercury, and KNTV - Channel 11 San Jose

Baby: DAVID BRYAN RAMBERG
arrived 12:19 a.m., Jan 1
weight: 10 pounds 8 ounces
length: 22-1/2"
hair: light brown

Parents: Mr. and Mrs. August J. Ramberg (mother: Ruth)
124 Ferne Avenue, Palo Alto

Father's occupation: marketing consultant
Sibling: Jennifer, 8 years
Mother's comments: "He's just grand." "You just look at him and you know it's going to be a good year."

(Nurse who appeared on TV: Miss Jacquie Gray, R.N.)

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for our information: father 54, mother 34.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

SAN FRANCISCO -- A Stanford University Nobel Prize winning geneticist Tuesday urged citizens to communicate to President Nixon their views of the priority that should be given to health research.

Dr. Joshua Lederberg warned that although the President has signed the Health Appropriation Act for fiscal 1971, he still has the authority to allocate or to withhold the funds.

Under the new appropriation, funds approved by Congress for the National Institutes of Health will amount to $1.6 billion. According to Dr. Lederberg, this amount is a little over what is needed to hold the line, after several years of serious restraint in health research.

"This is not a partisan issue--many previous administrations have used this prerogative to save tax moneys in favor of programs that had stronger political clout," he said.

Acknowledging that President Nixon has not yet expressed himself, one way or the other on this issue, Dr. Lederberg cited evidence that funds approved by Congress for health research may be sliced off without very serious consideration.

"It is disconcerting," he said, "that some of the President's advisers have commented in opposition to the increase in research funds in their testimony before Congress.

"Their arguments are based on cliches that reflect serious ignorance of the actual mode of training physicians, of the relationship of research and clinical training in the medical schools, and of the desperate financial plight of many schools when we have unprecedented needs for more skilled professionals to clear up a pernicious scarcity market."

Dr. Lederberg stressed that medical schools have been built with support of health research. "It would be better if medical education were supported directly on its own merits, rather than merely as a spillover benefit of subsidies for research, but choking the source will dry up the entire stream," he said.

Dr. Lederberg made his remarks in a statement prepared for delivery at a press conference at the University of California Medical Center. The conference was one of three held Tuesday in New York, Chicago, and San Francisco under the auspices of the National Cystic Fibrosis Research Foundation, New York. Nobel Laureates James Watson and George Beadle were among the participants in New York and Chicago.

"Unfortunately, health research has no particular lobby or political constituency," Dr. Lederberg said. "The people best equipped to report on the impact of budget cuts are those, who like my colleagues here, are deeply involved in it.

"We command very few votes and, of course, we can be accused of self-interest in pleading for these funds, as can anyone whose work is in public service."

He said the scientists' pleas will be useless unless the public--those whose health is at stake, express themselves directly--in letters to the President, to Congressmen, and to newspaper editors.

Dr. Lederberg said the confusions and conflicts of our public policy on health research exact their toll in various ways. The cost of uncertainty in not knowing about seafood contamination by mercury, radiation health hazards, food additives, and pesticides may be at least as high as the NIH budget.

He said the public pays the price eventually by taking expensive precautions against these hazards out of sheer ignorance.

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Mailed January 19, 1971.

Hoover Pavilion

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. John R. Hogness, president of the newly-formed Institute of Medicine in the National Academy of Sciences, will deliver the keynote speech at the dedication of the new $560,000 Psychiatry Clinic Building at Stanford University Medical Center, Thursday, December 9.

The public ceremony marking the official opening of the adult and child clinic facility will begin at 2:30 p.m. in the Dean's Courtyard at the School of Medicine. Dr. Hogness will be introduced by Dr. Clayton Rich, dean of the School of Medicine.

This will be Dr. Hogness' first public statement on mental health since assuming the presidency of the Institute last August.

A 1946 graduate of the University of Chicago School of Medicine, Dr. Hogness served as an administrator and faculty member at the University of Washington for 21 years before accepting his present position.

After six years as medical director of the University Hospital, Dr. Hogness was appointed dean of the School of Medicine and chairman of the Division of Health Sciences in 1964. He became executive vice president of the University in 1969. From 1970-71, he served as chairman of the Board of Health Sciences and director of the Health Sciences Center, composed of six colleges, two hospitals, and four health care and research centers.

Following the dedication ceremonies, an open house will be held for the public in the new building and also at the Department of Psychiatry's inpatient facility at Hoover Pavilion.

The new two-story redwood building was added to give the psychiatric outpatient program at Stanford space it urgently needed and to provide a more pleasant, informal setting for individual and group therapy sessions. Completed in mid-August and now being landscaped, it houses the department library and staff offices, group therapy rooms, and Adult and Child Psychiatry Clinics.

"Between the adult and child clinics, we'll be able to handle close to 20,000 patient visits per year," said Dr. Alan Rosenthal, director of the Child Psychiatry Clinic. "Every staff member has an office, whereas in the past most of our residents had to share offices. Now everyone is free to see many more patients."

Located just south of the main center, the new facility is adjacent to the Edwards Building, which formerly housed overcrowded clinics, department offices and laboratories.

The removal of the clinics and offices from Edwards has freed space for the broad interdisciplinary study of violence and aggression at Stanford, directed by Psychiatry Department chairman Dr. David Hamburg. The balance of the vacated space will be department laboratories for Psychiatry and Biochemistry.

Stanford's psychiatric program employs the "team treatment" concept, in that faculty psychiatrists, social workers, residents and psychologists are all involved in developing therapy for clinic outpatients. The floor plan in the new building facilitates this approach. -more-

"We designed the new clinic floor plan so that teams of doctors are physically located together in clusters of offices," said John Hornback, resident architect at the Medical Center. "Groups of four or five offices are situated around small waiting rooms."

The clustering of offices provides waiting patients with more privacy and reduces the amount of corridor space.

"In the new building we avoid the long walk down a corridor, which sometimes has a 'last mile' feeling for patients," said Dr. Peter Rosenbaum, director of the Adult Psychiatry Clinic.

The building also features a two-story covered courtyard, equipped with sliding panels on two sides for circulation.

The 18,000 square foot structure was designed with economy and flexibility in mind, according to Hornback.

"Outpatient psychiatric therapy doesn't have to take place in a high cost, concrete structure," he said. "With no need for laboratory utilities, we could construct a low cost facility.

"In terms of flexibility, all the interior partitions are non-load bearing and can be easily moved. The carpet and ceiling are continuous, so when a partition is moved, the room still looks finished. Additionally, the building can be taken apart by 30-foot sections and relocated by housemoving methods."

Hornback's staff members Jim Brenner and Ray Rooker carried major responsibility for designing the building, along with Stanford Hospital's Engineering Department. Welch Construction Company of Mountain View was the builder.

Funds to finance the building came from private sources. Plaques will honor the gifts of two major donors--John C. Cosgrove and Mrs. George A. Winzer. The upper floor of the building will be named the Emilie Dohrmann Cosgrove Psychiatric Clinic, in honor of Cosgrove's late wife, who was a member of the class of 1933 and a former trustee of the University. One of the wings on the first floor will be called the Frances Winzer Wing in honor of Mrs. Winzer.

Four members of the Stanford faculty were recently elected to membership in the Institute of Medicine, including Dr. Robert A. Chase, professor and chairman, Department of Surgery; Dr. Hamburg; Dr. Donald Kennedy, professor and chairman, Department of Biological Sciences; and Dr. Joshua Lederberg, professor and chairman, Department of Genetics.

Dr. Hogness' brother, Dr. David Hogness, is a professor of biochemistry at Stanford.

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Mailed December 6, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD--Similarities in the landscapes of Turkey and California emerge in the paintings of Susan Wexler, which are being exhibited at Tresidder Memorial Union on the Stanford campus through March 25. (Hours the Union is open are 8 a.m. to 10 p.m. Mondays through Fridays.)

Susan, a self-taught artist, is married to assistant professor of radiology at Stanford University School of Medicine Dr. Lewis Wexler. They spent two years in Ankara while he was serving with the U.S. Air Force there.

She says the experience influenced her painting to a great extent. "I became interested in the look of 'people in relation to the land,' " she says, "whereas before I tended to see either/or."

The artist, who took college degrees in English literature at Syracuse and Columbia, began painting 10 years ago. The inspiration, she says, comes from her reaction to places: "It's the way a place makes me feel."

The viewer at the exhibition will note akin responses to the California and Turkish countrysides, which she explains "resemble each other as far as sun and light, and a predominance of golds and earthy colors are concerned." There are several California subjects in the show: her (impressionistic) view of a Los Altos apricot orchard, the live oak-studded hills, Carmel, Pt. Lobos, Monterey, High Sierras forests as seen at Grant Lake.

There are some nudes, a portrait of a young bearded man, an abstract or two, and very few still lifes rounding out the show. The media demonstrate versatility--oil, acrylic, pastel, watercolor and drawing.

Mrs. Wexler is the mother of three sons, aged 2-1/2, 8 and 10. She is a volunteer art teacher for fourth-, fifth-and sixth-graders at the Lucille Nixon Elementary School at Stanford.

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Mailed, March 11, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- Stanford University Hospital has announced that it will supplement its daytime tours for expectant parents with one evening tour a month.

The later hour, arranged as a convenience for the fathers, who more typically cannot get away during the working day, will enable the couple to visit the hospital together.

Evening tours will be held the third Tuesday of each month from 7 to 8:15 p.m. Miss Marcie Barton, R. N., of the hospital's perinatal unit, will guide the tour groups, which will be limited to 20.

Regular daytime tours for expectant parents are held (most) Wednesdays at 11 a.m. Fathers are also welcome on Wednesday mornings.

To ensure a place, couples are asked to make reservations by calling the Office of Public Events, 321-1200, Ext. 5594, six to eight weeks in advance of the date the baby is due, so that they can visit the hospital approximately one month ahead of the due date.

This month the evening tour is March 16.

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Mailed March 3, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

EDITORS: Copies of STANFORD M.D. available on request if not included with the story.

STANFORD -- A Stanford University psychiatrist, who says humor has received insufficient scientific attention, has launched a study of laughter and its role in health.

"In most studies dealing with the positive human emotions, humor has played a minor role compared to love, affection, and desire," says Dr. William F. Fry, Jr.

"The state of our knowledge about the physiology of mirth is similar to the familiar iceberg--we know only the upper fraction of the whole," he adds.

Fry, an associate clinical professor of psychiatry, says he found it difficult to do his research by telling volunteers jokes and then asking them to rate them in order of funniness. That approach was too subjective. So he turned his attention to the physiology of mirthful laughter.

"My plan was to develop enough information about the happenings of various bodily systems during mirth that a physiologic model for laughter could be devised as an objective tool for humor research," Fry reports.

The studies he conducted thus far have included the effects of mirth on the heart rate and the electrocardiogram. He also examined laughter as a respiratory phenomenon, and the effects of mirthful laughter on the oxygen saturation levels of the blood.

Two Palo Alto electronics engineers, Con Rader and Paul Stoft, assisted in the studies in which Stanford people took part as consultants or volunteer subjects.

The volunteers were wired to machines which measured their physical responses as they listened to humor stimuli (taped jokes from professional and amateur sources.)

Here is what Fry found based on a report of his work in the current issue of STANFORD M.D., the magazine of the Stanford Medical Alumni Association:

. Laughter causes a complete disruption of the normal respiratory cycle. Recovery following laughter is a gradual--in excess of 10 seconds on occasion--return to normal breathing.

. Laughter consists of varying mixtures of expiration, inspiration, and interval pausing. These components have characteristics which give each person a generally unique laughing style.

More rapid-than-normal heartbeat (tachycardia) of varying degrees is associated with laughter. Rates of over 120 were found with more prolonged and intense laughter. The heart rate studies suggest a physiologic reflex effect on heart activity rather than the rapid heartbeat being a response to the emotion involved, Fry comments.

"This is research in process," Fry notes. "There are other basic areas that beg investigation: for example, brainwaves, blood flow rate, body temperature, and concentrations of body chemicals will be studied in the future."

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These basic studies have also suggested ideas for clinical research.

"People can suffer cardiac decompensation (heart attack) during sexual intercourse, dreaming, while driving on the freeway, as spectators in sports events, watching TV," says Fry. "To my knowledge, there is no literature detailing cardiovascular jeopardy during mirth--this despite the massive muscular activity associated with laughter, the rapid heartbeat, and adrenal gland activation."

Another area of study has to do with lesions of the upper gastrointestinal tract. "We know, from earlier studies of humor's physiology, that the diaphragm is much involved in laughter as are the muscles of the abdominal wall," Fry writes. "The spasmodic quality of laughter is also evident from everyday observation."

He comments that in view of this there may be clinical implications of laughter for esophagitis, hiatal hernias, and gastric and duodenal ulcers. Laughter could also contribute to strokes in those who are susceptible, Fry notes, and he points to an already documented fact in medical literature--laughter's contribution to the precipitation of seizures in epileptics.

Fry's research is not limited to the physiologic level. It is also concerned with psychologic and sociologic aspects of humor as a basic emotion as well as its evolution.

"How much farther down the evolutionary tree mirth goes is a matter of conjecture," Fry says. "Some hint comes from humor's consistent impact on several basic physiologic systems which must have had origin at the beginning of mammalian life, at least."

Three years ago, Fry was skeptical of scientific reports concerning the presence of mirth, or laughter, in chimpanzees and gorillas.

But he was argued out of his recalcitrance by the work of Dr. Lawrence Pinneo of the Stanford Research Institute in Menlo Park.

"During the process of numerous demonstrations--he even locked me in a cage with three delightful but inexhaustible young chimps--he has turned me around to the point I am strongly convinced that chimps have a sense of humor and do laugh in a very human fashion (or perhaps that should be vice versa)," Fry wryly comments.

Additionally, Pinneo and Fry with the assistance of pediatrician-photographer Sheldon Woodward, Menlo Park, are exploring the manifestations and roles in various species of the social grimace, grin, or smile.

"Consideration of a common progenitor for the social grimace and a human smile is of course speculative," Fry writes. "But it does touch rather resoundingly on the question of a dynamic relationship between humor, hostility, and anxiety--a question which has received much attention in human psychology."

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Editor's Note:

Fry is author of a book, SWEET MADNESS: A STUDY OF HUMOR (1963). He is also director of the Gelotology Institute, San Francisco. Gelotology, a word coined by linguist-anthropologist Edith Trager, formerly of San Jose State College, originates from the Greek root, gelos: laughter. It is used to designate the science of laughter.

Mailed April 1, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT:
EDITORS: Photos available on request from Pete Waller.

Pete Waller, 961-1111, X 2671
Ames Research Center, NASA
Moffett Field, Mt. View, Ca
or
Polly Downing, 321-5310
Stanford Medical Center News Bureau

FOR PM RELEASE WEDNESDAY, APRIL 7, 1971

STANFORD -- Doctors can watch a movie of the beating of a patient's diseased heart--identifying dead spots or scar tissue in the heart wall, aneurysms (bubble-like projections of the heart muscle), and other malfunctions--with a computer method devised by a NASA-Stanford University team.

The system, which is still under development, would improve on current complex diagnostic methods by providing a simple means of viewing the heart in action. Figuratively, it allows doctors to "walk around" the isolated beating heart, viewing it from any desired angle. They also can stop the heart at any desired point of expansion or contraction and can play the picture back and forth for many cycles.

The system projects a three-dimensional animated cartoon-like image of any desired chamber of the patient's heart, in lines of light on a computer display screen, similar to a television screen. The animated display is derived from two-dimensional "X-ray movies" made by injecting X-ray contrast dye into the desired heart chamber.

Scientists and doctors from NASA-Ames Research Center, Mountain View, California, and the cardiology division of Stanford University Medical Center, have worked together on the system.

It appears that the method may be a major advance for the physician to determine the patient's need for heart surgery, coronary artery grafts, and treatment of various heart conditions. Heart disease is the leading cause of death in the United States.

The system's animated display is exact enough to show dead sections of the heart wall about the size of a nickel (two centimeters), details of large malfunctions, and holes between heart chambers. Combined with standard clinical measurements of blood-flow per heart beat, it can measure inefficient pumping by heart chambers. It will also help to identify leaky valves and shows the severity of valve damage.

This system will allow further validation of a sonar-like system for testing heart function which is also under development by this group of scientists. These sonar systems would allow examination of the healthy hearts of astronauts, pilots and ordinary citizens, using a simple sensor placed on the chest.

"The Ames animated display system seems to be an important advance in the diagnostic tools for studying heart disease," comments Dr. Donald C. Harrison, chief of the Division of Cardiology at Stanford, which is doing the clinical work on the project.

-more-

New Diagnostic Tool for Heart Disease/NASA-Stanford

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"While X-ray examinations of hearts as they beat are currently in use," says Ames' Dr. Harold Sandler, originator of the system, "X-rays are two-dimensional and hard to interpret because of the various other body structures in the same picture."

The value of the method for doctors is that it eliminates all irrelevant details. For example, it can show the complete interior surface of the beating left ventricle (the heart's main pump) on the lighted display screen and nothing else. The system can do the same with the right ventricle and the two auricles (intake pumps).

Since the animated displays are a form of computer readout, they can be transmitted to doctors at distant locations by an ordinary telephone line, and recreated on a computer display screen.

The displays are derived from X-ray movies, plus a computer program based on intensive research in heart configurations and dimensions, plus new three-dimensional computer display techniques. Daryl Rasmussen, Ames Research engineer, developed the mathematical and computer techniques, using data gathered by Dr. Sandler during six years of work at Ames on heart chamber dimensions and means of measuring them.

Doctors first take the X-ray movie, known as an angiogram. To do this, they inject a dye opaque to X rays through a catheter into the patient's heart. The X rays then outline the selected heart chamber in cross section as it expands and contracts.

Stanford cardiologists working under Dr. Harrison's direction take two sets of X-ray movies at right angles to each other, at 60 frames (pictures) per second.

Obtaining the X rays may be difficult since injection of the angiographic dye itself changes the function of the heart and makes only the data from two heart beats acceptable for analysis. However, the researchers use a variety of independent measurements to make sure the two beats used are exactly typical. Validation of the technique by other independent means is now being accomplished.

From the two X-ray movies, the computer constructs the animated display. The entire sequence of movie frames, each one containing the heart chamber outline, is traced on a computer input screen, and is retained in the computer memory. The computer program then mathematically projects the two views of the heart chamber back into space. From these it reconstructs the chamber. This three-dimensional construction is also stored in the computer memory for analysis and display.

The technique allows the computer to calculate the changing positions of the entire interior surface of the heart chamber in question, so the moving heart chamber can be seen from any point.

The computer program is based on studies of the exact proportions of hundreds of normal and abnormal human hearts gathered by Dr. Sandler from autopsies, and studies of patients with heart diseases of various types.

The two stored beats are repeated over and over by the computer, allowing doctors to study the heart in action for any desired period of time.

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END RELEASE FOR WEDNESDAY P.M., APRIL 7, 1971.

Mailed Tuesday, April 6, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Charges that a Chicano faculty member in the Stanford Medical School was denied tenure for racial and political reasons are unfounded, Acting Dean John L. Wilson said Wednesday (April 7).

The charges were made by five Chicano student- and employee-related organizations in an article in The Stanford Daily.

The faculty member is Dr. Jose Aguilar, a neurosurgeon who had a three-year appointment as an assistant professor of surgery.

According to faculty appointment procedures of the Medical School, Dr. Aguilar was notified November 1970, that he would not be reappointed, Dr. Wilson explained.

The decision was made by an eight-member committee of the senior faculty of the Department of Surgery.

Dr. Aguilar's case was reviewed again in March 1971, at his request, and the decision not to reappoint him was upheld, Dr. Wilson said.

Dr. Wilson said that Dr. Aguilar is not the only assistant professor who did not get a reappointment. Funding problems, research projects that do not pan out, faculty productivity, or changing departmental needs count heavily in the reappointment of faculty, he commented.

The medical school dean said the charge of racial bias published in the Stanford Daily with respect to Dr. Aguilar was unjustified.

He said the Provost's office has investigated this case and no irregularities were discovered in the decision-making process.

The article in the Daily was signed by the National Chicano Health Care Organization, Stanford Chapter of the Student National Medical Association, Alianza Latina (a Stanford Hospital employee group), the Black Liberation Front, and Stanford Medical Student Association.

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Mailed April 7, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The Stanford University Hospital Wednesday night (APRIL 7) made a detailed response to questions concerning its personnel policies, and the firing of Sam Bridges, a Black employee at the Hospital.

The questions were raised by supporters of Bridges who rallied at the Medical Center yesterday to protest his firing and to demand more rights for workers.

Among the demands were: workers' rights to criticize administration policies, to organize, to have grievance rights from date of hiring and peers present at all grievance procedures.

The hospital was also asked to adopt an affirmative action program to hire and train minorities and to reinstate Bridges with back pay.

In an open letter to the Stanford community, Dr. Thomas A. Gonda, hospital director, stated: "Mr. Bridges was informed of the opportunity to file a grievance and was given a copy of the Hospital's grievance procedure and of the rules of conduct with those violations pertaining to him underlined. He has not chosen to bring his case before the grievance committee."

Dr. Gonda also wrote:

. "All employees have the right to criticize administration policies. If there are instances in which that policy has been violated, I would appreciate having the evidence brought to my attention."

. "Employees are free to decide if they wish to join unions. The Hospital was involved in a union election in 1967, and union organizing activities have been held regularly ever since."

. "Stanford University Hospital has an affirmative action program, and is completing its documentation. For the past two years Stanford hospital has had a Black advisory committee elected by Black employees. More recently the Alianza Latina, composed of most of the Spanish speaking employees of the Medical Center has been formed. These groups have been actively involved in the implementation of...the program."

On the question of grievance rights from date of hiring, Gonda wrote: "Present hospital policy is ambiguous on this point. Our practice, however, has been to make grievance procedures available to all employees regardless of length of service. I will take steps to clarify the policy manual on this point."

Dr. Gonda noted peers can be present in initial grievance proceedings, as well as in later stages.

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Mailed April 8, 1971.

STANFORD UNIVERSITY NEWS SERVICE

STANFORD, CALIFORNIA
ZIP 94305.
(A/C 415) 321-2300, Ext. 2558

FOR FURTHER INFORMATION CONTACT: Bob Beyers

STANFORD -- Making a strong plea for greater community control over medical care, Dr. Jose Aguilar told 250 persons at a Thursday noon rally at the Stanford Medical Center that from a personal standpoint "there isn't anything at stake" if he fails to receive a tenure appointment at the University.

"If I fail to get tenure, I'm 'doomed' to a $40,000 or $50,000 job by going out into private practice.... I don't have to be afraid of the Establishment. My referrals would not come from white doctors," he added. A neurosurgeon, he is the sole chicano on the Medical School faculty.

Active in recruiting chicano medical students to Stanford, Dr. Aguilar also works with the People's Medical Center in Redwood City. He said his referrals would come from the community, because when chicanos look for a physician sympathetic with their problems, "the only one around is me."

Noting the heavy federal support of medical activities at Stanford, he suggested that "we have to get our share" for the minority communities. Blacks and chicanos should set the policies for health care in their own communities, he indicated.

Because of the lengthy training required for physicians, he added, it could take 10 to 20 years before blacks and chicanos again could "take up the issue of tenure" for racial minority members seeking careers as physician-professors.

Several medical students and employees strongly endorsed Dr. Aguilar's work at the School. Paul Williams, sole minority student in the medical Class of '73, said "Academic excellence is necessary for minority students, but not sufficient," emphasizing the need for the personal example and guidance of Dr. Aguilar.

In a similar vein, Bertha Gonzalez, a first year medical student, said the School's research is "excellent" but it "tended to ignore the value of good clinical teachers."

Speaking in Spanish, a third student received wide applause when he said that the protest group was not allied with communists or other radicals, but were present "because we're chicanos."

Expressing his appreciation for the turnout and support, Dr. Aguilar said "Somehow all my life--I'm 44, now--I've been hearing someone tell me I'm half-assed good. After hearing that for so long, I'm almost inclined to believe it....

"All of a sudden now there's good for me not to believe what other people tell me--that I'm incompetent, etc.--because I know that somebody out there loves me."

An assistant professor of neurosurgery at Stanford since 1965, Dr. Aguilar was notified in November that he would not receive a tenure appointment. In a statement Wednesday, Acting Dean John L. Wilson of the School described as "unfounded" charges that tenure was denied for racial and political reasons.

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April 8, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Beyers or Spyros Andreopoulos 415: 321-5310

STANFORD -- About 50 persons continued to occupy an administrative hallway and offices in the Stanford University Hospital Friday morning, protesting the firing of a Black employee.

There was no interference with patient care. But locked doors to administrative offices in the area were opened and access to the hallway itself was restricted to doctors, patients, and demonstrators.

A Viet Cong flag and a large Venceremos banner decorated the area. Hospital Director Thomas A. Gonda met with a group late Thursday night.

At 12:15 a.m., Acting Dean John L. Wilson of the Medical School, and executive administrative officer of the Medical Center, warned the demonstrators that they were disrupting and said he would seek legal counsel. Police were not called, but hospital security officers continued to observe the area.

Dr. Wilson said he did not see any necessity for prolonging the sit-in, since discussion of the case would continue. But the group decided to remain. Several meetings have been scheduled this morning, including one between the Black Advisory Committee, an employee group, and leaders of the demonstration. Yesterday, the BAC issued a statement indicating their investigation had shown the employee dismissal was for cause.

If the discharged employee, Sam Bridges, were to initiate a grievance procedure, they said their group would seek to insure "fair and impartial treatment."

###

Mailed April 9, 1971.

FOR IMMEDIATE RELEASE

STANFORD - MOre than 50 demonstrators, some swining clubs, injured 13 police add caused an estimated $100,000 property damage to an administrative office area at the Stanford University Hospital late Friday, April 9, when Palo Alto police broke through barricades to end a 30-hour sit-in.

Six officers were treated at the hospital emergency room, where one was admitted for surgery on an injured hand. Four other persons were treated and released there.

There were ~~at least~~ about 20 arrests, including three juveniles. A preliminary check by University officials indicated only ~~three~~ four were students, faculty or staff members.

The demonstrators, who were protesting the dismissal of a black employee, barricaded themselves between two large glass partitions in the second floor before police came.

They were warned they were subject to arrest and given five minutes notice to leave. None did.

Palo Alto Police Chief James Zurcher told the demonstrators, "we'd like to do this as peacefully as possible." A voice inside replied, "There's a lot of expensive stuff in here and we're going to get it. People out there are going to get hurt."

When police used a wodden battering ram on heavy glass doors, the demonstrators turned on a fire hose and poured water on them. Officers squirted a chemical through the broken door and demonstrators threw ashtrays and other objects at officers.

At 6:37 p.m., when police pulled down the doors at one end of the corridor, and climbed over the barricade, many demonstrators using clubs, overwhelmed a nine-man squad blocking the other end of the corridor. Many protesters escaped out office windows, climbing down walls from the second floor.

The offices were a scene of absolute devastation. Desks, chairs, and metal file cabinets were turned over or piled on top of each other. Files and books covered the floor, as did shredded furniture. Phone wires were hung out the windows and the firehose was cut.

Campus police reported there were 11 false fire alarms, five bomb threats, and two trash fires following the hospital incident.

Chief Zurcher said 65 Palo Alto police were deployed, with an additional 110 officers coming to the hospital under a mutual aid agreement.

MORE

Commenting on the issue which led to the sit in, Acting President William F. Miller said that "before the sit-in began, the community was informed that the hospital agreed with five of the six demands made on it.

"On one, the rehiring of Sam Bridges, the answer on Thursday morning was that grievance procedures are available to him if he wishes to use them. That answer still stands. If Mr. Bridges wants to file a grievance, he can be assured of a full and fair airing of the facts of his case."

The demonstration began early Thursday afternoon, when about 70 demonstrators occupied the hallway, unfurling a Viet Cong flag and a Venceremos banner. Soon after, they were asked to leave, but did not do so. At 12;15 a.m. Friday, Acting Dean John L. Wilson of the Medical School, executive administrative officer of the Medical Center, warned the demonstrators they were disrupting and said he would seek legal counsel. Police were not called, and 50 demonstrators remained there.

Friday morning the Stanford Daily published a statement from the Black Advisory Committee, a hospital employee group, stating that Bridges "was terminated because he was not doing the job he was hired to do, and therefore putting an added burden on his co-workers." The BAC said it would insure Bridges "fair and impartial treatment" if he initiated a grievance hearing.

Dr. Thomas Gonda, hospital director, met for three hours with the demonstrators at his occupied office late Friday morning and early afternoon, reiterating similar assurances. He did not agree to reinstate Bridges.

Following a joint meeting with the Black United Front which led the demonstration, and a review of the case, the BAC recommended that Bridges be rehired and retroactively reimbursed for total time loss.

Dr. Gonda held further discussions with Medical Center officials and William F. Miller, acting president of the University during the absence from campus of Richard W Lyman. In a statement delivered to the demonstrators at 4:30 p.m. Miller said that he and Dr. Gonda agreed there could be no conclusion reached on the composition and dates for a grievance procedure while the occupation continued.

Shortly thereafter, the demonstrators voted to remain in the building until Bridges was rehired, indicating they were aware of the possibility that Palo Alto police would soon arrive. They then sealed both entrances to the hallway and erected barricades.

After the incident, Acting President Miller said his prime concern was "how to end the occupation with the least possible danger to patient care services and least possible risk to patients."

"So long as there was a reasonable chance that Dr. Wilson and Dr. Gonda might persuade the people involved to leave voluntarily, I was prepared to refrain from asking for police assistance. However, disruption of hospital functions could not be allowed to continue for long, and when it became clear this afternoon that furth r discussion would not be productive, I asked the Palo Alto police for assistance

President Lyman and Palo Alto City Manager George Morgan made separate visits to the hospital Friday night, surveying the damage. ###

At 12:30 a.m. Saturday, three molotov cocktails were thrown at a PG&E substanion on campus. There was no damage. There was scattered trashing on campus, with Hoover Library and the Varian building among those hit. Dem nstrators inside the hospital had urged supporters outside to "go out and trash."

Cowell Student Health Center said no one had been treated there as a result of the hospital incident. ####

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Activities at Stanford University Hospital were back to normal Saturday (April 10). Three main entrances to the hospital are open and tight security is maintained.

Employees have reported for work as usual.

Faculty and administrative staff are scheduling meetings with small groups of Medical Center employees and students. One meeting has been scheduled by the Black Advisory Committee, a hospital employee group, at 9:30 a.m., Monday in front of the Medical School.

The Hospital suffered an estimated $100,000 damage when police were called to end a 30-hour occupation of the administrative offices.

The demonstrators, who were protesting the dismissal of a Black employee, barricaded themselves between two large glass partitions on the second floor before police came.

The demonstration began early Thursday afternoon, when about 70 protesters--all nonemployees--occupied the hallway, and demanded an answer to demands presented to the hospital administration earlier.

Before the sit-in began, the community was informed that the hospital agreed with five of the six demands made on it.

These included the right of workers to criticize the administration, organize, and have the right to grievance procedures from the start of employment.

On one of the demands, the rehiring of Sam Bridges, the answer on Thursday morning was that grievance procedures are available to him if he wished to use them. If he wanted to file a grievance, he could be assured of a full and fair airing of the facts in his case.

On Friday Hospital administrator, Dr. Thomas A. Gonda met with the Black United Front which led the demonstration.

After many meetings with the demonstrators, asking them to leave, university and medical center officials concluded that there could be no agreement reached on the composition and dates for a grievance procedure as long as the occupation continued. Shortly, thereafter, demonstrators voted to remain in the building until Bridges was rehired.

Officials then decided that disruption of vital hospital functions could not be allowed to continue, and called police.

###

Mailed Saturday, April 10, 1971

Handed to SUH 4-12-71 by Jim Cheatham

We request that the demands listed below be considered as absolute and they are non-negotiable. Further, these demands presented should be resolved by the date, Wednesday 14, 1971.

1) All charges related to all persons who were arrested in connection with the non-violent demonstration held at Standord University Hospital, April 9, 1971. Notwithstanding, all legal fees incurred during this demonstration shall be paid in full by Stanford University.

2) Any persons who received any form of injury because of their direct or indirect involvement in the demonstration should have all medical expenses paid in full by Stanford University.

3) Sam Bridges shall be reinstated and reimbursed retroactively from date of termination.

4) Dr. John L. Wilson, active Dean of the Medical School, will be asked to resign.

5) Mr. Warren Thorpe, Assistant Chief Engineer, will be asked to resign.

6) There will be created a separation of the Stanford University and Medical Center with each having its own autonomy.

7) The Black Advisory Committee cannot function in an advisory capacity without having the power to represent the total Medical Center which includes both the Stanford Hospital and the Stanford School of Medicine.

8) The decision-making apparatus must exist only with horizontal authority. This restructuring is imperative.

The above demands have been setforth by the Black Advisory Committee in conjunction with students in the Stanford School of Medicine.

cc: Dr. John L. Wilson, Dean - Stanford School of Medicine
Dr. Thomas A. Gonda, Director - Stanford University Hospital
Dr. Milton R. Burnfield, Assistant Professor of Pediatrics
Mr. James E. Simmons, Assistant to the President

OR IMMEDIATE RELEASE

STANFORD - Bail has been set at $1,000 each (pending arraignment) for 22 persons arrested in Friday night's clearance of the Stanford University Hospital sit-in.

Leaders of the Black Students Union, at a campus news conference, warned that "in the face of brutal tactics employed by Stanford University against peaceful demonstrators, we cannot allow business to be carried on as usual until all our demands are met."

These include reinstatement of Sam Bridges, a black hospital employee whose firing led to the demonstration, and amnesty for all those involved in the protest.

Thirteen police and at least seven arrestees were among 22 persons injured in the Friday night incident, which also resulted in $100,000 damage to administrative offices at the hospital. One policeman was hospitalized.

Bail for those arrested was set Saturday afternoon by Palo Alto Municipal Court Judge Barton Phelps and Santa Clara County Superior Court Judge William Ingram.

At the court hearing, Deputy District Attorney Dennis Lempert called for ,000 bond each. Norton Tooby, defense attorney, argued for release on recognizance until arraignment, with provisions which would bar a repetition of the incident.

John Schwartz, presidential assistant at Stanford, said the University had no objection to Tooby's suggestion or to setting bail at an amount defendants could reasonably be expected to pay,

The judges released one defendant, who is pregnant, on her own recognizance. They said students, faculty, and other employees arrested were allowed on campus only in connection with their legitimate, useful purposes, pending arraingnment. Other defendants, not connected with the University, were barred from entering campus until arraignment.

The defendants may insist on arraignment within 72 hours of booking.

Black students attending the hearing warned that conditions on campus were tentially explosive.

In their statement, the BSU leaders said: "It should be understood that... entrance into Stanford Hospital and occupation (of a hallway and offices) were not disruptive of hospital functioning.

"Doctors and patients were allowed to carry on as usual.

"It should also be understood that the majority of the demands of the workers were met prior to the police intervention and that, when police moved to clear the building of demonstrators, there were only two unsettled issues," the rehiring of Bridges and amnesty.

They charged that Leo Bazile, former chairman of the BSU, was singled out for "racist attack" by the police when the hospital was cleared. ###

APRIL 12, 1971

FILE COPY

uncorrected copy

April 12, 1971

TO: Medical Staff and Students

FROM: John L. Wilson, M.D.
Acting Dean, School of Medicine

SUBJECT: Sit-in at the Stanford University Hospital on April 8-9, 1971

On Tuesday, April 6, a noon rally was held on the lawn near the Medical Center by the Black United Front. The BUF is said to be a coalition of the Black Liberation Front, the Black Workers Caucus and representation from the Black Student Union. The Front was organized as a response to the dismissal of Mr. Sam Bridges, a hospital employee, and the laying off of workers at Tresidder. Following the rally on April 6, over 100 persons went to the office of Doctor Gonda, Director of the Hospital, and presented to him a list of 6 demands. They stated that they would return for a reply to these demands at noon on Thursday, April 8. As far as is known, the groups presenting the demands included few if any Hospital employees.

On April 9, another noon rally was held following which about 50 persons went to the office of Doctor Gonda stating that they expected to receive from him, in person, the reply to their demands. The reply had been printed in the Daily on that morning and copies of it were handed to the group. The demands, with Dr. Gonda's responses to them, are printed below:

1. "Workers must have the right to criticize administration policies from the date of hiring without intimidation."

   All employees have the right to criticize administration policies. In addition, there are regular opportunities of communicating employee views to the administration. If there are any instances in which that policy has been violated, I would appreciate having the evidence brought to my attention.

2. "Workers must have the right to organize a union which represents the workers' interest."

   Employees are free to decide if they wish to join unions. The Hospital was involved in a union election in 1967, and union organizing activities have been held regularly since then.

3. "Workers must have grievance rights from date of hiring."

   Present Hospital policy is ambiguous on this point. Our practice, however, has been to make grievance procedures available to employees regardless of length of service. I will take steps to clarify the Policy Manual on this point.

4. "Workers must have the right to have peers present on all grievance procedures."

   While the grievance procedure does not explicitly provide for the presence of peers at the early steps, our practice has been to allow it as is expressly set forth in later steps of the grievance procedure.

5. "The rehiring of Sam Bridges with pay for time loss."

   Mr. Bridges was informed of the opportunity to file a grievance and was given a copy of the Hospital's Grievance Procedure (Section 525) and of the Rules of Conduct (Section 500) with those violations pertaining to him underlined. He has not chosen to bring his case before the Grievance Committee.

6. "Stanford Hospital must adopt an Affirmative Action Program."

   Stanford University Hospital has an Affirmative Action Program, and is in the process of completing its documentation. For the past two years Stanford University Hospital has had a Black Advisory Committee selected by Black employees. More recently the Alianza Latina, composed of most of the Spanish speaking employees of the Medical Center, has been formed. These groups have been actively involved in the implementation of the Hospital's Affirmative Action Program.

All of the above demands, with the exception of the rehiring of Mr. Sam Bridges, were reported by Dr. Gonda to be already part of Hospital policy or positive action on them is imminent. The rehiring of Mr. Sam Bridges with pay for time lost was identified early as the chief issue. The Black Advisory Committee, consisting of Black Hospital employees, issued the following statement giving the reasons for the firing of Sam Bridges and their support of the action taken:

MEMORANDUM

TO: Hospital Employees

FROM: The Black Advisory Committee

SUBJECT: OUR STAND ON THE SAM BRIDGES CASE

We, the Members of the Black Advisory Committee, upon reading the charges made by Mr. Sam Bridges, did, in fact, conduct a thorough investigation regarding his dismissal.

The investigation disclosed the following facts.

1) On several occasions his co-workers complained that Mr. Bridges was not doing his work and that they had to carry his workload as well as their own.

2) On two particular occasions he verbally abused - 1) a co-worker because he was questioned about some work he had not done, and 2) a Security Guard because he was told that he had to put money in a parking meter.

3) He was found asleep on one occasion in the "Brown Bag" room while he was supposed to be working.

4) He was counselled about his work performance on at least three different occasions due to complaints by his co-workers.

5) He was observed on campus several times while he was supposed to be working.

The Black Advisory Committee can present evidence to substantiate these facts. It was our conclusion that Mr. Bridges was terminated because he was not doing the job he was hired to do, and therefore putting an added burden on his co-workers.

Had Mr. Bridges, after being told about the grievance procedure, chosen to take his case before the grievance committee, this Committee would have insured him fair and impartial treatment.

4/8/71

By late afternoon of April 8, the crowd in the administrative area on the second floor of the Hospital had increased to 80 to 100 persons and refused to disperse. They called for the personal appearance of Dr. Gonda. They occupied the entire administrative area making it necessary for the Hospital administrative staff to discontinue their work and to lock the offices. The doors on either end of the corridor were closed and people entering the administrative area were challenged as to their business. The locked administrative offices were broken into by removing a door from the hinges so that the entire complex of offices was occupied. Administrative personnel necessarily left the area and all the files, facilities, and resources of the administrative section including the emergency and disaster radio and special telephonic equipment were inaccessible for the use of the Hospital. The occupiers placed guards on the doors at each end of the administrative corridor. This corridor connects clinic and treatment facilities on one side with blood banking, laboratory and hospital wards on the other. Hospital personnel and patients were permitted to pass after identification through a corridor crowded with a large number of people. Certain personnel of the Medical Center were required by the occupying group to leave the administrative area while certain outside groups of individuals were allowed to come and go.

The Black Advisory Committee of Hospital employees met with the group occupying the premises and discussed their demands, chiefly the rehiring of Mr. Sam Bridges, at about 4 p.m. on April 8. After these discussions, the Black Advisory Committee issued a statement at about 5:00 p.m. stating that new information regarding Mr. Bridges had come to light in the discussions and that another meeting with the Black United Front would be held at 8:00 a.m. on the following morning, Friday, April 9.

It was hoped that arrangements for a meeting at 8:00 a.m. on the following morning would result in dispersal of the occupying group which, however, reiterated the demand that Dr. Gonda must meet with them in person before they would leave the administrative area. Therefore, at 7:00 p.m. on Thursday, April 8, Dr. John Wilson, Acting Dean of the Medical School and Executive Officer of the Medical Center, met for approximately an hour with the occupying group. They were informed that their action in taking

possession of the administrative area of the Hospital and inhibiting normal traffic between patient care areas constituted a disruption of Hospital function and was a threat to the welfare of the patients in the institution.

It was noted at that time that the group involved in the occupation consisted almost entirely of persons from outside the Medical Center and the University. A few Hospital employees were present. Discussions were conducted in a crowded, closed conference room by persons who did not identify themselves. It was not possible to learn who was the individual or individuals in charge of the occupation. It was now clear that complete control of the administrative section of the Hospital had been established. The demand for the presence of Dr. Gonda continued and it was agreed to call him to the administrative area in the hope of resolving the difficulties and terminating the occupation.

Dr. Gonda arrived about 10:00 p.m. and spent until midnight conferring with the group in an attempt to reach agreement on the demands and to terminate the occupation. Dr. Gonda reiterated an earlier assurance that the grievance procedure of the Hospital was still available to Mr. Bridges and that he would receive reinstatement and all back pay if the findings were in his favor. Agreement was reached with the Black United Front group on all of the demands except for the immediate rehiring of Mr. Sam Bridges. The group stated that they intended to occupy the premises until Mr. Sam Bridges was rehired. At 12:30 a.m. on Friday, April 9, it was obvious that a sit-in was intended. They were again urged to leave, were again strongly advised that their continued occupation was a disruption of Hospital function, and were told that it would be necessary for the University to seek legal advice on means to terminate the occupation.

At 8:00 a.m. on April 9, the Black Advisory Committee met with the sit-in group in the administrative suite and heard witnesses regarding the work performance of Mr. Bridges. The BAC then issued the following statement:

April 9, 1971

Hospital Employees

The Black Advisory Committee

Reinstatement of Sam Bridges

In a hearing held this morning by The Black Advisory Committee and The Black United Front, all of the charges made against Sam Bridges were reviewed. All available witnesses were confronted and their statements reanalyzed. The purpose of this hearing was to ascertain the true facts surrounding the dismissal of Mr. Bridges.

Due to new and pertinent facts brought out at this hearing, the Black Advisory Committee recommends that Sam Bridges be rehired and be retroactively reimbursed for total time loss.

The new and pertinent facts referred to in the above document were essentially a reversal by the witnesses of their original statements according to the Black Advisory Committee.

Doctor Gonda received the above recommendation from the Black Advisory Committee and agreed to submit it for review by an impartial referee acceptable to Mr. Bridges, the Black United Front and the University in accordance with the final stage of the grievance procedure of the Hospital. Mr. Henry Organ was acceptable as the referee to Mr. Bridges and the BUF. Doctor Gonda disqualified himself from the grievance procedure and agreed to recommend Mr. Organ to Acting President Miller. This was not acceptable as a solution to the sit-in group which, after 2 hours of discussion with Doctor Gonda, voted at 1:45 p.m. to sit-in until Mr. Bridges was rehired. Doctor Gonda did not agree with this demand and left the meeting.

Acting President Miller then wrote the following note which was delivered to the sit-in at about 4:30 p.m.

STANFORD UNIVERSITY

April 9, 1971

STATEMENT BY WILLIAM F. MILLER

Dr. Gonda has conveyed to me his recommendation for his replacement in the Grievance Procedure. I have that under consideration. However, we agree there will be no conclusion on the composition or dates for the Grievance Procedure while the occupation of the Hospital continues. Under existing circumstances, Dr. Gonda and I concur he should not return to the discussions.

[signed]
William F. Miller
Acting President

There was no response from the sit-in and no indication of any kind that the occupation would end. About 5:30 p.m. one of the sit-in members (Mr. Willie Newberry) is quoted by the Palo Alto Times as saying that they would occupy the premises until the Bridges' case was settled and that "they're going to have to restore the man."

After 30 hours of occupation and extensive but unsuccessful negotiations, it was considered necessary to invoke the trespass law and to call for its enforcement. The Palo Alto Police arrived at 5:45 p.m. and informed the sit-in that the occupation was unlawful. Many promptly left but more than 50 stayed, barricaded themselves in the administrative area where they completely destroyed the furniture and equipment. In removing the occupants of the area there were 23 arrests. Six of the occupants and 13 policemen were injured, none seriously. Property loss is estimated to be about $100,000.

The problem of rehiring of Mr. Bridges could have been readily solved by resort to the regular grievance procedures of the Hospital. These were made available to him and he was assured of back pay if his firing proved unjust. He and his BUF supporters chose instead to demand re-instatement and

attempted to achieve that demand by occupying the administrative area of the Hospital. The reason given for this course of action was racial discrimination in evaluation of Mr. Bridges' work performance. If true, the grievance procedure provides a constructive means of redress. On the other hand, the sit-in was a threat of force and created an atmosphere in which sound interpretation and judgment were exceptionally difficult or impossible. It seemed unwise to accept an imposed settlement when there was ready access to another more effective process such as the grievance procedure.

Patient care was threatened by the occupation of the administrative offices and adjacent major corridor. The effects of the sit-in were many and increased with time. Forced entry into administrative offices placed equipment, facilities, confidential files in jeopardy and made them inaccessible. Counselling services were interrupted. Administrative personnel were dispersed and lost efficiency or function. The time of many staff members and others was consumed in dealing with the occupation and its side effects. The occupation of the administrative area interfered with the normal flow of doctors, secretaries, and technologists between the surgical pathology suite and the tissue processing areas of the pathology department in the Lane building. In several instances, personnel attempting to pass through the corridor were stopped and harrassed by individuals who were sitting-in. Another problem concerned the blood bank ~~and the transfusion issue service, both of which are located in the west corrid~~or immediately adjacent to the administrative suite. Both of these vital areas had to be closed down because of the disruption and the functioning of the blood bank and the transfusion issue service was seriously inconvenienced by the inability to use the areas in which those functions are normally carried out. Heart transplant patients were denied access to physical therapy through fear of viral or bacterial contamination in the crowded administrative corridor. Passage of patients and hospital personnel was allowed through the guarded administrative corridor but the sight of dozens of people sitting on floor and desks created apprehension and frustration. Toilet, telephone and waiting room facilities adjacent to the administrative area were overloaded while patients, relatives and hospital personnel were dislocated, re-routed and inconvenienced. Certain informational, management and planning activities were disrupted. Personnel were required to be stationed at various hospital locations in order to route visitors and the curious away from the affected areas. The occupation created apprehension among some patients and families. One patient demanded to be released from the hospital and was. In summary, normal hospital functions were disturbed and its capability to respond to patient needs was reduced. Members of the occupying group demanded evidence that patients were actually being harmed before considering that the sit-in was detrimental to patient care. It is unacceptable to allow conditions to deteriorate to this point.

Decision to invoke the trespass law was made only after hours of consultation and review of alternatives. There was no indication that the sit-in would be ended except by the rehiring of Mr. Bridges. That did not seem appropriate under the circumstances. The prospects were that the sit-in would become progressively better organized and entrenched. I recommended that the law enforcement officers of Palo Alto be requested to terminate the sit-in at 6:00 p.m. on April 9. Acting President Miller concurred fully and the necessary steps were taken. It is hoped that the unfortunate consequences of this event will not obscure the path to better understanding of our society and of the methods which we may safely use to effect the long-needed changes in it.

John L. Wilson

John L. Wilson

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Two members of the Black Advisory Committee and the director of Latin Resources at Stanford University Hospital said Monday demonstrators were making plans to end their sit-in at the hospital when police were called.

Mrs. Nadine Ellis and Mrs. Lovie Lewis of the BAC said protesters were ready to leave the building as soon as they got word from Hospital Director Thomas A. Gonda that a grievance procedure for Sam Bridges had been set up.

The demonstrators had staged the sit-in in the hospital's administrative offices to protest the firing of Bridges, a Black employee. The 30-hour occupation was ended last Friday by Palo Alto police, and there was an estimated $100,000 damage which Mrs. Ellis feels would have been avoided.

According to Mrs. Ellis, BAC chairman Jim Cheatham had talked with Black United Front leaders and it was agreed that "if word came that Bridges was going through a grievance procedure, and Henry Organ were the mediator, the protestors would leave at 6 p.m. (Friday, April 9)."

Henry P. Organ of East Palo Alto, is an associate general secretary at Stanford and a respected Black leader.

Tony Rodriguez of the Latin Alliance said he visited the occupied offices as an observer at 5:15 p.m. Friday and he, too, was told the BUF was "shooting for a six o'clock evacuation of the premises."

"I observed the area to be in a high state of cleanliness and order," said Rodriguez. "Even ash trays were being cleaned. The BUF was determined to avoid the usual charge of vandalism."

The three minority group members told the Stanford Medical Center News Bureau they were making the statement because they felt the News Bureau and press accounts of the demonstration had emphasized only Stanford's reasons for the police action, and had obscured other important aspects of the protest.

Press accounts, they said, did not mention that among the demonstrators protesting the firing of Sam Bridges were fellow employees at the hospital, and not all protesters were radicals from the outside.

"We want to make the point that many hospital employees were trapped in the demonstration, and some were injured as they tried to escape," said Mrs. Ellis who, with other BAC members, was still trying to negotiate a peaceful settlement with Bridges' supporters.

She and the other BAC members barely got out of the occupied offices as police arrived, Mrs. Ellis said. She was especially concerned, she said, about possible injury to herself because she is expecting a baby.

-more-

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Attached is a memorandum of April 12 from John L. Wilson, M.D., acting dean of the School of Medicine, to the faculty, staff and students of the Medical School. Dr. Wilson gives in some detail the sequence of events at Stanford University Hospital, beginning with the first rally of the Black United Front Tuesday, April 6, through the forcible evacuation of demonstrators from the administrative offices the evening of Friday, April 9.

The critical timing of the exchange of messages among the sit-in group, the Medical School administration, and the University administration is reviewed.

"Patient care was threatened by the occupation of the administrative offices and adjacent major corridor," Dr. Wilson stated. "The effects of the sit-in were many and increased with time. . . . Members of the occupying group demanded evidence that patients were actually being harmed before considering that the sit-in was detrimental to patient care. It is unacceptable to allow conditions to deteriorate to this point.

"Decision to invoke the trespass law was made only after hours of consultation and review of alternatives. There was no indication that the sit-in would be ended except by the rehiring of Mr. Bridges. That did not seem appropriate under the circumstances. The prospects were that the sit-in would become progressively better organized and entrenched.

"I recommended that the law enforcement officers of Palo Alto be requested to terminate the sit-in at 6 p.m. on April 9. Acting President Miller concurred fully and the necessary steps were taken."

Dean Wilson makes this evaluation:

"The problem of rehiring of Mr. Bridges could have been readily solved by resort to the regular grievance procedures of the Hospital. These were made available to him and he was assured of back pay if his firing proved unjust. He and his BUF supporters chose instead to demand reinstatement and attempted to achieve that demand by occupying the administrative area of the Hospital. The reason given for this action was racial discrimination in evaluation of Mr. Bridges' work performance. If true, the grievance procedure provides a constructive means of redress.

"On the other hand, the sit-in was a threat of force and created an atmosphere in which sound interpretation and judgment were exceptionally difficult or impossible. It seemed unwise to accept an imposed settlement when there was ready access to another more effective process such as the grievance procedure."

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4/13/71

April 12, 1971

TO: Medical Staff and Students

FROM: John L. Wilson, M.D.
Acting Dean, School of Medicine

SUBJECT: Sit-in at the Stanford University Hospital on April 8-9, 1971

On Tuesday, April 6, a noon rally was held on the lawn near the Medical Center by the Black United Front. The BUF is said to be a coalition of the Black Liberation Front, the Black Workers Caucus and representation from the Black Student Union. The Front was organized as a response to the dismissal of Mr. Sam Bridges, a hospital employee, and the laying off of workers at Tresidder. Following the rally on April 6, over 100 persons went to the office of Doctor Gonda, Director of the Hospital, and presented to him a list of 6 demands. They stated that they would return for a reply to these demands at noon on Thursday, April 8. As far as is known, the groups presenting the demands included few if any Hospital employees.

On April 9, another noon rally was held following which about 50 persons went to the office of Doctor Gonda stating that they expected to receive from him, in person, the reply to their demands. The reply had been printed in the Daily on that morning and copies of it were handed to the group. The demands, with Dr. Gonda's responses to them, are printed below:

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   All employees have the right to criticize administration policies. In addition, there are regular opportunities of communicating employee views to the administration. If there are any instances in which that policy has been violated, I would appreciate having the evidence brought to my attention.

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   Employees are free to decide if they wish to join unions. The Hospital was involved in a union election in 1967, and union organizing activities have been held regularly since then.

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The Black Advisory Committee can present evidence to substantiate these facts. It was our conclusion that Mr. Bridges was terminated because he was not doing the job he was hired to do, and therefore putting an added burden on his co-workers.

Had Mr. Bridges, after being told about the grievance procedure, chosen to take his case before the grievance committee, this Committee would have insured him fair and impartial treatment.

4/8/71

By late afternoon of April 8, the crowd in the administrative area on the second floor of the Hospital had increased to 80 to 100 persons and refused to disperse. They called for the personal appearance of Dr. Gonda. They occupied the entire administrative area making it necessary for the Hospital administrative staff to discontinue their work and to lock the offices. The doors on either end of the corridor were closed and people entering the administrative area were challenged as to their business. The locked administrative offices were broken into by removing a door from the hinges so that the entire complex of offices was occupied. Administrative personnel necessarily left the area and all the files, facilities, and resources of the administrative section including the emergency and disaster radio and special telephonic equipment were inaccessible for the use of the Hospital. The occupiers placed guards on the doors at each end of the administrative corridor. This corridor connects clinic and treatment facilities on one side with blood banking, laboratory and hospital wards on the other. Hospital personnel and patients were permitted to pass after identification through a corridor crowded with a large number of people. Certain personnel of the Medical Center were required by the occupying group to leave the administrative area while certain outside groups of individuals were allowed to come and go.

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Acting President Miller then wrote the following note which was delivered to the sit-in at about 4:30 p.m.

STANFORD UNIVERSITY

April 9, 1971

STATEMENT BY WILLIAM F. MILLER

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After 30 hours of occupation and extensive but unsuccessful negotiations, it was considered necessary to invoke the trespass law and to call for its enforcement. The Palo Alto Police arrived at 5:45 p.m. and informed the sit-in that the occupation was unlawful. Many promptly left but more than 50 stayed, barricaded themselves in the administrative area where they completely destroyed the furniture and equipment. In removing the occupants of the area there were 23 arrests. Six of the occupants and 13 policemen were injured, none seriously. Property loss is estimated to be about $100,000.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

HEART TRANSPLANT #13 Dead 4-13-71

STANFORD -- James E. Pounds, a heart transplant patient at Stanford, died this morning at Stanford University Hospital. The 60-year-old patient lived exactly two years to the day after his transplant operation April 13, 1969.

He is survived by his wife Louise, and their sons James and Ronald, who is stationed at McGuire Air Force Base, New Jersey. The family moved to Palo Alto in 1969 after the transplant operation. Their hometown is Bakersfield, California, where Pounds had been employed with an oil company.

Of Stanford's 30 heart transplant patients, there are now 11 survivors.

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Phoned to

Associated Press

United Press International

San Jose Mercury

Palo Alto Times

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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4/13/71

STANFORD UNIVERSITY NEWS SERVICE

STANFORD, CALIFORNIA
ZIP 94305.
(A/C 415) 321-2300, Ext. 2558

FOR INFORMATION CONTACT: Gary Cavalli or Spyros Andreopoulos, 5311 or
Jeff Littleboy

FOR IMMEDIATE RELEASE

STANFORD –

Some 400 persons attended an orderly morning rally at the Stanford Medical School today and voiced support for the black students and workers who are protesting the firing of hospital worker Sam Bridges.

Several senior members of the Medical School faculty spoke out in support of the blacks, including Dr. William C. Dement, Dr. Avram Goldstein, and Dr. Halsted R. Holman.

Dr. Adayapalam T. Ganesan, who moderated the rally, announced two resolutions of a faculty coalition group, which was formed Saturday night under the leadership of Holman. The coalition group condemned the action of calling police to evacuate demonstrators at the Medical Center Friday night and gave support to the blacks and Latin Americans against the "racism" at Stanford, Ganesan said.

None of the faculty members at today's rally specifically commented on the eight "nonnegotiable" demands issued yesterday by the Black Advisory Committee in conjunction with students in the Stanford School of Medicine. Indirectly, however, they seemed to be supporting the BAC demand that "the decision-making apparatus must exist only with horizontal authority. This restructuring is imperative."

Holman called for a "new system" which would result in all employees at the Medical Center and hospital working together "to criticize and improve all aspects of the medical program."

Goldstein charged that the police action of Friday night was "part of the repression that's gone on here at this campus, and part of the repression of blacks and Latin Americans that goes on every day and has gone on every day for hundreds of years. Nobody has to call in police to smash up our people, our furniture and our hospital. . . . After an action like this, I don't see how Wilson [Acting Dean John L.] can command the respect necessary to be the dean of an institution like this."

Goldstein also called for a "restructuring of the way this institution is run. This means rooting out the elitism we have here and transforming it in some effective way into a more democratic institution."

Dement, claiming that "racism hasn't been eradicated at Stanford," called for all whites on campus to convince the blacks that they have nothing to fear at Stanford.

"The black student walks in fear," Dement said. "He knows that when there is trouble, he'll be singled out by police." When a black worker is fired or a black applicant rejected, we can't be sure it is not because of his color, he added.

Dement also stressed that whites have nothing to fear from blacks at Stanford.

"We are afraid of what blacks will do, afraid of what they will ask, afraid we will lose too much," Dement said. "We whites really have nothing to fear. I trust the blacks at Stanford, and feel they want to make it a better place. Furthermore, I feel that Stanford is a better place because of the blacks here already. . . . I have not read the demands, but I support the blacks without qualification."

Sam Bridges made a brief appearance at the rally.

Shortly afterward about 75 people from the rally went to the President's Office in the Inner Quad and said they wanted to ask questions of Provost William F. Miller. They left after being told he was not there.

Following a noon rally in White Plaza, attended by about 250 persons, a small group of chicano students demonstrated in front of the President's Office Tuesday afternoon, demanding that Dr. Jose Aguilar of the Medical School be given tenure.

They were advised that both President Richard W. Lyman and Provost Miller were not available to discuss the matter. President Lyman was in San Francisco at the Board of Trustees meeting. Provost Miller was at the Medical Center.

(Dr. Wilson described as "unfounded" charges that Dr. Aguilar, assistant professor of neurosurgery since 1965, was denied tenure on racial grounds.)

The chicano students were part of a rally which attended the opening of Semana Latina on campus, a week-long series of skits and music depicting Mexican-American culture.

A scheduled noon rally called by the Black United Front in White Plaza was preempted by the chicano program. The black group had called the rally in protest of alleged police brutality at the Medical School sit-in Friday afternoon.

A group of 23 black students served themselves in the cafeteria line at Tresidder Union shortly after 1 p.m., carried the trays outside without paying for the food, and afterward dumped trays and dishes in the waste bins outside, Tresidder officials reported.

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4/13/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Mary M. Griffith 415: 321-5310

STANFORD -- James Gary Bowerman, a fifth-year student at Stanford University School of Medicine, is this year's Stanford recipient of the Pfizer Laboratories Medical Scholarship.

The scholarship, in the amount of $1000, was awarded on the basis of Bowerman's outstanding scholastic record. He has been commended on several occasions for excellent performance in medical school and was elected to the Stanford chapter of Alpha Omega Alpha, the national medical honor society, in December 1970.

The son of Mr. and Mrs. Harold L. Bowerman of Leaf River, Illinois, he plans to take his internship training in pediatrics. The internship begins July 1 at Bernalillo County Medical Center, Albuquerque, New Mexico.

Pfizer Laboratories makes scholarship awards at all the medical schools in the United States.

Mailed April 14, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Beyers or Spyros Andreopoulos 415: 321-5310

STANFORD -- At a special meeting Wednesday morning, the Faculty Senate of the Stanford School of Medicine unanimously pledged their support to "constructive efforts to resolve our present difficulties" and said all constituencies of the Medical Center should join together "to work toward equitable solutions under the continuing leadership of Dr. John L. Wilson."

Of the 29 Senate members present on campus, 23 attended the meeting. The Senate has 36 members.

The Senate resolution urged "the prompt review of current policies and adoption, if not already available, of effective, impartial, formal procedures for the resolution of current and future grievances."

"We reaffirm that the University policy on campus disruption applies to the Stanford Medical School and Hospital as an integral part of the University community," the Senate said.

"As physicians and teachers of medicine whose concern is the care of patients, and as individuals who wish to preserve the opportunity for peaceful expressions of dissent, we endorse the view that the use of force and threats of force cannot be tolerated in any hospital," the Senate said.

Text of the Senate resolution follows: "The Faculty Senate of the Stanford University School of Medicine expresses deep concern when circumstances exist wherein grievances of Hospital and Medical School workers are not peaceably resolved. It is tragic when an unresolved conflict results in violent confrontation, and we deplore the fact that recent events escalated beyond control of the internal Stanford community and resulted in the use of police force.

"We reaffirm that the University Policy on Campus Disruption applies to the Stanford Medical School and Hospital as an integral part of the University community. As physicians and teachers of medicine whose concern is the care of patients, and as individuals who wish to preserve the opportunity for peaceful expressions of dissent, we endorse the view that the use of force and threats of force can not be tolerated in any hospital.

"We urge the prompt review of current policies and the adoption if not already available, of effective, impartial formal procedures for the resolution of current and future grievances.

"We pledge ourselves to the support of constructive efforts to resolve our present difficulties and urge all the constituents of the Medical Center to join together to work toward equitable solutions under the continuing leadership of Dr. John L. Wilson."

Dr. Merton R. Bernfield, Senate chairman, said the special meeting was called to discuss recent events at the Medical Center and to designate a Senate representative to serve on the dean ad hoc committee on the Center's current problems.

Every Senate member available was contacted prior to the meeting. Those attending were: Robert S. Turner (Anatomy); Grant Fletcher (Anesthesia); David S. Hogness (Biochemistry); Byron W. Brown (Community & Preventive Medicine); Alvin J. Cox (Dermatology); Elliott C. Levinthal (Genetics); Leonard Hayflick (Medical Microbiology); Robert J. Roantree (Medical Microbiology); Allen B. Barbour (Medicine); Kao L. Chow (Neurology); Mary Herman (Pathology); David Korn (Pathology); Merton R. Bernfield (Pediatrics); Wm. van B. Robertson (Pediatrics); Sumner M. Kalman (Pharmacology); Ronald Grant (Physiology); George D. Gulevich (Psychiatry); P. Herbert Leiderman (Psychiatry); Norman Blank (Radiology); Robert F. Kallman (Radiology); William H. Northway, Jr. (Radiology); Lawrence G. Crowley (Surgery); James B. D. Mark (Surgery). ###

Mailed April 14, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Beyers or Spyros Andreopoulos 415: 321-5310

STANFORD -- Hospital officials have again affirmed, in writing, their willingness to assure prompt grievance procedures, on request, for Sam Bridges, the Black employee whose dismissal was cited as the reason for last week's demonstration at the Stanford Medical Center.

In a letter sent to Bridges Wednesday morning, Hospital Personnel Director Kenneth Dunkle reaffirmed the hospital's offer to waive the initial steps in the procedure, if requested. Dunkle said Hospital Director Thomas Gonda had agreed to have Henry Organ of the General Secretary's Office serve as hearing officer for the final stage of the case.

On Friday afternoon, Dr. Gonda asked not to serve as the hearing officer. While discussions had indicated that Organ was mutually regarded as an acceptable replacement, University officials said they would not reach a conclusion on the composition or dates for the procedure until the hospital occupation ended.

If Bridges requests that the initial steps of the grievance procedure be waived, Dunkle said, he would have a "full opportunity to present any facts and arguments" in an informal hearing with Organ, whose decision would be final.

Bridges also would be welcome to have an individual of his own choice assist him in the hearing. In accord with hospital policy, Bridges also would be entitled to have two hospital employees of his choice attend the hearing.

A copy of the letter was sent to James Cheatham of the Black Advisory Committe, a hospital employee group, and to Organ.

Dunkle wrote Bridges that if he wished to request a grievance procedure, he should do so no later than 5 p.m. Wednesday, April 21, one week hence.

Employees may present their grievance initially to their immediate supervisors, and then to the department head and the associate director for personnel. At the third stage, the employee may select two of his co-workers to attend a conference with his department head, line administrator, and the associate director for personnel.

Bridges, who was dismissed March 19 after several weeks' employment, has not yet requested a grievance procedure.

The BAC and other groups have demanded his reinstatement.

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Mailed April 14, 1971.

FOR INFORMATION CONTACT: Bob Beyers

4-14-71

FOR IMMEDIATE RELEASE

STANFORD –

Ten chicano faculty, administrators, and staff members at Stanford have called for re-examination of the "arbitrary" decision not to grant tenure to Assistant Prof. Jose Aguilar, neurosurgeon at the Medical School.

In a statement published in *The Stanford Daily* Wednesday, April 14, they said: "The University's attitudes and actions in this case have not been in keeping with its commitment to the chicano community on campus and to a strong affirmative action program.

"We are not asking that Dr. Aguilar be kept on because he is a chicano; we believe that all faculty should be judged on their competence and performance. The implications of not rehiring Dr. Aguilar go beyond his individual case and affect the entire chicano community."

Objecting to the manner in which the entire case has been handled, they contended there have been "irregularities" in the initial decision and subsequent reviews: "(1) Dr. Aguilar was not given documented reasons for his dismissal after having requested them.

(2) At an open meeting on April 5, members of the Department of Surgery [four deans and one department chairman] who partook in the original decision admitted that they did not feel competent to judge Dr. Aguilar's work; they, therefore, voted on the basis of the chairman of the neurosurgery division's opinion in this matter.

(3) Obstacles in the way of Dr. Aguilar's fulfillment of his obligation for tenure have not been taken into account."

Signers of the statement included: Carlos Jackson, assistant dean, Dean of Student Office; Lorenzo A. Esquibel, staff associate, SLAC; Ray Caldera, personnel representative, Personnel Services Department; Maria Baeza, assistant to the dean of the Graduate Division; Maria Gutierrez, financial aids counselor; Jose I. Santos, technical assistant, Department of Biological Sciences; Gil Chavez, assistant director of admissions; Renato Rosaldo, assistant professor, Anthropology Department; Arturo Islas, acting assistant professor, English Department; and Lilia Garfinkle.

MECHA, the chicano student organization at Stanford, presented a petition on Dr. Aguilar's behalf at the President's Office Tuesday, and the Student Senate passed a resolution calling for his rehiring with tenure.

Dr. John L. Wilson, acting dean of the Medical School, last week called reports that Dr. Aguilar was denied tenure on racial grounds "unfounded."

According to faculty appointment procedures of the Medical School, Dr. Aguilar was notified in November 1970 that he would not be reappointed, Dr. Wilson explained.

The decision was made by an eight-member committee of the senior faculty of the Department of Surgery.

Dr. Aguilar's case was reviewed again in March 1971, at his request, and the decision not to reappoint him was upheld, Dr. Wilson said.

Dr. Wilson said that Dr. Aguilar is not the only assistant professor who did not get a reappointment. Funding problems, research projects that do not pan out, faculty productivity, or changing departmental needs count heavily in the reappointment of faculty, he commented.

–30–

4/14/71

FOR IMMEDIATE RELEASE

STANFORD - Provost William F. Miller of Stanford Wednesday afternoon, April 14, ~~xxx~~ received a list of 11 demands from a newly formed Stanford Employees Coalition calling for reinstatement of Sam Bridges, dropping of all legal charges, and payment of legal and medical expenses for those involved in last week's occupation of the hospital.

James Cheatham of the Black Advisory Committee gave the demand to Provost Miller (on the lawn outside the Medical School) and set a 9 a.m. Monday deadline for a reply. Tony Rodriguez of the Latin Alliance and Willie Newberry of the Black Students Union were present when ~~xxx~~ Miller read the demands over a microphone, said "we will be getting people together to start ~~xxxxxx~~ these discussions," shook hands with Cheatham and left.

Other demands included having Dr. John L. Wilson resign as acting dean of the Medical School, granting tenure to Dr. Jose Aguilar, sole chicano on the Medical School faculty, and having ~~xxxxxxxxxxxxxxx~~ a black and Latin committee empowered to "evaluate the policies, practices and procedures" of all departments in the Medical Center, including development of an affirmative action program and evaluation of the Personnel Department.

Further demands having Stanford employee medical coverage include spouses, clear job descriptions and salaries, having four black and Latin delegates added to the Administrative Council of the hospital, and providing up to six months leave time for "acceptable and legitimate" reasons without job loss.

~~Xhxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~ Besides Dr. Wilson, the employee group called for having Deputy Hospital Director Frank Vitale and Warren Thorp e, assistant chief of engineering ~~and~~ (and Bridges supervisor) relieved of all Medical Center duties, with a black and Latin committee approving their replacements.

Provost Miller asked Cheatham and others present to designate the individuals from their group who would participate in the discussions.

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The following list of demands was presented by James Cheatham of the Black Advisory Committee to Stanford Provost William F. Miller at 1:35 p.m. Wednesday, April 14, following a rally on the lawn near the Medical School. A deadline of 9 a.m. Monday was set for a response. Tony Rodriguez of the Latin Alliance and Willie Newberry, co-chairman of the Black Students Union, were present when the demands were read by Provost Miller to a crowd of about 100. Miller said "we will be getting people together to start these discussions" and asked Cheatham and others present to indicate as soon as possible whom they would designate to participate in these discussions (Med.Center News Bureau)

THAT STANFORD EMPLOYEES COALITION DEMANDS OF THE ADMINISTRATION THAT:

1. ALL CHARGES RELATED TO ALL PERSONS WHO WERE ARRESTED IN CONNECTION WITH THE DEMONSTRATION HELD AT THE STANFORD UNIVERSITY HOSPITAL APRIL 9, 1971 BE DROPPED. NOTWITHSTANDING, ALL LEGAL FEES INCURRED DURING THIS DEMONSTRATION SHALL BE PAID IN FULL BY STANFORD UNIVERSITY.

2. ANY PERSONS WHO RECEIVED ANY FORM OF INJURY BECAUSE OF THEIR DIRECT OR INDIRECT INVOLVEMENT IN THE DEMONSTRATION SHOULD HAVE ALLMEDICAL EXPENSES PAID IN FULL BY STANFORD UNIVERSITY.

3. SAM BRIDGES SHALL BE REINSTATED AND REIMBURSED RETROACTIVELY FROM DATE OF TERMINATION.

4. THE FOLLOWING:

   a) Dr. John L. Wilson resign as Acting Dean

   b) Frank Vitale, Deputy Director of the Hospital, be relieved of all Medical Center duties.

   c) Warren Thorpe, Assistant Chief of Engineering, be relieved of all Medical Center duties.

   d) Black and Latin Committee must approve those persons hired as replacements in a, b, and c as well as the now vacant Chief Engineer position.

5. DR. JOSE AGUILAR BE GRANTED TENURE.

6. THE BLACK AND LATIN COMMITTEE BE EMPOWERED TO INVESTIGATE AND EVALUATE POLICIES, PRACTICES AND PROCEDURES OF ALL DEPARTMENTS IN THE MEDICAL CENTER. THE FIRST PRIORITIES OF THE COMMITTEE SHALL BE:

   a) The development and implementation of the Affirmative Action Program and

   b) Evaluation of the Personnel Department.

7. THAT FOUR (4) VOTING PLACES BE FILLED BY BLACK AND LATIN DELEGATES ADDED TO THE ADMINISTRATIVE COUNCIL OF THE HOSPITAL.

8. ANY EMPLOYEE WHO HAS TO TAKE A LEAVEFOR AN ACCEPTABLE AND LEGITIMATE REASON, SHOULD HAVE THE RIGHT TO DO SO. STARTING WITH THE FIRST DAY OF LEAVE, HE SHOULD BE GRANTED LEAVE TIME UP TO SIX MONTHS. THE JOB SHOULD BE LEFT OPEN FOR THE EMPLOYEE WHEN LEAVE IS TERMINATED. THIS AGREEMENT SHALL BE REDUCED SUCCINCTLY TO WRITING.

9. HOUSEKEEPING ASSISTANTS SHOULD BE AT LIBERTY TO USE ANY RESTROOM DESIGNATED FOR STANFORD HOSPITAL EMPLOYEES.

10. STANFORD'S EMPLOYEE'S MEDICAL COVERAGE SHOULD ALSO INCLUDE COVERAGE FOR THE EMPLOYEE'S SPOUSE.

11) EACH JOB SHOULD BE CLEARLY CLASSIFIED, AS WELL AS, DESCRIBED. FURTHER, EACH JOB SALARY SHOULD BE STATED IN WRITING.

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STATEMENT BY PRESIDENT RICHARD W. LYMAN
TO THE FACULTY SENATE

April 15, 1971

The last four sit-ins at Stanford have ended only when University officials asked the police to clear the area being occupied. I have said before, and I repeat now, that every time it is necessary to use the police at Stanford, a defeat is suffered. The defeat is not tactical or political; it consists of a blow to the conception of the University as a place of reason, not force. What follows, then, is not a "battle-plan", but a statement of policy that derives from that very idea of the University and the way in which it must conduct its affairs.

After each incident two themes were prominent in the arguments against the University's action. The first is that it was clear that the University would no longer allow peaceful sit-ins; the second is that everybody involved in the sit-in was surprised by the University's decision to call the police. I do not cite these two lines of argument in order to demonstrate their inconsistency, although they do appear inconsistent. Rather, I wish to take them as evidence of a continuing confusion over the way in which the Stanford administration views the use of the sit-in as a tactic. The importance of the question is obvious. It is not in anyone's interest to have people engage in an activity under a false set of expectations about the results to which that activity may lead. Therefore, I think it is worth an effort by me to bring as much clarity as I can to a set of policies which are inevitably shaped differently by the very circumstances of each case in which they must be applied.

Let me start, then, with the premise from which all else follows: Occupying a University building is not an acceptable form of political action within the University. When a sit-in occurs, it will be brought to an end as soon as possible, using the best judgment as to methods and timing that can be brought to bear on the circumstances of the particular case. This is quite similar to policies in existence at some other major universities, for example Yale and Princeton. Because that premise has guided University policy since the Encina Hall sit-in of 1969, we have experience to give content to the bare-bones statement of policy. It is worth looking at that experience.

The Encina sit-in produced a virtually immediate call for police assistance. In that case, the building was broken into late at night and once in, the people involved wandered throughout the building, searching desks and files and removing records. Encina Hall contains records vital to the functioning of the University. The imminent threat to those records could not be tolerated, hence the decision to call the police.

In the Spring of 1970, there were two sit-ins at the Old Union. On both occasions the occupation began during the day and the demonstrators were given what amounted to a set of ground rules. These were in essence that they were required to leave the building at 5 P.M., the close of business, and that in the meantime they had to conduct themselves in a way that did not disrupt the ordinary operations in the building. In both cases the group sitting in contained substantial numbers of people not associated with the University. For that and other reasons the decision was made that occupation of the building beyond the close of business constituted a serious threat to admissions, financial, and other records, and could not be allowed. In both cases, the group failed to leave when told to do so and the police were then called.

-over-

STANFORD UNIVERSITY NEWS SERVICE
FOR INFORMATION CONTACT: Bob Beyers

STANFORD, CALIFORNIA
ZIP 94305.
(A/C 415) 321-2300, Ext. 2558

FOR IMMEDIATE RELEASE

STANFORD - Noting that last week's hospital demonstration was started "largely by outsiders, including a fair number of white radicals not connected with the University," President Richard W. Lyman of Stanford said Thursday, April 15, it would be "tragedy piled on tragedy" for the University to falter now in its commitments to "deal with the results of a long history of discrimination against ethnic minorities," including both blacks and chicanos.

Reviewing the incident with the faculty Senate for more than two hours at its regular session, the President made these points:

* "Occupying a building is not an acceptable form of political action within the University. When a sit-in occurs, it will be brought to an end as soon as possible, using the best judgment as to methods and timing that can be brought to bear on the circumstances of the particular case."

* Campus judicial proceedings may be initiated against the "very few" students involved, although arrests alone will not warrant prosecution. "Inquiries have been set in motion" about faculty and staff participation and arrests. (A majority of those arrested had no University affiliation; five were students, one was faculty, and five were staff members, including one hospital employee.)

* The University "has not conclusively resolved" whether to initiate civil damage suits against the demonstrators to recover an estimated $100,000 in property damages, as well as other losses. Asking for faculty opinion, Lyman added: "We can't continue to absorb losses on this scale" simply by deploring them.

* He said he is "hopeful" it will be possible to convert all or part of the campus police to regular peace officers. While no campus in the country has enough police of its own to deal with major disorders, "a genuine police force of our own would have many advantages," especially in dealing with conventional crime problems on campus.

In his opening remarks to the Senate, President Lyman said: "Every time it is necessary to use the police at Stanford, a defeat is suffered. The defeat is not tactical or political; it consists of a blow to the conception of the University as a place of reason, not force....

"I have no doubt at all that a very large majority of students, faculty, and staff at Stanford recognize that every sit-in is intended as an act of coercion, based on either force or the threat of force.

"This is true regardless of the composition of the group. (In three previous sit-ins where police were summoned) virtually all of the people involved were white; in the fourth case, there was a sizeable minority of blacks and a small number of chicanos.'

"This difference must not be a deterrent to the application of our policy. Any other conclusion would surely---and rightly---be condemned as a patronizing and insulting kind of discrimination on the basis of race or ethnic background."

(Among 23 arrested last week, there were 15 whites, five blacks, and three chicanos.)

(OVER)

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FOR IMMEDIATE RELEASE

STANFORD -- Sam Bridges, the Black employee whose dismissal has been cited as the reason for last week's demonstration at the Stanford University Hospital, has agreed to submit his case to a grievance procedure.

Bridges requested the hearing Thursday (April 15), according to Personnel Director Kenneth Dunkle. Bridges, who was dismissed March 19 after several weeks of employment, had not previously requested a grievance procedure.

In a letter sent to Bridges Wednesday morning, Hospital officials affirmed their willingness to assure prompt grievance procedures, on his request.

Dunkle wrote that Hospital Director Thomas A. Gonda had agreed to have Henry Organ of the General Secretary's Office serve as the hearing officer for the final stage of the case. The Hospital offered to waive the initial steps of the procedure.

Arrangements for the hearing are being made, Dunkle said.

Meanwhile, Acting Dean John L. Wilson Thursday held informational sessions with associate deans, faculty representatives, and University officials to determine the manner in which discussions will be carried out with the newly formed Minority Advisory Committee.

The Committee Wednesday presented 11 demands calling for reinstatement of Bridges, dropping of all legal charges, and payment of legal and medical expenses for those involved in last week's demonstration at the Hospital. Other demands included having Dr. Wilson resign, granting tenure to Dr. Jose Aguilar, sole Chicano on the Medical School faculty, and having a Black and Latin committee empowered to evaluate the policies, practices, and procedures of all departments in the Medical Center.

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Mailed April 16, 1971.

Kathy - is this right? /sc

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

Heart Transplant #29 Harry Knudsen

STANFORD -- Harry Knudsen, a heart transplant patient at Stanford University, died late Wednesday night, April 14.

Knudsen, ~~48~~ 47, of Pleasant Hill, California, received his new heart February 22, 1971.

He is survived by his wife, Inez, and their son Jim, 22, of Pleasant Hill.

~~He was the 29th~~ Of the 30 heart tansplant operatins performed at Stanford, 10 are surviving.

Telephoned to:

SAN JOSE MERCURY

PALO ALTO TIMES

AP, UPI

April 16, 1971

STANFORD UNIVERSITY MEDICAL CENTER

STANFORD, CALIFORNIA 94305 • (415) 321-1200

STANFORD UNIVERSITY HOSPITAL

SUNDAY, APRIL 18, 1971

TO: ALL DEPARTMENT HEADS

FROM: THOMAS A. GONDA, M.D., DIRECTOR

SUBJECT: Meeting of Black and Latino Employees on April 19, 1971

There will be a meeting of the Black, Latino and other concerned employees of the Stanford University Medical Center at 9 a.m., Monday, April 19, 1971 on the Medical School lawn. It is expected that this meeting will last approximately one-half hour.

In addition, meetings for Black and Latino employees will be held from 1 p.m. to approximately 3 p.m. in Rooms M104 and M112 of the Medical School.

This memorandum is to request Stanford University Hospital department heads to make provisions, if at all possible, for those Black and Latino employees who wish to attend, to do so.

Thank you for your cooperation in this matter.

TAG:sc

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD --Stanford University officials Monday (April 19) rejected demands by a coalition of employees asking for the resignation of the acting Medical School dean and two hospital administrators, but they agreed in principle to six of the demands and pledged to pursue aggressive policies "to make equal opportunity a reality" at the Stanford Medical Center.

Medical School officials also rejected a demand that Dr. Jose Aguilar, sole Chicano on the Medical School faculty, be given tenure.

On the demand that Sam Bridges be reinstated, the Hospital replied that Bridges has now agreed to a grievance procedure, expected to begin later this week.

Bridges is a Black hospital employee whose dismissal was cited as the reason for a recent demonstration at the Stanford Hospital.

Answers to the 11 demands were given by University Provost William F. Miller and Hospital Director Dr. Thomas A. Gonda at a morning rally attended by 250 persons on the Medical School lawn.

Miller said "The President (Richard W. Lyman) and I reaffirm our confidence in Dr. John L. Wilson as acting dean and executive officer of the Medical Center.

"In so doing we take note of the resolution of the Faculty Senate of the School of Medicine."

The Senate April 14 unanimously pledged its support to "constructive efforts to resolve our present difficulties" and urged all the constituents of the Medical Center to join together "to work toward equitable solutions under the continuing leadership of Dr. John L. Wilson."

Miller also expressed "our strong confidence in Dr. Thomas A. Gonda as director of the Hospital and in the Alianza Latina and the Black Advisory Committee as advisors to him." The two groups represent Hospital minority employees.

"It is important now that these groups work together and that they make progress by non-coercive means and through our normal channels. This is the only way in which we can come to lasting agreements," Miller said.

Miller was followed by Dr. Gonda who read the answers to the demands. He stressed that the "Hospital administration shares many of the goals of the workers," and "we look forward to constructive talks."

Demands included having the Black and Latin committee empowered to evaluate policies, practices, and procedures of all departments in the Medical Center, voting places be filled by minority delegates on the Hospital's administrative council, and that housekeeping assistants be able to use any restroom designated for Stanford employees.

- more -

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- The ninth annual meeting of hospital residents in anesthesia will be held at the Stanford University Hospital April 24-25.

Limited to the western United States, the conference's emphasis is on the exchange of original research. The young doctors from several western states who are specializing in anesthesia will present their investigations in the form of papers. Thirty papers will be read, covering a wide range of problems and topics relating to anesthesia and its effects on humans and animals. Eighty residents are expected to attend.

Science writers from area papers are welcome to attend. Abstracts will be available at the meeting, which will be held in Room M106 at the Medical Center. Registration is at 8 a.m.

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Mailed April 21, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Polly Downing, (415) 321-5310

FILE COPY

EDITORS: Photos available on request.

FOR IMMEDIATE RELEASE

STANFORD –

Prof. William Dement, one of the nation's leading sleep researchers, has helped create a scholarly "dream world" for students in Cedro House at Stanford, where he's a faculty resident this year.

Undergraduates at the house are working on 12 major sleep research projects, mostly of their own devising, traveling into largely uncharted territory.

Dr. Dement believes their work is contributing significantly to general knowledge about sleep.

The students, under Dement's direction, are learning a lot about scientific inquiry and practice from a first-rate teacher and they are incorporating it into their everyday thinking—a far cry from the straight lecture, forced laboratory style of schooling.

But it is not play. Rather, it is a new, involved way of learning and living. It makes the acquisition of knowledge and day-to-day experiences seem more of one piece, which perhaps is what education, ideally, should be about anyhow, according to many of today's educators and students.

The students are receiving credit, but they have chosen to do the projects on their own. Initially, Dement envisioned only an "undergraduate special" lecture course. (Undergraduate specials are not in the general curriculum, and do not fall under any particular discipline or department; frequently they are specialized courses found only in the professional schools. However, Stanford undergraduates are allowed up to 36 units of such courses, which are usually offered to them on campus more at the interest and instigation of an individual teacher or researcher, than on a more organized basis.)

Some of their sleep projects will be written up in the new *Stanford Quarterly Review,* which will publish significant campus research.

Why are the students studying sleep? Some answers:

"In his lectures, Dr. Dement just mentioned some things that hadn't been studied and it made us want to take them on. Then, we started to think of other projects to do, too," said Damian Augustyn of Seattle.

"Sleep is something that is so relevant to everybody. It's learning about ourselves," observed Dave Ellison from Chicago.

"Well, I've always been really interested in dreams. And Dr. Dement's so sharp, the chance to listen to him meant a lot. Then, he's helped us get into some things that I'd really been wondering about," said Bill Swartout from St. Louis.

Technically, it was relatively easy to begin the projects, Dement said. With so many students eager to learn, he loaned them an old leeg machine (which measures brain waves) and showed them how to use it.

Rob Young of Grand Junction, Col., who already is a whiz with electronic equipment, explained: "There's a standard instruction manual, and some other material that the doctor gave us. So we've read up on how to work it, and we've studied how to read the graphs with Dr. Dement's help."

(more)

Bill Swartout said, "We watched real carefully a movie Dement had made for medical students about how to attach the electrodes (the sensors applied to the subject that are hooked up to the EEG machine). Then the doctor gave us a hand at first. We can all get them on okay now."

More sophisticated researchers could well be put off or discouraged by the conditions imposed. The EEG machine is set up in a home-made lab in the basement under the dining hall at Wilbur. The lighting is not the best, the pipes make continual noises, and the early morning traffic sounds "*just* when the subjects should be into their deepest sleep" are a real hindrance.

But the students seem to take the poor working conditions in their stride.

"There's a time," Dement observed, "when learning can be a very viable thing. These young people here have lots of energy, endurance and capacity—later, maybe other pressures and demands get more in the way."

* * *

Details of the students' sleep research projects, with some of the questions they are attempting to answer, follow:

* **Joy Kelley from Birmingham, Mich.,** is studying the 90-minute rhythm of rest and activity that the body is believed to function on, whether asleep or awake. For one entire week, she was allowed to sleep for a half hour and was awakened, to stay up for one hour only.

"Though I am having weird dreams, all in all I feel fine," Miss Kelley said. She described her dreams "great material for a novel—not confusing or especially scary at the time, but so hard to describe afterward."

Dement believes the experiment might provide some answers to the puzzle of body rhythm of normal rest and activity. Scientists believe this rhythm is different from the Circadian, or "biological clock" whereby physiological processes in all living things undergo cyclic changes in a 24-hour period, approximating day and night.

* **There is a theory** suggesting that important information in the brain is processed computer-like during REM periods. REM (rapid eye movement) sleep is a phenomenon which occurs regularly during sleep and is regarded as essential to well being. The theory suggests that when a person is learning a major new motor skill, the need and amount of REM sleep might be increased.

Doug Stevens of Portland, Ore., is testing out the idea by wearing prismatic goggles for six hours daily over a period of time. The goggles, which he made himself, distort his vision, forcing him to learn how to walk in a different way. The students are checking to see if his sleep recordings show any increased REM activity.

* **Bill Swartout and Damian Augustyn** want to know if outside sounds get into dreams.

They now have some clear evidence that they do. Next, the students want to learn if the same sounds act differently under stressful conditions, and if there is a difference between sexes of what is heard or ignored. So far the students are convinced the brain does discriminate and choose, even in sleep.

During an experiment there was a humorous dream recall when, unknown to the sleeping volunteer, special sound effects were used. "I was sitting on a bench talking with this friend and all of a sudden he stood up and started to crow and I thought 'what the hell is going on,' " the dreamer reported. Just as he was dreaming, a tape recording of a rooster had been played.

* **Grant Heidrach of Peoria, Ill.,** is the first of several students to remain blindfolded for 35 waking hours. The purpose of this experiment was to learn if visual deprivation can affect dreams. The evidence showed that his dreams were considerably affected. He recorded intense dream sensations of movements, shapes and colors.

* **Some students wondered** if there is any relationship between meditation and sleep. They had heard that meditation lowers the requirement for sleep. Dave Ellison and his group are now testing the claim by recording brain waves of meditating and sleeping subjects to see if there is any difference.

(more)

* **Dream researchers** have always wondered about the content of dreams of normal, healthy children. Are they any different from adult dreams, and if so, is there a consistent content? "There is very little research in the whole area of healthy children's dreams. Almost everything is a hypothesis," said Doug Anderson of Orland, Cal.

Doug and his fellow investigators have been sitting nights with a number of staff and faculty children watching them sleep. When the children begin to show eye movements, they are in REM sleep, and they are awakened. Usually, good dream recall is obtained at this time. "The dreams of kids are beautiful in their own right—it's a thing in itself just to learn about them," said Anderson.

* **Narcolepsy is a condition** causing irresistible attacks of REM sleep of relatively short duration, usually less than 15 minutes. Sleep researchers, including Dement, are studying its cause and treatment. The little understood disease has fascinated Thom Massey of Los Angeles, a graduate student-counselor at Cedro House, and some of his colleagues. What do narcoleptics dream about? Massey believes that their systemic study of narcoleptics' dreams is the first that's ever been done.

He and his team work at the Sleep Disorders Clinic at the Medical Center, recording some of the narcoleptic patients being treated there, and awakening them during REM periods for dream recall. Massey reports that narcoleptics seem to have an entirely different dream content including marked dream occurrences of persecution.

* **Several students,** including Gordon Gray of Mountain View, are going to apply their scientific curiosity to more practical matters—water beds, and the question of whether they are beneficial to sleep. Dream content and general REM sleep activity while sleeping on a water bed will be carefully monitored over a period of time. "We are finding very willing volunteers," said Gray.

* **Rapid eye movements in sleeping infants** at Stanford University Hospital are being studied by Beverly Harris of Los Angeles and Vivian Gordon of East Palo Alto. Dement believes that if a sleeping infant does not have any eye movements, there may be something organically wrong. The two students are donning surgical gowns to check on babies four times a week.

So far, they have seen 190 babies, and they all had rapid eye movement sleep However, if there were a case of no movement, the nurses would be alerted to double check over a period of time. Then tests could be run on the baby, with the possibility of instituting corrective measures. Such a test, which is easy for nurses to do on a continuing basis, might save a lot of heartache later on," commented Miss Harris.

* **Tom Graf of South San Francisco** leads a student team looking into differences among persons who never remember their dreams from those who do. They hope to find out why such differences exist in the face of the universality of REM sleep. They have already observed that nonrecallers seem to have more rapid eye movement when asleep, although what this means is difficult to evaluate.

* **John Reed of Aguanga, Cal.,** is interested in the effects of sleep deprivation, and stayed awake for 75 hours. Every three hours during this time he was given tests lasting 45 minutes each. When the deprivation was over he was allowed no extra sleep. At least two other students will undergo the same tests to get an average effect of sleep deprivation on various body functions. Other tests are planned to check deprivation effects on strength and endurance.

* **There is even** a project on extrasensory perception for the "turned on" researchers. Two students, Duard Slattery of La Jolla, and Sue Campbell of Atherton, thought that it might be possible for ESP to influence dreams. And now while one sleeps, the other attempts to influence his dreams through thought concentration.

STANFORD UNIVERSITY MEDICAL CENTER

STANFORD, CALIFORNIA 94305 • (415) 321-1200

STANFORD UNIVERSITY HOSPITAL

FILE COPY

APRIL 23, 1971

TO: Administrative Council and Hospital Department Heads

FROM: Thomas A. Gonda, M.D.

SUBJECT: Statement of Further Developments in Hospital Policies

A number of issues concerning Hospital personnel policies and practices have been raised in the last two weeks. Some of these have been aired publicly in the form of a set of demands. Others have come to the attention of the Hospital administration by other means. I believe it is important that the Hospital employees be informed as to the current status of its activity regarding these policies and practices. The accompanying statement contains the announcement of new policies and the clarification and implementation of some existing ones.

STATEMENT OF FURTHER DEVELOPMENTS IN HOSPITAL POLICIES

I. Development of an Employee Advisory Council.

A. Recent events have dramatized the necessity to obtain more involvement of employees in the decision-making process. Consequently, the Hospital intends to establish an Employee Advisory Council composed of representative employees on a Hospital-wide basis.

B. The Employee Advisory Council will be created in such a fashion that all employees, regardless of race or sex, will have a voice in the decision-making process.

C. It is the desire of the Hospital to implement such a Council at the earliest possible time, subject to an appropriate definition of its composition and function. The creation of the Employee Advisory Council requires a detailed evaluation of various alternative approaches. However, to expedite its creation, a target date of September 1, 1971 has been established.

II. Evaluation of Existing Practices and Policies by Minority Committees.

A. The Hospital is strongly committed to the principle that minority employees be provided equal employment opportunity. The Black Advisory Committee and the Alianza Latina shall have the right to receive and evaluate any complaints dealing with existing practices and policies regarding minority affairs.

It is expected that as a result of the evaluation of such complaints the Black Advisory Committee and the Alianza Latina will make constructive recommendations.

B. Recommendations made by the Black Advisory Committee and the Alianza Latina will include a detailed analysis of the present practice or policy and suggested procedures for implementation of the recommendations.

C. The Hospital is now developing an Affirmative Action Program to help solve present and any future minority employee problems. The analysis and recommendations of the Black Advisory Committee and the Alianza Latina should serve as a continuing influence regarding solution of minority employee problems.

-more-

III. Composition of the Hospital Administrative Council.

In order to have advisory input by minorities on Hospital matters, two additional full appointments are being made to the Hospital Administrative Council. These seats are to be occupied by the senior Black staff member and the senior Latin staff member in the Administration Department.

IV. Revision of Grievance Procedure Policy.

Any Hospital employee, whether permanent or probationary, may use the Grievance Procedure when he has a complaint relating to his employment.

V. Posting of Job Openings for Employee Advancement.

The Hospital will post notices of all employee job openings on the Personnel Department bulletin board and on the Cafeteria bulletin board. These notices will contain the starting salaries for the position.

VI. Implementation of Job Classification and Evaluation.

A. The Hospital is presently making a job audit to clearly define the duties of various positions within the Hospital. Salary ranges will be indicated on each job classification.

B. The Hospital will continue its policy of evaluating employees at regular intervals. A copy of each evaluation will be given to the employee involved and he will be expected to sign the evaluation form. To avoid any misunderstanding concerning the requirement that the employee sign the form, there will be on all such forms a notation to the effect that the employee acknowledges receipt of a copy of the form, but does not indicate by his signature that he agrees with the substance of the evaluation.

VII. Clarification of Leaves of Absence.

A. Request for leave of absence is to be made on a "Leave of Absence Authorization" form. A form is in preparation. In completing this form, the employee shall provide a description of the reasons for which the leave of absence is sought and appropriate documentation of these reasons.

-more-

VII. (continued)

B. The Hospital will make every effort, including such procedures as hiring of temporary personnel, to assure that an employee who has been on leave of absence is reinstated to the job which he occupied immediately prior to taking the leave of absence.

C. To inform the employee prior to beginning his leave of absence about his reinstatement status, the Department Head will note one of the following on the "Leave of Absence Authorization" form:

1. "Same position guaranteed";
2. "Similar position guaranteed";

VIII. Modification of Employee Medical Insurance Program.

The Personnel Department has been directed to prepare and circulate questionnaires concerning the desirability of Hospital-provided spouse medical insurance coverage, along with other alternatives under the Hospital's medical insurance policies. The findings of this survey will be the basis of further modification of our employee medical insurance program.

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April 23, 1971.

FOR INFORMATION CONTACT: Bob Beyers, Harry Press or Jeff Littleboy, DA 1-2300, ext. 2558
FOR IMMEDIATE RELEASE
STANFORD –

STANFORD UNIVERSITY NEWS SERVICE

Shortly before 4 a.m. Friday, an explosive device with a timer exploded in the attic of the president's office building at Stanford University, causing moderate damage.

Campus security guard George Curry, on the second floor no more than 30 feet away when the device exploded, said "I haven't heard anything like this since Korea." His ears still were ringing an hour later, he said, but he was not otherwise injured.

The device punched a two-foot diameter hole in the ceiling near two second-floor offices occupied by legal advisers to the president. Several pieces of red tile roof were knocked to the ground, and many others were damaged. Damage initially was estimated by Fire Chief Frank Jurian at $5000.

The FBI took charge of the investigation.

At 11:22 p.m. Thursday five bullets were fired at a PG&E transformer compound near the Women's Gym. Two bullets penetrated two transformers, causing an oil leak. Students informed police and firemen, who stopped the leak. Had the leaking continued, a mild explosion might have taken place, firemen said.

About half an hour before the explosion in the president's office, *Stanford Daily* and KZSU reporters reported seeing two persons, possibly female, running past the office. They were believed to be involved with the placing of revolutionary posters in many places on the campus during the night, and an attempt had been made to paste one on the office door.

At 3:35 p.m. Thursday afternoon Palo Alto police received an anonymous call from a male voice saying "a bomb will go off in 30 minutes in the Stanford area." The bomb in the president's office building exploded at 3:54 a.m. Friday, about 12 hours later.

It was not immediately known whether either the call or the posters were directly linked to the incident. For months the building has been guarded on a round-the-clock basis after normal working hours.

How the bomb was placed in the attic was not known. The two-story structure, located in Inner Quad, sustained more than $100,000 damage in an arson-caused fire July 5, 1968.

The explosion scattered plaster and debris over a 20-foot radius on the second floor, but employees were admitted to the building on arrival for work. The personal office of President Richard W. Lyman is located on the first floor.

Commenting on the incident, President Lyman said: "Naturally I am angry at this senseless act. Everything possible is being done to find out who did it. We need the cooperation and help of all at Stanford to bring to end such harassing attacks upon the University."

The posters protested "an undeclared, racist and aggressive war" and charged that Stanford has placed the "welfare and life of the Stanford professor above that of the Stanford worker."

"Where racism and injustice penetrate the very fabric of the institution, merely to question the established order is to rip that fabric asunder," the poster added. "It is no wonder then that Sam Bridges [was fired], Dr. Aguilar denied tenure, Bruce Franklin sacked and hospital workers brutalized in an unprovoked pig attack" (Photos show demonstrators clubbing police before officers responded).

"The power to build a humane and just society lies within the people," the poster added. "Support the workers, Power to the righteous."

–30–

4/23/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford University Hospital Saturday announced that effective immediately, Black and Latin employee representatives will sit on its administrative council as part of new personnel policies and practices being put into effect.

The seats on the council will be occupied by the senior Black staff member and the senior Latin member in the administration department.

Disclosure that the Hospital is moving forward to implement minority demands, accepted April 19, was made in a memorandum to hospital department heads by Dr. Thomas A. Gonda, hospital director.

Dr. Gonda wrote the appointments were being made to provide "advisory input by minorities on Hospital matters." Representation on the council, a Hospital advisory body, was a key minority demand.

"I believe it is important that the Hospital employees be informed as to the current status of its activity regarding these policies and practices." Dr. Gonda wrote.

The Hospital director announced the following new policies:

. The Hospital will establish a broad advisory council to assure that all employees, regardless of race or sex, will have a voice in the decision-making process. The target date for establishing the council will be September 1, 1971.

. The Black Advisory Committee and the Alianza Latina will evaluate practices and policies associated with minority affairs at the Hospital.

. All Hospital employees, regardless of length of employment, will have the right to a grievance procedure.

. Job openings will be posted on bulletin boards, along with starting salaries for each position.

. The Hospital will make every effort to assure that an employee who has been on leave of absence is reinstated to the job originally occupied. When an employee's leave is approved, the department head will note one of the following on the authorization form, "same position guaranteed," or "similar position guaranteed." If the position cannot be guaranteed, it will be so stated in advance.

. The Personnel Department will circulate questionnaires concerning the desirability of instituting medical insurance coverage for the spouses of all Hospital employees. The findings will be used as the basis for further modification of the employee medical insurance program.

A job audit to classify various positions in the Hospital is under way.

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Mailed April 24, 1971.

COPY

Transmitted 4-26-71 5:30 pm

APR 26 1971

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

BUSINESS WIRE; 4-26-71

STANFORD -- In the face of a morning walk out by Black employees, Stanford University Hospital officials took steps Monday afternoon to maintain patient care services, and stressed that employees who stay away in support of a work stoppage will not be paid.

Dr. Gonda, Hospital director, referred to a flyer distributed throughout the Hospital Monday morning by an unidentified group, which said employees engaging in a work stoppage over grievances cannot be replaced.

"That is not the law," Dr. Gonda stated in a memorandum issued to hospital employees and medical staff. "The Hospital has a grievance procedure. Employees who stay away from work over grievances can be legally replaced."

The Hospital director added: "I want to emphasize that employees who stay away from work in support of the so-called work stoppage will not be paid for time away from work."

He also said that hospital employees on their shifts are expected to perform their hospital duties. "So far as meetings are concerned, they will be expected to attend only designated official Hospital meetings. Employees who attend unofficial sessions or rallies will do so on their own time.

Dr. Gonda said that in the past two and a half weeks, the Hospital has been subjected to a sit-in, which ended in great damage, to bomb threats and "its employees have been threatened and intimidated."

"This is intolerable," Dr. Gonda said. "We remain ready to contin to reach rational solutions with our employees on any Hospital issues that are of concern to them, but not with disruptive forces who want to destroy our hospital."

4-26-71 Gonda p. 2 5:30 pm.

Earlier Dr. Gonda issued a statement saying that a group which styles itself as the Stanford University Medical Center Coalition "does not represent minority employees at the Hospital."

He said the legitimacy of the coalition is in question, and this made difficult for the Hospital to respond "appropriately and effectively to the issues, and to enter into binding agreements regarding hospital minority employees."

"The fundamental issue," Dr. Gonda said, "is the legitimacy of the group that purports to represent hospital minority employees.

"This group claims to represent a self-defined coalition that includes some minority employees of the Hospital and University, but also a large number of persons who are not University or Hospital employees.

"Many workers have made it clear that the Stanford Medical Center Employees Coalition does not, in fact represent the minority employees of Stanford University Hospital."

Dr. Gonda noted the Hospital has already initiated those improvements agreed upon in previous discussions with Hospital minority employees, and will continue to do so with all speed.

He said a numbeer of Black employees who stayed away Monday "have telephoned in and told us ~~that~~ they have been subject to coercion, intimidation and threats to keep them away from the Hospital."

Meanwhile Latin employees at the Hospital remained on the job, and declined to ~~issue a statement~~ comment about their plans after a meeting this afternoon.

Several hospital departments were hit hard by the stoppage, including housekeeping, diatary and diagnostic radiology. Since employees were scheduled to work different shifts throughout the day it was impossible to determine the exact number of employees who were abse

The Hospital received a bomb threat around noon, the third such incident since police ended the occupation of its administrative offices April 9 in which 23 persons, mostly white were arrested. Only one of those arrested was a Hospital employee. Most of the others were from outside the University.

Leaflets distributed by 20 pickets outside the Hospital Monday morning said that Black workers had voted Friday to stop work until the administration agrees to meet the demands. They carried signs calling for "Amnesty for the Hospital 23," "Rehire Sam Bridges," "Stanford Is a Racist Institution," and "Grant Dr. Aguilar Tenure." Many of the pickets wore Venceremos and Black Liberation Front buttons.

Bridges, whose firing after several weeks' employment precipitated the Hospital demonstration, was one of the picketers outside the Hospital this morning.

During the sit-in, Hospital officials asked Bridges to take part in established grievance procedures, but he declined. The offer was renewed after the disruption, and on April 15, he notified the Hospital that he would consent to a hearing. He was told the next day that the hearing was set for April 22. On April 20, however, Bridges stated in an open letter to the community that he had been fired for unsubstantiated charges, and that he should be reinstated.

Dr. Aguilar is a Chicano neurosurgeon who did not receive reappointment after six years on the Stanford faculty. The Medical School said Dr. Aguilar's case was reviewed twice at his request, and by the University Provost's office and no irregularities were found in the decision not to reappoint him.

4-26-71

STANFORD UNIVERSITY

FOR INFORMATION CONTACT: Gary Cavalli, 5311

STANFORD - Many black workers at Stanford University Hospital walked off their jobs Monday morning, April 26, in a work stoppage "to protest the failure of the Hospital Administration to meet minority demands" presented earlier this month.

Latin-American workers at the hospital tentatively elected to remain on the job, with a meeting scheduled for 3 p.m.

Leaflets distributed by 20 pickets outside the hospital said that black workers at the hospital had voted Friday to stop work until the administration agrees to meet the demands.

Saturday morning, however, the hospital announced that it was moving forward to implement six of the demands concerning workers' rights, including greater voice for minorities in the hospital's decision making.

There are 317 blacks and 133 Latin Americans employed at Stanford Hospital out of a total of 2,170 employees.

Since the employees were scheduled to work different shifts throughout the day, it was impossible to determine the exact number of minority employees who were absent from their jobs.

Several departments were hard hit by the stoppage, including housekeeping, dietary and diagnostic radiology. Virtually all of the 34 minority employees in housekeeping had gone home early Monday morning.

Pickets carried signs calling for "Amnesty for the Hospital 23"; "Rehire Sam Bridges"; "Stanford is a Racist Institution"; and "Grant Dr. Aguilar Tenure!"

Bridges, whose firing after several weeks' employment precipitated the hospital demonstration, was one of the picketers outside the hospital this morning.

Bridges, a black employee whose dismissal was cited as a cause of the April 9 hospital sit-in, phoned hospital officials April 15 and said he would consent to a grievance procedure. On April 16, he was informed a grievance hearing would be held April 22 and requested to list those persons, both employees and outsiders, whom he wished to have accompany him. He also was asked to submit a written grievance by April 19. He did not do so, but instead requested reinstatement with back pay.

Early in the controversy, United Stanford Employees filed a complaint on his behalf with the National Labor Relations Board.

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4/26/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

Heart Transplant #31

Herbert G. Juster, 48, of South Braintree, Massachusetts, became the 31st heart transplant recipient at Stanford University Hospital late Saturday night, April 24, 1971.

Juster is a retired engineer and is married. The donor is anonymous.

Juster is in satisfactory condition.

The operation was performed by a team headed by Dr. Norman Shumway. Of the 31 recipients, 11 are now surviving.

Telephoned to
Associated Press
United Press International
San Jose Mercury
Palo Alto Times

April 26, 1971.

STANFORD UNIVERSITY MEDICAL CENTER

STANFORD, CALIFORNIA 94305 • (415) 321-1200

STANFORD UNIVERSITY HOSPITAL
Office of the Director

April 26, 1971

TO: ALL HOSPITAL EMPLOYEES AND MEDICAL STAFF

FROM: Thomas A. Gonda, Director, Stanford University Hospital

We regret that some employees have seen fit to stay away from work today. We shall do our best to operate the Hospital with no interruption in patient care.

A number of Black employees who have stayed away have telephoned in and told us that they have been subject to coercion, intimidation and threats, to keep them away from the Hospital.

We ask all employees to do their best in the interest of our patients and request all employees who have stayed away to return to work on their next scheduled shift.

Hospital employees on their shifts are expected to perform their Hospital duties. So far as meetings are concerned, they will be expected to attend only designated official Hospital meetings. Employees who attend unofficial meetings or rallies will do so on their own time. They will not be paid for participating in such unofficial activities.

Speaking of pay, I want to emphasize that employees who stay away from work in support of the so-called work stoppage will not be paid for time away from work.

A flyer issued by outside groups says that employees who engage in a work stoppage over grievances cannot legally be replaced. That is not the law. The Hospital has a grievance procedure. Employees who stay away from work over grievances can legally be replaced.

The Hospital has tried and will continue to try to resolve problems on a rational basis. Toward this end, minority employees obtained a room within the Hospital to use as an Information Center. The room was almost immediately commandeered by outsiders for their purposes rather than those of the Hospital employees. This practice can no longer be condoned, and the room has been returned to regular scheduling.

It is important that all employees rededicate themselves to our primary responsibility for enabling the Hospital to continue to provide the best possible patient care.

In the past two and a half weeks, the Hospital has been subjected to a sit-in, which ended in great damage, to bomb threats, and its employees have been threatened and intimidated. This is intolerable. We remain ready to continue to try to reach rational solutions with our employees on any Hospital issues that are of concern to them, but not with disruptive forces who want to destroy our Hospital. ###

TAG:sc

From: STANFORD MEDICAL CENTER NEWS BUREAU For information: Spyros Andreopoulos 321-5310

FOR IMMEDIATE RELEASE

STANFORD - In the face of a morning walk out by black employees, Stanford University Hospital officials took steps Monday afternoon, April 26, to maintain patient care services and stressed that employees who stay away in support of work stoppage will not be paid.

Spot checks in several departments indicated that more than one half the black employees on the afternoon shift worked, compared to less than one fourth of the morning shift.Meanwhile, Latin employees remained on the job at the hospital, and declined to comment about their plans after a meeting Monday afternoon. Monday night, United Stanford Employees renewed its appeal for support of the work stoppage.

A flyer distributed throughout the hospital Monday morning by an unidentified group said employees engaging in a work stoppage of grievances cannot be replaced.

"That is not the law," Hospital Director Dr. Thomas Gonda stated in a memorandum sent to hospital employees and medical staff. "The hospital has a grievance procedure. Employees who stay away from work over grievances can be legally replaced."

The hospital director added: "I want to emphasize that employees who stay away from work in support of the so-called work stoppage will not be paid for time away from work."

He also said that hospital employees on their shifts are expected to perform their hospital duties. "So far as meetings are concerned, they will be expected to attend only designated official hospital meetings. Employees who attend unofficial sessions or rallies will do so on their own time."

Dr. Gonda said that in the past two and a half weeks, the hospital has been subjected to a sit-in, which ended in great damage, to bomb threats, and "its employees have been threatened and intimidated."

"This is intolerable," Dr. Gonda said. "We remain ready to continue to reach rational solutions with our employees on any hospital issues that are of concern to them, but not with disruptive forces who want to destroy our hospital."

Earlier, Dr. Gonda issued a statement saying that a group which styles itself as the Stanford University Medical Center Coalition "does not represent minority employees at the hospital." He said the legitimacy of the coalition is in question, and this made it difficult for the hospital to respond "appropriately and effectively to the issues, and to enter into binding agreements regarding hospital minority employees."

"The fundamental issue," Dr. Gonda said, "is the legitimacy of the group that purports to represent hospital minority employees. This group claims to represent a self-defined coalition that includes some minority employees of the hospital and University, but also a large number of persons who are not University or hospital employees.

"Many workers have made it clear that the Stanford Medical Center Employees Coalition does not, in fact, represent the minority employees of Stanford University Hospital."

Dr. Gonda noted that the hospital already has initiated those improvements agreed upon in previous discussions with hospital minority employees, and will continue to do so with all speed. He said a number of black employees who stayed away Monday "have telephoned in and told us they have been subject to coercion, intimidation, and threats to keep them away from the hospital.

Several hospital departments were severely affected by the Monday morning stoppage, including housekeeping, dietary, and diagnostic radiology.

The hospital received a bomb threat around noon, the third such incident since police ended the occupations of its administrative offices April 9 with the arrest of 23 persons, mainly whites. Only one was a hospital employee. The majority came from outside the University.

Leaflets distributed by 20 pickets outside the hospital Monday morning said black workers had voted Friday to stop work until the administration agreed to meet the demands. Their signs called for "Amnesty for the Hospital 23," "Rehire Sam Bridges," "Stanford Is a Racist Institution," and "Grant Dr. Aguilar Tenure." Many of those picketing wore Venceremos and Black Liberation Front buttons.

Bridges, whose firing after several weeks employment was cited as a cause for the sit-in, was one of the picketers. During the sit-in, hospital officials asked him to take part in established grievance procedures, but he declined. The offer was renewed after the disruption and on April 15 he notified the hospital he would consent to a hearing. He was told the next day the date was set for April 22. On April 20, however, Bridges stated in an open letter to the community that he had been fired for unsubstantiated charges and should be reinstated.

STANFORD UNIVERSITY MEDICAL CENTER
STANFORD, CALIFORNIA 94305 • (415) 321-1200

STANFORD UNIVERSITY HOSPITAL
Office of the Director

April 27, 1971

TO: Stanford University Hospital Employees and Medical Staff
FROM: Thomas A. Gonda, M.D., Director

In response to broadly elicited advice and in the light of clarification of issues with the passage of events, the Hospital Administration presents the following reformulation of its position with respect to discussions regarding terms and conditions of employment of Hospital employees:

The Hospital Administration looks forward to the establishment of a representative employee council with which it can consult on issues affecting Hospital employees. In the final analysis, only the widespread participation of all employees can ensure successful implementation of programs, including such vital programs as "Affirmative Action."

In the meantime:

(1) The Hospital Administration is prepared to meet with and take seriously the advice given by any group of Hospital employees on any Hospital-related issue. In such meetings employees may have advisors present within a framework of orderly discussions.

(2) The Hospital will negotiate Hospital-related issues only with groups that can demonstrate that they actually represent the employees who would be affected by agreements reached in the negotiations.

(3) The Hospital does not recognize the "Stanford Medical Center Employees Coalition" as an appropriate bargaining unit nor their representatives as negotiators.

TAG:sc

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Licensed vocational nurses at Stanford University Hospital will vote whether they wish to be represented by the California Licensed Vocational Nurses Association in collective bargaining in an election May 3, hospital director of personnel Kenneth Dunkle announced today.

The election, which will be supervised by the California State Conciliation Service, "will determine whether or not the organization will represent the Stanford LVN's in matters of wages, hours, and working conditions," Dunkle said. There are currently 51 LVN's at Stanford.

The election will be held in Room W001 by secret ballot from 6:30 to 7:30 a.m., and 1:30 to 3:30 p.m. on Monday, May 3. Notices will be posted throughout the Hospital for several days prior to the election.

The vote was scheduled after the CLVNA, claiming support from a majority of the LVN's at Stanford, wrote the Hospital asking for an election. Several Hospital nurses had contacted the organization and expressed interest in obtaining representation.

The last election of this type at Stanford Hospital was held March 30, 1967, when Hospital and Institutional Workers Union, Local 250, unsuccessfully attempted to organize all nonprofessional hospital workers. -30-

FOR INFORMATION CONTACT: Spyros Andreopoulos, 321-5310

STANFORD -

Stanford University Hospital officials Tuesday, April 27, said they are prepared to resume meetings with "any group of employees on any Hospital-related issue."

Moreover, in such meetings hospital employees may have advisers present "within a framework of orderly discussions."

In a statement issued Tuesday night, Dr. Thomas A. Gonda, hospital director, said the hospital will "negotiate Hospital-related issues only with groups that can demonstrate they actually represent the employees who would be affected by agreements reached in the negotiations."

Dr. Gonda stated that the hospital does not recognize the "Stanford Medical Center Employees Coalition" as an appropriate bargaining unit nor their representatives as negotiators concerning terms and conditions of employment of hospital workers.

He added: "The Hospital administration looks forward to the establishment of a representative employee council with which it can consult on issues affecting the hospital employees.

"Only the widespread participation of all employees can ensure successful implementation of programs, including such vital programs as 'Affirmative Action.' "

-30-

4/28/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- A small grant to study the effects of bunker oil on aquatic birds has been awarded to the Stanford University School of Medicine by Standard Oil of California.

This is one of the first such investigations to be made; apparently there has been little previous systematic research on the toxic effect of oil on birds.

Included will be pathology, microbialogy and tissue toxicity studies. A distinction will be made between the birds actually dying from an oil spill itself and from secondary causes, such as infection, malnutrition and reaction to captivity.

Two postdoctoral fellows at the Animal Care Facilities at Stanford, Dr. Bret Snyder and Dr. James Fox, will conduct the research with the $6,400 grant.

At the time of the recent massive oil spill in the San Francisco Bay, the young doctors offered, on their own, their diagnostic services to the San Francisco Zoo, where many of the oil soaked birds were being sent.

They soon had over 100 tissue specimens from birds that had already died.

They informed Standard Oil that they had such a collection and would like funds to do further research. This request has now been granted.

"We are going to make a systematic attempt to find out about the interrelated causes of death," Dr. Snyder commented. "It's primarily a field study. There has been a lot of simplification about why the birds actually died, but this study should make a start in sorting out all the factors."

Dr. Snyder and Dr. Fox are working with disease diagnosis and treatment of research animals at the Animal Care Facilities at Stanford.

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Mailed April 29, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD –

The secrets of alcohol addiction can now be probed more efficiently than ever before through a simple system developed by a Stanford University scientist. The system produces rapid alcohol dependence in mice and permits withdrawal reactions to be observed and measured.

This new approach to the study of alcoholism owes its existence to the work of Dr. Dora B. Goldstein, a senior scientist in the Department of Pharmacology of the Stanford University School of Medicine.

Dr. Goldstein explained that scientists have been trying for some time to develop an animal model that would help them understand the addiction process. The model is also needed because certain kinds of information cannot be obtained by studying alcoholics.

"Alcohol addiction in man develops over a period of years, and it is accompanied by malnutrition and disease," Dr. Goldstein said. "It is difficult to study alcohol dependence when other diseases are present."

Of all the animals used for studies of alcoholism, mice seemed to be best because they can become alcoholic in two to four days compared to about two weeks in the more expensive animals such as dogs and monkeys, she said.

The hitch, however, was that mice eliminate alcohol very rapidly and it has been difficult to maintain high blood alcohol levels by injection in their system.

Dr. Goldstein solved the problem by a simple approach. She administers the alcohol by inhalation, housing the mice (with food and water supply) in a transparent, air-tight plastic box to which alcohol vapor is pumped continuously.

The mice are removed by the scientist twice a day to weigh them, take blood samples, and inject pyrazole, a chemical that slows down alcohol metabolism, and assures constant blood alcohol level for the production of physical dependence.

After a few days in the chamber, the mice are removed and their falling blood alcohol is measured every two hours. The mice are observed continuously, with scores of the severity of withdrawal reaction recorded at intervals until the alcohol disappears from their blood and they recover. Typical signs observed in the mice are similar to those occurring in alcoholics who have stopped drinking—lethargy, trembling, jumpiness and convulsions.

Dr. Goldstein explained that "addiction is believed to be a result of the body responding physiologically to the effects of the drug on some target organ, most likely the brain, and adapting to it.

"In an adapted system, the organism functions well as long as the blood level of alcohol remains constant.

"When the drug level in the blood drops, the organism is out of balance. Withdrawal symptoms may be a display of an adaptation that is no longer appropriate because the drug stimulus is no longer there."

Dr. Goldstein said scientists do not yet know what biochemical system is involved in alcohol addiction, but "we can measure how long the body takes to adapt to alcohol, and to recover after it has been taken away.

"When we get an idea of what has changed biochemically for the body to make the adaptation, and if we can show that such a change follows the same time course as the adaptation process, we may have a clue to the alcohol addiction problem."

Other goals of Dr. Goldstein's research, supported by the National Institute of Mental Health, are:

* to test drugs that modify withdrawal symptoms and can be useful in therapy of alcoholics.
* to better understand what kinds of drinking patterns are dangerous and can lead to alcoholism, and
* to show genetic differences. (For example, if male and female drinkers may become equally dependent from the same amount of alcohol.)

Dr. Goldstein's work is reported in a paper titled 'Alcohol Dependence Produced in Mice by Inhalation of Ethanol: Grading the Withdrawal Reaction," in the current issue of *Science* magazine. –30– 4/29/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD —

Dr. Philip Sunshine, director of nurseries at Stanford University Hospital, Thursday, April 29, urged passage of a new California State Assembly bill which would require insurance companies to cover newborn infants from the moment of their birth.

"This type of legislation is long overdue," he said. "I believe it is imperative that this bill be passed."

In an interview, Dr. Sunshine voiced his strong support for the bill, introduced into the California legislature by Assemblywoman Yvonne Brathwaite of Los Angeles. He was prepared to appear at a hearing before the Assembly Committee on Finance and Insurance Wednesday, April 21, but testimony was not needed as the bill passed without opposition to the Assembly floor. A vote is expected some time in the next few weeks.

Dr. Sunshine has long been an outspoken proponent of compulsory reform in existing insurance policies, the majority of which do not cover infants until they reach 14 or 30 days of age. Such policies offer little help in paying the staggering medical costs which are faced by parents of premature infants and parents of babies afflicted with debilitating diseases.

Stanford Hospital, the referral nursery for the Mid-Peninsula and San Jose area, receives many premature infants because of problems that can't be handled by other area hospitals. Dr. Sunshine estimated that the Stanford nursery treats approximately 700 premature infants per year, some flown in from as far away as Fresno and Lake Tahoe.

The most common illness which affects premature infants is respiratory distress syndrome (RDS), a disease of the lungs occurring in approximately 20 percent of all premature babies. Dr. Sunshine said that the parents of an infant afflicted with RDS, receiving little or no aid from insurance policies, will have an average hospital cost of $2,500-$2,800.

"The important point is that most people have insurance policies and think they are fully covered," he said. "Then they read the fine print and find out that their baby isn't covered until he has lived 14 or 30 days. Today, with intensive care nurseries, the cost can reach $200 or more per day. This adds up to $2,800 for the parents with the 14-day policy, or at least $6,000 for those with the 30 day policy."

Assemblywoman Brathwaite's bill, introduced Feb. 24, would require that any insurance company offering comprehensive, group or family health, or disability insurance, must also cover the newborn infant from—and after—the moment of birth. In fact, companies would no longer be able to exclude coverage of a newborn infant for 14 or 30 days.

Dr. Sunshine stressed that the cost for such insurance, when compared with the burden many families are now forced to bear, would be minimal.

"The cost per family to have this insurance, providing the bill is passed, would be about 60 cents per month," he said. "But even if it was $2 per month in total coverage, it would still be worth it. Presently at Stanford, less than 25 percent of our babies who have RDS have adequate coverage."

At Stanford and other intensive care nurseries, many new techniques are being developed and utilized to give prematurely born and sick infants an optimal chance for survival.

"These infants are carefully monitored to insure their serum chemistries and acid-base status are maintained within normal limits," Dr. Sunshine said. "Careful temperature control, early detection of cardiorespiratory abnormalities, and sophisticated surgical techniques have also been perfected."

Recent studies have indicated that when the smaller premature babies are cared for in this manner, the incidence of neurological and intellectual impairment is markedly decreased.

In addition, Stanford and other centers are encouraging parents to become involved in the care of their premature infants soon after birth, and in this manner, the parents are better able to care for their infants when they are released from the hospital.

"Nowadays, we often don't wait until the babies reach five and one-half pounds to discharge them," Dr. Sunshine said. "We've often sent babies home who weigh less than four pounds to be cared for in modified home incubators, and with the aid of visiting and public health nurses."

—30— 4/29/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Two new administrative appointments have been announced at Stanford University Hospital.

Dr. Thomas A. Gonda, hospital director, announced the addition of Emil Strom as consultant in hospital planning and health care services, and John G. Williams as associate director of the hospital for patient care services.

Strom joins the University hospital after 18 years as a member of the California State Health Department. As a representative of that department's Bureau of Licensing and Certification in 1959, he played a major role in the original licensing of Stanford Hospital when the Medical Center opened. His work with the State included developing the methods of evaluating hospitals, nursing homes and clinics, as well as helping to set standards thay must meet for licensing and certification.

His role at Stanford is to study systems of health care delivery in relation to possible future expansion of facilities and services at the University hospital, and to advise the hospital in the areas of health insurance and current health legislation.

Strom is a 1948 graduate of Hamline University in St Paul, Minnesota. He received the M.A. in musicology at the University of California at Berkeley in 1951 and is a teacher of piano and composition.

A resident of Mountain View, he is serving in his fourth year on the advisory committee for long-term care of the Santa Clara County Medical Society.

John G. Williams comes to Stanford from the University of Utah Hospital, where he has been assistant administrator. He went to Salt Lake City in the summer of 1969 after obtaining the M.P.H. at the University of California at Berkeley.

At Stanford, he will serve as liaison with the medical staff, and will be the administrative director of the hospital's 26 clinical laboratories and patient care service departments.

Williams is a native of San Francisco. He received the B.S. in Business Administration from the University of San Francisco in 1967. While in the master's degree program at Berkeley he took an administrative residency at the University of California Hospitals in San Francisco.

He is married to the former Mary Ball of Berkeley, and they have a two-year-old son. The family moved into a new home in Cupertino in mid-April.

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Mailed May 27, 1971

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--A new program for monitoring the body concentration of important therapeutic drugs has been developed by a research team at Stanford University Hospital.

Dr. Paul Wolf, director of clinical laboratories, and Dr. Sumner Kalman, professor of pharmacology at the University School of Medicine, announced today (May 26) that the program is now being made available for use in the clinical laboratories at the Hospital.

"Our purpose," Kalman explained, "is the detection and measurement of drugs administered to a patient, and the determination of how his body handles them. This allows doctors to more effectively maintain proper drug levels in the patient's bloodstream."

In adjusting drug dosage, the rate of metabolism of different drugs from patient to patient will be taken into account, he added.

Kalman gave major credit for the research of the new system to Eric Watson, a chemist in his laboratory, and assistance from Wolf and his associates in the clinical laboratories.

Over the years, the major area of interest in the clinical laboratories has been the detection of toxic drugs a patient took. This usually required several hours because of tedious manual procedures, and often samples of a patient's blood had to be sent to reference laboratories.

At Stanford, due to much more rapid extraction, separation and gas chromatography techniques, the emphasis will now shift toward monitoring drugs administered to patients by clinicians at the Hospital.

"In the past we've been primarily concerned with drugs taken by an individual with suicidal intent," Wolf said. "The advantage of this new system is that we specifically know the level of the therapeutic drug in a patient's system and whether he is responding to the drug at that level."

The technique involves the use of a highly-sensitive instrument called a gas chromatograph (GLC), operated by medical technologist Jenny Meyer, which measures the amount of a drug present in the patient's blood.

A sample of the patient's blood is extracted and injected into the GLC, which turns the drugs in the sample into a gas phase through the application of intense heat.

The drugs in the gas phase are separated because they pass through the column in the GLC at different speeds. After a specific drug moves off the column it is ionized by flame, at which point the detector is capable of reading the amount of the drug present in the blood. Finally, a read out on the GLC's paper chart-recorder reveals the specific amounts of each drug.

This measurement, along with considerations of the patient's condition and his rate of metabolism, will enable doctors to adjust dosage when necessary and maintain the proper level of drugs in the patient's body.

"Our major push," said Wolf, "is to determine the specific amount of a drug for a specific illness and a specific patient."

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"This program will help us develop guides for rational dosage-scheduling of drugs," Kalman said. "Doses need to be fitted to individual needs. There is no average man who always need 400 mg of drug A or 100 mg of drug B on a certain daily schedule."

Last week Hospital clinicians began applying this technique in the detection and measurement of commonly used sedative drugs. The process takes only 45 minutes.

However, the primary impact of the program will be felt in the near future, when it is used in the detection of important drugs used in the treatment of heart disease. This, as Kalman explained, was where his research started.

"I've been interested for two or three years in developing a program like this," he said. "I decided to start with drugs that are used in treating heart disease--the digitalis group. We need this system because the amounts of digitalis in the patient's blood are very small. Its concentration in the bloodstream is among the lowest of important drugs."

Digitalis is widely used in the treatment and control of heart failure. A patient who has heart failure may have to take this drug for the remainder of his life. Another more sensitive gas chromatogra equipped with an electron capture detector, determines how much digitalis is present by utilizing other chemical methods.

"In this way," Wolf noted, "the patient will be monitored during the course of heart failure so that he'll get only the required amount of digitalis. There will be little chance of an overdose. The program will enable us to answer important questions such as whether the patient still is in heart failure, whether he has drug constancy, whether there are problems with metabolism of the drug, and whether the dosage should be altered."

Kalman's research team, supported by a grant from the National Heart Institute, has also been working on the detection of lidocaine, a drug used to control cardiac arrhythmias, that is, disturbances of rhythm of heart beat. This technique will also soon be put to use in the Hospital's clinical labs, perhaps by next week.

"In the future we hope to expand the program further and develop new methods of drug detection in human metabolism for all of the commonly used important drugs," Kalman said.

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Editors: Pictures are available if not included with article.

Mailed May 26, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. Norman Shumway, who pioneered heart transplants at Stanford University Hospital, has begun a program to meet what he calls "the greatly increased demands of cardiac patients" by helping develop new open-heart surgery centers at two San Francisco Peninsula hospitals.

Open-heart operations have more than doubled at Stanford University Hospital since 1965. During the past year, the number of such operations has further skyrocketed because of a new surgical technique to aid persons with coronary artery ailments, by far the most common form of heart disease.

"It is time for coronary artery surgery and heart valve replacement to come out of the university and into community hospitals," Shumway said.

Shumway has already assisted in putting together a surgical team at El Camino Hospital in Mountain View. He hopes to repeat the procedure at Peninsula Hospital in Burlingame in what he said is a "natural evolution" away from Stanford hospital. The Peninsula hospital medical board is reported to be considering Shumway's proposal.

New surgical units will handle all forms of heart surgery except experimental surgery such as heart transplants.

Shumway said he plans to do fewer routine open-heart operations to devote more time to experimental surgery and teaching. Transplants should remain at Stanford, he believes, because of "their highly investigational nature--there are still too many things we don't know about this particular procedure to let it get too far away."

The surgeon hopes satellite centers will play a big role in expanding bed space available on the Peninsula for a rapidly growing number of heart patients needing surgery. He said the idea represents a new approach, since with few exceptions, open-heart surgery nationwide today is performed by university-affiliated teaching hospitals.

Until recently Stanford Medical Center has been trying to meet the needs of most of these people with only about 200 beds, "far too few," according to Shumway.

In his view, branching out into community hospitals relieves pressure for surgical facilities, very often felt by university hospitals, provides better bed utilization of area hospitals, and opens more room for pure research and development at the academic centers.

Shumway hopes his dispersal program will begin a pronounced movement which will include the establishment of medical centers in rural and even suburban areas that could extent the latest advances of open-heart surgery to more people.

With improved communication, he expects that surgeons in every part of the country will be able to keep up on the latest methods, and could in addition periodically come to research centers such as Stanford for short stays.

The program of decentralization involves several surgeons trained by Shumway. One heads up the open-heart surgery program at the Palo Alto Veterans Administration Hospital. Two other surgeons are in the process of leaving the Shumway staff to go into private practice in Palo Alto. They will be able to admit routine open-heart cases to the community bed section of the Stanford hospital.

Still other Stanford-trained heart surgeons are expected eventually to take over the satellite operations at El Camino and Peninsula hospitals. All of them will continue their Stanford association as volunteer faculty members.

Shumway said he has no plans of his own for going into private practice. He said he enjoys the academic life "because there's time for everything--research, teaching, and the actual surgery."

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STANFORD--Dr. George J. Laird, 56, of Burlingame, is the new president of the Stanford Medical Alumni Association, and Dr. Theodore W. Loring of Eureka, is the new president-elect.

Laird, who will serve as president from now through June 1, 1972, is a general surgeon. He received his M.D. degree from Stanford in 1940, and has been active in medical alumni association affairs for several years.

Loring, 55, specializes in obstetrics and gynecology. He received his M.D. degree from Stanford in 1946.

Election of the new officers of the 3,400 member association were announced during the annual alumni reunion over the weekend.

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Mailed, May 25, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--The National Labor Relations Board has upheld the firing of Sam Bridges, 23, by Stanford University Hospital.

After investigating the matter, the NLRB said Bridges was fired "for reasons related to his work performance."

The NLRB decision, rendered Tuesday (May 18), came in response to a charge filed April 7 on behalf of Bridges by the United Stanford Employees that he was unfairly dismissed.

USE charged that Stanford University Hospital "had interfered with, restrained and coerced and finally fired...Bridges in his exercise of the rights" guaranteed by the National Labor Relations Act.

Bridges, a Black hospital employee, was dismissed March 19 after a few weeks of employment at the hospital. His dismissal was cited as a reason for a demonstration early in April which resulted in some 28 arrests and a $100,000 damage at the hospital.

In letters to Jim Berk, president of United Stanford Employees, and to the Stanford hospital, NLRB Regional Director Roy O. Hoffman wrote:

"The investigation (conducted by NLRB) disclosed insufficient evidence to support the conclusion that Sam Bridges was discharged in violation of the act. Rather, it appears that he was terminated for reasons related to his work performance... It is concluded that further proceedings are not warranted. I am therefore refusing to issue complaint in this matter."

Hoffman said that under NLRB rules, USE may obtain a review of this action by filing an appeal with the NLRB general counsel in Washington.

The Stanford Daily Wednesday quoted Berk that USE plans to obtain a review of the NLRB action. The review would be requested on the grounds that the NLRB concentrated on the issue of the firing of Bridges to the exclusion of the lesser charges of interfering with, restraining, and coercing Bridges' union activities.

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Mailed May 19, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD--Stanford University Hospital will no longer routinely give out names of patients undergoing heart transplant operations.

Until recently the hospital released names when a heart transplant patient or his legal representative granted permission. It has done so routinely on nearly all operations performed at Stanford.

Dr. Eugene Dong, a member of the Stanford heart transplant team, Monday (May 17) explained the new policy: "In response to requests from patients and their families, and because of advances in heart transplantation, we no longer feel that our patients' names can be considered public information. They are entitled to as much privacy as other patients."

The hospital's most recent heart transplant--the 32nd at Stanford--was performed May 8 on a 46-year-old man. In keeping with the new policy, his name was not disclosed. The hospital has performed an average of one heart transplant operation a month since January.

There are now 12 surviving heart transplant patients in the Stanford program--two of them living more than two and a half years.

Stanford medical center spokesman Spyros Andreopoulos said the hospital would continue to report all the pertinent scientific developments in the field of heart transplantation in which there continues to be public interest. The hospital would also release statistics about the number of operations performed and survivors.

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Mailed May 18, 1971

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. John A.D. Cooper, president of the Association of American Medical Colleges, will be the keynote speaker at the annual medical alumni reunion of the Stanford University School of Medicine Saturday (May 22).

Dr. Cooper, a biochemist and noted medical educator, will discuss the academic medical center and its role in improving the health of the nation at 1:30 p.m. in the Cooper Courtyard of the Medical School.

He will also talk about AAMC's viewpoints on the Carnegie Commission Report on Higher Education. The Carnegie Report calls for extensive reform of medical and dental education, development of nine new health science centers, and establishment of 126 "area health education centers" across the nation. It also proposes to reduce the time required to educate doctors and dentists.

After Dr. Cooper's talk, there will be a panel discussion on the Carnegie Report, moderated by Nobel Prize winning geneticist Joshua Lederberg in Room M-106.

Among the panelists will be Dr. Sherman Mellinkoff, dean of the UCLA School of Medicine; Dr. Roy Cohn, Stanford professor of surgery; Dr. Howard B. Kirtland of San Diego, president of the Stanford Medical Alumni Association; Dr. Bernard W. Nelson, associate dean of student affairs at Stanford medical school; Rodney L. Levine, a third-year medical student; and Dr. Cooper.

Morning sessions, beginning at 9:45 will feature clinical presentations on advances in the care of premature infants, medical genetics and prenatal diagnosis.

There will also be a presentation about the new human biology program at Stanford and its relationship to the medical school by Dr. Norman Kretchmer, professor and head of the Division of Developmental Biology and Laboratories.

Reunion dinners are scheduled in the evening.

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Mailed May 17, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. David M. Kaplan, associate professor and head of the division of clinical social work at Stanford University School of Medicine, has received honorable mention by the American Psychiatric Association for outstanding research in psychiatry.

Dr. Kaplan received the honor for the book The Treatment of Families in Crisis, co-authored by Dr. Donald G. Langsley, professor and chairman of the department of psychiatry at the University of California, Davis.

The certificate of honorable mention was presented by the Hofheimer Prize Award Board of the APA at a recent meeting in Washington, D.C.

Drs. Langsley and Kaplan developed a program for family crisis treatment as an alternative to psychiatric hospitalization. Between 1964 and 1969, the project was carried out in Denver, Colorado, and later at UC, Davis.

The Hofheimer prize which honors outstanding research accomplishments in psychiatry this year went to Dr. Joseph J. Schildkraut of Harvard Medical School, and his associates for their work on the pathophysiology of affective disorders.

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Mailed, May 14, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

SPECIAL ANNOUNCEMENT
TO ALL HOSPITAL EMPLOYEES

The Medical Center News Bureau will serve as a rumor verification center for the Hospital effective immediately.

The purpose of this effort is to track down rumors throughout the Hospital and determine as much as possible if they are true or not.

Hospital employees concerned about a rumor should call Extensions 5311, 5312 or 5666 any time during the day. Calls will be logged on a data sheet and will be validated, confirmed or negated through local agencies, members of the Hospital administration, and minority representatives.

Rumor verification is being set up because of the tense situation that has prevailed in the Hospital over the incidents of the past few weeks. It is hoped that the new service will contribute to reducing tension and prevent incidents caused by false rumors.

Minority employees are urged to look for announcements of interest to them on the special bulletin board by the first floor escalator, and the News Bureau bulletin board on the ground floor adjacent to Room C003.

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The News Bureau

May 12, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

EDITORS: Photos available on request if not included with article

STANFORD--Dr. Peter D. Wood doesn't look or act the part of the athlete. The lean, balding, research associate at Stanford University School of Medicine wears glasses and distinctly has the appearance of the scholar. But looks can be deceiving. He is considered one of the finest senior distance runners in the country.

Wood, who has been running competitively since the age of six, was named the most outstanding senior runner in Northern California last year by a ballot of Amateur Athletic Union (AAU) runners. He is currently training for the annual Bay to Breakers race across San Francisco Sunday, May 23. Last year he finished 73rd in a field of over 1000 starters, and was first among senior (over 40) entrants.

This will be Wood's ninth straight Bay to Breakers, and to prepare for it the 41-year old lipid chemist from London will run between 50 and 60 miles per week. In the past, while training for the dozen marathon races he has entered, he has run up to 100 miles a week.

Why does he do it?

"Basically, I think I'm just a conceited old man," Wood smiles. "Every time some guy is killing himself to get to the tape, it's for conceit."

"There's some content of feeling it's good for you, but primarily it's the feeling of accomplishment, similar to climbing a mountain. When you climb a mountain, or run your fastest time, you feel terribly pleased."

Wood, a member of the U.S. senior track team which will travel to Europe next year to compete against English and German senior teams before and after the 1972 Olympic Games in Munich, has had a lot to be pleased about.

In 1964 he won the first annual 32-mile race from San Francisco to Stanford, and in 1968 he won a medal for his 35th place finish (out of 1000 starters) in the famous 26-mile Boston Marathon. For the past two years he has finished third and fourth in the Examiner All-American Indoor Games senior mile run at the Cow Palace in San Francisco.

"This is a great area to live in if you're a runner," says Wood. "If you reach 40 and you're moderately good, you have a chance to run in public meets before a big crowd. It's really quite exciting."

But Wood, by his own admission, would continue running even if there were no competition, no meets, and no crowds to cheer him on.

"I think if I were on a desert, with nobody there to impress at all, I'd still run very hard," he says. "There's a great deal of self-satisfaction involved. It's really a very personal thing."

Wood first felt the urge to compete in London in 1935, when a race for six year olds was held on the occasion of the Golden Jubilee of King George V and Queen Mary. -more-

"In those days it was important for every British boy to have his sport," he recalls. "Running wasn't popular then as it is now, but I managed to survive every urge to quit."

At 15, he was running a mile every day, despite warnings from a schoolmaster that "it is well known you will strain your heart."

Ironically, much of Wood's research is now concerned with reducing cholesterol and fat levels in the blood, which can often lead to heart disease. He often stresses the positive effects exercise can have.

"There are various connections between exercise and levels of cholesterol and fat in the blood," he says. "Exercise can help reduce these levels, and indirectly, may help lessen the chance of heart disease. Lower cholesterol and fat levels are associated with a lower incidence of heart disease."

He offers little hope to overweight joggers, however, when he says "Running is not really a very good way to lose weight rapidly. Actually, you'd have to run about 50 miles to lose a pound. What it can do pretty effectively is prevent weight-gain in middle age."

Apart from its physical values, Wood feels the emotional and psychological advantages of running are also important.

"Running is an escape from pressure, really," he says. "It's a substitute for your present problems, like worrying about the mortgage or something."

"Most of the time you're physically relaxed and emotionally strained, but in running, the reverse is true. You're physically strained, but emotionally and psychologically relaxed. It's so much work, you forget other things, most often the things that are bothering you."

With the 7.8 mile Bay to Breakers coming up soon, Wood has laid out a rugged training program for himself.

I'm going to try and train every day, if I can," he says. "Some days I'll run eight or nine miles in the Foothill College area. It's very pleasant up there and I'll take it slowly. Every other day I'll go to a track and run six miles at a fair pace."

A week prior to the race, he'll compete in a "warm-up" eight-mile run through Golden Gate Park.

This year's anticipated Bay to Breakers starting field of 1500 includes many women, partially due to Wood's successful campaign to secure "women's rights" in distance running events as president of Bay Area Road Runners Club in 1967. His strategy backfired on him recently, however, when he was beaten by a woman in a race at Walnut Creek.

"I was a little off color and she turned out to be a very good runner," Wood smiles. "You can't underestimate women. You've got to watch out for them."

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Mailed May 12, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Stanford University Hospital's blood bank has received formal accreditation by the American Association of Blood Banks.

In a letter to the Hospital the AABB said: "It has been determined that the level of technical and administrative performance within your blood bank meets or exceeds the standards established by this Association."

The Hospital's blood bank was opened in 1966, made possible by a $30,000 gift from the Hospital Auxiliary. The blood bank, one of only 43 in California and one of a few operated by a hospital, is equipped to draw blood from donors, type, process and store it in temperature-controlled refrigerators until it is needed for sick or injured patients.

In addition the Blood Bank now is able to divide whole blood into its various fractions for specific purposes. It is also testing each unit drawn for the viral hepatitis antigen to decrease the incidence of transfusion hepatitis.

Dr. Thomas A. Gonda, Hospital director, explained, "This certification is assurance to the p[illegible]c of the blood bank's continuing high standards."

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STANFORD--Dr. Judith G. Pool, a senior scientist at the Stanford University School of Medicine, has been elected co-president of the Association of Women in Science (AWS).

She shares the AWS presidency with Dr. Neena P. Schwartz, professor of neuroendocrinology at the University of Illinois College of Medicine.

The association was organized recently by a group of women registered at the meeting of the Federation of American Societies for Experimental Biology in Chicago.

The purpose of this new organization is "to promote equal opportunities for women to enter the professions and to achieve their career goals," Dr. Pool explained.

An immediate aim of the new group is to prepare a North American registry of women in science, Dr. Pool said. This registry will be available to professional women seeking employment, and to employers seeking to fill academic or industrial positions. The group will also work to enlarge membership of women in scientific and professional societies.

Dr. Pool, a physiologist, is noted for developing techniques for obtaining the blood clotting factor needed for treatment of hemophiliacs. She has also been active in the Professional Women of Stanford University Medical Center. The group recently outlined proposals for increasing the number of women in medicine and in tenured positions on the medical faculty.

Further information on the new organization, may be obtained from the AWS treasurer Dr. Gertrude Schloer, assistant professor of microbiology at Mt. Sinai School of Medicine, City University of New York.

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Mailed May 6, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Licensed vocational nurses at Stanford University Hospital will vote whether they wish to be represented by the California Licensed Vocational Nurses Association in collective bargaining in an election May 3, hospital director of personnel Kenneth Dunkle announced today.

The election, which will be supervised by the California State Conciliation Service, "will determine whether or not the organization will represent the Stanford LVN's in matters of wages, hours, and working conditions," Dunkle said. There are currently 51 LVN's at Stanford.

The election will be held in Room W001 by secret ballot from 6:30 to 7:30 a.m., and 1:30 to 3:30 p.m. on Monday, May 3. Notices will be posted throughout the Hospital for several days prior to the election.

The vote was scheduled after the CLVNA, claiming support from a majority of the LVN's at Stanford, wrote the Hospital asking for an election. Several Hospital nurses had contacted the organization and expressed interest in obtaining representation.

The last election of this type at Stanford Hospital was held March 30, 1967, when Hospital and Institutional Workers Union, Local 250, unsuccessfully attempted to organize all nonprofessional hospital workers. -30-

FOR INFORMATION CONTACT: Spyros Andreopoulos, 321-5310

STANFORD -

Stanford University Hospital officials Tuesday, April 27, said they are prepared to resume meetings with "any group of employees on any Hospital-related issue."

Moreover, in such meetings hospital employees may have advisers present "within a framework of orderly discussions."

In a statement issued Tuesday night, Dr. Thomas A. Gonda, hospital director, said the hospital will "negotiate Hospital-related issues only with groups that can demonstrate they actually represent the employees who would be affected by agreements reached in the negotiations."

Dr. Gonda stated that the hospital does not recognize the "Stanford Medical Center Employees Coalition" as an appropriate bargaining unit nor their representatives as negotiators concerning terms and conditions of employment of hospital workers.

He added: "The Hospital administration looks forward to the establishment of a representative employee council with which it can consult on issues affecting the hospital employees.

"Only the widespread participation of all employees can ensure successful implementation of programs, including such vital programs as 'Affirmative Action.' "

-30- 4/28/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The Commonwealth Fund, a philanthropic foundation based in New York, has given a $505,686 grant to the Stanford University School of Medicine to support a University-wide program of research and education on the problems of human aggression and violence.

Announcement of the grant was made today (June 29) by Dr. John L. Wilson, acting dean of the School of Medicine.

The new program will be organized under the auspices of the Department of Psychiatry. It will be known as the Laboratory of Stress and Conflict. Dr. David A. Hamburg, professor and chairman of the Department of Psychiatry, will direct the program.

In a letter to Stanford concerning the grant, Quigg Newton, president of the Commonwealth Fund, wrote: "The Fund believes it is both appropriate and imperative for medical schools to concern themselves with the consequences to our society and civilization of the alarming rise in dominant, assertive, and violent behavior.

"Because, in its broadest sense medical learning is addressed to understanding the biological, psychological and sociological determinants of human functioning, medical schools are in a favorable position to take the initiative."

Newton added that such fields as education, law and government could also assist medicine "to forge a coherent, interdisciplinary attack on the underlying causes of aggression and violence and how they may be dealt with."

Hamburg, architect of the Stanford effort, said he hopes the program will be well developed in the next three years.

He envisions involvement of specialists from the biological, psychological, and social sciences, tackling research questions both at the basic science and clinical levels.

"Moreover, we hope to set up a curriculum on problems of violence and aggression that would provide a working model for other universities--both at the undergraduate level and in medical education," Hamburg said.

Space now occupied by the adult outpatient psychiatric clinics at the Medical Center will be vacated this summer when the clinics move to a new building. This space will be remodeled to house the biochemical and behavioral laboratories for the new program.

Hamburg also said he is developing a program of research and teaching in collaboration with Jan van Lawick-Goodall, a scientist noted for work on chimpanzee aggressive behavior at the Gombe Stream National Park in Tanzania since 1960.

In 1968, Drs. Goodall and Hamburg began planning joint research on aggressive behavior in nonhuman primates, both in Africa and at Stanford. Earlier this year Dr. Goodall served as a visiting professor at Stanford, and she is returning this fall.

-more-

Hamburg said animal studies are essential to obtain an evolutionary perspective "in which we perhaps can dimly perceive how man came to be the way he is, and search for subtle legacies of his ancient past."

He noted that "evidence is accumulating that begins to illuminate interactions of genes, hormones, and social environment in the shaping of aggressive behavior."

Other areas of research will include:

- Development of aggressive behavior in the early stages of life. This work will involve both animal and human studies of the role of early social environment for later social behavior.

- Problems of crowding, contact between strangers, and the psychobiology of modern living. This research will be concerned with relationships of population density to body chemistry and behavior.

- Stress and conflict in early adolescence. Some of the investigations will deal with the relationship of hormonal changes observed in puberty to behavior.

Hamburg commented that analyzing such problems scientifically holds much promise for future understanding of violent behavior. At present, the subject of aggression attracts only a modest amount of attention in the scientific community.

He said in research with pre-school children, "a remarkable set of findings has recently highlighted the susceptibility of children to learning aggressive patterns by viewing models who act aggressively."

The Stanford psychiatrist also commented that "biological predispositions to learning aggressive patterns and exposure to specific social learning situations may interact to produce great individual differences in aggressiveness during later life."

He said in light of present concerns about environmental problems, there is a remarkable lack of psychobiological research on the effects of crowding in man.

Concerning the studies of the adolescent, Hamburg said: "The prevalence of profoundly and pervasively hostile attitudes, the extraordinary spread of drugs, and the upsurge of violence in this age group sharply highlight the need for deeper understanding of adolescence."

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Mailed June 29, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- The School of Medical Technology at Stanford University Hospital graduated its fifth class of medical technologists Thursday evening, June 24.

A full year of training in the clinical laboratories and the classroom has readied the class of 12 for licensure by the State of California, and for certification by the Registry of the Medical Technologists of the American Society of Clinical Pathologists (ASCP).

The new technologists will work in laboratories in hospitals, clinics and medical research firms. Their specialized training includes instruction in 10 fields, with emphasis on biochemistry, hematology and microbiology. Miss Lisa von der Muehll is teaching supervisor.

Dr. Paul L. Wolf, director of the school, announced that the school has begun a minority recruitment program. The 12-member class which enters July 1 will include two minority students.

"This is a definite advance in our program," Wolf said. "We've never had a Latin-American or Black in our school before. Next year we hope to increase this number."

All entrants are required to have a bachelor's degree. In the past, most have majored in biology, chemistry, and microbiology.

The 1971 graduates are:

Miss Millie Ayres, a 1970 graduate of the University of California at Davis, daughter of Mrs. Helen Ayres, 4230 Silverado Trail, Napa, California.

Miss Julie Ann Foerster, a 1970 graduate of Stanford University, daughter of Dr. and Mrs. James Foerster, 3333 - 6th St., Wausau, Wisconsin.

Mrs. Carolyn Lee Hedrick, a 1964 graduate of the University of California at Berkeley, wife of Warren Hedrick, daughter of Mrs. Ruth Carmick, 440 Casita Way, Los Altos, California.

Miss Gerry Lynn Huffman, a 1970 graduate of University of California at Davis, daughter of Mr. and Mrs. Oscar Huffman, Route 3, Box 213, Orland, California.

Miss Michele Jungery, a 1970 graduate of University of Colorado, daughter of Dr. and Mrs. Wolf Jungery, 4704 Northwest 12th St., Oklahoma City, Oklahoma.

Miss Peggy Jane Ludwick, a 1970 graduate of Washington State University, daughter of Dr. and Mrs. Arthur Ludwick, 841 Red Apple Road, Wenatchee, Washington.

Mrs. Katie Parnell, a 1970 graduate of Utah State, wife of Gary Parnell, daughter of Mr. and Mrs. Kenneth Farrer, 1685 Saddle Hill, Logan, Utah.

Miss Alice Faye Ravi, a 1970 graduate of Michigan State University, daughter of Mr. and Mrs. William Ravi, 1710 Moorhouse, Ferndale, Michigan.

Miss Janice Eleanor Vierra, a 1970 graduate of California State College at Hayward, daughter of Mrs. Eugene Vierra, 20552 Forest Avenue, Castro Valley, California.

Miss Carol Ann Westlin, a 1970 graduate of Washington State University, daughter of Mr. and Mrs. Eric Westlin, 6551 23rd NE, Seattle, Washington.

Miss Janice Gail Young, a 1969 graduate of Beaver College (Glenside, Pa.), daughter of Dr. and Mrs. John Young, 3709 Cedar Drive, Baltimore, Maryland.

Miss Susie Chu-Hua Yu, a 1970 graduate of the University of California at Los Angeles, daughter of Mr. and Mrs. Hui-Sheng Yu, 1163 Sanborn Avenue, Los Angeles, California. ### Mailed 6/28/71.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

It is an odd feeling for Verne Freeman who builds freeways, coaches the athletic teams of youth groups in Palo Alto and has seven children, to be in the hospital requiring the clotting factor of some 32 units of blood daily. He has already used up over 1,000 such units.

Verne is a hemophiliac, but usually he "forgets about it" since he does not require preventive treatement. His bleeding only starts when there has been an accident or an operation, and he has just had both. In fact he has had three operations to correct a severe knee injury that he got in an accident playing baseball.

He needs donations to make up the enormous quantity of blood that he still requires, but the point that he wants to emphasize is that no one really thinks about needing or giving blood until someone is in the hospital and must have it.

He hopes his case might be an example of the fact that blood should be available on a continuing basis for all of those who need it. "The appeal is really embarrassing--I've got so many friends who've helped so much already."

"Yet, the need for blood for others is always with us," he says.

Well known in the area, Verne is president of Freeman-Sondgroth Construction Company, and is active in the athletic programs at Stanford. He is a member of the Stanford Athletic Board, which helps advise on the direction of athletics at Stanford and is on the Buck Club Board, which is the fund raising arm of the athletic department at Stanford.

He is also president of Community Blood Reserve, a blood assurance program for families which provides whatever amount of blood needed in times of illness, accident of surgery.

For a $1 enrollment fee and an agreement for one family member to donate on call no more than one pint of blood once a year to the Stanford University Hospital Blood Bank, members in a family are covered if they have a need for blood, whether at Stanford or any other hospital. The few limitations under this coverage include hemophiliacs.

-more-

222--Verne Freeman

(The coverage does not pay charges associated with giving a transfusion, or crossmatching tests, which most health insurance plans cover, but works somewhat like a bank account--the blood given is insurance that it will be there for members and their families when it is needed, and at the same time will provide the community with fresh blood at all times.)

The CBR finance committee has recently approved a donation of $18,500 to Stanford University Hospital. The funds will help acquire new instrumentation and furniture for the blood donor and component facility to be built at the Children's Hospital at Stanford, which has become a major treatment center in the area for hemophiliacs. These monies will be available in the near future.

But Verne himself now has to replace around 400 units of whole blood to make up for all the blood that he is getting.

Dr. Judith Pool, a specialist in hemophilia at Stanford, who developed a simple method of extracting the substance needed by hemophiliacs--cyroprecipitate (cyro)--noted that the other blood components go to patients with different needs. "So any donation helps three other people."

"Blood giving should become a way of life," she says. "If the many families in this area gave blood on a continuing basis, there would always be enough."

For more information about the program, call the Stanford University Hospital 321-1200, extension 5979. It is sponsored by the Junior League of Palo Alto.

Blood donations can also be made, by appointment, with Stanford Blood Bank, Red Cross in San Jose, Peninsula Blood Bank, Burlingame, and Irwin Memorial Blood Bank in San Francisco.

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Mailed, June 28, 1971

STANFORD UNIVERSITY NEWS SERVICE

STANFORD, CALIFORNIA
ZIP 94305.
(A/C 415) 321-2300, Ext. 2558

Following is the text of a statement issued Thursday, June 24, by Robert Nelson, Stanford University director of personnel and employee relations, concerning the dismissal of five University employees:

In discharging five employees for participation in the occupation of the administrative offices of the Stanford Hospital on April 9, 1971, the University was not acting as a law enforcement agency but as an employer making judgments about conduct which it deemed unacceptable on the part of the employees. This distinction is central to any attempt to understand the issues involved. To put the matter even more sharply, the University has not charged any of these employees with committing a crime, nor has it alleged that the conduct which serves as the basis for dismissal constitutes a crime. The five persons involved have not been dismissed because of any allegations that any of them committed trespass, assaulted a police officer, or engaged in any other criminal act. Nor is the asserted political content of their acts at issue. They have been dismissed simply and solely for participating in the occupation of the administrative offices of the Stanford University Hospital on April 9, 1971, and which in the University's judgment, makes these persons unsuitable for further employment in the University.

It is important to understand this point because it is easy to be misled into thinking that this employment action is simply another statement of criminal charges already pending against these individuals. It is not. The two overlap only in the sense that the same set of events produced conduct which the State believes chargeable under criminal statues, and conduct which demonstrated unsuitability for continued employment at Stanford. These were separate actions based on independent inquiries taken in discharge of different responsibilities.

I have made this point at some length in order to shed light on the demand that the University delay its proceedings until criminal charges are disposed of in order that the former not "jeopardize" an individual's defense against the latter. The University's unwillingness to delay action on employees whose conduct it deems unacceptable until the criminal courts have completed action on a different set of charges is consistent with well established practice in a variety of circumstances in the law. Far from being an unusual act, it follows the general rule in cases where cirminal and civil actions result from a single set of events. To argue otherwise is to say that no private party can remedy a wrong against it in a timely manner if the wrong is alleged by the State to involve criminal conduct or, indeed, if the individual who committed the act believes that answering for it might make him liable to criminal charges. That is an untenable position.

Each of these individuals was offered the opportunity to respond to the evidence, and provide any additional information that would bear on this case.

The five persons involved have been advised in writing that they are entitled to a hearing if they believe that they have been treated improperly or unfairly. In that hearing they may challenge the evidence on which the action against them is based, as well as the interpretation of University policy on which it rests. That is their proper course of action if they believe that they have been unfairly treated. —30—

Following is a statement from Provost William F. Miller concerning his meeting with Medical School faculty members, Thursday, June 24:

I met today with Profs. Herzenberg, Holman, McDevitt, Rosenberg, and Goldstein. We spoke entirely about the procedural aspects of the cases of the dismissals of the five staff employees for their participation in the hospital disruption of April 9.

We did not talk about the merits of the cases because I shall very likely be involved in a review of some of the cases at a later date. I have determined that the procedures employed were consistent with our policy, and that they are adequate for these cases.

All department chairmen were consulted and advised before actions were taken.

—30—

6/24/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

City Desks: This side bar to main story describes one patient care program at the Palo Alto VA Hospital, and how it could benefit community patients.

STANFORD -- Under a federal law, passed two years ago, veterans' hospitals can now share their facilities with medical schools for the benefit of community patients on a space-available basis.

Here is how the new law works for one program at the Palo Alto Veterans Administration Hospital designed for stroke victims.

For such patients the referring agency or doctor only needs to contact the physician-in-charge of the stroke program at the VA Hospital.

The patient's eligibility is determined by the business office of Stanford University Hospital, which acts as fiscal intermediary. The VA Hospital presently does not bill directly.

After securing the necessary information about the patient's insurance (private or Medi -Cal), the patient's family is given an opportunity to visit the hospital in advance to inspect the facilities.

The tour for the stroke program is conducted personally by a full-time faculty member in the department of neurology (it might be cardiology or surgery for another type of patient), and questions are answered.

The family is introduced to the nurses who will care for the patient, and if the patient is a woman, she is shown one of the single rooms, along with the private bath facilities.

Admission to the coordinated-care-stroke program means that, in addition to the house officer primarily responsible for the patient's day-to-day care, a team of other specialists are called in. They are all on the full-time staff, and most are also faculty members of the Stanford Medical School.

In the initial phase of the program, a neurologist, a psychiatrist, a public health nurse, and social worker see the patient within the first few days.

Contacts are established with the referring doctor and the family, no matter where they may be. The diagnostic studies go ahead under the supervision of the full-time faculty neurologist who is responsible for the program, and consultations are obtained at no extra cost to the patient, the state, or the insurance company from other specialists.

-more-

The patient's progress is closely followed daily by the nurse coordinator, and the entire team meets every other week to plan for the next phases of care.

In the second phase, when the patient is no longer bed-bound, he and the family are involved in planning for follow-up rehabilitation efforts and posthospital care.

At the same time, if psychological problems have appeared, a full-time psychologist or psychiatrist makes his service available (daily if needed) to the patient and his family.

Meanwhile, if the family is willing, a home visit is made by the public health nurse on the team, and provisions are made for any modifications or adaptive equipment that will permit the patient to go home.

If the VA public health nurse cannot travel to the patient's home community, the county public health nurse is asked to make the home visit and make recommendations to the VA hospital team.

Similar arrangements are made for speech therapy and other training after the patient leaves the hospital.

Before discharge, the patient's doctor is contacted by phone, and the findings and treatment are discussed. The ward nurse is also instructed to have a question and answer session for each patient and his family prior to dismissal.

"In this way," says Dr. William W. Hofmann, chief of the Palo Alto VA Hospital neurology service, "the VA team interacts with many facets of the community.

"The patient is given an opportunity to see many specialists about his problem without incurring large debts for doctor fees while in the acute inpatient services of his illness, and the patient is fully informed about the practical aspects of his condition."

"Exactly the same coordinated care is given to all veteran patients," Hofmann explains, "and we feel that the approach has considerably reduced the feeling of depersonalization many patients experience in a busy, large institution."

Most important, adds Hofmann, "for anything from intensive care to a 16-bed ward management the cost to the state or commercial carrier has been from one-third to one-half what it would have been elsewhere."

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Mailed June 24, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Science Writers: Photos available upon request.

STANFORD -- A Stanford University neurology professor says that hundreds of beds in veterans hospitals are empty in spite of a federal law encouraging public use of VA hospitals.

Among them is the Palo Alto Veterans Administration Hospital where "one can always find several hundred empty beds not required by veterans," said Dr. William W. Hofmann, chief of neurology there.

"The VA medical system ceased to be for veterans only, when public law 89-785 was passed," said Hofmann.

"For over two years now the means have been at hand to utilize VA beds for specific medical, surgical and rehabilitative programs for community patients," he said.

Hofmann said Congress correctly decided that the largest federal medical system in the world could well share some of its facilities with communities and medical schools. Several Stanford medical school departments now take advantage of this decision through "sharing" contracts which permit admission of community patients to the VA.

Yet few doctors have seen fit to refer patients to the VA, Hofmann said. And no effort has so far been made by local comprehensive health planning agencies to incorporate this huge tax-supported system into regional or community health planning.

"If the Congress has made it possible for the VA system to interact with communities," he continued, "how can the counties and cities overlook the hundreds of available beds right under their noses?"

Hofmann said an evaluation of university-affiliated VA hospitals as part of the total community's resources is long overdue.

"It is inappropriate," he commented, "to ask taxpayers to pay more in support of a sagging, overburdened local health care system when they have not been presented with an opportunity to use a first class operation already paid for with federal taxes."

Hofmann presented his views in an article in Stanford M.D., the magazine of the Stanford Medical Alumni Association, scheduled for publication next week.

He acknowledged there is public resistance to the VA system, "largely colored by inflammatory articles in recent popular magazines."

But if a study group elected to visit one of the university-affiliated VA hospitals, it would form a different opinion, Hofmann said.

Such VA hospitals, he argued, are staffed by physicians whose credentials entitle them to teach medical students and resident doctors, and to hold faculty positions at a university.

They include every major and minor specialty (except pediatrics and obstetrics), and the equipment is the best physicians can procure--namely, the equivalent of that in any other major hospital, he said.

-more-

In addition, paramedical personnel unequalled in any private hospital is available, and patient-oriented and basic research are in progress.

Although a "sharing" arrangement with an approved VA hospital might be the ideal approach to treat community patients who may be waiting unnecessarily for care, doctors have tended to express contempt for the VA medical system, Hofmann said.

Veterans' organizations "have also been actively concerned and hostile" to the sharing plan, according to the Stanford neurologist.

He said veterans insist on one hand, "for the best care for our boys," and on the other, that VA hospitals become nursing homes admitting every veteran who applies, whether he needs medical care or not.

"No custodial VA facility is going to attract the highest quality trainees and staff," Hofmann said. "The medical needs of the veteran patient are never going to be fully met in a nursing home atmosphere, which will be the most expensive in the world."

Hofmann stressed taxpayers can get an even break only if the VA system is put to its fullest use, with active patient turnover and strong interaction with the service needs of the entire community.

"Only then the veteran patient can get the good care to which he is entitled," he said.

At present several services headed by Stanford faculty at Palo Alto VA Hospital have sharing agreements to admit community patients referred by local doctors.

Community patients may be admitted if they need a service not presently available in their community, and when the VA hospital has such a service not needed by veteran patients. The patient must also be supported by his county or some form of health insurance.

Hofmann pointed out that the VA charges about $45 a day--roughly half the minimum basic cost of a bed in a local community hospital. This amount covers all routine procedures, and as with veteran patients, no doctor's bill is sent.

"If a community had no free beds, a tremendous saving to local taxpayers could be realized just by using VA facilities in which there would be no physician's charges," he said.

Hofmann stressed that VA physicians who run training programs and are part of the academic faculty are no longer willing to let their beds fill up with custodial patients, and hang a "no vacancy" sign.

"Instead, we are asking for more work and involvement in the community as a whole," he said. We challenge the health planners to provide us with a flow of patients who may be waiting unnecessarily for care and advice.

"If we fail in this, it will only be because we haven't been given a chance."

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Mailed June 24, 1971.

Under a Stanford medical school agreement with the VA, private patients may now be admitted to Palo Alto VA facilities on a space-available basis. Here, one of three private rooms in the 140-bed neurology building stands empty because of a general misconception that VA hospitals are for veterans only, the author says. The room is equipped for intensive neurologic care, with a $4,000 respirator donated by Lockheed. Stanford University Medical Center June 24, 1971

This Hubbard Tank and associated equipment worth $14,000 is used for treatment of paraplegic patients only twice a month. Many community patients could benefit from using it under a new public law which allows VA hospitals to share their facilities with medical schools when they are not used by veterans. Treatment in VA hospitals would cut the cost to the patient by one-third or one-half, the author says.
Stanford University Medical Center June 24, 1971

One of a 16-bed ward room is now closed for lack of patients.
June 24, 1971

Physical therapy gymnasium could benefit more neurological community patients daily than it now does. Author blames underutilization of VA facilities to local comprehensive health planning agencies. He says they have failed to take into account VA's potential as a health care provider in their local planning. Stanford University Medical Center 6/24/71

STANFORD UNIVERSITY NEWS SERVICE

STANFORD, CALIFORNIA
ZIP 94305.
(A/C 415) 321-2300, Ext. 2558

FOR INFORMATION CONTACT: Gary Cavalli, 5311
FOR IMMEDIATE RELEASE
STANFORD –

Several faculty members at Stanford University met with Provost William Miller Thursday, June 24, to ask for the reinstatement of five employees fired earlier this week for allegedly taking part in a sit-in at the University Hospital April 9.

Following the one-hour meeting with Miller, representatives of the faculty group held a press conference at noon, and threatened to take legal action if the employees are not reinstated.

In a statement released to the press, professor of genetics Leonard A. Herzenberg, professor of pharmacology Avram Goldstein, and Dr. Halsted Holman, chairman of the Department of Medicine, said:

"We urge the immediate reinstatement of these employees at least until after their court trials, [when they could] properly respond to University charges without ceding First and Fifth Amendment rights."

Herzenberg said that Provost Miller has promised to answer this request by 5:00 p.m. Friday.

At the press conference, Goldstein and Herzenberg both expressed concern that faculty members carrying out valuable research would have their work jeopardized by the sudden firing of employees for activities "not connected with their work performance."

"We are prepared to take legal action against the University to prevent this," Goldstein said.

"The rights of faculty members—particularly principal investigators—must be considered here," he said. "If my employee can suddenly be fired out from under me, this can be an irreperable loss."

Goldstein stressed that researchers feel a responsibility to funding agencies, and that the University is "disrupting" the close relationship between faculty members and the organizations supporting their research.

The five fired employees, dismissed June 22 for "unacceptable behavior," are Anthony Chatmon, clinic employee at Stanford; John Dolly, genetics lab assistant; library worker John Keilch; biology research assistant Mrs. Barbara Mooney; and Law School secretary Devera Satisky.

Dolly works under Herzenberg in researching the genetics of mammalian cells.

"The firing of an employee involved in research. . .without the consultation of the principal investigator is unacceptable," said Herzenberg, who claimed he was informed of Dolly's dismissal with only 27 hours notice.

"My research has been jeopardized," he went on. "The civil authority is adequate redress for the University. . .I don't think an institution should be able to fire an employee if there is adequate civil authority involved in the case."

Holman pointed out that University students charged with misdemeanors because of their alleged involvement in the sit-in will not have a University hearing until after their court cases, while the five fired employees were not granted this extension. They were offered a hearing with Personnel Director Robert M. Nelson before their firing, but turned it down for fear of jeopardizing their court cases, Holman said.

"There is a discrepancy here," he said. "The employees are put in the position of either jeopardizing their position in court, or losing their jobs at the University."

Other faculty members who have expressed opposition to the firings include Dr. Leon Rosenberg, associate professor of medical microbiology; Dr. Hugh O. McDevitt, associate professor of medicine; Dr. Luigi Luzzatti, associate professor of pediatrics; and W. Bliss Carnoch an associate professor of English.

"If people who commit such acts are to be fired in this way by the University," Rosenberg said, "it suggests that we'll be forced to hire people according to criteria which are irrelevant, such as political activities. . . . This is the kind of climate that existed in the McCarthy period."

Keilch, who appeared at the press conference with Dolly, Mooney and Satisky, indicated that the five employees had been planning to request a grievance procedure, but now feel that "we don't know if there'll be any point to it."

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6/24/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing or Spyros Andreopoulos 415: 321-5310

STANFORD -- When a rural town suddenly finds itself without a doctor--and no new doctor seems willing to take his place--what can the town do?

Most such communities find they can do very little, but that is not true for Livingston, Calif.

In a short time, the little town (pop. 3,000) has converted itself from a community in grave need into a model that may hold some meaning for all other communities lacking health care.

Livingston now operates a community-owned, self-supporting and locally-directed health center, with consulting specialists.

The center, known as the Livingston Community Health Services, is backed up by the Stanford University School of Medicine.

According to Dr. Everett Johnson, the center's medical director, health services are now available in Livingston that are usually enjoyed by communities of 50,000.

"The organization and style of operation are the innovations," says Dr. Count Gibson, Stanford professor of community health and preventive medicine. "The whole set-up is a far cry from a bureaucracy, or distant imposed restrictions.

"The local board sets up the program, identifies its priorities and pinpoints the available resources--whether through a university or elsewhere--to help bring its own plans about."

Dr. Gibson adds another dimension to the picture of the Stanford-Livingston cooperation. "It is the kind of partnership (with a community) that university medical centers have not thought of achieving in the past," he says.

Among critical problems Livingston has tackled, in addition to the short supply of rural physicians, are the spiralling cost of health care, the scarcity of government funds, and the frequent inability or unwillingness of medical schools to exercise new leadership and direction.

Livingston's health care enterprise began when the town's only doctor announced he would leave by fall, 1970. For Stanford, the tie to Livingston was made when a group of medical students went there in the summer of 1969 to conduct a clinic for migrant workers.

This effort has now evolved into a full-fledged partnership with Livingston offering health services for everybody. Stanford's department of community and preventive medicine sponsors the project.

But the community-run aspect of the health center and the community-set goals are both a major reason for the success and a continuing part of the story, Gibson comments.

Community diversity has also to be reckoned with. In Livingston, one of the string of little towns off Route 99 in San Joaquin Valley, live Mexican-Americans, Portuguese-Americans, Japanese-Americans, Filipinos, descendants of pioneer settlers and a large Mennonite community--all native Californians and many native to Livingston itself.

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Four basic principles guide the health center:

It is community controlled and through a local governing board, consumers decide what programs they want and what they can afford.

Reflecting this is the involvement of the Mennonite community. Their religion prevents them from serving on any governing body, but they have been staunch supporters of the health center through work on committees. Also, the Mennonites have long taken a naturalistic approach to medicine and prefer to have children born without intensive use of anesthetics or medication.

Currently, prenatal health classes go on at the center, open to expectant mothers and fathers, led by a woman with nursing background from the Mennonite group. Regular obstetrical care and techniques of natural childbirth are taught.

The health center is self-supporting.

Livingston residents felt that dependence on sources beyond their community might lead to a loss of local responsibility. They believed also that uncertainty of funding or policy might develop if the community looked for outside help. Consequently, no federal funds were sought.

While there is agreement that there are sufficient local dollars to get the center operating, it could not go it entirely alone, Gibson points out. In fact, it will be operating at about the top of its capacity during the coming year.

Dr. Gibson also notes that center finances are compatible with current proposals before Congress regarding national health insurance. In other words, if some sort of national health program (with adequate safeguards to insure that the money would be spent wisely) went into effect, it would serve as a much needed component to Livingston's own capacity to give its citizens adequate health protection.

The health center serves a geographically defined population.

"Livingston is an ideal size for such a center," Dr. Gibson observes. "But to insure that the people who control the center will continue to be served by it, it should not expand much more."

Otherwise, Dr. Gibson fears all gains might well be lost through bigness and depersonalization.

One of the corollary interests of Stanford in Livingston is to determine if the health care model established there is repeatable. The Department of Health, Education and Welfare has given Stanford a small grant to study Livingston's approach.

The center is operated to serve the entire community.

According to a center document, "This reflects the community's desire to avoid the traditional pattern of one quality of care for the rich, another for the poor."

The center is organized as a nonprofit corporation guided by a board representing a broad spectrum of the community. The 19 organizations in Livingston, including the ethnic groups, United Farm Workers, Chamber of Commerce, high school student body, and senior citizens club, each have elected a representative. There are also 10 "at large" positions to insure that people living in the outlying districts participate.

The board forms working committees to deal concretely with specific issues, such as fee schedules, grievances and finances. Community members may also be invited to serve on these working committees, which are each chaired by a board member.

Currently, according to Fred Kishi, board chairman, more than 100 Livingston residents are directly involved.

To help the center get started, the California Regional Medical Programs gave a small planning grant. The local elected board set out on a drive to raise an additional sum to buy the offices of Livingston's retired physician, which already constituted a small working clinic. With extensive community involvement, the money was raised.

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Last September, Dr. Johnson, an internist from the area, was persuaded to come on as health center director. As a further enticement, he was given a Stanford medical school teaching appointment.

Dr. Johnson points out he made a real sacrifice as far as income was concerned. His entire salary is paid by the center. But both he and his wife think that if American medicine is going to continue to advance, doctors themselves must take the initiative in providing a new approach to health care for the communities that need it.

He believes that because he is an internist, the diagnostic problems can be handled faster, which in itself reduces patient costs and perhaps shortens the time of illness.

Assistants for Dr. Johnson have also been found, and through them, the health center hopes to show that a doctor's efficiency can be increased.

As part of their medical school education, Stanford students have an opportunity to learn what all-around medical practice is really like by coming to Livingston. In addition, Stanford resident doctors rotate there throughout the year as part of their training.

The staff at Livingston also includes a full-time nurse practitioner. She is a recent graduate of a pilot Stanford program which prepares registered nurses to aid doctors in providing care for the entire family. In essence, the program gives nurses additional knowledge that will let them act as "physician-extenders."

The nurses are trained to identify what they can appropriately handle and when the doctor must be reached immediately. (Is it appendicitis, or a bad case of flu?) In any case, the nurse can go ahead with the preliminary findings, order the lab work done, describe the urgency to the doctor, and deal with the problem at hand.

Mrs. Lois Sykes, Livingston's nurse practitioner, says at first she was afraid she would not be accepted by the patients, but an associate comments: "Patients are now coming in asking for Lois and are disappointed if she does not see them."

For the second year, Stanford fifth-year nursing students will also be at the health center this summer. The aim is to help Mrs. Sykes and the other nurses, and also to get them involved as community aides in plans that are projected for migrant workers.

During the coming months, the health center is expected to get a full-time pediatrician. His arrival is eagerly awaited by the Livingston community, as there has been no pediatrician at all in a hundred-mile radius.

New plans under way for the center include an outreach education program to prevent injuries or accidents, and a program to give farm workers immediate treatment and education in the proper techniques of handling toxic sprays. Other efforts include family planning information, home nursing services, treatment of the chronically ill, and increased emphasis on the health of school children, as well as better maternity and infant care.

Are there any lessons to be learned from Livingston?

"The Livingston approach is community enterprise at its best," Dr. Gibson comments. "It offers a competitive challenge for doctors and hospitals to do better in their own delivery of health care, or they will be equalled by the strength of the community-oriented centers which are coming on strong."

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Mailed June 23, 1971.

Editors: Photos available on request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford University Hospital Monday (June 21) announced it will admit podiatrists to its medical staff.

The move to grant these health professionals staff privileges was recommended by the Hospital's medical board, and has been approved by the Hospital directors.

Until recently Stanford Hospital bylaws had no provision for including podiatrists on the staff.

"The change reflects the new role podiatry is assuming as a needed dimension in medical care," said Dr. Thomas A. Gonda, hospital director.

Presently, the department of dermatology has a podiatrist on its staff who teaches medical students, residents, and participates in patient care, Dr. Gonda said.

The department of community and preventive medicine also sees podiatrists as an essential part of the comprehensive health care delivery system.

A podiatrist is a non-M.D. who specializes in diseases of the feet. Podiatrists are highly trained professionals who attend four-year postgraduate colleges, and must meet minimum undergraduate requirements identical to those for medical school. Recently, a rapidly growing number of podiatry graduates have begun to serve formal internships and even residencies.

There are nearly 8,000 podiatrists in the United States, and five postgraduate podiatry colleges graduating about 250 foot specialists a year. One of the colleges is located in San Francisco.

Because podiatrists do not hold M.D. degrees, but make independent judgments in diagnosis and treatment, their proper role in health care had been controversial.

In recent years, however, changing attitudes about health care organization have allowed podiatry to win increasing acceptance as a division of the healing arts.

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Mailed June 21, 1971.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD--An increase in daily room rates beginning July 1 was announced today by Stanford University Hospital.

For area residents the daily room rates will now be $64.50 for medical and surgical wards. Semi-private rooms will be $70.50 and private rooms $79.50.

Obstetrical ward rooms will now be $66 daily, with nursery rooms at $46. Coronary care units will be $184 daily.

This represents an overall increase of about four dollars. A year ago there was a flat $5.50 increase in daily rates, and the year before there had to be a $7.50 increase.

"The continuing rise in the cost of wages for personnel and materials has given us no option except to make this new small increase in our operating revenues," said Dr. Thomas A. Gonda, director of the hospital.

"However, we are doing everything we can to slow the hospital cost spiral," Gonda continued. "The cost of health care is as much concern to the hospital administrators throughout the nation as it is to the patient. At Stanford a number of administrative and operating innovations are already in effect which help us keep costs in control as best we can without sacrificing quality care."

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Mailed, June 21, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- "The Palo Alto area is one of the biggest middle class junkie scenes in the United States today, but doctors here are hardly aware of the problem or refuse to deal with it," the founder and medical director of the Haight-Ashbury Free Medical Clinic said Friday (June 18).

Dr. David E. Smith charged that doctors in general are among the least informed about the illegal drug traffic that is going on, and treatment of addicts is rarely taken into consideration as part of the health care delivery system.

Yet 500,000 addicts are now seen and treated in the drug clinics springing up across the country, he said.

Dr. Smith is also assistant clinical professor of toxicology at the University of California, San Francisco. He spoke at the Annual Faber Day Symposium at Children's Hospital at Stanford.

"Heroin is the in-group drug to take in 1971," he said. "Heroin and its treatment should be one of the hottest items in the country right now--and an enlightened approach to treating its users is crucial."

"The new-style junkies are from middle class families, and these families are devastated when they find out the truth about their children. They need as much help as do the addicts," Smith said.

"There must be an interaction between counseling and education from the earliest years on. It must be a question of attitudes from the very beginning. It is too late to tell a teenager not to use dope, when he has grown up seeing the liquor and cigarettes used by his parents. Intensification of a human ecology approach in the early years as against a moral or wrong-doing attitude later on is the only way that shows promise of success," Smith continued.

"However, no drug education or control program will be totally effective until the Vietnam war is ended," Smith said. "A whole new generation of addicts has been created by this war, and their number exceeds the casualties.

"We have an obligation to treat these addicts as disabled veterans, not as criminals or those with a history of drug abuse or emotional ills before they went to war.

"The American public would be duped if it believes these current Pentagon charges, and supported the proposal to set up detention camps for veteran addicts who are returning to this country. We must resist a political whitewash," Smith urged. ###

Mailed June 21, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A broadened work-study program has been launched at Stanford University Hospital to qualify and train interested employees for job advancement within the Hospital.

The program was announced in the Medical Center's monthly newsletter, which was distributed to employees Monday, June 21.

The program offers classroom education for employees who desire instruction in English or wish to pass the California General Educational Development test (equivalent to a high school diploma), plus on-the-job training to prepare employees for specific jobs within the Hospital.

"Basically, this is a reorganization and broadening of previous education and training courses," said Dr. Thomas A. Gonda, hospital director. "It brings together elements of these earlier, episodic programs, coordinates them into a unified whole, and builds on them. This consolidated program is more suited to the needs of the hospital, as well as of the individual employees of the hospital."

Tony Rodriguez, originally appointed director of Latin Resources at the Hospital April 1, is the director of the work-study program.

"The basic concept we started from," Rodriguez said, "is that what's good for the minority employee is most likely good for all employees of the hospital.

"Our major interest is not in creating jobs, but in creating careers," he said. "The traditional barriers for minorities and whites on the bottom rung of the economic ladder have been lack of education and training. We believe that with the proper incentive, motivation and counseling, we can overcome these barriers."

In the case of the work-study program, the special incentive and motivation is threefold: the schooling, for the most part, will be conducted on the Hospital premises; the employee will in most cases be paid for the time he spends in class, so he won't lose money by going to school; and he'll be trained for a specific job in the Hospital.

"All these factors will make the employee more productive, increase his sense of worthwhileness, and stabilize him as an employee," Rodriguez said.

"To the best of my knowledge, this is the only program of its kind in a hospital west of Chicago," he noted.

The Hospital will provide major resources to run the program, Gonda said, including training personnel and hospital facilities. "In time, the Palo Alto Adult Education Program and local junior colleges will hopefully play an increasing role," he added.

Employees at the Hospital will have the opportunity to enter the program at any of the various levels--conversational English, GED, or job training.

The work-study program is expected to train employees for work in four areas at the Hospital--nursing, clerical, science and engineering. The emphasis will be on filling specific job openings in each department.

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"All our classes will be tailored to meet the specific needs of the Hospital," Rodriguez said, "so we'll be producing our own highly-trained labor force. In general, no employee will enter a class without first having a job committed to him."

Before moving on to the advanced training phase of the program, many employees will have the opportunity to take conversational English courses, or finish high school by fulfilling the California General Educational Development (GED) requirements.

The six-week English courses were initiated at the Hospital June 9, with an opening enrollment of 30 employees, grouped in six classes according to skill levels. Each employee attends class for one hour per day with pay. "Class times and individual scheduling have been set with the intent of inconveniencing the departments involved as little as possible," Rodriguez noted.

Instructors for the English classes, recommended by the Stanford Linguistics Department, are Mitchell Hall and Kathleen Colyer, both of whom have teaching experience in English. Hall taught English as a second language for the Peace Corps in Africa.

"The basic teaching technique we're using is a psycho-social approach to linguistics," Rodriguez said. "Our teachers are attuned to the cultural needs of adults who are learning English as a second language. The course is offered to all interested, so this involves not only Spanish, but Filipino and European employees as well."

The GED phase of the program hopes to utilize the personnel and facilities of Stanford, Palo Alto Adult Education and local junior colleges. "Stanford University minority students have already volunteered their services as tutors in the English and GED programs," Rodriguez noted.

The GED program is due to begin July 15, while the individual training programs have a target date of September 1.

"We'll wait until September to give ourselves a chance to get better organized, and also to possibly obtain federal funding, as well as more institutional help," Rodriguez said. "Also, we want to give our first graduating classes of conversational English and GED the opportunity to get into the more advanced classes."

Hospital officials hope that eventually as many employees as possible will take part in the program, although initially classes are expected to be small.

"While we're getting off the ground, our classes will be very small," Rodriguez said. "Selection will be based on potential and need. But eventually we hope to open the the program up to all interested employees, with order of selection on a need basis."

Applicants for all job training programs will be counseled and directed to the fields for which they are best suited.

"Counseling will be very important," Rodriguez said. "We want to make sure each employee is channeled to the job where he'll have the greatest chance of success. Additionally, no one can 'flunk out' of this school. Anyone having difficulty will be transferred to another area, more suitable to that individual."

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Mailed June 21, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 321-5310

ATTENTION: MEDICAL SCHOOL DEPARTMENTS

STANFORD -- Dr. John L. Wilson, acting dean and executive officer of the Stanford University Medical Center, did not receive the Henry J. Kaiser Award for excellence in teaching at the annual convocation of the Stanford School of Medicine June 13, as was reported in a release of June 14.

Rather, Dr. Wilson presented the awards to the four winners of the Kaiser Awards, who were Dr. Allen B. Barbour, M.D., associate professor of clinical medicine and head of the division of ambulatory medicine; Dr. A. Kent Christensen, Ph.D., associate professor of anatomy; Dr. Eugene D. Robin, M.D., professor of medicine (respiratory) and physiology; and Dr. Paul L. Wolf, associate professor of pathology.

The Medical Center News Bureau regrets the error.

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Mailed June 21, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Paul Gyorgy, well-known authority in the field of childhood development and nutrition, today voiced strong support for breast feeding of infants as "absolutely the best thing that babies can have."

The Hungarian-born pediatrician made his plea for a "renaissance in breast feeding" at the seventh annual Harold K. Faber Clinical Symposium at Children's Hospital at Stanford. The overall topic of the symposium is "The Child and the Changing Environment."

"Breast feeding is rapidly disappearing in highly developed countries," said Gyorgy, emeritus professor of pediatrics at Philadelphia General Hospital. "In the northeastern part of the United States, at least, 80 per cent of babies leaving hospitals are already on cow's milk."

"Human milk is for humans, and cow's milk is for cows," Gyorgy said.

He cited new scientific research which showed that infant mortality is markedly decreased among babies fed human milk. In fact, he stressed, a baby fed breast milk and no solid foods for the first three months of his life will be much more healthy than one fed cow's milk and solids.

"Fat cells in the body are produced during the first six months and remain with us for the rest of our life," he said. "Often there is nothing we can do to get rid of them." He emphasized that human milk, containing less fat-producing agents than cow's milk, is "exactly what the growing baby needs."

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Mailed June 18, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. David A. Prince has been appointed Chairman of the Department of Neurology at Stanford University School of Medicine, Dr. John L. Wilson, acting dean, announced today (June 17).

Prince, acting chairman of the department since last October, was simultaneously promoted to professor of neurology.

Neurology was a division of the Department of Medicine until last fall, when it was established as a separate department at the School of Medicine. This change pointed up the growth of neurology as a separate discipline, and reflected the increase in clinical and neurological research activities at Stanford and elsewhere.

Prince, 38, received his M.D. in 1956 from the University of Pennsylvania and his training in clinical neurology at the Mt. Sinai Hospital in New York City. He has been at Stanford since 1962.

His major research interests are in neurophysiology and experimental epilepsy. Earlier this year he was named as a recipient of the 1971 John Simon Guggenheim Memorial Foundation Awards, for his contributions in research of abnormalities of single nerve cells in epilepsy.

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June 17, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Frank R. Vitale, deputy director of Stanford University Hospital, has resigned to accept a partnership with Herman Smith Associates, a national hospital consulting firm.

His appointment as a principal partner becomes effective on July 1.

Founded by doctors 27 years ago, Herman Smith Associates has built nearly 500 hospitals across the country. Vitale has been an advisor to the firm for over two years.

"I feel my experience here at the Hospital has been an extremely rewarding one," he said, "but the offer of a partnership in this long-established firm is one that doesn't come along every day. It would be only this type of opportunity that would lead me to such a decision at this time."

The firm is headquartered in Hinsdale, Illinois, with offices in Newport Beach, California, and Palo Alto. Vitale will be in charge of the Palo Alto office.

A specialist in medical facilities planning, engineering, and management, he came to Stanford in 1961 as chief engineer. He soon advanced to management associate, assistant director, and associate director of the Hospital. In January of this year, he was appointed deputy director.

Vitale, 42, graduated from the U.S. Merchant Marine Academy in 1949 with a B.S. degree in mechanical engineering. He became a licensed chief engineer in 1955.

He is married, has two children, and resides in Menlo Park.

His professional affiliations include membership in the American Hospital Association and the American College of Hospital Administrators. He is past president of the National Association of Power Engineers (Peninsula Chapter) and currently president of the Kings Point Alumni Association, San Jose Chapter.

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Mailed June 17, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

(ADVANCE) FOR PM RELEASE FRIDAY, JUNE 18, 1971

STANFORD -- Dr. Norman Kretchmer has been named first Harold K. Faber professor of pediatrics at Stanford University School of Medicine.

Dr. Kretchmer, who has won many honors and awards for his work in pediatric research, has been professor and executive head of the department of pediatrics at Stanford.

He returned to full-time teaching and research in 1969 after ten years as chairman of the department. He currently heads the division of developmental biology and was active in setting up the new interdepartmental human biology program offered to Stanford undergraduates.

The Harold K. Faber chair at Stanford was established a year ago in honor of Dr. Faber of San Francisco, emeritus professor and head of the department of pediatrics at Stanford for 26 years before his retirement in 1949.

Dr. Faber is internationally known for his polio research. He is a former president of the American Pediatric Society and received the Society's Howland Medal and Award in 1956 for his extensive contribution to his profession.

"The appointment of Dr. Kretchmer to fill this chair is a particularly happy choice. Dr. Kretchmer's outstanding record serves, in a sense, as a continuation of the tradition of Dr. Faber," said Dr. John L. Wilson, acting dean of the School of Medicine at Stanford.

Dr. Kretchmer's classes in pediatrics and human development at the Medical School have long been sought after by students.

In 1969 he received the Borden award of the American Academy of Pediatrics for outstanding achievement in research relating to nutrition in the development of infants and children. He was specifically honored for a study leading to the understanding of biochemical processes which form the basis of the distinctive cell differentiation in growth and development.

Formal announcement of the appointment was Friday (June 18) at the 7th Annual Faber Day Symposium at Children's Hospital at Stanford. The overall topic was "The Child and the Changing Environment." Dr. Kretchmer delivered the Faber lecture, entitled "Growth and Adaptation."

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Mailed June 17, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FOR IMMEDIATE RELEASE

STANFORD -- A method for studying a key biochemical process in protein synthesis has been developed by a Stanford University scientist.

The method, regarded as a major advance in the field of protein chemistry, now makes it possible for scientists to study the transformation of inactive protein molecules into active ones.

A better understanding of this process is believed to bring scientists a step closer toward the much discussed goal of making deliberate alterations in the protein structure of human cells to treat genetic diseases and cancer.

The scientist is Dr. Oleg Jardetzky, professor of pharmacology at the Stanford University School of Medicine. He described his work Wednesday at the meeting of the American Society of Biological Chemists in San Francisco.

Proteins are chemically complex substances made up of a number of so-called amino acids. The nature of a specific protein depends on the kinds and amount of amino acids and the number in which they are combined.

"The genetic code (DNA) specifies the exact sequence in which the amino acids are to be connected to form a particular protein. But this extended chain of amino acids must be folded into an exact structure before the protein can act," Dr. Jardetzky said.

However, the folding process has so far eluded scientists because methods for studying it in detail have been lacking.

Dr. Jardetzky's method uses a modified version of a spectroscopic technique developed at Stanford 25 years ago by Nobel Laureate Felix Bloch, professor of physics. The technique is known as nuclear magnetic resonance.

By labeling amino acids with isotopes, a scientist can look at selected amino acids in the protein and chart the course of the structural change during folding.

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Dr. Oleg Jardetzky/protein folding process

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Dr. Jardetzky has already demonstrated the effectiveness of the method by studying the folding process in the protein of staphylococcus, the bacterium which causes "staph" infections.

He described these steps in the folding process:

The "staph" protein is first made as a simple string of amino acids. Almost the whole chain has to be completed before the folding can begin.

Folding takes place in several steps, at least seven of which can be seen spectroscopically.

The first to form are tight coils known as alpha-helices discovered by Nobel Laureate Linus Pauling 20 years ago. It is followed by formation of a loop known as a pleated sheet. Next to form are irregularly shaped clumps held together by looser bonds, and the last step is the attachment of the loose ends of the string to the folded structure. The active site is complete on the next to the last step.

Dr. Jardetzky predicted that when the detailed mechanism of folding is understood "one would be in a position to design and synthesize novel proteins with specific and potentially useful functions not normally found in nature."

Abnormal protein folding has been associated with genetic diseases and cancer.

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Mailed June 16, 1971.

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

City Desks and Science Writers: An internation symposium on psoriasis, the first of its kind, will be held at Stanford University July 7 through 10, 1971.

Psoriasis experts from all over the world will get together for a comprehensive discussion of the disease, which affects at least 1 out of 50 persons in the United States.

The exact cause of this common skin disorder which causes itching and scaling is not known. Basic and clinical research in recent years have led to better understanding of the disease and its control, although no specific cure has been found.

Childhood psoriasis, epidemiology and psychological factors will be among the more general topics discussed. However, emphasis will be on numerous clinical lectures and an examination of the biological approaches to the study of the disease. Specific topics include DNA synthesis in psoriasis, lipid metabolism, immunologic factors, screening techniques and scanning electron microscopy in psoriasis.

In addition, experimental and current therapy and complications will also be reviewed. Topics on the agenda include discussion of topically active chemotherapeutic agents, the chemistry and pharmacology in the use of tars and anthrain as well as topical and systemic treatments with steroids, and the use of methotrexate.

Among the speakers at the symposium will be Dr. Eugene Farber, professor and chairman of the department of dermatology at Stanford; Dr. Gunnar Lomholt from Mulago Hospital in Uganda, East Africa; Dr. Autoro Mom of Hospital Argerich in Buenos Aires; Dr. Toshiaki Yasuda, chairman of the department of dermatology at the Toho School of Medicine in Tokyo; Dr. Otto Braun-Falco, director of dermatology at Universitats-Klinik in Munich; and Dr. John Kenney, Jr. from Howard University in Washington, D.C. These men, as well as other lecturers at the conference, are renowned for the work they have done in the study of psoriasis. There will be more than 40 speakers from all over the world, from countries representing South America, Europe, the Far East and Africa. About 300 dermatology specialists are expected to attend.

The symposium is a report of the psoriasis task force of the National Program for Dermatology, a group sponsored by the dermatologists throughout the country. It was set up three years ago with the aim of conquering disability due to skin diseases.

The conference is under the auspices of the department of dermatology at Stanford. It is underwritten in part by a grant to the department from the Schering Corporation.

Science and medical writers are invited. The conference will be on the Stanford campus. If you plan to cover the meeting, please notify the Stanford Medical Center News Bureau by returning the form below:

TO: Psoriasis Symposium, July 7-10, 1971
News Bureau, Room C003
Stanford University Medical Center
Stanford, California 94305

I plan to attend the conference ☐ Please mail me a program. ☐ 6/16/71

NAME _____
(please print)

ORGANIZATION _____

ADDRESS (city, state, zip) _____

_____

Mailed June 16, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. John L. Wilson, acting dean and executive officer of the Stanford University Medical Center, received the Henry J. Kaiser Award for excellence in teaching at the annual convocation of the Stanford University School of Medicine, Sunday evening June 13.

The School presented awards to 10 medical students, including 7 graduating students. Diplomas were presented to 64 men and 5 women medical graduates.

Fifteen students, 8 women and 7 men, received master's degrees; and 28 received Ph.D.'s, including 19 men and 9 women. In addition, the School of Nursing presented diplomas to 14 graduates, and the School of Medicine awarded a Bachelor of Arts degree to one student in medical microbiology.

At the convocation, James G. Bowerman received the Robert H. Alway Book Award. Named in honor of Dr. Alway, dean of the Medical School from 1958-64, the award is given annually to a student "who has availed himself especially well of the unique opportunities afforded by the Stanford Plan" (five-year plan).

James M. Ferguson was presented the Borden Undergraduate Research Award, given by the Borden Company Foundation, Inc., to the graduate "who has completed the most meritorious research during his medical training."

The Harold K. Faber Pediatric Award was presented to Robert C. Hackman in recognition of his "outstanding accomplishments as a student of pediatrics and of his potential as a contributor to child health."

The first Robert J. Glaser Book Award was given to William R. Korns. The award is presented in recognition of Dr. Glaser's contributions as dean of the School of Medicine (1965-70) to the student in the graduating class "who has displayed outstanding characteristics of leadership."

The winner of the Lowell A. Rantz Memorial Award "to the student who has distinguished himself in the field of infectious diseases" was James M. Hughes.

John W. Fitzgerald received the Upjohn Achievement Award, given by the Upjohn Company to the graduating student exhibiting "outstanding clinical performance."

Merrill Eric Gershwin received the L.A. and Marian S. Hopkins Award, presented to the outstanding graduating student in dermatology. Gershwin also received the Robert M. Shelton Alumni Award of $750.

Three medical students, not members of the graduating class, received $500 "Alumni Scholar" awards, including Year II student Joseph R. Hopkins, Year III student Carol S. Portlock, and Year IV student F. Wells Shoemaker.

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The awards were presented by Miss Grace E. Ringressy, professor and director of the School of Nursing, and Dr. James B. D. Mark, associate dean for student affairs.

Michael Francis Dillon, representing the graduating class, presented the annual Arthur L. Bloomfield Award for excellence in the teaching of clinical medicine to Dr. Richard L. Kempson, associate professor of pathology.

The faculty address was delivered by Dr. R. Hewlett Lee, clinical associate professor of surgery. Following his address, the diplomas were presented by acting dean Dr. Wilson and Miss Ringressy.

Award winners, their home towns and parents' names are listed below.

James G. Bowerman, son of Mr. and Mrs. Harold Bowerman, Box 73, Leaf River, Illinois.

James M. Ferguson, of 1160 California Avenue, Palo Alto (son of Mr. and Mrs. V. B. Ferguson, 109 St. James Drive, Piedmont, Calif.).

John W. Fitzgerald, son of Mrs. Annette Fitzgerald, 51 E. Hoover, Phoenix, Arizona.

M. Eric Gershwin, son of Mr. and Mrs. George Gershwin, 8 Maurice Lane, Suffern, N.Y.

Robert C. Hackman, of 70F Escondido Village, Stanford, Calif.

James M. Hughes, son of Mr. and Mrs. James P. Hughes, 124 Guilford Rd., Piedmont, Calif.

William R. Korns, son of Mr. and Mrs. William L. Korns, Box 1363, Provo, Utah. ###6/15/71

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- The Stanford University School of Medicine announced today (July 14) the creation of a Lipid Research Clinic and Specialized Center of Research (SCOR) to conduct a wide-ranging investigation of treatment and prevention of heart disease.

The new programs, supported by federal grants totalling $773,387 the first year and projected at almost $4 million over the next five years, reflect a new commitment by the federal government to the prevention of heart disease.

A diverse research team, incorporating faculty members of Stanford's School of Humanities and Sciences as well as the School of Medicine, will conduct the studies.

Included in the anticipated five-year programs will be investigations of metabolic abnormalities and levels of blood lipids (fats, cholesterol and other compounds) in relation to heart disease; epidemiology (prevalence, distribution and control) of the disease in communities; effects of family structure, attitude and motivation on behavior toward health issues; and methods of modifying behavior to aid in effective prevention of the disease.

Dr. John W. Farquhar, associate professor of medicine at the Medical School and a well known researcher in heart disease, is the director of the Lipid Research Clinic and SCOR program. Dr. Peter D. Wood, research associate in medicine and prominent lipid chemist, is the deputy director of both.

The two closely-tied programs are being funded by the National Heart and Lung Institute as part of a broad new federal effort to combat heart disease. Nineteen research centers have been established across the country, including six Lipid Research Clinics and 13 SCOR centers for arteriosclerosis. Fifteen medical schools are involved, with Stanford and three other schools receiving grants for both centers.

The Stanford grants are expected to run almost concurrently for at least five years. The SCOR program (supported by a grant of $363,514 for the first year) was initiated June 1, the Lipid Research Clinic (funded by a $409,873 contract for the first year) on June 22.

"The National Institutes of Health have made it understood that this is a long-range commitment," Wood said. "Though the contracts are to be renewed annually, their estimate of the minimum time these programs will be funded is five years."

Farquhar called the establishment of the 19 research centers "a great new experiment" in one of the most pressing areas of medical study.

"We have an epidemic of coronary heart disease in this country that is largely preventable in younger age," he said. "It's a national tragedy that requires attention which is long overdue. These grants are timely entrees into this area of preventive medicine.

"Our studies will hopefully furnish us with information on who has heart disease, who has the precursors of it, and what can be done to treat existing disease and prevent its future occurrence.

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"A large part of our effort will be to study the epidemiology of heart disease in communities. We've enlisted the help of a group of behavioral scientists in a team approach to learn about attitudes and motivation in behavior toward health issues, and means of changing behavior which can affect heart disease."

Following exhaustive studies of factors which influence conduct related to health, Stanford behavioral scientists will prepare mass media campaigns designed to bring about behavior change, and will also test the separate effects of frequent personal sessions (conducted in an encounter group fashion) on behavior change.

"We'll be trying to persuade people to change their behavior with respect to habits which affect coronary disease," Wood said. "These changes will probably involve moderate exercise, weight loss, cutting down or giving up smoking, and modified diets.

"In this effort we'll utilize films, radio, television and newspapers. However, we don't know that these media are effective in changing behavior, and one purpose of our studies is to first determine what are the minimum requirements for achieving important degrees of change."

The"team" aspect in these studies is emphasized to the extent that information gathered at the 19 nationwide centers will be continually compiled and compared.

Within Stanford's programs, inpatient clinic research findings will be linked to community studies, so that the choice of strategies for intervention in communities will be dictated by the results of inpatient research, Farquhar said.

Wood will supervise and coordinate the setting up of accurate semi-automatic measurement of plasma lipoproteins (components of blood which carry cholesterol and fat). Other clinical inpatient research will involve studies of metabolic abnormalities associated with heart disease.

"Another component of our studies will be the development of an ultrasound method for the early detection of arterial disease by non-invasive techniques," Farquhar said.

Both supporting agencies are divisions of the National Heart and Lung Institute, and Farquhar noted that the Stanford Lipid Research and SCOR programs are blended together, to a large extent.

Several faculty members from Stanford's School of Humanities and Sciences will be involved in these studies, including Department of Communication chairman Dr. Nathan Maccoby; Dr. Henry Breitrose, associate professor of communication; and Dr. Clifford R. Barnett, professor of anthropology. Miss Janet Voelker, of the Department of Communication will be film research supervisor.

In addition to Farquhar and Wood, researchers from the School of Medicine include Byron W. Brown, professor of biostatistics in the Department of Community and Preventive Medicine; Dr. Abraham Silvers, research associate in medicine; Dr. Gerald M. Reaven, professor of medicine; Dr. Donald C. Harrison, associate professor of medicine; Dr. Richard L. Popp, assistant professor of medicine; Dr. Jobst von der Groeben, professor of medicine in anesthesia; and Dr. Michael P. Stern, instructor in medicine.

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Mailed June 14, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- Several national authorities on childhood development will be speaking to physicians at a conference June 18 at Children's Hospital at Stanford.

The overall topic is "The Child and the Changing Environment," the seventh annual Harold K. Faber Clinical Symposium.

Dr. Paul Gyorgy, emeritus professor of pediatrics, Philadelphia General Hospital, will talk on "Nutrition and the Developing Child"; Dr. Julius Richmond, chief psychiatrist at the Children's Hospital Medical Center in Boston will speak on "The Child and Society" and Dr. David E. Smith, assistant clinical professor of toxicology at UC Medical Center, San Francisco will talk on "Drug Abuse - 1971."

Stanford speakers include Dr. Norman Kretchmer, chief of the division of developmental biology, who will give the Faber lecture on "Growth and Adaptation" and Dr. Philip Sunshine, director of nurseries and associate professor of pediatrics, whose talk is on the "Environment of the Neonate at Risk."

The meeting will start at 9:30 a.m., June 18, in the auditorium at Children's Hospital at Stanford, 520 Willow Road. It is not open to the public, but science and medical writers in the area are invited to attend.

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Mailed June 9, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- A library in international health will be established at Stanford University Medical Center. The library will be named in honor of Dr. Quentin M. Geiman, professor emeritus of the department of community and preventive medicine at Stanford. Dr. Geiman, who is a noted specialist in tropical diseases and has done extensive work with malaria, was also director of the parasitic diagnostic laboratory before he became professor emeritus in 1970.

At Stanford since 1955, he developed an elective training program in tropical health which included traveling scholarships for students. In the past decade, he has arranged for more than 60 medical students to study overseas.

Dr. Geiman has given a collection of his own books accumulated over the years as a start for the new library.

In addition, teaching and reference materials dealing with health and medical programs especially in tropical and developing countries will be purchased. Included will be government health reports put out by the ministries of such countries as well as specialized journals not available in Lane Medical Library.

A surprise announcement of the funds to establish the library was made by Dr. James P. Hughes, vice president of Kaiser Foundation International (KFI), at a reception at Stanford on May 20, commemorating Dr. Geiman's retirement. In addition to KFI, library sponsors include Standard Oil Company of California and Standard Oil of New Jersey.

The library, to be housed in the department, will be under the direction of Dr. Paul F. Basch, associate professor of international health at Stanford.

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Mailed June 8, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- Proposed legislation making California hospitals and blood banks immune to legal action from patients who develop hepatitis from blood transfusions "should be amended or categorically rejected," a Stanford University surgeon said Monday (June 7).

Dr. J. Garrott Allen, professor of surgery at the Stanford University School of Medicine, declared that the bill under consideration (AB-2889) in its present form "is not good public policy nor is it in the interest of the welfare of the patient."

Allen, a nationally known expert on blood diseases, made his views known in a letter sent to the State Assembly committee on health, which will recommend action on the legislation.

As it now stands, the bill will, in essence, continue a present law which does not give patients any protection against transfusion hepatitis, Allen said.

Hospitals and blood banks involved in transfusions will remain exempt from any legal responsibility to the patient.

"This is an evasion of their responsibilities when the law actually can be easily changed to become an effective force for upgrading our entire national blood collection program," Allen said.

Currently, commercial blood banks offer a substantially inferior product than the blood bank whose source depends entirely on volunteer donors, Allen charged. "If people were made aware of the potential hazards of commercial blood, they would be much more inclined to participate in a voluntary donor program than they have in the past. There should be enough volunteer blood for everyone."

He pointed out that transfusion hepatitis occurs 10 to 12 times more frequently from blood drawn from commercial and prison donors than when the donors are volunteers, such as friends, relatives, service clubs and church groups. He added that 90 per cent of the hepatitis cases resulting from transfusions develop from blood obtained from commercial or prison sources. The infection rate runs as high as one out of every 25 transfusions. "This continuing hazard is guaranteed by AB-2889 unless amended, to remain at this unnecessarily high rate," Allen wrote the legislators.

At least 450,000 hospital days are consumed each year by patients who develop hepatitis, he said. "However, the bill actually encourages the use of commercial blood and so raises the cost of Blue Shield and other insurance policies that pay for blood, including Medicare," Allen continued. "The patient does not feel it necessary to get volunteer replacement for his blood, because his insurance company will pay the hospital, the hospital will pay the blood bank and the blood bank will buy more blood from commercial donors. The proposed bill discourages the use of volunteer donors and the development of a reliable program." Consequently, it helps to keep the cost of blood transfusions and hospitalization high, he noted.

In addition, "it in no way guarantees that the patient who recruits volunteers of his own blood group will receive only volunteer blood and not commercial blood," Allen continued.

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While there is an existing test for hepatitis, three out of four infectious donors still are not detected, he noted. "One can do much better, by simply eliminating the use of commercial and prison donors, or at least regulating their use while a volunteer program is set up. This step in itself would stimulate recruitment of volunteer donors on a sustained basis."

Allen pointed out that the State of Washington has just passed a law which does offer some protection to its citizens. The Washington law holds that hospitals are liable if a case of hepatitis arises from a transfusion from a commercial or prison donor, but not from volunteer donors.

According to Allen, the Washington law is a "start in the right direction," in that it at least encourages development of volunteer blood banks and the maintenance of good records.

"We can do much better than AB-2889," Allen wrote. "As it is presently written, it is a very dangerous bill."

He will testify against the bill and offer amendments when it is considered June 14. For many years Dr. Allen has been trying to reduce the hazard of hepatitis from transfusions. In 1958, he was the first to demonstrate that the incidence of hepatitis in commercial donors was many times higher than from volunteer groups.

Also testifying against the bill will be Dr. Marc Franklin, professor of law at Stanford. Dr. Franklin will testify on the legal aspects of the problem.

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Mailed June 7, 1971.

STANFORD UNIVERSITY NEWS SERVICE

STANFORD, CALIFORNIA
ZIP 94305.
(A/C 415) 321-2300, Ext. 2558

FOR INFORMATION CONTACT: Gary Cavalli, 321-5311 or Harry Press, 321-2300, ext. 2558

EDITORS: This story was moved on business wire 7/28/71

FOR IMMEDIATE RELEASE

STANFORD —

Dr. Clayton Rich, associate dean for research and clinical affairs at the University of Washington School of Medicine, was named today (July 28) as Dean of the Stanford University School of Medicine and Vice President for Medical Affairs.

The appointment, announced by Provost and Acting President William F. Miller on behalf of President Richard W. Lyman, is effective Sept. 1.

Dr. Rich, 47, also was appointed professor of medicine. He succeeds Dr. John L. Wilson, who has served as acting dean since Dr. Robert L. Glaser resigned August 31, 1970 to become Vice President of the Commonwealth Fund in New York.

His appointment culminated a year-long search by a faculty-student committee. More than 170 candidates were considered for the deanship.

"Dr. Rich brings a great deal of enthusiasm and talent to the deanship," Provost Miller said. "Both the President and I are delighted with this fine appointment."

Dr. Wilson said. "We all are anticipating his arrival and looking forward to working with him in the interests of the Medical School."

Dr. Rich, a native of New York City, was educated at the Putney School in Vermont and Swarthmore College. He received his M.D. in 1948 from Cornell University. He served his internship and residency at the Albany Hospital and Union University, and received additional clinical training at Cornell Medical College.

Before becoming an assistant professor of medicine at the University of Washington in 1960, he was engaged in research, teaching and patient care at Rockefeller University.

He was promoted to professor of medicine in 1967, and a year later became associate dean. He also served as chief of staff of the Veterans Administration Hospital in Seattle, which is closely associated with the Medical School there, and as medical director of the University Hospital.

In 1970, Dr. Rich was named associate dean for research and clinical affairs, his present position.

His research has been in endocrinology, specializing in diseases of the bone. His publications include more than 80 papers and abstracts.

Dr. Rich said that he believes medical schools will share with other medical agencies the major job of solving the nation's health care delivery problems.

"The whole area of delivery of health care is terribly important," he said. "It has become apparent in the past few years that the system in this country isn't working very well. We'll have to devise better ways of providing proper health care to everyone, not just a few.

"I see the primary role of medical schools in the health care scheme as that of innovation, and applying research methods to the problem."

Dr. Rich believes that, in coming years, there will be increased interaction between medicine and the other academic disciplines.

He and his wife, Scotty, have a son, 16, now attending Putney School. Mrs. Rich's father, the late Melvi G. Hodgkinson, attended Stanford as a member of the Class of 1925.

Dr. Rich holds memberships in the Association of American Physicians, American Society for Clinical Investigation, American College of Physicians, Western Society for Clinical Research (which he served as Vice President), Endocrine Society, Western Association of Physicians, Sigma Xi, King County and American Medical Associations, Seattle Academy of Internal Medicine, and Society for Experimental Biology and Medicine.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Seven Stanford University scientists have received cancer research grants from the American Cancer Society totaling $445,619, including one of $163,463 to Dr. Henry S. Kaplan--the largest individual grant ever made by the Society in California.

Announcement of the awards was made today (July 22) jointly by the Society's state president, Dr. L. Robert Martin, and Dr. John L. Wilson, acting dean of the Stanford School of Medicine.

The Stanford total includes a $35,000 institutional grant.

Kaplan, professor and chairman of the Department of Radiology, received a one-year grant to support his research into chemical inhibitors of the repair of radiation damaged cells.

Recently, Kaplan and Drs. Kendric C. Smith and Christopher D. Town discovered a mechanism by which cancer cells repair themselves after being damaged by X rays. The doctors believe that by administering drugs to inhibit this repair process, they can make cancer cells more sensitive to radiation.

All the Stanford grants were awarded retroactively from July 1.

In addition to Kaplan, the other Stanford recipients are:

. Dr. David A. Clayton, assistant professor of pathology. He received a $94,946 grant for two years to support research on leukemia and the hereditary molecule, DNA.

. Dr. Paul Berg, professor and chairman of the Department of Biochemistry. He received a one-year award of $30,902 to study the effects of viral genes on cell growth patterns.

. Dr. Stanley N. Cohen, assistant professor of medicine and head of the Division of Clinical Pharmacology. He was awarded a one-year stipend of $30,452 to study bacterial gene control mechanisms.

Dr. Richard D. Evans. Evans received a four-year postdoctoral research scholarship of $57,435 to attend medical school and do research in radiobiology under Kaplan. A physicist from Great Britain, Evans was a research associate at the Sloan-Kettering Cancer Institute from 1968-70 and is also a former associate professor of radiology in physics at Cornell Medical College. He is seeking his medical degree so that he may "treat cancer patients directly."

. Dr. Ellen L. Taylor. She received a two-year postdoctoral fellowship of $16,705.

. Dr. Robert C. Grant. He received a two-year postdoctoral fellowship of $16,716.

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Mailed July 22, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- The Stanford University School of Medicine has received a $1 million grant from the National Cancer Institute (NCI) for continued support of the 10-year-old Clinical Radiotherapy Cancer Research Center, acting dean John L. Wilson announced today (July 19).

The program is under the direction of Dr. Henry S. Kaplan, professor and chairman of the Department of Radiology, and Dr. Malcolm A. Bagshaw, professor and director of the Radiation Therapy Division.

The grant of $1,086,403 will be awarded retroactively for a period of one year beginning March 1, 1971.

The research center was established in August of 1961 with the support of a $943,412 grant from the NCI for the first year. Allocations have been negotiated annually since then.

In the past decade, between 200 and 500 patients per year have been treated through this program.

Major research at the center involves clinical investigations into cancers of the lymphoid tissue, particularly Hodgkins' Disease, and the study of super-voltage radiotherapy techniques, including the use of drugs and surgery in combination with radiation treatment.

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Mailed July 19, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD -- A new study to unravel gene control mechanisms in human cancer cells will be conducted by a Stanford University doctor under a grant from the National Cancer Institute.

The study will be directed by Dr. John H. Frenster of the Department of Medicine.

Frenster said that human cancer cells often display an embryonic pattern of proteins on the cell surface, which is similar to the embryonic patterns that can be induced in animal cancer cells by viruses, chemicals or radiation.

Control of this molecular process, which is known as gene de-repression, will be a chief focus of the study.

The molecular process, Frenster explained, which triggers the return to embryonic patterns, involves "turning on" previously repressed genes in the cell nucleus. This abnormal process plays a central role in the conversion of normal cells to cancer cells, Frenster said. "By a better understanding of how these cancer cells 'turn on,' we may be able to develop a process for returning these cells to normal behavior."

The three year program is funded for $117,769.

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Mailed July 15, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- The Stanford University School of Medicine announced today (July 14) the creation of a Lipid Research Clinic and Specialized Center of Research (SCOR) to conduct a wide-ranging investigation of treatment and prevention of heart disease.

The new programs, supported by federal grants totalling $773,387 the first year and projected at almost $4 million over the next five years, reflect a new commitment by the federal government to the prevention of heart disease.

A diverse research team, incorporating faculty members of Stanford's School of Humanities and Sciences as well as the School of Medicine, will conduct the studies.

Included in the anticipated five-year programs will be investigations of metabolic abnormalities and levels of blood lipids (fats, cholesterol and other compounds) in relation to heart disease; epidemiology (prevalence, distribution and control) of the disease in communities; effects of family structure, attitude and motivation on behavior toward health issues; and methods of modifying behavior to aid in effective prevention of the disease.

Dr. John W. Farquhar, associate professor of medicine at the Medical School and a well known researcher in heart disease, is the director of the Lipid Research Clinic and SCOR program. Dr. Peter D. Wood, research associate in medicine and prominent lipid chemist, is the deputy director of both.

The two closely-tied programs are being funded by the National Heart and Lung Institute as part of a broad new federal effort to combat heart disease. Nineteen research centers have been established across the country, including six Lipid Research Clinics and 13 SCOR centers for arteriosclerosis. Fifteen medical schools are involved, with Stanford and three other schools receiving grants for both centers.

The Stanford grants are expected to run almost concurrently for at least five years. The SCOR program (supported by a grant of $363,514 for the first year) was initiated June 1, the Lipid Research Clinic (funded by a $409,873 contract for the first year) on June 22.

"The National Institutes of Health have made it understood that this is a long-range commitment," Wood said. "Though the contracts are to be renewed annually, their estimate of the minimum time these programs will be funded is five years."

Farquhar called the establishment of the 19 research centers "a great new experiment" in one of the most pressing areas of medical study.

"We have an epidemic of coronary heart disease in this country that is largely preventable in younger age," he said. "It's a national tragedy that requires attention which is long overdue. These grants are timely entrees into this area of preventive medicine.

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"A large part of our effort will be to study the epidemiology of heart disease in communities. We've enlisted the help of a group of behavioral scientists in a team approach to learn about attitudes and motivation in behavior toward health issues, and means of changing behavior which can affect heart disease."

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Several faculty members from Stanford's School of Humanities and Sciences will be involved in these studies, including Department of Communication chairman Dr. Nathan Maccoby; Dr. Henry Breitrose, associate professor of communication; and Dr. Clifford R. Barnett, professor of anthropology. Miss Janet Voelker, of the Department of Communication will be film research supervisor.

In addition to Farquhar and Wood, researchers from the School of Medicine include Byron W. Brown, professor of biostatistics in the Department of Community and Preventive Medicine; Dr. Abraham Silvers, research associate in medicine; Dr. Gerald M. Reaven, professor of medicine; Dr. Donald C. Harrison, associate professor of medicine; Dr. Richard L. Popp, assistant professor of medicine; Dr. Jobst von der Groeben, professor of medicine in anesthesia; and Dr. Michael P. Stern, instructor in medicine.

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Mailed ~~June~~ July 14, 1971.

File copy

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford University scientists have reported a fundamental discovery believed to pave the way for improvements in X-ray techniques for cancer treatment.

Drs. Christopher D. Town, Kendric C. Smith, and Henry S. Kaplan of the Stanford radiology department, have discovered a new mechanism by which cells repair the strands of the crucial chemical DNA -- deoxyribonucleic acid. Their findings were reported in the May 21 issue of Science.

DNA is the molecule of heredity in living cells. The sequence of chemicals in the strands of DNA in a cell constitute a code that gives the cell its hereditary instructions, telling the cell what it can make and what it can become.

X rays produce breaks in the DNA chains of cells. Many of these chain breaks can be repaired by the cell. Scientists are interested in cellular repair mechanisms because administration of drugs that interfere with DNA repair processes should make cancer cells more sensitive to radiation treatment.

The discovery of the new system for the repair of DNA was facilitated by the isolation in 1969 by Drs. Paula de Lucia and John Cairns at Cold Spring Harbor Laboratory, New York, of a bacterial mutant that is deficient in the enzyme DNA polymerase. This enzyme was discovered by Stanford's Nobel Laureate Arthur Kornberg.

The bacterium that is deficient in DNA polymerase grows normally but is easily killed by X rays, the scientists said.

While investigating the cause of this sensitivity to X rays, Dr. Smith and his colleagues found the mutant was deficient in a repair system present that had not been observed before in normal bacteria because of its speed of action.

Two systems are now known to be present in bacteria (Escherichia coli) for the repair of DNA chain breaks: a rapid system mediated by DNA polymerase and a slower one controlled by the genes that control genetic recombination (previously reported by Drs. Daniel Kapp and Smith in the July 1970 Journal of Bacteriology).

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DNA Repair

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Genetic recombination refers to the process of the breakage and rejoining of chromosomes after two bacteria mate.

"Since DNA repair systems seem to be the major factor controlling cell sensitivity to radiation, the combination of radiation and drugs to selectively inhibit the repair of damage should make radiation even more effective in the treatment of cancer," Dr. Smith said.

The Stanford team has data showing that the antimalarial agent quinacrine and the antibiotic chloramphenicol facilitate the killing of bacterial cells by radiation.

"Both drugs achieved this effect by inhibiting the repair of DNA chain breaks," Dr. Smith said. He explained other drugs are also being tested.

The biochemist also revealed that preliminary studies at Stanford have shown that quinacrine also exerts its radiation-sensitizing effect on cultured mammalian cells.

The first objective in this research is to establish the principle of sensitizing cancer cells to radiation treatment by inhibiting their repair systems with drugs, Dr. Smith explained.

Once this is achieved, the Stanford scientists will turn their attention to the difficult problem of delivering sensitizing drugs to tumors while sparing normal cells in the process.

The Stanford research is being made possible by grants from the National Cancer Institute.

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Mailed July 13, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos or Gary Cavalli 415: 321-5310

STANFORD -- Leading dermatologists attending an international symposium on psoriasis Saturday agreed that the controversial drug methotrexate should be a part of the care of psoriasis, but urged extreme caution in its use.

Methotrexate is a drug used primarily for treatment of leukemia. It has also been useful in treatment of severe psoriasis when other drugs and ointments have been ineffective.

Psoriasis is the disfiguring skin disease which afflicts 1 out of 50 Americans. It is incurable but can be controlled with drugs.

Recent medical reports have associated methotrexate with liver damage in patients. The drug has been the cause of malpractice suits. And the federal government is reported to be studying the drug for the purpose of restricting its use.

A study reported at the Stanford meeting by Dr. John P. Tindall of Duke University showed liver abnormalities in 66 patients treated with methotrexate over a period of three years.

"The severity of the abnormalities varied, with increasing age," Tindall said.

A second group of 58 patients, some of whom had never taken methotrexate, was studied by Tindall and his associates to determine liver abnormalities.

Interrelationships between dose of the drug and liver damage were difficult to evaluate, he said, because some patients may have had liver involvement prior to taking methotrexate.

Another speaker, Dr. Hugh Zachariae of Copenhagen, Denmark, said he biopsied livers in 47 patients, and found that 29 of them had liver abnormalities even before they were treated with methotrexate.

He said evaluation of methotrexate was difficult because there is little information about how psoriasis itself may affect the liver.

Dr. Henry H. Roenigk, Jr. of the Cleveland Clinic, said the "clinical studies clearly indicate that methotrexate is the most effective drug available to date for treating psoriasis. But it is also a dangerous drug when not used properly."

Because of the many medical and legal problems with methotrexate, many dermatologists refuse to prescribe the drug, he said.

"It would be a disservice to discontinue the careful use of methotrexate in appropriately selected patients who are willing knowingly to accept the risks," he said.

Roenigk stressed that until a better drug becomes available, doctors must recognize the hazards of methotrexate, and must know how to evaluate and prevent its serious consequences.

Zachariae agreed: "In each individual, as always in medicine, the risk of treatment should be evaluated in relation to the severity of the disease. Severe psoriatic patients are highly invalid persons."

The Saturday sessions concluded the four-day long international psoriasis symposium, co-sponsored by Stanford and the Schering Corporation.

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July 12, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR IMMEDIATE RELEASE

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A psoriasis expert from East Africa has linked the low incidence of the disease in American Blacks with its relative absence in West African countries, notably Nigeria.

Dr. Gunnar Lomholt, professor of dermatology at Makerere University in Kampala, Uganda, made his remarks at a four-day international symposium on psoriasis at Stanford University.

Psoriasis is common in East Africa in contrast to West Africa (Nigeria), where it seems to be rare or very rare," Lomholt said. "This is reflected in the low incidence among the American Negroes, who mainly originate from West Africa."

Lomholt said that the tropical climate of Uganda and other East African countries "does not seem to be especially favorable for patients suffering from psoriasis." In Nigeria and Angola, where it is more humid, the disease is uncommon.

"Climate is involved," Lumholt said, "but the genetic factors are most important. The people of West and East Africa are genetically distinct. The West African belongs to the Sudan or pure Negro race, while the East African is of the Bantu or Nilo-Hamite race."

Lomholt said in his own studies of dermatology in 3,371 Black patients at Mulago Hospital in Kampala, Uganda, he found 93 cases of psoriasis, an incidence of 2.8%. He contrasted this with recent research in Nigeria and Angola, which uncovered an incidence of less than 0.5 of 1%.

Studies of psoriasis among U.S. Blacks, reported at the symposium by Dr. John A. Kenney of Howard University, indicated that psoriasis is markedly less common in American Blacks than in Whites.

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Mailed July 9, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A new formula for an old remedy was hailed Friday (July 9) as a significant advance in the treatment of psoriasis by an international panel of dermatologists meeting at Stanford University.

The substance is a combination of the 55-year-old anthralin paste with additives which reduce skin irritation and other side effects formerly associated with the old remedy.

A smooth-spreading medication, developed at Stanford University School of Medicine by Drs. Eugene M. Farber and David R. Harris, it is applied at night for 8 to 12 hours under a doctor's direction.

Harris said the best results were seen among patients hospitalized for a short period during the initial treatment with anthralin, and continuing therapy at home.

The paste is removed in the morning by brushing and the use of mineral-oil-soaked washcloth. A corticosteroid cream to soothe the skin is optional in addition to use of tar, followed by exposure to sunlight.

Once the skin clears, the paste is applied three times a week. After a few weeks it is used as needed. Staining of the skin, hair, and fingernails is a minor side effect that usually disappears after a few weeks.

More than 200 patients with psoriasis have been treated with anthralin at Stanford University Hospital over the past three years, Harris reported.

Hospitalized patients responded with clearing of the skin in an average of 6 to 10 days, he said.

Treated only as outpatients, their response was more variable. Depending on how religiously they applied the remedy, significant clearing of psoriasis was seen in three weeks or more.

Follow-up studies of 50 seriously involved psoriatic patients have shown that success of anthralin treatment depends to a large extent on the patient's willingness to assume continuing responsibility for control of his disease, Harris said.

"We have found subsequently, that many patients won't accept this responsibility," Harris said. "But for those who do, anthralin paste is the most effective topical preparation available."

Anthralin has also proved effective in psoriasis of the scalp, palms and soles, alternating with use of cortisone, he said. In the case of scalp, the pomade is left on overnight and removed in the morning by shampoo. Scalp lesions vanished within five to six weeks.

Harris's report was presented at an international symposium on psoriasis co-sponsored by the Stanford Medical School and the Schering Corporation.

Psoriasis is a common skin disorder which causes itching and scaling and affects 1 out of 50 persons in the United States.

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Mailed Friday, July 9, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- An international expert in psoriasis today said that the disease is "virtually non-existent" among the pure Indians in some Latin American countries, and pointed to this as evidence that the disease is determined by environmental as well as genetic factors.

Dr. Francisco Kerdel-Vegas, noted professor of dermatology at the Central University of Venezuela, made his comments at the International Symposium on Psoriasis at Stanford University.

"Psoriasis is almost completely absent in these groups of Indians who still live in isolated communities, where there are little opportunities for outbreeding, and where with all probability they have remained separated and living in unaltered conditions since the white man moved into the new continent," he said.

"In general, it is widely accepted that psoriasis is a disease determined by genetic factors," Kerdel-Vegas noted. But "it is obvious that to show that so many other non-genetic factors do not play an important, and perhaps a determinant role, in the precise problem of the occurrence of this disease, is difficult to prove...."

He cited a recent study by Dr. Jacinto Convit, which showed the absence of psoriasis in a total of 25,000 Indians of both sexes in 95 small villages in the Andean countries of Bolivia, Ecuador, Peru and Venezuela. These published findings, he added, have been "remarkably consistent" with many other unpublished studies by scientists researching the Indian population of Venezuela.

These communities of Amerindians "have remained isolated and untouched by the influence of the white man and 'civilization,' both from the genetic point of view and from any changes in the environment," Kerdel-Vegas said.

"In such cases," he stressed, "it is difficult...to ascribe the absence of the disease exclusively to the genetic factor.

"The way of life of this primitive people, their diet, their exposure to sunlight, and thus their pigmentation of skin, their habits, their social life, amount of physical exercise, freedom from emotional tension and hygienic factors, in summary, everything is different to the life of the civilized white man...," he said.

These findings, Kerdel-Vegas concluded indicate that environmental factors are highly significant in the epidemiology of psoriasis, and must be considered along with genetic factors in determining causes and treatment of the disease.

Another story reported by Dr. John A. Kenney of Howard University showed that psoriasis is not as common among American Blacks as it is in Whites.

Kenney said in his own study of dermatoses seen in 3,860 Negro patients, he found only 27 cases of psoriasis, an incidence of less than 0.7 of 1%. This was in marked contrast to other surveys which studied white patient groups and found an incidence of psoriasis of 4.6%.

As to the reason for a possible lower incidence of psoriasis in American Blacks, one can only speculate, Kenney said. "Certainly the suggestion that there is an inherited predisposition must be accepted," he said. "The corollary to this, that the incidence varies among different racial groups, must also be accepted."

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Mailed July 7, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-2300, Ext. 3838
or
415: 321-5310

STANFORD -- A Stanford University expert on psoriasis said Wednesday that after years of research, the disfiguring skin disease that affects some six million Americans remains incurable.

"As it stands," said Dr. Eugene Farber, "our armamentarium for the treatment of psoriasis is almost as bare as Mother Hubbard's cupboard."

Farber is professor and chairman of the Department of Dermatology. He made his comments at the opening of an International Symposium on Psoriasis at Stanford University, co-sponsored by the Schering Corporation.

"Patients consult us because they are anxious and sick and want our help," Farber told the conference. "We respond to this privileged position by prescribing therapy not much better than that of our grandfathers who were also well acquainted with ammoniated mercury, tar and anthralin.

"Although we have improved on the techniques for their use and have added corticosteroids and methotrexate, the state of the treatment of psoriasis today leaves much to be desired."

Farber said there is now an active search for development of new drugs, but not one as yet can be regarded as a winner.

Ironically, he added, there is little comfort in the information that other diseases are in need of better drugs also. He referred to the rheumatic diseases for which aspirin is still prescribed as the best treatment.

Farber called on the participants to accept the challenge and plan a decade of increased effort to solve the problem of psoriasis.

"We are very much aware that research support is infinitesimal when compared to the support of other crippling diseases," he said. "Funds allocated for research in dermatology are also small compared to expenditures by the public for creams and other skin preparations used for aesthetic reasons."

Farber said expenditures by the American public for nonmedicinal skin preparations approach $2 billion annually.

He said there are some unique features of psoriasis not present in other diseases.

- Psoriasis first of all is limited to the skin.
- There are genetic components. It is a disease built into the individual and is part of his makeup, rather than a superimposed disease.
- Although there are spontaneous remissions, psoriasis must be regarded as incurable.

"The lesions cause a stigmatizing blight, causing emotional problems and literally ruining the lives of those with severe manifestations," Farber said.

Farber said even if a successful treatment for psoriasis were found, there would not be enough dermatologists to cope with the demand of patient visits. There would be 2,000,000 severely disabled psoriatic patients requiring 50 office visits a year. The sudden demand to provide 50,000,000 additional office visits a year could not be satisfied, for this would constitute an additional 18,000 visits a year for the 3,000 board-certified dermatologists in America, he said. ### Mailed 7/7/71.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

NOTE TO CITY EDITORS AND SCIENCE WRITERS

An international symposium on psoriasis, the first of its kind, will be held at Stanford University July 7 through 10 in Physics Hall 100, (Physics Tank).

Experts from all over the world will meet to discuss this common skin disorder which causes itching and scaling and affects 1 out of 50 persons in the United States.

Childhood psoriasis, epidemiology and psychological factors will be among the more general topics discussed. In addition, experimental and current therapy and complications will also be reviewed.

Topics on the agenda include drug therapy, the chemistry and pharmacology in the use of tars and anthrain as well as topical treatments with steroid drugs.

The symposium is a report of the psoriasis task force of the National Program for Dermatology, a group set up three years ago with the aim of conquering disability due to skin diseases.

The conference is sponsored by the department of dermatology of the Stanford University School of Medicine, and is supported in part by a grant from the Schering Corporation.

Science and medical writers are invited. A press room has been set up near the Physics Hall in Room Ph-103. Enclosed is a copy of the program, and map.

Spyros Andreopoulos

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Mailed July 2, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FOR IMMEDIATE RELEASE

STANFORD -- The Stanford University School of Medicine has announced that 21 per cent of its 77-member entering class this fall will be women--nearly double the number of women admitted in previous years.

The change is a result of a new program adopted recently by the faculty senate of the Medical School.

It calls for efforts toward a substantial increase in the proportion of women on the faculty, on the house staff (interns and residents), and the student body.

The new program was developed by the Medical School's joint committee on the status and tenure of women, and is described in a guest editorial in the July 1 issue of the prestigious New England Journal of Medicine. The editorial is authored by Dr. John P. Bunker and Dr. Judith Pool, respectively chairman and member of the joint committee.

Elsewhere in the journal there is a paid advertisement inviting women to apply for faculty openings at Stanford medical school in departments ranging from anesthesia to surgery.

Dr. Pool explained the ad is "a first step toward open recruitment" for faculty openings hitherto conducted privately or by word of mouth.

"Traditionally women have been excluded from the kind of grapevine that informs them about faculty openings," Dr. Pool said.

Describing Stanford's program in the editorial, Dr. Bunker wrote: "The action expresses Stanford's clear conviction that more women are needed in medicine nationally.

"The case for more women in medicine can be made on the basis of what medicine has to offer to women in search of a career, but equally compellingly, on the basis of what women have to offer to medicine."

Dr. Bunker said college women are eagerly seeking new professional opportunities, and this quest will become increasingly earnest as restrictions on family size become accepted.

"Actively discouraged in the past, applications by women accounted for no more than 10 per cent of the total," Dr. Bunker said. "The potential pool of professional women is large and almost untapped."

But with encouragement, he added, it should be possible to increase the number of women applicants to nearly equal that of men.

Dr. Bunker said one of the major obstacles to the recruitment of women has been the inflexibility of the curriculum in medical schools as well as in internship and residency training.

Although some medical schools have in recent years introduced flexible programs for academic reasons, they provide also an opportunity to accommodate the special needs of women students.

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He said Stanford's curriculum has recently been made entirely elective, with no fixed timetable for completion of the M.D. degree. And there are courses not required to be taken by all students.

"Students may also arrange to take leave without academic penalty," Dr. Bunker said, "a feature of particular interest to women medical students with children or other house obligations."

Dr. Bunker called for similar action on the part of other medical schools to encourage women who may be interested in, but are hesitant about a medical career. Action should include improved recruitment programs, and close contacts with parents, teachers and vocational counselors who can aid in guiding young women in their choice of careers.

"We must make sure that young women know that the gates of the medical schools are open to them, and we must assure them that becoming a physician is an appropriate and realistic goal," Dr. Bunker said.

Echoing similar sentiments, Dr. Pool said Medical School departments had begun reviewing women with Ph.D. and M.D. degrees on the staff as candidates for faculty positions.

She said that of the 51 professional women in the Medical School, 8 are faculty and only 2 of them have tenured appointments. The remaining women are research associates, instructors, and senior scientists. There are nearly 300 full-time members on the Stanford medical faculty.

In spite of the small representation of women on the faculty, Dr. Pool thinks Stanford is ahead of other medical schools in opening up opportunities for women. The School was first to establish an office of women's affairs three years ago under a grant from the Macy Foundation of New York, she said.

Under Macy auspices, Medical School departments have established a program of flexible internships and residencies for women which Dr. Pool termed most successful.

"We still have a long way to go," Dr. Pool said, "but first we want young women to know that this is the new look--and that all this negativism about medicine careers for women is out of date."

Dr. Pool also said that professional women at the Medical School were working to establish a Day Care Center.

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Mailed July 1, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing 415: 321-5310

STANFORD--Hospitals can smother almost any child's development by the syndrome of institutionalism, says a pediatrician who was formerly assistant medical director at Children's Hospital at Stanford.

Dr. Helen H. Glaser, who is now in psychiatric residency training, notes that for whatever reasons children are in a hospital, they are still babies, toddlers, school-age children or teen agers with all the needs, fears and desires of these diverse aged people. Their normal needs are only complicated by the simultaneous illness.

However, hospital planners take few, if any of these needs into consideration, Dr. Glaser commented in an interview. "Yet, it is not so much a matter of money as the lack of thoughtful planning in the beginning." She added, "I have frequently seen errors of omission in the design of hospitals, simply because no one ever thought about them beforehand."

Dr. Glaser has spent the last two years studying hospital design with Roslyn Lindheim, professor of architecture at the University of California at Berkeley, and assistant dean in the school of environmental design; and Christie Coffin, research associate in architecture at UC Berkeley. The result of this study will appear in a book Environments for Sick Children to be published next spring by Harvard University Press.

Dr. Glaser hopes the study will help to generate planning of hospital environments sympathetic to different aged children.

Expert medical care must be supplemented by also meeting a child's social, emotional and developmental needs, Dr. Glaser believes. She contends that with planning, these needs can be accommodated for both acutely and chronically ill children within the hospital walls.

If medical facilities are to be used appropriately, she says, they must be comfortable, easily accessible, appropriate to the needs of children of different ages and staffed with personnel from all subgroups of the community involved.

In the forthcoming book she also proposes alternatives to hospital care, such as a medical service link to public schools.

She points out that perhaps the single most important factor affecting the needs of children in a hospital is the attitude of parents and staff toward each other.

"Today, there is a long standing atmosphere of mistrust, especially from those from a low socio-economic background," she says. "Hospitals should appear accessible and reassuring.

"Modern institutions have grown in scale to such a size that their physical expression is more monumental than human. Largeness has also resulted in an attitude of irresponsibility on the part of the users. The building tells the user that he needs not become involved."

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She suggests that flexible planning can result in increased staff efficiency and less fear and boredom on the part of the children. In addition, parents gladly will give both help and cooperation to the staff and children if a space can be made for them where they "do not infringe on the nurses' domain, but are made to feel they belong," Dr. Glaser says.

Among her suggestions for parents:

. sufficient number of private rooms and baths on each nursing unit to accommodate the parents of young children.

. an area where they can prepare special foods for their children. "Most parents would be happy to do this, and would have a sense of really helping, which indeed they would be doing. They can also feed the sick child who is very apt to be finicky about his food, and help to clean up afterward."

. a comfortable, non-institutional lounge where they can relax, and get away from the hospital atmosphere for brief periods.

For the staff, Dr. Glaser suggests:

. an informal setting for team meetings, conducive to the exchange of ideas between all personnel, regardless of status position. "Physical facilities cannot bridge the social gulfs created and maintained by rigid organizational structure of the hospital," Dr. Glaser says, "but what can be done is to provide opportunities for easy informal and formal interaction and then work for its realization."

. work for the nursery and toddler staff should be organized and set up so that nurses can be assigned to particular children to care for them in all ways. "The child feels that he has a secure relationship with one real person and the nurse's own attention is not pulled in so many different directions."

. long corridors should be abolished both for the sake of the staff and the children. "Children find the long halls between X-rays, treatment, and their own rooms frightening and of course the halls waste the time and energy of the staff."

She believes the nursery rooms should be bright, with opportunities for babies to look at or have small distractions--pulleys for mobiles, patterns, rocking chairs. "Hospital architects have assumed infants do not require visual, auditory or tactile stimulus, but studies have shown that this is not true."

Toddlers' rooms should have as many links with home as possible. Items might include connection equipment for a telephone, a place to hang up photos or to see home movies, windows where they can look out onto a hospital entrance to watch for parents and to observe routine comings and goings. "In this way, the child does not feel so isolated and cut off from day to day activities."

She also suggests that:

. toilets should be low, visible and easily accessible.

. bathing and water play could be provided in a specially designed room "more like a spa rather than the aseptic hospital bathroom."

. space and opportunity should be made for the interaction of school agers and toddlers, when it is desired. "Grade school children often get enjoyment and satisfaction out of caring for younger children and they also function as protectors or playmates."

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333--Dr. Helen Glaser

School children the same age and sex should be grouped together, she states. "This can be done easily only when there has been flexible planning in the beginning, such as removable partitions, and the opening up of other units as needed to compensate for the fluctuation of different children in the hospital at various times. There is no need for a not-so-sick ten-year old to be with a very sick six-year-old, though I have seen instances of this," says Dr. Glaser.

Other planning needed for schoolagers include a place of their own to display pictures and get-well cards "which seem to mean so much to them," and an area where a project can be left to work on again--not to take apart of put away to make room for treatment or eating. Closed circuit TV equipment for their own classroom participation would also be helpful.

"A nearby kitchenette is a necessity--a snack can be the event of the day," Dr. Glaser adds.

Turning to adolescents, she remarks "when they are in a hospital, they are often sicker than younger children and have more medical complications. And being confined in a hospital is particularly difficult for them. Therefore, it becomes even more crucial for the whole patient to be treated."

A suitable environment for young children in no way meets teenage needs, Dr. Glaser continues.

Among the most pressing needs for them she says are:

. a variety of special facilities, such as a place away from the bed for dining, a quiet room where they can hold a private conversation and a common room, where there could be record playing.

Also, the need for an adolescent patient to have privacy when he needs it is crucial, she believes. "Hospital curtains in no way suffice; there are many other imaginative and creative solutions that do not cost much extra money, but pay off from thoughtful planning."

Dr. Glaser is the wife of Dr. Robert J. Glaser, vice president of the Commonwealth Fund and former dean of the Stanford University School of Medicine. The Glasers are leaving the area to reside in New York City.

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Mailed July 1, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Your memories are holograms in your head.

Optical holography produces remarkable three-dimensional images by means of laser beams.

The idea that the brain's imaging process is based on holographic memory belongs to Dr. Karl Pribram of Stanford University. For two and a half decades, the noted neurophysiologist has been exploring the mysteries of the brain--how it records, stores and retrieves information.

The trim, soft-spoken scientist says that both his own studies with cats and monkeys, and the work of other researchers have shown striking similarities between memory and holograms.

The similarity is based on the fact that holograms provide a complete three-dimensional image of the original scene. Several holograms can be superimposed on a single film plate, and the images extracted independently when some of the conditions under which they were produced are repeated. The holographic film can be cut into fragments and each fragment when illuminated will reproduce the entire image.

"These are properties shown by the brain's memory mechanisms that have puzzled scientists for years," Pribram said.

His vision of how the brain works is described in the September issue of Psychology Today, and in his new book Languages of the Brain (Prentice-Hall) published today.

Reported are experiments which show that though a portion of a laboratory animal's brain is removed, its behavior can remain substantially unaltered.

Physicists can perform a similar trick with holograms, snipping off a small corner and using it to reproject the entire three-dimensional picture.

"Tear an ordinary photograph of your family in half, and half the family disappears," says Pribram. "Do this to a hologram and recognition remains unimpaired."

"These experiments bear out a common clinical observation," says Pribram. "A man who has a stroke that destroys half or more of his visual system does not thereafter fail to recognize his family. The organization of the brain's memory store is such that particular memories are hard to wipe out."

Pribram states that the hologram, like the human brain, has a fantastic capability to retrieve and store information. Many different kinds of information can be superimposed in one hologram. Some 10 billion bits of information have been stored holographically in one cubic centimeter.

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"Distributed information and the incredibly large storage capacity--two properties of the brain mechanism in recognition--are thus accounted for by the model," he says.

Pribram suggests on the basis of experimental evidence that the same set of equations and computations describes physical holography and image construction by the brain.

The physical hologram resembles a filter made when an optical image is projected onto a film placed "out-of-focus"--for example, at the focal rather than the image plane of a camera. Such out-of-focus filters can serve as sources for imaging when appropriately re-illuminated. They serve, therefore, as "memories" with the peculiar property that the information stored cannot be immediately recognized as such because it is distributed (defocussed) over the entire extent of the filter.

Evidence in support of Pribram's theory has come from experiments at Cambridge and Harvard universities. It indicates by means of electrophysiological experiments that the brain transforms information by a process which is mathematically identical to that used to make holograms.

"The experiments," he says, "account for the fact that a child who has learned to identify the letters of the alphabet by sight can recognize them no matter what size they are. The child readily identifies a 20-foot letter A on a billboard even if all the A's he has seen before then have been a quarter of an inch in height." But recognizing letters upside down is considerably more difficult, as would be predicted by the theory.

In recent years, other scientists searching for material explanation of memory have concurred in finding increased amounts of ribonucleic acid (RNA) in the brain of rats following learning activity. (RNA is the chemical that transcribes the inherited potential in deoxyribonucleic acid [DNA].)

Pribram accepts these findings, but feels RNA plays only a subsidiary role in memory function--for instance, he suggests RNA increases may merely reflect the synthesis of protein needed to establish new nerve cell connections.

"When the holographic model is taken seriously," Pribram concludes, "many paradoxes regarding brain function in perception become understandable. The outlines of the neural holographic processes are only now coming into focus, where not so long ago, only vague hobbits inhabited the land of neuromythology."

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Mailed August 31, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Ernest Hemingway, whose novels both mirror and helped shape the 20th century American character, was a deeply troubled man, suffering from anxiety and depression which stemmed from his failure to live up to the idealized image of himself.

This is the verdict of the first psychiatric study of Hemingway who struggled with his psychic conflicts all his life, and finally committed suicide July, 1961.

The study, published in the current issue of the Archives of General Psychiatry, was done by Dr. Irvin D. Yalom, a Stanford University psychiatrist, and his wife, Dr. Marilyn Yalom, a professor of literature at the California State College at Hayward. It is based on recorded events of Hemingway's life and his writings.

Ironically, Hemingway despised psychiatrists and considered going to one as the ultimate indignity. But he attempted to work out his conflicts through the typewriter and relived them, capping each episode in his novels with an ending more satisfying to his pride than the real story, Yalom says.

"His Corona typewriter was his analyst and one can hardly disagree with him," Major General Charles T. (Buch) Lanham, one of Hemingway's closest friends, is quoted in the study. Lanham assisted the Yaloms in their research.

Two factors were important in Hemingway's failure to live up to the image he had built up for himself.

"The image was so extreme that superhuman forces would have been required to satisfy it. Secondly, a number of counterforces limited his available degree of adaptability," Yalom says.

These secondary counterforces--dependency, cravings and oedipal conflicts--were sources of anxiety in their own right and hampered the actualization of the idealized self, according to Yalom.

Yalom observes that in the retrospect of scarcely 10 years, "it appears to us that Hemingway's legacy is one more of form than of substance, that he will be remembered as a stylistic genius, but as a very narrow guide to life.

"While we appreciate the existential considerations generated by the Hemingway encounters with danger and death, we do not find the same measure of universality and timelessness we associate with a Tolstoy or a Conrad or a Camus."

Yalom suspects that Hemingway's restricted view of the world is related to his personal psychological restrictions. There are many questions he never raised about the universe. There are even more he never raised about himself.

Observe Hemingway at any point during his mature years and one meets a powerful, imposing figure--the fellow obsessed with playing the part of Ernest Hemingway, says Yalom.

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"Whatever else we can see," Yalom comments, "always there is virility, strength, courage. He is the soldier searching out the eye of the battle storm. The intrepid hunter and fisherman compelled to pursue the greatest fish and stalk the most dangerous animal from the Gulf Stream to Central Africa. The athlete, swimmer, brawler, boxer, the hard drinker and hard lover who boasted he had bedded every girl he wanted and some that he had not wanted. The lover of danger, of the bullfight, of flying, of the wartime front lines. The friend of brave men, heroes, fighters, hunters, and matadors."

Yalom continues: "The image is so powerful that it obliges even the most naive observer of human nature to wonder whether a man firmly convinced of his identity would channel such a considerable proportion of his life energy into a search for masculine fulfillment."

It is well known that privately and publicly Hemingway invested inordinate energy into fulfilling his idealized image. The investment was not primarily deliberate. "He acted often not through free choice but because he was driven by some dimly understood internal pressure," Yalom writes. "He fished, hunted, and sought danger not only because he wanted to but because he had to, in order to escape some greater internal danger."

In The Snows of Kilimanjaro Hemingway suggested that he needed to kill to stay alive, the psychiatrist observes. After World War II, Hemingway complained of the emptiness of his life without the war.

Everyone has an idealized image of himself, somehow, Yalom comments, but Hemingway's idealized image was more, much more.

The development at an early age of an idealized image and the channeling of energies away from fulfillment of one's actual potential has extremely far-reaching ramifications on the developing personality, according to psychiatric theory.

Yalom elaborates: "The individual experiences great isolation as chasms arise between himself and others. He places increasingly severe demands upon himself....

"He develops a complete pride system that defines which feelings and attitudes he can permit and which he must squelch in himself.

"When the idealized image is severe and unattainable, as it was for Hemingway, tragic consequences may result: the individual cannot in real life approximate the idealized image...and he is flooded with self-hatred, which is expressed through a myriad of self-destructive mechanisms."

Hemingway, according to the study, was exceedingly dependent on praise and highly sensitive to criticism. He bore his critics' vengeance and, in a paranoid way, considered anything but unqualified praise as a conspiracy again him.

His relationship to General Lanham, quoted in Yalom's study, projects a childlike admiration for the professional soldier, with whom Hemingway compares himself unfavorably and attempts to identify.

He wrote to Lanham that others were "always jealous" of people like them, and that The Old Man and the Sea had in it everything in which they both believed. Hemingway wrote also in a period of depression that he was just killing time wishing he were a soldier like Lanham instead of a "chickenshit writer."

But it was in his novels, which Hemingway himself had labelled biographical, that his psychic conflicts swarm nakedly across the page, the psychiatric study shows.

"In his fiction, which includes some of the most moving love stories in contemporary literature, there is scarcely a single example of a successful male-female egalitarian relationship," Yalom observes. He gives these examples:

The Sun Also Rises describes the relationship of an impotent man, Jake Barnes, with the seductive, promiscuous Brett Ashley. In For Whom the Bell Tolls the worldly American Robert Jordan and the young and ingenuous Maria come together like teacher and pupil. This disparity is even more pronounced in Across the River and Into the Trees, where the 19-year-old girl Renata is called "daughter" by her lover, the 50-year-old Colonel Cantwell. In To Have and Have Not, Harry's wife Marie is an unfeminine, blowsy ex-prostitute. In The Snows of Kilimanjaro, Harry is married to a rich, intrusive woman who feeds on his vitality, and in The Short Happy Life of Francis Macomber the protagonists' wife infantilizes him until he begins to discover his authentic self, whereupon she manages to kill him by accident.

"It is as though Hemingway's attempts to portray a satisfying love-sex relationship are thwarted by a number of powerful counterforces, many of which Hemingway recognizes in his novels," writes Yalom. Looming large in such works as The Snows of Kilimanjaro, The Short Happy Life of Francis Macomber, Now I Lay Me and others, is the danger of emasculation.

"Throughout his life Hemingway considered love between man and woman as detrimental to other, truer types of relationships, such as friendship between males or man's communion with nature," Yalom comments. "One counterforce to mature love arose from a deeply based fear of women stemming from oedipal conflicts."

Hemingway also suffered from castration anxiety, says Yalom, "an idea which gains support as we consider his reaction to significant trauma."

During World War I, in which he served as an ambulance driver, Hemingway was wounded, receiving a serious and bloody injury to his legs and scrotum.

Yalom recounts the incident and believes it may have evoked terrifying, primitive fears of castration and annihilation.

"At some level of consciousness Hemingway realized this," Yalom says. "The war wound inflicted upon his fictional counterpart in his first novel, The Sun Also Rises, rendered him physically, but not psychologically impotent."

When Hemingway's typewriter was called upon to help repair the trauma he suffered in Italy, it seems to have been summoned in vain, says Yalom. He relived that injury often in his letters, conversation, and in his fiction. Each Hemingway protagonist receives a major injury, generally to an extremity.

Jake Barnes' injury, of course, was to his genitals. Lt. Henry in A Farewell to Arms suffers Hemingway's exact wound. Robert Jordan at the end of For Whom the Bell Tolls, fractures his leg and lies waiting for his death with "his heart pounding on the pine needle floor of the forest." Harry in The Snows of Kilimanjaro dies from a gangrenous injury to his knee. Harry Morgan in To Have and Have Not suffered an injury which necessitated amputation of his arm.

Of what value is this fantasied recall of injury? Does it not merely probe for pain in the same way that the tongue compulsively jars an aching tooth? Most psychiatrists will agree that the deliberate reliving of a traumatic incident represents an attempt to "desensitize" one's fear of real danger, says Yalom.

Yalom concludes: "In his posture toward self-sufficiency, physical injury and integrity, women and mature love, Hemingway fell very short of his idealized goals. His failure to do so took its toll. He was plagued by recurrent periods of self-hatred, which culminated in his suicide.

"It was the act that no Hemingway hero had ever done."

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Mailed August 30, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A special election to create an employee advisory council will be held at Stanford University Hospital September 22 through 24.

The election, announced Monday by Dr. Thomas A. Gonda, hospital director, would give hospital employees a representative voice in decisions affecting their employment.

Specifically, according to proposed by-laws, the council's role would be: "to advise...the administration on projects and programs for the improvement of employment conditions, policies and practices of the Stanford University Hospital through joint participation of staff members."

Creation of the council represents a committment made to hospital employees by the administration last spring. The idea, however, dates back to 1968 when hospital officials had pointed to the need of formally organizing a representative body through which employees could be heard.

Forerunners of such groups are the Black Advisory Committee and the Alianza Latina, which became elective this summer. Both represent minorities at the hospital.

As set by the proposed by-laws, nominations of candidates and alternates for the 17-member advisory council are now open. Ballots will be posted September 14.

The first meeting of the new council will be October 1. Subsequently, procedures concerning election of officers and order of business will be set by the council.

All hospital employees not represented in collective bargaining agreements will be eligible to cast ballots to elect 12 delegates and alternates to the council.

In addition, CRONA (Committee for Recognition of Nursing Achievements) which represents nurses, will designate five delegates and alternates to the advisory body.

Administrators and supervisors will be ineligible to vote or to be nominated. Also excluded from voting at the special election will be some 40 licensed vocational nurses. LVN's are represented by the California Licensed Vocational Nurses Association.

The document of by-laws was developed by hospital administrative staff in informal consultation with employees. Other input came from the staff of the Department of Industrial Relations, State Conciliation Service which will supervise the election.

Dr. Gonda stressed that Black and Latin employees of the hospital would be represented on the council, in addition to having their own elected advisory committees.

He said the newly elected Black Advisory Committee and Latin Alliance would continue to focus their primary efforts on minority problems and to assist in the development of affirmative action programs designed to extend equal opportunity.

"Until affirmative action becomes a reality, with strong and effective programs, there will be a need for special input from BAC and the Alianza Latina," Dr. Gonda said.

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Mailed August 30, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Three medical institutions in the Midpeninsula have agreed to consolidate their speech and language diagnostic and treatment programs.

Beginning September 1, all such programs will be coordinated by Stanford University's new center for communications disorders, it was announced Monday (August 23).

The agreement is a step in eliminating costly duplication, and achieving improved coordination and efficiency in the delivery of health services.

The institutions are Stanford University School of Medicine, the Palo Alto Medical Clinic, and the Children's Hospital at Stanford. Also affected are Stanford's Institute for Childhood Aphasia, and the Crippled Children's Services, which refer patients with speech-related disabilities.

Under the new plan, the Medical School's present speech clinic will be reorganized and expanded as a department of Stanford University Hospital. The center, under contract, will provide service in the other two institutions where satellite units will be maintained.

Functioning as a center for communications disorders, it will be able to treat larger numbers of patients than the present clinic, and will coordinate more effectively the existing fragmented network of speech-related rehabilitation services in the area, said Dr. Thomas A. Gonda, hospital director.

Director of the new center will be Dr. Kathryn R. Beadle, a speech and language pathologist.

Dr. Beadle said that in addition to first rate facilities, the new plan will serve as a model of "rational, coordinated diagnosis and treatment that may be followed by other institutions throughout the country."

Expansion of services will be made possible by moving certain functions from Stanford Medical Center to vacant offices in the Children's Hospital nearby.

Patient referrals and admissions, however, will be handled centrally by the Stanford facility, Dr. Beadle said.

The new center will be the only facility in the Midpeninsula offering complete services in speech, language and voice disorders for both adults and children, she said.

Dr. Beadle estimates the center will handle about 5,000 patient visits a year. She also hopes that as an independent unit, it will attract federal and private support.

"Outside financial support," she explained, "is needed because services can never be supported solely from patients' fees. To do so would mean considerable financial hardship to patients, or a sharply reduced range of service."

The added support, Dr. Beadle said, would make possible a sliding scale of fees based on financial ability so that no patient would be refused treatment because of inability to pay.

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Mailed August 23, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A two-year study of jaundice in newborn infants will be undertaken by the Department of Pediatrics of the Stanford University School of Medicine.

The study, announced Monday, will be conducted by Dr. John D. Johnson, assistant professor of pediatrics.

His research will be supported by a $60,893 grant from the United Cerebral Palsy Research and Educational Foundation.

Jaundice in the newborn, particularly in premature babies, is known to be associated with multicrippling cerebral palsy. It is hoped that Dr. Johnson's findings may be applied to prevention or treatment of jaundice, Dr. Leon Sternfeld, director of the Foundation, said.

The disease is a common outcome of high production of bilirubin--bile--in the bloodstream. Babies with a high level of bilirubin are three times more prone to nervous system abnormalities than are those infants with low bilirubin readings.

Exchange transfusions and light therapy have been effective in some instances. However, in many cases high bilirubin rates cannot be explained.

Dr. Johnson's work will attempt to find how blood pigments are broken down in the early postnatal period, determine how much bilirubin newborns produce, and the effects of age, maturity, oxygen and drugs.

The researcher is a Stanford graduate, and was chief pediatrics resident at the Stanford Hospital in 1969, following a two-year internship and residency at Johns Hopkins Hospital, Baltimore.

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Mailed August 23, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Brewer or Gary Cavalli 415: 321-5310

BUSINESS WIRE 8/19/71

Heart Transplant #34

STANFORD -- Stanford University surgeons performed their 34th heart transplant operation late Wednesday (August 18). The recipient is a 52-year-old man. He is reported in satisfactory condition.

Including the new recipient, 14 heart transplant patients operated on at Stanford are now living.

According to a new policy announced May 18 by the Hospital, the recipient's name is not announced to protect his privacy. Under the new policy, names can be released only at the patient's request. In this case, anonymity has been requested.

Donald Wanjon of Rochester, New York, who received a new heart on August 10, is now listed in very good condition.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing Brewer 415: 321-5310

STANFORD -- Peter Stangl, former assistant librarian at Yale University Medical Library, has been appointed new chief librarian at Lane Library at the Stanford University Medical Center. The appointment is effective September 15.

He succeeds Clara Manson, who will retire September 1, after 23 years as the top medical librarian at Stanford.

Author of a number of papers on biomedical book and journal use and retrieval in medical libraries, he has expressed interest in developing audiovisual and computer areas for Lane Library.

The Hungarian-born Stangl, 34, was graduated from Yale in 1962 with a B.A. in Russian. He then studied linguistics at the Sorbonne in Paris and at the Yale Graduate School, before obtaining his M.S. in library science at Southern Connecticut State College.

Stangl is proficient in five languages--Russian, German, French, Hungarian, and English--with some speaking proficiency in Bengali and Malay.

He began working at the Yale Medical Library in 1964, and was promoted to Assistant Librarian in 1969.

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Mailed August 18, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli, 415: 321-5310, Stanford
or
Stan Miller, 415: 961-1111, X 2671
Ames Research Center, NASA,
Moffett Field, Mt. View, Ca.

(ADVANCE FOR AM RELEASE THURSDAY, AUGUST 19, 1971)

STANFORD -- A unique approach to solving significant medical problems in heart disease will be employed by a newly-formed Stanford University-National Aeronautics and Space Administration research team.

This Biomedical Technology Transfer Team (BATeam) will apply aerospace technology generated by NASA to major problems in the field of cardiology.

The team, based at Stanford's School of Medicine, is under the direction of Dr. Donald C. Harrison, chief of the Division of Cardiology.

Under NASA contract, the project is part of NASA's Technology Utilization Program.

The Stanford group, the fourth biomedical team established throughout the country, is the first to be formed at a leading school of medicine.

The Stanford program is also unique in that it will, for the most part, concentrate on problems in only one area--cardiovascular medicine. Heart disease is the leading cause of death in the United States.

Several major medical centers on the West Coast will be contacted to obtain significant problems to work on which may be solvable by NASA technology.

The team will consist of five medical consultants and two administrative staff members from the Medical School, as well as five aerospace engineering consultants.

In addition to Harrison, the medical consultants are Drs. Edwin Alderman, William Barry, David Cannom, and Richard Crow, all from the Division of Cardiology at Stanford.

Deputy director of the program is Harry Miller, research associate and business manager of the division.

NASA currently has eight special teams charged with identifying individual problems and proposing solutions based on aerospace technology. Four of the teams concentrate on environmental problem areas. Another four, including the Stanford research team, concentrate on biomedical activities in public health research and clinical medicine.

The new program will increase the joint research efforts of Stanford and the NASA-Ames Research Center in Mountain View, California. Ames, the leading NASA center in life sciences research, will be a key technology resource for the new team.

Dr. Harrison and his staff have worked closely with Ames for the past several years, with many clinical innovations resulting. In April, a Stanford-Ames team devised a computer system to watch a movie of the beating of a patient's diseased heart--identifying dead spots or scar tissue in the heart wall, aneurysms (bubble-like projections of the heart muscle), and other disorders. ###

END ADVANCE FOR AM RELEASE THURSDAY, AUGUST 19, 1971.) Mailed August 17, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Polly Downing Brewer 415: 321-5310

BUSINESS WIRE, August 11, 1971

Heart Transplant #33, August 10

STANFORD-- A heart transplant operation was performed late Tuesday night, August 10, on a 47-year-old man from Rochester, New York.

A team of Stanford doctors, headed by Dr. Norman Shumway, did the operation. The patient is in fair condition.

Including the new recipient, there have been 33 heart transplants at Stanford, 13 of which are now living. Three recipients have lived longer than two years and a fourth received a transplant in September of 1969.

In accordance with a policy announced May 18, the recipient's name is not announced. The donor's name, as in most heart transplants, is anonymous at the request of the family.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--A newly-installed modular home will be the scene of "Family Focus," a unique training project in physical therapy at Stanford University Medical Center.

Supported by a five-year federal grant of over $400,000, the project will enable Stanford physical therapy students to work closely with patients and families who must make the difficult adjustments to long-term disability.

The modular home, a specially-designed prefabricated unit for family living, will serve as a "temporary home" for Hospital patients and their families for a transitional period prior to the patient's return home.

At the same time, it will be a valuable classroom for the families as well as Stanford Master's Degree candidates in physical therapy.

"The students will have the rare opportunity to work with patients and their families in a home-like setting, while the families will have an 'adjustment period' to help them adapt to or learn to cope with the family member's disability," said Helen Blood, project director and acting director of Stanford's Division of Physical Therapy.

The project will be supported by a five-year grant from the U.S. Public Health Service's Bureau of Allied Health Manpower Education, totaling $79,607 the first year and projected at $435,540 for the five year period.

It was jointly planned and will be jointly implemented by Division staff and the Mental Research Institute (MRI), a private, non-profit research institute based in Palo Alto.

The only project of its kind in the country, Family Focus is an outgrowth of Stanford's increased behavioral and social emphasis in physical therapy curriculum, Miss Blood said.

"For many years we've been working to provide training programs for students which involve them in out-of-hospital and community work as part of their education," she said. "In this case, the family and the temporary home are serving as the basis for this."

For the students, the academic and clinical aspects of their training will, for the most part, be combined.

-more-

222--Div. of Physical Therapy--Project

"Our Master's candidates will be involved in Family Focus for their full two years," said Kay Shepard, acting instructor in physical therapy and project coordinator.

"They'll assume an expanded role in working with patients, families and health professionals by taking part directly in observation, consultation, teaching patient skills, and program planning."

Apart from the academic benefits, the project is expected to have a significant impact upon the patients and families involved, said Dr. John E. Bell, Director of MRI and clinical associate professor of psychiatry at Stanford.

Bell, who teaches a course called "The Family in the Hospital," will take part in the instruction and supervision of students in the project, along with other MRI staff members. He emphasized the importance of the family in physical therapy.

"A patient who returns home with a handicap really upsets things," he said. "The family has to take over some aspects of physical therapy which the therapist performs when the patient is at the hospital. In the past, we've been acutely aware that some families don't do a very good job.

"The physical therapist can really get involved with the family and do something about this. The new program gives us this opportunity. By using the modular home, we can provide the family with a preview of how life will be when the patient returns home, and help them all cope with it."

The modular home will be set up to allow the family to engage in independent living. Adjacent but separate from the living quarters will be a combined staff office and observation room. With the family's permission, students will observe rehabilitation training and family-patient-staff conferences concerned with family readjustments.

Target date for the installation of the modular home is mid-October. It will be located behind Hoover Pavilion.

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Mailed September 27, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The prospect of medical malpractice suits is creating a great emergency for proposed physician's assistants training programs in California, an insurance executive warned Saturday (Sept. 25).

Unless the Legislature acts to limit liability of these new health team members, future investment for training physician's assistants stands the risk of crumbling, said James F. King.

King, general manager of the malpractice division of American Mutual, addressed a symposium of 200 educators, lawyers, doctors and lawmakers at Stanford University Medical Center. The symposium, the first of its kind, was organized to discuss development of physician's assistants programs and educational standards.

The physician's assistant will be the new member of the health-care team, trained to take over some of the doctor's mounting workload. Stanford, University of California and Charles Drew Medical Center in Watts are among institutions in the state planning to train physician's assistants.

King said the new professional would be liable for his own acts, but liability would also extend to his doctor employer.

Physicians and insurance companies already face serious difficulties by a rapid escalation in malpractice suits and rising premiums, he said. King cited figures showing that in the last six months malpractice suits in the state have risen from 10 to 14 per 100 M.D.'s.

"The physician's assistant is entering an area already fraught with problems, and he will only complicate the situation," said the insurance executive.

"An onslaught of malpractice suits could destroy the new health career forever," King added.

He urged adoption of well-defined educational standards, and favorable legislation to limit liability of physician's assistants.

"Otherwise insurance premiums would go up," he predicted.

One participant disagreed. Dr. Hughes Andrus, chairman of the department of family practice at UC, Davis, said he expected physician's assistants to help reduce the number of malpractice suits, because their presence on the health team would improve the quality of care. -more-

King countered that pressure was coming from lawyers who are looking for new areas of litigation to compensate for possible loss of income since passage by several states of no-fault automobile accident legislation.

He said some 500 lawyers had recently attended a seminar in Oregon devoted exclusively to how-to-do sessions on suing doctors and hospitals.

Another speaker, Dr. Tirso del Junco, president of the California Board of Medical Examiners, said the board was developing rules to avoid difficulties.

Under the law enacted last year the board is authorized to work with medical institutions to develop such standards.

Del Junco said the first program would begin in California before the end of 1971, but he outlined concerns he felt should be resolved before they begin to affect the consumer.

These concerns are:

. The question of informed consent. At which point is the patient going to be told that some procedures will be done by a physician's assistant or that a pregnant mother will be delivered by a midwife?

. Should the new professional have some kind of identification so that he can be easily recognizable by the patient?

. Minority groups fear that physician's assistants are being created to provied health care exclusively to them, and they object to it.

. Is the physician's assistant going to provide an instrument for the doctor to make more money?

"It is the board's obligation to guard against the latter thing happening," del Junco said.

The board, he said, is aware of veteran medics coming from Vietnam with some degree of medical experience. It has been proposed that these ex-medics be utilized as physician's assistants.

"But the level of medical judgment in the battlefield is always very narrow," del Junco said, " and the board feels these medics require orientation in civilian medicine."

Del Junco said clinical experience for physician's assistants should be provided in academic medical centers.

He said in 1960, West Germany trained some 6,500 physician's assistants to cope with the doctor shortage. But when training of doctors finally caught up with the demand, physician's assistants had no place to go.

So another of the problems now being tackled by the board is mobility and future advancement of the physician's assistant in the health field, del Junco said.

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Mailed September 27, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- "Half Kidney Will Travel." The slogan belongs to Martin Monica, a 16-year-old with a kidney transplant who is constantly on the go.

Two years ago Martin was in and out of hospitals with kidney disease. He was on hemodialysis for four months and then he underwent a kidney transplant.

Now he is in a hospital again...but this time not as a patient. Martin is Stanford University Medical Center's only male candystriper. Instead of the pink and white striped uniform that gives the teenage volunteers their name, however, Martin wears the monogrammed blue shirt and trousers that are the regular attire of the male hospital volunteer.

Since August, Martin has been coming to the Medical Center every Saturday to work in patient service, where he makes rounds to talk to patients and check on their needs. It is not surprising that his favorite hospital area is the renal care unit. Normally volunteers are not allowed in the unit, but Martin has obtained special permission from the medical staff to visit patients there.

"I often talk to people on dialysis about the benefits of a kidney transplant. Many of them are afraid of the surgery and the possibility of rejection. They would prefer to remain on the artificial kidney, even though they have to come for dialysis two or three times a week," says Martin.

Artificial kidney machines sustained Martin's life for four months after his diseased kidneys were removed in 1969. Then on October 14 that year he underwent the transplant operation in which he received a healthy kidney from his mother.

It was during his convalescence from the operation that Martin embarked on the first of his many enterprises for the National Kidney Foundation's local chapter: a cooking and catering service called "Martin's Kitchen." All the money Martin makes from catering small luncheons and dinners and baking cakes and desserts to order goes to the Kidney Foundation.

The Kitchen started January, 1970 because Martin wanted something to do while he was confined to the house. He began cooking meals for his family which includes his parents, three brothers and two sisters. One day he prepared a dinner for some family friends. A guest complimenting the young chef suggested that he go into business. Five days later "Martin's Kitchen" opened.

Word of his cooking and catering talents soon spread through the Peninsula, and now Martin receives calls from San Francisco to San Jose. He has business cards which bear his slogan, and a bulletin that he issues periodically to announce something for the Kidney Foundation.

Most of his recipes were obtained from his mother and her friends, or from books, says Martin, but he has perfected his own specialties. "When I wanted to bake a pie, my mom discouraged me because making a good crust is difficult. But I went ahead and made an apple pie anyway. It came out well, and now I have perfected a pie crust that I can prepare in five minutes. In fact, I can have a lemon meringue pie ready for the oven in ten minutes," says the young chef.

-more-

Martin's favorite dessert is his special chocolate cake with sour cream. ("The sour cream keeps the cake moist," he explains.) He also bakes and decorates wedding cakes, but his biggest cake order so far was for an eight layer chocolate birthday cake.

Sweet and sour chicken with pineapple is one of Martin's most popular dishes. Another attraction is yeast rolls which he likes to bake because "it's fun to watch the dough rise."

The month of October Martin is busy with the candy sale for the Kidney Foundation. He is in charge of part of the candy supply in the MidPeninsula area. Several people will be selling boxes of candy along with Martin, and the sale will continue until all the candy is sold.

Martin's aid to the Kidney Foundation is not only financial. The dedicated teenager works continuously to make the public aware of kidney disease. "Unless it happens to you or to someone close, you probably don't know anything about it," says Martin, who admits he had never even heard of kidney disease until he became ill.

With two friends last year he made a five-minute film to illustrate the difference between dialysis machines used in the hospital and at home. He often shows this movie when he talks about kidney disease to various groups such as businessmen or veterans.

The summer of 1970 Martin and his friends campaigned fervently in favor of a state bill that would provide for more local dialysis centers in California. Existing facilities now have waiting lists of those who require dialysis, according to Martin, and many patients have to travel over 50 miles for a machine. The bill was passed.

He collects Betty Crocker coupons for artificial kidney machines for the Foundation (800,000 coupons will buy one machine.) After December, however, the coupons will no longer buy a machine so the MidPeninsula Foundation will use them toward a station wagon for transporting patients to and from dialysis centers. Martin has also bought and distributed "Support Your Kidney Foundation" bumper stickers.

"Martin's Kitchen" and the other various projects seem like full-time work, but not for an active highschooler. A member of the San Jose Bicycle Club, Martin works out daily for cycle racing and races locally every Sunday to train for the big contests in the spring. His latest hobby is photography, and he is setting up his own darkroom. To help finance his racing and photography equipment, Martin has two jobs: a paper route and a gardening service.

Since his illness, Martin has decided to become a doctor. Although he isn't sure yet what kind of physician he will be ("maybe a surgeon or pediatrician") he is certain of his medical specialty. It will be in kidney disorders.

In preparation for his future career, he plans to take several sciences courses at Cubberley High School where this year he is in the tenth grade. However, he feels that volunteering at Stanford Medical Center is a more valuable and meaningful way to prepare right now. "You must have a feeling for working in a hospital or you can't do it," says Martin. "I think you have to go through some experiences to want to do it."

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Mailed September 20, 1971.

Photos on request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- An all-day symposium to discuss development of programs for training physician's assistants (PA) in California will be held at Stanford University Medical Center, September 25.

The meeting will provide the first status report on PA training programs since they were sanctioned by a California law a year ago.

The law authorized the Board of Medical Examiners to work with medical institutions to develop training programs and standards for physician's assistants.

Although the law at the time was hailed as a breakthrough, putting California at the vanguard of a nationwide effort to meet the doctor shortage, no training of physician's assistants has yet started in California.

Several programs, however, are in the planning stage. According to Dr. Michael Dennis, director of Stanford's PA program, implementation of these programs has been delayed because of concern over standards.

Health professionals have expressed concern that a new class of health workers will be produced by a number of institutions without sufficient educational uniformity and established criteria for certification and mobility within the health field, Dennis said.

Dennis said he hopes the Stanford meeting will encourage airing of problems to foster careful planning by institutions undertaking PA training programs.

The meeting, which will bring together medical educators, practicing doctors, lawmakers, insurance executives and administrators is co-sponsored by the California Medical Association Commission on Health Manpower, and Area III of the California Regional Medical Programs.

The symposium will begin at 9 a.m. in Room M106, Stanford University School of Medicine.

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[illegible]ed September 20, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Studies in the management and understanding of psoriasis, a common skin disease that affects one out of 50 Americans, will continue at Stanford University School of Medicine under a one-year grant of $49,997 from the John A. Hartford Foundation, Inc., New York.

Announcement of the grant, effective September 1, was made jointly by Harry B. George, president of the Foundation, and Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine. The research, under the direction of Dr. Eugene M. Farber, professor and head of the Department of Dermatology, has been supported by the Foundation for several years.

While no permanent cure is yet known for the disorder, which produces reddened, scaly spots or patches on many parts of the body, various drug applications have been found to provide effective control. However, relief is usually temporary, and in most cases the psoriasis recurs.

"Clinical treatment of psoriasis is limited by our lack of knowledge of its basic nature," explains Dr. Alvin J. Cox, Jr., professor of pathology and a member of the Dermatology Department who has been working with Dr. Farber. "We believe that a defect in the mechanism which controls the growth of the epidermis (outer skin layer) leads to the psoriatic lesions, but we still do not know exactly how this mechanism functions," he says.

In order to obtain further insight into what regulates growth, the Stanford investigators are studying epidermal cells in the laboratory that have been stimulated to grow the way psoriatic cells grow. They are also observing how certain drugs applied locally act on the cell metabolism to inhibit psoriatic lesions on patients who come to Stanford University Hospital and clinics for treatment. In particular, the researchers are interested in the mode of action of the well known drug anthralin, which is one of the most effective therapeutic agents.

The Stanford team is also continuing its questionnaire studies of patients with histories of psoriasis to learn more about the specific characteristics of the illness, and how it relates to hereditary and environmental factors.

The long term work in psoriasis of Dr. Farber and his colleagues led to an international symposium on psoriasis held at Stanford in July, and co-sponsored by the Department of Dermatology. The first of its kind, the four day conference drew leading dermatologists from all over the world.

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Mailed September 20, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

ADVANCE FOR P.M. RELEASE TUESDAY, SEPT. 14

STANFORD -- Five new rapid, inexpensive tests for the diagnosis of sickle cell anemia have been developed by a team of specialists on the disease.

Sickle cell anemia is a potentially disabling hereditary blood disease which primarily affects American Blacks.

The new findings were disclosed today at the 24th annual meeting of the American Association of Blood Banks in Chicago by the team leaders--Dr. Paul L. Wolf, associate professor of pathology and director of clinical laboratories at Stanford University Medical Center, and Dr. Robert M. Nalbandian, associate pathologist at Blodgett Memorial Hospital in Grand Rapids, Michigan.

The new tests, which may be performed within minutes for a cost of 2-8¢ per test, will permit mass screenings of the Black population across the country, Wolf said.

The red blood cells of sickle cell anemia victims become elongated, shaped like crescents or sickles. Unlike normal round, doughnut shaped red blood cells, they are inefficient oxygen carriers and have difficulty moving through the body's smaller blood vessels.

The result is seriously impeded blood flow and reduced oxygen supply to various body tissues, causing severe pain, increased infection, and often malfunction of body organs.

One Black American in 10 (approximately 2-1/2 million) carries one gene for the disorder and is said to have sickle cell trait. One in 500 (approximately 50,000) has inherited two genes and has sickle cell anemia.

A year ago the same research team unveiled a new treatment of the disease--the intravenous infusion of urea in invert sugar--based on the definition of the molecular mechanism of sickling by Dr. Makio Murayama, a biochemist at the National Institutes of Health in Bethesda, Md.

Urea, manufactured by the liver and excreted in urine, is capable of reducing the strength of the bonds formed in sickle cells and reversing the sickling process within hours.

Murayama's research into the molecular structure of hemoglobin (the oxygen-carrying protein of red blood cells which is affected by sickle cell anemia) also laid the groundwork for the team's development of the initial specific test for the diagnosis of the disease, the Murayama Test.

The Murayama Test involves placing a deoxygenated sample of the patient's blood in a 37° C. environment, and then quickly reducing the sample to 0° C. The sample will gel at 37° C and liquify at 0° if it contains hemoglobin S, the sickling hemoglobin associated with sickle cell anemia. Normal hemoglobin and other nonsickling hemoglobins will not gel at either 37° or 0°.

The first of the new tests is a simplification of the Murayama Test technique. Because of the time involved, it is the only new test not suitable for mass screenings, Wolf said.

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"We've modified the test by using moist nitrogen to remove oxygen from the blood sample, instead of dry ice," he said. "This speeds up the process to about 20 minutes." Originally it took one hour.

The four remaining tests--dithionite tube test, urea-dithionite tube test, and automated adaptations of the two--utilize a solution containing dithionite to test for sickling hemoglobin.

The chemical reagents in all four dithionite tests are potassium phosphate, sodium dithionite, and saponin (snake venom).

When a blood sample containing sickling hemoglobin is introduced into the solution, the system will become turbid (clouded, muddy).

This screening procedure for sickling hemoglobin takes less than five minutes in the test tube version and 30 seconds utilizing an Autoanalyzer, both at a cost of 2¢.

If a patient tests positive in the dithionite test screenings, doctors can test specifically for sickle cell anemia by carrying the test one step further. Urea is added to the turbid system. If hemoglobin S is present, the system will uncloud.

"Only a dithionite solution containing hemoglobin S will uncloud when urea is added," Wolf said. "The urea-dithionite tube test and automated urea--dithionite test provide us with specific tests for sickle cell anemia. Non-S sickling hemoglobin will remain turbid even after urea is added."

The automated urea dithionite test requires one minute and costs from 4-8¢ per test.

Extensive field trials of the dithionite tests have been successfully undertaken at the U.S. Army Medical Research Laboratory in Fort Knox, Kentucky, Wolf said. The automated dithionite test was used to screen 7,000 troops, with hemoglobin S detected in approximately 100.

The other members of the research team are Lt. Col. Frank Camp, from the U.S. Army Medical Research Laboratory; Dr. Raymond L. Henry, associate professor of physiology at the Wayne State University School of Medicine; and Bruce M. Nichols, a chemist at Blodgett Memorial Hospital in Grand Rapids, Michigan.

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END ADVANCE FOR P.M. RELEASE TUESDAY, SEPT. 14

Mailed September 9, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- The first stage of a computer-based system for the prevention of undesirable drug interactions in hospitalized patients went into operation this week at Stanford University Medical Center.

The unique new system, developed by scientists in the Division of Clinical Pharmacology, utilizes Stanford's Advanced Computer for Medical Research (ACME) to automatically monitor all drugs dispensed to patients at the University Hospital.

Ultimately, it will produce a computer-generated "alert" each time a newly prescribed drug has the potential of interacting with a drug the patient is already receiving.

The program is under the direction of Dr. Stanley N. Cohen, associate professor of medicine and head of the Division of Clinical Pharmacology at the School of Medicine.

"Our objective has been to design and develop a system which can detect and identify potentially interacting drug combinations before the second drug is administered to the patient," Cohen said. "So far as we know, ours is the first comprehensive drug interaction control system of this type to be developed, and we anticipate that it may become a prototype for systems elsewhere."

In emphasizing the need for such a program, Cohen cited 1969 findings by the United States Department of Health, Education, and Welfare Task Force on Prescription Drugs, which reported that more than one-seventh of all hospital days are devoted to the care of patients who have experienced drug toxicity, at an estimated cost of $3 billion per year throughout the U.S.

"The hazards resulting from therapeutic drug use far exceed other hospitalization hazards, such as transfusion reactions and diagnostic procedures," he said.

"Recent studies have shown that more than 60 per cent of all complications experienced by hospitalized patients are caused by therapeutically administered drugs. Moreover, about one-fourth of these are due to preventable drug interactions. The system being developed here at Stanford is intended to control this important component of undesirable drug reactions."

Cohen pointed out that "the large number of potential interactions among therapeutic drugs and the pharmacologic complexities involved have made it impractical for most physicians to have adequate drug interaction information on hand when they prescribe drugs."

Consequently, Stanford's Division of Clinical Pharmacology for the past two years has been compiling a large, documented data-base of information on interacting drug combinations. This data-base, which has been entered into the ACME computer file, will be used for the drug interaction control system.

At present, the system enables Stanford's pharmacists to record drugs dispensed for patients by the of a computer-controlled television unit located in the pharmacy. After the pharmacist responds to a series of question prompts at the video terminal, the computer automatically prints out a medication label and simultaneously stores appropriate information about the drug and patient in its file.

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When the completed system is put into operation, a "drug interaction report" will be generated by the computer and sent along to the physician with the medication whenever a newly prescribed drug has the potential of interacting with one a patient is already receiving.

This report will contain information about the pharmacologic basis for the interaction, potential clinical effects, clinical significance of the interaction, and documentation from medical literature.

The system will also provide safeguards against certain types of medication errors by automatically verifying patient identification numbers and bed locations, and printing out patient medication profiles for use by the Hospital nursing staff.

Additionally, it will enable the Division of Clinical Pharmacology to carry out research on mechanisms of interaction between drugs and serve as a tool for teaching medical students about the use of therapeutic drug combinations.

The system has been developed by Cohen, Drs. Marsha Armstrong and Gilbert Hunn, both postdoctoral fellows in the Division of Clinical Pharmacology, and Linda Crouse of the ACME computer facility.

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Mailed September 14, 1971.

EDITORS: Photos available upon request if not included.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

ADVANCE FOR PM RELEASE WEDNESDAY, SEPTEMBER 15

STANFORD -- Dr. Henry S. Kaplan, professor and chairman of the Department of Radiology at Stanford University Medical School is the recipient of the 1971 Robert Roesler de Villiers Award for achievement in leukemia research.

The award was presented today (September 15) to Dr. Kaplan by the Leukemia Society of America, Inc., at the banquet of the 5th International Symposium on Comparative Leukemia Research in Padua, Italy.

Established in 1954 by the Leukemia Society to recognize the contributions of leading leukemia researchers in the attack on leukemia, the de Villiers award consists of a medal and a $1,000 prize. Dr. Kaplan received the award this year "for his contributions to radiobiology, carcinogenesis and the understanding of lymphomas."

Dr. Kaplan is noted for his pioneering work in cancer and radiation. He has demonstrated an indirect mechanism in animals whereby irradiation or chemicals trigger a latent virus which induces leukemia. He has pinpointed the target cells for the virus and defined the mechanism by which bone marrow inhibits the development of leukemia unless irradiated.

At the clinical level, Dr. Kaplan adapted the linear accelerator to radiology in order to irradiate a large area. He developed a technique of irradiating all the lymph glands in the neck and thorax which has proved beneficial in treating Hodgkin's Disease and other tumors.

The Symposium, being held September 13 - 17, is principally co-sponsored by the Leukemia Society of America and the Special Virus Program of the U.S. National Cancer Institute, N.I.H. Several Italian agencies are also sponsoring the meeting.

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END ADVANCE FOR PM RELEASE WEDNESDAY, SEPTEMBER 15

Mailed September 13, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos and Gary Cavalli 415: 321-5310

THREE STORIES: FOR IMMEDIATE RELEASE

STANFORD -- Black employees at Stanford University Hospital are being tested for sickle cell anemia and a chemical blood deficiency which affects primarily American Blacks.

The tests are being conducted by Don Williams, a medical student, and sponsored by the Hospital and its Black Advisory Committee. Some 130 minority employees so far have been tested, and more will receive the tests next week.

Sickle cell disease is a severe hereditary disorder in which red blood cells become crescent shaped instead of round, causing a lack of oxygen in tissue cells. One Black American in 10 (approximately 2-1/2 million) carries one gene for the disorder and is said to have sickle cell trait. One in 500 (approximately 50,000) has inherited two genes and has sickle cell anemia.

Williams and his associates--all Black medical students in the project--feel that the incidence of the disease can be reduced significantly, if the carriers are identified and made aware of their problem before they have children.

The other disorder--glucose 6 phosphate dehydrogenase deficiency--is also inherited. When persons with this disorder are exposed to certain drugs, their red cells burst open causing a severe hemolytic anemia. Since a number of the drugs which cause this crisis are prescribed medicines, it is important for an individual to know whether or not he or she is affected by the disorder, Williams said.

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STANFORD -- Dr. John P. Steward, acting director of the Fleischmann Laboratories and senior lecturer in medical microbiology, has been appointed acting associate dean for student affairs at the Stanford University School of Medicine.

Dr. Bernard W. Nelson, associate dean for student affairs, has left Stanford on a one-year leave of absence.

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STANFORD -- Dr. Marguerite Lederberg, clinical instructor in pediatrics and community and preventive medicine, has been named coordinator of the Macy Office of Women's Affairs at the Stanford University School of Medicine.

She succeeds Dr. Barbara Arons, clinical assistant professor of psychiatry and supervising psychiatrist at Santa Clara Valley Medical Center.

The office was first opened in 1968 under a grant from the Macy Foundation of New York to study the opportunities of women in medicine at Stanford and to help establish programs to attract increasing numbers of talented women to medicine.

Over the past three years, the office has been instrumental in the development of programs of flexible internships, residencies, and fellowships for women at Stanford Medical Center. Dr. Lederberg is the wife of Stanford Nobel Laureate Joshua Lederberg, chairman of the department of genetics.

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Mailed September 10, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

ADVANCE FOR P.M. RELEASE ON FRIDAY, SEPTEMBER 10

STANFORD -- The mass media, while successfully drawing the broad outlines of environmental problems in the United States, have continually failed to provide the specific, hard-hitting information the public needs to do something about these problems.

This is the conclusion of a 14-month study into mass media coverage of environmental problems conducted by a team of 36 Stanford students and supported by a precedent-setting National Science Foundation grant of $53,600.

The NSF grant was the first ever awarded to a project instituted and directed by graduate students.

The principal investigators--David M. Rubin, who recently obtained his Ph.D. from the Department of Communication, and David P. Sachs, a fifth-year student at the School of Medicine--disclosed their findings today at a conference on mass media and the environment at Stanford.

The day-long conference was attended by national and Bay Area reporters, editors and other media personnel responsible for environmental news.

The project resulted in three published volumes, including Rubin's discussion of media coverage in the San Francisco area and nationally (Volume II), Sachs' description of the Bay Area water system and analysis of the California Water Plan (Volume I), and an annotated bibliography of information sources on environmental subjects (Volume III).

Though he feels the media have succeeded in awakening the public consciousness to environmental problems, Rubin emphasizes that there is still much room for improvement.

"Generally, the media as a whole and the media in the Bay Area have devoted more time and space to the subject dramatically since mid-1969," Rubin says. "There is an increased awareness--they're pulling men off other beats and assigning them environmental stories.

"But they're not hiring people as environmental reporters, which would really indicate they give a damn. If you have no reporter assigned to cover environmental problems, newsroom inertia takes over and only the red hot issue will get covered."

Rubin makes seven suggestions for improved media coverage in his volume. He urges media executives not only to hire environmental reporters, but to consider establishing environmental news pages and continuing broadcast features.

Perhaps the most pressing need, as he sees it, is for the media to begin dealing with problems close to home and presenting specific findings the public can use.

"On occasion, when there is a local disaster, like the Bay oil spill, they do a good job," he says. "But if they're given a chance to name a company which has a record of violating anti-pollution standards, or to point the finger at a public official who has a poor voting record on environmental issues, they don't do it.

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"In other words, if they have a chance to provide the public with specific information, they cop out."

Rubin feels advertising acceptance departments should reject misleading ads which claims a product or service will improve the quality of the environment.

"What we're really talking about are ads like Chevron F-310," he says. "We object to ads like this on two grounds: first, it's basically fraudulent. It does no more than any detergent gasoline. Second, it creates in the public consciousness the belief that industry is doing something to solve the problem. Basically, they're just after favorable publicity to take the pressure off."

Many private industries would stop polluting, Rubin belives, if the press would extend the "adversary" relationship from government to business.

"Big businesses are our biggest polluters," he says. "Until you put the glare of publicity on what business is doing, they'll be less likely to clean up."

Sachs' volume concerns the problems facing California water planners, and the possible steps that can be taken to alleviate them.

He criticizes the California State Water Project, which would divert water from the San Joaquin and Sacramento Rivers to irrigate Central Valley fields and supply Los Angeles with more water, as being both economically unsound and environmentally unwise.

"There are many reasons why we shouldn't have a city like Los Angeles growing more," Sachs says.

"Water is a limiting resource. Instead of trying to build up the water supply so that it can support a larger population, water should be used as a limiting factor to keep an area like LA from becoming even more over overpopulated than it already is."

He also argues that planners should consider using water reclamation and ground (well) water as future sources for the state's water supply, rather than building more aqueducts from the Sierras.

"You have to take into account that soft water is associated with cardiovascular disease," Sachs says. "Considerable data is being accumulated by the Japanese investigator J. Kobayashi and others to show that populations using soft water sources have higher death rates from heart disease, high blood pressure, and strokes.

"This information is particularly significant in view of the fact that mountain water transported through aqueductal systems is soft."

The project really began in 1960 at Shaker Heights High School in Cleveland, Ohio, where Rubin and Sachs first met.

Sachs' interest in environmental problems was sparked in the eighth grade, when he built a working model of a water reclamation plant while studying how to eliminate water pollution. He later won a national first prize in a Future Scientists of America contest.

His writing and research led to a 1968 article in McCall's listing 102 cities whose water supplies did not meet federal standards. According to U.S. Public Health Service officials, that article was directly responsible for initiating improvement in the water supply systems in most of those cities.

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Rubin, who will teach journalism at New York University this fall, did a follow-up article for Columbia Journalism Review on how the media in those 102 cities handled the water story as revealed in McCall's.

Faculty sponsors for the Rubin-Sachs study were Nobel Laureate Dr. Joshua Lederberg, chairman of the Department of Genetics, and William L. Rivers, professor of communication.

Rubin and Rivers recently co-authored a book on the newspapers of the San Francisco Bay Area.

Included in the 36 students working on the project were a Communication team, staffed by Masters and Ph.D. candidates in Communication, and an Ecological Medicine team, comprised of graduate medical, law, geology and physics students, and undergraduate biology and human biology majors.

"The project supported four Ph.D. dissertations and six Master's Degrees in Communication," says Rubin.

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Publication Information:

MASS MEDIA AND THE ENVIRONMENT

Volume I — San Francisco and Monterey Bay Water Resources
by David P. Sachs and David M. Rubin

Volume II — The Environmental Information Explosion: The Press Discovers the Environment
by David M. Rubin and David P. Sachs

Volume III — A Guide to Information Sources in the San Francisco Bay Area
edited by Ellen Marie Macke

Published by Stanford Environment Research Project, September, 1971. Copies of all three volumes may be ordered at nominal cost by writing to Environmental Research Project, Department of Genetics--IRL, Stanford University School of Medicine, Stanford, California 94305, or calling 415: 321-2300, Ext. 6056.

END ADVANCE FOR RELEASE ON FRIDAY, SEPTEMBER 10.

Mailed September 8, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The number of minority applicants to the Stanford University School of Medicine has risen dramatically since the School's minority program was started in 1968, according to a faculty report made public Thursday (Sept. 2).

The report shows that for the class beginning in September this year, 299 minority students applied for admission to the Medical School compared to 17 students in 1968.

Of the 299 minority applicants, 203 were Blacks, 85 Chicanos, and 11 American Indians. More than 3,000 students applied for admission to Stanford medical school this year.

The report is based on a review of the minority program now entering its third year. It was prepared by the ad hoc committee on minority admissions and education of the Medical School's faculty senate. The committee was chaired by Dr. Grant Fletcher, associate professor of anesthesia.

Stanford will again admit 10 minority medical students this year as part of the 77-member entering class. This figure will bring the number of minority students enrolled in the medical school to 30 or about 15 per cent of all students registered in Years I through III.

Of the 30 students, 16 are Blacks, 13 Chicanos, and 1 American Indian.

The report says the increase in minority applicants has occurred, in part, spontaneously and not because of an active or systematic recruitment program.

The committee did not review the academic achievements of minority students individually, but noted that 19 of the 20 students admitted thus far under the program are in good standing.

The report also added that minority students had apparently requested little or no special tutoring that is available to all students in the Medical School.

The faculty report praised the minority admissions committee for reaching unanimity on the broad criteria for evaluation of applicants. The committee looks primarily for students with high scholastic achievement, who identify firmly with their racial-ethnic community, and are highly motivated to become doctors.

The special admissions committee includes minority representation from the faculty, student body, and local professional community. It was created because evaluation of minority candidates was felt to require the cultural background and knowledge found among members of those minority groups.

The faculty report said it would be ideal to merge the regular and special admissions committees in the future, but such a merger is impractical as long as the number of minority professors on the medical faculty is still small.

With an increased number of faculty of minority background, it should be possible in a few years to phase out the special minority admissions procedure, and return to a single admission system, the committee stated.

It also urged that an ultimate goal should be to achieve a student body including minority students in approximately their proportion to the population of Stanford's region, about 20 to 25 per cent of the total enrollment.

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Mailed September 3, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

EDITORS: Picture and diagram of cell separator available on request if not included with article.

STANFORD: A unique new instrument to separate living cells on the basis of their fluorescence has been developed by a team of Stanford University scientists.

This sorting mechanism may open the door for new research and clinical study of treatment of diseases in man, as well as a better understanding of the body's immune system.

The Stanford cell separator utilizes photoelectric observation of fluorescence in cells in a liquid stream as the criterion for separation. Charged droplets containing the fluorescent cells are deflected electrostatically and separated from those containing non-fluorescent cells.

The instrument has been developed and clinically tested by a team that includes Dr. Leonard A. Herzenberg, professor of genetics; Dr. H. Russel Hulett, research associate in genetics; Dr. Paul L. Wolf, associate professor of pathology and director of clinical laboratories at the University Hospital; and engineers William A. Bonner and Richard G. Sweet of the genetics' instrumentation research laboratory.

Previous bulk fractionation methods--such as centrifugation, separation columns, and electrophoresis--allow sorting of large numbers of cells, but produce only limited resolution of functionally different types. The Stanford cell separator is unique in that various parameters or criteria may be used as the basis for making cells fluorescent, and thus separating them from the others in the stream.

"The net result of this," Hulett said, "is that we can take cells we want to look at or use experimentally and separate them from the rest of the cells in a general population.

"The system has proved capable of providing fractions containing large numbers of cells highly enriched in a particular functional type."

One of the most important immediate applications of the new instrument is expected to be in the study of the body's immune system.

Some body cells generate protective substances called antibodies, which are stimulated by different foreign materials or organisms (antigens). The cell separator enables scientists to separate specific antibody-producing cells from a general population, identify their chemical and biological characteristics, and determine the types of cells involved in antibody production.

If scientists can discover more about how antibodies are made, Herzenberg said, it could lead to the possible prevention of organ transplant rejection and more effective treatment of diseases such as leukemia and hemophilia.

Future possible uses may include the separation of cancer cells. Theoretically, scientists believe that if cancer cells are in the blood stream, they can be found--and treated--far earlier than has been possible in the past.

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Important clinical applications of the cell sorter, Wolf noted, will involve the rapid differential counting of immature red blood cells, malaria organisms, and fetal cells in maternal blood (to research hemolytic disease of newborns), and possibly a complete white blood cell count.

The Stanford cell separation process begins when fluorescent material (fluorescein, acridine orange, or quinicrine mustard) is added to living cells in suspension in a test tube. The added molecules attach themselves to cells having particular immunochemical characteristics, and only these cells become "stained."

"In addition, we use the 'sandwich' technique of immunofluorescence," Herzenberg said. "Cells have receptors on the surface which can react with proteins and other substances. Cells with surface sites binding particular antigens are made fluorescent by reacting first with the antigen, then with a fluorescent-tagged antibody to that specific antigen."

Air pressure forces the cells in the test tube down through a glass nozzle in a fine liquid stream two-thousandths of an inch in diameter.

The liquid stream is illuminated by a laser beam. The cells pass sequentially through the beam and fluorescent light emitted by the stained cells is converted into electric signals by the use of a photomultiplier tube. A signal pulse is generated at the photomultiplier outlet whenever a fluorescent cell crosses the laser beam.

The stream is broken into a series of uniform droplets downstream of the laser, through vibration of the glass nozzle. The cell signals cause a charging voltage to be generated electronically and applied to the stream. The delay between each signal and charge corresponds to the time it takes the cell to move from the laser beam to the point where the drops break off. Thus, an appropriate charge is given to the drops containing fluorescent cells as they break off from the stream.

The drops then pass between two statically charged deflection plates and are deflected to appropriate containers.

"By using this instrument, we can look at up to 10,000 cells per second and separate up to 2,000 fluorescent cells per second," Sweet said. "In a typical experiment, we can separate a sample containing 50 million cells into two fractions containing fluorescent and non-fluorescent cells."

The research has been supported in part by the National Institutes of Health and in part by the National Aeronautics and Space Administration.

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Mailed October 25, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

ADVANCE FOR AM RELEASE FRIDAY, OCT. 29

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A computerized system to efficiently store, retrieve, and disseminate bone marrow examination reports has been developed at Stanford University Hospital.

The new system enables medical personnel, using conversational language, to obtain information from patient files without any programmer intervention.

Development of the system was announced Thursday, October 28, at the annual meeting of the American Society of Clinical Pathologists in Boston, Massachusetts. Authors of the Stanford report were Dr. Herbert R. Ludwig and Dr. Jacques F. Vallee of the Stanford Computation Center, and Dr. Paul L. Wolf, associate professor of pathology and director of clinical laboratories at the University Medical Center.

Stanford is one of the few hospitals in the country which utilizes a computer for the storage and retrieval of bone marrow data.

The Stanford system is based on a new computer program called CUPID (Create, UPdate, Interrogate and Display), developed by Ludwig. It can be operated by anyone without previous experience in computer programming.

"Our system is unique in that the retrieval of pertinent information can be accomplished in an interactive, non-procedural mode," Ludwig said. "The physician, medical technologist, or secretary can talk to the computer directly and give it commands in natural, conversational language. There is no need for an experienced computer operator."

By using CUPID, Ludwig said, the physician is provided with essential information on three levels: the standard clinical diagnosis, an improved bone marrow report (permanently available for checking and editing), and a conversational retrieval and display language capable of answering unpredictable questions.

The new system solves a problem faced by many hematologists and pathologists in major medical centers, Wolf said. The expanding volume of bone marrow examinations performed has made it difficult to efficiently store and quickly have access to pertinent patient information essential to the diagnosis, treatment, and research of blood disorders.

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END ADVANCE FOR AM RELEASE, FRIDAY, OCT. 29

Mailed October 25, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

ADVANCE FOR RELEASE WEDNESDAY, OCT. 20, A.M.

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415:321-5310

STANFORD –

A group of scientists from Stanford University School of Medicine has found new clinical evidence showing that the kidney disturbance sometimes associated with methoxyflurane, a commonly-used inhalation anesthetic, is due to the amount of fluoride it contributes to the blood.

Fluoride is a major breakdown product in the metabolism of methoxyflurane. Recent animal work done by Stanford researchers in the Department of Anesthesiology and at Palo Alto Veterans Administration Hospital has shown that injections of fluoride produce abnormalities in kidney function similar to those seen after methoxyflurane is administered to patients.

In patients, the anesthetic appears to interfere with regulation of water in the body. Some excrete abnormally large quantities of urine due to failure of the kidney to conserve body water in the normal manner. In addition, abnormalities in blood chemistry result.

The findings were reported Tuesday, Oct. 19, at the American Society of Anesthesiologists meeting in Atlanta by Dr. Michael J. Cousins, acting assistant professor of anesthesiology, Dr. Richard I. Mazze, assistant professor of anesthesiology, and Dr. Tadashi G. Nishimura, resident in anesthesiology.

The investigators reported on a study designed to determine whether methoxyflurane could be administered at low dosage levels without producing kidney disturbance.

"Since fluoride is a breakdown product of methoxyflurane, and the kidney disturbance appears to relate to the amount of fluoride in the blood, the degree of kidney disturbance probably, in turn, relates to the total amount of anesthetic given to the patient," Cousins said.

The opportunity to test the theory came in the study of patients having heart surgery. Since they are very ill, they must receive relatively small doses of anesthesia, The study involved 20 male patients undergoing cardiac valve replacement or coronary artery bypass surgery. Ten of the patients received methoxyflurane and oxygen and a control group of 10 received intravenous morphine. Extensive laboratory tests of kidney fundtion were obtained on all patients before and after anesthesia.

Results of the study showed no differences between the two groups. Low dosage methoxyflurane anesthesia, for open heart surgery, did not cause abnormal kidney function. Clinically, all patients did well.

However, as expected, those patients receiving methoxyflurane showed 30-fold increases in their blood fluoride levels. However, the levels were only one-half those at which minor abnormalities in kidney function were seen in a previous study and one-fourth those at which more major symptoms of abnormal kidney function were previously detected.

"Although heart surgery represents a very specialized situation," said Cousins, "the results of the study may have generalized applications. The effects of fluoride ion on the kidney in these patients are probably not substantially different than those found in general surgical patients.

"The results support the hypothesis that methoxyflurane renal dysfunction is a dose-related phenomenon not occurring under the low-dosage conditions of the present study. Thus, it seems likely that if methoxyflurane anesthesia can be administered in carefully controlled low dosage, increases in fluoride ion will not be of a magnitude to result in abnormal kidney function. Studies are continuing to define these levels precisely."

It is of interest, Cousins notes, that the amounts of fluoride present in patients with kidney disturbances are at least 100 times those produced by drinking fluoridated water.

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END ADVANCE FOR RELEASE A.M. WEDNESDAY, OCT. 20 Mailed October 18, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Eugene D. Robin, professor of medicine and physiology, has been named acting chairman of the department of medicine at the Stanford University School of Medicine, Dean Clayton Rich announced Friday (Oct. 15).

The 52-year-old Robin, an expert on pulmonary disease, will succeed Dr. Halsted Holman who relinquished his administrative duties to return to research and teaching. Dr. Holman, Berthold and Belle N. Guggenhime Professor of Medicine, served as department chairman since 1960.

Dr. Robin came to Stanford in 1970 from the University of Pittsburgh where he had been professor since 1963 and associate professor since 1959. Previously he was associate director of the cardiovascular training program at Peter Bent Brigham Hospital in Boston.

At Stanford, Dr. Robin has supervised the respiratory function laboratory and the pulmonary physiology program.

He is a member of the board of trustees of the Mt. Desert Island Biological Laboratory, Salisbury Cove, Maine. He obtained his degrees at George Washington University: S.B. 1946; S.M. 1947; and M.D. 1951.

Last spring, Dr. Robin was one of the faculty recipients of the Henry J. Kaiser Award for excellence in teaching.

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Mailed October 15, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

FOR RELEASE SUNDAY, OCT. 17 A.M.

STANFORD — Heart patients with a high risk of developing coronary heart disease can now be monitored during their daily activities by cardiologists at Stanford University Medical Center.

The monitoring device is a small tape recorder unit, worn by the patients, which continuously records electrocardiograms.

The taped electrocardiograms, analyzed by computer, enable Stanford cardiologists to detect abnormalities in cardiac rhythm which could later lead to a fatal cardiac arrest. If such abnormalities are found, the patient is given anti-arrhythmic drugs.

The new long-term monitoring program was announced Saturday night, Oct. 16, at the American Society of Anesthesiologists meeting in Atlanta by Dr. Donald C. Harrison, chief of the Cardiology Division at the Stanford School of Medicine. "Sudden death is frequently the initial manifestation of coronary heart disease," Harrison said. "However, I believe many of these patients have electrocardiographic changes of abnormal rhythms prior to the fatal arrhythmia resulting in sudden death.

"If such abnormalities in cardiac rhythm are detected, the prophylactic administration of anti-arrhythmic drugs may reduce the incidence of sudden death."

The Stanford monitoring system was developed in an attempt to determine how frequently these premonitory signs of impending disaster can be detected, Harrison said. Once it is possible to detect abnormalities which signal the possibility of a fatal arrhythmia, appropriate treatment for their prevention may be developed.

The program has been applied to patients who are in the susceptible age (45-60) for sudden death through coronary heart disease, whenever high risk patients can be identified. Such patients include those with severe chest pain or pressure, fleeting episodes of palpitation or other subjective symptoms suggesting arrhythmias, and episodes of dizzy spells.

The patients to be monitored are equipped with small recorder units, consisting of a portable tape recorder in a carrying case with shoulder strap, three small electrode discs attached to the patient's chest, and three wires leading from the electrodes to the recorder.

The analog tapes in the unit can record electrocardiograms for a period of 10 hours, while the patient carries on his daily routine.

Patients are asked to keep a record of activities and time on a log sheet throughout the 10-hour period. At the completion of the testing program, they return the tape recorder unit and log sheet for interpretation by cardiologists.

Computer scanning devices for analyzing the cardiac rhythm recorded on the tapes and for determining the occurrence and frequency of abnormalities have recently become operational at Stanford. By comparing heart action with the written log sheets, cardiologists can relate the occurrence of abnormal rhythms to specific activities the patient undertakes each day.

If a pattern of frequent or increasing cardiac changes emerges, cardiologists attempt to determine the likelihood of a fatal episode, and whether preventive steps should be taken.

Coronary heart disease affects between 10 and 12 million Americans and is the leading cause of death in the U.S.

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Mailed October 15, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Stanford University surgeons performed a heart transplant operation late Wednesday night (Oct. 13). The recipient is a 48-year-old man. He is reported to be in satisfactory condition.

Including the new recipient, 14 of the 35 heart transplant patients operated on at Stanford are now living. Albert LeFleur of Fresno, 52, who received a transplanted heart on August 18 and was the 34th recipient, died Friday, October 8.

In accordance with a new policy announced by Stanford University Hospital in May, the new recipient's name has been withheld.

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Mailed October 15, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Halsted R. Holman, chairman of the department of medicine at Stanford University School of Medicine since 1960, has relinquished his executive responsibilities.

The announcement was made Tuesday by Dean Clayton Rich, who said Dr. Holman had offered his resignation, and he had accepted it.

Dean Rich said he would appoint an acting chairman in the next few days until a successor to Dr. Holman is selected.

Dr. Holman will continue his teaching, research and patient care duties as Berthold and Belle N. Guggenhime Professor of Medicine, an endowed professorship he has held since his arrival at Stanford.

In accepting Dr. Holman's resignation, Dr. Rich wrote:

"I appreciate the high integrity behind this offer, and I am aware of the many excellent strengths of your department. I have spent a great deal of time considering this matter and conclude that it is in the long-range interest of the School to have rotation of executive leadership after so long a period under one chairman.

"This is particularly important for a department of medicine because of its key role in the entire program of the School."

Dr. Holman came to Stanford 10 years ago from the Rockefeller Institute. He is the son of two renowned Stanford physician-teachers, Dr. Emile Holman and Dr. Ann Purdy of San Francisco.

His major field of interest is the immunology of rheumatic diseases and tissue transplantation. He is recipient of the Walter Bauer Memorial Award for Research on autoimmunity presented by the Arthritis and Rheumatism Foundation in 1964, and a past president of the Western Association of Physicians and the American Society for Clinical Investigation.

During the past year, Dr. Holman has participated as chairman of a Medical School's special subcommittee to explore ways and means of providing health services for a given community on a pre-paid basis.

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Mailed October 13, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

ADVANCE FOR RELEASE OCTOBER 13, 1971

STANFORD -- Thirty doctors, technologists and students are attending a two-day workshop on the use of automated laboratory equipment Wednesday and Thursday (October 13 and 14) at Stanford University Medical Center.

The participants, from the Hospital and the School of Medicine, are learning how to operate auto analyzers, which can perform a variety of chemical analyses. They are made by Technicon Corporation of New York, sponsors of the workshop.

The analyzer is a series of interconnected modules that automates the time-consuming procedures of manual analysis in the laboratory. Basic clinical tests, such as blood counts or coagulation factors, enzyme levels or hormone analysis, can be done in a matter of minutes. Only a very small quantity of sample is necessary.

Such equipment is an asset to patient care, explained Lisa von der Muehll, teaching supervisor at the Hospital's School of Medical Technology and Stanford coordinator for the workshop. Test results can be obtained rapidly and efficiently, an aid to the patient and his physician, she said.

Although analyzers are expensive, the cost per test is very low so that expenses are kept down for both the patient and the laboratory, according to Miss von der Muehll.

The clinical laboratory at Stanford University Hospital has several auto analyzers. The purpose of the workshop is to train additional medical and laboratory personnel and students in the uses of analyzers.

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END ADVANCE FOR RELEASE OCTOBER 13, 1971

Mailed October 12, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

ADVANCE FOR RELEASE THURSDAY, OCTOBER 14, 1971

STANFORD -- Nurses and female anesthetists who work daily in hospital operating rooms contaminated with trace amounts of anesthetics are exposed to a potentially serious health hazard, a Stanford University medical research team warned Thursday (October 14).

Chronic exposure of operating room staffs to low-grade anesthetic pollution may cause miscarriage in pregnant women, the researchers reported.

Their study calls on hospitals to initiate measures as rapidly as possible to reduce this operating room contamination.

The Stanford research was initiated because several recent studies have called attention to the presence of trace concentrations of anesthetic gases in the operating room environment, and indicated a potential hazard to personnel. Until recently these trace amounts of anesthetics were considered harmless. Precise measurements of anesthetic contamination in the operating room had not been made.

Dr. Ellis N. Cohen, Dr. J. Weldon Bellville, and Dr. Byron W. Brown based their two-part study on personal interviews with 67 operating room nurses and 92 general duty nurses in three large hospitals in Northern California and on a mail questionnaire sent to 50 anesthetists and 81 female physicians practicing in other specialties.

"Results indicate that during a five-year period, 29.7 per cent of pregnancies in operating room nurses ended in spontaneous miscarriage compared with 8.8 per cent in the control group," the researchers reported in the October issue of Anesthesiology, a medical journal.

The increase in spontaneous abortion was even more significant among physician anesthetists who receive a greater exposure to anesthetics than nurses, the report shows.

In a six-year period the miscarriage rate among the physician anesthetists was 37.8 per cent compared with 10.3 per cent in the other female physicians.

Operating room nurses and anesthetists suffered miscarriages earlier compared with their controls (eighth versus tenth week).

These findings, according to the researchers, are especially significant in view of animal studies which show that chronic exposure to small concentrations of certain anesthetics is lethal to the fetus.

Cohen and his associates are careful to point out that showing a relationship between employment in the operating room and a significant increase in the incidence of spontaneous abortion is no proof of causation, but they have tried to examine common factors between the control and exposed groups.

In a companion report in the same journal, Stanford researchers Charles E. Whitcher, Ellis N. Cohen, and James R. Trudell reported their measurements of the level of exposure to certain anesthetics in operating room staff.

They determined the concentration of the anesthetic, halothane, and found a marked increase throughout the day.

As one would have predicted, the levels of exposure were much higher for physician anesthetists than for the nursing staff. This was precisely the same direction of increase as occurred in the incidence of spontaneous abortion in those two groups.

The Stanford researchers point out that more work needs to be done, "but until this is proven or disproven, all volatile agents present in the operating room must remain suspect," they said.

"Total elimination of all waste anesthetic gas is the goal, and should be attainable," Cohen said. "In the meantime, we recommend that all possible corrective measures be initiated."

One such measure involves installation of a "scavenging system" in connection with anesthesia equipment. The system, developed by Whitcher and his associates, captures overflow gases during normal administration of anesthesia, and vents them out of the operating room.

Stanford University Hospital was the first to install this device, Whitcher reported, and operating room contamination has been reduced to about 10 to 15 percent of that previously measured.

Commenting on the Stanford research, a journal editorial calls for an extension of the Cohen-Bellville-Brown studies to the field of public health in general.

"These findings are potentially more far reaching than operating room staff and raise the question of exposure to volatile agents during pregnancy," the editorial said.

Questions raised by the study include: "Does this danger extend to women exposed to anesthetics during surgery? What are the possible effects of other volatile agents, spray paints, hairsprays and air fresheners when widely used?

The editorial also stressed the need for studies to determine if anesthetics and other agents cause birth defects.

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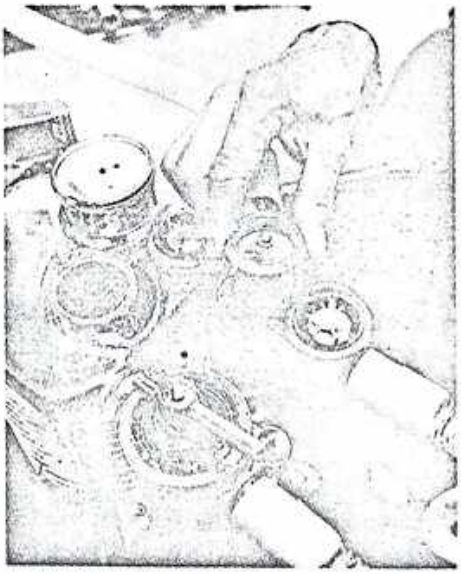
END ADVANCE FOR RELEASE THURSDAY, OCTOBER 14

Mailed October 12, 1971.



(B) Close-up shows adjusting of "scavenging trap" for anesthesia equipment designed by Stanford University anesthesiologists. The system reduced operating room contamination by anesthetic gases to about 10 to 15 per cent of that previously measured. 10/71

(A) Dr. Charles E. Whitcher (left) of Stanford University developed a system to reduce the health hazard of low-grade anesthetic pollution in the operating room. The system, a trap which replaces the standard "pop-off" valve in anesthesia equipment, captures overflow gases during normal administration of anesthetics and vents them out of the operating room. The device is adjusted here by Dr. Ellis N. Cohen, who found that trace amounts of anesthetics in the operating room environment constitute a potentially serious health hazard to nurses and female anesthetists. 10/71

TO: NEWS BUREAU, RM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

"Scavenging Trap" for Operating Room Contamination 10/71

Please send me (A) and/or (B) glossy prints.

NAME _____ PUBLICATION _____

ADDRESS _____ CITY, STATE, ZIP _____

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FOR IMMEDIATE RELEASE

STANFORD -- Dr. Robert H. Alway, former dean of the Stanford University School of Medicine, has been appointed to act as chairman of the department of pediatrics.

Dr. Clayton Rich, vice president for medical affairs and dean of the medical school, said Dr. Alway had agreed to accept the acting chairmanship at a crucial period during which the School is planning to undertake a re-examination of its goals.

He said a search committee for a new chairman would be appointed. It would have a dual charge of reviewing the future of pediatric training at Stanford and in a national context.

Dr. Alway, 57, succeeds Dr. Herbert C. Schwartz, who resigned to return to teaching, research and patient care duties. Dr. Schwartz headed the department for the past two years.

As dean of the medical school from 1957 to 1964, Dr. Alway was responsible for the successful relocation of the school from San Francisco to the campus, and recruitment of faculty which helped establish Stanford as a leader in medical education.

Dr. Alway, professor of pediatrics, will continue to direct the Stanford pediatric clinic.

He holds degrees from the University of Minnesota, and received graduate training in pediatrics from the same institution in 1940.

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Mailed October 12, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- An updated handbook that advises college undergraduates how to prepare for a career in medicine has been published by the Stanford University Premedical Society.

The handbook, newly revised this year, includes information for premedical and predental students on planning courses to meet the requirements of medical schools, selecting and applying to medical schools, and obtaining financial assistance. It was prepared by members of the Premedical Society under the guidance of faculty adviser Dr. Donald L. Stilwell, associate professor of anatomy in the School of Medicine.

Comprised of five sections, the booklet summarizes the experiences of medical faculty advisers and generations of students. An introduction by Dr. Stilwell stresses that "any field is compatible with medicine."

The section on academic curriculum lists specific science courses at Stanford that pre-medical and dental students should follow, but suggests schedules arranged to allow for a variety of nonscientific interests, including overseas study.

This section points out that although certain science courses are necessary, a student does not have to be a science major to be accepted by a medical school. "Medical schools are not interested in a narrow-minded person. They tend to look for people who have a diversified education".

Another section on the application process provides helpful hints on meeting various admission criteria of most medical schools. In addition to the individual's college transcript and scores on the medical college and dental admission tests, schools weigh such factors as recommendations, extracurricular activities and personal interviews.

"One of the most revealing of all criteria" according to this section, is the personal statement required on most medical school applications. "This 'self-recommendation' ought to be a subjective instrospection of goals, personal values and strengths, and an examination of oneself in medicine."

The purpose of the Stanford Premedical Society, explains president Burr Field, is to bring students interested in medicine or health-related fields together in a relaxed situation outside the classroom. The Society, which this year has 125 members, arranges programs during the year to expose its members to the diverse medical opportunities through personal contact and participation.

The handbook is available at Stanford at the Academic Information Center, and is also being distributed to premedical societies of other universities.

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Mailed October 11, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A recent disclosure by a group of students and staff that Stanford University School of Medicine will build a multimillion-dollar cancer center is "premature and misleading," a Medical School official said Tuesday.

"The School is only exploring the idea and has applied to the federal government for a $200,000 planning grant," said Robert G. Lindee, associate dean for administration.

The grant, according to Lindee, will enable the School to study the feasibility and desirability of expansion of the present radiotherapy center into a more comprehensive facility involving other departments engaged in cancer research.

"Only if expansion of the present center is deemed feasible and desirable, the School will undertake detailed planning," Lindee said.

He stressed the initial study will consider not only the scope and organizational aspects of the proposed center, but its impact on the goals and structure of the Medical School and the University.

He added that no one at this time could guess how much such a project would cost. It would be sheer speculation.

Lindee made the clarification because a statement, issued Monday by 22 medical students and staff, claimed that the Medical School is proceeding with development of a $20- to $30-million cancer research center "without regard for any real need for additional beds or services," and no discussion with those affected.

Lindee added, even if development of a cancer center went on independently, it would in no way interfere with other programs the Medical School may wish to develop in other areas.

In a separate statement, Thomas Raffin, co-president of the Stanford Medical Students Association, said he believes that a cancer center could be of great value to Stanford and the surrounding communities. "But it is important to carefully evaluate the effect that such a center might have on the future direction of Stanford Medical School, and on its role in the delivery of health care in this region," he added.

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Mailed October 5, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Karl H. Pribram, professor of neuropsychology at Stanford University School of Medicine, has been appointed to the Behavioral Sciences Training Committee of the National Institute of General Medical Sciences.

The Institute is a component of the National Institutes of Health (NIH).

According to Institute Director Dr. DeWitt Stetten, Jr., Dr. Pribram and other committee members will review applications for research training grants. They will also advise the Institute on the development of training programs in modern research techniques in the behavioral sciences.

An internationally noted neurophysiologist, Dr. Pribram has been exploring the mysteries of the brain--how it records, stores and retrieves information--for two and a half decades.

Author of numerous publications, he is editor of 10 volumes and co-author of Plans and the Structure of Behavior. His most recent book, Languages of the Brain, was published a month ago.

Dr. Pribram came to Stanford in 1959 after 10 years on the faculty of Yale University. He was appointed to his present position in 1961, the same year he was awarded a lifetime research grant from the NIH.

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Mailed October 5, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- "I send nearly as many patients to the library as to the drugstore," says Dr. Louis Shattuck Baer. "Often patients will leave my office with a list of recommended readings instead of a prescription."

Dr. Baer is a proponent of what he calls "philosophic therapy," a meditative, or humanistic approach to the treatment of patients. A specialist in internal medicine, he has been putting his theories to practice while treating patients in his Burlingame office for the past 25 years.

"Almost 30 years as a family physician have taught me that the precepts of philosophy surpass medicine or surgery as therapy for many of my patients," he says.

"I think the emphasis on scientific analysis and treatment of patients in many ways has burgeoned to the detriment of the meditative approach. From the standpoint of a family doctor, I feel this often has not beenin the patients' best interests."

In an effort to get his views across to the medical community, Baer is offering six one-hour seminars (free of charge) at the Stanford University School of Medicine this fall. The seminars, dealing with topics such as "The Necessity of Suffering," will be held in Medical Center Room M104 from 4:30 to 5:30 p.m. on six successive Wednesdays beginning October 13. They are also open to the public.

"There frequently is not enough time in the regular medical program for a consideration of the philosophic implications in both diagnosis and treatment," Baer says. "So many of our diagnostic methods today are invasive, and these methods often are more dangerous to the patient than what's bothering him in the first place.

"The scientific aspects are weighted too heavily--after all, we're in the atomic age. I'm just trying to keep the scales more evenly balanced. The more human aspects of medicine can't be ignored. As Montaigne said, 'we do not feel perfect health as well as we feel the slightest illness.' "

Baer doesn't recommend philosophic therapy for every patient. The value of the meditative approach comes in the treatment of a patient whose state of mind is related to, or even partially responsible for, his problem.

"Philosophy is not necessary for the average patient who comes to see a physician," Baer points out. "Where philosophy becomes important is in treating the patient who has a chronic illness he must live with or an illness which will be fatal.

"It's also valuable in dealing with the patient who's worried to the extent that it's making him sick, and the patient who's run out of hope, who sees his case as hopeless."

Others who might benefit from a meditative approach to their problems, he says, include unhappy and unthankful patients, who "look at their own problems too microscopically."

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Baer contends that suffering is not inevitable, but necessary to man's existence. He regards it as a foundation or cornerstone of reality.

"It's my belief that suffering is as necessary as oxygen, nitrogen or carbon for man's origins, his evolution and his continued existence," he says. "If this is understood, then perhaps we can seek to mitigate it with better proportions of calculative and meditative thinking than is seen in the practice of medicine today."

Baer first began thinking about philosophic therapy 20 years ago when he was stricken with polio.

"I was out of the picture for a year and a half," he says. "It was a very severe attack which changed my whole life. It gave me time to think of myself as both a doctor and a patient.

"For the next 10 years I did a lot of reading--mainly the philosophers. I only started writing the material for these seminars on the beach at La Jolla 10 years ago. I've been cooking it, doing a lot of re-writing, since then."

Baer, a clinical associate professor of medicine at Stanford, received his M.D. from the University of Chicago in 1938. He served his residency at the University of Michigan Hospital, then was a lieutenant commander in the U.S. Navy Medical Corps for four years. He entered private practice in Burlingame and joined the Stanford clinical staff in 1946.

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Seminar Information

"An Approach to Philosophic Therapy"

1.	The Necessity of Suffering	Wed. Oct. 13
2.	The Therapeutic Value of Charity	Wed. Oct. 20
3.	The Treatment of the Unhappy Patient	Wed. Oct. 27
4.	"Einbildung ist schlimmer aus pestiliz" (Imagination is worse than the pestilence)	Wed. Nov. 3
5.	The Unthankful Patient Syndrome	Wed. Nov. 10
6.	Maintenance of Hope	Wed. Nov. 17

Place: Medical Center Room M104

Time: 4:30 to 5:30 p.m.

By: Louis Shattuck Baer, M.D.
Associate Clinical Professor of Medicine, Stanford

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Mailed October 4, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- A new class of physician is being trained at Stanford University Medical School. Called a clinical scholar, the new physician will prepare for a career in the economical, social, administrative, or educational aspects of medical care delivery.

Stanford is one of five medical schools that has begun training clinical scholars in order to bridge the gap between the medical scientist and the community. Once trained, these scholars will research, develop and conduct new forms of health delivery programs and staff related training programs for other physicians and health personnel.

The programs at the medical schools--Stanford, Case Western Reserve, Duke, Johns Hopkins, and McGill--are being supported by grants from the Carnegie Foundation and the Commonwealth Fund of New York. Stanford Medical School has a two-year grant of $96,000 for the training of up to six clinical scholars through the Department of Medicine.

"The development of a good medical care delivery system requires a combination of biological and nonbiological sciences," said Dr. Halsted Holman, professor and chairman of the Department of Medicine. "At present the nonbiological aspects are a severely underdeveloped area of medicine," he continued.

Physicians today are trained for research in the pure sciences or for practice in the community, Dr. Holman explained. Neither group of physicians, however, study the organization or administrative aspects of the medical care system of which they are part.

Clinical scholars will study and investigate clinical practice and nonbiological areas of medicine in a manner analogous to the medical scientist. They may be concerned with developing new methods of medical care, setting up community health programs, supervising community hospital clinics, conducting clinical investigations within the community or evaluating and reorganizing clinical education.

Stanford Medical School has two clinical scholars this year. They are Dr. Raymond LaSure, a fellow in medicine and Dr. Edwin Alderman, an instructor in medicine. Dr. LaSure is developing mechanisms for estimating the quality of medical care delivery and the potential of future health plans. Dr. Alderman is concentrating on the handling of medical information, and is a consultant on a Stanford-NASA biomedical technology team.

The clinical scholars training program is one of several projects worked out by the five medical institutions during the last two years under a prior grant from the foundations to experiment with methods of improving graduate and continuing education for physicians and strengthening ties between medical schools and communities.

Faculty members in the Department of Medicine responsible for the program at Stanford include Dr. Edward Rubenstein, chairman of the committee on postgraduate medical education; Dr. Mark Perlroth, assistant professor and program director for the experimental training program, and Dr. James Fries, assistant professor and former clinical scholar in the experimental program.

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Mailed October 4, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

HEART TRANSPLANT #10, SASHA GILIEN, Transplant 2/8/69

DIED NOV. 29, 1971

BUSINESS WIRE

11/30/71 2:00 p.m.

FOR FURTHER INFORMATION CONTACT: Gary Cavalli or Hali Wickner 415: 321-5310

STANFORD -- Sasha Gilien, Stanford University's second longest surviving heart transplant patient, died suddenly at his home in Santa Cruz Monday night (Nov. 29).

Doctors at Stanford Hospital said Gilien died of a heart attack, although final autopsy reports are not yet available.

Gilien, 46, received a new heart at Stanford University Hospital February 8, 1969, after suffering a near fatal attack January 20. He was the tenth heart transplant patient operated on by Dr. Norman Shumway and his surgical team.

A free lance writer in Los Angeles for several years prior to his operation, Gilien recently moved to Santa Cruz , where he continued his writing career.

He authored several television scripts, including an episode of "Hawaii Five-O" starring Nancy Wilson which was honored by the annual Writer's Award Banquet in Los Angeles.

Gilien was co-author of the popular "The Begatting of a President" which sold more than 200,000 copies and was released on a record narrated by Orson Welles. The recording was nominated for a Grammy award for "Best Comedy Record of the Year."

Recently, he co-authored a sequel, "The Begatting of a Revolution" and wrote a television script "The Dream Boys" which American Broadcasting Company bought for a movie.

Of the 37 heart transplant recipients operated on at Stanford, 15 are now living. Carl P. Sheaffer, Stanford's longest surviving transplant patient, received a new heart on Oct. 26, 1968.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford University has announced plans to establish an outdoor primate facility for behavioral research and teaching on the northwest corner of Webb ranch.

An application for a land use permit was filed by the University with the San Mateo County Planning Commission Wednesday (Nov. 24).

A public hearing to review Stanford's application will be held in Redwood City December 15.

The land involved is 26 acres, located west of Interstate Route 280 at the meeting point of the Stanford Linear Accelerator and Jasper Ridge, the University's biological preserve.

The proposed open-field outdoor primate facility will be at the center of the 26-acre site on six acres of land. The fenced facility will house 10 to 40 young chimpanzees. A centrally located two-story observation center for up to 12 persons will be built. The first floor will serve as a shelter for animals, and as a feeding point. The structure will be about 2,200 square feet.

Stanford's application states that the facility will be far removed from residential areas. "It will have double fencing which will prevent escape of the animals as well as intrusion from unwanted visitors. An alarm system will be installed on the outer perimeter fence as an extra precaution."

In addition, the University plans to landscape the area for further isolation. The observation building and a portion of the fence in the main compound are designed to blend with the surroundings.

Prior to designing the facility, members of the department of psychiatry and the resident architect's office in the Medical School toured other outdoor animal centers around the country, and have incorporated key safety features in the planning.

Construction of the facility has been made possible by a grant from the Grant Foundation of New York. Stanford hopes to begin construction in Winter, with completion anticipated next Spring.

Research in primate behavior will be directed by Dr. David A. Hamburg, professor and chairman of the department of psychiatry, and Dr. Jane van Lawick-Goodall, a visiting professor of psychiatry at the Medical School, and a pioneer in studies of chimpanzee behavior.

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Primate Facility

222

The program is part of a broader University-wide study of the problem of human aggression and violence.

One of the researchers, Dr. Keith Brodie, assistant professor of psychiatry, said the facility will serve as an observation point of the natural behavior of chimpanzees.

"We will begin our observations with 12 animals, and build up slowly to a maximum of 40," he said. "Our initial studies will be on the adaptation of these chimpanzees to their new environment.

"About a year after arrival, the first signs of puberty in these animals should become evident, and we will then focus on the changes of behavior that occur during adolescence."

Brodie said that in recent years biomedical research has turned increasingly to man's closest relatives--monkeys and apes--to explore in depth the possible causes, treatment and prevention of many human disorders.

"Ultimately, such studies tell us where to look for crucial points of vulnerability. They permit us to examine relations of biology and behavior that are impossible to study in man, at least until they have been worked out in primates," he said.

Recent animal studies, however, have suffered from one major limitation--the nature of conventional laboratory facilities, according to Brodie. These studies, to a large extent, have been limited to animals housed in cages, and have been analogous to studying the behavior of man imprisoned in solitary confinement.

"Therefore, we view it as extremely desirable to have this experimental facility that combines features of the laboratory and natural habitat," Brodie said.

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Mailed November 24, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Heart Transplant Patient #37, Transplant #38

STANFORD -- Stanford University surgeons performed a heart transplant operation late Saturday night (Nov. 20) on a 49-year-old California man. He is reported in satisfactory condition.

Including the new recipient, 16 of Stanford's 37 heart transplant patients are now living.

In accordance with a new policy announced in May, the new recipient's name has been withheld.

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BUSINESS WIRE 11/22/71
4:00 p.m.

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

AN OUTDOOR PRIMATE FACILITY AT STANFORD

To answer inquiries from interested citizens, the Stanford Medical Center News Bureau interviewed Dr. Keith Brodie, assistant professor of psychiatry. Here he describes the work and purposes of the proposed outdoor primate facility at Stanford University, and answers questions related to construction and selection of the site.

Q: Where will the primate facility be located?

A: The facility will be located on a remote area of Webb Ranch, west of Route 280 at the meeting point of the Stanford Linear Accelerator and Jasper Ridge, the University's biological preserve. The land, which forms a small basin, is one of several sites considered. It was picked because it is out of view, and far removed from residential areas. It is also free from neighboring facilities, and relatively inaccessible to uninvited visitors, children, and stray animals. The land involved is 26 acres which will be enclosed by a secondary, eight-foot cyclone fence. The proposed primate facility will be located at the center of this buffer zone on six acres of land.

Q: What is the purpose of Stanford's primate facility?

A: Basically, we view this facility as a tool which will enable us to observe the natural behavior of chimpanzees. In recent years biomedical research has turned increasingly to man's closest relatives--monkeys and apes--to explore in depth the possible causes, treatment and prevention of many human disorders. Ultimately such studies tell us where to look in man for crucial points of vulnerability. They permit us to examine relations of biology and behavior that are impossible to study in man, at least until they have been worked out in primates. Recent animal studies, however, have suffered from one major limitation--the nature of conventional laboratory facilities. Because these studies have been, to a large extent, limited to animals housed in cages, they have been analogous to studying the behavior of man imprisoned in solitary confinement. Therefore, we view it as extremely desirable to have an experimental facility that combines features of the laboratory and natural habitat.

Q: What kind of animals will be housed in the facility?

A: We are interested in studying chimpanzees, under six years of age. When the facility is built, we will begin our observations with 12 animals, and build up slowly to a maximum of 40. Our initial studies will be on the adaptation of these chimpanzees to their new environment. We will be interested in their ways of exploring the new habitat, the mode of transmission through the group of new habits, and the ways in which their behavior differs from that in the old habitat. About a year after arrival, the first signs of puberty in these animals should become evident, and we will then focus on the changes of behavior that occur during adolescence.

Q: What will the primate facility look like?

A: As I mentioned, a six-acre escape-proof enclosure is contemplated, surrounded by a 20-acre buffer zone for isolation. The fence designed to contain the animals will be 15 feet tall. The upper portion of the primary cyclone fence will be sheet metal, sloping inward to prevent animals from climbing over it. The compound will be circular and will be divided into four sections or pens. A central two-story observation center for 12 people will be the only building on the site. The first floor of this building will serve as a shelter for animals, and as a feeding point. The structure will be about 2,200 square feet.

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Q: Do you anticipate any instances where some chimpanzees may escape?

A: First, six acres of land are rather a large area and provide ample freedom for animals to roam around. Second, chimps like to stay close to each other and find it unattractive to leave the group. Third, there will be a back-up protection if an animal manages to leave the compound. The secondary fencing system around the 26-acre perimeter will be equipped with an alarm or electronic guard connected to the security office. In other primate centers we have studied across the country, animals leaving the compound and causing damage to property or humans was not cited as a problem. Our major concern in taking these precautions is to prevent theft and vandalism and to keep unwanted persons from entering the area.

Q: Is there any work done elsewhere that is similar to this Stanford project?

A: No. Other primate centers have focused their efforts primarily on the medical aspects of chimpanzee research. For example, the problem of chimp resistance to viruses and antibody production. The chimp approximates the human in the sense of the number of chromosomes and certain of the blood proteins. Basically, no group has done the basic ethological observations we plan to undertake at Stanford.

Q: Can this work be done in Africa? Why Stanford?

A: This is a good question. The most important problem, of course, is an economic one. It would be very costly to assign researchers to a laboratory in Africa. There are advantages to having this facility here for several reasons: It is closer to our research laboratories where we plan at first to study urine specimens from these animals to observe metabolic changes. We also view the outdoor primate facility as a major center for research training, and for arousing interest among students in the scientific study of behavior. For example, during the past academic year no single subject has elicited so much interest among human biology students at Stanford as this topic. The human biology program is taught by several departments and deals with man as a biological organism in relation to his changing environment.

Q: What about the aesthetic appearance of the observation building and fences?

A: This question implies that someone will be there to look at the building. Actually, we have done tests and found that only a few homes in Ladera have eye contact with the proposed site. The distance between these homes and the site is 1-1/2 to 2 miles, and will present no problem. We plan to take steps to eliminate objectionable glare from the sheet metal of the primary fence. Earthy colors similar to the SLAC buildings will be used to make this facility blend with the surroundings.

Q: Do you plan any landscaping?

A: Yes. We will plant eucalyptus trees and other fast growing vegetation to screen the facility and to provide further isolation.

Q: Do you know if noise in such a primate facility is a problem?

A: The primate facility at Tulane University is within three blocks of a residential area. We inquired about noise and we were told there is no problem. Stanford's proposed primate center is farther away from residential areas and we do not see a noise problem arising either.

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Q: In your studies, do you plan to use drugs, surgery, or other manipulative techniques?

A: No. Our work will be simply to observe these animals and record their behavior in a natural environment.

Q: Who is funding construction of the primate facility?

A: Construction is made possible by a grant from the Grant Foundation of New York.

Q: Who will direct the research?

A: The research will be done under the direction of Dr. David A. Hamburg, professor and chairman of the Department of Psychiatry, and Dr. Jane van Lawick-Goodall, a visiting professor of psychiatry at the Stanford Medical School, and known for her pioneering studies of chimpanzee behavior. Dr. Goodall will commute to Stanford from the Gombe Stream National Park in Tanzania, Africa twice a year for teaching and research responsibilities. Collaborators in the research will also include members of the departments of psychiatry, psychology, sociology, biochemistry, and statistics. The program is part of a broader University-wide study of the problem of human aggression and violence.

Q: What is the construction timetable?

A: We hope to begin construction in winter, and have the facility ready for occupancy in the spring.

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November 18, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415; 321-5310

STANFORD -- An all day workshop on the safe use of medical equipment will be held at Stanford University School of Medicine December 4, sponsored by the Association for the Advancement of Medical Instrumentation (AAMI).

It will present information for personnel responsible for patient care and instrument management on how to operate medical equipment safely. In particular, the workshop will discuss the proper use of electrical equipment to avoid accidental shock to patients or personnel, and the correction of existing problems.

Registration and information can be obtained through the AAMI office at 9650 Rockville Pike, Bethesda, Maryland 20014 (telephone 301: 530-2800). The tuition fee, which includes training materials and lunch, is $50 for members; $60 for nonmembers, and $20 for medical students, interns and residents. Physicians, nurses and engineers, and other interested personnel are welcome to attend.

The coordinators for Stanford are Drs. Alfred P. Spivack, director of Stanford University Hospital's Coronary Care Unit, and Dr. Delmar Snider, assistant professor of anesthesia. The session will be held in Room M106 at the Medical School from 8:30 a.m. to 5 p.m.

Advance registration should be made.

Mailed November 17, 1971. ###

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Dr. Thomas N. James, director of the Cardiovascular Research and Training Center at the University of Alabama in Birmingham, will deliver the eighth annual John Kent Lewis Memorial Lecture Monday, November 22, at Stanford University School of Medicine.

His speech, entitled "Diseases of the Large and Small Coronary Arteries," will begin at 4:15 p.m. in Room M106 at the Medical School.

Dr. James, also professor of medicine and pathology, and associate professor of physiology and biophysics at Alabama, has devoted over 20 years to the study of the heart. He has published nearly 200 papers and contributed to 13 books on many aspects of cardiology.

In 1961, Dr. James authored Anatomy of the Coronary Arteries, considered the outstanding book in the field. His most recent research has dealt with the effect of disease on the cardiac conduction system, and how this relates to sudden death.

A past vice-president of the American College of Cardiology, he was awarded the 150-year medal of the Swedish Medical Society in Stockholm in 1961.

A native of Amory, Mississippi, Dr. James received his M.D. degree in 1949 from Tulane University School of Medicine in New Orleans, Louisiana. Before assuming his present position, he served on the Tulane faculty and was chairman of the Section on Cardiovascular Research at Henry Ford Hospital in Detroit.

The John Kent Lewis Lectures are presented in honor of the former chief of the Stanford Medical Service at San Francisco General Hospital. Dr. Lewis was a 1922 graduate of the Stanford School of Medicine. A noted pioneer in heart research, he died in 1961.

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Mailed November 15, 1971

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--

When the Mariner 9 spacecraft goes into its information-gathering orbit around Mars Saturday, Nov. 13, 4:31 PST, a team of Stanford scientists will begin analyzing data concerning variable features on the planet.

The basic objective of the Mariner 9 is to study the characteristics of Mars for a period of at least 90 days. Previous "flyby" missions (Mariners 4, 6, and 7) could make only spot checks of the planet, because they were in its vicinity for only a very short time.

Mariner 9 provides the first opportunity for lengthy orbital observation of Mars, and for analysis of data while the spacecraft continues to gather information. Thus, information from one orbital pass, processed at the Jet Propulsion Laboratory (JPL), Stanford and elsewhere, can be used to develop operations plans for the rest of the orbital passes.

Stanford Nobel Laureate Dr. Joshua Lederberg is one of five principal investigators in the television experiment, one of six orbital experiments to be conducted by Mariner 9. Dr. Elliott C. Levinthal, director of Stanford's Genetics Instrumentation Research Laboratory, is one of four co-investigators working with Lederberg.

The television experiment, perhaps the most significant of the mission operations, will include investigation of fixed and variable features of the planet. The fixed-features investigation will allow the mapping of 70 percent of the Mars surface in finer detail than is possible through telescopic observations or data from previous spacecraft.

The variable features investigation, the chief concern at Stanford, will provide information on daily, seasonal and time-variable changes in surface and atmosphere.

Stanford scientists are especially interested in the biological inferences which could be suggested by data from Mars.

"We'll be looking at this information to see what implications it could have for biological hypotheses about the planet," Levinthal said. "Generally, we believe Mars is very hostile to life. The television experiment probably won't provide direct evidence about the possibility of life on the planet, but rather an indication whether there are ecological niches which may be hospitable to biological life.

"The focus of our interest," he went on, "is looking for variable features. We've been designing methods of analyzing data so that surface changes are made apparent. Much of this work was done in our Artificial Intelligence Laboratory by a team which includes Prof. John G. McCarthy (computer science) and research associates Lynn Quam (computer science) and Robert Tucker (genetics)."

During the mission, digital data tapes will be brought to the Stanford Artificial Intelligence Lab for analysis by computer. The analyses will be sent back to mission headquarters at the JPL within a day or two.

Additional data obtained from the television cameras and other instruments on board the spacecraft will be processed at the JPL.

Together, these results will be used to make recommendations regarding possible changes in mission planning and operations throughout the 90-day period.

"Our concern is with data that can affect the mission," Levinthal said. "Decisions we make may change the spacecraft's operations a few days later. We can't anticipate where something interesting might turn up. If it does, and we'd like to take a better look at it, we can change our plans accordingly."

Levinthal and Lederberg have been working on the Mariner 9 project since October 1968. They are also involved in the research and planning of the Viking Mars exploration mission, in which an automated spacecraft will be landed on Mars. The present target date for the Viking launch is 1975, with the landing scheduled for '76.

Stanford School of Medicine's Genetics Instrumentation Research Laboratory was established nine years ago to design devices which can study the possibility of life on other planets. Techniques learned from the space program are being applied to the fields of biology and medicine.

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Mailed November 9, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Heart Transplant Patient #36, Transplant #37 November 8, 1971

FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Stanford University surgeons performed a heart transplant operation Monday afternoon (Nov. 8) on a 38-year-old man from New Berlin, Wisconsin. He is listed in satisfactory condition.

In accordance with a new policy announced in May, the Hospital does not usually release the name of the recipient. However, the Journal publishing company of Milwaukee, Wisconsin, where the recipient is employed as assistant foreman in the stereotype room, has revealed his identity. The Hospital has confirmed that he is Richard Mueller.

Including Mueller, Stanford's 36th heart transplant patient, 15 of those operated on here are now living. Stanford's longest surviving patient and seventh recipient, Carl P. Sheaffer, 57, of Winchester Bay, Oregon, recently celebrated the third anniversary of his new heart, which he received at Stanford on October 26, 1968.

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Business Wire 11/9/71

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310
EDITORS: Pictures available if not included.

FOR IMMEDIATE RELEASE
STANFORD –

The tall, attractive blonde seemed very much at home sitting behind a desk in the Department of Psychiatry at Stanford University Medical School. However, her real "home" is among the wild chimpanzees of East Africa.

Dr. Jane van Lawick-Goodall, visiting professor of psychiatry at the Medical School, has spent a good part of the past 11 years living among the chimpanzees of Tanzania. An internationally known researcher on chimpanzee behavior, she will commute to Stanford from Africa twice a year during the spring and the fall for teaching and research responsibilities here.

The rest of the year she will continue her work at the Gombe Stream National Park on the eastern shore of Lake Tanganyika, where she has been observing and recording the behavior of chimpanzees since 1960.

"The chimpanzee is a creature of immense significance to man," Dr. Goodall said. "In addition to being extraordinarily close to man in biochemistry and brain structure, the chimpanzee has striking behavioral similarities, particularly in his communicatory gestures and responses. We hope that research on the behavior of man's closest relatives will help man in understanding himself," Dr. Goodall explained.

The scientist said that she could not remember a time when she did not want to go to Africa to study animals. After she finished school in England, she worked to save up the fare to Nairobi where she had a temporary job. There, she met and worked for the noted anthropologist Dr. Louis Leakey. A year later, sensing the deep-rooted interest in the young English woman for the animals of the wild, Dr. Leakey asked her to undertake a field study of chimpanzees. He suggested that she use this research toward a doctorate in ethology [animal behavior] at Cambridge University, which Dr. Goodall received in 1965, and also helped her obtain the funds for the project.

Thus, with little experience in scientific observation, but a lot of spirit and enthusiasm, Jane Goodall set out to make camp among the apes of the Gombe Stream Park. The only area in Africa set aside specifically for chimpanzees, the Park is well suited for observation, according to Dr. Goodall, because of the treeless ridges and open spaces that are part of its 60 square miles.

Yet it took Dr. Goodall well over a year of daily observation, watching through binoculars and gradually moving in from the ridges, to even get close to the chimps. Her goal was to keep out of their social picture and be accepted as a piece ~~of the environ~~ment. At first the chimps were scared, then hostile and aggressive, but they never attacked her, she said.

After six months, Dr. Goodall could distinguish individual characteristics of various chimps, and as she got closer to them, their physical differences became more obvious. She began naming the chimps—Flo, Figan, David, Goliath, Passion, etc. Gradually, with courage and patience, Dr. Goodall won the confidence of these wild animals, many establishing themselves as regular visitors to her camp.

On the recommendation of Dr. Leakey, noted wildlife photographer Baron Hugo van Lawick joined Dr. Goodall in 1962 to film her work. The couple were married two years later.

Dr. Goodall's systematic studies of the chimpanzee in his own community have provided valuable insight into the behavior of both the chimpanzee and man, said Dr. David Hamburg, professor and head of the Department of Psychiatry at Stanford Medical School.

"Her research is unique because individual animals have been recognized and studied, because close range observations are accurately recorded, and because there is a superb photographic record made by Hugo," Dr. Hamburg said.

(more) 11/8/71

Drs. Hamburg and Goodall first met at a primate behavior conference in 1965. In 1968, they began planning joint research on aggressive behavior in nonhuman primates. Dr. Hamburg has visited the Gombe Park several times. He feels that Stanford's new primate center which is being planned to study chimpanzees in a habitat similar to their natural one will complement Dr. Goodall's research in Africa. Dr. Goodall will be a collaborator in research at the center.

With Dr. Hamburg, Dr. Goodall also lectures in human biology classes. This quarter she discussed the relevance of chimpanzee behavior to the study of man. It was her first teaching experience and she enjoyed it immensely, she said. Human biology is a series of courses which approaches biology from a multidisciplinary orientation to include all sciences related to biology. Dr. Goodall added that this concept of teaching biology is stimulating.

Since 1964, students have come to Africa each year to work with Dr. Goodall as research assistants. They usually have a bachelor's degree in one of the sciences, such as anthropology, psychology, zoology or physiology. "Such an interdisciplinary study of the chimps is necessary," Dr. Goodall explained, because there are so many facets to their behavior.

This year Stanford has begun a collaborative program with the African Observation center. Three students from the Gombe center will be working toward doctorates at Stanford. A selection of students from human biology will go to Africa as part of a new undergraduate training program there.

The assistants have enabled Dr. Goodall to maintain continuous, daily records that detail the behavior of these chimps as they range freely over their native hills and forests. The studies now encompass three generations of chimpanzees, having followed one mother and her young until the mother became a grandmother. "A shrunken, wizened old woman around 40, this grandmother is certainly the oldest chimp in our group," Dr. Goodall commented.

The British scientist has made contributions to the knowledlge of chimpanzee behavior that have altered man's concept of the primates and of himself. One of her most significant discoveries was that man is not the only species which makes tools. Dr. Goodall has watched chimpanzees fashion and use such simple tools as "fishing rods" to probe for termites in their mound, or "sponges" of partially chewed leaves to sop up drinking water they cannot reach with their lips.

Another "fascinating experiment" occurred in feeding the chimpanzees, Dr. Goodall explained. At first, anxious to lure the chimps into the camp, she would feed them bananas every day. But she noticed that during these regular feedings, aggression among the chimps had "skyrocketed" and the chimps would fight for bananas. She reasoned that the unnatural food source had altered normal eating patterns and had also attracted different groups of chimps that would not normally interact. Now, the chimps are not fed too frequently. The eating area is designed to simulate natural food sources and to stimulate as little aggression as possible. It consists of an elaborate trench system of sunken boxes which can be automatically emptied and filled from a main control inside one of the camp buildings.

Dr. Goodall is very excited about the affiliation of Stanford with Gombe in Africa. "It means that the research is taking the direction I've always wanted it to take, and that we will be making use of our understanding of chimpanzee behavior to understand man," she said.

She added that Gombe would not be functioning without Dr. Hamburg. "It is hard to sufficiently express my gratitude to Dr. Hamburg, not only for his aid in obtaining money from the Grant Foundation and the Commonwealth Fund of New York for us to continue in Africa, but for his inspiration, encouragement, and genuine interest."

Dr. Goodall has written several articles and books about life with the wild animals of Africa, and all include photographs taken by Baron van Lawick. The team's latest book, *In the Shadow of Man,* which has just appeared, is a personal, nonscientific chronicle of the rewarding years the couple have spent so far among the chimps.

Some years they spend more time than other years in Africa, because of lectures, meetings, and other commitments. However, Dr. Goodall said that beginning next year, with their four-year-old son, they will be living at the Gombe Stream Park "more or less permanently."

Reaching out to 11-month-old Flint, Dr. Jane van Lawick-Goodall extends the back of her hand to him--fingers turned away--to indicate she intends no harm. An internationally known expert on chimpanzee behavior, Dr. Goodall has lived among the chimpanzees of Africa since 1960. She will commute to Stanford University Medical Center twice a year as visiting professor of psychiatry.
Photograph by Baron Hugo van Lawick, courtesy of the National Geographic Society.
Stanford University Medical Center November 8, 1971.

The wild chimpanzees of Africa's Gombe Stream National Park can be as gentle and affectionate as Figan is here with Dr. Jane van Lawick-Goodall, who through courage and patience gradually won their confidence. She has been studying the chimpanzees in their natural habitat for 11 years.
Photograph by Baron Hugo van Lawick, courtesy of National Geographic Society.
Stanford University Medical Center November 8, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- An improved technique of reconstructive hip surgery--developed in England and now introduced in the United States--is expected to help thousands of elderly patients walk again, according to a Stanford University orthopedic surgeon.

The technique is a modified total hip implant, using artificial joints of metal and plastic welded to the thigh bone and pelvis with a special bone cement.

Innovations in the old technique of hip surgery include use of a new type of bone cement, and a combination of metal and plastic protheses which simulate the hip socket and ball-like upper portion of the thigh bone.

The bone cement was approved in October by the federal Food and Drug Administration for use in orthopedic surgery in this country. It is called Simplex P and consists of an acrylic polymer.

In describing the technique at recent meetings of the California chapters of the American Physical Therapy Association in Oakland and Newport Beach, Dr. David S. Burton said he would have little hesitation in advising this form of surgery to older patients who cannot walk without canes or crutches, who are unable to work, and who have severe pain.

"The operation," however, "is definitely not for the patient with an occasional hip pain," he explained.

Burton, an assistant professor of surgery at the School of Medicine, said the technique is especially expected to improve hip surgery in elderly patients with arthritis. In this severe kind of degenerative bone disease, reconstructive surgery has not been satisfactory because of a tendency of the older prostheses to deteriorate.

In the old method, some artificial joints were fixed to the bone with screws which became loose with time. In others, the metal also tended to wear out cartilage tissue in the hip socket creating a painful condition for the patient, Burton said.

"For certain hip conditions, the combination of metal and plastic is more satisfactory than the old devices. Metal and plastic get along better with less friction," he added.

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The new cement, which is as strong as bone, has also made a big difference in results, Dr. Burton said. It welds prostheses into place by filling space in and around them, and gives wide surface for weight-bearing, which could not be achieved previously.

The Stanford surgeon reported that 40 patients at Stanford University Hospital and Santa Clara Valley Medical Center received the new artificial hip joints last year under an experimental program approved by the FDA. Under similar programs, this total hip replacement has been carried out at certain medical centers across the country.*

"Before the operation these patients were very much in the disabled grade," he said. "Now the patients are in the excellent to good categories."

Burton said the patients were able to walk out of the hospital on their own strength or with the help of cane or crutch. All patients were free of their original hip pain approximately two weeks after the operation.

Hospital stay for these patients was shortened from an average of six weeks to two and a half weeks, depending on the patient's strength. This is due to the new bone cement which permits full weight-bearing postoperatively.

"In the past, reconstructive hip surgery could require lengthy physical therapy and sometimes as long as a year before the patient could walk," the surgeon said.

The new technique was developed by Dr. John Charnley, a British orthopedic surgeon who has tested it in 4,000 patients. Burton spent a period in England studying the new method and modified it for application to Stanford patients.

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* One patient to undergo such operation in recent months in Boston was Eugene Ormandy, conductor of the Philadelphia Symphony Orchestra. (Editor).

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Mailed November 3, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Frank H. Roberts of Palo Alto, has been appointed president of the Stanford University Hospital board of directors, Stanford President Richard W. Lyman announced Wednesday, (Nov. 3).

Roberts succeeds Kirk Jeffrey, a former Palo Altan who served on the hospital board since 1968. Jeffrey is now senior vice president of Union Bank in Los Angeles.

An attorney with the law firm of Pillsbury, Madison, and Sutro of San Francisco, Roberts was first appointed to the hospital board in June, 1970. He is a graduate of DePauw University, Greencastle, Indiana, and holds a doctor of law degree from the University of Michigan.

Roberts lives at 1295 Dana Avenue, Palo Alto.

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STANFORD -- Dr. Norman Shumway, Stanford University's pioneering cardiovascular surgeon, has received the Rene Leriche Prize from the International Society of Surgery.

The prize, considered one of the most distinguished in cardiovascular surgery, pays tribute to valuable work in surgery of the arteries, and clinical and experimental work on diseases of the heart.

Shumway has also developed the techniques used in heart transplantation.

In a letter to Dean Clayton Rich of the School of Medicine, Dr. J. van Geertruyden, secretary general of the society, wrote:

"The Rene Leriche Prize crowns a surgeon considered the most eminent in the domain of cardiovascular surgery."

The prize, awarded every other year by the 3,200-member international society, was first announced at its 24th Congress held earlier this fall in Moscow.

The School of Medicine was notified of the award yesterday (Nov. 2).

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Mailed November 3, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- The first linear accelerator to be used in this hemisphere for super voltage radiation therapy is being retired. The machine has been dismantled and removed from the Department of Radiology at Stanford University Medical Center, where it will be stored until it can be moved to the Smithsonian Institute in Washington, D.C.

After treating an estimated 8,000 patients over the last 16 years, Stanford's accelerator will take its place in history at the Smithsonian Institute when arrangements can be made, according to Dr. Henry Kaplan, chairman of the Radiology Department at Stanford University School of Medicine. He said that he wrote to officials at the Smithsonian offering to donate the instrument to them, and they agreed to accept it, but have not yet sent him any authorization or shipping instructions.

The pioneering apparatus, used to destroy tumors by bombarding them with radiation produced from electrons, will probably be displayed in a new hall of nuclear science which the Institute is planning, said Dr. Kaplan. "It's going to have a place of honor among respected company," he added, such as the first cyclotron and the first heavy ion linear accelerator.

The accelerator was designed and built jointly by researchers at the University's Medical School Radiology Department and Microwave Laboratory, with grants from the American Cancer Society and the National Cancer Institute, NIH. It was first installed in 1955 at Stanford's former teaching hospital in San Francisco, and then moved to the Medical Center with the Medical School in 1959.

The device took almost five years to assemble, said Dr. C. J. Karzmark, head of radiologic physics in the Radiology Department. "It was a kind of fallout from high energy physics research and the radar technology of World War II, and a number of physicists, including myself were involved with its development," he explained.

For clinical purposes, electrons injected into a vacuum cylinder called an accelerating wave guide, are accelerated by microwave power to a high velocity and aimed at a specific tumor tissue or used to produce penetrating X rays.

This model was particularly suited for treating cancers of the head and neck, prostate or bladder. The Stanford researchers also developed a specialized technique with this accelerator for treating an inflammatory skin lesion known as mycosis fungoides which can become malignant.

One of the first patients to benefit from the accelerator, Dr. Karzmark recalls, was a two-year-old boy with retinoblastoma, a tumor of the retina in the eyes of young children that can lead to blindness. The young patient had lost the vision in one eye, but his other eye was saved because doctors were able to destroy the tumor with radiation from the accelerator.

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"Such treatment requires the utmost precision," explained Dr. Karzmark. The tiny field of the tumor must be defined and destroyed without damaging the nearby optic nerve and other healthy tissue. "Today, retinoblastomas are treated at Stanford with one of the newer accelerators, but in 1955 there was only one model and because of it, that boy, who is now 17, still has his sight."

The Stanford device was the forerunner of several commercial accelerators first constructed for medical use in the early 1960's, and now numbering well over 100 in this country. The Division of Radiotherapy at Stanford Medical Center has two commercial models, both made by Varian Associates, a California instrument firm whose scientists worked closely with Stanford researchers to improve the medical linear accelerator. Stanford's first apparatus is being replaced by a third modern accelerator, also from Varian, and valued at $200,000.

"The new machine will have a very sharply focused and defined X-ray beam that can be accurately and speedily directed at a tumor without irradiating a large body of surrounding tissue," said Dr. Karzmark. The beam is also more penetrating so 17 tons of shielding is being added to the treatment room. This accelerator is almost one of a kind, he commented, since it has been specially adapted by the company to fit the existing mounting and rotating patient chair of the present room.

Stanford's early device proved invaluable, but it is obsolete now, said Dr. Karzmark. Current generator accelerators have high output and new functional accessories to facilitate more treatment procedures. The first accelerator is history.

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Mailed November 1, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Henry S. Kaplan, chairman of the Department of Radiology at Stanford University School of Medicine since 1948, will step down from his administrative responsibilities at the close of the current academic year.

In resigning as department chairman, he stressed his desire to relinquish administrative duties and devote himself more fully to teaching and research.

The announcement of Dr. Kaplan's decision was made Wednesday, December 22, by Dean Clayton Rich. Dr. Rich said he plans to appoint a search committee to aid in the selection of a new department chairman.

Dr. Rich characterized Dr. Kaplan as one of the most distinguished members of the medical school faculty, and expressed his appreciation for "tremendous achievements and outstanding contributions to Stanford University."

One of the leading international authorities on cancer, Dr. Kaplan conceived the use of the linear accelerator for medical purposes. After helping design the necessary apparatus, he set standards for its use. He has also pioneered in the development of radiotherapy techniques which have resulted in dramatic gains in the treatment of cancer, especially Hodgkin's Disease and other malignant lymphomas.

Dr. Kaplan has done extensive work over the years on radiation-induced leukemia in mice, and his studies have led to the discovery that such tumors in mice are really caused by a latent virus which is triggered by the radiation exposure. It was for his accomplishments in this area that the Leukemia Society of America selected him to receive the 1971 Robert Roesler deVilliers Award for achievement in leukemia research.

Dr. Kaplan has received international recognition for his work. He was made a Chevalier de la Légion d'Honneur by the Republic of France, and Italy has awarded him its Order of Merit. In 1969, he received the Atoms for Peace Award, the only physician to be so honored.

A 1940 graduate of Rush Medical College of the University of Chicago, he served his internship and residency at Michael Reese Hospital in Chicago. Following further postdoctoral training at the University of Minnesota, he was an assistant professor at Yale and a radiologist at the U.S. Public Health Service before coming to Stanford in 1948.

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Mailed December 22, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Betty Johnson, Stanford University Hospital's third longest surviving heart transplant patient, died late Saturday night (Dec. 18) at the Hospital.

Mrs. Johnson, 47, died from late rejection of her new heart.

A housewife from Logan, Utah, she became the 17th heart transplant patient operated on by Dr. Norman Shumway and his surgical team on September 3, 1969.

Mrs. Johnson is survived by her husband, Homer, an educational consultant, and four children, Jay, 25; Jeff, 21; Jim, 18; and Jarid, 13.

Funeral services will be private.

Fifteen of Stanford's 38 heart transplant recipients are now living.

Mailed December 20, 1971. ###

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Nurses are apparently a fairly straight-laced group, but things may be changing.

At least that's the conclusion which can be drawn from a recent study by a team of Stanford University scientists concerning the use of marijuana by nurses and nursing students.

Few practicing nurses have smoked marijuana, but a significantly higher percentage of nursing students have used the drug, the Stanford researchers found. Results showed that of 1,171 students and 962 nurses surveyed, 13 per cent of the students and 3 per cent of the graduates had smoked marijuana in the past, while 4 per cent of the students and 1 per cent of the nurses classified themselves as current users.

The survey was conducted by Drs. Martin R. Lipp and Samuel G. Benson, residents in psychiatry at Stanford University School of Medicine, and Patricia S. Allen, a graduate of Stanford's School of Nursing and now a staff nurse at San Francisco General Hospital.

The responses were obtained through questionnaires distributed in the spring of 1970 at the conventions of the National Student Nurses' Association (NSNA) and American Nurses' Association (ANA).

"Results indicate that cannabis (marijuana) use, past and present, is significantly more prevalent among student respondents," the authors wrote in their report, published in the December issue of the American Journal of Nursing.

"Exposure to cannabis (being in the room or at an event where marijuana was being used) follows the same pattern. However, there is no significant difference between the two groups with regard to alcohol and cigarette use," they continued.

Responses from the two conventions were analyzed with respect to several variables--age, graduating class, marital status, and state of residence. Single respondents revealed more marijuana use than married respondents, but the most significant differences were related to geography.

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Some states had no marijuana users. In others, particularly on the East and West Coasts, large numbers of students had experience with marijuana. In New York, for example, some 67 per cent of the student respondents had been exposed to cannabis use, and 31 per cent had used the drug in the past.

These results indicate that, in terms of geographic distribution, the nursing sample paralleled marijuana use among medical students.

Lipp, Benson and four other scientists conducted a similar study at four medical schools (also in the spring of 1970), which revealed that past marijuana use ranged from 17 per cent at one midwestern school to about 70 per cent in schools on either coast. In all, half of the 1,063 responding medical students had smoked marijuana and 30 per cent were current users.

The highest marijuana usage rate among nursing students was significantly lower than the highest percentage among medical students, the authors noted in the new report.

Predictions for the future use of the drug by nursing respondents followed the same pattern as the other results. Few practicing nurses said they would try marijuana regardless of possible medical or legal changes. "But, a significant minority of NSNA (student) respondents would expect to use marijuana as either the medical or legal status changed," Lipp, Benson and Miss Allen found.

The discovery that any medical personnel have used, currently use, and foresee continuing to use marijuana in the future is "remarkable," according to the authors, since prospective doctors and nurses using the drug jeopardize not only graduation, but also state licensure and employment.

This use of marijuana by medical personnel in the face of legal hazards raises serious questions, particularly since marijuana is at least partially a medical issue, they said.

"The health professions must soon come to grips with the fact of marijuana use among its own members," they concluded. "If medical authorities cannot convince nursing students to refrain from using marijuana, persuading the population at large seems unlikely."

The study was supported by a grant from the Commonwealth Fund of New York.

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Mailed December 20, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

HEART TRANSPLANTS/

Patient #38, Transplant #39 12/15/71 - Howard Paul Overson, 32

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Stanford University Hospital surgeons performed a heart transplant operation Wednesday afternoon (Dec. 15) on Paul Overson, 32, from Albuquerque, New Mexico. He is reported to be in satisfactory condition.

Hospital policy has been to withhold names of heart transplant recipients, unless a recipient requests that his name be released. In this case, Overson's relatives revealed his name to Albuquerque newspapers and the Hospital has confirmed it.

Overson has been disabled by his heart condition for the past year. Prior to that he was an insulation worker. He is married and has two children. At 32, he is the youngest of the 38 heart transplant patients to be operated on at Stanford.

Including Overson, 16 of Stanford's 38 heart transplant recipients are now living.

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BUSINESS WIRE 10: 45 a.m.
12/16/71

WEST COAST DISTRIBUTION
(AP/UPI send nationwide)
NEW YORK TIMES AND
WASHINGTON POST

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- John Dolly, a part-time Stanford Medical School employee fired for allegedly taking part in a sit-in last April, will get his job back.

Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine, has upheld the recommendation of a grievance committee which urged the rehiring of Dolly.

Dolly was employed by the Department of Genetics. He was one of five University employees fired for allegedly taking part in a sit-in April 9 at Stanford University Hospital. After extensive hearings, two of the five (including Dolly) have been reinstated. The firings of two other employees have been upheld, and the grievance procedure for a fifth employee is pending.

The three-member grievance panel said Dolly's participation in the sit-in was minimal. "His presence was involuntary and his participation was directed primarily by his concern for the physical safety of himself and particularly of his pregnant wife," the committee stated.

The panel recommended Dolly's immediate reinstatement to his previous position, with consideration given to "some remedial compensation."

Dr. Rich ruled that Dolly should receive one-half of back pay equivalent to the amount he would have earned August 9 through October 22. This is the period during which there was a hiatus in the active hearings of Dolly's case in spite of University efforts to expedite the proceedings, he said.

Dr. Rich also ruled there was no basis for Dolly to receive back pay from the date of firing (June 23). He said the University could not be held responsible for Dolly's failure to disclose information that would have cleared him of the charges against him. This was Dolly's choice as a result of which the University did not receive the services he otherwise might have performed.

Dolly has maintained he could not discuss his role in the sit-in because of a pending court case against him stemming from the same incident.

"The University administration acted reasonably in firing Dolly on the basis of facts known to it at the time," the grievance panel wrote. "Dolly voluntarily withheld mitigating information which could not have been obtained without his cooperation.

"The choice to withhold (information) was doubtless a difficult one, but the University cannot be held responsible for the difficulty in which Dolly found himself."

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Mailed 12-7-71

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. John R. Hogness, president of the newly-formed Institute of Medicine in the National Academy of Sciences, will deliver the keynote speech at the dedication of the new $560,000 Psychiatry Clinic Building at Stanford University Medical Center, Thursday, December 9.

The public ceremony marking the official opening of the adult and child clinic facility will begin at 2:30 p.m. in the Dean's Courtyard at the School of Medicine. Dr. Hogness will be introduced by Dr. Clayton Rich, dean of the School of Medicine.

This will be Dr. Hogness' first public statement on mental health since assuming the presidency of the Institute last August.

A 1946 graduate of the University of Chicago School of Medicine, Dr. Hogness served as an administrator and faculty member at the University of Washington for 21 years before accepting his present position.

After six years as medical director of the University Hospital, Dr. Hogness was appointed dean of the School of Medicine and chairman of the Division of Health Sciences in 1964. He became executive vice president of the University in 1969. From 1970-71, he served as chairman of the Board of Health Sciences and director of the Health Sciences Center, composed of six colleges, two hospitals, and four health care and research centers.

Following the dedication ceremonies, an open house will be held for the public in the new building and also at the Department of Psychiatry's inpatient facility at Hoover Pavilion.

The new two-story redwood building was added to give the psychiatric outpatient program at Stanford space it urgently needed and to provide a more pleasant, informal setting for individual and group therapy sessions. Completed in mid-August and now being landscaped, it houses the department library and staff offices, group therapy rooms, and Adult and Child Psychiatry Clinics.

"Between the adult and child clinics, we'll be able to handle close to 20,000 patient visits per year," said Dr. Alan Rosenthal, director of the Child Psychiatry Clinic. "Every staff member has an office, whereas in the past most of our residents had to share offices. Now everyone is free to see many more patients."

Located just south of the main center, the new facility is adjacent to the Edwards Building, which formerly housed overcrowded clinics, department offices and laboratories.

The removal of the clinics and offices from Edwards has freed space for the broad interdisciplinary study of violence and aggression at Stanford, directed by Psychiatry Department chairman Dr. David Hamburg. The balance of the vacated space will be department laboratories for Psychiatry and Biochemistry.

Stanford's psychiatric program employs the "team treatment" concept, in that faculty psychiatrists, social workers, residents and psychologists are all involved in developing therapy for clinic outpatients. The floor plan in the new building facilitates this approach. -more-

"We designed the new clinic floor plan so that teams of doctors are physically located together in clusters of offices," said John Hornback, resident architect at the Medical Center. "Groups of four or five offices are situated around small waiting rooms."

The clustering of offices provides waiting patients with more privacy and reduces the amount of corridor space.

"In the new building we avoid the long walk down a corridor, which sometimes has a 'last mile' feeling for patients," said Dr. Peter Rosenbaum, director of the Adult Psychiatry Clinic.

The building also features a two-story covered courtyard, equipped with sliding panels on two sides for circulation.

The 18,000 square foot structure was designed with economy and flexibility in mind, according to Hornback.

"Outpatient psychiatric therapy doesn't have to take place in a high cost, concrete structure," he said. "With no need for laboratory utilities, we could construct a low cost facility.

"In terms of flexibility, all the interior partitions are non-load bearing and can be easily moved. The carpet and ceiling are continuous, so when a partition is moved, the room still looks finished. Additionally, the building can be taken apart by 30-foot sections and relocated by housemoving methods."

Hornback's staff members Jim Brenner and Ray Rooker carried major responsibility for designing the building, along with Stanford Hospital's Engineering Department. Welch Construction Company of Mountain View was the builder.

Funds to finance the building came from private sources. Plaques will honor the gifts of two major donors--John C. Cosgrove and Mrs. George A. Winzer. The upper floor of the building will be named the Emilie Dohrmann Cosgrove Psychiatric Clinic, in honor of Cosgrove's late wife, who was a member of the class of 1933 and a former trustee of the University. One of the wings on the first floor will be called the Frances Winzer Wing in honor of Mrs. Winzer.

Four members of the Stanford faculty were recently elected to membership in the Institute of Medicine, including Dr. Robert A. Chase, professor and chairman, Department of Surgery; Dr. Hamburg; Dr. Donald Kennedy, professor and chairman, Department of Biological Sciences; and Dr. Joshua Lederberg, professor and chairman, Department of Genetics.

Dr. Hogness' brother, Dr. David Hogness, is a professor of biochemistry at Stanford.

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Mailed December 6, 1971.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A new, non-surgical treatment, expected to replace the now common surgery of the prostate, is being investigated by urologists at the Stanford University School of Medicine.

The treatment, still in the experimental state, utilizes a female hormone, medrogestone, given orally or by injection. It shrinks the diseased prostate, making an operation unnnecessary.

The work is directed by Dr. William R. Fair, assistant professor of surgery in the Division of Urology.

Dr. Fair said that benign prostatic hypertrophy or prostate enlargement is a common condition in males over 50. The prostate is a gland in the male situated around the neck and exit of the urinary bladder and through which runs the beginning of the urethra--the passageway for urine.

In one in five males, the prostate enlargement is severe enough to obstruct the urine passageway, resulting in inability to empty the bladder.

The most common treatment for this condition is prostatectomy, a simple but costly surgical procedure for removal of the prostate. Thousands of prostatectomies are performed on males in the United States yearly.

Dr. Fair and his associates believe that medrogestone offers hope of becoming the treatment of choice for this disease in the future, provided that clinical trials demonstrate its effectiveness.

This particular hormone appears to be free of the undesirable side effects associated with female hormone treatment, Dr. Fair said. These included male breast enlargement and temporary loss of sexual potency.

However, before recommending hormone treatment for the prostate on a routine basis, the Stanford urologists want to know if medrogestone actually has any effect on the antibacterial factor found in prostatic and seminal fluids.

"This is important," said Dr. Fair, "because we want to avoid compromising the patient's natural defenses against bacterial infections."

In 1965, Fair working with Dr. Thomas A. Stamey, Stanford professor of surgery, discovered that seminal and prostatic fluids contain a potent antibiotic substance which kills bacteria responsible for urinary tract infections. Their discovery not only accounted for the absence of urinary tract infections in healthy males, but explained how the body fought off bacteria that caused such infections.

"If further study confirms that medrogestone is effective in humans and has no effect on the antibacterial factor in prostatic fluid, prostate surgery for this benign disease may become a thing of the past," Fair said.

In addition, under a $53,105 grant from the National Institutes of Health, Dr. Fair and his associates plan to:

. Study the biochemical nature of the antibacterial factor in prostatic and seminal fluids, and its clinical importance as a defense mechanism against urinary tract infections.

. Investigate the possibility that the periurethral glands of the female (the counterpart of the male prostate in the female) may secrete a similar substance, and that this agent is responsible for the absence of harmful bacteria on the urethra and external vagina of normal females. ### 1/31/72

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- The Stanford University Medical Center has appointed Caudill Rowlett Scott of Houston and Los Angeles as executive architects to complete the initial step in forthcoming expansion at the Center. Dr. Clayton Rich, dean of the School of Medicine and vice president for medical affairs, made the announcement today (January 19).

The firm's specific task will be to carry out phase one, step one, in the master plan for the development of the Medical Center, said Dr. Thomas A. Gonda, hospital director.

Dr. Gonda said that this step calls for needed expansion of the Hospital's intensive care unit and clinical laboratories, and relocation of several supportive services.

John Hornback, resident architect at the Medical Center, elaborated on the plans for expansion:

"Basically, we're adding space to accommodate the clinical laboratories and dietary service, including the cafeteria and dining rooms," he said. "This will free space on the first and second floors to relocate and enlarge intensive care, diagnostic radiology, and other patient service and administrative functions."

The most recent master plan for the Medical Center's development, completed in 1970 by Bertrand Goldberg Associates of Chicago, set the basic framework for this expansion. Caudill Rowlett Scott (CRS) will work from this plan, reviewing and revising it to the extent that it is necessary to complete this step.

Dr. Gonda, Dean Rich, and Hornback were part of a 10-member search committee charged with recommending a new architect. In their report to Stanford's Board of Trustees, the committee said:

"It was felt that CRS offered a fresh and innovative approach to programming and planning that had proven itself on a number of recent projects of similar scope. They have received consistently high praise from their former clients. They have exceptional ability to communicate with the client and willingness to respond to his needs and desires in producing the final design."

The committee added that previous studies of design criteria by CRS indicated "a sensitivity to the environment and to aesthetic qualities that will be important to our project."

CRS, a full-service firm of architects, planners and engineers with over 300 employees, has undertaken projects in 40 states and 10 foreign countries since its birth in 1946. The winner of over 100 national awards for innovation in design, the firm last week received the 1972 American Institute of Architects award, given annually to the outstanding architectural firm in the country.

Previously known primarily for design of schools and educational buildings, CRS established a health facilities division in the early 1960's, which now handles almost half of the firm's volume. CRS recently developed the master plans for the medical centers at Tulane and Texas Tech University.

An important and unique feature of the CRS operation is the use of on-site project teams. This technique involves the client/user in making decisions concerning significant design concepts.

The Houston-based firm will work out of its Los Angeles regional office on the Stanford project. CRS is currently engaged in designing the Santa Clara County office building. ### Mailed 1/19/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Robert A. Chase, professor and chairman of the Department of Surgery, has been named the first Emile Holman Professor of Surgery at Stanford University School of Medicine. The announcement was made today (January 17) by Dean Clayton Rich.

The endowed professorship honors Dr. Holman, professor and executive head of the Department of Surgery at Stanford from 1926 to 1955.

Dr. Chase, a 1945 graduate of the University of New Hampshire, obtained his M.D. from the Yale School of Medicine in 1947. Following surgical internship and residency at New Haven Hospital, he served eight years as a chief surgeon in the U.S. Army. He was a teaching fellow in plastic surgery at the University of Pittsburgh and a surgical faculty member at Yale before being appointed to his present post at Stanford in 1963.

The author of many clinical and research publications, Dr. Chase is chairman of the Graduate Education Committee of the American College of Surgeons. He is also a consultant to the Surgeon-General of the U.S. Air Force.

Dr. Holman, a 1911 graduate of Stanford, was a Rhodes Scholar at Oxford University before obtaining his M.D. from Johns Hopkins University in 1918. He received further training at Harvard Medical School and was a faculty member at Western Reserve University Medical School in Cleveland before coming to Stanford in 1925.

Long considered one of the nation's finest cardiovascular surgeons, he contributed to the development of the surgical treatment of "blue babies" and was the first to perform the delicate operation on the West Coast.

In 1952, Dr. Holman received the Rudolph Matas Award in Vascular Surgery, generally regarded as the world's highest recognition for surgery of the heart and blood vessels. The winner of numerous other awards and honors, he has authored three books, contributed to four others, and published 187 articles in medical journals.

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Dr. Robert A. Chase/Holman Professor of Surgery

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The endowed professorship was made possible by a bequest from the estate of Deane and Louise Dart Mitchell.

Louise Dart, a native of Rock Island, Illinois, studied Latin at Stanford for two years before marrying Deane Prescott Mitchell in 1897. Mitchell, a classmate and close friend of Herbert Hoover, received his A.B. in geology at Stanford in 1896.

Mitchell was an expert in the mining and processing of ores. His successful mining career took him and his wife on extensive trips all over the world for over 50 years. They retired to Bermuda in 1949, where Mitchell died in 1965 at the age of 91.

Despite failing health, Mrs. Mitchell continued travelling after her husband's death. She died in Santa Barbara in 1970 at the age of 93.

The Mitchells maintained close ties with Stanford throughout their lifetime and agreed to make the University their chief beneficiary. In her last years Mrs. Mitchell decided to use the bequest to establish an endowed professorship in the name of Dr. Holman, their lifelong friend.

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Mailed January 17, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Henry S. Kaplan, professor and chairman of the Department of Radiology, has been named the first holder of the Maureen Lyles D'Ambrogio Professorship at Stanford University School of Medicine, Dean Clayton Rich announced today (January 12).

The endowed professorship was made possible when Stanford received a gift of approximately 100 acres of land on the Monterey Peninsula from N.J. D'Ambrogio of Berkeley (formerly of Carmel) in April of 1970. At that time, the Maureen Lyles D'Amborgio Memorial Fund was created in honor of D'Ambrogio's daughter, Maureen, who died of cancer in Berkeley on March 8, 1967.

The Fund will be used to maintain the professorship, which will always be held by a faculty member engaged in cancer research.

Dr. Kaplan, chairman of the Department of Radiology since 1948, recently announced he will step down from his administrative responsibilities at the close of the current academic year to more fully devote himself to teaching and research.

One of the leading international authorities on cancer, Dr. Kaplan conceived the use of the linear accelerator for medical purposes, and helped design the necessary apparatus. He has also pioneered in the development of radiotherapy techniques which have resulted in dramatic gains in the treatment of cancer, especially Hodgkin's Disease and other malignant lymphomas.

Last year Dr. Kaplan received the Robert Roesler deVilliers Award for achievement in leukemia research from the Leukemia Society of America. In addition to awards from France and Italy, he won the Atoms for Peace Award in 1969, the only physician to be so honored.

A 1940 graduate of Rush Medical College of the University of Chicago, he served his internship and residency at Michael Reese Hospital in Chicago. He went on to the University of Minnesota and Yale before coming to Stanford in 1948.

D'Ambrogio is a Stanford alumnus of the class of 1917. Following his graduation and a brief academic career, he entered the field of financial consulting and became an authority on sugar production and consumption.

The property donated to Stanford, known as Kent Manor, overlooks the Pacific Ocean on Highway 1, about three miles south of Carmel.

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Mailed January 12, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Heart Transplant #40, Patient #39

STANFORD -- Stanford University Hospital surgeons performed a heart transplant operation Friday morning (January 7) on James Casper, 32, of Canton, Illinois. He is reported to be in satisfactory condition.

The operation was performed by a team headed by Dr. Norman Shumway.

Casper, a welder at International Harvester Co. for eight years, has been disabled by his heart condition since last August. He is married and has two children.

Including Casper, 14 of the 39 heart transplant patients operated on at Stanford are now living.

Hospital policy has been to withhold names of heart transplant patients if they so request. In this case, Casper's family released his name to his home town newspaper.

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Mailed January 7, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Donald Wanjon, the 33rd heart transplant recipient operated on at Stanford University Hospital, died yesterday afternoon (January 5). Doctors at the Hospital said Wanjon died from pneumonia.

Wanjon, 47, was a retired schoolteacher from Rochester, N.Y. He received his new heart on August 10, 1971. He is survived by his wife, Norma, of Rochester, and three children: Mark, 23, of Albuquerque, New Mexico; Christopher, 18, and Rebecca, 12, both of Rochester.

Another Stanford heart transplant recipient, Herbert Juster of South Braintree, Massachusetts, died Sunday morning at Massachusetts General Hospital. Doctors at the Hospital listed pneumonia as the cause of death.

Juster, 48, received his transplanted heart on April 24, 1971. He is survived by his wife, Rose.

Thirteen of the 38 heart transplant patients operated on at Stanford are now living.

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Mailed January 6, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

Editors: Photo available on request.

STANFORD -- Stanford University Hospital has reorganized selected in-patient care units so the nurse can return to bedside care.

Instead of one registered nurse responsible for each patient unit, there are two people responsible for a unit. An R.N. is in charge of the clinical activities, or nursing care, while a lay manager handles clerical and other non-clinical functions.

After a year of preliminary study, Nursing Services has implemented a pilot program of restructured care delivery and administration on two patient units. The project, begun October 4, will be evaluated next spring and then gradually phased into all other in-patient units at the Hospital.

"Nurses are trained to care for patients, but they are often overloaded with paper work," said Sue Brueckner, director of the nursing demonstration project. "In the new organization, non-nursing personnel are responsible for all non-clinical duties on the patient unit so the nurses are free to concentrate on patient care."

Clinical activities include all aspects of patient care and any administrative tasks that require nursing judgment, such as evaluating new equipment, assigning nursing personnel to patients, and communicating with others about patient care, according to Miss Brueckner. Non-clinical activities are any other administrative or clerical duties necessary for the functioning of the patient care unit.

Titles of some personnel have been changed to be more inclusive of their duties and new roles have been developed. The clinical nursing coordinator is responsible for the overall delivery of nursing care on the unit. She supervises team leaders and other nurses who care for the patient. All other activities are directed by a unit operations manager working with unit secretaries.

The unit operations manager has taken over the administrative detail, such as budget and supplies, maintenance and repairs and interdepartmental communications, previously handled by the nurses. Now, one person--the clinical nursing coordinator--can manage all the clinical activities in a unit because she no longer has any administrative duties. Communication between the unit leader and nurses on her unit is direct, since a cumbersome hierarchy of associates and assistants has been eliminated.

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"The nurses are very enthusiastic about the changes, and appreciate the total nursing responsibility," said Miss Brueckner. "We think that the quality of care will also improve," she continued, "because now nurses are doing just what they have been trained to do. They can do a better job when they enjoy what they are doing and are not distracted by non-clinical clerical work."

Patient unit organization was revised after a year of study and evaluation by a nursing project committee that included representatives from all levels of nursing. Committee members worked with Miss Brueckner and administrative aid Steve Tani to review the literature, observe what other institutions were doing, identify the roles of personnel and assess the strengths of the traditional system at Stanford University Hospital.

The organizational plan developed is a combination of many ideas from various hospitals and much brainstorming. "No individual part is particularly original, but the entire package Stanford has put together is unique," said Miss Brueckner. "We have redefined and separated clinical and non-clinical roles in a novel and exciting program," she commented.

Clinical nursing coordinators in the two demonstration units are Joan Fair, who was formerly an inservice instructor in the coronary care unit, and Joan Mersch, who came to Stanford from the University of Colorado. Dick Pettingill is the unit operations manager for the two units. Each patient unit will have its own clinical nursing coordinator, but a unit manager will cover three to four units.

Miss Brueckner says that Nursing Services will be ready to implement the program in additional patient units this spring. She anticipates that by 1975, all 31 of the Hospital's in-patient care units will be operating under the restructured program of nursing care and administration.

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Mailed January 6, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

EDITORS: The Fourth National Conference on Methadone Treatment will be held at the Sheraton-Palace Hotel in San Francisco from Saturday, January 8, through Monday, January 10. The conference will consist primarily of workshops and study sessions for participants with professional involvement in methadone treatment of narcotic addiction.

Chairman for the conference is Dr. Avram Goldstein, professor of pharmacology at Stanford University School of Medicine.

California State Assemblyman John Vasconcellos will deliver the opening speech at 9:00 a.m., Saturday (January 8). Dr. Jerome H. Jaffe, Director of the Special Action Office for Drug Abuse Prevention, Executive Office of the President, Washington, D.C., will give the concluding speech at 11:00 a.m., Monday (January 10).

All speeches and study sessions at the conference will be open to newsmen. However, the physical arrangements at the conference do not permit television coverage. For the benefit of television stations that wish to attend, the participants in the conference will be available for interviews.

In addition, a press conference (open to all the media) will be held in the Regency Room of the Sheraton-Palace at the conclusion of the conference, 12:30 p.m. on Monday (January 10). Participating in the press conference will be: Dr. Vincent P. Dole of the Rockefeller University of New York, a pioneer in developing methadone treatment; Dr. Robert L. DuPont, director of the Narcotics Treatment Administration in Washington, D.C.; Dr. Goldstein, and Dr. Jaffe. They will report conclusions reached at the conference and answer questions from the press.

The conference is being sponsored by the National Association for Prevention of Addiction to Narcotics (NAPAN) and the National Institute of Mental Health (NIMH).

Under Goldstein's direction, an Addiction Research Laboratory is currently being developed at Stanford to continue and expand research into the most important problems of narcotic addiction.

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Mailed January 5, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310
Editors: Photos available on request.

STANFORD -- The traditional short cap worn by men in the operating room was not designed with today's hirsute male in mind. So at Stanford University Hospital, operating room personnel can choose among several styles of head coverings and masks according to the length and distribution of their hair.

Since evidence indicates that fallout from hair is a potential source of contamination in the operating room environment, long hair, beards, moustaches and sideburns must be covered.

"Surgical infection is the fourth leading cause of death in this country," said Mrs. Ludmila Davis, director of the Hospital's operating and emergency rooms. "Here at Stanford where we do 11 to 1200 operations a month, we cannot afford to be complacent about exposed hair."

Hair is a natural breeding ground for some bacteria, and the more unrestrained it is, the greater the hazard for both the patient and the doctor, according to Mrs. Davis. A beard not effectively covered, for example, could contaminate a patient and also pick up other germs in the environment which might then infect the bearded owner or those around him, she explained.

"In defense of everyone, then, we've had to design more inclusive head and face cover for those in our operating rooms keeping up with the contemporary long hair fashions," Mrs. Davis said.

She has created two new styles of protective headgear which the American Hospital Supply now manufactures to sell to other hospitals. One version, the "Lawrence of Arabia Helmet," is made to cover long hair, sideburns and a beard. Another design, the "Stanford Helmet," or "Davis Hat," takes care of sideburns and longish hair, and can be worn with a beard cover attached to either side near the ears. Both are made of light weight, disposable cloth that provides comfortable ventilation and eliminates laundering.

Men with moderately short hair sometimes elect to wear the style hat that is worn by many female personnel. However, these hats are made of extremely thin paper that can be easily pierced by stiff bristly hair and whiskers. A few men still wear the original cap, although it is practically useless in most instances, and not available in the operating room, Mrs. Davis said.

With all of the styles, there are improvisations. Males who need their ears free for glasses or stethoscopes, push their caps behind their ears or cut holes in the paper caps. Those who find the extra cloth about their heads and faces uncomfortable or stuffy, wear shorter hats and put tape over their sideburns. One resident who sports a full beard wears an extra wide mask that his wife sews for him.

Not to be out-fashioned by the men in the operating room, the women have begun varying their headdress. Some of the nurses have bouffant hats in subdued colors and others wear a turban style covering.

As long as the possibility of contamination from hair exists, the operating rooms will never relax their standards on covering hair, Mrs. Davis emphasized. ###

Mailed January 4. 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- "A lot of people won't understand why I don't want to be a heart surgeon making $200,000 a year in Beverly Hills."

So says David Sachs, M.D. In mid-1969, after over 400 operations, Sachs found himself "looking for a way out of the practice of medicine." He turned from heart surgery to a new career--acting. Today, with three movies and several television dramas behind him, and the prospect of a nationwide series ahead, he feels it was the right move.

"I'm happier than I've ever been before," says The Stanford Medical School alumnus. "I feel like I've just been reborn. It's a total rebirth for me, an awakening of an awareness that was there all along."

For Sachs, the "rebirth" began with a phone call to a friend in the movie industry. Soon he had a walk-on role as a hippie in "Hells Angels--'69" and another small part as a patient in the daytime television show "General Hospital." Hired as a technical adviser for the highly successful movie, "M.A.S.H.," Sachs was taken for a member of the cast by director Robert Altman and wound up playing a surgeon. He followed that up with a role as a Mexican sheriff in "The Road to Salina" with Rita Hayworth.

Sachs' television credits include an appearance on "Mission: Impossible" as a drunken Central American revolutionary, and several roles as doctors and surgeons ("you might call it typecasting") on "The New Interns," "Medical Center," and "The Bold Ones." He's also appeared in pilot films for two series, numerous talk shows, and a recent American Broadcasting Company Movie of the Week ("Earth II").

Medicine for Sachs has now become something of a hobby. He closed his Beverly Hills office a year and a half ago, but remains active as an assistant clinical professor of surgery (heart and lung) at UCLA School of Medicine. During the past 18 months, he has assisted in over 200 surgeries ("just to keep by fingers nimble").

Sachs' original decision to leave the day-to-day surgical routine and go into acting, he claims, was more a matter of seeking escape from the "business" of medicine than of being hit by the acting bug.

"I didn't get a 'bug' really," he says. "I was looking for a way out of the practice of medicine, and I wanted to get into a field where I could be fulfilled.

"I genuinely love heart surgery. What I always wanted to do was practice heart surgery as a hobby--because I wanted to do it, not because I had to do it. I just don't like the business of surgery, the business of medicine, and the all-consuming restrictions it had on my creative being. Things become grating on your soul...sending out bills, the voluminous time spent on forms, phone calls in the night. I found I had to be involved in more than just surgery." -more-

To those who might criticize the notion of an eminently qualified heart surgeon forsaking his practice for the glamor, hot lights, and publicity-oriented world of motion pictures, Sachs has this to say: "To 'just be' a family physician and not specialize 20 years ago was considered ludicrous, a waste of talent. Now that's the word I get today--that it's a waste of talent for me to not be practicing heart surgery.

"The key thing is that I feel I have talent which supersedes heart surgery. Acting is a vehicle, not an end in itself, for me. I don't know where it's leading. But I know I didn't want to be a slave to the practice of medicine. Acting is the vehicle which allows me to explore the many other areas which are open to a creative, innovative human being."

Sachs, a young-looking 40, resembles a Hollywood movie physician more closely than the stereotype of a "real life" doctor. Confident and articulate, his philosophy is to live life to the fullest, without being stifled by any set routine. His hair is voguishly shaggy, his dress "hip" and casual. He drives a new Mercedes-Benz with license plates reading "Sachsy."

"Life," he says thoughtfully, "is similar to a piece of sculpture. Add a little clay, or pull some off, and it completely changes the overall effect. It's the same thing with a person's life. You make a little change, and it can turn his life around.

"I think our society has gone askew in some respects. It makes unfair demands on a young adult by making him choose a career too early in life. I'm not saying there shouldn't be goals, but the concept that a career is all important, this rigidity of the career system, is not, I think, compatible with the needs of our growing people today.

"Flexibility is essential. Not to be flexible--to be rigid in medical diagnosis, in the political arena, and in choosing careers--is a sin."

For Sachs, flexibility has come only recently, since his break from medical practice. Prior to that, his life had pretty much followed the typical pattern of the successful heart surgeon.

Born in New York, the son of Russian immigrant parents, he knew he wanted to become a doctor by the time his family moved out to Southern California some 25 years ago.

"Certain things impress you to go to medical school," he says. "You drive to get the A's, you receive all the adulation. There is no group in the world that needs love more than doctors. They even surpass actors. I know one of the reasons I wanted to be a heart surgeon was because it was one of the most enviable scenes around.

"I wanted to please my parents. I wanted to please everybody. No one was forcing me...I wanted to do it. Now I've finally gotten around to pleasing myself."

After attending North Hollywood High School, Sachs entered Stanford in 1948 and graduated with distinction four years later. During his undergraduate years he was a founder and the first president of Stanford's pre-med fraternity, Phi Rho Sigma. He received his M.D. from Stanford in 1955, and interned there the following year.

Following two years as a flight surgeon in the Air Force, Sachs served six years of residency in vascular and thoracic surgery at UCLA and Johns Hopkins University. In 1964, he became assistant chief of surgery at Los Angeles Veterans Administration Hospital and opened an office in the San Fernando Valley. Two years later he moved his office to Beverly Hills.

The break from medical practice began in 1968, when Sachs, looking for a way out, applied to become an astronaut.

"I wanted to be the first heart surgeon in space," he says. "I wanted to make it...it was a good way out. But I wasn't accepted."

Acting, of course, was another way out.

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"Through all this, I felt I had the aesthetic feeling of the artist," he says. "Finally, I decided to try and involve myself in entertainment. I was on 'To Tell the Truth' about a year and a half ago. I was the only guy they believed could be a surgeon, an actor, and an astronaut. I was the only one crazy enough."

In the beginning Sachs, the heart surgeon, had some doubts about whether Sachs, the actor, would make it.

"When I made my breakaway, I knew I had to do it, but I really didn't know what would happen," he says. "When you reach med school it's all pre-ordained from there...internship, residency, practice. You make it--you get the grades and the degree--or you don't. But to go after something you feel you must do to be a total human being is even more difficult than reaching the status of a heart surgeon."

Along with the actor and the heart surgeon, there are many other sides to David Sachs. Incessantly active, aggressive and hard driving, he pursues everything, as he says, "with total commitment." It is almost as if he is afraid of being called merely "good" and not "great" at all he undertakes.

"I've been successful at everything I've ever done," he says quietly. "That's what's a little frightening to me. I know that sounds a little egomaniacal. But I feel an obligation to be totally committed in everything I do. I've not undertaken many things I wanted to do only because I didn't think I'd do well."

The walls of Sachs' Beverly Hills home are lined with several very professional paintings he has done. At present he is putting the finishing touches on a fascinating "Anatomy Coloring Book" for children. The book will contain drawings of parts of the body with a brief text (written in rhyme) as to the function and importance of that part, plus how to keep it in good shape. The coloring book is just one of the ways Sachs hopes to utilize entertainment in the mass media for public health education.

"I became tired and anxious about having to fix the ravages of time, aging, and disease on the human arterial system," he says. "The answers to better health must come from a strenuous effort through all the media, using entertainment as a framework to disseminate the concepts of better physical and mental health. Education in health is the key--without all the technological crap."

The chief vehicle in this effort may be a nationwide television series on health, starring Sachs. At present, the show is still on the drawing board, but "the prospects look very good," he says. "We're shooting for next fall."

Sachs' own education didn't end when he completed his residency. He received his Master's Degree in Health Education at UCLA last September, and has been accepted for his doctorate in "Health Entertainment, Communication." He was recently appointed consultant and adviser to the Board of Health Education for the State of California.

The next horizon for Sachs may be politics. A member of the government affairs committee of the Beverly Hills Chamber of Commerce for the past several years, he admits half-humorously, as if he is still toying with the idea, "Yes, I'm interested in going into politics."

A much-in-demand speaker, he averages about 200 hours of lectures per year to students and medical groups. "I was guest lecturer at the UCLA Experimental College a while back and spoke on 'Why Not Change Careers?'" he laughs. "Several of my topics are 'Happiness is....' I try to emphasize that, for most people, happiness is doing what you feel you have to do, without being strangled by convention."

His own speeches on happiness, perhaps, provide the best insight into David Sachs. Then again, the answer may lie deeper.

"The key word for me is uniqueness," he says. "I have to be doing the special thing that is only me and that only I can do."

Sachs may be still trying to find that "special thing." Even if he never does, it will make for an interesting search.

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Mailed February 16, 1972.

EDITORS: Pictures available on request if not included with article.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A new system of lifelong education, recycling if you will, of physicians in practice has been devised by the Stanford University School of Medicine.

The pilot effort contains these unique features:

. It is decentralized and uses, to a great extent, community hospitals as centers of teaching.

. Student-doctors do not simply attend lectures, but they enhance their learning by teaching others.

. Courses for doctors in practice are determined by local education needs, as perceived by the doctors themselves and established by audit of hospital patient records.

. Teaching effectiveness will be evaluated by the improvements it makes in patient care. This will be done by audit of patient records before and after doctors have taken a course.

The new approach to continuing education of doctors was developed by Dr. Edward Rubenstein, a practicing physician in San Mateo and clinical professor of medicine.

Dr. Rubenstein said the traditional approach of keeping doctors informed about the latest advances in medicine hasn't worked optimally.

"Merely organizing a catalog of symposia, courses, and lectures is insufficient," he said. "The effect of such programs on the level of actual medical practice is inconclusive. New efforts, adventuresome and experimental, are needed."

The California Medical Association's committee on continuing medical education has encouraged medical schools in the state to increase their activities in the field of lifelong education for doctors in practice.

"There is also strong evidence," Dr. Rubenstein said, "that many physicians are genuinely concerned that they maintain their competence, and are highly motivated to participate in well-conceived programs of postgraduate medical education.

"Furthermore, the public has let it be known that it expects its physicians to keep up to date."

Dr. Rubenstein said Stanford has formed an informal federation of hospitals within Area III of the California Regional Medical Programs (RMP). Area III includes 11 counties, and embraces Stanford's educational responsibility under the state-wide RMP network.

The federation includes Mary's Help Hospital in Daly City, Mills Memorial Hospital in San Mateo, and the Community Hospital of the Monterey Peninsula in Carmel. There are plans to add two other hospitals to the federation in the near future, one probably in the San Joaquin Valley.

Hospitals in this federation have committees on continuing medical education which keep in touch with Stanford. They determine what they need, and Stanford provides faculty to give lectures, hold conferences, consult and take part in other administrative and educational activities of each hospital.

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In addition, each hospital sends 15 staff members to Stanford for two one-week courses during the year. One course deals with the latest concepts of intensive care, the other is a review of basic science and molecular biology.

Each hospital also sends a physician to Stanford for two or more weeks as a clinical fellow to work in a department of his choice where he has an opportunity to refresh his knowledge. He then can take the new knowledge back to his community.

"An adventuresome project, now in its second year at Mills Memorial Hospital in San Mateo, is looking into the feasibility of offering the medical school basic curriculum, as presently taught, to doctors in their community hospitals," Dr. Rubenstein said.

This Back-to-Medical School program makes it possible for doctors who have been in practice for 20 to 40 years to re-enter medical school and "graduate" a second time.

The program is organized into two parts, one dealing with courses in basic medical science, and the other dealing with clinical subjects.

There are now 60 doctors participating in a review of human anatomy. Already completed has been a course in biochemistry extending over a period of 40 weeks. The applied clinical courses given so far have dealt with intensive care, clinical genetics, neonatal emergencies, immunology, allergy, and contemporary urology.

Each speaker, which includes alternately a faculty member or a community hospital physician, provides Stanford's Office of Postgraduate Medical Education a list of the major topics he emphasized in his discussion. This list is reduced to those items which reflect clinical management which can be evaluated by auditing hospital records. Those records completed prior to the course will be used as controls to attempt to evaluate the effectiveness of the course.

"As currently planned, the Back-to-Medical School project will continue for four to five years, during which there will be continuing evaluation," Dr. Rubenstein said.

Stanford also puts on annually a comprehensive review of basic medical science to meet the needs of doctors who want to expand their knowledge of molecular biology.

The first such course will be given at Stanford February 28 through March 3. Teachers will include four Nobel laureates--Drs. Arthur Kornberg, Robert Hofstadter, Joshua Lederberg, and Linus Pauling.

Stanford is planning several other programs for physicians who work in rural communities, Dr. Rubenstein said. There is an indication that for rural areas direct clinical services will prove to be a better educational method than lectures, courses, and symposia.

"We are currently studying the possibility of sending faculty members, especially those in the surgical fields, to work closely with practitioners in rural areas, assisting them with special care problems in their community," he said.

Stanford's program is essentially self-sustaining, Dr. Rubenstein said. The major revenue comes from annual fees paid by the participants. A federal grant, however, will be sought in the future to cover costs associated with the evaluation of the program.

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Mailed February 15, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

CORRECTION: EDITORS

STANFORD -- Monday (February 14), a news story emanated from the Stanford Medical Center News Bureau concerning use for the first time in the U.S. of human cells as a culture medium for vaccine production. The story incorrectly stated that Pfizer, Inc., a pharmaceutical manufacturer, had been issued a license by the Division of Biologics Standards (DBS) to make the first oral polio vaccine using human cells. The license, according to DBS, has not yet been issued. Pfizer has applied for permission to produce the vaccine and hopes some time this spring or early summer to begin marketing it through normal channels.

DBS, however, has approved human cells for vaccine production in the United States, and standards for their use were published in the federal register last November. A drug manufacturer has to meet these standards before a license is issued. Pfizer, Inc. is in the process of doing this now.

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Business Wire 2/15/72

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Copies of Stanford M.D. available on request if not included with story.

STANFORD -- Human cells stored and grown in a laboratory of the Stanford University Medical Center will be used for the first time in the United States to make the vaccines that protect people against disease.

An oral polio vaccine has been licensed by the Division of Biologics Standards of the National Institutes of Health. It will be produced by Pfizer Laboratories and made available to doctors, hospitals and clinics this spring.

In development by other companies for use in this country are human-cell vaccines for rubella, measles and rabies. All vaccines for human use can be made using human cells as the virus growth medium.

Use of human, rather than animal cells to make vaccines, signals a new era in the practice of vaccination in this country, said Dr. Leonard Hayflick, professor of medical microbiology at Stanford University School of Medicine. He pioneered in the development of a human cell strain during the late 1950's and early 1960's when he worked at the Wistar Institute in Philadelphia.

These cells, developed by Hayflick, will be used as a growth medium for the production of the oral polio vaccine.

Hayflick said use of these laboratory grown human cells would mean:

- Cheaper vaccine production.
- Standardization and unmatched safety.
- Development of vaccines where none previously were possible.
- An end to the senseless slaughter of monkeys whose cells are now widely used to make vaccines.

Present methods for obtaining animal cells are time consuming and costly. To harvest viruses for manufacture of vaccines, living animal cells are used as the "soil," so to speak, on which the viruses grow. Cells of monkeys and chicken embryos are now widely used. Vaccine makers must import thousands of monkeys annually, quarantine them and then kill them.

But in recent years scientists have discovered that cells of monkeys and other animals are often contaminated with other viruses, some previously unknown. They often crop up in the cell cultures, which then must be thrown away.

Also, cells differ from animal to animal, and this makes it difficult to develop a uniform vaccine-growing medium. As a result, the safety of the animal cells cannot be tested for unwanted viruses with absolute certainty.

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The discovery early in 1960 that a virus (SV-40), known to cause cancer in animals, existed in monkey kidney cells used in producing the first lots of Salk and Sabin polio vaccine caused some uneasy moments among federal regulators and vaccine makers alike.

In 1962, Hayflick produced a healthy tissue from cells taken from the lung of a human fetus imported from Sweden, which had liberal abortion laws. Since then, the tissue which he named WI-38, has been used in Great Britain, France, Yugoslavia and the Soviet Union to make vaccines against polio, measles, mumps, and German measles.

The WI-38 cells carry none of the viruses found in monkeys, Hayflick said. Researchers around the world have subjected these cells to the closest scrutiny for undesirable properties, but they have come up only with favorable results.

Cultures of WI-38 cells are stored at the Stanford University Medical Center, which supplies them to laboratories all over the world, including the Soviet Union. The cells are frozen in liquid nitrogen, from which they are thawed for vaccine production.

Hayflick discovered that these normal human embryo cells will divide up to a limit of 50 doublings when grown in culture. A few such divisions, however, increase the number of cells astronomically--for example, 10 doublings will produce 1,024 bottles of cells. At this rate, Hayflick estimates that WI-38 cells stored at Stanford will be able to supply the world's human cell vaccine needs for the next 20 years.

In the U.S., however, commercial use of WI-38 cells for vaccine manufacture was effectively blocked for 10 years by the Division of Biologics Standards (DBS), responsible for licensing all biological products, including vaccines.

Hayflick, who led the battle against the cumbersome and highly risky use of animal cells, blames the delay on excessive skepticism and bias on the part of DBS, in an interview in the winter issue of Stanford M.D., the magazine of the Stanford Medical Alumni Association.

Although by 1964, according to Hayflick, all major scientific questions concerning human cells had been resolved and the cells were regarded safe, officials continued to express "reservations" and "theoretical" objections.

Even before this, Wistar investigators had produced a number of experimental vaccines, and Hayflick had immunized each of his five children against polio with an oral vaccine made in human cells.

An adenovirus (common cold-like) vaccine produced in WI-38 cells was submitted to DBS for licensing in 1965. "No license was issued," Hayflick said, "and the agency used various tactics to stall a decision." DBS's objections continued, the Stanford microbiologist said, even though an identical adenovirus vaccine, made in human cells, had been freely and effectively administered in the United States to a million military recruits not within the authority of DBS.

Meanwhile, in 1968, seven West German laboratory workers died of "green monkey fever" and virologists warned that with the present production methods, "we are sitting on a volcano." The scientists were almost unanimous in recommending a shift from animal cell cultures for growing viruses to human cells. (At this writing, 23 laboratory workers are known to have died as a result of handling monkeys and their cultured cells.)

Back to Washington, DBS soon indicated that it would favor an oral polio vaccine produced in human cells. If there were in fact any deleterious effects from the use of human cells, as some had maintained, there would presumably be less risk from a product that was merely swallowed than from one that was injected.

With the ban now over, Hayflick welcomes the knowledge that will enable human cells to be used for making safer vaccines. But his personal experience has made him less confident about the ability of federal agencies to deal with the complexities of research and development and consumer protection.

It is anomalous, he said, that federal support, on the one hand has mounted a vast research effort to understand disease, while at the same time regulatory agencies are saying that methods or drugs cannot be developed to prevent it or treat it.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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or
Dick Cox, Santa Clara County Public Information
408: 299-3134

STANFORD -- An affiliation for joint teaching of Stanford University medical students has been agreed upon by Stanford's School of Medicine and the Santa Clara Valley Medical Center (SCVMC), the county hospital.

Formal approval was given Tuesday morning (February 1) by the county Board of Supervisors, following prior approval by Stanford.

Stanford and Valley Medical Center have been informally associated for teaching purposes for the past nine years. This new agreement will bring more Stanford medical students to the center for first-hand instruction from hospital staff and Stanford faculty members.

At present, SCVMC has 17 Stanford undergraduates in medicine working in various departments at the hospital, said Dr. Norman Nelson, county director of medical institutions. These students serve as clinical clerks, preparing medical histories and performing patient physicals. Their work is reviewed by the medical staff.

In addition, many interns and residents from Stanford receive advanced clinical training at SCVMC.

Dr. Clayton Rich, dean of the School of Medicine and vice president for medical affairs, said: "The more formal affiliation is to us a most appropriate step forward and will enable Stanford to strengthen its program of medical student teaching in the area of primary care of sick and injured persons.

"In return, we believe that the presence of more Stanford medical personnel at all levels will be of value to the Santa Clara Valley Medical Center," Dr. Rich continued. "This affiliation, then, is one which we believe will be of mutual benefit to the two institutions and will improve the health of people in the area now and in the future."

Dr. Nelson commented: "This is formal acknowledgement of nine years of a gradually developing association based on mutual benefit for Stanford and SCVMC. The advantage to our medical center is in bringing in the expertise of the Stanford medical faculty to the patient care area at the center. This will assure a higher quality of medical care.

"The advantage to Stanford is in the tremendous variety of acute illnesses to which undergraduate medical students and graduate students in specialty training will be exposed."

Stanford faculty members with clinical responsibilities at SCVMC comprise about one-third of the center staff, Dr. Nelson added. He also noted that most of the SCVMC staff has teaching appointments at Stanford.

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Mailed February 2, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310
or
Environmental Defense Fund 415: 548-8906

(ADVANCE) FOR AM RELEASE THURSDAY, FEBRUARY 3, 1972

SAN FRANCISCO -- A Berkeley environmental group and a Stanford University graduate student in genetics are suing the federal government to get the Food and Drug Administration (FDA) to release information on food preservatives the agency claims constitute "commercial property."

In a suit, scheduled to be started Thursday (Feb. 3) in U.S. District Court, the Environmental Defense Fund (EDF) of Berkeley, and Dale B. Hattis of Palo Alto, a doctoral candidate in the Stanford Department of Genetics, will challenge an FDA policy which restricts public access to toxicological data submitted by manufacturers in petitions for food additive tolerances.

Named defendants in the suit are Elliot Richardson, secretary of the Department of Health, Education and Welfare, and Charles Edwards, FDA commissioner in Washington, D.C.

Hattis and EDF said they requested the scientific data because certain food preservatives have recently come under heavy suspicion of producing mutations and cancer. His research deals with genetic mutations.

The pleading sets up that on December 8, 1971, the FDA "refused to give plaintiffs access to requested information on the ground that such information was 'confidential' as that term is used in the Freedom of Information Act."

The suit states that such refusal violates the Act, and asks the court to order the FDA "to give plaintiffs the requested toxicological information."

If the plaintiffs, and the scientific community at large, are barred from information of critical importance in assessing a potential threat to health, the suit contends, the public will be unable to judge whether the FDA is protecting its interests.

Stanford's Nobel prize winning geneticist, Dr. Joshua Lederberg, has submitted a statement on behalf of Hattis, asking for expeditious hearing of the case. Lederberg argues that long court delays in efforts to obtain information about public safety have often had "a chilling effect on this kind of debate."

Lederberg also wrote: "The evaluation of environmental chemicals must be exposed for continuous review by interested scientists.

"Safety evaluation, even if performed to the satisfaction of a regulatory agency, must not be protected as the private property of a sponsor of a new chemical."

Hattis, who once worked for consumer advocate Ralph Nader, has campaigned against the use of lead arsenate in pesticides in the Bay Area.

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Hattis/Food Additive Sodium Nitrite
222

Since July, 1970, Hattis has been trying to gain access to data on the safety of food additives and pesticide residues from the FDA. He has especially sought information about sodium nitrite, used as a color fixative and preservative in almost all salami, hot dogs, and cold cuts.

Hattis said there is concern voiced in scientific journals that sodium nitrite may combine with other food elements to form carcinogenic and mutagenic secondary products called nitrosamines.

He asked the FDA for petitions from the Morton Salt Co. and Tuna Products Corp. about tolerance levels for sodium nitrite. Those petitions, Hattis believes, probably contain most of the scientific information used by the FDA in establishing a tolerance level. He also asked the FDA for all other unpublished information relating to the safety of sodium nitrite.

Hattis said he never received a reply from the FDA until June 1971, when he was told he would have to pay for copying and compiling certain published reports which did not include all the pertinent data.

Since then he was joined in his efforts by EDF, a non-profit corporation with a staff of lawyers and scientists dedicated to preserving the environment. Together, on November 2, 1971, they sent a letter to the FDA requesting the pertinent information in its files.

On December 8, Sam D. Fine, FDA associate commissioner for compliance, wrote back: "Toxicological and other technical information is valuable commercial property that is regarded as confidential information.

"Since the data from the food additive petitions which you have requested is (sic) clearly exempt from disclosure under...guidelines, set by law, we cannot furnish it."

Hattis commented "the real issue is much broader than the questions concerning the scientific adequacy of the data...although the resistence the FDA is putting up increases my suspicion that they have reason not to be very proud of some of it."

The issue, Hattis contends, "is the ability of many parts of the executive branch to stifle informed public review of their policies by obstructing public access to the information on which these policies are based."

Hattis said troubling experimental evidence has come to light after most of the FDA approvals of sodium nitrite additives in various foods. "Without prejudging the adequacy of the FDA's tests, it is also possible that they were insufficiently exacting," he said.

"Time after time when consumers try to find out if the policies of government and industry are beneficial or harmful to the public interest, their access to information is blocked by the incantation, 'trade secret,' " he said.

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END ADVANCE FOR RELEASE THURSDAY, FEB. 3

Mailed February 2, 1972.
Also Business Wire 2/2/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A proposed expansion of Stanford University's nursing school cannot be implemented at this time for financial reasons, Dean Clayton Rich of the School of Medicine, said Thursday (March 30).

Instead, the dean said, he is in the process of appointing a committee to recommend an appropriate role Stanford should play in nursing education.

He said shortening the present five-year nursing curriculum and training nurses for primary care roles was one of several options. Currently, Stanford offers a baccalaureate degree program in nursing. It leads to certification in public health nursing.

The nursing school recently announced it will not admit students to the five-year program until a new nursing curriculum is developed.

The proposal, which would have phased out the present program and created an autonomous graduate school of nursing, was contained in a 120-page document titled "Planning for the Future of Nursing Education at Stanford 1972-82."

The document was prepared for the Medical School by Dr. Kathryn M. Smith, dean of the School of Nursing of the University of Colorado, and Mrs. Betty J. Dietrich, former associate clinical professor of nursing at the University of California.

Their report recommended a 10-year development plan for a new graduate school of nursing with programs leading to the Master of Science and Doctor of Philosophy degrees. The program would have stressed training of nurses for research, faculty, and administrative positions in schools of nursing, training of nurse clinicians for direct-care roles, and continued education of nurses in the Stanford area.

Dr. Rich termed the proposal for setting up a new school "unrealistic" in view of other priorities and financial constraints facing the Medical School and the University at this time.

"But some of the stated goals in the report are attainable and desirable," he said. He cited the training of nurses to provide direct care as an idea worth exploring.

The study was sponsored by the U.S. Public Health Service and the San Francisco Foundation.

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Mailed March 30, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Robert G. Lindee, assistant to the vice president for medical affairs and associate dean for administration at the Stanford University School of Medicine, has been appointed vice president of the Henry J. Kaiser Family Foundation.

Appointment of the 43-year-old medical school executive was announced today by George D. Woods, chairman of the charitable and grant making trust, and by Dr. Robert J. Glaser, who earlier this month was elected the Foundation's first full-time president. Glaser, currently vice-president of the Commonwealth Fund in New York, was formerly dean of the Medical School and acting president at Stanford.

Both Lindee and Dr. Glaser will take office on July 1.

Lindee, who has been at Stanford since 1965, is also executive director of the Sun Valley Forum on National Health, Inc., and serves as consultant to several National Institutes of Health Advisory Councils, including the National Cancer Institute, the Bureau of Health Manpower, the National Eye Institute, and the National Environmental Health Sciences Institute.

He is also a member of various committees of the Association of American Medical Colleges and was a member of the first Executive Committee of the Business Officers' Section of the Association.

At the state level, Lindee is a member of the California Medical Student Contract Advisory Committee (Scholarship and Loan Commission), and has served as a member of the California Ad Hoc Committee on Teaching and County Hospitals.

Prior to coming to Stanford, Lindee was associated for two years with Dr. Glaser when he was president of the Affiliated Hospital Center at Harvard Medical School. From 1959 to 1963 he served as executive assistant to the vice president for medical affairs and dean of the University of Colorado Medical School in Denver. While at the University of Colorado, he also was administrator of the Western Interstate Commission on Higher Education's Dental Grant Program.

He holds Bachelor of Arts degrees in Psychology and in School Administration from the University of Colorado at Boulder.

At Stanford, in addition to his other duties, he has served as president of the Faculty Club, and has served on numerous University committees. He has also been secretary of the executive committee of the Medical School Faculty.

Lindee was born in Denver. He is married to the former Marjorie Anne Frame. They have three children and reside on the Stanford campus. ### Mailed March 29, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: Pictures available on request if not included with release.

STANFORD--Scientists at Stanford University School of Medicine are developing a computerized system for diagnosing heart disease which may be instrumental in mass screening of the American population.

"Our basic goal is to develop a research-validated, fully-automated method to conduct mass screening of the population as to cardiovascular risk," said Dr. Jobst von der Groeben, director of the project and professor of anesthesia and medicine at Stanford.

Heart disease, the leading cause of death in this country, kills over 600,000 Americans per year. Computerized diagnosis and screening, von der Groeben believes, could help prolong or save the lives of many potential victims of this "epidemic."

"You don't need a computer to diagnose the later stages of heart disease, when a patient comes in with a crushing pain in his chest," he said. "We're interested in detecting the early symptoms of coronary artery disease. In this area, advanced methods of data acquisition and mathematical and statistical analysis are essential."

Stanford is currently utilizing computers to analyze electrocardiograms (recordings of the heart's electrical activity) and aid in the diagnosis of selected groups of heart patients. Von der Groeben estimated that fully-computerized diagnosis of heart patients could begin on a routine basis after approximately three more years of research validation.

"We don't want to merely mimic the high error rate in human interpretation of a patient's electrocardiogram (EKG)," he said. "In some instances the same EKG can be read and interpreted differently even by expert cardiologists. We want to use the computer to standarize the method of diagnosis at a very sophisticated level."

The system involves a preprocessing digital computer (designed specially for this project by Stanford research associate Robert Clappier), and a larger computer which undertakes the analysis.

The small bedside unit picks up the patient's heartbeat from chest electrodes, and converts heart voltage into numbers on a nine-channel digital tape. The tape is then fed into the larger computer for classification into statistical data.

In addition to the EKG, information on the patient's diet, exercise and smoking habits, blood fat levels, and family medical history is fed into the computer.

The computer then produces a diagnosis of the patient's heart condition. At present, this is in the form of a numerical and graphical display revealing how the patient deviates from the norm for his age and sex group. Eventually, the system will produce a diagnostic classification statement.

The whole process takes roughly four minutes of the computer's time. "Hopefully, this would mean that the screening program would be inexpensive enough so that everyone could afford it," von der Groeben said.

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If a patient is found to be carrying a high cardiovascular risk, doctors can prescribe exercise, changes in diet, blood pressure regulation, and restrictions on smoking, von der Groeben noted. "These measures could prevent, or at least delay significantly, many heart attacks," he said.

Von der Groeben, a pioneer in the development of a mathematical method for analyzing EKG's, gave up his private practice in Manteca, California in 1966 to come to Stanford and devote full time to this project. He felt that this mathematical analysis could become a valuable diagnostic tool when applied by a high-speed digital computer.

The Stanford cardiologist began accumulating data for the project in October of 1969, when his team recorded the EKG's of 1,180 volunteers in Modesto, California. Each volunteer was also given a physical examination and blood test. Two months ago, the research team returned to Modesto and tested 1,400 volunteers, including 800 of the original 1,180 from 1969.

By building up a large, validated "normal" sample, von der Groeben was able to establish standard heart patterns for particular age and sex groups.

"You can't diagnose heart disease without knowing what a normal EKG is," he said. "The standard EKG rarely includes age and sex. But we find there is a statistically significant difference between normal male and female EKG's, and between young and old."

The re-testing of 800 volunteers after two years allowed the Stanford researchers to make the first longitudinal comparison of heart patterns of a large population sample.

"We want to determine how a person's EKG varies over a period of time," von der Groeben said. "We find changes in the male population beginning at age 35 which don't show up in females until age 50. These changes may be related somehow to the very large incidence of coronary artery disease in men between 40 and 60."

Working with von der Groeben in the Modesto study and in developing mass screening methods are Dr. John Farquhar, associate professor of medicine at Stanford, and Dr. Peter Wood, research associate in medicine. Farquhar is director of Stanford's Specialized Center of Research in Arteriosclerosis and Lipid Research Clinic; Wood is deputy director of both.

During the last Modesto study, Farquhar and Wood conducted a random study of 350 Modesto residents concerning the relationship of blood fat levels and behavioral traits (such as diet, exercise, and smoking) to heart patterns.

At the conclusion of the Modesto studies, von der Groeben sent full reports on all volunteers to their doctors.

The Stanford researchers may return to Modesto again in two years to continue their observations of individual heart patterns through time. "This will enable us to further evaluate the longitudinal aspects of cardiovascular risk prediction," von der Groeben said.

The project is being funded by the National Heart and Lung Institute.

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Mailed Tuesday, March 28, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

Editors: Picture available on request.

STANFORD--When he is not serving food in the cafeteria of Stanford University Medical Center, dietary employee Salvador Ortega, better known as Alejandro Fontana, will most likely be found on stage acting or singing.

A native of Zacatecas, an ancient Indian town high in the mountains of central Mexico, Ortega studied acting in Mexico City. Under the stage name of Alejandro Fontana, he appeared in theatre, movie and television productions. After graduation from the drama school of the Mexican national artists association, however, the actor felt he needed broader experience.

In search of new opportunities, he came to Palo Alto last year. Although he uses his real name for official purposes, he prefers his stage name. To his fellow Medical Center employees and to anyone who has seen him perform, he is Alejandro Fontana.

Work in the cafeteria since last February has provided Fontana with two opportunities: to learn English and to study people. "As a person and as a performer I enjoy interacting with people as they come through the line. I talk to them, learn their ideas and watch their reactions," comments Fontana.

He feels that many of the Mexicans in this area do not appreciate their native culture. "Youngsters going to school here do not learn about Mexican literature or art, and older people who have been away from Mexico no longer remember their native traditions. I want to bring the traditions and culture of our country back to them," Fontana explains.

To do this, he has produced two plays, a classical play presented last fall in Redwood City, and a Christmas pageant shown December in San Jose. A comedy, "Rosalva y los Llaveros" by Mexican writer Y Carballido, will be presented in April in San Jose. These plays have given actor Fontana his first opportunity to direct and produce, and he considers the experience worthwhile.

"The real purpose of putting on the plays," says Fontana, "is to share my knowledge and love of Mexican theatre and life with others." They are a nonprofit venture and admission is charged only to cover production costs. He hopes to do more plays by native Mexican authors. -more-

222--Ortega Fontana

Alejandro Fontana is also familiar to many here and in Mexico as a singer. His interest in singing goes back to his early childhood when, before he could really talk, he would unabashedly climb up on the table and scream, he recalls. He was always singing in his free time, and even won some amateur contests as a youngster.

Now he sings on his days off for various functions when he is called. He prefers Mexican folk songs, but also sings in English, French or Italian, often accompanying himself on the guitar. For a few months last year, Fontana had a Spanish news and music program on channel 36. A record that he made, "Mi Distrito Federal" which is a song about Mexico City, sold well in this area.

Fontana also enjoys painting, another hobby he has indulged in since boyhood. He usually does portraits in oil or charcoal. Recently he has taken up Zapateado, Mexican folk dancing that involves rhythmic stamping. "When you're in show business, you never know what you'll be called on to do or what part you'll play next, so I just keep busy trying new things," says Fontana.

His family is still in Mexico, although his wife alternates her time between Palo Alto and Mexico City, but Fontana is not thinking of returning there yet. He thinks California is a beautiful place. "The weather is as nice as it is in Mexico, and the wine and apples are better."

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Mailed Monday, March 27, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A lawsuit filed by a Berkeley environmental group and a Stanford University graduate student has compelled the Food and Drug Administration (FDA) to agree to release information about a controversial food preservative.

The suit, filed in U.S. District Court on February 3 by the Environmental Defense Fund (EDF) of Berkeley and Dale B. Hattis, a doctoral candidate in Stanford's Department of Genetics, requested the disclosure of scientific data about an allegedly harmful food additive known as sodium nitrite.

Sodium nitrite is used commercially as a color fixative and preservative in almost all hot dogs and other sandwich meats.

Yesterday (March 22), FDA assistant general counsel Peter B. Hutt promised that the information, previously withheld under a policy restricing public access to "trade secrets" submitted by manufacturers, would be released shortly. He also requested that the lawsuit be dropped.

Thomas F. Graff, the attorney representing Hattis and the EDF, agreed to withdraw the suit as soon as the long-hidden data has been made available.

Hattis, a former associate of Ralph Nader, was supported in the suit by Stanford's Nobel Prize winning geneticist, Dr. Joshua Lederberg.

Hattis and the EDF contended that many scientists have voiced concern that sodium nitrite can combine with other food elements to yield cancer-causing chemicals in mice and rats.

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Business Wire March 23, 1972
Mailed 3/24/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: This is the first in a three-part series of articles dealing with heart disease and Stanford University Hospital's Coronary Care Unit.

Photos available upon request if not included with release.

STANFORD -- At first, Dick Lamb never suspected he was having a heart attack.

"For three consecutive nights I woke up after midnight with what I thought was indigestion," the 63-year-old Palo Altan remembers. "On each occasion I got up and sat down in my easy chair in the bedroom. Being upright seemed to ease the pain a little. I smoked a couple of cigarettes and went back to bed."

But on the third night, June 25, 1969, the pain didn't go away.

"After awhile I went back to bed, then I got up and smoked some more cigarettes, but the pain persisted," Lamb says. "As I sat there, I felt a numbness creeping down my arms. At that moment it hit me--I was having that dreaded thing called a heart attack."

At 3:00 a.m. the numbness had reached Lamb's fingers. He awakened his wife and told her of his suspicions. She called their physician, who asked the Lambs to go immediately to the Emergency Room at Stanford University Hospital, where he would meet them.

"I snuffed out my last cigarette, my wife packed me into the car, and we left for the Hospital," Lamb says. "I drove there in my pajamas."

Upon arriving at the Hospital, Lamb announced himself and found "they were expecting me." The treatment began immediately.

Emergency room nurses gave him medicines to relieve the pain (analgesics) and administered oxygen through a nasal catheter. His blood pressure, heart rate, and temperature were taken. Electrodes dabbed with conductive paste were attached to Lamb's chest so his heart rate and rhythm could be monitored.

After this preliminary treatment he was quickly taken to the Coronary Care Unit. Nurses there started an intraveous infusion of dextrose solution. This maintained an open line for emergency administration of medications if they would be needed. A central venous catheter was inserted to measure pressures and obtain blood samples. This provided doctors with helpful information relating to the functioning of the heart.

"They were well trained and well equipped to take care of me," Lamb recalls. "Soon my doctor, Dr. William Clark, arrived and assured me that everything would be okay if I followed all the rules. One rule he insisted on most strenously was that I stop smoking. I haven't had another puff since."

By late morning Lamb found that "the pain had disappeared." He spent a week receiving intensive treatment in the Coronary Care Unit. When his condition stabilized, he was moved to Cardiac Surveillance Unit, where he was treated for an additional two weeks.

Despite another attack in the September of 1971 ("I discovered you can get a heart attack for other reasons besides smoking"), he is now back at work as an associate editor of Business Week magazine in San Francisco.

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Dick Lamb's experience is not an uncommon one. In the United States, coronary heart disease has become "an epidemic," in the words of Dr. John Farquhar, director of Stanford's Specialized Center for Research in Arteriosclerosis and Lipid Research Center.

The target of this epidemic is a hollow sack which weighs well under a pound and is only a little larger than a fist.

The heart is basically a muscle to pump blood throughout the body. A normal human heart beats regularly 60 - 80 times per minute. Special conducting tissues in the heart deliver an electrical current to the muscle and cause it to contract. This electrical action which triggers the contraction of the heart muscle is what is recorded on an electrocardiogram (EKG).

The heart pumps blood to body organs. The blood carries oxygen to the tissues and is used to convert food into energy. Being live tissue, the heart needs the same type of energy. It gets this energy from oxygen-rich blood cells delivered by coronary arteries.

The coronary arteries must bring approximately one pint of blood per minute to the heart throughout an individual's lifetime. They are called coronary arteries because they surround the base of the heart like a crown, and then extend branches downward to penetrate the heart muscle.

Coronary heart disease affects the inside or lining of these arteries. The buildup of fatty materials along the interior walls causes narrowing or obstruction of the arteries.

In a heart attack, more technically known as a myocardial infarction, these arteries are obstructed so that enough blood cannot flow through. An area of the heart is deprived of its necessary blood and oxygen supply, and damage or death results. (Myocardial refers to the heart muscle or myocardium. Infarction is the destruction of tissue which occurs when too little blood reaches it.)

Coronary heart disease affects between 10 and 12 million Americans and is the leading cause of death in this country. Far more common in men than women, it affects men between the ages of 45 and 60, in particular.

The disease occurs more frequently with age and is found rarely in persons under 20, although it now strikes increasing numbers of young adults.

In the United States, heart disease kills over 600,000 persons per year. Over one million work days are lost annually in this country alone.

At the present time, a North American man has about one chance in five of developing coronary heart disease before age 60, mostly in the form of a myocardial infarction. At least 25 of those experiencing a first premature heart attack die within three hours after the onset of symptoms, often prior to hospitalization and before receiving any medical care.

These sobering statistics have stimulated the establishment of Coronary Care Units in many American hospitals throughout the past several years.

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Mailed March 24 , 1972.

Editors: Pictures available upon request if not included with release.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: This is the second article in a three-part series dealing with heart disease and Stanford University Hospital's Coronary Care Unit.

Pictures available on request if not included with release.

STANFORD -- "The Coronary Care Unit is the kind of place you ought to avoid getting into," says Dick Lamb. "But if you get there, don't wring your hands in despair. You've got a lot going for you."

Lamb ought to know. Twice he's been a patient in the Coronary Care Unit at Stanford University Hospital after suffering a heart attack. Despite his two attacks, the 63-year-old Palo Alto resident is now back at work as an associate editor of Business Week magazine.

The concept of the Coronary Care Unit (CCU) was born in the mid-1960's, when many medical centers across the country decided to try to do something about the increasing mortality rate due to coronary heart disease. Studies had shown that if a person survived a heart attack long enough to be admitted to a coronary care area staffed with trained personnel and equipped with electronic monitoring instruments, his chances of survival would be dramatically increased.

"Most of the deaths from heart attacks occur within the first few days," Dr. Alfred P. Spivack, director of Stanford's CCU, said at its opening in 1966. "Experience indicates that prompt and effective treatment in the hospital will significantly reduce this mortality."

Over the past five-and-a-half years, this theory has been borne out in innumerable cases. It is estimated that the in-hospital mortality rate due to heart attacks has been cut in half by the advent of CCU's. The mortality figure for patients admitted to a CCU has dropped to under 20 per cent.

Furthermore, cardiologists believe that many additional lives could be saved if more patients recognized the first symptoms of an attack and came to the hospital without delay. A majority of the 600,000 persons who die annually from coronary heart disease do not reach the hospital.

In the CCU, electronic monitoring equipment enables physicians and nurses to constantly observe a patient's heartbeat on an oscilloscope at the nursing station, or on a screen at the patient's bedside. Automatic alarm signals alert the staff to any change in cardiac rhythm or rate. In the event of an emergency, staff members are trained to immediately initiate cardiac resuscitation or defibrillation.

Primarily, the CCU is designed to care for patients who have been stricken with acute myocardial infarction, heart block, or severe heart failure due to other causes. All require intensive observation and treatment, and possible emergency resuscitation.

The average patient stay in Stanford's CCU is five days. Over 2,200 patients (or about 34 per month) have been treated in the CCU since it opened as a four-bed unit on September 26, 1966. Two additional beds were added in 1968.

"We now have four beds monitored in direct view of the nursing station," says Dr. Spivack, "and two beds with television monitoring. Our equipment has the capability for measuring electrocardiographich changes and one other parameter, such as blood pressure or pulse, from the patients' beds."

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Mailed March 24, 1972.

During the past few years, Stanford's CCU has attempted to expand the intensive treatment brought to the bedside of heart patients. More and more patients are being treated in the CCU for complications of myocardial infarction, degenerative heart disease, and aneurysms (weakening and stretching) of the ventricle.

"We're moving into the second generation of coronary care units," Spivack says. "The first stage in CCU development was recognizing acute changes, preventing fibrillation (random, uncoordinated contractions of the heart muscle, responsible for the majority of sudden coronary deaths), and early treatment of irregular rhythms. Prior to the advent of the CCU, patients often died during the night in quiet rooms.

"Now we're entering the second phase. The deaths we have now in CCU are often related to shock and heart failure. We have to recognize and treat this earlier."

The entry into the "second generation" of coronary care units has been accompanied at Stanford by the development of a special multi-purpose treatment room. CCU staff can use the room to perform cardiac procedures such as the insertion of pacemakers, as well as for teaching purposes and conferences to discuss patient therapy.

A special wall panel in the room has oxygen and suction outlets, compressed air, and resuscitation equipment so that a patient can remain overnight. This, in essence, provides Stanford with an additional short-term CCU bed.

"The advantage is that we can do various procedures right in this room without moving patients from the coronary care area," says Jan Gross, special procedures nurse. "In addition, we'll be doing some new things like studying electrical conduction within the heart to see if a person needs a pacemaker."

One of the most important uses of the room will be the treatment of patients suffering from shock.

"We plan to monitor patients while we're giving them therapeutic drugs for the treatment of shock," Miss Gross says. "We can insert catheters to measure how well the heart is functioning, whether a patient is coming out of shock, if a particular drug is working, or if we should consider using another drug."

To do a better job in the treatment of CCU patients, doctors are attempting to devise better techniques to measure heart function and detect early warning signals of impending fibrillation or cardiac arrest. Cardiologists at Stanford, including Spivack, Dr. Donald Harrison, chief of cardiology, and Dr. Jobst von der Groeben, professor of anesthesia and medicine, are working with computer programmer Bill Sanders on computerized detection and evaluation of changes in heart rhythm.

"It is important to recognize different heart rhythms and correlate them with different cardiac functions and changes," Spivack says. "This will give us an idea of how aggressively to treat these arrythmias."

Another detection method, developed at Stanford's CCU, is called venous oxygen saturation. CCU nurses obtain a qualitative measurement of heart function on the basis of how much oxygen is extracted from the blood by body tissues.

A new dimension was added to Stanford's treatment of heart patients in mid-1970 with the establishment of a new Cardiac Surveillance Unit, adjacent to the CCU. In this unit, a centralized monitoring console in the nursing station keeps watch over eight patients simultaneously.

Funds for equipmment in the surveillance unit, as in CCU, were provided by a gift from the Medical Center Auxiliary.

All 28 beds in the unit (located in the West IB wing of the Hospital) are equipped with monitoring capabilities, so any eight of the beds can be connected to the main console at one time.

"The surveillance unit has given us greatly increased flexibility," Spivack says. "Patients who need monitoring, particulary in an emergency situation, do not have to be moved since all the beds can be monitored."

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Patients are admitted to cardiac surveillance when they are being evaluated for cardiac surgery, if CCU is full, or if their condition is not serious enough to merit admittance to CCU. In many cases, however, a patient is moved to cardiac surveillance from CCU after his condition has stabilized.

"The surveillance unit is a logical extension of the smaller CCU adjacent to it, where patients require more intensive treatment," Spivack says. "It is also consistent with our philosophy of a graded care system. In the surveillance unit there is a program of gradual and continual healing, and phasing back into normal activity."

A key feature of cardiac rehabilitation is an in-hospital exercise program, developed at Stanford, designed to prevent complications of inactivity. The tone of muscles and blood vessels is often lost during extended bed rest. Prolonged immobility can also result in joint stiffness, and slowing of the circulation can lead to increased blood clotting. The exercises, which do not require the patient to expend any more energy than is required to roll over in bed, are organized and prescribed so that specific muscles are utilized. They are taught to the patients by the nursing staff.

Once they leave Stanford Hospital, many heart patients begin an exercise rehabilitation program at the Palo Alto YMCA. This exercise plan, under a doctor's supervision, is open to those who have a history of coronary heart disease and are referred by their doctors.

The workouts are supervised by Dr. Gary Fry, cardiologist at Stanford and Palo Alto Medical Clinic. Fry, who exercises along with the patients, says that one of the aims of the program is to show that endurance exercise can lower the death rate and prolong the lives of patients with heart disease.

The treatment of heart patients at Stanford has also been aided by the advent of a coordinated cardiology service from the School of Medicine. Until a few years ago, this teaching service did not exist. Now, two interns, two residents, and up to six students are assigned to cardiac surveillance and CCU.

"For the patients, it may appear that they're seeing a lot of people," Spivack says. "But there's always someone close by who knows them and can treat them in an emergency. The result is that patients are getting better care from a lot of very interested people."

The rendering of 24-hour-a-day care makes the CCU an expensive unit to maintain at peak efficiency. The unit staffs one specially-trained nurse for each two patients. Highly sensitive equipment must be continually updated, and new advances in the detection and treatment of heart disease must be implemented.

"Since the concept of coronary care units is relatively new, we're just beginning to come to the end of the line for our present equipment," says Sue Brueckner, nursing service administrator. "All the monitors we have now are the original ones we started with in 1966. Their life span is a little over five years, so we'll have to begin replacing them soon."

The cost of one complete electronic monitoring system is approximately $1,800.

"In two or three years we're projecting a budget of nearly $100,000," Miss Brueckner continues. "Cardiology is rapidly expanding. We need to be constantly updating equipment as well as modernizing the unit with new types of instruments that are being developed."

One such instrument system, telemetry, will enable doctors to monitor patients not just at their beds but as they begin to ambulate in the hall, says Dr. Spivack. Resembling a transistor radio, the portable monitoring system will be carried in the patients' shirt pocket or in a leather case on a shoulder strap.

The financing of new equipment such as the telemetry system is only part of the money problem faced by CCU and cardiac surveillance. The ever-increasing demands for intensive treatment of heart patients has created a need for additional space in many CCU's, including Stanford's.

"Now we can do all the things necessary and do them well," Spivack says, "but our expansion in treatment and diagnostic capabilities has created a greater need for space.

"The growth of coronary heart disease to epidemic proportions has greatly increased our need for beds, equipment, a testing area to aid in rehabilitation and diagnostic studies, and a special treatment room for patients with shock. We need two more beds in CCU on a routine basis. But this, as

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STANFORD UNIVERSITY MEDICAL CENTER
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Editors: This is the third in a series of articles dealing with Stanford Hospital's Coronary Care Unit. Pictures available on request if not included with release.

STANFORD--"It's an exciting place to work," says Joan Fair, clinical nursing coordinator of the Coronary Care Unit (CCU) and cardiac surveillance unit at Stanford University Hospital. "You have to be prepared to act on a moment's notice. Psychologists have referred to us as 'the green berets of nursing.'"

For the CCU nurse, emergencies are commonplace. With the possibility of a fatal cardiac arrest present at all times, a moment's hesitation could be disastrous. Nurses in CCU must be able to recognize early warning signals and deal with them immediately.

"Technically, our nurses need to know how monitors, oscilloscopes, defibrillators and pacemakers work, but there's much more than that," Mrs. Fair says.

"We have to recognize threatening electrocardiographic patterns and take appropriate actions, such as resuscitation or defibrillation, without even the slightest delay. We must recognize normal and abnormal patterns and relate them to disease pathology."

The image of the nurse as waitress-maid-custodian has long been antiquated, and nowhere is this more apparent than in Stanford's CCU.

"We're taking on tasks physicians used to do, like inserting central venous catheters," says Mrs. Fair. "In most hospitals, nurses don't do this. Here it's part of our training. Most of our nurses are expert at reading and interpreting electrocardiograms.

"We're involved in diagnosing not only arrhythmias (abnormal heart rhythms), but infarction as well. Since the nurse is the one most often with the patient, she is encouraged to use her scientific knowledge to assess the patient's condition and to observe and participate in skilled examinations, such as listening to heart sounds."

To prepare them for the demands of working in these units, all nurses from West 1B (where CCU and cardiac surveillance are located) are required to attend a special five-day training course. The emphasis is on training the nurses to care for patients with myocardial infarction. The course consists of lecture and review sessions covering anatomy of the heart, physiology and pathophysiology, plus two days of on-the-job training on a one-to-one basis.

Stanford works in conjunction with three other local hospitals--El Camino, Mills Memorial, and Peninsula--in offering this course. It is given once every two to three months to a group of about 30 nurses from the four hospitals. Each hospital gives the course once or twice per year.

It costs Stanford an estimated $800 to send one nurse through the course, including in-class time, on-the-job sessions, and materials.

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Generally, nurses work on West 1B for up to three months and spend a few days as an extra nurse in CCU before taking the course. Additionally, before registering potential CCU and cardiac surveillance nurses for the course, Mrs. Fair asks for a verbal commitment that they will remain in these units for at least six months.

"I feel it takes a person three months to become a useful, functioning member of the nursing team here," she says.

Increasingly, CCU and cardiac surveillance nurses have to deal with the psychological effects of heart disease. An attack or other disabling heart condition can take a tremendous toll on a patient and his family.

"You might have a patient of 50 who's had a heart attack," Mrs. Fair says. "He's known people his age who have died from it. He may have a son to put through college, or a house not paid for, or he may be the president of a company in the prime of his career. If he wants to know if he's going to die, you have to know how to deal with that. If you can't you shouldn't be a CCU nurse.

"A person who has an attack will not be able to return to work for some time," she continues. "He may have to work part time when he returns, or he may not be able to go back to work at all. Our goal is to return patients to their jobs about three months after their attack."

To many CCU nurses, these psychological ramifications of heart disease present a welcome challenge.

"Studies show that CCU nurses are frustrated pediatric nurses," Mrs. Fair smiles. "They really like mothering patients. They're not totally task oriented. They learn to help patients deal with both the emotional and physical aspects of their illnesses."

Stanford's CCU staff believes a patient can better adjust to his illness by learning more about it. Additionally, cardiologists at Stanford and elsewhere across the country are convinced that more widespread education regarding risk factors and symptoms of coronary heart disease can help combat the disease and reduce mortality.

"We're interested in patients learning as much about the disease they have as possible," Mrs. Fair says. "Most of them have had a heart attack or symptoms of it, or they are being evaluated for cardiac surgery. In every case, whatever we can teach them about their condition will be helpful.

"We've been giving classes here at night for some of our patients and their spouses to explain what a heart attack is, what the healing process involves, and what some of the risk factors, such as diet, are."

This education program, like everything else in CCU and cardiac surveillance, is designed to save lives. That, of course, is what it's all about. Dick Lamb, twice a patient at Stanford Hospital after suffering heart attacks, readily attests to the almost routine nature of life-saving in these units.

"When I was in cardiac surveillance the first time, I remember waking up and hearing something like 'Code 66,'" he says. "After that I heard the pitter-patter of feet outside my room several times. I asked a nurse what this was and found out it was the signal for cardiac arrest, and for all hands to get around the patient and try to bring him back. While I was there they brought them all back."

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Mailed March 24, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD--"A trained environmental extension agent could potentially do more for ghetto community health than a doctor or a nurse," an expert in environmental medicine said Wednesday (March 22) at Stanford University.

Addressing a symposium on health and housing, Dr. Elihu Richter of Mt. Sinai School of Medicine in New York City, said the many of the environmental problems in the ghetto community are caused by a breakdown in housing maintenance.

He outlined his work with a city group to involve local residents in the health and safety of their environment by training them to maintain their tenements.

The group involves the Mt. Sinai School of Medicine and the East Harlem Environmental Extension Service, a coalition of neighborhood housing groups, tenants and owners.

Trainees learn such specific repair tasks as plumbing, boiler upkeep, rodent and pest control, painting and plastering, and the relations of such maintenance to certain health problems.

The training program, Dr. Richter said, has shown that tenants and owners can work together for neighborhood health.

The program is funded by a pilot grant from New York State, and Dr. Richter feels it may serve as a model of a publicly subsidized way to deliver environmental health services to a community.

Dr. Richter made his remarks at the opening of a two-day symposium on Epidemiological Aspects of Housing, sponsored by Stanford' division of preventive medicine, and the California State Department of Public Health. Some 20 leading experts in the fields of housing and public health are taking part at the meeting which concludes Thursday (today).

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Released to Business Wire, March 23, 1970, and mailed.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Complications of shingles infection in patients with Hodgkin's disease and other cancers may be related to a basic defect in interferon production, a Stanford University medical research team reported Thursday (March 23).

Interferon is a natural antiviral protein produced by human cells. It is believed to be effective against a broad spectrum of viruses.

Shingles, known by its scientific name as herpes zoster, is a viral infection in which patients develop blisters which follow the course of nerves. The inflammation is accompanied by severe pain, and can be localized or disseminated throughout many parts of the body.

The significance of the finding, the Stanford researchers said, is that it points the way to "possible approaches" in the treatment of shingles in Hodgkin's and other patients.

These would include use of drugs which stimulate interferon production, or giving patients white cell transfusions to increase the amount of the antiviral protein in their systems.

The Stanford researchers are Dr. David Stevens, and Dr. Thomas C. Merigan of the Department of Medicine. They reported their findings at an international symposium on Hodgkin's disease being held on the Stanford campus.

The investigators studied Hodgkin's patients with shingles and found an increasing lag of interferon production as this complication progressed and reached its peak.

When the patients began to recover from the inflammation, studies showed their cells had resumed normal levels of interferon.

"This suggests," the researchers said, "a potentially important role for local interferon in host defense against viral infections."

The problem of disordered cellular immunity is a common denominator in a variety of situations in which normally mild viral infections become progressive and even lethal.

However, this is the first time important evidence of the role of interferon resistance to infection has been studied in patients with Hodgkin's and other cancers which impair the body's immune system.

The finding also goes beyond this common complication in cancer patients. Herpes zoster also affects patients who have received kidney or heart transplants because of the drugs they receive to control graft rejection.

The Hodgkin's disease symposium will continue through Friday. It is supported by the International Union Against Cancer and the National Cancer Institute.

Nearly 150 scientists from the U.S. and abroad are taking part.

Tomorrow's sessions will be devoted to conclusions and research and treatment goals for the future.

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Transmitted on Business Wire 3/23/72
Mailed 3/23/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Stanford University Hospital and American National Red Cross officials today (March 22) signed an agreement to establish a new blood center near the Stanford Medical Center.

The new center, scheduled for opening in July, will include two components--the Palo Alto Red Cross Sub-Center, a blood collecting and processing facility; and the Stanford University Blood Center, designed for research, teaching, and clinical care functions.

The Palo Alto Sub-Center, a satellite branch of the Four Counties Red Cross Blood Bank in San Jose, will supply Stanford Hospital with the major portion of its blood needs.

"Progress in the science of blood banking and in the use of blood components in therapy has made it essential for us to join with Red Cross in the establishment of this new blood center," said Dr. Thomas A. Gonda, hospital director.

Dr. Gonda said the new center will provide improved facilities for patient care, training future physicians and specialists, and research into the fields of immunotherapy, coagulation, and tissue-typing.

"This type of venture also gives us a starting point for potential exciting developments in the banking of tissues other than blood," he added.

The agreement was signed at Stanford Hospital by Dr. Gonda and Dane Christensen, chairman of Red Cross' Central California Regional Chapter (CCRC). Also signing for Red Cross was Roscoe Whatley, executive director of the CCRC.

The new center will be located in a 12,000 square foot building at 3330 Hillview Avenue, in Stanford Industrial Park.

Renovation of the building, which formerly housed offices of Control Data Corporation, will begin within 30 days. The Red Cross Sub-Center will occupy 6,000 square feet, and 3,000 square feet will be alloted to Stanford's teaching, research, and clinical functions. The remaining 3,000 square feet will be reserved for future expansion.

The blood center will be established in four phases, said Dr. Stanley Schrier, head of the division of hematology at Stanford.

Phase 1 calls for the establishment of the Red Cross Sub-Center to accommodate Stanford Hospital's increased need for blood. Stanford's kidney transplant and cardiovascular surgery programs alone now require more blood than was needed for the entire hospital 10 years ago.

Under phases 2,3, and 4, centers for tissue-typing, coagulation, and immunotherapy will be established.

Additionally, a blood freezing program will be initiated sometime during the first year of the center's operation. The Red Cross uses an advanced method of processing frozen blood. Its chief use will be for storage of rare types of blood.

"We predict that the center will draw 8,000 units of blood during the first year of operation, with about half broken down for use as components," Whatley said.

He said the new center is being designed as a model blood bank with the latest in equipment and facilities.

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Released Wednesday, March 22, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Evidence suggesting a link between viruses and Hodgkin's disease, and possible hereditary predisposition of some people to this form of cancer highlighted the opening session Monday (March 20) of a five-day international meeting at Stanford University.

Until now various laboratories have reported associations between viruses and cancer of the breast, the cervix, and Burkitt's lymphoma, found widely among children in Uganda, Africa.

But this was the first time the international panel began to look at Hodgkin's disease from a new point of view--namely that the initial damage was done by a virus.

Hodgkin's disease affects the body's lymphatic system and kills some 4,000 people in the United States each year. If caught early, the disease can be treated successfully with drugs and radiation in 80 percent of the cases.

The cause of the disease is unknown. But a person who has a close relative with Hodgkin's disease is three times more likely to get it. And recent reports of possible transmission from one person to another have suggested that a virus or viruses may be involved.

The infectious agents in question are the EB virus and various other herpes viruses. The EB virus has been implicated as a cause of Burkitt's lymphoma. Type 1 herpes causes cold sores. Type 2 is found in the genital tracts of adults and is considered a venereal infection. It is a key suspect in the origin of cancer of the cervix.

Although any association between these viruses and Hodgkin's disease remains tentative, the scientists at Monday's meeting agreed there should be more work done on what these viruses are and the disease they cause.

Among those reporting the presence of virus-like agents from patients with Hodgkin's disease was Dr. F. Kingsley Sanders, a virologist with the Sloan-Kettering Institute for Cancer Research in New York.

He said cultured cells from patients with Hodgkin's disease were found to undergo changes accompanied by the release of an agent tentatively identified as a member of the herpes group.

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Dr. Paul Gerber, a scientist with the Division of Biologics Standards of the National Institutes of Health, said his studies could not confirm that the EB virus causes cancer in man.

But, he went on, the EB virus possessed unique biologic properties associated with known cancer-causing DNA viruses.

Another scientist, Dr. Werner Henle of Children's Hospital in Philadelphia reported on studies showing an association of EB virus to infectious mononucleosis, commonly known as "the kissing disease " from the way it is transmitted among young adults.

Similarly, Dr. Henry S. Kaplan of Stanford University reported that 50 of 250 patients between 15 and 35 years of age, who were treated at Stanford for Hodgkin's disease in recent years, had a previous history of infectious mononucleosis.

This evidence does not support a causal relation of infectious mononucleosis to Hodgkin's disease, Dr. Kaplan cautioned, but points the need for a prospective study.

If Hodgkin's disease is caused by a virus why isn't the disease more widespread? Because, as in any other infectious diseases, most people develop immunity to it.

Curiously, however, a substantial number of patient s with Hodgkin's disease showed impairment of their immune response system, several scientists reported. Whether this impairment begins before or after the onset of the disease is not clear.

Dr. Walter Bodmer of Oxford University suggested that susceptibility to the disease may reflect the activity of scores of a person's genes. Some of these immune response genes were recently identified by scientists at Harvard and Stanford, and have led to several studies in England, France, and Australia which point to an association between heredity and Hodgkin's disease.

"The effect of the genes may simply be to increase or decrease the probability of getting the disease, for example through an effect on the individual's susceptibility to a virus," Dr. Bodmer said.

Other scientists presented reports on the epidemiological aspects of Hodgkin's disease, which appears generally to be more prevalent among populations in warm climates, and people of low socioeconomic levels.

There was a consensus, however, that epidemiological data from some underdeveloped countries were uneven, and in need of evaluation.

The Hodgkin's disease symposium will continue through Friday. It is sponsored by the International Union Against Cancer and the National Cancer Institute. Nearly 150 scientists from England, France, Israel, Japan, Italy, Norway, Sweden, The Netherlands, U.S., and West Germany are attending.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Heart Transplant Patient #41

STANFORD--Stanford University Hospital surgeons performed a heart transplant operation Friday afternoon (March 17) on a 51-year old California man. He is listed in satisfactory condition.

The operation was performed by a team headed by Dr. Norman Shumway.

Hospital policy has been to withhold names of heart transplant patients if they so request. In this case, the recipient requested anonymity.

Including the new recipient, 15 of the 41 heart transplant patients operated on at Stanford are now living.

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Transmitted on Business Wire March 20, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Editors: Photo available on request if not included with story.

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford medical students will no longer put up with monkey business from drug companies, which, the students claim, will sink to any level to sell their products.

To draw attention to the problem, the Stanford Medical Students Association (SMSA) sponsors a contest among students, faculty, and employees at Stanford University Medical Center.

Called "Absurd Drug of the Month," the contest invites persons to send in advertisements that have appeared in recent medical journals to get doctors to prescribe certain products.

This month's winning entries are laxative ads, one showing a happy face and the other two chimps dressed in nightgowns.

The ads won the honor because, according to the students, they are dedicated to the great American obsession, "the daily bowel movement."

Winning ads are put on a display board outside the student lounge, with a disclaimer that SMSA "does not endorse any of the products."

The "happy face" ad is titled "Happiness is often as simple as a normal bowel movement."

It appeared in M.D., a medical magazine. The chimp ad was published in the prestigious California Medicine, the journal of the California Medical Association. The ad shows Mrs. T. Farnsworth Lipp, preparing to administer the usual teaspoon of laxative to junior before bedtime.

"And junior thinks - - - tastes so much like bananas that I never worry about a slip between spoon and Lipp," the ad copy goes.

Such drug promotion for doctors is absurd, the students think. According to Consumers Union, wrote Stephen Bezruchka who runs the contest, "no organ of the body is so misunderstood and maltreated as the digestive tract.

"It has been purged, irritated, lavaged, massaged and pummeled, all in the name of the great American obsession, 'The Daily Bowel Movement.' "

Bezruchka said the "Absurd Drug" idea serves to point out "the incredible extremes and expenses of drug promotion whose costs are passed on to the sick by the so-called 'ethical' pharmaceutical companies."

Judging from the number of contestants, the competition is a success, the student said.

The ad that aroused the greatest reaction among students and faculty appeared earlier this year. It showed a young woman being interviewed for a job.

"Before you hire her, make sure she is not pregnant," the ad admonished. The product--a pregnancy test kit.

Some people do not always agree with the selections, Bezruchka explained.

When a two-page, full-color ad of a bikini-clad blonde promoting a steroid drug was displayed, someone, presumably a drug company detail man, was seen removing it from the board, he said.

In this week's display, graffiti by an anonymous critic appears above the monkey business ad. The writer argues, tongue-in-cheek, that the ad is basically honest.

"They actually tested their laxative on chimps and they are afraid to extrapolate their data to humans," he wrote.

SMSA treats all winners to a free natural food lunch. ### Mailed March 15, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Some people looking for an encounter group really need a psychotherapy group, according to a Stanford University psychiatrist.

Many people regard psychotherapy groups and encounter groups as synonymous and contact Bay Area mental health services asking for an encounter group experience, said Dr. Irvin Yalom. He is associate professor of psychiatry and director of the group therapy program at Stanford.

Although therapy and encounter groups may use similar techniques, the two are designed for different purposes, he said.

Author of a recent book and numerous articles on group therapy, Yalom cautions against confusing the goals of therapy and encounter groups. Encounter groups can provide worthwhile experiences or new methods of interacting with others. However, they can be disastrous for persons who unrealistically expect them to solve problems that may require long term follow-up. Severe problems, Yalom said, should be worked out with the help of professionally trained individuals in a psychotherapy group.

"A psychotherapy group concentrates on helping individuals work out personal problems. It meets regularly over a considerable period of time to provide the continuity necessary to explore problem areas of each member. An encounter group on the other hand is a short-lived, often intensive group which focuses more on sheer experience rather than change," he explained.

Yalom feels that those genuinely in need of help should be in a traditional psychotherapy group. Recent evidence also indicates that such individuals are the ones most likely to be hurt by an encounter group, which cannot accomplish in a few weekends what a therapy group does over a period of months or years.

Stanford Medical School has a large group therapy program readily accessible to the community. When people call requesting an encounter group, the psychiatrist on duty attempts to determine their needs. After the initial screening, potential group therapy candidates are further evaluated at the Medical Center by Donald Staight, a psychiatric social worker and administrator of the group therapy program.

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March 13, 1972.

When indicated, some patients are referred out to other therapy groups run by private practitioners, social agencies, or mental health clinics. Those placed on the psychiatry clinic group therapy waiting list are assigned to newly forming groups or existing ones that have openings. Assignments are made only after careful consultation with the group therapists.

"It is important to fit the person to the group and the group to the person," said Staight. "There may be a waiting list, but it is never very long, since we will form a new group whenever we have enough people to work together. Our primary interest is to meet the needs of the community," he added.

The Psychiatry Department runs from 15 to 20 groups, including special ones for couples with marital problems, parents of disturbed children, or adolescents. Stanford is a nationally known center for group therapy training and all groups are led by faculty members or resident psychiatrists under the supervision of senior clinicians.

Fees are based on a sliding scale according to the patient's ability to pay. Meetings are held once or twice a week late afternoon or early evenings in one of the six group therapy rooms of Stanford's new Psychiatry Clinic Building.

Patients with an acute situational crisis are usually better off in individual therapy sessions. Most psychiatric problems, however, involve relating to or dealing with other people. Psychiatrists believe that group therapy is a logical and effective treatment for such problems.

The group therapy situation creates a mini-community in which there are a wide spectrum of ages and problems. Individuals, over a period of time, begin to experience what psychiatrists call their "out-there" problems within the confines of the group.

Therapists and patients have an ongoing commitment to the group. The therapist also has a continuing responsibility to every patient. If the therapist recognizes that a patient needs additional support or medication, appropriate measures are taken at once.

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Mailed March 13, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

CITY DESKS AND SCIENCE WRITERS

STANFORD -- An international symposium on Hodgkin's Disease will be held at Stanford University March 20 through 24, 1972.

Experts from 11 countries will meet to pool their knowledge and talk about development and use of the best methods needed to conquer the disease.

Hodgkin's disease affects the body's lymphatic system and kills some 4,000 people in this country each year. Many persons, including physicians, tend to view the illness with an attitude of pessimism that is no longer warranted by the facts, said Dr. Henry S. Kaplan of Stanford University, a pioneering cancer researcher and chairman of the symposium's organizing committee.

Furthermore, many doctors continue to treat it by methods that specialists consider to be old-fashioned and often inadequate, Dr. Kaplan said.

Marked progress in diagnosis, as well as treatment, have contributed to the new outlook. Dr. Kaplan, as well as several groups including the National Cancer Advisory Council, the National Cancer Institute, and the American Cancer Society, have attempted to make known the possibilities of prompt and proper treatment.

Scientists have estimated that about 80 per cent of patients in whom the disease was found in an early stage were curable.

"We now see the beginning of important advances in epidemiology and causation of the disease," Dr. Kaplan said. The main sessions will focus on the relationship of Hodgkin's disease and viruses or, as Dr. Kaplan put it, "the biology of Hodgkin's disease."

Other topics scheduled for review include: immunological aspects, diagnostic methods, and treatment techniques.

In additon to U.S. representatives, participants from England, France, Israel, Japan, Italy, Norway, Poland, Sweden, the Netherlands, and West Germany will attend.

Dr. Kaplan said that much of the progress in treatment in recent years has been aided by these international meetings which began in 1965 in France, and subsequently held in London and Ann Arbor, Michigan. Stanford was chosen as the meeting site this year to commemorate the fact that the first clinical trials for treatment of the disease began at Stanford in Spring, 1962.

The symposium is sponsored by the International Union Against Cancer, and the National Cancer Institute (NCI). Members of the organizing committee include Dr. Ronald F. Dorfman, Dr. Saul Rosenberg, both of Stanford; and Dr. Gregory O'Conor of the NCI.

The meetings will be held at Tresidder Memorial Union starting at 9:00 a.m., Monday, March 20.

Science writers are invited. A press room has been set up at Tresidder Memorial Union, Room 205, (ASSU office). Papers or abstracts will hopefully be made available by the scientists at the meeting, and copies will be distributed to those who are interested. Copies of the program are available on request, if not included with release.

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Mailed March 13, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: In an interview with the Stanford Medical Center News Bureau today (March 9), Dr. Donald C. Harrison, chief of cardiology at Stanford, provided the following background information relating to the experiment in which a patient will transmit his electrocardiogram 51,000 miles. (See earlier News Bureau story.)

STANFORD -- "Today we plan to demonstrate that this small monitoring device can accurately transmit an electrocardiogram over long distances by phone. This is a very important characteristic of such a detection and warning system, since it allows the user to relay his EKG to his doctor from a remote location. It gives the patient the opportunity to consult with the physician and then take appropriate action.

"However, clinical trials to demonstrate its effectiveness in detecting life-threatening arrhythmias and warning patients have not been completed or documented.

"We felt that a public demonstration of this type of monitoring system was necessary to call attention to the epidemic of sudden cardiac death in this country and the efforts being made to prevent it.

"Sudden cardiac death is one of the biggest health problems in the country right now. Of patients who have heart attacks each year, approximately 150,000 die suddenly before they reach a hospital.

"Although we have good therapy in hospital coronary care units for preventing death due to cardiac arrhythmias (abnormal heart rhythms), we have no way to diagnose and treat these arrhythmias outside the hospital.

"Additionally, although cardiologists have suspected for years that these patients have premonitory arrhythmias prior to the fatal arrhythmia resulting in sudden death, it has not been possible to document this with certainty.

"In the past few years, however, results of investigations utilizing tape recorders to monitor heart patients have suggested that these people do have warning arrhythmias which they may not recognize themselves.

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"To diagnose and make a clinical study of this, several advances for detecting abnormal heart rhythms on ambulatory patients going about their daily activities have been developed. It is now possible to pick out patients who are in a high-risk group and use these techniques on them.

"To attest to the value of such methods, it should be noted that of people who die suddenly, half have seen their doctor in the previous week. So they know something is coming on.

"The first technique utilizes a small tape recorder for continuous recording of heart action. This tape can be worn by a patient and then returned to the hospital for analysis by cardiologists, or at some medical centers, by a computer.

"The second technique involves the same type of tape recorder unit, but the patient only turns it on when he suspects an arrhythmia. He then brings in the tape for analysis.

"The third method is to wear a small device which continuously monitors heart activity, detects abnormal rhythms, and sounds a warning, like the device we will test today.

"All of these techniques are now in the evaluation phase. Additionally, a great deal of clinical research is being carried on to attempt to validate the concept that people do have premonitory arrhythmias prior to the fatal arrhythmia.

"If, indeed, people do have these promonitory arrhythmias, and they can be detected outside the hospital, the administration of therapeutic drugs may help prevent the fatal arrhythmia. There are a number of anti-arrhythmic drugs which can be used in such therapy.

"Salvaging these individuals--many who are men between the ages of 40 and 60, in the prime of their productive careers--would be a great saving to society. It's these people we're especially interested in. Many have a good functioning heart, but die from an electrical disturbance. If we can prevent this fatal arrhythmia from occurring, we can add many years to the lives of these people.

"At Stanford, we're using all three of these methods I've mentioned to study the problem of sudden cardiac death. This is one of our major areas of clinical research.

"These techniques have not been tested in enough patients to be able to scientifically establish their usefulness. However, clinical trials are going forward using each one. When statistical evidence is accumulated, it will be reported in the appropriate medical literature."

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Mailed March 9, 1972.
Business Wire 3/9/72 4:00 p.m.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

FOR IMMEDIATE RELEASE

STANFORD -- A patient at Stanford University Medical Center successfully transmitted his electrocardiogram 51,000 miles today (March 9), using only a small electronic device and an ordinary telephone.

The patient, 42-year-old Melvin Raymes, of Cupertino, Calif., relayed his electrocardiogram from Stanford to Manila in the Philippine Islands, then to a synchronous satellite over the Pacific, and then back to Stanford.

Dr. Donald C. Harrison, chief of cardiology at Stanford, and Dr. David S. Cannom, postdoctoral fellow in cardiology, received the transmitted electrocardiogram on another telephone in the same room, after it had travelled the 51,000 miles.

The experiment is part of an on-going evaluation by Stanford cardiologists of an instrument designed to help prevent sudden cardiac deaths. The device, which resembles a transistor radio, can monitor a patient's heartbeat during his daily routine, sound a warning in the event of abnormal cardiac rhythms which may be life-threatening, and transmit the patient's electrocardiogram (EKG) to his doctor from any location through an ordinary telephone.

Today's experiment, which marked the first known transmission of an EKG from a patient to his doctor, verified the capability of the device to relay electrocardiographic signals over long distances without distortion. A direct recording of the patient's EKG was made to check the accuracy of the transmitted signal.

"Today, we've demonstrated that this small electronic device can accurately transmit an electrocardiogram over long distances by phone," Dr. Harrison said following the experiment. "This is a very important characteristic of such a detection and warning system, since it allows the user to relay his EKG to his doctor from a remote location. It gives the patient the opportunity to consult with the physician and then take appropriate action.

"However, clinical trials to demonstrate the effectiveness of the device in detecting life-threatening arrhythmias and warning patients have not been completed or evaluated."

Harrison pointed out that the device is one of several methods which have been developed for monitoring patients as they go about their daily activities. "All of these techniques are now in the evaluation phase," he said.

As part of the evaluation process, clinical trials with a selected group of high-risk patients have been initiated at Stanford, he added.

Harrison emphasized that a public demonstration of one of these techniques was necessary to call attention to the "epidemic" of sudden cardiac death and the efforts being made to prevent it.

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"Sudden cardiac death is one of the biggest health problems in the country right now," he said. "Of patients who have heart attacks each year in this country, approximately 150,000 die suddenly before they reach a hospital." In all, over 600,000 Americans die from heart disease per year.

The device used for today's 51,000 mile EKG transmission, known as the Ventricular Impulse Detector and Alarm (VIDA), has been developed by Cardiodynamics, Inc., of Dublin, California. It consists of a five-and-one-half ounce analog computer, attached to two skin electrodes which are applied to the patient's chest.

The patient's heartbeat is monitored continuously throughout his daily routine. The device sounds a warning beeper in the event of abnormal cardiac rhythms which may be life-threatening. At the onset of the warning, the patient can immediately transmit his EKG to his doctor from any location by holding a telephone receiver up to the device. He then acts according to his doctor's instructions.

The doctor can receive the call on an ordinary telephone, then press his receiver into a special terminal to obtain a printout of the EKG.

Cardiologists feel the device, if proven effective in detecting life-threatening arrhythmias and warning the user, will be especially valuable for heart patients who wish to travel or commute over long distances.

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Mailed March 9, 1972.

Business Wire 3/9/72, 4:00 p.m.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- President Nixon's message to Congress last week directing the Department of Health, Education and Welfare to develop "a safe and efficient" nationwide blood program represents a victory for Stanford University professor J. Garrott Allen of the School of Medicine.

Dr. Allen, a surgeon and international authority on hepatitis, has been a relentless critic of the present blood banking system as being unresponsive to the national demand for blood.

Among his targets have been the commercial blood banks because they often accept blood from derelicts, who may be the transmitters of such diseases as hepatitis, syphilis, and malaria.

Dr. Allen, whose studies have shown that the risk of hepatitis from paid donors is 11 to 70 times greater than blood from volunteers, began his campaign for a national volunteer program 17 years ago.

His pleas, however, for replacing the present patchwork system of blood banking fell on deaf ears among federal authorities. Even the prestigious National Research Council of the National Academy of Sciences, ignored the problem for many years, Dr. Allen said.

Only Leo Perlis, director of community services of the AFL-CIO, agreed with Dr. Allen. In 1971, the AFL-CIO endorsed the concept of an all-volunteer program.

Until 1969, Dr. Allen said, his campaign had been carried on primarily through articles in medical journals.

Disillusioned by the lack of results, Dr. Allen decided to bring his concerns to the attention of the public through the news media. Since the government didn't act, action had to be brought through a consumer revolt, he said.

"Then things began to happen," Dr. Allen recalled.

Congressmen and senators began to write him asking for advice on what an all-volunteer blood program should be. State legislatures introduced bills to regulate commercial blook banking. Response even came from the American Medical Association which, up to that time, had paid little attention to the blood problem, Dr. Allen said.

Among those who have contacted Dr. Allen are Representative Victor Veysey, Republican of California. His bill now pending in Congress would allocate $9 million to HEW in the first year to set up a structure for the supervision of blood collection, inspection services, and testing. Others were Sen. Charles Percy, Republican of Illinois, Sen. Vance Hartke, Democrat of Indiana, and Sen. Jennings Randolph, Democrat of West Virginia.

Last year, several newspapers carried exposés on the blood banking problems in their localities, Dr. Allen said. These included the New York Times, the Chicago Tribune, the National Observer, and Chronolog on the NBC Television Network.

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March 9, 1972

On November 1, Dr. Allen said, after years in which his letters to the federal authorities went unanswered, he received a letter from Dr. Ian A. Mitchell, special assistant to the Assistant Secretary for Health Affairs at HEW. It said in part:

"We fully share your concern about the quality of blood for transfusions. The problem of hepatitis from blood transfusions is indeed a serious one." HEW now has a full-time staff working on the problem.

Informed of the President's message, which calls on HEW "to recommend to me as soon as possible a plan for developing a safe, fast and efficient nationwide blood collection and distribution system," Dr. Allen commented he is pleased.

He said this was only a beginning step. Development of an all-volunteer blood program would require participation of the field of medicine, blood banking, and the public. It would also require a nationwide public education program to encourage unpaid donors.

Dr. Allen said he fully supports a position paper adopted in February by the Red Cross, which now supplies up to 40 per cent of the national blood needs. Red Cross sources are 100 per cent volunteer. It sets the principles for such a program--volunteerism, blood availability to all free of charge, and free interchange of blood between blood banks.

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Mailed March 9, 1972.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Heart Transplant #41, Patient #40

STANFORD -- Stanford University Hospital surgeons performed a heart transplant operation Saturday morning (March 4) on a 48-year-old California man. He is reported to be in satisfactory condition.

The operation was performed by a team headed by Dr. Norman Shumway.

Hospital policy has been to withhold names of heart transplant patients if they so request. In this case, the recipient requested anonymity.

Including the new recipient, 14 of the 40 heart transplant patients operated on at Stanford are now living.

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Business Wire March 7, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Scientists have discovered a new class of regulatory genes believed to control specific immune responses of the body to antigens or foreign proteins like viruses and bacteria.

Ten of the regulatory genes were identified by researchers at Stanford and Harvard medical schools, and nearly 20 similar genes were found by other researchers during the past eight years.

This, however, is the first time that discovery of the genes and implication that they may influence predisposition of some people to common viral and bacterial infections has come to public attention.

Genes are units within chromosomes that transmit hereditary characteristics and also govern the development of cell structures.

Scientific interest in immune response genes has increased in recent months because of the growing number of associations between heredity and certain diseases being reported in medical journals and scientific meetings here and abroad.

These genes have, in fact, caused so much excitement in the scientific community that last week leading immunologists and geneticists met in La Jolla to partly pool their knowledge and to talk about development of the best methods for the laboratory experiments needed to confirm this type of link between heredity and disease.

The most exhaustive study of the immune response genes has been made by Dr. Baruj Benacerraf, professor of comparative pathology at Harvard Medical School, and Dr. Hugh O. McDevitt, associate professor of medicine and head of the immunology division at Stanford University School of Medicine. They discussed the long-term implications of the work in a special report in Science, a scientific journal.

In a series of experiments, the scientists injected animals with antigens. Animals which had one of the immune response genes could form a vigorous reaction against the corresponding antigen. This was marked by production of antibody and development of immunity.

Animals lacking such a gene would not become immune and were either totally or partially deficient in their antibody response to the antigen.

Immune response genes, called Ir genes, are believed to be linked to immune response cells which mature in the thymus. The scientists, however, do not know how these genes work. They believe the genes are somehow associated with the same immunological apparatus responsible for rejection of organ transplants.

And this is the intriguing part.

Recent findings suggest a relationship between rejection-triggering antigens in organ transplants and certain types of cancer and other disease, Dr. McDevitt explained in an interview. Among these are Hodgkin's disease, the rare rheumatic disorder systemic lupus erythematosus, and acute lymphocytic leukemia.

-more-

March 7, 1972

Exactly how the tissue rejection antigens, located on the surface of white blood cells, exert an effect on susceptibility to these diseases is unknown.

One possible mechanism, Dr. McDevitt pointed out, is that host antigens may provide a safe receptor site for the attachment of an invading virus. Still another possibility is that the virus "mimics" the biochemical characteristics of host antigens so that the animal cannot identify the invader as foreign and react against it.

A third possibility is that immune response genes located near the genes for transplantation antigens on the host chromosome affect the host's ability to react against antigens on an invading virus.

If a link between hereditary disease susceptibility and transplantation antigens is definitely established, scientists believe it could have great medical significance.

It could lead to development of tests for identifying those who are prone to certain diseases because of hereditary factors, Dr. McDevitt said.

He stressed the studies have dealt so far with mice and guinea pigs. Mapping is under way in laboratories in Maine, Michigan, Montana and Stanford to define the genetic relationship between specific immune response genes and tissue compatibility antigens. But the knowledge gained from animals could ultimately be applied in studies of the immune response of man, he said.

"There is evidence suggesting that specific genes may be one of several factors affecting susceptibility to cancer in both animals and man," Dr. McDevitt said. He cited these examples:

. Scientists have shown a genetic control of cell susceptibility to the Rous sarcoma virus which causes tumors in chickens.

. Another researcher has shown that a gene, closely associated with genes for tissue compatibility antigens, influences susceptibility of mice to a type of mouse leukemia.

. Working with former Stanford geneticist Walter F. Bodmer, now of Oxford University, Dr. McDevitt and his colleagues have identified a statistically significant association between systemic lupus erythematosus and tissue compatibility genes in man.

. Several laboratories in France, England and Australia have found a similar association between Hodgkin's disease and tissue compatibility genes in humans.

The Stanford immunologist believes studies should eventually be made to detect and type immune response genes in man. But this is not going to be simple.

In the course of their evolution, animals and man have developed a highly sophisticated, complex interplay of different forms of immune responses that simultaneously deal with a variety of needs, Dr. McDevitt commented.

To manipulate these responses, requires a much more precise understanding of how they occur, and what controls them than scientists now have.

Dr. McDevitt's work is sponsored by the National Institutes of Health, the Arthritis Foundation, and the American Cancer Society.

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Mailed March 7, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors and Science Writers: On March 9, at 4:00 p.m., cardiologists at Stanford University School of Medicine will conduct an experiment in which a patient's electrocardiogram will be transmitted over 51,000 miles, more than twice the circumference of the earth. To do this, the patient will utilize a pocket-sized electronic device and an ordinary telephone. The device, which also monitors heart activity and alerts the user to any irregularities in cardiac rhythm that may be life-threatening, is being evaluated by Stanford cardiologists. This experiment is designed to test whether the device can transmit an electrocardiogram over long distances free of distortion. It will mark the first transmission of an EKG by a patient to his doctor.

After the demonstration, Stanford cardiologists Dr. Donald C. Harrison and Dr. David S. Cannom will hold a press conference to discuss the significance of the experiment and possible future clinical applications of the device in preventing sudden cardiac deaths.

We regret the late starting time, but because of technical matters relating to the unique nature of the transmission, an earlier time could not be arranged.

You are invited to send your representatives to attend the experiment and press conference, which will take place in Room W001 at the Medical Center. Background details follow.

* * *

STANFORD -- Utilizing a pocket-sized electronic device and an ordinary telephone, a patient will attempt to transmit his electrocardiogram over 51,000 miles Thursday afternoon, March 9, at Stanford University Medical Center.

The experiment is part of an on-going evaluation by Stanford cardiologists of an instrument designed to help prevent sudden cardiac deaths.

The five-and-one-half ounce device can continually monitor a patient's hearbeat during work or any other activity, sound a warning in the event of irregular cardiac rhythms which may be life-threatening, and transmit the patient's electrocardiogram (EKG) to his doctor from any location through an ordinary telephone.

Known as the Ventricular Impulse Detector and Alarm (VIDA), it has been developed by Cardiodynamics, Inc., of Dublin, California.

Thursday's 51,000 mile transmission is designed to test the capability of the device to relay an electrocardiogram over long distances without distortion. The patient will attempt to transmit his EKG to Manila in the Philippine Islands, then to a synchronous satellite over the Pacific, and then back to Stanford. A direct recording of an EKG will be made to verify the accuracy of the transmitted signal.

As part of the evaluation process, clinical trials of the device with in-hospital patients have begun at Stanford. Outpatient trials using a selected group of high-risk patients who have experienced a heart attack or abnormal rhythms will soon be initiated, said Dr. David S. Cannom, postdoctoral fellow in cardiology.

Stanford cardiologists believe that this type of coronary detection and warning system, with provision for physician review of the patient's EKG from a remote location, may help prevent sudden cardiac deaths and significantly reduce the number of office visits for many heart patients.

-more-

March 6, 1972

EKG Transmission to Philippines
222

"Sudden death is frequently the initial manifestation of coronary heart disease," said Dr. Donald C. Harrison, chief of cardiology at the Medical Center. "However, many patients have electrocardiographic changes of abnormal rhythms prior to the fatal arrhythmia resulting in sudden death.

"If such abnormalities in cardiac rhythm are detected, the prophylactic administration of anti-arrhythmic drugs may reduce the incidence of sudden death."

The device consists of a pocket analog computer, resembling a transistor radio, attached to two skin electrodes which are applied to the patient's chest. The patient's heartbeat is monitored continuously throughout his daily routine. The device sounds a warning beeper in the event of abnormal cardiac activity which may be life-threatening. This warning is based on specific danger criteria established by the patient's doctor. At the onset of the warning, the patient can immediately transmit his EKG to his doctor from any location by holding a telephone receiver up to the device. He then acts according to his doctor's instructions.

The doctor can receive the call on an ordinary telephone, then press his receiver into a special terminal to obtain a printout of the EKG.

Cardiologists feel the device may be especially valuable for heart patients who wish to travel or commute over long distances.

Heart disease is the leading cause of death in the United States and kills over 600,000 Americans per year.

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Mailed March 6, 1972.

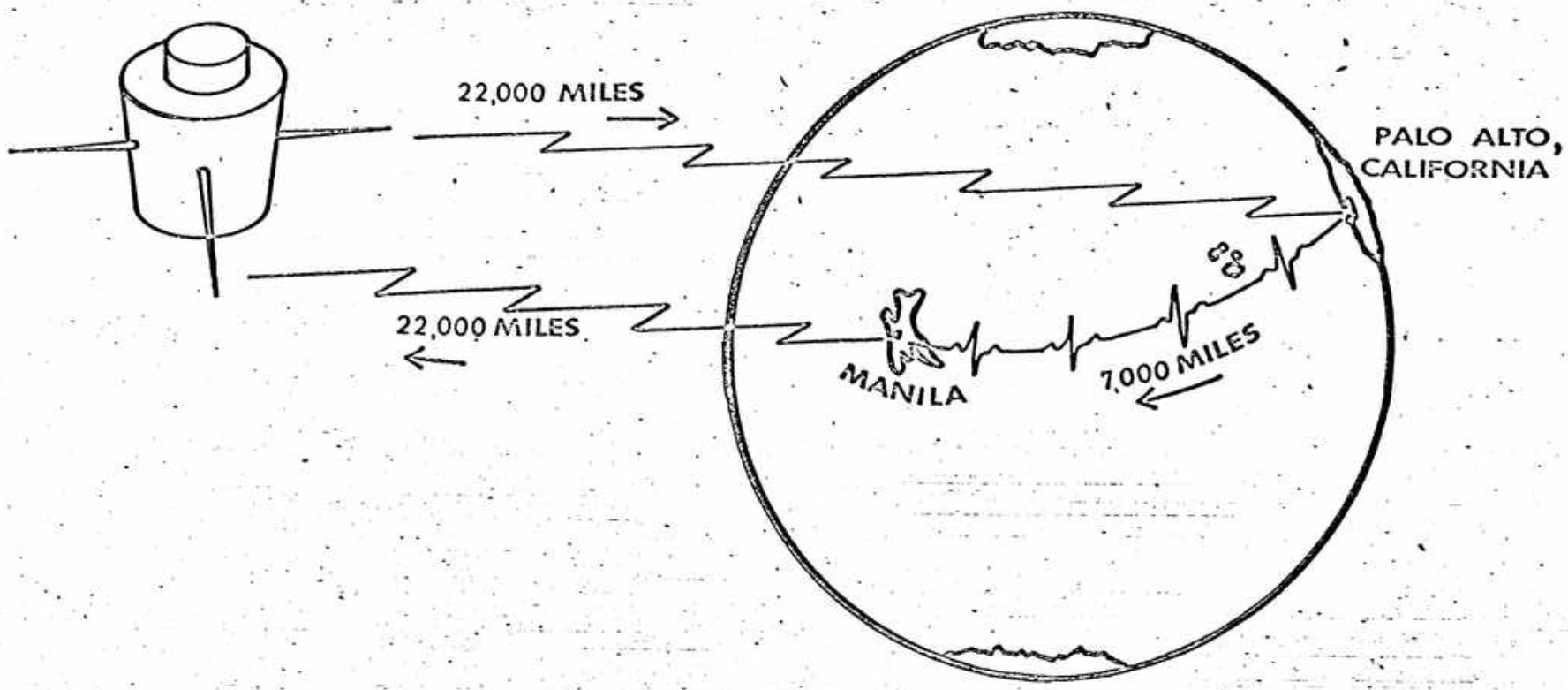

Diagram shows path over which a patient's electrocardiogram will be transmitted Thursday afternoon, March 9, at Stanford University Medical Center. Using a small electronic device and a standard telephone, the patient will attempt to transmit his electrocardiogram 51,000 miles free of distortion--from Stanford to Manila in the Philippine Islands, then to a synchronous satellite over the Pacific, then back to Stanford. The circuit routing for the experiment was made possible with the cooperation of American Telephone and Telegraph.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A committee to review the programs of the Stanford University School of Nursing and recommend future objectives has been appointed by Dean Clayton Rich of the School of Medicine.

Dr. Rich called on the committee to "develop an effective and intellectually stimulating educational program," and to give its task high priority. The study will be funded by a grant from the San Francisco Foundation.

The dean outlined these areas for committee consideration:

. The possible development of a program to prepare nurse practitioners. (As presently defined by nursing standards such a nurse is trained to give primary care to families as a whole and to aid physicians in providing for family care in areas where it is not available).

. Use of the resources of the Stanford faculty at large in training of nurses rather than predominant use of a separate faculty of nursing educators. A program for nurse practitioners would draw on many fields--biology, human behavior, nursing arts, and diagnosis and treatment. The program would lead to a baccalaureate degree after four years, and a master of arts degree a year later.

Dr. Rich urged the committee to review the role professional nurses of the Stanford Hospital should play in nursing education. He said Hospital nurses may be under-utilized in this area.

He also said: "The training of nurse practitioners might include instruction in diagnosis and management which has many similarities to the training of a physician. I would expect that Medical School faculty could make a significant contribution to this phase of nursing education."

Last month Dr. Rich announced that a proposal by two nursing educators to create an autonomous graduate school of nursing could not be implemented for financial reasons. But the dean accepted many of their recommendations which he felt were "feasible and desirable."

"Practical considerations dictate that students of nursing at Stanford be able to utilize the resources of the University to the fullest extent possible," he said.

Meanwhile, the School of Nursing has announced that it will not admit students to the present five-year program next fall until the committee makes its proposals and a new curriculum is developed.

The committee is chaired by Susan Brueckner, an alumna of the School of Nursing and nursing project director at Stanford Hospital. Members include Linda Cronenwett, instructor in the School of Nursing; Ludmila Davis, director of operating rooms at Stanford Hospital; Dr. Michael Dennis, director, physicians assistant program; Dr. Count D. Gibson, professor and chairman, Department of Community and Preventive Medicine; Sue Loper, nursing student; Grace E. Ringressy, professor and director, School of Nursing; W. Richard Scott, professor of sociology; Barbara Shonk, representative, Stanford Nurses Club; Florence Stroud, instructor in nursing, University of California School of Nursing; Paula Tognetti, nursing student; and Steven M. Zifferblat, assistant professor, School of Education.

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Mailed Thursday, April 27, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A new method to probe accurately the interior of the nucleus of living human lymphocytes (white cells) has been developed by a Stanford University medical researcher.

Lymphocytes are the cells which provide immunity against human tumors and transplants.

"The nucleus is especially important in controlling such lymphocyte activity," said Dr. John H. Frenster of the Department of Medicine. His work was supported by a grant from the National Cancer Institute.

The new method, developed by Dr. Frenster, employs a chemical that interacts with the genetic material (DNA) in cells. This interaction can be visualized with great accuracy by electron microscopy.

"Previously, no electron microscopy was available for such studies," Dr. Frenster explained.

He said the new method has revealed the control points for lymphocyte activity to be highly localized to the central area of the cell nucleus.

"By a better understanding of these control points, we may be able to increase lymphocyte activity against cancer cells or to decrease lymphocyte activity against transplants in patients," Dr. Frenster explained.

The Stanford scientist's work was reported in the current issue of Nature, an international scientific journal.

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Mailed April 25, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD --

A Stanford University scientist Thursday, April 20, urged that all national biomedical control activities be placed under a single director in an independent Consumer Safety Agency.

Dr. Leonard Hayflick said the Food and Drug Administration (FDA), the Division of Biologics Standards (DBS), and the comparable control activities of the Department of Agriculture and the Center for Disease Control should be combined.

"Many of the activities of these agencies and others now overlap," he said. "Because they require equivalent kinds of scientific expertise and laboratory facilities, they represent a wasteful duplication of effort.

"The distinction between those products that should be controlled by the FDA and those controlled by the DBS is becoming less discernible."

Hayflick, a professor of medical microbiology at the Stanford University School of Medicine, made his proposal in testimony before the U.S. Senate Subcommittee on Executive Reorganization in Washington, D.C. The subcommittee is chaired by Sen. Abraham Ribicoff (D-Conn.).

At present, according to Senator Ribicoff, several agencies are responsible for protecting the public against dangerous foods and drugs.

FDA tests drugs to see that they are effective. Vaccines, the primary means of preventing epidemics, are drugs, but these are tested by the DBS. The confusion is increased by the fact that vaccines for animals used for food are tested neither by the FDA nor the DBS, but by the Department of Agriculture.

This gray area, Hayflick suggested, could be covered simply and more efficiently by "an amalgamation of not only these agencies, but all federal agencies responsible for the public health."

Hayflick said his recommendations were based on personal experience in dealing with the policies "and some of the people" at DBS. In 1961, Hayflick developed a human cell strain that was found to be free of unwanted viruses. The strain was considered ideal for vaccine production because it lessened the likelihood of contamination from viruses found in monkey kidney and duck eggs where vaccines are made.

Because of their safety, Hayflick's cells have been used in many countries to make vaccines, and by the U.S. Armed Forces. Yet the first human cell vaccine production for civilian use in the U.S. was licensed by the DBS only last month.

"DBS has been inordinately slow to respond to new research developments which lead to improvements in the safety, purity, and efficacy of virus vaccine products," he said.

Hayflick also said the DBS involved itself in a serious case of conflict of interest in 1969. The agency licensed a rubella (German measles) vaccine developed by its own scientists and discouraged production of similar vaccines developed by independent scientists.

"It now appears that the DBS rubella strain produces more undesirable side effects in recipients than do the other strains," he said. "It is very likely that the next few years will see a shift in use from the DBS rubella strain to one of the earlier unsuccessful candidates."

Hayflick added that "no control authority should be permitted to sit in judgment of products when the choice is between substances developed by that control authority and those competing with it from other laboratories."

Business Wire 4/20/72 --30-- 4/20/72

STANFORD UNIVERSITY NEWS SERVICE
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FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- At age three Amy had not yet begun to talk. Her parents thought she might be retarded. Without treatment, she might have been unable to enter a regular class at school.

The initial workup by language specialists showed that Amy was above average in intelligence. A speech therapist worked with her individually to stimulate her, and later she was put in a group. After a year and a half of therapy, she was speaking and learning normally. By the end of second grade, Amy was a superior student.

Carl had suffered a stroke and could not communicate. When he came to the language clinic, he had not spoken for three years. With speech therapy, Carl talked almost normally. Now married, he is a volunteer who helps lead sessions for other patients.

These two patients are typical cases of the Stanford Speech and Language Clinic. With professional help, they have rejoined society.

Last year the fate of the clinic's future was uncertain. The Stanford School of Medicine had considered discontinuing it for financial reasons. Speech rehabilitation requires time. It can never be solely supported by patient fees. The problem facing Stanford also affected other language programs in the community.

To continue valuable speech services, Stanford joined forces with two other local institutions to eliminate costly duplication. They were the Palo Alto Medical Clinic and Children's Hospital at Stanford.

The three have formed the Stanford Center for Communications Disorders, which opened last September in a building at Children's Hospital. The facility is headed by Dr. Kathryn Beadle, a speech and language pathologist. It may serve as a model of coordinated diagnosis and treatment for other institutions throughout the country, according to Dr. Beadle.

A staff of six therapists and Dr. Beadle manage communications disabilities in all age groups. Problems include language development difficulties of children, voice disorders of adults and speech dysfunctions associated with stroke.

Children under two are rarely seen at the center, simply because faulty speech development at an early age is difficult to recognize, Dr. Beadle pointed out. Language development studies over the past ten years, however, have given specialists norms to go by for guides. "The younger a child is when we first see him or her, the better," Dr. Beadle noted.

Patients under three have usually been referred by an audiologist who has determined that suspected speech problems are not related to any hearing deficiency. The majority of children treated at the center are between three and five. By the time these patients are old enough for school, they no longer need special help, or they can be treated by the school therapist. Only school children with severe speech problems are seen by center personnel.

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Language difficulties of many youngsters are related to neurological immaturity, technically called minimal cerebral dysfunction. This involves underdeveloped perception and motor control. Children with this disorder cannot focus their attention or concentrate well, and have difficulty seeing or understanding things as they should. Therapy for such patients is therefore directed at increasing attention and perceptual skills as well as building language.

Much of the child therapy at the center is done in groups. Dr. Beadle feels that group participation should generally be a part of any child's treatment.

"The group is exciting and gives the patient more motivation. It is also helpful as a transition to the schoolroom," she said. "In addition, therapy activities for certain problems, such as the perceptual difficulties, are particularly suited to group work."

Adult problems are primarily voice disorders and strokes. Voice disorders concern speaking improperly. Misusing the voice, for example, can cause swelling and sometimes, growths on the vocal cords which interfere with speech. Such patients are referred to the communications center by the Medical Center's Ear, Nose and Throat Clinic or by other otolaryngologists in the area. Therapy retrains these patients to use their voices properly in order to eliminate the underlying causes of pathology.

Many of the adult patients are stroke victims who have lost the ability to speak or to understand speech. When treated soon after an attack, many of these patients who might otherwise remain severely handicapped, regain their power to communicate.

Most adult therapy is individual, but group work is done when a group situation is advantageous. At present the center has two groups for stroke patients, one for adult stutterers, and another for adolescent stutterers. There are also groups for parents of children with speech disabilities, since any successful therapy for a child requires cooperation of the parents.

In addition to diagnosing and treating individual patients, the center works closely with communities throughout the Bay Area to evaluate school children with learning difficulties. Staff do not necessarily do therapy with these children, but they make recommendations for the type of class or teaching a child may require. If treatment is needed, but Stanford is too far away for the patient, the center helps make arrangements for therapy in the patient's local community.

Stanford's communications center is also an integral part of other research and treatment programs in the area. With the Whitcomb Convalescent Hospital in Menlo Park, it participates in a co-care program for stroke patients, which insures that the extended care services patients need after they leave the hospital are available to them in the community.

Therapists are consultants to the Morgan Center in Palo Alto for emotionally disturbed children, and the Crippled Children's Services, which refer children with speech-related disabilities. Center personnel also work with various departments of the Stanford University and Children's Hospitals, and with the Stanford Birth Defects Panel.

Stanford Hospital is providing funds for the center's first three years of life. Dr. Beadle hopes that in the future the center will attract federal and private support. Outside financial support is necessary because patient fees do not cover the cost of operating the center.

"If we charged patients enough to pay for all the center's costs, most of them could not afford our services," Dr. Beadle said. "Our main purpose is to serve the community, and if the center's patient waiting list is any indication, speech services are certainly needed in this area."

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Mailed April 19, 1972

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1. Blowing bubbles motivates youngsters with speech and language disabilities. Speech therapist Donna Dagenais works with patients (left to right): Scott Blalock, Mark Lawler and Todd White. 4/72

2. Dr. Kathryn Beadle, director of the Stanford Center for Communications Disorders, uses a book to help stroke patient Charles Richardson practice word articulation. 4/72

TO: NEWS BUREAU, RM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

Stanford Center for Communications Disorders 4/72

Please send me #1 and/or #2, 8-1/2x11" glossy prints.

NAME _____ ADDRESS _____

PUBLICATION _____ CITY, STATE, ZIP _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

HEART TRANSPLANT PATIENT #42 April 9, 1972

STANFORD -- A 45-year-old California man became the 42nd heart transplant recipient at Stanford University Hospital Sunday afternoon (April 9). He is listed in satisfactory condition.

The operation was performed by a team of surgeons headed by Dr. Norman Shumway.

Hospital policy has been to withhold names of heart transplant patients if they so request. In this case, the patient requested anonymity. .

Including the new recipient, 16 of the 42 heart transplant patients operated on at Stanford are now living.

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Business Wire 4-10-72

Since infants have not yet developed the ability to ward off cold and maintain a stable body temperature, they must be transported in a neutral thermal environment. The Stanford infant transporter provides a comfortable temperature for the infant through the use of radiant heat warmers, a principle adapted from the Apollo space program.

The transporter has an oxygen ventilation system that will supply two to three hours of oxygen, battery powered monitors for heart rate; fluid intake, blood pressure and temperature; portable rechargeable battery units for the systems, and a stabilizing unit to prevent injury to the infant during sudden changes in speed or altitude. These features are still being streamlined and improved, according to Hackel.

A team composed of Drs. Hackel, Sunshine, and Johnson plus Drs. Nancy Edwards and Arnold Goldstein, fellows in newborn care, is responsible for coordinating transfers. One member of the team is always available.

When the Stanford nurseries are called to admit an infant, the appropriate means of transportation is determined. If the patient will be brought to Stanford by helicopter or airplane, the transport coordinator on call is notified to make the necessary arrangements. The coordinator, a pediatric house officer and a medical student, take the equipment in an ambulance to the heliport where they board the helicopter to fetch the infant.

At the outlying hospital the infant is transferred from the nursery to the Stanford transport unit and any necessary treatment is begun. During the return trip, the coordinator radios the Medical Center to inform the nursery of the patient's condition and to alert the ambulance for the expected arrival at the heliport.

As soon as the helicopter lands, the infant in the transporter is taken by ambulance to the nursery. There the infant is transferred to a hospital incubator where full intensive care gets underway.

Although air transportation for newborns is not a new idea in this country, it has not been used to a great extent in California. "We expect to expand the role of Stanford as a regional medical care center through development of an integrated transport service and we hope it can be used as a model for other hospitals in the state," said Hackel.

The heliport, partially funded by the Jr. Women's Club of Palo Alto, meets the requirements of the Federal Aviation Administration and the California Board of Aeronautics. It is equipped with floodlights to illuminate the landing area at night, and a telephone for on-the-spot communication.

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Mailed April 10, 1972.

ADDENDUM TO THE HELIPORT STORY OF APRIL 10, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Credit for the infant transport unit (page 1, bottom) has been incorrectly given. The original portable power system was designed and constructed by Lloyd Gano, senior electronics technician in the Anesthesia Department. Robert Moffat, associate professor of Mechanical Engineering, has designed a second, more versatile transporter.

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

Editors: Photos available upon request if not included with release.

The life-saving drama of transferring critically ill newborn infants to the intensive care nurseries at Stanford University Hospital is often played in the sky.

A heliport completed last April to provide a convenient landing pad near the Medical Center for helicopters, has enabled babies in critical condition to be transported to Stanford from distant hospitals in record time. So far 20 mercy missions for tiny infants have been flown by helicopters using the heliport, which is located 700 feet from the emergency room entrance.

The helicopter service is part of an interhospital transport system for rapid transfer of newborns designed and managed by Drs. Philip Sunshine, Alvin Hackel, and John Johnson of the Departments of Pediatrics and Anesthesia.

Stanford's newborn intensive care units serve area III of the California Regional Medical Programs, but acutely ill infants are brought from hospitals throughout central California or western Nevada which do not have the facilities to treat them. Close to 200 babies are transferred to Stanford each year to be placed in the intensive care nurseries, or the Premature Research Center, where intensive care is subsidized under terms of a grant to Stanford from the National Institutes of Health. Most of these babies are less than 24 hours old, and they usually have breathing difficulties or require major surgery.

"The most crucial period for the infant is the time it takes Stanford pediatricians to reach the baby, for once they are by the infant's side, they can initiate preliminary treatment and then continue to provide emergency care en route," explained Hackel.

"The transfer between hospitals should be as quick as possible since complete intensive care is not possible until the baby is at Stanford. The ideal traveling time between hospitals is less than one hour," Hackel said.

Most of the infant transfers come from within a 30-mile radius, and for these surface ambulance is used. Transfers beyond 30 miles are done by helicopter or airplane, weather permitting. Helicopters chartered from an Oakland firm are used for interhospital distances up to 100 miles and airplanes make transfers from hospitals more than 100 miles away. The longest trip the Stanford infant transport team has made yet was to Cedarville, 380 miles north of Stanford.

For air transport, special lightweight equipment had to be designed. The Premature Research Center worked with the Department of Anesthesia and the Thermosciences Division of the University's Department of Mechanical Engineering to modify and adapt the basic neonatal transport unit for use in helicopters and airplanes. The project was headed by Robert Moffat, associate professor of mechanical engineering.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- American schools must dramatically improve the learning environment they provide for children and help promote family strength, Stanford University child psychologist Dr. Alberta Siegel said Thursday (April 6).

Dr. Siegel said that our schools hold the key to how well individuals will meet the requirements of the 21st century and adapt to changing roles for men and women.

"Females and males will be more likely to be alive and well in century 21 if our schools reform all aspects of the learning environment they provide for children, and if they modify all their practices to bring them into line with the continuing viability and strength of the family," she said.

Dr. Siegel, a member of the Surgeon General's Committee to study the effects of television violence on children, made her remarks at the annual meeting of the American Educational Research Association in Chicago.

Emphasizing the significance of a child's early learning, she said, "We must recognize that the most important learning occurs within the family, from the people with whom the child has strong emotional bonds."

Because of this, she continued, it is vital for other social institutions to aid children by aiding the family. Schools, as "social institutions which can aid the family or contribute to its further deterioration," must be in the forefront of this movement, she said.

Dr. Siegel listed five suggestions for American schools. They included:

-- implementing employment practices which reduce pressures on employees to make geographical moves to advance their careers. Such frequent relocation, Dr. Siegel said, can be destructive to family life.

-- creating more part-time positions for women so they could more easily hold jobs and also adequately fulfill their responsibilities as wives and mothers.

-- avoiding sex-role stereotyping in all employment fields.

-- minimizing the barriers to the employment of spouses by making it easier for husband and wife teams to work together at the same institution.

-- encouraging more students to consider careers in the health professions, and providing better health care insurance for all employees.

By following such suggestions, Dr. Siegel said, schools could become models for other social institutions and help eliminate the "pollution of the family" caused by geographical dispersal, industrialization, electronic communication, and other technological advances.

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Mailed April 6, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos or Hali Wickner 415: 321-5310

STANFORD -- If the walls of the ivory-tower medical school have not come tumbling down, they at least have been breached. The latest sign of this comes from the Stanford University School of Medicine whose students now influence decisions on the very issues that affect their education.

In the last two years, students have gained representation on most of the important committees responsible for Medical School policies. These range from academic matters to the extent and quality of health care delivery.

"We are considered partners with faculty and administration in working to rectify many of the shortcomings of medical education at Stanford," said Tom Raffin, co-president of the Stanford Medical Student Association (SMSA).

Dean Clayton Rich said students have become more interested in the Medical School as an institution, are more vocal and forceful, and want access to the decision-making process, particularly in the area of curriculum.

"My observation is that students have made very important contributions because in general they have very accurate perceptions of the quality of the educational process in which they are involved," the dean added.

Student participation on committees is a by-product of the movement for educational reform of the mid-1960's. Stanford medical students began looking at their own educational environment, and saw certain aspects they wanted changed.

They saw, for instance, that Stanford emphasized medical research and training of specialists. Stanford's highly specialized facilities attracted mostly patients with rare and exotic diseases, virtually to the exclusion of routine cases which are needed for training young M.D.'s.

"In fact, the undergraduate educational program had become a diffuse, poorly controlled experience which simply reflected, in terms of quality, its low priority," Raffin said.

(While it is true that by the standard of the size of the undergraduate class, Stanford has put less emphasis in that area, it was not done by design. Nobel Laureate Joshua Lederberg says there has never been a federal mandate for support of undergraduate medical education, and medical schools have been able to bootleg a great deal of support for it as a by-product of research funding. The growth of the specialties occurred for two reasons, Lederberg adds. One is the kind of facilities they are able to provide, and the other has to do with the character of the patient population served by Stanford which requires highly specialized care.)

Nevertheless, the medical students wanted change, and they felt they could effectively bring it about if they had a say.

As a result, students have been given unprecedented voice in considering new faculty and tenured appointments. Two students served on the search committee which last September chose Dr. Rich as dean of the Medical School. -more-

Other students are currently aiding in the search for new chairmen in pediatrics, medicine, anatomy and radiology. They are also represented on committees dealing with curriculum development, admissions, patient care, primary care, financial aid, and the deliberations of the Medical School's faculty senate.

The SMSA, according to Raffin and co-president Maida Taylor, would like to see students even more involved in the selection of faculty at the Medical School. The organization is working with a dean's committee to set up means for using student evaluations in tenured appointments and promotions.

The students have not yet gained the privilege of serving on the executive committee, the highest level policy-making group composed of department chairmen of the Medical School.

"Unfortunately," said Raffin, "the voting majority of the committee does not think the SMSA should send an observer to the meetings, but we hope to discuss further such a proposal with them."

Miss Taylor and Raffin feel it is important for Stanford students to be active in national and community medical affairs not only for the educational benefit, but to help make constructive changes in the national health care system. At the local level, SMSA has a representative on the governing council of the Santa Clara County Medical Society, and students take part in some of its standing committees.

Looking into the future, Miss Taylor and Raffin believe that while Stanford should maintain its strength in basic and clinical research, it cannot continue to focus most of its attention in these two areas alone.

"At present, the Medical School is not completely meeting its responsibilities to health students or the community," Miss Taylor and Raffin said. "The program does not satisfy the needs of today's medical students, and the academic distance that Stanford has maintained from the community will keep it out of evolving health care delivery systems in this area."

Stanford is finally beginning to think about an active role with health care consumers and physicians in the community, the student leaders said.

At present, discussions are under way with other area institutions to determine how Stanford can make use of their medical facilities for teaching. Already, the Medical School has signed a formal agreement with Santa Clara Valley Medical Center to bring more medical students to the Center for first-hand instruction from hospital staff and Stanford faculty members.

"Discussions now under way with the Palo Alto Medical Clinic and other area facilities," continued the SMSA co-presidents, "will be crucial not only to a well-organized and integrated health care delivery system, but to the survival of the Stanford Medical School.

"Without deliberate and well planned steps in the immediate future, we will have failed to move ahead at a most opportune time, and it is possible that a second chance may not be forthcoming."

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Mailed April 5, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Dr. Charles E. McLennan, professor and chairman of the Department of Gynecology and Obstetrics at Stanford University School of Medicine for the past 25 years, will relinquish his chairmanship responsibilities at the end of the year.

He has requested to be relieved of administrative duties by December 31, 1972 at the latest, to devote time to teaching, research and clinical care. Dean Clayton Rich has appointed a search committee to choose a successor.

Dr. McLennan is author of a textbook, Synopsis of Obstetrics, and numerous scientific publications. A member of several professional societies, he is a director of the American Board of Obstetrics and Gynecology, vice president of the American Gynecological Society, president-elect of the Pacific Coast Obstetrical and Gynecological Society, and a past president of the Society for Gynecological Investigation.

Prior to joining the Stanford faculty in 1947, Dr. McLennan was chairman of the Obstetrics and Gynecology Department at the University of Utah. He also served on the faculty of the University of Minnesota where he earned his M.D. degree in 1934 and his Ph.D. in 1942.

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Mailed May 31, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Windsor Cooper Cutting, former dean of the Stanford University School of Medicine, died Monday morning (May 29) in his home in Hawaii. Cause of death is undetermined at the present time.

Dr. Cutting, 64, also served as dean of the School of Medicine at the University of Hawaii from its establishment in 1965 until July of 1971. He remained on the faculty as professor of pharmacology, and was due to retire from the University at the end of the current academic year.

A 1932 graduate of Stanford Medical School, he joined the Stanford faculty in 1938 following fellowships at the Courtauld Institute of Biochemistry in London and at Johns Hopkins University. He became a full professor in 1946, and was appointed executive head of the Department of Pharmacology and Therapeutics four years later.

Dr. Cutting was named dean of the School of Medicine in 1953, by President Wallace Sterling. He served in that position for four years before he resigned in 1957 and was appointed professor of experimental therapeutics.

In 1964, after 26 years at Stanford, Dr. Cutting was appointed the first director of the Pacific Biomedical Research Center at the University of Hawaii. A year later, he became the first dean of the School of Medicine at Hawaii.

An expert in the study of antibiotics and virology, he authored over 200 medical papers and one book, Handbook of Pharmacology: The Actions and Uses of Drugs.

Dr. Cutting willed his body to the University of Hawaii Medical School. Contributions will be used to support a memorial lectureship in his name.

He is survived by his wife, Mary, three sons and three daughters.

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Business Wire May 30, 1972.
Mailed May 31, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Dr. Thomas A. Stamey, professor of surgery and head of the division of urology at Stanford University School of Medicine yesterday (May 24) was awarded the American Urological Association's (AUA) annual Hugh Hampton Young Award for his work on the diagnosis and treatment of urinary tract infections.

The presentation was made at the annual meeting of the AUA in Washington, D.C., by Dr. W.E. Kittredge, president-elect of the Association.

"Dr. Stamey's research in dealing with the vital functions of the kidneys and urological medicine has been invaluable to the medical community," Dr. Kittredge said.

A 1948 graduate of Vanderbilt University, Dr. Stamey received his M.D. from Johns Hopkins University School of Medicine in 1952. He served on the faculty at Johns Hopkins and was chief of urology at Baltimore City Hospital for three years prior to his appointment as associate professor of surgery at Stanford in 1961. He was appointed to his present position in 1964.

Dr. Stamey is the editor of Urology Digest, and a member of the editorial board of two other medical journals. He is the author of two books--Renovascular Hypertension, dealing with the methods of studying kidney conditions in man which lead to high blood pressure, and Urinary Infections, now in press. He has also published numerous papers on kidney physiology, urinary tract infections, and hypertension.

Recently appointed a member of the scientific advisory board of the National Kidney Foundation, he is also a diplomate of the American Board of Urology.

The Hugh Hampton Young Award, which consists of a gold plaque and $2000, honors the late physician and educator who was clinical professor of urology at Johns Hopkins School of Medicine for 48 years. He also served as director of Brady Urological Institute, was co-author of the definitive two-volume work, "Young's Practice of Urology," and founder of the Journal of Urology.

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Mailed, Thursday, May 25, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A Stanford University surgeon today (May 24) urged reconsideration of heart transplantation as "appropriate therapy" for terminally ill heart patients.

"We believe significant progress has been made since 1967, both specifically in heart transplants in terms of selection, treatment and survival, and in the results of organ transplantation generally," said Dr. Eugene Dong, Jr., associate professor of cardiovascular surgery and a member of the heart transplant team at Stanford Medical Center.

"The past reveals that cardiac transplantation has resulted in a group of pain free, mobile, socially and vocationally rehabilitated patients, selected by current technology from a group of terminally ill patients," he said.

Dong made his remarks before an international symposium on clinical organ transplantation in Richmond, Virginia. Co-authors of the report were Dr. Norman E. Shumway, professor of cardiovascular surgery and a pioneer in heart transplantation, and Drs. Randall B. Griepp and Edward B. Stinson, two other members of the Stanford surgical team.

Forty-three patients have received heart transplants at Stanford since the program was initiated four-and-a-half years ago. Sixteen are presently surviving.

"If a patient survives the first three months after transplantation--and 22 patients have--75 per cent will survive to one year, 67 per cent to two years, and 27 per cent to three years," Dong said.

He attributed the rapid decline between the second and third years to poor survival statistics during the first year of the program. He noted that in the first year of the program (1968), 22 per cent of the patients survived one year, whereas 50 per cent of those receiving transplants in 1970 and through May of 1971 have survived at least one year.

Citing these statistics, Dong contended that "cardiac transplantation should be reconsidered as appropriate therapy for advanced heart failure due to irreparable myocardial disease using the proper selection criteria."

Experience at Stanford has shown that the operation can have a low surgical mortality and can bring about prompt and uniform improvement in cardiovascular function, he said.

The critical period for a heart transplant patient is three months following surgery, during which cardiac rejection crises are most likely to occur. After this, Dong said, "there is the appearance of a period of graft acceptance which is just as real for heart grafts as for kidney grafts."

But he emphasized that the most significant consequence of the program has been to return many patients to an active life, including virtually all of the current surviving patients and several who died over 18 months after receiving transplants.

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"Most important is the physical, social and vocational rehabilitation achieved by the group as a whole, irrespective of the improved cardiovascular status," he said.

Dong contrasted the survival statistics of the heart transplant recipients at Stanford with those of patients who were selected for transplantation but could not be operated on for a variety of reasons. Average survival for these 20 patients was 30 days. Half died by the 10th day after selection, and only one lived longer than 95 days.

He attributed the improvement in the Stanford program to several factors, including better patient selection, improved recognition of rejection, more effective immunosuppressive drugs, and more aggressive diagnostic efforts against infection.

On the subject of mechanical hearts, Dong said, "Despite significant and widespread interest in mechanical devices, design factors for control, power, and biocompatible materials, costs of production for energy sources, and reliability make the issue of a total replacement device real only on a time-scale of a decade, if indeed that soon.

"On the other hand," he continued, "heart transplantation is available now, and the need for its wider and appropriate application is urgent."

The first human heart transplant at Stanford was performed in January of 1968. Nine years earlier, in 1959, Dr. Shumway and Dr. Richard Lower (now at the Medical College of Virginia) announced perfection of the surgical technique developed in animal research which is the basic technique used in human heart transplantation today.

Since 1959, Drs. Dong and Shumway have studied the immunologic problem of cardiac rejection and methods of recognizing and treating it.

Stanford's longest surviving heart transplant patient is Carl Sheaffer, a retired plumber from Winchester Bay, Oregon. Sheaffer received his new heart on October 26, 1968, and is the fourth longest surviving heart transplant patient in the world.

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Business Wire May 24, 1972.

Mailed May 24, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A 19-year-old man today (May 18) became the youngest patient ever to receive a heart transplant at Stanford University Hospital. He is reported to be in satisfactory condition.

The operation was performed this morning by a surgical team headed by Dr. Norman Shumway.

Including the recipient, 17 of the 43 heart transplant patients operated on at Stanford are now living.

Hospital policy has been to withhold names of heart transplant patients if they so request. In this case, the recipient and his family have requested anonymity.

Previously, the youngest transplant patient at Stanford was Paul Overson of Albuquerque, New Mexico, who was 32 when he received a new heart on December 15, 1971. Overson was released from the hospital in late February.

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Business Wire May 18, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Students and faculty members at Stanford University School of Medicine no longer have to spend hours poring through lengthy indexes and journals to find references concerning a particular medical subject.

With a new computer storage and retrieval system called MEDLINE (MEDical literature analysis and retrieval system on LINE), they can now complete a thorough search in a matter of minutes.

"A search on a very specific topic which would otherwise be very time-consuming or perhaps impossible can be performed in just a few minutes with this system," said Peter Stangl, director of the Medical School's Lane Library.

The Medical School became licensed to use MEDLINE in January, Stangl said. After several weeks of testing, searches began in March.

The data base for the system is housed in a central computer in the National Library of Medicine in Bethesda, Maryland. It includes almost 420,000 titles from 1,100 medical journals dating back to January 1, 1969.

The computer can presently accommodate about 500,000 titles, or up to four years of publications, Stangl said. Throughout this year, new titles will be collected and fed into the computer. At the end of the year, 1969 entries will be dropped, making room for 1973 to be added.

Stanford is one of six authorized MEDLINE users in California, and 70 in the United States. Each of the California installations serves a designated area in the state. Stanford will support Area III of the state's Regional Medical Programs, which includes 11 counties in mid-California.

Eventually, it is projected that about 200 medical schools, libraries, and hospitals will be using the system, Stangl said. The computer is capable of responding to 47 or 48 simultaneous users without a delay of more than 10 seconds, he noted.

Access to the system is by a communications network linking the authorized MEDLINE users with the main computer in Bethesda. The hookup is established via a local telephone call, Stangl said.

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Searches are performed at Stanford at a small computer terminal in Lane Library operated by Paul Hanson, reference librarian. Hanson responds to a series of question prompts at the terminal on the basis of information provided him by the researcher requesting the search.

Each reference in the system contains title, author, source, date published, language, and those subject headings assigned to it by the National Library of Medicine's indexers. A reference can be retrieved by including in the search statement any combination of the various data elements given above, Stangl said.

"For example," he noted, "the search statement, 'vision disorders and children, and English, and 1971 thru 1972,' would retrieve all recent articles in English dealing with pediatric vision disorders."

MEDLINE evolved from two earlier computer systems for searching medical literature, Stangl said.

The earliest, MEDLARS (MEDical Literature Analysis and Retrieval System), was established in 1963. It includes all 2,400 medical journals found in Index Medicus, the complete bibliography for the health services. But MEDLARS conducts 15 to 50 searches together in a "batch" system, and requires from two to six weeks to provide responses, Stangl said.

In an effort to make the data available on a more immediate basis, an on-line computer system called AIM-TWX (Abridged Index Medicus-TeletypeWriter eXchange) was designed in 1969. However, this system includes only about 120 medical titles, an insufficient number for many medical schools and libraries, Stangl said. Also, AIM-TWX is operated on straight long-distance telephone charges, making the expense prohibitive for many users.

The development of the MEDLINE system was supported by the Lister Hill Center for Biomedical Communications at the National Library of Medicine.

Health professionals interested in using the installation at Stanford should contact Lane Library. At the present time, all searches are conducted free of charge.

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Mailed May 16, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- James G. Moore, director of personnel services at St. Mary's Hospital and Medical Center in San Francisco, has been appointed director of personnel at Stanford University Hospital.

The appointment, which becomes effective June 5, was announced today (May 15) by Dr. Thomas A. Gonda, director of Stanford Hospital.

Moore, 39, is a 1958 graduate of the University of Washington. He also did graduate work at Gonzaga University.

He was appointed to his current position at St. Mary's in June of last year. Prior to that, served as personnel director at Sacred Heart Medical Center in Spokane, Washington for 11 years.

Moore replaces Kenneth Dunkle, who resigned in March to become personnel director at Mt. Zion Hospital in San Francisco. In the interim, assistant personnel director William Hoffman has served as acting director of personnel.

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Mailed May 15, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- An infectious duck disease never before reported on the West Coast is responsible for the deaths of ducks and swans at the Palace of Fine Arts lagoon in San Francisco, according to Stanford Medical School veterinarians.

Their deaths most likely resulted from duck virus enteritis, a highly contagious, usually fatal disease caused by herpes-type virus that infects ducks, geese and swans. The ducks infected were Muscovy ducks, a domestic breed, and the disease is potentially most damaging for commercial duck breeders, said the investigators.

Five ducks and a swan were sent to Stanford by Palace of Fine Arts officials when they were found dead two weeks ago. Veterinarians Bret Snyder and Jim Fox analyzed lesions from the birds and then reported their findings to a U.S. Agricultural Department official in Southern California, who confirmed the disease. Although the investigators were 99 per cent sure of their diagnosis, they sent specimens to an East Coast laboratory for federal verification. Several more Muscovy ducks have since died, in addition to other breeds of waterfowl.

The disease was first reported in this country in 1967 in New York where it has since caused extensive damage in domestic ducks. Other cases have occurred in Pennsylvania and Maryland, but this is the first time the duck virus has been reported in this area, noted Snyder.

"It is possible that the disease was brought to the San Francisco area by wild birds who migrated over the Palace of Fine Arts. It is likely that it has been in this state for a little while and that the Palace ducks are not the first case," said Snyder.

The infection does the most damage to domestic ducks who live in closer quarters, explains Snyder. There is no cure for the disease, he added, but there is a vaccine for its prevention, although it has so far only been licensed in New York.

Once the federal authorities have verified the virus they will decide what measures to take. Snyder felt that the vaccine for protection will probably be licensed for use in California.

He added that if the disease becomes widespread, measures taken might be similar to those now in effect for an epidemic of Newcastle's disease in Southern California chickens. There the birds are quarantined to stop movement of the disease, and infected flocks are exterminated.

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Transmitted on Business Wire May 12, 1972.
Mailed May 15, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Dr. Sol Spiegelman, one of the nation's leading cancer researchers, will deliver the first Edwin W. Schultz Memorial Lecture Wednesday, May 17, at Stanford University School of Medicine.

His talk, entitled "Human Cancer and the RNA Tumor Viruses," will begin at 4:15 p.m. in Room M106 at the Medical School.

Dr. Spiegelman, recently appointed to the President's National Cancer Advisory Board, is director of the Institute of Cancer Research and professor of human genetics and development at the College of Physicians and Surgeons of Columbia University.

The author of more than 200 publications on many aspects of human genetics and microbiology, he is currently investigating the possibility that human breast cancer may be caused by a virus. Recently he detected the presence in human breast cancer of RNA homologous to mammary tumor virus RNA in mice.

A native of New York City, Dr. Spiegelman obtained his Ph.D. in cellular physiology from Washington University in St. Louis in 1944. He taught on the faculty at Washington until 1948, when he accepted a U.S. Public Health Service fellowship at the University of Minnesota.

A year later, he joined the faculty at the University of Illinois as professor of microbiology. After 20 years at Illinois, Dr. Spiegelman was appointed to his present position at Columbia in 1969.

The Edwin W. Schultz lectures honor the former chairman of Stanford's Department of Bacteriology and Experimental Pathology (now Medical Microbiology). Dr. Schultz taught at Stanford for 34 years, and served as chairman of his department from 1920 until his retirement in 1953.

A noted researcher in the field of virology, he published pioneering studies of poliomyelitis. He also directed an internationally sponsored medical training project at the University of Indonesia for seven years following his retirement from Stanford.

Dr. Schultz died last year at 83 following a long illness.

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Mailed Friday, May 12, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos or Eve Kaufman 415: 321-5310

Editors: Photos available upon request.

STANFORD -- Hospital nurseries should do everything possible to encourage the interaction of mothers and their premature infants, a Stanford University medical research team has recommended.

The traditional hospital practice of separating the mother and premature infant immediately after birth, for 3 to 12 weeks, has "a negative effect on maternal self confidence." This in turn may influence her subsequent relationship with her child, the researchers said.

Stanford University Hospital has adopted the recommendation and permits mothers to visit their babies in the premature nursery to engage in child care tasks.

Dr. P. Herbert Leiderman, professor of psychiatry, directed the four-year study conducted under the auspices of the Grant Foundation of New York and the National Institute of Child Health and Human Development.

He explained that due to the vulnerability of premature infants--their need for a controlled environment--trained medical personnel have in the past assumed the entire responsibility for fulfilling the child's physiological needs. Mothers have been denied the opportunity to learn and practice child care skills until the health and weight of their infants were adequate to permit transfer from the intensive care nursery to a discharge nursery.

Previous studies on the effects of mother-infant separation focused on the response of the infant rather than the attitudes and behavior of the mother. However, a variety of studies with non-human mammals indicate that a temporary separation "might deleteriously affect the female's subsequent maternal behavior."

The Stanford researchers postulated that the psychological effect of telling a mother that she is unable to provide the care her infant needs would be to lower her self-confidence, and that mothers of first-born would be particularly vulnerable.

The study was based on a modification of the Stanford University Hospital's procedure for the care of premature infants.

A group of 43 mothers--all with infants free of congenital abnormalities, fathers present in the home, and no previous history of premature or low weight births--were randomly divided into two groups. Members of the first group of 21 (the separation group) were able to view their infants through the nursery window, but denied all other contact.

The 22 mothers in the contact group were permitted to enter the intensive care nursery, and were able to interact directly with their infants--handling them, diapering them, and feeding them when the infant was able to suck.

The separation and contact phases of the study were alternated in blocks of 3 to 6 months, so that at any given time all mothers had the same experience, and believed it to be the normal procedure.

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The pilot phase of the research demonstrated that it is possible to "introduce mothers into the premature nursery without clinically endangering the infant or disrupting the organization of care."

In addition to the 43 mothers of premature infants, 24 mothers of full-term babies were studied as a control. An attempt was made to match the group of full-term mothers to the mothers of premature infants with respect to social class, sex of the infant, and number of previous children.

The self-confidence of all mothers was analyzed through questionnaires, interviews, and observations conducted by professionals, from birth until 21 months after the infant was discharged from the hospital. The women were asked to evaluate their abilities to fulfill six care-taking tasks including calming the baby, understanding his wants, showing affection, and the instrumental activities of feeding, diapering, and bathing.

The results substantiated predictions by the research team. Although mothers of premature infants who had other children were not less self-confident even with the separation experience, mothers of first-borns who were premature "felt less capable in the usual care-taking tasks." Self-confidence was higher for those mothers permitted to interact with their infants, but remained critically low for mothers in the separation group.

One month after the infants were discharged from the hospital, the difference in self-confidence between the two groups of mothers with premature infants disappeared. However, Dr. Leiderman emphasized that these mothers all returned to intact family units, which is not likely to be the case for many mothers of premature infants.

He said, "We think the initial low self-esteem sets up a certain kind of vulnerability. At times of stress people tend to revert to earlier learned patterns. Thus, these mothers could become less self-confident and less involved in caring for their infants when experiencing stress.

Observations of the different groups revealed that mothers of premature babies spent less time in close physical relationships with their babies than mothers of full-term infants. The latter smiled and talked to their infants more frequently, exhibiting greater social responsiveness.

Dr. Leiderman said that although no differences were discovered in the physical or psychological progress of the infants involved in the study, the optimal development of a child is dependent on a caring individual who, in this society, is the mother. Any distance produced by virtue of separation in the hospital may lead to relative social barriers between the infant and his primary source of support.

"The significance of the study for the hospital staff," Dr. Leiderman concluded, "is a realization that what we do in the hospital does make a difference in how people relate to one another. Hospital routines must be made to fulfill the needs of people, not the needs of the efficient operations of the mechanical system."

The detailed report of the Stanford research is now in press. Collaborators in the study included Dr. Aimée D. Leifer of the Department of Psychology; Dr. Marjorie J. Seashore and Judith Williams of the Department of Psychiatry; Dr. Clifford R. Barnett of the Departments of Pediatrics and Anthropology; Mrs. Rose Grobstein of the Division of Social Work; and Dr. Marshall Klaus, a pediatrician formerly of Stanford and now at Case Western Reserve University in Cleveland.

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Mailed May 8 , 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5010

STANFORD -- Dean Clayton Rich of the Stanford University School of Medicine, Friday (May 5) said he is prepared to recommend the addition of beds to Stanford University Hospital for leasing by the Palo Alto Medical Clinic.

At the same time, the dean said, he will recommend that the University lease land in the immediate vicinity of Stanford University Hospital so that the Palo Alto Medical Clinic can be relocated.

"This would give you access to beds at a predetermined and reasonable cost, and a clinic located in close proximity to the hospital, both of which you would need in order to have a hospital-based prepaid group practice," Dr. Rich proposed.

The Medical School plan which, if accepted, will require approval by the University Board of Trustees, was contained in a letter to Dr. Robert Jamplis, executive director of the Palo Alto Medical Clinic.

Dr. Rich said he considered the Medical School proposal "vastly more satisfactory" than an earlier Palo Alto Clinic plan to build a proprietary hospital and clinic at some distant location.

"By adding beds to Stanford rather than building a new hospital, we would avoid duplication of very expensive facilities and equipment and dissipating highly specialized personnel into two institutions," the dean wrote.

He added: "I believe that the quality of services and care provided to patients and the efficiency of operation would be strengthened by continuing to have the Stanford Hospital serve the entire community."

Dr. Rich said that at a meeting of the Medical School's executive committee April 7, "there was a positive opinion" for the proposed plan. "This was based on the high regard we have for the quality of medical practice and the contribution to medical education" that the Clinic staff makes to Stanford students, he said.

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There was also strong concern that the construction of a second hospital in Palo Alto would cause unnecessary and undesirable duplication of very complex and expensive medical resources, Dr. Rich said.

The dean said the University and the community would be served better by one hospital which is outstanding rather than two hospitals, possibly both underutilized.

Stanford has all of the necessary hospital support facilities in operation, and a construction project will be shortly underway to improve laboratory facilities and to add 26 intensive-care beds to the hospital.

"It would be appropriate for us to extend this project by adding those facilities which would be necessary to meet your (Clinic) needs," Dr. Rich said.

The dean said that a request made by the Clinic on March 9 asking that land be leased at some distance from the Medical Center for construction of a proprietary hospital was also discussed by the executive committee. "There was much less enthusiasm for this proposal," Dr. Rich said.

If a separate hospital is the only possible course for the Palo Alto Medical Clinic, Dr. Rich said he would have to discuss the issue further with the faculty, particularly the question of land being used for this purpose.

"I do not reject this other possibility," Dr. Rich said, "but we would need your response to our offer before pursuing it further."

The Palo Alto Medical Clinic announced last fall that it would proceed with plans for a new hospital, separate from the Palo Alto Medical Research Foundation which had planned "a hospital of the future." The location of that hospital was rejected by Palo Altans at a city election two years ago.

Since then the Clinic had signed a contract with American Medicorp, Inc. which would have built and operated its proposed hospital after a site search and feasibility studies.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

EDITORS: ADVANCE FOR PM RELEASE ON FRIDAY, MAY 5

STANFORD -- Does your doctor smoke pot?

If he's under 35 and lives in a large metropolitan area like San Francisco or New York, there's a good chance that he does, according to a survey conducted by two psychiatrists at Stanford University School of Medicine.

A significant number of practicing physicians have used marijuana, the researchers found. Results showed that of 1,314 doctors surveyed, 25 per cent had smoked marijuana in the past and 7 per cent called themselves current users.

Previous marijuana use ranged as high as 57 per cent among San Francisco Bay Area physicians under 35, to as low as 1 per cent among Nebraska physicians over 45.

The researchers, Drs. Martin R. Lipp and Samuel G. Benson, both residents in psychiatry at Stanford, reported their findings today (May 5) at the annual meeting of the American Psychiatric Association in Dallas, Texas.

The survey responses were obtained through questionnaires mailed and retrieved a year ago by the Department of Survey Research of the American Medical Association. Physicians in the study were chosen randomly from A.M.A. rosters in New York City, Upstate New York, Nebraska, and the San Francisco Bay Area. In all, 1,314 of 2,652 mailed questionnaires were returned.

Lipp and Benson emphasized that their data showed marijuana use is "very much a cultural issue, even among physicians.

"People in the health professions are creatures of our time," they said, "perhaps no more or less able to resist social phenomena than their neighbors and patients."

The discovery that a large number of doctors have used or currently use marijuana has special significance for the medical profession, Lipp and Benson noted.

"We can't simply call all marijuana users stupid or immature or crazy," they said. "Physicians must soon come to grips with the fact of marijuana use among themselves and cease talkingabout it as something that happens only to adolescents and patients.

"If medical authorities can't convince physicians to refrain from trying or using marijuana, convincing the public at large seems unlikely."

Of the 1,314 physician-respondents, 37 per cent had been exposed to marijuana (in a room or at an event where the drug was being used).

Usage of the drug varied according to age and geographical area.

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"In general, the younger age groups are more likely to have tried marijuana in the past and to be using it currently," the authors said. "The San Francisco Bay and New York City areas show considerably greater use than do Nebraska and Upstate New York."

In the San Francisco area, 27 per cent of the physicians under 35 classified themselves as current users of marijuana and another 30 per cent had smoked it in the past. In New York City, 19 per cent under 35 were current users and another 21 per cent had past experience.

Meanwhile, only 1 per cent of physicians over 45 in Nebraska and 3 per cent in Upstate New York had any experience with marijuana.

The same four geographic areas had previously been surveyed by Lipp, Benson, and four other scientists in 1970 to obtain similar data from medical students. That study revealed that half of the 1,063 responding medical students had smoked marijuana and 30 per cent were current users.

The physicians in the most recent survey also provided information about alcohol and cigarette use. Only 8 per cent overall were non-drinkers, and 21 per cent currently smoked cigarettes.

The physician-respondents' medical opinion correlated with their marijuana experience and exposure. The most popular opinion (40 per cent) indicated marijuana was "relatively harmless in milder forms; should be graded according to strength and subjected to controls accordingly."

Professional reading was the most popular source of information for the doctors in forming their opinions about marijuana.

The research was supported in part by the Commonwealth Fund of New York.

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END ADVANCE FOR RELEASE MAY 5.

Mailed May 2, 1972.
Business Wire May 5, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A pharmacologist from Stanford University Medical School called for the removal of lead from all gasolines today (May 4) in testimony before the Environmental Protection Agency (EPA).

"I strongly urge that lead be removed swiftly from all possible pollutants, including leaded gasoline, insecticides, additives for marine paints and other anti-fouling compounds," said Dr. Sumner Kalman, professor of pharmacology at Stanford. He made his remarks before an EPA hearing in Los Angeles on the issue of lead use in gasolines.

"Lead is a poisonous, persistent substance that we continue to deposit as an almost eternal film upon the earth and as particulate matter into the atmosphere," he said. "There is no simple way to clean it up. But we can stop putting it into the air by taking it out of gasoline."

Kalman emphasized the dangers of the current high levels of lead concentration in the air.

"Certain groups are placed unduly at risk as the amount of lead in the air continues to increase," he said. "These groups include the very young, and those with certain inherited metabolic diseases that might make them more sensitive to lead."

Lead-polluted air, he said, is implicated in lead poisoning in children, abnormal kidney function, and metabolic variances. These metabolic disturbances, particularly in the one to two million people in the United States with inherited metabolic disorders, can lead to harmful effects on the red blood cells.

Kalman also pointed toward the dangers of increased concentrations of lead which have recently been found in forage grass, especially near highways. He predicted that this will lead to toxicity among cattle and horses, and called for analyses of lead content in meat from grazing cattle.

Noting a "new dimension" of the problem, he said scientists have shown that levels of organic lead in sea water have increased, "endangering the survival of various so-called lower forms, in addition to ourselves."

Kalman testified on behalf of the Environmental Defense Fund, a national environmental group with local offices in Berkeley.

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Mailed May 4, 1972.
Business Wire 5/4/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: The full text of the PWSMS proposal and statement are available, if not included with story.

STANFORD -- Creation of an Office of Women's Affairs has been proposed by an organization of professional women at the Stanford University School of Medicine.

The new office would offer assistance to women to increase their contributions and improve their career opportunities. It would deal with problems affecting women in all branches of the health sciences, including women physicians and researchers, nurses, social workers, and physical therapists.

The proposal was submitted to Dean Clayton Rich, Wednesday (May 3) by the Professional Women of Stanford Medical School (PWSMS). This is an organization mainly composed of women M.D.'s and Ph.D.'s formed three years ago "to promote development of opportunities for women in the medical sciences."

Presently the Medical School operates an office devoted to development of career opportunities for women in medicine under the auspices of the Macy Foundation of New York.

"The Macy Office carries out part of the work we envision for the Office of Women's Affairs, but greater scope is needed," the PWSMS proposal stated. It added there was a need for an expansion of the role of the Office and a mechanism for continued function after the termination of Macy funding.

According to the document, the expanded functions of the Office of Women's Affairs would include counseling, recruiting of students and faculty, arranging for part-time work or study, and making possible a bigger role for women in medical affairs. The Office would also participate in a promotion review now under way at the Medical School, affecting many women in non-faculty positions.

The office, the proposal states, would be headed by a woman M.D. or Ph.D., appointed by a committee of faculty, administration, students and PWSMS. She would be assisted by an administrative assistant and a secretary.

In a prepared public statement Thursday, Drs. Ann Taylor and Dora Goldstein, PWSMS council members, suggested that a small part of the $5-million McCormick bequest to the Medical School might be an appropriate source of funding the new office. (The gift was made in 1969 by the late Mrs. Katharine Dexter McCormick in memory of her husband.)

The bequest, they said, contained the donor's wish that the money be used for the encouragement and assistance of women pursuing the study of medicine and engaging in medical research.

"Although the bequest indicated that 'needs and welfare of the School of Medicine' should be taken into account, many people believe that the donor intended the money to be used to bring about change in the status of women in the medical sciences," Drs. Taylor and Goldstein said.

"McCormick funds have been used to pay salaries of women already at the Medical School and the School of Nursing," their statement said, "yet no innovative programs have resulted from this bequest."

Dean Rich said he would study the PWSMS proposal and other recommendations and will make an appropriate response.

The dean commented that the Medical School had made substantial progress in the past two years in increasing opportunities for women to enter medical school. As a result of various faculty efforts, he said, the number of women in the entering class was increased from 9 per cent to 21 per cent last fall. Under Macy auspices, the Medical School has established a program of flexible internships and residencies for women.

At the same time, a joint committee of the School's Faculty Senate which included professional women had campaigned nationally and locally to increase the number of women. As a result, more women have been added to the medical faculty. ###

Mailed May 4, 1972.

STANFORD UNIVERSITY NEWS SERVICE
STANFORD, CALIFORNIA 94305
(415) 321-2300, Ext. 2558
Southern California office: (213) 627-0653

FOR INFORMATION CONTACT: Stanley Wilson

FOR IMMEDIATE RELEASE

STANFORD--

A new master of science degree program in Health Services Administration (HSA), perhaps the first of its type in the U.S. involving such a variety of disciplines, has been approved without dissent by the Faculty Senate at Stanford.

The interdisciplinary program will include the Schools of Medicine, Business, Engineering, and Humanities and Sciences. It will lead to a second graduate degree, a master of science, granted by the Department of Community and Preventive Medicine, for students already enrolled in other graduate curricula at Stanford.

The first class of 25 students is expected to begin study in Autumn Quarter 1973. Participants will be required to complete the HSA degree requirements in three academic quarters or less, depending upon previous course work, plus a three-month practicum at a health organization.

Program co-directors Count D. Gibson Jr., Department of Community and Preventive Medicine, and Nicholas Baloff, associate professor of business administration, believe it will help relieve the acute shortage of highly qualified professionals capable of assuming administrative roles in the newly emerging, sophisticated health delivery organizations proposed by President Nixon and members of Congress to combat the current national crisis in health care.

Financial assistance to developing and implementing the program is being sought from the Department of Health, Education and Welfare's National Center for Health Services Research and Development.

Baloff and Gibson foresee that the new specialty will fill the demand for administrators who are well versed not only in managerial concepts and techniques, but who also have an understanding of the sociological, "people" problems inherent in the new health organizations. The new program also is expected to provide a solid grasp of the practical applications of health systems research in day-to-day decision making.

The directors explain that through the multi-discipline environment provided by the HSA program, students will have the opportunity for the first time to follow a unified course of study in health services administration which draws on the increasing commitment by individuals within the cooperating schools to health systems research and the campus-wide movement by faculty and students toward socially involved, mission-oriented programs.

Gibson pointed out that the multitude of emerging health delivery organizations will have a mandate to provide a broader range of services than hospitals have traditionally delivered.

"The hospitals, with their orientation toward acute care, have been at one end of the health delivery spectrum," he said. "However, the health care system is also concerned with keeping people healthy and out of the hospital through preventive and ambulatory care.

"It is also concerned with making policy and planning on local, regional and national levels to meet the health needs of defined populations of people throughout the country." Therefore, an attempt is being made to educate men and women who can creatively manage all the resources available to them.

(more)

5/2/72 gr

Baloff noted that a graduate of the program would be qualified to work in health maintenance organizations, health care centers, preventive medicine, drug abuse centers, medical society foundations, hospitals, medical clinics, mental health facilities, and in governmental agencies such as HEW.

Providing specific examples of career paths for HSA graduates, Baloff said that a student with an engineering background would be qualified to bring his technical skills to the public sector, planning, designing and administering new health care systems.

The student from H&S would also bring his expertise to the health care field, initiating new programs and assessing the health care needs of a specific sector.

Dr. Clayton Rich, dean of the School of Medicine, agrees that "the need for well trained, research-oriented administrators with a variety of interdisciplinary backgrounds. . .will be very great in the next decade."

"The proposed program," Rich said, "could fill a niche not filled by schools of hospital administration and serve as a nucleus for very exciting research endeavors involving the different schools, the hospital, and medical agencies in the surrounding communities."

Arjay Miller, dean of the Graduate School of Business, said "one of the principal strengths of the program is its interdisciplinary nature For health services administration, with its broad social and technological implications, it is important that the schools of medicine and business be joined by humanities and sciences and engineering."

Miller also sees his school's participation as "an important extension of the Business School's activities in public sector management."

Closely associated with HSA from its earliest conceptual stages are Business Prof. John Moore and Medical Prof. John C. Hershey.

During the past two and one-half years, Baloff and Gibson have jointly headed a team of researchers from the Business and Medical Schools who are developing a management information system to provide health administrators, regional health planners, and federal policy makers with practical information with which decisions about operating health facilities, planning future health care needs and evaluating quality of health care delivery can be made.

Currently they are testing their management information system at a small community-owned and controlled health center in Livingston, San Joaquin County. After a successful demonstration there, the system is expected to become a model for health care centers around the country.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Paul B. Hofmann, associate administrator of San Antonio Community Hospital in Upland, Calif., has been appointed deputy director of Stanford University Hospital.

The announcement was made today (May 2) by Dr. Thomas A. Gonda, director of the Hospital.

The appointment, which followed a nationwide search of several months, becomes effective June 1.

Hofmann, 30, has been at San Antonio Hospital for three years. After serving a year as assistant administrator, he was promoted to associate administrator of the hospital in July of 1970. For the past two years he has also served on the faculty of the UCLA School of Public Health as a lecturer in hospital administration.

An expert in the applications of computer technology in hospitals, Hofmann has published nine articles in professional hospital journals over the past four years.

He received his B.S. in 1963 and his Master of Public Health degree in 1965 from the University of California in Berkeley. After further administrative training, he was assistant director of the Laboratory of Computer Science at Massachusetts General Hospital and instructor in computer applications at the Harvard School of Public Health before joining the staff at San Antonio.

The position of deputy director at Stanford has been vacant since July of last year, when Frank R. Vitale resigned to accept a partnership with a national hospital consulting firm.

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Mailed May 2, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Lawrence G. Crowley, professor of surgery at Stanford University School of Medicine, has been appointed associate dean for planning, Dean Clayton Rich announced today (June 28).

Dr. Crowley's appointment to the newly established position becomes effective July 1. He will have responsibility for coordinating the short- and long-range planning efforts of the Medical School, both in academic activities and in the development of new facilities.

Currently chief of surgery at the Palo Alto Veterans Administration Hospital, he has been instrumental in developing an effective clinical teaching service at the V.A. Hospital.

Dr. Crowley came to Stanford in 1964 as associate professor of surgery. He has done extensive research on breast cancer and the biochemistry of human tumors.

A native of Newark, New Jersey, he received both his B.A. (1941) and M.D. (1944) degrees from Yale University. After serving his internship and residency at New Haven Hospital, he taught on the faculty at Yale for two years.

Prior to his appointment at Stanford, he was in private surgical practice and was attending surgeon at the Los Angeles County General Hospital and Pomona Valley Hospital.

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Mailed June 28, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Two faculty members and a former member of the Division of Physical Therapy at Stanford University School of Medicine were honored recently at the annual conference of the American Physical Therapy Association (APTA) in Las Vegas.

Lucille Daniels, associate professor of physical therapy, received the Mary McMillan Lecture Award for 1973. The award, named after the first president of the APTA, is one of the highest honors for physical therapists. Miss Daniels will deliver the ninth annual lecture at next year's APTA conference in Houston.

Miss Daniels was director of the Division of Physical Therapy for 25 years, beginning in 1946. In 1971 she relinquished her administrative responsibilities to have more time for teaching and research.

Barbara Kent, assistant professor of physical therapy, was presented the Golden Pen Award for an outstanding contribution to Physical Therapy: Journal of the APTA. Her article, "Functional Anatomy of the Shoulder," appeared in the August, 1971 issue.

The division's first director, Dr. Catherine Worthingham, was given honorary membership in the APTA, of which she is a past president. Dr. Worthingham was head of the Physical Therapy Division from its establishment in 1941 to 1945. She was subsequently director of professional education for the National Foundation (March of Dimes). Now she is retired and lives in Connecticut.

Dr. Worthingham has been at Stanford to work with Miss Daniels on the third edition of a textbook they co-authored. The book, Muscle Testing, is a standard physical therapy text throughout the world.

The Division of Physical Therapy is part of the Medical School's allied sciences program. Its training program for physical therapists leads to a master's degree after two years. Students can specialize in physical therapy administration, teaching, community health or pediatrics. Research in the division centers around muscle function and testing.

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Mailed June 26, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos or Gary Cavalli 415: 321-5310

STANFORD -- Dr. Kendric C. Smith of Stanford University has been elected president of the newly formed American Society for Photobiology.

The new society was founded by the committee on photobiology of the National Academy of Sciences, National Research Council.

Dr. Smith, a biochemist in the department of radiology of the Stanford University School of Medicine, is a leading expert in the field of photobiology which deals with the chemical and biological effects of light.

Other society officers include Dr. Angelo A. Lamola of Bell Telephone Laboratories, Murray Hill, New Jersey, vice-president; Dr. Edwin W. Abrahamson of the department of chemistry, Case Western Reserve University, Cleveland, secretary; and Dr. Leo Preston Vernon, director of research at the Brigham Young University, Provo, Utah, treasurer.

Dr. Smith said that solar radiation is probably the most important element in our environment and yet, perhaps because of its ubiquity, the wide scope of its chemical and biological effects is often not fully appreciated.

"Research has been performed on the effects on man of other environmental factors such as temperature and pressure, yet very little research has been performed on the effects of light (beneficial and detrimental) on man and his environment," he said.

The American Society for Photobiology plans to take an active role in educating society in general about the unique properties of light, Dr. Smith continued. It also plans to make available information on the photobiological and photochemical aspects of national and international problems.

The Stanford biochemist described several national problems whose solutions will depend on accurate photobiological information. Examples included:

. the possible damage of the ozone layer of the earth's atmosphere by supersonic transport aircraft and the consequences of increased ultraviolet radiation to man and the environment.

. development of more effective methods for using visible light irradiation for treatment of premature babies with congenital jaundice.

. the effects of pesticides on man. Only recently has the question been raised as to the toxicity of pesticide molecules that have been altered photochemically by sunlight.

Photobiology is currently subdivided into several specialized research areas. They are bioluminescence, chronobiology, environmental photobiology, medicine, photochemistry, photomorphogenesis, photomovement, photoperception, photosensitization, photosynthesis, phototechnology, spectroscopy, ultraviolet radiation effects, and vision.

"One goal of the new society," Dr. Smith said, "is to provide a basis for communication, that is presently lacking, between scientists in these different areas of photobiology through annual scientific meetings and publications."

The Society will hold its first scientific meeting at Sarasota, Florida June 11 through 14, 1973, on the theme of Light and the Quality of the Environment.

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Mailed June 26, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A 53-year-old Massachusetts man became the 45th heart transplant patient at Stanford University Hospital last night (June 21). He is now listed in fair condition.

The operation was performed by a team of surgeons headed by Dr. Norman E. Shumway.

The patient has been suffering from coronary artery disease. In accordance with Hospital policy, his name and the name of the donor will be withheld.

Including the new recipient, 17 of the 45 heart transplant patients operated on at Stanford Hospital are now living.

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Business Wire 6/22/72

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau * Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- An increase in daily room rates beginning June 25 was announced Thursday (June 21) by Stanford University Hospital.

For community patients the daily room rates will now be $69 for medical and surgical wards. Semi-private rooms will be $75 and private rooms $84.50.

This represents an increase of $4.50 for ward and semi-private rates, and $5 for private rooms. A year ago there was an overall increase of about four dollars in daily rates, and the year before there was a flat $5.50 increase.

Obstetrical ward rooms will now be $70.50 daily, with nursery rooms $49.50. Coronary care units will be $195 daily.

The new rates represent an overall increase of 5.5 per cent, which falls under the 6 per cent Price Commission guideline, hospital officials pointed out.

The increase in rates was attributed by Hospital Director Dr. Thomas A. Gonda to the continuing rise in the cost of wages for personnel and materials.

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Mailed June 21, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- A tiny infant flown to Stanford University Hospital Tuesday (June 20) from Montana, is stable and in satisfactory condition, doctors report today.

Jason Scruggs, a one-month-old premature baby from Great Falls, Montana, was raced to the Hospital's newborn intensive care unit by ambulance after an Air Force jet brought him to Moffett Field.

He has lung disease and is being treated for a possible lung infection, according to Dr. Birt Harvey, clinical assistant professor of medicine at Stanford.

The infant, who weighs 4 pounds 12 ounces, had hyaline membrane disease when he was born. This respiratory difficulty seemed to have cleared up, but it is conceivable that the infant's current problems are complications of that earlier disease, explained Dr. Harvey. He said that the infant also has a heart problem, but that too may clear when his lungs are better.

Dr. Harvey, a specialist in pediatric chest problems, became involved in Jason's case when he was called by a relative of the Scruggs family to ask if Stanford could help the baby. Monday night the infant's physician in Great Falls called to say Jason's condition seemed critical.

An Air Force "med-evac"plane, which is part of the Military Airlift Command, was made available from Scott Air Force Base near St. Louis. The medical plane, specially equipped with an incubator, flew to Montana to pick up the infant and his parents, Donald and Pamela Scruggs.

Members of the Stanford infant transport team met the plane at Moffett Field, where they transferred Jason to an infant transporter and waiting ambulance.

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Business Wire 6/21/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD --- Twenty-nine Spanish speaking employees of Stanford University Hospital were honored for their English language skills at a banquet Sunday evening, June 17.

Dr. Thomas Gonda, Hospital director, awarded them certificates for completing English language classes. He made the presentation in ceremonies at La Fonda restaurant in San Jose.

The courses are provided for employees as part of the Hospital's work-study program, headed by Tony Rodriguez. The program was launched last year to coordinate staff education and training.

Conversational English classes are offered to employees who want to improve their language abilities so they can take advantage of more advanced training opportunities. For the most part, schooling is conducted on the Hospital premises and employees are paid for the time they spend in the classroom.

Recipients of certificates were:

From Palo Alto: Prudencio de la Cruz, Dietary; Romulo Alvarez, Housekeeping; Eduardo Begines, Housekeeping; Felipe Cornelio, Dietary; Ruben Hernandez, Housekeeping; Jose Rivero, Dietary; Eliseo Aguilar, Dietary; Josephine Garza, Personnel; Carlos Gimenez, Messenger Service; Luz Gonzales, Psychiatry; Refugio Guzman, Dietary.

From Redwood City Rigoberto Alvarez, Dietary; Carolina Ortiz, Housekeeping; Jose Lopez Villacorta, Housekeeping; Jose Luis Diaz, Housekeeping; Rosa de la Peña, Dietary; Mario Perez, Dietary; Ester Ponce, Housekeeping; Ymelda Torres, Housekeeping; Maria Villicaña, Housekeeping; Rigoberto Arreola, Housekeeping; Thomas Boukaka, Laboratory Animal Medicine; Aurora Sosa, Housekeeping; Vilandre Volcinus, Housekeeping; Carmen Medina, Housekeeping.

From San Jose ---David Zacarias, Housekeeping; Jose M. Zacarias, Housekeeping.

From San Francisco---Clarita M. Ignacio, Surgery.

From Atherton ---Cirenio Sosa, Housekeeping.

In addition, the work-study program presented four special certificates for outstanding contributions to Carol Hayes, director of Dietetics; Ernest Hultman, executive housekeeper; and instructors Kathleen Colyer and Mitchell Hall. Rodriguez also thanked Dr. Gonda and Donald Utt, associate director, for their cooperation and support of the courses.

Photos available on request.

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Mailed June 21, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

ADVANCE FOR PM RELEASE ON THURSDAY, JUNE 22

STANFORD -- Dr. Luigi L. Cavalli-Sforza, professor of genetics at Stanford University School of Medicine, today (June 22) was awarded the Thomas Henry Huxley Medal from the Royal Anthropological Institute of Great Britain and Ireland.

The medal is awarded annually to a scientist distinguished in any field of anthropological research.

Dr. Cavalli-Sforza was honored for his contributions in genetics research, particularly his work in human population genetics.

His research has focused on the role of chance in determining human evolution, and the development of models and methods for the study of evolutionary relationships between different human populations. He recently co-authored a book with Dr. Walter Bodmer, formerly of Stanford, The Genetics of Human Populations, published by W. H. Freeman.

He is also noted for his work in bacterial genetics which laid the foundation for a better understanding of the genetics of drug resistance in bacteria.

A native of Genoa, Dr. Cavalli-Sforza received the M.D. degree with honors from the University of Pavia in 1944. He was a research fellow and assistant in genetics at the University of Cambridge from 1948-50, and studied at the University of Wisconsin as a Rockefeller Fellow in 1954.

After seven years as director of research in microbiology at the Istituto Sieroterapico Milanese, he was appointed professor of genetics at the University of Pavia in 1958.

Prior to his appointment to his present position in February of 1971, Dr. Cavalli-Sforza was a visiting professor at Stanford on several occasions.

The Huxley Medal was established in 1900 in memory of Thomas Henry Huxley, famous English biologist who died in 1895.

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END ADVANCE FOR PM RELEASE ON THURSDAY, JUNE 22

Mailed June 19, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A 48-year-old California man became the 44th heart transplant recipient at Stanford University Hospital Saturday (June 10). He is listed in satsifactory condition.

The operation was performed by a team of surgeons headed by Dr. Norman E. Shumway.

Hospital policy has been to withhold names of heart transplant patients if they so request. In this case, the patient requested anonymity.

Including the new recipient, 16 of the 44 heart transplant patients operated on at Stanford University Hospital are now living.

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Business Wire June 13, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dean Clayton Rich of the Stanford University School of Medicine today (June 12) appointed three new associate deans to coordinate the School's community-related academic programs.

They are Dr. R. Morton Manson of San Jose; Dr. Franklin G. Ebaugh, Jr. of Salt Lake City, Utah; and Dr. Edward Rubenstein of San Mateo.

Dr. Rich said the appointments reflect "a recognition of the central role of community-based programs in the education of future physicians at Stanford."

Dr. Manson will coordinate academic activities of the Medical School at the Santa Clara Valley Medical Center (SCVMC). The Center, which signed a formal affiliation agreement with Stanford -- recently, provides a teaching environment and services for medical students and residents. Dr. Manson's appointment becomes effective September 1.

Dr. Ebaugh will take up his new duties July 1. He will coordinate Stanford's programs at the Palo Alto Veterans Administration Hospital and will serve as chief of staff, senior attending physician and clinical professor of medicine. An important portion of Stanford's teaching and research program is carried out at the VA Hospital staffed by full-time faculty members.

Effective immediately, Dr. Rubenstein will become an associate dean for postgraduate education. He will direct development of lifelong education programs for physicians in practice.

A 1945 alumnus of the Stanford medical school, Dr. Manson is currently director of SCVMC's clinical services, and an assistant director of the Department of Medical Institutions of Santa Clara County. The 53-year-old internist has also served as a clinical assistant professor of medicine, and has been instrumental in the development of clinical teaching and faculty development programs at SCVMC.

Dr. Ebaugh, 50, is a native of Philadelphia. He is former dean of Boston University School of Medicine, and University of Utah School of Medicine. He is currently a professor of medicine specializing in hematology, and chairman of the VA dean's committee at Salt Lake City. He is graduate of Dartmouth College, and holds a medical degree from Cornell Medical College. He was also associate director of laboratories of the Hitchcock Clinic and Mary Hitchcock Hospital and an associate professor of clinical pathology at Dartmouth Medical School from 1955 to 1964.

Dr. Rubeinstein, 48, is a lecturer and clinical professor of medicine, and served as chief of Stanford's medical service at San Mateo County General Hospital from 1960 to 1970. He was born in Cincinnati and was graduated from the College of Medicine in 1947. He is author of the texbook, "Intensive Medical Care." As chairman of Stanford's postgraduate medical education committee, Dr. Rubenstein developed a decentralized education program for physicians in practice, using area community hospitals as centers for teaching. Another effort under way is a Back-to Medical School program. It permits physicians to keep up with medical advances by re-entering Stanford medical school and "graduating" a second time.

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Mailed June 12, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Eight graduating students and 15 faculty members were honored at the annual convocation of Stanford University School of Medicine Sunday evening (June 11).

Diplomas were presented to 75 medical graduates, 7 women and 68 men. Another 43 graduates received advanced degrees in the basic medical sciences.

Master's degrees went to 20 graduates, including 11 women and 9 men. Doctoral degrees were presented to 3 women and 20 men. The School of Nursing awarded diplomas to 26 women.

F. Wells Shoemaker, Jr. received the Robert H. Alway Book Award, given to the "student in the graduating class who has best availed himself of the unique opportunities afforded by Stanford's five-year plan." It is named in honor of Dr. Alway, dean of the School of Medicine from 1958 to 1964.

The Robert deMailly Award was awarded to Bruce Wermuth. Established in memory of Dr. deMailly in 1957, it is presented to the "senior medical student who has distinguished himself in gynecology and obstetrics."

William Mitchell won the Harold K. Faber Award for "his outstanding accomplishment as a student of pediatrics and his potential as a contributor to child health." The award was established in 1964 by the pediatrics faculty to honor Dr. Faber, professor emeritus of pediatrics.

Recipient of the Robert J. Glaser Book Award was Dennis McShane. The award is presented in "recognition of Dr. Glaser's contributions as dean of the School of Medicine (1964 to 1970) to a graduate who had displayed outstanding characteristics of leadership."

Carol Portlock was presented the Janet M. Glasgow Memorial Award of the American Medical Women's Association which is given to "the senior woman medical student considered by her school to be outstanding in her class."

The L.A. and Marion S. Hopkins Award to the outstanding senior medical student in dermatology was presented to Gary Feldman.

John Vierling, "who has distinguished himself in the field of infectious disease," received the Lowell A. Rantz Memorial Award, established in 1967 to honor the memory of Dr. Rantz, professor of medicine. Vierling also won the Robert M. Shelton Memorial Award of the Stanford Medical Alumni Association.

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Graduation

Mary Alice Helikson was awarded the Upjohn Achievement Award for "outstanding clinical performance."

Four faculty members, two in the basic sciences and two in the clinical sciences, won the Henry J. Kaiser Award for excellence in teaching. They were: Drs. Robert Archibald, visiting assistant professor of pathology; Gerald Levine, assistant professor of pathology; Roy Maffly, professor of medicine and Stanley Schrier, associate professor of medicine.

Ten other faculty members received honorable mention. They included: Drs. Paul Berg, Jack, Lulu and Sam Willson Professor of Biochemistry; Robert Lehman, professor of biochemistry; Gerald Reaven, professor of medicine; Eugene Robin, professor of medicine, and Maureen Sass, instructor in anatomy. Also Drs. John Frenster, assistant professor of medicine; John Johnson, assistant professor of pediatrics; Halsted Holman, Berthold and Belle N. Guggenhime Professor of Medicine; R. Naomi Remen, assistant professor of pediatrics and Paul Wolf, associate professor of pathology.

The awards were presented by Grace Ringressy, professor and director of the School of Nursing, and Dr. Clayton Rich, dean of the School of Medicine.

Representing the senior class, Paul Rutala presented the Arthur L. Bloomfield Award for excellence in teaching of clinical medicine to Dr. Ernest Lowe, associate professor of gynecology and obstetrics.

The main address was delivered by Dr. LeRoy Pesch, a former associate dean of the School of Medicine, and currently president of Michael Reese Hospital and Medical Center, Chicago.

Award winners and their parents' addresses are listed below:

CALIFORNIA	William Mitchell, son of Mr. and Mrs. Roy F. Mitchell, 152 Alderbrook Dr., Santa Rosa 95405;
	Carol Portlock, daughter of Warren E. Swanson, 8040 W. 83rd, Playa del Rey and Mrs. Joan S. Redlich, 673 Georgetown Ct., Sunnyvale;
	John Vierling, son of Mr. and Mrs. Lester H. Vierling, 439 Catalina Dr., Newport Beach;
ILLINOIS	Dennis McShane, son of Mr. and Mrs. James McShane, 734 Suffolk, Westchester;
NEW JERSEY	Bruce Wermuth, son of Mr. and Mrs. Walter M. Wermuth, 30 Valley View Rd, Verona 07044;
OREGON	Mary Alice Helikson, daughter of Mr. and Mrs. Dale Helikson, 720 E. 2nd, Oakridge;
PENNSYLVANIA	Gary Feldman, son of Mr. and Mrs. Dan Feldman, 3323 Shady Ave Ext. Pittsburgh 15217;
	F. Wells Shoemaker, son of Mr. and Mrs. F. Wells Shoemaker, R.D. #4, Carlisle 17013.

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Mailed June 12, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Irving Schulman, an internationally known expert in blood diseases of children, has been appointed professor and chairman of the department of pediatrics at the Stanford University School of Medicine.

Dr. Schulman has been professor and head of the department of pediatrics at the University of Illinois College of Medicine in Chicago since 1961.

His appointment, announced Monday, (June 12) by Dean Clayton Rich, will be effective September 1. Dr. Schulman will succeed Dr. Robert H. Alway, professor of pediatrics, who served in an acting capacity during the year-long search for a new chairman.

The 49-year-old pediatrician was born in New York City. He attended public schools there and received the B.A. from New York University in 1942, and the M.D. from New York University College of Medicine in 1945.

Dr. Schulman said one of his challenges at Stanford will be to identify the needs of children who require specialized care in Northern California, but who are not getting it. Another need will be to increase programs for prenatal diagnosis.

The largest cause of mortality in children after accidents is malignant disease, he explained. Birth defects, developmental aberrations, and disorders of the immune system also represent significant problems. "There is a whole spectrum of hereditary defects which require study, understanding, amelioration and prevention," the pediatrician said.

Dr. Schulman emphasized he looks forward to developing closer ties with the Children's Hospital at Stanford. "This step is highly desirable and will be of mutual benefit to both institutions and the children who will be treated there," he said.

Although it has excellent facilities and is located nearby, this hospital is not utilized fully for teaching by the Medical School.

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Dr. Irving Schulman

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Dr. Schulman's research is in coagulation physiology and hemorrhagic diseases such as hemophilia. He is currently investigating the basic cause of the excessive tendency of some newborn babies to bleed, and its relationship to mental retardation. Specifically, the work deals with one of the smallest and lightest elements in the blood called platelets, which are essential for the clotting process. Platelet function is defective in some newborn babies. Finding out why has implications for preventing bleeding in newborn babies, and thromboembolic disease in adults, he believes.

Dr. Schulman interned at Queens General Hospital in New York City, and completed his residency in pediatrics at Bellevue Hospital in 1949. He served as a U.S. Public Health Service postdoctoral fellow in pediatrics at Cornell University Medical Center, and joined the faculty there in 1952. In 1958 he was appointed associate professor of pediatrics at Northwestern University Medical School, and in 1960 he was promoted to professor.

He is the author of nearly 80 papers in his field, contributor to three medical textbooks, and editor-in-chief of an annual volume titled Advances in Pediatrics.

In 1960 he won the Mead Johnson Award for Pediatric Research, and in 1968 the John F. Kennedy Award for distinguished service to children from Georgetown University. He also won awards for outstanding teaching by the junior class of the University of Illinois College of Medicine in 1963 and 1970. This year he received the University of Illinois College of Medicine Distinguished Faculty Award.

Dr. Schulman is a diplomate of the American Board of Pediatrics, a fellow of the American Academy of Pediatrics, and a member of the Society of Pediatric Research, American and International Societies of Hematology and American Society for Clinical Investigation among others.

Dr. and Mrs. Schulman have two children, a son 12-1/2 and a daughter, 16. Mrs. Schulman, a Cornell University graduate, is presently a librarian at Hadley School for the Blind at Winnetka, Illinois. The Schulmans plan to live on the Stanford campus.

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Mailed June 12, 1972.

NOTICE TO STANFORD EMPLOYEES:

SUPERVISORY PERSONNEL WHOSE OFFICES ARE IN ENCINA HALL WERE ASKED BY VICE PRESIDENT ROBERT R. AUGSBURGER TO REPORT FOR WORK AS USUAL THURSDAY, JUNE 8.

ALL OTHER EMPLOYEES IN ENCINA WERE ASKED TO REMAIN ON CALL THURSDAY. THEIR PAY WILL CONTINUE.

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STANFORD UNIVERSITY NEWS SERVICE

STANFORD, CALIFORNIA 94305
(415) 321-2300, Ext. 2558
Southern California office: (213) 627-0653

Fire of undetermined origin caused several hundred thousand dollars damage to Encina Hall, Stanford's main administrative building, Wednesday night, June 7. There were no injuries.

The fire apparently started in the attic of the four-story structure. The initial alarm was sounded around 9 p.m. The blaze was brought under control about two hours later, with help from about 100 firemen from Palo Alto, Los Altos, Mt. View and Sunnyvale. Eighty more began the cleanup at 1 a.m.

Stanford Fire Chief Frank Jurian estimated the damage would run to "several hundred thousand dollars."

The most heavily damaged portion of the building was the East Wing, which houses the Personnel Office and Health Physics Office. The fire broke through the attic there to the fourth and third floor, which were soon to be remodeled, and were vacant. The first and second floors had water and smoke damage.

The fire destroyed the attic of the central portion of the building, but did not break through to offices there. "We were very, very fortunate" the fire was contained, Chief Jurian said. Offices there suffered water and smoke damage. The central portion was remodeled in the late 1950's.

The West Wing, which had been remodeled in 1970 to house the Food Research Institute, appeared undamaged. Encina was built in the 1890's as a dormitory.

Following a post-midnight inspection of the building, top administrative officials said major University functions would continue almost without interruption.

Vice President Robert R. Augsburger said all supervisory personnel in Encina were being asked to report for work Thursday, June 8. Other employees in Encina were asked to remain on call, and their pay will continue.

Provost William Miller, who accompanied Augsburger and other officials on the inspection, said "The basic work of the University will continue despite this temporary interruption to some administrative functions. The academic program and all other University operations will not be interrupted."

The closing of all portions of Encina to employees is temporary until the County Fire Marshal and Stanford plant engineers are able to complete their work, Augsburger said. Encina Commons offices remain in full operation.

Temporary locations for the Personnel and Health Physics Offices, and other units in the East Wing of Encina, are being selected and will be announced as soon as possible.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT : Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Theodore W. Loring of Eureka, California, is the new president of the Stanford Medical Alumni Association, and Dr. Wilbur B. Hurlbut of New York City, is the new president-elect.

Dr. Loring assumed his new duties Saturday (June 3) at the conclusion of the Spring reunion of the Association on the campus. He will serve as president through July, 1973. Dr. Loring specializes in obstetrics and gynecology, and received his medical degree from Stanford in 1946. He also served on the Association's board of governors and many of its committees.

Dr. Hurlbut specializes in dermatology in New York City. He is an attending physician at Roosevelt Hospital, a member of the executive board, of the committee on public health of the New York Academy of Medicine, and a member of the Visiting Committee of the Stanford University School of Medicine.

Newly elected members of the board of governors of the Association include Dr. Frances K. Conley of Palo Alto, and Dr. John Minna of Bethesda, Md.

Dr. David A. Rytand of Atherton was re-elected secretary-treasurer.

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Mailed June 5, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Four students of Stanford University School of Medicine were named Alumni Scholars for 1972 by the Stanford Medical Alumni Association.

They were presented awards at Alumni Day Ceremonies Saturday (June 3). Eight other medical students who were candidates for the award were presented the Book Award.

Alumni Scholar Award winners were: Maida Taylor, Year II; Randall Morris, Year III; John Williamson, Year IV; and John Vierling, Year V.

The Alumni Scholar Award was established in 1965 by the Stanford Medical Alumni Association to honor a medical student in each of four upper classes. Recipients are selected "primarily on the basis of high scholastic achievement," but consideration is also given to"qualities of leadership, excellence of character and promise of becoming a doctor who will render superior service."

Last year, the award given to the fifth year student was designated the Robert M. Shelton Memorial Award Award to honor the late Dr. Shelton, a distinguished medical school alumnus and past president of the Alumni Association.

Second, third and four year class Alumni Scholars receive $600, and the fifth year class winner receives $750.

Award winners and their parents' names and towns are listed below:

Alumni Scholars:

New York	Maida Taylor, daughter of Martin and Muriel Taylor, Plainview
California	John Vierling, son of Lester and Ruth Vierling, Newport Beach
	Randall Morris, son of Mr. and Mrs. Walter Morris, Hillsborough
Oklahoma	John Williamson, son of R.D. and Jacqueline Williamson, Tulsa

Book Award Winners:

California	Rodney Ellis, son of Roy and Delores Ellis, San Francisco
	Stephen Nimelstein, son of David Nimelstein, Northridge
	Thomas Raffin, son of Bennett and Caroline Raffin, San Francisco
	Kenneth Yamada, son of Dr. and Mrs. Paul Yamada, Los Altos
New York	Ron Rosenfield, son of Stanley and Deborah Rosenfield, Elmont
Ohio	Sharon Hunt, daughter of Edward and Bernice Hunt, Northfield
Pennsylvania	Charles Caplon, son of Irving and Rosalie Caplon, Pittsburgh
Washington	John Ordal, son of Erling and Lorna Ordal, Seattle

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Mailed June 5, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Richard L. Balch, vice-chancellor for university relations at the University of California, San Francisco, has been appointed associate dean for administration and assistant to the vice-president for medical affairs at Stanford University School of Medicine.

The appointment, which becomes effective September 1, was announced today (July 31) by Dean Clayton Rich.

Balch, 53, succeeds Robert G. Lindee, who resigned July 1 to become vice-president of the Henry J. Kaiser Family Foundation.

A 1941 graduate of Union College in Schenectady, New York, Balch did graduate work at both Union College and Stanford, and later spent a year as a visiting fellow at Harvard Business School.

Twice in the past he has served as an administrator at Stanford, first as dean of men from 1947-55. After six years as associate dean of students and director of athletics at Massachusetts Institute of Technology, he returned to Stanford in 1961 as associate director for development.

He was appointed vice-chancellor for student affairs at the University of California at Irvine in 1964, and then served as director of the Peace Corps in the Philippines for one year. From 1967-70, Balch was vice-president for continuing education and community service at the University of Hawaii. He was appointed to his present position a year ago.

Balch and his wife, Patricia, have two children and reside in San Francisco.

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Mailed July 31, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford University has received a bequest valued in excess of $700,000 from the estate of Mrs. Fannie B. Dore, it was announced today by Dr. Clayton Rich, vice president for medical affairs and dean of the Medical School.

Half the amount thus far distributed is to be used for research in cardiovascular and renal diseases, and half is to be added to the Charles B. Doré Memorial Fund at the Stanford Medical School.

Established in 1955, this Fund provides support for faculty salaries and fellowships in the same two fields of medical research.

The current distribution brings to over $1 million the amount received to date for use in the Stanford University School of Medicine from Mr. and Mrs. Dore.

Mr. Dore, who died in 1955, was formerly vice president of Superior Oil Company and prominent for many years in the Bakersfield area. Mrs. Dore died in 1971.

In accepting delivery of the bequest from Bakersfield attorney Curtis Darling, Dr. Rich said, "We are greatly indebted to Mrs. Dore for providing this valuable support to Stanford's medical research activities in these two vital areas.

"This newest addition to the Charles B. Dore Memorial Fund will also provide added strength to our faculty and training programs, and will make possible the advancement of knowledge about these diseases. It is an honor for Stanford Medical School to receive such generous assistance, and we look forward to substantial accomplishments in the future."

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Mailed July 27, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Copies of Stanford M.D. available on request if not included with story.

STANFORD--Married couples, who think they can engage freely in any variety of lovemaking in the privacy of their homes, risk criminal prosecution under ancient laws which govern sexual behavior in the United States, according to two Stanford University psychiatrists.

"Almost all sexual activity that may occur between husband and wife, with the exception of kissing, caressing and vaginal intercourse, is defined as criminal in virtually every state of the union," said Drs. Herant A. Katchadourian and Donald T. Lunde.

People are either unaware of these laws or think they are largely "dead" and so rarely enforced as to be inconsequential, the psychiatrists said.

"But their very existence on the books allows for their occasional and capricious application," they continued. "This ill serves the interests of society, the individual and the law."

Katchadourian and Lunde made their comments in an article in the current issue of Stanford M.D., the magazine of the Stanford Medical Alumni Association. The article is based on their new book, Fundamentals of Human Sexuality just published by Holt, Rinehart and Winston, Inc.

"It is unlikely that the average married man suspects that his marital sexual activity will ever be held against him," Lunde said. "Even if he knows that a certain behavior is illegal, as long as he and his wife perform it in private, who can substantiate the charge?" In practice, however, it doesn't work this way. He gave this example:

In 1965, a woman in Indiana quarreled with her husband of 10 years, and filed a complaint of sodomy against him. She did not accuse him of having used force. Before the case came to trial the woman changed her mind and sought to withdraw the charge. She was not allowed to do so because sodomy is an offense against the state, and the state proceeded to prosecute. The man received a prison sentence of from 2 to 14 years. After serving three years, he was released when a higher court overturned his conviction on a technicality in the proceedings.

Sex laws even meddle with the frequency of intercourse between a married couple, said the psychiatrists. For example, if no intercourse at all has occured, the law provides for annulment of the marriage on these grounds.

"A man's impotence or a woman's refusal to engage in sexual intercourse with her husband have long been held sufficient grounds for annulment," they wrote.

"Our society is unique in many aspects of its sex laws, expecially those defining sexual intercourse between unmarried consenting adults as criminal behavior," the psychiatrists commented. "Other societies may condemn it as immoral, some may set limits on it, and others may encourage it. Yet most of our states define it as a crime."

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222--Sex Laws

Sex laws in America reflect a particular Judeo-Christian point of view of sexual behavior, the psychiatrists explained. The sole purpose of sexual activity is reproduction. Other notions arising from the ethical and religious backgrounds of the founders of Anglo-American society are also embodied in law, including the opinion that sex is evil.

As a result "our laws seem to be more preoccupied with prohibiting the stimulation of sexual activity than with prohibiting the stimulation of aggressive violent behavior," Katchadourian and Lunde wrote.

Citing the Kinsey report which shows that more than 95 percent of men have at some point engaged in sexual acts prohibited by criminal laws, the psychiatrists describe how existing laws are usually enforced and present arguments for and against their retention.

Sexual intercourse between consenting unmarried adults is prohibited by law in most states, wrote the psychiatrists. The offense is usually a misdemeanor, punishable by a fine, which may be as small as $10 (Rhode Island) or as large as $500 (Texas). In Arizona, however, the statute defines the offense as a felony punishable by imprisonment for no more than three years.

California has a seduction law which stipulates that "a person who seduces and has sexual intercourse with an unmarried female of previous chaste character" can receive a maximum prison sentence of five years and pay a fine of up to $5,000 or both.

Of course, the male can usually escape prosecution for seduction by marrying the girl, the psychiatrists note, but if she is under age, the culprit may still be prosecuted for statutory rape.

The concept of statutory rape is equally confusing, the psychiatrists pointed out, because it is based on the age of the girl which varies from 14 to 21, depending on the state. But only the male is regarded guilty, even if the girl has been a willing partner.

Katchadourian and Lunde side with the majority of criminal lawyers in attacking the absurdity of some of the sex laws. These authorities feel that all sexual activities in which married couples engage in the privacy of their homes should be legalized.

Like the lawyers, however, the two psychiatrists make a distinction between sex laws that should be retained and laws that should be repealed. Laws governing rape, child molesting and generally offenses involving violence should continue, they believe.

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Mailed Thursday, July 13, 1972

Stanford psychiatrists Donald T. Lunde and Herant A. Katchadourian have attacked ancient laws which govern sexual behavior of married couples in the privacy of their homes. "People are unaware of laws that define everyday sexual experiences as crimes, Lunde and Katchadourian said. They are often applied capriciously to the detriment of the individual and society. 7/13/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. Eugene M. Farber of Stanford University has received the Order of Jose Maria Vargas from the Central University of Venezuela. He is the first scientist from North America to receive the award.

Dr. Farber is an internationally known expert in psoriasis and professor and chairman of the department of dermatology at Stanford medical school. He was honored for his scientific contributions to dermatology and the development of the medical curriculum at Central University.

The Vargas award is the highest honor the Central University can give, according to the citation. It was established in honor of Jose Maria Vargas, a physician and former president of Venezuela. He was responsible for establishing the scientific basis for the teaching and practice of medicine in his country.

The award was presented to Dr. Barber recently at the annual reunion of the Venezuelan Society of Dermatology in Valencia which he attended as a guest lecturer.

In 1959, Dr. Farber and other Stanford faculty member helped plan a new curriculum at Central University that has become a model for medical education in Venezuela. In addition, many Venezuelan specialists in dermatology were trained at Stanford in recent years.

"Thanks to Dr. Farber, there is a permanent bond of cordiality, friendship and scientific solidarity between Stanford University and Central University of Venezuela," the citation read.

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Mailed Thursday, July 20, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- A unique clinic to help patients whose normal toilet habits have been altered by major abdominal surgery has been opened by Stanford University Medical Center.

The purpose of the clinic is to rehabilitate patients of all ages to an independent existence so they can resume normal activities. Patients return to work, school, sports and other activities they enjoyed before their illness and surgery.

Each year some 70,000 people in the United States spend a few hours on the operating table and have their toilet habits of a lifetime swept away.

These patients have enterostomy surgery, often performed to provide another outlet for waste products when the intestinal or urinary tract is diseased. A portion of the large or small intestine is brought out through the abdominal wall and sewn to the skin with sutures to create a new opening (stoma).

Since this artificial opening does not have muscles that can be tightened or relaxed, patients no longer have voluntary control over their normal physiological functions. They generally wear a bag-like appliance over the opening to collect bowel contents or urine. The appliance may adhere directly to the skin around the opening or may be held in place by an elastic belt.

For most, such an operation is overwhelming and embarrassing. These patients need help and encouragement in adjusting, especially after they leave the security of the hospital, according to Stanford surgeons.

Take for example, a 54-year-old mother from San Mateo, one of the patients who has been treated at the clinic.

Ten years ago, doctors told her she had less than six months to live because of cancer. She was determined to prove them wrong. Nevertheless, the next nine and a half years she spent fighting cancer and complications of radiation treatment which had incapacitated her large bowel, were a nightmare.

The turning point for the patient came last December when she underwent enterostomy surgery at Stanford Medical Center. She generally wears a collecting pouch, but after nearly a decade of illness, she has resumed normal activities.

Another 26-year-old patient from Campbell had been in and out of hospitals for two years with intestinal problems. Medication was not helping and her activity had come to a standstill.

Then she came to Stanford for enterostomy surgery. As a result, she too wears an appliance to catch her intestinal wastes. However, she finds it does not interfere with any of the activities she has once again been able to enjoy.

The Stanford clinic, which is part of the surgery clinic, is under the direction of Drs. Harry Oberhelman, Jr. and Duncan Govan, surgery professors at Stanford School of Medicine. It is run by nurse specialist Rosemary Watt.

"More care is needed for ostomy patients, especially in the West," said Dr. Oberhelman. "It takes time and effort to work with them, and I don't think physicians have done an adequate job in the past," he commented.

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A trained nurse specialist such as Mrs. Watt can spend time helping patients adapt, Dr. berheldman pointed out. He added that studies indicate patients who see a specialist have fewer postoperative complications after they leave the hospital. The Department of Surgery is currently studying an innovative role of the nurse in the enterostoma clinic under a one-year grant from the Division of Nursing, National Institutes of Health.

When the rectum or some of the large intestine (colon) is diseased, the affected part is removed, and a small portion of the remaining intestine is brought out through the abdominal wall to establish a new opening. This procedure is called colostomy. Common indications for colostomy include cancer of the rectum or large bowel, and inflammation or obstruction in the lower intestinal tract.

Most colostomies are permanent, but some are done as a temporary measure to allow healing of an infected bowel. Patients can often control their evacuation by periodic irrigation (giving an enema through the opening) so they do not always have to wear a collecting pouch.

If the entire colon is removed, part of the ileum, the longest and lowest portion of the small intestine, is brought out through the abdominal wall. The procedure is called an ileostomy. Debilitating inflammation of the colon due to ulcerative colitis or regional enteritis, also known as Crohn's disease, is the usual reason for an ileostomy.

In rare cases, an ileostomy may be temporary. Patients do not have the potential for bowel ntrol that colostomy patients have and they must wear an appliance all the time.

When it is necessary to divert urine from the bladder, a ureterostomy may be performed. The ureters, which carry urine from the kidneys to the bladder, are brought out through the abdominal wall to provide a new pathway for urine excretion. Another method is the ileal conduit, in which a portion of the ileum is used to bridge the gap from ureters to skin.

Urinary diversions are performed for cancer of the bladder, certain birth defects and other obstructions. The flow of urine through the new opening is continuous and an appliance must be worn constantly.

The Stanford clinic serves the entire Peninsula community. Patients learn how to manage their condition, use special equipment and regulate their diet according to their needs. Those operated on at Stanford are seen before their operation and throughout their hospital stay, as well as after discharge. Patients may be referred by other physicians in the area, or they may refer themselves.

The physician and nurse both play important roles in helping these patients to adapt after surgery, according to Dr. Oberhelman. Physicians constantly improve their surgical technique to eliminate many management problems. However, they may not have time to give their patients the kind of personal attention they require. A nurse specialist, on the other hand, can devote time exclusively to rehabilitation.

"Before Mrs. Watt worked at the clinic, patients in this area had no one to turn to for continuous advice when they left the hospital," said Dr. Oberhelman. "It is reassuring for both patients and doctors to know there is someone available to help answer questions and manage problems."

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Rehabilitation is very individual, Mrs. Watt noted, and each person adjusts in his or her own way. "The clinic provides social and psychological counseling as well as physical care," she explained. "With proper care and management, patients can live a normal life," she added.

Dr. Oberhelman agrees that patients should not feel limited by this operation. "I wouldn't discourage anyone from an activity, but it is up to the individual to be careful," he cautioned. "Patients can play football, ski, travel, or do anything else they want. Generally the worst that can happen is that the appliance will come off," Dr. Oberhelman said.

He felt that a colostomy was the best way to put the 54-year-old patient back on her feet. The energetic mother and grandmother is busy repainting her house and looks forward to bicycle riding and volunteer work in the fall. Her husband and four sons are delighted at her renewed activity, and their only regret is that they do not see enough of her now that she is always on the go.

The patient from Campbell was hesitant about having an ileostomy operation. "The son of my parents' friends had an ileostomy about ten years ago. He had a lot of difficulty because no one bothered to give him any care after he left the hospital. Needless to say, I didn't look forward to the surgery," she said. Her favorite activities now include swimming and motorcycling.

Enterostomy is not the answer for everyone, Dr. Oberhelman pointed out. Some problems clear up without surgery. However, when enterostomy is recommended, it is reassuring for patients to know there are facilities in the area to help them successfully manage their problem.

The United Ostomy Association, an incorporated group of former patients, has chapters throughout the United States. These groups are especially effective for moral support. Nevertheless, they do not take the place of the nurse specialist who combines professional knowlege and training with individualized care, Dr. Oberhelman commented.

Mrs. Watt, holder of a master's degree in surgical nursing, is the only nurse specialist in Northern California who offers services solely for enterostomy patients.

As a ranking authority in available community services, she is a consultant to various Bay Area agencies. She also works with the Santa Clara Chapter of the American Cancer Society to train enterostoma visitors for the United Ostomy Association and teaches medical, surgical and nursing staffs at hospitals.

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Mailed July 26, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Dr. Thomas A. Stamey, professor of surgery and head of the division of urology at Stanford University School of Medicine, is author of a new book, Urinary Infections.

The 293-page book was published this month by The Williams and Wilson Company of Baltimore. Designed for students and clinicians, it meticulously describes modern techniques utilized in the diagnosis, investigation and treatment of urinary tract infections.

Based on the broad experience of the urology division at Stanford, the book covers laboratory methods and operating principles used in dealing with urinary infections among all age groups.

It also describes the successful technique for management of kidney stones developed at Stanford. After determination that the patient's urine is absolutely sterile, surgical removal of the kidney stones is followed by irrigation with a drug solution, Renacidin, while the sterile urine culture is maintained. This method has greatly reduced the recurrence rate of infection.

Dr. Stamey, who worked on the book for several years, is editor of Urology Digest, and a member of the editorial board of two other medical journals, Kidney and the Journal of Investigative Urology.

He is the author of one other book, Renovascular Hypertension, dealing with the methods of studying kidney conditions in man which lead to high blood pressure. He has also published numerous scientific papers.

Dr. Stamey was recently awarded the American Urological Association's Hugh Hampton Young Award for his work on the diagnosis and treatment of urinary infections. A member of the national scientific advisory board of the National Kidney Foundation, he was past chairman of the renal disease and urology training grants committee of the National Institutes of Health.

A 1948 graduate of Vanderbilt University, he received his M.D. from Johns Hopkins University School of Medicine in 1952. He served on the faculty at Johns Hopkins for three years before coming to Stanford in 1961, and was appointed to his present position in 1964.

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Mailed Thursday, July 27, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--A special room for patients extremely susceptible to infection will be installed at Stanford University Hospital with a gift from the Medical Center Auxiliary.

The volunteer organization has donated $25,000 to finance the Hospital's first laminar flow room which will be used for treatment and research. Announcement of the gift was made today by Auxiliary president Mary Bohler.

Laminar flow is a method of filtering and circulating air that has proved successful in industry when a dust free environment is necessary. Although hospitals have used laminar flow hoods in operating suites and laboratories, the concept of an entire patient room is recent, according to Dr. Eugene Dong, Jr., associate professor of cardiovascular surgery at the School of Medicine.

Studies in other institutions have indicated that laminar flow rooms may decrease infection in patients with some forms of leukemia, Dong said. He will investigate how effective such a room will be in preventing infection in heart transplant patients. Their resistance is very low because in order to avoid rejection of the new heart, they are given drugs to suppress the body's immunity. They will spend a month in the special room.

The room may also be used for leukemia patients, who are often treated with immunosuppressant drugs, and for severe burn patients, who are prone to infection because their natural skin barrier has been burned off, Dong explained.

A room in the Hospital's intensive care unit is being converted for the air flow system and is scheduled to be ready in October. Air in the room will be sucked up by floor ducts and then passed through a filtering system. The cleansed air will be recirculated into the room in smooth sheets from vents in the ceiling. It will blow straight down to the floor, and then along the floor to the return ducts, passing smoothly around any physical barrier. A patient or anyone else in the room, then, will be isolated in a pocket surrounded by a curtain of air.

If patients with low resistance are being infected by bacteria that live in their own bodies, the laminar flow room will not help, Dong noted. He pointed out, however, that evidence implies that the infections come from external sources and are carried in the air of the patient's environment. If this is so, Dong said, the room could help protect the patients.

"No one knows for sure how effective a laminar flow room is for patients, but we hope to find out from the one we are installing at Stanford," Dong said. "Considering the favorable evidence thus far, and the extra cost and difficulty when a patient develops an infection, the room is an attractive bet," he added.

The 1100 member Auxiliary has served the Medical Center since it opened in 1959. It raises money solely through the gift shop which it operates and staffs at the Hospital. ###

Mailed Thursday, July 27, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Howard J. Wooling, of East Palo Alto, has been appointed assistant director of Stanford University Hospital.

The appointment, which becomes effective August 1, was announced Wednesday (July 12) by Dr. Thomas A. Gonda, hospital director.

Wooling, 31, received his Masters degree in public health last month from the University of California at Berkeley. He served his administrative residency at the UC Hospitals and Clinics in San Francisco.

At Stanford, he will assume line administrative responsibilities for several patient care services.

A native of Pittsburgh, Pennsylvania, he received his B.A. degree in 1965 from Eastern Nazarene College in Wollaston, Massachusetts. Two years later he obtained a Masters degree in education from Boston College.

From 1967-70, Wooling worked as an orientation and mobility specialist in the blind center at Palo Alto Veterans Administration Hospital. During his last two years at the VA Hospital, he was supervisor of the orientation and mobility section.

The position of assistant director at Stanford has been vacant since Donald G. Utt was promoted to associate director two years ago.

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Mailed Wednesday, July 12, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFROMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Dr. Henry S. Kaplan, professor and chairman of the Department of Radiology at Stanford University School of Medicine, has been elected to the Institute of Medicine of the National Academy of Sciences.

Dr. Kaplan was one of 52 new members elected to the Institute, President John R. Hogness announced Tuesday (July 10). Formed last year, the Institute now has 159 members.

Noted for his pioneering studies in the biologic and biochemical effects of radiation, Dr. Kaplan discovered that the genetic material DNA (deoxyribonucleic acid) is the target molecule in the cell for radiation effects. He demonstrated that radiation exposure or chemicals can trigger a latent virus which induces leukemia in animals.

He is well-known for his adaption of the linear accelerator for medical purposes, and the development of effective radiotherapy techniques for the treatment of Hodgkin's Disease and other malignant lymphomas.

Dr. Kaplan was also recently elected to the National Academy of Sciences. Chairman of the Department of Radiology at Stanford since 1948, he will step down from his administrative responsibilities at the close of the current academic year.

Institute members are elected by a vote of current members. Election is based on major contributions the individual has made to the general field of health care. Total active membership will reach 400 in the next few years.

Four members of the Stanford faculty were elected to membership last year, including Dr. Robert A. Chase, professor and chairman of the Department of Surgery; Dr. David A. Hamburg, professor and chairman of the Department of Psychiatry; Dr. Donald Kennedy, professor and chairman of the Department of Biological Sciences; and Dr. Joshua Lederberg, professor and chairman of the Department of Genetics.

The purpose of the Institute of Medicine is to study the larger problems of medicine and health. It provides a setting for professionals to improve American medicine and the national framework of health services.

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Mailed Tuesday, July 11, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Carl P. Sheaffer, Stanford University Hospital's longest surviving heart transplant patient and the fourth longest surviving transplant recipient in the world, died early this morning (July 7) at the Palo Alto Veterans Administration Hospital.

The cause of death is undetermined at the present time, pending results of an autopsy which will be performed today.

Sheaffer, 57, survived over 44 months after receiving his transplanted heart on October 26, 1968.

He had recently been admitted to the VA Hospital for rehabilitation from a back injury suffered in an automobile accident.

In 1963, Sheaffer was forced to retire from work as a plumber in Winchester Bay, Oregon and give up even mildly strenuous activity because of disabling heart disease. Following his transplant, moved to nearby Mountain View, but returned to Oregon frequently for fishing and hunting expeditions. He also worked out often in a local health spa.

Sheaffer is survived by his wife of 39 years, Effie, and five children, three sons and two daughters.

Funeral arrangements have not been made at this time. Sixteen of the 45 heart transplant patients are living.

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Released to Business Wire Friday, July 7, 1972 and
called Palo Alto Times

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A federal grant totalling $718,697 for the first year and projected at $2,112,000 for the next four years, has been awarded to the Department of Psychiatry of the Stanford University School of Medicine for clinical studies of alcoholism.

Funding of the grant was confirmed by letter Monday (Aug. 28) from the National Institute on Alcohol Abuse and Alcoholism of the Health Services and Mental Health Administration in Washington, D.C.

The grant will support 16 different studies, including established research at the Medical School, and several newer approaches to the study of alcoholism.

Project directors are Dr. David A. Hamburg, professor of psychiatry, and Dr. Bert S. Koppel, associate professor of psychiatry.

They said the research represents a major interdisciplinary effort in research and education on alcohol problems. They also stated that the ultimate clarification of such a complex disorder will depend on a broad base of scientific understanding.

"Investigators must search persistently for the relevance of newly emerging information on brain, behavior, and social environment," the psychiatrists said. "We believe complex interactions of psychosocial and biological processes will prove to be crucial in the understanding of alcoholism."

The study will cover not only psychiatry, but other disciplines including genetics, pharmacology, biochemistry and neurophysiology.

One study, carried out by Dr. Elizabeth Bing, involves causes of mental health problems in children of alcoholic parents.

Another study by Dr. Irvin D. Yalom will involve Alcoholics Anonymous in evaluating group therapy approaches to the treatment of alcoholics.

Other projects will focus on understanding factors involved in alcohol use and abuse with emphas on young people, biological aspects, community environments believed to influence the malady, and the relationship of alcoholism to violence. The latter study will be carried out by Dr. Keith H. Brodie using the Medical School's newly established Laboratory of Stress and Conflict. ### Business Wire 8/29/72

Mailed August 29, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

FILE COPY

Editors: Photos available upon request.

STANFORD -- Residents of a low-income section of San Jose have established a health center for the area's 20,000 residents with the assistance of Stanford medical students and California Regional Medical Programs.

The Gardner Community Health Center opened its doors June 28 in an old rectory at 325 Willow Street in San Jose. Since then, an average of 20 patients have been seen each Monday and Thursday night between the hours of 6:30 and 10:30.

Using donated medical supplies, equipment and drugs, the volunteer medical staff provides primary and emergency care to the residents of the Gardner district, a largely Chicano area in western San Jose.

For many years, the Gardner area has been medically indigent, cut off from the health facilities in San Jose by a lack of public and private transportation, low incomes, and in many cases a language barrier, said Roberta Horoho, a public health nurse from Regional Medical Programs (RMP) Area III office at Stanford, who serves as medical coordinator of the center.

"Many of the people here have had no medical care at all, while others have had little or fragmented care," she said. "Many speak little or no English, and if they could get to one of the area's health facilities, would have trouble communicating their needs."

In response to those needs, a clinic was opened in July of 1971 through the combined efforts of a group of Stanford medical students led by fourth-year student Chris Murias, San Jose Model Cities, and RMP. But plagued by lack of funds and facilities, it closed its doors in November.

In the wake of that short-lived clinic, representatives of several civic groups in Gardner established a community board of directors to organize a new clinic, guide its operations, and set its policies.

"After the first clinic closed, we decided that the only way we'd get our clinic was to do it ourselves," said Jim Flores, board chairman and chairman of the Gardner Neighborhood Council. "Community members had to be the ones to provide the organization and support."

The board--composed of seven delegates from local organizations, a physician from the Santa Clara County Medical Society, and a private dentist (future plans call for a dental clinic)--incorporated the health center as a non-profit organization in December. A few months later, a malpractice insurance policy and a license from the California Department of Public Health were obtained.

In February, the board leased the old rectory, located adjacent to Sacred Heart Church, from the church for $1 (one dollar) per year. Renovation was begun in May by a group of volunteers consisting of community members, Stanford medical students, and students from other local colleges.

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The volunteers spent $650 on the preliminary renovation. Money was raised from raffles, dances, and private donations, including one of $100 from the Stanford Medical Student Association.

"Working over a period of eight weekends, we changed the first floor from a five-room residence to a 10-room medical clinic," said Mike Kirkpatrick, administrative coordinator of the clinic. (Kirkpatrick began working at Gardner as a volunteer; his position is now funded by the Office of Economic Opportunity's Economic and Social Opportunity Community Action Program, and by RMP.)

The clinic now includes five examining rooms, an office, waiting room, laboratory, physicians' consulting room, and wash room.

It operates on an appointment basis, except in emergency cases. Medical services are presently free, although in the future a "pay if you can" billing system may be established, Kirkpatrick said.

In addition to Monday and Thursday evenings, the clinic has performed contract physical exams for the Neighborhood Youth Corps this summer on Thursday afternoons. Additionally, the Santa Clara County Department of Public Health operates a well-baby clinic Wednesday afternoons.

Equipment and supplies have been donated by over 25 organizations, including Stanford and Santa Clara Valley Medical Centers, O'Connor Hospital, pharmaceutical firms, private laboratories, local physicians and nurses.

Medical care is provided by a volunteer staff consisting of residents and interns from Stanford Hospital, private physicians, fourth- and fifth-year Stanford medical students, and nursing students from Stanford and California State University at San Jose.

Technologists from Stanford Hospital and pre-med students from San Jose man the laboratory. Community members have volunteered their services as secretaries, receptionists, and translators.

For Stanford, the initial tie to Gardner was made when Murlas, fourth-year medical student from Chicago, became interested in the health care problems of the area and led the organizing and recruitment efforts which culminated in the first clinic. Murlas has continued his active involvement in the new health center.

Despite the success at Gardner, problems remain, mostly related to future financing.

"Our biggest problem is finding operational money," Kirkpatrick said. "To date the clinic has only received assorted small grants for renovation of the rectory and drug education and abuse programs. But we've received no operational funds."

The clinic is now applying to RMP and the Campaign for Human Development for this funding. Sustaining support from government grants, foundations, and private donations will be needed, Mrs. Horoho said, because the clinic is located in a poverty area.

"I think it's unrealistic to expect that a center like Gardner can ever totally support itself," she said. "The people here just don't have the money."

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The clinic serves a six square mile area in San Jose. About two-thirds of the population of 20,000 is Chicano. Gardner residents generally have little education, poor housing, poor nutrition, and many are without jobs, Mrs. Horoho said. Nearly one-fourth of the community receives welfare of some sort, and 25 per cent have a family income under $4,000, she added.

For these people, the clinic represents the fulfillment of a dream for a community-operated and controlled health clinic, Flores said.

For the students from Stanford and other local campuses who have volunteered their efforts, the satisfaction has been of a different nature.

"The students who work here receive no monetary or academic rewards," said Murlas. "We get no course credit and no stipends--just the satisfaction of helping these people get decent health care."

In all, approximately 30 Stanford medical students have volunteered their services at Gardner. In addition to Murlas, three other students have been involved in the organization and planning of the center--Fernando Mendoza, second year, San Jose; Larry Crapo, fifth year, Santa Barbara; and Scott Brassfield, third year, Tulsa. Fred Krefetz, Stanford business student from Coral Gables, Florida, has assisted Kirkpatrick in administration of the clinic.

RMP's Area III office at Stanford, in addition to assigning Mrs. Horoho to Gardner as health coordinator on nearly a full-time basis, has provided stipends for two students to work at Gardner for the past two summers. Also, RMP area coordinator Dr. William Fowkes has volunteered medical and administrative time to the center.

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Mailed August 29, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. David A. Hamburg, professor and chairman of the Department of Psychiatry at Stanford University School of Medicine for the past 11 years, will step down from his administrative responsibilities on October 1 to pursue new programs of education and research.

His resignation was announced today (August 28) by Dean Clayton Rich. Dr. Rich said he accepted the resignation "with real regret" and praised Dr. Hamburg's "tremendous contribution to the school and to the discipline of psychiatry."

The dean said he plans to appoint a search committee to aid in the selection of a successor.

Dr. Hamburg stressed his desire to pursue three new programs of education and research he has been instrumental in developing--the Laboratory of Stress and Conflict and the Human Biology Program, both at Stanford; and the Program on Science, Technology, and Society at the Center for Advanced Study in the Behavioral Sciences, located in the foothills behind the Stanford campus.

The Laboratory of Stress and Conflict is an interdisciplinary faculty project organized by Dr. Hamburg to develop courses and research projects on behavior under stress. It involves work with patients and also research on chimpanzees at the forthcoming Stanford Primate Facility and in Africa.

The Human Biology Program is a recently developed undergraduate major at Stanford, in which faculty members from the medical school and the biological and social sciences team to present a comprehensive view of man from a life sciences perspective. Dr. Hamburg was one of the program founders.

He also aided in the planning of the Program on Science, Technology, and Society, in which a group of scholars will come to the Center for Advanced Study in the Behavioral Sciences each year to study the social impact of scientific and technological developments.

-more-

Dr. Hamburg, 46, came to Stanford in 1961 from the National Institutes of Health, where he was chief of the Adult Psychiatry Branch. Under his leadership, the Department of Psychiatry has earned international recognition, particularly for its scientific approach to psychiatric problems.

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EDITORS: Additional background on Dr. Hamburg follows.

A 1947 graduate of the Indiana University School of Medicine, Dr. Hamburg received his professional training at Michael Reese Hospital in Chicago and Yale University.

His research has focused on hormonal responses to psychological stress, ways in which individuals cope with very difficult circumstances, and conflict resolution.

The author of nearly 100 papers, Dr. Hamburg has served on the editorial boards of 10 medical and scientific journals. He recently published a book, Psychiatry as a Behavioral Science, and has edited two others.

He has been elected to membership in the American Academy of Arts and Sciences, and the National Academy of Sciences' Institute of Medicine. Past chairman of several boards and committees of the major professional psychiatric organizations, he has served on the executive committee on behavioral sciences of the National Research Council.

He has also served as president of the Association for Research in Nervous and Mental Disease, and chairman of the Psychiatric Research Society.

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Mailed August 28, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Malcolm A. Bagshaw, professor and director of the division of radiation therapy, has been appointed chairman of the Department of Radiology at Stanford University School of Medicine.

His appointment, which is effective September 1, was announced today (August 22) by Dean Clayton Rich.

Dr. Bagshaw succeeds Dr. Henry S. Kaplan, chairman of the department for 23 years, who resigned to devote himself more fully to teaching and research activities.

Director of radiation therapy at Stanford since 1960, Dr. Bagshaw is noted for his pioneering efforts in the treatment of cancers of the prostate and the larynx. He has done extensive research on the treatment of localized human cancers with a combination of drugs and intensive radiation therapy.

During the past two years he has been involved in the investigation of a new weapon against cancer, beams of sub-atomic particles called pi mesons or pions. Radiotherapists believe that pion radiation, which may be ready for clinical use in two to three years, could be much more effective than conventional radiation therapy.

A 1950 graduate of Yale University School of Medicine, the 47-year-old radiotherapist received his professional training at Yale and the University of Michigan.

He joined the staff at Stanford in 1956 as instructor in radiology and was made assistant professor three years later. He advanced to associate professor in 1962, and was appointed a full professor in 1969. For the past 11 years he has been assistant director of Stanford's Clinical Radiotherapy Cancer Research Center, supported by the National Cancer Institute.

Dr. Bagshaw is a member of the major professional societies and former chairman of the American Cancer Society's National Advisory Committee for Research. Past chairman of the National Institutes of Health (NIH) Radiation Study Section, and a former member of the executive committee of the Association of University Radiologists, he is president-elect of the American Association of Therapeutic Radiologists.

The author of over 70 publications, most dealing with radiation therapy and human tumors, he is a member of the editorial board of Investigative Radiology.

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Mailed August 22, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Scientists at Stanford University School of Medicine believe they have found a chemical co-factor which induces crises in patients with sickle cell anemia.

Sickle cell anemia is a potentially disabling hereditary blood disease which almost exclusively affects black people. In a crisis, which can last for several days or weeks, the victim suffers excruciating pain and is frequently disabled.

The Stanford investigators discovered that sickle cell crises may be initiated or enhanced by one of the prostaglandins, fatty acids manufactured in many tissues of the body and capable of acting in various ways on most body tissues in very minute quantities.

Prostaglandins have been used in clinical trials in the United States, Sweden, and other countries to induce labor and abortion, and to treat asthmatics.

With this discovery, scientists may now attempt to find drugs which will inhibit production of the prostaglandin type that causes sickle cell crises.

The findings were reported today (August 22) at the meeting of the American Association of Clinical Chemists in Cincinnati, Ohio, by the Stanford researchers--Dr. Paul L. Wolf, associate professor of pathology and director of clinical laboratories; and biochemists Drs. Israel Rabinowitz, Malcolm Johnson, and A. L. Willis.

The work was supported in part by a $92,000 grant from the National Heart and Lung Institute to Dr. Wolf and Dr. Linus Pauling, Stanford's Nobel Prize-winning chemist who did much of the early research on the molecular basis for red blood cell sickling.

The red blood cells of sickle cell anemia victims become elongated, shaped like crescents or sickles. Unlike normal round red blood cells, they have difficulty moving through the body's smaller blood vessels.

The result is seriously impeded blood flow and reduced oxygen supply to various body tissues, causing severe pain, increased infection, and often malfunction of body organs and disability.

Approximately 50,000 American blacks have sickle cell anemia. Another two and a half million carry the gene for the disorder and have sickle cell trait, though they usually do not suffer the symptoms of the disease.

For several years scientists have been searching for chemical co-factors which may trigger sickle cell crises. The Stanford researchers believe that prostaglandin may represent such a co-factor.

In tests they conducted during the past eight months, small concentrations of the prostaglandin known as E_2 were added to the red blood cells of sickle cell anemia patients.

"We found that the prostaglandin induced increased sickling in the red cells of the sickle cell anemia victims," Wolf said. "On the other hand, no changes were observed when it was added to normal cells."

-more-

To verify that sickling had occurred, urea (known to be capable of reversing the process) was added to the solution and the sickling was reversed. Changes were observed by light scattering and spectrophotometry.

The next step in this research, Wolf said, is to attempt to find drugs, perhaps prostaglandin analogues or antagonists, that can aid in the treatment of sickle cell anemia by inhibiting the prostaglandin type which causes sickling.

The Stanford investigators began to study prostaglandins, Wolf said, when it became apparent that "certain symptoms of sickle cell crises, such as inflammation and fever, simulated symptoms which can be induced by prostaglandin injections."

Additionally, Rabinowitz noted, levels of prostaglandins in body tissues are elevated during or following infection and during pregnancy. These events are associated with increased incidence of sickle cell crises.

Scientists had also demonstrated that prostaglandin made red cells more rigid, so they wouldn't fit through the finer blood vessels, Johnson said. "This, plus our own preliminary results, gave us both direct and indirect evidence that it might affect the red blood cells of sickle cell anemia patients," he concluded.

Blood samples for the tests were obtained through the assistance of local sickle cell anemia foundations, notably Sickle Cell Anemia Research and Education (SCARE) of San Francisco-Oakland.

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Mailed August 22, 1972.

Business Wire 8/22/72 10:00 a.m.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Heart Transplant # 47 8/20/72

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A 47-year-old California man became the 47th heart transplant recipient at Stanford University Hospital late last night (August 20). He is now listed in satisfactory condition.

A team of surgeons headed by Dr. Norman E. Shumway performed the operation.

Both the recipient and the family of the donor requested anonymity.

The operation was the second performed by Dr. Shumway and his team within four days. On August 17, a 26-year-old Midwestern man received a transplanted heart. He is now in satisfactory condition.

Including the new recipient, 17 of Stanford's 47 heart transplant patients are now living.

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Business Wire 8/21/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Heart Transplant #46
FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A 26-year-old Midwestern man became the 46th heart transplant recipient at Stanford University Hospital yesterday afternoon (August 17). He is now listed in fair condition.

A team of surgeons headed by Dr. Norman E. Shumway performed the operation.

The patient, who requested anonymity, is the second youngest ever to receive a transplanted heart at Stanford. The youngest, a 19-year-old man from Texas, is in good condition and was recently released from the Hospital.

Including the new patient, 16 of Stanford's 46 heart transplant recipients are now living.

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BUSINESS WIRE August 18, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Photos available on request if not included with story.

ADVANCE FOR A.M. RELEASE, THURSDAY, AUGUST 10, 1972

STANFORD -- Stanford Medical School's long-awaited training program for physician's assistants was launched this month, with the support of two federal grants totalling $360,226.

Forty students will receive training in the project, supported by the one-year contracts from the Bureau of Health Manpower of the Department of Health, Education and Welfare, and the California Regional Medical Programs.

Most of the funds will be spent for instruction, but some will go for student stipends, and evaluation of the initial phase of the training program.

The purpose of training physician's assistants is to improve the distribution of health professionals and the delivery of primary care, especially in poorly served inner-city and rural areas. Such assistants will free a physician to focus his skills where they are most needed.

The contracts, among several in the nation to be awarded for the training of physician's assistants for primary care, were announced today (Aug. 10, 1972) in Washington, D.C.

In 1970, California became one of 23 states which explicitly authorized the activities of M.D. assistants. Since then the State Board of Medical Examiners has been wrestling with the issues of developing an appropriate training model for California, setting up standards and legal requirements, and resolving problems of future employment of these new paraprofessionals.

The Stanford program and another co-sponsored by the University of California in Los Angeles and Charles Drew Medical Center in Watts, are the first programs to begin in California since the state enabling law was passed.

Stanford's program represents a four-year commitment. According to Dr. Michael T. B. Dennis, program director, this initial phase will lay the framework for future M.D. assistant training programs at Stanford. One area of anticipated expansion is training assistants in emergency care services.

Pointing out that training of physician's assistants varies widely, Dennis is cautious of developing programs which encourage early specialization of physician's assistants in fields such as surgery, psychiatry, or radiology where there are not yet validated needs.

"These programs ignore the identified needs for primary care in rural and inner-city areas," Dennis said.

Stanford's physician's assistant training is a two-year curriculum run jointly with Foothill College. It leads to an Associate of Science degree, and certification through a state-wide examination. All courses taught at Stanford and Foothill will carry academic credit.

A high school diploma or equivalent is required to enter the program. Students with an associate of science or higher degree can be admitted with advanced standing. -more-

"The program has been designed to attract men and women with varied backgrounds," Dennis emphasized. "It would include former military corpsmen, registered nurses, and persons with scientific backgrounds."

There is a special effort, Dennis continued, to recruit members of disadvantaged or minority groups, women or residents of medically underserved areas.

The present physician's assistants class of 20 includes nine former army medics and six registered nurses. Five students are members of minority groups, with previous medical experience or patient contacts. Another class of 20 will soon be accepted, bringing the total to 40 students.

"One of the objectives of the Stanford program will be to place 80 per cent of its graduates with physicians in areas where medical services are needed," Dennis said.

These men and women will engage in supervised medical practice. They will be trained to do many things for many patients--take medical histories, perform diagnostic workups, suture minor wounds, make rounds in extended care facilities, counsel in preventive medicine, and participate in the management of chronic disease.

Getting accepted into the Stanford program is not a matter of just applying. "For the class that just began, we had more than 1,430 applications," Dennis explained.

The application form asks for detailed educational background and medical experience. The applicant must attach a one-page narrative on why he wants to be a physician's assistant.

In addition, evaluation forms must be completed by a physician with whom the applicant has worked, his present supervisor, and a personal acquaintance of five years or more. Transcripts of all grades from high school on up are also required.

In the first part of their two-year study, the physician's assistant trainees cover such areas as anatomy, physiology, psychology, biology, the philosophy of primary care, anthropology, English, algebra, and other requirements of the junior college degree. This program is carried out at Foothill College.

In their second year, the trainees are taught medical history taking, general theory and practical knowledge relating to common medical problems in primary care for 17 weeks. The students then rotate through inpatient and outpatient services at Stanford Medical Center and neighborhood health clinics for 18 weeks. They are exposed to general medicine, community medicine and public health, obstetrics and gynecology, pediatrics, psychiatry and surgery.

Completing the second year, the student spends 12 weeks with a practicing doctor in a community. There is a minimum of a one-year residency in the program.

Before launching its program, Stanford did careful spadework with local leaders in the health field. Among other things, it surveyed 1,640 doctors throughout the state to get their reactions to physician's assistants. There were 700 replies to the survey, and 235 physicians indicated a strong interest in hiring an assistant. Most of these doctors were in rural or inner-city areas.

Subsequently, many of these doctors were interviewed with respect to the job they envisioned such paramedics to be doing, and the kind of diseases they encountered in their daily practice. This information was used in the design of the curriculum. ###

END ADVANCE FOR A.M. RELEASE THURSDAY, AUGUST 10, 1972. Mailed August 7, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. Boris V. Petrovsky, minister of health of the U.S.S.R., Friday (Aug. 4) will visit the Stanford University Medical Center as part of a four-day tour of health facilities in California.

Dr. Petrovsky is visiting the United States on the invitation of the U.S. Secretary of Health, Education and Welfare Elliot L. Richardson in keeping with the purposes of the recent U.S.--U.S.S.R. joint agreement on health cooperation.

The 64-year-old health minister is scheduled to arrive in San Francisco Thursday (Aug. 3) and will visit the Kaiser Permanente Medical Center in Oakland.

He is accompanied by, his wife (Madame Ekaterina M. Timofeeve, also a physician) and four other Russian officials.

At Stanford, Dr. Petrovsky will confer with Dean Clayton Rich of the School of Medicine, Dr. Thomas A. Gonda, hospital director, Dr. Norman E. Shumway, heart transplant pioneer, and Dr. Donald Harrison, chief of cardiology.

Dr. Petrovsky is a surgeon, and specializes in thoracic surgery and treatment of congenital and acquired heart defects. He is also director of the Scientific Research Institute of Experimental and Clinical Surgery.

The Russian officials will attend a luncheon with Stanford University President Richard W. Lyman at the faculty club.

In the afternoon, Dr. Petrovsky and his entourage plan to visit the Alviso Family Health Center, 1621 Gold Street, in Alviso.

Dr. Petrovsky will visit Los Angeles, and Atlanta before returning to Washington, D.C.

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Mailed Thursday, August 3, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- In a detailed study to determine how industrial oil affects birds, a Stanford University medical research team found that birds exposed to oil spilled in the San Francisco Bay last year died from ingesting large amounts of oil or from infections and stress related to their exposure and handling.

The birds had been brought to the San Francisco Zoological Gardens for cleaning and care.

The findings, by veterinarian Jim Fox and Steven Snyder of the Medical School's Division of Laboratory Animal Medicine, were presented recently to the Environmental Protection Agency in San Francisco and the Wildlife Disease Conference at Ann Arbor, Michigan.

The work was supported by a grant from the Standard Oil Company, whose Arizona Standard and Oregon Standard oil tankers collided in the San Francisco Bay January 18, 1971. Some 840,000 gallons of bunker c fuel -- a crude oil -- were spilled, contaminating the Bay and 110 miles of the California coastline, from Point Reyes to Santa Cruz.

A better understanding of the pathological effect of oil contamination on waterfowl may lead to improved methods of treating exposed birds and help assess the dangers to breeding affected populations, the researchers believe. They also feel it will aid in evaluating the overall impact of oil pollution on the environment.

"Our pathological findings imply that bunker c oil is toxic to tissues and organs of exposed waterfowl and can be a contributing factor to the deaths of debilitated birds," they reported.

"Birds that spend much of their time on the water are most susceptible to oil contamination," explained Fox, "for they swallow and ingest oil while cleaning their feathers." The three species particularly affected by the Bay oil spill were the western grebe, common murre and surf scoter.

In the 3-1/2 months following the spill, the Stanford investigators examined tissues and organs of 119 birds that had died after being brought to the San Francisco Zoo for cleaning. Specimens from the dead birds were analyzed, using standard histochemical and microbiological techniques, for pathological changes and chemical residues that could be attributed to the oil.

-more-

The birds were selected from the 1,600 received by the Zoo to represent the geographical range of the spill, common species affected, and different time intervals from exposure to death. Ten more birds that had not been exposed to oil served as controls and were examined in the same manner.

Mortality was highest during the first two weeks after the oil spill, and by the end of the second week, 90 per cent of the birds housed at the Zoo had died.

The gastrointestinal tract of these animals revealed the presence of oil; the intestines were often filled with a "black tarry substance" or contained "scattered clumps of oil," the researchers observed. Liver and kidney damage from the fuel chemicals and lung congestion were also widespread in this period.

As the time in captivity lengthened, oil was rarely seen in the intestines, and the incidence of oil toxicity in the liver, kidney and lungs decreased. However, there was an increase in infectious diseases and in degenerative changes in tissues.

By the end of the study, less than two per cent of the birds brought to the Zoo were still alive, Fox noted.

He emphasized that any evaluation of oil contamination to birds should take into account several factors -- chemical composition of different oils, amount of weathering on the sea, extent and length of exposure to oil and the degree of starvation, heat loss, handling or other stresses to the bird.

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Mailed September 27, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: Photo available on request if not included with article.

ADVANCE FOR P.M. RELEASE ON THURSDAY, SEPTEMBER 28.

STANFORD -- Discovery of a new drug which prevents rejection of transplanted kidneys in rats, apparently without affecting their immune mechanism against infection, was reported today (September 28) by a Stanford medical student working with the University's heart transplant team.

The new drug is chicken serum, harvested from a bird after it has been immunized with cells from the rat transplant donor.

If the drug is proven effective in other mammalian systems and then in humans, it could provide a long sought-after immunological key to more successful organ transplantation.

Randall E. Morris, a fourth-year Stanford medical student, found that the chicken serum significantly prolonged the survival of rats receiving kidney transplants in recent experiments at the Medical School.

Morris reported the research today at the Fourth International Congress of the Transplantation Society in San Francisco. Co-authors of the report included Drs. Eugene Dong, Jr., K. Enomoto, and heart transplant pioneer Norman E. Shumway, and Stanford premedical student Gregory Kay.

The investigators hope to test the serum in human transplant patients a year from now, if the preliminary results in rats are corroborated by further studies in other mammals.

Rejection and destruction of transplanted organs by the recipient's immune system has posed the main obstacle to successful human organ transplantation and forced almost all heart transplant teams to give up their efforts. For several years, scientists have been searching for an immunosuppressive agent which prevents rejection, yet does not cripple the body's defenses against infection.

In an interview, Dr. Dong, associate professor of surgery and senior author of the report, said:

"We've found that by using this chicken serum in rats, we're able to prevent rejection of the kidney graft and extend the survival of the recipient very significantly. On the basis of continuing experiments, we believe that this serum does not adversely affect the recipient's immune system."

Thus, unlike other immunosuppressive drugs, the serum may not check the body's defense mechanism and leave the recipient vulnerable to increased infection, Dong said.

Presently, organ transplant rejection is usually treated with horse serum, known as anti-lymphocyte globulin. (Lymphocytes are white blood cells, part of the body's immune system. Globulin is a fraction of blood plasma made up of proteins and containing protective substances called antibodies.)

Horse serum, Dong explained, is directed against human white cells. The serum attempts to keep the recipient's immune system, which recognizes the transplanted organ as foreign material, from rejecting and destroying it. But suppressing the white cells can leave the patient without adequate defenses against infection.

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Chicken Serum Prevents Rejection

The horse serum kills the white cells by activating a destructive enzyme system known as complement, Dong said. In contrast, the chicken antibodies, due to their unique molecular structure, do not activate this enzyme system.

More importantly, he added, the chicken antibodies apparently protect the transplanted organ from the recipient's immune system by reacting with the donor organ cells in a non-damaging way.

The experiments were conducted at Stanford over the past several months in two groups of rats. Morris found that "none of the rats who received the serum from immunized chickens following kidney transplants died of rejection."

In the first group, four white rats received kidneys from inbred, but unrelated brown rats. Two received the chicken serum and two served as controls.

The normal survival time for unrelated rats receiving kidney transplants is approximately 10 days. Both control rats died on day 11 due to rejection. One experimental rat is still living after 42 days with good kidney function. The other died after 15 days of causes unrelated to rejection with a functioning kidney.

In the second group, eight white rats received kidneys from related brown-white rats. This is similar to a kidney transplant within a family in humans. Three rats served as controls and five [illegible]ived the treatment serum.

One of the controls died at 10 days due to rejection; the others are still alive past 25 days. All five experimental rats survived past 20 days. One is still alive after 150 days, and two are alive past 40 days. The other two died of surgical complications on days 25 and 35.

Morris' procedure in the experiments was as follows:

White blood cells from the rat donor were injected into a rooster several times to build up his antibody level. After a period of three weeks, the rooster's blood was harvested.

Red and white blood cells were removed from the blood, and the globulin was precipitated out from the serum.

Then the kidney transplant was performed. The chicken serum was administered intravenously immediately after the transplant and periodically throughout the following two weeks.

In the cases of the controls, serum from non-immunized chickens was used.

Morris, 24, from Hillsborough, has been working under Dong's preceptorship as part of Stanford's Medical Scientist's Training Program, supported by the National Institutes of Health.

In addition to Morris and Kay, three other Stanford students contributed to the experiments--medical student Edward So, and pre-med students Molly Cooke and Charlene Struthers.

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ADVANCE FOR RELEASE THURSDAY, SEPTEMBER 28.

Mailed September 25, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

For information call Gary Cavalli

dictated to AP on Friday, September 22, 1972, at 10:00 p.m.

STANFORD -- James Antolchick, 29, of Tampa, Florida, tonight became the 48th patient to receive a transplanted heart at Stanford University Hospital. He is listed in satisfactory condition.

The operation was performed by a surgical team headed by Dr. Norman E. Shumway.

Antolchick, a technical service representative for the National Cash Register Company in Tampa, is married and the father of two children. He has been severely ill with disease of the heart muscle since May.

Including Antolchick, 17 of the 48 heart transplant recipients at Stanford are now living.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- A new, simple operation to restore urine control without major surgery to women who suffer from incontinence is being done at Stanford University Hospital. The technique eliminates the need for abdominal or pelvic surgery.

Dr. Thomas Stamey, professor of surgery and head of the Division of Urology at Stanford School of Medicine, devised the procedure. He presented the results in 16 patients over the past two years at a recent meeting of the Western Section of the American Urological Association in Vancouver, B.C.

Women who have borne children or are over 40 often experience urine incontinence, particularly during strenuous activity. They may wear rubber pants or pads to absorb any wetness.

To cure the condition, Stamey has devised a reliable method of tightening the urinary bladder (where urine is stored) with a suture on either side. He uses a cystoscope, an instrument for examining the bladder, to accurately place the sutures with special needles he designed.

"The operation has been 90 per cent successful," Stamey noted, "with all patients cured or markedly improved."

Stamey's method is a major modification of a similar operation developed by A. J. Pereyra, a California gynecologist. Pereyra initially showed the feasibility of drawing a suture through a special needle from the abdominal wall to the vagina. "He does not use a cystoscope, however, so he cannot see exactly where he is putting his sutures," explained Stamey.

Although the procedure is designed for females, its principles can be applied to male patients. Men, however, only need such an operation when the muscle that controls the flow of urine has been injured.

Women, on the other hand, can develop an inability to control urine without any apparent injury. It usually begins as occasional loss of bladder control during a strenuous activity. This condition, known as stress incontinence, generally worsens gradually and can result in total incontinence. Pregnancy and childbirth, which put considerable strain on the bladder, account for much of the incidence in females, but even women who have never been pregnant develop stress incontinence, according to Stamey.

With his technique, Stamey inserts the cystoscope in the urethra (the canal which discharges urine from the bladder) to observe that he places the sutures accurately. The sutures should be put exactly at the junction of the bladder and urethra, one on either side. There, they pull up the bladder and make it strong enough to hold urine without any leakage. For the suturing, Stamey developed three special needles with varying angles, which the Pilling Company of Pennsylvania made for him.

A total of 25 women, ranging in age from 15 to 88, have now been operated on at Stanford. comfort is minimal and most patients go home three or four days after their surgery, reported Stamey.

He added the procedure can even be performed on patients who have extensive scar tissue from previous surgical attempts to correct their condition.

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Mailed September 19, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The world's most powerful nuclear magnetic resonance spectrometer to study the mysteries of tiny atoms that make up a biological molecule will be built at Stanford University.

Funded by a $500,000 federal grant, the spectrometer will be part of a highly sophisticated instrumentation center to aid scientists in their efforts to understand and conquer disease.

The funding of the facility will be evenly split over the first three years of operation by the National Science Foundation and the National Institutes of Health.

Under the terms of the grant, the facility, scheduled for completion within a year, will serve as a regional resource in the San Francisco Bay Area. It will be used by eminent chemical physicists, physical chemists, biochemists, and pharmacologists from Stanford, the University of California, San Jose State University, and other area institutions.

In a joint statement, the two federal agencies said the project would assist in the solution of significant chemical, biochemical, and pharmacological problems. It would provide training for qualified scientists, and encourage the application of high-frequency, high-resolution nuclear magnetic resonance to chemistry, medicine and biology on a wider scale.

A nuclear magnetic resonance spectrometer makes it possible for researchers to observe the magnetic properties of atoms in a molecule, by providing information which describes their spacial relationships.

The technique allows scientists to "look" at structures many times smaller than can be seen with an electron microscope. In addition, it does not cause chemical alterations on the object being observed and can follow events in time.

For instance, a scientist may label amino acids (the building blocks of proteins) with stable isotopes and can chart changes in protein structure, which is important in understanding disease.

The scientists will study mechanisms of genetic control, cell membranes, drugs and their effect on enzymes, and the geometry of protein molecules. Abnormally shaped proteins have been associated with hereditary diseases.

The new facility will be directed by a committee chaired by Dr. Oleg Jardetzky, professor of pharmacology. Members are Dr. Harden M. McConnell, professor of chemistry; and Dr. Calvin F. Quate, professor of applied physics.

"Stanford's nuclear resonance spectrometer will approach a resolution of 360 MHz (Mega Herz), Dr. Jardetzky said. "We are confident that such a high resolution instrument can be built by available technology."

(At present, the world's most powerful nuclear resonance spectrometer is at the California Institute of Technology. It was made by Varian Associates and approaches a resolution of 300 MHz).

The spectroscopic technique was developed at Stanford 25 years ago by Nobel Laureate Felix Bloch, emeritus professor of physics. Other Stanford scientists who played a leading role in the development of applications of the method to chemistry and biochemistry are Professors McConnell and John D. Baldeschwieler, chemistry; and Dr. Jardetzky.

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Mailed September 18, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Dr. David Glick, professor of pathology at Stanford University School of Medicine, was elected president of the International Committee for Histochemistry and Cytochemistry.

The election was held at the Fourth International Congress of Histochemistry and Cytochemistry, held recently in Kyoto, Japan.

Dr. Glick, a specialist in tissue chemistry, has contributed to the development of methods for analysing the chemical composition of cells and tissues in the body, and to their application in biomedical research. These methods employ a variety of techniques, such as microchemistry x-ray absorption, electron microscopy and laser spectroscopy.

The International Committee, made up of the presidents and secretaries of every national histochemical society, in addition to the president and a secretary-general, is responsible for coordinating the international congresses and other world activities of the national groups. Dr. Glick served twice as president of the United States Histochemical Society.

Author of some 250 research papers and several textbooks (one of which has been translated in the Soviet Union), Dr. Glick is co-editor of a new review series, Techniques of Biochemical and Biophysical Morphology, whose first volume is scheduled to appear next year. He is also editor of the 21 volumes of Methods of Biochemical Analysis, started in 1954.

In 1932, Dr. Glick received a Ph.D. degree in biochemistry from the University of Pittsburgh. Subsequently he worked in Scotland, Italy, Sweden and Denmark, and is a member of the Royal Danish Academy of Sciences and Letters.

Before joining the Stanford faculty in 1961, Dr. Glick served on the faculty of the University of Minnesota Medical School for 15 years. Since 1962, he has been recipient of a Public Health Service Career Award from the National Institute of Arthritis and Metabolic Diseases.

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Mailed September 15, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Lead arsenate, a widely-used insecticide, does not pose a serious threat to the health of seasonal sprayers, according to an independent study by a Stanford University pharmacologist.

"The use of lead arsenate spray for ornamental plants is not an acute health hazard for the seasonal sprayer in normal health," said Dr. Sumner Kalman, professor of pharmacology at Stanford Medical School. "This is most likely due to the seasonal and brief nature of the exposure."

Kalman conducted a survey of a group of lead arsenate sprayers and their co-workers in Santa Clara and San Mateo Counties during the spring of 1971. He reported his findings recently in a report to the California Department of Public Health's Bureau of Occupational Health and Environmental Epidemiology.

Lead arsenate sprays and dusts have been used in orchards and cotton fields in this country for over 75 years. In the group Kalman studied, the spray was used for four weeks in April and May of 1971 to control the oak moth caterpillar, especially to protect ornamental plants.

Forty-five sprayers, tree surgeons, mechanics, supervisors, brush clearers and office personnel were included in the survey. Urine samples and hair samples were analyzed to determine lead and arsenic concentration and to check for possible poisoning.

"There was no evidence of toxicity," Kalman said. "None of the subjects appeared to have clinical signs of lead or arsenic poisoning."

Urinary lead levels were within the normal to high normal range, and there was no clear-cut difference between the mean lead concentration for sprayers and non-sprayers, he added.

Kalman pointed out, however, that lead arsenate can be toxic to individuals exposed over a long period of time, as reported in a U.S. Public Health Service study of workers in the apple orchards of Washington 30 years ago.

"Use of this insecticide should be avoided, since both lead and arsenic are persistent substances," he stressed. "It will probably be phased out, primarily because it contaminates the soil."

Kalman's survey was conducted independently, without any supporting funds. Lead toxicity studies were performed in Stanford's Department of Chemistry by Drs. Carl Djerassi, Ed Bunnenberg and Gunther Barth, using a new method of urine analysis which requires a very small sample. Professor Thomas Connolly of Stanford's Ryan Laboratories used highly sensitive analysis of hair to determine arsenic contamination.

The study was done in cooperation with S. P. McClenahan Pest Control Company of Palo Alto.

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Mailed September 14, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A scholarship fund for surgical students in the name of Palo Alto surgeon Dr. Blake C. Wilbur has been established at Stanford University School of Medicine.

Dr. Wilbur, general surgeon at the Palo Alto Medical Clinic for the past 42 years, is also emeritus clinical professor of surgery at Stanford.

The endowed fund was established by Mrs. Douglas T. Burch of Redwood City, a patient of Dr. Wilbur. Gifts are being added by other friends and patients.

The fund will be used to provide scholarships to surgical students, interns and residents at Stanford.

Dr. Wilbur received his A.B. degree from Stanford in 1922 and attended Stanford Medical School for two years before obtaining his M.D. from Harvard in 1925.

He was one of the eight founding partners of the Palo Alto Medical Clinic in January of 1930. Since that time, he has maintained his surgical practice at the Clinic, while continuing his active involvement in training surgical interns and residents at Stanford.

Dr. Wilbur is the son of the late Dr. Ray Lyman Wilbur, former president of Stanford University and dean of the Medical School.

He and his wife of 49 years, Mary, reside in Palo Alto. They have four children, two sons and two daughters. Their son, Dr. Richard S. Wilbur, is currently Assistant Secretary of Defense for Health and Environment.

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Mailed September 11, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors and Science Writers:

The following story concerns a new Stanford program to combat heart disease through the use of mass media campaigns. This represents the first time the media will be used in a community setting (Watsonville and Gilroy) in an attempt to persuade people to change high risk habits. It will also mark the first attempt by scientists to critically evaluate whether or not the media can play an important role in behavior change efforts. To determine the success of the campaign, a before-and-after comparison of heart disease risk factors will be made in a random sample of 500 individuals in Watsonville and Gilroy.

You are invited to send your representatives to a press conference on Thursday, September 7, at 10:30 a.m. in Room M114 at Stanford Medical School. Dr. John Farquhar, head of the interdisciplinary research team, and Dr. Henry Breitrose, associate professor of communication, will discuss the program.

Additionally, two television spots which will be utilized in the media campaign will be shown at the press conference. Prints of these television spots will be made available to all television stations attending the conference.

ADVANCE FOR P.M. RELEASE THURSDAY, SEPT. 7

STANFORD -- Stanford University researchers today (Sept. 7) announced plans to launch a new, community-based program to help prevent heart disease, using mass media campaigns in an attempt to persuade people to change high risk habits.

The project represents the first time that newspapers, television, and radio will be employed in a behavior change effort at the community level. It also marks the first attempt by scientists to evaluate critically whether or not the media can be used successfully for this purpose.

An interdisciplinary research team headed by Dr. John W. Farquhar, associate professor of medicine at Stanford's School of Medicine, will begin implementing the program next week in the community of Watsonville. Several other Northern California towns will be involved during the next few months.

Watsonville and Gilroy will receive the initial mass media, behavior change campaigns for a period of one year, Farquhar said. To determine the success of the campaigns, a random sample of 500 individuals per town will be selected for before-and-after comparison of heart disease risk factors such as blood pressure, body weight, and levels of blood sugar, fats and cholesterol.

Along with the media campaigns, virtually concurrent one-year research studies related to the causes, prevalence, and risk factors of heart disease will be conducted in Tracy and the communities San Mateo County.

Farquhar stressed that all planning for the project was done in close cooperation with local heart associations and medical societies, and civic organizations in the involved communities. "Their input was solicited from the beginning," he said, " and they've been very enthusiastic about the project. Without their cooperation and interest, we simply couldn't have gotten off the ground." -more-

The program has been in the planning stage since it was established a year ago with the support of two grants from the National Heart and Lung Institute. The grants, due to run at least five years, totalled over $750,000 the first year and are projected at nearly $4 million for five years.

In the next several years, the researchers plan to conduct further studies and behavior change campaigns in other California towns.

Farquhar said the Stanford project represents the type of preventive efforts needed to help stem the "epidemic" of heart disease in this country, which claims the lives of over 600,000 Americans per year.

"Most of the deaths of people under 65 in the United States due to coronary heart disease are preventable," he said. "We believe that success in achieving substantial behavior change at the community level lies at the root of any future national campaign to reduce premature mortality from heart disease and stroke."

Farquhar identified several high risk habits which will be targets of the media campaign, including smoking; physical inactivity or lack of exercise; gaining excess weight; and consuming increased amounts of cholesterol, saturated fats, sugar, salt and alcohol. Physicians have long associated these habits with heart disease.

"We're not advocating that people make massive changes in their lifestyle, just small but significant ones," said Dr. Henry Breitrose, associate professor of communication and a member of the research team.

"Our message will be a simple one--minor changes in a person's daily activities can significantly reduce his heart disease risk factors."

The campaign, which will be conducted in both English and Spanish, will utilize radio and television spots, press releases, recipe columns in local newspapers, a "cooking for your heart health" cookbook, and possibly other media.

A subgroup of certain high risk individuals will receive an intensive follow-up campaign, Farquhar said. These "triggering" sessions will consist of frequent meetings of the high risk group with "change agents" from the Stanford research team in an encounter group atmosphere.

Preliminary testing of the individuals in the random sample will begin next week in Watsonville and in Gilroy in mid-October. The data-gathering efforts in Tracy and in San Mateo County communities are due to begin in November.

Initially, home interviews will be conducted with individuals in the random samples to explain the nature and goals of the project, Farquhar said. Then, a survey center will be established in each town, where those in the sample will be given physical examinations and tested for prevalence of heart disease risk factors, including body weight, blood pressure, and levels of blood fats, cholesterol and sugar.

"At the end of a year, we'll come back to check the same things in these same people," Farquhar said. "In addition to behavior change, we'll be looking for beneficial changes in attitude, motivation, and information."

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In obtaining this data, tests and examinations at the survey center will be supplemented by detailed written questionnaires.

The before-and-after aspect of the Stanford project distinguishes it from previous behavior change efforts, Farquhar noted.

"Money has been spent in the past on media campaigns to change behavior and get people to do the right thing," he said, "but no attempt was made to find out whether they worked."

Involved in the planning of the project and the production of the media campaign has been a research team consisting of physicians, behavioral scientists, journalists, television and film specialists, dieticians, exercise physiologists, and statisticians.

Dr. Nathan Maccoby, professor of communication, is co-principal investigator of the project with Dr. Farquhar. The media campaign is directed by Janet Alexander of the Department of Communication. Dr. Peter D. Wood, senior scientist at the Medical School and deputy director of the program, will supervise testing for levels of blood lipids (cholesterol, fats, and other compounds).

Farquahar noted that the Stanford project, initiated last June with the establishment of a Lipid Research Clinic and Specialized Center of Research (SCOR) in arteriosclerosis, reflects a new federal commitment to the prevention of heart disease. Fifteen SCOR centers and 12 Lipid Research Clinics focusing on arteriosclerosis detection and prevention have been developed nationwide since the National Heart and Lung Institute began the program last year.

A vast number of civic organizations, medical groups, and individuals in the involved communities have worked closely with the Stanford researchers in the development of the project, including: county medical societies, health departments, and comprehensive health planning agencies; local heart associations; community hospitals; chambers of commerce; mayors' offices; city councils; and local newspapers, radio and television stations.

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Business Wire September 6, 1972.
Mailed 9/5/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Development of a new brainwave test which reveals a person's sexual preferences was announced Friday (Sept. 1) by a team of Stanford University psychiatrists.

The test, which utilizes sophisticated computer techniques, is believed to open a new era for research by providing scientists for the first time with an objective test of a person's arousal to any outside stimulus presented in the form of a photograph (slide), the psychiatrists said.

By measuring arousal to sexual stimulation more objectively, psychiatrists will be better able to evaluate the effectiveness of psychiatric treatment in child molesters and other sex offenders.

The technique of studying brainwave responses to photographs is also expected to have broad application to areas beyond the study of deviant sexual behavior, the psychiatrists emphasized. It can be used as a tool for measuring progress in other forms of psychiatric treatment.

In fact, one of the psychiatrists on the team, Dr. Ronald M. Costell, now at the National Institute for Mental Health in Washington D.C., plans to apply this technique in studies of family interaction. He will study brainwave responses to photos of family members in families undergoing therapy as a group.

Besides Dr. Costell, the Stanford research team includes Drs. Donald T. Lunde, Bert S. Koppel, and William Wittner. Their work is reported in the August 25 issue of Science, a professional journal. The studies were conducted under the auspices of the Veterans Administration at the Palo Alto Veterans Administration Hospital, an institution affiliated with the Stanford Medical School.

The researchers subjected groups of 12 male and female volunteers to exposure of photographic slides showing male nudes, female nudes, and sexually "neutral" silhouettes (the latter a female, but sexually indistinguishable back-lighted human figure). All of the volunteers were connected to a brainwave machine (EEG) through electrodes glued to their scalps. The EEG in turn was fed through a computer for analysis of the E brainwaves.

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E-brainwaves

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E brainwaves, or expectancy waves as they are called, because they occur when a person is in a state of anticipation, would be indistinguishable visually in an ordinary EEG tracing. E waves typically occur between a warning stimulus and the main stimulus.

Results showed that when the volunteers viewed a preferred sexual image in the photographs, there was a marked increase in activity of E waves.

The most important development in the experiment took place when E brainwaves in male volunteers increased in response to the "neutral" figure as they went through 25 trials of exposure, while the female volunteers showed precisely the opposite pattern.

"This suggests," the researchers said, "that as the experiment progressed, both male and female volunteers came accurately to perceive the picture in the 'neutral' slide as a female.

"Such response pattern lends support to an interpretation of E-wave enhancement when a person views preferred objects."

The findings, according to the researchers, indicate a clear relation between the level of E-wave activity and the expected degree of sexual interest to which these volunteers were exposed.

The results also support the potential utility of the method as a research and clinical tool for determining objectively sexual interest and preference patterns in both males and females," the researchers added.

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Business Wire September 1, 1972.

Mailed 9/1/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- The search for new understanding and improved diagnosis of Hodgkin's disease will be continued at Stanford University School of Medicine under a two-year $62,721 grant from the John A. Hartford Foundation, Inc. of New York.

The grant, the second from the Foundation to Stanford in support of Hodgkin's disease research, was announced jointly today (October 31) by the Foundation's president, Harry B. George, and Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

Hodgkin's disease is a form of cancer affecting the lymphatic system, which plays a part in the body's ability to fight infection. The disease kills some 4,000 Americans each year.

The Stanford investigators plan to utilize cell staining, tissue culture, and electron microscopy techniques to study the natural history of the disease, increase the accuracy of diagnosis and determine the response to therapy.

The project is being directed by Dr. Ronald F. Dorfman, associate professor of pathology. He will be assisted by Drs. Richard L. Kempson, Gerald Levine, Arturo Rosas-Uribe, and Irving Weissman the Department of Pathology, and senior research assistant Dede Rice.

To make a diagnosis of Hodgkin's disease, Dorfman said, pathologists must detect the presence of aberrant cells known as Reed-Sternberg cells.

The origin of the Reed-Sternberg cells is unknown. Using tissue culture and other techniques, Dorfman and his associates are investigating the possibility that these cells may be derived from lymphocytes, or white blood cells.

"We're pursuing the concept that some virus or oncogenic agent may be acting on the lymphocytes and transforming them into the Reed-Sternberg cells," he said.

Dorfman noted that the normal functions of the lymphocytes--maintaining cellular immunity and producing antibodies--can be abnormal in patients with Hodgkin's disease.

In future studies at Stanford, radioactive markers will be used to label cells from tissue removed for diagnostic purposes from patients with Hodgkin's disease. This will enable pathologists to follow the tagged cells and hopefully determine whether any transform into Reed-Sternberg cells, Dorfman said.

Additionally, continuing electron microscopy studies will focus on the relationship of Reed-Sternberg cells to others in the cell environment.

In diagnosing Hodgkin's disease, Dorfman said, pathologists must take certain cellular patterns into account. The diagnosis is complicated because other diseases, such as infectious mononucleosis, are characterized by similar cells and cellular patterns.

"We're beginning to recognize more and more the pitfalls in diagnosing Hodgkin's disease," he said. "We can recognize 'imposter' cells more clearly now, yet at the same time, there may be a relationship between these and Reed-Sternberg cells."

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Mailed October 31, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The Annual Harold K. Faber Clinical Symposium will be held Friday (October 27) beginning at 9 a.m. in the Children's Hospital at Stanford.

Eight faculty members of the Stanford University School of Medicine department of pediatrics will present papers during the day-long meeting ranging from heart disease to new philosophies in cancer treatment for children.

Dr. Alfred M. Bongiovanni, professor and chairman of the department of pediatrics at Children's Hospital of Pennsylvania will talk about new concepts of the adreno-genital syndrome.

The Faber lecture will be given by Dr. Irving Schulman, newly appointed professor and chairman of the Department of Pediatrics in the Medical School.

A paper on "Prospectives in Nutrition" will be presented by Dr. Norman Kretchmer, the Harold K. Faber professor of pediatrics in the School of Medicine.

The annual symposium honors Dr. Faber, a distinguished San Francisco pediatrician, Stanford emeritus professor of pediatrics, and former medical director of Children's Hospital at Stanford.

The press is invited to attend. The Children's Hospital is located at 520 Willow Road.

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Mailed October 25, 1972.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- How much milk should you drink?

It's all a question of heredity, says Dr. Norman Kretchmer, a Stanford University pediatrician and biochemist who specializes in problems of human growth and development.

Professor Kretchmer's views appear in the October issue of Scientific American. He urges a review of nutrition programs for underdeveloped areas because of recent findings showing that some populations cannot digest milk.

If your ethnic background is northern European or white American, chances are that milk is okay for you. If, however, your ancestors came from non-milking regions of the world as some parts of Asia and Africa, there is a good chance that too much milk gives you indigestion.

The reason is simple. To digest milk, your body must produce the essential enzyme lactase which breaks down lactose, the milk sugar. Lactose and fats and proteins make up the three major components in milk.

In populations that drink milk the adults have more lactase and drinking milk has no adverse effects. In non-dairying populations the opposite is true. But even for most adults with intolerance to milk sugar, drinking moderate amounts of milk has seldom adverse effects and is nutritionally beneficial.

The problem of lactose intolerance, writes Kretchmer, becomes crucial with infants between the ages of two and four. Their lack of the enzyme that breaks down milk sugar is more serious and they often suffer from severe diarrhea and vomiting. The decrease of lactase after the suckling period seems to be a normal development related to evolution.

"This can have serious consequences for poorly nourished populations," said Kretchmer. "Milk is a nearly complete human food, and in powdered form it can be stored and shipped long distances. It is a popular source of protein and other nutrients in many programs, including American blacks."

The problem and its implications for nutrition are being studied by the U.S. Office of Child Development and the Protein Advisory Group of the United Nations, Kretchmer said.

"It may well be that programs of indiscriminate, large-scale distribution of milk powder to intolerant populations should be modified, or that current moves toward supplying lactose-free milk powder should be encouraged," Kretchmer suggested.

Kretchmer noted that the problem of lactose intolerance has been found to be world-wide and not uncommon. He cites both his own work and studies of more than a dozen scientists.

-more-

"That this general adult deficiency in lactase has come as a surprise to physiologists and nutritionists can perhaps be attributed to a kind of ethnic chauvinism, since the few human populations in which tolerance to lactose has been found to exceed intolerance include most northern European and white American ethnic groups," Kretchmer said.

The development of tolerance to milk sugar of some groups has been linked to heredity. One scientist, Dr. Frederick J. Simoons of the University of California at Davis, has proposed that a genetic mutation enabling man to digest lactose probably occurred at least 10,000 years ago when some groups began to milk animals.

To test the genetic hypothesis, Kretchmer and other members of the Stanford Department of Pediatrics studied members of four of the largest ethnic groups in Nigeria. These were the Yoruba in western Nigeria, the Ibo in the east, and the Fulani and Hausa in the north. These groups have different origins and occupations, and in some, milk in their diet beyond the age of weaning was introduced only in recent times.

Kretchmer took blood samples from volunteers in each group after they had drunk milk and measured its sugar content. Results showed that the Hausas and Fulanis who live in cattle-raising areas and drink milk had a lower malabsorption rate of milk sugar than the non-pastoral Yorubas and the Ibos.

Once the Stanford pediatrician had determined the distribution of lactose tolerance and intolerance in the groups, he went on to study the genetics of the problem in the results of mixed marriages.

He found that intolerance to milk sugar appears to be transmitted genetically and is probably a recessive trait -- that is, both parents must be intolerant to milk sugar to produce an intolerant child.

"The blacks brought to America were primarily Yoruba and Ibo or similar West African peoples who were originally intolerant to lactose," Kretchmer said. "American blacks have been in this country for between 10 and 15 generations, in the course of which a certain complement of white northern European genes have entered the black population.

"Presumably as a result, lactose intolerance among American blacks has been reduced to approximately 70 per cent."

The Stanford research was supported in part by grants from the Foundation for International Child Health, the Institute of Child Health in Lagos, Nigeria, the National Institutes of Health, and the National Foundation-March of Dimes. It was carried out in collaboration with the faculty of the department of pediatrics of the University of Lagos.

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Mailed October 24, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A Stanford University hearing specialist says efforts to curb noise pollution should take into account the possible psychological effects of loud noise on man.

Up to now laws dealing with the problem have prescribed the noise volume acceptable to prevent physical damage to the human ear, said Dr. Donald A. Belt, a clinical audiologist and research associate in the Division of Otolaryngology.

"Scratching a blackboard with a piece of chalk makes little noise, but it's so irritating most people cringe," said Belt in an interview. "Listening to the roar and thunder of a symphony orchestra, on the other hand, can be simply delightful!"

Belt noted it is difficult to prove scientifically how loud noise affects man's psyche. But he added, "The absence of easily observable effects of environmental noise does not constitute scientific proof of a safe environment as some would have us believe."

A basic quality of human existence is the cyclic flow and withdrawal of energy in relation to the individual's environment, Belt said. There is activity and release of energy. Its complement is a state of rest. Health and normal functioning depend on a reasonable balance of these two states.

In vision, for example, one associates light with the activity state while darkness denotes the period of rest, Belt explained. For hearing, sounds are associated with activity while a relative quiescence is expected as a precursor for rest and revitalization. Man has no built-in defense against continuous exposure to loud noise and hence he goes partially deaf.

"We are faced with a situation in our society in which people are unable to find rest or retreat from an almost continual din," Belt commented. "In some areas, noise is heard 24 hours a day.

"Often people retreat to the remote seclusion of a mountain area, only to find themselves rudely interrupted by mini-bikes, motorcycles, snowmobiles and chainsaws.

"If we accept that quiet is important, then we must focus our attention not only on the maximum level of environmental noise which causes physiological damage, but also on the minimum which provides each citizen with the opportunity for revitalization."

One federal law, the Occupational, Safety and Health Act, requires industries to set up hearing conservation and noise abatement programs if noise levels exceed 90 decibels. New York City recently passed the toughest noise code in the nation which bans several major sources of street noise and forbids construction between dusk and dawn.

The decibel (db) is the unit for measuring sound. It is a logarithmic comparison of any given sound with the softest sound that is readily measurable. A zero-decibel sound would be close to the normal threshold of hearing. A 90 db sound would be extremely loud to the normal hearer but might be the softest one heard by a person with the maximum hearing loss; and a 135 db sound is strong enough to cause acute pain. Normal conversation registers about 55 db at the listener's ear.

-more-

Hearing Impairment

While such measures constitute a move in the right direction, Belt thinks tougher laws are needed to establish "the individual's right to quiet" at home for at least part of the day. He recommends a limit of 35 decibels or less as a permissible level for quiet periods.

Belt concedes that setting strict, quantifiable limits on offensive city sounds would be difficult to enforce with sound level meters and fines. He thinks the solution should be economic.

"When it is cheaper to own and use a quiet machine than a noisy one, we will be well on the way toward restoring tranquility in our environment," he said.

Belt recommends assessment of annual noise emission fees on motor vehicles at a rate proportional to the noise they produce. He also proposes that all commercial machines be labeled by law with their noise emission characteristics.

Belt and Dr. Earl D. Schubert, professor of hearing and speech sciences, are currently working with computers to develop an Audiological Data Bank in the Stanford University School of Medicine to study not only what constitutes normal hearing in the general population, but also to predict with reasonable accuracy the relative danger of environmental pollution.

At present the Bank has accumulated records of 30,000 persons. "Over the next five years we anticipate the accumulation of roughly a half a million records of individual hearing along with other inent data," said Belt.

The Bank covers an age range from newborn infants to geriatric patients. It relies on the cooperation of industry, public and private schools, government and local agencies, hospitals and clinics. The goal is to establish a comprehensive record of hearing and noise exposure on many individuals over a long period of time.

"The average person is almost totally unaware of his vulnerability to hearing loss," Belt emphasized. "There is neither pain nor bleeding. After noise exposure, the individual may have the feeling of temporary hearing loss, some ringing sounds in his ears, and slight decrease in ability to communicate effectively.

"After resting overnight, the symptoms may disappear, leaving the person with the impression that hearing has returned to normal.

"The fact is that hearing does not completely recover and, after many repeated insults, an accumulation of effects brings about a significant and irreversible hearing loss."

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Mailed October 23, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

FOR RELEASE WEDNESDAY AM, OCTOBER 25, 1972

STANFORD -- Dr. Henry S. Kaplan, professor and former chairman of the Department of Radiology at Stanford University School of Medicine, last night (October 24) received the Annual National Award of the American Cancer Society for his work in Hodgkin's Disease.

Dr. Kaplan, one of the leading international authorities on cancer, was honored at the Society's annual dinner in New York City.

He was cited for "performing original clinical research, developing megavoltage radiation equipment and techniques, and combining these with imaginative application of surgery and chemotherapy for the cure and control of Hodgkin's Disease."

Chairman of Stanford's Department of Radiology for 24 years, Dr. Kaplan stepped down from his administrative responsibilities last month to devote himself more fully to teaching and research.

Earlier this year, he was elected to the National Academy of Sciences and the Academy's Institute of Medicine. In 1971, he received the Robert Roesler de Villiers Award for leukemia research from the Leukemia Society of America. In addition to awards from Italy and France, he won the Atoms for Peace Award in 1969, the only physician to be so honored.

A 1940 graduate of Rush Medical College of the University of Chicago, he served his internship and residency at Michael Reese Hospital in Chicago. He went on to the University of Minnesota and Yale before coming to Stanford in 1948.

Dr. Kaplan was one of three winners of the Society's Annual National Award this year. The others were Dr. Harold Rusch, director of the McArdle Laboratories at the University of Wisconsin and editor of Cancer Research, for his accomplishments in cancer etiology; and Sir William J. Kilpatrick of Australia, for his pioneering efforts in the development of the International Union Against Cancer.

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END OF RELEASE FOR WEDNESDAY AM, OCTOBER 25, 1972

Mailed Monday, October 23, 1972

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- A comprehensive attack on drug addiction will be launched in a new laboratory by scientists from many specialties at Stanford University School of Medicine, it was announced today (Oct. 19).

The new addiction research laboratory will investigate the fundamental biological and pharmacological aspects of narcotics addiction and treatment. Most drug programs have focused on treatment rather than the scientific basis of addiction.

The facility will be headed by Dr. Avram Goldstein, professor of pharmacology. He has done extensive work on the basis of addiction and the effectiveness of methadone treatment. Former chairman of the pharmacology department, he relinquished his administrative responsibilities two years ago to devote his time to addiction research.

Narcotics addiction is becoming a nationwide epidemic, noted Goldstein. "With some 600,000 heroin addicts in this country, the need to prevent its spread is urgent."

Research in the biochemical and neurological mechanisms of narcotic addiction will improve the way we deal with the process in man, said Goldstein. "As we learn more about addiction, we will be able to formulate better treatment programs. We need to find out what works and what doesn't and why," he commented.

The laboratory operation will be supported in part by two grants from the Center for Studies of Narcotic and Drug Abuse of the National Institute of Mental Health (NIMH). The grants, totaling close to $500,000 a year, include an annual award of $380,200 for the next four years under a special NIMH program to fund a limited number of addiction research centers. Additional operating funds are also being sought.

The funds for constructing the building that will house the laboratory came from several private sources. The facility will be located on Campus Drive, near the Medical Center.

There, investigators of both basic laboratory and clinical aspects of narcotics addiction will work under one roof. Goldstein said he plans to continue and expand his present areas of research with the help of a larger staff. The staff will include scientists, physicians, statisticians, computer experts and administrative personnel.

Much of the work will be done in cooperation with the Santa Clara County Department of Mental Health and its methadone treatment program which Dr. Goldstein organized.

Methadone, a drug that prevents the withdrawal pains of addicts deprived of heroin, is used widely to treat and rehabilitate heroin addicts. Yet, "few well-designed clinical trials have been carried out to study dosage, duration of action, side effects or ancillary treatment needs," Goldstein said.

The Santa Clara County program is a "highly structured research program," he pointed out, which has yielded significant data on methadone treatment.

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One field test underway at a Mountain View clinic involves the use of a new form of methadone which Goldstein feels may be the "methadone of the future." If is a longer acting form of methadone which is only taken three times a week instead of every day as the present form requires.

The advantage, according to Goldstein, is the convenience. Addicts will have to report to the detoxification facility less often.

This new methadone may also help stop the supply of the drug on the street. With the current form advance dosages may be distributed to addicts. Unfortunately, instead of using the methadone at home as prescribed, some addicts sell it or give it away to friends. Like any drug, however, methadone may be dangerous when not used properly, Goldstein emphasized. The new form will only be administered at the clinic.

He estimates that it will be another six months before the federal government makes any decision on the long acting methadone.

In his pharmacology laboratory, Goldstein has found that narcotic tolerance and dependence are completely reversible in mice. "If this is true for man, treatment should aim to return addicts to a narcotic-free state," he said. He favors a methadone program based on temporary support rather than maintenance, which assumes that addicts cannot function without a narcotic in their systems.

Other methadone studies scheduled to be conducted in the new laboratory include the efficiency of different dosage levels and whether the level varies for individuals, examination of side effects and observation of personality changes and rehabilitation progress during methadone treatment.

Since laboratory animals can be addicted to narcotics, animal experiments can provide new clues to narcotic addiction in man. Goldstein plans to broaden his studies on how narcotics act in the brain and what biochemical processes they affect.

His laboratory has already identified certain drug receptor sites where narcotic molecules combine in nerve cells of mice brains and guinea pig intestines. Additional studies on this narcotic binding substance, he believes, may clarify how the drug triggers biochemical and physiological responses in the body and how narcotic dependence develops.

Construction of the laboratory has been made possible by donations from foundations, corporations and private individuals. The donors include the Drug Abuse Council (set up by the Ford, Carnegie, Commonwealth and Kaiser Foundations); Dr. Alejandro Zaffaroni, president of Alza Corporation; Hoffman-La Roche Foundation; Syva Company; Max Palevsky of Los Angeles; Marie C. and Joseph C. Wilson Foundation; Brig. General James O. Boswell of Palo Alto; and an anonymous donor.

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Mailed October 19, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

N. J. D'Ambrogio, an authority on sugar production and consumption, died Thursday (Oct. 12) at his home in Berkeley after a long illness.

In 1970, Mr. D'Ambrogio, a Stanford University alumnus, gave the University about 100 acres of land on the Monterey Peninsula to create a memorial to his daughter, Maureen, who died of cancer in Berkeley in 1967.

Proceeds from the gift will support cancer research in the Medical School and an endowed professorship known as the Maureen Lyles D'Ambrogio Professorship held by a faculty member engaged in cancer research.

The professorship is currently held by Dr. Henry S. Kaplan, an internationally known cancer researcher and professor of radiology.

Mr. D'Ambrogio was born in Rome, Italy, and immigrated to the United States as a boy. He began his elementary education in Flushing, New York, and his college education at the University of Colorado in 1915. He then transferred to Stanford University where he received an A.B. degree in 1917.

During the depression, while working in the investment field, he undertook independent research on world economic problems, becoming an authority on world sugar production and consumption.

Retired since 1951, Mr. D'Ambrogio lived at Kent Manor in Carmel until 1970 when he donated the property to Stanford.

Mr. D'Ambrogio is survived by his wife Bridie of Berkeley; two sisters, and nieces and nephews.

Services will be held at 4 p.m. Sunday (Oct. 15) at McNary and Morgan Chapel at Berkeley. Internment will be at Holy Cross Cemetery in San Francisco.

The family prefers that memorial gifts be made to the Maureen Lyles D'Ambrogio Memorial Fund, Stanford University School of Medicine.

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Editors: The age of Mr. D'Ambrogio was not disclosed.

Business Wire October 13, 1972.
Mailed October 13, 1972.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Dr. Paul Berg, professor and chairman of the Department of Biochemistry at Stanford University School of Medicine, has been awarded the V. D. Mattia Lectureship for 1972, for his work on how living cells make proteins.

The announcement was made recently by the Roche Institute of Molecular Biology in Nutley, New Jersey, which each year gives special recognition to a scientist for outstanding contributions to the biomedical sciences.

Dr. Berg was cited for "fundamental discoveries in protein synthesis," including the mechanisms by which enzymes activate the chemical units (amino acids) that form proteins, and the role of the genetic apparatus (nucleic acids) in their formation.

He will deliver a lecture entitled "Dissections and Reconstructions of a Viral Genome," November 9, 1972 at Hoffmann-LaRoche Inc., in Nutley. At that time, he will also be presented a $5,000 award and a certificate for his achievements.

After serving on the faculty of Washington University in St. Louis for four years, Dr. Berg came to Stanford as associate professor in 1959. He became professor in 1960 and was named Jack, Lulu and Sam Willson Professor of Biochemistry at Stanford in 1970.

A 1948 alumnus of Pennsylvania State University, Dr. Berg received a Ph.D. from Western Reserve University in 1952. In 1966 he was elected to the National Academy of Sciences and the American Academy of Arts and Sciences.

The lectureship was established in honor of the late Dr. V. D. Mattia, who served as president and chief executive officer of Hoffmann-LaRoche, Inc. He had been instrumental in creating the Roche Institute of Molecular Biology.

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Mailed October 12, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Copies of Stanford M.D. available on request if not included with story.

STANFORD -- Fierce competition and heavy flow of applicants challenge medical schools to define more clearly the type of student that should be admitted, according to two Stanford University physicians.

"Students are striving to enter an environment as competitive as that faced by applicants after World War II," said Drs. Bernard W. Nelson and Lawrence Crowley.

As a result the average student applied to three different schools in 1950, while his counterpart in 1971 applied to seven.

"The reasons for the increase in applicants need to be understood if medical schools are to develop equitable admission systems," said the physicians.

Nelson, associate dean for education, and Crowley, associate dean for planning at the School of Medicine, made their comments in the current issue of Stanford M.D., the magazine of the Stanford Medical Alumni Association.

In their article, "Who Will Be Doctors Tomorrow?" the Stanford physicians attribute the growth of applicants to a 30 per cent increase in the last two years of undergraduate freshmen who have declared majors in premedicine and dentistry, to women wishing to become physicians and to older applicants approaching medicine as a later second career.

"In addition, there has been a marked shift among undergraduates from physics, chemistry and engineering to the biological sciences and medicine," Nelson and Crowley wrote.

Nelson predicted 50,000 students will apply to U.S. medical schools in 1974. If they apply to eight schools, the number of applications will approach 400,000.

In 1971-72, only 12,361 students were admitted to U.S. medical schools.

About one out of every 10 students applies to Stanford, Nelson explained. Stanford Medical School should expect 5,000 applicants in 1974 competing for 86 positions in the entering class.

Nelson and Crowley commented that medicine and society stand to benefit from the increase in the number and quality of applicants. "But this development puts a tremendous strain and greater responsibility on the individuals who select future physicians," they said.

Plans, devised to facilitate student applications and to reduce the workload of admission committees, were termed inadequate by Nelson.

He said the situation calls for examination of admission practices in medical schools and studies to measure criteria for student selection against their career choices and performance as physicians.

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Mailed October 11, 1972

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Heart Transplant #49 10/7/72

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A 56-year old Midwestern man become the 49th patient to receive a heart transplant at Stanford University Hospital, in an operation performed Saturday afternoon (October 7).

He is now listed in satisfactory condition.

The patient requested anonymity, as did the family of the heart donor.

Including the new recipient, 17 of Stanford's heart transplant patients are now living.

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Business Wire 10/9/72

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The taming of the surgeon is now almost complete.

This is the opinion of a Stanford University anesthesiologist who says Frankensteinian potential lurks in all advanced technology.

But now, thanks to the anesthesiologist, the surgeon behaves as "the gentleman that he really wanted to be all along," says Dr. John P. Bunker, professor of anesthesiology.

This was not always so, Bunker explains. The anesthesiologist--a nonsurgeon looking over the surgeon's shoulders--was first considered an operating room intruder and his presence was vigorously opposed.

Bunker's views appear in an article in the current STANFORD M.D., the magazine of the Stanford Medical Alumni Association. It is based on his new book The Anesthesiologist and the Surgeon.. It is the story of how the two have become partners in the operating room.

"Every operation is for the beginning surgeon an adventure into the unknown," Bunker writes. "So indeed, the sociology of the operating room of the past is recapitulated for every new generation of young surgeons and anesthesiologists, and the operating theater revives that classic old melodrama, the taming of the surgeon."

Bunker says that when he saw the movie M*A*S*H, a comedy about battlefield surgeons in Korea, he felt that he was seeing for the first time the operating room and the surgeons who work there authentically portrayed.

Hawkeye Pierce, the principal character, was the very personification of the ultimate surgeon. In Bunker's words, "He was the rugged individualist, unconcerned with conventional values and constraints; unwavering in dedication to his patients; utterly scornful of incompetence in others, and overcome with grief at his own failures.

"Hawkeye, the man of decisive action, is what the surgeon must be to meet the awesome responsibility he faces."

Surgery might be epitomized as the taking of great and often unknown risks to achieve great cures by dramatic means, Bunker comments. -more-

He adds: "To understand behavior in the operating room we must turn to the surgeon, since it is about him and his decisions that everyone and everything revolve. He is the Captain of the Ship."

"It was not uncommon a generation ago," Bunker writes, "for the surgeon to throw a tray of instruments on the floor, to rap his assistant's knuckles, or to reduce his nurse-anesthetist to tears by verbal abuse. Fear of the effects of this on the patient made such behavior an accepted form.

"The surgeon's authority was easily perverted to autocracy and tyranny, and self-confidence led naturally to overconfidence and arrogance. His high opinion of himself was often matched by his low opinion of other physicians.

"Self-doubts were incompatible with the decisive action required in surgery--therefore, the surgeon's need for the scapegoat."

In his book, Bunker does not overlook the surgeon's other little known role--that of the master entertainer.

"All members of the surgical team indulge in the 'joking and small talk,' which often serves to relieve anxiety," he writes. "But the surgeon sets the tone.

"Many surgeons are outrageously funny and enter into this role with enthusiasm. But few are genuine wits, and some have taken the opportunity of a captive, and presumably admiring audience, to indulge in character assassination, what some...have termed 'knifemanship.' "

Such was the operating room, and its principal actor, at its worst. Bunker adds, however, that under most circumstances the strict discipline of operative surgery was translated into an orderly and highly effective team effort. Authority was understood rather than expressed. Everyone knew his place.

In the early days, the majority of surgeons opposed the specialty of anesthesia, Bunker says. But today the struggle is over. Whatever the surgeon's misgivings initially, he now accepts the anesthesiologist's assistance gratefully and graciously, even enthusiastically. The good-risk patient rarely succumbs to the unexpected, and even the desperately sick usually survive.

"Occasionally, of course, operating room behavior reverts to earlier patterns--though I haven't seen a tray of surgical instruments thrown for a good many years," Bunker adds.

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Transmitted on Business Wire 10/6/72.
Mailed 10/6/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Gary Cavalli

STANFORD -- James Antolchick, 29, a heart transplant patient at Stanford University Hospital, died last night at approximately 7:00.

Antolchick, of Tampa, Florida, apparently died of complications while undergoing surgery for a lung infection.

He received a transplanted heart in an operation at Stanford on September 22.

A former technical service representative of the National Cash Register Company, Antolchick had been severely ill with heart disease since May.

He is survived by his wife, Carolyn, and two children.

Telephoned to AP, October 5, 1972

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Faced with financial problems, medical schools will find it increasingly difficult to aid students in meeting the rising costs of medical education, according to a study headed by a Stanford University medical educator.

The report calls on federal and state governments to increase their contributions to loan and scholarship programs, and on the medical establishment to explore additional methods for assisting students before the situation reaches crisis proportions.

As enrollments grow and the representation of students from low-income families increases, greater difficulties will be faced in finding adequate sources for student financial assistance, the report predicts.

In 1970 about $39 million was available in the United States in the form of loans and grants to assist medical students, the study shows. The need for student loans and scholarships will reach $78 million by 1975 if enrollments increase by 50 per cent and costs continue to escalate at the present rate of 5 per cent a year, according to the report.

"Because of the anticipated influx of low-income students, a more realistic figure for aggregate need may be $100 million by that time," the report adds.

The study was done under the auspices of the Alfred P. Sloan Foundation, and appears in a recent issue of the Journal of Medical Education. Its authors are Dr. Bernard W. Nelson, associate dean for education at the Stanford University School of Medicine; Richard A. Bird, vice-president, Analytical Planning Consultants, Inc., Honolulu; and Gilbert M. Rodgers, an independent consultant now in Washington, D.C.

The report shows that loans and scholarships provided under the Health Professions Educational Assistance Act have constituted a major source of support for medical students.

However, the report notes, reductions in federal support have necessitated greater dependence of students on medical school and federally insured private loans. In addition, support from private donors and foundations has grown at a low rate.

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"It would be unrealistic," the report concludes, "to anticipate any significant acceleration of support from private sources to meet needs."

Nelson and his associates show that the Educational Opportunity Bank (EOB), one proposed method for dealing with the problem, is too costly from the perspective of the medical student and too risky from the perspective of the educational and financial institutions.

In the EOB loan plan for medical students, payments are contingent on career income. "It is this facet of the plan that many proponents of the Educational Opportunity Bank thought would appeal to students planning to enter low-paying careers in medicine," Nelson explained.

Nelson and his associates, however, made projections of incomes anticipated by future doctors, and found that it was the low earners who eventually repaid larger amounts to discharge their loans than graduates entering high paying fields of medicine.

The study also questions whether projections, based on current practice and current rates of growth in physicians' income would describe conditions 25 to 30 years from now.

The report concludes that privately funded EOB programs are not likely to do much good unless they get federal subsidy to lower the cost to the borrower.

"A balance between loans and grants must be maintained to ensure that the debt assumed by the student does not stifle his initiative. Loan burdens should not discourage students from embarking on a particular medical career," the report said.

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Business Wire 10/5/72
Mailed on October 5, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Richard S. Ross, director of the Cardiovascular Division at the Johns Hopkins University School of Medicine, will deliver the ninth annual John Kent Lewis Memorial Lecture Monday, October 9, at Stanford University School of Medicine.

His talk, "Natural History of Ischemic Heart Disease--Surgical Implications," will begin at 4:15 p.m. in Room M106 at the Medical School.

Dr. Ross, 48, is also Clayton professor of cardiovascular disease, professor of medicine, and director of the Myocardial Infarction Research Unit at Johns Hopkins.

He is noted for his work in many areas of heart research. Under his direction, the method of measuring myocardial blood flow with radioactive gas injected selectively into the coronary arteries was developed at Johns Hopkins.

The author of over 100 articles in medical journals and textbooks concerning cardiovascular physiology and disease, he is one of the editors of the 18th edition of The Principles and Practice of Medicine.

Dr. Ross has served as chairman of the cardiovascular study section in the National Heart and Lung Institute, and is currently chairman of the publication committee of the American Heart Association.

A native of Richmond, Indiana, he received his M.D. from Harvard Medical School in 1947. He completed internship and residency at Johns Hopkins Hospital, and in 1952 was a research fellow in physiology at Harvard. He joined the faculty at Johns Hopkins in 1954.

The John Kent Lewis Lectures are presented in honor of the former chief of the Stanford Medical Service at San Francisco General Hospital. Dr. Lewis was a 1922 graduate of Stanford Medical School. A noted pioneer in heart research, he died in 1961.

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Mailed October 4, 1972

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310
or
James H. McCracken 327-4800, X 365

Editors: The following story is released jointly by Children's Hospital at Stanford and the Stanford University School of Medicine. Children's Hospital is a separate corporate entity located on Stanford land and affiliated with the Medical School.

STANFORD -- A new large-scale program designed specifically for the treatment of children with cancer has been announced jointly by the Children's Hospital at Stanford and the department of pediatrics of the Stanford University School of Medicine.

The announcement was made by Dr. M. Harry Jennison, executive and medical director of Children's Hospital, and Dr. Irving Schulman, professor and chairman of the department of pediatrics at the Medical School.

The cancer program is part of an effort by the two institutions to strengthen patient care and teaching activities, and to deal realistically with the problems of cancer and genetic diseases in children. The program will greatly expand the capabilities for treatment of children with cancer at the Stanford Medical Center.

The new program is directed by Dr. Jordan R. Wilbur, former head of the department of pediatrics at the University of Texas M.D. Anderson Hospital and Tumor Institute in Houston.

At M.D. Anderson, one of the largest cancer institutes in the United States, the 40-year-old pediatrician helped pioneer a dramatic new philosophy of cancer treatment. Its basic principle is that cancer is no longer invariably fatal among children.

"We believe that every child with cancer has a chance for long-term survival provided that his intensive treatment and supportive care is coordinated by an experienced cancer treatment group, and that the therapy utilized is not one that has previously routinely failed."

The basis for the improving survival of children with malignant diseases, Dr. Wilbur says, is the aggressive use of recently developed methods of therapy administered in a cooperative effort by cancer treatment specialists. These include powerful drugs, radiation treatment, and surgery, sometimes prescribed singly, but often in some sort of combination. New techniques of supportive therapy also are vital to the success of treatment.

As a result of these new methods of therapy, 50 per cent of children admitted at M.D. Anderson in 1969 are alive today without evidence of cancer since their initial treatment, according to Dr. Wilbur.

Overall, two-thirds of these children are still alive. Eight years ago, probably only 20 per cent would have fallen in the first category, and only one-third would still be alive, he said.

In his new position, Dr. Wilbur will direct a newly created Children's Oncology Unit whose program will have two other major elements--parents will participate actively in their child's care, and every effort will be made to minimize frequency and length of hospital confinements. -more-

If possible, one parent will live at the Hospital while the child is there. Not only can the parent help with routine care, but also he or she can learn to perform certain nursing tasks such as giving medication and recognizing changes in the child's condition, which can be very useful when the child is released from the Hospital.

When the child is home, the parents become an extension of the physician, helping collect and relay information about their child's condition that may be vital to survival.

Dr. Wilbur's arrival at Children's Hospital marks his return to the Stanford area and the Stanford Medical School. He was graduated from Stanford in 1953 and then received his medical degree from the University in 1961. In addition, he was in the department of pediatrics before moving to Houston in 1968.

He comes from a family of distinguished physicians. He is the grandson of Dr. Ray Lyman Wilbur, the first dean of Stanford's Medical School and third president of the University. Dr. Wilbur's father is Dr. Dwight Wilbur, prominent San Francisco internist and former president of the American Medical Association.

Children's Hospital was founded in 1919 as the Stanford Convalescent Home. It is now an independent, nationally-recognized diagnostic, treatment and rehabilitation center for children suffering from chronic disease and physical disability.

In 1968 the Children's Hospital and the Medical School agreed to develop joint programs for the purpose of reducing unnecessary and costly duplication of facilities and staff, assisting each other in attaining comprehensive medical care for children, and providing the best possible opportunities for education and research related to the problems of chronically ill and disabled children.

Other clinical activities now located at Children's Hospital include a new pediatric orthopedic service which opened this summer, a comprehensive care program for hemophilia, and programs in allergy, rheumatology, chronic lung diseases, and physical medicine and rehabilitation.

Stanford and Children's Hospital also are developing a common system of medical records, and plan to share radiotherapy and surgical facilities as well as highly specialized laboratory services located at the Stanford University Medical Center nearby.

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Mailed October 3, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: Photos available on request if not included with story.

STANFORD -- Training smart monkeys to tell sounds and push color buttons may ultimately hold the key to developing a surgical treatment for aphasia or loss of language abilities in stroke victims.

This unlikely-sounding procedure has been devised by a Stanford Medical School scientist to study why memory is impaired after one of the parts of the brain which specializes in language has been damaged by a stroke.

The scientist is Dr. James H. Dewson, III, who heads the Hearing and Speech Sciences Section of the Division of Otolaryngology.

His research, conducted in a laboratory at the Palo Alto Veterans Hospital, deals with a part of the brain called auditory association cortex. Its exact function is still a mystery except it is believed to be related to hearing and memory.

Hoping for clues, Dewson has turned to man's evolutionary past--the monkeys. He trained a dozen of them to recognize sequences of tones and noises and to then perform a complicated exercise that demands not only listening and looking but some form of "thinking" as well.

To obtain their food, the monkeys must first listen to a sequence of two sounds from a loudspeaker on a panel resembling a slot machine. The combinations are random and the monkeys must next decide in what order to press two lighted buttons, one red and one green, so that the color sequence matches the sound sequence just heard. They have previously been taught that one of the sounds is correctly matched by pressing red and the other by pressing green. The buttons remain lit until the monkeys either make a mistake or press them twice in a row correctly.

Now that they have learned this task, Dewson is introducing delays between the end of the sound sequence and the lighting of the color buttons. As the monkeys experience progressively greater difficulty in remembering the sound sequence, the pattern of this effect is plotted on a chart.

Having a record of their normal memory capacity, Dewson will then study what happens after a "stroke" is induced surgically one one side of the brain in these animals. This is important for several reasons.

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In the human brain, each hemisphere seemingly has many of its own separate functions and handles problems with its own built-in strategy. Thus the left or major hemisphere of right-handed persons apparently deals with language and operates in logical computer-like fashion, while the right or minor hemisphere is largely mute and tends to put together bits and pieces into whole images but cannot verbalize what it sees or hears.

Dewson, however, points out that while strokes occurring on the dominant side of the human brain often cause loss of language abilities, the same effect in animals is impossible to show since they do not have these abilities. In fact, only recently has an auditory memory loss been demonstrated in animals after the auditory association cortex of just one side of the brain has been damaged. This suggests, Dewson explained, that in animals both sides of the brain may work equally in memory, and damage to one side yields only a partial loss.

He theorizes that one of the reasons the undamaged minor hemisphere in man does not carry fully half the language load may be due to interference or "noise" caused by the stroke damage in the major hemisphere. If Dewson is correct, eliminating surgically the pathway which conducts this interference would allow the minor hemisphere to more easily assume language functions in stroke patients. The operation would be similar to that performed in patients with epilepsy.

Dewson will test such an operation in an attempt to help monkeys that have had stroke damage on one side of the brain. The operation will be to sever some of the connections between the right and left hemispheres.

No memory improvement after this operation would simply confirm that in animals the two hemispheres of the brain can function independently of each other for the memory task. If, however, the monkeys' memory gets better after the operation, it would mean that cutting the connections across the brain has lessened the interference getting over from the damaged to the healthy side.

Dewson cautions that future clinical application of the procedure is purely speculative at this point.

But the idea seems to have caught the attention of the National Science Foundation which has given a $75,000 grant to Dewson to conduct the research.

"The implications of a positive finding would be dramatic and compelling," he said. "This line of research with monkeys is, without question, an untapped and valuable resource in our understanding of the brain and human language."

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Mailed October 2, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. C. Philip Larson, Jr., professor of anesthesia at the University of California, San Francisco, has been appointed professor and chairman of the Department of Anesthesia at Stanford University School of Medicine.

His appointment, effective November 1, was announced today (October 2) by Dean Clayton Rich.

Dr. Larson succeeds Dr. John P. Bunker, head of the department for 12 years, who resigned to devote himself more fully to teaching and research.

The 39-year old anesthesiologist has been on the faculty at the University of California since 1962. For the past six years, he has been vice-chairman of his department.

Dr. Larson is noted for his research on the effects of anesthesia on pulmonary ventilation, and his early work on the determination of the solubility and effects of anesthetic gases.

His current research focuses on the study of regional cerebral blood flow and the effects of anesthetic and therapeutic drugs on patients having sustained severe trauma.

A 1954 pre-medical graduate of Stanford, Dr. Larson obtained his M.D. from McGill University Faculty of Medicine in Montreal in 1958. Following internship at the Los Angeles County General Hospital, he served his residency at the University of California and received a one-year research traineeship at the University's Cardiovascular Research Institute.

A member of the major academic and professional societies, Dr. Larson is former vice-president of the American Society of Anesthesiologists. The author of 30 scientific publications, he has served as an editor of the journal, Anesthesiology, for the past seven years.

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Mailed October 2, 1972

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FILE COPY

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Dr. Francis D. Moore, Moseley Professor of Surgery at Harvard Medical School, will deliver a talk Monday, December 4, as recipient of the third Louis and Dorothy Kovitz Visiting Professorship at Stanford University School of Medicine.

His lecture, "The National Enigma: Not Enough Doctors or too Many Specialists?" will begin at 4:00 p.m. in Room M104 at the Medical School. It is open to physicians and other health professionals in the community.

Surgeon-in-chief at Peter Bent Brigham Hospital in Boston, Dr. Moore is noted for his work in problems concerning the quality and delivery of surgical care.

He is author of numerous publications in the fields of gastrointestinal surgery and tissue transplantation and in the study of body composition and metabolic aspects of surgical care. He is also on the editorial boards of Annals of Surgery, New England Journal of Medicine and Journal of Surgical Research.

Dr. Moore, a member of several professional organizations, has headed and participated in surgery committees for the American College of Surgeons, American Surgical Association, United States Public Health Service, office of the Surgeon-General of the U.S. Army, National Research Council and National Aeronautics and Space Administration.

A native of Evanston, Illinois, he received a bachelor's degree from Harvard College in 1935 and a medical degree from Harvard Medical School in 1939.

For the next nine years Dr. Moore was associated with Massachusetts General Hospital, first as an intern and resident, then as a member of the Harvard faculty. In 1948 he was appointed to his present post.

He has also been awarded several honorary degrees from universities in England, Scotland and Ireland and is a fellow of the Royal College of Surgeons.

The professorship was established in 1969 by Dr. and Mrs. Louis Kovitz of Los Altos to bring outstanding lecturers to the Medical School. ###

Mailed November 28, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A 51-year-old California man became the 50th heart transplant patient at Stanford University Hospital in an operation performed Sunday (November 19) afternoon.

The patient is listed in satisfactory condition.

The operation was performed by a team of surgeons headed by Dr. Norman E. Shumway.

The patient requested anonymity, as did the family of the heart donor.

Including the new recipient, 18 of Stanford's 50 heart transplant patients are living.

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Business Wire November 20, 1972.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Heroin addicts may no longer need narcotics if they can learn how to cope with life realistically, according to a Stanford University drug abuse expert.

Robert Campos, former coordinator of the drug abuse program for Santa Clara County Mental Health Services, believes that lifestyle has a lot to do with addiction.

He has been appointed to coordinate a withdrawal program for heroin addicts based on this premise at the School of Medicine's new addiction research laboratory. The program is scheduled to begin for patients after January 1, 1973.

Methadone, a drug that prevents the withdrawal pains of addicts deprived of heroin, is used to treat addicts. However, that merely substitutes one drug for another, Campos noted.

At Stanford, he is working with Dr. Avram Goldstein, professor of pharmacology, to develop treatment and training techniques that will enable heroin addicts already in methadone therapy programs to gradually withdraw from any drug dependence. "Our aim is to rehabilitate addicts so they can function in life without any narcotic in their systems," Campos said.

Addicts take heroin not only because they are physically addicted, but because the narcotic provides an escape from daily problems. When they are on methadone and trying to kick the habit, they often return to heroin if something goes wrong because they do not know another way to cope with a stressful situation, Campos pointed out.

He theorizes that if addicts can develop lifestyle changes that will enable them to deal with the little ups and downs of life, they will no longer need heroin or methadone. This is the basis of the program.

Campos and his staff will work with a group of 40 heroin addicts in Santa Clara County methadone treatment programs who have specifically requested to come off methadone.

Four family counselors, trained by Campos, will work in teams of two with patients and their families. In addition to doing individual and group counseling, they will help patients handle routine problems in such areas as nutrition, childrearing, budgeting, the courts and the welfare system.

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Campos, 37, said he has developed this type of approach through years of experience with addicts. A consultant to numerous mental health agencies and drug abuse committees, he has also trained community organizers and therapists.

Prior to his Stanford appointment, Campos was campus coordinator of training at the University of California, Santa Cruz, for eight months. He served as executive director of Quebrar, Inc. (a rehabilitation and drug prevention program in New Mexico)from November, 1970 to January, 1972, and before that he was with the Santa Clara County Mental Health Services for two and a half years.

Campos has also worked as director of social services and inservice training at the Tacoma/Pierce County Narcotic Center in Washington, as acting chief social worker of the alcohol and drug abuse screening unit of the San Francisco Department of Mental Health and as a research assistant at Langley Porter Neuropsychiatric Institute, University of California School of Medicine in San Francisco.

The addiction research laboratory, announced last month (October, 1972), will investigate the biological basis of addiction and the effectiveness of methadone treatment. It is headed by Dr. Goldstein who organized the Santa Clara County methadone programs.

Mailed 11/20/72.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310
or
James H. McCracken 327-4800, X 365

Editors: Photo available upon request if not included with story.

The following story is released jointly by Children's Hospital at Stanford and the Stanford University School of Medicine. Children's Hospital is a separate corporate entity located on Stanford land and affiliated with the Medical School.

STANFORD -- A new service to provide consultation and treatment for children with a broad variety of skeletal and neuromuscular disorders has been announced jointly by the Children's Hospital at Stanford and Stanford University School of Medicine.

The program was announced by Dr. M. Harry Jennison, executive and medical director of Children's Hospital, and Dr. Robert A. Chase, professor and chairman of the Department of Surgery at the Medical School.

It represents an effort by the two institutions to upgrade care to children with diseases of the spine or joints and other crippling defects. In addition, it will eliminate the duplication of staff and facilities through cooperative programs of pediatric care, teaching and research.

The service is headed by Dr. Eugene E. Bleck, an orthopedic surgeon previously in private practice in San Mateo, where he developed the practice of pediatric orthopedics exclusively.

Bleck explained that the emphasis of orthopedic problems in children as a separate entity within orthopedic surgery is consistent with the derivation of the word orthopedic, derived from the Greek words "ortho" (to make straight) and "pais" (child).

A portion of the service provides teaching at various levels of medical education, including graduate students from the division of physical therapy, medical students, interns and residents in orthopedics, and pediatrics and practicing physicians.

Programs include a cerebral palsy assessment service, specialized orthopedic consultation clinics and rehabilitative orthopedic surgery.

Physicians and state agencies may refer cerebral palsy patients to Children's Hospital for short-term assessment. "The purpose," explained Bleck, "is to furnish physicians and agencies with a more refined and detailed objective analysis of the patient to assist them in reaching decisions on treatment and future planning. Furthermore, we want to collect objective data so we can follow a patient's progress and evaluate the effectiveness of treatment through the years."

Cerebral palsy is a disorder of movement and coordination caused by injury to the immature brain. It affects some 750,000 in this country and is the biggest orthopedic handicap in the state according to Bleck. Children with the disorder may have impaired use of their arms and legs, distorted hearing, sight or speech, as well as some mental retardation.

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FILE COPY

The staff at Children's Hospital has developed measurable parameters for evaluating cerebral palsy patients in the disciplines concerned with their care and treatment. Specialists involved may include physical, occupational and speech therapists, ophthalmologists, audiologists, plastic surgeons and neurologists, as well as orthopedic surgeons.

In physical and occupational therapy for instance, special motor tests have been developed and the functional abilities will be measured.

Plans are also under way for a gait analysis laboratory to measure movement in children who have cerebral palsy. Special electromyographic equipment made possible by grants from the Hearst Foundation and the United Cerebral Palsy Association will be used.

The apparatus is a shortwave receiving system that can measure muscle patterns within a range of 100 feet by recording the electrical impulses active muscles generate. Patients are not "hooked up" to the machinery by any wires or electrodes, Bleck noted.

Specialty consultation clinics are held regularly on specific days at the Hospital. They include sessions for spinal diseases, foot problems, neuromuscular handicaps, joint diseases and hemophilia.

The service also provides orthopedic surgery and postoperative rehabilitation. Bleck performs all surgery at Stanford Hospital, but some patients return to Children's Hospital for intermediate and long-term rehabilitative treatment.

A building at the Hospital is presently being renovated to provide a new type of lodging for patients and their families. It will be a "hoptel" -- a cross between a hospital and a motel -- for patients who do not need to be admitted to the hospital, but do need some regular care, treatment or short-term evaluation, Bleck explained.

The facility will be much less expensive than a hospital room. Bleck said it will be used for patients coming for cerebral palsy assessment, by those in the Hospital's new cancer program which involves a parent living with the child, and other patients who do not require full hospitalization.

Before joining the full-time Stanford faculty, Bleck was a member of the clinical faculty . A graduate of Marquette University Medical School, he did his postgraduate training in orthopedic surgery at Duke University. This November he went to Duke University as visiting professor of orthopedic surgery for a week.

Bleck is a consultant to the physicians in the Northern California orthopedically handicapped schools, and is on the medical advisory Board of the State of California Crippled Children Services.

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Mailed November 14, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD — For many veterans of the Vietnamese war, the return home has been marred by the prospect of learning to live with a grotesque facial deformity caused by war wounds.

Hundreds of these veterans—as well as many others who have similar disfigurements resulting from cancer, birth defects, and automobile accidents—are being surgically rehabilitated through a unique program operated by Stanford University School of Medicine and the Palo Alto Veterans Administration Hospital.

The goal of the program, says its director, Dr. Donald R. Laub, is to improve not only the appearance of these patients, but also their self-concept and psychological approach to life.

"This is by no means strictly a cosmetic thing," says Laub, head of the division of plastic and reconstructive surgery at Stanford. "It's a very valid way of changing a person's life for the better."

Patients have been referred to Stanford and the VA Hospital from throughout the western U.S. and all over the world since the program began about five years ago. They usually require one or more of three services: silicone implants for facial or cranial defects; artificial eyes; and external anatomical restorations such as artificial ears, noses and breasts.

The program was initiated in the late 1960's in response to the great increase in the number of veterans returning from Vietnam with facial disfigurement. This increase was caused, Laub says, by the advent of high velocity rifles which increased the wounding power of hand weapons, and by the development of rapid helicopter evacuation which saved the lives of many wounded soldiers.

"Fortunately, over the past few years, the number of such injuries in Vietnam has dropped considerably," Laub says. "However, the services we provide also have good application for deformities caused by auto crashes, certain congenital defects, and surgical treatment of cancer."

For these patients, Laub says, surgical rehabilitation usually has a very beneficial effect on the psychological impairment which accompanies facial disfigurement.

"Self-image has a direct bearing on a patient's social and educational development," he says. "In countless cases, we've noticed just a fantastic improvement in a patient's entire outlook and approach to life once his appearance has been restored to normal."

The implants and artificial facial parts used in the program are created by anaplastologist Walter Spohn of Stanford's division of plastic and reconstructive surgery. Spohn, who recently launched the first anaplastology training program in the world at Stanford, was formerly head of the anatomical restorations clinic at the San Francisco VA Hospital for 25 years.

Since he was trained as an anaplastologist in Germany 30 years ago, Spohn has created thousands of artificial eyes. While at the San Francisco VA in the late 1940's, he developed the fast-curing, one-day process for making artificial eyes which is still utilized today.

To create artificial ears or noses, Spohn uses vinyl which is tinted to blend with the patient's skin. The replica is molded to the size and shape that fits in with the rest of the anatomy.

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Once the organ is completed, it is attached with the same kind of glue that is used to fasten false eyelashes, he says. Patients can go for several days between regluings, and since the glue is waterproof, there are almost no restrictions on bathing or swimming.

Medical grade silicone rubber, one of the most physiologically inert substances known, is used to make the cranial and facial implants.

"The person's own tissue would be best, but silicone is a close second," Laub says. "It's nonreactive, can be preoperatively formed to the exact configuration desired, and is not affected by temperature change."

Spohn has created over 200 silicone implants for forehead, cranial and facial defects since beginning his affiliation with the program in 1968.

The technique for creating an implant begins with the making of a negative impression of the patient's face by applying dental alginate reinforced with plaster. After the hardened moulage is removed intact, a positive model of the face is made by filling the impression with artificial stone.

The defect on the stone model is corrected by filling it with wax, and the wax is then used to make a mold of the defect. Next, silicone rubber is inserted into the mold of the defect and shaped to fit.

"The silicone implant is baked at 400°C. under 10,000 pounds of pressure for 10 minutes and then placed in an air circulating oven for six hours," Spohn says. "After being carefully washed, sterilized and autoclaved, it is ready for implantation."

This technique was developed over the past 10 years by several physicians and anaplastologists working independently, including Spohn and Dr. Harvey Lash, clinical assistant professor of surgery at Stanford and surgeon at the Palo Alto Medical Clinic.

The surgical implantation is performed by Laub and Dr. Lars Vistnes, assistant professor of surgery at Stanford and head of plastic surgery at the VA.

"Surgically, the advantage of silicone implants is that you have the model ready to go, and you know it'll fit," Laub says. "Additionally, there's a good blood supply in the cranial area, so foreign materials can be better retained."

The surgical technique is tailored to the operative site and the condition of the defect, he says. For a forehead, cranial or periorbital implant, the incision is placed away from the implant, and a large skin flap is fashioned.

The dissection extends down to the underlying bone surrounding the defect, and holes are drilled in the bone. Then the implant is secured by permanent wire sutures placed through the drilled holes, and the flap is closed.

"The result," Laub says, "is that the patient's appearance is restored to normal, or near normal. Also, in many cases, the body's natural protection for the brain and eye is reconstructed."

For many patients, Spohn says, a silicone implant or artificial restoration represents a chance to rejoin society.

"There are a lot of people who need this work, but they don't know where to go," he says. "They're really under 'house arrest,' so to speak. They're afraid to go out because they look so bad.

"Recently, I made a restoration and an artificial eye for a young school teacher who lost her eye when she was five because of a tumor behind the eye. When she saw herself in the mirror, she was so happy she almost jumped up to the ceiling."

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EDITORS: Photos available upon request.

Mailed November 13, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Editors: The recent operation of Shirley Temple Black at Stanford University Hospital has brought a flood of inquiries by women about breast cancer. The following story, prepared with the cooperation of Stanford University surgeons, attempts to answer many of their questions.

STANFORD -- Shirley Temple Black is a victim of a trouble, which may at some time or another, affect 1 in 18 American women.

More than 70,000 new cases of breast cancer are diagnosed annually. In 70 per cent of these, death can be avoided because proper treatment was sought early.

Dr. J. Garrott Allen, professor of surgery and author of a definitive study on the incidence of breast cancer, says: "The chief advance in the treatment of cancer of the breast has been the early recognition of the disease."

Allen attributes the progress to the educational efforts of the American Cancer Society.

Mrs. Black's left breast was removed last Friday at Stanford University Medical Center. A small, malignant tumor had been diagnosed the day before.

The former child movie star said she decided to publicize her operation in the hope that other women who discover lumps would not just "sit and be afraid. There is almost certain cure for this form of cancer if it is caught early enough."

A woman is often herself the first to discover a lump in her breast, said Dr. Allen. If she does, it is important for her to go to her doctor about it. Only after laboratory examination of a small sample of the suspect tissue, taken by a surgical procedure known as biopsy, can the doctor decide whether the lump is malignant.

Discovery of a malignant breast tumor before it has spread to other parts of the body increases a patient's chance for recovery.

For this reason, Allen suggests that women should ask their doctors to teach them how to examine the breasts. Success in treating most types of cancer rests with this step.

Because the breasts can be examined easily, it is possible to find most tumors by feeling for them. Every woman's annual checkup should include examination of the breasts by her doctor. She, herself, should be on the alert, between checkups, for any abnormal growth or other change.

Many doctors believe that every woman should examine her breasts regularly at the end of each menstrual period.

Surgery and radiation are both used for the treatment of breast cancer. In some cases, only one of these methods is preferred. In others the doctor may want to use both.

There is considerable controversy in medical circles about which procedure is safest and best, including radical surgery.

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But this controversy is not expected to be settled unless there is a better understanding of tumor immunology. Dr. Roy Cohn, professor of surgery, said "greater refinements in immunological techniques are beginning to demonstrate the importance of natural defenses of the body in the control of malignant disease."

So far, however, the best cure rates in breast cancer appear to be obtained surgically.

Mrs. Black underwent a simple mastectomy, the surgical removal of the breast. It differs from radical mastectomy, which involves the removal of the breast plus the muscle tissue and lymph nodes surrounding it. A third type of surgery for breast cancer is called lumpectomy, involving the local removal of the lump, but this is useful only when the tumor is benign.

A precaution surgeons sometimes take following mastectomy is to apply radiation to the site of operation in order to destroy any cancer cells that surgery alone might not have been able to remove. This, however, will not be necessary in the case of Mrs. Black.

Radiation treatment for breast cancer is often used alone in very special cases. It is sometimes used before surgery to reduce the size of breast tumors that are to be removed.

In special cases at the time of breast surgery, or later, a patient's ovaries may be removed if the tumor tends to spread beyond the breast. These organs are the prinicipal source of female hormones a[illegible]ting the growth of breast tissue. Also synthetic hormones developed in the laboratory are often beneficial in treating breast cancer.

There are no known causes of breast cancer. Some patients often mention a blow to the breast and believe that this is related to the subsequent development of a tumor. Scientists agree that a single injury, such as a blow, has never been proved to produce breast cancer.

Experts believe that daughters and sisters of breast cancer patients run a somewhat greater risk of developing the disease than women in whose families there is no history of this malignancy. They do not yet know to what extent this is true and just what role family relationship may play.

Statistical studies also suggest that the risk of developing breast cancer is lower for married women than for single women and lower still for married women who have borne children.

The incidence of breast cancer varies widely according to geographic area and living habits. According to the National Cancer Institute cancer of the breast is far less common, for example, in Japan than in countries of the West.

Extensive research is now going on at various medical centers to evaluate mammography, the technique for detecting cancer of the breast by X rays. This method may find cancer before it grows large enough to be felt by the patient or her doctor, and may be useful for routine examination of large groups of women.

Studies are also going on, on an even newer technique called thermography, the mapping of areas of increased skin temperature. Scientists have found that most skin cancers are accompanied by increased skin temperature and hope to use this finding to detect breast cancer. Thermography makes use of an infrared camera to map and record areas of elevated skin temperature.

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Business Wire Nov. 9, 1972
Mailed Nov. 9, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--The new American Red Cross-Stanford University Blood Center, one of the first in the country to combine a blood gathering facility with the teaching and research functions of a major medical school, will be dedicated Sunday afternoon, November 12.

The public ceremony marking the opening of the center, located at 3330 Hillview Avenue in Palo Alto, will begin at 4:00 p.m. at the center. An open house for the public will be held from 3 to 5 p.m.

Featured speakers at the dedication will be Dr. Thomas A. Gonda, director of Stanford University Hospital, and John W. Gates, manager of the Western United States region for Red Cross.

The new blood center will supply Stanford Hospital with the major portion of its blood needs.

In the past decade the Hospital's blood requirements have increased tremendously, Dr. Gonda said, due to expanded surgical programs and progress in the use of blood components in therapy. Stanford's kidney transplant and cardiovascular surgery programs alone now require more blood than was needed for the entire Hospital 10 years ago.

Gonda said that the new center will also provide improved facilities for the training of future doctors and specialists, and for research into the fields of immunotherapy, coagulation and tissue typing.

"Progress in these blood-related areas could result in more effective treatment of leukemia and other cancers, as well as more successful organ transplantation," he said. "We also hope to develop new methods for the banking of tissue other than blood."

The 12,460 square foot building, which formerly housed offices of Control Data Corporation, has been in the process of renovation for the past four months.

The center is expected to draw approximately 10,000 units of blood during its first year of operation, said Harold Horoho, administrator of the center. More than half will be broken down for use as components, he added.

Donor blood can now be broken down into four component parts--red cells, cryoprecipitate, platelets, and plasma--so that one donated pint can be used to treat four different patients.

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Mailed November 7, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- After 16 months at Stanford University Hospital, the only home he has known since birth, Arnold Cortez is going home for Christmas.

Arnie, as he is affectionately called, is a wide-eyed youngster with long eyelashes and an engaging smile.

The appealing toddler has broken something of a record. He is the patient with the longest stay at Stanford's Premature Research Center (PRC) and certainly has had one of the lengthiest stays in the Hospital.

Staff members say they are going to miss Arnie. But his parents, Maria and Miguel Cortez of San Jose and six-year-old brother Mike, are thrilled to have Arnie home at last.

"Last Christmas he was so sick, and this Christmas he can be home with us," his mother said. "He's come a long way."

Arnie's story began August 1, 1971 when he was born at Alexian Brothers Hospital in San Jose. He was premature, weighing only four pounds four ounces, and had severe respiratory distress syndrome. The following day he was transferred to Stanford's PRC, where he has been ever since.

Respiratory distress syndrome, also known as hyaline membrane disease, is most frequently seen in premature infants, according to Dr. John Johnson, assistant professor of pediatrics. Infants need increased oxygen to help them breathe. For some reason, Arnie had considerable difficulty breathing without the aid of oxygen.

The time needed to wean a baby with respiratory distress from extra oxygen varies considerably from infant to infant, but it generally takes no longer than six months, said Johnson. For Arnie, it was a lot longer.

When Arnie was brought to Stanford, his condition was so serious he was put on a respirator. Johnson estimates that roughly one-fourth of the infants with respiratory distress require a respirator, which pumps oxygen to the lungs through the mouth or nose. In less severe cases, an oxygen head box is used. Arnie was weaned from the respirator, but he could not yet breathe without distress. Until last month he was still using an oxygen mask at times and sleeping in an oxygen mist tent at night.

Although Arnie's progress has been unusually slow, he has steadily improved. Now that he can breathe without extra oxygen, he will be able to go home. At 15 pounds, he is still underweight for his age, and unable to walk or talk well. As his lungs and body strengthen, physicians expect his physical and mental development to proceed normally.

At present, Arnie has some pulmonary abnormalities which are common in babies who have received mechanical respiration. It is believed that direct oxygen to the lungs causes certain changes in the tissue which are similar to changes seen in chronic lung disease. Followup studies of children who had been on respirators in the PRC indicate that such problems are reversible by the age of five, said Johnson.

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Arnie/Premature Research Center

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Each year some 50 critically ill newborns are admitted to the PRC, which is directed by Dr. Philip Sunshine, associate professor of pediatrics. The costly intensive care the infants require in the PRC is supported by a grant to Stanford from the General Clinic Research Centers of the National Institutes of Health.

Throughout most of his hospital stay, Arnie had full-time nursing round the clock. Special nurses were by him constantly to help him breathe, to administer nourishment and to watch for any sudden changes. He was monitored and treated with a variety of complex equipment. The bill for such prolonged intensive care over the 16 months was an estimated $50,000 said Sunshine.

The cost of care for Arnie did not come out of his parents' pockets, because he was in the PRC. Only a small percentage of ciritically ill infants are admitted to the center, because of their special research problems.

Yet another 700 critically ill infants are brought annually to the intensive care nurseries, where their stays range from a few days to several months. Unfortunately, there are limited resources to help families pay for their infants' care, pointed out Rose Grobstein, social worker in pediatrics.

"Arnie's case illustrates the need for some form of insurance or subsidy to cover the enormous costs of catastrophic illness," she said.

The Center, established in 1963, studies a broad range of problems in infants, from biochemical and physiological abnormalities to behavior patterns in newborns. With Arnie, physicians in the PRC were able to follow closely the natural history of hyaline membrane disease, a condition which can only be fully understood through further research.

Arnie's case is unusual because he required additional oxygen for such a long time and because he has survived with one of the most severe instances of respirator-induced chronic lung disease Stanford physicians have encountered. His progress at home will be closely monitored, and physicians hope that he will not need to return to the PRC. ###

Mailed December 19, 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Hospitalization can be a traumatic experience for children. In the face of illness, the insecurity of a strange environment, and separation from family and friends, many children become very depressed.

But at Stanford University Hospital, thanks to a unique recreation program, young patients often find that hospitalization doesn't have to be an unhappy experience.

"We try to provide the children with enough new and positive experiences to minimize the possible damaging effects of hospitalization," says Betty Lovelace, pediatric recreation director at the hospital. "We want them to go home with enough good things to talk about so that their illness doesn't dominate their conversation."

The place for young patients at Stanford to "get away from it all" is the Marie Louise Graham Children's Center, located in the center of the hospital's pediatric unit. The center consists of a large playroom and an adjoining terrace area.

"Most children are depressed when they come to the hospital," Mrs. Lovelace says. "But here in the playroom, they don't feel like they're in a hospital anymore.

"In their rooms, the kids see and hear things associated with hospitals and sickness, and this depresses them. In here, it's so noisy that all they can hear are the sounds of children playing."

The playroom features a giant dollhouse, a pool table, and virtually every toy and game known to man.

"One of our doctors says this is the only hospital he knows of where the kids go home pool sharks and poker players," Mrs. Lovelace laughs.

Outside on the terrace, patients can take advantage of a ping pong table, basketball hoop, shuffleboard court, sandbox on legs ("at just the right height for children in a wheelchair"), and punching bag ("the kids need an outlet, a safe way of expressing their frustrations at a situation that's too much for them to cope with").

Each Wednesday, the young patients see a full-length feature movie in the playroom. For those too ill to be moved, the film is shown in their rooms. The playroom has also served as a stage for dramatic presentations, puppet shows, magicians, and science and art exhibits.

Many children learn to become skillful in certain arts and crafts during their stay in the hospital. They can try their hand at painting, playing musical instruments, or making things from leather, clay or other materials.

But the real keys to a successful recreation program are not toys and games, but friendship and understanding.

"The program has to be geared to the needs of each individual child and where he is on that particular day," says Mrs. Lovelace, who came to Stanford in 1967 after two years as recreation director at the Children's Hospital in Buffalo, New York. -more-

She consults with the doctors, nurses, and physical therapists in the pediatric unit each morning. If a child is scheduled for surgery, a blood test, or training in how to function with a handicap or prosthetic device, she makes an attempt to provide whatever support is necessary.

"I feel my role is primarily a supportive one and for this reason I don't wear a uniform," she says. "They can relate to me better."

For many children, hospitalization destroys the self-image of invulnerability and brings new restrictions into play which may be unbearable. Because of this, Mrs. Lovelace believes that hospitalization is most difficult for adolescents.

"For a teenager just getting hold of his identity, it's very difficult to cope with being taken from his normal routine and thrust into a hostile environment," she says. "He's separated from his family and peers, and has his clothes taken away for a hospital gown. He's assaulted on all sides by strangers and subjected to many bodily intrusions. And all this occurs when his physical condition is at a low ebb and he may have loss of bodily functions."

To counteract this, she believes, a good recreation therapy program can provide emotional support and intellectual and physical involvement.

"You have to give children a chance to retain some self-control, manipulate their environment, and maintain their sense of identity," she says. "It's important for most of them to realize that this is just a temporary interruption of the normal stream of life.

"For those who will have a permanent problem, we're trying to help them adjust to that. If we can enrich their lives somewhat by exposing them to new friends and experiences, then maybe they'll see that it's the quality of the life they lead that's most important."

Occasionally, special problems arise which require special solutions. Recently, one involved a teenage girl in the hospital for a kidney transplant.

"She was terribly depressed at having to spend her 14th birthday in the hospital," Mrs. Lovelace remembers, "and I had a feeling that an ordinary birthday party wouldn't help much.

"She loved rock music, so I thought of asking a local rock band called Gropus Cackus if they would mind coming to the hospital to play for her. I figured it couldn't hurt to try. Well, they not only came and played, but they brought her a dozen roses."

Another teenage girl, a frequent patient at the hospital for cancer treatment, was distressed at missing her junior prom.

"Two of our male volunteers, both real good looking guys, came and played the guitar for her," Mrs. Lovelace recalls. "We decorated her room elaborately and my husband brought a bottle of pink champagne for her. It may not have been as good as the junior prom, but she was really thrilled."

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Mailed December 18, 1972.

TO: NEWS BUREAU, RM C003, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

Stanford University Hospital Playroom 12/72

Please send me #1 2 3 4 5 6 (circle pictures desired) 8-1/2x11" glossy prints.

NAME _____ ADDRESS _____

PUBLICATION _____ CITY, STATE, ZIP _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Nineteen California Nobel Laureate scientists Monday (Dec. 11) asked the State Board of Education to reject a recommendation that would require religious doctrine about the origins of man to be given equal prominence alongside the theory of evolution in science textbooks.

In a letter to its nine members and State Superintendent of Public Instruction Wilson Riles, the California scientists urged the Board "to reject modifications to the science framework which require the addition of nonscientific material to our science textbooks."

The scientists' action is similar to that taken last October by the National Academy of Sciences (NAS). The NAS resolution called for limiting public school science texts "to the exposition of scientific matter."

In thousands of California homes, children are taught the Bible version of the origins of man. But in public schools, from grades fourth through sixth, they are confronted with Charles Darwin and the scientific explanation of man's evolution.

"Creation 'theory' is not based on science and does not belong in a science textbook," the Nobel Laureates said. "We urge you to support the recommendation of your own State Advisory Committee on Science Education in rejecting this unreasonable requirement for our science textbooks."

Religious fundamentalists have wanted the biblical version of the origins of life placed side-by-side with Darwin in the new science textbooks the Board will select at its Thursday meeting in Sacramento.

The scientists have wanted only evolution discussed in the science texts, on grounds that it is the sole scientific explanation for life's origin generally accepted.

To settle the controversy the State Curriculum Commission last month drew up a compromise proposal that would leave all mention of God and Genesis out.

But through suggested changes in wording, the Commission's proposal would change Darwin's theory of evolution from scientific explanation to simple speculation that man <u>might</u> have evolved--not did evolve from lower forms of life.

Dr. Arthur Kornberg, professor of biochemistry at Stanford University School of Medicine, wrote the recommendation seems innocuous, but it was clearly tailored to make room for the "creation theory" as an alternate to evolution.

"Conditional statements are appropriate," said Kornberg, "when multiple theories have been proposed and none of these can be eliminated by the existing scientific evidence.

"No alternative to the evolutionary theory of the origins of man exists today which gives an equally satisfactory explanation of the biological facts. Applying this requirement selectively to the evolutionary theory instead of, for example, atomic theory, is clearly not scientific but religious."

Kornberg stressed his remarks are not intended to foreclose further discussion on the validity of the theory of evolution.

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"Many of its details are the subject of continuing conflicting controversy," he said. "Students should have the opportunity to be acquainted with the factual evidence on which scientists have based their conclusions. In the realm of scientific teaching, they should not be biased by assertions based on arguments of faith, but rather by scientific evidence."

In testimony before the State Board of Education last November, another Stanford University scientist, Dr. David Hogness, likened the arguments against evolutionary principles to those "advanced by the Flat Earth Society."

"To consider the story of creation as a scientific alternative to evolutionary theory would not only sow the confusion of intellectual dishonesty in our students, it would also create real difficulties in preparing our youth to contribute to the solution of many problems," Hogness argued.

The problems, the scientist explained, which depend for their solution on knowledge of the molecular mechanisms of heredity extend from the medical treatment of a variety of illnesses to the provision of an adequate food supply for the expanding population.

"Clearly we all wish our youth to understand these principles so that they may participate in their solutions," Hogness said. "But just as clearly we cannot be demonstrating how they lead to an understanding of certain human illnesses while, at the same time, denying their validity with respect to our origins."

Kornberg and Hogness in November told Board President Newton Stewart of Sacramento that they had educated their children in California and "take great pride in the quality of the education our state provides. We implore you not to make us the laughing stock of the entire world."

All of the Nobel Laureates who could be reached signed the letter Monday. They include: Luis W. Alvarez, Melvin Calvin, William F. Giauque, Donald A. Glaser, Willard F. Libby, Edwin M. McMillan, Glenn T. Seaborg, and Harold C. Urey, all of the University of California; Carl D. Anderson, Max Delbrück, Richard P. Feynman, and Murray Gell-Mann of the California Institute of Technology; Robert W. Holley of the Salk Institute; and Felix Bloch, Robert Hofstadter, Arthur Kornberg, Joshua Lederberg, Linus Pauling, and William Shockley of Stanford University.

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Transmitted on Business Wire 12/11/72
Release mailed 12/11/72

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD — A task force on nursing education today recommended a plan for a new Stanford University graduate program in nursing.

In a report to Dean Clayton Rich of the School of Medicine, the 12-member group wrote that nursing at Stanford must be a contributing segment of the Medical Center which is marked by strong research emphasis, high degree of specialization, and a focus on complex medical care.

"It is at the graduate level that nursing would complement the School of Medicine and the surrounding health care milieu," the report said.

Under the proposed plan, Stanford's baccalaureate program, in existence since 1917, would be phased out. It would be replaced by a two-year program offering a master of science degree in nursing. (Nursing school admissions were curtailed last fall pending the task force report.)

If adopted, the new graduate program would be expected to admit its first students in the fall of 1974.

Dean Rich said he is studying the report, and will forward it with his recommendations to Vice-President and Provost William F. Miller in the near future.

The work of the task force on nursing education was supported by a grant from the San Francisco Foundation.

Susan J. Brueckner, task force chairman and nursing project coordinator at Stanford University Hospital, said the present baccalaureate program is small and has little effect on the overall health care delivery system.

"But the impact of graduating 30 advanced clinicians prepared for expanded roles in health delivery would be substantial," she said.

The task force recommended that nurses at the graduate level should be prepared for new roles as nurse practitioners and clinical specialists, with strong research orientation.

Nurse practitioners would work interdependently with physicians, assuming some of the functions ordinarily performed by the physician. They would obtain health histories, manage treatment for the chronically ill, and participate in preventive medicine efforts.

Clinical nurse specialists would be prepared to assume supervisory roles in nursing care units, including the assessment of nursing care needs of patients, and development of innovative methods in nursing care.

The report also recommended that:

* the curriculum of the proposed nursing program be flexibly suited to individual needs of students;
* faculty be able to hold joint appointments in nursing and other schools of University departments.
* qualified nurses from Stanford Hospital or other health care agencies serve on the clinical faculty;
* tenure and promotion policies for nursing school faculty be consistent with those of other University departments;
* a major effort be made to recruit and seek funding for minority students;
* a new director be recruited to head the graduate nursing program.

Members of the task force included Linda Cronenwett, instructor, School of Nursing; Ludmila Davis, director, operating rooms and emergency room, Stanford University Hospital, Dr. Michael T.B. Dennis, director, physician's assistant program; Karilyn Duarte, instructor, School of Nursing; Dr. Count D. Gibson, Jr., chairman and professor, Department of Community and Preventive Medicine; Lorrie Newmark, nursing student; Grace E. Ringressy, director, School of Nursing; W. Richard Scott, professor and chairman, Department of Sociology; Barbara A. Shonk, Stanford Nurses Club; Paula Tognetti, nursing student; and Steven M. Zifferblat, assistant professor of education.

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Mailed January 30, 1973.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Computer researchers at Stanford University have come up with a new type of patient medical record to help the doctor in making clinical decisions.

The new medical chart makes it possible to structure clinical data so that they can be fed into a computer.

The information in the"databank" can then be used flexibly to review a patient's status, past symptoms, prognostic indicators and treatment responses. In a matter of minutes, a study of the course and response to therapy of similar patients can be available.

Computers to extend the doctor's skill have been used for some time. But this is believed to be one of the first instances in which a doctor will be able to use a computer as a consultant on common clinical questions.

The new system was developed by Dr. James F. Fries using the facilities of Stanford's Advanced Computer for Medical Research (ACME), a biomedical resource of the National Institutes of Health.

In describing it in the Journal of the American Medical Association, Fries predicts that the computerized medical record will determine the quality of future health delivery systems.

"Computer storage of detailed clinical information has been feasible and useful in our clinic, and should have wide application," he said.

Fries is critical of present medical charts. He said they are designed more to meet legal requirements--to protect hospitals and doctors from malpractice suits--than to assist them in treating patients.

"Records are cumbersome, disorganized and redundant," he said. "If the patient's problems are enumerated at all, there is seldom a description of the treatment planned or an adequate recording of progress."

The Stanford computerized medical record utilizes a "flow sheet" format to display the patient's clinical history in chronological order. Each separate piece of information has a designated location. The chart is indexed and color coded for easy reference.

Progress notes by the doctor explaining his clinical reasoning are separated from flow sheets that contain all of the clinical data. The information on the chart is so organized as to encourage use of factual data rather than dependence on the memory of the physician.

In time studies, Dr. Fries and his associates found an average of seven minutes was needed to review each patient's rather bulky traditional chart, and five minutes more to write a clinical note containing only a few items from the patient's visit.

Using the computerized chart, the review process was cut to two minutes, and a five-minute clinical note now contained as many as 70 elements of new information.

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Fries pointed out that the decrease in review time by the physicians has allowed closer scheduling of patients. In addition, the omission of important items from the chart becomes immediately apparent and often serves as a reminder to obtain particular information.

The first application of the new medical record at Stanford was for patients suffering from rheumatic diseases. ACME's staff is currently adapting Fries' computer program for other clinical areas at the Medical Center.

Meanwhile, Fries seeks professional adoption of the new medical chart. The computer committee of the American Rheumatism Association is deeply involved in this work, as adequate communication between health professionals or hospitals requires that a standard "language" be used to describe disease.

Clinical data in patient records constitute an enormous potential resource, Fries maintains. But it is largely unavailable, he said, because differing standards of terminology and format make comparison either statistically invalid or impossible.

As a result, according to Fries, physicians are restricted to "anecdotal" information from their professional experience and to studies reported in the literature.

Both resources are limited, he said, and they seldom are precisely relevant to a particular case at hand. Worst of all, especially in the teaching environment familiar to Fries, errors in memory may lead to mistakes in purportedly factual information given to students.

At Stanford today, computerized clinical data help overcome these failings, Fries pointed out. He cited a typical question: "What is the effect of aspirin on uric acid (and gout) levels?" The computer searches the file, collects the data, selects a suitable scale, and prints the answer in a graph.

"Any rheumatic disease and desired parameters in our databank may be reviewed," said Fries. "The databank is frequently consulted instead of a traditional medical-library-based review of the literature as the computer often contains more information directly applicable to our patients."

The procedure takes about 10 minutes and costs about $1 in direct computer time or about $10 per search, including secretarial time, computer entry and storage. This cost is expected to decrease when the system becomes widely used.

From four years of research on the new chart and clinical databank, Fries made these observations:

"The biggest impact of the computer in medicine today is not its computational ability, but rather the re-examination it forces on the system designer. The medical record is thus undergoing searching reappraisal.

"We began with a desire to use computers to tap the mass of clinical data generated every day. But when we arrived at a logical system, we found we had created a powerful tool for the individual clinician."

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Mailed January 30, 1973.

Editors: Photo available on request if not included with story.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Patients at Stanford University Hospital will now be offered a model, restricted-fat diet during their hospitalization, as part of a new educational program focusing on dietary factors in heart disease.

The changes in Stanford's patient menus, which went into effect today (January 29), will cut down the saturated fat and caloric content in the food served to most of the Hospital's patients. The changes will not affect food offerings to a small percentage of patients on certain special diets.

The goal of the project, says Dr. John S. Schroeder, assistant professor of cardiology at Stanford, is to expose patients to a model diet that they will hopefully follow at home after their discharge from the Hospital.

"We hope to demonstrate what an ideal diet is, and show the patients that it doesn't represent a drastic change in their eating habits," said Schroeder, who worked together with the Department of Dietetics in instituting the program, believed to be the first of its kind in the country.

"Many experts now believe that to prevent the epidemic of coronary artery disease in this country, Americans must change their dietary habits throughout their lifetimes, preferably beginning in childhood," he continued.

"Being on this diet for a few days in the Hospital is of no therapeutic value in itself, but the diet may be very valuable as an example which patients can take home."

Cardiologists have studied the relationship between eating habits and heart disease for many years. As early as 1965 the American Heart Association, noting that several studies had uncovered "an association" between blood fats and the incidence of heart disease, recommended a decreased intake of foods which contribute to elevated blood fats. Specifically cited were foods containing saturated fats and cholesterol, and foods high in calories.

These same food groups are the targets of the menu changes at Stanford. According to Carol Torio, director of dietetics at the Hospital, the following changes have been made:

-- vegetable oils are used instead of animal fats in food preparation;
-- low-fat and nonfat milk are served instead of whole milk;
-- polyunsaturated margarine is served instead of butter;
-- a polyunsaturated non-dairy creamer replaces cream;
-- food portions are controlled (the usual serving of cooked meat is three ounces);
-- certain desserts and pastries are not served to limit intake of concentrated sugars.

In addition, Mrs. Torio said, Hospital dieticians will also recommend that patients limit their intake of eggs, bacon, sausage, luncheon meats and cheeses, and substitute sherbet for ice cream.

None of the changes affect entrees, she noted. Also, if a patient or his doctor specifically requests an item not on the routine menu, such as whole milk or pie, a Hospital dietician can order it.

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To determine whether the program succeeds in changing dietary habits at home, a selected group of patients will receive questionnaires three months after their discharge from the Hospital.

"It's probably unrealistic to expect people to completely follow this diet when they get home," Mrs. Torio said, "but hopefully they'll pick out one or two things to do. I think we might influence people to use low-fat or nonfat milk, or substitute margarine for butter."

Schroeder added: "A project like this might be effective because it is aimed at a receptive, captive audience. Patients are quite interested in their health at a time when they're sick enough to be in the hospital."

In a companion project, the Department of Dietetics is launching an educational program in the Hospital cafeteria. Each day menu recommendations will be posted adjacent to the menu board which lists the day's food offerings. Foods low in saturated fat, calories and cholesterol will be so labelled by the symbol of a heart.

Schroeder noted that these programs reflect a growing involvement in preventive health care on the part of certain hospitals. "Instead of just treating sick people, hospitals should also actively participate in health education and in the prevention of disease," he said. "With 32 million patients admitted to hospitals annually, the potential value is tremendous."

The new dietary programs are not the Hospital's first preventive public health measures. In July of 1969, Stanford discontinued the selling of cigarettes inside the Hospital.

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Mailed January 29, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Dr. A. Ralph Rosenthal, assistant professor of surgery, has been appointed head of the Division of Ophthalmology at Stanford University School of Medicine.

The appointment was announced recently by Dr. Robert Chase, chairman of the Department of Surgery. Acting head of the division since October, 1972, Dr. Rosenthal succeeds Dr. Angelos Dellaporta who has returned to private practice.

Dr. Rosenthal specializes in eye disorders that result from systemic diseases and in the genetics of many disorders. He is also interested in glaucoma, a condition that results in hardening of the eye and is the second leading cause of blindness in the United States.

Prior to his appointment to the Stanford faculty last September, Dr. Rosenthal spent three years at the Walter Reed Army Institute of Research in Washington, D.C. There he was noted for his studies on the effects of copper foreign bodies in the eye, commonly seen in war injuries and industrial accidents.

The Division of Ophthalmology is expanding, says Dr. Rosenthal. It has a general eye clinic that treats some 9,000 patients a year, as well as several specialty clinics for various disorders.

A native of Pittsburgh, Pennsylvania, Dr. Rosenthal received degrees from Johns Hopkins University: an B.A. in 1960 and an M.D. in 1964. Following an internship at Boston City Hospital, he returned to Johns Hopkins for residency training in ophthalmology at the University Hospital's Wilmer Institute.

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Mailed January 25, 1973.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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ADVANCE FOR RELEASE IN MORNING NEWSPAPERS, THURSDAY, JAN. 18, 1973

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 321-5310

EDITORS: Following is background on the work envisioned for the Fairchild Center for the Neurosciences:

Stanford University's new program in the neurosciences will probe one of the most formidable scientific frontiers—the brain.

How does the brain think? How does it remember and create, and why is it both rational and irrational? These questions have tantalized man from the earliest times.

The term neurosciences stands for a conglomerate of related sciences. They go by many names—anatomy, physiology, biology, genetics, cell biology, pharmacology, psychology, psychiatry, neurology and neurosurgery, to name a few.

But their common root is that they attempt to understand the workings of the mind through the mechanism and structure of the brain and nervous system.

"An understanding of brain function ultimately will give rise to understanding of intellect, creative thought, memory and behavior in terms of molecular and electrochemical processes," said Dr. Clayton Rich, vice-president for medical affairs and dean of the Medical School.

In recent years, according to Rich, there has been a rush of research scientists from molecular biology and other fields into brain research.

Out of this massive attack there have been some significant payoffs. The brain and associated nervous system, probably the most complicated matter in the universe, has been mapped more carefully than before. The major circuits have been traced, thus giving the surgeon and the psychologist a closer fix on the operation of the brain and its relationship to complex behavioral processes.

The brain has been found to be more differentiated, and individual units called neurons to have more specific functions, than scientists ever thought.

Intervention into the brain electrically or chemically, scientists predict, may give rise to a new type of prosthesis for the blind and the deaf and for victims of crippling diseases like stroke and spinal cord injury.

As complex structures come under analysis, Dr. Rich said, the prospect of finding the cause of mysterious diseases like multiple sclerosis has increased. A treatment for Parkinson's disease that now benefits most suffers has been found, and has stimulated much new research toward more effective therapy for Parkinsonism and other related diseases.

Rich predicted that the marriage of the high-speed computer to microelectronics, electric stimulation of the brain, and electrophysiological recording methods will rapidly bring brain research into even more important breakthroughs.

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END ADVANCE FOR RELEASE IN MORNING NEWSPAPERS, THURSDAY, JAN. 18, 1973

Mailed January 17, 1973 cr

STANFORD UNIVERSITY NEWS SERVICE
STANFORD, CALIFORNIA 94305
(415) 321-2300, Ext. 2558
Southern California office: (213) 627-0653

FOR INFORMATION CONTACT: Spyros Andreopoulos, 321-5310

ADVANCE FOR RELEASE IN MORNING NEWSPAPERS, JAN. 18, 1973

STANFORD –

The Fairchild Foundation, Inc., in the largest foundation gift to the Campaign for Stanford to date, has pledged $7.5 million to Stanford University for construction of the Sherman Fairchild Center for the Neurosciences at the Stanford Medical Center.

Sherman Fairchild, founder of Fairchild Camera and Instrument Corporation and Fairchild Industries, died in March 1971. Mr. Fairchild spent his life working at the forefront of technology. As a pioneer in the fields of both photography and aviation, he valued basic research as the forerunner of technological progress.

President Richard W. Lyman, in announcing the gift, said, "Stanford University and its School of Medicine welcome the challenge of establishing a solid base for further understanding of the human brain and nervous system.

"The establishment of the Sherman Fairchild Center for the Neurosciences will give force and focus to Stanford's strong interdisciplinary efforts in the neurosciences. Not only does the medical faculty include outstanding members in psychiatry and the neurosciences, but also the University is strong in disciplines necessary to further such research: engineering, computer science, biology and psychology.

"The opportunity for important advances at Stanford is exceptional. We are immeasurably grateful to the Fairchild Foundation for providing the key building from which this work can proceed."

The Center for the Neurosciences will provide space for the Departments of Anatomy and Physiology, research laboratories, classroom instruction, and administrative support. An auditorium and the initial elements of a student commons will be an important part of the complex, which will bear the name of the Foundation's donor, Sherman Fairchild.

Design of the complex will proceed immediately, with construction expected to begin in about a year. The Center should be completed within three years.

According to Dr. Clayton Rich, dean of the School of Medicine and Stanford's vice-president for medical affairs, "One of the most significant thrusts of medical research within the next two decades will take place in the neurosciences.

"We feel that Stanford University and its School of Medicine are now in a unique position to advance that research. The magnificent Fairchild grant presents an unprecedented opportunity for outstanding scientific achievement in the neurosciences."

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END ADVANCE FOR RELEASE IN MORNING NEWSPAPERS, JAN. 18, 1973 1/17/73 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Daniel D. Federman, associate professor of medicine and associate dean for continuing education at Harvard Medical School, has been appointed professor and chairman of the Department of Medicine at Stanford University.

The appointment, which culminates a one-year search, becomes effective February 1. It was announced today (January 17) by Dr. Clayton Rich, dean of the School of Medicine and vice-president for medical affairs.

The new chairman will head the school's largest department, including 11 divisions from cardiology to respiratory medicine. The department has responsibility for the clinical medical training of medical students, house staff and postdoctoral fellows at Stanford.

Dr. Federman, 44, is a nationally-known expert in clinical endocrinology and hormonal influences on human sexual development.

His primary interest, however, is in teaching. Twice he won awards for outstanding teaching from Harvard medical students. Director of the school's program in continuing education since 1966, he developed numerous pioneering educational programs for practicing physicians.

As assistant chief of medical services and chairman of the committee on teaching and education at the Massachusetts General Hospital, the largest of Harvard's teaching hospitals, he was responsible for the training of the hospital's medical house staff.

At Stanford, Dr. Federman succeeds Dr. Eugene D. Robin, who has served as acting department chairman since Dr. Halsted R. Holman resigned in October of 1971.

Dr. Federman said that in addition to continuing the focus on scientific excellence and research at Stanford, he hopes to place increased emphasis on "superlative clinical care and teaching."

"Departments of Medicine should critically re-examine every aspect of clinical conduct," he said, "from the rudiments of history-taking and physical examinations to the refinements of using therapeutic drugs."

One of the challenges facing medical educators today, he said, is to prepare students for the new demands being placed on physicians.

"The cost-plus basis of medical care will no longer be tolerated," he said, "and we must learn how to rationalize the interaction among science, humanism, and economics. There are many new roles for physicians, and the old ones--such as general practioner--are being reformulated. Departments of Medicine should be able to prepare students, house staff and fellows for any role in medicine."

Dr. Federman's research and clinical interests have focused on the relationship between endocrinology and genetics. With his associates at Massachusetts General, he defined a new hereditary disorder of connective tissue characterized by dwarfism, joint stiffness, and eye defects. He was among the first to describe translocation of a portion of the human Y chromosome.

-more-

Federman appointed chairman, Dept of Medicine

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His textbook, Abnormal Sexual Development: A Genetic and Endocrine Approach to Differential Diagnosis, published in 1967, has been widely acclaimed.

A native of New York City, Dr. Federman obtained his A.B. in 1949 and his M.D. in 1953 from Harvard. He completed his internship and residency in medicine at Massachusetts General.

After two years as clinical associate at the National Institute of Arthritis and Metabolic Diseases in Bethesda, Maryland, he served a year as a clinical research fellow at the University College Hospital Medical School in London, England.

Dr. Federman was appointed assistant professor of medicine at Harvard in 1966 and rose to associate professor four years later. In 1968 he also was appointed faculty counsellor to Harvard's chapter of Alpha Omega Alpha, the medical honorary society.

He is a diplomate of the American Board of Internal Medicine, a fellow of the American College of Physicians, and a member of the Endocrine Society and the American Society for Human Genetics among others.

Past president of the Boylston Medical Society, he is a member of the editorial board of the Journal of Clinical Endocrinology.

Dr. and Mrs. Federman have two children. They plan to live in Palo Alto.

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Mailed January 17, 1973.

STANFORD UNIVERSITY NEWS SERVICE

STANFORD, CALIFORNIA 94305
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FOR INFORMATION CONTACT: Hap Everett

FOR IMMEDIATE RELEASE

LOS ANGELES –

An endowed professorship in pharmacology has been established at Stanford University School of Medicine by the Donald E. Baxter Foundation of Los Angeles, it was announced Tuesday, Jan. 16, by Thomas V. Jones, Southern California major gifts chairman of the Campaign for Stanford.

The foundation's pledge of a gift of $600,000 for the Donald E. Baxter Professorship in Pharmacology brings additional support to a Stanford department which was ranked first in the nation in a recent survey by the American Council on Education.

The Baxter professor will be named at a later date, according to Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine at Stanford.

"Because our priority goal is to bolster the University's endowment, this splendid gift of a faculty chair gives further impetus to the campaign in its early stages," Jones said.

The foundation was established by Mrs. Delia B. Baxter in 1959 in honor of her late husband, Donald E. Baxter, a physician, scientist, and engineer who pioneered in the commercial preparation of sterile and pyrogen-free solutions and associated medical equipment for intravenous therapy.

The foundation provides funds for scientific and educational purposes with primary emphasis on medical research. For many years it has provided funds for medical scholarships and research at Stanford.

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1/16/73 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Floyd Estess has been appointed director of the adult and child psychiatric clinics at the Stanford University School of Medicine, it was announced Wednesday (Jan. 10). He will also be a senior attending physician and clinical professor of psychiatry.

Dr. Estess, former director of psychiatric services at Dominican Santa Cruz Hospital in Santa Cruz, was named by Dr. Bert S. Kopell, acting chairman of the Department of Psychiatry.

The 51-year-old psychiatrist and psychoanalyst plans a major reorganization to increase the clinic's involvement with the community by offering, among other things, help for people suffering from depression. He also hopes to expand consultation services to public agencies which might find the department's expertise helpful.

Dr. Estess feels there is a need for a clinic on depression because "I think depression is a widespread problem and people ought to know it is a common thing and that there are professionals trained to help them."

Presently the Stanford psychiatric clinics offer the full range of psychiatric services, including such highly specialized areas as sleep disorders. But Dr. Estess also plans to develop a night clinic so that psychiatric services are more accessible and convenient to area patients. Also contemplated is the development of a new clinic specializing in sexual and marital problems.

Dr. Estess has appointed two other Stanford professors to clinic associate directorships and to head specialized units. They are Dr. Warren B. Miller who will direct the consultation program, and Dr. Irvin D. Yalom, who will direct the Group Therapy unit. A third appointee, Dr. Alan J. Rosenthal, will head the child psychiatry unit.

The Stanford psychiatric clinics are located next to the Stanford Medical Center complex, in a new building which houses services for about 16,000 patient visits yearly.

Dr. Estess succeeds Dr. C. Peter Rosenbaum, associate professor of psychiatry, who left the post to return to teaching and research.

The psychiatrist and psychoanalyst is a graduate of the University of California, and received his training in psychiatry at the Langley Porter Neuropsychiatric Institute, and his psychoanalytic training at the Southern California Institute in Beverly Hills. He is also a former faculty member of the University of California at Los Angeles and the University of Southern California.

He is currently also an associate fellow at UC, Santa Cruz, and a lecturer at UC, San Francisco.

Dr. Estess, his wife Emily, and six children live in Santa Cruz.

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Mailed January 10, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD — A $9.1 million expansion of Stanford University Hospital was approved Tuesday, Jan. 9, by the University Board of Trustees meeting in Los Angeles.

The construction, scheduled to begin in June, will enable the Hospital to expand vitally needed support facilities, increase emergency services, and add 25 intensive care beds for the complex surgical and medical procedures that have been developed at Stanford.

Dr. Thomas A. Gonda termed the project "a catch-up phase" which will provide physical facilities to correct present deficiencies.

"This is necessary," the hospital director said, "to meet the needs of patients in the community and the region, and the present teaching needs of the Medical School."

Gonda explained the present support facilities were originally designed to serve a 418-bed hospital. But with the remodeling of Hoover Pavilion in 1965, the actual beds have grown to 612. Hoover Pavilion is a hospital annex located near El Camino Real.

In addition, Gonda cited a 70 percent increase in outpatient visits since 1961, a 260 percent increase in the number of laboratory tests, and a 196 percent increase in diagnostic X-ray examinations.

Expansion of the support facilities includes laboratory, X-ray, nuclear medicine, surgical and postanesthesia recovery, pharmacy and central services.

The project contemplates construction of a 150,000 gross-square-feet addition to the present Core Building of the Hospital, and a subsequent remodeling of 32,000 gross square feet in the present Core. The new building will be located in the parking lot of the emergency room.

The building will include two finished floors in its first stage of development, with the availability of interim underground parking on the unfinished ground floor. The latter will be completed as funds become available.

The design will also permit an additional or third floor to be built later.

Exterior design of the building will blend with the character and esthetic quality of the existing medical center and the Stanford campus. The new structure will be of steel frame construction with design features that will reduce future costs for servicing, remodeling and addition of utilities. Construction will be scheduled so as not to disrupt the present operations of the emergency room.

Stanford's hospital expansion has received approval from the State of California Comprehensive Health Planning Agency, Gonda said.

Construction of the project will be financed by federally guaranteed low interest bank loans and Medical Center funds.

Architects for the project will be the firm of Caudill Rowlett Scott of Houston and Los Angeles. The Texas-based firm is also developing the Stanford Medical Center's master plan. —30— 1/9/73 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Robert M. Butler, business manager of Stanford University's Department of Athletics and former budget director of W. P. Fuller and Company, has been appointed financial manager of Stanford University School of Medicine.

The appointment, effective immediately, was announced today (January 3) by Dr. Clayton Rich, dean of the Medical School and vice-president for medical affairs.

Butler, 52, will have responsibility for the administration of Medical School funds, the preparation of budgets and forecasts, and the financial aspects of long-range planning.

A 1947 graduate of Stanford, he has had 25 years of experience in fiscal management. After two years with Western Electric Company and 14 with W. P. Fuller and Company, he joined the controller's staff at Stanford in 1963. A year later, he was appointed business manager of the Department of Athletics.

In a related administrative move at the Medical School, Elwood C. Pierce, presently assistant controller, has been promoted to operations manager. He will direct staff salary payments and personnel [illegible]icies, administer fellowships, grants and contracts, and coordinate services needed to operate the Medical School.

Pierce, 44, came to Stanford in 1964 after 12 years with W. P. Fuller and Company. He served as assistant research administrator before being appointed assistant controller of the Medical School three years ago.

In the past, both the fiscal and operations management of the school have been directed by the controller and assistant controller. Now, these functions have been more clearly separated and are reflected in the titles of the two positions, said controller William B. Rowland.

Rowland, controller of the Medical School for the past 15 years, will take an early retirement this spring. He obtained his Master's degree from Stanford's School of Business in 1947 and worked on the staff of the University controller for seven years before coming to the Medical School in 1957.

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Mailed January 3, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Dr. Leonard Hayflick, professor of medical microbiology at Stanford University School of Medicine, has been awarded the Robert W. Kleemeier Award of the Gerontological Society for his contributions to research in aging.

The presentation was made recently at the 25th annual scientific meeting of the society in San Juan, Puerto Rico by Dr. Rao Sanadi, chairman of the awards committee.

The award is given annually to an outstanding researcher in the field of gerontology.

Hayflick has discovered that normal cells in tissue culture have a finite lifespan. He found that their ability to survive outside the body decreases after a period of time as their genetic program is played out. This results in aging.

A native of Philadelphia, Hayflick received bachelor's master's and doctorate degrees in medical microbiology from the University of Pennsylvania. Before coming to Stanford in 1968, he was an associate member of the Wistar Institute of Anatomy and Biology in Philadelphia.

He is a member of various scientific societies and committees and on the editorial boards of several professional journals. In 1971 he was chairman of the California State Committee on health for the White House Aging Conference.

The Gerontological Society is a multidisciplinary professional society composed of researchers and educators who are interested in aging research and its applications.

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Mailed January 2, 1973.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Weight control sessions for employees who want to take off extra pounds are now being offered by Stanford University Medical Center.

They are sponsored by the Employee Help Center, which was organized last year to provide certain social services for staff of the Medical Center.

Sessions feature a self-help approach to acquire eating and exercise habits that will aid in weight loss and control. Led by Alice Hine, nutritionist, and Pat Wood, therapeutic dietician, the sessions are held weekly for two to three months per group.

The two things people can do to lose weight, according to the group leaders, are "eat less and exercise more." They have drawn up a food plan that lists foods according to their nutritional and caloric value so that participants can plan their own menus wisely. They encourage members to expend more energy through exercise, even in simple ways such as using stairs instead of elevators and escalators. Discussions also include such topics as supermarket purchasing practices, ordering from restaurant menus and decreasing caloric content of recipes.

To encourage involvement, there is a small reward system. Initially, participants pay a fee. They can "earn back" their investment by gaining points for attendance, weight loss, food record keeping, and major changes in food or exercise routines.

"The first step is to help group members identify the behavior patterns that have been instrumental in keeping them overweight," Miss Hine says. "Then we give them guides for changing these patterns."

She stresses that success depends on the individual. "Modifying one's life style with respect to eating probably means changing the habits of a lifetime. A person has to be ready and willing to do this."

The enthusiasm and sharing of the group can provide the support one needs to effect the desired changes. The return-on-investment reward serves as an additional form of motivation, not as a police measure, Miss Hine emphasizes. "Participants learn to evaluate the effectiveness of their own diet routines," she says.

"The changing involves unlearning old patterns and relearning new ones," explains Mrs. Wood. "In behaviorist terms, it is a rearranging of the environment." For weight problems, she says it could mean keeping fewer fattening foods around the house or buying them in smaller quantities or going to a movie instead of eating out for the evening.

Participants find their own form of arrangements, Mrs. Wood continues. "The important feature [illegible]hat they are controlling their environments. When the group ends, they can continue these controls to maintain a desirable weight."

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Mailed February 28, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Peter F. Carpenter, deputy executive director for the Price Commission in Washington, D.C., has been named assistant vice president for medical affairs at the Stanford University Medical Center.

The appointment of the 32-year-old executive in this newly created position was announced Thursday (Feb. 22) by Dr. Clayton Rich, vice-president for medical affairs and dean of the Medical School.

Carpenter will carry on a wide range of administrative duties at the Center, Dr. Rich said. His appointment becomes effective immediately.

A career civil servant, Carpenter had previously served as director of the management team for President Nixon's federal assistance review program at the Office of Management and Budget.

A native of Berkeley, Carpenter received a Harvard National Scholarship and was graduated from Harvard in 1962. His college summers were spent as a smoke-jumper for the U.S. Forest Service, parachuting into remote areas of the Pacific Coast to fight forest fires.

After graduation from Harvard, Carpenter was commissioned as a regular officer in the U.S. Air Force, and held several assignments, ranging from research into nuclear radiation effects to liaison duties in Southeast Asia. He also served in the Office of the Secretary of Defense and on the White House staff.

Carpenter earned a master's degree in business administration from the University of Chicago in 1965, and became a doctoral student in the field of organizational behavior at Stanford's Graduate School of Business. From 1968 through 1970, he was assistant director of the Center for Materials Research at Stanford.

Prior to joining the President's federal assistance review program, Carpenter served briefly as vice president of E. G. Fubini Consultants, Ltd., and as a consultant to the Secretaries of Defense and Health, Education and Welfare, as well as to the Science Advisor to the President.

Carpenter is married to the former Karen Nordlie of Denver, Colorado.

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Mailed February 22, 1973.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A new research program to evaluate the medical team approach in the treatment of couples with sexual problems has been established at the Stanford University School of Medicine.

Funded by a $175,000 grant for three years from the Commonwealth Fund of New York, a professional team will attempt to deal with the multiple components of a patient's illness.

"Few clinical fields better illustrate the challenge and complexity of a medical problem than the area of sexual dysfunction," said the project director Dr. P. Herbert Leiderman, professor of psychiatry.

Here, anatomical, hormonal, individual psychological, and interactive social and cultural factors combine to create diagnostic and therapeutic problems of great difficulty, Dr. Leiderman explained.

The team will include psychiatrists, an obstetrician and gynecologist, a urologist, a clinical psychologist, a sociologist, social workers and nurses.

Dr. Leiderman and his associate, Dr. Ben Z. Taber, a Stanford specialist in obstetrics and gynecology, designed the research with several objectives in mind:

--to study the therapist as a participant in handling problems of psychosexual nature;

--to establish a team approach for the diagnosis and management of complex, many-faceted medical problems;

--to initiate a pilot program for the training of auxiliary personnel in the management of sexual and reproductive dysfunction.

At present, a common approach to treating patients with sex problems is through referral from one specialist to another. A patient may go to a psychiatrist who refers him to a gynecologist who may refer him to a urologist, when he suspects an organic cause of the problem.

"Rather than fragmented serial management by superspecialists seeing patients individually, the care of those patients presenting complex problems could be centralized in a therapeutic team," Leiderman said.

He added the concept of an improved team approach could be readily adapted to other medical problems.

"Sexual problems are not the only problems originating from multiple factors," Leiderman commented. "Obesity, problems involving mother-child interaction, and medical disorders with psychosomatic components such as rheumatoid arthritis and bronchial asthma could benefit from a team approach."

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Mailed February 20, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

ADVANCE FOR P.M. RELEASE ON SATURDAY, FEBRUARY 17, 1973

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD — Follow-up studies of 400 patients who underwent coronary bypass surgery at Stanford University Hospital indicate that the operation has produced excellent results with improved long-term survival, a team of Stanford cardiologists and surgeons reported Saturday, Feb. 17.

"The procedure provides generally excellent results with low surgical mortality and. . .long-term survival is improved by the operation," the researchers told a meeting of the American College of Cardiology in San Francisco.

Authors of the report included cardioligists David S. Cannom and Donald C. Harrison, and surgeons D. Craig Miller, Thomas Fogarty, Pat O. Daily and Norman E. Shumway.

Coronary bypass surgery is one of the methods of treating coronary artery disease, in which the arteries leading to the heart are obstructed by the buildup of fatty materials.

In the operation, a portion of a vein from the patient's leg is used to construct a bypass or detour around the obstructed part of one or more of the coronary arteries. This enables the artery or arteries, which had previously been blocked, to deliver blood and oxygen to the patient's heart.

The operation has remained controversial since its development five years ago because of high surgical mortality and inconclusive results at some hospitals.

At Stanford, the first 400 consecutive patients to receive the operation were included in the study. The group included 335 men and 65 women with a mean age of 52.5 years. Of the 400, 256 had experienced at least one prior heart attack.

The overall operative mortality was 25 deaths or 6.2 percent of the patient population. However, the authors noted, of 249 elective patients without high risk complications such as congestive heart failure, shock, or nonfunctioning valves, there were only two deaths for a mortality rate of 0.8 percent.

Follow-up data on the 375 surviving patients revealed that 63 percent had returned to work without any angina pectoris (severe chest pain), and an additional 16 percent were free of angina but not working.

"Thus, angina was totally abated in 79 percent of those surviving surgery," the authors said.

In nine percent of the patients, there was a decrease in angina during physical exertion. Unsuccessful results included nine percent of the patients who noted no improvement or experienced a heart attack, and four percent who experienced late cardiovascular death.

The authors also reported that the outcome of coronary bypass surgery for any given patient can be predicted by consideration of three preoperative variables—degrees of congestive heart failure, electrocardiographic changes, and mitral valve incompetence.

"Good, although not absolute, predictability of outcome can be achieved if these three variables alone are considered," they said. Adding other variables did not increase the accuracy of this "index of operative success," they noted.

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END ADVANCE FOR RELEASE SATURDAY P.M., FEB. 17 2/15/73 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Stanford University has appointed an association of two firms as construction managers for the forthcoming $9.1 million expansion of the University Hospital, James Nelson, director of facilities and properties, announced today (February 15).

The two firms are Rothschild and Raffin, Inc., prominent hospital contractors based in San Francisco, and McKee-Berger-Mansueto, Inc., international consultants in construction management.

Their responsibilities in managing the project will include direction of the multiple contractors who will carry out the construction, and consultation on the design of the new facilities.

The construction, scheduled to begin in June, will enable the Hospital to add 25 intensive care beds, increase emergency services, and expand vitally needed support facilities. The latter includes laboratory, X-ray, nuclear medicine, surgical and postanesthesia recovery, pharmacy and central services.

A 150,000 gross-square-feet addition will be constructed in what is now the emergency room entrance and Medical Center receiving area. Construction will be scheduled so as not to disrupt the present operations of the emergency room.

The appointment of the construction managers follows an evaluation of nine firms submitting proposals for the project, said John Lerry, Stanford's manager of construction and engineering.

In order to complete the expansion as quickly and inexpensively as possible, the University will utilize fast-tracking, in which portions of the job are under construction while the balance is still in design, Lerry said. This technique is used most effectively in conjunction with the construction management system, he added.

Architects for the project are Caudill Rowlett Scott (CRS) of Houston and Los Angeles.

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Mailed February 15, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A $300,000 gift in the form of an irrevocable trust has been made by a California physician to Stanford University to establish a teaching and research fund in pulmonary disease.

The gift was made by Dr. Francis S. North, a specialist in diseases of the chest at the Palo Alto Medical Clinic and member of the voluntary faculty at Stanford Medical School. The trust names Stanford as the beneficiary after Dr. North's death.

The money will ultimately be used to establish the Francis S. North Medical Research and Teaching Fund, the income of which will support teaching and research activities in diseases of the chest in the Department of Medicine, said Dean Clayton Rich.

He added, "The establishment of this generous trust represents Dr. North's expression of confidence in the Medical School."

The same trust established by Dr. North also names the University of California Medical Center in San Francisco as the beneficiary of another $300,000. It will be used for teaching and research at the Cardiovascular Research Institute, according to Dr. North's attorney, John R. Griffiths, of Palo Alto.

Dr. North is a graduate of the Columbia University College of Physicians and Surgeons. He was a resident in internal medicine under Dr. James J. Waring, a noted clinician and professor of medicine at the University of Colorado. He received his training in pulmonary disease under Dr. Waring and at the National Jewish Hospital in Denver.

He has been associated with the Palo Alto Clinic since 1949 and served for nine years at the Stanford University Health Service.

Dr. North has also established the James J. Waring visiting professorship at Stanford honoring his former teacher. It is awarded annually to a distinguished physician in the field of chest diseases. In addition, he has also supported a number of fellowships at the Medical School. He is a trustee of the Francis S. North Foundation in Chicago, established by Dr. North in memory of his father.

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Mailed February 15, 1973.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Plans for development of a research building to house the Lymphoma Virology Program of the Department of Radiology of the Stanford University School of Medicine were approved Tuesday (Feb. 13) by the University Board of Trustees.

The building, which will contain 10,000 gross square feet, will be located on eight acres of land west of Governor's Lane near the Medical Center. The structure will be of modular design, adaptable to laboratory or small classroom needs, said Dean Clayton Rich.

Estimated cost of the project is $733,000 to be mainly funded by the National Cancer Institute. Completion of the building is expected in March, 1974.

In addition, Dr. Rich said, plans for the eight-acre site will be developed for possible future laboratory needs of the University and the Medical School.

The new research program will be directed by Dr. Henry S. Kaplan, professor of radiology and cancer research pioneer. His work will deal with several aspects of the biology of human malignant cancers, including Hodgkin's disease. In the new laboratory, methods will be devised for the study of human cancer cells, with emphasis on the possible role of viruses in the cause of malignant disease.

In other action, the University Board of Trustees approved the academic program for the Sherman Fairchild Center for Neurosciences. This program will be made possible by a $7.5 million gift from the Fairchild Foundation announced last month. The buildings, located at the south corner of the medical center, will house the departments of anatomy and physiology, and will provide an auditorium for the Medical School.

The Fairchild Center will serve as an intellectual focus of efforts concerned with the central nervous system and will involve departments both inside and outside the Medical School, Dean Rich said.

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led February 14, 1973.

STANFORD UNIVERSITY NEWS SERVICE
STANFORD, CALIFORNIA 94305
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FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD –

Providing health care for all Americans now requires a universally available funding system.

Whether developed exclusively by the government or through a combination of private and public means, this insurance program must include effective cost controls and strong incentives for changing the present system of delivering health services.

Otherwise it will simply stimulate higher costs like those which have followed the introduction of Medicaid and Medicare.

Provision of health care services should remain primarily within the private sector with greater public accountability. Wherever possible individuals should have a right to choose among varied systems of health care.

Until an effective system of national health insurance with cost controls becomes operative, wage and price controls will be a needed element in governmental actions about health services.

These conclusions are reached in a new book on *Medical Care and Medical Cure,* edited by Spyros Andreopoulos, information officer at the Stanford Medical Center.

Published by the Sun Valley Forum on National Health and the Millbank Memorial Fund (251 pp., paper, $3), it reflects the views of 33 experts participating in last summer's forum and includes six invited papers on this topic.

Participants for the most part were professors and health care specialists. But they also came from related professions, such as sociology, economics, labor, and insurance.

While recommending top priority for a program of national health insurance, they emphasized the need to preserve pluralism in providing services mainly through the private sector and to achieve far-reaching changes within the entire health care delivery system.

"If social policy is to concern itself with financing health services alone, and if doctors continue to go along with the public demand for curing the incurable, they could bankrupt the nation and succeed only in supplying a constantly deteriorating quality of service," Andreopoulos said.

The medical care industry now involves between $80 and $85 billion annually, accounting for about 7.6 percent of the gross national product (GNP).

Projections by the Social Security Administration indicate costs are climbing at 10 to 15 percent annually, a trend which would require 9.8 percent of the GNP by 1980.

"The resources devoted to health services cannot be unlimited," the symposium participants agreed. "These resources must therefore be organized and administered effectively."

Present health care is characterized by a high level of scientific knowledge and technological skill and health professionals with a strong commitment to high-caliber, individual service.

But the system within which physicians and others now operate to provide care is "inefficient, inequitable, and often ineffective," the participants said. "The quality of care rendered varies widely and costs are rising rapidly."

As government involvement in the payment of medical care has progressively deepened, demands for public acountability have increased under a growing, vocal, consumer movement.

"Because physicians dominate the marketplace for medical care. . .generally free of the normal constraints imposed by consumer demand, the sum of their individual decisions, as to type of specialty and site of practice, very largely determines the allocation of all health resources," the symposium agreed.

"This largely unconstrained process has resulted in serious maldistribution and misallocation of resources. Sources of primary or family care have been shrinking even as the demand for personal health care services has been rising.

"In medical schools there has been a heavy emphasis on medical specialization and biomedical research and little attention to health services research—or how American families can be assisted to find points of entry and guidance through the health delivery system."

(more)

Financial barriers at the point of entry to this system should be greatly reduced, the seminar emphasized. "What is needed is a universal, comprehensive system of financing to support good medical care for everybody," without a means tests or a history of prior financial contributions.

Universal coverage of a minimum of specified services "is compatible with pluralism in the delivery of services. To the extent possible, people have a right to choose among systems of care and should be left options to choose among health care providers."

Families should be encouraged to have "a continuing relationship with a stable source of medical care," the symposium indicated.

"Prepaid group practice plans or health maintenance organizations. . .offer consumers an opportunity to participate in policy and program development and to benefit from related services that are continuous, professionally sound, and cost contained. They merit high priority support and financial encouragement."

In an introductory chapter, Andreopoulos said the experts believe "the present health care arrangements can be structurally and humanely improved, not through a national health service, but within the context of a continued pluralistic system.

"The provision of services should remain in the private sector except in special situations where government efforts are needed. . . . The pluralistic approach may not satisfy some who believe in neat organization charts, but the right of free choice for doctors and patients is, according to these experts, worth preserving in a free market system."

In one of the invited papers, Dr. Paul Ellwood Jr., whose studies led to the health maintenance strategy for the Nixon administration, warned that the "likelihood of change in the health system is relatively low," even though Congress probably will act favorably on "virtually everything we have sought with respect to Health Maintenance Organizations (HMO's) except adequate health insurance coverage for everyone."

"The health industry is a highly regulated one, whose regulatory controls are dominated by practitioners and their professional societies and associations, and focused on the activities of individual practitioners," Ellwood noted.

Comprehensive health planning organizations "tend to be dominated by the providers" of care, he explained and "some have tried to use their authority to thwart HMO's from acquiring needed [hospital] beds.

Congress has created a "Health Services Corps" to alleviate the shortage of physicians in underserved areas, but carefully structured this to give medical societies jurisdiction over the program. Other agencies proposed to control hospital bed use also would vest control in physicians.

"The ultimate direction of these and other actions is toward an almost totally regulated but structurally unchanged health system [in which] the possibility of innovation and change would be virtually nil," Ellwood warned.

One hopeful factor, he added, is that "virtual consensus" has developed on the need 1) to encourage the formation of larger health care organizations able to integrate the components of health care delivery and 2) to provide every consumer the purchasing power necessary to obtain basic health services."

The report urges that "serious consideration" be given to the direct public assumption of responsibility for certain services such as emergency care.

"Most physicians in practice have abdicated on this score," according to Dr. Avedis Donabedian of the University of Michigan. "Consequently, this standby function has gone by default rather than design to the hospitals, which are not quite sure what to do with it."

Harvard Prof. Rashi Fein, well known health economist, argued that unless payments from a national insurance system are channeled through a single payment mechanism, it will be difficult to achieve important changes in the health care system.

The largest savings in expenditures are likely to come as ways are found to affect utilization of these services rather than price. Since use is basically determined by the physician rather than the patient, "efforts to contain the total costs. . .required that the programs be structured to provide incentives to change physician behavior," Fein declared.

Legislation limited to the financing of the purchase of health services could make present problems "more severe," he warned, providing "a good deal less health or equity than we should with the resources available."

Dr. Kerr L. White, Johns Hopkins professor who recently headed the President's Science Advisory Committee panel on health services research and development, observed that "improved incentives for more adequate financing will involve greater public accountability—and this means effective regulation of use, costs, and quality" of health care.

(more)

Dr. Cecil G. Sheps, vice chancellor for health sciences at the University of North Carolina, noted that the "very success and rewarding character of medical service" to the individual physican explains why there is "virtually nothing in [his] training and background, and too little in his experience, to prepare him to give advice which is relevant to the need of the community as a whole" rather than individual patients.

"A physician can work hard all day doing his best for patients who have access to him—and do them a lot of good," he added. "At the end of the day, he naturally believes that he has spent his day in the most effective way.

"This may not be, and often is not, the case. Too often the patients who do not have acess to him, and the health problems he does not tackle, are of much greater importance to the community."

Sheps maintained that a controlling role for the consumer is "essential for the future sucess of a pluralistic health system."

Fein noted that physicians "would to well to consider that if there were a truly competitive market in medical care, there would be significant, impersonal economic controls on their decisions.

"It is not surprising that physicians prefer the U.S. pattern under which they can control the market forces. What is surprising is that the layman has come to accept that situation as an essential freedom" for physicians, he added.

The elimination of the fee-for-service payment, which can be achieved through prepaid group practice, "would go a long way toward eliminating the incentive to overdoctor," he said. The physician's income then would not depend on the sheer volume of services rendered.

In a similar vein Yale Prof. I.S. Falk stated, "The system must have an end to the near-total dominance of the provider of medical care. . . .

"The needed remedies for the system are fundamental and massive, not to be satisfied by applying bandaids, prescribing aspirin, or relying on the healing effects of time, nature, and nonintervention."

While financing and fiscal management should be "monolithic," as in social security, Falk added, the "availability and provision of services should be private and pluralistic.

"Alternative patterns of organization . . . should not only be permitted but even encouraged," especially for making comprehensive care available on a prepaid basis.

A national "health security" program could cover about two-thirds of the current expenditures for personal health services, later extending to 80 or 90 percent coverage as manpower and other resources are developed for dental and other services.

The initial phase would cost about $63 billion by 1974-75, he estimated. Total expenditures without such a program might reach $93 billion.

Financing would come mainly by rerouting present expenditures, including private insurance, individual payments from noninsured individuals, and from public funding of such categorical programs as Medicaid and Medicare, Falk said.

The dread of dying from some dramatic diseases has produced a demand for cures and a serious imbalance in medical research and education efforts, Andreopoulos reported. "The biologic needs of our population are insatiable, especially if physicians place their emphasis on curative medicine."

For example, Jean Hamburger, a leading French nephrologist, recently estimated that if all Frenchmen who would benefit from it were supplied with kidney dialysis, the cost would consume over 80 percent of France's total social security budget.

Copies of the book may be purchased direct from the Milibank Memorial Fund, 40 Wall Street (59th floor), New York, NY 10005.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

EDITORS: Story is released simultaneously with report from the National Academy of Sciences

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

FOR IMMEDIATE RELEASE

STANFORD — A report from a panel of experts to the National Academy of Sciences released Sunday, Feb. 11, predicts that 8,000 new cases of cancer could be caused annually if high-flying supersonic planes should damage the earth's thin layer of ozone in the upper atmosphere.

The 46-page report by a group of scientists chaired by Dr. Kendric C. Smith, a Stanford University biochemist, based its estimate from the progressively higher incidence of skin cancers near the equator where persons receive greater exposure to sunlight and ultraviolet radiation.

The scientists said there was not enough information to draw positive conclusions about the effects of the once proposed 2,000-mile-per-hour supersonic transport (SST), but they commented: "Sufficient knowledge is at hand to warrant utmost concern over the possible detrimental effects on our environment by the operation of large numbers of supersonic aircraft."

Congress scrapped the American SST program in 1971 on grounds of noise and atmospheric pollution, but debate on the SST effects on the atmosphere was quite limited, Dr. Smith said.

Life on earth is partially shielded from biologically harmful solar ultraviolate radiation by a thin layer of ozone in the upper atmosphere. Scientists disagree on whether operation of fleets of SST's would alter the ozone of the stratosphere, thus increasing the amount of solar ultraviolet radiation reaching the earth.

But the panel said if these activities should lessen the amount of ozone in the stratosphere, there would be a high probability of significant harm to humans and to other life systems.

Because of the radiation-absorbing properties of ozone, a small decrease in ozone concentration would result in a large increase in ultraviolet radiation reaching the earth's surface in the wavelength range 280-320 nanometers (billionths of a meter). A five percent decrease in ozone concentration, for example, would yield a 26 percent increase in the intensity of the most biologically damaging ultraviolet radiation.

The scientists recommended gathering information on the wavelength distribution and intensities of ultraviolet radiation at several locations on the earth's surface to provide a baseline from which to evaluate possible future environmental changes. This information would also provide needed knowledge relating to incidence of skin cancer to the amount of ultraviolet radiation received.

Biochemical repair mechanisms exist in most living organisms, the panel said. One molecule easily altered by sunlight is deoxyribonucleic acid (DNA) which carries an organism's genetic blueprint. Increased amounts of ultraviolet radiation may overload natural repair mechanisms with serious effects on biological systems.

Certain marine life, plankton for example, also may be threatened by increased levels of solar radiation, the scientists indicated. It recommended that accurate measurements of the depth of penetration of ultraviolet radiation in natural waters and studies of the reaction of marine life to ultraviolet light intensities be done.

Members of the panel included Paul Bener, Observatorium Davos, Switzerland; Martyn M. Caldwell, Utah State University; Farrington Daniels Jr., Cornell University Medical Center; Arthur C. Giese, Stanford University; Timothy H. Goldsmith, Yale University; William H. Klein, Smithsonian Radiation Biology Laboratory; John A.H. Lee, University of Washington, Seattle; and Frederick Urbach, Temple University Health Sciences Center.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD — To see again through clear eyes the sights obscured for years seems like a miracle for many. Thanks to eye banks, some 1,500 Americans each year can experience that miracle.

The Stanford University Hospital Eye Bank is one of the West's largest suppliers of human eyes for transplants. Its work is made possible in part by the volunteer efforts of the Cambrian Park Lions Club.

For almost a year now, the club has delivered eyes from Stanford to wherever they are needed for surgery and research. Since the service was started last March, club members have driven a total of 5,600 miles to transport more than 125 eyes, according to Paul Graton, head of the project.

The part of the eye used for transplants is the cornea. It is the "window" of the eye—the clear membrane in front which lets in the light, explained Dr. Mathea Allansmith, assistant professor of surgery and head of the eye bank.

Donor eyes must be removed within six hours after death and used for transplants within 24 hours. Immediate transportation is crucial. Teams of Lions Club members are on call round the clock to transport eyes as they become available.

The Hospital notifies the eye bank after a donor has died. (The candidate or a relative has already given permission for the eyes to be used after death.) If Stanford does not have a candidate for corneal transplant, the eye bank will contact another physician who can use the eyes.

When notified, the Lions team on call picks up the eyes and rushes them in a special container to their destination. Most of the deliveries are local, but mercy missions have taken members as far as Stockton. Graton himself has traveled over 2,000 miles for the eye bank.

The Cambrian Park Lions are the only volunteer group in the Bay Area who deliver eyes, said Graton, although Lions chapters throughout the country do work in sight conservation.

Dr. Allansmith said that the club's services are a tremendous help to the Stanford Eye Bank, which runs on a minimal budget. "Some 300 corneal transplants are done yearly in this area," she noted, "and because of the Lions, eye bank personnel do not have to interrupt their work to make deliveries."

A specialist in immunology and diseases of the external eye, Dr. Allansmith explained that the corneal transplant is the most successful type of tissue transplant, with only a 25 percent failure rate.

She said that a large number of transplants are done for a deformity of the cornea that causes it to bulge and become cone shaped. The condition, called keratoconus, is common in young people in their twenties and generally affects both eyes. Other indications for transplants include corneal ulcers or scars, and in older patients, swelling due to water in the cornea which prevents the cornea from remaining clear.

Unlike kidneys or hearts, corneas do not have to be typed and cross matched for transplantation. At Stanford, however, donor eyes are typed, but not intentionally matched to the recipient. Researchers are conducting follow-up studies to determine if there is a relationship between cross matching and failure. Results so far have indicated that tissue incompatibility is not a significant factor in corneal transplant failure, according to Dr. Allansmith.

"The health of the cornea and the skill of the surgeon are most likely the key elements for a successful transplant," she said. "Furthermore, improved surgical techniques and instruments are probably more important for lowering the failure rate than cross matching."

Corneas can come from donors of all ages, even if they wore glasses, had cataracts, cancer or a number of other systemic disorders. "As long as the cornea itself is clear and undamaged, it can be used," said Dr. Allansmith. As a general precaution, however, she said that no corneas are used from persons who had viral infections of the liver.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD — "No more training grants?" "Will we survive?"

Deans, faculty and young investigators at the Stanford University School of Medicine this week seemed to be repeating these questions to themselves, to Washington officials and their Congressmen as news of federal budget cuts for health were spelled out in the President's budget message.

For the Stanford Medical School, the proposed phasing out of federal training grants would mean the loss of $3,378,000 per year.

The federal action may put the School in the unenviable position of being unable to fulfill its commitments to some of the 271 trainees in its pre- and posdoctoral training programs, according to Dean Clayton Rich.

In anticipation of official word from Washington, Dean Rich took steps to freeze all new departmental appointments until further notice.

He also began a review of the effects of the cuts on other School operations. Training money supports the departments in which students are learning and a significant portion of it goes for faculty and staff salaries.

Presently, the National Institutes of Health (NIH) supports training efforts at the School for three to five years. It is on the basis of this commitment that Stanford has hired faculty and accepted trainees. According to Washington reports, however, all training programs would be phased out in three years.

Rich termed the cutbacks "a reduction between muscle and bone," not "fat and muscle." He said they will reduce the School's training capacity because there is no way adequate private funding can be obtained in a short time.

The federal training programs were put into effect 20 years ago to help medical schools attract young scientists. They have supported predoctoral and postdoctoral students in fields such as anatomy, physiology, biochemistry, genetics and microbiology.

In addition, the training programs have enabled medical doctors to seek specialization and to do research in areas covering the whole range of clinical disciplines.

Stanford departments expected to be hardest hit by cuts include psychiatry, medicine, radiology, biochemistry, genetics, microbiology, pediatrics and pharmacology.

Nobel prize winning geneticist Joshua Lederberg said termination of grant support for training "will have catastrophic consequences."

"It is especially obtuse," he said, "to terminate these training programs when women are at a point of finding their just parity, and when many minority group students have found their way through undergraduate programs to qualify for leadership in the sciences."

(more)

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Lederberg said the only rationale the Administration can give for these cuts is that we have a surplus of trained manpower. "This is hardly true in the biomedical sciences."

Paul Berg, professor and chairman of the Department of Biochemistry, said the federal action signals "the virtual dismantling of the foremost health sciences research program in the world."

Berg's department which has 25 postdoctoral fellows, in addition to medical students, is doing research in the causes of cancer at the basic biochemical level, and in the mysteries of the genetic code.

"People have to realize," Berg said, "that it isn't that the trainees look over the shoulder of the professors—they are the ones doing the work. If there is no money to support them, the research—or at least a substantial part of it—isn't going to be done."

Malcolm Bagshaw, professor and chairman of the Department of Radiology, said there may be justification for cutting back certain programs. "But there are fields in which we don't have enough trained physicians and researchers."

Bagshaw said, "We only have one-third of the radiation therapists we need to give proper therapy to people with cancer in the U.S."

In the light of the President's war on cancer, it would be a disaster to cut off the supply of people who can do therapy and research, he said. "The budget cuts will probably force us to trim some research programs and eliminate others entirely."

In another area of proposed cutbacks, close to $1 million is involved in Stanford's Regional Medical Programs (RMP) for area III. This includes 11 counties in mid-California from San Mateo, Santa Clara, to San Benito, Monterey and San Joaquin.

According to Dr. William C. Fowkes Jr., Stanford RMP coordinator, these programs have helped extend resources of Stanford Medical School to outlying communities, including the development of programs for better patient care.

A wide variety of projects has come out of the Stanford RMP, including a new organization for dental care for Indians, medical services for migrant workers, a plan for rehabilitating stroke patients, development of coronary or specialized care units in local hospitals, and establishment of community clinics.

Specific programs, promised funding for three years, but now threatened, include emergency care for critically ill newborn infants, using helicopter service to transport them to Stanford Hospital, a new community health center in Daly City which plans to train aides in home care, and training of community health workers at West Valley Community College.

Another program being affected is the training of physicians' assistants. It was launched at Stanford in 1972 with RMP helping to finance the initial phase. Aim is to improve the distribution of health professionals and delivery of primary care in poorly served inner-city and rural areas. Forty students are enrolled in the program. The two-year curriculum is run jointly with Foothill College.

Federal withdrawal of support of RMP "would restrict our activities, enrollment for the next class may be cut down, and we would have staff cutback of 20 percent," predicted Dr. Michael Dennis, program director.

Associate Dean Count Gibson, who serves on a review committee for new projects seeking RMP aid, said the program is "not a slush fund, no give-away, I've never seen a wiser use of money."

Gibson termed the demise of RMP as "arbitrary and mindless."

He said it would be more appropriate to look at what the federal withdrawal will mean for the country, not for Stanford University alone.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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or Spyros Andreopoulos 415: 321-5310

Editors: Copies of Stanford M.D. and illustrations are available on request if not included with story.

STANFORD -- A Stanford University surgeon says politicians are overinflating the public's expectation of doctors.

They make promises as they introduce health care legislation that cannot be met with dollars alone, says Dr. Robert Chase, professor and chairman of the Department of Surgery at the Stanford University School of Medicine.

"The concept of total freedom from disease as a right, and the physician's total responsibility for it, is a dangerous social illusion," he concludes.

Chase's remarks appear in an article on "The Physician Image: Expectation versus Reality" in the current issue of Stanford M.D., the magazine of the Stanford Medical Alumni Association.

"It is clear," Chase writes, "that public expectations go well beyond what physicians can do for individual patients.... The new doctor is expected to cope with overpopulation, famine, slums, pollution, traffic, racism, political corruption" and more.

Politicians, says Chase, must share some of the blame for the public expecting too much from doctors. "The politician characteristically looks for a scapegoat, and where health care is involved, there is no one more vulnerable than the American physician. There is, in a sense, a tendency to cast the M.D. in the villain role."

Chase cited these examples: when Sen. Edward Kennedy's health subcommittee hearings were held in 1971 to "hear the people on the health crisis," the proceedings, "had all the earmarks of a political campaign," says Chase. "In my view they lacked objectivity and played upon emotionalism."

In another instance, John Knowles, a prominent figure in medicine, was quoted as saying, "M.D.'s are the largest single purchasers of Lincoln Continentals." The Massachusetts Medical Society invited Knowles to document his allegations, but his response was, "I'm not going to diddle around with those jerks." The medical society, says Chase, censured him.

Chase says the news media has also been responsible for developing the physician's public image, with "repeated derogatory articles and presentations."

The now defunct Life magazine last year published an editorial "Our Sick Medical System," then was surprised to see the results of a poll of its readers: 68 percent thought their treatment was good to excellent; 70 percent thought their doctors cared about them personally; only 15 percent considered their care poor.

The Stanford surgeon notes that surveys and analyses have shown the typical patient is very complimentary about his own doctor, but uncomplimentary about "most doctors and organized medicine."

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He cites the Louis Harris poll in 1972 showing that college students rate the M.D. as "dedicated man," though they feel his fees are too high. Another survey indicated that respondents expressed more confidence in medical leadership than in any other field.

In another study ranking occupations, the physician was number two in prestige behind only the Supreme Court justices. Congressmen rated 8th, lawyers 11th, ministers 17th, and newspaper columnists 46th.

Stating that "physicians do care deeply about their public image," Chase suggests measures that might be taken to improve it.

"On a personal level," he recommends "it is important to reverse the vicious circle of mutual alienation which currently exists between the patient and physician, in which the patient suggests that physicians are 'machines' and 'money grabbers' while at the same time physicians call the patients 'ingrates.' "

He says physicians must readjust the image of organized medicine by participating in it more, and participating less in activity that appears to have self-interest rather than interest in the public. They should also avoid Madison Avenue tactics to paint a new image. "It has proven ineffective and actually counter productive."

"Organized medicine," he says, "must show evidence that it is willing to discipline itself through active peer review, and more active disciplinary actions against physicians who abuse their privileges."

Chase notes that in 19th century America, the family doctor became a trusted and respected community member, often idealized and glorified. With the rise of scientific medicine censure of medical skill became less frequent.

"The physician's image today is hardly a glorified one," says Chase. "We cannot return to the day of the country practitioner. One cannot quarrel with the technical direction of contemporary medicine. Its success is too apparent."

Advances in medicine are both a glory and a curse, he says. They make possible miraculous cures, but they also make medical care more complex, expensive and less personal.

But he adds: "As physicians we do recognize that public patient confidence is an important part of total medical care."

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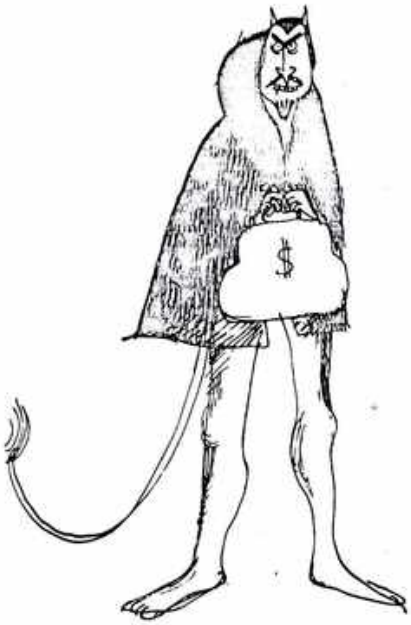
Mailed March 27, 1973

In 19th century America, the family doctor was glorified, with novelists depicting him as a composite of all the qualities of human perfection.



There is a tendency to cast the M.D. in the villain role, as a "money grabber."

A prominent physician was censured by the medical society for his unsubstantiated comment, "M.D.'s are the largest single purchasers of Lincoln Continentals."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD — Stanford University faculty and staff members will be evaluated on their risk of developing heart disease in a one year medical survey beginning next week on the campus.

The screening project is part of the Stanford Heart Disease Prevention Program, a five-year, Medical School based effort funded by the National Heart and Lung Institute.

All Stanford employees 26 years of age and older are eligible for the survey, said physiologist William Haskell, coordinator of the project. Participation will be on a voluntary basis.

"The purpose of the program is to determine the frequency of certain characteristics associated with a high risk of developing premature heart and vascular disease," Haskell said.

"For the participants, this is an opportunity to learn more about their own 'heart health' status and contribute to research on how to prevent heart attacks."

The survey, which has been approved by the University administration, will begin April 2 and continue through March of 1974. It will be conducted at several sites on the Stanford campus, near various employee groups, and at the program's offices at 730 Welch Road.

Approximately 5,900 Stanford employees are eligible, and some 4,500-5,000 are expected to participate.

"It is important that we have a high response rate," Haskell said. "The higher the percentage participating, the more representative the information will be of the entire Stanford population. If only a small sample responds, it could mean that only people with known medical problems are participating."

For most employees, the screening will consist of a 15-minute health evaluation, including a brief medical questionnaire, measurements of height, weight, and blood pressure, plus cholesterol and triglyceride (fat) analysis of a blood sample.

Approximately 25 percent of the participants will be asked to return for a second, more extensive evaluation. This group will include a random sample, as well as individuals who were found to have high blood fats in their first visit.

The second evaluation will include a more detailed questionnaire, more extensive blood tests, a urine sample for protein analysis, resting and exercise electrocardiograms, and a brief cardiovascular examination by a physician.

Results of both the initial and second evaluation will be made available to the participants or their physicians on requests.

This week eligible Stanford employees will receive a letter asking them to participate in the survey.

The Stanford Lipid Research Clinic, part of the Heart Disease Prevention Program, will conduct the survey. Nationally, 12 Lipid Clinics are participating in a collaborative effort to determine prevalence of heart disease risk factors. Dr. John W. Farquhar, associate professor of medicine, is the director of the Stanford clinic.

Heart disease is the leading cause of death in this country and kills over 600,000 Americans per year.

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Mailed March 27, 1973

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News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

Science Writers: Embargo date on this story is dictated by the scientific publication of this paper in the Lancet.

(ADVANCE) FOR PM RELEASE MONDAY, MARCH 26, 1973

STANFORD -- A Stanford University scientist and a British medical research team Monday (March 26) reported they had successfully tested in human volunteers an effective preventive remedy against the common cold, which could have usefulness in the future.

The remedy, called interferon, is a protein purified from human white blood cells infected by viruses. The substance is secreted by the cells to interfere with--or prevent--the viral infection of other cells.

The scientists stressed interferon is still too costly to produce and far from being a practical remedy. But, "it is likely," they said, "that given a definite clinical application, techniques will be improved, the cost of interferon will decrease and the method of administration will be simplified."

Findings showed that interferon could also delay the start of influenza B infection, leading the scientists to believe that the agent could prevent influenza if the proper dose could be given.

"This is the first agent known to prevent common cold infections in man," the researchers noted. They said that "interferon given to the volunteers in the study had no adverse effects."

The research was reported in the current issue of Lancet, a medical journal. The scientists are Dr. Thomas C. Merigan, professor of medicine and chief of the division of infectious diseases at the Stanford University School of Medicine; and Drs. Sylvia E. Reed, Thomas S. Hall, and David A. J. Tyrrell of the M.R.C. Common Cold Unit at Harvard Hospital, Salisbury, Wiltshire, England.

The investigation was supported by the British Medical Research Council. Merigan's work was done in England during his sabbatical leave. The latter was supported by the National Institute of Allergy and Infectious Diseases of the National Institutes of Health and by a fellowship from the Guggenheim Foundation.

In an interview, Merigan said the studies were made possible because human interferon production and purification techniques have improved in recent years.

"Interferon holds promise as a broad-spectrum antiviral agent for respiratory disease," he predicted. "Given to people early before a predicted epidemic or individual infection, it could protect them against several different types of viruses."

But it will require development of new technology before interferon could be mass produced for general public use, Merigan said. An effective dose of the agent produced with present methods costs several thousand dollars. Merigan expects methods for making the antiviral protein in greater quantities to be developed now that its effectiveness in man has been demonstrated. "I hope the findings will act as a stimulus."

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The Stanford scientist and his British associates obtained interferon for their experiments from Finland, aided by one American and a group of British pharmaceutical companies. Finland and the Soviet Union are currently producing interferon in greater quantities than the United States.

In the experiments conducted in England, Merigan and his colleagues gave interferon by nasal spray to 16 volunteers prior to exposing them to a common cold virus. The volunteers were known to be susceptible to the specific virus.

By increasing the daily dosage of interferon to 14 million units and by employing four days of treatment, the scientists were able to prevent the symptoms completely. Thirteen out of 16 volunteers who received a placebo developed common cold infections after exposure to the virus. (A unit is the minimum amount of interferon that inhibits a standard virus in tissue culture.)

Their earlier studies with 22 volunteers, half of whom acted as controls, showed that interferon doses as large as 1 million units were ineffective in preventing influenza, but there was some delay in the appearance of symptoms in the treated patients.

Merigan explained that the lower dose of interferon given and the large amount of influenza virus required to infect the susceptible volunteers may explain why the agent did not work.

When influenza occurs naturally, the amount of virus is probably small and this may account for good anti-influenzal effects with small amounts of interferon, he said.

Russian scientists have reported effective results against influenza virus with smaller interferon doses, Merigan said, but efforts to duplicate the Soviet experiments in England had been unsuccessful.

Merigan said the British studies may be viewed as a beginning in defining the minimum effective dose of interferon needed to prevent respiratory disease. However, further study will be required to define what might be the most practical regimen.

Since its discovery in 1957 in England by Alick Isaacs and Jean Lindenmann, interferon has been looked at as a potentially useful weapon against viruses. But the idea of making interferon outside the body to use inside the body was regarded as impractical. Scientists, including Merigan, turned their attention to developing drugs that stimulate interferon production in the body against viruses. Unfortunately, these drugs proved relatively ineffective and difficult to use in man.

Efforts have also been in progress at the National Institutes of Health to define the molecular structure of interferon. If the effort succeeds, it could be a major scientific breakthrough, eventually allowing scientists to synthesize interferon in the laboratory.

Meanwhile, interferon production depends on the supply of white blood cells obtained from blood donors. Interferon is made when white blood cells are exposed to a virus and incubated in tissue culture fluid. The cells secrete interferon which is collected, purified and tested for unwanted contaminants before it can be used in man.

Production costs are high and, according to Merigan, obtaining interferon this way is presently impractical. The United States has no centralized blood banking system, and it would be difficult to standardize production and to establish proper quality controls.

At the moment, the most promising source of interferon seems to be cells grown outside the body. "In the last two years, significant progress has been made in producing human interferon in acceptable tissue culture cells other than white blood cells, and there is every expectation that greater yields can be produced in the future," Merigan said.

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END ADVANCE FOR PM RELEASE MONDAY, MARCH 26, 1973

Business Wire release Monday, 3/26/73

Mailed 3/22/73.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

FILE COPY

STANFORD -- The first class of physician's assistants being trained at Stanford University Medical School has begun working with practicing physicians in communities throughout California for the final phase of instruction.

Starting today (March 26) the 16 physician's assistant students will spend the last 12 weeks of their two-year program assisting a community doctor in various primary care tasks.

Under supervision of their medical preceptors, the trainees will perform a broad range of services, from taking medical histories and doing physicals, to suturing minor wounds and removing casts.

These paramedics are being trained to help improve health care delivery in underserved rural or urban areas. They will enable physicians to direct their skills and energies to the most pressing medical problems.

When the newly-trained physician assistants graduate in June, they will be qualified to take both state and national certifying examinations which will be given next December.

"The physician's assistant may be the first person a patient encounters in the doctor's office, but he or she cannot make a diagnosis or prescribe treatment without consulting the primary care physician," explained Dr. David Clark, associate director.

The Stanford program, sponsored in cooperation with Foothill Junior College, leads to an Associate of Science degree. It is one of two programs set up in California since the state authorized physician's assistants in 1970. The other program is run by the University of California in Los Angeles and the Charles Drew Medical Center in Watts.

Applicants to the program must have a high school diploma or the equivalent. According to Dr. Michael Dennis, director, members of disadvantaged minority groups and people from areas with inadequate medical services, are particularly encouraged to enter the program. Stanford will try to place its graduates where health care personnel are needed.

The class now going out to the communities consists of nine former Army medics, six registered nurses and one Bachelor's degree recipient. Their preceptors were selected from among physicians who had expressed interest in the physician assistant concept when Stanford conducted a state-wide survey before setting up the program.

During their first year, students take courses at Foothill until June to fulfill requirements of the A.S. degree. Their science courses include anatomy, physiology, biology, psychology and philosophy of primary care. The next four months are spent in classes at Stanford where they learn about common medical problems.

After more than a year of classroom preparation, the trainees participate in clinical rotations through services at the Medical Center and affiliated health care facilities to gain firsthand experience in dealing with patients. They then devote their final 12 weeks to practicing what they have learned with a doctor in a community.

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The physician's assistant program at Stanford is supported by grants from the Bureau of Health Manpower of the Department of Health, Education and Welfare, and the California Regional Medical Program.

In addition to the class nearing the end of its program, another class of 20 is in its first year. Applications are now being accepted for a third class scheduled to begin this fall.

The 16 trainees and the communities they have been assigned are listed below.

BERKELEY	Don Massie
CARMICHAEL	Robert Scott
FREMONT	Marjorie Arendsee
FREMONT	Barbara Butler
GONZALES	Sergio Noriega
HEALDSBURG	Harvey Fine
KING CITY	Judy Schreiman
LAMONT	Eula Tucker
MERCED	Harold Casaletto
MERCED	Gary Hamilton
MODESTO	Larry DePute
SALINAS	Bill Dennis-Leigh
SAN JOSE	Charles Despres
SAN MATEO	Vicky Ramsel
SUNNYVALE	Ron Tachibana

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Mailed March 26, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A new clinical program for the diagnosis and treatment of patients with neuromuscular diseases has been established by the Department of Neurology at Stanford University Medical Center.

The program provides the combined services of two new facilities--an outpatient clinic and a diagnostic laboratory--said Dr. David A. Prince, department chairman.

Clinic patients include those suffering from various forms of neuromuscular disease, such as muscular dystrophy and myasthenia gravis.

These disorders are characterized by prominent muscle weakness and fatigue, diminished muscle size, muscle pain or cramps, and difficulty in walking, Prince said.

The neuromuscular clinic was organized by Dr. Judith Koehler, assistant professor of neurology and a specialist in neuromuscular diseases and child neurology. It provides a full diagnostic evaluation, including specialized examinations and laboratory tests, she said.

In the diagnostic laboratory, small biopsies (samples) of muscle tissue from patients are stained and examined microscopically. This procedure, together with a clinical evaluation, provides an accurate diagnosis, Prince said.

Treatment for many patients with neuromuscular diseases involves medications as needed and a program of physical and occupational therapy.

The clinic and laboratory will operate as a referral center, Prince said. Prospective patients should be referred to Stanford by their private physician.

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Mailed March 26, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Living human cells, stored and grown in a Stanford University medical research laboratory, will be orbited in outer space for 28 days to determine the effects of prolonged weightlessness on their ability to survive.

Cultures of the human cells will be put aboard Skylab, the U.S.' first manned orbital space station scheduled to be launched from Cape Kennedy May 14.

Stored in tiny chambers in a specially designed instrument package, the cells will be fed automatically with nutrients during the mission. The cells' movements in tissue culture will be recorded by time-lapse photography.

During their normal duties, Skylab's astronauts will check from time to time if the hardware is working. While in-flight data are being obtained, an experiment package on the ground will be operated at the same temperature as the in-flight package. This information will be available to permit comparison of the cell growth in earth gravity.

At the end of 28 days, the cells will be retrieved in the Pacific Ocean by an aircraft carrier, and flown to San Diego and then to Stanford where scientists will study the effects of zero gravity on their growth.

"This marks the first time that scientists will be able to assess the effects of prolonged space flights at the cellular level," said Dr. Leonard Hayflick, professor of medical microbiology at Stanford and co-investigator on the NASA project.

"We have no information regarding either subtle or perhaps even major effects that might take place at the cellular level," the Stanford microbiologist explained.

"It is probably not too far-fetched to assume that there are effects on the human cell's ability to divide normally at zero gravity that are not expressed in the short time that astronauts have lived in space.

"The more subtle effects following brief exposures must be determined if dangerous consequences are to be anticipated and avoided during future space explorations."

FILE COPY

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Hayflick said he plans to study the basic genetics of human cells exposed to weightlessness. Among these will be possible chromosome breakage, the same kind that is frequently produced by drugs.

The NASA project was designed and is directed by Drs. Philip Montgomery and Joseph Paul of the University of Texas, Southwestern Medical School in Dallas.

The human embryonic diploid cells that will be used in the experiment have been preserved in the super cold of liquid nitrogen for 11 years. They are called diploid cells because they have the correct shape and proper number of chromosomes known to be normal for man--that is, 46. Because these cells are known to be normal and free of contaminating viruses, they are being used all over the world as a growth medium for manufacture of human virus vaccines and for cancer research.

The cells are also used for Hayflick's studies in aging. He found these cells will double 50 times and then die because all embryonic human cells are "programmed" that way. When the cells are thawed for use, they "remember" the number of doublings they had achieved before being frozen.

The cells that will be used for the NASA experiment are at the 10th doubling level, Hayflick said.

Skylab will be launched atop a giant Saturn 5 booster and sent into a 269-mile-high orbit of earth.

Next day, a smaller Saturn 1-B rocket will loft an Apollo command ship with three astronauts on board on a similar orbital path to rendezvous and dock with Skylab. The astronauts will remain there for the next 28 days.

According to NASA, Skylab's mission will have far-reaching consequences. It will help determine if man can live and work in space for extended periods of time necessary to make round trips to other planets or moons.

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Mailed April 30, 1973.

Editors: Photo available upon request, if not included with story.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Roads around Stanford University Medical Center are being changed as part of the Hospital's $9.1 million expansion scheduled to begin in July.

Part of Quarry Road is being replaced and a new link to Campus Drive is being built. Work on these routes has already begun and will be completed by July 15, according to the Health Facilities Planning Office of the Medical Center.

The new addition will allow the Hospital to increase vitally needed support facilities, emergency services and intensive care beds. It will be an extension of the north side of the Hospital Core Building, and is expected to be finished in January of 1975.

During the construction, the existing emergency room entrance will be maintained. When the addition is completed, there will be new emergency and service entrances to the Hospital.

By June, the two service roads south and east of the Medical Center will be closed to through traffic. The Palo Alto bus will make its usual stop in front of the Medical Center, and then swing around to Campus Drive.

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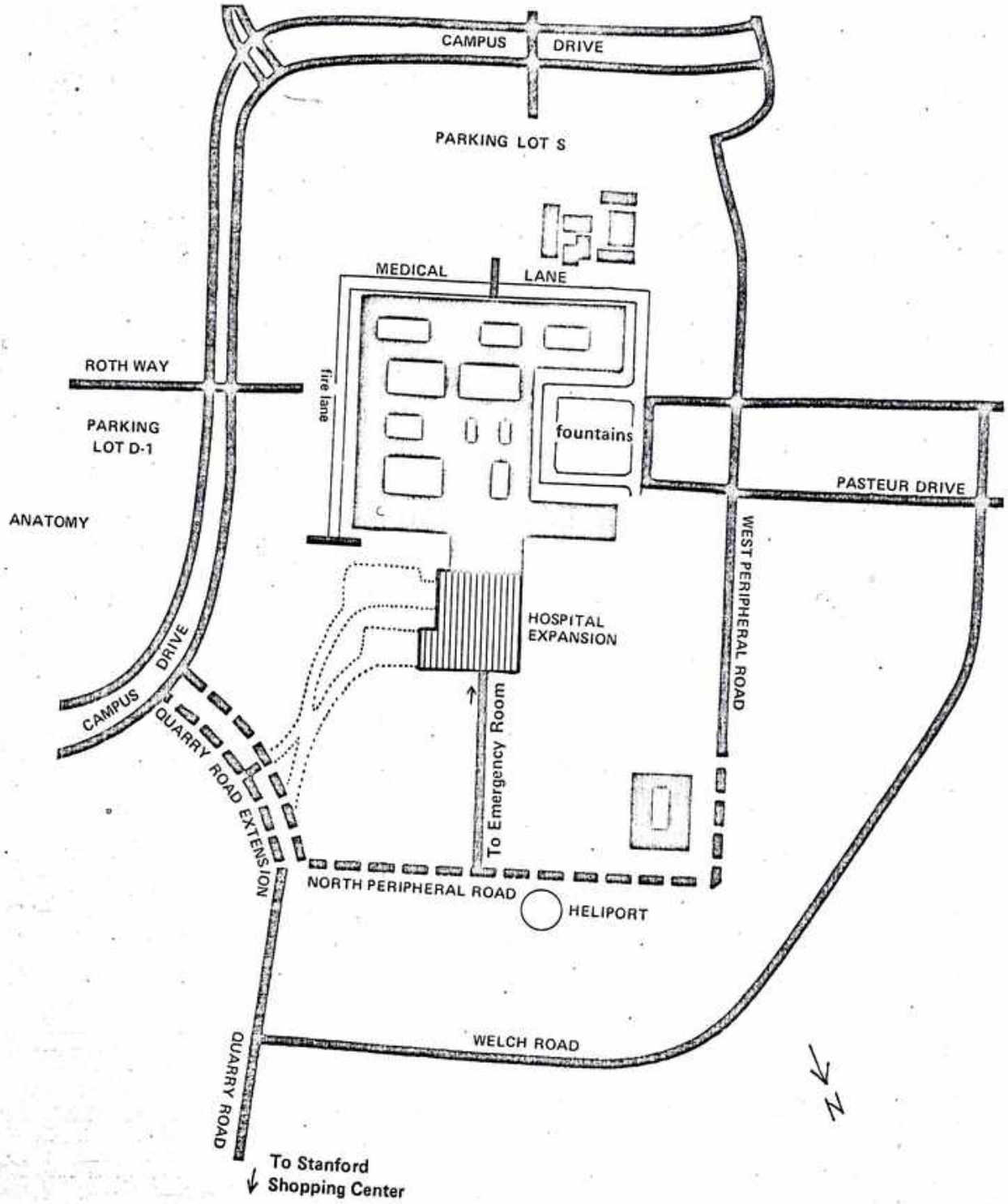
Mailed April 25, 1973.

Changes in roads around the Medical Center are shown on the above map. These alterations are part of the Hospital's $9.1 million expansion scheduled to begin in July. The broken lines show the new route that will be completed by July 15. Solid lines on the fire lane and Medical Lane indicate where those roads will be closed to through traffic. The small dotted lines designate the new emergency and service entrances to the Hospital when the addition is finished in January, 1975.

Stanford University Medical Center

April 25, 1973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HOSPITAL EXPANSION
CAMPUS DRIVE
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To Emergency Room
NORTH PERIPHERAL ROAD
HELIPORT
WELCH ROAD
QUARRY ROAD
To Stanford Shopping Center
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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--For the first ten years of his life, Martin Fierro was an outcast, the victim of a facial deformity which made his appearance grotesque and left him barely able to speak.

Today, following a delicate operation at Stanford University Medical Center to correct his double cleft lip and palate, the cheerful youngster from Mexico is talking enthusiastically and looking forward to attending school for the first time in several years.

"He never would have been able to get a job or go to school," said Dr. Donald R. Laub, who performed the surgery on Martin at Stanford. "Now he can become a productive member of society."

Martin was born with two gaping holes in his lip beneath each nostril and a large opening in his palate. His nose was snubbed down to where his upper lip should have been.

He was one of seven children raised by his father in the remote mountainous village of Mocorito in Sinoloa, Mexico. After being harassed unmercifully by neighbors and classmates for several years, he became a virtual recluse.

"Martin had such a grotesque defect that the other kids constantly would laugh and throw rocks at him," said Laub, head of the division of plastic and reconstructive surgery at Stanford. "So he was finally forced to drop out of the first grade three or four years ago."

A few months ago, the boy was discovered at a clinic in Mocorito by Dr. Dale E. Hoyt, president of an organization called the Flying Samaritans. Founded by a group of doctor-pilots, the Samaritans run several medical clinics in Mexico and provide free air transportation when needed by patients and physicians.

The Samaritans flew Martin to Stanford on March 14. Five days later, the operation was performed. Professional fees were waived and hospitalization costs were covered by Project Concern, a non-profit agency which assists in providing health care to the poor.

Facial tissue from the boy's cheeks was used to construct an upper lip. The nose was pulled out, and the narrow piece of skin between the tip of the nose and the lip was formed. The large opening in the palate was closed, and the palate was pushed back in good position for speech.

The result of the surgery, said Laub, was "instant rehabilitation."

"The change in Martin's outlook has been just as dramatic as the change in his appearance," the surgeon continued. "When he first came to us, he was very shy and withdrawn. Now, he's unbelievably happy."

Because of his advanced age, Martin was strong enough to have his lip, palate, and nose repaired in a single operation, Laub said. In younger children, correction of a similar deformity would require three operations.

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Surgery to correct a cleft lip and palate is rarely performed on a child of Martin's age in this country, Laub said. Such problems usually are handled through Crippled Children's Services, enabling most American children to have the necessary surgery before they are two years old.

Some 150 patients, nearly all of them children, have been brought to Stanford from Mexico, Latin America and Hong Kong for surgical rehabilitation in the Medical Center's INTERPLAST program (INTERnational PLASTic and reconstructive surgery).

Most of the children require reconstructive surgery for a cleft lip and palate, severe burns, or syndactyly (webbed fingers), Laub said. Recently, a few have undergone orthopedic or cardiac surgery.

Surgical services are donated by a team of Stanford surgeons headed by Laub. Free air transportation is provided by Pacific Southwest Airlines (PSA) or the Flying Samaritans. Drugs are donated by several pharmaceutical companies.

The average cost of hospitalization and operating room use is roughly $425. These expenses usually are covered by Project Concern or private donations.

During their rehabilitation, the children stay with foster parents in the Bay Area. Approximately 150 sets of parents serve in this capacity for the Stanford program, Laub said.

Martin's foster parents are Mr. and Mrs. Raphael Arbizo of San Jose. Though his speech will never be perfect, the boy is communicating very well now, Mrs. Arbizo said. He presently speaks only Spanish, but is trying to learn English.

For the Stanford surgical team, as well as the other groups involved, the project is a very rewarding one.

"We'd like to do one of these cases a week," Laub said. "Through this surgery a miraculous change is made in a person's life."

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Mailed April 17, 1973

EDITORS: Photo available on request if not included.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Doctor William R. Fair, associate professor of surgery at Stanford University School of Medicine, is recipient of a Research Career Development award from the National Institute of Allergy and Infectious Diseases of the National Institutes of Health (NIH).

The purpose of the award is to foster the development of young scientists with outstanding research potential for careers of independent research in the health sciences, according to the NIH.

A specialist in urinary tract infections, Fair is the first urologist in the history of the NIH to be granted such an award, noted Dr. Thomas Stamey, head of the Medical School's division of urology. Most such awards have gone to internists and basic scientists, he said.

Fair will receive $25,000 annually for the next five years to support his studies on the biochemistry of the prostate gland and its secretions. This research may provide clues for the diagnosis and treatment of urinary tract infections, infertility and prostatic cancer, Fair said. He will spend most of the award period at Stanford, but also plans to work at the Institute of Reproductive Biochemistry and Physiology at Cambridge University in England during the 1974-75 academic year.

In 1956, working with Stamey, Fair discovered that prostatic and seminal fluids contain a potent antibiotic substance that kills bacteria responsible for urinary tract infections. He plans to investigate the biochemistry of this antibacterial factor and its importance as a defense mechanism against infection in humans.

Fertility may also be related to the secretions of the prostate and accessory glands. Indications are that sperm are more motile in certain supporting plasmas, according to Fair, and he will pursue studies he and his colleagues have begun in this area.

He is also working on the development of a radioisotope scan that can be used for X-ray diagnosis of prostate cancer. Currently, the only way to diagnose cancer of the prostate is by feeling the gland during rectal examination. "A radiologic scan would provide a more objective means of diagnosis," said Fair.

Examination of the prostatic fluid may also provide a way of diagnosing prostatic cancer in the future, said Fair, but much more detailed biochemical studies are needed.

A native of Pennsylvania, Fair received his B.S. from the Philadelphia College of Pharmacy and Science in 1956, and his M.D. from Jefferson Medical College in 1960. He interned at Womack Army Hospital, Fort Bragg, and then served as a preventive medicine officer in Augsburg, Germany, followed by a year of general surgery at Martin Army Hospital, Fort Benning.

In 1964, Fair came to Stanford as a resident in urology. Four years later he joined the faculty as an assistant professor and was promoted to his present position in 1972.

He is a fellow of the American College of Surgeons and certified by the American Board of Urology. Associate editor of Urology Digest, he is also a member of the ditorial board of the Journal of International Medical Research. Currently he is serving as acting head of Stanford's clinical renal transplant service.

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Mailed April 16, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Patients will now receive fewer and less confusing bills from Stanford University Medical Center, as a result of a merger of the Hospital and Clinics patient accounting services.

The merger, which becomes effective this week, simplifies billing matters for both patients and Medical Center staff members, said Al Setton, assistant controller for patient accounting.

Formerly, since multiple bills emanated from both the Hospital and Clinics, many patients erroneously thought they were being billed twice for the same services, Setton said.

Now, all billing is handled by a Medical Center-wide patient accounting department, utilizing one computer system, one management group, and one business office.

Under the new system, patients receive a single inpatient statement, covering the regular Hospital bill and the professional fees of Stanford faculty physicians. In the past, these were billed separately by the Hospital and Clinics at different times.

Similarly, a single outpatient statement now covers all charges for emergency room services, clinic visits, and Hospital services rendered on an outpatient basis, such as radiation therapy. Previously, the Hospital issued separate bills for each emergency room and outpatient visit, while the Clinics handled charges for each clinic visit.

"The merger really uncomplicates billing matters for our patients," Setton said. "Under the old system, patients were forced to relate to two separate business offices to resolve questions regarding charges.

"Additionally, because of the overlap, insurance companies often had difficulty identifying which bills had been paid for."

Besides making things easier for patients, the merger may save the University an estimated $160,000 per year, said James Kurpius, project director. Kurpius attributed the savings to better utilization of staff and an elimination of areas of overlap.

Registration procedures have also been streamlined by the merger, Kurpius said. Outpatient registration has been centralized in one location, where patients will receive one account number for all outpatient charges. Previously, patients had to register for each type of outpatient visit and keep tabs on several different accounts.

The separate billing and registration policies dated back to the joint ownership of the Hospital by the City of Palo Alto and the University. When Stanford bought the Hospital from Palo Alto in 1968, these separate policies were continued.

Work began on the merger last June. The inpatient phase was completed October 1; the outpatient phase, April 16.

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Mailed April 16, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A benefit golf tournament for the intensive care nurseries at Stanford University Medical Center will be held Friday, April 27, at the Oakridge Golf Course in San Jose.

Proceeds will be donated to the Medical Center to help support the treatment of critically ill infants in the nurseries, as well as ongoing research efforts concerning prematurity and serious birth defects.

The tournament is being organized by C. J. MacPherson of Santa Clara, who each year sponsors a benefit golf tournament in the Peninsula area. MacPherson's interest in the care of seriously ill infants stems from the experiences of his close friends, Mr. and Mrs. Richard Woodward of San Jose.

The Woodwards' daughter, Elizabeth Ann, was recently hospitalized in the intensive care nurseries at Stanford for treatment of a congenital heart ailment. In her honor, MacPherson decided to sponsor the "Elizabeth Ann Foundation Golf Tournament," which he plans to make an annual event.

Now over seven months old, Elizabeth Ann was born at O'Connor Hospital in San Jose on August 24, 1972 and transferred to Stanford two days later. She was hospitalized for five weeks initially and re-admitted for 11 days in February for treatment of pneumonia.

"Elizabeth Ann was born with a severe heart lesion which is presently inoperable," said Dr. Philip Sunshine, director of nurseries at Stanford. "We treated her here for several weeks, and she is currently doing remarkably well for someone with this particular problem."

Each year some 700 critically ill newborn babies from Central California and Nevada are admitted to the intensive care nurseries at Stanford, Sunshine said. About half are full-term babies with acute medical or surgical problems. The others are premature infants weighing as little as one and a half pounds. Their average length of hospitalization is six weeks.

Few young parents whose infant is treated in an intensive care nursery can pay the hospital bill without assistance, Sunshine said.

"Most insurance policies do not provide for hospitalization of newborn babies," he said. "Some 50 or 60 percent of these infants carry no insurance coverage at all, though a bill for several thousand dollars may mount up before they are ready to go home."

In the Stanford nurseries, no babies are turned away because of their parents' inability to pay the costs of treatment, Sunshine noted.

"The money raised in this golf tournament will help us continue to treat seriously ill infants and conduct research on prematurity and congenital illness," he said.

The Oakridge Golf Course is located at 225 Cottle Road in San Jose. Tee-off time for the tournament is 1:00 p.m., with cocktails and dinner immediately following.

The $30.00 entry fee includes 18 holes of golf, steak dinner with wine, and a gift package. Persons interested in participating should contact MacPherson (408:299-3242) or the Premature Infants Research Center at Stanford (415: 321-1200, ext. 5445).

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Mailed April 16, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

BUSINESS WIRE April 13, 1973 10:45 a.m.

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Secretary of the Interior Rogers C. B. Morton today (Friday, April 13) completed seven weeks of radiation therapy at Stanford University Medical Center for treatment of an early-stage malignancy of the prostate.

"Secretary Morton has responded very well to the treatment, and there is every reason to be optimistic about his condition," said Dr. Malcolm A. Bagshaw, chairman of the Department of Radiology at Stanford.

Morton, 58, checked in at Stanford on February 20 as an outpatient. The prostate malignancy had been discovered during a routine physical examination by his personal physician.

During his treatment at Stanford, the Secretary was ambulatory and maintained a small office at the U.S. Geological Survey in Menlo Park.

He is expected to return to Washington, D.C. after a brief recuperation period.

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FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- An experimental class for pre-school children with speech and language problems will be launched this fall by the Communication and Learning Disorders Center at Stanford University School of Medicine.

Supported by a $10,000 grant from the Luke B. Hancock Foundation of Menlo Park, the class will include 10 to 12 children ranging in age from three-and-a-half to five-and-a-half years, said Dr. Kathryn Beadle, director of the Center.

The purpose of the class, she said, will be to increase and improve the children's verbal language skills so they will be better prepared to enter school.

"Children with developmental speech and language disorders represent one of the high risk groups for eventual learning disabilities," Dr. Beadle said. "Because of this, we believe our program can make a valuable contribution to the prevention of such academic learning problems."

The program will provide intensive work on establishing perceptual and motor skills, as well as developing linguistic areas, she said. Emphasis will be placed on teaching the children to use language and speech to organize and integrate their experiences.

The class will be directed by a language pathologist and special education teacher, with consultation from a physical education instructor and an occupational therapist. It will run five mornings a week for the full nine-month academic year.

To determine the effectiveness of the program, the children will be evaluated in several ways both before the class begins and again after it concludes, Dr. Beadle said. If it is proven effective, and additional funding can be obtained, the class may be established on a permanent basis.

In a companion grant, the center received $4,000 from the Hancock Foundation to establish a closed circuit television and videotape system. The system will be used for observation of patients and evaluation of clinical procedures in several programs for both adults and children. Tapes will also be used for a variety of teaching purposes.

The Communication and Learning Disorders Center is presently located at 400 Willow Road, north of Stanford Hospital and across from the Stanford Shopping Center.

The Luke B. Hancock Foundation was organized 25 years ago. Hancock, a specialist in oil production, died in 1961.

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Mailed April 3, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A research project to evaluate the long-term effects of weightlessness on a colony of living human cells aboard Skylab has been postponed until later this year, the project's co-investigator said Wednesday (May 30).

Dr. Leonard Hayflick, professor of medical microbiology at the Stanford University School of Medicine, said the cell experiment was among several dropped from the mission to make room for repair equipment aboard the command ship.

The equipment was used by astronauts to perform repair work outside the crippled orbiting space station. It included an emergency parasol used to replace Skylab's damaged meteoroid and heat shield which had caused temperatures inside the ship to soar dramatically.

The human cells were to have been stored in tiny glass chambers and flown aboard the command p to Skylab. They would have been returned to earth so that scientists could learn what effect a month of zero gravity has on their growth, reproduction and genetics.

The cells would have been maintained in tissue culture and their growth and movements in space would have been recorded photographically.

Hayflick said NASA officials have told him that the cells will be sent aloft when two other teams of astronauts slated to spend 56 days in orbit later this year might be able to live and work aboard Skylab.

The frozen human cells have been preserved at a Stanford cell bank for 11 years. They were picked for this experiment because they have been studied extensively and their characteristics are well known.

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Mailed May 30, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Merlin K. DuVal, vice president for Health Sciences at the University of Arizona and former assistant secretary for health and scientific affairs at HEW in Washington, will be the keynote speaker at the annual alumni reunion of the Stanford University School of Medicine Saturday, June 2.

Dr. DuVal will speak on "Health and Public Policy" at 1:30 p.m. in the Cooper Courtyard of the Medical School.

The 51-year-old medical educator served as an assistant secretary in the Department of Health, Education and Welfare from 1971-72. He holds an M.D. degree from Cornell University Medical College, was professor of surgery at the University of Oklahoma School of Medicine from 1961 to 1964, and dean of the University of Arizona College of Medicine from 1964 to 1971.

In addition to his surgical contributions, Dr. DuVal is considered a leader in medical education. His writings in recent years have covered many other topics, including the need of bridging the gap between medicine and the law, health manpower, development of quality standards for health care, rural health, and public health policy. He is currently chairman of the liaison committee of the joint task force on medical education of the American Medical Association and the Association of American Medical Colleges.

Morning sessions at the day-long alumni reunion will begin at 9:45 a.m. in Room M106 of the Medical School. They will include presentations on new engineering concepts in medicine and the implications for the practicing physician.

The program will be chaired by Dr. Donald C. Harrison, William G. Irwin Professor of Medicine and head of the Division of Cardiology.

Among the topics are "Integrated Circuit Technology--'Sight for the Blind,' ", "Computer and Ultrasound Methods for Measuring Cardiac Function," "Cardiac Biopsy--Application of a New Method for Diagnosing Heart Disease," "The Pharmacology of Anti-arrhythmic Drugs for Prevention of Sudden Death," and "Outpatient Heart Monitoring."

The afternoon session at 3 p.m. will feature Dr. L. Martin Griffin, a Stanford alumnus, who will speak on "Springtime in Nepal." In addition to his practice in internal medicine in Marin County, Dr. Griffin has distinguished himself as a naturalist and environmentalist. In the past four years, he has scouted and led expeditions into the Himalayas to observe and photograph animal and plant life. He was recently elected to the board of directors of the Marin Municipal Water District.

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Mailed May 30, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Robert J. Glaser, president of the Henry J. Kaiser Foundation and visiting professor of medicine at the Stanford University School of Medicine, will be honored as "a distinguished American educator" May 29, Temple University announced Friday (May 25).

He will be awarded an honorary Doctor of Science degree at Temple University's commencement exercises.

Glaser, a Harvard University graduate, has had a distinguished career in medicine starting in 1945. He was associate dean of the Medical School at Washington University for two years; vice president for medical affairs at the University of Colorado for four years; vice president for medical affairs and dean of the School of Medicine at Stanford University for five years, and is past president of the Association of American Medical Colleges.

He is a member of the board of medicine of the National Academy of Sciences and has served on numerous private and governmental committees.

Glaser also served a stint as acting president of Stanford before he left to become vice president of the Commonwealth Fund of New York.

Others honored by Temple University include Dr. Paul A. Freund, a Harvard Law School professor, and United States Senator Edward W. Brooke (R-Mass.).

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Mailed May 25, 1973.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Have you ever tried a steak shake, or an apple pie drink? They may not appeal to many people, but to anyone on a liquid diet, they taste delicious.

So claims Wilma King. The laboratory assistant in the Department of Genetics at Stanford University School of Medicine has written a recipe booklet for people who can't chew their food. Entitled Blend and Mend, it contains meals that can be liquified to milkshake consistency and drunk through a straw.

The suggestions are the results of the author's own culinary experiments while recuperating from a jawbone graft performed at Stanford in 1970. For almost four months her jaw was wired shut with space enough for a straw where a tooth was knocked out. She was restricted to a liquid diet for a year.

"I was starving on the tasteless hospital diet. When I got home, I decided I could whip up much better meals," Mrs. King said. Now she is sharing her recipes with others on similar diets. The approximate number of calories per meal is included to help readers plan their menus.

Mrs. King admitted that the dishes may not look like what people are used to, but pointed out that they provide variety as well as nourishment. For a dinner of roast beef and mashed potatoes that is 670 calories, she suggests: a 3-ounce serving of roast beef, 1/2 cup mashed potatoes, 1/2 cup gravy and 1 cup beef bouillon. Her instructions are to process meat in the blender two cycles at chop, then add remaining ingredients and process one cycle at stir, two cycles at blend.

Perhaps her most helpful selection is an original poem called "Fears and Tears" which she offers in the book's introduction. It calls for: "1 cup happiness, 1/2 cup fear, 1 cup patience, 1/4 cup tears, 1 cup time, dash of a year; put into blender fears and tears, process three cycles at grind or until they disappear; add the remaining ingredients, process one cycle at mix, two cycles at blend, or until your good health reappears!"

The author also urges readers not to stay at home because of their problem. "Cooks and waitresses in restaurants...(will) blend things to your order and laugh with you---not at you--for your courage."

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She, herself, has a lot of spirit and courage. Two weeks after she was discharged from the Hospital, she was back on the job she has held here since 1962. "I couldn't sit still at home," she explained. "My head was bandaged, so I bought myself a wig and came back to work, bandages and all!"

Actually, Mrs. King hasn't had a good piece of steak since 1965, when she first broke her jaw. It was wired together, but when the wires loosened in 1970, the bone had deteriorated. Her lower jaw was replaced with part of her hip bone in an operation performed by Dr. Donald Laub, associate professor of surgery. The next year, just as her recovery was considered complete, she smashed her new jaw in a minor car accident. Further surgery was ruled out and she will probably be on a soft diet the rest of her life, although she is not confined solely to liquids.

Publishing expenses for the 24-page booklet came out of the author's pocket, but she hopes to recoup them from sales. However, she noted that her aim was not to make money. "I just want to get the message out for the benefit of other people on liquid diets," she said. At least 10 percent of the book's earnings will go to Laub and Project Concern for the plastic and reconstructive surgery they help provide to underprivileged Central American children. She would also like to have enough to contribute to other worthy causes.

The booklet is more popular than she expected, commented Mrs. King, who does the advertising from her home in Mountain View with the help of her husband Donald. She has sold the book to several local stores, including the Stanford bookstores and the Hospital gift shop, and has filled many individual requests from patients and physicians. It sells for $1.95 a copy.

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Mailed May 23, 1973.

Editors: Picture available upon request if not included.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- A five-year, federal grant for $2,569,311 has been awarded to Stanford University School of Medicine for continued research in human heart transplantation.

The grant, funded by the National Heart and Lung Institute (NHLI), is the largest in the history of heart transplant research, according to NHLI officials. It was announced today (May 22) by Dr. Theodore Cooper, director of the NHLI, and Dr. Clayton Rich, dean of the School of Medicine and vice president for medical affairs at Stanford.

"This award will enable us to continue to explore and evaluate the clinical application of heart transplantation," said Dr. Eugene Dong, Jr., principle investigator and associate professor of surgery at Stanford.

The primary goal of the research effort, Dong said, will be further refinement of the post-operative treatment of transplant patients. He said the program will focus on four main areas:

--improvement of the diagnosis of cardiac rejection;

--development of new methods to treat rejection;

--prevention of some of the long-term consequences of immunosuppressive drugs (drugs which check the body's immune or defense system); and

--utilization of biomedical engineering to evaluate heart function in transplant patients.

Rejection of the transplanted heart by the body's immune system remains the main obstacle to more successful heart transplantation. For years, researchers have sought better methods to detect and treat rejection in its earliest stages.

"We hope to determine the changes in the body's immune system which occur early in a rejection episode," Dong said. "If we can spot these changes before irreversible damage is done to the heart, we may be able to treat rejection more specifically and effectively."

In addition to investigating new therapeutic drugs to combat rejection, the Stanford researchers plan to study more precisely how transplant patients respond to currently-used agents.

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"We need to find out why two patients receiving the same drug treatment respond very differently, and why some patients require less drug therapy than others," Dong said.

For long-term transplant survivors, one of the consequences of prolonged drug treatment has been the speeded-up development of atherosclerosis.

"We've noted in some of our early patients that there is a recurrence of the original heart disease in an accelerated fashion," Dong said. "Our current, still inconclusive data, indicate that through diet control, exercise, and anti-clotting drugs, this may be preventable."

The final area of research is related to evaluation of cardiac function in transplant patients.

"Unfortunately, many current methods are invasive, with a small but definite degree of risk," Dong said. "Our aim is to evaluate cardiac function using safe, non-invasive, non-painful, and non-toxic techniques."

These techniques include computerized analysis of electrocardiograms and echocardiograms (measurement of the heart's rate of motion, chamber size and wall thickness, using high frequency sound waves).

Co-investigators with Dong will be Drs. Norman E. Shumway, professor and head of the division of cardiovascular surgery; Edward B. Stinson, assistant professor of surgery, and John S. Schroeder, assistant professor of cardiology.

After over a decade of animal experimentation by Shumway, Dong, and their associates, the first human heart transplant at Stanford was performed in January of 1968. Since that time, 58 patients have received new hearts at Stanford; 22 are now living.

"The new grant reflects the continuing progress which has been made in heart transplantation over the past five years," Dong said. "The funds provide for continuance of the essential elements of our program, but due to the continuing restriction of government support, several important projects had to be cut."

Previously, Stanford had received $813,000 from NHLI over the past three years for clinical transplantation. Animal experimentation will continue under another ongoing grant.

Dong, a native of Watsonville, California, obtained his M.D. from the University of California, San Francisco, in 1959. The 40-year-old surgeon served his internship at Bellvue Hospital in New York and his residency in cardiovascular surgery at Stanford. He has held research fellowships from the American Heart Association and the United States Public Health Service. From 1966-71, he was an Established Investigator of the American Heart Association.

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Mailed May 22, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Young women whose mothers received stilbestrol--a synthetic form of estrogen--during pregnancy are being sought by Stanford University gynecologists for a study of the relationship between exposure to this hormone in the uterus and development of a very rare vaginal cancer.

The relation of stilbestrol to cancer in young women was first suspected in 1971, when two physicians at the Massachusetts General Hospital found the extremely rare cancer of the vagina in seven young women whose mothers had received stilbestrol during their pregnancy.

Documented incidence of stilbestrol-linked cancer in humans, however, is extremely small, according to Dr. Eugene Sandberg. Emphasizing that there is no cause for alarm, the associate professor of gynecology and obstetrics at the School of Medicine explained:

"Stilbestrol was administered to pregnant women with threatened or frequent miscarriage or certain conditions such as diabetes.

At least 200,000 female offspring (perhaps far more) were exposed to the hormone and less than 100 cases of cancer have been reported to date."

Nevertheless, Sandberg feels that all women whose mothers were treated with stilbestrol should be regularly examined. He will direct a clinic at Stanford where these women will receive free examinations.

Minor, non-malignant changes have also been observed in the vaginal wall and cervix of these young women, said Sandberg. Many of them seen so far have unique anatomical variations of the cervix. Some also have vaginal adenosis, an unusual condition in which the vaginal wall contains glands ordinarily seen only in the cervix. These structures are generally benign and often go unnoticed in the healthy female, noted Sandberg, author of several publications on adenosis.

"It is probable that stilbestrol modifies embryological tissues so that they develop these unusual changes," explained Sandberg. "While the variations are usually benign, they could have a malignant predisposition that would sensitize a small percentage of these women to the development of cancer."

Sandberg believes that women with such tissue abnormalities should be checked with regularity. He and Dr. Sue Massey, staff gynecologist at Cowell Student Health Center on campus, are examining these changes. The women will be followed free of charge at the new clinic which will be held on Wednesday mornings in the Gynecology Clinic at Stanford Medical Center.

There is no indication that stilbestrol has any harmful effect on the mothers who received it or on other women who receive it as medication, stressed Sandberg. The only effect to be concerned about, he said, "appears to be on embryological tissues during the third or fourth month of intrauterine development."

Mailed May 21, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--Local clergy add a personal touch to patient care at Stanford University Hospital.

In an age of technology and specialization, patient care requires more than medical excellence alone, explained Paul Hofmann, deputy director of Stanford University Hospital.

"The hospitalized person has spiritual and emotional needs as well as physical ones that must be met," he said.

The administration is seeking funds to support a full-time chaplaincy program. Meanwhile, Hofmann is working closely with ministers, priests and rabbis in the community to extend pastoral services for patients at Stanford.

Clergy of the Catholic, Jewish and Prostestant religions have volunteered to be available to Hospital patients and staff on a 24-hour basis. Members of each denomination rotate being "on call" for a particular period. If emergencies arise, the nurse on the unit can contact a clergyman of the patient's faith.

The role of the hospital chaplain is often underestimated, according to Hofmann, yet he can make a significiant contribution as a member of the health care team. Hofmann explained:

"Admission to a hospital is frequently a depersonalizing experience--the patient is stripped of belongings, identified by a bracelet and rendered dependent on many unfamiliar faces in a strange environment.

"For this reason, it is important to have someone on the team whose major responsibility is the emotions and responses of the patient as a human being."

A specialist in caring, the chaplain recognizes and understands the feelings of depression, fear or loneliness that a patient may have, and can help the individual deal with them.

The deputy director has established an advisory committee of representative clergy and Hospital staff members to explore the ways in which the two groups can work together. Seminars on topics of mutual concern, such as caring for the terminally ill patient, are also being planned.

A patient admitted to Stanford Hospital can now complete a card indicating that he would like a visit from a minister. If the patient knows a clergyman in the area, that person is notified by a member of the Medical Center Auxiliary. When a patient wishes a visit, but does not specify anyone, arrangements are made with a clergyman of his faith in the community. The services of the University chaplain, the Reverend Robert Minto, are also used.

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Previously, the system for pastoral care at Stanford was less comprehensive, Hofmann noted. The local parish of the Roman Catholic Church had its own schedule to cover Catholic patients in the Hospital, but recently the Reverend Raymond Dunn was appointed full-time Catholic chaplain. Individual Jewish and Protestant clergy continued to make visits as often as possible. The administrator said that all the clergy have supported the new organization with enthusiasm.

Hofmann, who helped develop a hospital chaplaincy program in southern California before coming here last year, hopes that funds for a full-time chaplain can be found by the end of this year. An outside source is needed, he explained, because the Hospital operates almost solely on income from patient charges, and the existing budget does not contain resources for this purpose. The chaplaincy program is a service that would meet several needs.

"Although he has an obligation to all faiths," said Hofmann, "the full-time chaplain would complement the local clergy." He would work with them to organize seminars and provide appropriate spiritual resources for patients and their families.

Another responsibility of the chaplain would be to develop a program at Stanford to train other pastors and theological students. Clergy who complete clinical courses under the supervision of a certified person at an accredited institution are qualified as hospital chaplains by the Association for Clinical Pastoral Education.

In addition to ministering to the needs of patients and training clergy, the chaplain could assist and counsel the medical and nursing staff. A staff member who needs advice on providing more effective support to a patient would be able to consult with the chaplain.

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Editors: Photos available if not included with release.

Mailed June 17, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Dr. Edward B. Stinson, assistant professor of surgery at Stanford University School of Medicine, has been awarded a five-year Established Investigatorship by the American Heart Association.

The award, effective July 1, was announced today (May 16) by Dr. Harold Hubis, chairman of the Bay Area Heart Research Committee.

A member of Stanford's heart transplant team, Stinson will receive $134,000 over the next five years to support a portion of his salary as well as his clinical and laboratory research on heart transplantation.

He plans to investigate new methods for the early diagnosis of rejection of the transplanted heart. He will also initiate new studies of human and dog transplant recipients to more effectively evaluate the functioning of the transplanted organ.

More sensitive methods to detect rejection are needed, Stinson said, so that preventive action can be taken before irreversible damage is done to the heart.

By focusing on changes in the body's immune or defense system which are known to occur early in a rejection episode, he hopes to define new indications of impending rejection, he said.

The 34-year-old San Diego native obtained his A.B. (1960) and M.D. degrees (1965) from Stanford. After internship at Hennepin County General Hospital in Minneapolis, he returned to Stanford and was trained as a cardiovascular surgeon by Dr. Norman E. Shumway.

He has held research fellowships from the United States Public Health Service (USPHS), the Bay Area Heart Research Committee of the American Heart Association, and the Bank of America-Giannini Foundation.

With the exception of a stint at the National Institutes of Health from 1970-72, Stinson has been a member of the heart transplant team at Stanford since the first transplant was performed at the Hospital in January of 1968. In all, 57 patients have received new hearts at Stanford; 21 are currently surviving.

This year, 29 scientists were awarded Established Investigatorships by the American Heart Association.

Each year the AHA makes these five-year awards to a small number of "individuals of proven superiority and originality who have demonstrated qualifications and motivation for careers in research."

Previous winners at Stanford include cardiovascular surgeons Shumway, Eugene Dong, Jr., Edward Hurley and William Angell.

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Mailed May 16, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Dr. Robley C. Williams, noted biophysicist, will deliver the second annual Edwin W. Schultz Memorial Lecture, Friday, May 18 at Stanford University School of Medicine.

He will present some of his recent work in a talk entitled "Observations on the Structure of Viruses." It will begin at 4:00 p.m. in Room M106 at the Medical School.

A member of the faculty at the University of California, Berkeley, since 1950, Dr. Williams is professor of molecular biology and associate director of the virus laboratory at Berkeley. From 1964 until 1969 he was the first chairman of the newly created Department of Molecular Biology.

His research interest for years has been in electron microscopy. He has been instrumental in the development of new techniques that enable scientists to discern more detailed structure of viruses and enzymes than previously seen with the electron microscope.

Dr. Williams is also investigating how tobacco mosaic virus (TMV) -- which multiplies in tobacco plants -- is assembled from its protein and nucleic acid portions. In 1955, he and Dr. Heinz Fraenkel-Conrat were the first to break down the rod-shaped TMV particles into their components and then mix the components together again to form new particles, identical to the originals and capable of infecting the tobacco leaf.

In the past, Dr. Williams worked with other optical instruments. He has done spectroscopy studies of hydrogen and of surface temperature of stars.

Born in Santa Rosa, he is an alumnus of Cornell University, receiving his A.B. in 1931 and his Ph.D. in physics in 1935. For the next 15 years he was at the University of Michigan, first in the astronomy department, and then as professor of physics.

He joined the Berkeley faculty in 1950 as professor of biophysics in the Department of Biochemistry. He later became professor of virology until he received his present title in 1964.

The Schultz lectureship, established last year, honors Dr. Edwin W. Schultz, who was chairman of the Department of Bacteriology and Experimental Pathology (now Medical Microbiology) for 33 years.

An educator and a researcher at Stanford since 1919, Dr. Schultz served as department head from 1920 until his retirement in 1953. His pioneering studies of poliomyelitis are well known in the field of virology.

Following his retirement from Stanford, Dr. Schultz was director of an international medical training project at the University of Indonesia until 1960. He subsequently did research at the National Institutes of Health and at the Regional Primate Research Center in Oregon. In 1971, he died at the age of 83 after a long illness.

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Mailed May 14, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Ruth T. Gross, chief of pediatrics at Mount Zion Hospital and Medical Center in San Francisco, has been appointed professor of pediatrics and an associate dean for student affairs at the Stanford University School of Medicine.

Her appointment, effective July 1, was announced today by Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

Since 1966, Dr. Gross developed and directed several successful programs in community health at Mount Zion Hospital and Medical Center. They included a comprehensive care program for children and youth, supportive programs for adolescent parents and their infants, and the first federally funded infant day care program in the Bay Area.

In her new position, according to Dr. Irving Schulman, chairman of the department of pediatrics, Dr. Gross will serve as coordinator of the clinical training in child health for medical students at Stanford and its affiliated hospitals. She will serve as attending pediatrician in patient care on the wards and outpatient pediatric department, and will engage in research to identify new types of health services for children which should be established at Stanford.

As an associate dean for student affairs, Dr. Gross will work closely with Associate Deans John P. Steward, M.D. and William P. Creger, M.D. on the development of the clinical aspects of medical student training, Dean Rich said.

Dr. Gross' arrival at Stanford will mark her return to the Stanford Medical School. She was a member of the pediatric faculty from 1950 to 1959, and served a two-year stint as acting pediatric chairman when the School was located in San Francisco.

A graduate of Barnard College, Columbia University, she received her medical degree from the Columbia University College of Physicians and Surgeons in 1944.

Dr. Gross has held academic appointments at Radcliffe Infirmary, Oxford, England, and was a professor of pediatrics and co-director of the Division of Human Genetics at Albert Einstein College of Medicine when she joined Mount Zion Hospital in 1966. She also serves as a clinical professor of pediatrics at the University of California in San Francisco.

Her research has included various aspects of drug-induced hemolytic anemia, metabolic aspects of disease in the newborn and premature, new approaches to health care delivery, and development of the problem-oriented medical record.

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ailed May 14, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dr. Donald C. Harrison, professor and head of the division of cardiology, has been named the first holder of the William G. Irwin Professorship at the Stanford University School of Medicine.

The endowed professorship, made possible by gifts from the William G. Irwin Charity Foundation of San Francisco, is awarded to an expert in the diagnosis and treatment of heart disease. The professorship supports the holder's salary and part of his teaching and research work.

Dr. Harrison has been a member of the Stanford faculty since 1964. He is known as an innovative academician who combines an interest in clinical research with a deep concern for patient care.

When, at the age of 32, Dr. Harrison became chief of cardiology at Stanford in 1967, he was one of the youngest men ever to become head of a major cardiology unit.

Since then, his two objectives have been to develop training for young cardiologists, and programs for both investigative and clinical cardiology.

The two major areas for which Stanford's division of cardiology has become nationally known are Dr.Harrison's studies with anti-arrhythmic drugs, and development of heart monitoring devices that may help to prevent sudden death.

A 1958 graduate of the Medical College of Alabama, Dr. Harrison took additional training at the Peter Bent Brigham Hospital in Boston. He also did research at Harvard Medical School and the National Heart and Lung Institute, Bethesda, Md.

The 39-year-old cardiologist is married and lives with his wife and three children in Los Altos, California.

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Mailed May 10, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andrepoulos, (415) 321-5310
FOR IMMEDIATE RELEASE

STANFORD — Dr. David A. Hamburg, professor of psychiatry, has been named the first holder of the Reed-Hodgson professorship in human biology at Stanford.

The Reed-Hodgson chair was established this year with gifts from Richard Hodgson and his wife, the former Geraldine Coursen Reed, as well as with funds from a Ford Foundation grant to the human biology program.

Mr. and Mrs. Hodgson are Stanford alumni. He is a group vice-president of International Telephone and Telegraph Corporation in New York. Mrs. Hodgson is a former vice-president of Ellington and Company, a New York advertising agency.

The professorship is the second to be established in the interdisciplinary Human Biology Program, one of Stanford's three most popular undergraduate majors, which Dr. Hamburg helped establish in 1969.

A member of the National Academy of Sciences, Dr. Hamburg served as chairman of the Department of Psychiatry for 11 years. He stepped down from his administrative responsibilities last year to pursue new programs of education and research.

A leading authority in the study of hormonal responses to psychological stress, Dr. Hamburg has been instrumental in developing the Laboratory of Stress and Conflict.

The laboratory is an interdisciplinary faculty project organized by Dr. Hamburg to develop courses and research projects on behavior under stress. It involves work with patients and also research on chimpanzees at the forthcoming Stanford Primate Facility and in Africa.

In the Human Biology Program, faculty members from the Medical School and the biological and social sciences team to present a comprehensive view of man from a life sciences perspective.

Dr. Hamburg also aided in planning the Program of Science, Technology, and Society in which a group of scholars will come to the Center for Advanced Study in the Behavioral Sciences each year to study the social impact of scientific and technological developments. The Center, an independent institution, is located on the hills behind the Stanford campus.

Dr. Hamburg, 46, came to Stanford in 1961 from the National Institutes of Health, where he was chief of the adult psychiatry branch. Under his leadership, Stanford's Psychiatry Department has earned international recognition, particularly for its scientific approach to psychiatric problems.

He is a 1947 graduate of the Indiana University School of Medicine and received his professional training at Michael Reese Hospital in Chicago and Yale University.

Dr. Hamburg and his wife, Beatrix, also a faculty member and psychiatrist, live on the Stanford campus. They are the parents of two children.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415:321-5310

STANFORD -- A night psychiatry clinic will be established this month at Stanford University Medical Center.

The new clinic, which opens Monday, May 14, hopefully will make psychiatric services more accessible and convenient for patients in the area, said Dr. Floyd Estess, director of Stanford's psychiatry clinics.

"Mental health services often require more time for each individual visit and for the duration of treatment than other types of health care," Estess said. "But many people in need of these services have job commitments and can't take off the necessary time during the day."

Initially, the clinic will operate Monday and Wednesday nights from 5:30 to 9:30 by appointment only.

"We'll start with two nights per week to see if there is sufficient community need for such services," Estess said. "If necessary, we are prepared to expand the schedule."

The clinic will be staffed by Stanford psychiatrists, psychologists, and psychiatric social workers. It will offer diagnostic studies, as well as individual, couple, and group therapy.

Fees will be charged according to ability to pay, Estess noted. However, there are minimal fees for each of the various services offered, he said.

The Stanford psychiatry clinics offer a full range of psychiatric services, including such highly specialized areas as sleep disorders and sexual and marital problems. Over 16,000 patient visits are made annually to the clinics, housed in an 18-month-old building located next to the Medical Center complex.

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Mailed May 1, 1973.

For further information contact: Gary Cavalli 415 321-5310

STANFORD--All four children of the David Costello family of Santa Rosa, California, are recovering today after open heart surgery at Stanford University Hospital.

The children--David, 18; Richard, 15; Kevin, 13; and Karen, 4--were born with a congenital heart ailment known as atrial septal defect. Today, they were operated on by surgical teams headed by Drs. Norman Shumway and Edward Stinson, two members of Stanford's heart transplant team.

"The surgery went very well, with no complications," Dr. Stinson said. "The children should recover quickly and be able to lead more active lives."

"I'm tremendously relieved," Mrs. Costello said. "I've had about four hours of sleep in the last week.

"Really, I'd like to thank the world. Thanks for the blood donations, all the letters, and the support."

The Costello children were born with a hole in the muscular wall (septum) between the heart's upper chambers (atria). Leakage of blood through the holes resulted in improper blood flow and an imbalance in the pressures within the heart. Because of this, insufficient oxygen-carrying blood was pumped to the body tissues.

Like other patients with atrial septal defect, the Costellos have tired easily and faced some restrictions in their physical activity.

The Stanford surgical teams included Drs. Shumway, Stinson, Philip Caves, Jefferson Hollingsworth, and Wally Buch. The surgeons said the defect is not an uncommon one, and the surgical procedure is "fairly routine."

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Smaller holes in the septum are sewn up; larger holes are patched with tissue from the pericardium, the membraneous sac enveloping the heart. Two of the Costello children, Karen and Kevin, had holes small enough to be sewn; the holes in David's and Richard's septums, roughly the size of a silver dollar, were patched. In all four cases the operation required a little over two hours.

The children will spend the next two or three days in the Hospital's intensive care unit. After an additional three to five days in the pediatrics ward, they will be discharged.

Within a month or two, they should be able to lead more active lives than they did previously, Stinson said.

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Business Wire, Thursday, June 28, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--The Henry J. Kaiser Family Foundation Thursday (June 1) announced a $50,000 grant to the Stanford University School of Medicine to help support its training program in biochemistry threatened by sudden cutbacks in federal training grants.

In a letter to Dr. Paul Berg, chairman of the biochemistry department, Dr. Robert J. Glaser, president of the Foundation, said the grant was made to emphasize the conviction that there must continue to be a strong research support in the basic medical sciences.

"In spite of its present focus on medical care, the Kaiser Foundation assigns a high priority to preserving centers of excellence for the training of basic medical scientists," Glaser said.

Since 1959, Stanford's biochemistry department has trained scores of graduate students, postdoctoral fellows, medical students, and senior investigators. They have made careers not only in biochemistry, but also in chemistry, microbiology, biophysics, genetics, and the clinical sciences.

The department has gained international distinction for its work in genetic chemistry, and its former chairman, Dr. Arthur Kornberg, won a Nobel Prize in medicine.

The department's funding problems began earlier this year when the National Institutes of Health told the nation's medical schools it was phasing out all training and fellowship programs.

The Kaiser foundation grant, according to Berg, will support the research training of graduate students to be admitted during the next few years. Without such support graduate student admissions would have to be sharply curtailed.

The biochemistry department also trains more than 40 postdoctoral fellows and senior basic scientists. Federal funding for support of research fellows has also been eliminated. Dr. Berg indicated that additional support is still needed for the remaining program as well.

Dean Clayton Rich of the School of Medicine said the commitment on the part of a major foundation to the training of basic medical scientists is a very important symbolic step at a time when federal research support is being cut without real understanding of the long-term consequences to the nation's medical schools.

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Mailed Thursday, June 22, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--"Why can't a woman be more like a man?"

That question will be addressed Wednesday (June 27) by Dr. Estelle R. Ramey, professor of physiology and biophysics at Georgetown University School of Medicine, when she delivers the first Katharine McCormick Lecture at Stanford University School of Medicine.

The lecture, sponsored by the Professional Women of Stanford Medical School, will begin at 4 p.m. in Room M106. It will be open to the public free of charge.

Dr. Ramey is currently president of the Association of Women in Science (AWIS) and vice president of the Women's Equity League.

Last year she represented AWIS in a controversy over an anatomy textbook which the organization felt was denigrative to women. She was instrumental in having the text removed from bookstores and taken off the market. In the last few years, she has authored several articles related to the women's movement.

Dr. Ramey received her Ph.D. from the University of Chicago, where she was a Mergler Scholar. Her research has focused on the relationship between adrenal cortical hormones and the central nervous system in the regulation of blood vessel and metabolic responses to stress.

The author of two books and over 70 scientific papers, she has been a recent lecturer at several government agencies, including Distinguished Lecturer of the State Department. A member of the major professional societies, she is also a director of the Washington Heart Association.

The Professional Women at Stanford named their lecture in honor of the late Katharine D. McCormick, who left a bequest of $5 million to Stanford in 1969 to aid programs of the School of Medicine. The organization, composed primarily of women M.D.'s and Ph. D.'s, was formed four years ago "to promote development of opportunities for women in the medical sciences."

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iled Thursday, June 21, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--A junior faculty member at Stanford University School of Medicine has developed a computerized medical record. A resident in surgery has designed a new course for medical students at Stanford and an intern is writing a book on the use of illness.

These young physicians are the beginning of a new breed. They are clinicians specializing in the skills needed to meet emerging problems in health care delivery.

The Medical School has been awarded $96,000 from the Robert Wood Johnson Foundation Clinical Scholar Program to continue training such doctors for another year. Effective July 1, the grant will support six clinical scholars investigating economic, educational, political or social aspects of medicine.

"There is a need for people with expertise in clinical medicine and the non-biological disciplines related to medicine," said Dr. Halsted Holman, professor of medicine and director of the Clinical Scholar Program at Stanford.

The scholars will do individual research in non-medical areas of health in a manner similar to the physician scientist.

Holman expects clinical scholars to help bridge the gap between medicine and the community. They would coordinate and staff community health care programs and clinics, develop and teach new types of courses in both clinical medicine and the non-biological disciplines, or assist government and public service agencies on health care policy planning.

The Johnson Foundation program is based on pilot projects developed by Stanford and four other medical schools over the last three years. Funds were provided by the Carnegie Corporation and the Commonwealth Fund. They were used at Stanford to support three scholars and to help develop new programs that would provide a basis for training future clinical scholars.

As Stanford's first clinical scholar, Dr. James Fries, assistant professor of medicine, began developing a computerized medical record. The patient chart, now being adapted for use in the Medical Center, saves time for physicians and aids them in making clinical decisions.

Information is recorded on flow sheets to display the patient's medical history in chronological order. Clinical data fed into the computer can be used to review a patient's status or to study the course of, and response to, therapy of similar patients.

Former scholar Dr. Edwin Alderman, assistant professor of medicine, designed data forms for handling cardiology information. The third participant in the experimental project, Dr. Raymond LaSure, assistant professor of medicine, will continue as a clinical scholar in the new program. He is concerned with assessing the quality of health care and meeting the medical needs of the poor.

"The other five doctors who will begin training in July as clinical scholars bring with them diverse interests and considerable experience," noted Holman.

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FILE COPY

222--Clinical Scholars

One of the incoming scholars is Dr. Douglas Rund, a resident in surgery. He is interested in clinical education and will explore ways to maximize the clinical experience for students.

When he was a medical student at Stanford two years ago, Rund worked with the clinical scholar program to initiate a student teaching course in physical diagnosis. The course was taught by senior medical students for first year students who wanted to relate clinical problems to their preclinical subjects before the second or third year when clinical courses are usually given.

Rund, who intends to pursue a career in general surgery as well as academic medicine, would like to see surgeons more involved in the economics of health care. He thinks their involvement would add a new dimension to medical problems.

Another new scholar is Dr. Howard Waitzkin, an intern at Stanford who in addition to an M.D., has a Ph.D. in sociology. He is working on a book about the roles of illness, based on research he began as a student in Boston and continued at Stanford. In the book, he discusses shortcomings in the present health care system and suggests that local communities have more control over medical care.

Waitzkin will also study information withholding and how patients find out about what's wrong with them. In addition, he will work part-time at the United Farm Workers clinic in Salinas.

The other scholars scheduled to arrive at Stanford are Drs. Michael Eliastam, who also has a Master's degree in public administration; Lawrence Horowitz, who has been a member of Senator Edward Kennedy's staff; and Jeffrey Weisberg who has been doing emergency medical practice.

An interdepartmental committee from the Medical School will supervise the clinical scholar program, which will draw on faculty from throughout the University. Scholars will work together in seminars and individually on their own projects with a faculty adviser.

The Johnson Foundation announced recently it will award a total of $5.9 million to at least eight medical schools for training clinical scholars over the next four years. Programs at the five original institutions--Stanford, Case Western Reserve, Duke, Johns Hopkins and McGill--have all been funded through June, 1974. Then the schools will apply with other schools for another three years of support.

In the future, Stanford hopes to integrate its program with the University of California, San Francisco Medical School. "By combining the resources of the two schools," said Holman, "we would avoid duplication and provide greater breadth in our Clinical Scholar Program."

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Mailed Thursday, June 21, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

EDITORS: The following story sent Business Wire 6/20/73.

STANFORD--The first class of physician's assistants trained at Stanford University Medical Center will graduate this Friday, June 22, in ceremonies beginning at 2 p.m. in the Medical Center's Grant Courtyard.

The 16 students completed a two-year training program that will enable them to aid community physicians in the delivery of primary health care.

"Our main objective is to place graduates with doctors in areas where medical services are needed," said Kees Ploeg, associate director of the program. "Twelve members of the first class have already found employment, and all of them will be working in underserved rural areas of California."

Following graduation, the physician's assistants can practice with interim certification from the State Board of Medical Examiners until December, when they will take the state and national certifying examinations.

The Stanford graduating class, including nine former Army medics, six registered nurses, and one Bachelor's degree recipient, will be only the second group of physician's assistants ever to graduate in California. The first, trained at Charles R. Drew Postgraduate Medical School in Watts and U.C.L.A., graduated May 25.

The programs based at Stanford and Drew are the only two which have been established in California since the state enabling legislation was passed in 1970.

Stanford's two-year program, co-sponsored by Foothill Junior College in Los Altos Hills, consists of classroom instruction, rotation through clinical services at Stanford or an affiliated institution, and practice with a community physician.

During the first year, students take basic science courses at Foothill to fulfill requirements for an Associate of Science degree. The second year begins with four months of classes at Stanford focusing on common medical problems.

After initial clinical experience is gained through participating in rotations, the students conclude the program by assisting a community physician for 12 weeks.

6/20/73

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222--Physician's Assistants Graduate

Although the physician's assistants cannot make a diagnosis or prescribe treatment without consultation from a doctor, they will take medical histories, perform diagnostic workups, suture minor wounds, counsel in preventive medicine, and participate in the management of chronic disease. The physician will be freed to focus his skills where they are needed most.

The program at Stanford is supported by grants from the Bureau of Health Manpower of the Department of Health, Education and Welfare, and the California Regional Medical Program.

Stanford's second class, including 20 students, will begin its second year of instruction June 25.

The 16 graduates and their hometowns are listed below:

Marjorie Arendsee, Hayward, CA

Barbara Butler, Hayward, CA

Harold Casaletto, Campbell, CA

William Dennis-Leigh, Mountain View, CA

Larry DePute, Arcata, CA

Charles Despres, Los Altos, CA

Harvey Fine, Marshall, CA

Gary Hamilton, Castro Valley, CA

Don Massie, Redlands, CA

Sergio Noriega, San Leandro, CA

Ronald Pang, Honolulu, Hawaii

Victoria Ramsel, San Carlos, CA

Judith Schrieman, Los Gatos, CA

Robert Scott, Fair Oaks, CA

Ronald Tachibana, Mountain View, CA

Eula Tucker, Arvin, CA

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--Eleven faculty members were honored at the annual convocation ceremonies of Stanford University School of Medicine Sunday (June 17).

The School awarded medical degrees to 88 men and women. Another 23 degrees were given out, including a bachelor's degree in medical microbiology, 11 master's degrees and 11 doctorates. Diplomas were also presented to 17 graduates in the School of Nursing.

In a departure from tradition, according to the wishes of the graduating medical class, student awards were not presented at commencement. Instead, the 24 students honored, including 18 members of the graduating class, recieved their awards prior to the ceremonies.

The Henry J. Kaiser Award for outstanding and innovative contributions to medical education went to two faculty members: Drs. Oleg Jardetsky, professor of pharmacology and Gerald Reaven, professor of medicine. Dr. Clayton Rich, vice president for medical affairs and dean of the Medical School, made the presentations.

Eight faculty members received the Henry J. Kaiser Award for excellence in teaching, presented by Steven Phillips of the graduating class. They were Drs. Norman Blank, associate professor of radiology; Carlos Camargo, assistant professor of medicine; Halsted Holman, Berthold and Belle N. Guggenhime professor of medicine; Hadley Kirkman, professor of anatomy emeritus; Gerald Levine, assistant professor of pathology; Mark Perlroth, assistant professor of medicine; James Theordore, assistant professor of medicine; and Bruce Tune, assistant professor of pediatrics.

Dr. Paul Wolf, associate professor of pathology, was honored with the Arthur L. Bloomfield Award for excellence in teaching clinical medicine. It was given to him by Ron Rosenfeld on behalf of the graduating class.

Diplomas were awarded by Grace Ringressy, professor and director of the Nursing School and Dean Rich.

Dr. Halsted Holman, an immunologist and a recipient of a Kaiser Award this year, was the keynote speaker for the occasion.

Each of the ten clinical departments have given an award to a graduating student who showed promise in that particular specialty. There were also three awards for outstanding research.

Three book awards named after former Medical School deans were made: The Robert A. Alway Book Award to the medical student who took advantage of unique opportunities available at Stanford; the Windsor J. Cutting Book Award for outstanding performance or promise in pharmacology and the Robert J. Glaser Book Award for outstanding leadership.

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In addition, 12 Alumni Scholar Awards were made to three members in each of the second, third, fourth and fifth year classes, including four graduating students. They are awarded annually by the Stanford Medical Alumni Association primarily on the basis of scholarship.

Most of this year's medical graduates are taking internships in hospitals throughout the United States. Over half have chosen to intern in medicine, but their interests cover a broad range, according to Dr. William Creger, professor of medicine and associate dean of students. "An internship in medicine could lead to one of many medical specialties or to a very general medical practice," he said.

Although only a small number of students chose internships in pediatrics and surgery this year, selections vary with every class, Dr. Creger pointed out, as departmental emphases and teaching models change.

Over the last 25 years, he added, 89 percent of Stanford's Medical School graduates practice medicine, and only a small segment goes into academic medicine or research. He predicted that this year's class would follow at about the same ratio. Award winners and their parents addresses are listed below.

CALIFORNIA

vrence Martin Crapo, son of Philip and Audrey Crapo, 1015 La Vista Road, Santa Barbara; Robert M. Shelton Memorial Alumni Scholar Award and the Medicine Award (Lowell A. Rantz Memorial Award).

James Goodwin Cuthbertson, son of Kenneth and Coline Cuthbertson, 399 Stevick Drive, Atherton; Alumni Scholar Award.

Hans Johannes Dankers, son of Antonius and Jeannette Dankers, 135 Lynn Way, Woodside; Alumni Scholar Award.

Stephen Nimelstein, son of Dr. David Nimelstein, 17342 Mayall St., Northridge; Eli Luke and Jacob David Research Award.

Gaeton Thomas Nola, son of Sebastian and Frances Nola, 311 East Empire St., San Jose; Alumni Scholar Award.

Klaus Porzig, son of Joachim and Anne Porzig, Box 1893, Carmel; Windsor J. Cutting Book Award.

Tom Raffin, son of Bennett and Caroline Raffin, 46 Jordan Ave., San Francisco; Community and Preventive Medicine Award.

COLORADO

Rodney Levine, son of Gerald and Rosemond Levine, 120 South Grape, Denver; Pediatrics Award (Faber Award).

ILLINOIS

Paul Williams, son of Sidney and Ruth Williams, 5445 S. Dorchester, Chicago; Robert J. Glaser Book Award.

IOWA

l Edward Dimsdale, son of Lewis and L.J. Dimsdale, 18 Blackstone, Sioux City; Alumni Scholar Award and Psychiatry Award.

MASSACHUSETTS

Beverly Woo, daughter of Way Dong and Emily Woo, 1 Todd Pond Road, Lincoln; Alumni Scholar Award.

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ICHIGAN

David Edward Avrin, son of Ira and Sylvia Avrin, 18200 Robson, Detroit; Alumni Scholar Award.
Sharon Ann Bogerty, daughter of Walter and Irene Bogerty, 7455 Kipling Ave., Detroit; Alumni Scholar Award and Neurology Award.
Jack Cronenwett, son of Jack and Marie Cronenwett, 807 E. Filer St., Ludington; Surgery Award.
Jeffery Marc Krakower, son of Joseph and Shirley Krakower, 3202 Helber, Flint; Alumni Scholar Award.

MINNESOTA

Geoff Kurland, son of Leonard and Miriam Kurland, 1165 Plummer Circle, Rochester; Gynecology and Obstetrics Award.
Dan Peterson, son of Thorsten and Ruth Peterson, Route 3, Parkers Prairie; General Research Award.

MISSOURI

Peggy Lynn Goldman, daughter of Melvin and Doris Goldman, 8650 Barby Lane, St. Louis; Alumni Scholar Award.

NEW YORK

Richard Anderson, son of David and Lillian Anderson, 1B Bentley Road, Great Neck; Radiology Award.
Jeffrey Arthur Brown, son of Harry and Annette Brown, 73-43 195th St., Flushing; Alumni Scholar Award and Robert H. Alway Book Award.
Ron Rosenfeld, son of Stanley and Deborah Rosenfeld, 591 Astor St., Elmont; Anesthesia Award.

PENNSYLVANIA

bert Bennett Clark, son of Jack and Dorothy Clark, 7964 Bayard St., Philadelphia; Alumni Scholar Award.

WASHINGTON

Gregg Davies, son of Maurice and Constance Davies, 1478 5th St., Chehalis; Eli Luke and Jacob David Research Award.

CANADA

Mary Anne Gail Johnson, daughter of Ina Johnson, 431 East 31st. Ave., Vancouver, B.C.; Dermatology Award.

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Mailed, Tuesday, June 19, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A Stanford University Nobel laureate in medicine says that cutbacks in federal training grants to medical schools "was a calamitous decision."

"I could imagine nothing more devastating than to stop training our best young people to do research in basic medical science," said Dr. Arthur Kornberg. "Yet this is precisely what has been done, and the consequences of the decision have not been foreseen."

Kornberg's views appear in the current issue of Science, a scientific journal. He was commenting on the Nixon administration decision earlier this year to phase out medical school training grants worth about $300 million annually.

"For the past five years, the support of science has been visibly ebbing," said Kornberg. "Funds for important research have been cut at a time inflation and advanced technology require increases.

"The support for the training of our best young scientists has been abruptly eliminated. This support for research and training cannot be finely regulated.

"When the flow of science support is turned down, the stream of progress dries up and cannot [illegible]estored for years."

Kornberg stressed the payoffs of the massive support of biomedical science during the past 20 years have exceeded even the most optimistic predictions.

"No one imagined that we would acquire so quickly the firm grasp we have today of the basic designs of cellular chemistry and its regulation," Kornberg said.

In the next 20 years application of chemistry of genes could transform the image of health and disease as dramatically as any advance in the history of medicine, he predicted.

"Nevertheless, those of us who do research in medical science and train young people for such work have witnessed in recent months the most calamitous decision a government of the United States could make for the future of medicine and the welfare of our country," the biochemist said.

The decision cannot be ascribed to economy, Kornberg said. The cost of medical training programs is less than one-half of one percent of the budget for welfare and defense. For weapons research and development alone, $20 billion a year is being spent.

"But now we have been told we can't afford to spend even one percent of this amount to train young people to fight diseases for which crusades have been proclaimed and that we know for certain will kill millions of our citizens each year," Kornberg said.

Noting that in the past 20 years the support of science came from the Congress and citizens t[illegible]fying before committees, Kornberg added:

"The support of science has been and must remain the responsibility of society. It is too important and too complex a problem to be left to scientists."

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Business Wire June 8, 1973.
Mailed 6-8-73.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD -- Drawings by Dr. Joseph Kriss, a faculty member at the Stanford University School of Medicine, are currently on exhibit at the Los Robles Gallery, 167 Hamilton Avenue in Palo Alto.

The selection of 41 felt tip drawings will be shown through June 14. They were done while Kriss was in Europe and Israel last year. Largely abstract, the drawings include a series of synagogues in Jerusalem, a series of Portofino, Italy and many others of those countries as well as France and Spain.

Kriss, professor of medicine and radiology and head of the division of nuclear medicine, is mostly a self-taught artist. He began painting in 1938, and later took night classes in figure drawing and studied one year with Berkeley artist Jon Cornin.

His works, which include oils and bronze sculptures, range from realistic to abstract. Many of his paintings are in private collections, but two of his largest abstract works are owned and displayed by Syntex Corporation of Palo Alto. Kriss has exhibited several times in the past at Los Robles Galleries.

In addition to painting, Kriss is noted for his research in internal and nuclear medicine, and has pioneered in the development of radioisotope procedures for diagnosing disease. He has been with the School of Medicine since 1948.

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Mailed June 8, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A joint pediatric reconstructive surgery program to provide diagnosis and treatment for birth defects was announced Wednesday (June 6) by Children's Hospital at Stanford and the Stanford University School of Medicine.

Announcement of the new program was made by Dr. M. Harry Jennison, executive and medical director of Children's Hospital, and Dr. Robert A. Chase, professor and chairman of the Department of Surgery.

The program represents an effort by the two institutions to provide new patient services to the community and to Northern California. It will be known as the Pediatric Reconstructive Surgery Service and will open at Children's Hospital July 1.

"Specialists from Children's and Stanford will combine efforts to provide comprehensive evaluation of cranio-facial deformities, cleft lip and cleft palate and speech disorders related to palate dysfunction," said Dr. Ernest Kaplan who will head the program.

Kaplan is an assistant professor of surgery in the Division of Plastic and Reconstructive Surgery in the Medical School.

The new program will be coordinated with the activities of the existing Birth Defects Center in the Department of Pediatrics at Stanford Medical Center. Headed by Dr. Luigi Luzzatti, this center is concerned with diagnostic evaluation and treatment of children with birth defects. In addition, the Center is involved in the training of personnel and conducts research in the genetic mechanisms of congenital defects.

"Research carried out at Stanford medical school has made restoration of facial and other bodily features a highly refined art," Dr. Kaplan said. "The program will apply knowledge learned from 10 years of research and clinical evaluations to restore children who a few years ago had little hopes of carrying disfiguring birth deformities and other defects throughout life."

Kaplan said in recent years exciting new techniques for surgical correction of malpositioned facial bones have been developed.

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"As a result, congenital anomalies of the face, clefts of the lip and palate, facial atrophy and other abnormalities can usually be corrected with appropriate reconstructive and plastic surgical measures," he said.

Stanford's surgery department has pioneered in the development of new techniques for diagnosis and treatment of velopharyngeal incompetence or cleft palate speech.

"This congenital disorder can now be treated surgically by a team approach," Dr. Kaplan explained. The patient is evaluated by pediatricians, neurologists, speech pathologists, dentists and plastic surgeons. In addition, he is tested for hearing deficits and has special x-ray motion pictures taken.

This is a continuous film recording (cinê-voice study) of the patient speaking during a fluorocopic examination. The technique allows doctors to visualize the movement of the soft palate while the patient is speaking or swallowing. The technique has been one of the most important in diagnosing cleft palate speech and prescribing treatment.

One of the problems in treating clefts of the lip and palate and associated speech disorders is the coordination of team efforts, said Kaplan.

To improve teamwork, the Pediatric Reconstructive Surgery Service will computerize clinical information for each patient seen at Children's Hospital so that data can be easily retrieved by physicians or parents who need medical information. This databank will also serve as a precise source for evaluation and further improvement in patient care.

"The additional bonus of centralizing this information," Kaplan said, "is the increase in medical knowledge to be gained by having accurate and complete records that can be rapidly processed by the computer."

In 1968, the Children's Hospital at Stanford, a separate corporate entity located on Stanford lands, and the School of Medicine agreed to develop joint programs for the purpose of reducing unnecessary and costly duplication of facilities and staff, assisting each other in attaining comprehensive medical care for children, and providing the best possible opportunities for pediatric teaching and research.

Other clinical programs located at Children's include the nationally recognized pediatric cancer and hemophilia care programs, a new orthopedic service, and programs in allergy, rheumatology, chronic lung diseases, and physical medicine and rehabilitation.

Another Stanford program located at Children's is the Center for Communications Disorders.

The two institutions are also developing common systems of medical records, and share radiotherapy and surgical facilities as well as highly specialized laboratory services.

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Mailed Wednesday, June 6, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. Wilbur B. Hurlbut of New York City is the new president of the Stanford Medical Alumni Association, and Dr. Robert E. Berner of Palo Alto is the new president-elect.

Dr. Hurlbut assumed his duties at the conclusion of the Spring Reunion of the Association on the Stanford campus. He will serve as president through July 1974, succeeding Dr. Theodore W. Loring of Eureka, Calif.

Dr. Hurlbut is an attending physician and chief of dermatology at the Roosevelt Hospital in New York City. He is a member of the New York Supreme Court malpractice arbitration panel. He has served on several committees and panels of the New Academy of Medicine including the executive committee on public health, the section on dermatology, and the admissions committee. He is also former president of the Manhattan and Metropolitan Dermatology Societies, and a member of the Stanford Medical School visiting committee.

Dr. Berner is a plastic and surgical consultant and a member of the clinical faculty of the Stanford University School of Medicine. He has served in that capacity for the past 23 years, and has also been active in the alumni association as a member of the board of governors.

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Mailed Tuesday, June 5, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD — In an apparently unprecedented action, two investigators from the Santa Clara County District Attorney's Office, using a search warrant to gain entry, attempted to search the medical record files of the Stanford University psychiatric clinic, Friday, June 1, seeking evidence that might assist them in the prosecution of an alleged sex offense case.

The warrant, signed by Judge Paul R. Teihl in San Jose Municipal Court, was for the records and documents relating to the victim in the case, a 19-year-old youth who was examined after the alleged attack last February.

Cassius L. Kirk, University legal counsel, said there was no question about the validity of the request for records, since the patient had signed a document waiving the confidentiality of his medical record.

But Kirk said he was surprised that a search warrant was issued when a court order after a hearing involving both parties would have done the job.

Two investigators from the district attorney's office, Anthony Cvetan and Duane Sands, showed up at the psychiatric clinic building about 10 a.m. Friday with the search warrant.

Peter Carpenter, assistant vice-president for medical affairs, met them and surrendered the file on the youth while telling the investigators that they could not go through the psychiatric files because of the confidentiality of the names of other patients.

The investigators complied and did not conduct a full search.

The psychiatrist who examined the patient and saw him several times since is Dr. Marguerite Lederberg, a psychiatric resident at the School of Medicine. She was not present when the investigators appeared at the clinic.

The warrant authorized an immediate search of offices, file rooms, storage areas, closets, and a library in the clinic, as well as Dr. Lederberg's car and residence at 1431 Pitman Avenue, Palo Alto. She is the wife of Nobelist Dr. Joshua Lederberg.

It listed as objects for the search the file or files on the youth and any other "records, papers, documents, or notes" relating to the patient's case.

Dr. Lederberg and her attorney, Jerry Marer, appeared Friday afternoon before Judge John Brenner in Santa Clara County Superior Court in an attempt to get him to stay the order on the additional documents listed in the warrant or to seal the files until the psychiatrist could discuss the case with the judge.

Dr. Lederberg said she was advised by her attorney not to comment on the case.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- A Stanford University psychiatrist Friday (July 27) said statements made in a newspaper story about President Richard M. Nixon's state of mind are "foolish and demeaning."

Dr. C. Peter Rosenbaum, associate professor of psychiatry, issued a response to a story which appeared in today's edition of the Stanford Daily, a student newspaper, and was attributed to the Chicago Sun-Times.

However, when contacted to verify the report, a spokesman for the Chicago paper denied that such a story had appeared in this morning's edition or wire service. The Stanford Daily editor could not be reached for comment.

According to the Stanford Daily, Stanford psychiatry classes have used a tape of President Nixon's concession speech in the 1962 gubernatorial election in which the President said, "You won't have Nixon to kick around anymore, because gentlemen, this is my last press conference."

The Daily said that according to the Chicago Sun-Times story, this tape was used to demonstrate a classic example of "acute paranoid state."

In his response, Rosenbaum said he used an audio tape of the speech in teaching a seminar for the psychiatric staff "because I wanted to demonstrate the different ways in which people can respond to stress, and also how they can recover in a supportive environment."

Nixon, he went on, reacted very temporarily to stress in a way it could have occurred in virtually everybody.

"It would be foolish and demeaning to draw any further inferences about his character or make-up on any more profound level," Rosenbaum said.

The psychiatrist said that Nixon's 1962 address received wide coverage, and no one who heard it or saw it was likely to forget it.

"Mr. Nixon's reaction was clear and vivid. It was used for teaching purposes along with many other examples showing the virtually universal effects of stressful experience," Rosenbaum said.

The last time the tape was used for teaching was in 1966.

Speaking of the 1962 campaign, Rosenbaum said it had been rough and exhaustive. "The stress on the candidates had been incredible. Physical stress and exhaustion showed themselves in many ways. In Mr. Nixon's case it was the statement that he made.

"Such an angry response to stress is no respector of party, person or occupation," the psychiatrist said. "It has happened to Democrats and Republicans, to doctors, to businessmen, and to soldiers in ombat."

He added most persons who have a significant reaction to the various types of stress never see a doctor or a psychiatrist, but instead recover with the support of their families and friends.

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Mailed and
Business Wire July 27, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: Last in a three-part series.
Photo available on request if not included with article.

STANFORD -- Nurses and technicians who work with kidney dialysis patients require a unique combination of skills. For, in addition to their medical and technical responsibilities, they must be able to meet the many psychological needs of patients who are forced to depend on an artificial kidney machine for life.

"Helping patients live with dialysis and the restrictions it places on their lifestyle is a large part of our work," says Pam Simmons, head nurse in the Renal Care Unit (RCU) at Stanford University Hospital.

Chief technician Martin Hudson put it another way: "In between operating the machines and instructing patients, we play father confessor, provide emotional support, and try to give patients some incentive to learn as much as they possibly can."

Technicians in Stanford's RCU receive six months of intensive on-the-job training, including basic kidney physiology and equipment mechanics. Their primary responsibilities are the operation, maintenance, and repair of the dialysis machines.

Nurses complete one month of formal training, "but it usually takes six months before they are fully oriented to the unit," Miss Simmons says. When the patient is on dialysis, nurses "take care of his physical well-being and monitor blood pressure and blood volume, as well as helping him cope," she says.

Stanford has five beds for chronic dialysis patients who need the treatment two or three times weekly, one bed for acutely ill patients, and one for home training sessions. In all, the 18 nurses and 7 technicians conduct about 400 dialysis runs per month.

Patients on chronic dialysis are encouraged to assume responsibility for much of their own care, Miss Simmons says. This includes care of the shunt which connects the patient to the machine, monitoring the operation of the machine, and resetting alarms.

In home training, the educational process is much more intense, as the patient and his assistant are taught to become more and more self reliant.

The program, conducted by one nurse and one technician, includes four sessions per week for six to eight weeks. Three times each week, while on dialysis, the patient learns "how his body acts and reacts to the machine," Miss Simmons says. The fourth session is totally machine-oriented.

Hudson breaks the technical instruction down into five main areas: "the theory of how the machine does its job; preparing the machine for a dialysis run; controlling it during a run, recognizing [illegible]er signals and how to respond to them; maintaining the machine--how to keep it safe and clean; and finally, ordering of supplies."

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Throughout the program, the patient and his assistant receive continual verbal and written testing, including problem-solving and reacting to hypothetical situations that may arise.

"Additionally, the nurse and technician meet constantly to discuss progress, problems, and new teaching methods that might be used," Hudson says. "It's up to us to be observant of the patient's physical and mental well-being. The doctor is always available for consultation and plays an active role in the care and support of the patient."

Though nurses and technicians now assume much of the responsibility for management of the dialysis patient, this wasn't always the case.

"In the early days of dialysis, the only thing the nurse did was bring coffee and donuts to the doctor who was running the patient," Miss Simmons laughs.

For many years, dialysis involved surgical cutdowns on a major blood vessel each time the treatment was needed, since no permanent access to the bloodstream had been developed.

"This made it impossible to dialyze a patient over a long period of time," says Dr. Norman Coplon, director of Stanford's RCU. "With the repeated surgery on the major vessels, doctors soon ran of places to tap into the patient's bloodstream."

In 1960, development of the arteriovenous shunt ushered in a new era for dialysis. Silastic tubes implanted in the patient's artery and vein (connected together when not in use) provided the necessary open access to the bloodstream.

Since then, Coplon says, many other advances have been made.

"Dialysis machines have become more compact, more efficient, and easier to operate," he says. "Additionally, doctors have developed the use of the fistula, whereby a patient's artery and vein are connected internally. Using this access, there is less chance of clotting or infection."

For the patients who must rely on dialysis, whether it be for lifelong treatment or to carry them along until a transplant is possible, these advances can mean safer treatment and a more normal life.

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Mailed July 24, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: Second in a three-part series.
Photo available on request if not included with article.

STANFORD -- For many people, serious illness comes suddenly, without warning. Virtually overnight, family life is disrupted, savings are wiped out, and future plans are forgotten.

When the problem is kidney failure, the emotional and financial repercussions are even more profound. The only treatment options are lifelong dialysis on an artificial kidney machine, or a transplant. Both are unpleasant, demoralizing, and extremely expensive.

Some 10,000 Americans currently are being kept alive by dialysis machines which take over the kidney's main task of filtering out impurities from the bloodstream.

But dependence upon a machine for survival can cause depression in many patients, says Lois Christopherson, chief social worker in the Department of Surgery at Stanford University Medical Center.

"If you're not a candidate for a transplant, the worst aspect of dialysis is that it's a lifelong proposition," she says. "You have to face the prospect of spending six to 12 hours a day on dialysis, two or three times a week, for the rest of your life."

With one family member virtually tied to a machine, the pressures on family life are considerable.

"Frequently, patients have serious guilt feelings at putting such a strain on their families," Miss Christopherson says. "Suddenly it becomes impossible to plan for the future or take trips to places that do not have dialysis centers.

"There are also sexual problems. Many patients become impotent or have a decrease in sexual drive."

If their job does not involve physical labor, dialysis patients can usually maintain employment. However, most are unable to change jobs because they cannot pass required physical examinations, Miss Christopherson says. Additionally, many companies are reluctant to take a chance in insuring a dialysis patient.

Medical complications pose a constant threat. The shunt which connects the patient's arm or leg to the dialysis machine can become clotted, and infections around the shunt area are common.

Despite the difficulties associated with dialysis, some patients prefer it to a transplant.

"To these patients, a transplant represents the unknown," Miss Christopherson says. "It's a new risk, involving major surgery and the ever-present threat of rejection.

"Dialysis, for all its problems, is a known, understandable, and predominantly successful way to keep the patient going."

With the growing sophistication of artificial kidney machines in the past five years, death rates for dialysis patients have dropped to 10 to 15 percent the first year, and under 10 percent for each year thereafter, says Dr. Norman Coplon, director of the Renal Care Unit at Stanford University Hospital.

At the same time, advances have been made in transplantation. Since the first kidney transplant 20 years ago, more than 13,000 have been performed. In the last five years, survival statistics have risen to 85 percent for one year with a related donor and 70 percent with a cadaver donor.

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Increasingly, kidney patients are electing to undergo a transplant, utilizing dialysis as a stopgap measure until a donor is available.

But once a patient decides on a transplant, he and his family must face the awkward and guilt-ridden question, "Who will be the donor?"

"The problem is, how do you ask someone in your family to give you a kidney?" Miss Christopherson says, "If family members line up and offer, that's one thing. But if the patient has to ask, he feels embarrassed and even more responsible for the donor's life than he would otherwise."

On top of all the psychological and medical problems posed by kidney dialysis and transplantation, the costs are tremendous.

Most kidney transplants cost between $15,000 and $20,000, but expenses can be as low as $10,000 when things go smoothly and as high as $40,000 when there are serious complications.

A dialysis run at most centers costs approximately $200. Considering that most patients require three treatments per week, "it costs roughly $30,000 a year to stay alive on dialysis," says Pam Simmons, head nurse in Stanford's Renal Care Unit.

The financial picture brightened considerably for kidney patients July 1, when federal legislation went into effect which covers most expenses for dialysis and transplantation.

The bill, H.R. 1, is an amendment to the Social Security Act. It is expected to cover an estimated 90 percent of the population, says Bill Stein, executive director of the Kidney Foundation of Northern California.

"The government will pick up 80 percent of approved costs from the third month of dialysis through one year post-transplant," Stein says. "If the transplant fails, the patient can re-establish his eligibility in an artificial kidney program."

In addition to pulling patients out of a financial hole, H.R. 1 may have another positive effect--triggering the development of more dialysis and transplant centers all over the country.

Currently, because of a shortage of adequate facilities, many terminal patients are unable to get the treatment they need. Kidney disease now kills some 60,000 Americans annually and is the fourth leading cause of death in this country.

California has 66 artificial kidney centers and 16 transplant centers, according to the Kidney Information Bureau at the State Public Health Department. But only New York has comparable facilities.

"There's no question that, in various states, a lot of people are dying who could be saved with the proper treatment," Dr. Coplon says.

"Up to now, many parts of the country have been reluctant to get into kidney dialysis and transplantation because of the high cost and the inability of many patients to pay. But with H.R. 1, there should be a big upsurge in these services all over the country."

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Mailed July 24, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: First in a three-part series.
Photos available on request if not included with release.

STANFORD -- Like most people, Dee Eads never gave much thought to her kidneys. She'd never had a major illness and was "just going along great."

But her life changed dramatically in August of 1970, when she was stricken with a serious kidney disease and nearly died. For two and a half years afterward, aided by heavy doses of medication, she "limped along" on two failing kidneys. Then, in March of this year, her kidneys gave out altogether.

Today, the attractive 38-year-old housewife is one of nearly 2,000 Californians who are kept alive by an artificial kidney machine.

The machine takes over the job her diseased kidneys cannot perform, filtering out poisons and waste products from her bloodstream. Without this process, known as dialysis, she would soon be poisoned by the impurities in her system.

Two small plastic tubes implanted in an artery and vein in Dee's arm provide the link between her bloodstream and the dialysis machine. Her blood is carried from the artery to the machine, where it is cleansed, and then back into the vein.

This tiresome filtering process, which must be repeated three times per week, takes Dee five hours to complete, since she is only 4'11" tall. (It can require up to 10 hours for patients who are larger or who have medical complications.) Another two hours are spent preparing the machine beforehand and washing it at the conclusion of dialysis.

For many patients, unable or unwilling to have a transplant, dialysis represents a way of life. For others, like Dee, it is only a temporary measure to carry them along until a donor kidney is available.

"I'd definitely like to get a transplant," Dee says. "I don't want to live the rest of my life attached to this machine. I'd rather have a transplant and take my chances."

Worldwide, over 12,000 patients have taken their chances on a kidney transplant. Some 5,500 are now living with a functioning kidney; another 2,000 have returned to dialysis after unsuccessful transplants.

A patient who receives a kidney transplant from a related donor now has an 85 percent chance to survive one year; when the kidney comes from a cadaver donor, the one year survival rate is 70 percent. For two and three years, the statistics are nearly as good.

In Dee's case, the kidney will have to be from a cadaver donor. Her two children, aged 16 and 10, are too young to be donors, and her father is too old. She also has a brother, a missionary in the Philippines, but the blood types do not match.

"I think I'd really rather have a cadaver donor than involve someone else," Dee says.

Her name was recently added to the list of patients awaiting transplants at Stanford University Medical Center.

"Now it could be two weeks or five years before someone dies who cross-matches well with me," she says.

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Until then, she must depend on the dialysis machine. But unlike most patients, who must travel to a medical center three times a week for treatment, Dee can perform dialysis in her home in Danville (a suburb of Oakland).

Last month, she and her husband, Hal, completed an intensive six-week home training program at Stanford Hospital. The course includes basic kidney physiology, as well as the operation, monitoring, and maintenance of the machine.

At the conclusion of the program, the Eads took home the dialysis machine they used during their training. It was donated by the Kidney Foundation of Northern California, saving them an expenditure of some $6,000.

In recent weeks, a plumber has been out to the house to install a sink and drainage system in the family room, where Dee goes on dialysis three times per week. Hal has also constructed a medical pantry to store the various supplies that are needed.

The training program cost the Eads nearly $4,000. But most of their maintenance costs ($10,000 the first year and $3,000 to $5,000 each year thereafter) will be assumed by the federal government through new legislation which went into effect July 1. Under the new bill, H.R. 1, the government is expected to pay about 80 percent of the costs of dialysis or transplantation for most Americans.

Prior to the passage of H.R. 1, many dialysis patients were forced to use their life savings, borrow large sums of money, or go on Medi-Cal to cover their medical bills. This was particularly true of patients undergoing long-term dialysis at an artificial kidney center, whose yearly bills can reach $30,000.

Perhaps more so than the financial effects, Dee has been concerned over the strain her illness has put on her family.

"It may seem crazy," she says, "but I feel guilty about this whole thing. If you can be sick and involve just yourself, that's one thing. But to inconvenience everyone else, you can't help but feel really guilty.

"Right now my experience is the biggest thing in our family. It's been hanging like a cloud over us for a long time."

The inconvenience, the expense, and the basic unpleasantness of dialysis, as well as the ego-destructive nature of having to depend upon a machine for life, causes extreme depression in many patients. Dee looks at it differently.

"It's really not that depressing," she says. "I'm just glad to be alive and have the time."

Although her future is still somewhat uncertain, she has definite feelings about it.

"It's hard to convince people that I have a sense of urgency about things I want to do," she says. "Lots of people think they'll live forever. I know I won't, so I want to enjoy my family and do the things that are meaningful to me. I don't want to waste my time on unimportant things."

For now, what's important to her is being a good wife and mother. "It's a hard job," she laughs. "I've never found it dull for one second."

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Mailed July 24, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- An overall 4.65 percent increase in prices beginning Saturday, July 21, was announced today (July 19) by Stanford University Hospital.

The bulk of the increase will be reflected in daily room rates, but virtually all other charges will remain unchanged, said Dr. Thomas A. Gonda, hospital director.

For community patients, the daily room rates will now be $78.00 for medical and surgical wards. Semi-private rooms will be $85.00 and private rooms $95.50. Obstetrical ward rooms will now be $79.50, with nursery rooms $56.00.

This represents an increase of $9 to $11 for daily rates.

Dr. Gonda said the increase is necessary "to meet the continuing rise in operating costs, including employee wages and materials. But nearly all other prices which make up a patient's total hospital bill, such as drug charges and most laboratory tests, will remain unchanged," he said.

Last year Stanford raised room rates $4.50 to $5.00; the year before, there was an increase of about $4.00. However, these increases were accompanied by proportional increases in laboratory, drug, operating room, and similar charges, Dr. Gonda said.

This year's overall increase of 4.65 percent is in compliance with Phase Four guidelines, the hospital director said.

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Mailed July 19, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

ADVANCE FOR P.M. RELEASE JULY 19, 1973

STANFORD — Scientists at Stanford University Hospital have found that some patients undergoing long-term treatment on artificial kidney machines develop deficiencies in an important body enzyme which may be caused by the "washout" of a vitamin.

To correct this deficiency and avoid possible harmful effects, supplemental doses of the vitamin (known as B_6 or pyridoxine) should be given to these patients, the researchers said.

Currently, some 2,000 Californians and 10,000 Americans are kept alive by machines which take over the kidney's main task of filtering out poisons and waste products from the bloodstream. Without this process, known as dialysis, they would soon be poisoned by the impurities in their systems.

Eleven of 19 patients recently undergoing chronic dialysis at Stanford Hospital were found to have markedly decreased levels or a total absence of the enzyme, aspartate transaminase (GOT). GOT plays a vital role in body metabolism.

The researchers—Drs. Paul L. Wolf, Norman Coplon and Alan S. Coulson, and medical technologist Dorothy Williams—reported their findings today at the annual meeting of the American Association of Clinical Chemists in New York.

"A possible explanation for the low or absent GOT activity is a washout of the enzyme itself," Wolf said in an interview. "But we believe it is the vitamin, pyridoxine, which is being washed out in dialysis."

The pathologist explained that pyridoxine acts as a "co-enzyme" and is needed for GOT to function. It is also essential for body growth and is actively involved in red blood cell production, as well as the functioning of the body's nervous and immune systems.

"Up to this point, the only known common condition which causes low GOT activity is pregnancy," Wolf added. "Here again, this may relate to a deficiency of vitamin B_6 which occurs during pregnancy." (None of the 19 patients in the study was pregnant.)

Scientists have previously determined that vitamin C and folic acid are both washed out by long-term dialysis. To avoid possible harmful consequences such as anemia and impairment of the blood's clotting mechanism, doctors now prescribe supplemental doses of both vitamin C and folic acid for dialysis patients.

Similarly, the Stanford researchers believe, doses of pyridoxine should be administered to dialysis patients.

"It is important to maintain GOT activity, and to have pyridoxine in the blood," Wolf said. "Without it, patients can develop a wide range of problems, including neurological disturbances, anemia, kidney stones, dermatitis, and depressive disorders associated with oral contraception."

In an upcoming study, Wolf and his associates will specifically measure pyridoxine levels in dialysis patients at Stanford.

END ADVANCE FOR P.M. RELEASE JULY 19, 1973 7/16/73

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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James McCracken 327-4800, X 365

STANFORD -- Last October, doctors in Western Samoa removed an eye with a cancerous tumor from three-year-old Iona Sakalia and told his family there was no hope for the boy.

Today, the Samoan youngster is one of the most active patients of the Children's Hospital at Stanford, where he has responded extremely well to treatment, according to physicians.

Iona, who will be four in August, came to Stanford in January with his father. "He was a very ill child, with a tumor the size of a grapefruit growing from his right eye socket", said Dr. Jordan Wilbur, head of the Pediatric Oncology Unit at Children's Hospital.

The condition, called retinoblastoma because the tumor starts in the retina of the eye, occurs in young children. When it is treated in the early stages by radiation therapy or surgery, the survival rate is excellent, noted Wilbur. With Iona, however, the tumor was infected, and the cancer had spread to other areas.

"Perhaps by other standards, Iona's case would have been considered fatal," said Wilbur, who acknowledged the tumor was one of the largest he had seen of its type. "But we always feel that we can try a therapy that has not failed in the past for similar, though less severe cases."

After intensive treatment that included antibiotics to combat infection and powerful drugs and radiation to shrink the tumor, "all evidence of tumor has been brought under control," Wilbur reported.

The entire cost of care and treatment for Iona is being underwritten by Children's Hospital. Transportation for both the child and his father to California was covered by the San Francisco Eye Institute medical group.

Currently, Iona has the distinction of being the patient with the longest stay in the oncology unit. Wilbur expects the child will be ready to leave the Hospital in a couple of weeks, but said he will have to remain nearby for some time.

During their stay here, father and son have grown remarkably close. They share a room at the Hospital and spend much of their time together. Iona has been able to take a few short trips with his dad, including one to Los Angeles to visit an uncle and see Disneyland.

"It's been a gradual upward trend for Iona," said Mary Nehring, social worker on the oncology service. "He has really blossomed." She also said that his father, Sakalia Peniata (in Samoa, the father's first name becomes the child's last name) has adapted remarkably well.

Peniata left his wife and three children to come to a strange country with a sick little boy. Now he is familiar with the Bay Area and at ease with the English language, which he said he hadn't used much since school.

It all began, recalled Peniata, about one and a half years ago, when he and his wife noticed a white speck on the pupil of Iona's right eye. Then, last summer, the eyeball started to bulge, and the tissue was found to be malignant.

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The eye was removed in October by the only ophthalmologist in Western Samoa, but the tumor continued [illegible]row. By December, Iona was so weak he could not walk or talk. "I carried him in my arms day and night," said his father. "Hospital officials told me to go home, because there was nothing more they could do."

Shortly before Christmas, though, the eye surgical team of the San Francisco Eye and Ear Hospital went to Western Samoa to perform surgery. Dr. John Beale, Jr., an ophthalmologist on the team, examined Iona and told Peniata he would try to arrange for treatment in the United States.

When he returned to San Francisco, Beale contacted Children's Hospital and made arrangements for Iona to be treated in the oncology unit. The Eye Institute medical group, which Beale heads, sent Peniata plane tickets for the trip. When the father and son arrived in San Francisco, January 10, Beale and his wife drove them to Children's Hospital.

Wilbur noted that it was unusual to see a tumor as large as Iona's because in this country, it would have been treated earlier. He also said that when the disease has invaded other parts of the body, it is usually fatal.

Iona had evidence of cancer in his central nervous system, blood, bone marrow and liver, among other places. He was started on a very intensive therapy program based on the philosophy of the oncology unit which Wilbur summed up:

"In patients who have no chance by anyone's standards, we should be willing to take risks, as long as the side effects from chemotherapy and radiation are no worse than the tumor itself. And the tumor was destroying Iona."

Wilbur explained that Iona was administered antibiotics to fight the infection and build up his resistance. [illegible]he same time, an aggressive chemotherapy program was begun, using powerful drugs to shrink the tumor [illegible]rid Iona's system of proliferating cancer cells. After the tumor had decreased in size, he received radiation therapy to eradicate any residual disease.

"Now Iona couldn't be doing better," said Wilbur. He will continue to receive intensive treatment for the next year or two, and eventually may be a candidate for plastic surgery to correct the bulge under his right eye that the tumor caused.

"With all the excellent care and love he has been given, Iona has become quite spoiled," said Peniata after he affectionately reprimanded his son for making too much noise. "But it's worth it," he added, just to see him laugh and run again."

Peniata admitted he never expected such a recovery. "It took eight bandages to cover the tumor when we arrived, and now there are none; that's progress," he pointed out jubilantly.

Although he cannot work in this country because of immigration laws, Peniata has managed to keep busy. A skilled carpenter and welder by trade, he has done volunteer work welding wheel chairs for the Hospital and repairing playground equipment for a church in Menlo Park. He also enjoys swimming with the children in the pool or at the Hospital, and entertaining on his guitar.

Meanwhile, Iona is happily running around the Hospital, babbling away in a strange mixture of Samoan, English and baby talk.

Children's Hospital at Stanford is a separate corporate entity located on Stanford lands and affiliated with the Stanford University School of Medicine. The cancer program is part of an effort by the two institutions to strengthen patient care, teaching and research in problems of malignant diseases in children.

Other clinical activities now located at Children's Hospital include a joint pediatric reconstructive surgery program, an orthopedic service, hemophilia care, and programs in allergy, chronic lung diseases, [illegible]umatology, and physical medicine and rehabilitation.

The Medical School and Children's Hospital also share radiotherapy and surgical facilities, as well as highly specialized laboratory services.

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Mailed July 16, 1973.
Editors: Picture mailed upon request if not included with release.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD -- Dr. Albert J. Stunkard, a nationally known expert in human eating disorders, has been appointed professor and chairman of the Department of Psychiatry at Stanford University School of Medicine.

Dr. Stunkard has been professor and head of the Department of Psychiatry at the University of Pennsylvania School of Medicine since 1962.

His appointment, announced today (July 9) by Dean Clayton Rich, becomes effective September 1. He succeeds Dr. Bert Kopell, who has served in an acting capacity since Dr. David Hamburg resigned last August.

Dr. Stunkard, 51, has carried out wide ranging research into the psychosomatics and treatment of human eating disorders, including both obesity and pathological under-eating.

He identified and offered clinical descriptions of the "night eating syndrome," a pattern of food intake which characterizes patients who are particularly resistant to weight reduction regimens.

He published the early observations of "dieting depression," a psychological response seen in some individuals who attempt to lose weight. With two associates, he also published findings on the close and systematic link between incidence of overweight and social class in an urban American population.

Dr. Stunkard is the author of 85 publications, including the chapters on obesity and under-eating in most standard textbooks and reference works. His new book, Understanding Obesity: The Biography of an Endeavor, is currently in press.

A native of New York City, he obtained his B.S. from Yale University in 1943 and his M.D. from Columbia University in 1945. He served his internship at Massachusetts General Hospital and his psychiatric residency at Johns Hopkins Hospital.

After postdoctoral research fellowships at Johns Hopkins, Columbia, and Cornell University, he was appointed instructor in medicine at Cornell in 1954.

Dr. Stunkard joined the faculty at Pennsylvania in 1957 as associate professor of psychiatry. He was promoted to professor and appointed department chairman five years later. In 1968, he was named Kenneth Appel Professor of Psychiatry.

A member of the major professional and academic societies, he is president-elect of the American Psychosomatic Society and past vice president of the Association for Research in Nervous and Mental Diseases.

In 1960, he won the Hofheimer Prize, the annual award of the American Psychiatric Association for outstanding research.

Dr. Stunkard has served on numerous national research committees and panels focusing on psychiatry, behavioral sciences, and food and nutrition. He is currently on the editorial boards of three professional journals.

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Mailed July 9, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- Many people who complain of insomnia may actually be suffering from sleep apnea, the temporary cessation of breathing during sleep, researchers at Stanford University School of Medicine have discovered.

This finding means that rather than large doses of sleeping pills, an evaluation of respiratory functions during sleep may be required for some patients with insomnia, the researchers said.

Six insomniacs undergoing treatment at the Stanford Sleep Disorders Clinic were found to be suffering from sleep apnea, according to Drs. Christian Guilleminault, William C. Dement, and Frederic L. Eldridge. They reported their findings with the first two patients in the current issue of Science, a scientific journal.

Both patients experienced severe sleep disturbances caused by repeated episodes of apnea, in which breathing stopped for periods of 20 to 150 seconds. These episodes were followed by arousal, often complete awakening, and resumption of breathing. Arousals numbered as high as 250 per night.

"It was clear that the sleep disturbance was directly associated with the apneas," the authors wrote. "It is almost certain that there is a functional association between the sleep disturbance giving rise to the complaint and the apnea."

The researchers raised the possibility that insomnia with sleep apnea may induce cardiovascular problems. In one patient, a substantial increase in blood pressure in the pulmonary artery during sleep was noted.

"The question of the possible interaction of sleep apnea and insomnia with cardiovascular disease should at least be considered," they wrote. "Can we speculate that night-time death in some such patients could be related to sleep apnea? This possibility should also be considered."

Research along these lines is now proceeding at Stanford.

In an interview, Drs. Guilleminault and Dement said that as many as 10 percent of all insomniacs may actually be suffering from sleep apnea.

"Of chronic insomniacs seen at the Sleep Disorders Clinic, 10 percent have had sleep apnea," Guilleminault said.

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Estimates of insomniacs in this country have ranged as high as 20 million, but no reliable, comprehensive survey is available, Dement said.

The rare condition of sleep apnea was first described in 1965 in obese patients ("Pickwickian Syndrome"). Three years later, it was reported in patients with hypersomnia or excessive sleeping tendencies.

The two patients described in Science, who were first seen in 1972, represent the first cases of sleep apnea associated with insomnia.

Both patients had "central" apnea, involving a stopped diaphragm apparently related to a hidden nervous system defect. The mean duration of their apneic periods was 30 seconds, with a range of 20 to 150. Repetitive apneas often lasted 20 to 30 minutes, and one patient spent 42 percent of his sleep time in apnea during a three-night test period.

"In these patients, the simultaneous resumption of breathing occurs when oxygen in the blood gets so low and carbon dioxide so high that the brain sends out an emergency signal that it needs oxygen," Guilleminault said.

He also noted that all six clinic patients suffering from sleep apnea claimed that their condition worsened after they took sleeping pills, particularly barbiturates.

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Business Wire 8/28/73.
Mailed 8/28/73.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Editors: Photos available upon request if not included with release.

STANFORD -- Young people in Palo Alto can receive free medical care at a health clinic in the North County building on Grant Street.

Called Our Health Center, it is staffed by physicians, nurses, laboratory technicians and others from Stanford University Medical Center and the community, who volunteer their services.

The clinic, with the cooperation of the Santa Clara County Health Department, has been operating for over a year. Although the county provides space in its North County building and furnishes some supplies, the clinic relies largely on outside donations and volunteers.

When the clinic is open, there is always a full house. However, more physicians and other staff are needed, says Dr. M. Harry Jennison, chairman of the Midpeninsula Urban Coalition's Health Task Force, which is interested in helping the clinic. Jennison, director of Children's Hospital at Stanford, explains that a doctor must be on the premises for the clinic to treat patients, because by law, only an M.D. can make a diagnosis or prescribe drugs.

The ideal shift for volunteers is two to three hours once a month, but that schedule requires a larger pool of personnel, according to Christine Palmer-Persen, clinic director. "We really need physicians," she notes, "because they are usually too busy to give more than a few hours a month. Yet now, some work every week."

The walk-in clinic, open Mondays and Thursdays from 3 to 8 p.m., has between 20 and 40 patients an evening. "It is diagnostic," explains Jennison, "and not intended to be a full-fledged primary care facility. More serious problems are referred to Stanford or elsewhere."

Modeled after other free health clinics in the state, Our Health Center is the only clinic in the area that treats transients, says Miss Palmer-Persen. Patients are mostly 17 to 24 years old, many of them sons and daughters of middle class parents. They are medically indigent because they are not living at home or are ineligible for other health plans," she says.

Their health problems range from veneral disease to strep throat or poison oak. About 40 percent come in for gonorrhea and another 20 percent for an unplanned pregnancy, continues Miss Palmer-Persen. She emphasizes, however, that the clinic is concerned with furnishing good care for any medical problem.

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Trained medical assistants and counselors take histories, aid the physician and/or nurse with the examination, advise patients in dealing with their problems and help with any referrals or follow-up. Basic laboratory tests are performed by licensed medical technologists and assistants at the clinic.

Jennison believes the clinic provides a valuable service for the Midpeninsula. "Thanks to the clinic, a certain part of the population is being reached for a modicum of health care when normally it wouldn't have any through traditional medical channels," he said.

He thinks the experience at the clinic can benefit medical students, house staff and others interested in medicine. "But above all," he points out, "it's really a labor of love."

Most of the Stanford volunteers claim that the desire to do something worthwhile in the community, as well as the personal enjoyment and value of the experience, prompts them to give their time to the clinic.

Dr. William Watson finds the clinic interesting because he sees different kinds of medical problems than he does as attending physician and clinical assistant professor of dermatology at Stanford. Yet, he acknowledges it can be frustrating.

"It is sometimes difficult to communicate with the patients because they have different lifestyles and values, but it's challenging and interesting." Watson adds that he also enjoys being among the young people who run the clinic because they are so enthusiastic.

Both he and Dr. Stanley Derezinski, a Stanford fellow in infectious diseases, feel the clinic offers good experience in primary care. "Having outpatient contact and dealing with routine medical problems is helpful, especially for those trained in a university hospital," says Derezinski. He finds the problems more similar to those he saw in the Army than he did while training as a resident in internal medicine.

There is a need for specialists, particularly gynecologists, say the physicians. The clinic is trying to set up a referral system of community physicians for problems the clinic can't handle. A backup system would also help the physicians on duty who may want to consult with doctors in other specialties.

Laboratory work is essential to diagnose many conditions, and the quicker tests are completed, the sooner treatment can begin. Coordinator of the lab is Terry Fotre, assistant in the Hospital's Clinical Laboratory. Volunteer medical technologists and trained assistants do complete blood counts, urinalyses, microscopic smears and bacteria cultures at the clinic. More elaborate tests are contracted to other labs for little or no cost.

"About two-thirds of the patients seen require several tests," says Fotre, "so on a busy night the lab does some 60 to 80 tests." Fotre, who wanted first-hand experience before applying to medical schools, feels the clinic has been invaluable for him. He also points out that some medical technologists consider it a way to review the more routine tests they may not do if they have specialized.

For other young people like Fotre, the clinic is a place to obtain practical experience. Betsy Allyn, a technician in the Department of Dermatology who starts medical school in Utah this fall, wanted prior contact with patients. She enjoys being a medical assistant or counselor, but also helps with lab work when necessary.

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Assisting and counseling are interchangeable, she explains, depending on what is needed. "Ideally the same person should follow a patient, from the interview and medical history through whatever counseling or follow-up care is required, but we don't have the personnel for that."

Dermatology research assistant John Walsh, planning on a career in biochemistry, thinks what he is learning about different diseases at the clinic may influence his research later. He has also been helping with publicity by taking photographs for posters.

When Adele Daly, director of Central Service, decided to do some volunteer work as a nurse, she had mixed feelings about the lifestyle of some of the patients, but felt the clinic was a worthy undertaking.

"Health care should be available to as many people as possible, including young people alienated from their families," she says. "The fact that the clinic exists, encourages people to seek help."

Mrs. Daly admits she occasionally feels a "generation gap," but says the casual atmosphere of the clinic helps overcome it. No one wears a uniform, and many of the staff with their long hair and faded blue jeans look no different from the young patients. She adds that the patients seem to have confidence in the staff and feel they can really talk to some of the doctors.

At times, however, the physicians rely on the counselors to relate to patients. For Stanford biology major Tim Nichols, it is easy to communicate with the patients because they are in the same age group.

"I can sense their fears or tell if they're withholding information," says Nichols, who is working in the Department of Dermatology this summer and plans to attend medical school when he graduates from Stanford. "I know whether they want to see a doctor or talk with me. It's important to be understanding and sensitive."

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Mailed August 20, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Editors: Photos and copies of Stanford M.D. available on request, if not included with release.

STANFORD -- Stanford medical students receive a major part of their clinical training outside Stanford Medical Center.

They can broaden their scope of medicine and caring for patients by working in institutions that range from farm clinics to sophisticated special care centers.

The idea is not new. Several years ago, professors decided there was a kind of in-between clinical experience missing from the curricula of medical schools.

Students were exposed only to the specialized, often complex cases seen in the university hospitals. Someone suggested affiliation with other hospitals, so that students could learn about the common man's lumps and bumps.

When Stanford Medical School was located in San Francisco, it maintained affiliations with local hospitals. When the School moved to the Stanford campus in 1959, the list of hospitals was changed and expanded, but the philosophy continues: enrich medical education and improve the medical care for patients in both institutions.

Today, two-fifths of the teaching at Stanford is done at three affiliated hospitals on the Peninsula, according to an article in the current issue of Stanford M.D., the magazine of the Stanford Medical Alumni Association.

Teaching is conducted in the Stanford Hospital, and at Children's Hospital at Stanford, located on the campus near the School; at Santa Clara Valley Medical Center in San Jose; and at the Palo Alto Veterans Administration Hospital.

In addition, students and residents receive some of their training at the Palo Alto Medical Clinic, at Kaiser-Permanente Medical Center in Santa Clara, Chope Hospital in San Mateo County, and other institutions.

Some receive part of their training in community health centers, such as Alviso near San Jose, Livingston in the San Joaquin Valley, Drew Health Center in East Palo Alto, and in King City.

Stanford students may work in a private doctor's office under his supervision. They also have the option of serving one full-time 6-12 week period literally anywhere, some traveling across the U.S. or Europe.

There are advantages to both the affiliated hospitals and the Medical School. Traditionally, such a system ensures an adequate amount of clinical teaching opportunities for students, and encourages referrals of complicated cases to the School.

"The aim is to provide a spectrum of experience that today no single hospital can provide," says Dr. Irving Schulman, chairman of pediatrics at Stanford.

The community hospital profits from the relationship with the Medical School. "This assures a higher quality of medical care," says former Santa Clara County director of medical institutions, Dr. Norman Nelson.

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The partnership, however, is not always easy. Says Schulman, "We have to recognize that each facility has a different mission. Our mission is to educate, but that is not the mission of Valley Medical Center entirely--it's patient care."

Dr. Daniel Federman, chairman of medicine, stresses the need for continual effort by both parties to approach each other's needs. "There will always be conflicts...it will require constant work. But those are hurdles, not barriers."

Students report that Valley Medical Center often serves as their introduction to primary care, a term used nowadays to describe the patient's first point of contact with the medical system. "There is an amazing amount of work, rather than academic pressure," says David Wells, a recent graduate. At Stanford, students are in the office, do progress notes, lab slips, discuss things. Here I don't remember sitting down."

Despite enthusiasm by both Stanford and Santa Clara medical center for affiliation, further growth of the program may be limited, due to the county hospital's current fiscal concerns, reflected both in government budget cuts and competition from other community hospitals.

"Our prime mission is patient care," explains Dr. Morton Manson, assistant director of medical institutions at Santa Clara. "Teaching is a by-product of that care. We can do so much, but only related to patient care. Properly handled that is an excellent vehicle."

Faculties of Stanford and the Veterans Administration Hospital in Palo Alto are interwoven. The same is true with the interns and residents who rotate there.

At both the VA and at Children's Hospital, professional staff appointments are made on recommendation of Stanford academic chairmen. With a few exceptions, all hold faculty status at the School.

There are currently 68 residents and 9 interns from Stanford on the VA house staff, plus a minimum of 20 students there at all times. Several subjects, like neurology, are taught there.

At Children's, students, house staff and faculty are involved in the care of children with a variety of diseases--hemophilia, rheumatoid arthritis, asthma, cystic fibrosis, cerebral palsy, paraplegia and various birth defects.

In addition, there are efforts to expand the role of affiliation and to cut costly duplication of services. A common system of medical records for both Stanford and Children's is being developed; also, single computer billing in the future; joint use of research computers; more shared work.

The famous Palo Alto Medical Clinic provides students with opportunities to study medicine in the environment of the prepaid group practice. Many of the partners in the Clinic are members of the Stanford clinical faculty.

Students may also choose to serve at community health centers. The center at Livingston near Merced has been most popular, and was established by initial student concern.

In the future, students may serve at the United Farm Worker clinics in Salinas. "Purpose of the training is not only community practice, but also to learn how the medical system is working," says Dr. Count Gibson, chairman of community and preventive medicine.

Students also work with private doctors or have the opportunity to broaden their scope of medicine by serving in a hospital elsewhere in the U.S. or abroad.

One student, after a stay in Appalachia, reported "dissatisfied patients, missed diagnoses, shotgun therapy, and psychoneurotic doctors.... There is nothing like direct experience to put it in concrete terms."

Mailed August 15, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD -- A new radiotherapy technique to treat an eye condition called Graves' ophthalmopathy has been reported by physicians at Stanford University School of Medicine.

In a study of 23 patients, 65 percent responded in an excellent or good manner to the radiation treatment, and no patient was made worse by it.

The study appears in the August issue of the Journal of Clinical Endocrinology. Investigators are Drs. Sarah Donaldson; Malcolm Bagshaw, chairman of the Department of Radiology; and Joseph Kriss, head of the division of nuclear medicine.

Their work was supported by grants from the National Institutes of Health in Bethesda, Maryland.

Graves' disease is a common disorder that can occur at almost any age. It is usually associated with overactivity of the thyroid gland. A complication of the disease is an eye condition that can cause a variety of problems, including protrusion, swelling, double vision, and loss of vision.

The most characteristic feature of the ophthalmopathy is a massive enlargement of the muscles that control the eye, pushing the eyeball forward. This abnormality is thought to be caused by a local hypersensitivity reaction involving lymphocytes (white blood cells) which build up in the small, precisely controlled muscles, according to the researchers.

Radiotherapy has been used sporadically in the last 40 years for treating Graves' ophthalmopathy, but not with very prompt or favorable results, said Kriss. He attributes the success at Stanford to improvements in technique and equipment.

Over a two-week period, the affected eye muscles are irradiated daily by a finely directed beam from a medical linear accelerator. "The beam is designed to avoid scattered radiation that could damage the lens, cornea, or other surrounding eye tissue," explained Kriss. He added that the field of treatment does not include the pituitary gland, which was often irradiated in the past for this condition.

The investigators believe that radiation suppresses the immune reaction, which involves the white blood cells accumulating in the ocular muscles. Improvement may occur even before the treatment is finished, and appears to be long lasting. The amount of radiation is much lower than the dose administered to treat cancer patients, Kriss point out, and is well tolerated by adults.

Corticosteroid therapy is also used to treat Graves' ophthalmopathy. However, the drug has various side effects, Kriss continued, and symptoms often return as soon as the drug is stopped. In the Stanford study, nine patients who had responded poorly to corticosteroids, were subsequently treated successfully by radiotherapy.

The 23 patients were studied at Stanford between 1968 and 1972, and ranged in age from 30 to 60. They included approximately an equal number of men and women, although Graves' disease is six times more common in women, noted Kriss.

None of the patients treated had any evidence of spontaneous improvement before the start of radiotherapy. They were hospitalized throughout the treatment period and examined frequently. Eye changes before and after radiotherapy were clinically evaluated, as well as numerically scored.

Seven patients showed an excellent response to the treatment; eight had a good response; six, a fair response; and two had no response or change. Another 12 patients treated since the study responded in about the same ratio, Kriss said. Only one mild relapse has occurred.

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Mailed August 13, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- The Stanford University School of Medicine will embark on a new residency training program in primary care for internists and pediatricians, Dean Clayton Rich announced Tuesday (Aug. 7).

He said the Department of Health, Education and Welfare has awarded a $210,400 contract to Stanford to develop a model graduate training program in primary care, utilizing a team approach to the delivery of family health services.

The program would qualify trainees to take board examinations for certification in internal medicine or pediatrics.

Stanford intends to admit at least 12 trainees in the program during the three-year period of the contract, including four part-time residents in the first year. Eventually, the School will have two trainees in medicine and two in pediatrics in each year of the three-year program.

"Training primary care-oriented internists and pediatricians is as crucial as training family physicians," said Dean Rich. "A significant amount of primary care in the United States is already being rendered by these specialists.

"Historically, these two groups have never had a model in which they could view and care for families in a complementary fashion."

Dr. Rich added that the present programs for training internists and pediatricians are hospital-based and that there is a need for innovation in relating to the roles of these two specialties in the delivery of health care.

The HEW contract was authorized under the Comprehensive Health Manpower Training Act of 1971, and awarded by the Bureau of Health Resources Development of the Health Resources Administration.

Similar contracts to foster the training of primary care physicians have been awarded by HEW to the Boston City Hospital, and to Washington University School of Medicine in St. Louis.

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Mailed August 7, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

STANFORD -- Potential encounter group participants should recognize both the promise as well as the limits of the encounter technique, according to a new book, co-authored by a Stanford University psychiatrist.

Such groups can present clear danger to participants if handled improperly, or they may be extremely effective.

These conclusions were reached after a three-year systematic evaluation of encounter groups, reported in the book Encounter Groups: First Facts. The authors are Irvin Yalom, professor of psychiatry at Stanford University School of Medicine, University of Chicago Psychologist Morton Lieberman, and State University of New York Psychologist Matthew Miles. The book is the first scientific study of the encounter movement.

Encounter groups attempt to provide an intensive, high contact experience, encouraging open, interpersonal confrontation, self-disclosure, and strong emotional expression. Generally the goal is some kind of personal change--of behavior, attitudes, values or life-style, say the authors.

The scientists evaluated 17 varieties of encounter groups, including Gestalt therapy, psychodrama, Synanon, and non-verbal. They enlisted the aid of 206 Stanford students who wished to participate in encounters. Groups were led by professionals, either psychiatrists or clinical psychologists, and consisted of 12-13 participants each, both men and women.

The investigators found that a third of the subjects showed positive changes, whereas approximately two-thirds found the experience to be unrewarding, either dropping out, gaining little from the encounter, or experiencing significant psychological harm.

Sixteen participants who were termed "casualties" developed adverse effects which ranged from psychoses and severe depression to students whose self-esteem was lowered. According to the authors, casualties were defined conservatively, only if there was evidence of psychological harm six to eight months after the group ended.

Though prominent encounter group practitioners and organizations have reported minimal negative effects on members, the authors state that they found group experiences damaging to eight percent of those who began the groups, "a figure which most people would not consider safe." Previous studies, they say, have tended to minimize negative effects, and such groups are not as safe as they have claimed.

Furthermore, the study found that persons who came to the groups with strong wishes and hopes for change, and considered the groups to be "safe," were rather more likely to be at risk, more vulnerable to unexpected attack and rejection. Persons who came with equivalently strong hopes and moderate skepticism were likely to learn a good deal, the authors report.

The most surprising finding of the study, says Yalom, is that the most successful groups focused on the participants' understanding of the encounter, rather than just experiencing it. The type of encounter group was found not to be as important as how the group was led, and if the leader provided a supporting framework for the participant to understand his experiences. The common anti-intellectual belief of encounter groups, "feeling, not thought," should rather be "feelings, only with thought," suggested the scientists.

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"Let it all hang out," they suggest, might be more properly revised to "let more of it hang out than usual, if it feels right in the group, and you can give some thought to what it means."

Another common myth is that enthusiasm makes for change in the encounter group setting. The investigators found instead that enthusiasm must stand the test of time, and that if real learning has occurred, it will be kept.

Some groups in the Stanford study were shown to be extremely effective, with participants experiencing significant personal growth and change six months after the groups ended.

"Encounter groups excel in their ability to involve and provide a setting in which certain basic human activities associated with productive change can occur.... The ability of such groups to provide a meaningful emotional setting in which individuals can overtly consider previously prohibited issues, cannot be ruled out as an important means for facilitating human progress," the investigators say.

However, the authors warn, "encounter groups present a clear and evident danger if they are used for radical surgery in which the product will be a new man." Findings of the study encourage the person considering attending such a group to determine realistically his expectations of the group.

"A person who feels, essentially, that he or she is in psychological distress should ordinarily be considering counseling or psychotherapy rather than an encounter group experience."

Dr. Yalom is associate director of the psychiatry clinic and director of the group therapy program at Stanford. He has authored the book, The Theory and Practice of Group Psychotherapy, and numerous articles on group therapy.

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Mailed August 3, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: Writers interested in attending the conference should notify the cardiology division at Stanford University School of Medicine (415: 321-1200, ext. 6823). The conference is not open to the public.

STANFORD -- An International Conference on Biomedical Electrode Technology, sponsored jointly by the cardiology division of the Stanford University School of Medicine and the NASA-Ames Research Center, will be held at Stanford September 13 and 14.

"The purpose of the conference is to bring together various major contributors in the field of biomedical electrode technology for discussion of recent advances," said program chairman Harry Miller, administrator of Stanford's cardiology division.

The session will focus on four main areas--materials sciences; physics and engineering; research clinical applications; and flight applications and future directions.

The keynote speaker will be Dr. Charles A. Berry, director of life sciences for the National Aeronautics and Space Administration.

All sessions and exhibits will be held in the Bishop Auditorium of Stanford's Graduate School of Business.

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Mailed August 2, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD — Dr. Thomas C. Merigan, professor of medicine and head of the division of infectious diseases at Stanford University School of Medicine, has been named winner of the annual Borden Award for outstanding research from the Association of American Medical Colleges (AAMC).

The award was announced Tuesday, Sept. 25, by Dr. John A.D. Cooper, president of the AAMC. It will be presented to Dr. Merigan Nov. 6 at the AAMC's 84th annual meeting in Washington, D.C.

Dr. Merigan was cited for his pioneering work on interferon, a protein produced by body cells in response to virus infection. Earlier this year he and three British scientists reported they had successfully used interferon to prevent common cold infections in human volunteers.

The findings indicated that interferon could have future usefulness as a preventive remedy for cold and other viruses. Currently it is too costly to produce and administer to be a practical remedy, but efforts are underway to develop simpler and less expensive techniques.

A prolific writer and researcher, Dr. Merigan has made numerous other contributions in the fields of molecular biology, virology, and human genetics.

The San Francisco native obtained his B.A. (1955) and M.D. (1958) degrees from the University of California. Before joining the faculty at Stanford in 1963, he was a clinical associate at the National Heart Institute in Bethesda, Maryland.

The Borden Award, presented annually since 1947 by the AAMC in cooperation with the Borden Company Foundation, is given in recognition of "outstanding research in medicine conducted by a member of the faculty of an affiliated college." The award consists of $1,000 and an inscribed gold medal.

Last year's winner was Dr. George C. Cotzias, professor of medicine at the State University of New York, Stony Brook, and professor of neurology at Mount Sinai School of Medicine. He was cited for findings which established L-Dopa as therapeutic treatment for Parkinson's Disease.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

STANFORD -- James H. Stanford has been named director of finance for the Stanford University Medical Center.

Stanford, finance director of the San Jose Hospitals and Health Center, Inc., for the past three years, will assume his new duties October 15.

The appointment of the 35-year-old executive was announced Monday (September 24) by Dean Clayton Rich.

Stanford will head a newly formed office consolidating the major financial activities of the Medical Center. The office will serve the needs of the School, the Hospital, and the Clinics.

The new office will be located in the Administrative Annex on Quarry Road.

Stanford is a former associate director of Stanford University Hospital, and also worked in the Dean's office of the Medical School.

He holds A.B. and M.B.A. degrees from Stanford University. He and his wife and two daughters reside in Portola Valley.

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Mailed September 24, 1973.

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

Science Writers: The embargo date on this story is dictated by the scientific presentation of this work at the meeting of the American Academy of Ophthalmology and Otolaryngology in Dallas, Texas, Sept. 19. Photo available if not included with story.

ADVANCE FOR P.M. RELEASE WEDNESDAY, SEPT. 19, 1973.

STANFORD -- Screening newborn babies for deafness is a 24-hour operation at Stanford University Hospital, but it is all done by machine.

A unique automated system called the crib-o-gram detects infant movement in the crib and records any changes when a test sound is turned on. Over the past three years, 180,000 tests have been administered to 6,000 babies in the Stanford nurseries.

The procedure was developed to meet the challenge of detecting hearing loss and deafness early in life, long before the parents or physician would normally suspect a problem exists.

Results so far have been encouraging. Eight babies who failed the test at birth were confirmed by additional testing at six months to have hearing losses. Treatment for them has begun before the age of one, giving them a better chance to live a fuller life in a sound-filled world.

The findings were reported today (Wednesday, September 19) by the crib-o-gram's developer, Dr. F. Blair Simmons, head of the division of otolaryngology at Stanford University School of Medicine. They were presented at the 78th annual meeting of the American Academy of Ophthalmology and Otolaryngology in Dallas, Texas.

Simmons' work was done with the help of Frederica Russ, research assistant. It was supported by a grant from the National Institute of Neurological Diseases and Stroke of the National Institutes of Health in Bethesda, Maryland.

"Hearing rehabilitation is most successful if it is begun around six months of age," said Simmons. "Yet very few children with hearing defects are discovered before they are one. In fact, most problems are not detected until children are two or three, when their language development falters. Testing hearing at birth or soon after can improve the chances of normal speech and language development," he noted.

The heart of the automatic system is an inexpensive motion detector called a transducer. It was originally developed to register the fuel load in aircraft by the amount of weight stress on the wing supports. When mounted on the crib frame, it detects the stress caused by movement in the crib.

The device monitors motion before, during, and after a test sound is emitted from a microphone in the ceiling of the nursery. It is so sensitive, it can detect breathing, heart beats or hiccups.

Activity is recorded on a paper tape which is scored during normal working hours. Since the crib-o-gram is a pilot project, scoring is done by individuals, but a computer could do it as completely, Simmons pointed out. "It is simply a matter of determining whether there has been a change in crib activity after a test sound."

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The likelihood of a positive test response independent of spontaneous movements, nursery routines and changes in arousal level depends on the infants' level of consciousness. Tests are most accurate when infants are lightly sleeping according to the investigators, and least dependable when they are fully awake and active or deeply asleep and dreaming.

At Stanford, the best time to obtain positive responses is between 3:00 and 4:00 a.m., said Simmons. However, he stresses that it is important to test infants repeatedly at different times throughout their nursery stay for a valid response rate.

An index of infants' response rates to account for spontaneous movements unrelated to the test sound is computed periodically by running a test without sound. The scorer, who does not know when a test has been silent, scores it the same way as a regular test. Scoring criteria are revised from the results of the random rates.

Criteria for passing and failing the test have been developed through a control study of 5,000 babies in the Stanford nurseries between October 1970 and April 1973. Infants are considered to hear if their response rates are better than 20 percent, or if there are two distinct arousal responses within two seconds after the test sound.

The average response rate of those in the study who passed was 36 percent. Pediatricians of every infant tested have been requested to notify Stanford if any hearing problems develop later. But in a follow-up study of two-year-olds who passed the test, there have been no reports of deafness.

A total of 327 babies who failed the crib-o-gram were asked to return to Stanford or another facility at six months for further screening. Eight of those babies were found to have hearing defects.

The incidence of deafness in newborns is one or two per thousand, according to Simmons. Since it is a relatively small ratio, nursery staff or pediatricians do not always feel it is worth their time to screen every infant individually, he said.

"With the crib-o-gram, little extra time or effort is involved," explained Simmons. "Everything can be mechanized, and the average cost is 85 cents per child."

The equipment is set to test each of four rooms of the well-baby nursery 20 times a day. It turns on, simultaneously monitors all cribs in a room, switches to another room and then shuts off after every room has been tested until a timer begins the next cycle.

Although the system monitors the 32 cribs in the Stanford nursery, it is capable of testing 600 babies an hour throughout the day, Simmons said. Each crib is identified for the recorder unit by a digital code.

For babies in the premature and intensive care nurseries who require more individual care, Simmons has designed a small, portable unit that can be used with any type of crib, including an isolette. Infants as small as three and one-half pounds have been successfully tested.

The transducer is placed under the mattress and a small microphone is clipped to the crib. Before infants are discharged, a test sequence is recorded hourly for 24 hours. Results are processed as in the larger system, but there are no silent tests to check spontaneous responses. This smaller unit is also being tried by hospitals in Boston, Denver and Pittsburgh.

A considerably larger population and consistent follow-up are needed to determine exactly how reliable the crib-o-gram is, said Simmons. Nevertheless, the system can detect hearing defects in newborns, and at this stage it appears to be the most effective mass screening technique available for infants.

END ADVANCE FOR P.M. RELEASE WEDNESDAY, 9/19/73. ### Mailed Sept. 17, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Cancer research at Stanford University has received a major boost through federal grants totalling $3,388,000, the National Cancer Institute announced Tuesday (Sept. 11).

The grants, ranging from three to five years, will support efforts to improve understanding of cancer and methods of cure.

The largest grant of $2,461,000 to Dr. Henry S. Kaplan will provide continuing basic support to the Stanford cancer research facilities in the Division of Radiobiology, where more than a dozen senior scientists are engaged in radiobiology research, radiation treatment, and training of new personnel.

Kaplan, the Maureen Lyles D'Ambrogio professor of radiology, is noted for his studies in mouse leukemia and as a leading exponent of the use of supervoltage radiation therapy.

Other recipients and grants include:

Dr. Lewis Aronow, professor of pharmacology, $193,000 for studies related to the use of steroid hormones in cancer chemotherapy;

Dr. J. Martin Brown, assistant professor of radiology, $241,000 for the study and development of radiosensitizing compounds which may some day play an important role in the treatment of cancer;

Dr. Bruce Hudson, assistant professor of chemistry, $101,000 for studies to improve an analytical method for the detection of circular DNA, the genetic material of viruses believed to be associated with animal cancers;

Dr. Robert F. Kallman, professor of radiology, $226,000 for studying the mechanisms of radiosensitivity in normal and tumor cells; and

Dr. Kendric Smith, professor of radiology, $166,000 for studying the mechanisms by which radiation kills cells, and the way irradiated cells repair themselves.

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Mailed September 11, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A Stanford University professor thinks medical schools must develop a new type of faculty which takes the teaching of medicine and the care of patients as serious assignments.

"The flowering of federally supported biomedical research in the past 20 years has not been an unmixed blessing," says Dr. Daniel Federman. "Combined with social factors it has contributed to two problems which now beset medical schools.

"One is an inattentiveness to health care delivery, the other is the denigration of clinical teaching."

Federman said that as research in departments of medicine became more fundamental, it has tended to draw the faculty further away from the patient.

"In brief, because of their often minimal role in a clinically responsible capacity, they risk becoming amateurs," the Stanford professor said.

He added that this is the more worrisome because clinical care in the hospital has become much more time consuming, complex, and dangerous.

Federman made his remarks in an article in the current issue of the Harvard Medical Alumni Bulletin. A Harvard medical graduate, he is professor and chairman of the department of medicine of the Stanford University School of Medicine.

He proposed that along with research-oriented faculty, the medical schools should develop faculties which will specialize in the teaching and practice of medicine from a scientific base.

To foster this development, a school has to provide unambiguous signals to young people by the appointment and promotion of people with clinical interests, Federman recommended.

"I feel good teaching can be learned," he said. "Rather than assuming teaching skill in the faculty, I believe it should be part of their training, and be both taught and evaluated.

"For two decades our model has been the person excellent in three areas of patient care, teaching and research. But triple threats are as rare in medicine as in football."

Medical schools, according to Federman, have been reluctant to define standards of teaching quality. As a result many of them have denied themselves of some of their best graduates who would have been interested in a clinical teaching career.

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This is because research generates new knowledge which is published and recognized at a distance, Federman said. The teaching and clinical activities of any school do not easily generate a distant reputation.

Federman said the curriculum and clinical exercises are but a small part of learning for the future doctor. Equally important is the teacher's performance as a physician from whom the students learn how to achieve the blend of science and humanism that characterizes the excellent doctor.

"If you have watched a teenager who likes rock music," wrote Federman, "you know that as soon as she turns on the radio and hears just two bars of music, her foot is tapping, the hands are beating, her chin is bobbing and she's singing.

"She knows every note, every word--and she was never taught it. She has learned without being taught, and a whole pattern of response is cued by the briefest stimulus."

Turning to the future of medicine, Federman suggested that every hospital can and should become a learning hospital "because doctors must continue to learn or else abdicate their goal of providing the best care for every patient."

"Every day of the physician's life should be a learning day," he wrote. "It doesn't matter what hospital you are in, it ought to be a place to learn.

"Thinking of every hospital as a learning hospital would enable us to provide the right intellectual response to the new stress on peer review, on audit, on vouching for the quality of what we do, and on studying and assessing the quality of care.

"But it will only work when the self-demand for clinical excellence is established in the student during medical school."

To attract clinician-teachers, Federman said, universities must stop judging clinicians on the same basis they judge the work of history professors.

"The department of history has to teach history and do research in history, but it doesn't have to make history," he said. "But the clinical departments must do clinical work in order to foster pertinent research and to provide the proper teaching environment."

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Mailed, Tuesday, September 11, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD -- An expansion of patient care, training and research activities was announced today by the Communications Disorders Center at Stanford, a joint program of the Children's Hospital at Stanford and the Stanford University Medical Center.

The expansion coincides with the Center's move into new, more spacious offices at 600 Willow Road, adjacent to Children's Hospital, said Dr. Kathryn Beadle, director of the Center.

Beginning this month, Dr. Beadle said, the Center will focus on four new projects: an experimental class for pre-school children with speech and language disorders; an expanded training program for interns from California State University at San Jose and San Francisco; research plans concerning possible new diagnostic and treatment methods; and assumption of responsibility for patients who were treated previously at the Scottish Rite Institute for Childhood Aphasia at Stanford.

The Aphasia Institute, established at Stanford in 1962, has moved to California State University at San Francisco.

"All services begun under the auspices of the Aphasia Institute will be continued at the Communications Disorders Center," Dr. Beadle said.

The Center's pre-school class, supported by a $10,000 grant from the Luke B. Hancock Foundation of Menlo Park, begins September 17. Its purpose, Dr. Beadle said, will be to increase and improve the children's verbal language skills so they will be better prepared to enter school.

The class will include 10 children ranging in age from 3-1/2 to 5-1/2 years, she said. There are still openings for two children in the class.

Also beginning later this month, Master's Degree candidates in communications disorders from the state universities at San Jose and San Francisco will serve internships at the Center.

The Communications Disorders Center at Stanford was established in 1971, when the Medical Center, Children's Hospital, and Palo Alto Medical Clinic agreed to consolidate their speech and language diagnostic and treatment programs.

The current expansion of services is another step in eliminating costly duplication and achieving improved coordination and efficiency in the delivery of health care, Dr. Beadle said.

The Center's staff of eight speech and language pathologists and one special education teacher handle about 8,000 patient visits per year.

Diagnosis and treatment is provided for all types of speech, language and voice disorders in patients aged 18 months to geriatrics. Services are also provided in a satellite unit at the Palo Alto Medical Clinic.

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Mailed September 10, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Stanford University medical researchers have developed an instrument which permits them to take a small sample of heart tissue from a living patient and study it for evidence of rejection or heart disease.

The instrument, called a bioptome, was pioneered by Japanese physicians 10 years ago, but very few doctors in the West have used it.

Working with Werner P. Schulz, a Peninsula engineer who specializes in microsurgical instruments, Stanford researchers have developed a new bioptome which is shorter and more flexible than the original.

The bioptome is essentially a piece of wire with a clipper at the end. It is inserted into the patient's jugular vein and threaded down into the heart, where it takes a small sample of cardiac tissue. The procedure is done under local anesthetic, and the insertion is viewed through a fluoroscope.

At Stanford the instrument is now used routinely to obtain tissue specimens from patients following heart transplantation, and to make a direct diagnosis of rejection--a common problem in transplants. Previously, the doctors made their diagnosis by studying the electrocardiogram and clinical signs.

The report of the new development appears in a recent issue of the Journal of the American Medical Association. The authors are Drs. Philip K, Caves, Edward Stinson, Anthony F. Graham, Margaret E. Billingham, Todd M. Grehl, and Norman E. Shumway.

"The virtue of the bioptome," Dr. Shumway explained, "is that it permits direct judgment, based on tissue study, of the rejection reaction."

In particular, he said, the bioptome samples help avoid excessive use of drugs to combat the rejection reaction. This is important because the drugs cripple the body's immunological defenses and thus open the way for infections.

Caves, who is now a lecturer in cardiac surgery at the University of Edinburgh, reported that up to now studies of the transplanted heart in living patients have been limited by the lack of a simple, safe biopsy technique.

Caves and his collaborators first tried the new bioptome in transplanted dogs and found they could obtain excellent tissue specimens for microscopic studies.

He subsequently tested the instrument in 10 heart transplant patients, obtaining 20 biopsy specimens "The specimens were valuable in diagnosing acute rejection episodes," he said. "All the patients tolerated the procedure well and there have been no complications."

Stanford physicians, Caves said, plan to apply the new technique to the study of other forms of myocardial disease.

He did the work while at Stanford under fellowships from the British Heart Foundation and the American Heart Association. (Pictures available on request if not included.) Mailed September 5, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD -- Dean Clayton Rich of the Stanford University School of Medicine thinks that a bill banning experiments on human fetuses will jeopardize efforts to insure the delivery of healthy babies in the future.

"I understand the benevolent motivation for the bill, but it is more harmful than beneficial," he said.

Rich said the legislation could interfere with future efforts to learn about human development.

He noted that studying the physiology of the fetus is important because neonatal mortality still remains disappointingly high.

"We need new knowledge to insure the maximum health and well-being of every pregnant woman and newborn child," Rich said.

The dean made his comments in a letter sent to the Assembly Committee on Health, and released Friday (Aug. 31).

A bill, authored by Sen. David Roberti, D-Los Angeles, cleared the Committee on Thursday on an 8 to 0 vote. It would deem experimentation on human fetuses to be unlawful and unprofessional conduct.

Apparently, the bill passed after a witness told of alleged "cruel acts" performed on human fetuses at Stanford Medical School, according to United Press International.

Rich disputed the testimony of James Babcock, a premedical student from the University of California. The testimony was given before the Senate Judiciary Committee and repeated, in part, yesterday.

Babcock, according to Rich, visited Stanford in 1972 with members of the Student Pro-Life Federation.

The student could not have witnessed the described procedures at Stanford because the project had been terminated in 1969, Dean Rich wrote. Babcock could only testify to his interpretation of remarks made by Dr. Robert Goodlin, an associate professor of gynecology and obstetrics.

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Dean Rich defended Goodlin's work "as essential to insure the delivery of healthy babies in the future. The legislation before the committee would prevent such research."

In a separate letter, Dr. Goodlin said that in all studies related to human fetuses, anesthetics were used for humane benefits and to protect the fetus.

He said his purpose was to develop an artificial environment in which a baby could be maintained alive through artificial rescuscitation and feeding of nutrients.

Dr. Philip Sunshine, in written testimony, said progress in the treatment of respiratory distress syndrome, the disease that killed the late President John F. Kennedy's son, could not have been made without techniques developed in conjunction with fetal research.

Sunshine, a Stanford pediatrician, argued that the issues are so sensitive and so important they require an informed judgment on the benefits and risks of such experiments, rather than a ban on all research.

He proposed creation of a committee made up of clergymen, informed laymen, legislators and scientists to review the issues and formulate "a thoughtful approach" to the problem.

"Stanford and other university premature centers are constantly on the forefront of medical practice to save babies that only yesterday would have died," Sunshine said. "We feel your legislation goes to the very heart of such research and, in fact, may foreclose it."

Dean Rich said the complex ethical problem of research on human fetuses now is under review at the national level.

"This review will undoubtedly result in an analysis of the issues and a policy that could be exceedingly useful in considering legislation that would be most beneficial in this State," he said.

The bill, approved by the Assembly Committee on Health, deleted a provision banning human conception outside the womb.

Stanford physicians had opposed this provision as foreclosing research in infertility.

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Business Wire 8/31/73.
Mailed September 4, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: f 321-5310

STANFORD--Two noted professors have joined the faculty of the Stanford University School of Medicine. They are Drs. William Agras, a psychiatrist well known for his work in behavior modification, and Dr. John Nicholls, a neurophysiologist concerned with the relation of the central nervous system to behavior.

Their appointments, effective October 1, were announced by Dr. Clayton Rich, vice president for medical affairs and dean of the Medical School. Dr. Agras is professor of psychiatry, and Dr. Nicholls is professor of physiology.

Former professor and chairman of psychiatry at the University of Mississippi Medical Center, Dr. Agras is an authority on using behavior modification to deal with psychiatric problems. The approach involves helping a patient change his environment or behavior to alleviate symptoms, instead of attempting to understand the causes of his problem through psychoanalysis. The technique was endorsed this year by the American Psychiatric Association.

Dr. Agras, author of numerous scientific publications, is on the editorial boards of several professional journals and is the 1974 editor of the Journal of Applied Behavior Analysis. He has also served on a variety of local and state committees concerned with enhancing mental health services.

A native of England, Dr. Agras, 44, graduated from the Middlesex Hospital Medical School in London, in 1955. Following a year of training in England, he became a psychiatry resident in Canada, first at Montreal General Hospital and then at Montreal Children's Hospital.

From 1959 until 1961, he was a teaching fellow in the Department of Psychiatry at Montreal General Hospital. He subsequently served on the faculty of the University of Vermont College of Medicine for eight years, from 1961 until 1969, when he went to Mississippi.

A neurophysiologist, Dr. Nicholls is interested in how nerve cells work together to produce organized behavior. His studies of the basic mechanisms in central nervous systems in lower animals have contributed to the understanding of the more complex nervous systems of mammals.

Dr. Nicholls, 43, was previously associate professor of neurobiology at Harvard Medical School. Since 1971, he has also been an adjunct fellow of the Salk Institute. He is author of several research publications.

Born in England, Dr. Nicholls received his Ph.D. in physiology in 1955 from London University. After serving as casualty officer at Charing Cross Hospital in London for a year, he did research in physiology at University College, London and at Oxford.

In 1962, he became a research fellow in neuropharmacology at Harvard Medical School. Three years later he joined the faculty of Yale University School of Medicine as associate professor of physiology, where he remained until returning to Harvard in 1968.

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Mailed October 3, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

Editors: Copies of Stanford M.D. available on request, if not included with story.

STANFORD--Astronomical medical malpractice verdicts and skyrocketing insurance premiums for physicians are making the California malpractice picture rather desperate.

A leading consultant to physicians on legal-medical questions, Dr. David S. Rubsamen of Berkeley, who holds both medical and law degrees from Stanford, says the most alarming trend in malpractice suits is the size and frequency of awards.

There have been six medical malpractice awards in California in excess of $1 million--four of them within the last 20 months.

"The public cannot help but be impressed by these verdicts. They not only make a million dollars or more for serious disability seem reasonable, but awards in less severe cases will tend to be inflated as well," Rubsamen said in an interview for the current issue of Stanford M.D., magazine of the Stanford Medical Alumni Association.

He cites the difficulty of insuring physicians, particularly those in high-risk specialties, whether they have had suits against them or not.

In addition, the number of malpractice claims against doctors is increasing at a rate of 15 to 20 percent annually, he says.

Changing sentiment among jurors during the last few years has intensified the problem for doctors. Five or six years ago, says Rubsamen, cases of exceptionally complex medical facts probably would have been won by the defense. Juries in those days seemed reluctant to second-guess medical decision-making, particularly in metropolitan areas. Recently juries have been more willing to find for the patient-plaintiff in complex cases.

Rubsamen foresees further changes in the malpractice picture as the California Supreme Court's recent "informed consent" decision is enforced. This ruling states that the patient has a right to "all information relevant to his decisional process." The patient must be told of alternate treatment methods, unless he requests not to be told.

The patient has the right to decide whether to accept one treatment or another, or to forego treatment because he is unwilling to face a possible complication.

The court has also said that a private physician may not delegate significant responsibility for the care of his private patient without that patient's specific consent.

Rubsamen emphasized that it is not enough for the doctor to tell his patient that a resident of a teaching hospital will be "on the team" cooperating in his treatment. The patient must be made aware that the resident will be performing the operation.

With the prospect of rising awards and increased legal actions, Rubsamen has studied the question of no-fault liability in medical malpractice, and he determined that in the end that system would be as accusatory as the present system.

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Taken literally, he says, a no-fault system means payment for every unanticipated disability resulting from medical intervention or omission. The slightest evidence of medical oversight would "ring the compensation bell."

Under a no-fault system, Rubsamen says, "there would be pressure for defensive medicine far in excess of anything we have today." He cautions that we could end up trying to define ideal care, and paying compensation to any patient who suffered for lack of it.

Instead, the doctor-lawyer suggests another approach: eliminating the jurors, the courtroom, and the judge. With arbitration, an informal hearing would be held in a small office before an arbitrator agreed upon by both defendant and plaintiff.

The arbitrator's decision is usually final, with laws limiting appeal. Advantages, says Rubsamen, would be privacy for both doctor and patient, and quick disposition of cases.

Arbitration, he says, would put a lid on skyrocketing awards for the patient-plaintiff. However, there is also more assurance of a decision for the patient with a relatively trivial disability which an attorney may not otherwise decide is worthwhile to pursue.

Rubsamen feels that the most effective legal reforms over the next 10 to 20 years will be procedural: trial before a judge, select panel, or arbitrator.

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Mailed Wednesday, October 31, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

Editors: Photos available upon request if not included with release.

STANFORD--Stanford engineers are developing an instrument that will harmlessly take pictures of organs inside the human body, using sound instead of light or X rays.

The device is expected to be immensely valuable in medical diagnosis, particularly in cardiology, in abdominal surveys for tumors, in ophthalmology, and in obstetrics when X rays may be harmful.

The Ultrasonic Imaging System (ULISYS) is being developed by Stanford Electrical Engineering Professor James D. Meindl, director of the Stanford Electronics Laboratories, and a team of collaborating engineers and doctors.

The ultrasonic "camera" consists of a cylindrical tube, about 24 inches long, which is connected to a control apparatus and display screen. It works by aiming a concentrated "bundle" of high frequency sound waves at an organ, such as the heart. The echoes produced are processed to form a picture similar to a television image.

The ultrasound waves generated by ULISYS are harmless and cannot be heard, since the pitch or frequency is above the range of human hearing. (The ear can hear sounds between 100 and 20,000 cycles per second; ultrasound in ULISYS is at 3 million cycles per second.)

Because it is a harmless procedure, Dr. Meindl foresees the ULISYS becoming a standard examining tool in pregnancy. He describes the procedure as quick, accurate, and low cost.

In cardiology, the kind of information supplied would not ordinarily be available. In part it can be obtained with the use of catheterization and other invasive procedures which entail hospitalization and potential risks to the patient. (Catheterization involves passing a small tube into a vein in the arm and through the blood vessels into the heart.)

The ULISYS can picture the heart in continuous action as seen on a television screen.

Dr. Meindl notes that sound waves are particularly suited to carrying such images, since they travel well through solids, and particularly well through liquids, which make up a high percentage of the human body.

Ultrasonic diagnosis is an established clinical technique in several medical areas, such as obstetrics, gynecology, and cardiology. To date, however, it has been limited almost exclusively to use of a single, pencil-like beam or signal which is echoed back to a receiver. In this way the depth of a particular structure can be determined.

In ULISYS, however, many sound beams are emitted, then processed, to form a more real, two dimensional, picture of the structure.

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222--ULISYS

Ophthalmologists are currently using a pencil-like beam of ultrasound to search for disease states and foreign bodies in the eye. In the future, with use of ULISYS, they will be able to obtain a more thorough and accurate picture.

According to Dr. Meindl, the unique instrument is more than two years away from being available as a commercial device for use by doctors.

He, and collaborators Drs. James Plummer, Maxwell Maginness and others, are at work on improving the resolution--or clarity--of the reflected image, on making larger fields of view possible, and on improved television displays.

The engineers see the instrument as a valuable complement to X-ray procedures, enabling doctors to see pictures, like that of the heart, not possible with radiation techniques.

Besides medical applications the instrument may find testing uses, as in detecting an interior flaw in a metal object such as a propeller blade. It may also find uses, says Meindl, in underwater imaging.

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FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--Stanford University Hospital has embarked on a campaign to discourage smoking. Signs that read "thank you for not smoking" have been posted in patient care areas.

"In a polite fashion, we are trying to dissuade people from smoking in patient care units," said Dick Pettingill, assistant director in Nursing Services, who is coordinating the campaign. "We hope that employees and visitors will abide by the suggestion and confine their smoking to lounges or solariums outside the patient units."

For patients bothered by smoking, the Hospital provides a sign they can hang on the door or above the bed to indicate they would prefer not to have their visitors smoke in the room. The sign consists of the international stop logo with a burning cigarette in the middle.

The campaign will eventually be extended throughout the Medical Center, according to Pettingill. For some time, sales of cigarettes have been prohibited within the Medical Center and the Hospital gift shop is phasing out its inventory of cigars and tobacco.

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Mailed Tuesday, October 30, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--A group counseling program for dying patients has been launched by a psychiatrist at Stanford University School of Medicine.

The service, begun three months ago, is designed for a small group of patients who are aware they have a life-threatening illness or an illness which will shorten their life span, said Dr. Irvin Yalom, professor of psychiatry at Stanford.

"The group provides a place where these patients can talk openly and share their thoughts on dealing with the prospect of death as well as the optimal ways to live the rest of their lives," Yalom said.

"In many respects, the real focus is on living," he continued. "Facing the prospect of death can help these patients achieve a new perspective on life and perhaps re-cast their remaining life in a different and more gratifying way."

Yalom noted that death is in many respects a taboo subject in our society.

"These patients welcome having a forum where they can talk about topics which are often taboo," he said. "Usually, they have to keep these things to themselves, since the outside world believes they don't want to talk about them."

At the same time, the psychiatrist said, patients themselves are often reluctant to discuss their thoughts about death with others.

"The patients feel they shouldn't put an additional burden on relatives in their grief," he said. "They're also afraid that talking about it will drive away doctors and nurses.

"So, in effect, there is a mutual misunderstanding. What results is a conspiracy of silence about the subject of death."

Because of this, Yalom feels the group counseling service "can have a real benefit."

Patients in the group have wanted to discuss many things, including their own thoughts about death, the effect of their condition on their families, ways of overcoming feelings of isolation, and the best ways to utilize their remaining life span.

Yalom, who has many years of experience in group therapy, has "no set doctrine" he wants the participants to adopt.

"I'm not trying to strip away patients' defenses," he said. "But many people believe that it's possible to face death openly and courageously. This allows one to face death with dignity, instead of the usual silent conspiracy about someone dying."

Up to this point, doctors have reacted somewhat unenthusiastically to Yalom's program, but he feels this reaction is understandable.

"To some extent, doctors are threatened by the dying patient," he said. "In many cases, the physician backs off and tries to avoid the patient. He fears his own failure, and fears there is nothing more he can do. He believes his presence is unwanted by the patient, when, in fact, the patient really wants him there."

Yalom expects to keep his group down to a half-dozen persons, although additional groups may be added if the need arises. Patients can be self-referred or referred by physicians.

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Bus. wire & mailed 10/25/73

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

ADVANCE FOR P.M. RELEASE WEDNESDAY, OCTOBER 24, 1973.

STANFORD--An enzyme test, until recently used for research, can now be applied to the diagnosis of heart attacks which cannot be detected by the electrocardiogram, a Stanford University pathologist reported Wednesday (Oct. 24).

The enzyme, called creatine phosphokinase (CPK) plays an important role in the energy storing mechanism of tissues.

Scientists have known for some time that a rise of total CPK in patients' blood serum is associated with heart attacks. But because abnormal values may be caused by a multitude of other factors--for example, physical activity and pain-killing drug injections also cause a rise in total CPK--its clinical usefulness was severely limited.

Now, however, a Stanford medical research team, building on the work of Dr. Frank Elevich of Mt. Zion Hospital and Medical Center in San Francisco, has analyzed the sources of elevated CPK in a heart attack and confirmed the three possible patterns by which CPK leaks into the blood rum.

The researchers have found three sources of CPK elevation--heart, brain and skeletal muscle. One characteristic pattern of CPK rise was found specifically in patients after a heart attack and in those who suffer from muscular dystrophy.

Dr. Paul Wolf, associate professor of pathology and director of the Stanford clinical laboratories, said the test was a sensitive indicator and specific to these diseases. The test is now used in certain types of cardiac and open-heart surgery patients at Stanford.

He said the test will detect whether a heart attack has caused heart muscle damage when it cannot be diagnosed by the electrocardiogram.

The research was reported at the meeting of the American Society of Clinical Pathologists in Chicago. Wolf's collaborators included Dr. James Lauridson, Jeane Albrecht, and Terry Kearns.

Wolf said the test can also be used to identify persons who are sensitive to general anesthesia, and prevent the relatively rare but fatal condition, malignant hyperthermia or hyperpyrexia. This reaction is characterized by a rapid increase of the patient's temperature which cooks the blood vessels.

He said prevention may now be possible by identifying the susceptible individuals. He said recent studies at Stanford and in other centers have shown that this susceptibility runs in families, and detection of raised CPK has indicated these individuals.

Wolf said the test is simple, inexpensive, and can be easily performed in every hospital clinical laboratory by taking a small blood sample and placing it in an electric field instrument. The test result is determined by simple stain of the blood. If heart muscle damage has occurred, only the heart CPK pattern is present.

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10/23/73

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Dr. W. Maxwell Cowan, an internationally-known expert in the structure and development of the brain and nervous system, has been appointed professor and chairman of the Departments of Anatomy and Physiology at the Stanford University School of Medicine.

His appointment, which culminated a nationwide search, was announced Tuesday (October 23) by Dr. Clayton Rich, vice-president for medical affairs and dean of the Medical School. It becomes effective July 1, 1974.

Dr. Cowan's appointment follows the announcement earlier this year of a $7.5 million grant from the Sherman Fairchild Foundation for the construction of a Center for the Neurosciences at Stanford.

The Center, to be completed in early 1976, will house the Departments of Anatomy and Physiology, as well as research laboratories and classrooms. Both departments are currently in quarters at some distance from the Medical Center.

"We believe," Dr. Rich said, "that a major frontier for important scientific advances in the t decade will be the field of neurosciences--the search for better understanding of the brain and nervous system, the intellectual processes, and mental disorders.

"Because of this fine appointment, construction of the Fairchild Center, and an opportunity to attract additional outstanding faculty members, Stanford is in a unique position to advance the study of the brain."

Dr. Cowan, 42, has been professor and chairman of the Department of Anatomy at the Washington University School of Medicine in St. Louis since 1968.

He is noted for pioneering research on the structure and connections of those parts of the nervous system involved in emotion and memory. Also, his studies of the mechanisms of the nervous systems in avian models have led to a better understanding of the development of the visual system.

His recent research has focused on the problems of how nerve fibers make appropriate connections in the brain during development. He and his associates determined that nerve fibers from the developing eye return to the brain to make connections with appropriate nerve cells, so that the picture of the world seen by the retina is accurately transmitted to the brain.

They found evidence that two mechanisms were at work: growing nerve fibers must have an identifying chemical marker which is recognized by the appropriate target nerve cell; and a first come, first serve, principle seems to exist in the distribution of available cites on target nerve cells.

Dr. Cowan is also investigating the applications of computers to the collection and analysis of anatomical data concerning the brain and nervous system. An automated radiographic method of tracing nervous system pathways was perfected in his laboratory.

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222--W. Maxwell Cowan appointed

A native of Johannesberg, South Africa, Dr. Cowan received the B.Sc. degree from Witwatersrand University in Johannesberg in 1951. He obtained both the Ph.D. in 1956 and the B.M., B.Ch. (equivalent to the M.D.) in 1958 from the University of Oxford in England.

He taught on the staff at Oxford until 1966, when he was appointed associate professor of Anatomy at the University of Wisconsin School of Medicine. In 1968, he became professor and chairman of Anatomy at Washington University, where he had served as a visiting associate professor in 1964 and '65. He was also appointed professor or bioengineering at Washington in 1971.

Formerly managing editor of the Journal of Comparative Neurology, Dr. Cowan is the author of over 60 scientific publications and textbook chapters.

He is a fellow of the Royal Microscopical Society and a member of the Anatomical Society of Great Britain and Ireland, the American Association of Anatomists, and the Society for Neuroscience. In 1971 he was appointed to the Board of Scientific Counselors of the National Eye Institute in Bethesda, Md.

In Stanford's Anatomy Department, Dr. Cowan will succeed Dr. Robert A Chase, professor and chairman of the Department of Surgery, who took over as acting Anatomy chairman when Dr. Donald Gray retired Sept. 1.

In physiology, he will succeed Dr. Maurice Krahl, who will retire next year.

Dr. and Mrs. Cowan have three children--a daughter, 16, and two sons, 14 and 11. They plan to live on or near the Stanford campus.

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Mailed, Tuesday, October 23, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Seventy-two percent of patients treated by Stanford's medical linear accelerators for cancer limited to the prostate gland survived at least five years after treatment, and 44 percent at least 10 years, two radiologists have reported on the basis of 16 years experience.

In a restrospective study of 405 patients treated at Stanford, this high survival rate was found in patients who malignancy was limited to the prostatic capsule.

However, the radiologists said, cancers that extend beyond the prostate to surrounding tissue are more difficult to treat. In such patients they found a significant decrease in survival--51 percent at 5 years, and 38 percent in 10 years.

Results of the study were presented Saturday (Oct. 20) at the International Congress of Radiology in Madrid, Spain. Authors of the report are Dr. Malcolm A. Bagshaw, and Dr. Gordon R. Ray of the department of radiology of the Stanford University School of Medicine.

According to Bagshaw, survival rates depend on the degree to which lymph glands are involved. "It appears there is better survival for the more limited disease," he said.

To determine more precisely the degree of cancer involvement before a method of radiation treatment is selected, future Stanford patients will undergo special diagnostic procedures as well as surgical staging (exploratory surgery for purposes of diagnosis). The radiologists hope that by defining more precisely the area involved, especially if adjacent lymph nodes are affected, the extended field of radiation treatment will bring about increased cure rates.

"Prostatic cancer is an important malignancy, especially in Caucasians and Blacks," said Bagshaw. "The incidence is equal to colon cancer, and each of these is second only to cancer of the lung as being the most lethal cancer in the male."

Cancer of the prostate kills some 18,000 men annually in the United States. The prostate gland is part of the male reproductive system, lying below the bladder and surrounding part of the canal that empties the bladder.

The disease may produce two quite different kinds of symptoms. One kind, due to the enlargement of the prostate itself, consists of urinary difficulty. The other is pain in other parts of the body, for instance in the lower spine, resulting from spread of the disease to the bones of the skeleton.

While surgical removal of the prostate remains the treatment of choice in a small percentage of carefully selected patients, according to Bagshaw, "for many patients whose tumor, though still localized to the prostate, is too extensive to be cured by surgery, there has been no definitive treatment available."

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It is for these patients, Bagshaw said, "that we believe treatment with external beam radiotherapy has its greatest curative potential."

He added that in cases where the tumor has extended to other parts of the pelvis, radiotherapy is the only treatment that is both widely applicable and potentially curative.

The Stanford radiologists also studied the impact of radiotherapy on potency. Sixty-one percent of the patients who alleged potency before therapy stated they had remained potent after treatment, Bagshaw said.

He stressed that the interval between diagnosis and therapy was relevant to the five-year survival rates, with delay of more than one year having an adverse effect.

He recommended that digital examination of the prostate should be made an unfailing part of every physical examination in the male.

"If the cancer is less than one centimeter in diameter and surrounded by compressible, normal feeling prostatic tissue and relatively low-grade malignancy, surgery may be used," he said.

If, on the other hand, the lesion is more extensive but limited to the prostate, aggressive radiation therapy is the treatment of choice, the radiologist added.

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Business Wire 10/22/73

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD -- A government-sponsored panel Wednesday (Oct. 10) warned that operating room staffs may be exposed to potentially serious health hazards.

The panel suspects that chronic exposure to trace amounts of anesthetics that leak into operating rooms may relate to increased incidence of cancer, liver disease, miscarriage, and birth defects. Such contamination has only recently been measured and seems to be present in all operating rooms.

Emphasizing the preliminary nature of the report, the scientists declined to disclose specific incidence figures until the study is finished early next year.

But given the importance of the data, they felt justified to issue a warning, and a statement is being sent to the nation's hospitals urging them to take measures as rapidly as possible to reduce operating room contamination.

Reduction of trace concentrations of anesthetic gases can be achieved by installation of a scavenging system which vents them out of the operating room, the scientists said. Many hospitals have already put such devices in operation.

The report is based on a nationwide epidemiologic survey of operating room personnel. It was scheduled for release later this week in Washington by the National Institute of Occupational Safety and Health (NIOSH) which sponsored the work. However, part of the report was made public Tuesday at the meeting of the American Society of Anesthesiologists (ASA) in San Francisco.

With the assistance of the ASA, American Association of Nurse Anesthetists, Association of Operating Room Nurses, Association of Operating Room Technicians and American Society of Oral Surgeons, a questionnaire was designed and mailed to their members, according to the report. The study was carried out by an ad hoc committee of the ASA headed by Dr. Ellis Cohen, professor of anesthesia at the Stanford University School of Medicine.

Control groups consisted of members of the American Academy of Pediatrics and segments of the American Nursing Association and American Dental Association. These groups normally do not receive chronic exposure to anesthetic agents.

A total of 81,287 questionnaires were distributed, augmented by some 33,000 follow-up letters. To date, 43,173 questionnaires have been returned. The information obtained so far has been entered into computers and is being analyzed by Stanford biostatisticians.

The scientists are careful to point out that showing a relationship between employment in the operating room and an increase in the incidence of miscarriage or other disease is no proof of causation, but they have tried to examine common factors between control and exposed groups.

"Even though human evidence for a cause-effect relationship is not available, we have to assume on the basis of animal experiments that waste anesthetic gases may be responsible," they said.

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Their statement calls attention to these findings:

Miscarriage: Studies of more than 24,500 pregnancies confirm previous reports that exposure of the pregnant woman to the operating room environment increases her risk of spontaneous abortion.

Cancer: Female physician anesthetists may show an increase in susceptibility to cancer, but this is not true for male physicians. Earlier reports that nurse anesthetists have an increased incidence of cancer could not be confirmed.

Liver disease: There is suggestion of a substantial increase in the risk of liver disease among exposed physicians, nurse anesthetists, and oral surgeons. This risk appears equally applicable to males and females.

Birth defects: There is an increase in the incidence of congenital anomalies in children of women who work in operating rooms. The incidence appears related to the degree of operating room exposure.

"The need to assure safe and healthful working conditions for hospital workers is critical," the scientists said.

Presently, federal authorities are evaluating the results of a survey of hospital employee health services. The survey indicates a lack of positive programs to identify early pregnancy and to counsel employees before and during pregnancy about potential hazards to the unborn child, the researchers said.

NIOSH, in cooperation with the ASA ad hoc committee, will recommend standards on waste anesthetic gases including work practices and control procedures for removing them from operating rooms. (A model scavenging device for venting gases out of the operating room has been designed by Stanford professor Charles E. Whitcher, and further investigations in this area are currently being conducted at Stanford.)

Members of the ASA scientific panel are: Ellis N. Cohen, chairman, Stanford; Byron W. Brown, Stanford; David L. Bruce, Northwestern University; Helmut F. Cascorbi, Case-Western Reserve University; Thomas H. Corbett, University of Michigan; Thomas W. Jones, American Society of Oral Surgeons; and Charles E. Whitcher, Stanford.

NIOSH members include Joseph K. Wagoner, Victor E. Archer, Philip Bierbaum, and Jane A. Lee.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFROMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Dr. Bruce N. Goldreyer, a prominent researcher in heart disease, will deliver the 10th annual John Kent Lewis Memorial Lecture Monday, October 15, at Stanford University School of Medicine.

His talk, "Paroxysmal Supraventricular Tachycardia--Its Mechanism and Therapy," will begin at 4:15 p.m. in Room M106 at the Medical School.

Dr. Goldreyer, formerly assistant professor of medicine and director of the Medical Intensive Care Unit at the University of Pennsylvania, is clinical assistant professor of medicine at the University of Southern California.

The 32-year old cardiologist is an expert on the electrophysiology of the heart, particularly the geneses and mechanisms of irregular heart rhythms. Paroxysmal supraventricular tachycardia is an abnormally fast heartbeat occurring in sudden attacks.

Earlier this year, Dr. Goldreyer was named an Established Investigator of the American Heart Association. He has authored numerous scientific articles and textbook chapters on cardiac physiology and disease.

A native of Brooklyn, New York, he received his A.B. from Amherst College in 1961 and his M.D. from Columbia University in 1965. He served his internship and residency at the Columbia-Presbyterian Medical Center.

The John Kent Lewis Memorial Lectures are presented in honor of the former chief of the Stanford Medical Service at San Francisco General Hospital. Dr. Lewis was a 1922 graduate of Stanford Medical School. A noted pioneer in heart research, he died in 1961.

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Mailed, Wednesday, October 10, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: Photos available on request if not included with release.

STANFORD -- A small house located on hospital grounds has become "home" to many physically handicapped patients and their families at Stanford University Hospital.

The fully-furnished house serves as a temporary residence for patients and families who must learn to cope with a long-term handicap or disability.

Prior to his discharge from the Hospital, the patient and his family move into the house for a transitional two-to-five day period. During this time, family members are trained to perform nursing and physical therapy tasks, such as helping the patient into a wheelchair, turning him in bed, transferring him to a chair, and bathing him.

Having received this training, family members can more effectively manage the patient when they all return home, Stanford physical therapists believe.

The program, called "Family Focus," is the only one of its kind in the country. It was established two years ago by the Division of Physical Therapy at Stanford Medical School. After a year of planning and preparation, the first patient and family moved in 14 months ago.

To date, 27 families have made "Family Focus" their temporary home. During their stay, patients continue to receive all necessary medical services, and 24-hour nursing coverage is provided.

A large number of patients in the program have been elderly individuals, including some suffering from cancer and others learning to walk following total hip replacement. However, the program has also included a four-month-old baby with a damaged respiratory system and a young mother who suffered a stroke and temporary paralysis during childbirth.

"We have had both 'uphill' and 'downhill' patients," says Stanford physical therapist Elaine Hansen. "For the uphill group, which includes many patients recovering from a stroke, accident, or operation, our aim is to increase function.

"The downhill group consists of patients who must learn to adjust to loss of function. This is true for many cancer patients. Here our focus is on the family, and helping them do more for the patient."

The house, located directly behind Stanford Hospital's Hoover Pavilion, consists of a living room, family room with eating area, kitchen, bedroom and bath.

At the same time it functions as a home, the house is a classroom for both the families and interns from Stanfords' Master's Degree program in physical therapy. A second bedroom in the center of the house serves as an observation room. With the family's permission, first-year interns observe treatment and family training sessions.

Each family works directly with Stanford physical therapists and one second-year intern who is given the opportunity to carry out much of the treatment and instruction.

"The interns act as instructors for the patients and families, in addition to providing treatment," says program coordinator Kay Shepard. "They see a different kind of role for themselves in terms of including the family as part of the healing team."

Within a three-month period after discharge, three follow-up visits are made to the patient's home by the intern and his instructor.

The follow-up visits are part of an effort to evaluate the success of the program. "Family Focus" patients will be compared to control patients who were not involved in the program, but had similar handicaps and received follow-up visits on the same schedule.

"Though we are continuing to gather data, our impressions are very positive," Miss Shepard says. "In some instances, physicians referred cases here to demonstrate to family members that they could not handle the patient and shouldn't take him home. But in each instance, the families proved much more capable than expected."

The program has been supported by the U.S. Public Health Service's Bureau of Allied Health Manpower Education. The $72,500 per year grant was originally scheduled to run five years. However, because of cutbacks in federal funding, continuation of the program beyond June of 1974 is uncertain, according to Helen Blood, director of the division of physical therapy at Stanford.

In addition to the physical therapists from the Medical School, the "Family Focus" staff includes psychologists John E. Bell and Norma Davies, who provide consultation in helping the patients and families adjust to the handicap. ###

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD--Two noted professors have joined the faculty of the Stanford University School of Medicine. They are Drs. William Agras, a psychiatrist well known for his work in behavior modification, and Dr. John Nicholls, a neurophysiologist concerned with the relation of the central nervous system to behavior.

Their appointments, effective October 1, were announced by Dr. Clayton Rich, vice president for medical affairs and dean of the Medical School. Dr. Agras is professor of psychiatry, and Dr. Nicholls is professor of physiology.

Former professor and chairman of psychiatry at the University of Mississippi Medical Center, Dr. Agras is an authority on using behavior modification to deal with psychiatric problems. The approach involves helping a patient change his environment or behavior to alleviate symptoms, instead of attempting to understand the causes of his problem through psychoanalysis. The technique was endorsed this year by the American Psychiatric Association.

Dr. Agras, author of numerous scientific publications, is on the editorial boards of several professional journals and is the 1974 editor of the Journal of Applied Behavior Analysis. He has also served on a variety of local and state committees concerned with enhancing mental health services.

A native of England, Dr. Agras, 44, graduated from the Middlesex Hospital Medical School in London, in 1955. Following a year of training in England, he became a psychiatry resident in Canada, first at Montreal General Hospital and then at Montreal Children's Hospital.

From 1959 until 1961, he was a teaching fellow in the Department of Psychiatry at Montreal General Hospital. He subsequently served on the faculty of the University of Vermont College of Medicine for eight years, from 1961 until 1969, when he went to Mississippi.

A neurophysiologist, Dr. Nicholls is interested in how nerve cells work together to produce organized behavior. His studies of the basic mechanisms in central nervous systems in lower animals have contributed to the understanding of the more complex nervous systems of mammals.

Dr. Nicholls, 43, was previously associate professor of neurobiology at Harvard Medical School. Since 1971, he has also been an adjunct fellow of the Salk Institute. He is author of several research publications.

Born in England, Dr. Nicholls received his Ph.D. in physiology in 1955 from London University. After serving as casualty officer at Charing Cross Hospital in London for a year, he did research in physiology at University College, London and at Oxford.

In 1962, he became a research fellow in neuropharmacology at Harvard Medical School. Three years later he joined the faculty of Yale University School of Medicine as associate professor of physiology, where he remained until returning to Harvard in 1968.

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Mailed October 3, 1973.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Harry Schwartz, member of the editorial board of The New York Times, will be the luncheon speaker at the Big Game Reunion of the Stanford Medical Alumni Association Friday (Nov. 23) in the Palo Alto Holiday Inn.

Schwartz, author of a new book, "The Case for American Medicine," clearly believes that neither a crisis nor even any serious problems exist in American health care, and is therefore skeptical of widely touted proposals for improving it.

In his book, Schwartz not only thinks that medical care in the United States is the world's best, but he challenges those zealous advocates of change whose arguments largely consist of a recitation of horror stories and a damnation of doctors as villains.

Schwartz questions the estimate of a current doctor shortage of 50,000, and argues that available examples of health maintenance organizations (HMO's) should be examined critically before the federal government spawns a string of them across the country.

And it is very useful, according to Schwartz, to compare infant mortality rates in several countries not only in rough totals as is usually done but, among other ways, in terms of population densities. On such a basis he finds that the infant mortality rate of New York City is about the same as that of Moscow or Leningrad.

Schwartz says that the technological marvels of American medicine, exotic as they may sometimes seem, shouldn't be ignored for they are saving thousands of lives.

He also thinks it may be an illusion, as some believe, that changes in the health care system will greatly improve the nation's health, which may be more affected by diet, housing, atmospheric conditions, and education than by medical treatment.

Schwartz does not imply that American medicine is perfect, that the status quo must be preserved intact, or that improvement is impossible. He recommends improvements in two aspects:

Funding a system of catastrophic medical insurance, with "limits to preserve expensive abuses," is not an unreasonable step for the federal government to take.

Training programs in specialties where there is a surplus of doctors should be drastically reduced, and financial incentives should be offered to correct imbalances. The number of neighborhood health centers should be increased. And "the medical profession might designate certain geographic areas that are best supplied with physicians as areas of doctor surplus and attempt to discourage other physicians from moving to the surplus areas for some periods of time."

Following Schwartz's talk, Dean Clayton Rich, vice president for medical affairs and dean of the School of Medicine, will report on medical school facilities and academic planning.

Alumni sessions in the morning will be devoted to presentations by the new chairmen of psychiatry, pediatrics, anesthesia, neurology, radiology and medicine. The morning sessions will be in Room M106 of the Medical School.

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Mailed, Wednesday, November 21, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Stanford University Medical Center has launched a comprehensive energy conservation program, assistant vice-president for medical affairs Peter Carpenter announced Monday (November 19).

"We intend to minimize energy usage wherever possible," Carpenter said. "At the same time, our top priority is to insure that we have the necessary energy supply to meet our patient care responsibilities and support long-term research projects."

Several steps to conserve energy have already been taken.

The fountains and decorative lights in front of the Medical Center have been turned off, and the hot water temperature on all hot water systems has been turned down, chief engineer James McNally said.

Additionally, all escalators are being shut down from 9 p.m. to 6 a.m., and the Center's corridors are being left on half lighting 24 hours a day, except for nursing units, McNally said.

Two fluorescent light tubes are being removed from all four tube light fixtures, and all non-essential air conditioning is being disconnected, he added. Weekend energy service is being reduced, except for vital patient care requirements.

McNally said that Medical Center officials became aware last spring that an energy crisis was likely this year, and immediately began considering possible conservation measures.

Currently, his staff is making an intensive energy survey of the 1 million square foot center.

"We want to get input from all departments so that, in planning future energy conversation efforts, we do not in any way jeopardize patient care or research activities," he said.

Contemplated future measures include: a shut down of certain extra elevators from 10 p.m. to 6 a.m.; encouragement of employees to remove fans, foot warmers, and coffee pots; removal of electrical cords from unnecessary window air conditioners; and shutting off of circuits at panels where other service is not affected.

Additionally, McNally said, efforts will be made to conserve energy in all future renovation projects in the Medical Center.

The energy resources utilized in the operation of the Medical Center are primarily natural gases, fuel oils, and electricity. Electricity generated by the Bureau of Reclamation hydro-electric dams and power stations is supplied by the City of Palo Alto.

Steam for the Center's heating and hot water needs is provided by the University's Steam Plant. The Plant's main source of power is natural gas from Pacific Gas & Electric. A backup system produces steam by burning fuel oil.

The Hoover Pavilion has its own boilers for the generation of steam and hot water. The primary source of power is natural gas, with fuel oil as the backup system. ###

Mailed, Monday, Nov. 19, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

Editors: The press is invited to attend this symposium. The Children's Hospital is located at 520 Willow Road.

STANFORD--The ninth annual Harold K. Faber Clinical Symposium will be held Friday (Nov. 16) beginning at 9 a.m. in the Children's Hospital at Stanford.

Three papers will be presented at the meeting. Dr. Norman Kretchmer, Harold K. Faber professor of pediatrics at Stanford, will talk on the "Evolutionary Aspects of Human Nutrition." Dr. Louis K. Diamond, professor of pediatrics at the University of California Medical School, will speak on "Splenic Function, Asplenia and Splenectomy."

The Faber lecture, "Who Will Take Care of the Child?" will be presented by Dr. Waldo E. Nelson, professor of pediatrics at Temple University Medical School, Pennsylvania.

Luncheon will follow at the Children's Hospital.

The symposium honors Dr. Faber, a distinguished San Francisco pediatrician, Stanford emeritus professor of pediatrics, and former medical director of Chidren's Hospital at Stanford.

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Business Wire, Thursday, November 15, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Stanford University specialists in the treatment and prevention of heart disease will be featured in a 90-minute documentary to be telecast Monday, November 19, at 8 p.m. on KQED (Channel 9).

The program, entitled "Heart Disease: The 20th Century Epidemic," is the premiere of a five-part series called "The Killers," dealing with five major causes of death in this country.

Stanford's heart transplantation program is extensively covered in the documentary. Included are the following: an interview with Dr. Eugene Dong, Jr., director of the clinical transplantation program, concerning the present and future status of heart transplants; film of a cardiac biopsy being performed on a patient; and an interview with transplant patient Ralph Trout at his Menlo Park home. Trout has survived four and one half years with his transplanted heart.

Stanford's efforts to combat heart disease through a mass media behavior change campaign in Watsonville and Gilroy will also be featured in the documentary. Dr. John Farquhar, director of the University's Heart Disease Prevention Program, will discuss the effort, and two of the television spots being utilized in the campaign will be shown.

A locally produced half-hour show, "Postscript: Bay Area," will follow the 90-minute documentary. A panel of Bay Area physicians, including Stanford's Dr. Farquhar, will discuss local heart services.

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Mailed, Wednesday, November 14, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--The Stanford University Medical Center Auxiliary surpassed the million hour mark in service to the Hospital last month. Those hours represent the equivalent of 490 people working full time for a year.

"Highly motivated and dedicated, members of the Medical Center Auxiliary have a level of skill that the Hospital could not otherwise afford to recruit," said Paul Hofmann, deputy director and administration liaison to the Auxiliary. "Their support and assistance unquestionably have played an integral role in the delivery of health care at Stanford."

The organization, formed in 1929 as the Palo Alto Hospital Auxiliary, expanded considerably when the Medical Center opened in 1959. Functioning without the assistance of even one paid employee, it now has over 1000 members, including 20 men.

Through its two gift shops, baby photo service and annual dues, the Auxiliary has raised close to $330,000 for the Hospital. Among its major gifts, have been the Hospital's blood bank, the surgery unit at Hoover Pavilion and a special room for heart transplant patients.

"Yet, the contribution of the Auxiliary is far greater than hours of dollars could possibly reflect," Hofmann points out. On behalf of the Medical Center, he has nominated the group for a National Volunteer Award, given each spring by the National Center for Volunteer Action in Washington, D.C. to an individual and a group.

"Although the Medical Center pays tribute to the accomplishments of the Auxiliary, the attitude and spirit of its members deserve broader acknowledgment," Hofmann added.

Each month, some 600 volunteers assist Medical Center staff, patients and visitors through a variety of projects. They help transport patients, deliver messages, lab specimens and reports for staff, and offer aid to relatives of patients in the intensive care unit, emergency or operating rooms.

The sum of these daily activities adds up to a contribution that is invaluable not only to the Hospital, but to the individual patients as well. As Mary Bohler, Auxiliary president, puts it:

"The lessening of tension on the face of a patient being wheeled for treatment by an Auxilian; the words of appreciation from families waiting anxiously outside surgery; the smile of a child who starts home with a puppet made by the Auxiliary as a parting gift--these are the things that make volunteering worthwhile."

While Mrs. Bohler emphasizes that it is the Auxiliary as a group which should be recognized, one member deserves special mention. She is Ann Ramsay, head of the Hoover Pavilion gift shop, who has donated over 15,000 hours to the Hospital.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Memorial services will be held Thu[illegible] p.m. in the First Presbyterian Church, Palo Alto for Marshall V. Virello, director of development at the School of Medicine and an associate general secretary of Stanford University.

Virello, who lived at 727 Northampton Drive, died Saturday in Los Angeles after suffering a heart attack. He and his wife Merrium had arrived at the Los Angeles Coliseum to attend the Stanford-University of Southern California football game when death came. Virello was 58.

A lifelong resident of Palo Alto, he was educated in the local schools, at San Jose State College and Stanford (class of '36). He began his career at the Palo Alto Times, where he rose to advertising manager in 1942. He was a public relations specialist with Pacific Gas and Electric Company from 1944 to 1949 and with the California Physicians Service for 11 years before accepting a post as director of public relations at the California and Hawaiian Sugar Refining Corp. Ltd.

Virello was a member of the General Secretary's Office at Stanford since 1965, and had worked extensively on foundation and major gift projects for the University and the School of Medicine.

Active in youth, church and community service, Virello had served since 1970 as president of Community Housing, Inc., a nonprofit corporation established to provide integrated low income housing for senior citizens. In the early 60's he also served on the advisory committee on public information for the City of Palo Alto.

In 1956-57, he was president of the San Francisco Advertising Club and two years later was chosen "1959 Advertising Man of the Year" in San Francisco.

He was a member of the First Presbyterian Church in Palo Alto, chairman of its building committee from 1952 to 1954, and an elder from 1958 through 1964. He was a member of the Public Relations Society of America, San Francisco Advertising Club, Commonwealth Club of California, and Press Club of San Francisco.

Survivors include his wife, Merrium, and four children: Mrs. Robert Moore of Honolulu; David, Steven and Marshall.

The family requests that memorial contributions be made to the Stanford University School of Medicine.

Tinney Funeral Chapel in Palo Alto is in charge of arrangements.

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Mailed, Monday November 12, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Stanford University physicists and heart specialists are now measuring heart blood flow and other functions through a new device which detects the heart's magnetic signals.

The new technique, still in the experimental stage, is noninvasive, safer and can be repeated more often than present methods to diagnose heart conditions.

A patient is placed in a magnetic shield which reduces magnetic interference from power lines, autos and other sources. A superconducting magnet is aimed at the heart to boost the normally weak earth's magnetic field encompassing the heart so that changes produced by blood flow can be picked up by a magnetometer, and recorded and analyzed by computer.

The device records two signals. One is the heart's magnetic field generated by its electrical activity and called the magnetocardiogram. The second signal, called magnetic susceptibility flow (MSF), is generated by the heart's contractions in the constant magnetic field created by the magnet. This signal measures the blood flow.

The magnetocardiogram is not a new concept. Its existence has been known for years through the pioneering work of Prof. David Cohen of the Massachusetts Institute of Technology.

"But the detection of magnetic signals corresponding to blood flow in the heart is new and may revolutionize diagnostic techniques in cardiology," said Dr. Donald Harrison, professor of cardiology at the Stanford University School of Medicine.

The technique is the work of a physics graduate student, John P. Wikswo, Physics Professor William F. Fairbank, and Dr. James E. Opfer. Other collaborators include Drs. Harrison and William D. Barry of the cardiology division.

"Magnetic measurements applied to the heart would be valuable for screening apparently healthy people for the presence of heart disease and also for following quantitatively a patient's disease," the researchers said.

Wikswo said the technique is expected to provide information about the heart which now can only be obtained through catheterization.

The latter is a diagnostic method by which a thin plastic tube, a catheter, is inserted into the heart chambers to take blood samples and measure pressure readings. It has its drawbacks because it is invasive, requires hospitalization, and cannot be used as often as needed for patient follow-up.

-more-

"Magnetic measurements have been an important tool in physics, but they have not been applied to medicine," Wikswo said.

"The reason," he explained, "is the small magnitude of the biologically produced magnetic signals, and the large signals present as magnetic noise in the environment."

Wikswo said these difficulties have now been overcome by the superconducting magnetometers and the construction of the special shield.

The experimental shield used in the present studies is a well 6 1/2 feet in diameter and 25 feet deep. The walls are made of special iron alloy panels backed by plastic foam to reduce vibration. Each panel can be demagnetized by an electric system. Eight feet above the bottom of the well is a fiberglass bed bolted to the floor. A superconducting magnet connected to a magnetometer is attached to a support platform above the bed and can be aimed at all desired positions to the patient's chest. The patient will enter the well at the bed level.

The superconducting magnet generates a constant magnetic field 200 times that of the earth's. The shift in position of the blood during the heart cycle causes fluctuations in the magnetic field which are detected by the magnetometer, analyzed by a computer, and presented in the form of a graph which is representative of the blood flow within the heart.

Now that these magnetic signals of blood flow have been successfully detected in healthy volunteers, the research group plans to study patients to determine the accuracy of the technique in diagnosis compared to present methods.

If these studies prove successful, a modified shield for hospital use will be built.

Details of the development of the new device will be presented November 16 at the Annual Meeting on Magnetism and Magnetic Materials in Boston. The work has been supported by a grant from the National Science Foundation's Research Applied to National Needs Program.

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EDITORS: Photos are available upon request if not included with story.

Mailed Thursday, November 8, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

Editors: Photo available upon request if not included with story.

STANFORD--Little Marianna Smith, a 10-month-old Korean baby, is expected to have a perfectly normal and healthy life today--but without alert medical observation and some good fortune--it might not have turned out that way.

Marianna was an infant without a name, found abandoned on the streets of Seoul. She was placed with a foster family, and given the name Jo Yung Sook for the first few months of her life. After a case of measles, her future looked brighter. Last week, she was placed on an airplane bound for San Francisco International Airport to meet her new adoptive parents, Mr. and Mrs. Mike Smith of Vernal, Utah, who had flown out to meet her and take her home.

But Marianna Smith suddenly grew intensely ill during the flight from Korea. She arrived feverish and comatose. The airport doctor referred her immediately to Chope Community Hospital, where liver failure was diagnosed. Doctors recommended her transfer to Stanford University Hospital for observation and treatment.

"We had planned to take a plane out immediately to Utah," says her new mother, Joyce Smith. "If she had become ill while we were on our way home, it might have been too late."

Stanford pediatricians confirmed the diagnosis: Reyes Syndrome is an unusual disease, somewhat rare, and most often fatal.

The disease is characterized by liver failure, usually following a viral infection. The liver's function is to produce bile, convert sugars into glycogen, and store it--a function that is vital to life. Marianna was comatose and suffered severely low blood sugar--hypoglycemia.

Doctors know no "cure" for the disease except, if the patient's condition continued to deteriorate, to attempt a risky blood exchange transfusion. In Marianna's case, she improved so well with treatment of intravenous glucose and constant blood checks that such a blood exchange was not necessary.

Mike Smith, a carpenter, and his wife have a son, 6, and daughter, 9, of their own and had always wanted a larger family. "We decided we wanted to give another little child a home who's already here," says Mrs. Smith, rather than have another of their own.

However, several adoption agencies told them there would be a two-year wait, or longer. So they considered adopting a Korean baby. After several months processing with an adoption agency, word came that Jo Yung Sook would be arriving.

Mrs. Smith has stayed with her new daughter almost constantly during her illness, providing the moral support for recovery. "It's all part of the responsibility you accept when you adopt a child," says Mrs. Smith.

Financial assistance for the family came from a special fund established in the Stanford Pediatrics Department. It's made possible through donations of individuals and organizations, to support the care of children whose parents cannot meet the unexpected and costly medical bills.

Doctors expect Marianna to have perfectly normal health when fully recovered from her illness and they foresee no reoccurrence. She is expected to be released from the hospital today.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Stanford University Hospital physicians Tuesday (Nov. 6) warned Bay area residents to refrain from collecting and eating wild mushrooms.

Their warning came after mushroom poisoning claimed the life of Michael J. Kimble of LaHonda. He died at Stanford University Hospital Tuesday afternoon.

The 20-year-old Kimble was admitted to Stanford Sunday after sharing a meal of wild mushrooms with a friend. His companion also developed poisoning symptoms, but to a lesser degree, was treated as an outpatient and released. He is now being followed up in the outpatient clinic, doctors said.

"Mushroom poisoning sometimes resembles cholera in severity," said Dr. Peter Rudd, a resident in medicine. "The victims suffer from nausea, vomiting, abdominal pain and diarrhea.

"After a period of apparent improvement, the patients begin to show signs of liver, kidney, and central nervous system damage, with life threatening consequences."

Evidence of the effects of mushroom poison on such patients include gastrointestinal bleeding, jaundice, seizures, prostration, confusion, coma, visual disturbances and abnormal reflexes, he said.

Although the physicians are not absolutely certain which mushrooms the victims ate, the species Amanita phalloides, Amanita muscaria, and Amanita verna are among the leading causes of mushroom poisoning in the United States. They grow in abundance in the San Francisco Bay area after the fall rains and through the winter and spring.

Kimble is the first victim of mushroom poisoning at Stanford Hospital this year.

Dr. Rudd said there are drugs available which have been effective in limiting toxicity, but they must be given within eight hours after ingestion of the mushrooms.

Complicating further the problem of treatment is the toxin content which varies within species of mushrooms depending on the season, environment, and age of mushrooms, he said.

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Mailed Wednesday, November 7, 1973

Transmitted via Business Wire, Tuesday, November 6, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

Editors: Copies of Stanford M.D. available on request, if not included with story.

STANFORD--The effect of President Nixon's plan to cure cancer may be to slow down rather than speed up progress toward solution of the problems, a Stanford genetics professor says.

In 1970, Congress unanimously passed a resolution calling for a "national crusade" for the conquest of cancer by 1976, "as an appropriate commemorative of the 200th anniversary of our country."

Such a programmed approach to cancer research is both dangerous and shortsighted, says Leonard A. Herzenberg, genetics professor at Stanford School of Medicine, writing in the current issue of Stanford M.D., magazine of the Stanford Medical Alumni Association.

Herzenberg contends that there is much basic research to be done in many areas of biology before it is likely that we will be able to understand, prevent, and control most malignancies.

President Nixon's National Cancer Program promises to do the job by applying systems engineering managment techniques, says Herzenberg. This plan favors directed research in areas chosen by officials of the National Cancer Institute, capturing funds used previously to support traditional biomedical research.

The systems engineering approach, like that used to construct the atomic bomb and to send man to the moon, "required virtually no acquisition of new fundamental scientific knowledge; rather they demanded the practical extension and application of existing knowledge. Unfortunately, no such firm scientific base for the development of a centrally directed cancer program currently exists," says Herzenberg.

"Basic research needs considerable freedom to flourish.... It can only very broadly be directed towards an applied goal before its value as a pioneer for medical advances begins to be lost."

Basic research findings should be applied wherever they are useful, he says. "The National Cancer Program's intention to delineate narrowly the confines of cancer research is both dangerous and shortsighted," says the geneticist.

By granting large contracts for specific jobs, the program encourages groups of scientists who will direct large numbers of technicians doing rather routinized, prescribed kind of work, says Herzenberg. Graduate students and research fellows will not be drawn into this type of research, and will not be "alert to the aberrant result of chance observation that may yield a minor or major new clue to understanding cancer, or some other human disease."

Herzenberg concludes that the "centralized control of cancer research is in complete accord with the whole Nixon approach of attempting to control the entire country from the White House.

"A sweeping reversal of this whole trend" may be required to solve the cancer problem, he says.

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Mailed Thursday, November 1, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A new program to explore group therapy techniques in the treatment of alcoholics has been launched by the psychiatry department of the Stanford University School of Medicine.

The program is being established after group therapy was tested with a handful of alcoholic patients over the last year. Stanford psychiatrists hope it will prove of long-term value.

"Although much has been written about the treatment of alcoholics in groups, there have been few systematic attempts to utilize the intensive group experience with these patients," said Dr. Irvin D. Yalom, professor of psychiatry and an authority on group therapy.

In such a situation, he explained, participants are stimulated by each other, develop close bonds and see the group as a powerful agent for change in their behavior.

Yalom said the Stanford groups are not intended as a substitute for Alcoholic Anonymous (AA). Rather the two approaches can complement one another.

"AA's task is to help individuals refrain from drinking," he said. "Our efforts are designed to get to the root cause of the problem--helping patients work through underlying personality conflicts which produce the fuel powering the alcoholic compulsion."

The aim, he said, is to help group members overcome feelings of self-contempt, loneliness, alienation and disengagement and to help them maintain normal social and business activities.

The program is funded by the National Institute of Drug Abuse and Alcoholism. Individuals may enroll in groups which meet once a week for an hour and a half in the afternoon or early evening. No fees are charged.

Yalom stressed there is no age limit or educational level for the patients admitted. And names are kept confidential.

The Stanford psychiatrist prefers groups to be small. "Those consisting of approximately seven members are ideal to permit considerable face-to-face interaction," he said -more-

The groups meet under the guidance of faculty and experienced therapists. There are three therapists on the project, Stephanie Brown, Sidney Block and Yalom.

"Before therapy begins," said Yalom, "patients are interviewed to determine their suitability and are prepared for the experience that lies ahead.

"We suggest they may find the experience discouraging or even frustrating at first, but urge them to make a commitment for at least a dozen sessions before attempting to judge whether the groups will be useful to them."

"Patients are also asked to delineate their goals in therapy," he said.

To provide a clear view of how the patients function, the group sessions are videotaped. On subsequent sessions, the tapes are played back. "Videotape playback has the potential of reducing anxiety. It is a constructive experience for some to observe themselves," he said.

Another approach used to help members observe and understand their behavior is by discussing summaries written by the therapists of each session.

"Our written formulations have underscored the relevance and importance of honest feedback," said Yalom. "We want to eliminate the stereotype of the mysterious therapist who never explains things to patients."

These discussions, the psychiatrist said, help patients assume the self-reflective position which is so essential in group therapy.

"It would be premature to comment on the results of each patient," said Yalom. "This type of group therapy has ambitious goals and is a long process. But the endeavor so far to establish a working therapy group made up of alcoholics has been successful."

Individuals who wish to participate in the research may call 321-1200, Ext. 3652. ###

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--A course in operating room techniques offered by Stanford University Hospital has been accredited as a postgraduate course for nurses by DeAnza College. Effective winter quarter, which begins January 2, 1974, the six-month course will be worth 34 academic units.

The program was initiated by Stanford in 1968 to educate more registered nurses in the specialized skills of the operating room. Since then, nurses from all over the country and as far away as England and Nigeria have come to the Hospital for training.

Instruction by nursing and medical personnel at Stanford includes classroom lectures and supervised clinical experience in the principles of asepsis and various surgical procedures. Students receive a monthly stipend.

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Mailed Wednesday, December 5, 1973

FILE COPY

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--The Professional Women of the Stanford Medical School (PWSMS) have voted to remove all restrictions on membership in the organization. Any person, male or female, who supports the group's purpose of "promoting development of opportunities for women equal to those of men in the medical sciences" is eligible to join.

Founded in 1969, PWSMS was previously open to women at the Medical School studying for or holding doctoral degrees. A new amendment to the organization's constitution was passed at the annual October, 1973 meeting to eliminate all restrictions based on training, position, geographic location and sex.

The group will still focus on women in careers related to medicine, but it now intends to include the problems faced by social workers, nurses, dieticians, technicians and other health care professionals. New members are welcome from both Stanford and the community, according to PWSMS officers. Those nterested should contact membership secretary Dr. Netta Grandstaff of the Department of Family, Community and Preventive Medicine.

Since its inception, PWSMS has been involved in several issues affecting women at Stanford Medical School. At the suggestion of the group, a McCormick Memorial Lectureship has been established in the School of Medicine to bring outstanding women physicians and scientists to the Medical School. Funds will be provided from the $5 million bequest of Katharine McCormick to the Medical School in 1969 "for the encouragement and assistance of women in...medicine." Speakers will be selected by a committee headed by Dr. Rose Payne, professor of medicine.

PWSMS members have also participated on the Joint Committee on the Status and Tenure of Women, set up by the Medical School in 1970 to develop ways of increasing the number of women hired and promoted to faculty positions. Others PWSMS proposals on behalf of women include establishment of a separate academic ladder for research personnel, many of whom are women, to bridge the gap between research associate and an independent senior scientist; and creation of an Office of Women's Affairs with part of the McCormick bequest to help improve the career opportunities for women at the Medical School.

Chairwoman of PWSMS for 1973-74 is Dr. Helene Rauch of medical microbiology. Other members of the council are: Dr. Sonia Baur, medicine; Sally Dorfman, medical student; Sara Gerling, graduate student; Dr. Dora Goldstein, pharmacology; Dr. Netta Grandstaff, family, community and preventive medicine; Rose Grobstein, medicine; Dr. Dorothy Huntington, surgery; Leona McGann, family, community and eventive medicine; Dr. Myrna Miller, psychiatry; Drs. Lois O'Brien and Ann Taylor, medicine.

Two of the council members, Drs. Baur and Goldstein, along with Dr. Marion Smith of neurology, were among the four Medical School representatives elected to the University Academic Senate last spring.

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Mailed Monday, December 3, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

STANFORD--Dr. Bruno Bettelheim, world-renowned children's psychologist and psychcanalyst will be visiting professor of psychiatry at the Stanford University School of Medicine.

The appointment was announced by Dr. Albert Stunkard, chairman of psychiatry at Stanford.

Dr. Bettelheim is Stella M. Rowley distinguished service professor emeritus of education, psychology and psychiatry at the University of Chicago. For the past 29 years he has been director of the Orthogenic School, the University's residential treatment center for severely emotionally disturbed children. He is world famous for his work in rehabilitation of autistic children.

His primary responsibility at Stanford will be continuing education programs for the Medical Center's clinical faculty He also plans to teach in the School of Education at Stanford during the summer quarter.

Early in his work in Europe, Dr. Bettelheim and his wife took into their home a seven-year-old istic American girl, who had been diagnosed as hopelessly feebleminded. This was a decade before the autistic child was described in scientific literature. He worked with her until Hitler annexed Austria in 1938, at which time his wife and his "patient" left for America. Dr. Bettelheim, who had received his Ph.D. just before the German Anschluss, was imprisoned by the Nazis, whom he had long opposed. He was in the Dachau and Buchenwald concentration camps.

"It wasn't like with some of today's young people who think you can be a great revolutionary without paying for it," he has said. His experiences during this time provided him with materials for two books: Individual and Mass Behavior in Extreme Situations, and The Informed Heart.

With his release in 1939, he came to the U.S., and became research associate with the Progressive Education Association at the University of Chicago.

He became an American citizen, began his association with the Sonia Shankman Orthogenic School, and concurrently became professor of educational psychology at the University of Chicago.

Dr. Bettelheim has published widely both in professional journals, and in many popular magazines. He has written about the alienation in modern society, the role of women, sex and violence, education of gifted, and of emotionally and culturally deprived children, academic discontent, and many other cs.

Some of his books, such as The Empty Fortress, Love is Not Enough, and Truants From Life, describe the work of the Orthogenic School in rehabilitating severely disturbed youngsters.

-more-

Others are based on his many years of helping parents of normal children with the problems of childrearing. His well-known Dialogues with Mothers, and others have been translated into all major languages.

His most recent book, Children of the Dream, discusses communal childrearing in the Israeli Kibbutzim and its implications for American education. Other books include Symbolic Wounds and Social Change and Prejudice.

A new book will be published in early 1974, dealing with what mental institutions should be like, a guide to what patients should expect.

Dr. Bettelheim is a founding member of the National Academy of Education, a fellow of the American Academy of Arts and Sciences, a fellow and diplomat of the American Psychological Association, and a fellow of the Orthopsychiatric Association.

He and his wife will make their home in Portola Valley.

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Mailed Monday, December 3, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--A new clinic for the diagnosis and treatment of patients with multiple sclerosis has been established by the Department of Neurology at Stanford University Medical Center.

The clinic provides complete neurological evaluations and diagnostic studies for patients with suspected or known multiple sclerosis, said Dr. David Prince, department chairman. Patients are preferably accepted on a referral basis.

Multiple sclerosis (MS) is a disease of the central nervous system in which nerves lose their insulation--a coating called myelin. This may result in a variety of symptoms including weakness, lack of coordination, and disturbances of speech and vision.

The cause of the disease is unknown, although much progress is being made toward understanding the possible basic mechanisms which produce its symptoms, according to Dr. Frederick Seil, clinic director.

Dr. Seil emphasized that there is no effective treatment for MS at present. He and his colleagues are actively pursuing research focusing on improving the understanding, diagnosis and management of demyelinating diseases, particularly multiple sclerosis.

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Mailed Wednesday, December 19, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--John J. Schwartz, special assistant to Stanford University President Richard W. Lyman, has been appointed counsel for medical affairs at the University Medical Center.

The move was announced Wednesday, December 19, by Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine.

Schwartz's appointment is part of a reorganization of legal services within the University. Previously, the Medical Center's legal affairs were handled on a part-time basis by Schwartz and attorneys Cassius L. Kirk and Merel Glaubiger of the Business and Finance Office.

Kirk will return full-time to the Business and Finance Office. Mrs. Glaubiger will become associate counsel for medical affairs.

Schwartz, 39, is a native of White Plains, New York, and a graduate of Cornell University (1955). He received his law degree from Harvard in 1958 and obtained a Ph.D. in physics from the University of Rochester in 1965.

He practiced law in Phoenix, Arizona and taught physics at the University of Rochester before coming to Stanford in 1969 as assistant professor of physics. He has served as special assistant to President Lyman since 1970.

Schwartz, his wife and four children live at Stanford.

"Over the past several months, John has been invaluable in dealing with a wide range of issues in the Medical Center which involve questions of a legal nature," Dr. Rich said. "His appointment will achieve needed coordination of legal services for the Hospital, Clinics and Medical School."

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Mailed Wednesday, December 19, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--A new rehabilitation program for heart attack victims has been launched at Stanford University Hospital.

The program, begun December 1, consists of exercise testing and training, physical therapy, and psychological and dietary counseling.

Its overall goal, said Dr. Robert F. DeBusk, program director, is "to get heart patients back on their feet and back on the job sooner--and safely."

Two major functions of the program are the determination of how much exercise each patient should undertake and the development of a "prescription" for regulating home activity, said DeBusk, assistant professor of cardiology at Stanford.

"Many patients go home and feel very threatened without doctors and nurses around," he said. "They lack confidence in themselves and don't know how much they should do.

"This program enables us to tell good risk patients to be more active and less of an invalid. They can go home assured of just what they can and can't do."

DeBusk said that the Stanford program will also attempt to meet the patients' psychological needs. Eliminating the uncertainty about physical exertion is an important first step, he said.

Additionally, a staff psychologist will provide counseling in overcoming depression related to serious illness, as well as encouragement in making recommended behavioral changes such as weight reduction.

"Depression is a normal part of the patient's reaction to a life-threatening illness," DeBusk said. "The concern is to keep him from looking at himself as a sick person, instead of someone who will recover and maximize his own functional capability."

The program begins when the patient is still in the hospital following a heart attack. Prior to discharge, approximately three weeks after the attack, he is given a carefully-monitored minimum cardiac stress test. The test simulates stress the patient would have at home in activities such as climbing stairs.

In developing a home activities plan, test results are considered along with 10 or 24 hour tape recordings of the patient's heart action made while he is ambulatory.

Throughout the first 12 weeks after the heart attack, the patient follows a program of increasing physical activity at home. Follow-up testing is conducted at two to three week intervals to determine how much his capability increases.

-more-

After 12 weeks, the patient will be encouraged to join a long-term exercise program, such as the cardiac rehabilitation program directed by Dr. Gary Fry of the Palo Alto Medical Clinic.

Patients can be admitted to the Stanford program upon referral by their physician. All data obtained in the program will be made available to the referring physician. Costs are billed to the patient's health insurance carrier.

DeBusk, who feels "the application of cardiac rehabilitation up to now has lagged behind that of heart surgery," hopes the program will show that rehabilitation training can be effective in prolonging the lives of patients with heart disease.

"I don't think anyone would dispute the fact that the quality of life is improved through rehabilitation programs," he said, "But we need data to establish the efficacy of rehabilitation in terms of preventing sudden death and prolonging life."

Though the initial focus of the program will be on patients who have suffered heart attacks, he hopes to extend it to those who have undergone coronary bypass surgery and those with stable angina pectoris or chest pain.

"In Santa Clara County alone, there are tens of thousands of people who should be given cardiac stress tests," DeBusk said. "This figure includes survivors of heart attacks, patients who have had heart surgery, and individuals with noticeable symptoms, as well as others who are apparently normal but have risk factors of coronary heart disease.

"Many can be put on an exercise program to help determine whether it can prolong life not only for heart attack victims, but for others in the early stages of heart disease as well."

Co-director of the Stanford program is exercise physiologist Dr. William Haskell. The staff also includes a nurse, psychologist, and Stanford Hospital dieticians and physical therapists.

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Mailed Tuesday, December 18, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

Editors: Photo available on request if not included with article.

STANFORD--A cell separating instrument developed at Stanford University School of Medicine will soon be employed as an important research tool in laboratories all over the world.

The first two commercial versions of the cell separator, built by the Becton-Dickinson Electronics Laboratory of Mountain View, California, went into operation this month at Stanford and the National Cancer Institute. Early in 1974, another group of instruments will be produced for additional research teams in Europe and the United States.

Scientists believe that the cell separator may open the door to a better understanding of the body's immune or defense system, as well as new research and clinical study of diseases in man.

It is the first device which enables researchers to take rare cells from the general cell population for inspection and experimentation. Cells are observed individually and separated on the basis of their fluorescence and light-scattering ability.

Several thousand cells can be processed per second, and populations in fractions as small as one in 1 000 can be identified.

Previous bulk methods (utilizing a centrifuge, separation columns, or electrophoresis) allow sorting of large numbers of cells, but produce only limited separation of functionally different types.

The cell separator was developed by a Stanford team which includes Dr. Leonard A. Herzenberg, professor of genetics; engineers Richard G. Sweet and William A. Bonner; and research associate H. Russel Hulett.

One of the most important applications of the separator, Herzenberg said, is in the study of the body's cancer and infection-fighting immune system.

"We hope to determine the chemical and biological characteristics of the different cells involved," he said, "as well as the specific functional roles they play.

"Increasing our knowledge about the immune system could lead to better understanding and hopefully prevention of organ transplant rejection. It may also lead to more effective treatment of diseases such as leukemia and hemophilia."

At Stanford, a series of experiments focusing on the roles of specific cell types in the immune process has begun.

The instrument works as follows: cells suspended in the central stream of a very small liquid jet are observed individually as they pass through two laser beams. The jet is later broken into uniform droplets. The droplets containing the desired calls are charged electrically and then deflected in an electric field.

Two characteristics serve as the basis for separation: fluorescence, which can be used to detect functional differences after reacting the cells with fluorescent-labelled proteins, and light-scattering ability, which is a function of particle size and internal structure.

Work on the development of the cell separator began at Stanford seven years ago with grant support from the National Institute of General Medical Sciences.

Early in 1972, the investigators received a contract from the National Cancer Institute to build two prototype instruments. The engineering and fabrication were subcontracted to Becton-Dickinson. The Stanford team provided the original machine as a model, and supplied design concepts and techniques.

The goal was to come up with a standardized version which could be made available to other researchers.

"The new machine is more sophisticated than the original," Sweet said. "The operation and maintenance now have been simplified enough so that a non-engineer can run it." Mailed, Monday, Dec. 17, 1973

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. David A. Prince of Palo Alto has been elected president of the American Epilepsy Society.

Prince, 40, is professor and chairman of the Department of Neurology at the Stanford University School of Medicine, and neurologist-in-chief at Stanford Hospital.

His election was announced this week in New York at the society's annual meeting.

Prince and his associates have pioneered in studies of single nerve cells responsible for abnormal electrical discharges that characterize epilepsy in animals and man.

The society is a nonprofit organization made up of more than 600 physicians and scientists. Its purpose is to foster efforts in clinical care and research in epilepsy.

Prince is a medical graduate of the University of Pennsylvania. In 1971 he received a John Simon Guggenheim Memorial Foundation Award for his research in epilepsy.

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FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Stanford University Medical Center has launched two new programs as part of a continuing energy conservation effort.

A free bus service to transport employees between the Southern Pacific Palo Alto Train Station and the Medical Center will be initiated January 2, 1974. Additionally, employees who form car pools of four or more persons will receive free parking privileges in the pay parking lot near the Center whenever three or more riders are in the car.

"Our goal is to reduce energy consumption and relieve the somewhat congested parking conditions at the Medical Center," said Peter Carpenter, assistant vice-president for medical affairs. "We hope these programs will motivate employees to form car pools and ride commuter trains and buses."

The bus service will begin with two runs each morning and late afternoon between the S.P. station and Medical Center. A rented 38-passenger bus will leave the station at 7:45 and 8:10 a.m. Monday through Friday; it will leave the Medical Center at 5:00 and 5:45 p.m.

The runs coincide as closely as possible with employee work shifts and scheduled trains and buses which serve the S.P. station and the nearby Greyhound Bus Terminal. If the demand exists, the number of runs and the size of the buses will be increased, Carpenter said.

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Mailed Wednesday, December 12, 1973

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

EDITORS: Copies of Stanford M.D. available on request if not included with release.

STANFORD--The Tuskegee syphilis study, involving 399 black men whose infections were allegedly left untreated since 1932, was not a "medical atrocity" as it was publicized in the press, says a Stanford professor.

There is no evidence that treatment was deliberately withheld from the participants, says Dr. Charles W. Barnett, emeritus professor of medicine at Stanford University Medical School, who has made a study of the controversial project.

Lack of treatment was not contrived by the U.S. Public Health Service, but was an established fact before the study began, he maintains.

He terms the study "a fully justified investigation. It stood a fair chance of adding immensely to our meager knowledge of the natural history of the disease, without endangering the lives of the syphilis subjects," Dr. Barnett writes in the current issue of Stanford M.D., a magazine of the Stanford Medical Alumni Association.

"The study proceeded peacefully, with numerous publications...and received no attention outside the medical profession until it was discovered by the Associated Press in 1971. It was then publicized widely as a horrible medical atrocity against a poor, suppressed black minority. It was alleged that the odious physicians...had callously withheld from them life-saving therapy without telling them that they had a horrible disease for which there was a readily available and infallible treatment," writes Dr. Barnett.

It was assumed that therapy, particularly with penicillin, results in a complete cure. "Unfortunately, this idea has rubbed off onto some in the medical profession," says Dr. Barnett. "The fact is that no amount of any kind of treatment will always prevent the development of later manifestations of the disease."

He points out that "there is little reason to suppose that treatment of latent syphilis with penicillin would have changed the lives of the subjects."

In 1973 an Ad Hoc Advisory Panel of the Department of Health, Education and Welfare investigating the study issued its final report. It concluded that the study was never justified because it did not obtain informed consent from the participants.

The Panel said the study should have been ended when penicillin became available in 1952. And it called for a complete overhauling of the current system for protection of human subjects.

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Dr. Barnett disputes these conclusions, and says the medical profession should protest unjustified charges. "It is highly probable that the untreated blacks in the Tuskegee study did not have treatment withheld from them deliberately, and their failure to get therapy was by their own choice." In fact, he says, many of the originally untreated subjects did get treatment during the course of the study.

Treatment at the time consisted of weekly doses of arsphenamine, alternating with weekly injections of mercury or bismuth for up to two years. Reactions were frequently painful and severe.

"Latent syphilitics have no infection they are trying to clear up. When treatment makes them sick, and they feel well without it, they have doubts about the wisdom of continuing it," writes Dr. Barnett.

The treatment of advanced syphilis by drug therapy was often discouraging to both physician and patient, Barnett points out. Frequently one started with a well patient with a positive test, gave a two-year series of expensive and painful injections that often made the patient sick, and wound up with a well patient with a positive test. Sometimes it seems that the black patients who refused treatment were smarter than the doctors who prescribed it, says Barnett.

He notes that press reports emphasized that the untreated group could transmit the infection to others, but if treated, they could not.

"This is complete nonsense," he says. Syphilis is transmissible only in the first few years of the disease, probably never after four years and only very rarely during the fourth year. Participants selected for the study all had their disease for at least three years or longer.

It seems that syphilis produces some change in the bodily defense system that makes the infected person more susceptible to disease, like cardiovascular disease, that is not directly related to the infection.

"A great deal of effort has been expended over many years to find the effect of therapy on the progress of syphilitic disease itself," says Dr. Barnett, "but nothing at all is known about the effect of antisyphilitic therapy upon this vague nonsyphilitic threat to life and health."

He says that a shortcoming of the study was that it did not include a control group of treated patients. If it had, information about the long-range effects of the disease might have been obtained.

Barnett has been a member of the Stanford faculty since 1927. He was director of the syphilis clinic at Stanford in San Francisco for nearly 30 years, and he became director of the general medical clinic when the medical school moved to Palo Alto.

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Mailed Wednesday, January 30, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--A new educational program focusing on the rehabilitation of cancer patients has been launched by the Division of Physical Therapy at Stanford University Medical School.

Supported by a two-year grant of $231,260 from the National Cancer Institute, the program enables Stanford physical therapy students to work with patients facing the difficult adjustments to life-threatening illness and disability.

The training effort stresses technical knowledge and skills required to treat cancer patients, and especially the social and psychological ramifications of the disease, said Helen Blood, head of the Division of Physical Therapy.

"Unfortunately, many health professionals tend to avoid working with cancer patients," Miss Blood said.

"Those who do get involved often lack specific knowledge or have a pessimistic and fatalistic attitude which can affect the patients. We hope to do something about these problems."

Under the new training plan, Stanford's 45 physical therapy students are involved in cancer rehabilitation throughout their two-year Master's program. The first-year curriculum now includes observation and supervised treatment of patients, as well as classroom instruction in basic cancer terminology and therapy, up-to-date rehabilitation techniques, and psycho-social aspects of working with cancer patients and their families.

In their second year, students may take an advanced course in which they assume increased responsibility for the rehabilitation of two or three patients and their families. Other second-year courses have been modified to place added emphasis on cancer rehabilitation.

A major goal of the Stanford effort, Miss Blood said, is to develop a model training program which can be adopted in whole or in part by other physical therapy schools.

With this in mind, Stanford will sponsor one-week summer workshops this year and again in 1975. Participants will include faculty members and clinicians from the 10 physical therapy schools in the western United States; in 1975, practitioners from the Bay Area will also attend.

Workshop participants will help evaluate the cancer program and its application to physical therapy education and practice, Miss Blood noted. Evaluations will also be obtained from Stanford trainees and the patients they have treated.

Principal investigator for the program is Barbara Kent, assistant professor of physical therapy. Other Stanford faculty members involved in the program include Carolyn Houser, Kay Shepard, John E. Bell, and Linda Van Hoesen.

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Mailed Monday, January 28, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

STANFORD--"The Values of Children" will be the topic of the second annual Alfred E. Weisz Memorial Lecture on Tuesday, January 29 at 8 p.m. in Bishop Auditorium on the Stanford campus. The lecture is open to the medical community, students and the public.

Dr. James T. Fawcett will be the speaker. He is assistant director of the East-West Population Institute in Honolulu, Hawaii, and associate professor of psychology at the University of Hawaii.

Dr. Fawcett has done extensive cross-cultural studies of the different reasons why people have children. He has been associated with the Population Council for several years, and worked on population problems in Thailand for four years.

He is the author of several books, including Psychology and Population: Behaviorial Research Issues in Fertility and Family Planning, published in 1970. He also edited a collection of essays of psychological perspectives on population in 1973.

Dr. Fawcett received his Ph.D. in psychology at the University of California--Berkeley.

The Weisz Memorial Lecture was established in 1973 to honor the memory of Dr. Alfred E. Weisz, assistant professor of psychiatry at the Stanford University School of Medicine, who died of cancer in 1970.

The Weisz lectures emphasize the psychological aspects of population, according to Dr. Warren B. Miller, assistant professor of psychiatry at Stanford, who is coordinator for the lecture.

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FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

STANFORD--"Overweight and Obesity" will be the topic of Dr. Albert J. Stunkard, professor and chairman of the Department of Psychiatry, at the fourth Progress in Medicine lecture on Wednesday, January 30, at 8 p.m. in Memorial Auditorium.

The series of weekly lectures are presented by the Stanford University Medical School as a public service to the community, and are free of charge.

Dr. Stunkard is a nationally known expert in human eating disorders, including both obesity and pathological under-eating. He identified the "night eating syndrome," a pattern of food intake which characterizes patients who are resistant to weight reduction regimens. He also published the early observations of "dieting depression," a psychological response in some individuals attempting to lose weight.

Dr. Stunkard is a medical graduate of Columbia University, and former head of the Department of Psychiatry at the University of Pennsylvania. He is recipient of the American Psychiatric Association's Hofheimer Prize for research.

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Mailed Thursday, January 24, 1974.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Because of record attendance the Progress in Medicine lectures featuring recent advances in psychiatry have been moved from the Medical Center to Memorial Auditorium, the Stanford University School of Medicine announced Friday (Jan. 18).

Dr. David Hamburg, Reed-Hodgson professor in human biology, will present an illustrated lecture on "The Relevance of Primate Research for Psychiatric Disorders" Wednesday (Jan. 23) at 8 p.m.

He is a leading authority in the study of hormonal responses to psychological stress and past chairman of the Department of Psychiatry.

Dr. Hamburg has been instrumental in developing the Laboratory of Stress and Conflict at Stanford, and also directs research on chimpanzees at Stanford's primate facility and in Africa. He is a 1947 graduate of the Indiana University School of Medicine, and received his professional training at Michael Reese Hospital in Chicago.

The other scheduled lectures to be held at Memorial Auditorium are:

January 30: "Overweight and Obesity," by Dr. Albert J. Stunkard, professor and chairman of the Department of Psychiatry.

February 6: "Sleep: What Can Go Wrong with It and What to Do When It Happens," by Dr. William C. Dement, professor of psychiatry.

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Mailed Friday, January 18, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310
ADVANCE FOR AM RELEASE SUNDAY, JANUARY 20, 1974

STANFORD--Will my child walk? When? These are the questions most frequently asked by parents whose children have cerebral palsy or slow development.

A Stanford University orthopedic surgeon has devised a simple and effective method to help answer those parents.

The test, based on the presence or absence of seven reflex responses, can predict with close to 95 percent accuracy if a child with cerebral palsy or delayed motor development will walk.

It was developed by Dr. Eugene E. Bleck, chief of the orthopedic rehabilitation service of Children's Hospital at Stanford. He used the method for prognosis in 73 nonambulatory children followed from 1958 to 1973

Bleck reported the results of his research today (Sunday, January 20, 1972) at the annual meeting of the American Academy of Orthopedic Surgeons in Dallas, Texas.

Cerebral palsy, a movement and coordination disorder caused by injury to the immature brain, affects some 750,000 in the United States. Among other things, it may result in impaired use of arms and legs.

Predicting whether or not a child will be able to walk can affect parental attitudes, clinical management and surgical decisions, according to Bleck.

Parents who know their children have a poor prognosis for walking will not have unreasonable expectations, he explained. Different goals can then be set up to include such needs as feeding, dressing and wheelchair manipulation.

Watching the painstakingly slow progress of children learning to walk can be frustrating for therapists and heartbreaking for parents. In the study, Bleck found that when children had a favorable prognosis for walking, but seemed to make little progress, both therapists and parents were more relaxed and patient.

Some children require orthopedic surgery to improve their function by restoring muscle balance. Bleck recommends postponing such surgery until a walking pattern has been established because better results have been obtained. If however, there is a structural change in the limb joints, surgery is indicated. A prognosis for walking can help surgeons decide when to perform surgery.

The 73 children were first examined when they were between ten months and four and one half years old, and then re-examined at regular intervals.

Seven automatic reflexes were tested, including the parachute reaction, which normally involves extending the arms when suddenly lowered, as if to break a fall. Children were graded one point for each abnormal reflex. A score of zero was a good prognosis for walking, and a score of one was guarded. A score totaling two or more was poor.

-more-

By the time they were seven, 54 of the children studied could walk at least 50 feet without falling. These included all but three of the 49 who scored zero, and seven of those with a score of one. One child with a score of two also walked at the age of seven.

Forty-one children were able to walk without crutches, although with some lack of coordination. These children could also climb stairs and demonstrated ability to run. None of the children regressed to not walking.

There was some correlation between the type of cerebral palsy and the age of walking. Those with some paralysis on one side only could walk at the earliest age (about two years old). Thirty-six of the children in the study were walking by age four. Practically all children who are going to walk will do so by the age of seven years, said Bleck.

In the past, two infant reflexes were used to predict locomotion, but they were not very dependable, Bleck noted. He said the tests developed in this study are more reliable. Because some of the reflex actions do not appear immediately after birth, he suggested waiting until children are at least one year old before making any firm walking prognosis.

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END ADVANCE FOR AM RELEASE SUNDAY, JANUARY 20, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

ADVANCE FOR PM RELEASE TUESDAY, JANUARY 22, 1974

STANFORD--The knee is the most common target of injury in automobile accidents when the front seat occupants are not wearing seat belts, Stanford University researchers reported Tuesday (Jan. 22).

After a collision, the unrestrained occupant is driven forward, and the knee strikes the dashboard in a "second collision."

"The extremities might be considered then the first line of defense against the frontal impact," said Dr. Donald A. Nagel, associate professor and head of the Division of Orthopedic Surgery.

Dr. Nagel presented his findings at the meeting of the American Academy of Orthopedic Surgeons in Dallas, Texas. The study, funded in part by the National Highway Traffic Safety Administration, was done in association with Dr. Davis S. Burton, an orthopedic surgeon, and Dr. John Manning, assistant professor of mechanical engineering.

The group studied 153 persons injured in California accidents. Fifty-seven sustained a total of 80 injuries to their knees. Sixty-nine of the injuries were caused from contact with the dashboard.

Dr. Nagel has labeled these injuries "the dashboard knee."

Injuries usually correlated with the severity of the accident, he told the academy. Injuries were mild in lighter accidents and severe in major accidents. In some major accidents, persons wearing seat belts got off with only minor injuries to the knee.

If the knee should strike a protruding knob or sharp edge, the force of deceleration is concentrated in a small area, and a severe laceration or fractured knee cap can result, Dr. Nagel said.

"When the point of contact was smoothly contoured sheet metal, the dashboard usually deformed and did not cause major injury to the knee," he reported. "But trapping of the leg below the dashboard with overstraightening of the knee will tear capsules and ligaments."

In the Stanford study, doctors and engineers investigated 74 accidents and reconstructed each one to determine occupant motion and correlate this information with the occupant injuries.

"It is our hope," said Dr. Nagel, "that with better understanding of the mechanism of injury of the dashboard knee, we will be better prepared to diagnose and treat the various injuries. The automotive engineers will also be able to redesign automobile interiors so that there will be fewer injuries."

In California alone a total of 252,429 people were injured in auto accidents in 1972.

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END ADVANCE FOR PM RELEASE JANUARY 22, 1974

Mailed, Thursday, January 17, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--Ten young scientists pursuing careers in teaching and research at Stanford University School of Medicine have been named Andrew W. Mellon Fellows.

They will be supported in part over the next three years by a $325,000 award to Stanford by The Andrew W. Mellon Foundation of New York "to assist young postdoctoral scholars of exceptional promise and ability."

The fellows were announced recently by Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

According to the Mellon Foundation, "The chief purpose of the grants is to help minimize the loss to medical education and to research in the basic medical sciences which is certain to occur if individuals...are forced by lack of support to turn to other careers."

Stanford is one of 15 private medical schools to receive such funds under the newly established Mellon Foundation program. With the award, the School of Medicine can continue to contribute to the professional development of some of its most promising young teacher-scientists, said Dr. Rich.

Those designated fellows are:

. Dr. Douglas L. Brutlag, who will join the Department of Biochemistry in September, 1974. He is presently with the Commonwealth Scientific and Industrial Organization in Canberra, Australia, where he is studying the DNA--the substance that determines heredity--of the fruit fly.

. Dr. John R. Daniels, assistant professor of medicine in the Division of Oncology. He is conducting clinical studies in cancer chemotherapy and research on the chemistry of collagen--a fibrous protein--in kidney, lung and blood vessel membranes.

. Dr. Henry F. Epstein, assistant professor of pharmacology and a fellow of the National Genetics Foundation for 1973-74. His work on the genetic and molecular basis of muscle development in nematode worms may lead to better understanding of inherited nerve and muscle disease. -more-

. Dr. Errol C. Friedberg, assistant professor of pathology, whose research concerns the repair mechanisms of DNA.

. Dr. Michael L. Goris, assistant professor of radiology in the Division of Nuclear Medicine. He is applying mathematics and computer science to diagnostic procedures using radioactive tracers.

. Dr. Randall H. Griepp, assistant professor of surgery in the Division of Cardiovascular Surgery. A member of the Stanford heart transplant team, he heads the cardiovascular research laboratory which is doing immunological studies on heart transplantation. He is also doing animal research on cooling down the body to stop circulation while surgery is performed.

. Dr. S. David Holtzman, assistant professor of neurology and head of the Division of Pediatric Neurology. His interest is the biochemistry of the developing brain and the effects of fetal and neonatal disease on its maturation.

. Dr. John D. Johnson, assistant professor of pediatrics. Also assistant director of the nurseries, he is interested in the relation of bilirubin (bile) metabolism to jaundice in newborn infants.

. Dr. Allen K. Ream, assistant professor of anesthesia, who is using computer techniques to monitor patient physiology.

. Dr. William T. Wickner, fellow in the Department of Biochemistry. He is studying the enzymes involved in DNA synthesis in the Phi X174 phage, a dwarf virus considered one of the simpler forms of life.

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Mailed Tuesday, January 15, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--A five-year federal grant of $2.75 million has been awarded to Stanford University School of Medicine to establish the first shared national computer facility for medical research.

The computer, expected to serve as an important research tool in problem solving and analyzing data, will be used by medical investigators throughout the country on a time shared basis.

Funded by the Division of Research Resources of the National Institutes of Health (NIH), the facility will be known as the SUMEX--Stanford University Medical Experimental Computer--and directed by Dr. Joshua Lederberg, professor and chairman of the Department of Genetics at Stanford.

The two main objectives of the SUMEX program, Lederberg said, are the development (with the NIH Biotechnology Resources Branch) of the relatively new concept of national shared resources, and the further exploration of computer science applications in medicine.

Initially, SUMEX will consist of a powerful PDP-10 computer, scheduled to be delivered and installed in April. The computer will be available to approved users through a computer-communication network.

The primary focus of the SUMEX project, Lederberg said, will be on applications of artificial intelligence in medicine (AIM). A national AIM coordinating group, now being organized, will advise on the management of the facility and review applications for eligibility to use it.

Artificial intelligence is a part of computer science concerned with the symbol-manipulation processes that produce intelligent action. Rather than employing the digital computer as merely a number calculator, scientists in this field utilize the computer to reach decisions and solve problems through symbolic analysis and reasoning.

SUMEX will be staffed by a group of scientists experienced in artificial intelligence techniques, Lederberg said.

Core research efforts at Stanford will include on-going interdisciplinary projects involving Drs. Lederberg, Edward Feigenbaum (computer science) and Carl Djerassi (chemistry). They are applying artificial intelligence techniques to the study of unknown organic compounds. The computer analyzes data obtained from instruments such as mass spectrometers in an attempt to determine molecular structure.

A new project, in collaboration with Dr. Stephen Freer of the University of California, seeks to infer protein structure from data obtained by an x-ray crystallograph.

Other scientists who have been identified as initial users of the computer resource include Dr. Saul Amarel of Rutgers University, who is directing several projects in artificial intelligence in biomedicine, and Drs. Stanley Cohen (pharmacology), Stanton Axline (infectious diseases) and Kenneth Colby (computer science) of Stanford.

Cohen and Axline are utilizing the computer to help plan strategy for the treatment of infectious diseases.

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Mailed Tuesday, January 15, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. Ulf S. von Euler, a Swedish neurophysiologist who won the 1970 Nobel Prize in medicine and physiology for his studies of the chemistry of the central nervous system, will give the first Windsor Cutting Lecture at the Stanford University School of Medicine Monday (January 21).

He will speak on "Some Problems Related to Adrenergic Neurotransmission" at 4:15 p.m. in Room M106 of the Medical School. The lecture is open to the medical community and the public.

Dr. von Euler is professor of physiology emeritus at the Karolinska Institute in Stockholm. He studied how nerve impulses are transmitted chemically across minute insulating gaps--synapses--which separate nerve from nerve or nerve from muscle. In 1947 he demonstrated that the transmitter substance which diffuses from the ends of stimulated sympathetic nerves to bridge the synaptic gap is noradrenaline.

This work, according to the Karolinska Institute, led to the Nobel Prize which he shared with Sir Bernard Katz and Julius Axelrod. Dr. von Euler's work has also stimulated the search for remedies against nervous and mental disturbances.

Dr. von Euler began his career at the Karolinska Institute in 1930 as assistant professor and advanced through the ranks to professor of physiology in 1939. He is a member of the Swedish Medical Research Council, and has served as chairman of the board of the Nobel Foundation since 1965. From 1965 to 1971 he was vice president of the International Union of Biological Sciences. He is a member of the Swedish Academy of Sciences.

He is the author of Noradrenaline (1956), Comparative Endocrinology with Hans Heller (1963), Structure and Function of Inhibitory Neuronal Mechanisms (1966); and many papers on endocrinology.

The Windsor Cutting Lectureship was established in 1973 by the faculty of the Department of Pharmacology, and supported by private contributions. It honors the memory of Dr. Windsor Cutting, professor and former chairman of the Department of Pharmacology, who also served as dean of the Stanford University School of Medicine (1953-57), and dean of the University of Hawaii Medical School (1963-71). Dr. Cutting died in 1972.

The lectures, given annually during the Winter quarter, feature speakers prominent in the field of pharmacology.

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Mailed Monday, January 14, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dr. William Agras, professor of psychiatry, will speak on "Behavior Analysis and Modification" Wednesday (January 16) at the Stanford University School of Medicine.

The public lecture, the second in a series on recent advances in psychiatry, will be at 8 p.m. in Rooms M106 and M104 of the Medical School.

Agras was professor and chairman of psychiatry at the University of Mississippi Medical Center before he joined Stanford in 1973. He pioneered in research using behavior modification to deal with psychiatric problems.

The approach involves helping a patient change his environment or behavior to alleviate symptoms, instead of attempting to understand the causes of the problem through psychoanalysis.

A native of England, Dr. Agras, 44, graduated from the Middlesex Hospital Medical School in London, in 1955. Following a year of training in England, he became psychiatry resident in Canada, first in Montreal General Hospital and then at Montreal Children's Hospital.

The lectures are part of the Medical School's PROGRESS IN MEDICINE series offered to the community as part of a program of public education.

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FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--The Stanford University School of Medicine has received a $6,900 grant from the California Community Foundation of Los Angeles for support of students engaged in cancer research.

The contribution was made from the Foundation's Esther Sparks Cross Fund established by her will. It stipulated that a portion of the annual income from the Cross fund be given to Stanford University to provide scholarships for needy and promising medical students doing cancer research.

Eleven awards have been made to Stanford students since the Fund was established in 1970.

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Mailed Friday, January 11, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--"Encounter Groups: A Current Perspective" will be discussed Wednesday (January 9) in a lecture at the Stanford University School of Medicine.

The lecture, open to the public, will be at 8 p.m. in Room M106 of the medical school. It will be delivered by Dr. Irvin Yalom, professor of psychiatry and co-author of a book on encounter groups.

A graduate of Boston University Medical School, Dr. Yalom is known for his work in group therapy and the relationship of hormones to behavior. At Stanford, he has launched a group counseling program for terminally ill patients, and a program to explore group therapy techniques in th treatment of alcoholics.

The lecture is part of the Medical School's Progress in Medicine series offered to the communi as a public service.

The first weekly series of five lectures on psychiatry includes a wide range of topics, from group therapy and behavior modification to obesity and sleep disorders.

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Mailed, Monday, January 7, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--A new series of five public lectures on recent advances in psychiatry will begin Wednesday (January 9) at the Stanford University School of Medicine.

The weekly presentations will include a wide range of topics, from group therapy and behavior modification to obesity and sleep disorders. The lectures are free of charge.

Dr. Irvin Yalom, professor of psychiatry, will present the first lecture on "Encounter Groups: A Current Perspective" at 8 p.m. in Room M106 of the Medical School Building.

He is co-author of the book "Encounter Groups: First Facts," the first scientific study of the encounter movement.

A graducte of Boston University Medical School, Dr. Yalom is known for his work in group therapy and the relationship of hormones to behavior. At Stanford in recent months he launched a group counceling program for dying patients and a program to explore group therapy techniques in the treatment of alcoholics.

The lectures are part of the Medical School's PROGRESS IN MEDICINE series initiated in 1965. According to Dean Clayton Rich, the lectures are offered to the community as a public service.

"Many exciting developments in medicine are being brought into being in medical centers throughout the world," said Dr. Rich. "Public understanding of these developments is important for intelligent participation in important social decisions."

He added some of the decisions have to do not only with community health and with the public investment in health care and research, but with the long range problems of world population, the management of artificial and transplanted organs, and the ethical and legal issues raised by the applications of the new knowledge of cell biology and heredity.

The lectures, featuring outstanding members of the Stanford medical faculty and distinguished visiting professors, will be given each Wednesday during the winter and spring quarter from 8 to 9 p.m. in the same location.

The other psychiatric lectures are:

JANUARY 16: "Behavior Analysis and Modification," by Dr. William Agras. Former professor and chairman of psychiatry at the University of Mississippi Medical Center, he is an authority on using behavior modification to deal with psychiatric problems. The approach involves helping a patient change his environment or behavior to alleviate symptoms, instead of attempting to understand the cause of his problem through psychoanalysis. Dr. Agras joined Stanford as professor of psychiatry in September 1973. He is a native of England and a 1955 graduate of the Middlesex Hospital Medical School in London.

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JANUARY 23: "Relevance of Primate Research for Psychiatric Disorders," by Dr. David Hamburg, Reed-Hodgson professor in human biology. He is a leading authority in the study of hormonal responses to psychological stress, and past chairman of the Department of Psychiatry. Dr. Hamburg has been instrumental in developing the Laboratory of Stress and Conflict at Stanford, and also directs research on chimpanzees at Stanford's primate facility and in Africa. He is a 1947 graduate of the Indiana University School of Medicine, and received his professional training at Michael Reese Hospital in Chicago.

JANUARY 30: "Overweight and Obesity," by Dr. Albert J. Stunkard, professor and chairman of the Department of Psychiatry. He is a nationally known expert in the human eating disorders, including both obesity and pathological under-eating. A medical graduate of Columbia University, Dr. Stunkard is former head of the Department of Psychiatry at the University of Pennsylvania. He has identified and offered clinical descriptions of the "night eating syndrome," a pattern of food intake which characterizes patients who are resistant to weight reduction regimens. He also published the early observations of "dieting depression," a psychological response in some individuals attempting to lose weight. He is a recipient of the American Psychiatric Association's Hofheimer Prize for research.

FEBRUARY 6: "Sleep: What Can Go Wrong with It and What to Do When It Happens," by Dr. William C. Dement. A professor of psychiatry at Stanford, he is noted for his pioneering work in the field of physiology of sleep and dreams. He directs Stanford's Sleep Disorders Clinic where precise diagnostic and treatment methods for persons suffering from insomnia, hyperinsomnia narcolepsy and other sleep abnormalities are being developed. He and his colleagues have recently discovered a new syndrome related to insomnia. It is sleep apnea or cessation of breathing during sleep. Dr. Dement received his medical degree from the University of Washington in 1955 and obtained a Ph.D. in neurophysiology from the University of Chicago in 1957. He is a recipient of the American Psychiatric Association's Hofheimer Prize for his discoveries.

Following the psychiatric presentations, a series of lectures will be presented by the Department of Pediatrics. Details will be issued later.

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Mailed Wednesday, January 2, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310
or
Joan Spiegelhalter 415: 666-2557
University of California

STANFORD--Three Bay area universities will combine resources to train physicians in the skills needed to meet emerging problems in health care delivery.

Stanford University, University of California, San Francisco and University of California, Berkeley have been awarded $850,000 by the Robert Wood Johnson Foundation for an integrated three-year program to help strengthen ties between medicine and the community.

Beginning September, 1974 up to 12 physicians, called clinical scholars, will study and investigate nonbiological sciences related to medicine in a manner analogous to the graduate student. Once trained, clinical scholars may be teachers in new types of clinical and nonclinical education programs, organizers and administrators of community medical care systems and clinics, or health policy advisers to government and public service agencies.

The cooperative clinical scholar program is based on a similar program at Stanford University School of Medicine. Under a one year grant of $96,000 from the Johnson Foundation, Stanford is training six clinical scholars in a program headed by Dr. Halsted Holman, professor of medicine. According to Holman who will continue to head the Stanford program, joining with San Francisco and Berkeley will avoid duplication and broaden opportunities in the program.

Scholars will be affiliated with either Stanford or the University of California, San Francisco medical schools. However, they will be recruited and supervised by an interuniversity faculty committee and will draw on the facilities and personnel of all three institutions as needed.

"Inclusion of the Berkeley campus adds a new dimension to health care planning," notes Dr. Wallace Epstein, associate professor of medicine, who will head the program at San Francisco. "Scholars will be able to choose from a wide range of nonmedical courses and work with faculty members of all three campuses." The Berkeley program will be the responsibility of Sanford Elberg, dean of the graduate division.

In addition to continued clinical responsibilities, the scholars will pursue a curriculum that includes introductory courses in the administrative, economic, legal and social aspects of medicine, joint seminars, and independent research projects under the direction of faculty advisers from at least two of the campuses.

Current Stanford scholars are involved in such projects as assessing the quality of health care, developing medical information systems, planning health care for minority groups, evaluating medicine in urban areas and revising clinical education.

The combined clinical scholar program will be supervised by a governing board that includes citizens and physicians from the community as well as faculty and scholars. Such an integrated approach might contribute to the creation of a regional health care delivery system for the Bay Area, says Holman.

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Mailed, Wednesday, January 2, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 321-5310

STANFORD--Stanford University Hospital has been sued by a patient for refusing to allow her to be given the controversial drug, Laetrile.

Mrs. Josephine Bergman, 49, and her husband, James, 766 Vista Grande, Los Altos, seek a court order to allow her to receive Laetrile at Stanford University Hospital where she is receiving chemotherapy for cancer by Stanford physicians.

John Schwartz, legal counsel for the Stanford Medical Center, said the hospital is prohibited by law to permit use of Laetrile on cancer patients.

According to Mrs. Bergman's complaint filed in Santa Clara Superior Court February 22, Dr. Stewart M. Jones, a Palo Alto general practitioner, had treated her with Laetrile at Stanford Hospital but was ordered to discontinue use of the drug.

In an affidavit filed with the court, Dr. Jones indicates he is not using Laetrile to treat the patient's cancer, but rather as "nutritional therapy."

Dr. Jones states, however, that although Mrs. Bergman "has reached the terminal stages of her disease, she has an excellent chance of significantly increasing her life span and a very fair prospect of surviving to an almost normal life span, provided she is permitted to resume her nutritional program immediately..."

This statement is contradicted by Laetrile's long and devious history. Claims of its value in cancer therapy have never been substantiated by scientists. Laetrile consists of a substance obtained from peach and apricot pits.

The federal Food and Drug Administration states flatly there is no acceptable evidence to justify use of Laetrile in clinical tests in humans. The California State Board of Health specifically prohibits its use on cancer patients. The drug is listed in the American Cancer Society's book of unproven cancer remedies, and the Canadian government has banned its distribution in that country.

The National Cancer Institute tested Laetrile several times as recently as 1973. The results of those tests were negative, according to Dr. C. Gordon Zubrod, director of NCI's division of cancer treatment, and Saul A.Schepartz, associate director for drug research and development.

In an article in California Medicine in June 1973, Dr. Frederick B. Hodges, director of the State Department of Public Health, wrote: "The action of Laetrile on living cancers has been studied *in vitro* and in man, and in none of these studies has it shown any demonstrable anti-cancer effect."

According to affidavits by Drs. Saul Rosenberg and Malcolm Bagshaw, noted Stanford cancer specialists, there is no basis that such substances known as Laetriles have a favorable effect in the treatment of human cancer either by reducing the tumor or prolonging the patient's life.

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Schwartz said the Hospital believes the Laetrile used by Mrs. Bergman's physician was not labeled as to composition, toxicity, purity and other state and federal requirements. In addition, no authorization was given for its use as specified by the Hospital's Committee on Pharmacy and Therapeutics.

The attorney said Stanford Hospital must comply with standards promulgated by the Joint Commission on Accreditation of Hospitals. These are designed to maintain high quality care, and administration of a drug in this manner would be a violation of these standards.

George W. Kell, a Modesto attorney, filed the complaint for Mr. and Mrs. Bergman. Named in the suit are the Stanford University Hospital, Dr. Thomas A. Gonda, hospital director; Dr. Daniel Federman, professor and chairman of the Department of Medicine, and several John Does.

A hearing is scheduled Monday in San Jose.

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Transmitted by Business Wire 2/27/74
Mailed February 27, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--The first hospital-based psoriasis day care center in the country opened last week at Stanford University Medical Center to provide inpatient care at outpatient convenience for those with psoriasis.

This innovative center, located at Stanford University Hospital's Hoover Pavilion on Quarry Road, enables patients to receive the treatment they need during the day and return to their families each evening. It is the beginning of an effort by Stanford dermatologists to make health care more available to the general population.

Director of the center is Dr. Eugene Farber, professor and chairman of the Department of Dermatology at the School of Medicine and a leading authority on psoriasis. Dr. William Watson, assistant professor of dermatology, is associate director.

Psoriasis, a common skin disorder that causes itching, scaling and redness, affects an estimated 6 million people in the United States alone. While no permanent cure is yet known, applications of appropriate salves provide effective control.

The majority of patients do not require hospitalization, but for the 5 to 10 percent who do, the average hospital stay is two or four weeks, says Farber. Another 10 percent with psoriasis on one quarter to one half of their bodies can benefit from a day care center where they can receive intensive therapy.

"Many psoriasis patients do not come into the hospital because they cannot afford to spend the time away from their families or jobs. Yet such patients may also find it difficult to care for themselves adequately at home," explains Farber.

He views the day care center as a practical compromise which makes it possible for more patients to obtain proper treatment without being hospitalized. For those who come to Stanford from other parts of the country, it means they can spend the night in a hotel or motel instead of a hospital. For children, it eliminates the fear associated with staying in a hospital.

A 2300-square foot area has been remodeled on the first floor of Hoover Pavilion for the day care center. The facility, adjacent to the dermatology inpatient unit, is expected to accommodate up to 20 patients a day by autumn, and 30 or 40 by next year. After an initial treatment period, patients can be followed periodically by their physician.

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222---Psoriasis

Patients report to the center in the morning, five days a week for therapy sessions lasting seven or eight hours. Treatment, geared to the individual, involves special lights, baths and dressings, as well as local application of various preparations considered beneficial in reducing psoriatic lesions.

While under treatment, patients are free to use the center's facilities. These include two television lounges where occupational therapy is available and an audiovisual room with instructional media about psoriasis. At the end of the day, patients go home to their families until the next morning.

The hospital day care center offers several advantages, notes Dr. Paul Jacobs, associate professor of dermatology and head of the dermatology clinic. He expects it to reduce the cost of hospital treatment by as much as 50 percent. In addition to being closely followed throughout their therapy, patients have access to other hospital facilities if necessary. "It is important to care for the entire patient, not just the skin," Jacobs comments.

The audiovisual lounge contains a variety of helpful information on psoriasis. Films, slides and tapes are available to show patients what to expect in the course of the disease, and how to care for themselves at home and prevent further outbreaks.

Group sessions and informal discussions during the day are expected to help patients manage better when they go home. Although psoriasis is not contagious, many feel embarrassed or restricted by it, and the support of a group can help overcome this, Jacobs says.

Psoriasis day care is not a new idea. Farber pioneered day care centers for psoriasis in Europe with Dr. Charles Grupper of Paris several years ago.

Stanford's center is the first in the United States to be located in a hospital. Its organizers believe the concept holds tremendous potential for some other areas of medicine as well.

Mailed Monday, February 25, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner (415) 321-5310

STANFORD--Howard Jack Wooling, assistant director of Stanford University Hospital since August of 1972, has been promoted to associate director.

The appointment, effective March 1, was announced today (February 21) by Paul Hofmann, deputy director of the Hospital.

With the promotion, Wooling's duties for certain patient care services will expand to include the Pharmacy and Medical Records Departments. Currently he has responsibility for three laboratories (cardiology, electroencephalography, and pulmonary function) as well as the Dietary, Physical and Occupational Therapy, and Respiratory Therapy Departments. Along with his line administrative functions, he is involved in several medical staff committees.

Wooling, 32, received his master's degree in public health from the University of California at Berkeley in 1972. He holds a bachelor's degree from Eastern Nazarene College (1965) in Massachusetts and a master's degree in education from Boston College (1967).

In addition to his full-time work at Stanford, Wooling serves as assistant minister for the Church of Christ in East Palo Alto.

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Mailed Thursday, February 21, 1974.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--Stanford University's research program on problems of stress and conflict has been awarded a $319,731 grant from the Commonwealth Fund of New York.

The three-year award was made to the School of Medicine to support the Department of Psychiatry's Laboratory of Stress and Conflict. It was announced today (Wednesday, February 20) by Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine, and Quigg Newton, president of the Commonwealth Fund.

In an interdisciplinary program that involves the medical, biological and social sciences, the laboratory has been studying hostility, aggression, and ways of coping with stressful experiences. Dr. David Hamburg, Reed-Hodgson professor of human biology, is director of the laboratory, which was organized in 1971 with the assistance of a previous grant from the Commonwealth Fund.

One of the laboratory's major interests is adolescence. "The prevalence of profoundly and pervasively hostile attitudes, the extraordinary spread of psychoactive drugs, and the upsurge of violence among adolescents sharply highlight the need for deeper understanding of this age group," says Hamburg.

He feels that aside from the first few years of life, adolescence--roughly the teenage years--is probably the most formative and critical time in life. How people cope with the stress of biological and social changes during this period can have lifelong implications, he notes.

In an effort to reach adolescents, the laboratory staff have developed an extensive peer counseling program in the local school districts. More than 450 students between 12 and 18 years old have been trained to counsel their fellow students with psychological, social or personal problems. In addition, nearly 100 adults in the schools have been trained as instructors and supervisors for the peer counselors.

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Peer counselors have also helped collect information on the patterns of drug use by adolescents so that more relevant drug education and prevention programs can be established. They work with youths in recreational and rehabilitational activities that provide rewarding alternatives to the use of drugs.

Patients who become hyperirritable and even violent under the influence of alcohol are being studied and treated at the laboratory's clinic on alcohol and violence. Related investigations are assessing psychological and social factors that make drug intake the preferred mode of dealing with life stresses.

Other areas of research include:

. Aggressive behavior of chimpanzees, particularly during adolescence. This work, in collaboration with Dr. Jane van Lawick-Goodall at the Gombe Stream National Park in Tanzania, will be enlarged when the Stanford outdoor primate facility is completed this spring.

. Sex hormones and aggressive behavior. Studies are underway to determine the relationship of sex hormones and behavior in infants, and also the association in normal men of male hormones and aggressiveness.

. Conflict and Psychotherapy. Through interviews with psychotherapists, an effort is being made to delineate effective methods of resolving hateful conflicts between individuals.

. Constructive alternatives to prison for adolescent offenders. Investigators are concerned with improving medical care and social opportunities for adolescent lawbreakers, particularly when offenses involve alcohol, drugs or psychiatric problems.

The human capacities for hostility and aggression are so complex that the resources of many disciplines are needed to help understand them, says Hamburg. Comprehensive scientific examination of these problems, he adds, may lead to improved ways of resolving human conflicts.

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Mailed Wednesday, February 20, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--Dr. Mary Ellen Avery of McGill University, a noted authority on lung diseases of the newborn, will deliver a talk at Stanford University School of Medicine Friday, February 22, as the first Katharine McCormick Distinguished Lecturer.

She will discuss "Recent Studies in the Pulmonary Surfactant" at 4:00 p.m. in Room M106. The lecture is open to physicians and health professionals of the community.

Professor and head of pediatrics at McGill University Faculty of Medicine for the past five years, Dr. Avery is also physician-in-chief at Montreal Children's Hospital. In June, she will become the first woman to head a major department at Harvard Medical School as the Thomas Morgan Rotch Professor of Pediatrics and physician-in-chief at Children's Hospital Medical Center in Boston.

Dr. Avery is well-known for her work on the role of the lung surface material (surfactant) in hyaline membrane disease, a respiratory disorder of premature infants. She has helped demonstrate that a deficiency of surfactant, which normally prevents lung collapse, is an important factor in the pathology of hyaline membrane disease.

A native of Camden, New Jersey, Dr. Avery received her A.B. in 1948 from Wheaton College in Massachusetts, and her M.D. in 1952 from Johns Hopkins University. She wrote The Lung and Its Disorders in the Newborn Infant, and coauthored another book Diseases of the Newborn.

The Katharine McCormick Distinguished Lectureship was established recently to bring outstanding women physicians and scientists to the School of Medicine. It honors the late Katharine D. McCormick who left a $5 million bequest to Stanford in 1969 to aid programs in the School of Medicine, particularly those "for the encouragement and assistance of women in ...medicine."

Last year, the Professional Women of Stanford Medical School sponsored an unofficial McCormick Lecture when they invited Dr. Estelle Ramey of Georgetown University to speak at Stanford. At their suggestion, the lectureship was formally established for 1974.

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Mailed February 19, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

EDITORS: Photo available on request if not included with article.

STANFORD--An experimental satellite communication system has dramatically improved the delivery of health care in 14 remote Alaskan villages and should be expanded to other isolated areas in the state, Stanford University researchers have reported.

The satellite service enables native health aides--who have at most only 16 weeks of training, yet provide all the primary medical care in their communities--to obtain needed daily consultation from doctors at an Alaskan field hospital.

With telephones virtually non-existent in these bush regions of central Alaska, the health aides previously were forced to depend upon unreliable high frequency radio contact to reach the doctors. Because of interference from storms, mountain ranges and atmospheric disturbances, such radio contact is possible only 14 per cent of the time.

To provide more dependable communication and make expert consultation available to the health aides and their patients, the National Library of Medicine's Lister-Hill Center for Biomedical Communications funded an experimental satellite service that began in August of 1971.

Satellite communication is more reliable than radio, since the signal is transmitted from one point up to the satellite and back down to another point, bypassing most interference.

The project has utilized NASA satellite ATS-1 (Applied Technology Satellite-1), parked 22,300 miles above the equator, and small ground stations located in each village. The system is operated and maintained by the Indian Health Service and the University of Alaska Geophysical Institute at Fairbanks

The Lister-Hill Center contracted with researchers at Stanford to evaluate the project and propose recommendations for the development of a permanent system.

Two members of the Stanford research team-Edwin Parker and Heather Hudson from the University's Institute for Communication Research--reported their findings in a recent issue of the New England Journal of Medicine, a scientific journal.

They found that the installation of satellite radio in the native villages improved the frequency of contact with Tanana Hospital (a 26-bed field hospital staffed by three doctors) by over 500 per cent. Perhaps more significantly, the number of medical cases discussed with a doctor increased nearly 400 per cent.

"Both health aides and doctors are convinced that the quality of health care has improved," the authors said.

The increased contact with doctors, they said, had the triple effect of increasing the health aides' medical knowledge, boosting their confidence in their work, and making patients more apt to follow their instructions.

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222---Satellite

Because of the impact the experiment has had, the Stanford researchers propose that a permanent satellite system be implemented which would be expanded "to serve other remote and isolated areas in Alaska."

Much of the state's native Indian and Eskimo population is scattered in about 175 villages with populations between 25 and 500, they pointed out. The villages are typically without electricity and draw their water from rivers. Reliable communication, as in the experimental villages prior to the advent of satellite radio, is non-existent.

In an interview, Parker described the Stanford recommendations: "We're proposing that low-cost ground stations be installed in the 175 remote Alaskan communities where the need for this service exists," he said. "Manufacturers have indicated that the stations would cost under $15,000."

Such a system, Parker said, could utilize RCA circuits on the Canadian national satellite, Anik II.

The NASA ATS-1 could not be used for the permanent system, he said, since it is an experimental satellite without the capacity for the desired 24 hour a day operation. It was launched in 1966 with a life expectancy of two years.

Parker noted that the Indian Health Service is presently studying various methods to fund a permanent system.

Aside from the major benefit of improving health care in the isolated villages, he said, the satellite has other medically-related uses. The current experimental system has enabled patients at Tanana Hospital to talk to their families in the villages for the first time.

It has also been used to transmit a lecture from the University of Washington Medical School to a premedical class in genetics at the University of Alaska. Additionally, a doctor on St. Paul Island in the Bering Sea regularly uses the satellite to consult with specialists in Anchorage.

The Stanford research team, in addition to Parker and Hudson, includes Dr. William Fowkes, assistant professor of medicine, and Bruce Lusignan, associate professor of electrical engineering.

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Editors: You are invited to send your representatives to a demonstration of the proposed permanent satellite communications system on Saturday, February 23, at 12 noon, at Point Reyes, California. A small ground station, similar in design to those proposed for use in the Alaskan villages, has been installed at Point Reyes. Using this station and the Canadian satellite, Anik II, a two-way "satellite" conversation will be held. Additionally, Senator Ted Stevens of Alaska will discuss prospects for development of the permanent system. For directions on how to reach the demonstration site, please contact Professor Parker at (415) 321-1200, ext. 2755.

Mailed February 19, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 321-5310

SCIENCE WRITERS: Following is a statement by Dr. Avram Goldstein on the significance of isolation and partial purification of the first chemical opiate receptor, a story mailed for AM papers Friday, February 15, 1974. There are also some helpful answers and questions gleaned during an interview with Dr. Goldstein by the Stanford Medical Center News Bureau.

STATEMENT BY DR. AVRAM GOLDSTEIN

In our research laboratory we are trying to understand in biological terms what narcotic addiction is all about. The major scientific question about addiction can be divided into two parts: first, how can heroin produce its remarkably powerful gratifying effect that makes people use it over and over again? Second, what kinds of biochemical changes occur in the brain when an addict becomes hooked on heroin that make it so difficult to get off and to be cured?

How the heroin acts on the brain is a question that could be asked about any drug—how does it work? And the first step in understanding how narcotic drugs work is to isolate and purify the receptors in brain cells that these chemicals combine with. To explain, drugs work by interacting with specific molecules in brain cells or cell membranes. This combination triggers a chemical event that leads to what we call drug action. These special molecules are the receptors to which narcotic drugs fit, like keys fitting into their proper locks.

In our work during the past few years we studied mouse brain fragments and learned how to isolate and partially purify a receptor molecule that combines with a narcotic drug closely related to morphine. This receptor is a proteolipid, a protein molecule with fatty or lipid properties. We have estimated its molecular weight and found that the receptor combines specifically with narcotics and also with narcotic antagonists—drugs that block the "high" narcotic addicts seek. The receptor is found almost exclusively in nervous system tissue (the brain, spinal cord) and the nerve net of the intestine that controls intestinal contractions.

We think the receptor isolated thus far is probably involved in the pain-killing effects of narcotics because it is present principally in that part of the brain in which pain relief is known to occur. This is in the lower part of the brain stem called rhombencephalon.

The receptor has not been completely purified yet, but the report in *Science* describes the partial success along that road, which we expect to lead to an increased understanding of brain chemistry and eventually addiction.

(more) 2/13/74

QUESTIONS AND ANSWERS

Q. What is the next step in your research?

A. There is evidence we are dealing with a family of receptors mediating different actions of narcotic drugs. We think one receptor in one part of the brain mediates the rewarding-euphoria effect that causes addicts to use narcotics. Another receptor in a different part of the brain mediates the pain-killing action. We are now in the process of isolating and purifying different receptors in mouse brain tissue to see how they differ chemically.

Q. Your findings so far are limited to the discovery of a receptor in mouse brain. Do similar receptors exist in human brain?

A. Very similar molecules are almost certainly involved in human narcotic addiction. Dr. Eric Simon's group at New York University, and Dr. Solomon H. Snyder's group at Johns Hopkins University have shown the presence of opiate receptors in membranes from human brains obtained at autopsy, although they did not attempt to extract and purify these receptors. Many of the effects of heroin and morphine are almost identical in mice, rats, and other mammals including man. Mice and rats can become addicted to narcotics and suffer withdrawal symptoms when deprived of the drugs afterwards.

Q. Why was it difficult until now to extract a narcotic receptor from the membranes of brain cells?

A. The reason is technical. Most drugs that act on the brain dissolve easily in cell membranes. The drugs have to be soluble because the brain is a difficult place to get into. But this very fact makes it difficult to isolate receptors because once a drug enters the cell membranes it interacts not only with receptors but also with other nonspecific molecules. In 1971 we published a paper describing the technical problems that would be encountered in any attempt to isolate opiate receptors, and we argued that only opiates of a certain kind have access to the receptor sites. Accordingly, we sought to discover such binding sites in mouse brain.

Q. Can you describe the steps in which this was done?

A. To find the receptor we used a radioactive form of an opiate related to morphine which has all the effects of morphine. The drug is available in two forms which contain the same atoms but have a different spatial layout. In their chemical configuration, these two forms of the drug are mirror images of each other, like left and right hands.

The right-hand form binds to the narcotic receptor, but the other form of the opiate does not. The difference between the amount of attachment of the two forms of the drug represents the amount of actual chemical combination with the receptor molecule.

The receptor is separated from other membrane material by a series of chemical steps. Because the receptor is a proteolipid, which does not dissolve in water, various solvents such as chloroform, methyl alcohol, and heptane had to be used to extract it. Then the receptor was purified by removing contaminating substances by treatment with ether and also by the process of column chromatography with solvent mixtures. The receptor has not been completely purified yet. It represents about 1/1000 of the protein in a mouse's brain.

Q. What do you mean, the receptor has been purified partially?

A. The goal is to obtain the receptor proteolipid in absolutely pure form, so that its exact composition, structure, and shape can be determined. We want to know especially how combining with an opiate molecule like morphine changes the structure and function of the receptor. To accomplish these aims we have to remove every trace of impurity from the receptor. This we have not yet done.

Q. What do you believe is the significance of this work?

A. Eventually, it could have enormous importance in dealing with narcotic addiction. This is an area of great public concern where social policy is being made on the basis of extremely little scientific understanding of the problem. We tend to think of heroin addiction now as a disease but we don't know what kind of disease.

There is some evidence that heroin addicts may have some really abnormal function in their brains. It is even possible that through repeated use of narcotics the drug receptors in brain cells are changed in some irreversible fashion either in their structure and function or through the biochemical system of which they are part. If we understood these changes in receptors—assuming that they occur—we might have the basis for a new approach to the treatment of addiction. This approach might involve finding chemical means for restoring these abnormal receptors to their normal configuration and function.

Better understanding of how the chemistry of the brain changes when a person becomes addicted might make it possible to restore healthy cell function more rapidly.

With better knowledge of the function of opiate receptors we might make progress in another area. If we could show, for example, any differences between receptors that mediate pain-killing action and those mediating gratifying-euphoric effects, we could develop new nonaddictive opium-like pain-killing drugs.

This has been a goal of pharmacologists for the past 100 years. We do not yet know whether it can be done. But certainly this would be the possible outcome of a clear differentiation of these two types of opiate receptors.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

STANFORD--Sleep, what can go wrong with it and what you can do when that happens, will be the subject discussed by Dr. William C. Dement, professor of psychiatry at Stanford University Medical School, at the PROGRESS IN MEDICINE lecture on Wednesday (February 6).

The fifth in the series of free public lectures will be held at 8 p.m. in Memorial Auditorium on the Stanford campus.

Dr. Dement is noted for his pioneering work in the field of physiology of sleep and dreams. He directs Stanford's Sleep Disorders Clinic, where precise diagnostic and treatment methods for persons suffering from insomnia and other sleep abnormalities are being developed.

Dr. Dement and his colleagues have recently discovered a new syndrome related to insomnia. It is sleep apnea or cessation of breathing during sleep.

Dr. Dement received his medical degree from the University of Washington in 1955 and obtained a Ph.D. in neurophysiology from the University of Chicago in 1957. He is recipient of the American Psychiatric Association's Hofheimer Prize for his discoveries.

This is the last in the series of psychiatric presentations. The series will continue with lectures presented by the Division of Cardiology, beginning in March. Details will be issued later.

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Mailed Monday, February 4, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFROMATION CONTACT: Barbara Battino 415: 321-5310

STANFORD--Stanford University Medical School will be developing, and concurrently evaluating, a system for monitoring the quality of medical care at Stanford Hospital.

The six-months study is being supported by a $39,900 contract from the California Regional Medical Program. It is in addition to other quality of care studies underway at the Medical Center.

The study comes at a time when the California Medical Association and the California Hospital Association are proposing that hospitals implement a quality assurance program. This is in response to recent federal legislation requiring new systems to monitor medical care.

The quality assurance program attempts to monitor patient care in the hospital, identify problems in both professional and administrative areas. It will set up systems for determining if a patient should be hospitalized and for how long, proper services to be rendered, and alternative treatments.

According to Dr. Edward Rubenstein, associate dean for postgraduate education at Stanford, the need for quality assurance programs is widely recognized, but actual operation of such systems has proceeded slowly. There is resistance to universal adoption of a standard system for determining diagnoses, admission procedures, courses of care, for example. "Quality" has not been adequately defined, and the cost benefit of such an assurance program is unknown, says Rubenstein.

The planning of a quality assurance program, and concurrent evaluation of it, is being undertaken by the office of postgraduate medical education at Stanford. Working with Rubenstein are Drs. Raymond J. LaSure, James F. Fries, William H. Forrest, Jr., and Harold C. Sox, Jr.

Rubenstein says that Stanford is "now developing a comprehensive system but we plan to proceed slowly and to identify areas for evaluation as we go."

The investigators have identified common disease-problem categories leading to hospital admission, and subcommittees will develop criteria related to these diseases and/or problems. Monitor systems to detect possible deficiencies in care will be developed, as well as an administrative framework to correct problem areas.

The aim is to develop flexible criteria of care which take into account the various problems of the patient. The doctors will use the clinical data computer system now in operation at Stanford to assess the relation between process of care and the eventual outcome, to evaluate results, and to provide feedback to physicians

A further aim is to foster implementation of this system within the 12 community hospitals in northern California which have formed a consortium with Stanford for postgraduate medical education.

Rubenstein reports that a subcommittee is also engaged in designing evaluation of the program itself.

Mailed Monday, March 25, 1974 ###

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CALL: Gary Cavalli (415) 321-5310

STANFORD--The increasing roles of computer and engineering technology in the study of heart disease will be discussed by Dr. Edwin Alderman, assistant professor of cardiology, in a free public lecture at Stanford University Wednesday (March 27).

The lecture, entitled "New Methods to Diagnose Heart Disease," will begin at 8 p.m. in Memorial Auditorium. It is the third in a series of four presentations by Stanford Medical School on recent advances in cardiology.

Co-director of Stanford's cardiac catheterization laboratory, Alderman is an expert on computer methods of diagnosing heart function.

He and his colleagues utilize computers to analyze 10-hour tape recordings of patients' heart action, as well as data obtained from cardiac catheterization (in which long narrow tubes are threaded through blood vessels into the heart to measure heart functions).

Stanford engineers are now developing an instrument that will harmlessly take pictures of organs inside the human body, using sound instead of light or X-rays. This device is expected to be very valuable in medical diagnosis, particularly in cardiology.

Alderman is consultant for the Stanford-NASA biomedical technology team. A medical graduate of Johns Hopkins University, he received his professional training at Bronx Municipal Hospital and Montefiore Hospital in New York.

The cardiology lectures are part of the Medical School's Progress in Medicine series, initiated in 1965.

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Mailed Monday, March 25, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--Two scientists at Stanford University School of Medicine have been named Macy Faculty Scholars for 1974-75.

Dr. Eric Shooter, professor of genetics and biochemistry, and Dr. Irving Weissman, assistant professor of pathology, have each been awarded a scholorship from the Josiah Macy, Jr. Foundation of New York to support research during their sabbatical year.

The award was announced recently by Dr. Clayton Rich, vice president for medical affairs and dean of the Medical School, and Dr. John Powers president of the Macy Foundation.

Dr. Shooter, a molecular neurobiologist, will spend his sabbatical at the University of Geneva. He will do research in the pathology department there with Dr. Bernard Fulpius on the characterization and isolation of receptors important in the development of the nervous system.

A member of the Stanford faculty since 1963, Dr. Shooter received a Ph.D. degree in 1950 from the University of Cambridge in England. He was awarded a doctor of science degree from the University of London in 1964 for distinguished work in biochemistry.

Dr. Weissman will divide his sabbatical time between the Salk Institute in La Jolla and the Sir William Dunn School of Pathology at Oxford University in England. An immunologist interested in how the body's defenses can help fight cancer, he will investigate the thymus gland, studying leukemia induced virus tumors with Dr. Melvin Cohn at La Jolla and lymphocyte differentiation with Dr. J. L. Gowans at Oxford.

He graduated from Stanford Medical School in 1965 and was a postdoctoral fellow and a research associate in the Department of Radiology before joining the faculty in 1969.

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Mailed Thurdsay, March 21, 1974

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Bruce Marsh, a well-known Canadian radio and television broadcaster who was awaiting a heart transplant at Stanford University Hospital, died suddenly last night (March 18).

Marsh, 48, a native of Toronto, was found dead in a Los Angeles hotel room. Death was caused by an apparent heart attack.

The popular announcer, a nationally-known figure in Canada, was in Los Angeles to visit friends and handle a short broadcasting assignment. When he failed to show up for a dinner engagement, friends went to his hotel room, and found him dead.

The victim of four heart attacks during the past 10 years, Marsh had been waiting in Palo Alto since mid-November for a heart transplant.

During the past three weeks, he appeared on numerous San Francisco news and television shows to discuss the recent shortage of organ donors which has slowed the heart transplant program at Stanford, as well as the kidney transplant program at the University of California, San Francisco.

Since Marsh's first television appearance, two heart transplants have been performed at Stanford--one on March 2 and another today (March 19). Prior to that time, Stanford had not received a heart donation since December.

Marsh is survived by his wife, Elizabeth, and two teen-aged sons. Funeral arrangements will be handled by the A.W. Miles Funeral Home of Toronto.

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Released to Business Wire Tuesday, March 19, 1974

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
(415) 321-2300, Ext. 2558

TWO STORIES: Hali Wickner, 5311
Jeff Littleboy
FOR IMMEDIATE RELEASE
STANFORD –

The community is invited to visit Stanford University Hospital's new psoriasis day care center at an open house this Friday and Saturday, March 22 and 23.

Members of the staff will be available to show visitors around the center Friday from 9 a.m. to 5 p.m., and Saturday from 9 a.m. to 12 noon. Refreshments will be served.

The center, believed to be the first hospital based day care center for psoriasis in the country, opened last month. It is located at the Hospital's Hoover Pavilion on Quarry Road.

Patients with psoriasis can obtain the treatment they need during the day at the center and return home to their families each evening

Psoriasis is a common skin disorder that produces reddened, scaly spots or patches on many parts of the body. It affects some 6 million people in the U.S. The majority do not require hospitalization, but an estimated 10% can benefit from intensive day care.

Dr. Eugene Farber, professor and chairman of the Department of Dermatology at the School of Medicine, is director of the center. Dr. William Watson is associate director. –30– cr

EDITORS: Portion sent Business Wire 3/19/74. Group picture (street clothes) available on request.
FOR IMMEDIATE RELEASE
STANFORD –

Vicki Hays, Stanford's ace swimmer from Fullerton, set a meet record in the 50-yard breaststroke during the women's national intercollegiate meet March 14-17 at Penn State University.

Hays, referred to as "the one girl team" by her teammates, also placed second in the 100-yard individual medley, second in the 100 yard breaststroke, and set six new Stanford records in other events.

First place went to Arizona State, which swept an invitational meet at Stanford a few weeks earlier. The University of Miami, University of Washington, University of New Mexico, and UCLA took the next four places.

The Stanford team placed 11th in point totals out of 91 participating university entries in the meet, sponsored by the American Intercollegiate Athletics for Women (AIAW).

Coach Betsy Weeks clocked Hays at 0:30.90 as she splashed to first place.

Hays set new Stanford records in both the 50-yard and 100-yard breaststroke (1:07.58) and 100-yard individual medley (1:01 12), 200 yard medley relay (1:55.12), the 400-yard medley relay (4:12.20), and the 400-yard freestyle (3:50.77).

Mei Ong of Malaysia placed 5th in the 200-yard medley, and Kathy Heinze of Saratoga, 12th in the 100 yard butterfly.

Hays, Ong, Sue Trupin of Champaign, Ill , and Heinze placed 8th in the 400-yard medley relay and 5th in the 200 yard medley relay, with Nan Leuschel of Portland, Ore., swimming in place of Heinze.

–30– cr

3/19/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--Two major administrative appointments at Stanford University Medical Center were announced today (March 18) by Dr. Clayton Rich, vice-president for medical affairs.

Dr. Thomas A. Gonda, director of Stanford Hospital, has been appointed medical director of the Medical Center and associate dean for clinical affairs of the School of Medicine.

Paul B. Hofmann, deputy director of the Hospital, has been appointed director of the Stanford Hospital and Clinics.

The changes, part of an administrative reorganization in the Medical Center, will consolidate the management of all patient-care functions, Dr. Rich said. The Center's financial operations were merged last September.

"The revised organization largely is a response to the increasing interdependence of the Medical School, Hospital and Clinics," he said. "The aim is to achieve a high degree of coordination and effectiveness to meet the changing needs of the entire Medical Center."

In his new position, Gonda will supervise the patient care activities of the medical staff within the Hospital and Clinics. He will work closely with community and faculty physicians, as well as residents, interns and postdoctoral fellows.

He will also coordinate the development of the Medical Center's quality assurance and professional standards review programs.

Hofmann will assume responsibility for the administration of the Hospital and Clinics.

The appointments are effective April 1.

Gonda, 52, has had a distinguished career as a psychiatrist, teacher, researcher, and administrator.

He has been director of Stanford Hospital since 1968. Twice he served as acting chairman of the Medical School's Department of Psychiatry, from 1955-56 and again from 1958-61. He has been an associate dean of the Medical School since 1967.

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222--Appointments of Gonda and Hofmann

A native of Vienna, Austria, Gonda obtained both his A.B. (1942) and M.D. (1945) degrees from Stanford. He received further professional training at San Francisco Hospital and the Langley Porter Clinic.

He served as clinical director of psychiatry at San Francisco Hospital from 1949-51, and was chief of neurology and psychiatry at the Veterans Administration Hospital in San Francisco the following two years.

After a year in private practice, Gonda joined the faculty at Stanford in 1954 and was promoted to professor of psychiatry in 1965. The author of numerous book chapters and scientific articles on human behavior, he served as a visiting professor at Oxford University in 1961-62.

Hofmann, 32, becomes one of the youngest University Hospital directors in the country and the youngest in Stanford's history. He has served as the Hospital's deputy director since June of 1972.

He is also a lecturer in the Medical School's Department of Family, Community and Preventive Medicine, and teaches a popular course in Stanford's Health Services Administration program.

Before coming to Stanford, Hofmann was associate administrator at San Antonio Community Hospital in Upland, California, and a lecturer in hospital administration at the UCLA School of Public Health.

A native of Portland, Oregon, he received his B.S. (1963) and Master of Public Health (1965) degrees from the University of California, Berkeley.

After two years as a research associate in hospital administration at the Massachusetts General Hospital's Laboratory of Computer Science, he became assistant director of the Laboratory and also instructor in computer applications at the Harvard School of Public Health.

He has published numerous articles in professional hospital journals on a variety of topics, including the use of computer technology in hospitals. He is a member of the American College of Hospital Administrators, the American Hospital Association's counsel on research and development, and the California Hospital Association's committee on hospital licensure.

Hofmann, his wife Lois, and their 18-month old daughter, Julie, live on the Stanford campus.

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Mailed Monday, March 18, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Dudley C. Kenworthy, associate general secretary at Stanford, has been named director of development for the Stanford University Medical Center.

His appointment, effective April 1, was announced Monday (March 18) by Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine, following a nationwide search.

In his new position, Kenworthy will head the Medical Center's fundraising efforts. During the past five years, the Center has received an average of $9 million a year from private gift sources.

Currently, Kenworthy directs the University's major gifts program in Northern California, Hawaii, and the Pacific Northwest. Both his present position, and his new one in the Medical Center, are related to the current $300 million Campaign for Stanford, begun two years ago.

Kenworthy succeeds Marshall Virello who died last November.

A native of Glendale, Kenworthy attended Pasadena schools, and received his AB from Stanford in 1951 and his MBA in 1953.

Before joining Stanford in 1959, Kenworthy held positions in personnel and industrial relations with several corporations. At Stanford he has been responsible for programs of annual giving, major gifts, building projects and long-range studies.

He has been active in several community and civic organizations including the Palo Alto YMCA, the Sierra Club, and the Sempervirens Fund.

His wife, Marion, is a member of the Stanford class of 1952, and holds a Stanford AB and AM in Education. She is counsellor at Saratoga High School. They have three children.

The Kenworthys live in Menlo Park.

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Mailed Monday, March 18, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 408: 321-5310

STANFORD--"Exercise in the Prevention and Treatment of Heart Disease," will be discussed by Dr. Robert F. DeBusk, assistant professor of cardiology, in a public lecture at Stanford University Wednesday (March 20).

The lecture, second in a series of four presented by Stanford Medical School on recent advances in cardiology, will begin at 8 p.m. in Memorial Auditorium. It is free of charge.

DeBusk is director of Stanford's cardiac rehabilitation program, designed for heart attack victims and patients recovering from open heart surgery. The program consists of exercise testing and training, physical therapy, and psychological and dietary counseling.

In the future, DeBusk hopes to extend the program to individuals with early symptoms of heart disease, including stable chest pain or angina pectoris.

"Many people can be put on an exercise program to help determine whether it can prolong life not only for heart attack victims, but for others in the early stages of heart disease as well," he says.

A 1964 graduate of Stanford Medical School, DeBusk received his professional training at Stanford and Harvard.

The cardiology lectures are part of the Medical School's Progress in Medicine series, initiated in 1965.

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Mailed Monday, March 18, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415-321-5310

STANFORD--Dr. I. Robert Lehman, professor of biochemistry, has been named chairman of the Department of Biochemistry at Stanford University School of Medicine.

The appointment, effective September 1, was announced today (Wednesday, March 13) by Medical School Dean Clayton Rich.

He succeeds Dr. Paul Berg, head of the department since 1970, who is relinquishing his administrative responsibilities to return to teaching and research.

Dr. Lehman's research on the mechanism of DNA synthesis and degradation has contributed to scientists' understanding of the cell's genetic apparatus. His most recent work has involved the joining of DNA molecules by the enzyme DNA ligase, an enzyme known to be required for replication and recombination (exchange of hereditary material).

An alumnus of Johns Hopkins University, Dr. Lehman received his A.B. in 1948 and his Ph.D. in biochemistry in 1954. From 1954 to 55 he was a fellow at the McCollum-Pratt Institute of Johns Hopkins. He then joined the Department of Microbiology at Washington University School of Medicine in St. Louis, first as an American Cancer Society fellow, then as an instructor.

In 1959, Dr. Lehman was appointed assistant professor of biochemistry at Stanford. Two years later he was promoted to associate professor, and in 1966 he became a professor.

The 49-year-old biochemist is author of numerous scientific publications, and an associate editor of the Journal of Biological Chemistry. He is a fellow of the American Academy of Arts and Sciences and a member of the Johns Hopkins Society of Scholars. He has also received the Henry J. Kaiser Award for excellence in teaching at Stanford Medical School.

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Mailed Wednesday, March 13, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CALL: Gary Cavalli (415) 321-5310

STANFORD--New evidence that a body chemical may trigger crises in patients with sickle cell anemia was reported Tuesday (March 12) by a team of Stanford University researchers.

Sickle cell anemia is a hereditary blood disease which almost exclusively affects black people. In a crisis, which can last several days or weeks, the victim suffers extreme pain and is frequently disabled.

The Stanford investigators first reported 18 months ago that sickle cell crises may be initiated or enhanced by one of the prostaglandins, fatty acids manufactured in many tissues of the body.

The new findings indicate that the same prostaglandin type produces two related effects on the red blood cells of sickle cell anemia patients: an impairment in the ability of the cells to carry oxygen, which results in decreased oxygen supply to body tissues; and an increased intake of calcium, which can cause the cells to become more rigid and sickle more easily.

The researchers--Dr. Paul L. Wolf, associate professor of pathology and head of the clinical laboratories at Stanford, and Dr. Israel Rabinowitz, Stephen Berman, and Neal Shikuma--reported their findings at the annual meeting of the American Association of Pathologists and Bacteriologists in San Francisco.

"These findings support the suggestion that prostaglandin is a contributing factor in the sickling process," Wolf said.

Red blood cells of sickle cell anemia victims become rigid and elongated, shaped like crescents or sickles. Unlike normal blood cells, which are round and flexible, they have difficulty moving through the body's smaller blood vessels.

The result is seriously impeded blood flow and reduced oxygen supply to various body tissues, causing severe pain, increased infection, and often malfunction of body organs and disability.

Approximately 50,000 American blacks have sickle cell anemia. Another 2 1/2 million carry the gene for the disorder and have sickle cell trait, though they usually do not suffer symptoms of the disease.

Prostaglandins are capable of acting in various ways on body tissues in very minute quantities. They have been used in clinical trials in the United States, Sweden and elsewhere to induce labor and abortion, and to treat asthmatics.

In their experiments, the Stanford investigators added prostaglandin type E_2 to blood samples from individuals with normal blood and patients with sickle sell anemia and sickle cell trait.

They found that the presence of the chemical produced a 33 per cent decrease in the oxygen carriage of blood cells of sickle cell anemia patients. There was a slight increase in the normals and patients with sickle cell trait.

In a companion study, they determined that prostaglandin E_2 caused a marked increase in the intake of calcium into blood cells of sickle cell anemia victims.

Wolf suggested that the possible role of prostaglandin E_2 in the sickling process is to affect or damage the cell's membrane so that more calcium enters. This, in turn, increases cell rigidity and accelerates sickling of the cell.

With these new findings, scientists may now attempt to find drugs that can aid in the treatment of sickle cell anemia patients by inhibiting the production of prostaglandin E_2.

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Mailed 3/12/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau · Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310

STANFORD--"Your Diet and Your Heart" will be discussed Wednesday (March 13) by Dr. John S. Schroeder, assistant professor of cardiology, in a lecture at Stanford University.

The public lecture, first in a series on recent advances in the prevention and treatment of heart disease, will be delivered at 8 p.m. in Stanford's Memorial Auditorium. It is free of charge.

Under Schroeder's direction, Stanford Hospital a year ago began serving patients a model, low-fat menu in an educational program on the role of diet in heart disease prevention.

Questionnaries returned by over 100 patients three months after their discharge from the Hospital, indicated that at least half had modified their home diets in some way to cut down on fat intake.

A graduate of the University of Michigan Medical School, Schroeder is noted for his studies of contributing factors in heart attacks and evaluation of high risk cardiac patients. He is also chief cardiologist on Stanford's heart transplant team.

The cardiology lectures are part of the Medical School's Progress in Medicine series, initiated in 1965 as a public service to the community.

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Mailed Monday, March 11, 1974.
Palo Alto Times and Mercury News

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

SAN JOSE--A court order, sought by a Los Altos woman to allow her to take the illegal drug Laetrile while a cancer patient at Stanford University Hospital, was denied Wednesday (March 6) by Superior Court Judge John S. McInerney.

"The court is being asked to order a hospital to do something which the hospital does not feel it has the legal right to do...and feels is medically unwise," Judge McInerney wrote in a five-page opinion.

In a complaint filed last week, Mrs. Josephine Bergman, 49, had sought the order to permit her to receive doses of the medicine which is prepared from peach and apricot pits.

Mrs. Bergman said Dr. Stewart M. Jones, a Palo Alto physician, has been treating her with Laetrile at Stanford hospital, but discontinued its use on orders from hospital officials.

"The hospital has the right to require of Dr. Jones that he obey reasonable rules and regulations," the judge wrote. "One such rule relates to the use in the hospital of only those drugs... whose pharmaceutical integrity can be reasonably assured.

"The Laetrile previously used by Mrs. Bergman is alleged not to meet this requirement and no evidence to the contrary has been introduced."

At a hearing Monday, Stanford's staff counsel Merel Glaubiger contended that use of Laetrile is illegal and allowing it now would leave the center open to prosecution and a flood of requests from other cancer patients.

George W. Kell, attorney for the Bergmans argued the issue essentially was one of freedom of choice, involving the patient's "right to choose what to do with her body."

The court said the patient had freely chosen to seek care in the Stanford hospital, and as such she subjects herself to reasonable hospital rules and regulations.

The U.S. Food and Drug Administration says there is no acceptable evidence to justify use of Laetrile on human beings, and the California Cancer Act prohibits its use specifically on cancer patients.

Proponents of Laetrile have argued that use of the drug as a vitamin is legal. But Stanford attorneys said there is no exception in the law for the administration of Laetrile as nutritional therapy.

Mrs. Bergman was quoted Thursday in the Stanford Daily as saying "I'm not giving up. Now I have to wait until I'm discharged, but I don't feel bad that I lost. The story is out in the open and I think that's good."

According to the campus newspaper, both she and Kell indicated they will press on with their legal battle, this time for a permanent injunction against the hospital.

The hospital has approximately three weeks to respond to the plaintiff's charges before the court schedules a hearing on the permanent injunction. ### Mailed, March 7, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CALL: Barbara Battino (415) 321-5310

STANFORD--The Sleep Disorders Clinic at Stanford University School of Medicine has been awarded a $60,000 gift from Pfizer Laboratories, New York.

Dr. William C. Dement, professor of psychiatry and director of the clinic, notes that the financial support will enable the clinic to continue to study patients, a basis for further understanding of sleep.

"Exploratory research in sleep disorders has far to go," says Dr. Dement, "particularly in patient care, and we need all the assistance possible to keep our clinic running."

A check for $20,000 will be given to the clinic annually for three years. In making the initial presentation of the check to Dr. Dement this week, John Abeles, associate medical director of the pharmaceutical firm, explained the company's motivation:

"Sleep disorders is a new field, and information accruing from pure scientific exploration is important and useful to us as drug manufacturers as well as to medicine. We need to learn directions to take in this still murky area..."

Physicians, says Dr. Dement, have made little progress in sleep problems, as millions become dependent upon drugs for help, and reports of drug misuse grow. Disorders are variously described as neurologic, untreatable, imaginary, psychiatric or psychosomatic.

More research, he feels is needed in the study of what sleep itself is. Dr. Dement and his associates have been developing systematic approaches to diagnosis of sleep disturbances.

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Mailed March 7, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Gary Cavalli, (415) 321-5310
FOR IMMEDIATE RELEASE
STANFORD –

A new series of four public lectures on recent advances in the prevention and treatment of heart disease will begin Wednesday, March 13, at Stanford.

The weekly lectures, presented by members of the Medical School's Division of Cardiology, will focus on a wide range of topics, including the importance of diet and exercise, new diagnostic methods, and prevention of sudden death. The lectures are free of charge.

The first talk, "Your Diet and Your Heart," will be delivered by Dr. John S. Schroeder, assistant professor of cardiology, at 8 p.m. in Memorial Auditorium. The 45-minute lecture will be followed by a question and answer period.

Under Schroeder's direction, Stanford Hospital a year ago began serving patients a model, low-fat menu as part of an educational program on the role of diet in heart disease prevention.

"The crucial diet problem of most Americans is not malnutrition, but overnutrition," Schroeder says. "Many experts now believe that to prevent the epidemic of heart disease in this country, Americans must change their dietary habits throughout their lifetime, preferably beginning in childhood."

A graduate of the University of Michigan Medical School, Schroeder is noted for his studies of contributing factors in heart attacks and evaluation of high risk cardiac patients. He is also chief cardiologist on Stanford's heart transplant team.

The cardiology lectures are part of the Medical School's Progress in Medicine series, initiated in 1965. They are offered to the community as a public service, according to Dean Clayton Rich.

The other lectures in the cardiology series, all scheduled Wednesdays at 8 p.m. in Memorial Auditorium, are as follows:

March 20: "Exercise in the Prevention and Treatment of Heart Disease," by Dr. Robert F. DeBusk, assistant professor of cardiology. DeBusk is director of Stanford's cardiac rehabilitation program, designed for heart attack victims and patients recovering from open heart surgery. Begun last December, the program consists of exercise testing and training, physical therapy, and psychological and dietary counseling. DeBusk graduated from Stanford Medical School in 1964 and received his professional training at Stanford and Harvard.

March 27: "New Methods to Diagnose Heart Disease," by Dr. Edwin L. Alderman, assistant professor of cardiology. Co-director of Stanford's cardiac catheterization laboratory, Alderman is an expert on computer methods of diagnosing heart function. He and his colleagues utilize computers to analyze 10-hour tape recordings of patients' heart action and data obtained from cardiac catheterization (in which long narrow tubes are threaded through blood vessels into the heart to measure cardiac functions). A medical graduate of Johns Hopkins University, Alderman is consultant for the Stanford-NASA biomedical technology team.

April 3: "Sudden Death: The Problem and How to Prevent It," by Dr. Donald C. Harrison. Harrison is William G. Irwin professor and chief of cardiology at Stanford. He is nationally known for his studies of various drugs used in the treatment of life-threatening abnormal heart rhythms. In recent years he has pioneered in the application of computer and engineering technology to cardiology. He is developing numerous monitoring and warning devices for high risk patients to prevent sudden death. Under his direction Stanford has established a Center for the Study of Sudden Death. A graduate of the Medical College of Alabama, Harrison received his professional training at Harvard and Stanford. He has been chief of cardiology at Stanford since 1967.

–30– cr 3/6/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

STANFORD--In a unique application of the Red Cross Blood coverage plan, a group of employees at Stanford University Medical Center have volunteered to donate blood to insure blood coverage for all Spanish surname patients at Stanford University Hospital.

The Alianza Latina (Latin Alliance), which represents the Spanish-speaking employees of the Medical Center, has arranged with the American Red Cross-Stanford University Blood Center to have group coverage extend to all Spanish surname patients in the hospital, except those with hemophilia or leukemia.

This plan is effective immediately. The first six volunteers gave blood at the Stanford Blood Center today (Friday, March 1).

Under the standard group coverage plan, if 20 percent of the group members donate a pint of blood during the year, the entire group as well as dependents are entitled to receive unlimited blood for that year without being charged for replacing it. There is a processing fee, but that is usually covered by insurance companies, according to Harold Horoho, director of the Red Cross-Stanford Center.

"The Alianza has taken the standard plan a step further to apply to patients," explains Tony Rodriquez, manager of training and development and coordinator of the project. "While we don't expect many people will use the plan at first, the important thing is that such a service is now available to a group of people who might not otherwise be able to afford it."

This plan is just one way the Alianza, which has about 150 members, is trying to meet the needs of Spanish speaking patients, points out Delores Silva, chairperson of the group.

Horoho says he doesn't know any other Red Cross units that provide such coverage. He feels that the concept deserves a one year trial and that it could be a model for certain other groups.

"It's a gamble for the Blood Center because we're dealing with an unknown quantity; there's no way of predicting how many patients will be in the Hospital," he notes. "However, the concept is a means of reaching a segment of the community which may not ordinarily give blood."

He explains that the Red Cross hopes to stimulate donations throughout the county in the name of Alianza Latina. Volunteers will also receive the standard coverage for themselves and their families.

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Mailed Friday, March 1, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 4:15 321-5310 or 497-6911

STANFORD – Most critically ill newborn infants who would otherwise have died, today recover without handicaps because of various supportive measures now available.

This is the story from the Stanford University Hospital's intensive care nursery and Premature Infants Research Center, now entering its eleventh year of operation.

Julie, for example, was born prematurely and weighed just four pounds. Her blood condition required that she have a transfusion minutes after birth.

Shortly afterwards she developed respiratory problems severe enough to require a lengthy period on a respirator to assist her breathing. More transfusions were required. Doctors put her chances to survive at only 40%.

Julie was born at Stanford University Hospital in 1967 and today she is a bright, healthy, highly intelligent six-year-old.

Infants like Julie born today have a much greater chance of survival than she had. Today, the overall survival rate for infants with respiratory distress syndrome is 85%, according to Stanford nursery statistics.

Survival for all infants admitted to the Stanford intensive care nurseries (ICN) in the first half of 1973 was 92%.

Follow-up studies of survivors who had mechanical ventilation (oxygen assistance) between 1962 and 1969 at Stanford show that more than 80% have no handicaps, neurologically or intellectually. Incidence of handicaps decreased in the latter part of the period studied.

Dr. John Johnson, assistant director of the Stanford nurseries, points out that 95% of those studied probably would not have survived at all without treatment.

Dr. Philip Sunshine, director of nurseries, and Dr. Johnson list several developments in the care of critically ill infants at Stanford that have helped bring about this improvement.

They cite more extensive monitoring, new equipment, more diagnostic tools, and changes in therapy and general procedures.

About 700 infants are admitted to the ICN yearly. An additional 50 are admitted to the Premature Research Center annually, where the intensive care is supported by a grant from the General Clinical Research Centers Branch of the National Institutes of Health.

Respiratory distress is the most common complication of premature infants, and doctors at Stanford have developed methods of therapy to improve the survival of these infants.

Today respiratory distress syndrome (RDS) occurs in approximately one to 2% of all live births, affecting 20 to 25% of all prematurely born infants in the U.S.

According to Dr. Sunshine, mechanical ventilation techniques have been most important in Stanford's success in altering the picture of RDS mortality.

RDS, or hyaline membrane disease, are terms often used interchangeably to describe the developmental phenomenon.

(more) 4/30/74 cr

Treatment aid, says Dr. Sunshine, is to support the infant until he produces a surface active material to line the airway and keep the alveoli, the tiny air sacs in his lungs, from collapsing.

Normally this material is manufactured during the late fetal period before birth, but may be absent in premature infants.

"We treat HMD as one would treat a heart attack. We treat the complications it brings and give the infant time to heal himself," says Dr. Sunshine.

Recently research has begun to indicate that steroids administered to the mother a day or two before birth may cause the enzyme material to be made more readily by the infant.

The use of oxygen in the care of the premature infant is a subject of great controversy, since prolonged use of high concentrations of oxygen can be damaging to both the lungs and eyes of the baby.

Stanford doctors have developed specific criteria for initiating oxygen therapy. Their aim is to have a shortened exposure to oxygen, starting at lower concentrations.

Anticipating the need for this therapy is an important development in the Stanford ICN during the past 10 years. According to Dr. Sunshine, "the ideal management of an infant with RDS is to anticipate the infant at risk to develop the syndrome and to monitor that infant carefully. Time is of utmost importance. . . ."

Doctors also require regular temperature checks. The premature infant has very poor temperature control. The smaller he is, the greater his chance of survival if his temperature and that inside his incubator are maintained at specific levels. At these levels his oxygen consumption is minimal.

Not only premature infants require intensive care. Recently Stanford ICN has placed increasing emphasis on identification of small-for-dates infants: those full-term babies weighing under 2500 grams (5.5 lbs). Only infants delivered before 37 weeks are termed premature. More than 20% of the infants admitted to the Stanford nurseries are small-for-dates.

The problems and complications of such infants are markedly different from those encountered in an infant of the same weight, but who suffers from early growth retardation. The small-for-dates infant normally doesn't have respiratory distress syndrome, but hypoglycemia (low blood sugar) and pneumonias are characteristic problems.

For example, it is standard prodedure at Stanford to monitor glucose frequently in such babies to prevent hypoglycemia before symptoms may overtly appear. As a result, says Dr. Sunshine, there are fewer complications of the disorder.

Another factor in lowering newborn mortality has been improved infant transport systems. The Stanford heliport is a well-known feature, with more than 200 infants flown or transported by ambulance annually to the ICN from outlying community hospitals.

Improvements in infant transport systems have lowered mortality in transit to about 15% from the 25 to 35% rate of 10 years ago, says Dr. Sunshine.

Among new procedures in the PRC and ICN are earlier feedings, more extensive use of mother's breast milk, and feeding by IV. There is a "walking blood donor program," where Medical Center staff may periodically donate the very small amounts of blood needed for a baby.

Parents now have a more extensive role in the nurseries. Many parents come as often as three times a day to learn to feed and care for their baby who has an extended stay in the intensive care nurseries.

For the future, doctors expect even further reductions in infant mortality. But the real breakthrough would be prevention of prematurity. At Stanford, work in that respect is centered on family counseling, nutrition, and prenatal care.

Says Dr. Johnson, "Doctors can anticipate and correct a lot of complications, but prevention is the ultimate goal."

1. Electronic monitors keep a constant watch as this three-and-a-half pound baby girl sleeps in Stanford University Hospital's Premature Infant Research Center.

2. A premature baby who began life weighing just a pound-and-a-half receives care from her mother in the Stanford Premature Infant Research Center.

3. Dr. Philip Sunshine, director of Stanford's intensive care nurseries, checks a baby whose breathing is assisted by a respirator. Stanford Medical School student Eddie So (right) and Joann Tsuchimochi, RN, look on.

TO: NEWS BUREAU, BLDG. TC135, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305

Stanford Intensive Care Nurseries 4/74

Please send me #1, #2, #3, 8 x 10 glossy prints (please circle).

NAME _____ ADDRESS _____

PUBLICATION _____ CITY, STATE, ZIP _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310 or 497-6911

STANFORD--June commencement will mark what may be the last chapter in the 77-year history of the Stanford University School of Nursing.

The nursing school will close this summer as 18 young women of the last class receive their baccalaureate degrees.

The future of nursing education at Stanford remains uncertain.

A study committee in 1973 had recommended phasing out the present program leading to a baccalaureate degree, and replacing it with a two-year master's program.

That new program can only be implemented by a combination of private and federal support. Unfortunately, federal funding for nursing education has dwindled in recent years and "realistically, we must have some outside financial involvement for our plan to go ahead," says Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

The study committee had reasoned that the present program was too small, and had little effect on the overall health care delivery system, but the impact of graduating 30 nurses with advanced training and prepared for expanded roles would be substantial.

In the current program, students complete two years of undergraduate university work before entering the nursing school for three years of study leading to a baccalaureate degree in nursing. New students have not been admitted to that program since 1972, pending development of a new curriculum.

Dr. Rich expresses disappointment at the "undesirable and unwanted demise" of the nursing program.

And so do nursing students, alumnae and faculty who hope that a strong graduate nursing program may someday become a reality.

Several members of the last class are completing or working toward additional degrees. Some will receive their degree in subjects like English or psychology as well as nursing; one student will receive a master's degree in education; another plans to continue study at law school, perhaps combining careers in medical law.

In the last class 52 percent of the students received their two (and frequently more) years of undergraduate work at Stanford.

Most of the nursing school faculty was terminated in 1972 and 1973. Of the current faculty, two are retiring and the remaining two are seeking other positions.

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222--School of Nursing

Grace Ringressy, director of the school for the past 28 years, will retire this summer. She received her diploma from the school in 1932, then was awarded undergraduate and graduate degrees in nursing and nursing administration from the University of California at Berkeley.

She notes that the changes in education of nurses in recent years left Stanford as the only private, non-sectarian university on the West Coast to offer the bachelor's degree in nursing.

Currently, baccalaureate programs are offered at the UC campuses in San Francisco and Los Angeles, at several campuses of the California state university system and at three private schools.

Former hospital or diploma programs are rapidly closing as the trend for more college-educated nurses grows. Increased numbers of community colleges are offering AA (two-year associate of arts degree) nursing programs.

The school had its beginning in 1897, when six nurses were graduated from the Lane Hospital Training School in San Francisco.

The baccalaureate program was offered by 1917, and two years of undergraduate preparation has been required for students since 1939.

The school moved to Palo Alto with the medical school in 1959. Although the complete faculty of 14 came to the campus, the change was a major one in the philosophy of nursing education at Stanford.

On campus, it was possible for students to utilize the resources of the total university community. They did not depend on hospital service as student nurses of early hospital training programs.

Principles, in addition to practice skills, became an important part of the professional nurse's education.

Although the future of nursing education at Stanford is uncertain, alumnae of the school are actively pressing for a new program.

The Stanford Nurses Club, with a large membership, "is not giving up," according to its president, Marlene Handy.

"Our members are very sad," she says. "The older San Francisco group is very close, and has strong feelings about the school. There is a sadness, but also a real determination to see a new program established."

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Mailed Monday, April 29, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310 or 497-6911

(ADVANCE) FOR RELEASE TUESDAY, APRIL 30, 1974

Editors: Release date for this story has been set to coincide with Dr. Hayflick's talk at the University of Southern California Andrus Gerontology Center.

STANFORD--The "fountain of youth" lies not in hoaxes and crazes, a Stanford medical microbiologist says, but rather in practical scientific research in aging, particularly the research on cells.

Dr. Leonard Hayflick, speaking at the University of Southern California Andrus Gerontology Center Tuesday (April 30), said that gerontology specialists can make progress toward solving the questions of aging.

"The notion that the biology of aging is too vastly complex to yield to experimentation is, I believe, a myth," he said.

Dr. Hayflick was awarded the Biomedical Science and Aging Award today from the USC Gerontology Center. He is well-known for his discovery that normal fetal cells have a predetermined capacity to divide, about 50 times in man, and that adult human cells divide fewer times according to the age of the donor. Then they stop dividing and die.

The microbiologist believes that cells gradually acquire errors in their genetic information, and the "program" is simply played out, resulting in aging and an ultimate limit to the span of life.

Presenting the Isadore and Esther Kesten Memorial Lecture in Los Angeles, Dr. Hayflick suggested that the capacity for cell divisions is rarely completed in man, that functional losses occur in the cells before they stop dividing This produces age changes long before normal cells reach their maximum limit of division.

This phenomenon of the finite lifetime of normal cells, he says, "cannot be attributed to any trivial cause, but is best explained by intracellular events undoubtedly genetically based."

The goal of research in aging, he maintains, is not simply to increase longevity.

"If longevity is to be increased merely by extending the years of our infirmities, then the goal is not worth seeking," he said.

"The goal that appears to be not only more desirable but indeed more attainable is not the extension of longevity, but the extension of our most vigorous and productive years."

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Researchers have noted that the life span appears to be fixed at about 90 years in man, regardless of the state of technological or medical progress. Modern medical achievements have resulted in more people reaching that fixed life span.

Life expectancy at birth has increased in recent years, but at age 65 to 70 it has remained essentially constant.

Dr. Hayflick says that even if cancer, heart disease, stroke and other major diseases were conquered, the human life span would be basically unaffected.

The human life span, he says, will not be significiantly changed until the underlying, non-disease related, biological causes of aging are either slowed or stopped.

Claims of super-longevity, he said, should be taken with skepticism. Adequate scientific proof has not been given to substantiate the claims for longevity. Current claims, he says, "should be regarded as unproven if not outright hoaxes."

Dr. Hayflick noted that biological gerontology has long been regarded as a pseudo-science, lacking scientific respectability.

He cited hoaxes like the yogurt craze of the early 1900's and said that few researchers are willing to risk their reputations in a field with such a stigma.

He called for more scientific interest in the field, and increased support for research.

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Mailed Thursday, April 25, 1974

END ADVANCE FOR RELEASE TUESDAY APRIL 30, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD--Research in molecular genetics will have major consequences for curing the sick and for developing novel plants of particular advantage to agriculture rather than creating supermen, says a Stanford University biochemist.

"I can imagine attempts to create particularly advantageous domestic animals and plants," says Dr. David Hogness, "but I do not find that schemes to create supermen by such techniques are credible."

Many laymen, including Congressmen, have often expressed concern about future possibilities of "perfecting the race" by altering genes.

But Dr. Hogness, writing about the human use of genetics in a new book The Great Adventure, says no one would want to perform such potentially horrendous experiment.

With the exception of efforts to cure hereditary defects and finding answers to diseases such as cancer, the practical advantages of man's search for new gene combinations will be restricted to agriculture, according to Dr. Hogness.

Among the possibilities would be to create plants that would not need nitrogen fertilizers, the biochemistry professor said. "This might be done by inserting bacterial genes that allow the needed nitrogen to be obtained from the air, rather than from fertilizers in the soil."

In agriculture, knowledge of heredity has allowed construction of new plant varieties "because the aims are better defined, the system is simpler...and ethical objections are tenuous," Dr. Hogness said.

But man has only just begun to tap the reservoir of genes made available by centuries of mutation and natural selection.

"The yield from different crops has been augmented by selecting for resistance to particular pests or for growth cycles to fit different growing seasons," he said.

"Short, stiff-strawed rice varieties developed at the Rice Institute in the Philippines increased the yield from 1,200 to more than 9,000 pounds per acre.

"This extraordinary increase soon allowed the Philippines to become an exporter of rice, and we may expect that the food supply will be profoundly altered as these strains are introduced throughout Asia.

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"Seedless watermelons are now available to those with inhibitions about spitting, and pineapples have been developed that will fit a number two can."

Dr. Hogness said there is some urgency in preparing a proper base by moving genetics to the center of man's educational experience.

"The knowledge we have acquired regarding the molecular structure of genetic information forms the unifying link and fundamental basis for all terrestrial life," he said.

"It indicates that man's potential for changing life through the use of his intellect is far greater than we would have guessed even 30 years ago.

"It is much as if we had taken a drink from Alice's elixir, and had shrunk smaller and smaller, until we could see the individual atoms of which genes are composed."

Dr. Hogness said pessimists who fear the advance of man's knowledge in molecular genetics are unduly concerned.

"In any case, it is not possible to halt that advance, so interrelated are all aspects of biology," he said.

"The millions we spend on a 'cure for cancer' will inevitably reveal some of the basic mechanisms for the integration of viral DNA into human chromosomes..."

(DNA or deoxyribonucleic acid is the substance of heredity. Its purpose is to perpetuate a species by cell division and provide the information for constructing the proteins that develop and operate the cell).

Viral DNA can now be used as a vehicle to insert genes from one species into the cells of another, Dr. Hogness said.

This can be done by first attaching DNA containing the genes from one species to the viral DNA in a series of reactions carried in the test tube. The resulting hybrid DNA is then inserted into cells of the other species.

In experiments at Stanford, animal genes have been inserted into bacteria, Dr. Hogness added, but we may reasonably suppose that in the future it will be possible to insert bacterial genes into plants or animals, or mix genes from any two species.

"The implications of this type of genetic mixing are indeed radical," Dr. Hogness said. "We can imagine the insertion of new genes into the cells of genetic cripples to provide the functions that cannot be contributed by the defective genes."

He said it is recognized that many diseases are hereditary. There are about 2,000 of these ranging from anemias to diabetes and mongolism. As more of these are treated and prevented, they will occupy an increasing fraction of the physician's load.

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Mailed 4/25/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD -- He's a very good man," says the elderly woman sitting in the doctor's waiting room. "Please don't take him away from us."

The "good man" in this case is Sergio Noriega, one of the first in a new class of health professionals--the physician's assistant.

Noriega is a 29-year old Mexican who for four years was a medical corpsman in the Navy. He now sees 25 to 30 patients a day in the predominantly Spanish--speaking agricultural community of Gonzalez, where he assists three family doctors.

A similar story has developed in Boulder Creek, a small California village nestled in the mountains between San Jose and Santa Cruz. There physician's assistant Ron Tachibana, another former Navy corpsman, aids two general practitioners. Tachibana, too, has established his own clientele in the area, and counsels many patients on their emotional problems.

Noriega and Tachibana, along with 14 others, were members of the first class of physician's assistants (PA's) trained at the Stanford Medical Center. They graduated last June, after completing a two-year training program. Thirteen graduates from that class now have jobs as PA's in California and another is working in Michigan.

Nationally, there are over 60 paramedic training programs supported by the federal government or approved by the American Medical Association. These programs, though similar in purpose, are by no means identical. They vary in length--four months to four years--and in name--physician's assistant, primary care associate, MEDEX (Medical Extension), and nurse practioner.

Most are designed to aid over-worked family doctors in the delivery of primary health care, particularly in underserved rural or ghetto areas. Others provide specialized training in emergency medicine, surgery, or child care.

Stanford's is one of two primary care PA programs established in California since the state enabling law was passed in 1970. The other, cosponsored by UCLA and the Charles R. Drew Postgraduate Medical School in Watts, has also graduated one class.

Several nurse practitioner programs also have been launched in the state, including those based at the University of California's San Francisco, Los Angeles, and Davis campuses. These provide specialized medical training on top of nursing school education.

To date, 1600 trainees have graduated from the various nationwide PA programs; some 900 are involved in delivering primary care to families in underserved areas.

On the job, primary care PA's perform a myriad of tasks under the supervision of their doctor-employers.

They take medical histories, perform physical examinations and diagnostic workups, counsel in preventive medicine (including diet, social habits and family planning), and participate in the management of chronic diseases.

They also give injections, suture minor wounds, apply and remove casts, handle emergency calls, and perform office laboratory work.

With this assistance, the physicians are freed to focus their skills where they are needed most. Perhaps more significantly, they are able to treat more patients.

"By having Sergio here, we're able to offer and provide care to a lot of people who otherwise might not get it," says Dr. James Fassett, who supervises Noriega in Gonzalez.

(more) 4/24/74

Fassett, a 1945 graduate of Stanford Medical School, was raised in Gonzalez and has practiced there for 25 years. Tremendously popular and well-respected in the community, he has had patients drive out to his home and knock on his door at 2 a.m. complaining of a headache.

With an extremely busy, entirely rural practice, Fassett believes his office is the ideal setting for a PA.

Noriega echoes those sentiments: "That's really what the PA program is all about," he says, leaning forward in his chair for emphasis. "The over-worked rural family doctor may finally get some relief because of us. The influx of PA's also may entice other doctors to the country.

"To me," he continues, "the most frustrating thing is the fact that there are so many people who needed treatment and so much uncaring by the medical profession. The doctors are all concentrated in Palo Alto and San Francisco. There's no one out here treating the farmers and migrant workers, the low and lower middle class people."

For the lower income patient, he adds, a language barrier often poses another obstacle to adequate medical care.

Spanish-speaking people comprise 75 percent of the patient population treated by Noriega and the three doctors he works with in Gonzalez—Fassett, Leonard Nevarez, and June Dunbar.

Because of this, the doctors say, Noriega is even more valuable than he might be otherwise.

"Even though we all speak Spanish, it's just not the same as with Sergio," Fassett says. "The patients feel he'll understand their problems better—their background, their traditions, their family ties.

"In this area, he's been a tremendous asset. He's particularly good with children, just a natural. Mexican patients are very concerned with children. It's the center of their life, so this is very important to them."

Noriega, himself the father of two girls and a boy, was named Sergio after a character in a Russian novel his mother was reading when he was born. He has a unique feeling for the Mexican patients, and believes he is providing better care in a Spanish-speaking community than he would be elsewhere.

"When a Mexican woman comes in and tells me she's tried to treat herself by drinking tea or putting a patch of mustard plaster on her stomach, I don't laugh at her," he says. "I know what she's talking about.

"To get these patients to tell you what's bothering them, you often have to go at it in a roundabout way," he adds. "Certain things in their culture are taboo and you have to be careful not to insult them."

Just as Noriega's language and cultural ties with the community have made him so valuable in Gonzalez, Tachibana's counseling talents have filled a need in Boulder Creek. Each day he commutes 30 miles through the mountains from Sunnyvale, where he lives with his wife and five-year old daughter, Lisa.

"Ron's an exceptional individual," says Dr. Kenneth B. Reed, his employer, who has practiced in Boulder Creek for 12 years. "He now sees many patients about their emotional problems as well as physical. I can't; I just don't have the time. That's an added bonus I didn't anticipate when I hired him."

Tachibana feels he's more able to attend to patient's emotional needs because he's not a physician.

"Patients are less reluctant to ask me questions about their illness or therapy since I'm not an M.D.," he says. "Many times they don't want to ask the doctors because they think their questions are dumb."

Tachibana saves the last appointment of each day for patients who have problems they want to talk about.

"That way we can take as long as we want without worrying about a waiting room full of other patients," he says. "In these situations you really have to listen to the patients—not only what they're saying, but also what they're not saying. A lot of illnesses are related to home problems. If you can do something about the home problem, you can often do something about the illness."

In large part because of their special interests and capabilities, Noriega and Tachibana have been extremely well-accepted in their communities. For several months both Fassett and Reed solicited opinions and criticisms from their patients. The result: no adverse comments and many compliments.

(more)

But the issue of patient acceptance is tied in with another, potentially more troublesome one—the threat of malpractice suits. This fear, heightened by the rising number of large malpractice awards in recent years, has led many physicians who could use PA's to shy away from hiring them.

A PA's personal malpractice insurance is attached as a rider to the doctor's policy, as is an office nurse's. Under this arrangement, the PA is liable for his own acts, but liability extends to the doctor-employer, who ultimately bears the responsibility for all services provided in his practice.

Those involved in current programs feel that physician's assistants will help reduce, rather than increase, the number of malpractice suits, because their presence on the health team will improve the quality of care.

"I had a lot of misgivings about patient acceptance and the medical-legal aspects of having a PA at first," Reed says. "But as time goes by, I worry about both a lot less. It's very evident that Ron adds to the quality of care rather than detracts from it."

Dr. Michael Dennis, director of Stanford's PA program, is another who shares this belief.

"Most malpractice suits occur against doctors forced to see 80, 90, or 100 people a day," Dennis says. "It's hard to see that many people every day without either being too abrupt or missing something.

"Probably 40 of those 100 people simply need to talk with someone about a minor problem. The PA can handle them and allow the doctor to devote his time to the more serious problems. With the PA helping in this manner, the doctor is less likely to miss something."

The early returns would seem to substantiate this viewpoint. To date, only two malpractice suits have been filed nationwide against PA's and their employers. Both cases were dismissed before reaching the courtroom.

In minimizing the risk of malpractice and maximizing the PA's effectiveness, there appear to be three major concerns: the PA must not try to assume too much responsibility; the physician-employer must exert the proper supervision; and informed consent must be obtained from the patients.

"Something you really have to look for in a PA," Fassett says, "is his recognition of his own limitations. Sergio knows his capabilities very well. He doesn't do anything he feels incapable or unsure of.

"Typically, he'll find something abnormal, come to me and tell me about it, and I'll ask him, 'What do you think we should do?' Then we'll confer and decide on the appropriate treatment."

The issue of determining what constitutes appropriate supervision is one that lawmakers, PA's and physicians have been grappling with since the first experimental PA program was started at Duke University in 1965.

"Does supervision mean that the doctor has to be looking over your shoulder or down the hall, or does it mean he occasionally can go out to lunch and leave you in charge?" Noriega asks. "I personally feel it's a question that has to be answered individualy by each doctor and his PA."

California law simply says that the physician must review the findings of the PA following an evaluation and consult with him before therapeutic measures are initiated. Stanford's Dennis was one of those involved in writing the 1970 state law.

"We agonized over the wording for a long time," Dennis says. "Some wanted to specifically call for immediate supervision. Others wanted to say 'supervision by electronic means.'

"The problem is that the PA's effectiveness in terms of man-hours declines in proportion to the amount of immediate supervision provided by the physician. The ultimate aim is to strike a balance between maximum effectiveness and responsible supervision."

Dennis feels that the key to achieving this delicate balance is mutual trust between the parties involved.

"In any adviser-advisee relationship," he says, "the amount of immediate supervision depends on trust. In this case, the trust develops in a triad among the PA, the physician, and the patient.

(more)

"The patient must recognize who the PA is—not another M.D., but an individual whom the doctor has confidence in and delegates a great degree of responsibility to."

Under California regulations, written consent must be obtained from patients before care can be rendered by a PA, except in life-threatening situations. Consent need not be given for each visit, but on an annual basis. Additionally, the PA is required to identify himself to each patient.

"You don't walk in and say, 'I'm sorry I'm a PA,' because the patient will freak out," says Don Massie, another Stanford graduate now working in Corning, Calif. "You have to be very professional about the whole thing."

Despite the routine identifications, many patients find it easier to simply address the PA as "doctor."

"You can explain 'til you're blue in the face that you're not an M.D., but they'll still call you 'doctor,' " Tachibana laughs. "It's practical, I guess, since there's really no title that goes along with the role."

Compared to a doctor's training—which begins in undergraduate years with premed courses, carries through four years of medical school, then internship and residency—the PA's education seems pretty elementary. But the graduates of Stanford's first class, which includes nine former military medics and six registered nurses, feel they were well-prepared for their on-the-job responsibilities.

Cosponsored by Foothill Junior College in Los Altos Hills, the two-year program consists of classroom instruction, rotation through clinical services at Stanford or an affiliated institution, and practice with a community physician.

"The tools I use every day come from the training program," Noriega says. "At the end of the two years you have a tremendous amount of medical knowledge. On the job, you refine that knowledge daily."

Tachibana regards his previous experience as a corpsman and his training at Stanford as the foundation which he builds upon.

"I feel cheated if I don't learn something new each day," he says.

Aside from an ongoing education, the knowledge that they're doing something very worthwhile, and the satisfaction from helping people, the job has its other rewards.

Nationally, the average salary is a little above $15,000, Dennis says. Some PA's, given little responsibility by over-cautious doctors, are paid receptionist's wages. Others, operating on a lucrative fee for service basis, earn over $20,000 per year.

"Your salary depends," Noriega says, "on what the doctor thinks you're worth to his practice, whether it's bringing in more patients, giving him more time off to be with his family, or freeing him to attend continuing education seminars."

Though many PA's enjoy being called "doctor," few have plans to attend medical school and obtain an M.D. degree.

"Before I started my job I had visions of going on to med school," Tachibana says. "But if things continue as they have, I don't see any need for it. I'm quite satisfied as a PA."

Noriega never thought seriously about medical school, but after his stint as a Navy corpsman he, too, sought a career in medicine. He worked as an orderly and licensed vocational nurse before entering the PA program.

"I wanted to put the things I had learned into practice, without having to go to school for 14 years," he says. "We have a lot less money to pay back than the M.D.'s."

With that, Sergio Noriega smiles and pauses for moment. He shakes his head as he thinks about the $10-$15,000 in loans many medical students must repay after they enter practice.

It is inevitable, some would argue, that many young doctors become eager to cash in on their long, expensive, and demanding medical education. Because of this, they are drawn away from primary care into the more lucrative specialties, away from the country to the more affluent suburbs. And because of this, they help create the need for primary care PA's.

"There's really no need for me to go back to school," Noriega says. "Here I have all the responsibility I want, all the patient acceptance I want, and most important, all the satisfaction I want."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310

STANFORD--Dr. Leonard Hayflick, professor of medical microbiology at Stanford University School of Medicine, will receive the Biomedical Science and Aging Award and the Isador and Esther Kesten Memorial Lectureship from the University of Southern California Gerontology Center.

The awards, which will be presented at a banquet April 30 in Los Angeles, honor achievement and distinguished contributions in the field of aging. Dr. Hayflick will also present a lecture on the USC campus Tuesday morning (April 30) titled "New Wrinkles on Aging."

Dr. Hayflick receives the awards for his work on the biology of aging. In growing normal human and animal cells outside the body, he found that the older the donor, the fewer times the cells divided. The number of cell divisions also depended on the average life span of the species.

Dr. Hayflick believes that cells gradually acquire errors in their genetic information, and the "program" is simply played out, resulting in aging and an ultimate limit to the span of life.

The microbiologist also played a key role in persuading the government to permit use of human cells for production of safer and cheaper vaccines.

More than 50 percent of polio vaccines used in this country are produced in the strain of human cells developed by Dr. Hayflick. Many other vaccines produced in these cells will soon be available here as they are now in many other countries.

Dr. Hayflick has spoken out on a variety of issues, including the need for standardizing vaccine production, cancer research, and cell banks.

As a recipient of the Kesten Lectureship, he will stay at USC's Andrus Gerontology Center for several days to lecture and exchange ideas with faculty and students. He will also present a paper before a Sigma Xi, national honorary scientific society, meeting.

Dr. Hayflick established the cancer-virus research program at Stanford in 1968. He also established a central human cell bank which supplies normal human cells to research labs throughout the world.

He received his Ph.D. from the University of Pennsylvania.

He is active in numerous scientific organizations, and has received honors from the National Cancer Institute, the Commission for Aging Research, and the U.S. Gerontological Society, among others. He has often served as a consultant to government, industry and international scientific committees.

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Mailed Wednesday, April 17, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CALL: Spyros Andreopoulos (415) 321-5310

STANFORD--A team of investigators at Stanford University School of Medicine has discovered a new mechanism controlling cell division and cell maturation in human tissue.

The finding makes it possible to do detailed studies of cancer cells and determine why they are perpetually growing in comparison to normal cells which have a limited life cycle and die.

The team, led by Dr. John H. Frenster, clinical associate professor of medicine, reported its new findings in the March 22 issue of Nature, a scientific journal.

All cancer cells have at least two things in common. They grow in an abnormal uncontrolled fashion, and this ability to grow "out of control" is passed on from one generation of cancer cells to the next. When an abnormal malignant cell grows and divides it produces another malignant cell that "pays no attention" to the regulatory mechanisms that govern a normal cell.

"Human cancer cells display unusual types of cell division and fail to mature and die at normal rates," explained Dr. Frenster.

"This maturation defect preserves the cancer cells in a state of perpetual youth, and accounts for the accumulation of increasing numbers of cancer cells in cancer patients."

Dr. Frenster and his group analyzed human bone marrow cells taken directly from patients. They utilized techniques newly developed by Dr. Frenster in which molecular probes are inserted into living cells and are visualized by high-resolution electron microscopy.

The Stanford scientists studied the activity of deoxyribonucleic acid (DNA), the hereditary material packed in the nucleus of the cell. DNA is the substance of the chromosomes and the chemical language in which the construction manual for living things is written. The purpose of DNA is to perpetuate a species by cell division and to provide the information for constructing the proteins that develop and operate the cell.

DNA is copied into RNA which is the source of information for protein synthesis.

Dr. Frenster and his associates have found that during normal cell division and maturation there was a progressive decrease in RNA and DNA synthesis, suggesting that the copying activities of these molecules are strongly repressed and inactivated.

Scientists have long suspected that some cancers may be a disease of DNA, but the scientific evidence has been spotty and circumstantial.

"The finding is important because it now allows an analysis of cancer cells to determine if the repression mechanism is malfunctioning in such cells," Dr. Frenster said.

The Stanford team included Shirley L. Nakatsu, Marilyn A. Masek, and Sharon Landrum, research assistants in Dr. Frenster's laboratory. The study was funded by a grant from the National Cancer Institute and the American Cancer Society, and by a research scholar award from the Leukemia Society.

Mailed 4/11/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CALL: Gary Cavalli (415) 321-5310

STANFORD--Dr. Norman E. Shumway, noted heart transplant pioneer, has been appointed professor and chairman of the new Department of Cardiovascular Surgery at Stanford University School of Medicine.

Dr. Shumway's appointment and the establishment of the new department, both effective June 1, were announced Tuesday (April 9) by Dr. Clayton Rich, vice-president for medical affairs. They were approved earlier in the day by the University Board of Trustees.

The new department, formerly a division in the Department of Surgery, is believed to be the first of its kind in the United States.

"It is generally recognized that the Stanford program of cardiovascular surgery has for 15 years been among the most productive in the nation in research and education as well as patient care," Dr. Rich said.

"A remarkably dynamic and creative interaction among many diverse disciplines has occurred at this University as a direct consequence of a broadly conceived surgical approach to the investigation and treatment of heart disease.

"Granting departmental status to Cardiovascular Surgery will serve to maintain at Stanford a distinguished program in a new discipline which has reached scientific and academic maturity," he concluded.

Dr. Shumway, 51, is world reknowned for his work in cardiac transplantation and open-heart surgery. The heart transplant program at Stanford is the most active in the world, averaging one transplant per month. To date, 69 patients have received new hearts at Stanford; 24 are alive, one for four years and 11 months.

In cardiac surgery, Dr. Shumway's contributions have included the development of safer and more effective techniques for total surgical correction of "blue baby" heart defects, heart valve replacement, and correction of birth defects involving transposition of the heart's great vessels.

A firm believer that "the best arena for training good surgeons is the dog laboratory," he experimented with heart transplantation in dogs for nine years before undertaking his first human transplant on January 6, 1968. He credits much of his success in heart surgery and transplantation to persistent experimentation in the animal laboratory.

Dr. Shumway is the author or co-author of nearly 200 scientific publications and books.

A native of Kalamazoo, Michigan, he obtained his M.D. from Vanderbilt University in 1949, and his Ph.D. from University of Minnesota in 1956. He was a special trainee of the National Heart Institute at Minnesota from 1956-57, and joined the faculty at Stanford the following year.

Dr. Shumway and his wife have four children. They reside in Palo Alto.

In addition to Dr. Shumway, charter faculty members of the new department are Dr. Eugene Dong, Jr., associate professor of cardiovascular surgery, and Drs. Edward B. Stinson and Randall B. Griepp, assistant professors.

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Mailed April 9, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

STANFORD--Two Stanford University dermatologists say injury to the skin often triggers attacks in patients with psoriasis.

"With poetic license, a psoriatic patient may be compared with a hemophiliac," write Drs. Eugene M. Farber and Paul H. Jacobs in the current issue of Cutis, a medical journal. "When cut, the hemophiliac bleeds, and the psoriatic develops a new lesion."

Several million persons suffer from the skin condition called psoriasis which produces reddened, scaly spots or patches, disability in many cases, and embarrassment, especially to women concerned about their skin.

"In a person with a lifelong disease such as psoriasis, prevention of injury to the skin is of the utmost importance," the dermatologists stressed.

Dr. Farber, who heads Stanford's department of dermatology, said that outbreaks of the skin condition in patients have been caused by such things as eyebrow plucking, chronic friction of the Achilles area from poorly fitted shoes, pressure of the wristwatch, a wallet rubbing against the hip, and tatoos.

"Even overenergetic manicuring produces injury to the matrix of the nail and is responsible for nail lesions," the dermatologist warned.

In addition, hair tints, sprays, vaccinations, skin tests, and insect bites have caused outbreaks, he said.

In the last decade, the dermatologists noted, light sensitivity of the skin has also increased in frequency because of widespread use of photosensitizing compounds in soaps, lotions, ointments and oral medications.

"Psoriatics," they added, "must be warned that photosensitizing compounds are deleterious and may result in the appearance of new lesions."

Dr. Farber cited a recent survey of 1,537 psoriatics conducted at Stanford under the auspices of the John A. Hartford Foundation of New York. The survey revealed the patients were frequently unaware of the effects of injury on their condition.

And more than half of the patients were found to have a history of attacks following injury to their skin, Dr. Farber said.

"The skin of the psoriatic patient has a characteristic reactivity when the disease is on the upswing," explained Dr. Farber. In an analysis of 100 patients with acute psoriasis, such outbreaks occured in 90 percent of the patients following injury.

The sensitivity of the psoriatic skin to injury was first described by Dr. Heinrich Koebner in 1876. It would help psoriatic patients to know that injury to their skin is as detrimental as the wrong kind of eating is to diabetics, the dermatologist said.

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Mailed Monday, April 8, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

EDITORS: Photo available on request if not included with article.

STANFORD--"The lag between the advanced state of technology and our ability to handle it at the human level indicates a pressing need for ethical guidelines in biology and medicine."

So says Dr. Ernle Young, acting chaplain of Stanford University Hospital. He is teaching the School of Medicine's first course on biomedical ethics, this spring quarter.

Young, who is also visiting assistant dean of Stanford Memorial Church, has been associated with Hospitals in Dallas, Texas and in his native Johannesburg, South Africa. It was his suggestion to offer such a course for Stanford medical students.

The course, which meets Wednesday evenings, includes theory as well as specific applications. "There seems to be a need for an ethical framework within which scientists and physicians may base their actions," explains Young. "The theoretical portion will provide a background that will help them in making concrete decisions."

Ethical issues at all stages of life will be examined. These include genetic manipulation, abortion, human experimentation and euthanasia.

Although the course is intended primarily for medical students, Young welcomes interaction with physicians, nurses and other Medical Center staff on the issues. He explains that because the field of biomedical ethics is still in the pioneering stages, everyone has much to learn.

Young belongs to a group of West Coast medical ethics teachers who meet periodically to share resources. Their diverse backgrounds--political, social, philosophical as well as theological--provide a rich pool of ideas.

He also expects to benefit from his own course. "I hope to open up the questions rather than provide the answers," the acting chaplain says," for there are no simple solutions in this area. At most, one can hope for a thorough ventilation." -more-

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Medical students are enthusiastic about the course. "There seems to be a deficit of discussion on certain aspects of life throughout medical school training," says fifth year student Bill Hurlbut. "For instance, students should be able to sit and talk with others about death," he said.

Young's course is a valuable addition to the curriculum, according to Dr. Count Gibson, chairman of the Department of Family, Community and Preventive Medicine, which sponsors the course. "At a time when technological growth raises more ethical problems than solutions," Gibson notes, "it is important that the life scientists and ethicists collaborate to insure human welfare."

He adds that Young's willingness to develop a course on biomedical ethics is particularly welcome in view of his background. A Methodist minister in Johannesburg since 1956, Young went to Southern Methodist University in Dallas in 1967 to earn his Ph.D. in social and political ethics.

"I hoped to acquire some new means of entering into dialogue with the Dutch Reformed Church, which supports the South African government's policies of racial segregation (apartheid)," he says. However, when he returned to his country four years later, after receiving his degree, he found that no meaningful dialogue was possible. He left again in 1973 for "reasons of conscience."

He explains: "I cannot accept the situation in South Africa because it is incompatible with the Christian ethic of love; nor as a white English speaking person can I change it (the blacks themselves will have to). Under the circumstances, I feel it would be immoral to continue to benefit from the privileges which a white skin affords every South African."

Similar principles of conscience and humanity are involved in dealing with patients. "A patient must be treated as a whole person," Young says. "There are dimensions of personality that don't fit into the test tube or conform to laboratory values, and these spiritual aspects are as important as the physical ones."

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Mailed Monday, April 1, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CALL: Gary Cavalli (415) 321-5310

STANFORD--"Sudden Death: The Problem and How to Prevent It," will be discussed Wednesday (April 3) in a public lecture at Stanford University by Dr. Donald C. Harrison, Irwin professor and chief of cardiology.

The lecture, free of charge, will begin at 8 p.m. in Memorial Auditorium. It concludes a series of four presentations by Stanford Medical School on recent advances in cardiology.

"Sudden cardiac death is now being recognized as one of the most important health problems in the country," Harrison says. "Nearly 300,000 Americans die each year of heart disturbances before they reach a hospital.

"Our efforts are aimed at finding better methods to identify high risk individuals and prevent some of these deaths."

Harrison is nationally known for his studies of various drugs used to treat life-threatening abnormal heart rhythms. He is also noted for the development of numerous monitoring and warning devices for high risk heart patients.

Under his direction, a Center for the Study of Sudden Death has been established at Stanford Medical School.

In recent years, he has pioneered in the application of computer science, physics, and engineering technology to cardiology. He is currently working with Stanford physicists on the perfection of a new device to measure blood flow and other cardiac functions by detection of the heart's magnetic signals.

A graduate of the Medical College of Alabama, Harrison received his professional training at Harvard and Stanford. He has been chief of cardiology at Stanford since 1967.

Harrison's presentation is the final Progress in Medicine lecture for the current academic year. The series will resume next fall.

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Mailed April 1, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310 or 497-6911

STANFORD — Stanford University medical student Thomas Okarma has been selected as one of the first Luce Scholars, a group of 15 leading American students who will spend a year working and studying in Asia.

Okarma, due to graduate from Stanford Medical School next month, will work as a clinical pharmacologist at the University of Malaya Hospital in Malaysia.

He also will conduct research at the University's School of Medicine, where he plans to probe the mysteries of dengue fever, a tropical virus transmitted by mosquitoes. The hemorrhagic form of the fever has a particularly high mortality rate in Malaysian children.

The Luce Scholars program was established this year by the Henry Luce Foundation of New York. Each fall the program will send a group of outstanding American students to Asia for a year's experience in their field. The program excludes Asian scholars and focuses on students in professions such as physics, architecture, medicine, journalism, economics, and law.

Okarma, 28, said the year in Malaysia "will give me a chance to find out what tropical medicine is all about. There must be an incredible array of interesting things going on in Asian medicine which American doctors are unware of," he added.

Because he eventually plans to devote his career to clinical pharmacology, "exploring new ways of treating diseases," the assignment in Malaysia ties in very well with his long-range goals.

At the University of Malaya, Okarma hopes to determine why dengue fever is life-threatening in some instances and relatively benign, like a flu, in others.

The Malaysian government is particularly interested in encouraging research on the fever, since an epidemic is expected within the next few years, he said.

One of the workers in Okarma's lab may be his wife, Betsy, now a nurse at Stanford Hospital. A graduate of Stanford's School of Nursing in 1969, she also has earned a degree in art history from Stanford.

Okarma graduated from Dartmouth in 1968 and obtained a Ph.D. in pharmacology from Stanford in 1971 before entering medical school.

The Luce Scholars program appealed to him because he felt he needed a "creative year" before beginning his medical internship.

"Malaysia also struck us as the perfect place to be," he said. "English is spoken throughout the country, so I can teach and do research without a language barrier. There are numerous ethnic groups, each with their own religions and customs. For a foreigner, it's a marvelous place to learn about diverse groups of people."

Kuala Lumpur, where the University is located, is a very modern city, Okarma said. However, the native Aborigines and the Malaysian jungles are but 200 miles away.

The program begins in mid-September with a 10-day briefing at the Brookings Institution in Washington and a month-long orientation on Asian politics, culture and religion at the Chinese University in Hong Kong.

The Luce Scholars are selected from nominations submitted by a group of 60 participating colleges and universities around the country.

Okarma is the son of Mr. and Mrs. Theodore Okarma of Robbinsville, New Jersey.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310

EDITORS: Copies of Stanford M.D. available on request if not included with story.

STANFORD--The "Tuskegee" experiment is a prime example of white, educated clinical researchers exploiting nonwhite undereducated subjects for the benefit of middle-class Americans, a leading doctor of community medicine said Wednesday (May 29).

Dr. Count Gibson urged doctors to study the ethics of the issue because "only then we can be sure that we are not exploiting others for our own benefit."

In the Tuskegee syphilis study, 400-odd black men who had syphilis were left untreated 40 years so that the natural history of the disease could be studied.

The project was condemned by many researchers, doctors, civil rights groups, and a government advisory panel appointed to look into it on the ground that treatment was withheld from the study group. The study ended two years ago, but families of the subjects have initiated damage suits against Macon County, Ala., the Center for Disease Control, and the state health department.

Gibson, chairman of family, community and preventive medicine at Stanford University, addressed his remarks to articles published by two colleagues, Drs. Charles Barnett, emeritus professor of medicine at Stanford, and R. H. Kampmeier, editor of the Southern Medical Journal. Both defended the study on the grounds that treatment was never withheld deliberately.

Dr. Barnett published an article in Stanford M.D. maintaining that the cause of lack of treatment in syphilitics in those days was probably the intimidating nature of the therapy itself.

"At that time," he explained, "treatment consisted of courses of an arsphenamine in weekly doses for 6 to 10 weeks, alternating with weekly injections of mercury of bismuth for 10 to 15 weeks." This went on, he added, as long as two years.

There were severe and painful reactions to the therapy, he pointed out. "Patients with latent syphilis were well and took treatment only because they were told they must," Barnett stressed.

"When treatment made them sick and they felt better without it, they developed severe doubts about the wisdom of continuing." So, he feels, the untreated black Alabamans declined treatment after they had learned from friends what the "cure" was like.

But Gibson, writing in the current issue of Stanford M.D., argues that when effective treatment that improves prognosis is available--as he contends it was--ethical considerations demand that it be given.

Gibson responds with evidence that female syphilitics were not included in the study group and were intentionally treated to prevent possible transfer of the disease to offspring.

Another case of selective nontreatment cited by Gibson was the request in 1941-42 by the U.S. Public Health Service to the Selective Service Board. It asked that draftees in the study group be withheld treatment for syphilis because they were part of the study. A total of 256 men were denied medical aid as a result of this request, Gibson said.

- more -

In his article, Barnett defended the investigators for not providing penicillin treatment when it became available. He pointed out that penicillin injections are not guaranteed to prevent later manifestations of the disease. Several studies, he said, have shown that treatment probably reduces the incidence of later disease damage but have not shown that improvement is statistically significant.

Gibson said this line of reasoning is irrelevant. "The question obviously was not that of effecting cure but of halting any further microbial action," he pointed out.

Not surprisingly, Barnett disagreed. "The Tuskegee patients had lived long enough with their infections to show that almost all of them would never develop late-stage syphilis, and that penicillin treatment would have little effect on prognosis."

The Tuskegee study raised ethical questions of informed consent, Gibson said.

"It is extremely difficult if not impossible," he wrote, "for members of an oppressed group to give full and free consent to representatives of a dominant group, no matter how noble their intentions.

"The black rural residents of Macon County were as oppressed as if they had been in a physical prison. They did not have the autonomy that goes with education, good nutrition, a decent income, and political power.

"I do not feel we should benefit from therapeutic knowledge which depends on the exploitation of unfree human beings."

Theoretically, there could have been only one ethical way in which the "Tuskegee" experiment could have been carried out, Gibson added. The doctors could have inoculated themselves, isolated themselves when they were contagious, and could have followed their own progress..."

But the professor doubts that any syphilologist would have volunteered, given his knowledge of the disease.

Gibson criticized Kampmeier's sustained and intemperate attack on the news media for declaring the Tuskegee experiment "a horrible medical atrocity."

"In fairness," Gibson said, "I would like to point out that the medical profession never debated the ethics of the 'Tuskegee' research in its own journals despite the publication of a dozen studies on the topic over the years.

"The reporting in the press should be as much an indictment of the indifference of the medical profession as of the research itself."

He said he reviewed the Southern Medical Journal and "I cannot find a single reference to the lack of access to medical care by the Southern rural population, the segregation of black people in health care facilities until the Civil Rights Law of 1965, and the continuing lack of an adequate payment mechanism for medical care for poor people in Southern states."

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Mailed Wednesday, May 29, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310 or 497-6911

STANFORD--The Speech and Language Clinic at Stanford will offer several group programs this summer for preschoolers, school age children, and adults with communications problems.

Preschool and school age programs will deal with articulation, language enrichment, visual-motor training, language-perceptual-motor training, and voice therapy. There will also be a summer program for deaf children, to improve their lipreading, oral language and sign language.

Ongoing parent observations are a part of these programs.

Adult programs include a stuttering group and voice therapy.

Each of the programs runs for six or eight weeks, meeting two to four times weekly for one-hour sessions.

Further information may be obtained from the Speech and Language Clinic at Stanford, 600 Willow Road, Palo Alto. Interested persons may call 497-6751.

The Clinic is a joint program of the Children's Hospital at Stanford and the Stanford Medical Center. The staff includes eight speech and language pathologists and one special education teacher, who handle about 8,000 patient visits per year.

Diagnosis and treatment is provided for all types of speech, language and voice disorders in patients of all ages.

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Mailed Monday, May 20, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Gary Cavalli 415-321-5310 or 497-6911

STANFORD –

A technique for the production of new genetic species that may eventually lead to the synthesis of antibiotics or insulin by common bacteria, and possibly the correction of certain hereditary defects, has been reported by Stanford University and University of California scientists.

The technique involves the introduction of genetic material from one species into the cells of another.

Already it has been used by Stanford scientists to create functioning species of bacteria that do not exist in nature.

The scientists anticipate that within the next several years it will result in the construction of new biological species useful in medicine and agriculture.

Specific genes may be introduced into common bacteria for the synthesis of insulin and antibiotics, they indicated. Ultimately, specific genes may be inserted into the cells of patients to cure hereditary diseases, or inserted into plants to create desirable new types, they said.

Genes are biological units that transmit hereditary traits and govern the development of living cells.

Use of the technique to combine genes from unrelated bacteria was reported in the current issue of the *Proceedings of the National Academy of Sciences* (PNAS) by the Stanford researchers—Dr. Stanley N. Cohen, associate professor of medicine and head of the division of clinical pharmacology, and research assistant Annie C. Y. Chang.

"By constructing functional molecules in which genes from different species are joined, new types of bacteria are formed," Cohen said.

The basic method for constructing new functional genetic combinations was reported earlier by Cohen and Chang, in collaboration with Drs. Herbert W. Boyer and Robert B. Helling of the University of California, San Francisco.

Dr. Joshua Lederberg, Stanford's Nobel prize-winning geneticist, called the new technique "a major tool in genetic analysis."

"It does at the molecular level what cell fusion does at the cellular level, and cross-breeding does at the level of the entire organism," he said.

Lederberg believes the technique will have important applications in medical diagnosis, the study of the nature of cancer cells, and the study of gene control mechanisms or what turns a gene on and off.

"Finally," he said, "it may completely change the pharmaceutical industry's approach to making biological elements such as insulin and antibiotics."

(more)

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new genetic species 2-2-2

The Stanford and UC scientists, in another study, successfully inserted genetic material from an animal into bacteria, where it reproduced itself and functioned biologically. (That study, carried out with former Stanford student Dr. John Morrow and UC biochemist Howard Goodman, will appear in the May issue of PNAS.)

"The introduction of animal genes into bacteria provides a mechanism to study the organization and expression of hereditary material from higher organisms," Cohen said.

"Also, this technique provides a potential method for producing bacteria capable of synthesizing a wide variety of biological substances, such as antibiotics or insulin. It may also lead to bacteria capable of synthesizing chlorophyll or substituting for fertilizer in agriculture.

"Ultimately," he continued, "it may be used for correcting genetic defects."

Before this can be done, he said, scientists must develop better methods to isolate specifically desired genes from cells.

"Procedures are currently being developed at Stanford and elsewhere that may make it possible to select the genes required for these special functions within the next several years," Cohen said.

"However, certain other technical problems and important ethical considerations must also be resolved," he said.

The technique for constructing new genetic combinations is based on the ability of certain enzymes to cut DNA in a way which produces fragments having cohesive ends. These sticky ends are used to join DNA fragments from two sources.

(DNA or deoxyribonucleic acid is the molecule of heredity in living cells. It is the substance which gives the cell its hereditary instructions and perpetuates cell division.)

The essential units of DNA used in the experiments are known as plasmids. Plasmids are independent genetic elements within the bacterial cell capable of reproducing themselves independently of cellular reproduction.

DNA plasmids from bacteria have been joined in the test tube with genes from unrelated bacteria and from animal organisms. The newly-constructed DNA molecules are then inserted into bacteria treated with certain chemical agents.

Following the uptake of the DNA plasmids, the "transformed" bacteria acquire the genetic characteristics of both the parent molecules. In this way a new bacterial species is developed.

"This new species can reproduce to make other identical cells," Cohen said. "A single DNA plasmid molecule introduced into bacteria can be used to create many billions of molecules of this same new species."

Although the technique was first described only a few months ago, it is now being used by scientists around the world to introduce genes from various sources into bacteria, Cohen said.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Gary Cavalli 415: 321-5310 or 497-6911

STANFORD--State Senator George Moscone and national health policy strategist Dr. Paul Ellwood will be the featured speakers Thursday afternoon (May 16) at the opening session of a three-day health care symposium at Stanford, sponsored by the Stanford Medical Students Association.

The symposium, "Health Care: Problems and Prognoses," continues Friday and Saturday with panel discussions on the issues of health maintenance organizations (HMO's), regional health planning, and health manpower needs.

Ellwood's lecture, "How to Change the System," opens the meeting at 12 noon Thursday in Room M104 at the School of Medicine. Moscone's talk, "Issues in National Health Insurance Proposals," begins at 4 p.m. in Room M104.

The lectures are free of charge and open to the public.

Panel discussions are scheduled as follows: HMO's, 12 noon, Friday, Room M104; regional health planning, 1 p.m. Saturday, Room M104; and health manpower, 3 p.m. Saturday, Room M106.

The Stanford symposium is being held in conjunction with a meeting of the chapter officers of the Student American Medical Association's Western Region.

Ellwood, a Stanford Medical School alumnus (1953), is President of InterStudy, a Minneapolis-based organization engaged in social policy research. He is known as the architect of the Nixon administration's HMO strategy and a strong advocate of health care delivery reform.

In addition to HMO strategy, his studies have had a significant impact on national policy in comprehensive health planning, quality assurance, and health services research and development.

Before going into research full-time, Ellwood was a practicing physician in pediatric neurology and physical medicine and rehabilitation.

Moscone, California State Senate Majority Leader, is also chairman of the Senate Subcommittee on Nutrition and Human Needs. A former member of the San Francisco Board of Supervisors, he obtained his law degree from the University of California's Hastings College of Law in 1956.

For the past eight years, Moscone has represented California's Sixth Senate District, including southern San Francisco and northern San Mateo Counties. He has been Democratic Floor Leader since 1967.

Panel participants will be experts in the three discussion areas. Local panelists include Dr. William Fowkes, coordinator of the California Regional Medical Programs, Area III; Dr. Michael Dennis, director of Stanford's Primary Care Associate Program; and Richard Anderson, medical economist from the Kaiser Foundation Health Plan. ### Mailed Monday, May 13, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310 or 497-6911

STANFORD--Sleep studies and heart transplants will be among the topics discussed at the annual symposium of the General Clinical Research Center of Stanford University School of Medicine, Wednesday, May 15.

The community is invited to hear six investigators discuss their recent research from 12 noon to 5 p.m. in Room M106 at the Medical School.

The Center, on the third floor of the Hospital's east wing, is supported by a continuing grant from the National Institutes of Health, Division of Research Resources. Established in 1962, it provides a setting for clinical research and training at Stanford.

Specialized personnel and facilities are available in the area. Patient expenses are largely supported by the Center.

Dr. H. Keith H. Brodie, assistant professor of psychiatry and program director for the Center, will moderate the presentations.

The schedule is as follows: 12:00 noon, Dr. Clayton Rich, dean of the School of Medicine--Introduction; 12:15 p.m., Dr. William C. Dement, professor of psychiatry--"Clinical Studies of Sleepy People"; 1:00 p.m., Dr. John A Luetscher, professor of medicine--"Abnormal Adrenal Function and Hypertension"; 1:45 p.m., Dr. Stanley L. Schrier, professor of medicine--"Sideroblastic Anemias"; 2:45 p.m., Dr. Edward B. Stinson, assistant professor of surgery--"Why Stanford Continues Its Heart Transplant Program"; 3:30 p.m., Dr. Gerald M. Reaven, professor of medicine--"Role of Insulin Resistance in the Genesis of Hyperglycemia in Diabetes Mellitus"; 4:15 p.m., Dr. Thomas C. Merigan, professor of medicine--"Interferon and Other Anti-Virals in Varicella Zoster Infections."

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Mailed Thursday, May 9, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321 6310 or 497 6911

ADVANCE FOR RELEASE THURSDAY, MAY 9, 1974

EDITORS: Release date set to coincide with publication of report in the *New England Journal of Medicine*

STANFORD — A Stanford University study reported Thursday, May 9, shows that physicians and their spouses receive as much or more surgery than other professionals and their relatives.

The study was undertaken by Dr. John P. Bunker and Dr. Byron W. Brown Jr., because it has been alleged that overuse of surgical services in the U.S. is often due to lack of consumer knowledge.

"Assuming that physicians possess such knowledge," Drs. Bunker and Brown wrote in the current issue of the *New England Journal of Medicine*, "we have examined their utilization of surgical services and compared it with that of lawyers, ministers and businessmen.

"Operation rates for physicians and their spouses were found to be as high as or higher than rates for other groups.

"Overall operation rates for physicians and for the other professional groups studied were estimated to be 25 or 30% higher than for the country as a whole."

Dr. Bunker concludes the physician as a patient and informed consumer places a high value on surgical care.

"The results presented suggest that as the public becomes more fully informed, the demand for surgical services will increase," he said.

Dr. Bunker, professor of anesthesia at the Stanford University School of Medicine, is currently on leave as a Guggenheim Fellow and visiting professor of preventive medicine at the Harvard Medical School. Dr. Brown is professor and head of the Stanford division of biostatistics.

Seven California groups took part in the study. They included male members of the Santa Clara County Medical Society and the Bar Association, Protestant ministers in Northern California, male graduates of Stanford Business School in Santa Clara and San Mateo Counties, women physicians practicing in California, and women members of the California Bar Association.

The surveys were carried out by mail questionnaire in 1972 and 1973. A total of 7,400 questionnaires was mailed, and response ranged from 75 to 83% for the several groups.

The questionnaire solicited information about a small number of commonly performed operations—appendix and gall bladder removal, repair of groin for hernia, thyroid gland and hemorrhoid removal, and hysterectomies.

Rates of these operations for male physicians and for the other three professional groups were closely similar for four of the five procedures, the Stanford study found. But the physicians' wives tended to have more operations than wives of the other three professional groups. (more)

The rate of hysterectomies among doctors' wives exceeded 50% by age 65, compared with the national rate of 33%.

"It is apparent that physicians and their wives place a high value on hysterectomy," Dr. Bunker said.

"Since more than half of the physicians' wives will have undergone hysterectomy by age 65, it can be assumed that many are performed for sterilization or convenience rather than for conventional medical indication.

"And it can be assumed that many would appear to be unnecessary. Yet, to the extent that hysterectomy was demanded by a knowledgeable consumer, one might reasonably argue that the operation did represent a perceived need."

Dr. Bunker said that with some caution, the results of the study can be used as a basis for predicting the impact of consumer education on demands for care in a medical system in which financial barriers are removed, as seems likely with National Health Insurance.

"We base this prediction on three assumptions," he said. "Physicans currently charged with defining norms and standards for optimal care for the general population (under the auspices of Professional Standards Review Organizations) can be expected to use the same liberal criteria they use in selecting care for themselves and for other physicians.

"The legislation of National Health Insurance will allow the public to translate these perceived needs freely into demands.

"And the need for surgical care for the population as a whole is greater than for the favored professional groups under study."

The research was supported by grants from The Robert Wood Johnson Foundation of Princeton, N.J., and the Commonwealth Fund of New York.

END ADVANCE FOR RELEASE THURSDAY, MAY 9, 1974.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Spyros Andreopoulos, 321-5310 or 497-6911
Jeff Littleboy, 497-2558

FOR IMMEDIATE RELEASE

STANFORD — Dr. Irvin Yalom, professor of psychiatry at the Stanford School of Medicine, has received the Edward A. Strecker Award for outstanding contributions in the care and treatment of patients.

The award, consisting of a certificate and an honorarium of $1,000, was announced Tuesday, May 7, at the meeting of the American Psychiatric Association in Philadelphia.

Dr. Yalom is currently on sabbatical leave at Oxford University in England. A graduate of Boston University Medical School, he is known for his studies in group therapy and the relationship of hormones to behavior. He is also known for his pioneering work in group counseling for dying patients and a program to explore group therapy techniques in the treatment of alcoholics.

He is coauthor of the widely acclaimed book *Encounter Groups: First Facts,* the first scientific study of the encounter movement.

The prize is offered annually by the Institute of Pennsylvania Hospital in memory of Dr. Edward A. Strecker, a distinguished psychiatrist and former president of the American Psychiatric Association.

—30— cr

FOR IMMEDIATE RELEASE

STANFORD —

Education and Cultural Process: Toward an Anthropology of Education, edited by Stanford Anthropology Prof. George D. Spindler, was published this week by Holt, Rinehart, and Winston, New York.

Spindler, who contributed five major chapters to the work, pioneered the anthropological approach to teacher education when he edited the first volume in the series in 1955.

Thrust of the current book, he said, is an examination of how the theories, methods, and theoretical models of anthropology can be brought to bear upon educational problems and make a contribution to the training of teachers and the improvement of schools.

His articles examine built-in cultural biases of teachers, which stem from their own training and are not necessarily intentional, and how schools give their pupils a cultural identity.

He also looks into cultural sensitization techniques which can be incorporated into teacher training and for younger people in school.

Another chapter discusses how American colleges and universities have not acted as avenues to social and economic mobility, but rather to stabilize the *status quo.*

Spindler's two other books, *Transmission of American Culture* and *Education and Culture,* have often drawn on the collaborative abilities of his wife, Louise, who also holds a doctorate in anthropology.

Spindler and Prof. Robert Textor, professor of education and anthropology, together head a program called Anthropological Studies in Education.

Spindler and Textor are cofounders of the Council for Anthropology and Education, established in 1968. Textor is president-elect of the association.

—30— 5/7/74 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 321-5310 or 497-6911

EDITORS: A press conference with Dr. Zhores Medvedev has been scheduled for Friday, May 10 at 11:30 a.m. in Room M114 of the Stanford University School of Medicine.

STANFORD — Dr. Zhores A. Medvedev, a leading Russian gerontologist and geneticist and outspoken fighter for scientific freedom, exiled from his country last year, will lecture on "Dissent in the Soviet Union" Monday, May 13, on the Stanford campus.

His talk will be given at 8 p.m. in Dinkelspiel Auditorium. It is free and open to the public.

Dr. Medvedev will also lecture on "An Analysis of Longevity and the Human Lifespan" at 4 p.m. Friday, May 10, in Room M106 of the Stanford University Medical School

Currently on his first visit to the U.S., Dr. Medvedev will be the guest of Dr. Leonard Hayflick, Stanford medical microbiologist, a longtime friend and colleague

Dr. Medvedev was the first Russian intellectual to be confined in a mental institution, in the USSR in 1970, as a result of his outspoken views on Russian control of scientific thought and personal freedom.

The geneticist was barred from returning to Russia in January 1973 after he was allowed to leave the Soviet Union to undertake research in England

He is currently a visiting scientist conducting research on the biochemistry of aging at the Medical Research Council Laboratories in England. He was the originator, in the late 1950s, of what has grown into the "error theory of aging." His recent work deals with effects of redundancy in the genetic code on longevity.

Dr. Medvedev's latest book, *Ten Years after Ivan Denisovich,* has recently been published by Knopf in New York. The scientist is a close personal friend of Alexander Solzhenitsyn, and the book is a biography of the last 10 years of the life of Solzhenitsyn.

Dr. Medvedev came to public attention with publication of *The Rise and Fall of T. D. Lysenko* in 1962. Lysenko was the Russian geneticist who taught that animals and plants could be bred for characteristics acquired as a result of environmental treatments. Scientific thought holds that characteristics are acquired by hereditary mechanisms.

Lysenko's fame increased as Stalin favored his hypothesis. He became one of the leading geneticists in Russian, seriously setting back genetics in that country by his false doctrine.

Dr. Medvedev's book traced the rise of Lysenkoism to its eventual abandonment in 1965. The book was originally published in the Soviet underground, then smuggled out and published in the West.

Though Western scientists noted the book's value as a historical document, Dr. Medvedev became labeled by Soviet authorities as an undesirable dissenter.

In 1971 he was refused permission to present papers at the annual CIBA Foundation Lecture on Aging in London. In response he wrote *The Medvedev Papers,* highly critical of Soviet policy preventing scientists from freely exchanging information with Western colleagues and participating in international meetings outside the Soviet Union.

Publication of that material in the West led to his ouster as head of the Laboratory of Molecular Radiobiology at the Institute of Medical Radiology in Obninsk, near Moscow.

As a result of his 1970 imprisonment in a mental hospital, Dr. Medvedev and his brother, Roy, wrote *A Question of Madness.* This book was published in the West, and recounts his arrest, experiences in the mental hospital, and his release after a large letter-writing campaign both inside and outside Russia.

In 1972 Dr. Medvedev was reportedly "kidnapped" by Soviet authorities to prevent him from attending the International Gerontological Congress in Kiev. He was later released to return to his home.

Dr. Medvedev's treatement has raised concern among many U.S. scientists whether or not to promote and participate in exchanges with the USSR. Such action could damage West-Soviet relations.

The scientist has long-standing invitations to lecture and do research at Stanford, as well as at other U.S. institutions. However, Dr. Medvedev wants to return to the USSR and has expressed hope that his citizenship will be restored.

—30— 5/7/74 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310 or 497-6911

STANFORD--A study to determine more effective methods of controlling and preventing recurrent urinary tract infections in women is under way at Stanford University School of Medicine.

The project is supported by a $41,500 award from the Henry J. Kaiser Family Foundation, announced recently by Dr. Clayton Rich, dean of the Medical School, and Dr. Robert Glaser, president of the Foundation.

Urologic infections are extremely common in women, noted Dr. Thomas Stamey, chairman of the Division of Urology and head of the study. "As many as 20 percent of all women will experience urinary infections at some time during their life," he said. "Starting with an incidence of one percent in girls six years old, the rate increases to eight or 10 percent in women over 60.

Stamey stressed, however, that despite their prevalence in women, these infections pose no risk of serious kidney damage or complications for 95 percent of the patients.

The urologist plans to involve paramedical personnel in the project. Nurses and other paraprofessionals cannot make a diagnosis or precribe medication without consulting a physician, but they can learn to analyze and interpret urine cultures, Stamey explained.

"If they can be trained to assume some responsibility for routine care of patients with recurrent urinary infections, which constitute a large share of the urologist's caseload, we will be able to devote more time to patients with more serious renal problems," he said.

Over the next 18 months, women who have three or more episodes of urinary infection a year will be seen in the urology clinic at Stanford Hospital on Fridays. A nurse, supervised by Stamey, will help assess the patient's symptoms, test for infection and monitor the prescribed medication in routine cases.

The award reflects the continued interest of the Kaiser Family Foundation, according to Glaser, in supporting programs attempting to meet the health care needs of the nation. ###

Mailed Wednesday, May 1, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER FORMATION CONTACT: Gary Cavalli 415: 321-5310 or 497-6911

STANFORD--An overall 9.0 percent increase in prices, effective immediately, was announced today (May 1) by Stanford University Hospital.

The bulk of the price change is reflected in the Hospital's daily room rates. Smaller increases will be made in the ancillary services (laboratory tests, drugs, x-rays, etc.) that make up half the average patient's bill, said Paul B. Hofmann, director of Stanford University Hospital and Clinics.

Hofmann said the increase is necessary to help align Hospital charges with operating costs, which have spiralled upward this year as suppliers were freed from price controls while hospitals were limited by Economic Stabilization Act regulations.

"We feel this is a fully justified adjustment," Hofmann said. "It is based only partially on anticipated cost increases. Primarily, it is an effort to recover costs we've already incurred this year due to inflation in the prices of food, utilities, linen, and medical supplies, as well as merit raises for employees."

Hofmann emphasized that Stanford's price increase is consistent with what the Hospital would have been permitted under Phase 4 guidelines, had they been continued.

For community patients, the daily room rates will now be $87.50 for medical and surgical wards. Semi-private rooms will be $95.00 and private rooms $107.00.

These figures represent increases of $9.50 to $11.50. Last July, the Hospital raised daily medical and surgical rates $9.00 to $11.00.

Obstetrical ward rates will now be $89.00 daily, with nursery rooms $62.50.

Hofmann pointed out that the daily room rate includes 24-hour nursing care, plus dietary, medical record, and other routine hospital services.

Medical and surgical room rates will be slightly higher for patients receiving services of interns and residents. Charges will also be higher for specialty units, such as Coronary Care.

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Mailed Wednesday, May 1, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, (415) 321-5310 or 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

With negotiations continuing, Stanford University Hospital took steps Tuesday to reduce elective admissions and surgeries in the event of a threatened nurses' strike.

The Committee for the Recognition of Nursing Achievements (CRONA), representing the Hospital's 714 registered nurses, announced it will strike Tuesday, July 2, if a contract is not signed by July 1.

Ms. Bonnie Johnson, CRONA president, said the nurses will supply minimal coverage for critical care areas, but would expect elective admissions to be cancelled so that limited personnel can be available to take care of seriously ill patients.

CRONA and the Hospital have been negotiating a new contract since March. The remaining issues are monetary, but neither side would give details today in their joint statement.

Both Ms. Johnson and Paul Hofmann, director of Stanford University Hospital and Clinics, said, "It's still our hope that we can avert a strike."

Hofmann added that Edward Allen, a state labor mediator, was joining the negotiations tonight at the request of the Hospital and the nurses.

In a letter to the medical staff, Dr. Thomas A. Gonda, medical director, said physicians have been asked not to admit elective patients who may need critical care after July 2.

–30– cr

Mailed June 25, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino 415: 321-5310 or 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

A comprehensive care center for persons suffering spinal cord injuries will open Wednesday, June 19, at Palo Alto Veterans Administration Hospital.

The new center, serving veterans in the greater Northwest region, provides care for paralyzed patients immediately after injury, flying them, if necessary, directly to the center from as far north as Alaska.

Following initial treatment and rehabilitation, patients may be visited in their homes by medical staff. Continued outpatient service will be provided at the new facility for up to 100 patients per month.

Director of the extensive program at the VA is Dr. Inder Perkash, who holds a joint faculty appointment as both associate professor of surgery (rehabilitation) and clinical associate professor of surgery (urology) at Stanford University School of Medicine.

Dr. Perkash is noted for his work in returning paraplegics and quadriplegics to near normal functioning lives. (Paraplegia is paralysis of the lower half of the body, including both legs. Quadriplegia is paralysis from the neck down, including both arms and both legs.)

He has emphasized complete care of the patient, and in addition to staff physicians, several other specialists, including neurosurgeons, urologists, orthopedists, internists, and neurologists are available as consultants. Dr. Perkash has also brought together a staff of physical, educational, and occupational therapists, psychologists, and others.

Patients will also be seen by faculty and residents in training from Stanford School of Medicine.

The spinal cord is a bundle of nerve fibers and cells about 17 inches long, depending on the person's height, and connects the brain with the muscles, skin, and internal organs. The vertebrae are the 33 bones of the spinal column which surround and partially protect the spinal cord, which is soft and can be damaged by pressure from surrounding bones. How much of the body is paralyzed depends on where the injury occurs to the spinal cord.

Most spinal cord injury patients are victims of home, sport, or traffic accidents. Combat injuries cause a relatively small percentage of such injuries.

Spinal cord injuries used to be considered fatal or near terminal.

"More than 60% of World War II veterans with spinal cord injuries ultimately died of urinary tract infections and failures," says Dr. Perkash. "Today, the paraplegic can expect to live a near normal lifespan and have a relatively productive life."

One of the most critical factors in returning paralyzed patients to normal functioning lives, says Dr. Perkash, is reducing the rate of urinary infection.

As chief of the Houston Veterans Administration Hospital's spinal cord injury service prior to his current post, Dr. Perkash did extensive work in bladder rehabilitation through the use of intermittent catheterization, leading to bladder reflex without use of the catheter.

(A catheter is tubing passed through the urethra to drain the bladder. Until recently, the catheter was left in place for long periods of time in paralyzed patients.)

(more) cr 6/13/74

spinal cord injury center 2-2-2

Dr. Perkash's current studies indicate that as high as 98% of paraplegic and quadriplegic patients may become catheter-free, lowering their rate of catheter-related infections.

He has reported that catheter-free status had been achieved by 70 out of 76 paraplegic and quadriplegic patients at Houston who had catheters in place from a week to more than 10 years.

Patients are first taught to catheterize themselves. The frequency of catheterization is gradually reduced with increasing spontaneous voiding.

All the patients in the Houston study had infections when the transition to self-intermittent catheterization began. But 75% were rendered infection-free during hospitalization, and a further 66% were without infections on follow-up examinations.

The new center will have a "tremendous" effect on improved treatment for patients, says Dr. Thomas A. Stamey, head of urology and professor of surgery at Stanford.

Research work now under way at Stanford on neurogenic bladder and the neurophysiology of urinary tract problems will be enlarged at the VA facility.

"Each patient will receive a greater intensity of care and study," says Christos Constantinou, Stanford research associate in biomedical engineering and a consultant to the new center, who will be continuing his study of the early diagnosis of urinary tract changes in paralyzed patients.

Staff will also continually evaluate new mechanical devices to aid patients, such as a new pneumatic pressure suit a patient can wear to help him stand or walk.

There are motorized wheelchairs that can be controlled by the patient's chin, and devices that enable a patient who cannot speak to communicate by blowing or breathing techniques. Therapists are currently devising a way that a paralyzed patient may call his nurse by just a turn of his head when he cannot press a call button.

The facility will be one of the few centers to evaluate new "environmental control" devices which are being supplied from the VA Prosthetic Research Center in New York.

"Our aim," says Dr. Perkash, "is not to let the patient become dependent on the hospital, but to get him out on his own in the shortest time."

In Houston, paraplegic patients went home on an average of 10 weeks after injury, and quadriplegics after 17 weeks. Periodic outpatient care is necessary.

The new center consists of almost an entire building, completely remodeled at a cost of $700,000. It has many special features such as automatic sliding doors throughout, television sets that are both for recreation and serve as monitors for the nurses station, X-ray facilities, outpatient rooms, and 30 in-patient beds in modern rooms.

The facility offers activity-oriented indoor and outdoor recreation areas. There is also a complete "apartment" with kitchenette, bedroom, and living area that a patient will live in for a week or two to ease his transition to home life.

Physicians, social workers, and other staff can visit the patient in a home base program that begins July 1. Occupational therapists, for example, will rearrange kitchen utensils to levels the patient can reach, devise special ways to turn on faucets and answer telephones, and order ramps over steps where needed.

The Veterans Administration operates 16 spinal cord injury centers throughout the country. Dr. Perkash estimates that there are about a half million paraplegics and quadriplegics in the U.S., and approximately 1,900 hospital beds for veterans, and 500 such beds outside the VA system. He estimates that more than 10,000 new patients are added each year to those needing continuing outpatient care.

The Palo Alto VA is located on Stanford land four miles southwest of the Medical School. It is one of several facilities in the area closely affiliated with the University for purposes of patient care, clinical teaching experience for doctors in training, and research projects.

Dr. Perkash was trained in general surgery, urology, and rehabilitation medicine in India, England, and the U.S., with a special interest in paraplegic bladder control. In addition to serving as chief of the Houston service, he was associate professor of urology at Baylor College of Medicine.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 321-5310

EDITORS: Photo available on request if not included with article.

STANFORD –

When Dr. Albert Stunkard joined the Department of Psychiatry as chairman last year, the courtyard of the psychiatry building was ivy and shrubs. Now, with his help, it has been transformed into a lovely Japanese garden.

The distinctive stone and sand gardens of Japan are designed to impart a "feeling of tranquility and restfulness," notes Stunkard, an Oriental garden enthusiast. "The idea seemed appropriate for the area used by patients waiting for treatment and by our staff."

Besides, the chairman adds, he wanted a Japanese garden. He missed the one he had at his home in Philadelphia. There he headed the Department of Psychiatry at the University of Pennsylvania before coming to Stanford. Here, he lives in a large apartment complex, where it is not possible to have his own garden.

The psychiatry courtyard, with its glass roof, looked like an ideal location. Since it would have been inappropriate for the Medical School to finance a Japanese garden, Stunkard arranged for one personally. He asked a professional gardener, Toshio Saburomaru of East Palo Alto, to work with him in designing the garden.

The art of Japanese gardening, nearly a thousand years old, has been strongly influenced by developments in Zen Buddhist monasteries. "It is based on an intricate philosophy of relationships in nature," explains Saburomaru, "but I just use my own imagination. There is no limit, other than budget, and it is surprising what can be done with a little space," he adds.

Psychiatry's garden is a microcosm of nature, a concept basic to the Japanese garden, according to Stunkard. The concrete walk which divides the garden is like a bridge over a stream. A stone structure on one side simulates a waterfall, the largest rock representing the chute. Smaller rocks suggest the tumbling water that gradually becomes a flowing stream of small pebbles. The ripples in the pebbles are the waves created as the water swirls around the smooth stones of the stream bed.

On either side of the pebbles are the banks of the stream with various plants: the small ferns and shrubs commonly found close to the water, then the taller bushes and trees of the forest beyond. The center of interest behind the waterfall is a pine tree, surrounded by smaller maples. On the other bank, the dominant tree is azara.

Like most Japanese gardens, this one has few flowers. "Evergreen trees and bushes are the general rule, with two or three flowering shrubs for color at different times of the year," explains Stunkard. This garden includes azaleas in bloom last month; rhododendrons now beginning to blossom; and two heavenly bamboo trees with white flowers and reddish leaves at opposite corners of the garden.

The ground cover of the garden is a fern-like plant called creeping mint. A group of medical students has begun a pool to predict when the entire area will be covered. They have placed bets on the exact date, and the one who comes closest will win the money in the pool.

Stunkard points out that Japanese gardens require little maintenance, and are particularly adaptable to small areas. Medical Center gardener Michael Tyers has already mastered the fine art of raking the pebbles into the wave-like ripples with a special rake, and cares for the garden with great devotion, he says. Saburomaru adds that in addition to watering and raking, only pruning is needed once or twice a year.

"This garden may not have the longevity of its centuries-old forebears," notes Stunkard, "yet its simple beauty may bring some of the peace and serenity characteristic of its predecessors to the patients and staff at Stanford today."

–30– 6/3/74 cr

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner (415) 321-5310
Maurice LeBlanc 327-4800, ext. 358

EDITORS: Story is released jointly by Children's Hospital at Stanford and Stanford University School of Medicine.

STANFORD — The first comprehensive center on the West Coast for design and fabrication of devices to fit needs of physically disabled children will be established at Chidren's Hospital at Stanford.

The center is believed to be one of the first in the U.S. for the research and development of rehabilitation aids for children with neuromuscular impairments.

It is funded in part by a matching grant of $800,000 from the Max C. Fleischmann Foundation of Reno, Nevada. The award was announced recently by Dr. M. Harry Jennison, executive and medical director of Children's Hospital, and Julius Bergen, chairman of the Fleischmann Foundation.

Children's Hospital is an independent institution affiliated with the Stanford University School of Medicine.

There are an estimated 40,000 physically disabled children in Northern California alone, said Dr. Eugene Bleck, clinical associate professor of surgery and chief of orthopedics and rehabilitation at Children's.

"The service will bring contemporary rehabilitation devices to patients throughout California and complement our orthopedic program," he added.

The rehabilitation engineering center is headed by Maurice LeBlanc, former staff engineer for the committee on prosthetics research and development of the National Academy of Sciences.

"Rehabilitation engineering is an umbrella term," explains LeBlanc, "which includes orthotics [braces], prosthetics [artificial limbs], and other products of advanced technology."

These include electric wheelchairs and mobility aids, communication devices for nonverbal children, and special assistive equipment for daily activities.

Children now obtain most of their equipment from community orthopedic appliance firms. "The difficulty," says Bleck, "is that the patient population has extremely varied disabilities requiring custom-built equipment for maay patients."

The new center will begin where these firms stop. "Our intention is not to duplicate or compete with private industry, but to supplement and improve," he emphasizes. "We want to develop different methods and create new devices to meet patient needs."

Scheduled for completion in October, the center will be housed in a modular building adjacent to Children's Hospital. It will be accessible to patients on wheelchairs and will include areas for actual construction and fitting of devices for patients.

Children referred by physicians will be examined by a team that includes orthopedic surgeons, physical and occupational therapists and rehabilitation engineers.

The service will be modeled after the Ontario Crippled Children's Centre in Toronto, Canada, the only one Bleck knows that is similar to what he envisions for Stanford. Orthotist Wallace Motloch is on leave of absence from Toronto to help set up the Children's Hospital Center. Physical therapist Fran Ford is patient coordinator.

Patients who can benefit from these rehabilitation aids include children with cerebral palsy, spinal deformities, muscular dystrophy, brittle bones (osteogenesis imperfecta), or crippling joint diseases. The device for each child will depend on that child's stage of development and particular problem—the extent of paralysis, deformity, or lack of neuromuscular control.

New approaches are rapidly replacing past practices, LeBlanc notes. The philosophy today is to provide physically disabled children with a life style that includes as normal development as possible. "Instead of giving children a brace and sending them home, we hope to offer them a wardrobe of devices, all tailored to their individual needs and in tune with their growth."

The Center is expected to cooperate with the Palo Alto Veterans Administration Hospital, where adult patients with spinal cord injuries have needs for mobility and communication similar to many of the physically handicapped children, LeBlanc said.

—30— 7/29/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

STANFORD--An historical play, "Cuahutemoc," describing the last days of Montezuma, last Aztec emperor of Mexico, will be presented in Dinkelspiel Auditorium on the Stanford University campus Saturday, July 27, at 7 p.m.

La Alianza Latina (Latin Alliance), advisory committee on Latin affairs at Stanford University Medical Center, is sponsoring the event, which is free and open to the public.

This is the first in what is hoped will be a series of cultural and art presentations of La Alianza Latina, which represents the Spanish-speaking employees of the Medical Center.

Alejandro Fontana, Hospital dietetics supervisor, will play the lead role of Cuahutemoc, Montezuma's son-in-law. A familiar actor and singer who has appeared in theater, movie and television productions, Fontana also is playwright of "Cuahutemoc." Other parts will be taken by professional community actors from the peninsula.

The Medical Center group has assisted with preparations for the production, including making all costumes by hand. These include elaborate Indian headdresses.

An aim of the group, according to Tony Rodriguez, manager of training and development at the Medical Center and officer of Alianza Latina, is to "develop an awareness in the Stanford community, to search out the old Latino culture and history and present it in plays and music."

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Mailed July 24, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jeff Littleboy 415: 321-5310 or 497-6911

STANFORD –

Stanford Medical School's successful physician's assistant program, jointly operated with Foothill College, will be broadened in September to include four other community colleges.

Dr. Michael Dennis of the Department of Surgery directs the overall program and supervises the clinical curriculum, while Foothill College provides the preclinical course work for the two-year program.

New funds for the expansion and decentralization of the program total $972,000, provided through HEW's Bureau of Health Manpower Resources and the California Committee on Regional Medical programs.

The community colleges selected to participate are located in Eureka, Redding, Modesto, and Salinas. Others will be added later.

The Stanford/Foothill program will continue as it has for the past two years, with about 20 students per class. The new grant will enable similar programs to be launched at the other community colleges and cooperating area hospitals.

Students in the program are called "primary care associates (PCA)." They receive an associate in science degree plus a certificate of completion from the community college they attend.

Purpose of the expansion is to recruit and train PCA's in the areas in which they live, then assigning them to serve with overburdened physicians in their communities or other medically underserved areas.

The PCA's assist the overworked and understaffed local M.D.'s by taking patient histories, giving physical examinations, doing simple laboratory analyses, providing minor therapeutic and diagnostic services, and offering patient counseling and education under the doctor's supervision.

"Current reports show," Dr. Dennis said, "that physicians are leaving rural areas for urban or suburban areas faster than they can be replaced, to say nothing of attrition due to death or retirement. The program hopes to retard this trend."

For example, he said, Merced County has only 29 general practitioners for a population which can go as high as 200,000 persons counting the annual influx of field workers. "Twenty-five additional physicians are needed there alone," he stressed.

The three-year grant, which extends through fiscal 1977, will provide for five PCA candidates among the four new community colleges for the first year, 10 the second year, and 15 for the third.

"In this way, California areas which show the greatest need for adequate medical care can be served quicker through PCA programs in their home areas," Dr. Dennis pointed out.

One physician in each area will be selected to serve as the clinical coordinator "to establish a firm link with existing family practice, residency programs, private practitioners, hospitals and clinics for rotation and preceptorship."

After the first year of basic preclinical course work, the second year stresses clinical training, primarily at Stanford Medical School and later at a local hospital as the programs develop, he said.

Recruiting standards are high. Of about 400 applications per year, the Stanford/Foothill program admits only about 20 students. Prerequisites include two years of "responsible direct patient contact," a hurdle which nurses and former medical corpsmen can easily clear; a high school diploma; college or high school courses in biology, chemistry, and physics; "documented evidence of ability to perform well at college level in health sciences"; and evidence of good health. Bilingual skills will be helpful, he added.

Before going to full employment, PCA graduates must pass the national certifying examination given by the National Board of Medical Examiners.

As in the past, the Stanford/Foothill PCA program will cooperate closely with the California Regional Medical programs through Dr. William C. Fowkes, area coordinator; with William Rogers, executive secretary of the California Academy of Family Practice, and with the five-county Health Services Educational Council.

Of the grant, nearly $345,000 will support the decentralization program over the three-year period, and about $43,000 is allocated for maintenance of "on the spot" education for each area program.

Of the first Stanford/Foothill PCA class, which graduated in 1973, nine of the 15 are now working in medically underserved areas of California. Of the 19 members of the PCA class of 1974, who were graduated in June, 16 intend to do the same.

–30– 7/22/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jeff Littleboy 415: 321-5310 or 497-6911

STANFORD — Stanford University Hospital, standing as it does in the heartland of the Peninsula's electronics industry, is probably one of the most heavily monitored establishments of its kind.

Except for patients well on the road to recovery, it's hardly an exaggeration to say that there isn't a pulse beat that isn't monitored somewhere.

In the opinion of James McClure, the chief medical instrumentation engineer, it's probably the best monitored hospital in the state, if not the country.

McClure heads a staff of five, whose expertise is sought out by other hospitals and by manufacturers' representatives, who want them to run tests on their equipment, whether they sell it to Stanford or not.

His No. 1 priority, naturally, is the saving of life. Consequently the most heavily monitored areas are coronary care, intensive care, premature infants nursery, renal dialysis, and the like.

The next highest priority is life support equipment, electrocardiographs and electroencephalographs, pumps, and defibrillators—in addition to closed circuit TV for security services, VHF radio transmitters and receivers, down to checking the humidity and electrical conductivity in the operating rooms at least once a month.

In short, if it's a matter of electronics, McClure and his staff can handle it.

The staff consists of Bob Rich, bench technician and quality assurance man; Frank Evans, who holds a B.S. degree in physics and is a systems analysis technician; Joe Echols, preventive maintenance and trouble-shooter; Joe Bennett, TV repairman, who has had his own TV repair business in Redwood City for 25 years and works here part time (he takes courses in medical instrumentation at Foothill College); and Tom Poston, another technician who teaches at Hill School of Business in San Francisco and holds a first-class radio operator's license.

The staff is augmented by Charles A. Drace, mechanical engineer, Ralph Crawford, electrical project engineer, in charge of equipment installation, and other members of the Medical Center's support services team.

McClure himself spent 21 years in the Air Force. After serving in various categories, including a stint as a special investigator, he opted for Air Force training school in health sciences in 1958 and never looked back. He came to SUH in July 1972 while he was in the process of mustering out of the service.

Partly because of his military training and partly because he likes it that way, McClure's world is an orderly one. Every job is done by the book, carefully logged, records properly kept. Any piece of equipment which takes more than eight hours to fix goes to an outside repairman or back to the factory.

In a way, the recent nurses' strike was a blessing. It allowed McClure and his staff to get a little ahead in their maintenance work, a consummation devoutly to be wished in their line of work.

They also run a small consumers' research operation: No gear goes on duty without a thorough bench test, even if it's right out of the shipping box. If it doesn't measure up to SUH's high standards, back it goes.

"Our function," McClure emphasizes, "is to be as pleasant and supportive to the nurses and doctors as we can. Our job is to maintain life-saving and life-support equipment in top shape 24 hours a day, seven days a week, year-round, and we want the staff to know we're here to help."

In a small but efficient suite in the hospital basement, McClure and his staff can simulate the condition of any patient for equipment testing purposes. Many illnesses can be duplicated on a test machine, he explained.

He is especially proud of two things—a new manual he has prepared for the medical staff's benefit titled *Medical Instrumentation Operation,* a sort of how-to-do-it book for doctors and nurses.

The second thing of pride is the new monitoring setup in the hospital's East 2A Ward. This unit, plus the 30 "crash carts" for cardiac arrest stationed all over the hospital, has got to be the best in the country, he feels. "We can do things here that no other hospital can do," he says.

For that matter, he believes his new manual to be the only one of its kind in hospital use. McClure bases that judgment on the fact that many other hospitals want to copy it.

—30— 7/22/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Barbara Battino 415: 321-5310 or 497-6911
Robert Lamar 497-2558
FOR IMMEDIATE RELEASE

STANFORD –

Dr. Henry E. Simmons, director of the Office of Professional Standards Review (PSRO) of the Department of Health, Education and Welfare, will speak at a colloquium on "Quality Assurance of Medical Care" at Stanford University School of Medicine on Monday, July 29. The meeting will be held in Room M108, 10 to 11:30 p.m.

Simmon's office is responsible for implementing the nationwide PSRO program. He is also HEW deputy assistant secretary for health.

The PSRO program was legislated by Congress for professional medical groups to maintain continuous review over the quality of care given Medicare and Medicaid patients. The reviews are expected to apply to virtually all hospital care if national health insurance becomes a reality.

Following the colloquium, Simmons will meet with Dr. Thomas Gonda, medical director of Stanford University Hospital, who recently assumed chairmanship of the Quality Assurance Program committee, and other Stanford faculty and administrators.

The visit to Stanford was arranged by the Health Services Administration program in the Department of Community and Preventive Medicine. The colloquium is open to interested members of the Stanford community and the public. –30– cr

EDITORS: Photos available on request.

FOR IMMEDIATE RELEASE

STANFORD –

Two nuclear physicists deeply involved in research on peaceful uses of the atom will be the next two speakers in the Stanford summer series of Aerospace Technology Seminars.

Dr. John L. Emmett, a Stanford alumnus who heads the Laser Fusion Division of the Lawrence Livermore Laboratory, will discuss his research Thursday afternoon, July 25. Lasers are considered one of the most promising means of achieving controlled nuclear fusion to provide an almost limitless source of energy.

Prof. Sidney D. Drell, deputy director of the Stanford Linear Accelerator Center (SLAC), will speak Thursday afternoon, Aug. 1, on the subject of "S.A.L.T. (Strategic Arms Limitation Talks)—Prospects and Progress."

Each will speak at 4:15 p.m. in Skilling Auditorium. The lectures are open to the public admission free.

Emmett was engaged in laser research for a number of years before taking his present post at Livermore. He previously worked at the Jet Propulsion Laboratory operated by his alma mater, Caltech, as well as at the Naval Research Laboratory in Washington and at Stanford Research Institute. He earned the Ph.D. in physics at Stanford in 1967.

Drell is a former member of the President's Science Advisory Committee, since abolished by President Nixon. He is a consultant to the U.S. Arms Control and Disarmament Agency, a fellow of the American Physical Society, and in 1972 received the E. O. Lawrence Memorial Award from the U.S. Atomic Energy Commission for research in theoretical physics. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences.

The lecture series is sponsored by Stanford's Department of Aeronautics and Astronautics. It is part of the 1974 ASEE-NASA Summer Faculty Institute chaired by Prof. Danial Bershader. –30– 7/22/74 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310 or 497-6911

STANFORD — A committee of scientists has advised the National Academy of Sciences to call for a moratorium on research with hybrid or otherwise new viruses which may pose risks to scientists who work with them and to the population at large.

Scientists have recently developed techniques that permit joining together genetic material (DNA) from bacterial and animal cells or viral sources in the laboratory.

These experiments, experts believe, offer exciting potential both for studying how bacterial genes work and for alleviation of human health problems, including cancer.

"But there is serious concern that some of these artifical recombinant DNA molecules could prove biologically hazardous," Dr. Paul Berg, a Stanford University biochemistry professor, reported at a news conference in Washington, D.C., Thursday, July 18.

The scientists worry because some of the new kinds of molecules that can be created in the laboratory might escape accidentally and become established in the population at large. The effects of such exposure to man are unknown.

Berg was chairman of an 11-member group asked by the National Academy of Sciences-National Research Council to study the problem and recommend solutions. Appearing with Dr. David Baltimore of the Massachusetts Institute of Technology, Berg emphasized that lack of sufficient data makes it impossible to determine if a serious hazard actually exists.

But the scientists added, "Our concern for the possible unfortunate consequences of indiscriminate application of these techniques motivates us to urge all scientists working in this area to join us in agreeing not to initiate experiments until some resolution of the outstanding questions has been achieved."

The committee seeks a temporary ban on experiments which introduce new drug-resistant genes into bacterial strains that do not presently carry such information. An example of this would be altering the genes of the bacterium staphylococcus so that it becomes resistant to known antibiotics.

The ban also includes introducing genetic information from animal tumor virus DNA into bacterial cells.

The scientists urged their colleagues to proceed with caution in introducing animal cell DNAs into bacterial strains that can infect man. An example would be the bacterium *E. coli* that is common inhabitant of the human gut.

(more) 7/17/74 cr

"Since joining of any foreign DNA to a DNA replication system creates new recombinant DNA molecules whose biological properties cannot be predicted with certainty, such experiments should not be undertaken lightly," the committee said.

The committee also said that the National Institutes of Health should establish an advisory group to evaluate potential hazards of man-made DNA molecules, to develop procedures for minimizing their spread within human and other populations, and to develop guidelines for investigators in the field.

In addition, the group urged that an international meeting of scientists from all over the world should be convened early in the coming year to review scientific progress and to discuss ways for dealing with potential hazards.

Berg said he believes this is the first time in which scientists working in a particular area of research have called for a voluntary restraint in experimentation.

The general issue of hybrid DNA molecules so concerned Berg and other scientists involved in DNA research that a conference to discuss the subject was held at Asilomar, California, in 1973.

Similarly, a group of scientists at the Gordon Research Conference in June sent a letter to the National Academy of Sciences stating that such "hybrid molecules may prove hazardous to laboratory workers and the public," and suggested that a committee be set up to study the problem.

Besides Berg and Baltimore, other scientists on the committee were Herbert W. Boyer, University of California, San Francisco; Stanley N. Cohen, Ronald W. Davis, and David S. Hogness, Stanford University; Richard Roblin, Massachusetts General Hospital; James D. Watson, Cold Spring Harbor Laboratory; Sherman Weissman, Yale University; and Norton D. Zinder, Rockefeller Institute.

The committee report will be published simultaneously in the July 26 issues of *Science* and *Nature* magazines.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner (415) 321-5310 or 497-6911

STANFORD--Emergency screening for poisoned patients will now be provided by a special drug laboratory at Stanford University School of Medicine.

Until now, blood and urine samples were sent to San Francisco for drug identification and analysis.

Called the Drug Assay Lab, the facility also helps monitor patients on certain therapeutic drugs to prevent toxicity and to help adjust dosage.

For a suspected drug overdose or poisoning, identification and timing are crucial. Laboratory personnel will be available 24 hours a day to screen and measure patient samples for the type and amount of substance involved. They will have the results within four hours, far less than a stat analysis from San Francisco would cost, according to Dr. Sumner Kalman, director of the laboratory.

"When poisoned patients are brought into the emergency room, we need information as soon as possible," says Dr. Michael Eliastam, director of emergency services. "Dealing with a laboratory in the City is more expensive and time consuming. A toxic screening here at the Medical Center is really needed."

It is difficult to determine the type of poisoning from clinical signs and symptoms alone, Eliastam continues. "Patients who are conscious may be reluctant to admit what they took, especially if it was an illegal narcotic. Some may not know what they had; street drugs can contain very strange mixtures."

Until the type and level of drug has been identified, no specific antidote can be administered. In the interim, measures are taken to stabilize patients and prevent their condition from worsening.

Followup tests to monitor drug amounts in seriously poisoned patients admitted to the Hospital are done at no extra charge. "The periodic analysis also offers the opportunity to study the effect and rate of excretion of potentially lethal drugs in humans, which of course could not be done any other way," Kalman notes.

The Drug Assay Lab, also provides blood and urine determinations of certain clinical drugs, particularly those with a small safety margin between a beneficial and dangerous dose. Drugs measured include those used in treating heart disease, epilepsy or other neurological disorders. Barbiturates and sedatives are also assayed.

- more -

222---Laboratory

"Every individual has a distinctive metabolic personality that determines how rapidly a drug is cleared from the body. There can be a ten-fold difference in the amount of drug required by different people in order to achieve the desired therapeutic effect," Kalman notes.

Dr. Dennis Clark, supervisor of the laboratory, explains the need for routine drug monitoring. A patient with epilepsy, for example, is taking a prescribed drug to control seizures, and the drug's effectiveness depends on that patient's metabolism. The drug could reach a toxic level in the bloodstream before it helps prevent attacks. Or the patient might have an unusually high tolerance for the drug and require more than the standard amount to achieve control.

"The important thing is to alert physicians to any drug levels which are either too high or too low in their patients so they can adjust dosages accordingly," Kalman stresses.

He says the services of the laboratory are available to physicians throughout the Bay Area, and he welcomes suggestions for new drugs to be included. At the request of Children's Hospital at Stanford, the laboratory is now developing a reliable assay for methotrexate, a potent anti-cancer drug used to treat children with leukemia.

Screening services such as Stanford's are relatively new, Kalman points out. Improvements in analytic techniques in recent years have made the identification and determination of specific materials easier and faster. The drugs are separated by gas chromatography, using assays developed primarily at the Stanford laboratory.

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Mailed July 16, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310 or 497-6911

STANFORD--The Stanford University School of Medicine has received an unrestricted gift of $2 million from Mrs. Frances Nunnally Winzer of La Jolla, Calif., it was announced Monday (July 15).

The gift will be used to permit construction of a third floor in the Sherman Fairchild Center for the Neurosciences, to endow a professorship in cell biology, and to help complete the diagnostic and treatment laboratories in the Stanford University Hospital addition now under construction.

This is the second largest private gift received by the Medical School to date as part of the Campaign for Stanford.

Stanford University President Richard W. Lyman gratefully acknowledged the gift from Mrs. Winzer. "The University has long been the fortunate beneficiary of Mrs. Winzer's generosity," he said.

"Thanks to the Goodrich scholarships which she established in 1963 more than 200 students have been assisted financially to become practicing doctors. We are deeply indebted to her."

Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine, said "the gift allows unusual flexibility in using the funds where they really count in developing the programs of the School."

"Stanford is developing a strong, new program in the neurosciences," he added, "to study the brain and its relationship to neurological diseases and complex behavioral processes. The opportunity for important advances in this field are exceptional."

The Sherman Fairchild Center for the Neurosciences will house the departments of neurobiology, anatomy and physiology, laboratories for neurology and neuropharmacology, a bioengineering laboratory, and an auditorium. The Center should be completed in 1976.

-more-

222--Winzer Gift

A total of $1.5 million of Mrs. Winzer's gift will be used to add a third floor to the Fairchild Building being constructed with funds from the Fairchild Foundation.

Dr. Rich said $450,000 of the gift has been earmarked for the establishment of an endowed chair to be known as The Mrs. George A. Winzer Chair in Cell Biology. It will be held by the chairman of the Department of Anatomy and Physiology to be appointed in the near future.

The Winzer gift has attracted an additional $150,000 by an anonymous donor to fund the professorship fully, he noted.

Previous gifts have aided in the construction of the psychiatry building and laboratory for the study of the biological basis of behavior. The Frances N. Goodrich scholarships now assist 50 to 60 students annually.

Mrs. Winzer has been a major benefactor of Children's Hospital at Los Angeles and has also served as a member of its board of directors. She has been responsible for establishing five endowed chairs there in pediatrics, hematology, metabolism-endocrinology, pathology and nephrology.

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Mailed Monday, July 15, 1974.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310
or 497-6911

STANFORD--Registered nurses began returning to work Friday (July 12) at Stanford University Hospital after voting overwhelmingly to approve a new two-year agreement ending their 11-day strike.

The Hospital is recalling its nurses as needed. It is expected that all of the nurses will be back within ten days as the Hospital builds back the case load of patients.

The vote of the members of CRONA (Committee for the Recognition of Nursing Achievements) in the Medical Center Thursday evening was 544 for acceptance of the tentative agreement and 15 against.

CRONA, which represents 714 registered nurses, had demanded a 16 percent wage increase and 1 percent in benefits during negotiations for a one-year contract. The Hospital's offer prior to the strike was 12 percent.

But a settlement for a two-year contract was hammered out Thursday morning at the end of 9-hour bargaining session assisted by Edward Allen of the State Mediation and Conciliation Service in San Francisco.

Principal provisions of the contract include a 15 percent wage increase this year for all registered nurses, and a second-year adjustment of 8.5 percent, effective July 1, 1975.

The settlement would provide a new salary range of $989-$1193 for an experienced staff nurse for the first year of the contract. The current range is $860-$1037.

Paul Hofmann, director of the Hospital and clinics, said the cost of the wage increase to the Hospital for the duration of the two-year contract is slightly less than 12 percent a year.

The 618-bed teaching hospital, normally filled with some 500 patients this time of the year, had 72 hospitalized patients Thursday morning.

About 30 nurses had staffed the Hospital's coronary care unit, intensive care unit, renal care unit, emergency room, and premature infants nursery. Half of them were CRONA nurses assigned by previous agreement to staff critical areas.

Most noncritically ill patients were discharged or transferred to other area hospitals. ###

Mailed Friday, July 12, 1974.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310 or 497-6911

STANFORD--Stanford University Hospital Friday (July 12) will put into effect new prices averaging an 11.5 percent overall increase for rooms and services such as laboratory, x-rays and drugs.

Daily room rates represent an increase between $12.50 and $15.50.

The new rates will be $100 for ward, $109 for semiprivate room, and $122.50 for a private room. Obstetrical ward rates will now be $97, up $8.

The new prices were approved by the Hospital's board of directors Thursday morning.

Paul Hofmann, director of the Hospital and clinics, said the rise reflects wage adjustments for non-contractual employees, anticipated increases for nurses and higher costs in the Hospital's general operation.

"Wage increases this year were the highest in recent years in response to the rising market for hospital personnel in the Bay Area and nationwide," he said.

The Hospital increased its prices an overall 9 percent in May to give employees deferred wage increases and to cover costs already incurred.

Prior to May, Hofmann said, hospitals were under wage and price controls while most parts of the economy were allowed to raise their prices. As a result funds needed for equipment replacement, new projects, and salary adjustments have been depleted.

However, Stanford's rates are somewhat lower than those of a comparable university teaching hospital such as the University of California in San Francisco. Rates there are $114 for a ward, $119 for a semiprivate room and $122 for a private room.

Hofmann said the daily room rate includes 24-hour nursing care, plus dietary, medical record, and other routine hospital services.

Medical and surgical room rates will be slightly higher for patients receiving services of interns and residents. Charges will also be higher for specialty units, such as coronary care.

More than 99 percent of the Hospital's revenue comes from patient care services. The Hospital has no tax support or endowment income.

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Mailed Friday, July 12, 1974.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner (415) 321-5310

STANFORD--Mass screening for eye disease through television will be investigated by ophthalmologists at Stanford University School of Medicine.

Drs. A. Ralph Rosenthal, head of the Division of Ophthalmology and Milton Flocks, clinical associate professor of ophthalmology, will study the feasibility of utilizing television to detect vision impairment and visual field defects.

"We plan to test the responses of adults to a brief television or videotape sequence," said Dr. Rosenthal. "This procedure could prove effective for large scale detection of certain ophthalmological problems, particularly visual field defects which are often associated with glaucoma, retinal degeneration, brain tumors and certain other disorders of the central nervous system."

The work will be supported initially by a one-year award of $5000 from the National Society for the Prevention of Blindness. Effective August 1, it was announced recently by Frederic Weisenheimer, executive director of the Northern California Society for the Prevention of Blindness, and Dr. Clayton Rich, dean of the School of Medicine.

A reliable mass screening technique can be extremely valuable, according to Rosenthal. There are many individuals throughout the world who have serious visual field defects and are unaware of them. Identification of these individuals and discovery of the cause of their visual defects could save many of them from blindness and some of them from an early death.

Once developed, the procedure could be used in areas and countries where for economic or other reasons people do not receive regular eye examinations.

Mailed July 8, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 321-5310

STANFORD--Scientists at Stanford University School of Medicine have found that a tumor produced in mice may serve as a model for studying little understood brain tumors in children.

The research report received an award for the best paper in experimental neuropathology presented at the 50th annual meeting of the American Association of Neuropathologists in Boston.

The tumor was found to correspond to different types of brain tumors in children. About half of the intracranial tumors in childhood are of the embryonal type found in the mouse strain.

The scientists, including a second year medical student, have transferred this particular tumor to succeeding mice within a certain inbred strain, thus establishing a tumor bank that makes continued studies possible. The original tumor was developed by Dr. L.C.Stevens at the Jackson Laboratory, Bar Harbor, Maine.

The mouse tumor showed 80 to 90 percent nervous system tissue. It also exhibits various stages of maturity of the nervous system, and may be used to study how the nervous system matures normally in man.

Dr. Mary M. Herman, who directed the research project, is assistant professor of pathology (neuropathology). Presenting the paper in Boston was Scott R. Vandenberg, second year Stanford medical student. Researchers also included Dr. Amico Bignami, associate professor of pathology (neuropathology), and Drs. A.M.Spence, J.C.Sipe and S. Ludwin, trainees in the graduate neuropathology training program.

This is the second time that a group of workers from Stanford was selected for the award, and the second time in the history of the award that a medical student was a leader in the research effort.

Now that the tumor has been characterized in the lab, further work will begin on isolating its cellular components and identifying them using biochemical and antigenic markers, according to Dr. Herman.

The work was supported by an American Cancer Society Institutional Grant, and a grant from the Stanford University Research Development Fund awarded to Dr. Herman.

Mailed July 8, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 321-5310

STANFORD--Dr. Robert A. Chase, Emile Holman professor of surgery and chairman of the Department of Surgery at the Stanford University School of Medicine, has resigned to become president and director of the National Board of Medical Examiners.

Chase's appointment was announced Monday (July 8) in Philadelphia by Dr. Jack D. Myers, chairman of the board.

The 51-year-old surgeon will succeed Dr. John P. Hubbard, who is retiring after 25 years as chief executive of the board. Chase's appointment becomes effective in November.

Myers said, "Dr. Chase will assume the presidency at a critical juncture in the National Board's continuing search for better ways to measure the clinical competence of physicians throughout their professional careers."

Chase, an internationally known surgeon who specializes in reconstructive surgery of the hand, is also well known for his teaching and leadership in medical curriculum innovations, residency training, medical licensure, and continuing medical education.

He has been chairman of the department of surgery at Stanford since 1963 and, in addition, has served as acting chairman of the anatomy department for the past year.

His interest in teaching will be continued through an affiliation with the School of Medicine of the University of Pennsylvania where he will also serve as a consultant in surgery.

Chase, a native of Keene, N.H., is a graduate of the University of New Hampshire (1945) and Yale University School of Medicine (1947).

Prior to coming to Stanford, he was an associate professor at Yale University School of Medicine.

He is a member of the Institute of Medicine of the National Academy of Sciences, past chairman of the surgical council of the American Board of Medical Specialties, and the international relations and graduate education committees of the American College of Surgeons.

The National Board of Medical Examiners, founded in 1915, is a voluntary, nongovernmental examining agency concerned with maintaining high standards of medical education and in testing physicians' qualifications for professional practice.

The Board's examinations are now taken by medical students throughout the United States. Medical schools also use National Board examinations as a source of external evaluation of their students' progress.

Mailed Monday, July 8, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Hali Wickner, (415) 321-5310

FOR IMMEDIATE RELEASE

STANFORD –

Bedrooms for people who can't sleep will be provided this summer through a Stanford University project.

A specially equipped Stanford dormitory, dubbed Hotel Insomnia, has been set up to help researchers learn more about why people can't sleep.

"Insomnia affects some 20 million people in this country," said Dr. William C. Dement, director of the Sleep Disorders Clinic and head of the project. "There may well be 100 entirely different causes of troubled sleep," he continued, "but until we have the opportunity to study hundreds of sufferers, we just won't know."

Recent studies have already revealed several causes of insomnia, previously unsuspected by patients or their physicians. For example, there is a peculiar condition called nocturnal myoclonus in which the muscles of the anterior calf twitch continuously, but only during sleep. Nearly one-fourth of the insomniacs tested in the past few months at Stanford exhibited this symptom, which eventually arouses the sleeper.

Another problem, Dement continues, is sleep apnea insomnia. Certain patients actually stop breathing for repeated intervals and must awaken to resume normal respiration. A few insomnia sufferers have an increasing tendency to gag while asleep. Others just keep moving throughout their sleep.

These and other causes can only be identified by extensive observation and brain wave analysis, in both insomniacs and normal subjects. "Once the cause of insomnia can be detected in an individual, it may be treated to reduce or eliminate the sleeper's problem."

He stressed that the Stanford study provides an opportunity for volunteers to have their insomnia expertly evaluated. All costs involved in clinically processing each volunteer are covered by private sources.

Subjects will be followed at no charge for several nights while they sleep. All physiological functions will be carefully monitored on one of Hotel Insomnia's 20 electroencephalograph machines. Highly trained sleep laboratory technicians are on duty constantly, and a physician is on call at all times. Such a comprehensive evaluation would cost over $2000 in a hospital setting, according to Dement. He notes that former participants enjoyed being part of the insomnia project.

Volunteers are asked to call Sleep Disorders Clinic, (415) 497-1128 as soon as possible.

–30– cr 7/3/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Jeff Littleboy (415) 321-5310

STANFORD--More than 700 Stanford University Hospital nurses went on strike Tuesday morning in the first walkout of its kind in the Medical Center's history.

The walkout, threatened for a week by members of CRONA (Committee for the Recognition of Nursing Achievements), went into effect after the latest salary offer by the Hospital was turned down.

CRONA seeks a 16 percent salary increase plus one percent in benefits. Hospital management first offered a 7.9 percent raise, then a 9 percent increase, but CRONA rejected all offers, including a 12 percent offer voted down Monday. CRONA said that the salary is needed to be competitive in the Bay Area nurses' market. "In order to maintain our high level of patient care," CRONA said, "we need to attract and keep the best quality of nurses possible."

The two original offers, Hospital management said, were based on prevailing Bay Area wage patterns for nurses. The 12 percent offer reflected the recent settlement involving the 42 Affiliated, Associated and Kaiser hospitals.

The second or 9 percent offer was comparable to wages paid at the University of California Hospital in San Francisco, following a request for parity with that institution by CRONA.

As of early Tuesday, 38 nurses reported for duty out of a normal complement of 146 per shift. Of the 38, nineteen were on strike but were serving in critical areas as previously agreed to by the nurses' association, including intensive care, emergency service, premature infants, coronary care, renal care, and certain operating rooms.

Stanford University's outpatient clinics are not affected.

Both sides said they will meet Friday for further talks.

In the meantime, patient load at the Stanford Hospital has been reduced from more than 500 normally to 185 patients, and this was expected to be reduced to 130 as soon as possible.

All but critically ill patients have been discharged or transferred to other area hospitals.
CRONA has stood firm on its demand for a 16 percent raise plus a one percent increase in benefits.
Hospital management said it was prepared to accept final and binding arbitration of the dispute.
Edward Allen, a mediator from the State Labor Conciliation Service, has been meeting with both sides for a week attempting to work out a settlement.
CRONA's contract with the Hospital expired at midnight Sunday, June 30.

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Mailed Tuesday, July 2, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 321-5310 or 497-6911

STANFORD--A new proposal for a salary increase for registered nurses will be submitted to a vote Monday (July 1), Stanford University Hospital officials and negotiators for the nurses announced Sunday night.

Details were not disclosed.

Negotiations have been under way since March 20 on a new contract for Stanford registered nurses which expires tonight (June 30). Salary is the major issue.

The Committee for the Recognition of Nursing Achievements (CRONA), representing the hospital's 714 registered nurses, announced last week that nurses would strike July 2 if their contract demands are not met by Monday.

In anticipation of the possible strike, the Hospital took steps to reduce elective admissions and surgeries. CRONA President Bonnie Johnson said nurses have offered to supply minimal coverage in critical areas but would expect elective admissions to be cancelled.

During the weekend, many patients were discharged by their physicians or transferred to other hospitals. The Hospital census on Sunday night was 300. Stanford Hospital has 618 licensed beds.

Publicly both Ms. Johnson and Paul Hofmann, director of the Hospital and Clinics, expressed their hope that a strike can be averted. A state labor mediator, Edward Allen, has joined the negotiations and met with both groups during the weekend.

In the event of strike, Stanford Hospital plans to care for only the number of patients for whom a high quality of care can be provided with available personnel. Areas which will be open include the premature infants nurseries, intensive care unit, coronary care unit, emergency room, and certain operating rooms, Hofmann said.

Hospitals which will receive transfer patients include Kaiser and Sequoia Hospitals in Redwood City, the Palo Alto Veterans Administration Hospital in Palo Alto, El Camino Hospital in Mountain View and Santa Clara Valley Medical Center in San Jose.

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Mailed Monday, July 1, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911
EDITORS: This may be of interest to your sports department.
Photos available on request.

STANFORD--Although millions of Americans may suffer with what is commonly referred to as "tennis elbow," they may also be unknowingly aiding bone growth. Specifically, bone in the playing arm.

This is the conclusion of research directed by Dr. James D. Priest, an orthopedic surgery resident at Stanford Medical Center.

Priest says gains are finally being made toward understanding this dreaded malady believed to afflict about one-half of the nation's estimated 20 million tennis players, amateur and professional alike.

Studies have shown tennis players to have a significant increase in bone and muscle tissue in the elbow area, according to Priest. Furthermore, a study by Priest and Dr. Henry H. Jones, professor of radiology at Stanford Medical School, also shows an average increase of about one-third in the size of humeral bone (bone from the shoulder to the elbow) among tennis players. In one player studied the bone volume nearly doubled.

Tennis elbow is usually caused when the elbow is subjected to abnormal motion and stress, similar to what is required in the game of tennis.

In two recent studies, one involving 84 professional tennis players (54 men and 30 women) and another in which 231 amateur players at the Palo Alto Tennis Club were questioned, Priest found that approximately one-half have had tennis elbow at one time or another.

In addition, he discovered that among the professional players about one-third had "major symptoms" about the playing elbow, including lateral humeral epicondylitis (tennis elbow). However, at the same time, Priest found a significant increase in size of the humeral bone among the professionals.

Priest is quick to point out that although tennis elbow is automatically associated with the tennis game it is not limited to players of that sport. Elbow injuries also strike baseball pitchers, javelin throwers and others. Industrial workers using hand tools are also good candidates for tennis elbow as are dentists and other technical and professional people.

"If a dentist or surgeon develops tennis elbow he may not be able to use his arm effectively or painlessly for up to a year," Priest said. "Tennis elbow goes far beyond athletics; it is a public health problem."

- more -

22--Tennis Elbow

For those who get tennis elbow Priest estimates the discomfort to last between three months and one year. He noted that an extreme case would even prevent a person from lifting a teacup with his playing arm.

A tennis buff himself, Priest said he hopes his studies will eventually lead to a cure. He said this might include equipment changes in the game itself, but further studies would be needed to determine if this is necessary.

Although he says he falls into that "lucky half" not yet touched by sore elbows, Priest notes that those not so fortunate are seeking cures now. These often include an elbow band for the forearm and steroid injections to ease the pain. But he says none of the oral medications or other treatments have actually been proven successful.

Significantly, in his studies with the Palo Alto tennis players, Priest discovered that the stroke most often associated with pain was the backhand. He noted that nearly all of those with elbow problems use a one-handed backhand swing on the court. Conversely, nine players who said they use a two-handed backhand did not report any elbow pain.

Priest, who was also an engineering postdoctoral research fellow (1972-73) at Stanford's Department of Applied Mechanics, believes his work on tennis elbow has opened new avenues of research into bone growth, as well as into shoulder and spine problems associated with sports. Priest noted that half of the pro tennis players interviewed complained of shoulder pain (in addition to elbow pain).

In all of his work Priest did not find any significant differences between right and left handed players. However, he said there was a high incidence of elbow pain among tennis players who compete regularly over the years as opposed to those who take up rackets on weekends.

Priest stressed that he hopes his work will eventually help older people suffering with disuse osteoporosis, or "brittle bones." "If we can correlate the incidence of brittle bones with the lack of exercise among older persons this may be one of the more important ramifications of the study," he concluded.

Priest was assisted in his study of the professional tennis players by Carol Jo Chinn, physical therapist, and by Barbara E. Kent, assistant professor and clinical co-ordinator in the Division of Physical Therapy, Stanford.

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Mailed 8/19/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD--A new training program designed to improve emergency care delivery on the peninsula is being initiated by the Stanford University Medical Center.

Twenty-two firemen--12 from Palo Alto and 10 from South San Francisco--will begin 12 weeks of training Sept. 3 in the Department of Emergency Services at Stanford to become qualified paramedics, or emergency medical technicians.

Dr. Michael Eliastam, director of emergency services at Stanford Hospital, is in charge of the program which will tutor the firemen in special emergency medical procedures.

The paramedics will be trained to treat a patient on the scene while keeping contact by radio with a physician or nurse at the Medical Center. This contact will continue until the patient arrives at a hospital.

However, the paramedics unit will not transport the patient, although one paramedic may accompany him on the ride to the hospital. The other member of the two-man paramedic team will follow the ambulance in his own emergency van in case the patient should develop complications along the way.

Switchboard operators at police and fire stations will summon the paramedics when they are needed in a certain emergency. Although specially trained, the paramedics will not replace ambulance attendants on emergency runs. Instead, they will be called first to provide emergency medical care.

To date, Campbell is the only other Northern California city with trained paramedics ready for field service. In Southern California, however, paramedics (firemen) have been in operation in San Diego and Los Angeles for several years.

Initially, the Stanford University campus will be covered by the Palo Alto paramedics. Barron Park will also be covered, but not other adjacent towns and cities.

The paramedics will receive 200 hours of lecture and 300 hours of clinical work from Stanford physicians and nurses. The training will be supervised by Charlene Souza, RN, emergency services training co-ordinator.

Among the most enthusiastic supporters of the paramedic program is Palo Alto Fire Chief William Korff, who is excited over the prospect of having an emergency medical team. "This (program) has been badly needed and we should have had it years ago," he said, "it should be an outstanding program for the City of Palo Alto, Stanford University and the nearby area."

Dr. Eliastam hopes the program will expand so that the Stanford community will ultimately have its own paramedic unit. "The Palo Alto system will probably be deluged by Palo Alto calls alone," he explained, "therefore Stanford should eventually have its own system." Dr. Eliastam said the Menlo Park Fire District (like Stanford) should also eventually have its own group of paramedics (the Menlo Park district includes Menlo Park, Woodside, Atherton and East Palo Alto).

- more -

22--Paramedics

The City of Palo Alto has budgeted $84,541 for the first operational year of the program, according to Korff, including $30,000 for an emergency van to be used by the paramedics. The City of South San Francisco has likewise allocated funding for a van as well as for training.

Dr. Eliastam noted that although he wants Stanford and other local fire departments to have paramedics on their staffs he is uncertain whether additional groups will be trained at Stanford in the near future. However, the program may also be open to private ambulance companies.

The paramedics will keep in contact with the hospital during their field operations and their emergency van will carry various specialized equipment, including a cardiac monitoring device. The two-man teams will be on call on a rotating basis working out of Palo Alto's Mayfield fire station.

For the patient the paramedic service will not be free. The Palo Alto City Council has set a flat $40 fee for each patient. In addition, the patient will be responsible for ambulance transport and hospital charges. The council imposed the fee to reduce what it termed "frivolous" or unnecessary calls.

Once the firemen have completed the training and final testing, including oral examinations, they will be certified by the county public health department to serve as paramedics.

Campbell's eight trained firemen/paramedics are expected to begin their operations next month. Stanford's emergency staff will provide the radio supervision of their field work. However, the Campbell ambulances will continue to transport their patients to local hospitals.

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Mailed August 14, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

STANFORD--Families of critically-ill patients often must spend long hours waiting in the hospital for a brief bedside visit. They must confer with doctors in busy hospital corridors.

A Menlo Park couple, both former Stanford University Hospital patients, now hope to make the waiting easier by providing a comfortable, private refuge for families of the very ill.

Mr. and Mrs. W. Drew Leonard plan a unique meditation room and lounge for the new Stanford Hospital wing which is now under construction.

During the last year, both spent long hours in the Hospital's corridor waiting area outside the intensive care unit, as each took a turn as patient. Leonard was hospitalized with a heart attack. Shortly afterward, Mrs. Leonard underwent surgery which revealed cancer of the liver. She is currently undergoing chemotherapy treatment.

During these times, each became aware of the need for a comfortable place where families and close friends can spend their waiting hours, and where a physician can talk privately about the prognosis for a critically-ill patient.

Space has been set aside for an enclosed waiting room in the $9.1 million Hospital expansion project. The Leonards would like to see it designed as a small meditation room and a larger adjoining lounge, located near the entrance to the emergency room and adjacent to the intensive care unit.

Although the space has been designated, the interior design and furnishings of the rooms must be financed. So the Leonards began writing to many friends and acquainfances asking for support of their project.

Mrs. Leonard, a sustaining member of the Peninsula Volunteers and a Stanford Hospital Auxiliary volunteer, is now confined to her home by her illness, but she enthusiastically shows swatches of carpeting and unrolls blueprints.

"It has taken away the blow from my illness to know I can do something to help patients and their families. I feel blessed to have this project..."

She does not plan an antiseptic, institutional waiting room. She envisions soft carpeting, stained glass windows that are the work of a recognized artist, religious books, a game table, sofas and chairs--an area designed by professional decorators "as a place of comfort and privacy."

Particularly, she plans to loan to Stanford Hospital several rare 1400-year-old Peruvian "Huacos," pottery pieces, to be exhibited in the meditation room and lounge.

Mrs. Leonard visualizes the stained glass window as one of the most important features of the meditation room, "providing consolation to those in distress."

To date, more than $12,000 has been donated. It is estimated that costs, however, may go as high as $25,000 or more, so the campaign is continuing for what Mrs. Leonard calls "this essential human environment."

Leonard is a vice president of Utah International, and graduate of the Stanford School of Business. The Leonards have two daughters, Lisa and Mrs. Robert Burnett of New Jersey.

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Mailed August 5, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner (415) 497-6911

STANFORD--Dr. Norman Kretchmer, Harold K. Faber Professor of Pediatrics at Stanford University School of Medicine, has been named director of the National Institute of Child Health and Human Development (NICHD) of the National Institutes of Health (NIH).

His appointment was announced today (September 27) in Bethesda, Maryland, by Dr. Robert S. Stone, director of the NIH. It was effective September 1.

The 51-year old pediatrician and biochemist was on sabbatical leave from Stanford as a Guggenheim Fellow this year, and served as consultant to the office of the NIH director. In his new position, he succeeds Dr. Gilbert Woodside, acting director of the NICHD for over a year.

Former chairman of the Medical School's Department of Pediatrics, Kretchmer is internationally known for his research in developmental nutrition and biology. His studies on differences in the nutritional needs of infants and adults have helped physicians assess the importance of proper diet in childhood.

In addition to his administrative responsibilities at the NICHD, Kretchmer will continue to study the biochemical basis for certain hereditary and metabolic diseases of infants. He will also be clinical professor of pediatrics at Howard University and consultant to the U.S. Navy at Bethesda National Naval Hospital.

Kretchmer also contributed to patient care and education at Stanford. Under his leadership from 1959 to 1969, the pediatric department broadened the scope of its clinical and scientific programs. When he relinquished his executive duties, Kretchmer headed the committee responsible for Stanford University's undergraduate human biology major.

A native of New York City, Kretchmer received his B.S. degree from Cornell University in 1944. He was awarded a Ph.D. in physiological chemistry from the University of Minnesota in 1947 and an M.D. from State University of New York in 1952.

Before coming to Stanford in 1959, he was associate professor of pediatrics at Cornell University.

Kretchmer is a member of the American Academy of Pediatrics, president of the International Organization for the Study of Human Development and consultant to the World Health Organization. He is also past chairman of the Medical Advisory Board of the Foundation for International Health and past president of the Society for Pediatric Research.

The NICHD supports and coordinates research related to population, maternal and child health, and human development and growth. It is one of 10 component institutes of the NIH, the principal federal agency responsible for biomedical research.

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Mailed September 27, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Stanford University Medical Center, already facing belt-tightening to control operating expenses, will have to spend more money to complete the Stage I expansion of Stanford University Hospital.

The University Board of Trustees has approved a revised budget of $12,600,000 for the project.

This increase, from the formerly approved budget of $9,560,000, is primarily due to changes in design made necessary by the interpretations of earthquake safety under a new state law, according to Peter Carpenter, assistant vice-president for medical affairs.

The construction which began more than a year ago is necessary to enable the hospital to expand vitally needed support facilities, increase emergency services, and add 25 new intensive care beds. Expansion of the support facilities includes radiology, cardiology, surgical pathology, and postanesthesia recovery.

Carpenter said inflation, the energy crisis, strikes, and higher prices of materials have increased the cost of the project.

"But these factors have had relatively small impact on the project compared to the effect of the state's earthquake requirements," Carpenter said.

"Nobody at the state level has really cost-accounted the effect of the new law on hospitals," he added.

He explained that Stanford made allowances in the design of the building for the effects of the new regulations. But their slow implementation by the state resulted in many delays and revisions that could not have been anticipated.

Carpenter said at one time the University considered seriously closing down the project. "However, we could not do so, either academically or financially, because about $6 million had already been committed to the construction."

Even with the increase in budget, Carpenter said, the project has been scaled down by a decision to complete first only those parts that are most critical. A substantial portion of the interior of the building and some remodeling and equipment purchases have been deferred until funds become available.

Carpenter said fund raising for the hospital will be intensified. He also disclosed that borrowing money, or going to the state for legislative relief to recover the increased costs are some of the options under review.

The hospital's Phase I project is the first addition to the hospital since it was built 15 years ago. The need for the new building was created because needs for radiological, laboratory, and other support services have more than tripled.

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9/25/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

STANFORD--Dr. Thomas E. Starzl, internationally known for his work in kidney and liver transplantation, has been awarded the fourth Louis and Dorothy Kovitz Visiting Professorship at Stanford University School of Medicine.

Dr. Starzl, professor and chairman of the Department of Surgery at the University of Colorado Medical Center, will deliver the Kovitz lecture on Monday, September 30, at 4:15 p.m. in Room M106 of Stanford Medical School. His subject will be "Hepatotrophic Portal Blood Factors: A Century of Controversy." The talk is open to physicians and other health professionals in the community.

The Kovitz professorship was established in 1969 by Dr. and Mrs. Louis Kovitz of Los Altos to bring outstanding lecturers to the Medical School.

Dr. Starzl performed the first human liver transplant at Colorado in July 1967.

A native of Le Mars, Iowa, he received his M.D. and Ph.D. degrees in anatomy from Northwestern University. He trained in surgery at Johns Hopkins and continued his studies at Jackson Memorial Hospital in Chicago. He joined the University of Colorado Medical Center faculty in 1962.

Dr. Starzl was named Colorado Man of the Year in 1967, and in 1970 won the Eppinger Prize in Germany for his outstanding contributions to treatment of liver disease. He has received many awards and honors, is active in several medical organizations, including membership on the General Clinical Research Centers National Advisory Committee.

An honorary member of both the Korean Medical Association and the Peruvian Academy of Surgery, he is also past officer of the International Transplantation Society and corresponding member of the Surgical Research Society of Southern Africa.

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Mailed September 23, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD--Epilepsy, the brain disorder which affects about two million Americans, is beginning to yield its secrets to increasingly sensitive instruments.

A major technical advance is now allowing Stanford University scientists to make important observations about epileptic discharges in experimental animals.

Reporting in a recent issue of Experimental Neurology and Brain Research, Dr. David A. Prince, Dr. Kin Futamachi, Dr. Roberto Mutani, and William J. Moody, Jr., have found significant changes in concentration of brain potassium during experimental seizures.

Potassium is an element involved in regulating excitability of nerve cells and is important in the generation of normal nerve impulses.

"Large amounts in brain potassium concentration increase excitability and may lead to epileptic seizures," explained Prince in an interview.

Until recently scientists were unable to make accurate measurements of changes in brain potassium during the actual course of epileptic activity.

But in 1971, Dr. Prince, working with Drs. H. Dieter Lux, and E. Neher of the Max Planck Institute in Munich, Germany, made the first such accurate measurements through use of highly sensitive microelectrodes which detect minute changes in potassium concentration.

Back at Stanford, Dr. Prince and his associates have continued their research under the auspices of the National Institute of Neurological Diseases and Blindness and the Epilepsy Foundation.

They have shown there is poor regulation of potassium concentration in the spaces around the nerve cells during experimental epilepsy. In fact, local potassium buildup may reach three to four times the normal level.

"This change may have important effects on the involved nerve cells and contribute to the intense discharge of nerve cells which is characteristic of epilepsy," Dr. Prince said.

The Stanford researchers are now studying scarred areas of brain similar to those which occur in humans with epilepsy. The results are expected to show whether there are disorders of potassium regulation which might be responsible for epileptic discharge.

"If such abnormalities are demonstrated," Dr. Prince added, "it may be possible to correct them with drugs or naturally occurring brain chemicals.

"The results of these experiments could have major importance to our understanding of epilepsy in man and its successful treatment."

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Mailed September 18, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

EDITORS: Copies of Stanford M.D. available on request if not included with story.

STANFORD--Kidney patients who need dialysis on a regular basis should be trained to operate the equipment in their home, instead of traveling to a hospital or dialysis center for the treatment.

So says Dr. Belding H. Scribner, who in 1960 developed the technique of chronic dialysis (use of an artificial kidney machine which takes over the kidneys' main function of filtering out impurities from the bloodstream).

It has become cheaper for patients to remain on center dialysis and not undertake home treatment since Congress passed federal legislation in 1972 covering about 80 percent of the costs of center dialysis or kidney transplantation.

Federal regulations don't cover the costs of many aspects of home care.

"This is totally unfair," says Scribner. "Medically, psychologically, and every other way, home dialysis is better for most patients."

Scribner, a Stanford University Medical School alumnus, is at the University of Washington in Seattle and conducts research at the Northwest Kidney Center. The Center accepts all applicants, with nearly 90 percent trained for home dialysis.

His views appear in an interview in the current issue of Stanford M.D., the quarterly magazine of the Stanford Medical Alumni Association.

"If the dialysis population of the United States is 30,000, which is what we think it will be when things level off," says Scribner, "then it will cost $700 million per year to treat these patients in limited care dialysis centers. If they're treated at home, it will cost less than $300 million."

He maintains that taxpayers will have to pay over twice as much and scarce medical manpower will be used unnecessarily because of the increased use of dialysis centers.

(more)

In home dialysis the patient and one family member first complete four to eight weeks of intensive training at a dialysis center, then assume full responsibility for the operation and maintenance of the artificial kidney in their home.

They order supplies, clean and repair the machine, and respond to technical problems.

Scribner and Dr. Stanley Shaldon of London were the two pioneers of home dialysis. The concept was unheard of before their programs began in 1964.

"The idea was to make the patient as independent as possible," Scribner says. He designed the machine with special warning devices for home use, enabling the patient to sleep at home while on dialysis.

One of the major benefits of home care, in addition to the psychological and practical advantages of not being tied to a medical center, was its cost.

After initial expenditure of about $15,000 the first year for necessary supplies and equipment, maintenance costs drop to under $10,000 per year. Center dialysis, on the other hand, costs roughly $15,000 per year, according to Scribner.

Scribner devised the first arteriovenous shunt for a Seattle patient in 1960.

He inserted plastic tubes in an artery and a vein of the patient's arm, and kept the access open by hooking the tubes together, creating a shunt. During dialysis, the shunt would be pulled out and replaced by the lines to the artificial kidney.

Overnight, with permanent access to the bloodstream available, lives that once were considered lost could be saved by repeated dialysis.

The longest survivor, one of Scribner's first patients in Seattle, has lived more than 14 years.

Before his work, dialysis had been an operating room procedure performed to preserve the life of patients with temporary kidney failure, to keep them alive until their own kidneys returned to normal. Patients whose kidneys did not recover, soon died.

In addition to promoting home dialysis, Scribner strongly feels that a national registry of all patients with chronic kidney failure is necessary. Such a registry would help ensure that patients seeking a transplant would be tissue-matched with every available donated kidney.

At present, there are two separate registries: one for dialysis patients and one for transplant patients, making it impossible to follow the course of the patient when he shifts from one form of treatment to the other.

Scribner is also currently concerned with new ways to prevent coronary artery disease, the number one problem for long-term patients. It is believed caused by a combination of factors, including abnormal lipid metabolism on dialysis.

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Mailed September 18, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT (TWO STORIES): Spyros Andreopoulos (415) 497-6911
Bob Tapia (415) 497-6911

STANFORD--United Stanford Employees has filed a petition with the National Labor Relations Board seeking to represent more than 1,000 employees at the Stanford University Hospital.

Filed last week, the petition proposes a bargaining unit including "all patient care, technical, service and support personnel, including pharmacists, licensed vocational nurses, and nursing clerks..(and) excluding all registered nurses, office clerical employees, guards, and supervisors."

Provisions of the Taft-Hartley Act were amended earlier this year to cover nonprofit hospitals.

The USE petition lists the California Licensed Vocational Nurses Association as an interested union. This group has negotiated but not yet executed a new contract covering licensed vocational nurses at the Hospital. Under NLRB rules, a union may be selected to represent employees previously represented by another union if a written contract between that union and the hospital is not in effect.

John Meakins is the NLRB agent for the petition. The board's practice calls for an investigation to determine if hearings are necessary on the petition.

USE is local 680 of the Service Employees International Union, AFL-CIO.

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STANFORD--Approximately 30 per cent of the in-coming class of Stanford medical students will be women, an increase of about four per cent from last year.

Classes for an anticipated 86 first-year students begin September 25.

John P. Steward, associate dean of student affairs at Stanford School of Medicine, sees the steady rise of new women medical students as "a very good thing." He believes the pattern will continue and says a future class of med students equally divided between men and women is not "out of the question."

At Stanford there were 4,553 applicants for this year's class, an increase of 420 from 1973. Women students comprised 12 per cent of the first-year medical students at Stanford in 1966 and fell to three per cent in 1969 But since 1970 the number of women students has steadily risen from 10 per cent to 26 per cent last year.

Nationally, 21 per cent of first-year medical students are expected to be women this year (average), according to the American Medical Association's Council on Medical Education. The national average five years ago was 9.1 per cent.

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Mailed September 12, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

(ADVANCE) FOR RELEASE IN P.M. PAPERS THURSDAY, SEPTEMBER 12, 1974.

STANFORD--Some people can't digest table sugar, just as some can't digest the lactose in milk, says a Stanford University scientist.

This is why they experience feelings of distention and suffer diarrhea when they eat sugar.

The problem seems to be a hereditary deficiency in the enzyme that breaks down sugar, explains Dr. Gary M. Gray, associate professor and head of the division of gastroenterology at the Stanford University School of Medicine.

The enzyme normally allows the sugar to be split in the intestine so that the smaller products such as glucose can be assimilated into the body.

Dr. Gray made his remarks in a paper scheduled for presentation Thursday (September 12) at the meeting of the American Chemical Society in Atlantic City.

Contrary to earlier thought, Dr. Gray said, most digestion takes place not by the action of intestinal "juices," but rather by the action of enzymes imbedded in the surface of cells lining the small intestine.

Scientists at Stanford have recently isolated and characterized some of the enzymes active on this intestinal surface. One of these is sucrase, the enzyme that breaks down sugar.

If the enzyme is not present, sugar from the diet remains in the intestine and by osmotic action draws water out of the tissues into the intestine, creating a bloated feeling and resulting in a watery diarrhea.

Stanford researchers Drs. Edward Silverblatt and Gray have discovered that in normal people the sucrase enzyme is manufactured by immature intestinal cells as a protein that initially lacks the ability to split sugar. As the intestinal cells mature within only a few hours, the protein undergoes a change that enables it to digest the sugar.

Little is known about the factors that control either the manufacture of the immature protein or its conversion to the mature active sucrase.

The studies have shown that patients who cannot digest sugar still possess the immature sucrases. Gray suspects some genetic deficiency results in failure of the conversion of the inactive protein to the active form of sucrase.

Segments of some populations seem to be deficient in producing the enzyme, perhaps due to a traditional lack of sugar in their diet, says Gray. He cites particularly the Eskimos as such a group.

Tolerance of some people to milk has been linked to hereditary adaptations, according to earlier work by Dr. Norman Kretchmer, former Stanford pediatrician. It has been proposed that a genetic mutation enabling man to digest milk (lactose) probably occurred at least 10,000 years ago when some groups began to milk animals.

The inability to digest lactose has been found to be world-wide and not uncommon. The inability to digest sucrose however, is much more rare.

The research on sugar digestion is supported in part by grants from the National Institutes of Health.

Mailed September 10, 1974

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD--Site preparation work began this week for Stanford University Medical School's Sherman Fairchild Center for the Neurosciences, which will include a main building and adjacent auditorium.

This is one of four construction projects currently underway around the medical center. The others include a new hospital wing, Renal Care Unit Building and Governor's Lane Complex.

Due to the increasing inflation factor, the multi-million dollar expansion program at Stanford University Medical Center is expected to be scaled down somewhat in final design and equipment costs.

A number of sub-contractors are involved in construction of the Fairchild Center with the Turner Construction Co. of San Francisco serving as construction manager.

The projects include:

--Sherman Fairchild Center for the Neurosciences, which will be situated south of the Medical Center. This $9.75 million facility is tentatively scheduled to be completed by August, 1976. The neurosciences building will be three stories and a full basement, according to plans, and will house the departments of anatomy-physiology and neurobiology (a new department). The auditorium will provide seating for 400 persons, a lobby and display area and enclosed facilities for a projection room, preparation rooms, storage and administrative space. Large lecture classes and meetings can be accommodated in this facility (the limit is 145 persons in the existing lecture amphitheatre). The Fairchild building was designed by the architectural firm of Stone, Marraccini and Patterson of San Francisco. The Fairchild Foundation of Greenwich, Connecticut has pledged $8.25 million for construction of the center, which is named after the founder of Fairchild Camera and Instrument Corp. and Fairchild Industries.

--Hospital wing, which will add vitally needed support facilities, including 25 intensive care beds, increased emergency services, radiology, cardiology, surgical pathology and post-anesthesia recovery. Initially, Stanford University Trustees approved a budget of $9.5 million for this project, but recently they revised that figure upward to $12.6 million due to increased construction, equipment costs and code

- more -

requirements. This facility is tentatively scheduled to be completed and in operation by December, 1975, even though a substantial portion of the interior of the building and some remodeling and equipment purchases have been deferred until more funds become available.

--Governor's Lane Complex, west of the medical center, which will initially contain a research building for the lymphoma virology program of the Department of Radiology. The two-story structure will contain approximately 10,000 square feet of space and is scheduled for completion in June, 1975. Much of the project costs of $1,155,000 will be borne by the National Cancer Institute. Dr. Henry S. Kaplan, professor of radiology and a cancer research pioneer, will direct the program and his work will deal with several aspects of the biology of human malignant cancers, including Hodgkin's disease. In the new laboratory methods will be devised for the study of human cancer cells, with emphasis on the possible role of viruses in the cause of malignant disease.

--Renal Care Unit, which is located southwest of the Psychiatry Building, is scheduled to be completed in early November. This temporary structure, which costs approximately $185,000, is being designed to handle kidney dialysis for seven patients at a time.

Peter F. Carpenter, assistant vice president for medical affairs, noted that recent costs hikes involving construction of the new hospital wing were caused by design changes required under state laws for earthquake safety. He said that Stanford has made allowances in designing the new wing to conform with new state regulations. However, slow implementation of the regulations by the state has resulted in many delays and revisions that were not anticipated, he said.

Even with the budget increase, the project has been scaled down by a decision to complete first only those parts that are most critical, he added. Furthermore, a substantial portion of the interior of the building and some remodeling and equipment purchases have been deferred until funds become available.

Carpenter said fund raising for the hospital will be intensified and he noted that several options are under review to recover the increased costs, including the borrowing of money.

The new hospital wing is the first addition to the facility since it was built 15 years ago. The need for the new building was created when radiological, laboratory and other support services more than tripled.

Mailed October 30, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia (415) 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Itamar Barnea might appear to be just another student at the University of Jerusalem in Israel, but it is doubtful if many other students can match his experiences.

Barnea, 24, an ace pilot in the Israeli Air Force, recently returned to his homeland after undergoing intricate corrective surgery at Stanford University Hospital to repair internal complications from wounds he suffered in the last Mideast war.

He spent eight months in a POW compound in Syria after his Phantom jet was shot down Oct. 21, 1973, while he was on his 60th mission in 12 days. His was officially listed as the last plane to be shot down in the war. He escaped from the plane and while plummeting in his parachute he was wounded by rifle fire from soldiers on the ground. One bullet went through the right side of his chest in the front and exited through the back.

However he survived and was treated by a Russian-trained surgeon who subsequently removed his right lung. Following repatriation, Barnea was examined at Hadassah Hospital in Jerusalem where physicians decided to call in Dr. Karlman Wasserman, former assistant professor of medicine at Stanford, who was in Israel at the time as a visiting professor. Wasserman, who is now a professor of medicine at UCLA, is a specialist in chest disease.

He made arrangements with the Israeli government to have Barnea flown to the U.S. and asked Dr. Robert W. Jamplis to conduct the operation. Jamplis, who is chief of thoracic surgery at Palo Alto Medical Clinic and clinical professor of surgery at Stanford University Medical Center, had worked previously with Wasserman at Stanford.

"Itamar had several problems," Jamplis explained, "shortness of breath and a bad cough. We thought his breathlessness was due to an overexpansion of the left lung into the empty right cavity, and his coughing caused by turbulence of air in the windpipe. He also had a wheeze, since his left lung was pulled so far into his right chest that it shut off the air to the left part of the left lung."

Jamplis feels it is remarkable that the young man has recovered from the ordeal, since he probably received little postoperative care during his many months as a POW. "His heart had been pulled into the right chest so far that it was right under the right ribs," Jamplis noted. "We had to devise an operation that would push the heart and windpipe back into the mid-line of the chest and have it hold there."

(more) cr 10/28/74

Jamplis said silastic implants had been considered at one point in order to keep vital organs in the chest from shifting back. (Silastic implants are silicone-based materials sometimes used as supportive replacements for organs removed by surgery.)

He consulted with Dr. Harvey Lash, head of plastic and reconstructive surgery at Palo Alto Medical Clinic, before deciding that implants would not be necessary. "We didn't really know what we would do until we opened the chest," Jamplis recalled, "but we decided to have everything ready."

Although Barnea would have survived without surgery, he most likely would have had "chronic infection" in part of the chest cavity, according to Jamplis. "Now that he's home he won't need more treatment. I would hope that he would be able to live a normal life."

Although reluctant to talk about his military experiences, the soft-spoken Barnea remains bitter over medical treatment he received while in captivity. "The operation caused me a lot of troubles. But I was lucky because I met some doctors from the U.S. who helped me to get my second operation."

Barnea says it was just a lucky "accident" for him that Wasserman was in Israel at the time and that the physician agreed to make arrangements for him to fly to the U.S. The plans were coordinated through the pilot's father-in-law and personal physician, Dr. Zvi Eyal, professor of surgery at Hadassah, who accompanied Barnea to the U.S.

The young ex-prisoner of war who lives with his wife, Taly, and six-month-old daughter, Lilach, is optimistic he will be able to return to his former lifestyle without too much discomfort. As a student he plans to take some biology and psychology courses and eventually return to the military, possibly in a teaching position.

It is unlikely he will return to his former job as a military pilot. His wife, meanwhile, has already attended the University of Jerusalem for two years and plans to go into social work.

Following his release from Stanford Hospital, Barnea underwent some postoperative tests in Los Angeles by Wasserman and then flew to Tel Aviv via New York.

"It will take time [to recover]," Barnea sighed. "I felt like an old man before, with shortness of breath and all. But I feel better already."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD — Patients treated for obesity often suffer from emotional troubles.

These troubles differ in intensity and duration and are related to the type of patient and to the place and kind of treatment.

Persons who were obese as children are much more predisposed to having emotional difficulties as a result of dieting than patients who become obese in adult life.

Short-term fasting in a hospital environment causes less stress to patients than programs in which there is severe caloric restriction.

These conclusions are reached in an article by Dr. Albert J. Stunkard, professor and chairman of the Department of Psychiatry and Behavioral Sciences at Stanford University.

Stunkard in collaboration with Dr. John Rush, a University of Pennsylvania psychiatrist, reviewed their own as well as other studies of long-term and short-term fasting during the past 22 years.

"There is striking unanimity of findings about the benign effects of short-term fasting," they reported in the October issue of *The Annals of Internal Medicine*.

There are three major treatments for patients hospitalized for obesity: short-term fasts lasting no longer than two weeks, low-calorie diets, and long-term fasts which may last from two weeks to 40 days.

For fasting that lasted from 10 to 40 days there was a dramatic rise in emotional disturbance, Stunkard reported. In one study, patients "showed definite mood fluctuations of marked degree," increased aggression, and even "near psychotic episodes." In another study there were two suicide attempts.

Low-calorie diets caused the same degree of emotional upsets as long-term fasting, the psychiatrist said.

The psychiatrists noted that severe emotional disturbances nearly always appeared after patients had either lost 15 to 20 pounds of weight or had been in the hospital more than 10 days, or both.

"These may be the critical values," Stunkard said. "They suggest that the disturbances may, in part at least, be precipitated by metabolic changes, which doubtless occur in long-term fasting."

Stunkard said persons who became overweight in childhood were more difficult to treat and had more emotional difficulties than patients whose obesity began in adult life.

The most dramatic evidence for this special vulnerability was found by researchers at Rockefeller University in 1968. "It was the most distinctive factor in vulnerability yet identified," said Stunkard.

The psychiatrists hope that making these facts better known would aid the profession in making more informed decisions about obesity treatment.

"It might help both doctors and patients to realize just how difficult weight reduction can be and to lessen unrealistic expectations of treatment," Dr. Stunkard commented.

"Such help might even make physicians more tolerant and patients less guilty."

—30— 10/25/74 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911
Transmitted on Business Wire 10/21/74

STANFORD--A new blood test that acts as "an early warning system" for detecting graft rejection in heart transplant patients has been developed by surgeons at Stanford University School of Medicine.

Five patients were studied with the new test called the modified reactive leukocyte blastogenesis (MRLB) assay. The patients were monitored for 45 to 75 days after they had received heart transplants at Stanford University Hospital. There were 18 documented rejection episodes in these patients.

Test results were compared with two other methods now used to detect rejection. These are the electrocardiogram and heart tissue biopsies.

The MRLB test predicted rejection almost five days earlier than the other methods, and continued to be as sensitive in predicting subsequent episodes, the researchers reported.

The scientists are Randall E. Morris, Dr. Eugene Dong, Jr., Charlene M. Struthers, Dr. Randall Griepp, Dr. Edward B. Stinson, Dr. Margaret Billingham, and Dr. Norman E. Shumway. Morris is a fourth-year medical student and Miss Struthers is a student in human biology. Their findings were presented Monday (Oct. 21) at the meeting of the American College of Surgeons in Miami Beach.

"This test should be applicable in diagnosing rejection of transplanted organs other than the heart," their report said. "However, more experience with the test would be needed before determining the ultimate benefit to patients."

The surgeons believe that detecting rejection in its earliest stages would require less medication to reverse it. This would lessen risk to patients.

Drugs now used to suppress the immune reaction in these patients act as a two-edged sword, the surgeons said. They reverse rejection, but they also predispose patients to infections and malignancies.

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"The undesirable effects of these drugs could be avoided through more judicious administration," they commented.

The MLRB test works this way:

Tissue rejection in the body is a two-stage process. In the first stage immune cells begin to multiply. In the second stage the immune cells invade the graft and destroy it.

The MRLB test detects immune cell division as soon as it gets under way. It does so by monitoring the synthesis of DNA (deoxyribonucleic acid), the hereditary material of cells that is essential for division.

To monitor DNA synthesis, a blood sample is obtained as often as needed from the patient and incubated in a test tube containing nutrients essential for the growth of blood cells outside the body. The incubation solution contains a radioactively labeled DNA building block (tritiated thymidine). Actively dividing cells incorporate the thymidine into their newly synthesized DNA, providing a clue that the immune system is being mobilized.

This signals the time to begin antirejection treatment.

Stanford Medical Center is one of the few institutions in the United States where heart transplants are being performed. Of the 77 patients who received new hearts at Stanford, 26 survive.

According to a recent report, survival for all transplant patients operated on at Stanford was 44 percent surviving at one year, 39 percent at two years, 24 percent at three years, and 20 percent at four and five years--for an overall figure of 33 percent. In the past year the one-year figure has been 50 percent.

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Mailed 10/21/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Hali Wickner (415) 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

When he entered Stanford Hospital last week, Henry Gearing was virtually blind; he walked with a cane to avoid bumping into objects.

A few days later, thanks to a relatively new and delicate surgical procedure, he walked out the door unaided, enjoying his first views of the world in six months.

Gearing has diabetes, which often causes eye complications. His problem began in the retina, the eye tissue that acts like film in a camera to pick up images and transmit them to the brain.

The condition, called diabetic retinopathy, is the most common cause of new blindness in U.S. adults today, according to Dr. A. Ralph Rosenthal, head of the division of ophthalmology at Stanford Medical School.

New blood vessels form in the retina, Rosenthal explained. These vessels are fragile and often burst, spilling blood into the jelly-like vitreous cavity that surrounds the retina. The blood clots in the vitreous prevent light from reaching the retina.

Both of Gearing's eyes had hemorrhaged periodically for two years. Finally, six months ago, his vision was totally blocked.

"It was like looking through milk," he said. "Nothing came through."

An operation to remove the dense clot could restore Gearing's vision. The technique, called vitrectomy, has only been performed regularly for about a year. It requires microscopic precision and special lighting, and newly designed equipment not yet available in many hospitals.

When Gearing and his wife, residents of Cleveland, Ohio, were visiting a son who lives in the Bay Area, they discovered that Stanford was one of four hospitals where vitrectomies were done on the West Coast.

Gearing's operation was performed by Dr. Robert Jack, clinical instructor of ophthalmology at Stanford School of Medicine and a staff ophthalmologist of the Palo Alto Medical Clinic, who studied the procedure in Miami where it was pioneered two years ago.

Jack inserted a mechanized probe with a rotary cutting edge into the vitreous cavity of Gearing's left eye. The blade "chopped up" the clotted vitreous blood, which was then sucked up a hollow tube of the probe. The extracted clot was replaced by a clear saline solution, administered through another tube of the probe.

Twenty-four hours after the operation, Jack removed the bandage from Gearing's eye. "It was beautiful," said Gearing. "I could see the faces and features of everyone around me."

"Gearing's case is particularly dramatic," pointed out Jack, "because both eyes were affected. He could see nothing the day before surgery, and saw so well the morning after the operation. It is not unusual for several weeks to elapse before the eye clears after vitrectomy surgery."

Although it's too early for any long-term prediction on the success of the operation, the results so far have been very promising, said Jack. He doesn't foresee any more hemorrhages for Gearing. As additional insurance against future bleeding, Gearing will undergo periodic laser treatments.

In another month he returns to Stanford for a repeat performance on the right eye. The retired employee of U.S. Steel looks forward to resuming his fishing and traveling with two good eyes. But nothing can surpass the thrill of this first operation.

"I can't get over how wonderful it is to see again. Just being able to tell time from the clock is a precious experience," Gearing said eagerly, turning his head to take in everything around him. –30– 10/8/74 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Editors: A press conference to announce plans for incorporation of a comprehensive cancer center program for northern California and northwestern Nevada has been scheduled by the American Cancer Society at 9:45 a.m. Thursday, October 3, 1974 in the Lassen Room, San Francisco Hilton. The story is issued simultaneously with a similar release distributed by the ACS.

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911
FOR RELEASE IN P.M. PAPERS THURSDAY, OCT. 3, 1974. Charles Dahle, ACS (415) 777-1800

SAN FRANCISCO--Plans for a major comprehensive cancer center program which will be based in the San Francisco Bay Area and serve all of northern California and northwestern Nevada were made public here Thursday (Oct. 3).

The plans call for creation of a new organization which will be known as the Northern California Cancer Program. Papers of incorporation of the coordinating body will be signed within the next few weeks.

The program will include several organizations already involved in cancer research and treatment activities, among them--the University of California School of Medicine, San Francisco, the American Cancer Society, and the Stanford University School of Medicine.

The new program was described at a press conference in the San Francisco Hilton by Dean Julius R. Krevans of the University of California School of Medicine in San Francisco; Robert F. Murphy, executive vice president of the American Cancer Society; and Dr. Saul A. Rosenberg of the Stanford University School of Medicine.

When in operation, it is expected that the California Cancer Program will be financed in large part--but not entirely--by the National Cancer Institute. Sixteen existing centers have current budgets ranging from $700,000 to $12.6 million or an average of about $3 million per year. No major financial commitments have been made except for seed money which will be provided by some of the participating institutions to get the program going.

However, once it is incorporated, the Northern California Cancer Program will apply to the National Cancer Institute for increasing working funds, it was disclosed.

The 16 comprehensive cancer centers already in operation elsewhere in the nation, include one in Los Angeles under joint sponsorship of the University of Southern California and Los Angeles County Hospital, and another in Seattle under joint sponsorship of the University of Washington, the Fred Hutchinson Cancer Research Center and the Children's Orthopedic Hospital and Medical Center.

The Northern California Cancer program will have no buildings of its own, but will work through existing facilities and institutions including community hospitals. Lay programs of the American Cancer Society also will be coordinated with the plan.

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22--Cancer Center

The planning group foresees, in addition to the coordination of basic science and clinical investigation, the expansion of training programs for various categories of medical and hospital personnel, the establishment of new and enlarged cancer detection and resource clinics, consultation services and radiotherapy networks; the development of uniform procedures in pathology and epidemiology, the expansion of public education programs, and a continuing evaluation of results.

The local planning committee is chaired by Dr. Rosenberg, professor and head of the division of oncology at Stanford. Among its most active members have been representatives from the University of California at Berkeley and San Francisco, Stanford University, the San Francisco Regional Tumor Institute, the West Coast Cancer Foundation, the California Medical Association, The California State Health Department, the Northern California Cancer Council, Inc., and a number of leading community hospitals in the area.

Three members of the planning group serve as representatives of the lay community. They are attorney B. J. Feigenbaum, banker Edward J. Schneider, and American Cancer Society executive Murphy.

Dr. G. Denman Hammond, director of the center at U.S.C., Dr. John Hartmann, associate director of the center in Seattle, and Dr. Jesse Steinfeld, former U.S. surgeon general, have been serving as advisers to the local group along with officials from the headquarters of the National Cancer Institute.

The San Francisco Bay Area has for nearly three decades been recognized as one of the nation's foremost centers of cancer research. It has been strong in basic research, surgery and chemotherapy, and has been a pioneer in the development of high voltage radiation and nuclear medicine. It has grown as a center of cancer research because of the size and spread of the universities and hospitals clustered here. In this respect it is unlike most other major areas, where single institutions have tended to become dominant in the field. It is expected that the Northern California Cancer Program will combine all of the present anti-cancer activities into a coordinated effort involving not only research but public and professional education and some aspects of service to cancer patients.

According to the ACS, current funding of scientific and lay programs in cancer research and control in northern California totals approximately $15 million annually from the National Cancer Institute and the American Cancer Society alone. Of this amount, about $9.7 million comes from NCI, and $5.25 million from ACS.

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Mailed October 2, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD--Through the assistance of a sophisticated brain-scanning device, Stanford doctors hope to better understand the nature of brain disease.

The Department of Radiology at Stanford Medical Center recently placed its new EMI Scanner into operation and patients with suspected brain disorders are being examined by the machine on a daily basis.

The device, which was developed by a British firm, utilizes an X-ray beam, computer analysis and Polaroid film. It is able to detect benign and malignant brain tumors, blood clots, brain injuries, brain defects resulting from strokes and certain birth defects.

The machine is considered "revolutionary" in some medical circles in the diagnosis of brain disease, but Dr. William Scott, acting assistant professor of radiology at Stanford, believes the device will also aid scientists through extensive research into gaining fundamental information about various brain diseases.

The scanner, which Scott estimates costs approximately $380,000, was actually purchased by Stanford late last year. However, there was a nine to 10 month waiting period for delivery so the unit did not become operational until last summer. In the near future the machine will be installed with a modification developed by the manufacturer which gives the computerized X-ray readings a finer detail. The modification costs approximately $12,000.

Scott is convinced the scanner can be used as the takeoff point for research into areas involving actual and potential brain disease.

He believes animals can be used in a number of experimental research projects. He noted that spinal flow and any brain disorders such as tumors, could be studied by the scan. The animals used in an EMI Scanner study would be temporarily sedated because they must be held still during the scanning process. Humans must also be still and the scan can usually be completed in 20 to 25 minutes.

(more)

Although Scott considers the scanner a major breakthrough in the study and detection of brain disorders he stressed that it does not totally replace old tests previously used. "We expect to shorten the hospitalization in some patients," he said, "and to other patients the scan will act as a supplement to other tests."

Those "other" tests are pneumoencephalograms and angiograms. In pneumoencephalograms the brain and head chamber are outlined with air before X-rays are taken, while with angiograms substances are injected into arteries of the patient's brain before X-rays are made. Both of these procedures entail some risk, are more time consuming and cause some discomfort to the patient, Scott says.

To be scanned, the patient lies flat on his back while an X-ray tube and X-ray detectors move across his head. Information from the detectors is then analyzed by computer following a visual display of the results on an oscilloscope. This information represents a cross-section, or a horizontal "slice" of the brain. By comparing slices doctors can determine the depth of a tumor and by comparing the various shades of gray they can distinguish between tumors and other disorders, such as damage from strokes.

This process represents a major advance since the brain is inaccessible by the more standardized X-ray devices because of the density of skull bone encasing. More important to the patient, there is less X-ray exposure with the EMI Scanner than with more conventional X-ray scans, Scott said.

Although Stanford operates an EMI Scanner so does the Palo Alto Medical Clinic, which actually received its machine a month before the university did. According to Scott, Stanford and the clinic plan to work together on joint clinical research utilizing both scanners in the near future.

He noted, furthermore, that Stanford will scan patients for smaller hospitals that cannot afford their own EMI Scanners. In all, he estimates about one-half dozen scanners are either in operation or soon will be in the greater San Francisco Bay Area.

What is the life span of the EMI Scanner? Will better scanners soon replace it?

"More sophisticated, similar equipment to further improve resolution (detail) and speed of study will likely make the present scanner model outdated within three to five years," Scott predicted. "However, the present equipment is astonishingly useful, providing information essential to the care of large numbers of neurologic patients."

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Mailed October 7, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Editors: A press conference to announce plans for incorporation of a comprehensive cancer center program for northern California and northwestern Nevada has been scheduled by the American Cancer Society at 9:45 a.m. Thursday, October 3, 1974 in the Lassen Room, San Francisco Hilton. The story is issued simultaneously with a similar release distributed by the ACS.

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911
FOR RELEASE IN P.M. PAPERS THURSDAY, OCT. 3, 1974. Charles Dahle, ACS (415) 777-1800

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The plans call for creation of a new organization which will be known as the Northern California Cancer Program. Papers of incorporation of the coordinating body will be signed within the next few weeks.

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22--Cancer Center

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Mailed October 2, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD--A preliminary hearing is scheduled Tuesday, November 26 in U.S. District Court in San Francisco on a class action suit filed by two Stanford resident physicians who want a "loyalty questionnaire" required by the Veterans Administration invalidated.

The suit, filed in behalf of Drs. Peter Rudd and Steven Oboler, seeks to eliminate the questionnaire which asks potential employees at VA facilities about their affiliation with political organizations, including the Communist party.

An earlier suit, in which Rudd was one of the plaintiffs, was upheld last year by the U.S. Ninth Circuit Court of Appeals thereby throwing out a similar questionnaire. The court ruled then that such a questionnaire did not have to be filled out by physicians working at VA hospitals because it infringed upon individual rights granted by the First Amendment. The government did not appeal that ruling to the Supreme Court.

Approximately 10 years ago Dr. June Fisher refused to answer a VA questionnaire during her residency at Stanford and subsequently worked without pay at the VA Hospital in Palo Alto. Several other physicians at the facility followed suit and either worked without pay or forfeited their opportunity to work at the VA.

The original suit was initiated by Drs. Rudd, Howard Waitzkin and Peter Cummings, all of whom were interns at the time but did not work together. All three refused to answer the questionnaire. They were on the house staff at Stanford Hospital when the first suit was filed and were scheduled to serve clinical rotation at Palo Alto VA Hospital.

Stanford resident doctors generally serve rotations at affiliated hospitals, of which VA Hospital is one.

Shortly after the revised form, which is called "G.C. 51," was distributed to some VA hospitals around the country, Oboler was requested to sign the form. He refused and the new class suit was initiated.

"Political affiliations, like religion or race, should not be included among the conditions for employment," Rudd commented. "We are anxious for people to know about this case."

A spokesman at the VA's regional office in San Francisco said the VA would not comment on the suit while it is in litigation.

The physicians have spent approximately $6,000 for legal costs and have hired attorney Marshall Kraus of San Rafael to represent them in the latest suit. The preliminary hearing November 26 at 2 p.m. will be before Judge Oliver Carter.

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Mailed November 25, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Stanford University's Lipid Research Clinic has received a contract for $738,590 from the National Heart and Lung Institute to support its on-going study of the effectiveness of reducing blood cholesterol levels in the prevention of heart disease.

A recruiting drive continues in the Bay Area to enlist persons with high cholesterol levels for the five to seven year study, according to Dr. Michael Stern, director of the Stanford program.

The Stanford effort is part of a research program being conducted at 11 clinical centers nationwide and one in Canada, with support from the National Institutes of Health.

Researchers hope to produce conclusive data concerning whether or not cholesterol lowering will prevent the development of heart disease.

Doctors expect to screen thousands of people in the Bay Area, since only an expected one percent of those initially screened will be found suitable for the program.

Nationally, approximately 4,000 male volunteers, aged 35 to 59, will participate. Besides other requirements, candidates must have cholesterol counts of at least 275 milligrams per milliliter of blood or above, but not have symptoms of heart disease.

One group of volunteers accepted into the program will be placed on a special low cholesterol diet. The other group, in addition to the diet, will receive doses of a drug intended to reduce their cholesterol level even further. Those not receiving the drug will receive a placebo.

All participants will receive frequent regular physical examinations to monitor their health.

Community physicians, area blood banks, clinical laboratories, and other medical organizations are assisting in recruiting efforts for the study. Persons interested in participating may contact the Stanford Heart Disease Prevention Program at 730 Welch Road, Palo Alto, CA 94304. Telephone is 329-1300.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

EDITORS: Release date for this story has been set to coincide with presentation of the research report at the American Heart Association meeting in Dallas.

ADVANCE FOR RELEASE AFTER 6 P.M., WEDNESDAY, NOVEMBER 20, 1974.

STANFORD — Middle-aged men may reduce their chances of developing heart disease if they engage in vigorous physical activity, like long distance running, says a group of Stanford researchers.

Scientists discovered that male runners they studied, aged 35 to 59, had blood fat distribution more like younger women than like less active middle-aged men. Young women comprise a group that is rarely afflicted by heart disease.

Dr. Peter D. Wood, adjunct professor of medicine at Stanford University Medical Center, and Herbert Klein, Steven Lewis, and Dr. William Haskell presented their findings at the annual scientific session of the American Heart Association meeting in Dallas on Wednesday, Nov. 20.

Their work represents solid evidence to support contentions that strenuous physical activity by older men is beneficial with respect to avoiding heart disease. They cautioned, however, that no such vigorous exercise program should be launched without sufficient preconditioning and advice from a physician.

The runners were a Northern California group of 41 male long-distance runners who averaged at least 15 miles of running each week during the preceding year. Many had begun their habit within the last few years and were not lifelong athletes. They were all in excellent physical condition, as measured by treadmill testing.

Compared with this group was a larger group of randomly selected middle-aged men, more representative of the entire male population, according to Wood, and generally rather sedentary.

Researchers found cholesterol levels modestly lower in the runners. Most significantly, they found changes in the distribution of cholesterol in the blood lipoproteins which carry the fats through the body circulation. Cholesterol in low density lipoproteins, generally considered an important risk factor for heart disease, was only 125 in runners, but 139 in the control group. Plasma triglyceride levels were very much lower in the runners than in the control group (70 versus 146), confirming previous reports.

"It is interesting to note that these older male runners show a pattern of cholesterol and triglyceride distribution that is more like that of younger women than that of males of the same age who are sedentary," says Wood.

The continued presence of excess fats in blood plasma is thought to increase the chances that these fats will accumulate in the artery walls. If this occurs in a coronary artery, reduced or obstructed blood flow could result in heart attack.

The recent research indicates that vigorous exercise may help to slow down this process of fat accumulation.

None of the runners smoked cigarettes, and most were close to ideal weight. However, says Dr. Wood, the data suggest that it was the exercising and not these other factors that was primarily responsible for the distribution of fats in the runners.

The researchers conclude: "Vigorous activity in older men is associated with a pattern of blood lipids considered by most authorities to be conducive to heart health, and that such activity is to be commended, at least from this point of view, in fit individuals."

Wood himself is considered one of the finest senior distance runners in the country, and has often stressed the positive effects exercise can have in respect to heart disease.

He was named most outstanding senior runner in Northern California in 1970 by a ballot of the Amateur Athletic Union runners. The 45-year-old lipid chemist from London runs up to 100 miles a week when training for marathon races.

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11/19/74

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD--Dr. Albert J. Stunkard, professor and chairman of the Department of Psychiatry at the Stanford University School of Medicine, has asked to be relieved of his administrative responsibilities.

In a letter to Dr. Clayton Rich, vice-president for medical affairs and dean of the medical school, Stunkard cited personal reasons for his decision.

He plans to continue his Stanford association as professor of psychiatry and director of the newly established eating disorders clinic.

Dean Rich said he has the highest regard for Stunkard. "I look forward to his continuing contributions to the psychiatric teaching and clinical programs."

Rich has appointed Dr. Thomas A. Gonda, professor of psychiatry, as acting chairman of the department. The appointment is effective immediately. He has also appointed a committee to advise on the selection of a new chairman. The committee is headed by Dr. Philip C. Larson, Jr., professor and chairman of the Department of Anesthesia.

Gonda, 53, is currently medical director of the Stanford Hospital and an associate dean for clinical affairs.

Stunkard became psychiatry chairman at Stanford in 1973. Prior to that he headed the department of psychiatry at the University of Pennsylvania School of Medicine.

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Mailed November 19, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner (415) 497-6911

STANFORD--Dr. Erich Lindemann, visiting professor of psychiatry at Stanford University School of Medicine and one of the world's most distinguished psychiatrists, died Saturday, November 16, at his home in Palo Alto, California, after a lengthy illness.

Lindemann, 74, was also professor emeritus of psychiatry at Harvard Medical School and former chief of psychiatry at the Massachusetts General Hospital in Boston. He had been a clinical teacher and consultant in mental health at Stanford since he retired in 1965 from 30 years of active service at Harvard.

As an experimental psychiatrist and pyschologist, Lindemann pioneered studies on how people react to loss and grief, and developed an original approach to the origin of mental disease in an American community.

His interest in changes in the social structure which affect an individual's mental well-being began in 1942 when he was called upon to aid victims of the Coconut Grove fire in Boston where hundreds of persons were killed and injured.

Six years later he was responsible for establishing the first community health center in Wellesley, Massachusetts, to study community conditions that can lead to mental breakdown.

Lindemann also headed the West-End project, in which some 2,600 families in the West-End area of Boston were forced to relocate in 1957. He and his colleagues conducted a systematic appraisal of the social and psychological stresses involved in relocation.

A native of Witten, Germany, Lindemann received a Ph. D. in 1922 and an M.D. in 1926 from the University of Giessen. He came to the United States in 1927 and served on the faculty of the University of Iowa for the next eight years. Since 1935 he was associated with Harvard and the Massachusetts General Hospital, and became professor and chief psychiatrist in 1954.

Survivors include his wife, Elizabeth B. of Palo Alto, a daughter, Brenda of San Raphael, a son, Jeffrey of San Francisco, and two sisters and a brother of Germany. Remains will be sent to Plainfield, Vermont.

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Mailed November 18, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner (415) 497-6911

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Mailed November 18, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

EDITORS: Release date for this story has been set to coincide with presentation of the research report at the American Heart Association meeting in Dallas.

ADVANCE FOR RELEASE IN AM PAPERS, WEDNESDAY, NOVEMBER 20, 1974.

STANFORD--Studies in three California communities suggest that mass media campaigns can persuade people to change habits believed to increase risk to heart attacks, and can result in significant changes, such as lower blood pressure and cholesterol levels.

The results are from the first phase of a three-year Stanford program launched in 1972 using mass media campaigns in an attempt to persuade people to change high risk habits such as cigarette smoking, diet, and lack of exercise.

Results were presented at the scientific sessions of the American Heart Association in Dallas on Wednesday (November 20) by Dr. William Haskell and his colleagues of the Stanford Heart Disease Prevention Program.

In the community of Gilroy, a random sample of approximately 500 men and women aged 35 through 59 were surveyed before and after a Spanish and English media campaign by radio and television, newspapers, billboards, and mail. The campaign focused on smoking, physical activity and exercise, weight, and consumption of cholesterol, saturated fats, sugar, salt and alcohol. Before and after the campaign all participants had physical examinations and completed written questionnaires.

In Watsonville, the same campaign was carried out. In addition, a smaller number of persons were given personalized, intensive information by teams of physicians, dieticians and other health personnel. These people had been judged to be high-risk for heart disease during initial examinations.

In Tracy, a random sample of persons were surveyed at the beginning of the study, and then again a year later. There was no media campaign to educate them about heart disease.

Results for the first year show a reduction of 2.5 percent in the cholesterol level of persons tested in Watsonville, compared with increases in the cholesterol level of Gilroy participants of 0.6 percent, and 3.1 percent in Tracy.

Levels of triglyceride (a form of dietary fat in the blood) were reduced by 4.9 percent in Watsonville, but increased 5.5 percent in Gilroy and 16 percent in Tracy.

Blood pressure of participants in Watsonville was reduced by 1.6 percent, and by 2.7 percent in Gilroy, compared with an increase of 4 percent for those surveyed in Tracy, where there was no media campaign.

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Respondents in Watsonville reported that they smoked 31 percent less cigarettes after the one-year campaign. Gilroy subjects reported a 9 percent reduction in smoking, and Tracy reported a 4 percent reduction. Weight reductions of about one percent were reported in all three communities.

Besides the physiological changes, results also confirm the researchers' hunch that changes in knowledge and behavior are possible. For example, more than 15 percent increase in knowledge that smoking was a risk factor was reported in Watsonville, compared with less than 10 percent change in that knowledge in Gilroy, and no change in Tracy.

Respondents in Watsonville reported they ate about 35 percent fewer eggs per week, 25 percent fewer in Gilroy, and 15 percent fewer in Tracy.

"In general," says Haskell, "a hierarchy of change was observed, with the greatest improvement occurring in Watsonville, where our efforts were most intense, and the least improvement or a worsening in Tracy, where no campaigning took place.

"Preliminary results are encouraging," says Haskell. "The statistics are significant showing that substantive changes can be effected by an intensive media and instructional campaign . . . But the big question is if these figures can be maintained through the following years of the study. We are about two-thirds of the way through the second evaluation period, and it looks like we are moving in the desired direction."

The program was launched in the fall of 1972, and present data represents the changes seen between the initial survey and the first follow-up in the fall of 1973.

The project is the first time that news media has been employed in a behavior change effort at the community level, and the first attempt by scientists to evaluate whether or not the media can be used successfully for this purpose.

Dr. John W. Farquhar, professor of medicine at Stanford's School of Medicine, heads the interdisciplinary research team. Dr. Nathan Maccoby, professor of communication, is co-principal investigator. Grant support is from the National Heart and Lung Institute.

In the coming year, the researchers hope to find ways to provide longterm reinforcement in the communities, to maintain the changes in life styles already initiated. "We will be looking for ways to localize the program," says Haskell, "particularly using organizations such as the local Heart Association chapters."

A logical next step, according to Haskell, is to take the study into a larger community and try to find out if lowering risk factors would significantly reduce the level of heart disease in the community. "Our objective would be to find if the tools we have devised to reduce coronary artery disease really work," says Haskell.

"In the future, we hope to be ready to design a very effective risk reduction campaign. We should know what will work and what doesn't work, and what would be most cost-effective," he says.

Farquhar says Stanford's project represents the type of preventive effort needed to help stem the "epidemic" of heart disease in this country, which claims the lives of more than 600,000 Americans per year.

"Most deaths of people under 65 in the U.S. due to coronary disease are preventable," he said. "We believe that success in achieving substantial behavior change at the community level lies at the root of any future national campaign to reduced premature mortality from heart disease and stroke." Mailed Nov. 18, 1974 ###

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

STANFORD--Dr. Robert A. Chase, president and director of the National Board of Medical Examiners, will present the keynote address, "Dynamic Reforms in Graduate Medical Education and Licensure," at the annual Stanford Medical Alumni Day program on Friday, November 22.

Dr. Chase is former Emile Holman professor of surgery and chairman of the Department of Surgery at the Stanford University School of Medicine. An internationally known surgeon who specializes in reconstructive surgery of the hand, he is also well known for his teaching and leadership in medical curriculum innovations, medical licensure, and continuing medical education.

The National Board of Medical Examiners is a voluntary, nongovernmental examining agency concerned with testing physicians' qualifications for professional practice, and with maintaining high standards of medical education. Medical students throughout the U.S. take the Board's examinations.

Dr. Chase will speak at 1:30 p.m. following a luncheon for medical alumni, associates, faculty, and spouses at the Holiday Inn in Palo Alto.

A morning clinical symposium is planned from 9 a.m. to noon, presenting the work of Stanford's major program in plastic, reconstructive, and rehabilitative surgery.

The scientific sessions will be held in Room M106 of the Medical School. Subjects to be discussed include hand surgery, facial deformities, severe burns, body-image surgery, training rural practitioners in advanced surgical techniques, transplantation and replantation, and what Stanford is doing about surgically deprived people.

Speakers from the Stanford faculty include Drs. Robert E. Berner, Harry Buncke, Jr., Sherman Souther, Lars Vistnes, Ernest N. Kaplan, Russell Pardoe, Donald R. Laub, Michael T. B. Dennis and Robert Chase.

Luncheon reservations may be made by calling the Medical Alumni Association, 497-5594.

Mailed November 18, 1974.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD--A two-man art show featuring works by Drs. Alan R. Goldin and Joseph Kriss of Stanford University Medical School will be held Nov. 17-30 at Los Robles Gallery, 176 Hamilton Ave., Palo Alto.

A reception for both, considered proven artists in their own right, at the gallery is set for Nov. 17, 5 to 7 p.m.

Goldin, who sculpts under the name Alan Raphael, will show polyester resin sculptures that are semi-translucent, colored and abstract in nature. This will be his first show in California although he has had similar showings in Paris, Johannesburg and Capetown, South Africa. He will have shows early next year at Galerie Entermonde in Paris and in London.

Goldin, a visiting associate professor at Stanford Medical School, is on a leave of absence from the University of Capetown where he is a senior consultant in radiology.

Kriss, who is head of the Division of Nuclear Medicine, has had numerous shows in the Stanford area and his latest showing will consist primarily of abstracts and semi-abstract impressions of architectural settings, according to a gallery spokesperson. Many of the paintings are of marketplace scenes, she said, and are an extension of drawings he presented at an earlier show at Los Robles.

The gallery is open 9:30 a.m. to 5:30 p.m. Monday through Saturday.

Mailed November 15, 1974.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

SCIENCE WRITERS: You are cordially invited to attend a day-long meeting scheduled in connection with the dedication of the SUMEX-AIM facility at Stanford University. The story below gives details. The description of the projects has been included for background purposes.

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD--Computer science and latest applications of artificial intelligence in medicine will be topics of a day-long conference at Stanford University Thursday (Nov. 14).

The occasion is the dedication of the Stanford University Medical Experimental Computer (SUMEX), the first shared national computer facility to focus on applications in Artificial Intelligence in Medicine (AIM).

Morning presentations from 9 a.m. to 12 noon will feature scientists from Stanford and other parts of the United States. The sessions will be in Room M104 at the Medical School.

Afternoon talks will be on sharing resources and intellectual efforts. Speakers include Prof. Joshua Lederberg, Nobel laureate in genetics, Vice President and Provost William F. Miller of Stanford, Dr. Thomas G. Bowery of the National Institutes of Health, and Dr. J. C. R. Licklider, professor of information science at Massachusetts Institute of Technology.

His talk will be on augmenting individual intellect by electronic communication. The sessions will be from 2 to 4 p.m. in Cubberley Auditorium.

SUMEX-AIM is funded by five-year $2.5 million grant from the Division of Research Resources of the NIH (Biotechnology Resources Branch). It is directed by Dr. Lederberg, with the assistance of a national advisory group.

The two main objectives of SUMEX, Lederberg said, are the development of the relatively new concept of national shared resources, and the further exploration of computer science applications in medicine.

SUMEX consists of a powerful PDP-10 computer. It is available to approved users through a computer-communications network.

Artificial intelligence is a part of computer science concerned with the symbol-manipulation processes to produce intelligent action. Rather than employing the digital computer as a number calculator, scientists in this field utilize the computer to reach decisions and solve problems through symbolic analysis and reasoning.

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Following are details about projects scheduled to be presented at the conference.

Dr. Saul Amarel and Dr. Casimir Kulikowski, computer scientists at Rutgers University will describe the development of a computer-based consultation system for diseases of the eye.

In collaboration with Dr. Aran Safir, an ophthalmologist at Mount Sinai School of Medicine, they have established a national network of collaborators for diagnosis and treatment of glaucoma by computer.

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22--SUMEX

The computer system, which includes an elaborate pathophysiological model of the disease, is about to be tested through the SUMEX-AIM network at three eye centers: Mount Sinai Hospital and Medical Center, New York; Washington University, St. Louis, and the Johns Hopkins University in Baltimore.

Glaucoma, in one form or another, afflicts two percent of all people over 40. The eye disease often leads to irreparable damage of the optic nerve and blindness.

The computer-based program, says Dr. Amarel, has great potential for assisting doctors and researchers in understanding the disease, and in improving its diagnosis and treatment.

Another application of the computer will be discussed by Drs. Stanley Cohen, Stanton Axline and Edward H. Shortliffe of the Department of Medicine at Stanford. They have programmed a computer to advise physicians about treatment of patients with bacterial infections.

"Patients with infectious diseases often need treatment before complete information about the bacterium is available," explains Dr. Shortliffe.

The researchers have identified clinical and historical data that serve as decision rules for the early selection of antibiotic therapy. The rules have been coded and stored in the computer so they can be used to guide the physician during consultation about choice of antibiotics.

This novel application of the computer is expected to have potential impact on the broad range of medical decisions which rest on informal judgment, according to the researchers.

Dr. Kenneth Colby, a computer scientist and psychiatrist at UCLA School of Medicine, will talk about use of computers in psychiatric treatment.

Colby has programmed computers to conduct preliminary interviews with psychiatric patients, and to simulate a patient's mental processes for other psychiatrists to diagnose.

He is using the SUMEX-AIM project to improve simulation of human belief systems, and pathological thought processes.

The idea would aid the psychiatrist not replace him. "But if the computer can be used in psychotherapy to help thousands of patients in understaffed hospitals," Colby says, "we could use it."

Other applications of artificial intelligence utilizing SUMEX-AIM involve the study of unknown organic compounds by Drs. Lederberg, Edward Feigenbaum (computer science) and Carl Djerassi (chemistry).

Still another project in collaboration with Prof. Joseph Kraut and Dr. Stephan Freer, protein crystallographers at the University of California in San Diego, seeks to infer protein structure from data obtained by x-ray defraction from crystalized samples.

Technical demonstrations for interested scientists and visitors will be from 4 to 6 p.m. at Stanford Medical Center, Room TB 105.

Mailed November 12, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD — A new outdoor research station for chimpanzees born and raised in the wild has been officially opened on an isolated 24-acre tract adjacent to Jasper Ridge Biological Preserve and the Stanford Linear Accelerator Center (SLAC).

The primate center, officially known as Stanford Outdoor Primate Facility (SOPF), will allow researchers and students to observe social behavior and hormonal changes among chimpanzees in a natural setting. At present, 15 chimpanzees live on the compound, both infants and adults. However, this figure is expected to increase slightly as the chimps reproduce.

The $408,000 facility is approximately half completed. When in full operation, it is expected to have four quadrants, or enclosed areas, of about 1½ acres each. Two of the quadrants are presently open, containing trees, climbing structures, nesting areas, objects for manipulation, and other devices designed to provide the chimps with a varied and near-natural environment.

In the center of the facility is an observation tower complete with electronic equipment to record individual behavior on a daily basis. It also includes a closed-circuit television system.

The Stanford primate center is patterned somewhat after Gombe East, also known as Gombe Stream Research Center, located on the eastern shores of Lake Tanganyika in Tanzania, where researchers have been studying chimpanzees in their natural habitat since 1960.

Plans for SOPF were developed by Dr. David Hamburg, Reed-Hodgson professor of human biology at Stanford, and Jane Goodall, noted ethologist who initially ventured into the African wilds to study chimpanzee behavior.

Hamburg has noted that a high correlation exists between chimps and humans, relating to depressive and psychotic behavior. Therefore, research into nonhuman, or primate behavior, will further the understanding of depression and psychotic states in human beings.

He further noted that an upsurge in secretion of brain, pituitary, and sexual hormones at puberty may directly influence behavioral changes in both chimpanzees and humans.

In Tanzania, Goodall observed that when a chimpanzee discovered his mother had died he "sat in a huddled posture, stopped playing and exploring, ate almost nothing," and eventually lost one-third of his original body weight.

Similarly, chimpanzees in England that were separated from their peer "social group" for six months developed serious physical and mental disorders, according to Hamburg. These were characterized by clasping of the body, lack of appetite, and lack of response to stimulation.

The Stanford primate facility is being run in conjunction with the Laboratory of Stress and Conflict of the Department of Psychiatry and Behavioral Sciences at Stanford School of Medicine. Its construction was supported by gifts from private foundations and individuals.

(more)

Since the facility was delayed in opening for various reasons, all of the chimps now at SOPF were kept for two years at animal preserves in Louisiana and at Laguna Hills near Los Angeles. All 15 of the chimps were either born in Africa or in a natural setting.

The animals, hopefully, will be studied for their entire lifetimes at the Stanford compound, according to Dr. Patrick McGinnis, field director of SOPF. This will provide researchers with long-term observation of chimpanzee behavior. The researchers also plan to take urine and blood samples from some of the animals to determine hormonal changes as they age.

"The recording methods now in use at the facility are designed to note developmental changes in social behavior," McGinnis said. "These include aggression, sex, play, submissive behavior.

"No one has ever collated the relationships of hormone and behavior levels before in seminatural groups of chimpanzees," he continued. "Chimps have been studied in unnatural situations. But here there is a minimum of interference to them."

McGinnis noted that chimpanzees generally live from 40 to 60 years and may weigh as much as 170 pounds. The average chimp, he said, is three to four times stronger than man, pound for pound.

The animals are fed twice a day, including a morning meal of "monkey chow" which resembles salty, greasy biscuits. In the afternoon they are fed fresh fruit and vegetables. They drink water from spigots they have learned to operate by nudging with their mouths.

Human biology students at Stanford spend about 10 hours apiece each week at SOPF collecting data using a behavior code developed by Stanford researchers. This information is then fed to computers each month to keep a running account of individual chimps.

The primate center is large enough for the chimpanzees to get adequate exercise, avoid one another in aggressive encounters and yet permit them to live together in groups for long periods of time, as in the wild. This gives researchers a unique opportunity to view first hand the physical and behavioral development in chimps. It also provides special opportunities to see unusual development.

McGinnis, who worked four years at the Gombe Stream Research Center, noted that one of the "functions" of SOPF will also be to breed chimpanzees. These animals, which resemble man more than any other living creature, are becoming an endangered species in Africa because of continuous encroachment of their environment by man.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD--Garth is 15 years old, bright and eager to learn. But he is also shy and now he is lonely much of the time, withdrawn from his small circle of friends and from his usual daily activities.

Garth is in the hospital recovering from a severe back sprain he suffered while playing sandlot football recently. He is likely to be hospitalized several weeks and like many people before him, Garth has found hospital life traumatic and even frightening at times.

Unfortunately, until now most hospitals have been unable to give kids like Garth the psychological and recreational therapy they need. What programs are available have usually been oriented toward children or adults. The teenager has been mostly ignored.

However, at Stanford University Hospital teenage patients are now coming under a new program designed to make their stay in the hospital easier and hopefully, more enjoyable.

A small corps of Stanford University students are helping the teens by serving as volunteers in a program developed by the pediatrics department. The program, officially listed as the "Adolescent Unit Program," allows students to lend a helping hand to teenage patients. This may include playing card games, shooting a game of pool, helping with school work or just "rapping."

The program is a joint effort of the pediatrics staff and the Stanford Medical Center Auxiliary, which donated $7,832 for creation of a teen recreation area in the hospital. Some of the money was also used to purchase accessories for rooms now usually occupied by teenage patients.

The pediatrics staff was given the green light to implement the program based on studies of admission data and from interviews with teenage patients and their parents by department chairman Dr. Irving Schulman and Lee Rasmussen, formerly the clinical co-ordinator of pediatric nursing services at Stanford (she has since become director of nursing at Children's Hospital at Stanford).

This information showed that at any one time an average of 10 to 12 teenagers were placed in rooms with younger children or in adult wards, rather than with patients closer to their own age.

From this information the idea of the student volunteers evolved. Most of the handful of volunteers are medical or pre-med students and at least several of them are around each night for several hours to mix with the young patients.

They operate independently from the regular Stanford Medical Center Auxiliary whose members also work with children. The auxiliary members, however, wear uniforms whereas the student volunteers do not.

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The program is being directed by Betty Lovelace, pediatrics recreation director at Stanford Hospital, and assisted by university students Susan Greenspan and Neil Resnick.

"Our recreation programs have mainly been for everyone in the hospital," Mrs. Lovelace explained, "but the needs of adolescent patients are perhaps more important. Many have a fragile self image of themselves at this age and if they break something, say a leg, it becomes a real problem to them. They have lost much of their independence by being in the hospital and now they have diminished privacy, therefore their very identity is threatened.

She noted that the more difficult cases are those teenagers who do not have any friends. In these instances she feels the student volunteers can fulfill a real need.

"In addition to specialized medical care we need to help these adolescents develop and retain their sense of identity," she said. "Illness attacks the (teenagers) 'code of conformity' and they feel a loss of independence."

To make up for this void, she says, it is important to give the teenage patient his own "personal space." As a result and as part of the adolescent program, rooms in two wards have been set aside for teenage patients to be used only by teenagers whenever possible. In addition, the rooms themselves have individual telephones, bulletin boards, closets and curtains for privacy.

Furthermore, the rec room (which can be divided from the children's playroom next door by a sliding wall partition) has been equipped with a record player-radio console, pool table, ping pong table and poker table.

"We have a comfortable place where the teenage patients can bring visitors into the hospital, a place where they can get away from the medical aspect of the facility," Mrs. Lovelace explained. "It is often awkward for them (teenage patients) to meet their friends once they are in here. That is why it is important for us to provide them with a recreation lounge."

Mrs. Lovelace said it was agreed to recruit university students for the program because it was felt they could work best with the young patients. She said using the Candy Stripers (high school girls who work as volunteers) in this instance would not be as beneficial because teenage patients tend to "over identify" with them. The stripers are more effective by being involved in other hospital programs, she said.

"We feel we must get them (teenage patients) away from this increased dependence they have for us here in the hospital because we are mother figures to them. And we think with our college volunteers we are starting to do just that."

Mailed November 6, 1974 EDITORS, PHOTOS AVAILABLE IF NOT INCLUDED.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A Stanford University professor says the present distribution of doctors does not meet the nation's needs.

There are acute shortages in some areas, such as general practice and pediatrics. And there are perhaps too many specialists.

"The reason is unplanned and uncontrolled medical manpower," writes Dr. John P. Bunker, professor of anesthesia, in the current issue of Stanford M.D., the magazine of the Stanford Medical Alumni Association.

How did this come about? "The medical profession has made no attempt to determine how many physicians are needed in each specialty nor have our medical schools and hospitals," says Bunker.

"And strong initiatives will be needed because the usual checks and balances of the free market system do not apply to the medical care industry."

Two forces have contributed to the present situation, according to Bunker. Medical schools aren't well prepared to train doctors for primary or first-contact medical care.

"I believe this is largely the result of the economic structure and financing of medical schools," explains Bunker. "Our faculties are made up of highly sophisticated researchers and clinicians whose sources of income are largely research grants and the practice of medical specialties.

"There is essentially no economic base for the teaching of medical students and specifically for the teaching of primary care. It is because our medical schools are funded primarily from patient care fees and research grants that our teaching programs do not meet the needs of the country."

A related problem has to do with the service needs of teaching hospitals. These provide some 25 percent of the nation's specialized care--kidney dialysis, open-heart surgery, the care of premature infants and other dramatic procedures.

"It is the young physicians in postgraduate training who provide almost all of the physician manpower and much of the skill to carry out these complicated procedures," says Bunker.

"We are training young men and women in a system providing highly specialized care. This is hardly the kind of education which prepares one to go out into general practice.

Bunker points out that the number of residencies offered in the United States presently exceeds the number of students graduating each year from medical schools. Of the 17,000 surgical residencies currently offered, only about 12,000 are filled.

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"It is apparent the medical specialties could easily absorb all new physicians, leaving none for general practice," says Bunker.

How many specialists should be trained, Bunker thinks, must be geared to the long-range medical needs of the country, and not on the basis of the short-term needs of the hospital for an extra pair of hands.

Bunker urges the medical profession to assess the relative contribution of each specialty and judge where the need is greatest. ("How much surgery is needed for good health is not known, for no one has yet collected this kind of data.")

He says a national commission should be formed to set priorities. The Commission needs to be broadly representative of the medical profession, teaching institutions, and the public. The charge to this commission must include the separation of teaching priorities from the needs of hospital service, and must be coordinated with total manpower needs.

In medical education, Bunker says, the federal government needs to balance strong basic research support with strong support for primary care and teaching.

"Faculty members are only human," he notes. "They are going to set their own priorities on the basis of where their financial support comes from. They are paid primarily to do research or care for patients or both, and only secondarily to teach students.

"We have provided large economic incentives which run counter to the teaching of medical students in some areas such as primary care which now we realize we need."

Bunker is presently on sabbatical leave from Stanford as a visiting professor of preventive and social medicine at Harvard Medical School.

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Mailed Tuesday, December 31, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD--Twenty-four men have completed three and one half months of training at Stanford University Hospital and have graduated as emergency medical technicians, or paramedics.

The men, who are ambulance drivers and firemen in various cities on the San Francisco Peninsula, have been recommended to the California Public Health Department for certification to be acting paramedics.

The graduation marks the first time a large group has been trained in paramedics procedures in Northern California. The men work as firemen in Palo Alto and South San Francisco, and as employees of the San Jose Ambulance Company.

The paramedics received 200 hours of lecture and 300 hours of clinical work from Stanford physicians and nurses. The program was directed by Dr. Michael Eliastam, director of emergency services at Stanford Hospital, and supervised by Charlene Souza, RN, emergency services co-ordinator.

In graduation ceremonies held Dec. 21 at Stanford's Tressider Union, Robert Sorensen, director of the General Services Agency in Santa Clara County, addressed the new paramedics. Also speaking to the group was Dr. Robert Monlux, assistant director of public health in Santa Clara County.

The 24 graduates and their hometowns are listed below:

Dave Harry Anderson, Daly City, CA
William G. Baker, Mountain View, CA
Hal Barnes, Sunnyvale, CA
Kenneth Bass, San Jose, CA
Brian Davis, San Jose, CA
Richard Garcia, Cupertino, CA
James Geiger, Los Gatos, CA
Wallace Gonsalves, Palo Alto, CA
Bruce Hallberg, Palo Alto, CA
Carl E. Hill, South San Francisco, CA
Jerry Holbrook, South San Francisco, CA
Richard Holm, Sunnyvale, CA
Dale Hopkins, Los Gatos, CA
John Leslie, Palo Alto, CA
Al Meyer, South San Francisco, CA
Patrick O'Brien, San Carlos, CA
Gene Proietti, Palo Alto, CA
W. Keith Ramsey, Los Altos, CA
Ronald Sciandri, South San Francisco, CA
William Stridbeck, South San Francisco, CA

Mailed December 23, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A group of students from Stanford University Medical School gathered around a cozy living room fire not long ago to chat with a woman recovering from major heart surgery.

"How did you prepare for such an operation?" they asked. "Did your doctor answer all your questions? Were you anxious?"

The students were participating in a new class at Stanford Medical School offered to medical students and others in health and social sciences. The relaxed meeting in the patient's home was quite different from the students' normal work in a hospital clinical setting or a large lecture hall.

Each week during the Fall quarter, about 16 students met with a patient and often his family, either in a faculty member's home, the patient's home, or around a library table in the Medical School's Department of Family, Community, and Preventive Medicine.

Purpose of the class is to expose students to the impact that medical illness has on patients and their families, emotionally, financially, and in other ways.

Dr. David Kaplan, director of clinical social work at Stanford, and Leona McGann, assistant professor, indicate their aim is "to introduce students to today's health care system through the eyes of the patient and his family."

They cite the need for students to learn vital communication skills, and to understand related problems of patients, particularly those with long-term illnessess.

The students talked with patients whose illnessess were crises in their lives: a man on renal dialysis; the parents of a baby who was in the intensive care nursery for an extended time; a woman with breast cancer and her husband; a stroke patient in a convalescent home; a young girl paralyzed by a spinal cord injury.

Students rate the class highly. "It's more realistic and concrete. It's valuable because it's people oriented."

John Sanchez, third year medical student, has been trying to interest others in a similar class to be given in the Winter quarter. "This class is refreshing," he says. "Our experiences have been in the scientific lecture or the clinical setting, and we don't have much exposure to the humanistic side of medicine.

"We learn to treat muscle atrophy, for example," he says, "but we don't know about the social and psychological problems of the illness that can determine whether the patient takes his pills or not, or whether he will stick to his diet....I was never aware of these problems before. It's a different side of the coin."

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222--Students

In talking with the heart patient recently, students inquired about symptoms, current exercise, whether she can tell if she is getting tired.

The patient passed her hospital and doctor bills around the room. Students reviewed the long itemized statements, asked what "customary charges" meant, what part insurance and Medicare would pay. One student, perplexed over a bill, shook his head. "Why don't they write down what it means?" he asked.

The financing of medical care is emphasized, with the aim of informing students about the costs of tests and procedures, for example, and their impact for the patient.

Often the students just listened. "I couldn't sleep--it was too uncomfortable. I don't remember the time in the intensive care unit; it's all a blank."

And they listened as a family member noted how hard it is to talk about fears before surgery and reactions afterward: "Her hands were icy cold, and when she could talk, her voice sounded so different. It's hard to know what to say."

Besides the patient, various members of the medical team including nurses, physicians, and social workers were often present at class sessions. Tape recordings of interviews with patients were also used.

One student commented, "This course showed the need for a humanistic approach to patients, and that those involved in patient care should be understanding and have concern beyond the physical problems."

Another says that "probably the most valuable knowledge I gained is the importance of keeping the patient informed, and of letting the patient be active in treatment and decision-making."

Besides future physicians, the class is open to graduate and undergraduate students in health fields and from the social sciences. It has already reinforced the career choices of several undergraduate students in the human biology program.

According to Dr. Kaplan, similar classes are being planned for the future to give students the opportunity to observe doctor-patient communication.

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Mailed Tuesday, December 17, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD — An 18 month-old who appears to be deaf; a two-year-old who isn't talking; a three-year-old who fails to follow directions or can't talk clearly. . . .

Commonly, children with such communications problems have a high risk for academic failure when they reach school age.

But dramatic changes have been seen in such children following the first year of an experimental preschool at Stanford, according to Dr. Kathryn R. Beadle, director of the Stanford Speech and Language Clinic.

The new program stresses early identification of children with such problems, then specialized teaching in a group situation, rather than individual speech therapy. The class was held five mornings a week for the nine-month academic year. Its development was aided by the Luke B. Hancock Foundation and will be continued by the University this year.

Of the 10 children who began the class in 1973, six entered the public school system this fall, four of them in normal classes, and two in combined first grade with special help. The others, mostly younger children, are repeating the preschool program this year.

All of the children showed dramatic improvement in understanding and behavior control by the end of the year, Beadle said. Socially they had learned to enjoy each other, she said, and to learn in small and large group settings. There was a noticeable increase in talking, and their speech was easier to understand. Initial tests showed that all the children had certain problems in common: difficulty following directions or understanding speech; poor concentration, which Beadle describes as both an auditory and visual focusing problem; eye-hand coordination problems; and poor speech.

Without help, she notes, 70% of children with such symptoms would have difficulty in school, despite normal intellectual potential.

Speaking before a meeting of the American Speech and Hearing Association recently, Beadle noted that the aim of the preschool is to increase and improve the children's verbal language skills so they will be better prepared to enter school, correcting problems as early as possible.

The class does not focus on speech as such, but rather on a child's total development, providing varied experiences to help improve concentration, balance, physical coordination, perception, and understanding of speech.

"Our framework for the program is based on the concept of speech as the primary organizer and regulator of experiences. Our emphasis is on listening, then using speech as an aid to learning. We feel communication skills will then follow," says Beadle. (more) 12/11/74 cr

speech clinic 2-2-

A key element in the program is the children's social interaction with each other in a varied curriculum.

"Speech and language does not develop in a vacuum, nor is it an independent process. . .normal children are not taught how to talk. We may influence vocabulary and grammatical development, but the generation of language is essentially a process of spontaneous combustion.

"The group experiences offer more natural encounters than individual therapy, plus the incentive of children with whom it might be more fun to communicate," she says.

In addition, teachers and children constantly verbalize what they are doing. Teachers also help the children to verbalize feelings. Beadle stresses the importance of building positive self-images. "A major part of our intervention is to motivate the children by demonstrating that we consider them special and valuable."

The program also involves using the normal learning stages of children, which include coordination. Early language development is thought to be tied to sensory-motor development.

To aid coordination, the children do warm-up exercises, build obstacle courses with tires and tables, roll balls, throw bean bags. They make up dances and play active as well as verbal games.

They closely watch their teachers (usually three for the eight to 10 children in the class) during a group lesson on numbers or language. There are art projects, science lessons, story time, and sharing. For children who are ready, skills to prepare them for reading and writing are taught.

Parents are closely involved and considered an important part of the program. There are weekly mothers meetings as well as monthly meetings for mothers and fathers as a group. Homework booklets are sent home each week to review the curriculum and encourage parents to work with their children.

Dr. Beadle stresses the need to follow the children through the next several years to note if improvements continue. She urges continued work on developing an effective teaching program for such children, particularly since public schools may soon become responsible for all children three years old and over.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner (415) 497-6911

EDITORS: Background and details follow asterisks

FOR IMMEDIATE RELEASE

STANFORD — Portions of the intricate printing press that cells use to reproduce their genetic information have been deciphered by biochemists at Stanford University School of Medicine.

The work is expected to help scientists understand how normal cells grow and divide and why cancer cells multiply so rapidly.

Scientists know that the cells' hereditary machinery can produce exact copies of itself to perpetuate the species. But they have only recently begun to sort out the individual parts of that machinery.

With the identification of some switches that regulate the apparatus, the Stanford team was able to reconstruct three systems in the test tube that seem to represent the duplication mechanisms of cells themselves.

Their research was reported in the December 13 issue of *Science,* the journal of the American Association for the Advancement of Science. Authors are Randy Schekman, a graduate student in biochemistry, Dr. Alan Weiner, formerly a postdoctoral fellow in the Department of Biochemistry, and Dr. Arthur Kornberg, professor of biochemistry. The work was supported by the National Institutes of Health and the National Science Foundation.

The cell factory is directed by a remarkable construction manual known as DNA (deoxyribonucleic acid), explained Kornberg in an interview. This manual has two main functions. It contains the chemical instructions for manufacturing the molecules that run the cell. In addition it serves as a template to duplicate itself so that the cell offspring will have the same manual as their parents.

"At times, something goes wrong, and the construction manual isn't duplicated correctly," Kornberg noted. "If we don't know the working parts of the press that duplicates the manuals, we can't step in to make repairs."

Several years ago, scientists thought they understood the press. They had found an enzyme called DNA polymerase which could copy the manual faithfully by linking the building blocks of DNA in proper sequence. In 1967, a team led by Kornberg used this enzyme to create the first synthetic DNA molecule that was biologically active.

It turned out that the duplication process was actually a more complicated series of events involving several different enzymes. The laboratory techniques used to prepare the man made molecule in 1967 did not faithfully represent the cell apparatus.

"We thought then that DNA polymerase is only one component," Kornberg said. Although it can string together the DNA alphabet without error, DNA polymerase is apparently blind to signals that begin duplication.

(more)

For the last few years, investigators at Stanford and in other laboratories have been searching for the missing pieces of the cell duplication machinery. Two obstacles had to be overcome first. Experiments had to be designed that could detect the unknown units. Then these units needed to be put together in a manner that permitted them to function efficiently in the test tube.

Through major efforts in several laboratories, some of the agents that initiate DNA synthesis have been identified, and the properties of DNA polymerase have been more precisely defined. The Stanford team has successfully assembled those components to perform in the laboratory. (Drs. Sue Wickner and Jerard Hurwitz at Albert Einstein College of Medicine in New York reported similar results in the October issue of the *Proceedings of the National Academy of Sciences*.)

"Our results are an encouraging beginning," said Kornberg. "We now have the outlines of the major parts of the duplicating machinery. With intensive and sustained efforts, we can locate additional pieces to fill in the gaps. Painstaking detail is involved, but it is necessary if we are to fully understand the cell."

* * *

Patience and dedication are the trademarks of such research. Every new finding increases knowledge and contributes to scientific advancement.

Scientists knew about the construction manual for living things for over 80 years before they began to comprehend its language. Since James Watson and Frances Crick determined the helical structure of DNA in 1953, scientists have gradually been able to translate its intstructions into chemical language. Their progress has been step by step.

In 1959, Kornberg successfully created DNA in the test tube. Although this DNA had the physical and chemical properties of the natural molecule, it was biologically inactive. It took another eight years to manufacture a molecule that could reproduce. And now, some 20 years after the basic DNA model was defined, the scientists have started to unravel the secrets of the intricate apparatus that allows DNA to perpetuate itself generation after generation.

The primary tools for the Stanford studies were tiny viruses. It would have been futile to try to unravel the operations of larger life forms first. Animal cells contain chromosomes made up of thousands of genes. Each gene in turn is a DNA segment that has about 1,000 building blocks. Viruses, on the other hand, have chromosomes a thousand times smaller than a bacterial chromosome and hundreds of thousands of times smaller than any animal chromosomes.

The researchers used three viruses that infect *Escherichia coli*, a generally harmless bacterium found in the human intestine. These viruses subvert the bacteria duplication system to propagate themselves at their host's expense. They are the same size and complexity of some viruses that produce cancer in animals. Cancer viruses invade the cell and distort cellular operations in a way that causes the cell to grow out of control and become malignant.

(more)

"By studying how these simple creatures go about their business, we can figure out how bacteria manufacture chromosomes," said Kornberg. "From our knowledge of evolution and previous experience, our findings are likely to apply to animal cells, and provide major clues for human cells."

Nature guards her most fundamental life process with elaborate control signals. Their elucidation can aid in the diagnosis, treatment, and ultimate prevention of a range of diseases that stem from a failure in the duplication process, according to Kornberg.

"Much of the cancer mystery must lie in the control of DNA synthesis, a process required in young growing cells, but malignant in mature ones," he said. Normal liver cells in an adult, for instance, do not produce DNA. Yet when these liver cells become cancerous, the duplication cycle is turned on again and DNA synthesis proceeds rapidly.

The forces that govern DNA synthesis may also hold the key to psoriasis, a common skin disorder that produces itching, scaling, and redness. It is thought to be caused by a defect in the mechanisms that regulate the growth of certain skin cells.

"It seems essential that we understand normal DNA synthesis to understand the proliferative or abnormal response," pointed out Kornberg. "If we want to use drugs to interrupt the process when it is proceeding at an undesirable rate, we have to know at what stage to intervene with the appropriate medication."

One of the viruses employed by the investigators was Phi X 174, which Kornberg's group used in 1967 to manufacture the active DNA. Other bacterial viruses they used were M13 and G4. Their chromosomes, which contain only eight to ten genes, are relatively easy to copy. The DNA molecules are single stranded circles which are converted to double stranded structures when the virus invades the cell. These strands separate and each one serves as a template for generating more DNA, using the cell system.

Every reaction of the duplication process was carefully monitored. The scientists found that each virus utilized a distinctive system with highly specific enzymes to duplicate its DNA. They are convinced that the three systems identified are similar to those the cell uses to duplicate its own genetic elements. It seems likely that additional systems remain to be discovered, they said.

Components of the individual systems were isolated and purified. Then the systems were reconstructed in the test tube. DNA synthesis was optimal when all parts of any system were assembled. It was reduced if a single component was omitted. Specialized methods were used to measure DNA production.

In spite of their individual requirements, all three systems operate with similar mechanisms. Duplication can be divided into three stages: initiation, elongation, and termination.

Initiation is the most involved. Specific signals in each system promote the formation of spe special priming runs that turn on duplication. Once the cycle is started, DNA polymerase extends the new DNA chain according to template directions. After the template has been copied completely, the priming runs are excised and the DNA circle is sealed.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD — A psychiatrist and a patient are talking frankly about each other.

He is a professor at Stanford University. She is a young, talented writer whose desire to help herself was matched by her determination to hate herself.

Then she entered treatment with Dr. Irvin D. Yalom. They agreed to write separate journals of each of their sessions which they would exchange every six months.

The result is *Every Day Gets a Little Closer* (244 pages, Basic Books, New York, 1974, $8.95). It is the first book to share the dual reflections of psychiatrist and a patient whose pen name is Ginny Elkin.

"There is a little demon within Ginny stealing the meaning and pleasure from everything she does," Yalom's diary begins. "At the same time she tends to observe herself and romanticize her plight in a tragic way.

"She flirts, I think, with the vision of herself as Virginia Woolf who one day will fill her pockets with rocks and walk into the ocean."

And Ginny writes: "I felt like a dilettante in your office, at first. You were asking me what was on the agenda, what I wanted to happen. I have a long history of not answering or taking questions seriously."

For two years, Yalom and Ginny exchange their reports in the hope of therapeutic benefit, frequently adding afterthoughts, interpretations and associations they hadn't voiced during the sessions.

Here is a sample of selected quotes, not as they appear in the book, but juxtaposed to give a rare glimpse of the relationship between patient and therapist and the progress of treatment.

Yalom: She looked very well today, with a neat skirt, blouse and tights, and her hair almost brushed, but she was clearly very shaky. . . .

Ginny: The session was very important to me. I think I managed to talk and think and feel through my tears.

Yalom: I was being good for Ginny today. I worked hard and helped her to get at some things. I wonder if I wasn't just trying to impress her, trying to make her fall in love with me. Good Lord! The ludicrousness of it. Here I am trying to help Ginny with survival problems and I'm still burdened down with my own petty vanities.

Ginny: Something might happen if I were more natural looking. So I left my glasses on. Something might not happen though.

Yalom: I was really impressed with how pretty she looked today. I was looking at her more in profile. There have been times before. . .when I considered Ginny rather homely, and yet today I saw her quite lovely.

Ginny: I was inside the car [with a friend] discussing the *Freedom of Sexual Surrender,* a book which discredits clitoral orgasm. . . . So in the middle of this sexual talk, you and your wife crossed the crosswalk in front of us, like a stunt in a TV comedy.

(more) 12/9/74 cr

Yalom: An odd sort of session.

Ginny: I know I want too much attention, undivided attention.

Yalom: I feel we moved into a new and fertile territory today. She wants me to treat her like an adult and I said to her, fearing that I was being a scolding parent, that to be treated like an adult, one has to act like an adult. I think this tact is helping her to relate to me more as a grown-up person.

Ginny: Oh, God, yesterday's session was the first that I began to feel my own methods.

Yalom: I think I've been too intrusive in forcing my values on Ginny. I was too authoritarian today. . . .

Ginny: It's hard for me to remember what happened [at the session].

Yalom: I told her I would feel so much closer to her if she could come into the interview and give me hell if she were upset about something that I did wrong.

Ginny: I disliked the grin on my face whenever I answered one of your questions.

Yalom: There was a time today when I felt that Ginny had practically nothing to say to me, indicating that maybe she's better, maybe she'll be discontinuing therapy before long.

Ginny: Somehow I felt like I had taken several steps closer to a starting line from where we could begin.

Yalom: Today I felt for the first time I've left therapy too open-ended. Maybe I should set a termination date.

Ginny: When you asked me about goals I realized how outside any self I feel. I gave civil answers. I might as well have been talking to a high school guidance counselor.

Yalom: A weird vaudeville-like hour.

Ginny: I thought yesterday we were just like two friends getting together.

Yalom: One of the dullest hours I've spent.

Ginny: I forgot what we talked about in session.

Yalom: One up, one down. Ginny really is right. The sessions do alternate strikingly in their meaningfulness.

A few months later the sessions between Dr. Yalom and Ginny continue, but something has been added.

Ginny: This session was very helpful to me. You took a more active part.

Yalom: Something very different happened today. Ginny brought Karl with her [the young man she had been living with].

Ginny: It was so funny to see you round the corner ready to welcome me, and then get surprised by seeing Karl. I had always thought I was protecting you from Karl's abuse. But he thought you were wonderful, intelligent. He thought it was weak of me to have considered not taking him. I really enjoyed it and was grateful to you. You seemed to be my true friend.

Yalom: Ginny wants Karl to come again next week and perhaps the week after. She realizes as I do that the joint sessions are tremendously important.

Ginny: The night before in a surge of warmth and truth toward Karl, I had started to broach the subject of my sex problems. I tried to reassure Karl that every night I don't lie there at the edge of destruction. Now there is a strong undertow. I'm coming face to face with my own resistance.

Yalom: The last hour. I feel very shaky, very sad and very moved. When I stopped the hour and said, "Well, I guess the time has really come for us to say good-by," both of us remained frozen for a few seconds. She started to cry and said, "You're so wonderful to have done this for me. . . . She left the office, not a borderline character disorder. . . . She left as Ginny and I will miss her.

Ginny: I admit I'm capable now of leading a normal life. I feel okay.

Was Ginny cured? Yalom says the reader will have to judge for himself. But gone are the night panics, the frightening dreams, the migraines. And Ginny has now terminated her relationship with Karl which was growth-retarding for both parties.

Yalom observes, "The 'art' of psychotherapy establishes its own truth transcending objective scientific analysis.

"The truth is a beauty that Ginny and I experienced. We knew one another, touched one another deeply, and shared splendid moments not easily come by."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--A new technique for predicting which heart transplant patients will reject their new heart severely and which will have a smooth clinical course has been developed by a Stanford University heart research team.

The technique has predicted accurately the clinical course of the last nine patients who received new hearts at Stanford University Hospital. It is being used to help screen potential heart transplant recipients.

The procedure is based on the recent finding that immune systems function differently in individuals, and that white blood cells are responsible for this variation.

Patients whose white blood cells mount a vigorous attack to a test panel in the laboratory, also react violently to a new heart. These patients have serious rejection episodes and are considered hyperreactive. Patients with fewer active blood cells have fewer rejection problems and do better.

A study of 11 heart transplant patients in 1972 and 1973 is reported in the November issue of Transplantation, the journal of the Transplantation Society. Authors are Drs. Alan Coulson, Fran McMillan, Randall Griepp, Edward Stinson, Eugene Dong, Jr., and Norman Shumway. Virginia Geitman is also working on the project now.

It is not surprising to find a variation in immune activity, noted Coulson. Many organs--including the brain, thyroid gland, bone marrow, even the stomach--are known to vary functionally from one person to another.

"Eventually we may use this method to help the surgeon determine whether or not to do a heart transplant operation. In theory, such screening techniques could be done before other organ transplant operations also," Coulson added.

For the screening procedure white blood cells are separated from the blood of heart recipients prior to surgery, before they receive any immunosuppressive therapy to prevent rejection. They are mixed in a laboratory tissue culture with several stimulants, including standard immunosuppressive preparations and donor white cells.

A standard stimulant added to the tissue culture provokes an immune response that results in a transformation of the recipient white cells. The greater the number of cells transformed, the higher the immune activity. The data are analyzed on a computer and a response profile of each patient is drawn up.

In the study, the screening results were compared to the postoperative course of the transplant patients. The number, frequency and severity of rejection episodes were scored.

A low response profile carried a good prognosis, the investigators found. A high response profile was associated with a poor post transplant course.

Of the 79 heart transplant patients operated on at Stanford, 28 are living. The survival figure for the heart recipients in the past year has been 50 percent. ### Mailed Tuesday, December 3, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Paul F. Basch, associate professor of family, community and preventive medicine at Stanford University School of Medicine, has accepted an invitation to visit the People's Republic of China in April.

An expert in international health, Dr. Basch will visit China as a member of the schistosomiasis delegation.

The trip is arranged by the committee on scholarly communication with the People's Republic of China, sponsored by the American Council of Learned Societies, the National Academy of Sciences, and the Social Science Research Council.

The delegation will consist of scientists in the fields of parasitology, epidemiology, immunology, public health, and chemotherapy. The visit is part of a series of exchange programs arranged in collaboration with Chinese scholars, he said.

Dr. Basch is an expert on parasitic diseases, with special emphasis on schistosomiasis. He is also interested in international measures in disease control. He teaches courses in international health, medical parasitology and epidemiology in the practice of medicine.

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Mailed Wednesday, January 29, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD--Union representation elections for five categories of Stanford University Hospital and Clinics employees will be held April 10, 11, and 12 at the Hospital following a consent agreement reached Friday (January 24).

The agreement between the Hospital and five labor organizations culminated nearly three months of formal hearings before the National Labor Relations Board (NLRB).

According to John J. Schwartz, counsel for medical affairs, employees will cast ballots in the following five groups: 1) allied health professionals, 2) service, technical, patient care and plant clerical, 3) pharmacists, 4) maintenance, and 5) interns and residents.

Negotiations, Schwartz added, are in progress for an agreement to hold a separate election on the same dates for Licensed Vocational Nurses.

Registered Nurses will not participate in the election because they are already represented by the Committee for Recognition of Nursing Achievements.

Secret ballot elections will determine whether a majority of employees in each group wishes to be represented by one of the unions on the ballot or no union at all.

Locations and times of the election will be decided by the NLRB regional director after consultation with the parties.

The labor organizations are United Stanford Employees, Local 680, Service Employees International Union, AFL-CIO; Stanford United Medical Technologists; Stanford University Medical Center Engineering Department Association; Stanford University Housestaff Association; and Engineers and Scientists of California, AFL-CIO.

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Following is a summary about the agreement, the employees and organizations involved:

--Allied health professionals except for registered nurses and doctors will choose to be represented by Stanford United Medical Technologists, United Stanford Employees or no union at all.

The professional category covers about 300 people and includes licensed medical technologists, blood gas technicians, pulmonary physiology technologists, dieticians, nutritionists, physical therapists, recreation therapists, clinical psychologists, social workers and social worker assistants, speech and hearing clinicians, anaplastologists, architect/planners, cardiovascular engineers, computer digital engineers, industrial engineers and project engineers.

--About 1,000 service,technical, patient care and plant clerical employees will vote for representation by Engineers and Scientists of California (an affiliate of Marine Beneficial Association), United Stanford Employees, or no representation at all.

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--About 15 pharmacists and pharmacy interns will choose whether to join for representation with the allied health professional or the non-professional categories as well as choosing whether they will vote to be represented by Stanford United Medical Technologists, Engineers and Scientists of California, United Stanford Employees, or have no representation.

--Eighty maintenance employees now represented by the Stanford University Medical Center Engineering Department Association will decide whether to be represented by the Engineering Association, United Stanford Employees or no union at all.

Maintenance employees covers those working in the support services/facilities department and includes carpenters, electricians, locksmiths, painters, masons/plasterers, mechanics, plumbers, maintenance engineers, preventive maintenance personnel, gardeners, laborers, tool and crib attendants, biomedical electronics technicians and assistants, operations center personnel, and communications operators.

--Some 360 interns and residents will vote by mail ballot to choose between Stanford University Housestaff Association or no representation. Schwartz said interns and residents will receive their ballots by mail on April 1 and must return them by April 11. Eligible to vote are residents and interns with contracts of appointment in effect as of December 28, 1974.

To be eligible to vote, all permanent part-time employees and all relief recurring and relief one-time employees must have worked in a classification described for at least four of the six consecutive payroll periods preceding December 28, 1974 for no less than 80 hours. The cutoff date for similar employees on the University payroll is December 31, 1974.

Managers, supervisors, and guards as defined in the National Labor Relations Act are excluded from voting.

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Mailed Monday, January 27, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--The muscle structure of a common round worm may give researchers clues to understanding muscular dystrophies that cause gradual paralysis in humans, according to a Stanford scientist.

Studies in the nematode, a round worm, have shown for the first time that molecular defects in the structure of the muscle tissue can lead to defects in the function of that muscle.

The research is being done by Dr. Henry Epstein, assistant professor of pharmacology at Stanford University School of Medicine, and by Drs. Sydney Brenner and Robert Waterston and by J.N. Thomson, all of the Medical Research Council Laboratory in Cambridge, England. Their work is reported in the recent Journal of Molecular Biology, and in Nature, a British scientific journal.

Normal muscle viewed end on end, consists of a lattice of thick protein filaments surrounded by thin protein filaments, all in a very definite unvarying pattern. But the muscle of certain mutant nematodes who have been paralyzed by early exposure to high temperatures is conspicuously different, with thin filaments set at all angles, randomly, instead of being in parallel.

Scientists are investigating whether the fault lies perhaps in some protein which acts during the assembly of the muscle components--whether some slight alteration in the chemical composition of the enzyme prohibits it from performing its function as an enzyme.

Another set of mutant nematodes studied have severe paralysis at all temperatures and throughout their lifespan.

"We traced the genetically defective muscle back to disruptions in the filament lattice-work responsible for contraction, and to the myosin molecule, which is the "engine" for contraction," says Epstein.

Errors in the myosin molecule can prevent formation of normal thick protein filaments which in turn prevent development of normal structure and function within the muscle, according to Epstein.

Scientists who have been working on dystrophic muscle for many years have not been in agreement whether defects are in the nervous system or in the muscles. Epstein feels that the current work may help give future research more direction, by pinpointing certain defects in the muscle molecules.

Also, he feels that techniques developed for analyzing the contraction proteins of round worm muscles could be applicable to study of muscle diseases in humans.

Besides muscular dystrophy, the basic research hopes to further scientists' understanding of how the heart muscle works in cardiovascular diseases and diseases of the arteries.

The work is supported by grants from the Muscular Dystrophy Associations of America, and the American Heart Association, National Genetics Foundation, and National Institutes of Health.

Mailed Monday, January 27, 1975 ###

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
SCIENCE WRITERS: Additional technical information about the Stanford medical pion generator has appeared in the fall issue of *Stanford Magazine*. Reprints as well as photos are available on request if not included with the story.
FOR IMMEDIATE RELEASE
STANFORD —

Stanford University scientists Friday, Jan. 24, announced they had developed a new tool for cancer treatment, and would soon begin testing it in living cells and laboratory animals.

Called a medical pion generator, the new tool will use a stream of pimesons, subatomic particles generated by a high-energy accelerator, to kill cancer cells with miniature nuclear explosions.

The experiments will take three to five years before the treatment is available to patients, but if pion beam therapy becomes a reality, it would mark a milestone in cancer radiotherapy, they pointed out.

It would enable physicians to attack more successfully some cancers now difficult to treat. These include cancers of the mouth and throat, certain tumors of the brain and lungs, or those which presently go untreated because they are resistant to conventional radiation.

The pion generator is the brainchild of Drs. Malcolm Bagshaw and Henry S. Kaplan of the Department of Radiology, and three members of the Physics Department—Prof. H. Alan Schwettman, Dr. Douglas Boyd, and Prof. William Fairbank.

The five men have worked for nearly four years to bring the pion generator to this stage of development.

Stanford's team is one of four groups in the U.S., Canada, and Europe exploring the potentialities of pion therapy today. At least two others are expected to begin treating patients ahead of Stanford, but Stanford's represents the only effort to develop a machine which could be installed in a hospital, where it will serve the maximum number of patients.

The Stanford researchers announced their development at a two-day conference on technical aspects of pion radiotherapy and future clinical applications at Rickey's Hyatt House in Palo Alto Friday. The conference will be concluded Saturday.

What is pion beam therapy and why is it so exciting to radiotherapists? Pions (also known as pimesons) are small particles found in the nuclei of atoms. They make up the "glue" or "cement" that holds protons and neutrons together in the nuclei.

Pions can be generated by the newest, most powerful high-energy particle accelerators of the type used in nuclear research. When pions strike living tissue, they slow down and are eventually captured by nuclei in atoms of living cells. A nucleus which captures a pion explodes. This miniature nuclear explosion is known as "star formation."

(more) cr 1/23/75

"Because," Bagshaw explains, "the nuclear fragments produced in this explosion cause such great destruction, pion therapy is expected to be about three times as effective in killing tumor cells as X rays giving a comparable radiation dose."

Furthermore, pions can be stopped quite precisely in a target region by varying their momentum. Thus, tissue damage can be confined entirely to the tumor volume. X rays, on the other hand, are attenuated gradually and many pass through the body, damaging healthy as well as malignant tissue.

Another advantage of pions is that the radiation released during the miniature atomic explosion within the cells can be detected, and therapists expect to see exactly where cell destruction is taking place.

Finally, the Stanford medical pion generator involves a radical new approach for delivering cancer killing radiation which should further improve treatment with little or no damage to nearby healthy organs or other tissue. Dr. Kaplan calls this approach "absolutely unique."

Schwettman said that the powerful superconducting magnet techniques employed in the system design made it possible to construct a pion generator of maximum efficiency and great simplicity. The device is about 60 times more efficient in collecting pions and delivering them to patients than conventional channels. ("Channel" is the name physicists give the device, but the radiotherapists who will be using it have named it the medical pion generator.)

The generator is a large tank about 17 feet long. It is the crucial part of the system. Its interior consists of 60 individual superconducting magnet coils at each end, placed like photographic slides in a circular slide tray. In this case the tray is in a vertical position.

The machine is connected to a 500-Mev linear accelerator. Pions are produced when the powerful accelerator beam hits a titanium target. The pions produced in this way escape from the target in all directions, are collected by the magnets, and are channeled into 60 separate beams.

At the other end of the tank a second set of magnets takes the 60 beams and aims them at the patient. Slits along the circumference of the tank, midway between the ends, can be adjusted to change the intensity of the pion beams striking the patient's tumor.

The generator is cooled by liquid nitrogen and liquid helium to make the wire windings of the magnets superconductors.

Work on the pion generator, the scientists said, has also spawned three new instruments essential to the pion system. They were developed by Boyd in the High Energy Physics Laboratory.

One instrument measures the density of tissues that pions must enter. This is important because knowing the density, radiotherapists will then be able to adjust the momentum of the pions so that they will stop and be captured at the exact location of the tumor.

(more)

A second instrument will be used to monitor the actual pion stopping region during treatment. When pions are captured in the tumor and explode they give off gamma rays which can be detected. With this type of information, radiotherapists can be sure that every day's treatment utilizes a stopping region which coincides with the location of the tumor. A third instrument developed by Boyd will be used to pinpoint the location of the tumor itself.

The treatment approach grew out of the way Schwettman and Fairbank designed the pion generator "It really opened the way to a new kind of dose distribution in the patient," said Kaplan.

The Stanford pion generator was designed and built in the High Energy Physics Laboratory with approximately $1 million in grants from the Research Applied to National Needs program of the National Science Foundation The planned experiments with living cells and laboratory animals will be supported with new funding from the National Cancer Institute.

If medical pion generators like the current prototype are installed in a hospital, four could be operated off a single accelerator. Such an accelerator for hospital use has not yet been built. For testing purposes, the present pion generator is energized by a relatively large and expensive accelerator constructed originally for physics research.

But the scientists are confident that once the pion therapy is proven superior to conventional radiotherapy, a scaled-down version that would fit into a hospital could be constructed.

The accelerator, four pion generators, other equipment and the building might cost about $8 to $10 million at today's prices, which isn't far from building and equipping a radiotherapy facility in a large medical center, the scientists said.

Fairbank feels the medical pion generator should make radiotherapy much more like surgery. Not only will cancer therapists have a much better "knife" at their disposal—but for the first time they will really have "eyes" to see where it is cutting.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--New prices representing an average three percent increase in room rates and services will be put into effect tomorrow (Jan. 15) by Stanford University Hospital.

The new rates will be $104 for ward, $113 for semiprivate room, and $127 for a private room.

The rates were approved by the Hospital Board of Directors at their regular meeting Monday (Jan. 13).

In addition, the directors approved a 15 percent increase in daily Intensive Care Unit charges, from $317 to $364.50.

Paul Hofmann, director of the hospital and clinics, said the new prices reflected these factors:

--an extraordinary increase in malpractice insurance premiums.

--an increase in patients with acute conditions requiring 24-hour coverage by one or two registered nurses per patient in the Intensive Care Unit.

--an increase in the number of patients covered by Medicare and Medi-Cal (about 40 percent of Stanford's patients are covered by these plans which pay hospitals on the basis of cost only, not taking into account that hospitals have requirements for replacement of equipment and facilities).

--increases in the cost of supplies, equipment and utilities due to inflation.

Hofmann said Stanford hospital participates in the California Hospital Association's insurance program. All member hospitals were notified in December that their malpractice premiums would go up in 1975. Stanford's premium, based on the number of beds, doctors, residents, and patients treated, will be more than $1 million in 1975, a 100 percent increase.

"Stanford hospital with its highly specialized services for patients, cannot continue to defer urgent capital equipment acquisitions without compromising seriously its ability to maintain an adequate standard of patient care," Hofmann said.

He said the inadequacy of government reimbursement, the increasing intensity of the care provided by Stanford hospital, escalating inflationary prices, and the continued pressure for increased salaries have their inevitable effect on institutional costs.

Hofmann emphasized that the price increase would have been higher if cost reductions had not been implemented in several major areas of the hospital operations.

Stanford hospital raised its rates in July, 1974. The effect of the price increase had averaged 11.5 percent overall. More than 99 percent the hospital's income comes from patient revenues. The Hospital has no tax support or endowment income.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Maestro Artur Rubinstein and Nobel Laureates Linus Pauling and Joshua Lederberg will join others eminent in the sciences and humanities to discuss "The Majesty of Man" in Dinkelspiel Auditorium on the Stanford campus at 7:30 p.m. Friday, Jan. 24.

Sponsored by the Office of Postgraduate Medical Education of the Stanford School of Medicine, the program proposes to discuss optimistic views of man and his future in a kind of "celebration" of mankind's humanity and creativity.

A scientific portion of the program will deal with how the human brain is put together, how it functions, how its performance is modified by experience, how it differs from those of lower organisms.

New findings in this scientific area will be presented by John G. Nicholls, M.D., Ph.D., professor of physiology at Stanford, and by Gilbert S. Omenn, M.D., Ph.D., of the University of Washington School of Medicine in Seattle.

Dr. Nicholls, a neurophysiologist, is studying how nerve cells work together to produce organized behavior. He will discuss the structure and function of the nervous system. Dr. Omenn, involved in recent research in genetics and DNA, will report on his findings indicating the biochemical uniqueness of the human brain.

Maestro Rubinstein, 86, world renowned pianist, will join a panel to discuss more informally the creativity of man. Recognized as a musical genius at an early age, Rubinstein is expected to discuss his thoughts about talent, genius, creativity, and their encouragement.

Joining him will be Linus Pauling, an energetic teacher and investigator whose studies of how molecules are put together formed the basis of chemistry and biochemistry of this era. Dr. Lederberg, professor and chairman of the Department of Genetics at Stanford, is recognized internationally for his pioneering work in the recombination of bacterial cells, and for his more recent work in molecular biology.

David Hamburg, M.D., professor in both biological sciences and psychiatry, will moderate the discussion. Topics are expected to include conditions favorable to creativity, the idea of increased mental achievement with age, the importance of early development, and the uniqueness of man.

According to Dr. Edward Rubenstein, associate dean for postgraduate medical education at Stanford, the program seeks to emphasize the creativity and humanity of mankind, focusing on man's positive aspects and potentials. "As we approach the truth about nature, we find that man is more unique than we have realized, capable of enormous mental achievements," says Dr. Rubenstein.

"I think people have heard enough about the world's problems. . . . We should end this era of misanthropy. Despite the problems, man has been extraordinarily constructive."

Because of limited seating, admission to the program is by ticket only. Tickets are free of charge, but must be reserved in advance at the Tresidder ticket office on campus, 497-4317.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University Vice President for Medical Affairs Clayton Rich said Monday that a budget balancing program for the School of Medicine is necessary for the next five years.

In a letter to the faculty, Rich said that a revised financial forecast for the Medical School shows "a considerably more serious trend toward deficit than earlier predictions."

The previous forecast had concluded that the Medical School was relatively well off compared to the rest of the University, and that "we had a couple of years to make adjustments to bring about financial equilibrium," Rich said.

But a revised forecast just completed indicates that the Medical School will suffer operating budget deficits in all but the first year.

Rich said the initial forecast was based on a three percent projected growth in faculty and staff annually, and an assumed 10 percent increase in faculty salaries.

"This rate of increase is considered necessary," Rich said, "because the salary structure in the School of Medicine is significantly behind that of the rest of the University, being at the 60th percentile for medical schools nationally, except in the basic science departments which are at approximately at the 75th percentile."

Rich said the Medical School revised forecast will not support the projections "we had planned to achieve."

Consequently, major reductions and significant reallocation of resources would be necessary to make it possible for the School to support its critical academic programs, he asserted. Similar steps will have to be taken in the Stanford University Hospital and Clinics and other Medical Center components.

Rich announced he was instituting effective immediately a program of Budget Review and Revision (BURR) for the purpose of evaluating budgets of all administrative and academic support services.

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The first phase of BURR will apply to each division of the Medical Center administration, the Dean's Office, administrative services of the Medical School and Clinics, the administrative support activities of departments, and supporting academic programs, and selected hospital activities.

Plans call for evaluating the product and cost of these services, with a goal of achieving a 10 to 25 percent savings in net costs of operation, either by reduction of expenses or increased income or both.

A method for evaluating academic programs will be developed this winter in consultation with departmental chairmen and faculty, he said.

The School of Medicine is self-funded and receives its budget based on a general funds ceiling formula. The budget consists of gifts, Medical School endowment income, and funds received under the ceiling formula. This includes tuition income, and part of the overhead on grants and contracts awarded to the medical faculty.

The operating budget of the Medical School for fiscal 1974/75 comprises $10.3 million of a total budget of $36 million. The operating budget consists of $3.5 million from gifts and endowment, $5.1 million from tuition and overhead, and $1.7 million from clinical earnings and other sources. The remaining, $25.7 million consists of restricted funds--federal research grants and contracts, and nongovernmental grants.

The School uses the operating budget to support its own administrative services, including departmental administrations, a portion of the cost of salaries of faculty and staff, educational and research support services such as the library, office of student affairs, learning center and animal facilities, custodial and maintenance services, and utilities.

The revised forecast for the Medical School, Rich explained, takes into account the combined effects of continuing inflation and depression and projected reductions in federal support. It also assumes that present economic conditions will continue for several years and then gradually abate.

Rich stressed the analysis of the Medical School's financial situation is as realistic as one can make it. "Improvement or further deterioration of the economy, wage and price controls, or altered federal policies having to do with biomedical research could change the situation one way or another," he said.

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January 7, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

STANFORD--A special diet has been found to be effective in managing severe intestinal complications that result from radiation treatment in children with cancer.

The new work in radiation enteritis (inflammation of the intestine) was done by Dr. Sarah Donaldson, assistant professor of radiology at Stanford University Medical School, while she was a visiting fellow at the Institut Gustave-Roussy in Villejuif, France. She recently described the work at a meeting of the American Society of Therapeutic Radiologists.

Donaldson and her colleagues studied 44 children in France who had received whole abdominal irradiation as part of the management of their malignant disease. It was determined that subsequent inflammation of the intestines and bowel obstruction in these children was caused by the radiation, not by recurrence of the tumors.

The problem may be life-threatening, even though the cancer has been arrested. According to Donaldson, "no specific dietary therapy has been developed for this condition in children."

The diet consists of a blended mixture of substances that can be taken through a tube if the patient is too sick to eat or drink it. It is free of gluten (the protein of wheat and other grains), free of protein obtained from cow's milk and lactose, low in fat, and low in residue.

Donaldson calls it a "diet by omission," since it was developed by eliminating all the food items that affected the enteritis.

"Our work under the microscope gave us the clues," she says. "We made it free of fat and milk products, since we saw that the damaged bowel couldn't absorb milk. And we made it low residue to avoid further obstruction."

Donaldson describes a "dramatic reversal in the children's clinical status that began with the initiation of the diet."

Followup for the 14 longterm survivors ranged between 19 months and 7 years. There were no deaths attributed to radiation enteritis. Of those surviving, none have shown evidence of recurrent intestinal obstruction.

Roughage, gluten, milk, and fat were gradually added to the children's diets following improvement in their X-rays and small bowel biopsies. The diet, continued for 12 to 24 months in some cases, was gradually replaced to a normal diet which was well-tolerated.

The paper is the first description of the syndrome of intestinal injury following whole abdominal radiation in childhood. Dr. Donaldson points out that as the survival rate of children with these tumors increases, such complications of treatment become more apparent.

This is also the first time a specific dietary therapy has been published as the major form of treatment for radiation enteritis in children.

Work is now underway at the Institut Gustave-Roussy to determine if use of the diet during the period of radiation treatments would avoid later intestinal complications.

The diet is not yet in use at Stanford, but is under study.

The work was supported in part by grants from the Anna Fuller Fund, the National Cancer Institute, and the National Institutes of Health.

Mailed Tuesday, January 7, 1974

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415-497-6911

STANFORD — Dedication ceremonies will be held Friday, Jan. 10, for the Stanford Hemodialysis Center building at Stanford University Medical Center.

An open house for the new, one-story facility is scheduled from 3 to 5 p.m. with a dedication ceremony at 4 p.m.

The new SHC will replace the current overcrowded renal dialysis unit in the main Stanford Hospital complex. The new SHC will be able to accommodate seven patients at a time.

Dr. Clayton Rich, dean of Stanford University Medical School, will head a list of speakers at the dedication ceremony. Also speaking will be Dr. Daniel D. Federman, chairman of the Department of Medicine at Stanford Medical School; Dr. John Phillip Pennell, assistant professor of medicine (nephrology) and director of the SHC; and Paul Hofmann, director of Stanford Hospital. Master of ceremonies will be Dr. Rex L. Jamison, associate professor of medicine (nephrology) and co-head of the Division of Nephrology at Stanford Hospital.

Dr. Roy H. Maffly is the other co-head of the division at Veterans Administration Hospital in Palo Alto.

Hemodialysis was first performed at Stanford Hospital in 1965 after the hospital's auxiliary purchased a twin-coil artificial kidney for the Division of Urology. Hemodialysis was confined to the treatment of acute renal failure until early in 1968. Then the first patient was treated after his kidney which was transplanted from a living relative failed.

In July 1971 the Division of Nephrology was established by the Department of Medicine at Stanford, and the following year a master plan for hemodialysis at Stanford was drawn up.

The Stanford Hemodialysis Center treats patients with acute kidney failure, or those with chronic kidney failure who cannot dialyze themselves at home.

An important part of the SHC program is to train patients to dialyze and care for themselves at home, if possible.

In addition, the SHC acts as a "back up" support for four satellite hemodialysis units whose patients are admitted through the Stanford Dialysis-Transplant Committee. The satellite units are Monterey County General Hospital in Salinas, Queen of the Valley Hospital in Napa, Limited-Care Facility in San Jose, and Washington Hospital Dialysis Unit in Fremont.

Furthermore, SHC serves in the education of nurses, medical students, medical residents, and nephrology fellows. Also included in this category is research on special problems among dialysis patients.

Since January 1973, over 100 patients have been admitted to the unit for chronic hemodialysis, or home training. Approximately 350 dialysis "runs" (four to eight hours in duration) are performed each month at SHC.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--An important laboratory advance, which may aid scientists in the study of human malignant lymphomas, was reported Tuesday (Jan. 7, 1975) by researchers at Stanford University School of Medicine.

With new techniques, the researchers have grown tumor cells from lymphoma patients in the laboratory. Except for Burkitt's lymphoma, a cancer found in African children, human lymphoma cells have not been grown successfully in culture.

Lymphomas are cancers of the lymph glands. The tumor cells grown at Stanford came from three patients with histiocytic lymphomas, one of the most malignant cancers of the lymphoma group.

The researchers, Alan L. Epstein and Dr. Henry S. Kaplan, said the cells will provide an important new source for laboratory investigations. They will pave the way for studies of drugs for chemical control of the disease, radiation treatment, and improved methods of diagnosis.

In addition, the cells can be used in a search for cancer-inducing viruses and in immunotherapy research, finding ways for stimulating natural body immunity against cancer.

The establishment of cell cultures from human tumor biopsy specimens has been difficult, the researchers noted. This is because dividing tumor cells require a critical combination of nutrients, growth factors, and environmental conditions for their continued sustenance outside the human body.

Epstein and Kaplan said their success was due to development of new cell culture methods that enabled the rapid testing of a large number of factors.

Moreover, by dividing the tumor cells of the patients into small samples and storing them at low temperatures, they were able to test each biopsy specimen repeatedly until the growth requirements of each individual tumor were uncovered.

The medical researchers said the establishment of these human malignant cells in culture is of particular note because they are free of the Epstein-Barr virus.

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This herpes-like virus, which is associated with infectious mononucleosis and Burkitt's lymphoma, has been found to pass onto normal white cells the ability of continuous growth in the laboratory.

The researchers said that establishing a lymphoma cell line uncontaminated by Epstein-Barr virus has been a major challenge because the virus is present in many persons for most of their lives, including lymphoma patients.

Reporting their work in the December issue of Cancer, the journal of the American Cancer Society, Epstein and Kaplan said the cultured cells were strikingly similar to the patients' tumors from which they were taken.

"The malignant cells had the same chromosomal abnormalities and were capable of widespread growth when inoculated into the brains of "nude mice," they reported.

These laboratory mice are used because they lack a thymus gland and therefore do not have a cellular immunity to destroy the implanted cells. It is well accepted that when such transplanted cells "take" and proliferate, they are malignant, the researchers explained.

The cells were flown to Children's Hospital in Philadelphia where Drs. Werner and Gertrude Henle did the Epstein-Barr virus studies and confirmed its absence.

Epstein is a medical and graduate student at Stanford supported by the Medical Scientist Training Program of the National Institutes of Health. Dr. Kaplan is the Maureen Lyles D'Ambrogio professor of radiology and cancer research pioneer. Their work was supported by a contract from the National Cancer Institute, a grant from the John A. Hartford Foundation of New York, and by gifts to the Joseph Edward Luetje Lymphoma Research Fund at Stanford.

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Mailed Monday, January 6, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

STANFORD--A search for life on Mars will begin this year, but Stanford scientists say they will be looking for microorganisms, not current civilizations.

"We have no reason to think that there are people like us on Mars now . . . The search for intelligent life elsewhere in the universe is another ballgame," says Dr. Elliott Levinthal, director of the Instrumentation Research Laboratory at Stanford University Medical School, and member of the team of scientists nationwide preparing to soft-land scientific instruments on Mars.

Since Dr. Joshua Lederberg, chairman of the Stanford Department of Genetics, coined the word "exobiology" more than a decade ago to denote the study of life other than on earth, the School has been actively involved in Mars research. Some of that work has led to extensive applications in medicine here on earth, according to an article in the current issue of Stanford M.D., publication of the Stanford Medical Alumni Association.

The scientists were involved with the Mariner 9 mission of 1972, the satellite which mapped more than 85 percent of the surface of Mars.

They are now involved in the camera system and life-detection experiments to be carried out on the planet in the Viking mission. Launch is planned for summer, 1975 and landing by mid-1976.

The National Aeronautics and Space Administration mission calls for soft-landing two automated science payloads on Mars, with the objective of obtaining data about the possibility of life on the planet. Instruments will examine the surface for microorganisms, for organic chemistry, minerology, quakes, magnetic dust, and gases.

Dr. Lederberg is one of seven eminent scientists on the mission's biology team, which has devised tests for life by photosynthesis, metabolism, and growth.

Dr. Levinthal is one of seven members of the imagery team, which has devised a pair of stereoscopic cameras to scan the surface and skies at different resolutions and wavelengths.

Mariner 9 revealed huge rifts that suggest the planet's interior may be geologically alive. Photos showed volcanoes larger than any on earth, giant basins, and channels extending for hundreds of miles with small tributaries and high "walls" suggesting water erosion.

Winds were recorded exceeding 120 miles per hour, and there were planet-wide dust storms. Mars' atmosphere was shown to be composed primarily of carbon dioxide with small amounts of carbon monoxide, oxygen, and water.

Photos also revealed that the two satellites or moons of Mars are what they appear to be: dark, battered, entirely natural objects.

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During the Viking mission, scientists will seek answers to such questions as whether the wandering channels are beds of ancient rivers, how much free water is available to possible living systems, and how thick the polar caps might be.

The biology experiments devised at Stanford are based on the assumption that life on Mars would depend upon the same basic carbon chemistry that supports life on earth.

Most of both the universe we know and of life on earth is made of a few particular atoms: carbon, nitrogen, oxygen, hydrogen, helium, says Levinthal. Since the atoms most useful for life on earth are also in very high cosmic abundances, he feels that it is likely there could be enormous numbers of planets in our galaxy with the same behavior in their environment.

But the likelihood of finding living organisms on Mars during the Viking mission may not be great. "We know so little about the habitat of Mars that Martian bugs would be adapted to. With the limited weight we have for the biology package, and the limited options, it is a big gamble," says Lederberg.

He notes that there is no single, unambiguous "life detector." Tests based on what constitutes life on earth may not hold true for life on another planet.

As a result of technology learned from the NASA missions, Stanford has designed programs which are now becoming increasingly important in medical research.

A particularly outstanding example is the first shared national computer facility for medical research, known as SUMEX. Its purpose is to employ the computer to reach decisions and solve medical research problems by symbolic analysis.

Other instruments are being used in analyzing unknown organic compounds, or determining molecular structure, with applications in treating infectious diseases, for example.

Another instrument which came from initial NASA work is the cell separator, now produced commercially. Developed by Dr. Leonard Herzenberg of the Genetics Department, it is aiding the study of the body's immune system, helping determine the chemical and biological characteristics of different cells. This could lead to possible prevention of organ transplant rejection, and more effective treatment of diseases such as leukemia and hemophilia.

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Mailed January 6, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Howard Lewis, Information Officer
National Academy of Sciences (at Asilomar) 408: 372-8016
or
Spyros Andreopoulos 415: 497-6911

STANFORD--A press conference to announce the conclusions of the International Conference on Recombinant DNA Molecules in Asilomar this week will be held Friday, February 28, 9:30 a.m. at the San Francisco Press Club.

The meeting, attended by more than 150 scientists from throughout the world was called to consider potential risks connected with research involving transfer of genes between different microorganisms. The research is considered essential to the solution of important medical problems, but there is concern of possible biological hazards.

The conference was organized by a committee of scientists from the National Academy of Sciences, and funded by the National Institutes of Health and the National Science Foundation.

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Released to Business Wire, Thursday, February 27, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Hali Wickner, 497-6911
FOR IMMEDIATE RELEASE
STANFORD —

A new public lecture series on recent developments in diagnosing and treating skin diseases will begin Thursday, March 6, at Stanford.

The five weekly lectures, by members of the School of Medicine's Department of Dermatology, will focus on a variety of topics. They include venereal disease, acne, skin cancer, and psoriasis.

These lectures are free of charge.

A talk on "New Venereal Diseases" will open the series. It will be presented by Dr. Paul Jacobs, professor of clinical dermatology, at 8 p.m. in Cubberley Auditorium on campus.

"Changes in morality and patterns of sexual intercourse in the past 10 years have contributed to a marked increase in infectious skin diseases such as lice and herpes in the genital areas," Jacobs says. "It is important that people be aware of these problems and learn what they can do to help prevent them."

Director of the dermatology clinic, Jacobs is a 1953 graduate of the Stritch School of Medicine at Loyola University.

The lectures in dermatology are part of the Medical School's Progress in Medicine series. Initiated in 1965, the lectures are offered to the community as a public service, according to Dean Clayton Rich.

The other four dermatology lectures, scheduled for Thursdays in Cubberley Auditorium at 8 p.m., are as follows:

March 13: "From Diaper Rash to Acne—Childhood and Adolescent Skin Problems," by Dr. Alvin Jacobs. Senior attending physician and clinical professor of dermatology and pediatrics, Jacobs has helped pioneer the specialty of pediatric dermatology. The growth of the specialty in recent years has led to more systematic study and increased knowledge of skin disease in children, from newborns to teen agers. Jacobs received his M.D. from Johns Hopkins University in 1937.

March 20: "California Skin Problems—Sunburn, Wrinkles, and Poison Oak," by Dr. William Watson, attending physician and clinical assistant professor of dermatology. An active clinician, Watson has studied the skin problems of an outdoor society like California's, especially skin damage from the sun, as well as one of the state's most common skin diseases: poison oak. Watson graduated from the University of Michigan Medical School in 1964.

March 27: "Moles and Skin Cancer," by Dr. Norman Price, acting assistant professor of dermatology. He is interested in the relation of moles and cancer and, in particular, what triggers some pigmented skin lesions such as moles to turn malignant. Price earned his M.B. (cq) and Ch.B. from Trinity College in Ireland in 1970.

April 3: "Understanding and Treating Psoriasis," by Dr. Eugene Farber. Professor and chairman of dermatology, Farber is a noted authority on psoriasis. He is director of Stanford's Psoriasis Day Care Center, opened last year to provide daily hospital care on an outpatient basis for those with psoriasis. He and his colleagues have been instrumental in identifying how stress and other conditions influence psoriasis, and in developing more effective treatments for the skin condition. Farber is a 1943 graduate of the University of Buffalo Medical School.

—30— cr 2/27/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

J. Willis Hurst, M.D., eminent cardiologist and professor and chairman of the Department of Medicine at Emory University School of Medicine in Atlanta, Georgia, will present the 11th annual John Kent Lewis Memorial Lecture at Stanford University School of Medicine.

Dr. Hurst will discuss "Newer Syndromes in Cardiology" at 4:15 p.m. Monday, Feb. 24, in Room M106 of the Medical School. Physicians and other health professionals in the community are invited to attend.

Dr. Hurst served as president of the American Heart Association in 1971 and received the Gold Heart Award from that organization in 1974.

He became well-known as private physician and cardiologist of late President Lyndon Johnson.

Most recently his work has been in problem-oriented medical record keeping, examining how doctors make diagnoses, and logical approaches to patient data organization.

He received his undergraduate education at the University of Georgia at Athens, and his medical degree in 1941 from the Medical College of Georgia. He served as a cardiac fellow with Dr. Paul Dudley White at Massachusetts General Hospital, and in 1950 joined the faculty of Emory University School of Medicine in Atlanta, attaining his current position in 1957.

He has received many awards and honors, particularly for his teaching. He is also coauthor of *The Heart, Arteries and Veins,* a widely-used cardiology text.

The John Kent Lewis Lectures are presented annually in honor of the former chief of the Stanford Medical Service at San Francisco General Hospital. A 1922 graduate of Stanford Medical School and noted pioneer in heart research, Lewis died in 1961.

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2/19/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. John R. Vane, group research and development director of the Wellcome Foundation in England, will give the second annual Windsor Cutting Lecture at the Stanford School of Medicine on Wednesday, Feb. 19.

He will speak on "Prostaglandins and Aspirin-like Drugs" at 4:15 p.m. in Room M106 of the Medical School. The lecture is open to the medical community and the public.

Dr. Vane served as professor of experimental pharmacology at the University of London's Royal College of Surgeons before his appointment in 1973 to the Wellcome Research Laboratories. His most recent work involves prostaglandins and aspirin.

His degrees include the bachelor of science in chemistry from the University of Birmingham, bachelor of science in pharmacology from Oxford, and doctorates in philosophy and in science from Oxford.

After serving as assistant professor of pharmacology at Yale University in 1953-55, he returned to England to the Institute of Basic Medical Sciences at the Royal College of Surgeons.

He is a fellow of the Royal Society, joint editor of *Adrenergic Mechanisms* and *Prostaglandin Synthetase Inhibitors,* and has published numerous articles.

The Windsor Cutting Lectureship was established in 1973 by the faculty of the Department of Pharmacology and is supported by private contributions. It honors the memory of Dr. Windsor Cutting, professor and former chairman of the Department of Pharmacology, who also served as dean of the Stanford University School of Medicine (1953-57) and dean of the University of Hawaii Medical School (1963-71). Dr. Cutting died in 1972.

Given annually during the winter quarter, the lectures feature speakers prominent in the field of pharmacology.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Thomas A. Gonda has been appointed chairman of the department of psychiatry and behavioral sciences, and Dr. Robert H. Alway has been named medical director of the Stanford University Hospital and Clinics and associate dean for clinical affairs.

The appointments, effective immediately, were announced Tuesday, Feb. 11, by Dr. Clayton Rich, vice-president for medical affairs and dean of the Stanford University School of Medicine.

Gonda, 53, has had a distinguished career as a teacher, researcher, and administrator. He succeeds Dr. Albert J. Stunkard, who resigned from the chairmanship last November citing personal reasons.

A native of Vienna, Gonda obtained his A.B. (1942) and M.D. (1945) degrees from Stanford. He received further professional training at San Francisco Hospital and the Langley Porter Clinic.

He joined the Stanford faculty in 1954 and was promoted to professor of psychiatry in 1965. In 1968 he became an associate dean and director of Stanford University Hospital, and in 1973 he relinquished the position to assume responsibility of a newly created post of medical director.

Dr. Alway, 62, is professor of pediatrics and director of the Stanford pediatric clinic.

In his new position he will supervise patient care activities of the medical staff within the Hospital and Clinics as the focal point of interaction with community and faculty physicians, as well as interns, residents, and postdoctoral clinical fellows.

Dr. Alway also will coordinate the development of the quality assurance and professional standards review programs of the Hospital and Clinics.

As dean of the Stanford University School of Medicine from 1957 to 1964, Dr. Alway was responsible for the successful relocation of the School from San Francisco to the campus, and recruitment of faculty, which helped establish Stanford as a leader in medical education.

He holds degrees from the University of Minnesota, and received graduate training in pediatrics from the same institution.

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2/11/75 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--You have just become a parent. However, your joy is subdued when you discover your child has been placed in the premature nursery.

The infant has respiratory distress syndrome, a common and serious respiratory ailment among many premature babies.

Weeks pass and your child is still in the special unit, still receiving specialized care which you would be unable to administer at home. You are becoming more depressed daily by the situation. Will the child ever be normal? Will he ever be able to come home?

These are common questions posed by parents with infants in Stanford University Hospital's East Nursery, where high-risk babies are cared for.

But now, under an innovative program initiated about nine months ago parents can be more optimistic because they actually participate in the care of the infants. They are involved in the everyday feeding, diapering and bathing chores. Furthermore, the parents are encouraged to hold their babies, talk to them and help them to "identify" with their own families.

This kind of interaction has been possible through innovations by nurses in a section of the East Nursery known as the "Romper Room" which allows them and parents more freedom in caring for the infants. Among these changes is a modification of the oxygen administration system which makes it easier for the babies to be handled.

The program is an outgrowth of a four-year study conducted by Dr. P. Herbert Leiderman, professor of psychiatry at Stanford. The researchers found that hospitals should do everything possible to encourage the interaction of mothers and their premature infants.

Those infants in the Romper Room need long-term specialized care and are transferred here from the more critical care unit across the hall.

The Romper Room generally houses between four and five infants, whose parents generally spend an average of several hours a day with their babies. The East Nursery itself has approximately 16 to 17 babies at any one time, accepting many infants that are referred by other area hospitals.

"This is a very difficult time for most of these parents," explained Stina Miller, clinical nursing coordinator in the nursery, "it's almost like a grief reaction in that they (the parents) were expecting a normal baby and it was a severe blow to them when it wasn't."

While the hard reality is being dealt with, the parents can begin physically caring for their children, she continued, but it is a formidable crisis for many parents.

"We try to support them as much as possible," Mrs. Miller noted, "we teach the parents the needs, which may be special, that the babies may have. We try to do the same kind of teaching for parents of infants that are discharged directly from the East Nursery."

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222--East Nursery

For each shift there are generally two nurses in the Romper Room and between eight and 10 on duty in the main nursery. However, when the infants are considered "critical" the ratio is usually one nurse to one baby.

In addition to supplying the basic physical needs of the infant, nurses use play therapy and exercises with the infants which generally consist of toys designed to promote psycho-social, as well as muscular development. As a part of this program the nurses involve parents in the play and exercise periods.

"We have to make up for lost time because other babies already have started this kind of development," Mrs. Miller added. "To do this we encourage the parents to help stimulate this development. We even urge them to bring clothes and some play things."

One of the parents who spends time each day with her child in the Romper Room is Tani Wright of Quincy, Calif., whose boy Jared will be three months old Feb. 24. Jared suffers from bronchopulmonary dysplasia, a chronic lung disorder which some premature infants acquire after taking respiratory therapy for respiratory distress syndrome.

Because of his present condition, Jared is required to take in oxygen through tubing that is connected to a nose catheter. Despite Jared's complications, his mother is optimistic about his chances for a full recovery.

"The medical care here is really good," she said, "He also gets a social orientation that helps him to develop in that way. You know, he has a lot of aunts in here. All the nurses are his aunts."

She said she was "scared" when told her son would be taken to the Romper Room section. "I thought it meant he might not get well," she noted, "but they have all really helped him. Over here he gets a lot more love."

Once infants are discharged they are still checked regularly at a follow-up clinic. Depending on the child, the follow-up exams are usually completed within six months to a year.

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Mailed Wednesday, February 5, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Barbara Battino, 497-6911
Hali Wickner

FOR IMMEDIATE RELEASE

STANFORD –

Dr. David M. Kipnis, chairman of the department of internal medicine at Washington University School of Medicine, St. Louis, Mo., will speak Wednesday, Feb. 12, at Stanford School of Medicine as recipient of the fifth Louis and Dorothy Kovitz Visiting Professorship.

The lecture, "Regulation of Insulin Synthesis and Secretion," is open to physicians and other health professionals in the community. It will begin at 4 p.m. in Room M106 of the Medical School.

Dr. Kipnis' specialty is endocrinology and metabolism. He is noted for his work in diabetes, the control of metabolism, physiologic regulations of levels of blood sugar, and functions of the endocrine glands.

The Kovitz Visiting Professorship was established in 1969 by Dr. and Mrs. Louis Kovitz of Los Altos to bring outstanding lecturers to the Medical School.

A native of Baltimore, Md., Dr. Kipnis received the bachelor's and master's degrees from Johns Hopkins University and a medical degree from the University of Maryland School of Medicine in 1951.

He joined the Washington University School of Medicine in 1957, becoming professor of medicine in 1965. He is serving as director of the Washington University Lipid Research Clinic and is physician-in-chief at Barnes Hospital, in addition to his administrative duties.

Dr. Kipnis is a fellow of the American Academy of Arts and Sciences and a member of the Institute of Medicine of the National Academy of Sciences. His honors include the Lilly Award of the American Diabetes Association and the Ernst Oppenheimer Award of the Endocrine Society.

He is the author of numerous publications in the fields of endocrinology and metabolism and serves as editor-in-chief of *Diabetes.*

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FOR IMMEDIATE RELEASE

STANFORD –

Betty Harris, head nurse in Stanford University Hospital operating rooms died at Stanford Feb. 1 of an irreversible illness.

A native of Shelbyville, Tex., Mrs. Harris would have been 54 on March 1. She was graduated as an R.N. from Methodist Hospital in Houston, Tex.

For 24 years Mrs. Harris worked in the operating rooms of the hospital. When Palo Alto Hospital changed to Stanford ownership she became head nurse of schedule coordination, "a role she filled with competence, unique charm, and humor," said Ludmilla Davis, director of operating rooms. Mrs. Harris was an active member of the San Jose Chapter of the National Association of Operating Room Nurses.

Outside of her professional activities, Mrs. Harris was devoted to her family. She enjoyed gardening, sewing, and cooking.

Survivors include her husband Roy, a daughter Denise Michelle, her mother, brothers, and sisters in Texas, Arkansas, and Louisiana.

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2/4/75 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Dr. Eugene Farber, professor and chairman of the department of dermatology at Stanford School of Medicine, will discuss psoriasis in a free public lecture Thursday, April 3 at Stanford.

His talk, entitled "Understanding and Treating Psoriasis," will conclude the Medical School's progress in medicine lecture series on recent advances in the diagnosis and treatment of skin problems. It will begin at 8 p.m. in Cubberley Auditorium, in the School of Education on campus.

An international authority on psoriasis, Dr. Farber is also director of Stanford's psoriasis day care center, opened last year. Patients with psoriasis receive intensive care during the day at the center and return home each evening.

Psoriasis is a common skin disorder that causes itching, scaling and redness, and affects an estimated 6 million people in the United States alone. No permanent cure is known, but investigations by Dr. Farber and his colleagues of the basic mechanisms of skin cell growth and metabolism have helped pave the way for more effective treatment. Dr. Farber has also been studying the influence of environmental factors such as stress on psoriasis.

Dr. Farber is chairman of the Psoriasis Task Force, National Program for Dermatology and editor of the International Psoriasis Bulletin.

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Mailed Monday, March 31, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911
EDITORS: The following story is a feature about the Stanford University Medical Center's infant transport program.

STANFORD--Shortly after noon last December, Joaquin Livingston was born at Community Hospital of the Monterey Peninsula.

The tiny infant was premature and weighed only three pounds, seven ounces. He was in respiratory distress because his immature lungs could not take in enough air.

Before Joaquin was an hour old, pediatrician Dr. George Penn had arranged to have him transported to the intensive care nurseries of Stanford University Hospital.

By the time Joaquin was two hours old, a Stanford transport team, always on call for such emergencies, was in an ambulance speeding toward the Palo Alto airport to board a plane to Monterey.

During the half hour flight, the team members--Dr. Mary Ann Pass, housestaff pediatrician, Polly Sawian and Judy Hudson, both nurses--were busy planning what they would have to do when they reached Monterey.

The specially designed portable unit that would carry Joaquin had been carefully checked just before the team left Stanford and would be tested again in Monterey. Joaquin's life would depend on the proper functioning of all components: the oxygen ventilation system to help him breathe, the heat warmers to maintain a neutral temperature, the battery powered monitors for heart rate, fluid intake and blood pressure, and the stabilizing unit to prevent injury during sudden changes of speed or altitude.

In the third hour of Joaquin's life, the team arrived at his side. By this time, every breath the infant took cost him a lot of energy and he was in severe respiratory distress.

For the next two hours the team members worked with Monterey physicians and nurses to stabilize Joaquin and prepare him for his journery. They inserted a thin tube into the infant's umbilical artery to measure the concentration of oxygen in his blood. Another tube was passed into his trachea (windpipe) to provide a passage for supplemental oxygen. Then Dr. Pass began to pump pure oxygen into the underdeveloped, overworked lungs, by rhythmically squeezing a bag attached to the end of the tube. She or Miss Sawian would continue to breathe for Joaquin with the bag until a mechanical respirator took over back at Stanford.

- more -

By the time Joaquin was eight hours old, he was in the Stanford Hospital intensive care nurseries, breathing on a respirator and receiving antibiotics for suspected infection.

Over the next twelve days, doctors and nurses, especially trained to care for premature infants, watched over Joaquin around the clock. After eight days, Joaquin was able to breathe by himself, without the assistance of a respirator. In another four days he was well enough to return to the Monterey Hospital where his parents could visit him regularly.

At the age of one month he was strong enough to go home. Today he is in good health and as lively as any four-and-a-half-month old infant.

Joaquin was one of more than 200 infants brought to Stanford last year. Close to 300 are expected this year, according to Dr. Alvin Hackel, co-director of the infant and pediatric transport program.

Most of the children come from communities throughout northern California and Nevada, but infants have also been brought from other western states. Last month a Stanford team traveled to Hong Kong to bring back a seriously ill one-month-old.

Stanford is one of seven regional referral centers in northern California for critically ill infants and newborns, explains Hackel, senior attending physician and clinical associate professor of pediatrics and anesthesia. Each center has a program designed to meet the needs of the region it serves.

At Stanford, about half the infants come from more than 30 miles away. The trend is to use airplane rather than helicopter, notes Hackel, because airplanes are faster and safer. Several of the infants brought to Stanford are more than a month old.

The program, in existence since 1971, is a joint undertaking of the Medical School's Departments of Anesthesia and Pediatrics and the University's Department of Mechanical Engineering. Dr. Philip Sunshine, professor of pediatrics is the other co-director.

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Mailed 4/28/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Dr. Ruth T. Gross has been appointed director of the Division of Ambulatory Pediatrics at Stanford School of Medicine and chief of pediatric clinics at Stanford.

Her appointment, effective immediately, was announced by Dr. Irving Schulman, professor and chairman of the Department of Pediatrics at Stanford Medical School.

Since 1973 she has served as professor of pediatrics and as associate dean for student affairs at Stanford Medical School. She succeeds Dr. Robert H. Alway, who is now medical director of Stanford Hospital and Clinics and associate dean for clinical affairs.

Dr. Gross has served as coordinator of clinical training in child health for medical students at Stanford and its affiliated hospitals. She has also served as an attending pediatrician in patient care on the wards and outpatient pediatric department. Under her supervision a youth clinic has been initiated which is designed for young people ages 12 through 18. The clinic provides counseling and health education, in addition to comprehensive health care.

Under her re-assignment, Dr. Gross will retain her student teaching duties in pediatrics.

From 1950 to 1959 she served on the pediatric faculty at Stanford, and served for two years as acting pediatric chairman of Stanford Medical School when it was located in San Francisco.

She is a graduate of Barnard College, Columbia University and received her medical degree from Columbia University College of Physicians and Surgeons in 1944.

She has held academic appointments at Radcliffe Infirmary, Oxford, England, and was a professor of pediatrics and co-director of the Division of Human Genetics at Albert Einstein College of Medicine when she joined Mount Zion Hospital in San Francisco in 1966 and served as chairman of the department of pediatrics there. She has also served as a clinical professor of pediatrics at the University of California in San Francisco.

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Mailed March 28, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A well-dressed, quiet-spoken physician stood near the entrance to Stanford University Medical Center on Thursday (March 27) holding a sign reading "Patients Pay Medical Malpractice Insurance. . ."

"What would you do with a $16,000 bill," he asked a passing doctor in white coat, who just shook his head. Frequently, passersby stopped to read, to wonder what was being "protested."

Richard C. Thompson, M.D., San Mateo anesthesiologist, had come not so much to protest but to "find out what people are thinking about the sudden astronomical malpractice bills.

"I received my bill for insurance coverage about three weeks ago--$15,808," Thompson said. "Translated into the cost per patient that I take care of--industrial accident cases and Medi-Cal patients--it's astronomical, and I can't in fairness pass that cost on to them," he says.

So he decided not to pay the bill, and consequently curtailed his practice at Mills Hospital, where he had been affiliated, since that hospital requires its physicians to carry insurance. Not without some consideration, he decided to take to the streets to inform the public about the malpractice problem.

He spent about an hour in front of Stanford Hospital, and plans to do the same at other Bay Area hospitals, on the streets of San Francisco, and in shopping centers. He also hopes to take his sign to Stockton and Sacramento.

Thompson, who received his M.D. degree from Stanford in 1944, says doctor's malpractice insurance rates have increased 500 percent and hospital insurance rates have doubled. "Write your legislator now," reads his sign.

He doesn't offer any specific solutions to the problem, but maintains, "There's no question the problem can be dealt with effectively by the Legislature. There has been sophisticated input to legislators--it just needs to be dealt with, not put on the back shelf."

He reasons that "lots of public support" will be needed to effect that action. "I just want to arouse the concern of the people who pay the bills," says Thompson. "I just want them to have sufficient concern to write their legislator, to let those who have the power to do something about the problem, do it, and promptly."

The high rate increases for individual physicians and for hospitals are nationwide, and have been attributed to extraordinary jury malpractice verdicts and out-of-court settlements. Insurance companies handling malpractice have in the past months called attention to the seriousness of the situation, and called for major changes in handling medical suits.

Upon questioning, Thompson feels one method might be to specify set legal fees for malpractice actions, or to establish impartial commissions instead of the present jury situation.

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Mailed March 27, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--"Moles and Skin Cancer" will be discussed by Dr. Norman Price, acting assistant professor of dermatology, Thursday, March 27 at Stanford University.

The talk is the fourth in a series of lectures an recent advances in diagnosing and treating skin problems presented free of charge for the public by the School of Medicine. It will begin at 8 p.m. in Cubberley Auditorium on campus.

Price has done research on pigmented lesions such as moles and what triggers them to become malignant. He is also interested in the types of skin cancer often caused by exposure to the sun.

The speaker completed his medical education in 1970 at Dublin University in Ireland. He received further training as a dermatology resident at the University of Miami and at New York University, and joined the Medical School faculty in 1974.

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Mailed Monday, March 24, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Two gifts totalling $1.05 million to complete a portion of the new wing of Stanford University Hospital were announced Monday (March 17) by Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

A gift of $800,000 from the Donald E. Baxter Foundation of Los Angeles, and a gift of $250,000 from the Max C. Fleischmann Foundation of Reno, Nevada, will be used for construction of a new cardiology center to serve hospital and clinic patients.

The new facility, Dr. Rich said, will be named The Donald E. Baxter Cardiology Center and will be located on the second floor of the new $12.6 million hospital expansion now under construction.

"We particularly appreciate the generosity of the Baxter and Fleischmann foundations in providing this facility," Dr. Rich said, "which will greatly strengthen our ability to make progress in this critical aspect of medicine in the coming decade."

Stanford's cardiology division is nationally known for its work with antiarrhythmic drugs, development of monitoring devices to prevent sudden death, and use of engineering and computer technology in early detection, diagnosis and treatment of heart disease.

Heart patients come to Stanford from California and Nevada, and many other parts of the world, Dr. Rich added.

Dr. Donald C. Harrison, William G. Irwin professor and head of the Division of Cardiology, said the Center will permit a 30 percent increase in the number of patients now seen by Stanford cardiologists.

In addition, it will make it possible for the activities of the Department of Cardiovascular Surgery headed by Dr. Norman E. Shumway to be joined physically with those of cardiology.

The center will include a suite of four patient-evaluation laboratories and support facilities. One laboratory will specialize in nuclear medicine, and three others in ultrasound, blood-gas analysis, and x-ray diagnosis. -more-

They will be clustered around one viewing area and will be associated closely with a computer facility and a video-processing unit, which will service all four.

"The computer will enable us to judge and, if necessary, change what we are doing, without delay," said Dr. Harrison.

Computer analysis is presently applied to catheterization, a diagnostic procedure used to determine if the heart's function and blood output are normal and, if not, why not.

Before the computer was applied, it took four to six hours of a physician's time to make the necessary calculations," said Dr. Harrison. "The computer provides these data while catheterization is underway."

Dr. Harrison said Stanford's cardiology division has become one of the largest centers on the West Coast for training cardiologists and providing programs for investigative and clinical cardiology.

The Donald E. Baxter Foundation was established by Mrs. Delia B. Baxter in 1959 in honor of her late husband, Donald E. Baxter, a physician, scientist and engineer who pioneered in the commercial preparation of sterile and pyrogen-free solutions and associated medical equipment for intravenous therapy.

The foundation provides funds for scientific and educational purposes with primary emphasis on medical research. For many years it has provided funds for medical scholarships and research at Stanford, in addition to an endowed professorship in pharmacology.

The Max C. Fleischmann Foundation was established by the first chairman of the board of Standard Brands, Inc. (successor to the Fleischmann Company in 1929). Foundation funds have aided in the construction of a solar observatory on the Stanford campus and the Max C. Fleischmann Laboratories at the School of Medicine. The laboratories house medical student research projects, an audio-visual learning center, and other teaching and medical research programs of the School.

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Mailed Monday, March 17, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Common skin problems in California will be discussed at a free public lecture Thursday, March 20, by Dr. William Watson, attending physician and clinical assistant professor of dermatology at Stanford School of Medicine.

The lecture, entitled, "California Skin Problems: Sunburn, Wrinkles, and Poison Oak," will begin at 8 p.m. in Cubberley Auditorium on the Stanford campus. It is the third in the Medical School's series on developments in diagnosing and treating skin problems.

"The sun can be one of the most important factors in skin damage," says Watson. "The outdoor society of California is particularly susceptible to sun related problems such as wrinkles, aging, severe sunburn, and skin cancer."

Another prevalent problem in this area is poison oak. The next best remedy to avoiding contact with the plant is recognizing the itching skin lesions early and knowing what types of treatment are most helpful.

An active clinician, Watson helped coordinate the first statewide skin cancer detection program at the Stanislaus County Fair in Turlock in 1973. The screening has since become an annual event and will be conducted again at this summer's fair.

Watson is a 1964 alumnus of the University of Michigan Medical School. He took an internship at the Highland-Alameda County Hospital in Oakland and a residency in dermatology at Stanford. Before joining the Stanford faculty in 1972, he was on the faculty of Downstate Medical Center in New York.

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Mailed Monday, March 17, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Alain C. Enthoven, Marriner S. Eccles professor of public and private management at Stanford Graduate School of Business, has been appointed acting director of the Health Services Administration Program at Stanford, effective June 1.

The appointment was announced Wednesday (March 12) by Dr. Count D. Gibson, professor and chairman of Family, Community, and Preventive Medicine at Stanford School of Medicine and currently the acting director of the HSA program. Gibson will begin a one year sabbatical leave in June.

Enthoven, 44, a Stanford graduate, is a former Rhodes scholar and was a top aide in the Department of Defense during the Kennedy and Johnson administrations. He was the first recipient of the endowed chair at Stanford, established in 1973 by Marriner S. Eccles, former chairman of the Federal Reserve Board. In addition to serving as acting director of HSA, Enthoven will continue teaching all public management courses at Stanford Graduate School of Business.

Health Services Administration is a program designed to develop administrators and planners with interdisciplinary training for roles in public and private health organizations. Graduate students selected for the program are enrolled in medicine, engineering, business and humanities and sciences.

The program allows students to blend a variety of backgrounds and interests into health field careers and prepares them for work in the continually changing health care field.

The curriculum is centered in three general subject areas, including administration, quantitative techniques and health services systems. HSA graduates earn a master of science degree in health services administration from Stanford School of Medicine.

Before joining the Stanford faculty in 1973, Enthoven was president of Litton Medical Products, a subsidiary of Litton Industries. He was one of a group of civilian experts former secretary of Defense Robert McNamara summoned to the Pentagon from the Rand Corporation at the start of the Kennedy administration. He was given the President's Award for distinguished federal civilian service by Kennedy in 1963, and 1969 he was awarded the Defense Department's medal for outstanding public service.

Enthoven has written extensively on monetary theory, defense and economic spending and he was an economics instructor for one year at Massachusetts Institute of Technology. He received his B.A. in economics from Stanford in 1952, and A.B. in philosophy from Oxford and a Ph.D. in economics from MIT.

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Mailed Wednesday, March 12, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--"From Diaper Rash to Acne: Childhood and Adolescent Skin Problems," is the topic of a lecture by Dr. Alvin Jacobs, clinical professor of dermatology and pediatrics, Thursday, March 13, at Stanford University.

The free public lecture is the second in a series on recent advances in dermatology presented by the School of Medicine. It will begin at 8 p.m. in Cubberley Auditorium.

In recent years, both dermatologists and pediatricians have devoted more attention to skin problems in children, points out Jacobs. The growth of the specialty in pediatric dermatology has led to increased knowledge of childhood skin diseases.

"There are common observations that can be made even in the newborn--the distribution of hair, peeling of skin, growth of fingernails, for example--that provide clues to the health status of the baby," Jacobs says.

One of the most pressing adolescent skin problems, he continues, is acne, which generally occurs at the beginning of puberty. "Contrary to popular belief, a lot can be done to control the problem and avoid permanent physical and emotional scarring effects."

Jacobs, also senior attending physician in dermatology and pediatrics, received his M.D. from Johns Hopkins University in 1937. He joined the full-time faculty of the Medical School in 1972 after retiring from private practice.

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Mailed Monday, March 10, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Bladder infections after sexual intercourse, a common and perplexing malady for many women, can now be prevented with a single dose of an antibiotic, a Stanford University Medical Center study shows.

Dr. Kenneth L. Vosti, professor of medicine, treated 14 patients with chronic or recurring urinary tract infections for one and a half to nine years.

Treatment consisted only of taking a single antibiotic pill after sexual intercourse.

The incidence of infections was reduced significantly when the patients received the treatment as compared to equal periods of time when they did not, Dr. Vosti reported.

His conclusions appear in an article in the current issue of the Journal of the American Medical Association.

Dr. Vosti said no serious side effects from use of the antibiotics were encountered.

In some women recurrence of infections can be related clearly to sexual intercourse, Dr. Vosti said, presumably because it provides a means of entry of bacteria from the urethra into the bladder.

These patients must also have other as yet unrecognized defects in bladder defenses against infection, he added, since previous medical reports have shown that when bacteria were introduced into the bladders of normal volunteers infection did not develop.

Infections in the patients studied ranged from the simple presence of bacteria in urine without any symptoms or patient discomfort to more acute forms of cystitis or bladder inflammation.

Dr. Vosti said some patients, as a result of frequent symptomatic infections will curtail sharply their sexual activity, leading frequently to marital tension.

Doctors have tried a variety of methods to cope with this problem. Often such patients are advised to wash the genital area and empty the bladder after intercourse.

"In general, these practices have not been successful either because they don't work or because patients find them inconvenient and fail to carry them out," Dr. Vosti said.

Instead these patients first receive antibiotic treatment after intercourse. In his study, he reported, many of these patients will be successfully treated by this simple regimen.

"If it fails to control recurrences, the patients may receive a single dose of antibiotic nightly, or more frequently if needed," he explained.

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Mailed Thursday, March 6, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--The Stanislaus County Fair in Turlock has become the site of California's first large-scale skin cancer detection program.

The annual screening project was begun in 1973 by the Stanford University Department of Dermatology. It is sponsored by the American Cancer Society and the National Program for Dermatology.

In a pilot screening booth at the 1973 fair, Stanford physicians examined the skin of 605 men and women. Of these, 149 had significant skin problems and all but 14 were referred to their personal physicians for further attention.

The 1973 study was reported in the February issue of The Western Journal of Medicine, the publication of the California Medical Society. Authors are Drs. William Watson, attending physician and clinical assistant professor of dermatology at Stanford, and E. Dorinda Loeffel, a former Stanford dermatologist now of Chicago.

A smaller detection program was conducted at the 1974 fair, but more comprehensive screening will be done again at this summer's fair, according to Watson. He explained that Californians who are in the sun frequently are particularly susceptible to malignant or premalignant skin lesions. Yet skin cancers can be recognized early and in most cases treated successfully through simple surgery or radiation therapy.

Turlock, located in California's hot and fertile San Joaquin Valley, has a population of farmers and ranchers at a high risk for developing skin cancer, the authors said.

In 1973, the 605 people seen ranged in age from three to 89 years old. Physicians examined only sun-exposed areas of the skin--face, neck, arms and upper chest--unless otherwise requested by an individual.

The 149 skin problems detected included 125 malignant and premalignant lesions. None of these were found in those under 25 years old.

In Turlock, where an estimated 50,000 people attend the county fair each year, a large population can be easily screened if fair-goers can be encouraged to visit the detection booth, the authors pointed out.

There is a second advantage to such a program. "Possibly the greatest long-term benefit could be cancer prevention through mass education concerning the hazards of prolonged sun exposure and the usefulness of sun-screens," they wrote.

They also noted that Caucasians with red or blonde hair, blue eyes and fair skin are more likely than others to develop skin cancer.

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Mailed Tuesday, March 4, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University scientists are investigating a clotting factor concentrate believed to offer hope for hemophiliacs who develop antibodies to treatment with the plasma protein their own bodies lack.

Hemophilia is a hereditary disease found almost exclusively in males. Victims of it lack one of the 10 proteins in blood plasma known to interact and cause coagulation.

Most hemophilia patients today can be treated successfully with infusions of the clotting protein known as antihemophilic globulin (AHG), also called Factor VIII. However, about 10 percent of these patients develop an antibody to the protein which complicates their therapy greatly.

The new lead, according to Dr. Judith Pool, professor of medicine, turned up almost accidentally. Someone treated an inhibitor patient with a batch of a different plasma protein concentrate rejected for general release because of "excess activity." He found that it worked.

The experimental concentrate is called activated prothrombin complex. Standard prothrombin complex is used to treat patients who have a congenital deficiency of Factor IX, another blood plasma protein. Since then other physicians have reported similar findings.

"Because of these findings we think the mechanism of action of this activated concentrate should be studied and understood," Dr. Pool said.

"We presume it contains activated intermediate products of the clotting process, enzymes, that short-circuit the inhibitor-antibody which these hemophilia patients have," she added.

As presently understood blood clotting is a sort of a cascade of enzymatic reactions which ends with the formation of fibrin, the clot itself. This part of the process has been studied most intensively and scientists know that it involves at least 10 enzymes, the biological regulators of most chemical reactions in cells. Each enzyme in the sequence activates the next until clotting takes place.

"We suspect the principal activated clotting factor in this material is thrombin, the last enzyme in the clotting chain," Dr. Pool said. "So we want to identify it and assay it.

Dr. Pool discussed the project with officials of the Hemophilia Foundation of Southern California at Beverly Hills because of the need for funds and equipment to pursue the work.

-more-

The foundation provided $10,000, Dr. Pool said. The money will be used in part to purchase a second Coag-a-Mate, an automated electronic machine which detects clot formation by the rate of opacity change in the plasma mixture. The new equipment will nearly double the number of assays a technician can turn out in a given day.

Dr. Pool also believes that specific assays can be developed to identify potential inhibitor patients. "We think it is extremely important to detect these boys before the antibody has appeared," she said.

One approach with these patients used at other centers, she noted, is to withhold treatment for minimal bleeding episodes and to save infusions of antihemophilic globulin for more serious episodes. This prevents increased antibody formation.

But it means more hemorrhaging, slower recovery, more crippling, Dr. Pool said. The approach at Stanford is to use small doses. These are usually effective because the antibody destroys Factor VIII slowly. Use of the experimental preparation is increasing, however, because it appears to be effective without stimulating more antibody formation.

"The foundation ordinarily does not support hemophilia research in Northern California," said Dr. Walter Platz, a foundation official. "But we decided to do so in the case of Dr. Pool because of the exciting prospect of her work and reputation in the field."

Dr. Pool discovered a way to separate Factor VIII from blood in 1964, in such a way that the rest of the blood in blood banks is still fully usable for ordinary transfusions.

Until that time, the boys were frequently infused with massive doses of blood which were rough on the patients' circulatory systems as well as expensive.

Now, when a boy suffers a bump that starts to bleed, he can give himself an infusion of the antihemophilic substance at home.

Dr. Pool is also studying the immunological characteristics of Factor VIII and of the antibody which might lead to an understanding of what is different about the 10 percent of the bleeders who develop the complication.

"Although it was formerly feared that inhibitor production was due to multiple transfusions with Factor VIII, it now seems more likely that the tendency to form the antibody is hereditary," she said.

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Mailed Wednesday, April 30, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911
EDITORS: The following story is a feature about the Stanford University Medical Center's infant transport program.

STANFORD--Shortly after noon last December, Joaquin Livingston was born at Community Hospital of the Monterey Peninsula.

The tiny infant was premature and weighed only three pounds, seven ounces. He was in respiratory distress because his immature lungs could not take in enough air.

Before Joaquin was an hour old, pediatrician Dr. George Penn had arranged to have him transported to the intensive care nurseries of Stanford University Hospital.

By the time Joaquin was two hours old, a Stanford transport team, always on call for such emergencies, was in an ambulance speeding toward the Palo Alto airport to board a plane to Monterey.

During the half hour flight, the team members--Dr. Mary Ann Pass, housestaff pediatrician, Polly Sawian and Judy Hudson, both nurses--were busy planning what they would have to do when they reached Monterey.

The specially designed portable unit that would carry Joaquin had been carefully checked just before the team left Stanford and would be tested again in Monterey. Joaquin's life would depend on the proper functioning of all components: the oxygen ventilation system to help him breathe, the heat warmers to maintain a neutral temperature, the battery powered monitors for heart rate, fluid intake and blood pressure, and the stabilizing unit to prevent injury during sudden changes of speed or altitude.

In the third hour of Joaquin's life, the team arrived at his side. By this time, every breath the infant took cost him a lot of energy and he was in severe respiratory distress.

For the next two hours the team members worked with Monterey physicians and nurses to stabilize Joaquin and prepare him for his journey. They inserted a thin tube into the infant's umbilical artery to measure the concentration of oxygen in his blood. Another tube was passed into his trachea (windpipe) to provide a passage for supplemental oxygen. Then Dr. Pass began to pump pure oxygen into the underdeveloped, overworked lungs, by rhythmically squeezing a bag attached to the end of the tube. She or Miss Sawian would continue to breathe for Joaquin with the bag until a mechanical respirator took over back at Stanford.

- more -

By the time Joaquin was eight hours old, he was in the Stanford Hospital intensive care nurseries, breathing on a respirator and receiving antibiotics for suspected infection.

Over the next twelve days, doctors and nurses, especially trained to care for premature infants, watched over Joaquin around the clock. After eight days, Joaquin was able to breathe by himself, without the assistance of a respirator. In another four days he was well enough to return to the Monterey Hospital where his parents could visit him regularly.

At the age of one month he was strong enough to go home. Today he is in good health and as lively as any four-and-a-half-month old infant.

Joaquin was one of more than 200 infants brought to Stanford last year. Close to 300 are expected this year, according to Dr. Alvin Hackel, co-director of the infant and pediatric transport program.

Most of the children come from communities throughout northern California and Nevada, but infants have also been brought from other western states. Last month a Stanford team traveled to Hong Kong to bring back a seriously ill one-month-old.

Stanford is one of seven regional referral centers in northern California for critically ill infants and newborns, explains Hackel, senior attending physician and clinical associate professor of pediatrics and anesthesia. Each center has a program designed to meet the needs of the region it serves.

At Stanford, about half the infants come from more than 30 miles away. The trend is to use airplane rather than helicopter, notes Hackel, because airplanes are faster and safer. Several of the infants brought to Stanford are more than a month old.

The program, in existence since 1971, is a joint undertaking of the Medical School's Departments of Anesthesia and Pediatrics and the University's Department of Mechanical Engineering. Dr. Philip Sunshine, professor of pediatrics is the other co-director.

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Mailed 4/28/75

1. Dr. Maryann Pass of the Stanford infant transport team and Dr. Robert Penn of Community Hospital of the Monterey Peninsula insert an umbilical catheter in tiny Joaquin Livingston to monitor the concentration of oxygen.

2. Linda Livingston gazes affectionately at her son as he is prepared for his journey to the intensive care nurseries of Stanford University Hospital.

3. In the airplane on the way to Stanford, Dr. Maryann Pass squeezes the bag that does the breathing for Joaquin until he is put on a mechanical respirator in the intensive care nurseries. Nurse Judy Hudson watches the monitors on the transport unit.

(Photos by Ronald Shuman)

4. In the Stanford intensive care nurseries, nurses Penny Cotrell (left) and Barb Matthews look after Joaquin Livingston, born prematurely in Monterey less than eight hours ago.

TO: NEWS BUREAU, TC 135, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD, CA 94305
INFANT TRANSPORT 4/75

Please send: #1, #2, #3, #4, 8" x 10" glossy prints (please circle).

NAME _____ ADDRESS _____

PUBLICATION _____ CITY, STATE _____ ZIP _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Christa Battelle or Spyros Andreopoulos, 415: 497-6911
EDITORS: Photos are available on request.
FOR IMMEDIATE RELEASE
STANFORD –

Can you take the risk of having a child that is mentally or physically defective for genetic reasons?

Many couples who have had one defective child or suspect that they may in the future are turning to the Stanford Genetic Counseling Clinic for advice on this dilemma.

Formed last fall by Dr. Luigi Luzzatti, professor of pediatrics, and Dr. Howard Cann, associate professor of pediatrics and genetics, the clinic counsels up to four couples a week.

Dr. Cann, clinic director, explained the "neutralist" approach taken by the counselors.

"We supply information and the opportunity to discuss it and ask questions," he said. "It's up to the couple to make a decision—whether to have the child, an abortion, or whatever. Many people have difficulties accepting probability information, but we don't tell them what to do. We take a neutral stance."

"If a couple has a 25% chance of having a defective child, we try to put that in clear terms—a chance of one in four. We also say that there is a 75% chance their baby will be normal."

Physicians can now detect 20 to 30 genetic diseases before the child is born by a test called amniocentesis. A sample is taken of the amniotic fluid surrounding the fetus, which also contains fetal cells that have sloughed off.

Dr. Cann suggests that pregnant women over 35 consider undergoing amniocentesis to determine if their baby might have Down's Syndrome, or mongolism.

Statistics show that the normal risk for a 20-year-old mother is less than one chance in 1,000. For a woman of 45, the risks shoot up to one chance in 50 that her child will have Down's Syndrome.

This test can also determine the sex of a child when parents fear the possibility of a sex-linked inherited disease.

Cells from the fetal amniotic fluid can be "cultured" and grown so that the presence of any one of 20 rare biochemical enzyme deficiencies can be detected and possibly treated in the newborn infant.

The procedure is performed in the obstetrics clinic at the Medical Center.

Dr. Cann stressed the genetic counseling clinic's policy of preparing couples so that amniocentesis is decided upon with "eyes wide open."

"They must know why the test is being done," explained Cann. "They should understand what the risk of complication is. It's actually very low for this test—fewer than one amniocentesis in 200 will develop complications."

Should the result of the test indicate the child will be defective, many couples consider abortion.

"We in no way coerce couples to have an abortion," stressed Dr. Cann. "It's their own decision. We won't withhold amniocentesis if a couple says they won't undergo abortion."

The counseling sessions often last one to two hours, and both members of a couple are encouraged to attend.

(more) cr 4/22/75

Each couple is simultaneously counseled by one physician and Rose Grobstein, chief of pediatric social work.

This doctor-social worker team is helpful in situations where the parents of a defective child have defensive or guilt feelings they haven't come face-to-face with successfully.

A correct diagnosis is of the utmost importance in genetic counseling. Dr. Cann described the extensive search for medical verification and completion of a family tree to establish the risks involved for a couple interested in childbearing. This is important when inheritance of a disease is feared.

Often, Cann happily reports, "we are able to rule out the probability of genetic disease. We do a lot of work reassuring people."

The information a couple receives during a session is structured into two areas.

The counseling team first outlines the "recurrent risk," or probability that the couple will have a genetically defective child.

They also explain the "burden" that is to be expected. "Burden" describes what the life of the child and parents could be expected to be like—how long the child might live, how defective it would be, what the financial and emotional costs to the parents, child, and society would be.

People often ask about the effects of "street drugs" on genes.

According to Cann, "there is controversy over whether pot and some other street drugs cause deformed babies. We have no convincing evidence that they do."

He added, "We tend to be reassuring to women who have been exposed to X rays before conceiving or during pregnancy. The levels of exposure are almost always low. There is little evidence that the usual amounts of radiation used in diagnosis injures the fetus."

Dr. Cann criticized the temporary moratorium by the Department of Health, Education, and Welfare on fetal research.

He pointed out that though sickle-cell anemia, hemophilia, and other blood diseases are presently undetectable in the unborn child, a new, untested method utilizing a tiny telescope and a needle can extract blood from the fetus. This procedure may have potential in the detection of fetal blood diseases.

"But we're stuck because the moratorium prevents development of this method," he explained. "If we tested a fetus that a couple was considering aborting because of one of these possible diseases, only to find that it was healthy—couldn't that be considered saving the life of the fetus?"

The genetic counseling clinic at the Stanford University Medical Center is part of a popular surge of these clinics. It is one of 50 in California alone.

At least three universities award a degree for "genetic assistant" to those trained in human genetics, psychology, and social work counseling.

Dr. Cann was especially enthusiastic about such courses as "Medical Genetics" taught to medical students at Stanford Medical School.

"We want to teach doctors about genetic counseling. We hope that patients would get more out of a session with their family doctor than traveling 200 miles to see some guy they've never met at a university."

He predicted an increase in the number of genetic counseling clinics such as the one at Stanford.

"There is great interest in genetic disease now," he stated, "because so much more progress has been made toward understanding it."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Christa Battelle 415: 497-6911
or
Spyros Andreopoulos

STANFORD--Stanford University scientists have developed a prototype machine capable of constructing computer images of thin cross-sections of the body.

Called a computer tomographic X ray scanner, the instrument makes use of a fan of X-ray beams that travel through a patient and are detected by a Xenon multi-wire proportional counter. The computer then constructs the projections of the X rays into density distributions.

The result is a cross-sectional view that utilizes 32 colors to indicate different densities. Tumors and cancers show up as different densities than the soft tissue around them.

Dr. Douglas Boyd, one of the developers of the instrument, pointed out that the scanning time is only 10 seconds--short enough that a patient can hold his breath during the scan. This lessens the possibility of respiratory movement.

The Stanford physicists, radiologists, and electrical engineers who collaborated on the X ray scanner during the last four and a half years hope that it will be instrumental in the early diagnosis of cancer.

Dr. David Pistenma, radiologist, outlined the possible contributions of the scanner to medical technology.

"The scanner will improve detection of tumors. Most tumors today are not detectable until they reach a size of about 5-10mm. The scanner will hopefully pick up tumors that range from 1-2mm."

Dr. Pistenma added that improved diagnostic information would be of value to all physicians who rely on diagnostic radiology, including internists and orthopedic surgeons.

"The scanner can locate tumors in 3-D. This is important in planning treatment for cancer, because radiotherapists need to know where others organs in the body are in relation to the tumor itself. Say you have a tumor in the pancreas--the kidney, liver and spinal cord must be located because they are radiosensitive organs."

The X ray scanner's ability to pinpoint the exact location of tumors in soft tissue will aid therapy with the newly developed pion generator now undergoing testing. The generator explodes cancer cells by bombarding them with tiny subnuclear particles called "pimesons," and it is is expected to be used in patients in three to five years.

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222--Computer X ray Scanner

Projected costs for the scanner are set at $50,000 to 75,000. Dr. Boyd is uncertain as to how much time will be needed for refinement of the scanner.

The X ray scanner is expected to be an improvement over the British-designed EMI Brain Scanner, which produces cross-sections of the brain only.

The EMI scanner uses X rays and a computer to construct black and white density patterns of the section. One of the difficulties with the EMI scanner is it's four and a half minute scan time, the length of which results in body movement in the patient.

Dr. Boyd explained the X ray scanner's advantages over the EMI instrument:

"Our machine looks at the entire body, not just the brain. We can do three-dimensional soft tissue cross-sections, measure a succession of slices, and pinpoint a soft tissue tumor--all within 10 seconds."

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Mailed April 14, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University Hospital and Clinics employees in five voting groups have rejected union representation for purposes of collective bargaining.

The elections were conducted by the National Labor Relations Board, and the votes were counted Saturday (April 12).

More than a 1,000 of the 1,200 eligible employees in four voting groups cast secret ballots Thursday, Friday, and Saturday. A total of 846 votes were against union representation.

The employees included: 1) allied health professionals, 2) service, technical, patient care, and plant clerical, 3) pharmacists, and 4) licensed vocational nurses.

"I am extremely pleased that about 85 percent of the eligible voters turned out to cast ballots and that the preference expressed was so overwhelmingly clear," said Paul Hofmann, director of the Hospital and Clinics.

The fifth group, interns and residents, received ballots by mail April 1 and returned them by Friday evening. They were voting on whether or not to be represented by the Stanford University Housestaff Association. It lost by 144 voting for the association and 150 against.

Of the other three labor organizations seeking to represent hospital and clinics employees, United Stanford Employees, Local 680 of the Service Employees International Union, AFL-CIO, received 98 votes; Stanford United Medical Technologists, 56 votes; and California Licensed Vocational Nurses Association, 16 votes.

A fifth union, the Stanford University Medical Center Engineering Association, seeking to organize maintenance employees withdrew from the election earlier.

According to John J. Schwartz, counsel for medical affairs, United Stanford Employees also attempted to withdraw on the eve of the election, but the National Labor Relations Board denied its request.

U.S.E. circulated leaflets Thursday urging its members to boycott the elections by casting blank ballots. Of the 20 void ballots, approximately 10 were blank, Schwartz said.

Jim Berk, U.S.E. president, Thursday was quoted in the Stanford Daily that the union had filed an unfair labor practices charge against the hospital with the San Francisco office of the NLRB.

Schwartz said "there is no merit to the charges."

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222---NLRB Election

Following is detail about the NLRB election and how groups voted:

VOTING GROUP 1--PHARMACISTS (eligible voters 15)

Stanford United Medical Technologists	1
United Stanford Employees	1
Neither	6

GROUP 2--SERVICE, TECHNICAL, PATIENT CARE & PLANT CLERICAL (eligible voters 983)

United Stanford Employees	94
No Union	700

GROUP 3--ALLIED HEALTH CARE PROFESSIONALS (eligible voters 172)

Stanford United Medical Technologists	55
United Stanford Employees	3
Neither	119

GROUP 5--INTERNS AND RESIDENTS (eligible voters 368)

Stanford University Housestaff Association	144
No Union	150

LICENSED VOCATIONAL NURSES (eligible voters 46)

United Stanford Employees	0
California Licensed Vocational Nurses Association	16
Neither	21

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Mailed April 14, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Sammy King, wife of former West Helena resident Robert King is reported in good condition at Stanford University Hospital where she underwent a heart transplant operation last week.

The operation was performed Friday, April 4, by a team headed by Dr. Norman Shumway, chief of cardiovascular surgery. Mrs. King is the 84th patient to receive a new heart at Stanford in California.

She is the daughter-in-law of Mr. and Mrs. J.M. Mathis of West Helena. The King's son Robby, age two, is staying with King's sister Beth Smith, also of West Helena, while the couple are at Stanford.

The King's are from San Antonio, Texas, where he is a communications analyst with the U.S. Air Force.

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Mailed Wednesday, April 9, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos or Hali Wickner 415: 497-6911

STANFORD--The problems of the terminal cancer patient is the topic of a talk by Orville Kelly of Burlington, Iowa, Friday (April 11) at 12 noon in Room M104 of the Stanford University School of Medicine.

Kelly, a 44-year-old cancer patient, is founder of "Make Today Count," an organization with chapters all over the country. It is made up of cancer patients, their families, persons with other incurable diseases and community members.

Their purpose is to share the problems of learning to live with a disease and to try to cope with them, Kelly said.

Kelly, former editor of a weekly newspaper in Illinois, learned that he had cancer in 1973. It was diagnosed as a lymphocytic lymphoma.

After surgery, he said, one doctor gave him an estimate of his time left, three years at the most.

He experienced feelings of isolation. The doctors were treating him from a medical standpoint. A minister or two had discussed the hereafter with him. He had no one to talk to about his present problems.

Kelly's answer was the founding of "Make Today Count," he said.

His Stanford appearance is co-sponsored by the Medical Center's allied health council and the Department of Family, Community and Preventive Medicine.

It is open to the public. ###

STANFORD--Dr. Stanley Cohen, associate professor of medicine at Stanford University School of Medicine has been named a faculty scholar of the Josiah Macy, Jr. Foundation of New York for the 1975-76 academic year.

The award, made annually by the foundation to support research of medical and public health scientists on sabbatical leave, was announced recently by Dean Clayton Rich of the School of Medicine, and the Macy Foundation Board of Directors.

Cohen will spend part of his sabbatical year at the John Innes Institute in Norwich, England, where he will study the possible involvement of bacterial plasmids in antibiotic production by streptomyces, a soil bacteria. Plasmids are extrachromosomal elements associated with a variety of hereditary activities in bacteria.

Head of the Division of Clinical Pharmacology, Cohen is a 1960 graduate of the University of Pennsylvania School of Medicine. Before joining the Stanford faculty in 1968, he was at the Albert Einstein College of Medicine in New York. ###

Mailed Tuesday, April 8, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Helen M. Ranney, professor and chairman of the Department of Medicine at UC-San Diego School of Medicine, will speak as second Katharine McCormick Distinguished Lecturer at Stanford University School of Medicine on Thursday, April 10.

A noted hematologist, Dr. Ranney will discuss "The Sickle Polymer" at 4 p.m. in Room M106. The lecture is open to physicians and health professionals of the community.

Dr. Ranney has an international reputation for her work in molecular genetics and hematology. A native of New York, she received her A.B. from Barnard College, Columbia University, and her M.D. in 1947 from the College of Physicians and Surgeons, Columbia University.

She was appointed head of the Department of Medicine at UC-San Diego in 1973, having served as professor of medicine at State University of New York at Buffalo and at Albert Einstein College of Medicine.

She is president-elect of the Western Association of Physicians, and has served as president of the American Society of Hematology. In 1972 she received the Martin Luther King Jr. Medical Achievement Award for outstanding contributions in the field of Sickle Cell Anemia.

The McCormick Distinguished Lectureship, established to bring outstanding women physicians and scientists to the School of Medicine, honors the late Katharine D. McCormick who left a $5 million bequest to Stanford in 1969 particularly "for the encouragement and assistance of women in medicine."

The Professional Women of Stanford Medical School invite those attending to a reception in the courtyard immediately following the lecture.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University School of Medicine has received a $500,000 gift from Johnson & Johnson to establish an endowed faculty chair in the Department of Surgery at Stanford.

The gift was announced Wednesday (May 27) by Richard B. Sellars, chairman of the Board of Directors of Johnson & Johnson in New Brunswick, New Jersey, and Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

The chair will be known as the "Johnson & Johnson Chair in Surgery" and will be held by a faculty member in that department. The holder of the new chair will be named in the near future, Dr. Rich said.

The Johnson & Johnson grant is one of several awarded by the diversified health care firm to medical schools to help improve the quality of patient care, reduce hospital costs and develop a high level of medical proficiency and skill. Mr. Sellars commented that the urgent need for more trained physicians in today's overburdened health care system prompted the company's contributions.

In addition to the new chair of surgery at Stanford, Johnson & Johnson has endowed chairs of surgery at Harvard, Columbia, New York University, Cornell Medical College and the New Jersey College of Medicine and Dentistry.

Dr. Rich said the new chair will assist the Department of Surgery in adding to its distinguished faculty. The department has had a solid tradition of academic excellence, graduating surgeons who now head departments and units throughout the United States.

The department has worked vigorously to develop strong clinical services, aimed primarily at introducing medical students to the best and most advanced surgical treatment and care of patients, Dr. Rich said.

The university surgeons have also developed a strong community reciprocal relationship, an accomplishment he values highly.

Dr. Rich said more than 180 community practitioners contribute their skill, time and interest to surgical teaching programs.

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Mailed Wednesday, May 28, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

EDITORS: Copies of The Stanford Magazine are available if not included with story.

STANFORD--A Stanford University psychiatrist says some 0.3 percent of the people in the United States--almost as many individuals as are schizophrenics--are incapacitated by fear and phobia.

"Among the common fears," says Dr. Stewart Agras, "fear of snakes, heights, storms, doctors, sickness, injury, and death lead the list."

But the commonly occurring fears and the less common phobias pose a fascinating research and treatment problem which is only gradually being solved, writes Agras in the current issue of The Stanford Magazine, published by the Stanford Alumni Association.

Phobias of adult life tend to be chronic, severely disabling and are difficult to treat by traditional psychotherapy, notes Agras. It is estimated that there some 635,000 phobics in this country.

But successful use of behavior modification techniques might be an approach to the problem. This approach, based on reward and punishment, has only begun to be explored in psychiatric treatment, Agras said.

"The technique," he explained, "simply boils down to the way in which the patient is induced to go out and actively confront the phobic situation."

Agras described the case of Jane, a patient treated successfully with behavior modification techniques.

Jane suffered from a condition called agoraphobia, also termed the "housebound housewife" syndrome, even though it affects almost as many men.

The patient was unable to leave home shortly after she married. Just a few yards away from her house, she would become terrified, imagining she might faint, choke, or even die if she did not return home at once.

Jane was first treated with psychotherapy and medication, but neither helped. Then, Dr. Agras and his colleagues tested a simple treatment approach, "the effect of a therapist's paying attention to and praising the patient's progress."

"We laid out a one-mile course from the hospital to downtown, marked at about 25-yard intervals so that the distance walked alone from the hospital could be measured," Agras said.

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"The patient was asked to walk as far as she could without undue fear. If the patient walked each day further than before, she was praised enthusiastically. If not, the therapist was silent.

As Dr. Agras hoped to prove, the patient gained self-confidence and walked further. But when praise was withdrawn in later sessions, her phobia returned.

"This reversal of progress demonstrated that praise was responsible for the therapeutic effect," Agras said. "When praise was started again, the patient was very rapidly able to walk alone downtown."

Eventually the patient felt quite independent, and praise was withdrawn much more slowly until she completely recovered.

Fears start in childhood, said Agras. Parents and children have similar fear patterns, suggesting they are inherited or acquired by example.

The whole idea of being fearful makes sense, Agras explained, because it protects a species against danger. Fear leads to fast action and flight, and these were useful to primitive man.

Studies have revealed that girls are more fearful than boys, that socioeconomic level makes no difference, and that there is no relationship between a number of fears and problem behaviors such as bedwetting or nightmares, he said.

Phobias are presumably common fears which intensify rather than follow the normal course of gradual disappearance, Agras said. The reasons are not known. But perhaps environmental events such as fearful parents or accidental frightening incidents may help intensify fears into phobias.

"Once a phobia becomes intense," Agras said, "the phobic expends so much energy avoiding the feared situation that it ensures its tendency to persist."

Fear of doctors starts early in childhood, Agras said, "and is probably reinforced by the occasional painful visit."

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Mailed Wednesday, May 28, 1975

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD –

If Canada's experience is any guide, the advent of national health insurance will have only a relatively modest impact on use of medical services in the U.S.

Rapidly rising costs will remain a persistent problem, and defects in the distribution and organization of health services will demand concerted corrective efforts.

These conclusions are reached in a new book, *National Health Insurance: Can We Learn from Canada* (304 pp., cloth $10.95, John Wiley & Sons), edited by Spyros Andreopoulos, information officer of the Stanford Medical Center. It includes six invited papers and discussion highlights on this topic from the Sun Valley Forum on National Health.

Canada's experience includes two major lessons for the U.S., Andreopoulos declares: "The main objective of a national health insurance program is not to control costs, but to remove barriers to health care.

"If doctors and health services are badly organized, national health insurance will only reveal the magnitude of the problem and lead to a determination to do something about it. . . . Perhaps without going through such an experience once, it is unrealistic to expect professionals, providers, and politicians to agree on methods and goals.

"Canada is now looking beyond the problem of organization of health services to find ways to a healthier country. In this respect, Canadians are perhaps 20 years ahead of the U.S."

The Canadian effort now is exploring three perspectives: 1) human biology, including diseases which are part of an individual's inheritance or genetic makeup; 2) environmental issues; and 3) lifestyle, personal habits which create self-imposed health risks, such as smoking.

"These are threats to health that an organized health system can do little more than serve as a catchnet for its victims," Andreopoulos notes.

Canada now ranks among the world leaders in several indices of health care, he notes. Compared with Australia, Denmark, Sweden, the United Kingdom, and the U.S., its hospital and medical insurance coverage is equalled only by Sweden and Britain; it leads in physicians per thousand population; and it is second only to Australia in nurses per thousand people.

But the Canadian system is not problem-free, he adds. Because they took no efforts to control the type, quantity, and quality of hospital services and made no attempt to determine the number and types of physicians which would be needed, "Canada today has too many specialists and not enough primary doctors. . . .

"The annual rate of cost escalation has been between 12 and 16%, which is far in excess of the economic growth of the country. . . .

"Canada now finds itself with an excess of acute care beds, coupled with a shortage of alternative treatment, such as convalescent and custodial care facilities.

(more)

"Medical services are not yet equally accessible to all segments of the population because doctors prefer to practice in cities, and it is difficult to attract them to rural or isolated locations."

For every new physician, the system now incurs about $50,000 annually for his services and costs, plus $100,000 for inpatient hospital care, laboratory, and special nursing work. "Consequently, some provinces now have considered curtailing the doctors' freedom to practice in any one province," he notes.

In a forward to the volume, Dr. Philip R. Lee, director of the health policy program at the UC-San Francisco School of Medicine, notes that "increasing the supply of physicians to improve their geographic distribution and to restrain cost increases through competition among fee-for-service physicians is likely to fail on both counts.

"After more than a decade of experience with detailed budgets and incentive reimbursement experiments for hospitals, Canadian officials have adopted a strategy to limit the future establishment of hospital beds as the best means of cost control. . . .

"Although different conclusions may be drawn from this book, it represents a milestone in the attempt to place the debate on national health insurance in the U.S. on a more rational basis."

Forum participants agreed on the following conclusions, among others:

1. Introduction of national health insurance in Canada. . .did not appreciably alter the nation's basic structure for provision of health care.

2. Removal of financial barriers to medical care improved equality of access and removed the fear of financial catastrophe caused by illness. . .the poor in Canada have been going to doctors earlier and more often.

3. The great majority of the Canadian public appears to have perceived neither a reduction nor an improvement in the quality of medical care [since national health insurance].

4. There is no evidence that national health insurance has impaired the physician-patient relationship.

5. Introduction of national health insurance reduced resistance to [such pressures as wage increases for unionized, non-physician health personnel, introduction of expensive new medical technology, and lack of effective incentives to control costs] and to that extent contributed to increases in aggregate costs.

6. Fixed fee schedules may have inhibited sharper escalation of physicians' incomes, but they have not led either to a leveling off of physicians' incomes or to a significant containment of total medical services expenditures.

7. Professional peer review of physicians' charges has worked satisfactorily to detect and control excessive [use] and billing and fraudulent or inappropriate claims, but has not been effective in containing the multiplication of units of care under the fee-for-service system.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--From modest beginnings three years ago, the American Red Cross-Stanford University Blood Center is steadily developing into a major blood procurement-research facility.

The center, located near V.A. Hospital in Palo Alto, is now supplying approximately half of Stanford University Hospital's blood needs, or 16,000 units a year, according to Dr. Carl F. Grumet, medical director of the blood center and the hospital transfusion service, and clinical assistant professor of pathology.

The remainder of the hospital's blood is procured from Central California Red Cross in San Jose and from Peninsula Memorial Blood Bank in Burlingame.

However, prior to 1972 Peninsula supplied nearly all of the blood used at Stanford Hospital, including Hoover Pavilion, and at Children's Hospital at Stanford. Some blood was also drawn at the hospital transfusion service in the clinical lab.

"The whole idea (for the blood center) was to combine an efficient Red Cross blood procurement and blood donation service with Stanford Medical Center's research and technical expertise," Grumet explained. "It is our responsibility to not only provide the best current blood products available, but also to do the development, testing and application of new methods which are beyond the capability of community blood banks.

"The present arrangement with our blood center is far superior to the old system," he continued. "For example, one donor can give four units of platelets in a single session with a specialized machine we now use. Furthermore, we now have better technical distribution as well as a frozen blood depot where we can store rare blood types."

He noted that with expanded surgical programs and progress in the use of blood components in cancer and leukemia therapy, Stanford Hospital's blood requirements have increased significantly.

"For example, we now use more platelets in one week than we did during all of 1965," he added. "In addition, research is now being carried on in such areas as immunotherapy, coagulation and tissue typing."

When blood is needed a request is sent to the blood center which then ships it to the hospital transfusion service on the second floor. The hospital is then responsible for cross matching, dispensing and regulating the blood units.

Under the working arrangement, Grumet said, the hospital pays the blood center for its processing costs. The hospital, in turn, charges the same costs to the patients. The entire cost of the blood is therefore limited to the laboratory expenses incurred in processing, without needless replacement penalty fees.

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22--Blood Center

Volunteers, technologists, administrators and some research personnel at the blood center are affiliated with Red Cross while physicians and other research staff members are on the university payroll. The volunteers, who number 120, put in between 1,700 and 1,800 hours a week.

Harold J. Horoho, blood center adminstrator, estimates it will take at least two years to "build up a good (blood) reserve." He said he hopes by that time the center will be able to handle 20,000 units of blood a year.

Meanwhile, Horoho is more concerned with keeping up with the monthly demand, which includes blood for those persons with the more rare blood types and for leukemia patients.

A major advance in meeting this need has been the Model 30 Blood Processor, which was placed into operation at the center late last year. The processor is able to separate plasma from platelets, which are needed by hemophiliacs

The machine, which is designed to provide "compatible platelets" to a blood recipient, collects blood in a plastic bowl that spins at 4,800 revolutions per minute This drives the lighter plasma to the top, and with the push of a button, the plasma flows into a plastic bag Once the blood turns opalescent another button is pushed and that flow is sent into a second plastic bag, containing the platelets.

Another button is then pushed sending the collected plasma back into the donor's body. For one pint of blood the platelet collection process takes approximately 14 minutes and single donors can safely give platelets from between six and eight pints of blood (per session)

Since platelets are replaced by the body rather quickly any healthy person is capable of donating platelets every other day if it were necessary, Grumet noted

The blood processor is also capable of separating white cells, which are needed when suppressive drugs given a leukemic patient kill off his own white cells.

Donated blood is actually broken down into four component parts at the center, including red cells cryoprecipitate, platelets and plasma. Hence, one donated pint can be used to treat four different patients.

Grumet noted that none of the donors are paid. They are strictly volunteer and explained that a "strikingly high incidence" of hepatitis is encountered with paid donors. "So we are clearly better off with volunteers," he said.

Horoho noted that less than three percent of the population actually donates blood on a regular basis and that a "high percentage" of these donors are repeaters.

"This can be difficult for all of us," he said "For instance, we have an extremely high need for type O, RH negative blood for the newborn nurseries It is a chronic shortage and we have to continually call persons we know who have this type of blood Recently we called 50 women with this type and only one showed up."

Horoho said most healthy people can donate every eight weeks and noted that most people later say their first donation was the hardest "About 90 percent of them tell us the pain was not nearly what they thought it would be."

Although the center frequently calls previous donors with rare blood types, many persons visit the center on their own or go specifically to donate for a family member or friend.

The center offers a variety of blood coverage plans for donors and their families, ranging from one year to lifetime coverage, depending on the amount donated Plans for blood coverage are also available to those persons unable to donate, but who are willing to give volunteer service to any Red Cross program instead.

Mailed 5/20/75

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A highly successful heart valve developed from a pig's heart is now being used in humans, according to heart surgeons at Stanford University Medical Center.

The valve has had no mechanical failures, and its use has resulted in a low incidence of thromboembolism, a major cause of death following valve replacement.

Dr. Edward Stinson, assistant professor of surgery, said that extensive clinical tests in animals at several centers in the United States preceded use of the valve in humans.

He said pig valves are now used widely in U.S. medical centers and in Europe for either mitral or aortic valve replacements or both, with excellent results.

A total of 200 patients received mitral valve replacement with pig valves at Stanford between 1971 and 1975. An additional 126 patients had aortic valve replacements, and 35 patients underwent replacement of both mitral and aortic valves.

So far pig valves have resulted in better than 95 percent survival rate for patients who had their heart valves replaced. Practically all of the patients enjoyed an improvement in the functioning of their hearts.

The mitral and aortic valves control the flow of blood in and out of the heart. When they become diseased, the heart becomes sluggish and the patient, unless the situation is corrected, eventually dies.

In a report in the Annals of Thoracic Surgery earlier this year, Dr. Stinson said the incidence of clots in the blood stream is far lower than that which is found when other mechanical valves are used.

The device consists of a preserved pig aortic valve mounted on a flexible polypropylene platform covered with Dacron.

Dr. Stinson and his co-authors, Drs. Randall B. Griepp and Norman E. Shumway have concluded that pig valves provide "a technically and functionally satisfactory valve substitute...."

Stinson said the advantages to the use of tissue valves from pigs include the elimination of the usually necessary anticoagulants and the low irritation factor in blood.

He also said there has been only one mechanical failure in patients who received pig valves at Stanford and there has been no tissue rejection.

The pig valves are preserved in a chemical fixative, glutaraldehyde, and are now available commercially for use by open heart surgery centers, he said. ###

Mailed Monday, May 19, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--The deficit for operating Stanford University Hospital's hemodialysis center was significantly reduced when federal officials increased payments to Medicare patients undergoing chronic and home training dialysis treatments, it was announced today (May 9).

According to Paul Gallagher, unit manager of the hemodialysis center, the Bureau of Health Insurance increased its payments by an average of $32 per treatment or dialysis, thereby reducing the gap between what Medicare will pay for patients with chronic renal disease and what their treatment costs Stanford.

Presently, treatments run about $220 per session with Medicare now covering about $177 of that cost.

Medicare's decision will reduce Stanford's total deficit for running the hemodialysis operation from about $200,000 to approximately $118,300, Gallagher said.

He said the government's decision to increase its allocations resulted only after Stanford had filed a request (called an exception) with Medicare. He said another exception request will be filed, probably within a month, because of continuing cost increases. The second exception would hopefully reduce the deficit further, Gallagher said, and perhaps eliminate it altogether.

Several years ago the federal government expanded its Medicare laws to grant full coverage for practically everyone with chronic renal disease, regardless of age.

Stanford's new, one-story hemodialysis center was opened in January at a cost of about $180,000. It is presently handling between 35 and 40 patients, who need a combined total of 5,000 treatments per year.

Stanford officials had expressed concern that the hemodialysis center might have to be closed if the huge deficit could not be reduced. However, Gallagher said he is encouraged by Medicare's action and said he is hopeful another exception will be approved by the government.

Dialysis treatments are necessary for persons with kidney failure. In some cases three treatments are required each week. The dialysis process involves purifying the blood of uremic toxins by machine with each session usually requiring six hours.

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Mailed Friday, May 9, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Stanford researchers have found that it is safe to place premature infants on plain or gently rocking waterbeds inside the incubator.

In fact, a recent study shows that infants placed on oscillating waterbeds had significantly fewer apneic spells, or temporary cessations of breathing, than did infants in standard incubators.

Results of more than three years of study with waterbeds in the Stanford Intensive Care Nurseries were presented by Dr. Anneliese F. Korner, adjunct professor, at a meeting sponsored by the Department of Psychiatry and Behavioral Sciences Wednesday, May 7, at the School of Medicine.

Studies were based on 10 years of research with infants and rat pups which highlighted the importance of movement stimulation for the developing infant.

Movement stimulation in the uterus is caused by the fetus' movements in the amniotic fluid and by his mother's movements. The researchers' aim is to facilitate the infant's maturation and development by using a waterbed to make up for such stimulation missed by the prematurely born infant.

It has been found by Dr. Korner and her collaborators that such movement stimulation is much more potent in bringing about behavioral and developmental changes than is touch and body contact, long considered the most important form of stimulation for very young infants.

Two kinds of waterbeds were developed at Stanford. One allows the baby to experience the rocking produced by his own movements. The other waterbed provides, in addition, gentle, irregular oscillations in the rhythm of maternal respirations.

The waterbeds are the same size as incubator mattresses, only deeper. A plastic tray contains the bag, which is filled with two gallons of warm water. The temperature is maintained by the incubator heating system.

A highly elastic membrane covers the unit. Oscillation is provided with the help of a respirator.

The units are adapted to all medical procedures commonly used in an intensive care nursery, such as I.V. or oxygen administration, and are designed for hospital use only, not for home use.

In their controlled study, the researchers found that premature infants placed on the gently oscillating waterbeds for seven days had pulse and respiration rates, temperature, weight changes, and oxygen need similar to those in ordinary incubators. There were no indications that the oscillating waterbed made the infants "seasick."

But significantly fewer apneas were found in the babies on the oscillating waterbeds than among babies in the control group.

By the sixth day after birth, the incidence of apnea decreased among the babies placed on the oscillating waterbed, whereas it continued to increase in the control group.

Infants participating in the study suffered mild respiratory distress and apnea, mild hypoglycemia and hypocalcemia. Infants with moderate or severe respiratory distress, and infants with congenital anomalies were not included in the study.

According to Dr. Korner, the studies indicate that it is safe to proceed with further research to assess not only the clinical, but also the developmental effects of this change in incubator environment.

Further studies at Stanford will also help determine whether, once an infant has severe apnea, placement on the oscillating waterbed will shorten the course of this disorder.

The non oscillating waterbed was also found clinically useful particularly in the care of infants recovering from abdominal surgery.

In addition, a study of the developmental effects of waterbed flotation on premature babies has begun in collaboration with the Department of Pediatrics at Kaiser-Permanente Medical Center, Santa Clara.

The Stanford work is supported by grants from the Grant Foundation, Inc., the National Institutes of Health, and the Boys Town Center for the Study of Youth Development at Stanford. –30– cr 5/7/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911
EDITORS: Details about Dr. Moos' work follow asterisks.
FOR IMMEDIATE RELEASE
STANFORD –

Dr. Rudolf H. Moos, Stanford professor of psychiatry and behavioral sciences and director of the Stanford Social Ecology Laboratory, has been awarded the Hofheimer Prize by the American Psychiatric Association at its annual meeting in Anaheim Wednesday, May 7.

The prestigious prize is awarded annually for outstanding psychiatric research. Moos was honored for his book, *Evaluating Treatment Environments: A Social Ecological Approach,* which describes his work in the new field of social ecology, the study of human environments.

Moos, who received his Ph.D. in psychology from UC-Berkeley, has been at Stanford since 1962. He is director of Stanford's psychiatry research training program, and chief of psychiatric research at the Veterans Administration Hospital in Palo Alto, where the Social Ecology Laboratory is located.

This award brings to four the number of Stanford psychiatry faculty members who hold the Hofheimer Prize. Others are Dr. Albert Stunkard, who won it in 1960, Dr. Seymour Levine, 1961, and Dr. William C. Dement, 1964.

The APA award is named in memory of Lt. Lester N. Hofheimer who died in action in World War II.

* * *

Can classroom environment change students' attitudes or achievement? Do some work environments cause more absenteeism or health problems than others? Will a college student's choice of dorm affect his behavior?

Designing ways that individuals can answer these questions has been the concern of Stanford's Social Ecology Laboratory.

Dr. Moos' best known contribution to the field of social ecology has been a series of "social climate scales." These are designed to enable staff, patients, employees in a particular environment, such as a hospital setting, to understand their environment better, its effects, and how they might change it.

"There has never been a way of systematically describing the environments in which individuals function—their 'ecological niche.' Why is it that an individual student does well in one classroom, but has problems in another? Systematic descriptions of the social environments of the two classrooms may help answer this question," says Moos.

The series of questions in the scales deals, for example, with persons' involvement, the support they receive in the environment, spontaneity, clarity of the program, as well as how they conceive of an ideal environment.

The information can then be returned to the people to motivate them to try to change their environment.

"The scales," says Moos, "show that environments, like people, have unique personalities. Just as some individuals are usually experienced by their associates as warm and supportive, some social environments are felt to be supportive by their members. Some individuals are dominating; similarly some environments are extremely controlling."

(more) cr 5/7/75

Use of the scales, he says, "could enable the clinician, physician, or social worker to aid their clients in choosing environments or in improving them. The systematic measurement of social climates could become an important aspect of the work of the diagnostician."

Moos' initial work involved evaluating psychiatric treatment environments. From that work he found that a wide variety of different environments could be described using the same dimensions.

Scales have been developed not only to measure the environments of hospital-based and community-based psychiatric treatment programs, but also juvenile and adult correctional facilities, military companies, university student living groups, junior high and high school classrooms, industrial and work environments, and families.

Moos has found that "psychiatric wards that emphasized autonomy and personal problem orientation have patients who like the staff and feel they can develop their abilities and increase their self confidence."

In military companies, climate was related to total performance on tests at the end of basic training, and to the AWOL and sick call rate. Companies with excessive sick call lists, for example, were also those where men felt that the work was repetitious and boring and without opportunity for leadership.

Moos also hopes that his scales will enable people to have better information about an organization before they get into it.

College catalogs, for example, provide little or no information about the social atmosphere even though this may affect student satisfaction and development. And the social climates of different work groups, he says, may be as important for job morale as rates of pay and fringe benefits.

Moos is the author of *Evaluating Treatment Environments,* 1974; coeditor of *Issues in Social Ecology,* 1974, and *Health and the Social Environment,* 1974; and author of the soon to be published *Evaluating Correctional and Community Settings.*

Two other books are forthcoming: *Human Adaptation: Coping with Life Crises,* and *The Human Context: Environmental Determinants of Behavior,* in which he will review the impacts of architecture, weather, population density, noise and air pollution, among others.

Moos' work is supported by grants from the National Institute of Mental Health and from Veterans Administration Research Funds. In addition, he is now involved in a study of the effects of alcohol treatment programs, work supported by the National Institute on Alcohol Abuse and Alcoholism.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Bob Tapia, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. John C. Hershey, assistant professor of management science in the Health Services Administration program at Stanford School of Medicine, has been named a Robert Wood Johnson Health Policy Fellow for 1975-76.

The HSA program is run jointly by the Medical School and Stanford Graduate School of Business.

The fellowship was established in 1973 by the Institute of Medicine, National Academy of Sciences, with a grant from the Robert Wood Johnson Foundation.

As one of six persons who will serve as Johnson Fellows during 1975-76, Hershey will work with members of Congress in health care-related legislation, policies, and programs. The fellowship is conducted in cooperation with the American Political Science Association.

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FOR IMMEDIATE RELEASE

STANFORD –

Stanford Hospital Director Paul B. Hofmann will participate in the King's Fund International Seminar for Administrators June 2-5 at King's Fund College in London, England.

Hofmann is one of seven American administrators invited to participate in the seminar which will also include representatives of Canada, Australia, and the United Kingdom.

Each of the participants will present a paper on the administrator's role as it applies to the standards, assessments, and evaluations of health services. Hofmann's paper is entitled "The Administrator's Role as a Catalyst in Establishing Standards of Institutional Performance."

–30– cr

5/6/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Dr. Leonard Hayflick, professor of medical microbiology, has been named to the newly formed National Advisory Council on Aging of the National Institutes of Health.

His appointment was announced recently by Secretary of Health, Education and Welfare Casper Weinberger. According to Weinberger the Council will "advise, consult with and make recommendations to the Secretary on programs relating to the aged" and to the recently established National Institute on Aging.

Hayflick is one of 12 appointees, who include lay people as well as physicians and scientists.

A leading researcher on the biology of aging, Hayflick is noted for his discovery that normal human and animal cells have a finite lifespan. He found that the ability of cells outside the body to divide decreases with the age of the donor. Their "genetic program" is played out and the result is aging.

Hayflick received his Ph.D. in medical microbiology and chemistry from the University of Philadelphia in 1956. He has been honored by numerous universities and government organizations for his contributions to the understanding of the aging process.

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Mailed Monday, May 5, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Nominations are being accepted for members of the Stanford University faculty to serve as University Fellows in 1975-76.

All members of the Stanford community are eligible to nominate candidates and nominations should be sent before May 15, 1975, to University President Richard W. Lyman.

Nominees should be men and women whose future at Stanford appears bright and who have promise of not only becoming distinguished teachers and scholars but also academic statesmen willing to involve themselves in university-wide problems.

Of the six current fellows, three will continue in the program during the 1975-76 academic year. Three additional faculty members will be elected as fellows beginning in the fall. Those fellows remaining are Paul A. Brest, law; Alexander L. Fetter, physics; and Lee H. Yearley, religious studies.

The University Fellows program was initiated in 1969 as an effort to encourage faculty members to examine and work on concerns that would make contributions of a general nature to the university. The program is supported by a grant from the Ford Foundation.

In addition to the six fellows, the program also involves four or five officers of the academic administration. Each fellow is appointed for a two-year term, with options for longer or shorter terms not precluded.

Over the two year period each fellow will have a total of five months of salary to make possible released-time from departmental responsibilities or to use as a summer supplement.

Dr. William H. Northway Jr., associate professor of radiology (diagnostic) and pediatrics, is among the 15 faculty members who have served during the five years of the program.

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Friday, May 2, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. David Baltimore, noted molecular biologist, will deliver the third annual Edwin W. Schultz Memorial Lecture Friday, May 9 at Stanford University School of Medicine.

He will discuss "Reverse Transcription," a process which converts the information in ribonucleic acid (RNA) to deoxyribonucleic acid (DNA). His talk will begin at 4:15 p.m. in Room M106 of the Medical School.

A member of the faculty at the Massachusetts Institute of Technology in Cambridge since 1968, Dr. Baltimore is professor of biology and American Cancer Society professor of microbiology.

His work involves fundamental discoveries in how nucleic acids duplicate themselves in animal and tumor viruses. He was a member of the National Academy of Sciences committee with Dr. Paul Berg of Stanford which called for a temporary suspension of certain research with DNA until potential hazards were evaluated.

Baltimore, a native of New York, received his Ph.D. in biology from the Rockefeller University in 1964. He served as research associate at the Salk Institute for Biological Studies in La Jolla before joining MIT.

Currently he is also consulting scientist in medicine at Children's Hospital Medical Center in Boston, and consulting scientist in pediatric oncology at the Children's Cancer Research Foundation, Boston.

He is editor of the Journal of Virology, and serves on the Cancer Special Program Advisory Committee of the National Institutes of Health.

The Schultz lectureship honors Dr. Edwin W. Schultz, who served as chairman of the Department of Bacteriology and Experimental Pathology (now Medical Microbiology) for 33 years. His pioneering studies of poliomyelitis are well known in the field of virology. He died in 1971 at the age of 83, and the memorial lectureship was established by his family and friends.

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Mailed Thursday, May 1, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 415: 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

For some people the thought of getting a cast conjures up visions of heavy plaster of paris whipped up in buckets, slapped onto a broken extremity and taking hours to dry.

Nothing could actually be further from the truth. In fact, cast making has undergone changes in recent years, perhaps the most interesting being an orthopedic casting system known as Lightcast II.

This type of cast can often be applied within 15 minutes, is approximately three times lighter than the traditional cast but much stronger at the same time, can be immersed in water and is porous, allowing the air to get in. For John A. Walker and Wilhelm Schueler, orthopedic technicians at Stanford University Hospital, this cast making system has streamlined their operation. Under a doctor's supervision, Walker and Schueler apply about one-third of the casts needed in the hospital. Correspondingly equal numbers of casts are annually applied in hospital surgery, the emergency room and clinics.

Still, despite the obvious advantages of the lightcast method, plaster casts still outnumber lightcasts.

"Lightcast will probably never replace plaster," Walker explained, "still, we're applying more and more of them all the time."

Walker said that lightcast is actually a soft, flexible, resin-impregnated fiberglass. It is applied over a cloth padding known as a stockinet and shaped by a technician or physician, who often will wear rubber gloves to keep the resin off his hands. In most cases the resin is harmless and only those persons allergic to it are likely to get a skin reaction. (By contrast, plaster of paris is sealed in gauze pads which can be applied after being dipped in water.)

Once the fiberglass is formed it is placed inside a harmless Lightcast II Lamp for three minutes in order to cure it. The machine generates ultraviolet light and the cast is usually rubbed for the first 15 seconds once it has been placed in the machine in order to expedite the curing process.

Walker noted that traditional plaster casts may take from 24 to 72 hours, in some cases, to be fully set as opposed to the lightcast method which often can be completed in 15 minutes, depending on the body areas involved.

However, with so many different kinds of casts in demand, Walker noted that cast setting can be risky business. "With some traction cases you could easily cause nerve injury if the cast is improperly applied," he said, "and for that and other reasons we go through extensive training and always have a doctor present."

Walker himself has worked in the Stanford Hospital cast room for two years and Schueler for five. Previously, Walker had been a nursing assistant at Stanford for three-and-one-half years.

Both Walker and Schueler are often called upon to help administer a number of different kinds of casts, including those for the legs and arms, hip and body casts. The casts themselves may be worn for as little as six weeks and for as long as a year, in some cases. When it is time to remove the casts they are usually cut with an electric cast cutter and hand tools.

–30– cr 5/1/75

1. Resembling a wide piece of tape, Lightcast II can be easily applied to the extremity. Lightcast is soft in its uncured state and can be "molded" by hand.

2. The cast is cured by placing it in the Lightcast II Lamp, which generates ultraviolet light. Here John A. Walker, an orthopedic technician at Stanford Hospital, does some final rubbing of the cast worn by Frank Aguirre, a nursing assistant.

3. Once it is ready to come off, Lightcast can be removed with an electric saw. As its name implies, Lightcast is lighter than traditional plaster of paris, but is three times stronger.

TO: NEWS BUREAU, TC 135, STANFORD UNIVERSITY MEDICAL CENTER, STANFORD CA 94305

CAST 4/75

Please send: #1, #2, #3, 8" x 10" glossy prints (please circle).

NAME_____ ADDRESS_____

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University Hospital rates for rooms and services will increase an average 10 percent starting next Tuesday.

The rise in rates reflects raises in salaries of employees as well as the inflationary cost increases in food, medical supplies, and utilities, said Paul Hofmann, director of the hospital and clinics.

Hofmann said the replacement of the hospital's equipment and other capital requirements are also becoming increasingly important cost factors.

The hospital board of directors Thursday (June 26) voted to raise the daily room rates between $13.50 and $16.50.

The daily rates will be $117.50 for ward, $128 for semi-private room, and $144 for a private room.

Daily rates for patients utilizing services of the housestaff (interns and residents) are $12.50 higher. Medical need for housestaff services is determined by the patient's attending physician.

The board also approved new rates for acute care units. Daily room rates for intensive care would be boosted to $390 and intermediate intensive care to $284.

The hospital director said the increases would have been higher if the hospital had not achieved cost reductions of more than $3 million in the budget process.

Hofmann added that Stanford Hospital's financial picture has been complicated by reimbursement programs for patients covered by Medicare and Medi-Cal (about 25 percent of Stanford patients are Medicare and 15 percent are Medi-Cal).

Under maximum rates stipulated by these programs, the hospital is grouped with those in Santa Clara County and reimbursed at a rate of $96 per day, far below what it costs Stanford to provide the service.

Stanford, however, is a highly specialized regional center and should be grouped with hospitals in the San Francisco-Oakland metropolitan area paid $133 per day, Hofmann said.

Last January Stanford Hospital increased its room rates an average three percent to offset a 100 percent boost in malpractice insurance premiums.

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Mailed Thursday, June 26, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497:6911

STANFORD--Congressman Robert H. Mollohan (D-W. Va.) Friday (June 20) completed seven weeks of radiation therapy at Stanford University Medical Center for treatment of an early-stage malignancy of the prostate.

"Congressman Mollohan has responded well to the treatment, and we have every reason to be optimistic about his condition," said Dr. Malcolm A. Bagshaw, chairman of the Department of Radiology at Stanford.

Mollohan, 55, checked in at Stanford May 2 as an outpatient. The prostate malignancy had been discovered during a routine physical examination by a physician at U.S. Naval Medical Center in Bethesda, Md.

During his treatment the congressman lived in Palo Alto. He is expected to return to Washington, D.C. after a brief recuperation period.

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Transmitted on Business Wire June 19, 1975 at 3:30 p.m.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Stanford University School of Medicine awarded 154 degrees during its annual commencement exercises Sunday, June 15.

The ceremonies also honored six faculty members. The graduating medical class, however, elected not to grant student awards this year.

Medical degrees were presented to 81 men and women. The school also awarded 22 Ph.D.'s, 39 master's, and 12 bachelor of science degrees.

Diplomas were presented during ceremonies at Grant Courtyard at Stanford School of Medicine following Stanford's 84th annual commencement rites at Frost Memorial Amphitheater.

Dr. Clayton Rich, vice-president for medical affairs and dean of the School, and Dr. Ruth T. Gross, professor of pediatrics, presented the diplomas.

The faculty address was given by Dr. Daniel Federman, professor and chairman of the Department of Medicine.

The Henry J. Kaiser Award for outstanding and innovative contributions to medical education was presented by Dean Rich to Dr. Joseph P. Kriss, professor of medicine and radiology and head of the Division of Nuclear Medicine.

Robert Bennett Clark, a member of the 1975 graduating class, presented the Henry J. Kaiser Awards for excellence in teaching to Drs. Mahendra Ranchod, acting assistant professor of pathology; Mark Perlroth, senior attending physician and clinical associate professor of medicine (cardiology); Bruce Tune, assistant professor of pediatrics; and Stanley L. Schrier, professor of medicine and head of the Division of Hematology.

Dr. Federman was awarded the Arthur L. Bloomfield Award for recognition of excellence in teaching clinical medicine. His award was presented by Brian Leslie Kotzin, a member of the 1975 graduating class.

A reception in the Dean's Courtyard for the graduates and their guests followed the convocation ceremony.

All but one of the medical graduates will receive additional clinical training in hospitals across the U.S. One student will undertake research work.

–30– 6/16/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Stanford University School of Medicine has been awarded a federal grant totaling $956,200 over the next five years to expand its research programs in epilepsy, a brain disorder that affects an estimated four million Americans.

The award, from the National Institute of Neurological and Communicative Disorders and Stroke of the National Institutes of Health, was announced today (July 28) by Dr. Clayton Rich, vice president for medical affairs and dean of the medical school.

Dr. David Prince, professor and chairman of the Department of Neurology and head of the epilepsy program said that researchers will study the function, structure and chemistry of the brain to clarify the following questions:

--how do brain injuries lead to epilepsy?

--what are the effects of epilepsy on the immature brain and its development?

--how do the damaged "epileptic" nerve cells in the brain behave?

--what effect does abnormal nerve cell activity have on the rest of the brain?

The most common form of epilepsy--"focal" epilepsy--occurs when a particular area of the brain is damaged. Each seizure begins with the same phenomenon which depends on the site affected. Seizures may be limited, and involve, for example, only altered sensation or jerking in a limb, visual disturbances, or emotional states. They do not necessarily result in convulsions, Prince explained.

While one-half to two thirds of epileptic patients can be controlled with medication, the remainder suffer seizures which often interfere with a normal lifestyle.

Many patients experience their first epileptic episode during childhood. It may be that there is a critical period, perhaps at birth and during early development, when brain disturbances that occur will later produce epilepsy in the mature brain, Prince said.

Prince's group has been studying the behavior of animal brain cells by using microelectrodes that can record the electrical activity of individual nerve cells. "Abnormal nerve cells such as those involved in epilepsy fire many impulses in bursts, disturbing the normal patterns of signals which carry messages between different parts of the brain. We need to know what the basic abnormalities are which cause these cells to act this way," Prince explained.

Another important question is whether the disturbance in certain nerve cells has any long-term effects on the entire collection of brain cells. There is now some evidence that abnormal electrical discharges (characteristic of epilepsy) in a small area can influence other parts of the brain and may affect subsequent brain function. "If this is true," Prince noted, "we might want to treat epilepsy much more vigorously at an earlier stage to prevent potential problems in the mature brain."

Investigators working in the newly funded program with Prince include Drs. K.L. Chow, David Holtzman, John Peacock and Philip Schwartzkroin in the Department of Neurology and Lawrence Mathers in Anatomy.

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Mailed Monday, July 28, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University Hospital officials are holding emergency meetings this week to take steps needed to offset a $4.5 million deficit precipitated by new Medicare regulations from the Department of Health, Education, and Welfare in Washington.

The new regulations, which go into effect August 1, set ceilings on daily charges for routine services that hospitals can collect from Medicare. The restrictions apply also to Medi-Cal patients because Medicaid law stipulates that state programs will not pay hospitals more than Medicare rates.

About 40 percent of Stanford hospital's patients are Medicare and Medi-Cal beneficiaries.

The projected deficit in the coming year stems from inadequate reimbursement, according to Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine.

It now costs Stanford $139 per day to provide standard inpatient care, but under the new rules the hospital will get $97 per day.

For purposes of reimbursing hospitals for Medicare, HEW has divided the country into Standard Metropolitan Statistical Areas (SMSA). These have been classified into five groups based on per capita income. HEW presumes that the cost of operating any hospital is proportional to the income level of the SMSA in which the hospital is located.

Stanford hospital has been placed in the same SMSA as community hospitals in Santa Clara County.

"The nature of the SMSA boundaries is inappropriate and arbitrary," said Rich. "These boundaries are political (state and county) rather than economic."

Rich said the new classification fails to take into account that Stanford hospital, located only 700 yards from the San Mateo County line, has labor costs and operation more closely aligned with those in San Francisco than San Jose. The regulations also ignore Stanford's scope of services, patient mix, and intensity of care.

Similarly sized hospitals in San Mateo and San Francisco counties (a different SMSA), may be reimbursed up to $133 per day for routine care under the new HEW guidelines.

He said Stanford will seek from HEW a reclassification on the basis that its costs reflect those of hospitals in San Francisco and San Mateo counties.

"Some measure of hospital output complexity should be added to the classification scheme to provide more equitable treatment of the teaching and highly specialized institutions," Rich added.

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The appeal to HEW, however, cannot be made until after the new regulations are in force. The appeal takes 45 days or longer and during this time, the hospital will be losing income at the rate of $10,700 per day.

Rich said he had ordered a temporary freeze on hospital capital expenditures, and other steps aimed at reducing costs. These include reductions in administration, data processing, support services, and some patient care areas.

"If these measures fail," Rich said, "the hospital may be forced to limit care for Medicare and Medi-Cal patients to remain in operation."

He also said the hospital might take legal action if the appeal fails.

"Unlike most teaching hospitals in California," Rich said, "we receive no state support and, unlike many community hospitals in the region, we are not supported by a tax district. There is no endowment or reserve. The hospital must operate on the basis of income it receives."

The Association of American Medical Colleges recently indicated that 40 percent of the nation's teaching hospitals were affected adversely by the new regulations.

AAMC also filed suit on the grounds that the regulations discriminated unfairly against the teaching hospitals.

A U.S. District Court, however, allowed implementation of the HEW regulations stating that "atypical educational costs for hospitals...can be better identified through the exceptions process..."

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Transmitted on Business Wire
Wednesday, July 23, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Stanford University School of Medicine has received a gift of $6,358 from the California Community Foundation of Los Angeles to study the relation of oxygen lack and other injuries at birth to certain brain disorders, it was announced recently.

Research will be conducted by Drs. David Prince and Philip Schwartzkroin in the Department of Neurology.

"We know that lack of oxygen in premature and newborn infants can have long-term effects on memory, movement or learning," Prince said. "But very little is known about the influence of such an insult on the function of individual nerve cells."

The investigators will examine the chronic effects of oxygen deficiency on development of electrical activity and connections in the brains of immature animals. Their work may provide new clues for understanding and treating disorders of brain function such as epilepsy or cerebral palsy.

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STANFORD--Dr. Eugene Farber, professor and chairman of dermatology at Stanford University School of Medicine received the 1974 Mr. and Mrs. J.N. Taub International Memorial Award for Psoriasis Research, it was announced recently.

A noted expert on psoriasis, Farber is director of Stanford's psoriasis day care center. His studies of skin cell growth and the influence of environmental factors such as stress on psoriasis have helped pave the way for more effective treatment of the skin disorder.

Farber is also chairman of the National Program for Dermatology Task Force on Psoriasis and editor of the International Psoriasis Bulletin. He received his M.D. from the University of Buffalo in 1943.

The Taub award was established in 1957 by Carol and Henry J.N. Taub in honor of their grandparents Mr. and Mrs. J.N. Taub with the hope that the award would be an incentive to develop methods to alleviate psoriasis.

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Mailed Tuesday, July 22, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Stanford University School of Medicine has been awarded a two-year grant of $70,000 from The National Foundation-March of Dimes to investigate a new method of detecting genetic defects before birth, it was announced recently.

The principal investigator is Dr. Leonard Herzenberg, professor of genetics. Drs. Michael Iverson and James Schroeder will also work with him.

Some fetal white blood cells cross the placental barrier into the mother's blood throughout pregnancy, Herzenberg explained. The researchers are working out a technique to identify and separate these cells from the mother's cells so they can be tested for inherited defects.

Using maternal blood would be safer than the present technique of amniocentesis which involves sampling fluid directly from the uterus and entails some risk to the fetus. It could be used for routine screening of pregnant women.

The group will use a highly sensitive instrument Herzenberg's laboratory helped develop--the fluorescence-activated cell sorter (FACS)--which can isolate cells according to their surface composition.

All cells in the body are covered with antigens, chemical fingerprints unique to each individual. Fetal cells are also coated with antigens, half of them inherited from each parent. Fluorescent antibodies which adhere only to the antigens inherited from the father will distinguish fetal blood cells from those of the mother.

The FACS rapidly separates the labeled fetal cells from the mother's cells and sorts them in test tubes. These cells can be stimulated to grow in the laboratory and can be tested for chromosome defects, or other indications of genetic disorders.

The work is also being supported by the National Institute of General Medical Sciences of the National Institutes of Health.

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Mailed July 21, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

EDITORS: Photo available on request if not included.

STANFORD--Northern California's first woman paramedic graduate, one of 19 persons who completed training Friday (July 18) at Stanford University Hospital, doesn't regard herself as "special," but she does feel she has a responsibility to help people.

Penelope (Penny) Babienco, 25, of Saratoga and her male classmates have been recommended to the California Public Health Department for certification as emergency medical technicians, or paramedics.

It is the second class to complete the Stanford paramedics course, bringing the total to 43 persons who have graduated at Stanford. The first class graduated on Dec. 21, 1974.

"I have just seen too many people die on the way to hospitals," Miss Babienco noted while explaining her interest in the paramedic field. "Some of the shabbiest care has been given on the scene. Many times it is a case of life or death, and I feel paramedics can often make the difference so that patients will live."

The daughter of San Jose physician Dr. Allorie W. Babienco, she admits she was "crazy" about ambulances and emergency care before she was hired one year ago by the San Jose Ambulance Co. as an ambulance attendant. She will now become part of the company's second crew of working paramedics in the field. Six of the firm's first seven paramedics also graduated from the Stanford program.

The paramedics course, directed by Dr. Michael Eliastam, director of emergency services at Stanford Hospital, involves 200 hours of lecture and 300 hours of clinical and field work from Stanford physicians and nurses. Course instructors are registered nurses Charlene Souza and Toni Day.

Originally, Miss Babienco had intended to do volunteer work among the Navajo Indians in southern Utah after graduating from Pacific Union College in Angwin, California. ("I majored in piano performance which everyone always laughs about.") However, her plans fell through and she decided to investigate her interests in emergency care.

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"Ambulance work keeps you in touch with reality and life," she said. "When you see a seven or a 10-year-old child die it does something to you, it really sobers you. I think that I now have a very healthy respect for life."

A part-time freelance writer, Miss Babienco does not consider herself a women's liberationist. "I feel I can retain my feminity and still work on the ambulance," she commented. "I do feel, however, that women's pay should be the same" (as the men).

Miss Babienco was the first full-time woman ambulance attendant to be hired in Santa Clara County, but she says she never gave it much thought. "Fact is, for a long time I didn't even know it."

The 19 graduates and their hometowns are:

San Jose: Jerry Dumas, Gary Skalko, Daniel Venosta, Robert Worsham, Bill Bazuik; Vallejo: Mark Berto, James Innes, Joe Gee; Bethel Island: Ted Alesna, Leroy Burnett; Berkeley: Michael Stettner; Campbell: Lance Valencia; Saratoga: Penelope Babienco; Palo Alto: Alex Brazelovich; Mountain View: Nick Marinaro; San Lorenzo: Dave Holland; Aptos: Phil Scofield; Dana Point: David Fleming; Atascadero: Glenn Graves.

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Mailed July 21, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Judith Graham Pool, 56, professor of medicine at Stanford University School of Medicine and noted hemophilia researcher, died Sunday (July 13) at Stanford University Hospital after an illness of several months.

Dr. Pool was recognized internationally for developing a simple method for extracting from normal blood the protein (called Factor VIII) needed by hemophilic patients.

Availability of the missing clotting factor has enabled hemophiliacs to treat themselves at home with injections, reducing both the length of hospitalization and treatment costs.

She was awarded the Murray Thelin Award of the National Hemophilia Foundation in 1968 for her work.

Recently, Dr. Pool had been investigating another concentrate which may offer hope to the small percentage of hemophilia patients who develop complications from the standard Factor VIII treatments.

Dr. Pool had also been active in promoting opportunities for women in medicine. She was the first co-president of the Association of Women in Medicine, formed in 1971, and the first chairwoman of the Professional Women of Stanford Medical School organized in 1970.

Professor Pool was born in New York City. She attended the University of Chicago, earning a bachelor's degree there in 1939 and her Ph. D. in physiology in 1946.

She later taught at Hobart College in New York State before joining the Stanford medical faculty in 1957.

Dr. Pool belonged to numerous professional organizations including the American Physiological Society, the American Heart Association's Council on Thrombosis, and the World Federation of Hemophilia. She once spent a year as a Fulbright Research Fellow in Norway, and also studied for a year ending in May, 1974 at the Oxford Hemophilia Center in England.

Dr. Pool lived on the Midpeninsula since 1949 except for a period spent in San Francisco. She had lived since in Menlo Park.

Survivors include her two sons, Jonathan Pool of Setauket, N.Y., and Jeremy Pool of Boston; her daughter, Loma Pool of Menlo Park; her mother, Nellie Graham of New York City; a sister, Ruth Stark of Roslyn, N.Y., and a brother, Walton Graham, of Roslyn Estates, N.Y.

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Mailed 7/15/75

Transmitted by Business Wire 7/14/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A hearing aid inside the head is one of the latest ideas for producing better hearing currently being explored by Stanford researchers. The major hitch in the development of such a device seems to be the lack of a small, rechargeable battery for a power source.

Researchers are attempting to improve on the conventional "behind-the-ear"hearing aids by studying implantable prototypes.

One type of aid being developed involves a totally implanted device contained entirely within the head. The device itself utilizes the same principle as today's aids, by which electromagnetic waves are converted into sound waves.

The implantable device requires the placement of a tiny magnet on the ear drum or ear bones. A microphone and small amplifier connected to a coil transmit amplified electromagnetic waves to the magnet, causing it to move. The movement of the magnet vibrates the ear drum or bones, stimulating the inner ear to relay messages to the brain.

According to Dr. Richard Goode, ear, nose, and throat specialist at Stanford University Medical Center and a developer of the implantable device, the main problem is the lack of a long-term power source.

Dr. Goode felt that progress being made in the field of rechargeable batteries will help this stumbling block to the development of a totally implantable device.

"We need a good power source," he said. "A hearing aid inside the head would be on during waking hours. Today's batteries just aren't durable enough to supply power for more than a few weeks. You can't replace a battery surgically every two weeks--that's no improvement over today's conventional aids."

Heart pacemaker patients have encountered the same problem. Every two or three years, the patient with a pacemaker must undergo surgery to have a new battery installed.

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Recently, Pacesetter Systems, Inc. developed a rechargeable battery for heart pacemakers that can be recharged inside the person.

"This rechargeable battery is presently too big for our purposes," said Goode. "I hope within a year or two someone will come out with a rechargeable battery about the size of a quarter, or smaller. That would be just right for our implantable devices.

Another type of device being tested is the "partially implantable" hearing aid. It contains a power source in the conventional ear mold supplying power to a series of coils implanted inside the ear. This partially implanted aid would, like the totally implantable device, provide improved sound quality to the wearer over present day conventional hearing aids.

Dr. Goode outlined the advantages of the implantable devices he and other physicians and engineers are testing over conventional aids.

"Some of the limitations of conventional hearing aids include low fidelity, feedback, the need for a tight-fitting ear mold, and the presence of an externally visible device."

"An implantable hearing aid has the theoretical potential to improve all of these deficiencies and hopefully add no major ones."

Dr. Goode explained that an implantable device would not be marketable until it was capable of functioning as well as or better than conventional aids do.

"It won't help if the implantable device does not reproduce sound as well as today's hearing aids do. Being invisible is no improvement to the hearing aid wearer unless sound quality is improved too."

"Invisible" hearing aids developed a few years ago were found to have limited usefulness. The amplification supplied by the hearing aid was barely able to offset the hearing loss incurred by the device blocking sound waves entering the ear canal. Feedback was also a problem.

Dr. Goode estimates that a patient-ready model of the implantable hearing device may appear on the market within five years.

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The above story was prepared by Christa Battelle, a science writing intern in the News Bureau. Mailed 7/10/75. Photos 1) of Dr. Goode and 2) outside of ear and X-ray showing device available on request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A Stanford University psychiatrist says Americans are killing each other twice as fast as they did 20 years ago, and predicts that as long as the economy remains in a slump the nation's murder boom will continue.

"We are experiencing a murder epidemic that is breaking all previous records," says Dr. Donald T. Lunde. "More Americans were murdered from 1970 through 1974 than were killed during the entire Vietnam war.

"In 1975, one of every 10,000 Americans will be murdered."

Lunde, assistant professor of law and psychiatry, makes this grim prediction in a new book, Murder and Madness (133 pages, paper, $3.55, The Portable Stanford, Stanford Alumni Association).

A forensic psychiatrist, Lunde studied dozens of violent criminal suspects and testified in their trials. Among them were two mass murderers, John Linley Frazier and Edmund Emil Kemper III.

Lunde says the most likely murderer is still a victim's relative. "Almost a third of all victims are related to their killers," he reports.

The two peak months for murder are July and December (summer vacation and Christmas), Lunde says. This is when most people are with those most likely to kill them--relatives, friends, and drinking companions. Few homicides occur during business hours. But on weekends the murder rate soars.

Authorities do not recognize that increasing material expectations combined with a depressed economy have something to do with the growing murder rate, Lunde reports. They think the answer lies in tougher criminal penalties, increased rehabilitation programs, and more money to beef up police forces.

"The trouble is, murderers are not a homogeneous group of 'bad guys'," Lunde concludes. "For the most part, they are husbands, wives, lovers, neighbors, friends, and acquaintances--persons who can no longer endure chronic frustration."

Lunde observes that during economic depressions in the past, murder rates went down and suicides went up. The opposite seems true today.

"This reversal," he explains, "may have come about because Americans no longer blame themselves for their material misfortunes.

"When traditional values and the Protestant ethic reigned in America, we took out our frustrations on ourselves. Many committed suicide during the Depression for instance."

Now Americans have moved away from self-reliance and expect society to provide them with certain material things, the psychiatrist believes. When it doesn't, people strike out at others.

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Most murders in the United States are committed by young adults, predominantly males and in their twenties. Young people also have a greater tendency than adults to blame outside factors if something goes wrong, Lunde believes.

But felony murders are also surging, Lunde indicates, and one big reason for this is lack of gun control. In felony murders the killer, almost always a man, kills for money, sex, or drugs, or when he tries to escape.

"Two-thirds of all murders in the U.S. are committed with guns, 92 percent of these with handguns," Lunde reports. "Gun ownership is highest in the regions with the highest murder rates."

The United States leads the world in the death rate due to firearms, Lunde says.

"Unlike any other major country," he explains, "we have carried on a domestic 'mini arms race' for generations and now face some of the problems internally that we experience on an international scale in trying to curtail armaments.

"The arms race aspect of guns proliferation applies to those who buy guns for protection. Yet the likelihood of personal disaster from possession of guns far exceeds the likelihood of protection. Guns increase the probability of homicide among family members and friends.

"And far more homeowners and family members are killed in gun accidents than by burglars and robbers."

Lunde concludes it might be impossible to "disarm" the millions of Americans who own guns. There are at least 50 million guns in the hands of civilians, and estimates run as high as 200 million.

But instead of licensing laws which seem to be favored in many states, Lunde supports restrictions on the manufacture and importing of both handguns and ammunition.

Lunde's book advances these conclusions among others:

1. Murder rates vary geographically. You are most likely to die young if you live in the South, where 13 out of every 100,000 persons are murdered each year. New Englanders have the best odds. In that part of the country only four out of every 100,000 persons die violently each year. Forty-four percent of all recent murders occurred in Southern states, 22 percent in North Central states, 19 percent in Northeastern states, and 15 percent in Western states.

2. Murder rates climb as population density increases. If you live in a large city, your chances of being murdered are twice those for a rural or suburban resident.

3. Men used to dominate the murder statistics, but women are changing this pattern. In 1950, less than 20 percent of all murderers were women. Now, that figure has inched up to about 25 percent.

4. Murder statistics also vary according to the color of a person's skin. Blacks are a more likely target. Black men are 10 times more vulnerable than white males, and black females five times more in danger than white women. And the races keep murder mostly segregated. In more than nine out of 10 homicides, killer and victim are of the same race. In a few instances where racial lines are crossed, it's more often whites murdering blacks than the reverse.

5. Alcohol and murder are closely linked. In the majority of homicides, the person who kills has been drinking beforehand. Most of the murderers are not alcoholics, however.

6. There's no significant correlation, either positive or negative, between the threat of the death penalty and the homicide rate in the United States.

Lunde emphasizes he does not blame the murder rate on dissatisfaction alone.

"Even changes in child-rearing practices have contributed to the holocaust," he writes. "Permissive parents are less likely to insist that children develop and use internal constraints.

"Organized religion, an institution that taught self-restraint and accountability, reaches fewer and fewer young people.

"Corruption in government makes it easier for people to blame external forces for hard times. Many have forgotten and some never realized that 'there is no free lunch.'

"If we continue to demand as rights what actually are privileges, we will continue to kill each other in frustration."

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Mailed July 8, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR IMMEDIATE RELEASE
FOR INFORMATION CONTACT: Barbara Battino 415 497-6911
STANFORD –

Stanford's Lane Medical Library is suffering from an epidemic of damage to its scientific and medical journals, according to Peter Stangl, director of the library.

There has been a rash of page tearing and cutting of noncirculating material. An electronic device installed at the library entrance last year significantly reduced the losses of whole volumes. But mutilation of books has been increasing.

The costs of replacing the journals and repairing the ones damaged are "truly staggering," says Stangl.

Damage and loss of books is also a major problem at the main library and branches on campus.

According to Gloria Stockton, chief of circulation at the main library, "it's pretty bad. We've had a high number of cases of mutilation, particularly in scientific area journals." She reports that whole chapters have been ripped out of some books and journals, one of the hardest types of damage to replace.

One of the largest problems at Lane has been the purposeful tearing or cutting of articles from journals in the "green area" of the library, a noncirculating collection of journals published within the last 10 years.

Stangl is anxious to inform library users not only what expense the "ripping off" causes, but also what alternatives there are to damaging volumes.

He points out that if the volume searched for is not in the "green area," it can be checked out. If it is in the "green area," then there is a good chance that another copy is in the second-copy collection, and can be checked out.

If there isn't a second copy, there are four coin-operated machines where a copy of the article can be made.

The extensive second-copy collection is located on the main floor of the library, towards the back. The library receives these copies as gifts. They are not bound and may be checked out.

The copy machines, which cost a nickel a page, are located on the lower floor of the library. In addition, an operator-attended machine is available from 8 a.m. to 4:30 p.m. daily for larger copy needs.

When a journal is damaged by pages being pulled out, the library must go to great lengths to replace it, sometimes having to request it through interlibrary loan if it is no longer in print.

A single article torn from a bound journal can cost $25 or more to replace. Rebinding is more expensive than binding it originally. In addition, the volume is out of circulation for a length of time.

"Journals are not cheap," says Stangl. "We pay for close to 2,000 subscriptions a year, at an average cost of more than $40 each. We spend about $100,000 a year in journal subscriptions."

The problem of missing material is both costly and disruptive. "The library functions as a working resource," says Stangl, "not for replacing a user's personal collection. Restricting material to use in the library makes it available for many users."

The problem, he says, is that most people want the same few books. And it happens that the most heavily used texts and journals are the ones most likely to disappear or be destroyed, hurting the most people.

– 30 – cr 7/7/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A reception honoring Dr. and Mrs. Alvin J. Cox, Jr. was held Friday (June 27) at the Stanford Faculty Club.

The reception, attended by more than 200 faculty and former dermatology residents, featured the presentation of an oil portrait of Dr. Cox painted by San Francisco artist George Sheppard.

The portrait was commissioned by members of the dermatology faculty and former students of Dr. Cox. It will be hung along with the portraits of other noted Stanford medical school professors in the Medical Center.

Dr. Cox came to Stanford as a freshman in 1923 and has been associated continuously with Stanford for 52 years. He has been a faculty member for 42 years and has served as chairman of the Department of Pathology for 23 years.

In 1964 he joined the Dermatology Department to develop a dermatopathology laboratory and to do research in skin biology. He is a professor of pathology emeritus in the Department of Dermatology, and he is still actively engaged in research and teaching at Stanford.

Dr. Eugene M. Farber, chairman of the Department of Dermatology, said Dr. Cox trained several generations of pathologists and has been a "meticulous, painstaking and extraordinary teacher."

Dr. Cox and two colleagues in the early forties discovered a chemical carcinogen, 2-acetamino fluorene, but it was not until 1966 that his work received worldwide attention," Farber said. "This was at a time cancer researchers began to study environmental hazards and they referred back to the pioneering effort of Dr. Cox."

In 1973 Dr. Cox was elected president of the American Society of Dermatopathologists.

Among guests who attended the reception were Dr. and Mrs. Loren "Yank" Chandler of Palo Alto. Dr. Chandler, professor of surgery emeritus, was dean of the Medical School for 20 years when it was located in San Francisco; San Francisco artist George Sheppard, and Dr. Clayton Rich, vice-president for medical affairs and dean of the Stanford medical school.

The program also featured a song recital by Lorene Adams of Atherton, soprano and soloist with the San Francisco Symphony. She was accompanied on the piano by her husband, Dr. Robert M. Adams, a clinical assistant professor of dermatology at Stanford.

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Mailed July 2, 1975

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Mailed July 2, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--New hope for successful treatment of general virus infections in humans was revealed Friday (August 29) at Stanford University during an international symposium for antiviral agents.

Leading infectious disease researchers reported that in early trials with patients, two substances for the first time seem capable of altering active virus infections. They emphasized, however, that the results are still preliminary and that more comprehensive studies are needed to determine the value of these therapies for widespread use.

Vaccines have been developed to prevent various virus infections. However, few agents are available to effectively control ongoing infections the way antibiotics can fight bacterial infections. Two substances have shown promise in recent years.

They are a protein called interferon, which is produced by the body's defense system to help fight disease, and a drug known as adenine arabinoside (ara-A) which can be manufactured synthetically.

Dr. Thomas Merigan, Jr., head of infectious diseases at Stanford School of Medicine, reported that in preliminary observations interferon seemed to modify the severity of certain virus diseases in cancer patients. Viral infections are usually self-limiting in healthy humans, but they can be life-threatening in cancer patients whose body resistance is low.

In another study, ara-A promoted the healing of shingles in cancer patients, according to Dr. Richard Whitley of the University of Alabama. Shingles, caused by the herpes zoster virus, is a painful condition in which skin blisters erupt along the course of a nerve.

Cancer patients at Stanford, Children's Hospital at Stanford, the University of California, Davis and St. Jude Children's Hospital in Tennessee were studied by Merigan and his colleagues Drs. Kenneth Rand, Paul Abdallah, George Jordan, Sandor Feldman and Richard Fried. Their work was supported by the National Institute of Allergy and Infectious Diseases (NIAID), of the National Institutes of Health.

In one group of 17 leukemia patients with chicken pox, those who were administered interferon had fewer complications due to spread to other organs than those given a placebo.

Another group of 55 patients with cancer of the lymphatic system had shingles. Organ complications from the virus were five times more frequent in patients who did not receive interferon than in those who did. Interferon patients also seemed to have less severe pain from nerve involvement.

Interferon is produced naturally by the immune system to limit the spread of virus infections and can be obtained from human white blood cells. It is also thought to be helpful in reducing the severity of the common cold and other upper respiratory tract infections caused by viruses.

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However, studies have been limited because the protein is difficult to prepare in quantity in cultured cells. Merigan is confident that with improved production and purification techniques, adequate supplies of interferon will be available for further testing

The ara-A study, which involved 87 cancer patients at 10 different hospitals, marks the first collaborative effort to assess the effectiveness of the drug in treating systemic viral diseases. Whitley and Drs. Charles Alford, Jr., of Alabama, and George Galasso of the NIAID, are the coordinators of this study.

The patients were divided into two random groups: 47 were administered ara-A for five days followed by a placebo; the other 40 were treated with the opposite regime. Patients who received the drug the first five days of infection seemed to heal faster. The most favorable responses were in patients under 38 years old who had infections for less than six days, and in those who had lymphomas.

Ara-A acts at the cellular level by inhibiting viral replication, Whitley said. Additional studies are needed to verify these encouraging early results and to determine the long-term effects of ara-A, he added.

The drug, produced by Parke-Davis Laboratories, is available for a large-scale testing program under the auspices of the NIAID that involves 21 institutions throughout the country.

It has also been found useful as a topical application for treating eye infections caused by herpes simplex virus, according to two studies reported at the symposium yesterday.

Dr Deborah Pavan-Langston of the Massachusetts Eye and Ear Infirmary reported the results of a five-year study of ara-A on 315 patients with inflammed corneas from the herpes simplex virus. The drug, applied locally, proved "to be an effective nontoxic antiviral and an excellent alternative to IDU," (iododeoxyuradine) the drug more conventionally used, but which often causes complications, she said.

In another study at Moorfields Eye Hospital in London, England, corneal ulcers from herpes simplex which had failed to heal with IDU healed well after application of ara-A in 48 patients, Dr. Barrie Jones told the symposium.

Some 300 physicians and researchers have been attending the symposium on antiviral substances with clinical potential at Stanford this week. It is sponsored by the NIAID and Stanford University School of Medicine.

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Mailed Friday, August 29, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Physicians attending a symposium on antiviral agents at Stanford were cautioned Thursday (August 28) against the use of a popular treatment for herpes simplex, a virus which causes blisters around the mouth (cold sores) and genital area.

A recent study showed that neutral red dye and light, a therapy widely used by dermatologists against herpes simplex infections, is no more effective than a placebo, it was reported.

One of the investigators, Dr. Martin Myers of the University of Iowa, recommended that routine use of neutral red and similar dyes be discontinued until their efficacy and safety can be proved.

The combination of neutral red dye and light for herpes simplex has been used increasingly in the past couple of years after it was demonstrated to be effective in test tube studies. In tissue culture, neutral red, a photoactive dye, sensitizes the herpes simplex virus so that it does not reproduce on exposure to light.

For treatment, lesions around the mouth or genital area are painted with neutral red and then exposed to light. The procedure, thought to be safe, became controversial recently when researchers suggested there might be unknown long-term hazards, including the possibility of cancer, from its use. Nothing definite, however, has been shown.

Because of the controversy, Myers and his colleagues--Drs. Michael Oxman, Joan Clark and Kenneth Arndt, all of Harvard Medical School--undertook a comprehensive controlled study in Boston of neutral red therapy.

Ninety-six patients with a total of 170 episodes of recurrent herpes simplex infections were treated. Lesions were painted with either neutral red or a placebo dye and then exposed to light.

Neutral red "had no significant effect on the rate of resolution of herpetic lesions or on the incidence of subsequent recurrences," according to the investigators.

"The blisters eventually disappear and neutral red therapy does not make them heal any faster," Myers noted. "Nor does it seem to prevent recurrence."

Since the study failed to demonstrate any advantage of neutral red treatment and there are still unresolved questions about potentially harmful effects, Myers and his colleagues suggest that it no longer be used routinely.

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Mailed Thursday, August 28, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--"Effective treatment of even some of the many viral infections would change the course of medical care as did the advent of (antibiotics) in the 1930's and 40's," a leading health administrator told an international gathering of infectious disease research experts Tuesday (August 26) at Stanford University.

Dr. Dorland Davis, retiring director of the National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health addressed the opening of a symposium on antivirals with clinical potential.

Although there are vaccines to prevent various virus infections, few agents have proved successful in treating infections once they occur. However, studies over the last few years provide new promise that certain substances may help control active viral infections in humans.

The impact of virus diseases on the health of the nation is substantial, Davis said, and he called on participants to continue the search for effective ways to combat these diseases. He pointed out that influenza and other respiratory conditions, including the common cold, account for one third of the visits to private physicians each year in this country.

The symposium is sponsored by the NIAID and Stanford University in conjunction with 22 drug companies. Dr. Thomas Merigan, Jr., professor of medicine and head of the division of infectious diseases at the School of Medicine is chairman.

The results of studies with interferon--a natural body protein, and adenine arabinoside--a synthetic drug, in treating virus diseases will be reported at the meeting. Additional topics presented include evaluation of other therpies for respiratory viral problems, herpes and other specific virus infections as well as the development of animal model systems for further investigations.

Some 300 representatives from 19 countries including the USSR are participating in the four-day symposium, which is being held at Bishop Auditorium on the Stanford campus.

The conference is dedicated to Dr. Dorland Davis who was instrumental in establishing a comprehensive federal program to support research on antiviral substances during his tenure as NIAID director for the past 11 years.

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Mailed Tuesday, August 26, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--A fund has been established at Stanford University School of Medicine in memory of Dr. Judith Graham Pool to support students and physicians studying in the hematology field.

Dr. Pool, 56, professor of medicine at Stanford and an internationally recognized hemophilia researcher, died July 13 after an extended illness. She had been a member of the Stanford medical faculty since 1957.

The fund, which will be comprised of private contributions, is being administered by Dr. Stanley L. Schrier, professor of medicine and head of the Division of Hematology at Stanford. He is being assisted by Dr. Daniel Federman, professor of medicine and executive chairman of the Department of Medicine, and Dr. Clayton Rich, dean of the school of medicine and vice president for medical affairs.

Undergraduate students, medical students, housestaff physicians and fellows, and gifted high school students will be eligible for training under the Pool Fund. Research and seminars will also be supported by it.

Dr. Pool is credited with developing a simple method for extracting from normal blood the protein (called Factor VIII) needed by hemophiliac patients.

Availability of the missing clotting factor enables hemophiliac patients to treat themselves at home with injections, reducing both the length of hospitalization and treatment costs.

She had recently been investigating another concentrate which may offer hope to a small percentage of hemophilia patients who develop complications from the standard Factor VIII treatments.

Dr. Pool earned her bachelor's degree in 1939 and her Ph.D. in physiology in 1946, both from the University of Chicago. She later taught at Hobart College in Geneva, N.Y. prior to joining Stanford.

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Mailed Monday, August 4, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Malpractice insurance rates for Stanford University Hospital and Clinics will increase by nearly $1 million yearly on November 1, bringing the Hospital's rate to approximately $2.4 million.

Stanford Hospital is one of many members of the California Hospital Association insurance group which received the news last week.

Although the impact of the increase will be felt in higher daily room rates, not all patients will bear the full burden. Currently, there are limits on the amount that hospitals can be reimbursed for care of Medicare and Medi-Cal patients.

James Stanford, Medical Center Director of Finance, admits that "This represents a major increase in costs to patients," but he also notes that it comes when costs are already high, "and there is tremendous pressure from state and federal governments to keep costs down."

The new insurance rate is the second this year. In January there was a 100 percent increase over the 1974 rate.

But the future may hold even worse news. According to James Stanford there is no guarantee that the rate won't go up again before the end of the year, since the bills are sent monthly. "My best guess is that it will be even worse in the near future," he says.

The new increase applies to all member hospitals of the CHA insurance group. But because the rates are based on the number of beds, outpatient visits, staff, and surgeries, the dollar amount is even greater for Stanford than for other hospitals.

The CHA insurance program, with member hospitals throughout the state, is administered by Walker & Company of Los Angeles, insurance brokers. Coverage includes Hospital and Clinic staff and the Medical School faculty.

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Mailed September 30, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

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Mailed September 30, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Fifteen physicians on the Stanford University Hospital clinical staff have been denied court injunctions which would have allowed them to practice at the Hospital without malpractice insurance.

The court also denied a request that it prohibit the insurance carriers from canceling the hospital's malpractice insurance if uninsured doctors use the facilities.

Both decisions were made by Judge John M. Brenner in Santa Clara County Superior Court in Palo Alto on Friday, September 26.

The doctors' suit was a result of dramatic increases in malpractice insurance costs. Last April insurance carriers notified hospitals throughout the state that they must require doctors using the hospital facilities to have individual policies.

Stanford Hospital is one of many members of the California Hospital Association insurance group, with coverage for all Hospital and Clinic staff and Medical School fulltime faculty, but not covering community physicians who use the Hospital.

In his decision, Brenner noted that the requirement that these doctors carry such insurance would be an extremely heavy burden to some, but the insurance companies have said they will cancel the hospital's insurance if physicians practice without coverage.

Brenner said that if the 15 uninsured doctors used the hospital, the hospital would then lose its liability insurance, and would "thereby be placed in a position where it could not safely continue its normal operations."

Brenner said the court could not tell the insurance carrier not to cancel the hospital's insurance. "It seems to this court, and the court holds, that a doctor does not have the right to put a hospital in the position of having to pay the full cost of joint doctor-hospital negligence .... It is reasonable for the hospital to require that doctors who want to use the hospital facilities must be financially able to meet their share of any such potential joint liability."

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Mailed September 30, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911
STANFORD –

Dr. Daniel D. Federman, professor and chairman of the Department of Medicine at Stanford University School of Medicine, has been named the Arthur L. Bloomfield Professor of Medicine.

The appointment, effective immediately, was announced Wednesday, Sept. 11, by Dr. Clayton Rich, vice-president for medical affairs and dean of the Medical School.

Federman, 47, succeeds Dr. David A. Rytand, who held the endowed chair from 1958 until he became Bloomfield Professor emeritus Sept. 1 this year.

A nationally-known expert in clinical endocrinology, Federman came to Stanford as head of the medicine department in 1973. He was previously associate professor of medicine and associate dean of continuing education at Harvard Medical School.

Federman is widely recognized for his outstanding contributions to teaching and his cogent approach to improved medical education. His teaching was honored twice by Stanford students: with the Henry J. Kaiser award for excellence in teaching in 1974 and with the Arthur L. Bloomfield Award in recognition of excellence in clinical teaching in 1975. He has also been similarly honored by Harvard medical students.

One of the challenges facing medical educators today, Federman said when he accepted executive responsibility for the School's largest department, is to prepare students for the new demands being placed on physicians.

In the past two years he said in a recent interview, "The Stanford medicine department has concentrated on meeting the changing trends in clinical medicine, such as the increased interest in primary care, without threatening its subspecialty strength and without compromising its scientific standards."

His research interests have been mainly concerned with hormonal and genetic influences on human sexual development. One of his major scientific contributions has been studies of abnormal gonadal physiology seen in clinical conditions. His textbook, *Abnormal Sexual Development: A Genetic and Endocrine Approach to Differential Diagnosis,* published in 1967, has been widely acclaimed.

With colleagues at Harvard, he defined a new hereditary disorder of connective tissue characterized by dwarfism, joint stiffness, and eye defects. He was also among the first to describe translocation of a portion of the human Y chromosome.

Born in New York, Federman is an alumnus of Harvard, receiving his A.B. in 1949 and his M.D. in 1953. He took an internship and residency in medicine at the Massachusetts General Hospital.

After completing additional training at the National Institute of Arthritis and Metabolic Diseases in Bethesda, Maryland, and at the University College Hospital Medical School in London, he returned to Harvard.

In addition to his faculty responsibilities at Harvard, he was assistant chief of medical services and chairman of the committee on teaching and education at the Massachusetts General Hospital.

The Bloomfield Professorship was established in 1954 in honor of Dr. Arthur L. Bloomfield who retired as head of the medicine department that year after 26 years on the Stanford medical faculty. Bloomfield died in 1964.

– 30 – cr 9/11/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Tobacco smoking is a "unique and hazardous form of indoor air pollution" that is likely to worsen breathing problems in non-smokers, according to a Stanford medical professor.

Furthermore, according to Dr. William J. Sayer, clinical assistant professor of medicine at Stanford Medical School, smoking in a poorly ventilated room or car causes carbon monoxide levels "well within the range known to cause impairment of visual acuity" and balance.

He added that such levels "could be lethal for the bystander who suffers from arteriosclerotic heart disease."

Also writing in the Western Journal of Medicine, Sayer said other non-smokers susceptible to tobacco smoke are those with bronchitis, asthma, allergies and other respiratory diseases.

Sayer noted that carbon monoxide in the air near a smoker can be increased from an atmosphere value of one to three parts per million to "transient peaks" exceeding 90 parts per million. At the same time, nitrogen dioxide, an acutely irritating gas, "exists in cigarette smoke in amounts 160 times greater than levels considered safe for extended exposure," he said.

"It is no cause for wonder," he added, "that the Surgeon General of the United States has declared a Bill of Rights for the non-smoker."

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Mailed Tuesday, September 2, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. David A. Hamburg, Reed-Hodgson professor of human biology and professor of psychiatry at Stanford University School of Medicine has been appointed president of the Institute of Medicine.

The appointment was announced Friday, Oct. 31, by Dr. Philip Handler, president of the National Academy of Sciences in Washington, D.C.

Hamburg will be the Institute's third president, succeeding Dr. Donald S. Fredrickson, who left the office last July to become director of the National Institutes of Health.

The Institute of Medicine is composed of distinguished biomedical scientists, health professionals, and persons who have made contributions to public health. Its work is concerned with analysis of public policy problems in the health field. Hamburg became a member of the Institute of Medicine in its first election in 1971.

Hamburg will be taking leave of absence from Stanford at the end of the present academic year to take up his new position.

He came to Stanford in 1961 as professor and chairman of what is now the Department of Psychiatry and Behavioral Sciences.

For 11 years he directed the department's development into a nationally recognized center of research on psychiatric problems.

Hamburg stepped down from the chairmanship in 1972 to devote his efforts to the development of new programs including the Stanford Laboratory of Stress and Conflict, the undergraduate Human Biology Program, and the Program on Science, Technology and Society at the nearby Center for Advanced Study in the Behavioral Sciences.

His research contributions have centered on behavior under stress, especially hormonal responses and ways of coping with difficult situations. He was one of the first in psychiatry to call attention to the scientific value of studies on monkeys and apes.

In this context, he established the Stanford Outdoor Primate Facility, and a program of research and education on chimpanzees and baboons in East Africa.

His wife, Dr. Beatrix Hamburg, is an associate professor of psychiatry and behavioral sciences at Stanford. She has done pioneering work on problems of early adolescence and will be enlarging the scope of this work in a new position at the National Institute of Mental Health.

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Mailed Friday, October 31, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A Stanford physician says that over-the-counter drugs should be better labeled, including information about such commonly consumed ingredients as caffeine and aspirin.

"Packaging and advertising of non-prescription medicines are woefully lacking in pertinent facts," said Dr. William H. Forrest, Jr., associate professor of anesthesia.

He spoke today (Oct. 29) before the monopoly subcommittee of the Senate Small Business Committee in Washington, D.C.

Forrest called for more complete labeling that would enable users to directly associate the brand name with its contents and their effects.

Labels, he said, should include a listing of every active ingredient, giving the amount of each dose in milligrams. They should also give a brief common definition of why an ingredient is in the product, and list conditions which might alter the main effect of the medicine.

He called for providing this information in type much larger than that now used to list ingredients, and placing all information on the outside of the package, as well as in every advertisement.

He also recommended that supervision of such advertising be given to the Food and Drug Administration, instead of the Federal Trade Commission.

As an example, Forrest pointed out that caffeine, like all drugs that are affected by the user's mood at the time, cannot be guaranteed to produce the same effect in every person, or in the same person every time.

Almost a third of current over-the-counter pain compounds contain some caffeine.

Forrest pointed out that the stimulant effect of caffeine-containing medicine is influenced by how much coffee the individual drinks.

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"One might expect medication containing caffeine to have less of a stimulant effect on a heavy coffee drinker than on a light coffee drinker or some one who used no coffee at all," he said. Medication containing caffeine should carry a warning that it might, under certain circumstances, have no effect or even the opposite effect on coffee drinkers, he said.

"In other words," said Forrest, "if you took one of these preparations at bedtime for a headache, you could conceivably find your headache gone after a while, but you might be lying in bed wide awake because of the caffeine."

Using another example, he said, "It is clear that certain individuals should not take aspirin because it irritates their stomachs and may even cause ulceration and bleeding. And yet you seldom see warnings about these hazards on any aspirin bottle or in any advertisement for medicine containing aspirin."

In addition, Forrest recommends that labels provide some description of the effect of active ingredients, such as "an antihistamine," "a sedative," or "analgesic" after the technical name.

Forrest believes that "most over-the-counter products are not problems in respect to safety." The Food and Drug Administration, he says, "already has good machinery for judging efficacy and safety.

"The real problem is that the public needs better information in advertising and at the potential point of sale. It needs facts presented in clear, non-technical language, with the full story told each time the drug is promoted."

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Mailed Wednesday, October 29, 1975

Transmitted on Business Wire 10/29/75

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
(415) 497-2558

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

"I favor the education of women, believe in co-education and, in fact, believe fully in the right of women to have the franchise. . . . A woman can be educated and even vote, if you please, and still be a womanly woman."

With these words, Jane Stanford, cofounder of Stanford University, expressed her views of women's rights during the National Woman Suffrage Association meeting in San Francisco in 1901.

Her legacy in the cause of women's rights and education is now detailed in a new book, *Jane Stanford: Her Life and Letters* (179 pp., Stanford Alumni Association, $8.95, cloth, $6.95, paper) by Gunther W. Nagel.

The book is also a "first"—the first publication of Mrs. Stanford's letters in which she herself is allowed to tell her story.

Nagel, an emeritus Stanford clinical professor of surgery and San Francisco author, spent more more than two years in the University archives studying Jane Stanford's letters.

He has connected them with explanatory bridges and footnotes, depicting Jane Stanford's role not only in keeping the fledgling institution going in those early days but also in shaping its future.

"Her letters," Nagel states, "reveal a portrait of a remarkable woman. They have an impact and reality no historian can match."

Jane Stanford was born Jane Eliza Lathrop in Albany, New York, in 1828. One of six children of a successful merchant, she started schooling at the time the first stirrings of the women's movement began in America.

One of the movement's original goals was an education for women commensurate with that of men. By the time Senator and Mrs. Leland Stanford had founded Stanford University she wrote:

"Nobody appreciates more than I do the advantages of an education to those of my sex. Nor does anybody realize more than I do the effect on society of an educated and enlightened womanhood."

A sincere religious feeling and belief in old-fashioned virtues came naturally with Mrs. Stanford's upbringing. "I hope to see departments of philosophy and ethics established," she wrote in 1905. "Science must not overbalance the humanities as at present."

Jane Stanford from the start envisioned a university being in the forefront of changes taking place in higher education. There was to be a departure from the rigid course of study of the classical period, with its class distinctions, toward more practical courses and the ideas of freedom of choice.

Stanford University, writes Nagel, helped lead the way by setting up new guideposts with new conventions and customs in an environment far removed from the trappings of tradition.

Mrs. Stanford expressed her feelings on this subject in a letter to Stanford's first president, David Starr Jordan:

(more)

"I was quite surprised to find that any ceremony was expected in laying the cornerstone of the new library. . . . I prefer to do what is to be done in a quiet, unpretentious, unsensational manner. . . . One of the pleasures of adding to and beautifying the buildings is to do it without the blowing of trumpets. . . ."

In another letter she wrote: "There is one thing that troubles me very much, this constant comparison of our University with Berkeley, Harvard, Yale, Cornell, etc. Always remember we are simply a unique institution of our own; not trying to compete with any other in the world. . . ."

Jane Stanford respected President Jordan's wishes, but she was not sure about the faculty. "The professors as a rule (but there are exceptions and golden exceptions) think they want many things they can do without. It is so easy to spend money, but, oh, how hard it is to get it you and I know."

Mrs. Stanford's severest test of will came after Senator Stanford's death, when the country was in a financial panic, and the government initiated a suit attempting to establish the estate's liability for more than $15 million in Central Pacific Railroad construction loans.

When a group of bankers and lawyers told her point-blank, "The University must be closed!" she refused to be intimidated. "Do you think I believe that my husband's carefully laid plans can wholly miscarry?" she replied. They would learn eventually what a determined woman could do.

Stanford's doors were never closed, writes Nagel. "The University which Senator and Mrs. Stanford dedicated with high hopes became one of the important centers of learning in the world."

Below are excerpts of Mrs. Stanford's views:

On equality: "It shall be the duty of the University authorities to prohibit excessive expenditures and other excesses on the part of students, and the formation or growth of any organization, custom, or social function that tends to the development of exclusive or undemocratic castes."

On freedom of speech: "I feel that all American citizens are entitled to their own opinions and to express them if they feel inclined to do so. That is the blessed liberty that American freedom gives to us all.

"One of the most beautiful features of the gift of my husband is his insertion among its laws that the purposes of the University are 'to promote the public welfare by exercising an influence in behalf of humanity and civilization, teaching the blessings of liberty regulated by law, and inculcating love and reverence for the great principles of government as derived from the inalienable rights of man. . . .' "

On development of character: "Always be gentle in manner, resolute in purpose, and you will develop characters on which others can depend; and you can safely dispense with the more brilliant qualities if you can be depended upon for truthfulness, honesty of purpose; and each example of a good student will reach out and have an undying influence."

On the dangers of the politicization of the University: "As you know, my husband was an ardent Republican. He never flaunted the vices or the mistakes of his party leaders before the public. He praised their virtues and deplored in secret their vices, but he never would have used the president of a great University which he founded to further his political views or his enmities or his prejudices."

On professors: "I consider the lectures and opinions of a professor secondary to those of a president of a university."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner: (415) 497-6911

STANFORD –

A new department of neurobiology which will concentrate on the brain and nervous system has been established at Stanford University School of Medicine.

Formation of the department was announced Wednesday, Oct. 22, by Dr. Clayton Rich, vice-president for medical affairs and dean of the medical school.

Dr. Eric Shooter, professor of genetics and biochemistry and a noted molecular neurobiologist, has been appointed professor of neurobiology and chairman of the department, effective immediately. Other faculty members are Drs. Denis Baylor and John Nicholls.

The department will be located in the Sherman Fairchild Center which is scheduled for completion in September 1976.

According to Shooter, the department will act as a focal point for teaching and research activities in the basic neurosciences at the medical school. It will include aspects of anatomy, physiology and biochemistry relating to the nervous system and will also coordinate the interdepartmental Ph.D. program in neuro- and biobehavioral sciences organized by the medical school and university in 1963.

Shooter noted that the field of neurobiology promises major advances in the coming decades. "Neurobiology today is at the forefront of the life sciences. Technological advances in areas such as molecular biology, electron microscopy and computer science make it possible to study how the nervous system functions not only at the cellular and molecular level, but also at higher levels as in perception and movement control," he said.

Research in the new department will include studies of nerve impulse transmission, of nerve connections and pathways in the visual system, and of nerve cell development.

Shooter is recognized for his work on nerve growth factor, a protein that affects the development, differentiation and maintenance of nerve cells. He and his colleagues have isolated and recently crystallized the protein and are studying its three dimensional structure in an effort to better understand its role in nerve development.

A member of the Stanford faculty since 1963, Shooter received his Ph.D. in 1950 from Cambridge University in England. In 1964 he was awarded a doctor of science degree from the University of London for distinguished work in biochemistry.

Shooter is an editor of *Neurobiology*, and *Journal of Biological Chemistry*, and a member of several professional committees and societies. He is also chairman of the Committee on the Teaching and Research Manpower Needs in Basic and Communicative Sciences of the National Research Council's Assembly of Life Sciences.

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10/22/75 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Stanford scientists are working on a new imaging system that may provide doctors with a chest x-ray with the bone structure eliminated, making cancers or lung tumors clearly visible.

When developed, the new x-ray system could provide isolated images of specific materials, such as bone, soft tissues, or the circulation system, on conventional x-ray film and without any more risk to the patient then standard x-rays.

Dr. Albert Macovski, adjunct professor of electrical engineering and radiology at Stanford, reported the progress in this work at the annual meeting of the Optical Society of America today (Oct. 22) in Boston.

According to Macovski, x-rays utilize a spectrum of energy ranges. Certain energy levels act specific ways on different materials. For example, the absorption region for contrast material, like iodine and barium, occurs in specific regions of the energy spectrum. Lower energy levels, which are more responsive to bones and calcifications, could be delineated from higher energy regions.

With the new x-ray system being studied, information gained at certain energy levels can be encoded on a standard radiology film, then this information can be decoded to provide isolated images of specific body materials.

Says Macovski, "Grating structures, containing alternate stripes of different materials, are placed in the path of the x-ray beam. These allow the encoding of a wide variety of energy spectrum information

"This information, when decoded and processed allows the radiologist to delineate various body structures and administered contrast material (like iodine or barium) in a manner that was not possible before

"The ability to delineate these structures should significantly improve the diagnosis," he says.

He cites the advantage to the radiologist who could look through the bony pattern of a chest x-ray and see soft tissue, lesions, and airways which underlie the bone, or for example, lung tumors under the ribs.

Radiation exposure for the patient would be no higher than in standard radiography. A single exposure made through the grating would separate the various components of the "picture."

An important application being investigated is the system's ability to see iodine contrast material used to study the cardiovascular system. Catheterization could be replaced by a simple intravenous injection of iodine, because of the sensitivity of the system in isolating images of this material.

Dr. Macovski and his colleagues have simulated trials of the system, and hope to apply it in animal studies during the next few months. its use for patient diagnosis would come at a later time.

The investigation is being supported by a grant (GM 20984) from the National Institutes of Health.

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Mailed Tuesday, October 21, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Barbara Battino, 497-6911 130/4,5 cr
FOR IMMEDIATE RELEASE
STANFORD –

Nobel Laureate Gerald M. Edelman of Rockefeller University, New York, will deliver the third annual Linus Pauling Lecture at 4 p.m. Thursday, Oct. 23, in Room 420-040 of the Jordan Psychology Building on the Stanford University campus.

Dr. Edelman will discuss "Surface Modulation and the Control of Cell Function." The lecture is sponsored by the Departments of Biochemistry, Biology, Chemistry, and Pharmacology, and the Stanford Magnetic Resonance Laboratory. It is open to the public.

Dr. Edelman, 1972 Nobel winner, is engaged in the study of the structure of immunoglobulins and the genetics of the immune response, and the study of cell surface receptors and the control of cell division.

He holds the M.D. from the University of Pennsylvania School of Medicine, and the Ph.D. from the Rockefeller Institute. Since 1964 he has been Vincent Astor Distinguished Professor at Rockefeller University. Dr. Edelman is a member of numerous scientific societies, and holds several honorary degrees.

The Linus Pauling Lecture was established in 1973 in Dr. Pauling's honor by his friends and colleagues. Dr. Pauling delivered the first lecture, and Dr. Arthur Kornberg, holder of the endowed Emma Pfeiffer Merner professorship of biochemistry, and 1959 Nobel Prize winner, delivered the 1974 address. The topics are chosen in areas of molecular biology related to Pauling's work.

Dr. Pauling, Stanford professor of chemistry, won the Nobel Peace Prize in 1962, and the Nobel Prize in Chemistry in 1954.

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FOR IMMEDIATE RELEASE
STANFORD –

Stanford's Heart Disease Prevention Program, directed by Dr. John W. Farquhar, will be highlighted Friday, Oct. 24 on the ABC network program, "Close-Up on the Weekend Athlete."

The one-hour program can be viewed locally on Channel 7 at 10 p.m. Topics will include jogging, tennis, and medical aspects of sports activities, with Drs. William Haskell and Peter Wood, and program participants from the University and Palo Alto community.

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10/20/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Stanford University has announced plans for seeking construction of a new, approximately 48,465 square foot, cancer research building to be located on Governor's Lane near the Medical Center.

Total cost is estimated at $11.1 million. Support is sought from the National Cancer Institute (NCI) and through private gifts.

The new building would be the second increment in the development of the Governor's Lane complex, compatible with the long-range plan for that site. It would be located adjacent to the Louis B. Mayer Cancer Biology Research Laboratory, which houses a new program in cancer research under the direction of Dr. Henry S. Kaplan, Stanford professor of radiology.

The new facility will house investigators in medical oncology, radiobiology and tumor immunology and virology, now located in the main medical center building. A portion of the grant requested from NCI would allow renovation of the vacated facilities for other cancer-related programs in basic immunology and virology.

The new construction is expected to remedy the severely limited and fragmented space for the ongoing cancer research in the main medical center building, as well as strengthen and expand research, clinical investigative and educational programs in cancer.

Communications with appropriate agencies are underway, and Stanford has prepared an environmental assessment statement.

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Mailed Wednesday, October 15, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Stanford University Hospital daily room rates will increase two percent beginning November 1.

The increase, according to Paul Hofmann, director of the Hospital and Clinics, is for the purpose of covering an almost $1 million increase in the Hospital's annual malpractice insurance rate, which is effective on the same date. Malpractice insurance rate increases of 66 percent will be implemented for all hospitals participating in the California Hospital Association program. Hofmann emphasized that the room rate increase would have been substantially greater if Stanford did not require practicing physicians to have malpractice insurance.

Action was taken at this week's meeting of the Hospital's board of directors. The new rates add approximately $3 to the average daily room rate.

New daily medical-surgical rates will be $120 for ward, $130 for semi-private room, and $147 for a private room.

Daily rates for patients using services of the housestaff (interns and residents) are approximately $12.50 higher. The use of housestaff services is determined by the patient's attending physician.

New rates for the intensive care units will also increase two percent, to $398, and intermediate intensive care will rise to $289.50.

Last July the Hospital increased its room rates an average 10 percent to reflect raises in salaries of employees as well as the inflationary cost increases in food, medical supplies, and utilities. A major increase in malpractice insurance had not been expected at that time.

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Mailed Wednesday, October 15, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A new technique for monitoring heart function for the lifetime of the patient after open heart surgery has been developed by the Palo Alto Medical Research Foundation working in collaboration with researchers from the Stanford University School of Medicine.

The technique consists of implanting small metal coils at strategic points in the patient's heart muscle during the operation, then using them in conjunction with x-ray video disc pictures to monitor changes in the heart.

The system has been used for nearly 19 months at Stanford University Hospital, the researchers reported Monday (Oct. 13) at the meeting of the American College of Surgeons in San Francisco.

The researchers are Dr. Neil Ingels and George Daughters of the Palo Alto Medical Research Foundation, and Drs. Edward Stinson, Edwin Alderman, Lewis Wexler, Philip Oyer, Randall Griepp, Jack Copeland, and Norman Shumway of Stanford.

According to their report, markers have been placed in 23 heart transplant patients and in 20 patients who underwent coronary artery bypass graft and valve replacement surgery.

The tiny metal coils--about the diameter of a needle and about 1/16th of an inch long--can be inserted easily in the muscle fiber of the heart by the surgeon in a matter of minutes.

The coils are made of tantalum, an inert metal that creates no reaction within the body and can be left in place without complications for a lifetime.

Using a sequence of x-ray photos taken at any time after surgery, in conjunction with video monitors and a computer, the researchers can determine--within an hour of photo taking--how each segment of the heart is working, how much blood the heart contains, how much it is pumping, and the contraction time of the muscle.

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222--Metal Coils

By comparing one set of photos with a later one, they can determine if the heart is getting larger or smaller, if rejection of the transplanted heart is taking place, and how fast heart deterioration or improvement is occuring.

The condition of the patient's heart can be checked at frequent intervals without any danger or discomfort to the patient merely by taking a three-second sequence of x-ray pictures.

The project has been funded by a grant to the Foundation from the National Heart and Lung Institute and by private funds. It is designed, according to the researchers, to further the study of the short-term recovery process after surgery, the effects of drugs and exercise in the hearts of patients, and the effects of the rejection process and anti-rejection drugs on the transplanted heart.

"The long-term course of cardiac function can be followed precisely and routinely over the patient's lifetime using this noninvasive technique," the report concluded.

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Mailed Monday, October 13, 1975

Transmitted on Business Wire 10/13/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Fifty community physicians, suspended last week for failure to meet Stanford University Hospital's malpractice insurance requirements, will have till October 30 to comply.

According to Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine, the effective date of suspension was changed at the request of several physicians.

"In addition," Dr. Rich said, "the hospital has now been informed that a failure on its part to enforce these requirements will not adversely affect the hospital's own insurance program until November 1.

"For these reasons the board of hospital directors, on the recommendation of the medical board, has approved such an extention to October 30."

Dr. Rich said he hoped that during the additional time physicians would reconsider the matter and obtain the insurance necessary to remain on the staff.

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Mailed Friday, October 10, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Treatment with high doses of radiation therapy are resulting in 62 percent of patients with nasopharynx cancer surviving at least five years, and 56 percent surviving at least 10 years, according to a Stanford Medical Center study.

The findings are based on 18 years experience with 82 patients treated by Stanford's medical linear accelerators. They reflect improvements in the survival rates from earlier studies that showed from 28 to 56 percent survival for five years.

Results of the study were presented today (October 9) at the annual meeting of the American Society of Therapeutic Radiologists in San Francisco. Authors of the report are Dr. Richard T. Hoppe, radiology fellow; Dr. Don R. Goffinet, assistant professor of radiology; and Dr. Malcolm A. Bagshaw, professor and chairman of the Department of Radiology at Stanford.

Cancer of the nasopharynx accounts for approximately 1.3 percent of all cancers.

The authors report that irradiation of adequate size to encompass all the disease as well as other areas of possible involvement with doses of 6500 to 7000 rads in six to seven weeks "can achieve cure in more than half of the patients with cancer of the nasopharynx."

According to Bagshaw, cancers of the nasopharynx are best treated with radiation therapy. This is because the location of the primary cancer and the high incidence of spread to other inaccessible sites make surgery almost impossible.

Fifty-seven men and 25 women, with a median age of 52 years, received high dose megavoltage irradiation on linear accelerators in the study.

Survival rates, says Bagshaw, depended on the initial extent of the disease. Five-year survival rates for first stage cancers were 76 percent; for second stage, 68 percent; and for third stage, 55 percen

Patients with uninvolved lymph nodes or only one nodal involvement did well (78 and 70 percent five-year survival), while patients with more nodal involvement did worse (39 to 42 percent five-year survival).

According to Bagshaw success has been particularly evident in first and second stage patients since 1967, when the use of larger radiation fields began. "The better results since then," he says, "are due to the larger volume radiation, allowing us to pick up microscopically involved areas."

The study was supported by grants from the National Cancer Institute and the National Institutes of Health.

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Mailed Thursday, October 9, 1975
Transmitted on Business Wire 10/9/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A new laboratory, which will enable scientists to unlock the mysteries of tiny atoms that make up biological molecules, will be dedicated at Stanford University during a two-day conference Thursday through Friday (Oct. 9-10).

The international conference on molecular structural methods in biological research will begin at 9 a.m., Oct. 9, at Stanford Children's Hospital Auditorium. It is expected to attract more than 150 eminent chemical physicists, physical chemists, biochemists and biologists.

The Stanford Magnetic Resonance Laboratory, located in the Chemistry Building, will serve as a regional instrumentation center to aid scientists in their efforts to understand and conquer disease.

The facility, established with a joint award of $500,000 from the National Institutes of Health and the National Science Foundation, houses the first of the world's most powerful nuclear magnetic resonance spectrometers designed to the specifications of the Stanford group, according to Professor Oleg Jardetzky, director of the laboratory.

"So far," Dr. Jardetzky said, "46 scientists from the United States and abroad have used the facilities for exploratory experiments to evaluate the potential of high-frequency, high-resolution, nuclear magnetic resonance in the solution of chemical, biological, and medical problems."

A nuclear magnetic resonance spectrometer makes it possible for researchers to observe the magnetic properties of atoms in a molecule, and provide information which describes their spacial relationships and movements.

The technique allows scientists to "look" at structures many times smaller than can be seen with an electron microscope. In addition, it does not cause chemical alterations on the object being observed and can follow events in time and without interfering with the process.

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For example, a scientist may label amino acids (the building blocks of proteins) with stable isotopes and can chart changes in protein structure which result from the effects of drugs or other chemical agents. The studies are important in understanding disease.

The facility, said Dr. Jardetzky, will be used to study the physical and chemical properties of certain important biological materials to increase understanding of the roles they play in life processes.

Specific projects include the study of mechanisms of genetic control, cell membranes, drugs and their effect on enzymes, and the geometry of protein molecules. Abnormally shaped proteins have been associated with hereditary diseases.

"The instrument will provide the only systematic approach by which scientists can get a better understanding of the basic mechanisms of certain diseases and to make drugs for their treatment," Dr. Jardetzky said.

Stanford's nuclear resonance spectrometer was built to operate at the highest frequencies that could be attained with available technology, he said. The instrument has a resolution of 360 MHz (Mega Herz) for hydrogen nuclei and 90 MHz for carbon-13. It was built for the new laboratory by Bruker Scientific, a company based in West Germany and Switzerland, and Oxford Instruments, Oxford, England. Since the Stanford installation a similarly powerful instrument was installed at Bell Laboratories, he said.

The discovery of nuclear magnetic resonance in 1945 was made almost simultaneously by Professor Felix Bloch at Stanford and Edward M. Purcell at Harvard. Professor Bloch, a Nobel Price winner, will speak at the meeting.

The laboratory operates under guidelines established by the Biotechnology Resources Branch of the NIH and an administrative committee. It is chaired by Dr. Jardetzky and includes Professors Robert L. Baldwin, and Harden M. McConnell of Stanford; Melvin P. Klein, University of California, Berkeley; and Manuel F. Morales, University of California Medical Center, San Francisco. Professor William F. Massy, Stanford vice-provost for research, serves as an ex-officio member.

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Mailed Wednesday, October 8, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A human cancer virus will be detected within the decade, a Stanford University scientist predicted Saturday (Oct. 4).

"This is my personal conviction," said Dr. Henry S. Kaplan, speaking at the dedication of the $1.2 million Louis B. Mayer Cancer Biology Building at Stanford.

Kaplan, Maureen Lyles D'Ambrogio Professor of Radiology, told 300 guests that research in the building will involve an intensive attack on the basic aspects of human lymphomas, with respect to their biologic nature, immunologic behavior, and the increasingly strong possibility they might be caused by viruses.

Basic to this work, he said, is the success he and his associates have had recently in growing in laboratory cultures the tumor cells from 15 different types of human malignant lymphomas.

He explained that the search for a cancer virus requires successful cultivation of cancer cells outside the body. Inside the body, many of these viruses induce antibody which binds to the virus and masks its detection.

"If we identify a virus in certain types of human cancer, such as the lymphomas, and grow the virus and purify it, the opportunity to do some practical things would become very real," he said.

"But we would have to prove beyond any reasonable doubt that the virus had something to do with the causation of the cancer from which it came," he added.

This would not be easy. Viruses are known to grow in cancers as "passengers." They like the environment of the cancer better than normal tissue.

"It would be important to prove first that any virus we may find is human, and not a contaminant," Kaplan said. "We have to show it isn't a passenger virus, and finally we have to find a causal relationship to the tumor."

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All that would take a few years, he said. But if a human cancer virus were isolated, its components could be altered biochemically to function as a vaccine.

"If we reach that point, I think there is a good reason to believe cancer prevention might become possible on a mass scale," Kaplan said.

Isolating one human cancer virus will not eliminate all cancer, Kaplan cautioned. This is because each group of viruses produces only limited categories of cancers.

But the techniques developed from the original work could be used to isolate other viruses.

Dr. Frank J. Rauscher, Jr., director of the National Cancer Institute, said at the dedication that he had toured many facilities across the nation, but that he had "seen none better than this cancer research center."

Rauscher also called for an end to what he termed "halfway technology."

"We must do all we can for today's cancer patient and not worry only about tomorrow's patient, he said.

"We must also concentrate our efforts on the prevention of cancer by determining those who have high risk of cancer and have these people come in more often for a checkup."

University President Richard W. Lyman presented the building, and Robert Minge Brown, president of the Board of Trustees, made the acceptance speech. Melvyn, C. Ury, chairman of the Friends of Radiology Steering Committee, acknowledged the donors.

Faculty investigators who will work in the laboratory with Dr. Kaplan are Dr. Michael Feldman, visiting professor in cell biology, Weizmann Institute, Israel; and Drs. Zvi Y. Fuks, Marcia Bieber, Alain Decléve, Miriam Lieberman, and Peter Rosenthal.

The new laboratory was designed with special consideration for containment of biohazards. It was funded by the National Cancer Institute and gifts from the Louis B. Mayer Foundation, the San Francisco Foundation, and other private donors.

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Transmitted by telephone Saturday (Oct. 4), 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Fifty community physicians on the staff of Stanford University Hospital have been suspended for failure to carry adequate malpractice insurance, officials said Thursday (Oct. 2).

Thirty of the suspended doctors are psychiatrists, five are general surgeons, and 15 are in other specialties. With few exceptions, most of them have only on occasion used Stanford, according to Dr. Robert H. Alway, medical director.

But more than 400 community physicians have now complied with the hospital bylaws requiring doctors to be insured in order to practice in the hospital, Dr. Alway said.

The new policy went into effect August 1. The hospital has been considering such a requirement in the interest of protecting its patients for some time, officials said. But their decision to impose it at this particular time was due in large part to insistence by the hospital's own insurance carrier.

According to the hospital, failure to comply would have resulted in cancellation of the Hospital's insurance or at the very least enormous increases in its premiums.

Officials also said that last spring, even before any insistence by their carriers, about 200 California hospitals had already required that their physicians be insured, and by now all California hospitals have such a requirement.

Stanford belongs to the California Hospital Association insurance group. The program is administered by Walker & Company of Los Angeles, insurance brokers.

The suspended physicians are reinstated as soon as they have adequate coverage, Dr. Alway said. The minimum individual coverage required is $1 million per malpractice case, and $1 million aggregate per year for all cases.

The major carrier for California hospitals has announced this week that institutions allowing uninsured doctors on their staffs would have to pay an additional premium because of the increased risk. The premium would equal 20 percent of the hospital's annual liability insurance bill.

-more-

In Stanford's case this would have added another $400,000 per year to its already very high premiums.

This alternative, said officials, was not accepted at Stanford because the hospital would have to charge the non-Medicare, and Medi-Cal patients significantly higher room rates for the 50 doctors who did not obtain insurance. Even after paying those rates, there would be still uninsured physicians on the staff.

Stanford hospital was notified recently that its malpractice premiums will cost nearly $2.4 million a year after a new rate hike becomes effective next month. The policy covers hospital and clinics personnel and the medical school faculty.

In August, 15 community physicians sought an injunction to prevent the hospital from requiring the insurance, and to prohibit the carrier from cancelling the hospital's insurance policy if uninsured doctors used the facility.

The court denied the request. Judge John M. Brenner, Santa Clara County Superior Court in Palo Alto, said, "that a doctor does not have the right to put a hospital in the position of having to pay the full cost of joint doctor-hospital negligence."

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Transmitted on Business Wire Thursday, October 2, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University Medical Center, affected adversely by new Medicare regulations, has been notified by the Bureau of Health Insurance that it will be reclassified with the group of hospitals of the San Francisco-Oakland area.

The medical center would have faced a projected deficit of $4.5 million from the Medicare and Medi-Cal programs if its exception request to the BHI in Baltimore had been denied.

The problem, according to Clayton Rich, vice-president for medical affairs and dean of the School of Medicine, stemmed from new regulations that went into effect August 1.

The new rules established Medicare reimbursement ceilings, based, among other things, on geographic location of the hospital and per capita income of the area in which the hospital is located.

Stanford Medical Center was placed in a group of hospitals that takes in Santa Clara County with a maximum reimbursement of $97 per day for routine care, while it costs Stanford $140 per day to provide this care.

Stanford officials argued that the medical center was located 700 yards from the San Mateo county line, and costs and other economic factors coincided with those of comparable hospitals in the San Francisco-Oakland area than the rest of Santa Clara County.

Hospitals in San Mateo, San Francisco, Alameda, Marine and Contra Costa counties are placed in a group with a top reimbursement of $135 per day, and Stanford will now receive the same maximum level of reimbursement.

About 40 percent of Stanford's patients are Medicare and Medi-Cal beneficiaries. The new rules affect both programs.

The reclassification is not expected to eliminate the hospital deficit completely. The medical center still faces a deficit of more than half a million dollars from these programs.

Dr. Rich, however, indicated that the center would continue its present efforts to reduce costs through changes in organization of certain patient areas, and file requests for exceptional reimbursement where abnormal intensity of care required it. ###

Mailed Thursday, October 2, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415· 497-6911

STANFORD--Dr. Frank J. Rauscher, Jr., director of the National Cancer Institute, and other noted speakers will highlight the dedication of the new $1.2 million Louis B. Mayer Cancer Biology Laboratory at Stanford University, Saturday, October 4.

Tours of the Department of Radiology and the new building will mark the beginning of the ceremonies at 10 a.m., which will conclude at noon with an address by Dr. Henry S. Kaplan, Maureen Lyles D'Ambrogio Professor of Radiology.

The new laboratory, located on Pasteur Drive and Governor's Lane near the medical center, will house a new program of cancer research under the direction of Dr. Kaplan.

Research in the building will involve an intensive attack on the basic aspects of human lymphomas, with respect to their biologic nature, immunologic behavior, and the increasingly strong possibility that they might be caused by viruses. Basic to these studies is the success Dr. Kaplan and his associates have had recently in cultivating in tissue culture the tumor cells from human malignant lymphomas.

Dr. Kaplan also plans to launch a program in experimental immunotherapy in collaboration with Dr. Michael Feldman, professor of cell biology at the Weizmann Institute of Science in Israel.

Dr. Feldman, who will join Stanford this fall during his sabbatical leave, has developed a technique for sensitizing normal human white cells in tissue culture to become killer cells.

A series of experiments are planned to determine whether these white cells of patients can be educated to recognize and attack the lymphoma cells in culture and to do the same thing when they are put back into the patient.

-more-

Another project will carry forward studies of the mechanisms underlying the development of very closely similar lymphomas in mice. The work had its beginning 18 years ago with the discovery and isolation by Dr. Kaplan of a leukemia-inducing virus in mice.

Completion of the Louis B. Mayer Cancer Biology Research Laboratory was made possible because of a combination of public and private funding. Support came from the National Cancer Institute, the Louis B. Mayer Foundation, the Friends of Radiology, and an anonymous gift through the San Francisco Foundation.

The building has been named in honor of the late Louis B. Mayer, a Russian immigrant whose interest in films began in 1908 and who served as vice-president and chief of production of MGM for 28 years.

The foundation that bears his name supports primarily medical education and research. It has been generous to the Stanford Medical School for many years.

Participants at the dedication will include Robert Minge Brown, president of the Stanford University Board of Trustees; Stanford University President Richard W. Lyman; Melvin C. Ury, chairman, Friends of Radiology Steering Committee; Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine; and Dr. Malcolm A. Bagshaw, chairman of the Department of Radiology.

The new laboratory contains about 11,000 gross square feet. It was designed with special consideration for containment of biohazards. A sophisticated heating, ventilating, and air-conditioning system handles exhaust air requirements of the laboratories in which virus work will be done. Tissue-culture and virus handling operations will be carried out in specially designed laminar-flow biohazard safety cabinets.

Architect for the project was the firm of Caudill, Rowlett and Scott of Houston, Texas. The Hodgson Construction Company of Redwood City was the general contractor, and Ray Rooker was the landscape architect.

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Mailed Wednesday, October 1, 1975.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497 6911

FOR IMMEDIATE RELEASE

STANFORD —

Dr. Walter F. Ballinger, Bixby professor of surgery and head of the Department of Surgery at Washington University School of Medicine in St. Louis, Mo., will deliver the sixth Louis and Dorothy Kovitz Visiting Professorship lecture at Stanford on Wednesday, Oct. 8.

The professorship includes four days of doctors' conferences at Stanford and at Palo Alto Veterans Administration Hospital and Santa Clara Valley Medical Center.

Highlight of the visit will be Dr. Ballinger's discussion of "Experimental Transplantation of the Islets of Langerhans for the Control of Diabetes," 5 p.m. October 8, in Room M106 of the Medical School.

Physicians and other health professionals in the community are invited to attend the lecture.

The Kovitz Visiting Professorship was established in 1969 by Dr. and Mrs. Louis Kovitz of Los Altos to bring outstanding lecturers in medical and surgical fields to the Medical School.

Dr. Ballinger is well known for his work in hyperparathyroidism, as well as gastrointestinal physiology and metabolic responses to injury. A text *The Management of Trauma* which he coedited, is in wide use.

A graduate of the University of Pennsylvania School of Medicine in 1948, Ballinger has served at the Johns Hopkins University School of Medicine and as a consultant in surgery at Walter Reed Army Medical Center.

Currently, besides heading the Department of Surgery, he is surgeon in chief of Barnes and allied hospitals, consultant to the Jewish Hospital of St. Louis, Veterans Administration Hospital, and city and county hospitals in St. Louis.

He has held active committee posts with the American College of Surgeons, the American Surgical Association, and served for four years on the surgery training committee of the National Institute of General Medical Sciences.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415. 497-6911

STANFORD--A new program to train medical school faculty to teach general internal medicine will be established at Stanford University School of Medicine.

The program will be supported by a $180,000 grant from the Henry J. Kaiser Family Foundation of Palo Alto.

The two-year grant will be administered by Dr. Daniel D. Federman, Bloomfield professor and chairman of the Department of Medicine at Stanford.

Major emphasis of the program will be on preparing faculty for the teaching of general internal medicine. He cited "a severe shortage of well-trained junior faculty to exemplify and teach the role....

"It is clear that the academic pressures of the past 20 years have almost completely inhibited this source of faculty. The emphasis on subspecialization has oriented a whole generation of young internists away from academic careers based on practice, teaching and research in general medicine."

He continued, "Lacking this role model, students and house staff have abjured this direction. There is no greater need than for salary support of such faculty, enabling them to maintain their scholarly status by having sufficient time for teaching, learning, and research in addition to seeing patients."

The Kaiser grant will help support advanced fellowship training for selected residents interested in an academic career in general internal medicine. According to Federman, fellows would be "men and women who have completed three years of internship and residency in internal medicine, and are experienced in patient care, teaching, and research, preparing them to function as faculty." Federman expressed hope that a future program could provide basic training for residents preparing for practice.

Dr. Robert J. Glaser, president of the Henry J. Kaiser Family Foundation, noted in a letter announcing the grant, "Our trustees are aware of the dearth of well-qualified primary care physicians and the resulting need for a reemphasis on training in general medicine. They believe the fellowship program at Stanford...will offer a useful model and contribute toward remedying the situation."

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Mailed Monday, November 24, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

EDITORS: The study on which this release is based is being reported Thursday, November 20, at the morning session of the American Heart Association meeting in Anaheim.

ADVANCE FOR RELEASE IN AFTERNOON PAPERS, THURSDAY, NOVEMBER 20.

STANFORD--People with sleep apnea--periodic breathing obstruction during sleep--have abnormal heart rhythms that can lead to death while they are asleep, a research team at Stanford University School of Medicine has found.

These irregular heart rhythms can be completely reversed, they reported.

The findings were presented Thursday, November 20, at the American Heart Association meeting in Anaheim, by Dr. Ara Tilkian, formerly of Stanford and now teaching at UCLA.

He worked at Stanford with Drs. Christian Guilleminault, John Schroeder, Kenneth Lehrman, and F. Blair Simmons.

The physicians studied and monitored 16 patients with sleep apnea. All patients had normal heart rhythms when they were awake, but showed a variety of rhythm abnormalities (arrhythmias) during sleep. Such arrhythmias are potentially dangerous and can lead to sudden death.

Eight patients had a tracheostomy--a surgical opening made to facilitate breathing at night. The opening was protected by an implanted valve which could be opened or closed by the patients.

The procedure eliminated the heart irregularities and also abolished the most common patient complaint of excessive daytime sleepiness.

Patients with sleep apnea stop breathing for periods of about 30 seconds as many as 400 or 500 times a night, explained Guilleminault in an interview. They tend to snore loudly when asleep and are sleepy during the day, probably because they have a disturbed sleep at night.

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22--Sleep

The condition was first described ten years ago in obese patients as Pickwickian syndrome. Then in 1972, physicians at the Stanford Sleep Disorders Clinic found that some insominia patients also had sleep apnea. Since patients with Pickwickian syndrome may have heart problems, they speculated at the time that sleep apnea may have associated cardiovascular abnormalities.

Sleep apnea occurs when the respiratory center in the brain that regulates breathing impulses malfunctions, or when a muscle weakness causes the upper airway (pharynx) to collapse, preventing oxygen from reaching the lungs.

A tracheostomy, which is an opening into the windpipe below the voice box, bypasses the obstructed airway and allows oxygen to pass into the system during sleep. It can be kept closed whenever the patient is awake.

When the valve was closed at night, all patients had the same arrhythmias they demonstrated before surgery. With the valve open so air could pass, the arrhythmias disappeared.

It is hoped that the restoration of normal breathing will lessen the chance of sudden death, said Tilkian and also prevent the development of other cardiac problems in such sleep apnea patients.

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Mailed November 18, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Stanford Medical Center's Division of Child Psychiatry has expanded its services recently, to include several new areas, including a special problems clinic.

A custody clinic has been established which accepts referrals of children involved in court cases. There is also a new crew of psychologists trained in developmental assessments.

The special clinic, according to Dr. Thomas F. Anders, director of child psychiatry, is directed at "problems that people don't pay much attention to, such as the depression associated with adolescent diabetes, or young children's nightmares. . . .

"There are areas that may require the multidisciplinary approach of a medical center, where we hope the community can use us as a resource. We hope that each special area will become a focus of research, and we will further improve our ability to help."

The division is building ties both with related Medical Center departments and with agencies in the community.

For example, recently a 16-year-old girl seen in the pediatric youth clinic was feeling "funny," and her epileptic mother worried that her daughter might have the same disease. She was referred to the new clinic, where it was found that the pressures of family, school, and emerging adolescence were the problem, rather than organic disease.

Anders has also revived a pediatric liaison program, in which he and child psychiatry residents attend pediatric conferences in the Stanford Hospital and are available for consultation with pediatricians on the ward.

The division is affiliated with several community agencies, including the Children's Health Council, Children's Hospital at Stanford, Peninsula Children's Center, and the Children and Adolescents Psychiatric Inpatient Service of San Jose Hospital.

Such affiliation proved helpful recently in the case of a six-months-old girl admitted to the Hospital pediatric ward because of vomiting. Pediatricians could find no organic disease. Upon referral to the special problems clinic, psychiatrists found that the mother had led a very stressful life, suffered a severe auto accident, became divorced, and had financial problems. Mother and child were referred to an affiliated program that specializes in helping mothers relate to their babies, as well as provide individual counseling for the mother.

The Division not only trains child psychiatry residents, but also pre- and postdoctoral clinical fellows train under Dr. Elizabeth Bing, chief psychologist and director of the Child Psychiatry Clinic.

The Child Psychiatry Clinic was founded in the 1930s by the late Dr. Hale S. Shirley, who pioneered in developing child psychiatry as a medical specialty. The clinic countinues to provide help in the more traditional problem areas of delinquency, runaways, drug-related cases, and problems with academic achievement, among many others. Referrals come from families, physicians, schools, or other agencies.

Anders became director of child psychiatry last year, having served as associate professor of psychiatry and pediatrics and director of the division of child psychiatry at State University of New York at Buffalo.

He received his A.B. from Stanford in 1956 and his M.D. in 1960. His research interests have been in the areas of community mental health services and the sleep patterns of infants.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

EDITORS: Release date for this story has been set to coincide with presentation of the research report at the American Heart Association meeting during the afternoon session, November 19.

ADVANCE FOR RELEASE IN AM PAPERS, THURSDAY, NOVEMBER 20, 1975

STANFORD--Medically supervised exercise programs for heart patients appear to be relatively safe according to a survey of programs in the U.S. and Canada.

Dr. William Haskell, physiologist at Stanford University Medical Center, presented the survey findings at the annual meeting of the American Heart Association on Wednesday, November 19, in Anaheim.

Coronary artery disease patients frequently are recommended a program of increased physical activity. The study was to determine the relative safety of such participation and the frequency of major cardiovascular complications during the exercise sessions.

Haskell reported that, based on current programs, the risk of death for cardiac patients while exercising in medically supervised programs is not much different than that reported for cardiac patients in general.

On the average, one death could be expected every 14.4 years of experience in current programs, based on 120 patients meeting three times a week. Only one death has occurred in programs surveyed since 1970.

According to Haskell, medical supervision is the key element for successful exercise training. "A medical evaluation and electrocardiogram should be required prior to the exercise," he says, "and a cardiovascular-trained nurse or physician should be in attendance who can give immediate care if necessary."

Another element of a successful, low-risk program is that it be designed individually for the patient by his physician.

Programs surveyed were required to include medical examination on entry and annually, and all sessions had to be medically supervised including the capability of providing electrical defibrillation and emergency medication.

Twenty-five programs meeting those criteria represented 86 exercise class locations in major population centers in the U.S. and Canada. Of the 25 programs, 24 did not perform continuous ECG monitoring of patients during the exercise session. The program that included such monitoring of all patients had no fatalities or cardiac arrests in 168,000 man hours of participation.

Haskell observed that "continuous ECG monitoring of patients may reduce cardiac arrest rate."

The survey also determined that a wide range of cardiovascular event rates occur among the programs, and most cardiac arrests are successfully resuscitated (82 percent).

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Mailed November 17, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

Editors: This report is being presented during the morning session of the American Heart Association meeting in Anaheim.

ADVANCE FOR RELEASE IN AFTERNOON, WEDNESDAY, NOVEMBER 19.

STANFORD--Patients take too long to get to the hospital when they may have a heart attack, a Stanford University cardiovascular nurse researcher told the American Heart Association today, November 19, in Anaheim.

The biggest delay in getting a suspected heart attack patient to a coronary care unit occurs between the time a patient first experiences chest pain and the time he decides to seek medical help, Ms. Irene lamb told the group.

She reported the results of a recent study directed by cardiologist Dr. John S. Schroeder, assistant professor of medicine at Stanford. Two hundred and eleven patients with chest pain admitted to the coronary care unit of Stanford University Hospital were interviewed.

"The majority of deaths from cardiac disease occur outside the hospital, and as many as 30 percent of these seem to happen within an hour after chest pain begins," Schroeder said in an interview. It is essential that patients recognize oppressive pain or discomfort in the center of the chest as a possible heart attack and obtain proper care immediately.

He and Ms. Lamb found that 66 percent of the patients delayed more than three hours after they developed chest pain before reaching the hospital. Delays ranged from 10 minutes to three days.

Transportation only took 17 minutes on the average. Primary emphasis must be placed on patient education rather than on improved transportation for chest pain patients, Ms. Lamb said.

The advent of coronary care units in the 1960's dramatically improved the survival chances of heart disease patients, but they have to get to the hospital first, said Schroeder.

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Nurses can play a greater role in the education of patients admitted to coronary care units, he noted. They can teach people to recognize the significance of chest pain, even those for whom heart attacks are ruled out after examination because this group is especially susceptible to a real attack with heart damage within a year, he explained.

Of the 211 patients studied, 61 had a heart attack on admission and another 30 developed one in the hospital. Preliminary followup showed that 15 percent of those for whom a heart attack was ruled out at the first admission were soon hospitalized with a real attack. Another 20 percent of the "rule outs" died within a year.

The researchers found that men delayed seeking help on the average of 30 minutes longer than women. Patients with previous heart attacks also delayed longer, "so hospitalization alone does not educate them," they said.

There were also delays in the emergency room and as a result of the study all chest pain patients are now monitored upon admission. The researchers suggest that emergency room personnel evaluate and transfer patients with chest pain to the coronary care unit as soon as possible.

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Mailed Monday, November 17, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A Federal rights panel has ruled that there is reasonable cause to believe Stanford University has violated provisions of the Civil Rights Act of 1964 by laying off a medical school black technician.

The finding was announced in a recent letter from Fred D. Brooks, Jr., acting director of the San Francisco District Office of the Equal Employment Opportunity Commission. (EEOC)

Brooks' letter invited the university and the employee to undergo conciliation efforts.

Douglas Barton, staff legal counsel for Stanford, said that an outside arbitrator, attorney Gerald Marcus of San Francisco, is scheduled to hear the case under an agreement between Stanford and the United Stanford Employees (USE), the union representing the technician.

The black man laid off as a medical school life-sciences technician is Roscoe (Rocky) McGill, a San Francisco resident.

McGill had charged that his attempted layoff in 1973, his suspension in 1974, and his permanent layoff in 1975 were all based on racial discrimination.

The EEOC found cause to believe only that McGill was discriminatorily denied cross-training in other skills which would have prevented his dismissal.

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STANFORD--Stanford medical graduates will hold their annual fall reunion on the Stanford campus Friday, November 21.

Morning meetings will cover aspects of Stanford's work in orthopedic surgery in Room M106 of the Medical School.

Beginning at 9:35 a.m. the sessions will feature these topics:

"Problems of the Knee in Children" by Dr. Eugene E. Bleck, clinical associate professor of surgery; "Football Knee" by Dr. Frederick L. Behling of the Palo Alto Medical Clinic and clinical associate professor of surgery; "Dashboard Knee" by Dr. Donald A. Nagel, professor and head of the division of orthopedic surgery; and "Status of Total Knee Joint Replacement" by Dr. David J. Schurman, assistant professor of surgery.

The noon reception and luncheon will be in the Palo Alto Holiday Inn. Dr. Paul F. Basch, associate professor of Family, Community and Preventive Medicine, will speak on "Six Weeks in China: Recollections of a Barefoot Patient."

Other speakers include Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine, and Dr. Paul Campbell of Portland, Oregon, president of the medical alumni association.

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Mailed November 17, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

EDITORS: Release date for this story has been set to coincide with presentation of the research report at the American Heart Association meeting in Anaheim.

ADVANCE FOR RELEASE IN AM PAPERS, THURSDAY, NOVEMBER 20, 1975

STANFORD--Mass media campaigns can help people eat right and stop smoking, lowering their risk of heart attack, according to preliminary results of a Stanford study in three Northern California communities.

Researchers cited a "rather large risk reduction" in two communities that received mass media campaigns in 1973 and 1974. Risk was calculated by measuring smoking, systolic blood pressure, plasma cholesterol levels, and relative weight.

They also reported dramatic changes in respondents' knowledge about heart disease risk factors.

Dr. John Farquhar, director of the Stanford Heart Disease Prevention Program, reported results from the second year of a three-year health education campaign on Wednesday, November 19, at the American Heart Association annual meeting in Anaheim.

Random samples of about 600 residents in Watsonville, Gilroy and Tracy are being monitored in the study. In Watsonville, radio, television, newspapers, billboards and mail focused on reducing smoking exercising, reducing weight, and consuming less cholesterol and saturated fat, but more polyunsaturated fat. In addition, a smaller group of respondents who were at high risk for heart disease received face-to-face personalized instruction from doctors, dietitians and other health personnel.

In Gilroy, the multimedia campaign was carried out, but not the personalized instruction. A random sample of residents of Tracy was surveyed each year as a control.

Data are still being collected in these communities during this third and last year of the study.

Farquhar reported that risk factors continued to be reduced in Wastonville and Gilroy subjects during the second year of the study. This was despite a reduced intensity in the media campaigning. Residents maintained or improved their behavior changes, said Farquhar, whereas Tracy residents showed the expected gradual rise in risk factors during the two year period.

Compared to no treatment, net risk reductions were 25 percent in Watsonville and 24 percent in Gilroy after two years of campaigning. First-year figures had been 21 percent reduction in Watsonville, and nearly 12 percent reduction in Gilroy.

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Compared with control, systolic blood pressure dropped 6 to 9 percent in the two towns at the end of two years of campaigns.

Farquhar cited "impressive" results in getting people to reduce or stop smoking.

In Watsonville, 31 percent of high risk respondents had given up smoking by the end of the first year, and 44 percent by the end of the second year. Corresponding changes in Gilroy were 14.8 percent the first year and 13.1 percent the second year, and in Tracy 8.2 percent and 12.2 percent respectively.

Among the larger sample of respondents in each community, the net percentage of smokers changed most in Watsonville (18 percent), and less in Gilroy (6 percent) at the end of two years.

About 18 percent net fewer cigarettes were smoked by the Watsonville respondents the first year, and 22 percent fewer the second year. In Gilroy, there was no change the first year, and 5 percent fewer cigarettes smoked the second year.

The knowledge of smoking as a risk factor was significant in Gilroy, but did not seem to affect the individuals' behavior. Says Farquhar, "The implication is that stopping smoking is a complex matter, and the person needs feedback and individual instruction to accomplish it."

Data do indicate that sustained reduction in smoking can be achieved with a combination of mass media and face-to-face instruction, he added.

The researchers also found that knowledge changes surpassed behavioral changes. Says Farquhar, "Real changes occurred in risk factors. They persisted and were even extended in the second year. But there were even larger changes in knowledge. We saw that people can learn things, but not necessarily change their behavior."

He also noted, "We saw in addition that disadvantaged groups could increase their recognition of dietary risk factors at a greater rate than others in the communities. With carefully designed campaign programs, we might be able to close the 'knowledge gap' between the two groups."

The project is the first time that news media have been employed in an effort to change health habits at the community level, and the first attempt by scientists to evaluate whether or not the media can be used successfully for this purpose.

Dr. Farquhar heads the interdisciplinary research team. Dr. Nathan Maccoby, professor of communication, is co-principal investigator. Grant support is from the National Heart and Lung Institute.

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Mailed Monday, November 17, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--A North American databank network designed to improve the care of thousands of arthritis patients has been established among eight medical centers in the U.S. and Canada.

The pilot project for ARAMIS (American Rheumatism Association Medical Information System) is being funded by an $854,000, three-year grant from the National Bureau for Health Services Research.

The project is under the direction of Dr. James F. Fries, assistant professor of medicine at Stanford University School of Medicine, with central computing facilities for ARAMIS at Stanford.

Fries believes ARAMIS will benefit both patients and physicians by making available to physicians information about a cross section of patients, including their ailments and treatment. ARAMIS will also tell physicians what has happened to the patients after they have received specific kinds of treatment.

Such a databank of information, Fries said, will provide for more accurate prognoses and therefore, more effective therapeutic programs. Databanks such as ARAMIS are not currently available to doctors on a nationwide, or international basis.

Fries said the project will also evaluate optimal ways of actually extending the system to many areas of the two countries.

In addition to Stanford, other medical centers participating in the ARAMIS network are the University of California at San Francisco, University of Cincinnati, Cornell, University of Pittsburgh, Phoenix Arthritis Center, UCLA and the University of Saskatchewan, Canada.

Fries said information on hundreds of patients with similar problems, as well as data on their treatment, will be pooled and analyzed by the computer.

As a result, Fries said, ARAMIS will be particularly beneficial to physicians dealing with unusual arthritic and rheumatic diseases.

Initial results show that successful treatment of rheumatic disease cases has "clearly increased," Fries noted. Furthermore, ARAMIS data shows that some patients should be receiving different kinds of treatment than those usually administered, he said.

As the project proceeds, Fries is hopeful ARAMIS will branch into a national databank system for rheumatic and other chronic diseases. He believes such a system could be developed within eight years.

Working directly with Fries at Stanford are associate director Dr. Alan Shapiro; Jean Porta, biostatistician; Alison Harlow and Jim Standish, information systems analysts; and, Cathy Williams, coordinating secretary.

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Mailed Wednesday, November 12, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Spinal arthritis may be more prevalent than previously suspected, according to Stanford University immunologists.

Over three million (Americans) may have undiagnosed, symptomatic ankylosing spondylitis, a type of spinal arthritis once considered rare, they say.

Drs. Andrei Calin and James Fries of the School of Medicine report their findings in the October 23 issue of The New England Journal of Medicine.

Ankylosing spondylitis, characterized by back pain, stiffness and inflammation, limits movement and can result in fusion of the spine. People with a certain hereditary antigen called W27 are known to be particularly susceptible to the disease.

Antigens stimulate the immune system to help fight disease. W27 belongs to a group of more than 30 antigens that determine how an individual responds to foreign substances and influence the acceptance or rejection of organ transplants. Every individual inherits four of these antigens--two from each parent--which are located on the surface of all body tissues.

About seven percent of the American white population, and a smaller percentage of the black population carry the W27 antigen. On the basis of former estimates of the incidence of ankylosing spondylitis, the investigators expected that some 2 percent of the men, and 10 times fewer women with W27 in any study would have the disease.

Yet they found a much higher frequency of up to 20 percent.

A detailed medical questionnaire was sent to 78 W27 carriers presumed healthy and 126 others who lacked the antigen. X rays were then taken of those the physicians thought might have the disease.

The X rays confirmed ankylosing spondylitis in eight of the 48 women and six of the 30 men who carried the W27 antigen. Twenty-seven non-carriers in the control group had normal X rays.

"Extrapolation of these figures to the United States population suggests that 20 percent of (those) who are W27 positive are affected," the authors write.

Although the disease may be more severe in men, nearly as many women may be affected, they suggest. However, women may not be so readily identified because of the reluctance to expose the female pelvic area to radiation.

The W27 antigen serves as a helpful genetic marker to screen for ankylosing spondylitis in patients with a history suggesting inflammatory backpain. Since there are drugs which effectively control the painful symptoms of the disease, the report concludes, "increased awareness of ankylosing spondylitis may result in substantial clinical benefit to large numbers of patients."

Their work was supported in part by the Arthritis Foundation. ###

Mailed 11/10/75

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

SCIENCE WRITERS: The scientific paper on which this story is based will be presented Thursday, November 6, during the morning meeting of the Acoustical Society of America in the Jack Tar Hotel in San Francisco.

ADVANCE FOR RELEASE IN AFTERNOON NEWSPAPERS, THURSDAY, NOVEMBER 6, 1975.

STANFORD –

An important discovery, believed to bridge a major evolutionary gap between man and animals, was reported Thursday, Nov. 6, by a Stanford University scientist.

Dr. James H. Dewson, III, told the meeting of the Acoustical Society of America in San Francisco that monkeys have now been shown to possess a type of brain which earlier had been associated primarily with man's specific intellectual capacities.

In humans there is an asymmetry of brain organization, and each half of the brain, therefore, is specialized to handle different activities. The left hemisphere deals particularly with those activities which contribute to the understanding and use of spoken language.

Dewson said that like humans, monkeys have been found to have similar asymmetries of brain function.

Researchers have generally determined, Dewson explained in an interview, that monkeys had brains with two operationally equal halves. Animals certainly exhibit no natural linguistic behaviors similar to man's which might demand one-sided brain specializations.

"It is also possible, however, that the underlying complex brain functions ultimately necessary for man's language have not been thoroughly examined in animals," he noted.

Hoping for clues to the reasons for asymmetry of human brain functions, Dewson and his associates turned to man's evolutionary past—the monkeys. Under grants from the National Science Foundation they trained more than a dozen macaque monkeys to recognize various sounds and to match these sounds with certain colors. The task demands not only listening and looking but a form of recall memory as aell.

To obtain their food pellets, the monkeys were taught to listen to a sound from a loudspeaker on a panel resembling a slot machine.

The particular type of sound could never be predicted ahead of time by the monkeys. After hearing it, they had to decide which of two lighted buttons, one red and one green, was correct according to the sound they had just heard.

If they pressed the correct colored button, it rhowed they remembered the sound.

(more)

After the animals learned this task perfectly, Dewson introduced delays between the end of the sound and the lighting of the random-position color buttons. As the monkeys experienced progressively greater difficulty in remembering a sound, their memory capacity was plotted on a chart.

Having shown that by this method the monkeys could remember a sound for as long as 20 seconds, Dewson and his colleagues surgically removed a part of the brain called the auditory association cortex.

This part of the monkey's brain may correspond to a part of the left side of the human's brain where many so-called language functions seem to be located.

"We performed this operation six times," Dewson said, "and without any question, without any overlap, all of the animals with damage to the left side had their auditory recent memory capacity virtually wiped out."

Two animals whose brains were damaged on the right side did not show any deficient memory, he added.

"It seems that unevenness of function between the two hemispheres of the brain is not restricted to humans," Dewson said, "and it cannot possibly be linked exclusively to man's linguistic behavior."

Dewson said that the trained monkeys can be used as an animal model for studies of such maladies as strokes which lead in humans to aphasia or loss of the capacity for understanding or expressing thoughts conveyed by language.

"These monkeys can also be helpful in studies which seek clues to the evolution of man's intellectual prowess," he explained.

In recent years apes have been taught to communicate with people either through sign language or appropriate use of plastic symbols or computerized visual displays, he said. These experiments demonstrate that nonhuman primates are capable of much more complicated thinking than had previously been supposed.

"Monkeys, as well as apes, can now provide us with vital and unexpected information about the organization of the human brain," Dewson said.

Dewson heads the Hearing and Speech Sciences Section in the Division of Otolaryngology. His report was coauthored by Allen C. Burlingame, Kenneth Kizer, Sue Dewson, and Patti Kenney, all research assistants, and Dr. Karl H. Pribram, professor of psychiatry and psychology.

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END ADVANCE FOR RELEASE IN AFTERNOON NEWSPAPERS, THURSDAY, NOVEMBER 6, 1975.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Stanford University School of Medicine's new department of neurobiology has been awarded $270,000 for research and training from the Alfred P. Sloan Foundation of New York.

The grant, effective November 1, was announced Monday, November 3, by Dr. Clayton Rich, vice president for medical affairs and dean of the medical school.

It is part of the Sloan Foundation's program to support new developments in the neurosciences.

Dr. Eric Shooter, professor and chairman of neurobiology, said the award will help the department get started over the next three years while additional funding is being sought from other sources. The money will be used toward faculty salaries, graduate student support, equipment and materials.

The neurobiology department was established last month to coordinate training and research related to the brain and nervous system in the medical school. With the new department, teaching and scientific activities in the basic neurosciences are being expanded.

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Mailed Monday, November 3, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Discovery of three types of sleep apnea and their possible relationship to the mysterious sudden infant death syndrome or "crib death" has been reported recently by Stanford University medical researchers.

Apnea is a condition marked by the temporary cessation of breathing during sleep. In the last three years, sleep researchers have gathered a mounting body of evidence that crib death may be caused by defects in the mechanism that controls breathing.

Drs. Christian Guilleminault and William Dement in collaboration with Dr. Rose Peraita and Mariane Souquet studied 15 premature infants and eight full-term babies in the Stanford hospital nurseries.

The preemies, they reported in the journal Science, suffered apneic episodes after birth. The full-term babies had been taken to the emergency room or to their pediatricians to be treated for "stop-breathing" episodes during sleep.

These episodes were treated by stimulation ranging from shaking the baby to mouth-to-mouth resuscitation. When they were discovered having difficulty breathing, the babies were described by their parents as "white," or "unconscious," and "not breathing."

The babies were given complete pediatric examinations, but these failed to explain the sudden loss of consciousness during sleep. The only exception were five infants who had respiratory infections when hospitalized.

The babies were studied during sleep and wakefulness for several weeks. The studies included polygraphic recordings of their brain waves, heart and respiration monitoring, and behavioral observations by a specialist stationed in the nursery.

Guilleminault and Dement found three types of apnea in both groups of infants.

One type, central or diaphragmatic apnea, involves no movements of the respiratory muscles of the abdomen and chest. In upper airway apnea, the diaphragm moves but there is no exchange of air because of an obstruction at the top of the windpipe. In mixed apnea, a period of upper airway apnea follows one of central apnea.

The Stanford researchers believe these distinctions are important.

The heart rate of normal people slows when they hold their breath. This is the "diving reflex." Dement and Guilleminault found that a similar slowing of the heart rate occurs in infants during all three types of apnea but that it is more severe during episodes of the upper airway and mixed types.

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Moreover, they have measured a greater loss of oxygen from the blood during these two kinds of apnea than during central apnea.

They have also observed frequent heart beat abnormalities during upper airway and mixed apneas.

Preemies with relatively high birth weights, and "near-miss" infants, that is, those who were found in time and resuscitated, have all three kinds of apnea, according to the researchers. But preemies with very low birth weights have predominantly central apneas.

Guilleminault and Dement suggest that certain infants may have a slight regulatory defect of the central mechanism of respiration during sleep. Mild upper respiratory infections in such infants may cause upper airway apnea, heart rhythm abnormalities, and, in some instances, death.

The Stanford researchers recommend hospitalization and careful evaluation when an upper airway infection occurs in infants with previous history of "stop-breathing" episodes.

The new findings are far from providing a complete answer to the riddle of crib death. But the researchers believe it is an important step in understanding a condition which, in the United States alone, kills up to 18,000 infants every year, and is the leading cause of death between the ages of 1 and 12 months.

The research was supported by grants from the National Institute of Child Health and Development of the National Institutes of Health.

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Mailed Friday, December 19, 1975

PHOTO AVAILABLE ON REQUEST IF NOT INCLUDED WITH STORY.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--In the spirit of the season, doctors and nurses on the Delivery Room staff at Stanford University Hospital are planning to make this Christmas a little brighter for a group of area senior citizens

For the fourth straight year, the staff is shelving its past tradition of office exchange gifts. Instead, the staff is pooling its resources to purchase gifts and some commodities for the elderly living in a Mountain View retirement home.

"As in the past, the nurses are spearheading this themselves," explained Delivery Room Head Nurse Barbara Petree. "It is something we all thoroughly enjoy. It really gets us into the Christmas spirit."

The nurses decided to help the elderly when it was learned recently that three of them have no families to share the season with. Since then the Christmas project has been taken over by staff nurses Gwen Anderson, Marie Smith and Biruta Cavara, who have made arrangements to have the Christmas packages delivered to the home.

Although the project seems to develop spontaneously each year, not everyone on the Stanford staff is a volunteer donor.

"Some of our doctors are sort of conned into it," Mrs. Petree noted with a grin. "One doctor was approached and he turned his pockets out and said, 'look, I'm broke.' The nurses replied, 'hey, that's okay. How much would you like us to put you down for?' "

Four years ago when the Delivery Room staff hit upon the idea of helping needy families they agreed to take care of a Half Moon Bay mother and her 12 children.

"We discovered her children had never had new Christmas presents," Mrs. Petree said, "so that was all the incentive we needed to help them. But, in addition to the presents, we also gathered food and clothing for them. Everything took up the whole back of a station wagon."

The following year the staff donated gifts to a convalescent home and last year they played Santa Claus for a family of six in Mountain View that had been on a string of bad luck.

"The mother had a number of medical problems and the family was barely making it, nevertheless they were too proud to go on welfare," Mrs. Petree noted. "And to top it off, their home was burglarized just before Christmas."

At first, she said, the family was reluctant to accept the food, clothing and presents but they eventually changed their minds.

"The family came in later to thank us. Each of the children had signed a thank you letter. We didn't expect this kind of praise. It was very touching." ###

Mailed Thursday, December 18, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino or Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Edward L. Ginzton, chairman of the board of Varian Associates of Palo Alto, and Kenneth R. Hansen, a consulting economist in Los Altos, have been named to the board of directors of Stanford University Hospital.

The new members were appointed by the University board of trustees on December 9.

Dr. Ginzton, who received his Ph.D. in electrical engineering from Stanford, served as a professor of applied physics and electrical engineering from 1946 to 1968. He then became a founder of Varian Associates. He is a member of the National Academy of Sciences, the National Academy of Engineering, and the American Academy of Arts and Sciences. He is a fellow of the Institute of Electronic Engineers, and is a member of the advisory committee of the School of Engineering.

Hansen is a consulting economist who specialized in economic analysis of investment opportunities, national and international financial planning and organization of public and private institutions, and systems analysis. He is a fellow of the Adlai Stevenson Institute in Chicago, and an advisor to the United Nations and to the inter-American Development Bank.

Others on the Hospital board are Frank H. Roberts, an attorney with the firm of Pillsbury, Madison and Sutro of San Francisco; Dr. Alejandro Zaffaroni, president of Alza Corporation of Palo Alto; John M. Santana, Jr., vice president of Peninsula Creamery Company; Conrad F. Gullixson, an attorney with Lakin, Spears of Palo Alto; Mrs. O. Meredith Wilson of Palo Alto; Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine; and Carroll J. Roush, chairman of Rocor International, Palo Alto.

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STANFORD--"As Life Begins," an hour-long special television program about the mysteries that surround human life from its conception to birth will be shown at 10 p.m., Monday, December 22, on KGO-TV (Channel 7).

The show utilizes the knowledge of over 18 medical specialists in neonatology, genetics, immunology, birth defects, and obstetrics. Several Bay Area institutions are represented.

Among those interviewed on the show from Stanford University School of Medicine are Dr. Howard Cann, pediatric geneticist; James Schroder, cytogeneticist; and Michael Iverson, immunologist.

The program also will analyze the present level of research in such genetic diseases as sickle-cell anemia which affects only Blacks; tay sachs disease which affects only Jews; thalassemia which affects people of Mediterranean origin, and cystic fibrosis affecting only Caucasian children.

The program was produced and written by Roger Herst and Bob Anderson of KGO.

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Mailed Thursday, December 18, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--An independent arbitrator has upheld the 1974 suspension of a Stanford University medical school black technician.

Roscoe (Rocky) McGill, a medical school life sciences technician, had charged that his suspension had been based on racial discrimination.

Arbitrator Louis Garcia of San Francisco, former commissioner of the Fair Employment Practices Commission, heard the case under an agreement between Stanford and the United Stanford Employees (USE), the union representing the technician.

Garcia affirmed the suspension without pay, and found that the discipline "was not the result of sexism, racism, or past union activities of grievant."

McGill has also charged that an attempted layoff in 1973 and a permanent layoff in 1975 were based on racial discrimination. A second arbitration is pending regarding that layoff.

Earlier, in a separate action the Equal Employment Opportunity Commission (EEOC) ruled that there is reasonable cause to believe that the University violated provisions of the Civil Rights Act of 1964 in denying McGill cross-training in other skills which would have prevented his dismissal. The panel invited the University and the employee to undergo conciliation efforts.

According to Douglas Barton, staff legal counsel for Stanford, the EEOC has now advised the University to abandon those conciliation efforts since McGill has recently filed suit against the University in U.S. District Court, charging racial discrimination.

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Mailed Thursday, December 11, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Abraham J. Treves, an Israeli scientist, has joined the Stanford University School of Medicine's Department of Radiology as the first Naomi van den Horn-Adelson Research Scholar.

Dr. Treves will be studying the specific sensitization of human white cells against human lymphoma cells. He will be working under the direction of Professor Henry S Kaplan, director of the Cancer Biology Research Laboratory, and Dr. Michael Feldman, visiting professor from the Weizmann Institute of Science in Israel.

Dr. Feldman has developed a technique for sensitizing normal human white cells in tissue culture to become killer cells. Experiments are planned to determine whether these white cells of patients can recognize and attack the lymphoma cells.

Dr. Treves received his Ph.D in the Department of Cell Biology at the Weizmann Institute. His initial appointment at Stanford is for one year.

The Naomi van den Horn-Adelson Research Fund was established by Mr. and Mrs. David E Adelson of Berkeley, in memory of their daughter who died of Hodgkin's disease in 1970. Support is designated for young physicians and researchers studying human malignant lymphomas.

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Mailed Monday, December 8, 1975

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497 6911 167/1-4
FOR IMMEDIATE RELEASE

EDITORS: Review copies of the book are available at the Stanford Medical Center News Bureau.

Ian, a 27-year old Army veteran, had a history of drug abuse since he was 17. He did not use heroin until he was drafted and served in Vietnam where the stuff had been widely available at $2 a fix.

When he was discharged and returned home, Ian was sick and felt lost. He joined the Marines but he was unable to kick the habit and was discharged.

Ian was one of many thousands of veterans "addicted in action" in Vietnam, who needed help desperately. Fortunately, he was lucky enough to get into an innovative program at Palo Alto Veterans Administration Hospital which offered him a chance to return to normal life.

He now lives in an apartment in the community and attends college regularly. His dependence on drugs has been eliminated.

Ian's success story and of the program that helped him and other Vietnam war heroin addicts are described in a new book, *Drug Addicts in a Therapeutic Community: The Satori Approach* (257 pp. cloth $14.50, York Press, Baltimore).

The book is authored by Dr. Vincent P. Zarcone, Jr., a senior attending physician in the Department of Psychiatry and Behavioral Sciences at the Stanford University School of Medicine. It shows how the program evolved, describes the lessons learned along the way, and offers guidelines for setting up similar programs at other centers.

The program, called Satori and meaning enlightenment, was started experimentally at the Veterans Hospital in 1971 by a group of Stanford psychiatry professors.

Treatment in Satori is similar to that of medical illness in a hospital. It is in three phases that last 16 to 28 weeks. A patient enters treatment, is treated, and then leaves.

"This is one major difference between Satori and Synanon-type programs in which treatment of finite duration is not a goal," explained Zarcone.

In the Synanon system, addicts are trained to live within an alternative life-style and then are expected to stay.

"We feel it is unwise to seek this goal because it results in people who live on the edge of the general community," Zarcone said. "Ever since the Middle Ages, Western culture has tended to keep various groups—lepers, the very poor, the mentally ill-just outside the city walls.

"For us, such an attitude is impossible. We set as our goal the return of a productive, coping member of society to the general community beyond the hospital."

The program uses concepts developed in therapeutic communities for psychiatric patients. They include encounter groups, and other forms of therapy which force a man to face his addiction and admit to himself whatever it is he has been trying to evade.

Therapy usually starts with methadone detoxification. But unlike traditional methadone maintenance programs that tend to substitute one addiction for another, the Satori approach at the Veterans Hospital uses methadone only to buy time.

"We believe that social psychiatric intervention is more important and that methadone maintenance is not a solution by itself," said Zarcone.

The result: as many as 70% of the addicts that leave the Palo Alto VA Hospital program are less likely to be using heroin at one year, less likely to be arrested or convicted, and more likely to be working or attending school than patients who were not treated or stayed in the program for a short time.

The research also indicates that length of stay in the program is highly related to a change in life-style as measured by abstinence from heroin, work history, and lack of criminal activity, Zarcone said.

Of those who were discharged after at least six weeks in the program, only 46% continued on methadone after the end of the first-year study.

(more) 12/1/75

The outcome, however, should be interpreted with caution, Zarcone notes, because the figures come only from one year's study. Reports from two-year interviews now being conducted will present a more accurate comparative picture of results.

Zarcone describes the program as a complex therapeutic community. "This means we use a combination of social pressure to persuade people to change their ways of relating to others, individual and group psychotherapy, and psychoactive drugs.

"Satori involves patients in real relationships. Most therapeutic communities maintain well-defined healer-patient roles while Satori is a brotherhood or family."

Patients enter the program after a screening meeting with the staff and senior patients. Candidates sign a probationary admission contract and become aware that they will have to control their behavior in many areas in order to move through the phases of the program and graduate successfully.

Once they have passed the motivation test, the patients become members of the self-governing therapeutic community.

"We try to be frank about the nature of the program and its goals," Zarcone said.

The brochure which the Palo Alto VA Hospital distributes to prospective patients reads in part:

"The program is a small, tight community of veterans who want to kick drugs. It has three goals: Clean up, get your head on straight, and learn to live in the real world.

"It is tough for a drug abuser to reach these goals. You have to be out front with your feelings and behavior or you won't make it. Secretiveness, holding it in, and keeping to yourself insure failure. . . .Until your brother shares his secret he has no safety from it . . . . So people in the program help each other—really help.

"The clean-up part of the program takes at least two weeks. You are on probation and restricted to the immediate living area. Your motivation and capacity for change are being tested. Methadone may be used to help with withdrawal symptoms.

"Getting your head on straight means understanding your emotional problem—why you have to be loaded to make it through the day. In small group raps, you learn to see yourself through others' eyes.

"Learning to live in the real world means acting on what you learn in a small group . . . . It may mean developing new friends, cleaning up sick relationships, and making plans to do your thing. . .or learning what it is."

The new program at the Palo Alto VA Hospital spends about $2,500 to treat one patient. "This seems inordinately expensive to some people," Zarcone said. "But these figures are not high in comparison with the more than $350 million that the narcotics traffic is estimated to cost U.S. society."

Costs are attributed, in part, to the large staff-patient ratio. Most, if not all, of the nursing assistants have been either trained in psychology or have bachelor's degrees in that subject. Also a large number of people, including physicians, social workers and nurses work there part time.

Zarcone believes that therapeutic communities of this type will need to be developed to take care of the influx of veteran addicts.

"It takes about three to four years on the street," he said, "before a person becomes motivated to seek help. This group probably will not begin to arrive in large numbers for treatment until the latter part of the seventies."

In a foreword to the book, California Senator Alan Cranston writes that the Satori approach "has stood the test of experience to become a viable drug treatment alternative."

"It provides the basis for a model, which can, and I hope, will be replicated in other medical centers," he adds.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Vigorous physical activity, like running, swimming and cycling, not only improves the functioning of the heart and muscles, but also lowers blood fat and cholesterol, wards off constipation and hemorrhoids, and may even help in the fight against cancer, says a Stanford researcher.

Speaking at the National Track and Field Coaches Clinic at Rickey's Hyatt House in Palo Alto Saturday (January 31), Dr. Peter D. Wood, deputy director of the Stanford Heart Disease Prevention Program, outlined the physiological effects now known about vigorous exercise.

He addressed almost 400 coaches and athletes who had gathered to discuss training techniques and tactics. Dr. Wood noted that "physical educators must now consider what participation in vigorous sports has to offer to the large numbers of people who are not destined to be champions."

Muscle mass increases and body fat decreases as a result of vigorous exercise, he said. Women runners, though they have a greater body fat content than active men, still have a much lower fat level than inactive women.

Wood's research has confirmed that blood cholesterol in runners is somewhat lower than in more sedentary people, and also that the distribution of this cholesterol "is very favorable in runners."

A recent Stanford study has found that triglyceride levels, or levels of blood-fat, are remarkably low in groups of male runners aged 30 to 60, about one-half the level in more sedentary men.

Women runners were even lower in this respect than the male runners. He pointed out that women runners have more body fat than male runners, but lower levels of fat (triglyceride) in the blood.

The heart enlarges with exercise, "but in a healthy way," says Wood, "to become a bigger, more powerful pump. The resting heart rate slows; stroke volume increases; heart cells develop more mitochondria."

Mitochondria are particles inside cells which contain enzymes. Increased mitochondria increase the capacity of the cells to contract.

222--Exercise Benefits

Blood pressure falls following vigorous exercise. "Generally very active people have relatively low pressures," says the researcher, "although the value of exercise in reducing elevated blood pressure is still not clear."

Does running help prevent cancer? "It sounds rather revolutionary, but the answer is almost certainly yes," says Wood, "because runners almost never smoke. According to the Surgeon General's reports, smokers suffer considerably more than non-smokers from several forms of cancer, not only lung cancer," says Wood.

In his research, Wood has found that "for reasons not entirely clear, smokers who become runners always quit smoking."

As another benefit, he cited that "vigorous activity seems to promote regularity.... If this is true very active people probably enjoy relative freedom from hemorrhoids, varicose veins and intestinal disorders in later life."

Wood told the gathered coaches that they can not only give their students the opportunity for recording-breaking performances in early life, but with lasting involvement in exercise, possible protection from disease in later life.

"A person who is in this well-conditioned state is much better able to withstand abrupt physiological insults, like an injury or sudden illness," he said.

Wood, adjunct professor of medicine at Stanford, is also considered one of the finest senior distance runners in the country.

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Mailed Friday, January 30, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415. 497-6911

STANFORD--Dr. William H. Northway Jr., associate professor of radiology and pediatrics, has been appointed director of the Diagnostic Division and associate chairman of the Department of Radiology at Stanford University School of Medicine.

Northway succeeds Dr. F. Frank Zboralske, professor of radiology, who will continue to do research in the department, according to Dr. Malcolm Bagshaw, chairman of the Department of Radiology.

A graduate of Stanford with a B.A. in 1954, Northway also received his M.D. from Stanford in 1957. He interned at New York Hospital (Cornell University) and completed his radiology residency at Stanford in 1961.

Northway was a James Picker Foundation Scholar in Radiology in 1963-66, and a resident étranger at hopital des Enfants Malades in Paris in 1963. In 1965-66 he was voted the best pediatric instructor by the pediatric resident staff. He was also a Stanford University Fellow in 1972-75.

Northway has concentrated his research in the area of newborn lung disease, and particularly in pulmonary oxygen toxicity in newborn infants. He has written numerous medical articles and book chapters.

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Mailed Monday, January 19, 1976

EDITORS: PHOTO AVAILABLE IF NOT INCLUDED.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--New visiting hours will be from 11 a.m. to 8 p.m. daily in the general care units of Stanford University Hospital.

The new hours, modified in order to better provide rest and quiet for patients and enable Hospital staff to provide timely and effective care, were approved recently by the Medical Board. Previously, visiting hours had extended from early morning until 9 p.m.

As in the past, state law provides that children under 16 may not visit in the maternity department or maternity lobby. This age restriction has now been extended to the nursing unit adjacent to the maternity area and to other units with patients receiving immuno-suppressant drugs.

Children under 12 years may not visit, and no more than two visitors per patient are normally permitted.

The new hours and age restrictions are posted at the entrance to each nursing unit.

Maternity visiting hours remain the same: 3 to 4:30 p.m. and 7 to 8:30 p.m., with infants being shown at these hours only. Fathers may visit at any time.

In pediatrics, parents may visit their children at any time. No visitors under 16 years of age are permitted.

Visiting hours in the intensive and respiratory intensive care units remain 10:15 to 10:30 a.m., 1:15 to 1:30 p.m., 5:15 to 5:30 p.m., and 7:45 to 8 p.m. Only the immediate family and members of the clergy may visit at these times. All visits are at the discretion of the nurse in charge.

In the coronary care unit, immediate family and members of the clergy may visit for 10 minutes out of each hour at the discretion of the nurse in charge.

In the therapeutic community at Hoover Pavilion, visiting hours are noon to midnight. There is no age limit. Visits may be limited at the discretion of the physician or nurse in charge.

Visitors to both the main center and Hoover Pavilion are urged to observe posted "no smoking" signs. Smoking is permitted only in designated areas.

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Mailed January 15, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 321-5310

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Leonard Hayflick, professor of medical microbiology, has resigned from the Stanford University faculty effective immediately, it was announced Friday, February 27.

Hayflick's resignation stems from a dispute between the 48-year old scholar and the University over the management of certain University research contracts.

Hayflick maintains that he managed the contracts in compliance with the University's and contractual guidelines.

Stanford was concerned that its laboratories were inappropriately used in the performance of a contract to store, produce and distribute a strain of human cells, some of which Hayflick sold on his own behalf.

In addition, Hayflick was told that he improperly deposited fees received for mycoplasma testing into a non-University bank account for his personal use.

John J. Schwartz, assistant vice-president and counsel for medical affairs, said the University initiated a study last June after receiving inquiries from government contract officials concerning Hayflick.

He added that the University will seek recovery from Hayflick of the $9,500 in testing fees that should have been deposited to University accounts.

Hayflick maintains that the collection of fees was done openly for the past seven years and with the knowledge and consent of contract officers.

He said that the establishment of the non-University account was the result of misinformation received by Hayflick when he inquired of University policy.

He denied that the funds were deposited for his personal use.

Hayflick said that, in fact, he first initiated the inquiry himself by contacting government officials to clarify contractual policies and procedures, which he felt were still unclear, although long established.

Hayflick joined Stanford as a professor of microbiology in 1968.

He is credited with discovering that cultured normal human cells from embryonic connective tissue (known as fibroblasts) subdivide 50 times, then die out.

He also has advanced the theory that cells gradually acquire errors in their genetic information and their "program" is played out, resulting in aging and an ultimate limit to the span of life.

Hayflick urged for a number of years that the cell strain he developed be used as a medium for safer vaccine production.

As a result of his efforts, a license was issued in 1972 by the Division of Biologics Standards (now a part of the Food and Drug Administration) to produce an oral, live-virus polio vaccine cultivated on human cells.

Hayflick also established a cancer virus research program at Stanford in 1968.

He received his Ph.D. from the University of Pennsylvania.

His work has received awards from the National Cancer Institute, the Gerontological Society, and the Southern California Gerontology Center.

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2/27/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--The National Labor Relations Board's General Counsel says it has authorized issuing of a complaint against Stanford University and Stanford University Hospital alleging the Hospital unlawfully assisted two minority employee groups active in affirmative action efforts.

The allegation says that the Hospital acted unlawfully by providing assistance such as meeting rooms, time off to attend meetings, some materials and supplies and occasional advice by certain administrators

The complaint is a result of charges of unfair labor practices during a labor election campaign last April. Charges were filed by United Stanford Employees (USE) Local 680, of the Service Employees' International Union, on April 9, 1975.

USE had alleged that the Alianza Latina and the Black Advisory Council were dominated and controlled by the Hospital administration, and had campaigned as agents of the administration in urging employees to vote against representation by USE. In the election, employees had rejected representation by overwhelming majorities.

According to supervisory examiner Dean Francis of the San Francisco Regional Office of the NLRB, the Counsel rejected the USE allegation that the groups were dominated by the administration or agents of it.

The Counsel alleged that the two minority employee groups are "labor organizations," a legal term for labor unions.

The Hospital and University have contended that neither group should be considered a labor organization since they had been organized as part of a nation-wide recognition of the needs of minority employees. Hospital officials say that neither group regards itself as a labor union, and each provides advice to the Hospital about improving affirmative action programs and relations with minority employees.

The Counsel action does not mean final decision by the NLRB. The matter will now be heard by an administrative law judge before a decision is made by the Board.

Under the law, the Counsel issues a complaint when a case involves novel issues which it feels should be decided by the Board, since Counsel decisions cannot be appealed.

To date, the NLRB has not yet ruled on the labor organization status of employee groups involved in civil rights and affirmative action.

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Business Wire and Mailed February 26, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A recent Stanford study reports that women who use oral contraceptives or older women who take estrogen-only compounds are at greater risk for heart disease than women who do not use the "pill."

Researchers found that women taking birth control pills that contained a combination of estrogen and progestagen hormones had increased blood pressure as well as increased levels of triglycerides, a type of blood fat recognized as a factor in risk for heart disease.

They also found that estrogen-only pills generally caused a rise in triglycerides, but had little effect on blood pressure. Estrogen-only pills are more likely to be taken by post-menopausal women.

The study is based on 986 randomly selected women, age 35 to 59, in the Northern California communities of Watsonville, Gilroy and Tracy. The research was conducted as part of the three-year study of heart risk factors in those communities

The report was published in the current issue of the Journal of the American Medical Association, and authored by Dr. Michael P. Stern, Dr. Byron W. Brown, Jr., Dr. William L. Haskell, Dr. John W. Farquhar, Clare L. Wehrle, and Dr. Peter D.S. Wood, all of the Stanford Heart Disease Prevention Program.

According to Dr. Stern, the project did not try to detect actual heart disease, but rather changes in factors, blood pressure and triglycerides, that are thought to increase the risk of heart disease.

The report supports an early widely publicized study by the Royal College of General Practitioners in London in 1974 that found that women taking oral contraceptives were two to two-and-a-half times more likely to develop hypertension than those who do not take the medication.

The Stanford study reported differences in risk factors somewhat greater than those reported by others. Average systolic blood pressure was 7.2 mm higher among users compared with non-users.

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Higher triglyceride levels were found among those taking estrogen-only (19.9 milligrams percent increase), and among those taking the oral contraceptives (75.8 milligrams percent increase).

Although the results suggest that effects are greater with oral contraceptives than with pure estrogens, Dr. Stern emphasizes that this does not mean that estrogen-only medications are "safer" than oral contraceptives.

Stern noted that estrogen-only pills are generally taken by women in the older age range who may be more vulnerable to heart attacks. Stern noted the serious lack of information about the effects of pure estrogen, and the need for more studies in this area.

In the study, women were divided into Mexican-American and "other white" categories to detect if there were ethnic differences in risk factors.

The study noted "an apparently greater susceptability of Mexican-American women to the blood pressure effects of oral contraceptive use." Among the Mexican-American women, systolic blood pressure was 19.9 mm higher and diastolic pressure 9.4 higher in users of oral contraceptives than in non-users.

Stern suggested that the greater increase may be because the Mexican-American women tended to have higher weight levels.

The researchers termed it "paradoxical" that female hormones should increase heart attack risk when women generally have a lower heart attack rate than men. Stern cited possible "yet undiscovered differences in metabolic effects between the natural female hormonal cycle and the artificial one produced by hormone administration."

The Stanford study is supported by grants from the Lipid Research Clinics Program of the National Heart and Lung Institute, and from a gift of CPC International.

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Mailed Monday, February 23, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Paul B. Hofmann, director of Stanford University Hospital and Clinics, has been presented the Robert S. Hudgens Memorial Award of the American College of Hospital Administrators as the outstanding "young hospital administrator of the year."

The award was presented to Hofmann during a meeting of the ACHA in Chicago Feb. 19.

Named after a former director of the graduate program at Virginia Commonwealth University in Richmond, VA, the Hudgens Award is given in cooperation with the Alumni Association of the Department of Hospital and Health Administration at the university.

The American College of Hospital Administrators is a professional society of 11,500 health care executives. It offers continous education for administrators in the health field for improving management in hospitals, clinics, and other health service institutions.

Hofmann, 34, was named director of Stanford Hospital and Clinics in 1974. Previous to that he was deputy director of the hospital.

Prior to his appointment at Stanford, Hofmann was associate administrator of San Antonio Community Hospital in Upland, CA, and a faculty member of the UCLA graduate program in hospital administration.

Previous appointments included 2½ years at Massachusetts General Hospital in Boston as research associate and assistant director of the Laboratory of Computer Science, during which time he was on the faculty of the Harvard School of Public Health.

Hofmann is a fellow of the American College of Hospital Administrators, chairman of the American Hospital Association's Council on Research and Development, and a member of several state and local health committees.

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2/20/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A Stanford radiologist foresees wide-scale abdominal screening of patients by means of high-speed "sound pictures."

New ultrasonic equipment can produce continuous moving images as on a television screen.

Dr. Jason Birnholz, assistant professor of radiology at Stanford, is working closely with Stanford's birth defects clinic and the Department of Obstetrics and Gynecology to monitor fetal growth by means of ultrasound. He is also studying tumors with the division of radiation oncology.

A current line of research is aimed primarily at the prenatal detection of fetal abnormalities with ultrasound, particularly in families at high risk for genetic disease or congenital malformations.

In a more routine application, new ultrasound equipment is being used to examine women with intrauterine devices, an exam that can be done in a minute or two, according to Birnholz.

A preliminary study also indicates that ultrasound can be used as a yearly gynecologic examination as a means of locating tumors more reliably than with traditional physical exams.

"One of the benefits of the new equipment is that a thorough study can be concluded quickly, so that large numbers of patients can be seen without delay," says Birnholz. The high-speed phased array system provides "pictures" with good detail, which can be recorded on videotape for permanent reference.

The use of ultrasound in diagnosis is growing throughout the U.S., and has become an established method of examining in pregnancy.

New equipment at Stanford involves the electronic movement of a beam of high frequency sound that is far beyond the range of human perception. At these high frequencies, sound acts much like light rays. Echoes reflected back from objects inside the body are pictured in good detail, including internal organs like the heart, liver, and kidneys.

In recent examinations, Birnholz has recorded the facial profile of a five-month-old fetus, and the pulsing profile of an eight-week-old heart.

Other obstetric uses include early identification of multiple pregancies, a broad spectrum of fetal abnormalities, estimation of fetal maturity, and visualization of the placenta.

Birnholz cites the harmless nature of the ultrasound to both mother and fetus, since the procedure does not involve exposure to ionizing radiation.

The new equipment at Stanford includes instruments produced by Varian Associates and by G.D. Searle & Co.

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Mailed Thursday, February 13, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Jack L. Shepard, chairman and president of Granger Associates, Menlo Park, has been appointed chairman of the Stanford University Medical Center Friends Program.

Dr. Clayton Rich, vice president for medical affairs and dean of the school of medicine, said the Friends Program consists of individuals and organizations in the community and other parts of the country interested in supporting the unique services provided by the medical center.

Shepard will serve on the volunteer post to coordinate and help expand the activities of the group, Rich said.

"A teaching hospital such as Stanford's requires constant modernization of equipment and facilities to keep pace with technological improvements, to apply research findings to patient care, and to train young doctors. These special needs must be supported by gifts.

"Our hospital and clinics operate without endowment or university subsidy, thus differing fiscally from teaching hospitals affiliated with state universities and from community hospitals supported by district taxes."

Shepard, formerly director of development at Stanford University, has been with Granger Associates since 1967.

He is a Stanford graduate of the Class of 1953. He earned a master's degree in education in 1955 and one in business administration in 1957, both at Stanford.

Shepard was nationally known to sports fans as a major league baseball player with the Pittsburgh Pirates during 1954-56.

He has served on other key staff posts at Stanford during major fund drives in the past, and is currently a member of the Stanford Associates, a volunteer group which over the years has provided support to the University's gift program.

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Mailed February 5, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Rose Elizabeth Bird, secretary of California's Agriculture and Services Agency, Tuesday, Feb. 3, underwent an operation for breast cancer at Stanford University Hospital.

"She was found to have a type of tumor for which the prognosis for recovery is excellent," said Dr. John Kieraldo, clinical associate professor of surgery.

Miss Bird, 39, checked in at Stanford hospital Monday after her malignancy was discovered during a routine medical examination last week.

She is expected to be out of the hospital by the end of the week, and back to work in Sacramento in two to three weeks, Dr. Kieraldo said.

The state official asked the hospital to issue a statement about her hospitalization because of numerous requests about her condition.

Transmitted on Business Wire and Mailed Wednesday, February 4, 1976

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FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--The emergency room of Stanford University Hospital has a new telephone number, 497-5111.

According to emergency room personnel the new number should be easier for people to remember and will also allow better telephone service when the unit moves this summer into the new hospital wing now under construction.

The new number is now in operation. Callers using the old number will hear a recording directing them to dial the new number.

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Mailed Wednesday, February 4, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Hali Wickner 415: 497-6911

STANFORD--Stanford University Hospital has suspended until further notice its requirement that community physicians on the medical staff carry adequate malpractice insurance.

The action, approved by the Hospital Board of Directors at a meeting Tuesday evening, February 3, is effective immediately.

Physicians who had been suspended by the hospital because they failed to show proof of the required coverage are reinstated. At least 37 physicians, and possibly others who have changed insurance carriers are affected, said Dr. Robert Alway, medical director.

He emphasized that the requirement was eliminated in view of the "current uncertain medical malpractice situation in California and the apparent efforts on the part of the State legislature to solve this problem."

Hospital bylaws had stipulated that physicians on the medical staff show proof of adequate coverage in compliance with a requirement of the hospital's insurance carrier. The minimum individual coverage was $1 million per malpractice case and $1 million aggregate per year for all cases.

Stanford Hospital is a member of the California Hospital Association insurance group administered by Walker and Company of Los Angeles. Last November the member hospitals were notified that unless they certify their staff physicians have adequate malpractice insurance, there would be a 20 percent surcharge added to the institution rate. In Stanford's case, this would have amounted to another $400,000 according to hospital officials.

On January 22, the hospitals were told that the surcharge was discontinued.

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Mailed February 4, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Many older persons losing their memory or behaving abnormally are thought to be senile when they are only depressed, according to Dr. Leo E. Hollister, professor of medicine and psychiatry at the Stanford University School of Medicine.

"Unrecognized depression may be a more important problem in old age than organic brain conditions," Hollister reported in an article in the Journal of the American Medical Association.

As many as one in four, or one in three, persons 65 and over have depression or other functional emotional conditions such as anxiety, he said. But only one in six in this age group has some symptom of organic brain condition from hardening of the arteries to other physical damage.

"Because the functional and organic conditions mimic each other, depression in many older persons doubtless is unrecognized," Hollister said.

"Both depression and anxiety usually can be greatly alleviated or cured if properly treated by drugs and psychological means," he added.

Age alone does not necessarily mean that the patient's emotional disorder is due to organic brain disease, Hollister stressed.

"Life has plenty of psychosocial vicissitudes to make the elderly depressed," he said.

Among these are decreased earning power and loss of prestige, illness or death of one's spouse and friends, and isolation.

Also, a stroke or a heart attack is a depressing experience for many of these patients.

"Suicide is common among the elderly," Hollister said, "but many depressions may be missed, either by the patients' families or physicians.

"And since depression is treatable, one should be highly sensitive to its manifestations."

For the one in six individuals whose mental deterioration may be caused by organic changes in the brain, best control of disturbing symptoms is accomplished with tranquilizing drugs.

In the future drugs that alter disturbed brain metabolism may afford a new and possibly more specific approach to treatment, but it is far too early to assess fully their potential, Hollister added.

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Mailed February 3, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Lewis Dexter, internationally known cardiologist, will speak on "Venous Thrombosis and the Chair" at the 12th annual John Kent Lewis Memorial Lecture at Stanford University School of Medicine.

Dr. Dexter, professor of medicine at Harvard Medical School, Peter Bent Brigham Hospital, will speak on Monday, February 9, at 4:15 p.m. in Room M106 of the Medical School. Physicians and other health professionals in the community are invited to attend.

Dr. Dexter played a major role in the introduction and development of cardiac catheterization laboratories in the United States, and has directed that laboratory at Peter Bent Brigham Hospital.

He was part of the team that developed the first mitral valve operation in the 1940s, and is also a widely known clinician and investigator in adult congenital heart disease.

He received his A.B. from Harvard College (1932) and M.D. from Harvard Medical School (1936), and has been associated with Peter Bent Brigham Hospital since 1939. He is also consultant to Children's Hospital Medical Center and Robert Breck Brigham Hospital in Massachusetts.

The John Kent Lewis Lectures are presented annually in honor of the former chief of the Stanford Medical Service at San Francisco General Hospital. A 1922 graduate of Stanford Medical School and noted pioneer in heart research, Lewis died in 1961.

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Mailed Monday, February 2, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--A fund has been established in the Department of Pediatrics at Stanford University School of Medicine to help attract medical researchers into the field of pediatric hematology.

The Scott Dunsford Memorial Fund is named after the four-year-old Aptos, Calif. boy who died at Stanford University Hospital Jan. 10 of aplastic anemia.

The boy had been treated at Stanford for several months for the disease which is characterized by a deficiency of blood cell formation. Those suffering with the disease in its severest form must receive transfusions of blood components, including platelets, which are necessary to prevent internal and external bleeding episodes.

The fund is under the direction of Dr. T. John Gribble, senior attending physician and clinical associate professor of pediatrics. Gribble said the Scott Dunsford Memorial will be utilized as part of the Pediatrics Hematology Fund. This fund supports research into blood disorders, such as aplastic anemia, which primarily effect children.

Dunsford's parents, Charles and Frances Recknagel, said they hope the fund will "attract people that may eventually be able to bring the kind of resources necessary to treat, and possibly cure, this disease (aplastic anemia) and others."

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Mailed Monday, February 2, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A Stanford University Medical School student has been named the first recipient of an endowed medical scholarship, recently established by the Retail Clerks International Association.

Stanford officials believe that this is the first student aid fund established by an international trade union. The scholarship fund honors the union's current president, James T. Housewright.

Recipient of the first award is John Reeves, first-year medical student. Reeves attended Santa Rosa Junior College, then received his undergraduate degree in sociology at the University of California at Berkeley.

With a California Heart Association grant last summer, Reeves worked on a project dealing with the early prognosis of patients hospitalized with myocardial infarction.

Reeves is married and his wife is working toward an R.N. degree. They have two children.

Recipients of the award may be chosen from medical schools throughout the United States and Canada. The scholarship award is renewable for up to four years for each recipient for a total amount of $5,000.

According to the union, the scholarship originated at a 1973 convention of the Southwestern States Council of Retail Clerks, as a living monument to the union's president and as a way by which the union could help in the training of physicians and surgeons. Other locals asked to be involved and the scholarship was expanded to a permanent fund covering the United States and Canada through gifts from individual union members, other Retail Clerks councils and local unions.

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Mailed Monday, March 29, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Former baseball great Joe DiMaggio will be among 36 top Northern California golf professionals and ranking amateurs from the corporate world at the Joe DiMaggio Invitational Executive Pro-Am Golf Tournament Friday, April 9, at Half Moon Bay.

Proceeds from the charity event will be donated to the Bay Area Chapter of the March of Dimes and to support dermatology research at Stanford University Medical Center.

Amateur golfers may enter the tournament at the Half Moon Bay Golf Links at Ocean Colony for a $100 entry fee. Those interested should contact Moon Mullins, the resident pro golfer.

Signups will be at 9:30 a.m. at the hospitality desk with a shotgun tee off at 11 a.m. From noon to 1 p.m. lunch will be served on the course for players and working press followed by an informal awards dinner in the evening.

The par-72, 18-hole golf course is located on California's coastline about 28 miles south of San Francisco on U.S. Hwy. 1. The 7,105-yard course opened in 1973 and is ranked among the most difficult in California.

"Joltin' Joe" DiMaggio, who was raised in San Francisco, played 13 years with the New York Yankees, setting a major league record for hitting safely in 56 consecutive games. Inducted into baseball's Hall of Fame in 1955, DiMaggio was voted the American League's Most Valuable Player in 1939, 1941 and 1947. He was also the league's top hitter in 1939, 1940 and 1948, and in 1969 was named baseball's greatest living player by sportswriters and fans.

The public may attend the golf tourney free of charge.

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Mailed Monday, March 29, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Julius Axelrod, distinguished pharmacologist with the National Institute of Mental Health and 1970 Nobel Prize winner, will present the third annual Windsor Cutting Lecture at the Stanford School of Medicine on Thursday, April 1, 1976.

Dr. Axelrod will discuss "The Pineal Gland and the β-Adrenergic Receptor" at 4:15 p.m. in Room M106 of the Medical School. The lecture is open to the medical community and the public.

Since 1955, Dr. Axelrod has served as chief of the Section on Pharmacology, Laboratory of Clinical Science, of the National Institute of Mental Health, Alcohol, and Drug Abuse Administration.

His fields of interest include the biochemical mechanisms of drug and hormone actions, drug metabolism, enzymology and study of the pineal gland.

His work on the metabolism and synthesis of neurotransmitters, compounds involved in chemical transmission in the nervous system, brought him the Nobel Prize for physiology or medicine in 1970.

Dr. Axelrod began his career as a laboratory assistant in the department of bacteriology at New York University Medical School in 1933. He served as chemist with the Laboratory of Industrial Hygiene for several years, and in the research division of New York University at Goldwater Memorial Hospital. He joined a celebrated group of investigators at the National Heart Institute in 1949 before joining the Institute of Mental Health in 1955.

He serves on the editorial boards of many publications, has received numerous awards for distinguished service, and is the author of more than 400 scientific publications.

The Windsor Cutting Lectureship was established in 1973 by the faculty of the Department of Pharmacology and is supported by private contributions. It honors the memory of Dr. Cutting, professor and former chairman of the department, who also served as dean of the School of Medicine, 1953 to 1957, and dean of the University of Hawaii Medical School, 1963 to 1971. Dr. Cutting died in 1972.

The lectures feature speakers prominent in the field of pharmacology, and are given annually during the winter quarter.

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Mailed Monday, March 22, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Dr. Ronald W. Davis, assistant professor of biochemistry at Stanford University Medical School, has been named 1976 recipient of the Eli Lily and Co. Award in Microbiology and Immunology.

The award is presented annually to an outstanding scientist under 35 years of age and includes a medallion and $1,000. Davis will accept his award at the 76th Annual Meeting of the American Society for Microbiology in Atlantic City, N.J. He will deliver the award address on May 3.

In graduate work at the California Institute of Technology (CIT), Davis developed the electron microscope heteroduplex method of investigating the sequence of nucleic acids, an analysis which has had significant uses in mapping sequences in DNA molecules.

A well-recognized electron microscopist, Davis received a postdoctoral fellowship to Harvard, where he was involved in DNA and virus molecular biology.

Davis, 34, came to Stanford in 1972 as an assistant professor of biochemistry, where his research emphasis has been on gene manipulation. His laboratory has developed techniques for joining fragments of cleaved DNA together for viable recombinant DNA. More recently he has worked on a derivative of a bacteria virus that can only multiply if it incorporates foreign DNA segments, a technique that may have important applications in the future.

Davis earned a B.S. degree in 1964 from Eastern Illinois University and undertook graduate studies at CIT, where he had an NIH predoctoral traineeship from 1964 to 1970.

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EDITOR's: PHOTO AVAILABLE IF NOT INCLUDED

Mailed THURSDAY, MARCH 18, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Gifts totaling $11,920 have been presented to Stanford University Medical School for neurological studies and for educating medical students engaged in cancer research.

The gifts were made available by the California Community Foundation of Los Angeles, a publicly-supported trust which distributes funds for charitable purposes.

The foundation earmarked $5,012 from its Jane Reinking-Killgore Fund to be used in Stanford's Department of Neurology for studies into the effects of injury, occurring in early life, on the function of brain nerve cells.

These studies, which are being directed by Drs. David A. Prince and Philip A. Schwartzkroin, were begun under a similar foundation grant last year. Ultimately, both researchers hope it will be possible to specify the basic nerve cell abnormalities which result, and devise treatments that will prevent or correct them.

A total of $6,907 from the foundation's Esther Sparks Cross Fund will be used for scholarships to support "the education of promising and needy medical students engaged in cancer research."

Last year the California Community Foundation gave $1.3 million to 212 charitable and educational institutions. It is one of the largest community foundations in North America.

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Mailed Wednesday, March 10, 1976

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Two key administrative appointments have been announced at Stanford University Medical Center.

Ronald D. Twomey has been appointed medical center director of personnel while Margaret Neill has been named associate director of Stanford Hospital and director of Nursing Service.

Neill begins her new duties April 1 while Twomey expects to be on the job in early May.

According to Peter Carpenter, assistant vice president for medical affairs, Twomey will head a newly formed office consolidating the other major personnel activities of the medical center. In addition to hospital personnel, Twomey's office will also serve Stanford School of Medicine, Hospital and Clinics within the framework of general university policies, procedures and contractual commitments.

Twomey is currently the director of personnel relations and organization (the National Health Care Industry Program) for Arthur Young and Co., Chicago, a consulting firm.

From 1967 to 1974 he was associated with the University of Chicago Hospitals and Clinics, serving as associate administrator, assistant administrator and personnel director.

Twomey was also director of personnel at Dee Memorial Hospital in Ogden, Utah, a contract administrator and negotiator for the Thiokol Chemical Corp. of Ogden, and a psychologist for the Utah juvenile court system, 1958-60.

A native of San Francisco, Twomey earned a bachelor of science degree in industrial psychology from the University of Utah in Salt Lake City. He has also undertaken graduate work at Utah, as well as at the University of Chicago and at Loyola University in Chicago.

For the past 10 years Neill has been director of nursing and assistant administrator at University Hospital, University of California Medical Center, San Diego.

She succeeds G. Darlene Lutts, who resigned in January, 1975. In the interim, Lois Williams has served as acting director of the hospital's Department of Nursing Service.

Prior to joining U.C. San Diego, Neill served four years as associate director of nursing at Valley Medical Center in Fresno. She holds a bachelor of science in nursing from the University of New Mexico in Albuquerque and a master of science in nursing from UCLA. ###

EDITORS: PHOTOS AVAILABLE IF NOT INCLUDED.

Mailed Tuesday, March 2, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Plans to begin activating Stanford University Hospital's new $12.6 million wing next month may be delayed, Paul Hofmann, director of the hospital and clinics, said today.

The building had a preliminary inspection April 23, Hofmann said. The inspectors found some potential code deficiencies and will notify the architect and contractors so that they can be corrected.

Robert Bowen of the State Bureau of Licensure and Certification declined to list the problems until he issues a report. "But they are not insurmountable," he said. "The building is a good structure. When you deal with a physical plant of this magnitude, there are bound to be clean-up type problems."

Bowen said the "preliminary visit" was conducted for the purpose of reviewing the project at this stage to advise the architect and contractor.

Others on the inspecting team were fire marshals from the state, Palo Alto, and Santa Clara County, and two federal officials representing programs for the handicapped and the Hill-Burton Hospital Construction Act.

James E. Nelson, director of facilities and properties at Stanford, said that some parts of the building may have to be modified if they fail to meet hospital building code requirements.

But Stanford has not yet received a written report from the inspectors. Information on any required modifications is expected in a few days, he said.

Hofmann explained the hospital had expected to receive the completed wing in May, and to admit its first patients in July.

The project, designed by Caudill Rowlett Scott (CRS) of Houston and Los Angeles, will add 25 intensive care beds and increase emergency services facilities. Expansion also includes vitally needed services in X-ray, surgical pathology and cardiology and postanesthesia recovery.

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4/28/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Learning and educational problems of the sleepy child will be studied by researchers at Stanford University School of Medicine beginning this summer.

The study, directed by Dr. William C. Dement, professor of psychiatry and behavioral sciences, will be funded by a one-year $40,550 grant from the Spencer Foundation of Chicago.

"Excessive daytime sleepiness," said Dr. Dement, "is believed to have a damaging effect on learning and school performance."

He indicated that some children have been diagnosed as mentally retarded while their sleepiness was overlooked.

"All but the rudimentary learning and memory functions are inoperative during sleep," Dement explained. "However, the effects of sleepiness must be understood in the child, and a clear relationship between sleepiness and the degree of impairment must be established."

In his study Dement will be assisted by Drs. Thomas C. Anders, Vincent P. Zarcone, Christian Guilleminault, and consultants from the School of Education, and the Department of Psychology.

Plans will be worked out with parents and school authorities to administer questionnaires to high school, junior high, and elementary school students.

Children identified as "sleepy" will be tested in the Stanford Sleep Research Laboratory for learning, memory, and presence of organic disease, and then matched in terms of age, sex and I.Q. with a normal control group.

Others in the study will include children referred to the Stanford clinics for sleep problems and learning difficulties.

Dement said these specific areas will be studied:

--To what extent is intellectual performance a function of sleepiness? Can school performance be correlated with overall sleepiness ratings?

--What are the individual variations in amount of daytime sleepiness in school children? Can they be changed?

--To what extent is severe or borderline pathological sleepiness overlooked in school children?

"Pilot work in our laboratory," Dement explained, "suggests that children who undergo a fairly small reduction of habitual sleep during the night feel sleepy the next day."

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Mailed April 8, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

EDITORS: Photo available if not included with article.

STANFORD--What initially began as a suggestion during a ride to a San Francisco cocktail party has blossomed into a full-sized recipe book, catchingly entitled The Happy Cooker., compiled and edited by a small group of Stanford University Hospital nurses.

The book, which embodies "favorite recipes of the nurses," is primarily the brainchild of two nurses, Marie Murphy and Pat Pocek, who were joined by Belle Pullano, Dorcas Walton and Mary Sheehan in the project. Another nurse, Joanne Hendricks, designed the book's cover that features a Pennsylvania Dutch motif.

"We began collecting recipes last spring," Murphy explained, "and we put the word out to people on the floor, including dietitians and housekeepers, they could contribute if they wanted to. We even had the wife of one of our patient's bring in a birthday cake, the recipe for which is in the book."

After six weeks of recipe collection, the nurses arranged for typesetting and layout work to begin. They were aided and advised by Gregg Pullano (Belle's husband), who works for a publishing company.

"We must have spent a thousand hours apiece on this project," Murphy noted, "at least it seemed that way."

Murphy said she was able to help considerably since she was confined to restricted work on the floor for nine months following right knee surgery. "The book was great for me then because I needed some kind of mental activity to keep my sanity."

Ironically, Murphy noted, The Happy Cooker. is loaded with recipes for high caloric and high cholesterol foods (including 11 cream cheese recipes) even though her hospital wing (East 2A) treats many cardiac patients.

As a result, several proposed book titles were eventually rejected by the nurses, including "Heart Disease With Ease," "Eat Your Way to East 2A," and "Prescriptions for the Pantry." The 160-page book was printed by David Moody of Mountain View.

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222--The Happy Cookers

Aside from the other pastries and desserts ("one-third of our book"), Murphy pointed out that the many cheesecake recipes range from the "never fail" variety to one that takes three days to prepare.

The book also gives recipes for appetizers, salads, noodles, breads and miscellaneous items. Furthermore, it offers dishes of unusual faire such as cream cheese enchiladas, pork chops with grape jelly and pork roast with peanut butter.

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Five specially-trained employees known as "Safety Security Supervisors" recently began their duties at Stanford University Medical Center.

All five men are Stanford Hospital employees. They replace one lieutenant and three sergeants previously assigned to the medical center by the California Plant Protection Company, the center's contract guard service.

The five supervisors have assumed administrative control over the other 20 contract guards still at the center, according to Hilary Ryniewicz, the medical center's occupational health-safety officer.

The men are Pedro Guzman, 44; Burt Albert and George F. Whitfield, 26; Hayward L. Brandon, 29; and, Michael Kierig, 22. Each man works a 40-hour week and each wears a maroon-colored blazer with the medical center emblem, and gray trousers.

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Mailed April 8, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A bequest of more than $1.7 million for medical research has been received by the Stanford University School of Medicine from the estate of John S. Ladd of Stockton.

Ladd died in February 1974, naming the Medical School as his beneficiary.

"The School is honored to receive this bequest and to establish the John S. Ladd Medical Research Fund in his memory," said Dr. Clayton Rich, vice president for medical affairs and dean of the School. "This fund will support medical research of the highest quality, and we are most grateful for it."

John (Jack) Ladd was the only child of John S. Ladd, Sr. and Mary Ladd, whose families settled in California in the early 1880's. The senior John S. Ladd was postmaster general in the Philippines at the turn of the century. Later, he returned to farm in the Stockton area.

Mr. Ladd graduated from Stockton High School and the University of California at Davis, where he received a degree in agriculture. He served in the South Pacific during World War II as a captain in the artillery. After the war, he returned to Stockton where he was engaged in various farming operations until his death at age 53.

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Mailed Monday April 5, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A fellowship grant from the Damon Runyon-Walter Winchell Cancer Fund has been awarded to a postdoctoral research fellow at Stanford University Medical School.

The $14,800 grant to Dr. Shlomo Eisenberg in the Department of Biochemistry will support research on the control of DNA replication, under the direction of Dr. Arthur Kornberg, Stanford professor of biochemistry.

Dr. Eisenberg's research concerns the molecular mechanisms involved in the process and control of DNA replication. That research, according to Dr. Kornberg, should be of significant value in the pursuit of an understanding of the cancer process.

Dr. Eisenberg completed undergraduate work at Hebrew University in Jerusalem, and received his doctorate in biochemistry at McGill University, Montreal.

The Runyon-Winchell Fund is a charitable organization that provides support for cancer research in the form of fellowship grants. The grants assist in the training of young investigators pursuing careers in cancer research.

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Mailed April 2, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

EDITORS: Photo available if not included with article.

STANFORD--Dr. Rosalyn S. Yalow, a pioneer in the development of radioimmunoassay techniques, will present the third annual Katharine D. McCormick Distinguished Lecture April 8 at 4 p.m. in Room M106 at Stanford University School of Medicine.

Yalow, whose address is entitled "Radioimmunoassay: Its Role in Clinical Medicine," is a distinguished service professor at Mt. Sinai School of Medicine, New York City, and chief of Nuclear Medicine Service at Veterans Administration Hospital in the Bronx.

She is well known for the development of the first radioimmunoassay, for circulating insulin, and for similar methods she developed later for gastrin, ACTH, somatomedin and other hormones. These techniques have opened new areas of investigation and understanding of the function of polypeptide hormones in normal human physiology and in disease states.

Originally trained as a physicist, Yalow received her Ph.D. in physics at the University of Illinois in 1945, and worked as a physicist at the Bronx V.A. Hospital until 1970, during which time she developed the initial radioimmunoassay techniques. She has been a member of the President's Study Group on Careers for Women since 1966.

The McCormick Lecture was established to bring outstanding women scientists and physicians to Stanford Medical School. It honors the late Katharine Dexter McCormick, who left a $5 million bequest to Stanford in 1969 to aid programs in the medical school, particularly those "for the encouragement and assistance of women in...medicine." The lectureship was initiated in 1974 at the suggestion of the Professional Women of Stanford Medical School.

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Mailed Thursday, April 1, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Harriet Baumgarten, 497-6911
EDITORS: Review copies of the book are available upon request.
FOR IMMEDIATE RELEASE
STANFORD –

Consumerism has touched many areas of life from food to transportation and even the cost of burial. Now a Stanford physician has coauthored a consumer's guide to medical care.

Dr. James F. Fries, an assistant professor of internal medicine, and Dr. Donald M. Vickery, director of the Reston, Virginia, Medical Center tell how to become an englightened consumer in *Take Care of Yourself,* a consumer's guide to medical care (Addison-Wesley Publishing Co., Reading, Massachusetts 1976, 269 pgs., $5.95 paperback, $9.95 hardcover).

The book provides decision charts and home treatment information for 68 of the most common medical problems ranging from dandruff and chest pain to flu and burns.

For each problem, the doctors provide a brief description of the condition, suggest home treatment, and indicate symptoms which warrant a physician's attention and whether that attention should be immediate. The reader is told what to expect at the doctor's office, from the type of history the doctor may require for that particular ailment to diagnostic tests and finally, possible treatments that may be prescribed.

The handbook helps the consumer find a physician and suggests the need for an annual checkup is a myth. Most tests that should be done annually, the authors state, often can be provided at little or no cost by the public health department.

The authors recommend regular checks of blood pressure, skin tests for tuberculosis every few years, regular Pap smears for women over 25 and breast self-examination each month, a periodic glaucoma test, urinalysis, urine cultures, and tests for blood in the stool after age 30 for high-risk individuals.

The doctors remind us "The best health maintenance strategy is to seek medical care promptly whenever a truly important complaint or finding occurs. If you find a lump in your breast, if you have unexplained weight loss, if you have begun to cough up blood or run a fever for more than a week, then you should seek medical attention without undue delay.

They suggests further ways to reduce health care costs by teaching consumers to have their doctors prescribe generic drugs. Pharmacies carry variously priced generic drugs, and the authors recommend that you shop around to find the best value.

Home remedies for problems such as skin dryness, fever, warts, and upset stomachs are suggested which the doctors feel can save even more money for the consumer, in addition to providing him with the knowledge to choose the product which will be most effective.

A section "For Women Only" describes how to do a breast self-examination and what to expect at a gynecological examination. It also deals with menstruation and venereal disease.

A useful "Family Records" section is provided at the end of the book for the consumer to keep track of immunizations, childhood diseases, blood types, RH factors, allergies, and hospitalizations. Space is provided for important telephone numbers.

In addition to saving money for the consumer, Fries and Vickery hope to alleviate the growing demand for physician services by providing guidelines on when to seek medical attention. Perhaps more important, according to the authors, "by learning to identify the significance of medical problems, the consumer can ensure that professional medical care is obtained when it is needed. With this information you can take good care of yourself and your family."

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5/27/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Victor Richards, a long-time San Francisco surgeon, is new president of the Stanford University Medical Alumni Association. New officers were named at the May 21 meeting of the Board of Governors of the association.

Dr. David A. Rytand, Bloomfield Professor of Medicine emeritus at Stanford and chief of cardiology at Santa Clara Valley Medical Center in San Jose, was named president-elect.

Dr. Richards, a member of the class of 1939, will serve as president through June 1977, succeeding Dr. Paul Campbell of Portland, Oregon.

Dr. Richards joined the Stanford faculty in 1943 and served as professor and executive head of the Department of Surgery from 1955 to 1958 before the School moved to the Stanford campus.

He has continued his association with the Medical School as a clinical professor of surgery, and has been long active in the Alumni Association. He is currently chief of surgery at Children's Hospital of San Francisco.

A member of the class of 1939, Dr. Rytand has served several terms as secretary-treasurer of the Alumni Association. A specialist in renal and cardiovascular medicine, he has been a member of the Stanford faculty for more than 35 years. From 1954 to 1960 he was executive head of the Department of Medicine.

Dr. Don Goffinet, class of 1964, and assistant professor of radiology at Stanford, has been elected new secretary-treasurer of the medical alumni group.

New members of the Board of Governors are Dr. Anthony Engelbrecht, class of 1962, of Lafayette, and Dr. Frank Norman, class of 1944, Santa Rosa. Reelected to three year terms are Drs. Norman M. Christensen '48, James A. Clever '62, and S. Gainer Pillsbury '57. ###

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--An unrestricted gift of $6,826 has been given to Stanford University Medical School by the American Medical Association-Education and Research Foundation (AMA-ERF).

The check was presented to Dr. Clayton Rich, vice president for medical affairs and dean of the school of medicine, at a recent meeting of the Santa Clara County Medical Society.

The gift is part of the AMA-ERF contributions given annually to medical schools to support training of physicians. The funds originate from donations by individual physicians, AMA Auxiliary members and others across the country.

Funds from the gift will be used to support instructional materials at Stanford's Fleischmann Learning Center through the use of the Health Education Network. ###

Mailed Tuesday, May 25, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD –

A brain-wave pattern assumed until recently to be associated with epilepsy is being studied to determine if in fact it occurs in normal people.

Normal persons between the ages of 10 and 65 are needed to aid in the countywide research program, according to Dr. Timothy A. Pedley, acting director of the EEG (electroencephalograph or brain-wave scan) Laboratory at Stanford University Medical Center.

Dr. Pedley, Dr. James White of the San Jose Medical Clinic, and Dr. J. William Langston, chief of neurology at Santa Clara Valley Medical Center, are the principal investigators. Dr. Pedley says that 200 "entirely normal individuals" are needed for the study.

The doctors will be looking for a spike-wave pattern which for many years has been associated with psychomotor epilepsy. Along with many other factors this pattern has been used in the diagnosis of epilepsy.

Recently, however, the significance of this particular spike-wave pattern has been questioned, with some doctors suggesting that the pattern may not be abnormal at all, occurring as frequently in normal individuals as in epileptics.

"If this is true," says Dr. Pedley, "then it is possible that some patients have been incorrectly diagnosed as having abnormal EEG patterns."

Until this definitive study is completed, perhaps in six months, this particular brain wave is being interpreted with caution, says the neurologist. While a diagnosis of epilepsy is not made on the basis of the EEG alone, it has been decisive in borderline cases.

Dr. Pedley has no estimate of the number of persons whose epilepsy was diagnosed on the basis of the EEG; he feels it is a "small number of persons but it is a diagnosis of great importance to them.

"The individual thus labeled immediately becomes subject to all the restrictions and handicaps imposed by society on epileptics. It may mean almost certain loss of driving privileges, limitation of certain physical and recreational activities, and in some persons, such as truck drivers, ariline pilots and high-rise construction workers, it may threaten their jobs."

About 50 normal volunteers have been examined already in the study. Doctors have little difficulty in locating persons under age 35 who wish to volunteer, but the hardest group to find have been those from age 40 to 65.

He stresses that there is no risk or pain in having an EEG. "There may be a slight inconvenience for some volunteers since they are asked to stay awake the night preceding the test. This is because the EEG pattern we are interested in occurs mainly in the light stages of sleep and may even be activated by sleep deprivation."

Volunteers may call the EEG Laboratory of any of the three medical centers participating in the study. They will be sent a questionnaire and consent form to insure that nothing in their past medical history disqualifies them from participating. An appointment may be made on a weekend if necessary.

Interested persons may call the Stanford EEG Laboratory at 497-7181; the San Jose Medical Clinic, (408) 998-5551 extension 380; or the Santa Clara Valley Medical Center EEG Laboratory at (408) 293-0262 ext. 520.

The study is being sponsored by grants to the Stanford Department of Neurology, by the San Jose Medical Clinic Research Foundation, and by the Santa Clara County Epilepsy Society.

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5/25/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD –

Stanford University Hospital's new wing is expected to be completed by Sept. 1 and may be ready for patients in December, according to Hospital and University planning officials.

Original plans called for activation of the new wing in July. Those plans were delayed after a preliminary inspection in April revealed a variety of code and licensing deficiencies.

Cassius Kirk Jr., University staff counsel, said that a claim against the architectural firm of Caudill Rowlett Scott of Houston and Los Angeles has been filed for an undisclosed, but substantial amount.

Philip Williams, director of planning, said that construction of the $12.6 million wing and correction of building code deficiencies is expected to be completed within the budget planned. Additional costs because of delays and design changes have not been established, he said.

The project will add 25 intensive care beds and increase facilities for emergency services. The expansion also includes services in X ray, surgical pathology, cardiology, and postanesthesia recovery.

According to James McNally, director of facilities at the Medical Center, work is now underway to make necessary corrections and additions indicated by the preliminary inspection.

Problems are in three categories: hospital building code requirements, state and federal licensing requirements for patient care, and functional modifications requested by the departments.

The inspecting agencies include the State Bureau of Licensure and Certification, the State Facilities and Construction Section, federal officials representing programs for the handicapped and the Hill-Burton Hospital Construction Act, and fire marshals from the state, Santa Clara County, and Palo Alto.

Inspectors called for changes, for example, in doors, restrooms, plumbing fixtures, and wall and ceiling surfaces. Departments to be located in the new wing have described such problems as proximity of ambulance access, placement of reception areas, and adequate preparation of rooms for installation of equipment.

These problems are now being addressed by the Hospital engineering group and the architects, according to McNally.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Mrs. Rebecca Ahl Northway, 69, wife of the late Dr. William H. Northway, a distinguished Stanford physician, died Friday, May 21, 1976, of cancer at her home at Channing House in Palo Alto.

Mrs. Northway had been closely associated with Stanford University Hospital and the Medical School since 1927, when she entered the Stanford School of Nursing. From 1964 until her retirement early this year, she was familiar to many as receptionist at the Information desk at Stanford Hospital.

Born October 18, 1907 in Mowequa, Illinois, she came to Modesto, California with her family in 1925. She graduated from Modesto Junior College in 1927 and entered Stanford Nursing School.

Upon Graduation in 1930 she was married to Dr. Northway, who that year received his M.D. from Stanford. The two came to Palo Alto in 1932, and Mrs. Northway served as a nurse at the Stanford student health service.

Dr. Northway through the years served as chief of clinics, assistant dean of the Medical School, and acting physician-superintendent of Stanford Hospital. He also served on the governing board of Palo Alto-Stanford Hospital. Dr. Northway died in 1960.

Three sons survive, all Stanford graduates. William H. Northway, Jr., A.B. '54 and M.D. '57, serves as associate professor of radiology and pediatrics, director of the diagnostic division and associate chairman of the department of radiology at Stanford. Dr. J.D. Northway, A.B. '57 and M.D. '60, practices in Indianapolis, Ind. John C. Northway, A.B. '62 and M. Arch. '67, is a Palo Alto architect.

Mrs. Northway was an active member of the Stanford Faculty Wives Club, the Stanford Hospital Auxiliary, and the Allied Arts Guild to the Palo Alto Auxiliary of the Children's Hospital at Stanford.

Memorial services will be held by Roller & Hapgood Mortuary, Palo Alto, with private internment in Alta Mesa Cemetery.

The family prefers that gifts be directed to the William H. Northway Memorial Book Fund, in care of the Office of the Dean, Stanford University School of Medicine.

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Mailed Friday, May 21, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Establishing balanced public policies to deal with potential hazards from chemicals and radiation is impeded by public ignorance of the dangers and by consumer activists with insufficient scientific data, according to Dr. Joshua Lederberg, Nobel laureate geneticist at Stanford.

It is possible that man is subjecting himself to significant risks from a wide array of chemical substances and radiation, said the geneticist, but there is not enough scientific work being done to adequately weigh the dangers against the benefits.

Lederberg discussed the implications of altering genetic factors during a clinical symposium at the Stanford School of Medicine's alumni reunion day on Saturday, May 22.

He noted that ionizing radiation is the most widely discussed method of potentially increasing mutations--genetic changes--and carcinogenetic, or cancerous changes in man.

Average levels of radiation from natural causes in the atmosphere are from 100 to 200 millirads, he said, and 30 to 50 millirods from diagnostic X rays in medicine. Radiation from nuclear power plant leakage or fallout from nuclear testing, he says, amount to very small fractions.

Medical usage, he said, is the single largest source of artificial radiation exposure, and one that he feels could be reduced.

Chemical compounds also may cause changes in the genetic material of human cells.

"There are reasons to believe that the chemical environment may be even more serious in causing mutations than the radiation environment," says Lederberg. He calls for "judicious biological, chemical, and economic analyses of environmental health." Proper testing, he says, should occupy a much higher priority than it does now.

Such testing, he said, must involve animal studies, and "it is entirely appropriate to extrapolate from animal studies to what the general population will experience when it has correspondingly lower doses."

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Testing of cyclamates had been criticized, he said, for not being relevant to humans. Extremely high doses had to be given the animals before any adverse effects were seen.

This led to some complacency by the public, said Lederberg, which was not warranted, and obstructed the need for doing necessary scientific work.

Testing food additives such as cyclamates in humans at high enough levels to achieve adverse results would be unacceptable, he said: "there would not be many people left after a few years to comment on the situation."

Regarding the use of nitrite in food additives, Lederberg said that at first it looked like a horror story, with large quantities of the material being used in a wide range of foods, such as bacon, ham and frankfurters. But he also noted the economic value of the compound as a disinfectant and preservative, and said that more scientific studies are needed to find out precisely what happens to the compound when foods treated with it are ingested by man.

The geneticist also expressed concern about the lack of proper investigations into the use of chlorine. He noted the obvious importance of the chemical for disinfection, but he also called attention to the high chemical activity of the agent, which can react with DNA, the genetic material in human cells, and result in mutations. "We don't know if chlorine could be a hazard to human health, or if there are differences between tests and what happens when it is swallowed by humans in water, but we ought to find out more about this.

"Maybe we shouldn't rely on chlorination so much, although alternatives may be expensive; we don't know if the detriment outweighs the advantages."

In other chemicals already proven toxic at high doses, such as vinyl chloride, he asks if the vigilence is adequate in relation to the mutagenic potential. "Just how bad would one millionth of a lethal dose be when the entire population is exposed," he asks.

Regarding the exposure of people to diagnostic X rays, Lederberg noted that a halving in the levels of medical radiation could result in a two percent decrease in the human mutation rate.

He noted that about five percent of human health problems are of mutation origin. "That would amount to about one tenth of one percent decrease in the health burden by reducing the use of diagnostic X rays. On the average, such X rays are undoubtedly far more beneficial than harmful, but the opposite may be true in a significant proportion of X rays that are taken for defensive motives, rather than in the prudent interest of the patient." ###

ADVANCE--FOR PM PAPERS SATURDAY, MAY 22, 1976, to coincide with Dr. Lederberg's address at 11 a.m. at the Stanford Medical Alumni Reunion Day.

Mailed Friday, May 21, 1976.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Researchers at Stanford University Medical School have received a grant of $120,000 from the National Institutes of Health (NIH) to continue their studies into narcolepsy, a chronic sleep disorder that affects an estimated 200,000 Americans.

The two-year grant will enable the Stanford researchers to study dogs afflicted with the disease.

According to Merrill Mitler, associate director of the Stanford Sleep Disorders Clinic and Laboratory, the studies are centered on the genetic influences, neurophysiological defects and pharmacological treatments of narcolepsy. Principal investigator of the study is Dr. William Dement, director of the Sleep Disorders Clinic.

Narcolepsy is fundamentally a disease of REM sleep, a state of sleep found in mammals, including man. The main features are rapid eye movements (REM), and paralysis of voluntary muscle. Most persons dream during the several episodes of REM sleep that occur each night.

In narcolepsy something goes wrong with the REM mechanism, Mitler noted. "There is an abnormality of the central nervous system that somehow leads to a disorganization of sleep and components of sleep."

The first signs of narcolepsy usually begin to trouble the narcoleptic patient during puberty.

Mitler says there is no known cure for the disease which is diagnosed in humans by four symptoms: an irresistible urge to sleep, muscular weakness often leading to a complete collapse during excitement, frightening hallucinations prior to the onset of sleep and immediately after awakening, and paralysis during these latter periods.

"Narcoleptic dogs represent one of the major hopes for an eventual cure," Mitler said, "because we can study the sleep mechanism in dogs that have developed the disorder naturally."

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Mitler noted that narcoleptic dogs have symptoms similar to humans possessing the malady. The most noticeable, he said, is a general "collapse" when they become excited, such as when eating or playing. The disease seems to occur mostly in poodles, Doberman pinschers and dachshunds.

One of the continual problems with the studies, Mitler explained, is obtaining additional dogs.

"New additions to our dog colony are well cared for," he noted. "In fact, they are much safer here than if they were running free. Our interest is in precisely observing their usual sleeping behavior and in improving their conditions."

Mitler said narcolepsy is often confused with epilepsy in some dogs while other affected dogs might go unnoticed altogether. "The result is that many of the dogs are destroyed because their owners no longer find them acceptable pets."

One of the major areas the Stanford researchers wish to study is hereditary of narcolepsy in dogs.

Mitler explained that several breedings in the sleep lab of an affected poodle named Monique failed to produce one narcoleptic among her four pups. At the same time, he said, there are two female Doberman pinschers from the same liter with the disease.

"It raises a major question as to whether canine narcolepsy is hereditary. We just haven't had enough dogs yet to study."

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Mailed Thursday, May 20, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Two Stanford medical school faculty members have been appointed to the nine-member regional Medical Quality Review Committee serving Santa Clara County, Gov. Brown's office announced Tuesday (May 18).

The Stanford appointees are Dr. Robert H. Alway, professor of pediatrics and medical director of Stanford University Hospital; and Frances K. Conley, assistant professor of neurosurgery.

Also named were three community physicians who also teach at Stanford. They are Dr. Joseph H. Davis, clinical associate professor of pediatrics and chief of pediatrics at the Palo Alto Medical Clinic; Dr. Philip M. Lippe, clinical associate professor of surgery, San Jose; and W. Warren Mills, clinical assistant professor of medicine, Los Altos.

The committee is one of 14 regional subgroups of the Board of Medical Quality Assurance (formerly the State Board of Medical Examiners). The purpose of the committees is to review medical quality care practices, to investigate public complaints, and investigate the standards of practice of physicians involved in malpractice suits.

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FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Vincent T. DeVita, director of the Division of Cancer Treatment at the National Cancer Institute, will give the first Frederick Hurd Welland Memorial Lecture at the Stanford University School of Medicine.

DeVita will discuss, "The Evolution of Cancer Treatment: Combined Modality Treatment and the Interaction of Medical Disciplines," at 4 p.m., Friday, May 21 in Room M106 of the Medical School.

Dr. Welland, a Palo Alto physician, died at the age of 40 in 1973. He had been chief resident in medicine and a fellow in oncology at Stanford. The lecture was established in his memory by his family and friends.

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Mailed Tuesday, May 18, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

EDITORS: Review copies of the book are available upon request.

STANFORD--A Stanford cardiologist concerned with preventing heart disease, and a Palo Alto cooking teacher concerned with preparing fine food, have put together a new cookbook of exotic and simple cuisine--all low in saturated fats, cholesterol, and calories.

A guide to the levels of fat, cholesterol, and calories is included for each recipe in the Whole Family Low Cholesterol Cookbook by Helen Cassidy Page and Dr. John S. Schroeder, (Grosset and Dunlap, New York 1976, 334 pps., $10; paperback $5.95).

The cookbook is not a weight-reduction diet book, not is it for the cardiac patient on a stringent diet, say the authors.

It's aim is to reflect current medical opinion about restricting dietary cholesterol and saturated fat for people of all ages in hopes of preventing heart disease, according to Dr. Schroeder, assistant professor of medicine (cardiology) and director of the coronary care unit of Stanford University Hospital.

"There is now considerable scientific medical evidence that dietary modifications can reduce abnormally high serum fats and hopefully the development or progression of cholesterol deposition in the heart's coronary arteries.

"Several studies have now definitely shown that even minor changes in daily intake of cholesterol and saturated fat will lower blood cholesterol in the average person. The time has come for all of us to modify our diet," says Schroeder in the introductory chapters.

For the cookbook, Mrs. Page contributed a range of recipes from canapes, sauces, fish and meat, to breads and desserts. She assures her readers "all the recipes have been tested and passed with flying colors." Suggested menus include lamb curry, duck, flaming veal smetana, rack of lamb; hollandaise, mayonnaise, and even chocolate sauces, spiced cake and cherries jubilee.

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She also prepared chapters on kitchen tips and equipment needs, cooking techniques, and a chapter on "Cooking as an Art."

According to Dr. Schroeder, medical evidence suggests limiting the daily intake of cholesterol to 250 to 350 milligrams and saturated fat to 30 to 35 grams.

The book's "Three Spoons" signpost next to each recipe indicates up to four "C"s for increasing cholesterol levels, and up to four "F"s for saturated fat levels. A third "spoon" indicates the calorie content of one serving of the recipe. The authors suggest that no more than four "C"s or four "F"s be eaten at any one meal.

The authors point out that the body cannot use or excrete more than about 500 mg of cholesterol per day, the equivalent of two eggs. More than that amount may increase blood levels over a period of time, leading to deposits of cholesterol in the walls of coronary arteries which can gradually slow the blood flow to the heart.

Eating saturated fats--usually these are animal fats that are solid at room temperature, found primarily in animal meats and dairy products--causes cholesterol rises.

"Substituting vegetable oils--polyunsaturates--almost always results in a lowering of these fats in the blood stream, because the body does not make cholesterol from them," says Schroeder.

The authors urge that unless a person has a serious heart condition it is not necessary to abruptly change family meals. They recommend gradually replacing potentially harmful items with healthful ones, without drastically affecting lifelong food likes and dislikes. A unique feature of the book is a suggested six-month program to achieve that.

"We suggest moderate changes in food intake...eating more fresh fruits and vegatables, smaller portions of meats, cereals, starches, sugars and fats, using fewer sauces and fried foods, serving fewer desserts, will do more to help weight control than endless counting of calories," says the cardiologist.

Under Dr. Schroeder's direction in 1973 the Hospital began serving patients a model, low-fat menu as part of an educational program on the role of diet in heart disease prevention. A graduate of the University of Michigan Medical School, he is noted for his studies of contributing factors in heart attacks and evaluation of high risk cardiac patients.

Mrs. Page offers cooking lessons at the "Helen Page School of Cooking" in Palo Alto, and is also a secretary to Dr. Michael Eliastam, director of the Hospital emergency services.

Nutrition consultant for the book was Phyllis Ullman, chief dietition with the Stanford Heart Disease Prevention Program.

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Mailed Monday, May 17, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

"The ABC of Hepatitis Virus" will be discussed in the fourth annual Edwin W. Schultz Memorial Lecture on Thursday, May 20, at Stanford University School of Medicine.

A noted virologist, Dr. Joseph Melnick, professor and chairman of the Department of Virology and Epidemiology at Baylor College of Medicine, Houston, Texas, will be the speaker in room M-106 of the Medical School at 4:15 p.m.

Dr. Melnick is dean of graduate sciences at Baylor, and in 1964 received the school's distinguished service professorship award.

He has contributed to understanding of the nature of defective viruses and the mechanisms of viral carcinogenesis. He also pioneered in the development and testing of dye-light therapy, photodynamic therapy for patients with herpesvirus infections.

Prior to joining the Baylor faculty, he served as head of the virology laboratories of the Division of Biologic Standards of the National Institutes of Health.

The Schultz lectureship honors Dr. Edwin W. Schultz, who served as chairman of medical microbiology at Stanford for 33 years. At his death in 1971 his family and friends established the memorial lectureship.

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5/12/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Alumni of the Stanford University School of Medicine will gather for their Spring reunion day on Friday, May 22, at the Medical School.

In a morning symposium, Dr. Henry S. Kaplan, holder of the Maureen Lyles D'Ambrogio Professorship in Radiology, and director of the Louis B. Mayer Cancer Biology Laboratory, will speak on "Carcinogenesis."

Dr. Joshua Lederberg, chairman of the Department of Genetics and endowed Joseph D. Grant professor of genetics at the School, will also speak during the morning clinical symposium. His subject will be "Mutagens, Carcinogens and Public Health Policy."

Following luncheon for alumni, associates, spouses and faculty in the Grant Courtyard of the School, Dr. Sherman Mellinkoff, dean of the UCLA School of Medicine and a Stanford alumnus, will present the keynote address. His subject will be "The Federal Government and Medical Education."

An additional afternoon address will be made by Dr. Elliott Levinthal, director of Stanford's Biomedical Instrumentation Laboratory. He will discuss "Stanford's Trip to Mars," at 3 p.m. in room M106 of the Medical School.

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Mailed Wednesday, May 12, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A new program of professional education, clinical care and research in various aspects of aging will be launched by the Stanford University School of Medicine and the Palo Alto Veterans Administration Hospital.

The new program will be headed by Dr. Leo Hollister, professor of medicine and psychiatry.

Hollister, 55, an internationally known researcher in clinical pharmacology, will direct the effort at the newly developed Geriatric Research, Education and Clinical Center (GRECC) based at the VA Hospital.

The center is one of seven designated by the Veterans Administration to deal exclusively with care of the aged. Two of the centers are in the Los Angeles area, one is in Seattle.

Hollister said the program stems from concern that one-fourth of all patients in VA hospitals are age 65 or older. The number will increase as the largest group of veterans from World War II approach that age.

"Older patients often manifest chronic diseases," Hollister explained. "The process of aging is also accompanied by major physiologic, immunologic, and endocrine changes. Our knowledge in these areas of aging is limited."

Scientists will study the biology of aging at the cellular level. They also will carry out research on clinical aspects of the aging process. The purpose is to develop pilot approaches to treatment and rehabilitation.

Among the clinical aspects are respiratory ailments, heart conditions, diabetes and other metabolic diseases.

Clinical studies will be conducted in a 12-bed research center at the VA Hospital. The center will be staffed by Stanford faculty and VA personnel.

Hollister and his associates will study drugs used to treat mental deterioration or senility.

Research will also explore treatment of the aged in different therapeutic environments.

In addition, the center will train residents in geriatric medicine, and organize postgraduate education courses for physicians in practice and other professionals.

The center will work closely and share information with local agencies, Hollister said.

The hoped-for result will be to facilitate the transfer of research results to clinical applications outside the VA system, he added.

Hollister has contributed toward understanding of drug abuse. He has pioneered patient selection methods and data analysis for clinical research with psychotherapeutic agents.

He is also the author of a definitive book on the subject. He has been on the Stanford faculty since 1953.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--An endowed professorship in pediatrics has been established at Stanford University Medical School through gifts from Mr. and Mrs. Marron Kendrick of Atherton.

Dr. Clayton Rich, dean of the Medical School and vice-president for medical affairs, made the announcement for the University Board of Trustees.

"This new professorship, the second in pediatrics, joins 14 other endowed chairs at the School," said Dr. Rich. "It is an important gift which will immeasurably strengthen the future of pediatrics here, in teaching, in medical research, and in patient care."

The chair will be known as the Marron and Mary Elizabeth Kendrick Professorship in Pediatrics in the School of Medicine. Holder of the professorship has not yet been named.

The gift, the donors said, "Represents our statement of personal gratitude, for the exceptional and dedicated care received by our family from Stanford-trained doctors and the physicians, nurses, and staff of the Medical Center."

Kendrick is the chairman of the board of the Schlage Lock Co., headquartered in San Francisco, and a director of its parent corporation, Ingersoll-Rand. He received the AB in 1931 from Stanford in economics, and has been active over the years in Stanford affairs, serving as class agent, fund-raising volunteer, and currently as a member of the executive board of the Stanford Alumni Association.

Mrs. Kendrick, the former Mary Elizabeth Roth, is affiliated with the Stanford class of 1935, and is a member of the board of directors of the Children's Hospital at Stanford. The Kendricks have been particularly interested in perinatal and neonatal care, and have made substantial donations in the past for these purposes.

The Kendricks have extensive familial ties to the University. More than 25 close relatives and members of their immediate family have attended Stanford.

Mrs. Kendrick's father, the late Almon Roth, '09, JD '11, served the University as its first controller from 1919 to 1937. He had been the dean of men, 1909 to 1912, and later served as a trustee, 1940-43. As an undergraduate, he was a member of the track, football, and rugby teams, and was a charter member of Stanford's Athletic Hall of Fame. After leaving Stanford, he became known for his expertise in management-labor relations, and headed both the Pacific Coast and national shipowners associations.

Mrs. Kendrick's mother, Mildred Hayes Roth, received her AB from Stanford in 1911 in English. She is a member of Stanford Associates, and had long and distinguished service on the board of Children's Hospital at Stanford.

Kendrick's father, Charles, was a well-known San Francisco philanthropist. Besides extensive gifts to the University of San Francisco, he established a memorial scholarship fund at Stanford, in memory of Marron's brother, Charles W. Kendrick, killed in World War II.

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Mailed Wednesday, May 5, 1976.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--"Coping with Stressful Experiences: Perspectives from a Collaboration with Alfred E. Weisz," will be the topic of the annual Alfred E. Weisz Memorial Lecture on Wednesday, May 12, at 8 p.m. in Kresge Auditorium of the new Stanford Law School building.

Speaker will be Dr. David A. Hamburg, Reed-Hodgson professor of human biology and professor of psychiatry at Stanford, and recently appointed president of the Institute of Medicine.

Members of the medical community, students, and the public are invited to attend.

The Weisz Memorial Lecture was established in 1970 to honor the late Dr. Weisz, assistant professor of psychiatry at Stanford. He had done research on the psychological aspects of population before his death from cancer in 1970.

Dr. Hamburg came to Stanford in 1961 as professor and chairman of the Department of Psychiatry and Behavioral Sciences. For 11 years he directed the department's development into a nationally recognized center of research on psychiatric problems.

In 1972 he stepped down from the chairmanship to develop new programs including the Stanford Laboratory of Stress and Conflict, the undergraduate Human Biology Program, and the Program on Science, Technology and Society. His research contributions have dealt with behavior under stress, especially hormonal responses and ways of coping with difficult situations.

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Mailed Wednesday, May 5, 1976.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 321-5310

FOR IMMEDIATE RELEASE

STANFORD –

Visiting hours in Stanford University Hospital's maternity areas have been reduced, the hospital has announced.

Although fathers may visit at any time, other visitors 16 years of age and older are now allowed only between 6:30 and 8 p.m. daily. Children under 16 may also visit during these hours, but they are restricted to the waiting area outside of the maternity unit.

State health codes require that children under 16 not be allowed on actual maternity patient units at any time, and hospital officials ask that children be supervised at all times.

Previously, visitors in maternity areas were also permitted from 3 to 4:30 p m. However, Lois Williams, assistant director of the hospital's Nursing Service, said this visitor period was eliminated to provide the nursing staff needed time for the teaching of patients on infant and personal care prior to their release.

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5/4/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Dr. Lewis Aronow, acting chairman and professor of pharmacology at Stanford University Medical School, has resigned effective Aug. 31.

Aronow, 49, will assume the chairmanship of the Department of Pharmacology at the new Uniformed Services University of the Health Sciences in Bethesda, Maryland. The school was established by Congress to train physicians for the military services and the Public Health Service. It will accept its first group of students in the fall.

Dr. Tag E. Mansour, professor of pharmacology, will be appointed acting chairman of the Stanford Pharmacology Department, succeeding Aronow.

A member of the Stanford faculty since 1956, Aronow is considered a national leader in his field. His research has centered on anti-cancer drugs, biochemical pharmacology and glucocorticoid hormones.

Aronow has also been active in teaching and faculty affairs in the medical school and at one time served as chairman of the admissions committee. He currently heads a committee which is completing a study of tuition policy in the medical school.

One of three co-authors of Principles of Drug Action, the Basis of Pharmacology, Aronow was a research fellow at Harvard University in 1955-56. In 1970-71 he served as an American Cancer Society-Eleanor Roosevelt International Cancer Fellow at Cambridge, England.

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Mailed Monday, June 28, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--The Robert Wood Johnson Foundation has awarded a $65,300 grant to Stanford University Medical School in support of the planning of a research and training program in pediatrics.

The one-year study will help to determine if the primary health care needs of children are being met through current pediatric training. Researchers will then determine if combining traditional training with developmental psychology and behavioral training would lead to a new competency in pediatrics.

The study is under the direction of Dr. Ruth T. Gross, chief of the pediatric outpatient clinic at Stanford and director of the division of ambulatory pediatrics at Stanford Medical School. The co-investigator is Dr. Thomas F. Anders, head of child psychiatry at Stanford.

Part of the investigation will be conducted in cooperation with the Palo Alto Unified School District. John Martin, assistant superintendent for educational services says the study will involve a task force of classroom teachers, guidance and special problems counselors, health services personnel and administrators. Martin says, "We are working together because we are interested in the health of children. In the long run, the schools will benefit by being the recipient of healthier students."

According to Gross, in the past 25 years the problems seen by pediatricians have changed drastically. Infectious diseases which were once life threatening are now managed through immunization and antibiotic therapy. Today's pediatricians see a more complex set of problems related to behavioral or emotional disturbances. And traditional training may not prepare them to adequately deal with these problems.

The Stanford study, according to Dr. Gross, "will try to find areas where pediatricians would be able to intervene and improve the health of children if they were properly trained."

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Mailed Tuesday, June 22, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

EDITORS: Photo available upon request.

STANFORD--Stanford University Hospital has treated its 1,000th patient on the Coordinated Care Program (Co-Care), a multidisciplinary program designed to help restore patients' abilities to care for themselves.

Established in 1970 under the auspices of the Regional Medical Program, Co-Care was originally known as the Stanford Stroke Program and was designed to provide assorted hospital services for stroke patients.

Since then the program has expanded and is now designed to provide needed services for all patients with chronic or long-term physical or medical problems, according to Co-Care Nurse Coordinator LaVerne Westerlund.

Among the various hospital services brought in to help Co-Care patients are Physical Therapy, Occupational Therapy, speech therapy, social service and Discharge Planning. Others such as dietitians and hospital chaplains are also called in when needed.

Co-Care's 1,000th patient--Verneil Kuhfuss, 48, of Mountain View, Calif.--was placed in the program on his doctor's referral after suffering a stroke last April.

Like other patients receiving Co-Care services, Kuhfuss has received assistance in long-range planning for his future needs--an important element of the Co-Care program, Westerlund noted.

"These long-term needs involve selection of the appropriate 'next step' following discharge, such as a rehabilitation center, a skilled nursing facility, home care or out-patient care."

Westerlund, who has been nurse coordinator of the program since its inception, regards Co-Care as Stanford Hospital's "answer" to the absence of a geographical rehabilitation unit.

"It brings rehabilitative services to the patient, wherever he is in the hospital, keeping his individual needs in mind."

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Mailed Monday, June 21, 1976

file 6/18/76 release file.

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A claim for an unspecified amount against the architect who designed the new Stanford University Hospital wing has been made by the University, according to officials.

The claim concerns the hospital's first expansion phase, where total project costs have risen to $18.1 million.

The contract with the Texas firm of Caudill Rowlett and Scott calls for arbitration in such disputes, said Cassius Kirk, University staff counsel.

Kirk said the University contends that the building is not in accordance with what was anticipated. It seeks compensation because it feels the firm is responsible for the delays in the project and numerous problems in the building.

Work on the project began in Spring 1973, with completion expected in May 1975. Because of construction delays a new opening date was set for July 1976.

But last month Paul Hofmann, director of the hospital and clinics, announced that patients would not be placed there until December. The latest delay was caused by some functional deficiencies, but principally construction code violations noted by government inspectors in April.

Even before that inspection, however, Stanford had made a claim against the architect for a portion of the cost overrun.

According to original estimates, the cost of construction was $9.1 million, excluding activation costs and equipment.

That amount represented construction costs for two floors with 25 percent shell space for later completion, a basement that could be used as interim parking and the capability of adding a third floor in the future.

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Included in the wing are 25 intensive care beds, and increased facilities for emergency services, cardiology, X-ray, surgical pathology, transfusion issue and coagulation, and postanesthesia recovery.

In 1974 the basic budget was revised to $12.6 million to cover design changes due in part to a new state earthquake law. A $2.4 million activation and equipment budget was determined, and $1.1 million, obtained in the meantime from private sources, was earmarked for completing a portion of the shell space for several departments.

But now, according to Hofmann, at least $2 million more will be needed to correct code violations, and to pay interest costs added by delays.

The building is financed by $6.3 million in federally guaranteed low interest private loans, and $6.3 million in private borrowing through the California Educational Facilities Authority, with the balance coming from hospital and medical school funds, and private gifts.

Dr. Clayton Rich, vice president for medical affairs, said the architect grossly underestimated the initial construction costs. Factors which the architect might not have taken into account were new stringent earthquake codes. Inflation also complicated the picture.

The architect was picked by a 10-member committee comprised of faculty, medical center and university planning office administrators. Records from that search show that Caudill Rowlett and Scott had designed or constructed some 30 hospital projects with over 2,000 beds--among them the Norton-Children's Hospital in Louisville, Kentucky, and Doctors Medical Foundation Hospital in San Antonio, Texas.

Several design errors in the new wing stand out. The building was originally designed to accept a third floor. But space developed to facilitate addition of mechanical and other support equipment for the extra floor is inadequate..

There are elevators in the wing which will not accommodate hospital beds, in addition to numerous code deficiencies and functional problems.

According to Emil C. Strom, health services planner at the hospital, changes are required among other things because of:

--bathrooms lacking facilities for the handicapped.

--sprinkler heads that hang too low into hallways.

--doors that are too narrow.

--stairwells with slippery surfaces, and handrails that are too short.

--lack of knee and foot controls in sinks where infectious materials are handled.

--stucco walls that are uncleanable for infection control purposes, and

--fire code violations.

Another deficiency is a 57-foot ramp connecting the operating rooms in the existing building to the recovery room and intensive care unit in the new wing. The wing has floor elevations different from the existing hospital, and ramps rising 3.5 feet have been built. Regulations require a level section every 30 feet.

Some surgeons and anesthesiologists have expressed concern that the ramp is too steep to safely transport anesthetized patients. In addition, they said, a bed, plus a patient and accessory cardiac support equipment weighs from 450 to 600 pounds, and may require more than two people to move it on the incline.

Jim McNally, director of facilities at the Medical Center, and Dr. Myer H. Rosenthal, director of the ICU, are now conducting tests on a similar ramp in the basement--without patients--to determine what changes will be needed to move the beds, and whether a hazard exists.

Original plans for the wing, according to hospital officials, had called for the new floor to be level with the old one. But an additional 3.5 feet of extra excavation would have been necessary before construction could have begun. To reduce costs, the excavation was not done.

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444--Construction

Work is underway to correct the problems so that the building can be opened for patients in December. "The added space," Rich said, "is an absolute requirement, one that is long overdue. When the deficiencies are corrected, the building will be of undisputed benefit."

Meanwhile, the hospital has deferred hiring of new personnel for the wing. As many as 250 persons will be employed when the addition opens, about half of them are nursing personnel.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Stanford University School of Medicine awarded 145 degrees during its annual commencement exercises Sunday, June 13.

The ceremonies also honored six faculty members.

Medical degrees were presented to 73 men and women. The school also awarded 20 Ph.D's, 40 masters' and 12 bachelor of science degrees.

Diplomas were presented during ceremonies at Grant Courtyard at Stanford Medical School following the university's 85th annual commencement rites at Frost Memorial Amphitheater.

Dr. Clayton Rich, vice-president for medical affairs and dean of the medical school, and Dr. Hadley Kirkman, professor of anatomy, emeritus, presented the diplomas.

The guest address was given by Dr. Grady Stumbo, president of the East Kentucky Health Services Center and a primary care physician.

The Henry J. Kaiser Award for outstanding and innovative contributions to medical education was presented by Dean Rich to Dr. Ruth T. Gross, professor of pediatrics.

Michael D. Amylon, a member of the 1976 graduating class, presented the Henry J. Kaiser Awards for excellence in teaching to Drs. Michael B. Jacobs, assistant professor of ambulatory medicine; Mark Perlroth, senior attending physician and clinical associate professor of medicine; Eugene D. Robin, professor of respiratory medicine; and Lawrence H. Mathers, assistant professor of anatomy. Perlroth was awarded the honor last year as well.

For the second straight year, Dr. Daniel Federman, professor and chairman of the Department of Medicine, was presented the Arthur L. Bloomfield Award for recognition of excellence in teaching and clinical medicine. His award was given by Peggy A. Warth, a member of the 1976 graduating class.

A reception in the Dean's Courtyard for the graduates and their guests followed the convocation ceremony.

All but one of the medical graduates will receive additional clinical training in hospitals across the U.S. One graduate will undertake research work.

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The 1976 medical school graduates and their hometowns:

CALIFORNIA--Raul Alvarez, Reedley; Michael G. Bazaral, LaJolla; Larry E. Bell, Palo Alto; Arnold Berk, Sherman Oaks; Edward P. Gelmann, Palo Alto; Fred E. Heidrich III, San Diego; Brian Lee Johnson, Arcadia; Alan M. Jones, Portola Valley; David T. Linker, Los Angeles; David Bruce Mark, Arcadia; Randall E. Morris, Hillsborough; Gary A. Palmer, Van Nuys; James D. Prickett, Palos Verdes Estates; Richard P. Rodriguez, Ontario; Martin Donald Rubenstein, Mar Vista; Paul M. Sanchez, Oxnard; Michael Lewis Shorenstein, Stanford; Rosalind Greenberg Shorenstein, Stanford; Edward H. Shortliffe, Stanford; Stephen Sidney, Palo Alto; Linda Skory, Berkeley; Suzanne Fields Steinbach, Stanford; Karen Johnson Train, San Francisco; James Pritchard Viney, West Covina; Lennard S. Wilson, Anaheim; Margaret J. Zwerling, Oakland.

RHODE ISLAND--Michael David Amylon, Scituate.

OKLAHOMA--Robert C. Barton Jr., Oklahoma City.

CONNECTICUT--Constance Bowe-Anders, Fairfield.

MINNESOTA--Barbara Covey, Minneapolis; David William Feigal Jr., Wayzata.

NEW YORK STATE--Nancy E. Ebbert, Syracuse; Sally Dorfman, Cornwall-on-Hudson; Ira Walter Gold, Brooklyn; Allen D. Hillel, Rye; Edward Lawrence Hoder Jr., Poughkeepsie; Arthur K. Huberman, West Hempstead; Joseph Magliozzi, Rochester; Leonard H. Sigal, Forest Hills; Owen Neil Witte, Stony Brook.

NORTH CAROLINA--Sanford Martin Dawsey, Chapel Hill.

PENNSYLVANIA--George G. Dougherty Jr., Shillington; Bruce P. Foreman, Pittsburgh; Robert H. Odell Jr., Wayne; Sandra Lee Propst, Honesdale.

TENNESSEE--Louis Martin Edelson, Memphis.

ARIZONA--Joseph Glassford Garner, Phoenix.

NORTH DAKOTA--Glenn Richard Gourley, Grand Forks; Kaarel T. Kaljot, Minot; Patrick George Lamb, Michigan.

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IOWA--Richard E. Gregg, Storm Lake.

WISCONSIN--Steven Hancock, Kenosha.

MICHIGAN--Lawrence Jay Hamburger, Bloomfield Hills; Andrew Hoffman, Detroit; Jesse C. Krakauer, Southfield; Amos Luther Lash, Detroit.

KANSAS--William Robert Jahnke II, Manhattan.

NEW JERSEY--Ann Johnson, New Vernon; Wendy Parker Knudsen, Plainfield.

MASSACHUSETTS--Steven Harris Marks, Waban; David P. Sklar, Swampscott; Charles A. Swanson, Reading.

WASHINGTON STATE--Diana Jean Parsons, Mercer Island; Peggy A. Warth, Spokane.

TEXAS--Antonio Luis Ruiz, El Paso.

NEBRASKA--William Charles Mobley, Lincoln.

LOUISIANA--Cleveland Moore, New Orleans.

OHIO--Deloy Oberlin, Bryan.

MARYLAND--Catherine Owen, Bethesda.

VERMONT--Edward N. Taylor, Hartford.

ILLINOIS--Fred R. Volkmar, Sorento.

WASHINGTON, D.C.--Cathryn Stevenson.

THAILAND--Chumrurn Sorapipatana.

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Mailed Monday, June 14, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-691

STANFORD--Dr. Irving Schulman, an internationally known expert in childhood diseases and chairman of the Department of Pediatrics at Stanford University Medical School has been named Marron and Mary Elizabeth Kendrick Professor of Pediatrics.

The appointment was announced Friday, June 11 by Dr. Clayton Rich, vice-president for medical affairs and dean of the medical school. It is effective immediately.

Dr. Schulman, 54, came to Stanford in 1972 after serving as professor and chairman of the Department of Pediatrics at the University of Illinois College of Medicine from 1961-1972. He has also been a faculty member of the medical schools of Cornell University and Northwestern University.

Schulman is considered to be an outstanding investigator in pediatric hematology and has made significant research contributions in the fields of nutritional iron deficiency, hereditary hemolytic anemias, and disorders of blood coagulation.

One of Dr. Schulman's goals at Stanford has been the development of complete health care services for children. His efforts have resulted in closer ties with the Children's Hospital at Stanford and joint planning for patient care and pediatric academic programs.

Schulman was the recipient of the Mead Johnson Award for Pediatric Research (1960), the John F. Kennedy Award from Georgetown University for distinguished service to children (1968), and the Distinguished Faculty Award from the University of Illinois College of Medicine (1972). He was also elected president of the Society for Pediatric Research in 1967.

Born in New York, Schulman is an alumnus of New York University where he received his B.A. in 1942 and his M.D. in 1945.

He is the first person to hold the Marron and Mary Elizabeth Kendrick endowed professorship in pediatrics, which was established this year through gifts from Mr. and Mrs. Marron Kendrick of Atherton.

The gift, the donors said, "Represents our statement of personal gratitude for the exceptional and dedicated care received by our family from Stanford-trained doctors and the physicians, nurses, and staff of the Medical Center."

Kendrick is board chairman of the Schlage Lock Co., of San Francisco, and is a director of its parent company, Ingersoll-Rand. He received the A.B. from Stanford in 1931.

Mrs. Kendrick graduated with the Stanford class of 1935 and is a member of the board of directors of the Children's Hospital at Stanford.

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Mailed Monday, June 14, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Lubert Stryer, an expert on biologic structure and protein chemistry, has been appointed chairman of the Department of Anatomy at Stanford University School of Medicine, and holder of the Mrs. George A. Winzer endowed professorship in cell biology.

His appointment, which culminated a nationwide search, was announced Friday, June 11 by Dr. Clayton Rich, vice-president for medical affairs and dean of the medical school. It becomes effective July 1, 1976.

Dr. Stryer, 38, has been professor of molecular biophysics and biochemistry at Yale University in New Haven, Conn. since 1969.

He was on the faculty of the Department of Biochemistry at Stanford as associate professor from 1966 to 1969, and as assistant professor from 1963 to 1966.

The endowed professorship is named for Mrs. Frances Nunnally Winzer of LaJolla, Calif., a longtime major benefactor of the medical school.

Dr. Stryer is noted for his studies of biological structure at the molecular level, studies fundamental to a better understanding of cell organization and function.

His most recent work demonstrating the flexibility of certain components of an antibody molecule has provided new insight into the relationship between structure and function in an important class of protein molecules.

In addition to outstanding credentials as a scientist, he is considered an accomplished and stimulating teacher. His Biochemistry is a widely used textbook emphasizing principles of biologic structure and the interrelationship with function.

A native of Tientsin, China, Dr. Stryer received the B.S. with honors from the University of Chicago in 1957, and the M.D. magna cum laude from Harvard University in 1961.

He was awarded the Eli Lilly Award of the American Chemical Society in biological chemistry in 1970, and is a fellow of the American Academy of Arts and Sciences.

During his career he was a visiting investigator with the Medical Research Council Laboratory of Molecular Biology at Cambridge, England, and served as a consultant to the National Institutes of Health study section on biophysics and biophysical chemistry.

Dr. Stryer will succeed Dr. Lawrence H. Mathers, assistant professor and acting chairman of anatomy.

Mrs. Winzer's unrestricted gift of $2 million announced in 1974 will permit construction of a third floor in the Sherman Fairchild Center for the Neurosciences and help complete diagnostic and treatment laboratories in the new Hospital addition, in addition to the professorship. The Fairchild Center, scheduled for completion this year, will house the departments of neurobiology, anatomy and physiology laboratories for neurology and neuropharmacology, a bioengineering laboratory, and an auditorium.

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Mailed Monday, June 14, 1976.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911
or
Bennett J. Mintz 213: 681-5553

EDITORS: The following story is released jointly by the National Council of YMCAs and the Stanford University School of Medicine.

STANFORD--A nationwide educational program aimed at lowering people's risk factors for heart disease is being developed by the Stanford Heart Disease Prevention Program and the National Council of YMCAs.

This is believed to be the first time that a prevention program of such wide scope has been established in respect to heart disease.

The Risk Factor Reduction Program will bring together the techniques developed in Stanford programs, notably the "Three Communities Study," with the nationwide staff and facilities of the YMCA.

Announcement of the program was made by Dr. John Farquhar, director of the Heart Disease Prevention Program at Stanford, and by Gary A. Fry, M.D., director of the YMCA's YMCArdiac Therapy Program.

The risk factor reduction classes are part of a broad cardiovascular health program being launched by the YMCA, with the aim of instituting health education and physical fitness activity centers throughout the nation. Another part of that program is YMCArdiac Therapy, which provides medically prescribed and supervised education and exercise.

The risk factor programs will be tested in three West Coast cities: Palo Alto, Portland and Los Angeles says Fry, and then implemented on a broad scale across the nation.

Stanford will develop the pilot programs, provide educational materials, assist in setting up the classes on Y premises, and train YMCA personnel--dietitians, nurses, health counselors and physical educators. Stanford personnel will act as consultants as the program is initiated more widely.

Classes being developed for the YMCA will be modeled after ones now being offered at Stanford facilities. These pilot programs deal with stress reduction; smoking cessation; and weight, diet and exercise control. They are open to the public, range from four to eight weeks, and involve eight to 16 sessions.

Dr. Farquhar lists recognized risk factors as smoking, high blood pressure, high blood cholesterol, emotional stress, and lack of exercise and obesity that play an important role in the early development of heart disease.

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He notes that 80 percent of adult male Americans have at least one of the major risk factors, and 40 percent have two. Therefore programs aimed at reducing these risks, he feels should involve the entire community.

"Such programs, involving so many people of all ages, are beyond the scope of the current 'medical model' and require new community and family-based approaches at relatively low cost," he says.

He cites the groundwork laid for the YMCA program in the Stanford Three Communities Study, a three-year health education campaign conducted in three Northern California communities.

Large risk reductions were reported in communities receiving mass media educational campaigns and personalized instruction. There were also dramatic changes in people's knowledge about heart disease risk factors.

"That study showed that the average citizen has the capacity to increase his or her health knowledge and to take responsibility for improving health habits," says Farquhar.

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Mailed Tuesday, June 1, 1976.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

ADVANCE FOR PM PAPERS TUESDAY, JUNE 1, 1976

EDITORS: Release date for this story has been set to coincide with the presentation scheduled for Tuesday afternoon, June 1.

STANFORD--Researchers at Stanford University Medical School have designed a computer-based consultation system to help physicians select antimicrobial therapy for their patients.

The MYCIN system (named for the many antimicrobial agents with that suffix) was discussed by Drs. Edward Shortliffe, Randy Davis and Stanton Axline of Stanford at the second annual workshop on "Artificial Intelligence in Medicine" at Rutgers University in New Jersey on June 1.

The MYCIN system has been under development at Stanford for the past several years. Researchers are still working to improve its performance, and do not expect it to be ready for general clinical use for some time.

MYCIN uses the computing facility of the Stanford University Medical Experimental Computer (SUMEX), established in 1974 as the first shared national computing facility for medical research. SUMEX is directed by Dr. Joshua Lederberg, professor and chairman of the Department of Genetics, and is funded by a grant from the Division of Research Resources, Biotechnology Resources Branch, of the National Institutes of Health.

The computer program is designed to determine if a patient has an organism which requires therapy, compile a list of possible therapies, and then determine the recommended one from that list.

It does that by "talking" via the keyboard of a computer terminal with the physician, asking questions, for example, about the patient's condition, available laboratory data, how the infection was acquired, just as a human consultant does.

The physician can also question the computer about its reasoning, even why it asks the questions it does, and how it arrived at its recommendations.

If the physician makes a simple spelling error in typing a question or answer, the computer will figure out what word was meant and correct the doctor's spelling. To some extent, the computer can also understand colloquial or everyday English expressions.

Researchers emphasize that MYCIN is designed to be a tool for the physician and not a replacement for his own judgment. The physician can ask the computer to justify both its questions and its final conclusions, so that the doctor may reject or accept its recommendations.

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"We want the physician to be adequately assured that the computer knows what it is talking about," said Shortliffe.

The computer's reasoning power comes from "rules" that are programmed into it--rules based on the knowledge used by infectious disease experts. The more than 400 rules now in use were formulated during extensive discussions between the computer researchers and physician collaborators. New knowledge can automatically be incorporated into the program.

Currently researchers are testing the validity of the computer's judgment by comparing its recommendations with how several physicians would treat particular cases of bacteria in the blood.

According to Shortliffe, "We expect the program will be ready for introduction once the experts approve its performance in at least 90 percent of cases, or once they agree with MYCIN's reasoning as much as they agree with each other."

Shortliffe said his reasons for developing the MYCIN system stem from studies that have shown a need for improved drug selection for patients with infectious diseases. Since the advent of penicillin and streptomycin and other antimicrobial agents, he says, almost one-third of patients in an average general hospital are receiving at least one such agent on any given day, with wide opportunity for indiscriminate use or misuse.

The computer system also allows for immediate initiation of therapy, he says, without the need to wait for final results of laboratory cultures for a patient who may be critically ill.

Shortliffe began work with the computer project as a medical student in the laboratory of Dr. Stanley N. Cohen, professor of clinical pharmacology at Stanford. Drs. Cohen and Axline are coprincipal investigators in the research which is supported by grants from the Bureau of Health Services Research and Evaluation of the Department of Health, Education, and Welfare.

Davis is a Stanford graduate student in computer sciences. He completed doctoral research on the problem of allowing MYCIN to learn directly from infectious disease experts who need not understand computer programming.

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Mailed Friday, May 28, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Pianomime, a nonprofessional mime troupe that includes several Stanford students and staff members, will present a benefit performance Wednesday, July 28 starting at 8 p.m. in the Little Theater on campus.

Proceeds from the event will go to the Premature Research Center at Stanford University Hospital.

Formed last fall, Pianomime is a seven-member troupe directed by Stella Bensadon, who is an instructor in mime. A former student of Ella Jaroszewics (ex-wife of legendary mime performer Marcel Marceau), Bensadon taught mime in 1966-67 at Stanford and in 1975-76 at San Jose State. In 1974 she was instructor to a Stanford troupe called "The Company."

In addition to Bensadon, other Pianomime members are Jill Hester, Helene Davis, Jeff Cabili, Beccy Sako, Scott Daniels and Clyde Dodge. The troupe is accompanied musically by Bob Willey, a music major at Stanford, who plays both piano (from which the troupe name is derived) and the guitar.

In addition to its upcoming performance on campus, Pianomime also recently performed at Cubberley High School in Palo Alto and at San Jose's Bicentennial observance.

Tickets may be purchased at the door.

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Mailed July 22, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--David Rand Charney, 23, a graduate student in biochemistry at Stanford University Medical School, was found dead in his home at 1196 Hamilton Avenue, Palo Alto Tuesday evening, July 20, apparently from gun shot wounds.

According to the report of officer Bryan Chiles of the Palo Alto Police Department, Charney's brother, Allen, of Wheaton, Maryland, had been talking with Charney by telephone when he heard gun shots, and called the police to investigate.

The cause of death is being investigated by the Santa Clara County Coroner's Office.

Charney was in his third year of graduate work in the department of biochemistry. He had received his undergraduate degree in biochemistry from Columbia University, and entered Stanford in September 1973.

In addition to his brother, he is survived by his parents, Mr. and Mrs. Louis Charney of Las Vegas, Nevada.

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Sent Business Wire Wednesday, July 21, 1976
Mailed Thursday, July 22, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

"If doctors devoted as much time and energy to minimizing the need for medical care as they now devote to its delivery, the quality of life might increase appreciably."

This is the opinion of Victor Fuchs, professor of economics at Stanford University, writing in the July issue of ***The Western Journal of Medicine.***

"One step is the development of self-care, including care by family and friends," says Fuchs. "Self-care movements are burgeoning, both in this country and abroad.

"To be sure, some of them are simply fads, some are gimmicky, and some may be dangerous frauds.

"At their best, however, they are attempts to give concrete expression to what every physician knows: an intelligent, informed lay person can deal with a large proportion of the acute and chronic conditions that are called illness.

"The trickiest part is making sure that such conditions requiring professional attention get it promptly."

Fuchs, who is a vice-president of the National Bureau of Economic Research, maintains that beyond encouraging and teaching self-care, medicine could contribute to the quality of life by the promotion of health.

This is not easy, he admits, since much that affects medicine is beyond its reach. Many doctors are moving in this direction, he says, but more could be done.

"Medical schools in particular," says Fuchs, "could increase the emphasis on the prevention of disease and the maintenance of health in their research and teaching.

"A physician emerging from a school with this emphasis would take a broad view of his duties and responsibilities. Instead of the yardstick of success being the length of the queue in the waiting room, physicians would judge themselves collectively by improvements in the health levels of the populations they serve."

Fuchs warns that people should not have unrealistic expectations of medicine, and doctors should not promise more than they can deliver.

"The quality of life depends on many things besides health," he writes, "and health depends upon many things besides medical care. But given medical care's share of the gross national product (over 8%), significant improvements in our health system could have major spinoffs for other sectors."

Fuchs says that medicine has made important contributions to raising life expectancy and has contributed to a fuller, more satisfactory life for millions.

But its advances, associated with increased specialization, have had their negative aspects also.

"Many of the advances and (pseudoadvances) have been very expensive," the economist says. "Each additional reduction in mortality or morbidity requires a massive diversion of resources from other purposes.

"Some technologic advances, which are viewed not so much as extending life as prolonging dying, may actually adversely affect the quality of life."

Fuchs recommends that leaders of medicine should eschew taking bows for contributions of the past, abandon the myths that presently enthrall teaching and practice, and create a more effective and equitable system of health care."

–30– 7/20/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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SCIENCE WRITERS: The following story is distributed jointly with the University of California, San Francisco

STANFORD –

Stanford University and the University of California have filed an application to patent key elements of a new genetic engineering technique developed by scientists at both institutions.

If awarded, the patent would cover commercial use of the process, said Niels Reimers, manager of Stanford's technology licensing program. It would not affect its use for academic or industrial research.

Reimers said licensing of the patent by Stanford and UC would help enhance early use of the beneficial aspects of the technique. It would also require commercial users to abide by safety guidelines issued recently by the National Institutes of Health.

The guidelines, which apply to federally funded research only, ban hazardous experiments and allow others under strict physical containment procedures.

Stanford and UC, according to Reimers, will be entitled to royalty income only if the process is used commercially. The money will be applied to further education and research.

However, William F. Massy, acting vice-president and provost, stressed that Stanford has made no decision to exploit the technique commercially. "The matter is still under discussion with federal officials, and being debated internally," he said.

The technique was developed by groups headed by Dr. Stanley Cohen of Stanford and Dr. Herbert Boyer at the University of California, San Francisco. They published their findings in 1973 and 1974, and it was their research which opened an unprecedented public debate of possible risks and benefits in the experimental manipulation of genes.

The method permits the transplantation of genes from one organism into another. It has the potential of creating a wide variety of novel genetic combinations in microorganisms.

Although the process is important in molecular genetics for the study of medical problems, it also makes it possible to introduce genes into easy-to-grow bacterial cells. This potentially enables construction of bacterial "factories" that will synthesize a variety of biologically produced substances such as insulin, hormones and so on.

Such commercial uses would be covered by the patent.

Cohen and Boyer have stated that neither they nor other scientists named in the application would benefit financially if the patent is awarded. They have made personal decisions to assign their proceeds to fellowship programs and research.

The scientists' work was funded by the NIH, the American Cancer Society, and the National Science Foundation. These agencies have agreed that the work could be handled under the institutional patent agreement of Stanford with NIH. The agreement gives universities sole patent rights to inventions developed with NIH support unless a project is specifically exempted. The genetic studies were not.

Scientists believe the technique is a landmark technical achievement with enormous potential for medicine and agriculture.

But they also have been concerned that such techniques could be used for construction of novel gene combinations that may be hazardous to humans.

In 1974 a committee of the National Academy of Sciences called for a temporary deferral of certain types of experiments until the potential risks were fully assessed.

The review culminated with the publication of the long-awaited guidelines by the NIH last month.

–30– 7/19/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD -- A new experimental therapy for psoriasis, combining oral drugs and ultraviolet light, could become the most effective treatment for this disease, dermatologists report.

But they also cautioned against its widespread immediate use until current studies can measure risks as well as benefits.

Oral psoralen and ultraviolet-A (PUVA) photochemotherapy is being evaluated in clinical trials with more than 1,000 patients in 16 U.S. medical centers, including Stanford. It is reported to have more than 90 percent effectiveness in clearing psoriatic skin disease.

Scientists reported at the Second International Symposium on Psoriasis being held this week at Stanford that "there are no known medical problems associated with PUVA." However, they reported concern about possible long-term delayed hazards, such as skin cancer or cataracts.

The benefits of the new treatment include more rapid clearing of skin lesions than with other existing treatments, without the daily laborious applications of ointments, or use of more toxic drugs.

"There would be virtually no restrictions of a patient's job or his life style," say Drs. Thomas B. Fitzpatrick, John A. Parrish, Madhukar A. Pathak, and Lewis Tannenbaum, all of Harvard Medical School and Massachusetts General Hospital, who were among the symposium participants.

The average patient on PUVA therapy, who has at least 30 percent of his body involved in the disease, is cleared of psoriasis in 15 to 20 treatments, given twice weekly. Each treatment requires less than 15 minutes. After clearing, weekly treatments of 15 to 25 minutes may be required.

The risks, according to the Harvard team, "are theoretical long-term effects, as there are no acute toxic effects in more than 1,650 patients now under treatment." They have not observed any evidence of serious injury to the eye, liver, skin or any other organ.

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Some researchers say the skin and eyes could be the targets of adverse effects delayed over many years.

In the therapy, the drug Methoxsalen is taken by mouth. It acts as a photosynthesizer, sensitizing the skin to light. Then the combination of drug and special ultraviolet light treatment appears to slow down and break up the disease process.

In the presence of ultraviolet light, the drug binds to DNA, the genetic material of cells, affecting cell function by decreasing DNA replication and cell division. In psoriasis, the regulatory mechanisms that control cell reproduction are impaired; the cells multiply much more rapidly than normal, causing thick and scaly skin.

The drug Methoxsalen is not approved for use in this regimen except experimentally, and an approved ultraviolet light system is not commercially available.

Drugs such as Methoxsalen, called psoralens, have been commercially available for use in other skin diseases for more than 20 years, without adverse effects, say the Harvard researchers, except for burning or blisters that may occur without careful use.

Psoralens are present in eatable plants, they say, and have been used since ancient times in medicines. But studies in animals have shown that prolonged exposure to very high intensity ultraviolet light has caused cataracts, especially when the drug is given also.

Dr. Eugene Farber, chairman of the department of dermatology at Stanford University Medical School, and moderator of the symposium discussion, said patient demand for the therapy has been very high. Current use of PUVA, he emphasized, is "promising" but strictly experimental, and more widespread use should await guidelines that will come from the nationwide study.

Current experimental trials with PUVA, which began in May 1975, are continuing, and patients will be followed for the next five years to determine the safety of the treatment.

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Mailed Friday, July 16, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

STANFORD –

Day-care therapy for severe cases of psoriasis has been effective in 80 to 90 percent of cases, according to reports from physicians at both Stanford and UC-San Francisco medical centers.

The first such day-care centers in the country, opened in 1974, enable patients to receive treatment during the day and return to their families each evening.

Between 80 and 90 percent of 204 patients with severe psoriasis remained clear of the disease for a year or longer after treatment at the Stanford center, according to Dr. Eugene Farber, professor and chairman of dermatology, and Dr. William Watson, assistant professor of dermatology.

Dr. David L. Cram, director of the UC center, presented similar findings using somewhat different therapy. The reports were made at the Second International Psoriasis Symposium being held this week at Stanford University.

Psoriasis, a common skin disorder that causes itching, scaling and redness, affects six million people in the U.S. While no permanent cure is yet known, various treatments with salves or ultraviolet light provide effective control.

According to Dr. Farber, the day-care centers were designed to meet the need of patients who cannot afford to spend time away from their families or jobs for hospital treatment, yet find it difficult to care for themselves adequately at home.

Most of the patients treated at the Stanford center had 50 to 75 percent of their bodies involved, with lesions too extensive to treat at home, says Dr. Watson.

Patients receive individualized treatment which may include ultraviolet light, medicated baths, and applications of various preparations. Anthralin paste has been in use at Stanford, which has an advantage of providing rapid clearing of lesions, according to Dr. Watson. Therapy at UC involves the use of coal tars, a long-time effective treatment for psoriasis.

Stanford patients report to the center in the morning five days a week for therapy sessions lasting seven or eight hours. The average treatment program lasts about 10 days.

While under treatment, patients have access to a sun parlor and special lounges where recreational and occupational therapy is available.

A recent addition has been psychiatric group therapy sessions. According to Dr. Watson the sessions with dermatologists and psychiatrists have proved very effective in helping patients achieve a positive outlook about their disease and better manage when they go home.

In addition the program reduces the cost of hospital treatment, says Dr. Watson.

The Stanford and UC centers were the first of only a few centers now in the U.S.

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7/14/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD--Swimming and sunbathing at the Dead Sea may be an effective treatment for psoriasis, according to a report by Dr. Willy Avrach of Hadassah University Hospital's Dead Sea Psoriasis Center in Ein Boquk, Israel.

Avrach, medical advisor to the Royal Danish Embassy in Israel and a noted skin specialist in charge of the center, reported his findings Wednesday, July 14 at the Second International Symposium on Psoriasis at Stanford.

According to Avrach, "96 percent of the patients were either free of symptoms or had obtained improvement" after treatment consisting of rest, bathing in the sun and the Dead Sea, application of bland emollients to the skin, and patient education.

Conditions at the Dead Sea are unique for this type of therapy, although climatotherapy is available in other countries including Yugoslavia and Bulgaria.

Because the Dead Sea is the lowest place on earth--1286 feet below sea level--patients spend up to seven hours in the sun without burning as the ultraviolet rays which cause sunburn only rarely penetrate the area's high density air.

In addition, the sea's mud "probably contains a photosensitizer" which aids in treatment, according to Avrach. Although patients spend more than an hour in the sea daily, it is not known how the water's high salt and mineral content contribute to the therapy.

According to Avrach's report, of the 1052 patients treated for four weeks from 1971-1975, 24 percent were "completely clear" of symptoms after therapy; 53 percent showed "marked improvement"; 19 percent "partial improvement"; and only 4 percent had no change, deteriorated, or did not complete the treatment. After returning home, 45 percent reported recurrences within one month, but 65 percent observed the recurrences were milder than after previous hospital treatments.

An important part of the therapy may be the vacation atmosphere of the Dead Sea area and the rest and relaxation that are encouraged, according to Avrach Some scientists feel stress is related to psoriasis, and the therapeutic atmosphere may play a significant role.

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Mailed Wednesday, July 14, 1976

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD--"The influence of life stress, emotional disorder and personality type has been grossly exaggerated" as causes of psoriasis according to Drs. Richard D. Baughman and Raymond Sobel of Dartmouth Medical School.

The doctors presented their findings on the possible causal relationship between emotional state and psoriasis Tuesday, July 13 at the Second International Psoriasis Symposium at Stanford University.

Psoriasis, which affects an estimated six million people in the United States alone, is characterized by red patches covered with white scales that cause itching.

Baughman, a dermatologist, and Sobel, a psychiatrist, conducted a controlled study over a six-month period which included testing with a standardized psychiatric questionnaire and psychiatric evaluations of 48 hospitalized psoriatics and a larger control group.

They found the psoriatics were, if anything, better-adjusted than the control group and there was "no evidence of a psoriatic personality type or of any psychological or psychosocial predisposition to the disease."

Many doctors and patients feel there is a connection between psoriasis and emotional factors and that the disease is aggravated by stress, but Baughman and Sobel conclude that if such a connection does exist, "it has been grossly exaggerated. This is perhaps a result of the need to provide a plausible explanation for an otherwise inexplicable illness which affects millions of persons," they said.

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Mailed Tuesday, July 13, 1976

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD--Scholars from 27 countries gathered at Stanford University on Monday, July 12, for a week-long symposium about psoriasis, a common skin disorder suffered in nearly all parts of the world.

Dr. Eugene Farber, professor and chairman of the department of dermatology at Stanford School of Medicine, delivered the opening address at the Second International Symposium on Psoriasis. He called for more research on many fronts, including the search for a viral cause of the disease, and study of psoriatics' immunity systems.

More than 200 dermatologists and skin disease researchers at the symposium will discuss topics ranging from newest treatments to immunology, hereditary aspects, and the biologic nature of the disease.

Psoriasis, which affects an estimated six million people in the United States alone, is characterized by red patches covered with white scales that cause itching. The degree of severity varies from patient to patient. Some have only patches on their elbows, knees and scalp; others have their entire body involved.

Man's outer skin, the epidermis, is composed of layers of cells, which are continually being reproduced and shed. In psoriasis the regulatory mechanism for this is impaired and the cells multiply much more rapidly than normal. As a result the skin becomes thicker and scaly.

The disease is not contagious. What causes it is not known, and there is no permanent cure. Treatments for disabling cases can include potent drugs, ultraviolet light therapy, and ointments applied to affected areas.

Dr. Farber foresees major advances both in treatment and in investigations of the origin of the disease within the next five years.

He feels there should be a concerted effort to consider a viral cause of the disease, although he notes that as yet "there is no hard evidence for presence of a virus."

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He speculated that a search for the cause of psoriasis should include a search for a "slow virus." A slow infection is caused by an agent that continues to multiply over months and years, producing changes in a single organ up to a year or more after it is contracted.

Immunology is another area Dr. Farber says deserves intensive study. "A direct approach for a psoriasis-specific antigen would be fruitful," he says. "There are subtle signs that psoriatic patients show somewhat suppressed cellular immunity while they may be hyperproducers of antibody."

Establishing a non-human host for the disease should also have a high priority, he said. There are no satisfactory experimental models, he said, and that is a serious handicap to research.

"The ideal model would be classical psoriasis in a non-human primate," he offered. Psoriasis has never been diagnosed in any animal species, though non-human primates have nearly every other disease known to man.

Dr. Farber foresees more applications of basic principles from other disciplines, including virology, genetics, immunology, and pharmacology.

"Where the main area of progress will be is something we can't predict at this time," he said. "We cannot assume that there is a single road that will lead to the discovery of the cause and cure of psoriasis."

He foresees improved therapeutic systems, and less toxic chemotherapy. Investigations of the basic mechanisms of skin cell growth and metabolism are paving the way for more effective treatments.

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Mailed Monday, July 12, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD--Dr. Howard Cann, Stanford associate professor of pediatrics and genetics, is one of a group of doctors serving on an advisory committee to the newly-formed genetics disease control unit of the State Department of Health.

Cann, and the other committee members from the state's medical schools, are charged with recommending tests for newborns to be required under the new genetics testing bill (SB 489), passed into law by the legislature last September. The bill will probably be implemented early in 1977.

At present, the state only requires testing for one genetic disease--phenylketonuria (PKU). Of the 300,000 babies born in California each year, about 20 will have PKU, which leads to severe mental retardation if not treated early with a special diet.

But there are other genetic diseases which, although less common, can be as debilitating as PKU. Some of these diseases can be detected through testing in the newborn period and treated, and the law will make these tests mandatory.

Cann feels the committee will only recommend tests for diseases which have an effective treatment. "It is not enough to have a test which will accurately pick up a disease and can be implemented easily," he says. "There's also got to be a treatment for the disease. If you can't treat a disease, or offer some other positive alternative such as prenatal diagnosis, there's no need to screen newborns for it."

The law, signed by Governor Brown last year, establishes a genetics disease unit "to coordinate all department programs in the area of genetic disease and to promote a statewide program of testing information and counseling services."

The law requires that tests for six genetic diseases--galactosemia, histidinemia, galactokinase deficiency, homocystinuria, maple syrup urine disease and tyrosinosis--be evaluated by the genetics disease unit which will consider the recommendations from its advisory committee of doctors. Cann says screening for two or three disorders will be recommended in addition to PKU. They are congenital hypothyroidism, galactosemia, and maple syrup urine disease. The other diseases are either extremely rare, have no good screening test available for the newborn period, or there is some controversy as to effective treatment.

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Hypothyroidism, a deficiency in thyroid function, affects as many as one in 7,000 babies and can be treated with thyroid hormone. Unchecked, it can cause extreme mental and growth retardation.

Galactosemia is a relatively rare disease which strikes only one baby in 100,000. But it has an extremely common trigger--milk. The infant is unable to digest galactose, a component of milk sugar, and after the first few feedings can show symptoms of the disease. If diagnosed, a diet free of milk sugar is prescribed.

Maple syrup urine disease is the rarest of the group, with only one case in 200,000. It is a metabolic disorder in which breakdown products of three amino acids accumulate in the blood, urine, cerebrospinal fluid and various tissues of the body and affect the central nervous system. Because it occurs rarely and the effectiveness of the treatment is still unevaluated, Cann feels the advisory committee may recommend this test not be included.

Cann estimates that the cost for these tests should not exceed the $5 currently charged for the PKU test alone by most hospitals. The tests will be required for all newborns in California, except on grounds of religious conflict.

Although only three or four tests are likely to be recommended, more can be added to the list as effective tests and treatments are developed. "We will continually be reviewing the data on how effective these tests are, how effective treatment is, and the frequency of the disease's occurrence in the population," says Cann.

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Mailed Monday, July 12, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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EDITORS: Copies of The Healing Arts are available upon request if not included.

STANFORD--Twenty years ago, Sandy Kolterman was an eight-year-old on vacation with her family when she suddenly developed symptoms of juvenile diabetes.

Today she is an aware, intelligent and attractive woman. She is also legally blind. As a rehabilitation therapist at Palo Alto's Peninsula Center for Blind and Visually Handicapped, she helps other people who are blind as a result of diabetes to cope with their unique problems, as well as working with people who have lost their sight for other reasons.

Kolterman is featured in the current issue of The Healing Arts, a publication of Stanford University Medical Center. The entire issue deals with diabetes, a disease in which the body is unable to burn carbohydrates efficiently because of an insufficient amount or lack of insulin.

Early in this century, insulin-dependent diabetics could only hope to live a few years after the onset of the disease. Today, though, with insulin injections and diet, most diabetics can lead fairly normal lives. Complications from diabetes, however, evolve over a long time, and because diabetics now live longer, they run a higher risk of experiencing some complications, one of which is blindness.

Diabetic retinopathy is the leading cause of blindness in people under 60 in the United States today. It involves the blood vessels of the retina which become weak and leak blood or other fluid into the retina, ultimately destroying vision. There is no cure for the disease, although Stanford ophthalmologists and others are successfully treating it and help to prevent total loss of vision through the use of argon laser therapy which destroys the weak blood vessels before they can hemorrhage.

Kolterman, who lost most of her sight as a result of diabetic retinopathy, is incredibly well-adjusted and she only feels discouraged that "there still isn't sufficient public education about the disease. My parents were well-educated and informed people, yet none of us knew there was a possibility I would lose my sight."

She credits them with her smooth adjustment to the disease. "My parents educated me about diabetes and taught me to take care of myself. I was administering my own injections by the time I was ten." Her life was kept as normal as possible, and she was told, "Now get out there and play football, but be sure to carry a candy bar with you."

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Kolterman was aware that she was different from her peers and says, "A juvenile diabetic is the kid who has to have a shot every day, and has to have different activities on the playground. Some children have insulin reactions after they're first diagnosed. Until they learn to handle it, they may pass out on the playground or act 'funny' and the kids think they're drunk. So there are a lot of psychological implications."

Kolterman had a "normal" adolescence and says, "The only thing I resented, is that I couldn't do all the things my friends did. When everyone else started drinking beer I was scared to death and never touched it."

It was at college, at age 20, that she first began having trouble with her sight. "I was shooting archery and noticed a 'floater.' It was my first hemorrhage. I kept trying to brush this spot away, and after a few days it hadn't gone away and began to affect my shooting. I went to an ophthalmologist, he examined my eyes, and said I had diabetic retinopathy. Within six months I lost all the sight in my left eye."

Undaunted, she returned to school with total vision in only one eye. "I was back two weeks when in the middle of taking a shower I had a massive hemorrhage in my good eye and was totally blind except for shadow perception for about two weeks." Her condition stabilized and she now has 20/160 vision in the lower left quadrant of her right eye and is totally blind in her left.

Once her condition stabilized, Kolterman learned to cane travel, was taught braille, and returned to college. She was the first blind student to earn a master's degree in education at Stanford University, but says, "No one wanted a blind English teacher, even though I have some vision."

Kolterman was offered a job as a rehabilitation therapist for the visually handicapped and decided to draw on her own experiences to help others. Her ability to cope serves as a reassuring example to them even though most of the diabetics who are referred to her are distraught because they fear that they can no longer take care of themselves.

"They'll be sent over here in a panic because they can't imagine how they'll be able to give themselves an insulin injection or test their urine. I spend a lot of my time counseling and teaching them about special devices available to help them."

One of these is a card which attaches to a syringe and helps the diabetic to measure his correct insulin dosage. Another is a metal cap which fits over the insulin vial to guide the needle into it. Kolterman is aware of these and other products designed to aid diabetics with low vision.

Sandy Kolterman is a woman who lives very much in the present. Although she has not experienced any other complications from her diabetes, she is realistic about living with a disease that will not go away.

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Mailed 7/8/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911 47/1

FOR IMMEDIATE RELEASE

STANFORD –

Registered nurses at Stanford University Hospital represented by CRONA (Committee for the Recognition of Nursing Achievements) have signed a new two-year contract with the Hospital providing an eight percent wage increase effective immediately, and an additional seven percent adjustment effective July 1, 1977.

The Hospital and CRONA jointly announced the agreement on Wednesday, June 30 following four months negotiations. CRONA represents approximately 900 full and part-time nurses employed at the Hospital.

Under the new compensation provisions, a new employee will start at the staff nurse I level earning $1,081 per month. The previous rate was $1,001.

Additional provisions of the new contract include changes in the Hospital's dental, educational and retirement plans.

Paul Hofmann, Hospital director, said the negotiations were conducted "with a mutual sense of cooperation." Negotiating committees reached final terms in lengthy sessions last weekend, and nurses voiced near unanimous approval in ratification meetings Monday.

Two years ago registered nurses at the Hospital were on strike for 11 days before settlement was reached.

Representing the Hospital on the negotiating team were Margaret Neill, Joe Ross, Carol Sasso, John Schwartz, Ron Twomey, and Carol Ann Hoshour. CRONA was represented by Marilyn Barnes, Mary Boudeman, Donna Gaffri, Margo Isola, Joan Kuykendall and Peter Fortune.

– 30 – cr 7/1/76

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

STANFORD :

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William E. Ayer, Stanford University trustee, has been named chairman of the Stanford University Medical Center Council, a recently established organization that coordinates fund raising and volunteer activities at the Medical Center.

Ayer is founder and former president of Applied Technology in Sunnyvale, and is present chairman of the board of Develco Inc. in Mountain View. His appointment to the Medical Center Council was recently announced by Dr. Peter S. Bing, president of the Stanford University Board of Trustees.

As chairman of the Council, Ayer will also serve as chairman of the Committee on Resources of the Medical Center, a group of volunteers who will help meet funding needs for new facilities, renovation and expansion of current facilities, as well as for research, patient care, and teaching programs.

Ayer is a member of the boards of directors of Barry Research Corporation of Palo Alto, Buckbee-Mears Company of St. Paul, California Water Service Company in San Jose, Commerical Electronics Inc. in Mountain View, Electrofusion Corporation in Menlo Park, GRT Corporation in Sunnyvale, and Spectra-Physics Inc. of Mountain View. He is a trustee of the Palo Alto Medical Research Foundation.

Ayer holds four Stanford degrees, the A.B., A.M., E.E., and Ph.D. He was elected to the Stanford Board of Trustees in 1974, and is a member of Stanford Associates, the Advisory Council to the School of Engineering, and the Northern California Major Gifts Committee for the Campaign for Stanford.

He and his wife, Mary, reside in Los Altos Hills. Their three sons are Stanford graduates.

— 30 — cr 8/30/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

STANFORD –

Stanford University Hospital charges will increase an average of 11 percent in the new fiscal year starting September 1.

The new rates, according to Paul Hofmann, director of the Hospital and Clinics, are necessitated by increases in wages and benefits and in the costs of medical supplies and utilities.

"Another significant factor," Hofmann said, "is that the Hospital will be employing more personnel to keep up with advances in medical technology and increases in the complexity of illnesses treated here."

The hospital board of directors voted on Tuesday, August 17, to approve the annual budget, including room rate increases averaging 12 percent. Ancillary services such as X-ray, laboratories, and pharmacy will be increased an average of 10 percent.

Medical and surgical patients will be charged $134 for ward accommodations, $146 for a semiprivate room, and $165 for a private room. As in past years, rates for medical and surgical patients utilizing the services of house staff physicians (interns and residents) are $12 higher for each type of room. The patient's attending physician determines the medical need for house staff services.

Hofmann pointed out that the new rates compare favorably with those charged by similar highly-specialized teaching facilities. He also noted that more than 98 percent of the hospital's funds come from patient revenues. The hospital has no tax support or endowment income.

"Our approach to pricing our services in the past few years has been to see that the price for each service more closely reflects the cost of providing it," Hofmann said. "Historically, most hospitals undercharged for some services and overcharged for others. Stanford University Hospital and many others are moving away from this practice. That is why room rate increases are slightly larger than those for ancillary services," he said.

Hofmann said that only a small part of the increased rates is related to the cost of starting up the new hospital wing now under construction and scheduled for occupancy in 1977.

"The new facility should be basically self-financing after the first year of operation and maybe sooner," he said. Rates in the new facility will be identical to those in other parts of the hospital. The new construction increases bed capacity from 618 to 643 and improves the capacity of several ancillary services.

The last increase in daily room rates was a 2 percent rise in November 1975, for the purpose of covering an almost $1 million increase in the Hospital's annual malpractice insurance rate.

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8/18/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD--A proposed "natural death act" now under discussion in the California Senate, "would allow a patient to make an informed decision about the quality of life he or she wishes to maintain," according to Paul Hofmann, director of Stanford University Hospital and Clinics.

The bill (AB 3060) would legally recognize the right of an adult to direct his physician, in writing, to withhold or withdraw life-sustaining procedures in the event of a terminal condition.

Hofmann endorsed the bill in testimony prepared for the Senate judiciary committee hearing Tuesday, August 17, 1976, saying "with its safeguards, a patient will not have to abdicate this fundamental prerogative to health care providers, relatives or others."

The legislation would allow a person to decide, in advance, whether medical care should be withheld or withdrawn in the event of a terminal illness or mortal injury.

The bill defines a life-sustaining procedure as one which utilizes mechanical or other artificial means to sustain a vital function to prolong the moment of death where, in the judgment of the attending physician, death is imminent.

It does not authorize mercy killing, and does not permit any deliberate act or omission other than to permit the natural process of dying.

Under its terms physicians, other health professionals and health facilities would be relieved from civil liability or criminal prosecution for withholding life-sustaining procedures at the patient's request.

The directive would not prevent life-saving techniques from being used. Rather, says Hofmann, it would be a guide at the "frequently obscure point in the continuum of medical treatment when it is death, not life, which is being prolonged."

Currently, says Hofmann, physicians, family members, clergy, and occasionally patients, jointly decide the course of treatment or nontreatment, including the decision to withhold or withdraw mechanical respirators or other such equipment.

He cited problems raised by the "technological imperative"--the use of life-sustaining methods because they are available.

"The answer," says Hofmann, "lies in compassionate action which will relieve the terminally ill patient of unnecessary pain and suffering--action approved by the only individual truly qualified to do so. Only then will patients remain the beneficiaries of modern technology and not its victims." ###

Mailed Monday, August 16, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Margaret LaVanne Denley, 55, of Los Altos, wife of Terence W. Denley, associate general secretary for Stanford and associate director of development at the Medical Center, died on Saturday, August 7, 1976 during a vacation trip with her husband to Honolulu. She had been ill for more than a year.

Trained as a bookkeeper and public accountant, Mrs. Denley worked in that capacity for a number of local organizations, including the Stanford University Accounting Office, Philco Corporation in Palo Alto, the First Presbyterian Church of Palo Alto, the Menu Tree Restaurant, and the Ladera Oaks Swim and Tennis Club.

She was a member of the parish of St. Nicholas Church, Los Altos, the Los Altos Women's Club, and the Stanford Faculty Wives Club. Before her illness, she was an active golfer and a member of the Stanford Women's Golf Club.

Besides her husband, she is survived by her mother, Mrs. Bessie Bumps, a half-sister, Mrs. Merle Driver, both of Santa Cruz; and three children, all of San Jose, Roger Frank Carr, Mrs. Donna Denise Sowers, and John Thomas Carr. She had five grandchildren.

A rosary will be said at Spangler Mortuary in Los Altos on Thursday, August 12, at 8 p.m. A memorial mass will be held on Saturday, August 14, at 10 a.m. in St. Nicholas Church.

The family suggests that memorials be directed to cancer research at Stanford University Medical Center.

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Mailed Wednesday, August 11, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--Twenty-four local children have volunteered to spend part of their summer sleeping to help research at a unique sleep camp at Stanford University.

The youngsters are participants in a study of the sleepy child and related learning problems directed by Drs. William C. Dement, professor of psychiatry and behaviorial sciences, and Thomas F. Anders, head of child psychiatry at Stanford University Medical School. The study is funded by the Spencer Foundation of Chicago.

"Excessive daytime sleepiness," says Dement, "is believed to have a damaging effect on learning and school performance." He finds that some children have been diagnosed as mentally retarded while their sleepiness was overlooked.

Six groups of four children, aged 9-13, are participating in the sleep disorders study. All are volunteers, and most of them have no sleeping problems. By studying them, researchers will be able to define normal sleeping behavior to compare with problem sleep.

The children stay at the sleep "camp" on the Stanford campus for six days. Machines which measure eye movements, muscle tone, respiration and brain patterns monitor the children during six 20 minute naps each day and their nighttime sleep.

When they are not sleeping the campers take tests involving word memory, listening skills and mathematics to determine their alertness.

The children also have a chance for recreation--they play board games, participate in a variety of athletics, play musical instruments or go bowling. However, they cannot swim because the electrodes they wear cannot get wet.

Mary Carskadon, research assistant supervising the laboratory, notes that eleven staff members, many of whom are Stanford undergraduates, provide an extremely high staff/camper ratio for the 24 participants. They try to make the children's experience as enjoyable as possible. When the staff learned one girl would have a birthday while at camp, they arranged a party complete with cake and presents.

The study will continue after camp ends. Children identified as "sleepy" will be tested in the Stanford Sleep Research Laboratory and children referred to the Stanford clinics for sleep problems and learning difficulties will also be studied.

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Mailed Wednesday, August 11, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Christina Harbury, assistant professor of medicine at Stanford University Medical Center, accepted a research grant from the Hemophilia Foundation of Southern California in a special event in the office of San Francisco Mayor George R. Moscone on Tuesday, August 10, 1976.

This was the second installment of a $15,500 grant for research on hemophilia, a hereditary disease in which one of the 10 proteins in blood plasma that cause coagulation is missing.

The initial portion of the grant was presented last year to the now late Dr. Judith Pool, who discovered a way to separate the clotting factor from blood in 1964, eliminating the need for massive doses of blood for hemophiliacs.

Before her death in 1975, Dr. Pool was investigating a clotting factor concentrate believed to offer hope for hemophiliacs who develop antibodies to treatment with the plasma protein.

Most hemophilia patients today can be treated successfully with infusions of the clotting protein known as antihemophilic globulin (AHG), also called Factor VIII. However, about 10 percent of these patients develop an antibody to the protein which greatly complicates their therapy.

Dr. Harbury is continuing Dr. Pool's work, studying the immunological characteristics of Factor VIII and of the antibody which might lead to an understanding of what is different about the 10 percent of hemophiliacs who develop the complication.

Dr. Harbury, a native of Sweden, received both her undergraduate and M.D. degrees at Stanford, and has been involved with the hematology work at Stanford since 1966. She is head of clinical and special coagulation laboratories.

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Mailed Tuesday, August 10, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--Dr. John D. Earle has been appointed head of the radiation therapy division of the Mayo Clinic in Rochester, Minnesota, the Clinic recently announced.

Earle, 38, an assistant professor of radiology, has been associate director of Stanford's radiation therapy division since 1973.

He hopes to develop an active training program and a basic research program at the Clinic, while expanding the clinical research currently being done there in radiation therapy.

Earle has seen great advances in radiation therapy techniques and feels the gains of recent years in radiation therapy and chemotherapy need to be consolidated in order to provide the most effective treatment for various cancers.

Earle received his B.A. in biology from the University of Oregon and graduated from Stanford Medical School in 1964. He interned at the Graduate Hospital of the University of Pennsylvania and was a fellow in radiation therapy at Stanford for three years. After serving in the Navy, Earle returned to Stanford as assistant professor of radiology.

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Mailed Wednesday, Aug. 4, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--Dr. Herant A. Katchadourian has been promoted to professor of psychiatry and behavioral sciences. The appointment was announced by Clayton Rich, dean of the Stanford University Medical School.

Katchadourian, 43, will also become vice-provost and dean of undergraduate studies September 1.

He is originator of Stanford's most popular course--human sexuality--and is known to more than half the University's undergraduates and hundreds of alumni through his lectures and books on the subject. About 1,000 undergraduates enrolled in the human sexuality course during the last winter quarter.

Katchadourian came to Stanford in 1966 as assistant professor of psychiatry and coordinator of the psychiatry residency training program. He served as Stanford's first ombudsman and is a former University fellow. He has been associated with the human biology program since its inception in 1969 and intends to continue to teach as a dean.

Katchadourian was born in Iskenderun, Turkey of Armenian parents and was educated in Beirut, Lebanon. He received both his B.A. and M.D. degrees from the American University in Beirut. He interned in Beirut and did his residency training at the University of Rochester.

Author of "Human Sexuality: Sense and Nonsense" and coauthor of "Fundamentals of Human Sexuality," Katchadourian is coauthor of a forthcoming book-length study of a Lebanese-Armenian community.

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Mailed Wednesday Aug. 4, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

A Stanford University Medical School life sciences technician who was permanently laid off last year has agreed to an out-of-court settlement award of $12,500 following a series of lengthy legal actions.

Under terms of the agreement, Roscoe (Rocky) McGill and United Stanford Employees (USE), which served as McGill's collective bargaining agent while he was an employee, agreed to drop all pending legal actions against the University, and waive all claims arising from his employment. Among the claims was one seeking back pay and damages of $700,000.

McGill, who is black, was hired in 1971. He was informed in January 1973 that he would be laid off in June of that year. The University said the layoff was necessary because his research unit was to withdraw from a project which McGill and another employee were working on. McGill's fellow employee, who is white, had also been notified of the pending layoff.

McGill filed charges with the Equal Employment Opportunity Commission (EEOC), alleging that the layoff was the result of racial discrimination.

Prior to the announced layoff, McGill was rehired elsewhere in the School of Medicine. Nevertheless, he continued to press his charges before the EEOC. The commission ruled that there was reasonable cause to believe that the University had violated provisions of the Civil Rights Act in denying McGill cross-training in other skills which would have prevented his dismissal.

While in his second position, McGill was suspended for disciplinary reasons and filed grievance against the University. His suspension was upheld by Arbitrator Louis Garcia, former commissioner of the Fair Employment Practices Commission, and now a judge in San Francisco municipal court.

But USE filed a petition in superior court to overturn Arbitrator Garcia's decision.

In December 1975, McGill filed suit in federal district court claiming "certain adverse actions," including his layoff, were the result of race discrimination by Stanford. In the suit he sought reinstatement to his former position, back pay, and damages amounting to $700,000.

In addition, McGill and USE had filed four grievances, which had already proceeded to arbitration and had gone through 14 days of hearings when the final settlement was reached.

According to University staff counsel Douglas Barton, the four grievances pending before the arbitrator were dismissed as part of the settlement with McGill and the union. Also dismissed were McGill's federal court suit and the union's superior court petition.

McGill has, in addition, withdrawn his EEOC charges, waived any other claim to reinstatement, and has released the University from any other claim he might subsequently raise concerning his Stanford employment.

Barton said the University decided to settle all claims for the payment of $12,500 even though "we certainly were confident the arbitrator would have sustained Stanford's position.

"However, Mr. McGill would still have had the right under federal law to pursue his claims in federal district court and have a complete rehearing of all issues relating to his allegations of race discrimination." Barton cited the extensive expenses and other hardships that continued litigation would have brought.

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8/3/76 cr

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
(415) 497-2558

FOR IMMEDIATE RELEASE

Following is a joint statement by Stanford University and the United Stanford Employees bargaining team, issued Sept. 29, 1976:

In a bargaining session Wednesday afternoon, the union and University bargaining teams suryeyed outstanding issues and agreed to meet intensively in an effort to resolve the major remaining issues.

Additional bargaining sessions have been scheduled for Thursday and Friday, Sept. 30 and Oct. 1.

In order that the bargaining representatives of both sides will be able to devote their undivided attention to these and subsequent sessions, public comment on negotiations will be made only through joint statements until further notice.

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Betty Munson, 497-4631

FOR IMMEDIATE RELEASE

STANFORD –

Officials of United Stanford Employees failed to get authorization to call a strike against the University Tuesday, Sept. 28, as the ballots from union members were counted.

The final tally was 37 votes short of the necessary two-thirds needed for strike authorization, USE president Roger Hardy reported.

The 538-327 vote will send USE back to the bargaining table, Hardy said, indicating the union will possibly poll the membership again.

"Another strike vote will be determined totally by the progress of negotiations," he said.

"It's an overwhelming mandate to reject the University's latest proposal," he said. "The membership gave us a sense that our demands are pretty much rock-bottom line."

Union members meeting Tuesday noon reported a "disturbing" trend of harassment by some University supervisors, Hardy said.

"We will try to go through appropriate chanels to get relief for workers, but because USE has no access to any disciplinary procedures (under an expired contract), the only way to combat harassing tactics may be job action."

Negotiating teams for both sides are scheduled to meet again Wednesday, Sept. 29.

* * *

Negotiators for the University and USE met in three bargaining sessions last week and reached agreement on some noneconomic issues, even while union officials waited the return of USE members' strike ballots.

The sessions were quite productive, according to Douglas H. Barton, counsel for employee relations and the University's chief negotiator. At Friday's session, the University team presented proposals about temporary promotions to supervisory positions, benefits for employees on temporary layoff, and disciplinary procedures.

Although both sides are still far apart on wages and benefits, substantial portions of the contract have been agreed upon at the bargaining table since negotiations began in July. The contract, which covers 1,350 technical, maintenance, and service employees at Stanford, expired Sept. 15 after a two-week extension.

Issues yet to be resolved include the question of union security, job classifications, certain provisions concerning training and job posting, and the major issue of wages and benefits.

The union earlier rejected the University's proposed wage and benefit package which would provide for about a 22% increase in compensation over three years.

Under the University's proposal, bargaining unit employees would receive first-year increases of 7.5%, second-year increases of 5.5% plus additional increases for certain job classifications costing an additional 1% of the wage base, and third-year increases of 5% plus a cost-of-living escalator costing up to an additional 2.2%.

Substantially improved retirement benefits for longer-service employees in the Staff Pension Plan were included in the University's economic package.

USE has proposed a pay package that calls for increases in the first year costing 14.5% of the wage base, a second-year gain of 8%, and third-year increases based on a quarterly cost-of-living escalator. USE's economic demands include proposals for either a dental plan for employees and dependents, or University payment of the full cost of existing medical coverage, or a substantial increase in pension benefits.

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9/28/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Six weekly lectures on important areas of research in medicine will be presented by professors from the Stanford School of Medicine beginning October 12.

Topics will range from cardiac transplantation to diabetes mellitus and the protection of human subjects in research.

The Stanford Alumni Association's fall quarter course will consist of six evening lectures on campus, October 12 through November 16. The series is open to the public, and preregistration is required through the Association, located at Bowman Alumni House on the Stanford campus.

The first lecture will be October 12, presented by Dr. William Robinson, professor of medicine (infectious diseases), who will discuss "Protection of Human Subjects in Research at Stanford." Dr. Robinson is chairman of the medical subpanel of the Stanford committee on the use of human subjects in research. His scientific work has been concerned with the structure and replication of several viruses.

On October 19 Dr. Jerrold Olefsky, assistant professor of medicine, will discuss "Diabetes Mellitus--Insulin Deficiency or Insulin Resistance?" Dr. Olefsky is investigating reasons for insulin resistance in some diabetics who have abnormally high blood sugar levels despite high levels of insulin in their blood.

On October 26 Dr. Gerald Reaven, professor of medicine, will speak on "The Effect of Diet on Blood Lipids--and Why Do We Care?" Dr. Reaven heads the endocrinology and metabolism research team at Stanford. His research is in hyperlipidemia, abnormal carbohydrate metabolism and atherosclerosis.

On November 3 Dr. Peter Greenberg, assistant professor of medicine (hematology) will discuss "Factors Involved in the Progression of Leukemia." Dr. Greenberg's research has focused on the mechanisms involved in the clinical evolution of the disease. He is studying factors such as the alteration of bone marrow cell function.

On November 9 Dr. Thomas Merigan, professor of medicine and head of the division of infectious diseases, will speak on "Vaccines, Antibiotics, and Now, Antivirals?" Dr. Merigan has received international recognition for his work with interferon, and antiviral substance occuring in the human body. He is part of the team that recently reported successful treatment of chronic hepatitis B virus infection with interferon. In 1973 he and his colleagues reported they had successfully used interferon to prevent common cold infections in human volunteers.

On November 16 Dr. Edward Stinson, associate professor of cardiovascular surgery, will discuss "Cardiac Transplantation at Stanford." Dr. Stinson has been one of the mainstays of the heart transplantation program since its inception at Stanford. Early in the program he identified a comprehensive plan for understanding and dealing with cardiac rejection, and he continues to contribute new techniques for diagnosis of rejection, as well as investigating a wide range of cardiological disorders.

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Mailed Tuesday, September 21, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A Stanford University Nobel Laureate Wednesday (Sept. 22) called for legislation committing the federal government to invest a fixed percentage of the dollars spent for health in basic research.

Spending, for example, 5 percent of the health industry dollar for basic research to make medicine more technologically reliable would seem a prudent and conservative investment, said Arthur Kornberg, professor of biochemistry.

"An investment of this size would call for immediate expansion of biomedical training and research rather than the retrenchment which has taken place and is being planned in the future," he said.

Kornberg made his remarks at a meeting on the future of academic pathology at College Park, Maryland.

The retrenchment began during the Johnson administration, he said. "One of the Johnson legacies that Richard Nixon eagerly accepted was this impatience with basic research. His administration called for crusades to vanquish cancer and heart disease without regard for the fact that we lacked the weapons to conduct such major wars at that time."

"Despite all that the history of medical science has taught us," said Kornberg, "there is an irresistible urge to gamble on a quick payoff."

The biochemist explained that it makes little sense to legislators to fund something as esoteric as the life cycle of a bacterial virus when cancer ravages their relatives and constituents.

Yet he added, "We can show that the pathway to practical benefits started from fundamental science and it was circuitous and took many years to traverse.

"We can point out the key discoveries which made X rays, penicillin and polio vaccine possible were not related to research on disease.

"These medical miracles came from the curiosity of physicists, bacteriologists, biochemists and cell biologists about basic scientific questions unrelated to medicine."

Once the insights and techniques were discovered, Kornberg said, the applications to medicine were rapid and dramatic.

"Conversely, crash and costly programs directed to the curing of diseases have invariably failed when the basic knowledge needed for application was lacking," he added.

Kornberg said he was not optimistic about the efforts by scientists to assure sustained support to advance basic biology and its applications to clinical medicine.

He said few scientists wish to engage in the political process needed for a federal long-term commitment for biomedical research, including support for basic science. ### Mailed Tuesday, Sept. 21, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Participants in a new diet and weight control program at Stanford Medical Center are learning to be their own behavioral therapists.

The classes, offered by the Stanford Heart Disease Prevention Program and open to the public, focus on the behavior modification approach to changing eating habits.

They will serve as a model for a cooperative program between Stanford and the National Council of YMCAs. The aim is to change dietary quality and reduce weight in order to improve cardiovascular health, according to Dr. John Farquhar, director of the Heart Disease Prevention Program, and Dr. Gary A. Fry, director of the YMCArdiac Therapy program.

The emphasis is on helping participants recognize their own eating problems and how to solve them, rather than rely on fad diets or a list of "how tos," according to Drs. Joyce Nash and Linda Ormiston who coordinate the classes.

The program was inaugurated last Spring, and a new series of 12 weekly evening classes will be forming in October.

According to Dr. Nash, "We help the individual to identify his eating-related behavior patterns, and then learn techniques for changing these patterns." Problem areas might be with specific food groups, time devoted to eating, emotions, buying food, or could be entertaining or eating out problems. Not everybody in the class works on the same problems.

"The exciting thing is developing a person's self-control. The individual becomes his own therapist, not responding to someone saying 'you must do this,'" says Nash.

Participants are also urged to increase their level of activity, for both fitness as well as increase metabolic rate to take off pounds more rapidly. Each wears a pedometer to help increase consciousness of the amount of exercise.

"We encourage natural ways to promote activity, like walking more," says Nash. The pedometer also acts as a motivating device, she says, so the person can do more exercise if he feels he needs to.

Besides help with attitudes and behavior, participants hear from a nutritionist, although they are not given a specific diet plan. "Persons need to live in their particular life style," says Nash, "They need to learn to make reasoned choices."

One class member lost 22 pounds in 16 weeks, but quick weight loss is not the objective of the program, say the directors.

Weight loss of one to two pounds per week is a reasonable goal, says Nash, but the emphasis should be on gaining control of eating habits, thoughts and feelings so that maintenance of weight loss is permanent.

Because participants learn to measure their success in terms of behavior change and not weight loss, some choose to not know the results of weekly weigh-ins. They get on the scale backwards.

Participants may bring to classes a spouse, relative or other person who could influence their food habits. Although a fee is charged for the class, there is no charge for the guest.

One class member reports a particular help in having her husband attend and understand her problems. "When we had guests who brought a gift like candy, he would quietly put it away and remove the temptation," she said.

Others note that the intensive classes and "homework" forced them to think more about what they were eating. "It's something you must deal with 24 hours a day," said one woman. "Keeping track of your behavior helps you become prepared to deal with all the problem situations you encounter."

One woman liked being in control of her own diet plan: "For the first time in my life, I don't feel guilty when I eat something."

Based on these classes, personnel from the YMCA will be trained in conducting similar programs for the future.

Long-range plans call for developing slide and tape programs, with group discussion led by paraprofessionals. Such programs would be available on a wide basis to individuals or small community groups.

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Mailed Monday, September 20, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A distinguished cardiovascular surgeon and a noted pediatrician have been named as the first occupants of two new endowed chairs at Stanford University School of Medicine.

They are Dr. Norman E. Shumway, the Frances and Charles Field Professor of Cardiovascular Surgery, and Dr. Ruth T. Gross, the Katherine Dexter and Stanley McCormick Professor.

Dr. Gross is the first woman at Stanford to be named to an endowed professorship.

Announcement of the chairs was made Wednesday (Sept. 15) by Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

Dr. Shumway, chairman of the department of cardiovascular surgery, is known for his pioneering work in the field of open-heart surgery, correction of congenital heart defects in children, and heart transplantation. A graduate of Vanderbilt University and the University of Minnesota, Shumway is recipient of numerous awards including the Lerische Prize of the International Society of Surgery, and the Texas Heart Institute Medal.

Dr. Gross, director of the Division of Ambulatory Pediatrics and chief of pediatric clinics, has contributed new approaches to comprehensive health education and care for children, and improvement of pediatric training programs. A graduate of Barnard College and the Columbia University College of Physicians and Surgeons, Dr. Gross has held academic appointments at Radcliffe Infirmary, Oxford, Albert Einstein College of Medicine and the University of California. In addition, she has served as chief of pediatrics at Mount Zion Hospital and Medical Center in San Francisco, and as an associate dean for student affairs at Stanford. Last summer, Dr. Gross received the Henry J. Kaiser Award for outstanding contributions to medical education.

Funds for the Field endowed professorship were contributed by Mr. and Mrs. Charles Field of San Francisco, who have also endowed a professorship in history.

Mr. and Mrs. Field are both members of families that came to California during the nineteenth century. Frances Field's family held interests in San Francisco banking and West Coast lumbering concerns; members of Charles Field's family were in mercantile and financial firms in San Francisco and Los Angeles. Field, who holds a Stanford history degree, was until recently associated with an investment management firm in San Francisco.

The Fields have long been active in Stanford affairs. They are members of the Associates of the Stanford University Libraries and the committee for art, and are supporters of the Buck Club and Inner Quad. Mr. and Mrs. Field have stipulated that after Dr. Shumway retires, the chair will be known as the Norman E. Shumway Professorship.

The McCormick professorship in the School of Medicine will be funded by a portion of a $5 million unrestricted bequest made to Stanford in 1969 by Mrs. Katherine McCormick who spent her long life vigorously championing women's rights and welfare. The gift was made in memory of her late husband, Stanley McCormick whose father's company, later became the International Harvester Company.

Mrs. McCormick died in 1967 at the age of 92. She was a co-founder of the League of Women Voters. In bequeathing the money to Stanford, Mrs. McCormick had expressed the hope that funds could be used "for the encouragement and assistance of women in pursuing the study of medicine, in teaching medicine, and in engaging in medical research."

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Mailed Wednesday, September 15, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Dr. LeRoy Heinrichs has been appointed professor and chairman of the Department of Gynecology and Obstetrics at Stanford University School of Medicine.

Heinrichs' appointment was announced by Dr. Clayton Rich, vice president for medical affairs and dean of Stanford Medical School.

A nationally recognized scientist and clinician, Heinrichs has been the leader of a research group working on the biochemistry and physiology of sex hormones. His current studies are concerned with how prenatal hormones imprint in the fetus the regulation of metabolism in adulthood.

Heinrichs, 44, has served as professor of gynecology and obstetrics at the University of Washington School of Medicine. Earlier, he served as a clinical instructor in the Department of Obstetrics and Gynecology at the University of Oregon Medical School and recently was a visiting fellow at Battelle Memorial Institute's Research Center in Seattle, Washington.

A member of numerous professional organizations, Heinrichs is also acting editor of Gynecologic Investigation, and international journal of the science of reproduction.

Heinrichs earned a bachelor of science degree from Southwestern State College in Weatherford, Oklahoma, his M.D. from the University of Oklahoma and his Ph.D. in biochemistry from the University of Oregon.

His training in gynecology and obstetrics was at Harper Hospital of Wayne State University, Detroit, Michigan. He succeeds Dr. Charles E. McLennan, who served as chairman of the Department of Gynecology at Obstetrics for 26 years prior to retiring in 1972. ###

STANFORD--Family Focus, a training program for patients with physical handicaps, has been renewed for two years under a $128,000 grant from the U.S. Public Health Service's Bureau of Allied Health Manpower Education.

The program, which is coordinated by the Division of Physical Therapy at Stanford School of Medicine, includes counseling and assistance by physical therapists to help patients and their families manage their disability once they are discharged from the hospital. The grant covers training of masters degree students in physical therapy working in the Family Focus project.

As part of the project, families are housed temporarily in a specially-designed, modular home located behind Stanford Hospital's Hoover Pavilion. Persons in the program are then shown how to deal with the daily health care needs of the patients, and how to handle any unusual circumstances that might arise at home.

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Mailed Wednesday, September 15, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--"The Heart: Its Life and Yours" will be the subject of a symposium to be held at Stanford October 1-2, conducted by medical specialists from the Stanford School of Medicine.

The aim of the meetings, which are open to both medical professionals and the public, is to discuss how the heart functions physiologically, how symptoms of heart disease are diagnosed and what sorts of treatment are possible.

The event is part of the continuing education program sponsored by the Stanford Alumni Association. Preregistration is required and forms are available from the Association at Bowman Alumni House on the Stanford campus.

The symposium will begin on Friday evening, October 1 with an introduction by Dr. Donald Harrison, holder of the William G. Irwin professorship and head of the division of cardiology at Stanford. In addition, Dr. William Barry, assistant professor of medicine, will speak on the anatomy and physiology of the heart.

On Saturday, October 2 topics will include the early diagnosis and electrophysiologic testing for heart disease, by Dr. John Schroeder; the heart as a pump, by Dr. Edwin Alderman; special X ray studies, by Dr. Lewis Wexler; medical treatment of heart disease, by Dr. Roger Winkle; surgical treatment, by Dr. Eugene Dong; risk factors, by Dr. John Farquhar; and rehabilitation of the heart attack victim, by Dr. Robert DeBusk.

Heart disease prevention workshops are planned for the Saturday afternoon session, with participants able to choose sessions on stress management, weight control and diet change, ways to stop smoking, and on exercise.

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Mailed Tuesday, September 14, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten or 415: 497-6911
Margaret McElwain (NIH) 301: 496-5717

EDITORS: This story is released jointly with the National Institutes of Health

STANFORD--Researchers at Stanford University Medical Center report they have successfully treated chronic hepatitis B virus infection with the antiviral substance, interferon.

The investigators tested the effectiveness of interferon in battling chronic hepatitis B virus which affects as many as one million people in the United States today. Their findings are reported in the current issue of The New England Journal of Medicine.

They emphasize their findings are preliminary and further testing is required before interferon will be considered for general use. Additional patients infected with chronic hepatitis B virus are currently being sought and evaluated for possible interferon treatment.

Hepatitis viruses cause inflammation of the liver. There are two major viruses which cause hepatitis--infectious hepatitis A virus which is associated with epidemic jaundice and hepatitis B virus which is associated with blood transfusions and unsterile needles used in injections.

About 10 percent of those who develop acute hepatitis B continue to carry the virus in their liver and blood indefinitely. Some of these chronically infected people feel fine and do not even know they have the disease, but they can transmit it to others who may or may not develop symptoms says Dr. Harry B. Greenberg, a member of the research team.

Doctors who participated in the study are: Greenberg, a gastroenterology fellow; Richard B. Pollard and Larry I. Lutwick infectious diseases fellows; Peter B. Gregory, assistant professor of medicine (gastroenterology); William S. Robinson, professor of medicine (infectious diseases); and Thomas C. Merigan, professor of medicine and head of infectious diseases.

Four patients with different degrees of chronic hepatitis B virus infection were selected by the team for treatment with interferon, a protein produced by the body's defense systems to limit the spread of viral infection.

Prior to treatment the blood of each patient carried Dane particles which appear to be the complete hepatitis B virus, according to Robinson, who developed a test to measure their presence in blood. Patients were given interferon either for one week or for a month or more.

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Interferon significantly reduced or eradicated evidence of the Dane particles in all patients. However, once interferon therapy was concluded, the short-term therapy group which had shown a decrease in Dane particles during treatment demonstrated an increase to previous levels. The extended therapy group's Dane particle decrease "seems to be long lasting" say the investigators.

"Interferon appears to be exerting a suppressive effect on the production of Dane particles," says the report. But it cautions, "Whether these effects will be of therapeutic value in limiting carrier infectivity or eradicating chronic infection remains to be shown." Post treatment serum from patients with no detectable Dane particles will be tested to determine if it will still cause hepatitis.

The National Institutes of Allergy and Infectious Diseases (NIAID) has supported a major portion of Stanford's antiviral research. In commenting on the hepatitis project, the Institute's director, Richard M. Krause, said, "These studies are indeed encouraging and it is expected that if this therapy does prove to have long-term effectiveness, it will be a major step in the advancement of antiviral agents. This is an area of long-standing interest in the Institute and we hope these studies will provide the impetus for further advancement."

Interferon, which was supplied for the study by the NIAID, is in limited supply and is very expensive. The only present source of interferon is human white blood cells, although drug companies are beginning to produce the substance in human cells grown in the laboratory. This could increase the supply and decrease the cost of interferon.

The researchers feel their findings could set the stage for treatment of other chronic viral infections. Merigan, who has shown interferon's effectiveness against the common cold, hopes the substance will block viruses with the same efficiency that antibiotics destroy bacteria.

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Mailed Wednesday, September 1, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
EDITORS: Following is a commentary by Dr. Rodney R. Beard, professor and head of the Division of Preventive Medicine at the Stanford University School of Medicine. In his specialty he has used influenza vaccines for 30 years. His article explains the reasons for the swine flu vaccination program, and why he believes it is important for each individual to take part.

FOR IMMEDIATE RELEASE

STANFORD –

Many people are in doubt about the value of the swine-flu vaccine.

I believe most people should take the vaccine. At the price of a little time and possibly a mild reaction for a few hours, one can get at least some protection from what could be a devastating illness. It could contribute to the prevention of a worldwide pandemic.

Influenza vaccines became available for widespread use about 30 years ago. Their effectiveness was uncertain and sore arms and illness were frequent. Scientists learned there were several varieties or strains of influenza virus. A sufficient injection of killed virus of a given strain would give rather good protection against infection by that same strain. However, one could not predict which strain might be prevalent in the next flu season. Also, the protective dose was likely to cause quite a few unpleasant reactions—sore arms and fever. None of these reactions was severe, however. No deaths directly caused by vaccination have been recorded.

As time passed, more was learned about influenza viruses. Some degree of skill was attained in predicting which ones would occur in the U.S. and some other areas. At the same time, new knowledge and skills made possible purified vaccines which caused very few reactions, all mild.

Influenza epidemics in the U.S. have generally been imported. The virus strain which caused each U.S. epidemic first caused an epidemic in another part of the world. Public health workers began to dream of the day when a worldwide network of observation posts would promptly identify the virus strain of a new outbreak. A vaccine from the same strain, or one closely similar, would then be produced and administered in areas as yet unaffected, thereby putting up a barrier against further spread of the virus.

An opportunity for this occurred with the Asian flu which hit the U.S. in 1957-58; the virus had been isolated in Japan and was brought to U.S. vaccine manufacturers months before the disease appeared in this country. For various reasons a vaccine was not produced and many preventable deaths occurred.

But the idea didn't die. When an epidemic started in Hong Kong in 1967, another effort was made: this time, 100,000 doses of vaccine were released in the U.S., but only two weeks before the outbreak hit us, and it didn't do much good. Another time we could probably be successful.

Early in 1976 there was a lot of respiratory disease among Army recruits at Fort Dix, N.J. However, as the weeks progressed the numbers swelled much more than usual. By the end of the month it was suspected that a flu epidemic was in progress. Throat washings s from hospital patients were shown to contain flu virus. Most were of a strain known as A/Victoria, which was widespread in New Jersey at that time. A few were of a different strain, later identified as A/Swine.

The swine flu virus has been especially interesting because virologist think it might have been the cause of the devastating 1918 pandemic. This idea is based on finding antibodies for the swine flu virus in many people born before 1918, but not in those born later (unless they had worked with pigs). The virus is widely distributed among pigs and is sometimes transmitted to man from them. But man-to-man transmission of the virus was unknown.

The unique feature of the Fort Dix outbreak was that swine flu virus was transferred from man to man. This was shown by isolation of the virus in five cases, by increases in swine flu antibodies in eight more, and by the finding of swine flu antibodies in the blood of over 500 young men who had neither worked with pigs nor lived through the 1918 epidemic.

With understandable enthusiasm, though questionable justification, reporters and others soon began to refer to "the killer virus." This epithet rests on the terrible history of the 1917-18 pandemic, which had caused more havoc in London than the Great Plague.

(more)

In the U.S. those years show great spikes on the graph of annual death rates. It attacked not only the young and the old, but also many vigorous people in early maturity and middle life. It was not unusual for a previously healthy person to die within 24 hours from the onset of the disease. Although we now have antibiotics which can cure the bacterial pneumonias that killed many patients in the 1918 epidemic, there were cases in which there was not enough time for such treatment. If this were indeed the virus present at Ford Dix, the outlook would have been for disaster.

The swine flu disease observed at Fort Dix was not unusually severe. One person died, but it was after he disregarded advice to stay at home and went on a forced march.

The reasons for serious concern were that a virus strain which had not previously passed from man to man was now doing so; that it was a strain which had possibly been derived from that responsible for a devastating pandemic; that on the basis of long experience we are about due to have another pandemic. (Historically, pandemics have been observed at about ten-year intervals, and the last was in 1967-68).

Public health officials faced a difficult choice: Viewed in one way, it could be said that there was no proof that the Fort Dix observations were not just a fluke; perhaps similar limited epidemics of swine flu had occurred but had not been recognized; no one could be certain that a swine-flu vaccine would work; some people inevitably would blame the vaccine, rightly or wrongly, for subsequent illnesses; it would be a costly experiment to put up an imperfect vaccine against the risk of a presumed epidemic.

Viewed another way, it was the first good opportunity to nip the bud of a pandemic; vaccines had been effective on many occasions; the newer purified vaccines caused few reactions; the potential for a devastating pandemic could be great; there was adequate time to produce enough vaccine before the next flu season if the decision were made without delay.

In the light of all this, the Public Health Service officials, with the agreement of their expert advisers, decided they could not conscientiously withhold from the public this opportunity for health protection. The President and Congress agreed with them that the prudent course would be to embark on a national vaccination program. The vaccine was produced and the injections are under way.

Now questions are raised about safety, effectiveness of the vaccine, and the need for the program.

As to safety, few reporters take note of the tens of thousands already injected with minimal complaints of soreness or illness. Much emphasis has been placed on the deaths of some chronically sick people soon after they received the vaccine. It must be remembered that sick, elderly people are likely to die anyway. We should expect about one death among 10,000 old people each day. In no instance reported to date (Oct. 22) has there been cause-effect relationship between the vaccination and death.

In one episode, three old people with heart and lung disease who received the vaccine at one station died within a day. This was more than was expected, and an extensive investigation is under way. So far, no specific cause for their deaths on this particular day has been found.

There is no significant reason to doubt that any healthy adult can take the vaccine safely, with very little risk of even a sore arm as a result. Any sick person, especially anyone with chronic illness, should take the advice of his personal physician. For many such people, the vaccination could be life-saving, but for others it could be harmful.

As to efficacy of the vaccine, the best that can be done to test it is to see if it causes humans to form antibodies, and this it does. It is fully potent in evoking antibodies against one factor of the virus called the hemagglutinin factor. It is ineffective in evoking antibodies against a second factor, the neuraminidase factor. There is some desagreement among experts as to the importance of the second antibody; a majority believe the hemagglutinin antibody most important for the prevention of infection.

As to the need for the program, it is said by some that there has been no further outbreak of swine influenza in this country or elsewhere in the world.

The answer is that all pandemics must start somewhere, and there is no reason one shouldn't begin in the U.S. To wait for other appearances of the virus would throw away the chance of keeping the outbreak under control.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--An automated system developed at Stanford for mass screening of newborn babies for deafness is being tested at fifteen hospitals throughout the country.

The device, called the crib-o-gram, was developed by Dr. F. Blair Simmons, head of the division of otolaryngology and Frederica Jones, R.N., at Stanford University School of Medicine.

Hospitals in Massachusetts, Illinois, New York, Colorado, Florida, Texas, Virginia, Iowa, Nova Scotia and California are participating in the crib-o-gram study. The data they accumulate for two years through June 1977 will be analyzed by Simmons and his team to determine crib-o-gram's reliability.

The device monitors infant movement before, during and after a test sound is emitted from a microphone in the ceiling of the nursery. It is so sensitive it can detect breathing, heart beats or hiccups. The infant's activity is recorded on a paper tape during the night which is scored the following day.

The device has been used in the Stanford nurseries for six years. In that time more than 10,000 babies have been tested. The 1,000 who failed the test at birth were again screened at six months. Of those, 23 were confirmed to have hearing losses. The incidence of hearing loss in babies in the intensive care nursery is significantly higher than for infants in the well baby nurseries.

"Hearing rehabilitation is most successful if it is begun around six months of age," explains Simmons. "Yet very few children with hearing defects are discovered before they are one. In fact, most problems are not detected until children are two or three, when their language development falters. Testing hearing at birth or soon after can improve the chances of normal speech and language development," he notes.

If hearing loss is detected early, children can be taught to use whatever hearing they have as well as lip reading so they can attend regular classes at public schools. Their improved communications skills will help them lead more normal lives, says Jones.

The incidence of deafness in newborns is one or two per thousand, Simmons says. Since it is a relatively small ratio, nursery staff and pediatricians do not always feel it is worth their time to screen every infant individually, he says.

"With the crib-o-gram, little extra time or effort is involved," explains Simmons. "Everything can be mechanized, with an average cost of less than one dollar per child."

The heart of the automatic system is an inexpensive motion detector called a transducer. It is commonly used by burglar alarm companies to detect floor movement caused by walking. When mounted on the crib frame, it detects the stress caused by movement in the crib.

The data from participating hospitals will help determine the device's effectiveness. It has already demonstrated it can detect hearing defects in newborns, and at present appears to be the most effective mass screening technique available for infants.

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Mailed Wednesday, October 27, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A Stanford University surgeon Tuesday accused the American Association of Blood Banks (AABB) of making "misleading and partly deceptive statements" in claiming an impending blood supply crisis.

Dr. J. Garrott Allen said that when the American National Red Cross withdrew from the AABB's national blood clearinghouse last week, the trade association issued a statement predicting that blood shortages will develop and the cost of donated blood will rise.

"This claim is unwarranted," said Allen. "Locally an ample supply is available from the Central California Red Cross Blood Center in San Jose. The situation is the same elsewhere."

He said the American Blood Commission surveyed 23 blood banks nationwide. Twenty of the 23 said the blood supply was equal to or more than last year's. Most blood banks in the survey dispute the alleged crisis.

Allen, a noted researcher in blood coagulation and serum hepatitis, has been a long-time critic of blood banking practices. He has campaigned for reform and blood labeling laws to reduce the incidence of hepatitis attributed to blood from paid donors.

"It is important that donors not be misled," Allen stressed. He urged that they continue to give blood to the Red Cross. He also suggested that civic or employee groups with current commitments to AABB-affiliated blood banks reassess their relationships.

The AABB represents an important segment of the private sector in blood banking, said Allen. "It should be encouraged to continue but under conditions in which the patient's interest comes first."

"Blood banking as now represented by the AABB is big business," said Allen. "It is especially profitable under the AABB clearinghouse arrangement."

The clearinghouse is a system operated by the AABB representing some 2,000 non-profit and a small number of commercial blood banks. Under the program, blood donations can be credited to individuals in any area. The credits are computed and balanced among participating blood banks, and units of blood that are owed are then delivered.

Allen said the Red Cross withdrew from the clearinghouse because of objections to commercialism and AABB's use of a non-replacement fee. The non-replacement fee forces patients unable to replace blood to pay a penalty.

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As a result, Allen said, the actual charge to patients for unreplaced blood, from such banks as Irwin Memorial or Peninsula, is $15 higher than when it is obtained from the Red Cross. The Red Cross charges only a processing fee and it is covered by insurance. The blood itself is free.

"Volunteer donors give blood to the Red Cross freely," said Allen. "It must go to patients who need it free of charge. "But the Red Cross discovered that when its blood went through the AABB clearinghouse, it was often sold, making a profit for AABB affiliates and betraying the donors."

Allen said the AABB recently sent a memorandum to its affiliates which has confused the public, patients and physicians.

The memo advised affiliates to alert hospitals and laboratories to discourage acceptance of blood from the Red Cross unless it was shipped through the clearinghouse which charges a fee.

The AABB memo also urged its blood bankers to tell patients that the Red Cross will no longer transfer blood credits on behalf of specific patients.

"This is true," said Allen, "only as it affects the clearinghouse. "But the Red Cross has informed me that it will deliver blood directly to any hospital to meet the needs of its patients."

Allen said the Red Cross will deliver blood to a hospital even if the patient has never participated in a Red Cross blood program. "This is one of the advantages of the Red Cross community, non-specified donor approach," he said.

Allen warned, "Any shortages of blood in the future could be created by hospitals willing to follow the advice of the AABB memorandum."

The surgeon said the AABB was attempting to interfere with blood collection functions of the Red Cross and other non-AABB blood banks.

He quoted the AABB memorandum which suggested: "You (blood bankers) may wish to...collect blood in Red Cross areas for individuals or groups who would like to establish credit in areas served by clearinghouse participants."

"This sounds as though the AABB wants its affiliates to send their bloodmobiles into Red Cross territory to bleed it dry." said Allen.

Allen said the AABB also advised its members to highlight the importance of the clearinghouse "in your area." It provided, he said, a sample news release with blank spaces for the name of the blood bank and its director to send to the local newspapers.

This was the story published widely in Bay area newspapers October 19.

Allen said such tactics do not serve the national interest nor that of the AABB. He said he had transmitted the material to the Department of Health, Education and Welfare, and to the state department of consumer affairs requesting an investigation.

It is the responsibility of the federal and state governments to determine whether such practices by a "non-profit" organization are proper, he said.

The AABB, Allen said, has consistently opposed other blood banking groups, including the Red Cross, which have formed a national commission for the private sector, the American Blood Commission.

"AABB is opposed because its affiliates would be required to make their financial records available for public inspection," said Allen. "For whatever reasons, the AABB wants to avoid this practice which is acceptable to the Red Cross and others."

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Mailed Tuesday, October 26, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--It is painful for a child, or even an adult, to be physically different. Whether you are the tallest or shortest, the fattest or skinniest, others will have some derisive comment to make.

Like other physical characteristics, height is primarily a product of heredity. If you are short, your ancestors were probably short too. Occasionally a chronic disease can be responsible for decreased growth. Or sometimes people are small because they lack growth hormone. Doctors can supply that hormone to children who are deficient to help them reach a more normal height.

Dr. Raymond Hintz, Stanford assistant professor of pediatrics and a specialist in endocrinology, has been involved in growth hormone research and has used it to treat patients for a number of years. He was recently awarded a supply of growth hormone from the National Pituitary Agency for a Stanford-Yale study involving 50 children.

Growth hormone will not make every short person tall. Hintz cautions, "At our present state of knowledge, there is no hormone which is going to make someone bigger than their own genes dictate."

But if tests prove that lack of growth hormone is the cause of shortness after ruling out disease or heredity, treatment with the hormone can begin.

In most cases growth will follow, although not everyone will respond. Some children will begin to grow after the dosage is increased, while about 10 percent develop antibodies and no longer react to treatment. According to Hintz, at least 8 out of 10 diagnosed cases will respond successfully to the hormone.

Unfortunately, because the supply of this hormone is limited--it is strictly regulated and available only from the National Pituitary Agency (NPA)--it is only given until a patient reaches a height of five feet. Until there is a greater supply of the hormone, that is all the NPA will provide.

Growth hormone is extracted from the pituitary gland and acts primarily on bone, cartilage and muscle although it also affects other organs. To treat one child for one year, fifty pituitaries from donor-cadavers are needed, with average treatment lasting 5-10 years, says Hintz.

Only about half the needed supply of pituitaries are available in the U.S. today. However, they are not as scarce in other parts of the world where regulations concerning donor organs are less stringent. Growth hormone is an unregulated, prescription item in these places.

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The hormone may soon be marketed commercially in this country, although supplies will still be limited and lengthy therapy will be expensive.

Only three percent of the population can be considered abnormally small, Hintz explains. About one percent are short due to growth hormone deficiency. Of the patients seen in Stanford's pediatric endocrinology clinic, 10 percent have some sort of illness which causes their shortness; the other 89 percent are short for no apparent reason other than heredity.

When a child comes to the clinic, the doctors first determine that he is free from disease. If this is ruled out, a history is taken and heights of all family members including parents, grandparents, aunts and uncles are recorded. Past growth records are also examined. "If a child has been growing at a certain rate and then stops or slows dramatically," says Hintz, "there is more concern than if he has always had a slow growth rate."

Hintz urges that treatment begin early. "You're more receptive to the hormone at a young age," he explains. "The chances of response begin to diminish after age ten. One of the problems we face is getting children who can benefit most from this therapy diagnosed early enough."

According to Hintz, once a child has started growth hormone therapy, two psychological problems are common. First is the so-called King Kong complex in which a child who has always been small begins to grow and becomes very aggressive. The second involves the child's inability to change his body image--he sees himself as a small, sweet child. When he becomes the same size as his friends, he loses his uniqueness.

Parents most often suffer from inflated expectations and hope the first injection of the hormone will make their child normal size. Although there is an initial growth spurt, it usually takes months to approach normal, says Hintz. It can even take years if therapy is begun late.

Hintz believes that understanding how growth hormone works may help to improve the therapy for its deficiency. An intermediary called somatomedin is stimulated by growth hormone. It is this intermediary which actually influences bone and cartilage to grow.

"We are studying the interaction of somatomedin with tissues and cells to learn why they grow. The intermediary is a smaller molecule than growth hormone and may be easier to synthesize once we know its structure," Hintz says.

Until a synthetic hormone is developed, supplies will remain limited. But as Hintz says, "We can now take a 15-year-old who looks six and make him look at least 12 by giving him growth hormone." While that 15-year-old may still want to be as tall as a basketball player, at least he's closer to normal height.

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Mailed Tuesday, October 26, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

(ADVANCE) FOR A.M. RELEASE MONDAY, OCTOBER 25, 1976

STANFORD--Behavioral scientists at Stanford University School of Medicine have come upon a chance finding which shows that chimpanzees may predict earthquakes.

The research is carried out at the Stanford Outdoor Primate Facility located near Jasper Ridge Biological Preserve. The facility is adjacent to the San Andreas fault.

The scientists reported their finding Sunday, October 24, at a meeting sponsored by the U.S. Geological Survey in Menlo Park.

They are Dr. Helena C. Kraemer, associate professor of biostatistics in the Department of Psychiatry and Behavioral Sciences; Bruce Smith, a geophysicist with the Geological Survey; and Dr. Seymour Levine, professor of psychiatry and director of the primate facility.

According to Dr. Kraemer, interest in the project was triggered by recent Chinese reports of animal behavior changes preceding a major earthquake by as much as two months.

"While our evidence is not yet sufficient to conclude that animal behavior will predict earthquakes," she said, "it suggests a model for researching the question."

Popular reports of unusual behavior prior to an earthquake have been numerous, Dr. Kraemer noted. But they have been accorded little credence because of their anectodal and retrospective nature.

"Animal behaviors can be monitored and reliably measured," the researchers said. "We believe we have the first scientific evidence there are behavior changes that precede earthquakes."

Dr. Kraemer said animal studies would be particularly valuable for short-term and location forecasting. "But to prove it conclusively, we will have to predict the next earthquake," she added.

The primate facility is a unique research station housing chimpanzees born and raised in the wild. Opened in 1974, the center has been used by researchers and students to observe social behavior and hormonal changes among chimpanzees in a natural setting.

In locating the facility near the fault, Dr. Kraemer commented, Stanford officials had inadvertedly built an ideal model for studying the relationship of animal behaviors to earthquakes.

She explained that prior to a single swarm of minor earthquakes last June, observers at the facility had recorded "intriguing behavioral changes" among the chimpanzees.

"The animals were more restless than usual, she said. "They spent more time on the ground than high on their climbing structures and nesting areas. Their behavior change was so significant it seems unlikely it was due to chance."

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222--Outdoor Primate Facility

Dr. Kraemer emphasized that at the time the animal behaviors were recorded, the observers were doing unrelated research. And they were unaware that any tremors had occurred.

Acting on a suggestion by Geophysicist Bruce Smith of the U.S. Geological Survey, Drs. Kreamer and Levine analyzed the course of chimpanzee behavior before and after 25 minor earthquakes had occurred in the vicinity between June 19 and 24.

The Stanford researchers found that the animal behaviors changed on the day prior to two of the largest earthquakes in this period. One took place June 19 and registered 3.1 on the Richter scale. The other earthquake occurred June 24 and measured 2.0.

In each instance, the signs of restlessness and change in location by the chimpanzees had occurred the day before, said Dr. Kraemer. Their behavioral change was less pronounced in the in-between period during which the area was experiencing tremors of lesser intensity.

The researchers said they are not yet ready to say that the behavioral changes were unequivocally due to the impending seismic activity alone. There may be other factors.

But they note the behavioral data were collected and stored in the computer before information about any earthquakes having occurred became available. Consequently, observer bias can play no role, they asserted.

"There were no unusual events which might have caused the chimpanzees to behave the way they did," said Dr. Kraemer. "And none of the observers took note of the earthquakes."

The researchers said it is unlikely that the Stanford facility would experience enough isolated earthquakes in a reasonable period of time to answer the questions raised.

"Multiple monitors," Dr. Kraemer suggested, "will be needed using perhaps less expensive animals, for example, poultry and cattle at ranches scattered along major faults.

"Trained observers or automated behavior monitors will be required, coupled with computerized systems for routine observation and data analysis."

In addition, the behaviors of each animal species will have to be studied, and decisions made as to the magnitude of change warranting an earthquake alert, she said.

Recently scientists have said that animal behavior studies will comprise the most significant effort in earthquake prediction in the next few years. Prof. Amos M. Nur, a Stanford geophysicist, was among those who had conferred with Chinese scientists after they had predicted a major earthquake in the city of Haicheng last year.

In an article in the Stanford Earth Scientist, Nur pointed out that a few days prior to the earthquake, a swarm of foreshocks occurred;"...at the same time, many reports came from a multitude of villagers concerning abnormal behavior in their livestock."

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(ADVANCE) FOR A.M. PAPERS MONDAY, OCTOBER 25, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A graduate of Stanford Medical School's physician's assistant program and a current Stanford staff member have been appointed to the state's Physician's Assistants. Examining Committee of the Board of Medical Quality Assurance.

The appointments of Sergio Noriega, physician's assistant in Gonzales, California, and Stanford program staff member George Armstrong, were announced recently by Governor Edmund G. Brown, Jr. Terms are for four years.

The nine-member committee regulates physician's assistants practicing in California, their training programs, and approves the physicians who hire them.

The federal and state supported program is designed to aid overworked family doctors in the delivery of primary health care, particularly in underserved rural or ghetto areas.

The Stanford program is operated jointly with community colleges in Eureka, Redding, Modesto, Salinas and Bakersfield, and with Foothill College in Los Altos. The aim of the two-year program is to recruit and train people in areas where they plan to return to work in the health care field. The students come to Stanford for one quarter of clinical training in the Fall.

Sergio Noriega was a member of the first graduating class of physician's assistants from Stanford in 1973. He has worked since in the Salinas Valley community of Gonzales aiding general practitioners in the predominantly Spanish-speaking agricultural community.

George Armstrong has been field services coordinator at Stanford for the past two years, traveling thoughout the region to generate interest among communities and physicians.

The Stanford program has 70 assistants currently in training. There are 75 graduates now in practice, most with physicians in general practice in rural areas.

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Mailed Tuesday, October 19, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Seymour Levine will be the new director of the Stanford Outdoor Primate Facility.

He is professor of psychiatry and behavioral sciences. Levine's appointment, to be effective immediately, was announced Wednesday (Oct. 13) by Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine.

The primate facility is a research station housing chimpanzees born and raised in the wild. It is located on an isolated 24-acre tract adjacent to Jasper Ridge Biological Preserve and the Stanford Linear Accelerator.

Opened in 1974, the center allows researchers and students to observe social behavior and hormonal changes among chimpanzees in a natural setting.

Plans for the center were developed by Dr. David Hamburg, Reed-Hodgson professor of human biology, who served as its first director. Hamburg left Stanford this year to become president of the Institute of Medicine of the National Academy of Sciences in Washington, D.C.

Levine's research is in the areas of physiological and behavioral development, including stress, hormones and varieties of infantile experience, as they affect behavior.

Levine joined the Stanford faculty in 1962. He holds a Ph.D. from New York University, had been on the faculty of Ohio State University, and had spent two years as a fellow in neuroendocrinology at the Institute of Psychiatry at Maudsley Hospital in London, England.

He won a Hoffheimer Research Award in Psychiatry in 1961.

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Mailed Wednesday, October 13, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Full heart resuscitation equipment should be on hand in all dental offices using general anesthesia for minor oral surgery, a Stanford University anesthesiologist reported Monday, October 11.

Dr. Alexander Thurlow made this recommendation following a study of the high incidence of abnormal heart rhythms in 160 children, aged 7 to 14, who underwent dental surgery at the outpatient clinic of the Royal Dental Hospital in London, England.

Dr. Thurlow is attending physician at Stanford Medical Center and visiting assistant professor of anesthesia from St. George's Hospital, the University of London.

He presented his findings at the annual meeting of the American Society of Anesthesiologists in San Francisco.

According to Thurlow, recent studies have established that the incidence of cardiac arrhythmias occurring during general anesthesia for minor oral surgery is about 25 percent, or one in every four cases, a level he calls extremely frequent.

Cardiac arrhythmias in dental anesthesia, said the physician, are a worrisome problem. "They may account for several cases of unexplained collapse and death in the dental chair every year."

In light of such findings, Thurlow says essential drugs, electrocardiogram monitors, and portable cardiac defibrillators should be standard equipment in dental offices. Such equipment is not commonly available in British dental offices, he says.

In the U.S., such equipment is not required, although the American Society of Oral Surgeons has advocated that it be available in offices administering general anesthesia.

Portable resuscitation equipment, Thurlow says, is not prohibitively expensive, even though it may only be used rarely by an individual dentist.

"The chances of getting a patient out of ventricular fibrillation (cardiac arrest) are greatly reduced by an hour's wait for an ambulance and hospital equipment," he says.

Dr. Thurlow says British statistics count one cardiac arrest in 200,000 young, healthy patients undergoing oral surgery under general anesthesia. There were more than 40,000 cases of arrhythmias among the same group.

The physician's most recent study indicated that 37 children out of 160 (23 percent) developed a cardiac arrhythmia. However only 14 percent developed the disorder when anesthesia was begun intravenously and then continued by inhalation. Thirty-two percent arrhythmias were noted among those who received anesthesia only by inhalation.

Only 1 of 12 patients who received the initial intravenous injections developed serious disorders, compared to 12 out of 33 patients who received inhalation anesthesia.

The results confirm, he says, that intravenous induction with inhalation maintenance reduces both the incidence and severity of arrhythmias.

The physician also called for local anesthesia as the method of choice in patients for minor oral surgery. If inhalation anesthesia is indicated, he said, "patients should be routinely monitored and dental anesthesia should only be given where full cardiac resuscitation facilities are available." ###

Mailed Monday, October 11, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
EDITORS: Text of committees' responsibilities available on request.
FOR IMMEDIATE RELEASE
STANFORD –

A newly-formed panel, which includes a public representative and an outside expert in biosafety, will monitor and maintain safeguards for research on recombinant DNA at Stanford University.

William F. Massy, vice-provost for research, announced the formation of the group Tuesday, Oct. 5. The 12-member administrative panel on recombinant DNA molecules will be chaired by Prof. Allan M. Campbell of biological sciences.

Campbell, a 47-year-old microbiologist-geneticist, is not involved in recombinant DNA work.

A controversial issue in genetics, DNA recombination involves techniques which make it possible to select genes from one organism and transplant them into the chromosomes of another. Most researchers use bacteria as the recipient species to study the organization of complex chromosomes in ways that were not possible previously.

The research provides the potential for introducing genes into easy-to-grow bacterial cells, enabling construction of bacterial "factories" that will synthesize such medically needed substances as insulin, hormones or antibiotics. The method, its proponents suggest, also holds promise in agriculture, energy, and ecology.

From the beginning, however, it became clear to the scientists involved that these techniques could be used to produce novel gene combinations that may be biologically hazardous. They agreed in 1974 to a temporary halt of some experiments until guidelines could be worked out for safety.

After several public meetings, officials of the National Institutes of Health issued guidelines last summer. These detail the responsibilities of scientists and their institutions in doing the research.

The Stanford panel, Massy said, will review proposals and research activities involving DNA recombination. It will determine their acceptability with respect to procedures and facilities.

"The panel," Massy added, "will insure that those involved in such research comply with applicable policies, guidelines, and standards of good practice, thereby insuring safety of personnel and the general public."

The NIH guidelines ban certain experiments altogether, including those involving highly toxic substances. Experiments permitted under the rules are classified according to their potential hazards. The guidelines also define the safety precautions to be taken with each class of studies.

According to Massy, the panel will be responsible for reporting to University officers any potential or apparent violations of policies related to the research.

The Stanford panel met for the first time September 28. It voted unanimously to adopt the NIH guidelines to cover all recombinant DNA work on campus, he said.

The panel membership consists of six scientists of whom three are not involved in recombinant DNA research, one engineer knowledgeable in design and operation of containment facilities, two faculty members from the humanities and law, a staff member, a public representative, and a student yet to be named.

In addition to Campbell, panel members from Stanford are Profs. Paul Berg, biochemistry; Stanley Cohen, clinical pharmacology; Edwin Good, religious studies; John Kaplan, law; David Korn, pathology; Robert T. Schimke, pharmacology and biological sciences; Bruce Stocker, medical microbiology; and Research Associate Lucille Rasmussen, infectious diseases.

Berg will be succeeded in 1977 by David A. Clayton, associate professor of pathology.

Panel members from outside Stanford are Mark Chatigny, chairman of the University of California Biological/Environmental Department, Naval Biomedical Research Laboratory at Richmond, and Richard Rosenbaum, a former Palo Alto city councilman and research engineer at Lockheed.

Ex-officio members are James C. Bitter, assistant occupational health and safety officer (Medical Center); Patricia L. Devaney, assistant to the vice-provost for research; and Anthony J. Sidlow, Stanford manager of health and safety.

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10/5/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Most patients who receive heart transplants at Stanford Medical Center return to competitive employment, but some have encountered hiring discrimination before finding jobs, according to a recent study.

Ninety-one percent of Stanford's cardiac transplant patients who survived six months or more after their surgery have successfully returned to employment, to retirement by choice, or to student or homemaker status, according to the study published in the current Journal of the American Medical Association.

Half of those who returned to fulltime work resumed positions they had previously held and retained on disability leave during the transplant period. Others returned to self-employment.

A remaining five patients were successful in finding new employment postoperatively, but at lower salaries then those held preoperatively.

"The hiring discrimination often experienced by cancer patients and kidney transplant recipients appeared to be expressed even more strongly against cardiac recipients," according to Lois K. Christopherson, chief social worker in the transplantation program; Dr. Randall B. Griepp, assistant professor of cardiovascular surgery, and Dr. Edward B. Stinson, associate professor of cardiovascular surgery.

Fifty-six patients who survived six or more months after cardiac transplantation participated in the the study. Fifty-one were classified as successfully rehabilitated, defined as physically and psychologically able to lead active lives, performing tasks like those before their severe cardiac disease.

Four of the patients retained substantial physical disability, and one experienced psychiatric disability.

All patients selected as potential cardiac recipients at the Medical Center had an estimated life expectancy in the range of weeks to months.

Potential recipients were carefully screened not only for severity of illness but also for medical or psychosocial problems that might deter rehabilitation.

"There should be reasonable expectation that additional time gained by transplantation would be meaningfully used by the patient rather than be perceived as simply an extension of the dying process," the author said.

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A notable feature of the rehabilitation of almost all recipients, said the authors, "was an intense sense of personal accomplishment and an awareness of expanded capacity for the enjoyment of living.

"Activities that before had been taken for granted assumed new meaning because of recipients' heightened sensitivity to the significance that each day of life held for them."

Foremost among adjustment tasks was coping with the new status that often generated increased attention.

Although at first attractive, this attention was "soon found to be superficial and to interfere with the cultivation of other, more meaningful roles."

The authors report that most patients and their spouses experienced more open communication as a result of transplantation, and considered the uncertain longevity in their family priorities.

When they described their transplant experience to friends, they usually focused on the benefits rather than past and current risks.

Currently, Stanford transplant patients show 69 percent survival rate at one year, 60 percent at two years, 51 percent at three years, 45 percent at four years, and 40 percent at five years after transplantation.

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Mailed Monday, Novembe. 29, 1976

File:

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A $30,000 grant in support of a new oncology day care center at Stanford University Medical Center has been awarded by the Fannie E. Rippel Foundation of Morristown, New Jersey.

The oncology day care center is planned as a self-contained unit on the lower level of Stanford Hospital, offering a comfortable home-like atmosphere for cancer patients.

The Rippel Foundation, long active in the medical and hospital field, was formed by J.S. Rippel, a New Jersey banker and financier, as a memorial to his wife.

Individual donors, as well as other organizational support, will help meet the projected $140,000 costs of the unit.

The new oncology facilities will be located in the current Emergency Services area of the Hospital when Emergency is relocated into the new wing of the Hospital early next year.

Currently approximately 9,000 patients from throughout the U.S. and many foreign countries are treated each year in the oncology clinic. Examination rooms and outpatient facilities are shared with other medical specialties.

Dr. Saul Rosenberg, professor of medicine and chief of the division of oncology, will be director of the new unit.

He notes that the new facility, one of the first of its kind, will better meet the special needs of oncology patients who do not need to be admitted to the hospital. Such patients may need to receive regular chemotherapy infusions, or need to be seen daily for brief injections and blood counts, then return home.

The new unit will contain several separate examination and treatment rooms, patient waiting and consultation rooms, a doctors' conference area and other laboratories.

A pharmacy will be included, where nurses may store and mix drugs that require special handling. A small laboratory for hematology work will permit immediate laboratory results and should decrease patient waiting time.

Private offices will be provided for social worker and clinic service representatives, to aid patients with emotional, personal and financial problems related to their diseases.

Design of the unit calls for a waiting area outside the mainstream of the general hospital and clinical activities, to insure privacy for patients and their families.

Suzanne Miller, clinical oncology nurse coordinator, says special attention will be paid to furnishing the area. "We want to offer a home-like atomosphere, a warmth that is not possible in the present facilities, where patients can share their feelings privately with those they know. A cancer patient needs everything we can do to make it easier."

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Mailed Monday, November 22, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--New blood transfusion and coagulation laboratories are being constructed in the new wing of Stanford University Hospital with a $100,000 grant from the William Randolph Hearst Foundation

Dr Clayton Rich, dean of the medical school and vice president for medical affairs, designated the general purpose grant for use in construction of the new laboratories. It is expected they will be in use before the end of the year

The transfusion service, the largest in California, ensures the compatibility and safety of all blood and blood products transfused at the Hospital and at Children's Hospital at Stanford

The coagulation laboratory provides routine consultation on medical and presurgery patients as well as those with hemophilia Much work of the unit is performed for the intensive care unit, in identifying coagulation deficiencies in surgical patients, particularly those receiving open heart surgery

Past gifts of the William Randolph Hearst Foundation have supported Stanford student writing awards, the department of communications, and the Hoover Institute

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Mailed Thursday, November 18, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT. Harriet Baumgarten 415: 497-6911

STANFORD--Ten scientists pursuing careers in teaching and research at Stanford University School of Medicine have been named Andrew W. Mellon Fellows.

They will be supported in part by a $325,000 award to Stanford by the Andrew W. Mellon Foundation of New York "to assist young postdoctoral scholars of demonstrated achievement and exceptional promise to continue their advance toward careers in teaching and research."

The fellows were announced recently by Dr. Clayton Rich, vice president for medical affairs and dean of the school of medicine.

According to the Mellon Foundation, "The chief purpose of the grants is to help minimize the loss to medical education and to research in the basic medical sciences which is certain to occur if individuals...are forced by lack of support to turn to other careers."

Stanford is one of 15 private medical schools to receive such funds under the Mellon Foundation Program. Stanford received a similar three-year grant from the Foundation in 1973.

The designated fellows are.

--Dr. Paul R. Cipriano, assistant professor of radiology, who is studying the structure and function of the middle muscular layer of the heart in normal and diseased states.

--Dr. Leslie J. Dorfman, assistant professor of neurology, who is studying the electrical activity of the nervous system in normal and certain disease states such as multiple sclerosis.

--Dr. Donald R. Goffinet, assistant professor of radiology, who is studying the effects of anticancer drugs and radiation therapy on cancerous tissue and spinal cord function.

--Dr. Mark Hilberman, assistant professor of anesthesia, who will be studying postoperative renal function to identify a pattern which leads to renal failure after cardiac surgery. He is also studying the interaction between muscle relaxants and inhalation anesthetics to determine the length of the two drugs' interaction following surgery.

--Dr. Ronald Levy, assistant professor of medicine (oncology), who is studying the relationship between immunology and cancer, particularly in human lymphomas and leukemia.

--Dr. Paul Pitlick, assistant professor of pediatrics, studying the exercise tolerance of children with congenital heart defects, especially following cardiac surgery.

--Dr. David J. Schurman, assistant professor of surgery (orthopedics), who is looking at mechanisms which cause arthritis and other inflammations of joints which may lead to new methods of treatment.

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222--Andrew W. Mellon Foundation Grants

--Dr. Gerald Silverberg, assistant professor of surgery, who is working on a monitor to measure the production of intracranial pressure.

--Douglas Wallace, Ph.D., assistant professor of genetics, who is studying genes found in human cells which are important to respiration and certain inherited diseases.

--Dr. Roger Winkle, assistant professor of medicine (cardiology), who is studying the clinical effectiveness of drugs for the treatment of cardiac rhythm disorders.

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Mailed Tuesday, November 16, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-7911

EDITORS: Photo available if not included.

FOR IMMEDIATE RELEASE

STANFORD –

Dr. William H. Northway, Jr., has been promoted to professor of radiology and pediatrics at Stanford University School of Medicine.

Northway is director of the Diagnostic Division and associate chairman of the Department of Radiology. His professorship, which is effective Jan. 1, was announced by Dr. Clayton Rich, vice-president for medical affairs and dean of the school.

A graduate of Stanford with a B.A. in 1954, Northway also received his M.D. from Stanford in 1957. He interned at New York Hospital (Cornell University) and completed his radiology residency at Stanford in 1961.

Northway was a James Picker Foundation scholar in radiology in 1963-66, and in 1963 he was at L'hopital des Enfants Malades in Paris. In 1965-66 he was voted the best pediatric instructor by the pediatric resident staff. He was also a Stanford University Fellow in 1972-75.

Northway has concentrated his research in the area of newborn lung disease, particularly pulmonary oxygen toxicity in newborn infants. He has written numerous medical articles and book chapters.

Northway's father, the late Dr. William H. Northway, Sr., also received his M.D. from Stanford Medical School.

The senior Northway served as chief of clinics, assistant dean of the Medical School, and acting physician-superintendent of the old Palo Alto-Stanford Hospital. He also served on the Hospital's governing board. He died in 1960.

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11/15/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-7911

FOR IMMEDIATE RELEASE

STANFORD –

The Big Game Medical Alumni Reunion, sponsored by the School of Medicine and the Stanford Medical Alumni Association, is planned for Friday, Nov. 19.

Morning postgraduate education courses in Room M112 will feature Dr. Stanley N. Cohen, professor of medicine, who will speak on "Genetic Manipulation of Microorganisms," and Dr. Abraham White, consulting professor of biochemistry, who will talk about "Prostaglandins: Biochemistry and Clinical Implications."

A noon reception and luncheon for alumni, associates, faculty, and spouses is planned for the Holiday Inn, Palo Alto. Featured speaker will be Dr. David S. Rubsamen, with the topic "The Malpractice Crisis: Turnaround in 1977?" Reservations are necessary for the luncheon.

A spouses' program in the morning includes a visit to the Myra Keen exhibit of shells in the Geology Building and an address by Dr. Robert L. Kovach, professor of geophysics, on earthquake prediction.

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11/15/76 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--Dedication ceremonies for a new laboratory to study the effects of disease on tissue and other skin problems will be held at 12:30 p.m., Saturday, November 13 at Stanford University Medical Center.

The new facility will be known as the Irving B. Wershaw Dermatology Research Laboratory, according to Dr. Eugene Farber, chairman of the Department of Dermatology.

The laboratory will be equipped with an electron microscope and will be used for dermatology research as well as teaching.

Irving Wershaw was board chairman of Dome Chemicals, Inc. of New York and a vice-president of Miles Laboratories before his death in 1963. Dome, founded by Wershaw in 1939, made prescription medicine for skin disorders. The company was acquired by Miles Laboratories in 1959.

"Mr. Wershaw," Farber said, "was a very well-known and well-loved individual in the fields of dermatology and pharmacology." He had a collection of more than 2,000 autographed photographs of dermatologists and allergists whom he knew.

Mrs. Lona Duval Wershaw of New York City has given the dermatology research laboratory to Stanford University Medical Center in memory of her husband.

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Mailed Thursday, November 11, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University School of Medicine may reject several hundred thousand dollars of federal funds on principle to avoid federal intrusion into its admission procedures.

"I believe universities must not compromise if they are to remain free academic institutions," said Dr. Clayton Rich, vice president for medical affairs and dean of the school.

In a letter circulated to faculty and students seeking their opinions, Rich said that giving in on this issue "could be unwise and counter to important academic principles."

The problem stems from a new law which sets conditions under which medical schools would be eligible for basic educational support. One provision requires schools to reserve places for Americans who have failed to gain admission into U.S. medical schools and now are studying medicine abroad.

The Department of Health, Education and Welfare is to set the rules for their admission to schools in this country. The problem, Rich said, is over having the university agree that the government and not the faculty set these rules.

"I believe we should not accept these provisions," wrote Rich. "This (law) compromises two fundamental academic decisions, the criteria for admission and selection of students.

"These are among a group of decisions which also includes criteria for faculty appointments, the curriculum, awarding of degrees, and content of scholarly activity which the university must not yield."

Rich said Stanford could receive up to $800,000 in capitation support. In addition, the law provides federally insured student loan support which would supplement what is now available.'

Last year the federally insured loan program accounted for 40 percent or $556,000 of the accumulated debt of Stanford medical students, he said.

Another condition in the law creating residency controls sets requirements for the number of physicians that could be admitted for training in the specialties. The mandate is that 35, 40 and 50 percent of all first-year residencies be in primary care (general internal medicine, general pediatrics or family medicine) for the three successive years beginning in 1977.

"I have reservations about this provision," said Rich, "but do not take the position that we should reject it on principle. That is because interns and residents are not matriculated in a university degree program and because the provisions clearly are intended in the public interest."

Rich said the initial faculty reaction to his letter has been strongly favorable.

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A final decision, however, will not be made for several months until HEW issues its regulations and their effect on the admissions process is clear. Rich said he hopes that Congress would amend the law.

Last month Stanford University President Richard W. Lyman echoed similar sentiment before the Academic Senate.

"The issue is not whether the numbers involved will turn out to be large or small," Lyman said. "The issue is one of principle: a university medical school's right to establish its own admissions process, and to treat all applicants evenhandedly."

The New York Times reported Sunday that Yale Medical School may lose $1.5 million in capitation and grant support if it refuses to set aside places for U.S. foreign medical graduates.

Yale President Kingman Brewster called the action "an outrageous federal intrusion upon academic self-determination," according to the Times.

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Mailed Wednesday, November 10, 1976
Transmitted on Business Wire Wednesday, November 10, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--Almost half the patients hospitalized for heart attacks or coronary surgery in six San Jose-area hospitals, including Stanford, are not aware they have a disease involving the arteries of the heart.

Eighty-three patients at Stanford Hospital, O'Connor Hospital, El Camino Hospital, Good Samaritan Hospital, Community Hospital of Los Gatos-Saratoga and San Jose Hospital completed a questionnaire designed to test their knowledge and attitudes about heart disease before being discharged from the hospital.

Pat Barbarowicz, R.N., of Stanford's Cardiac Rehabilitation Program, who heads the study, said the questionnaire was a first step in developing an education program for hospitalized heart patients.

She explained that present patient education in hospitals is sporadic. A more effective and efficient teaching tool, such as audio-visuals, is needed. Barbarowicz also feels time for patient education should be provided in the nursing schedule and nurses should be trained to teach patients.

She said that by increasing patients' understanding of disease, the number of hospitalizations may be reduced. The hospitals' initial outlay for educational materials and commitment of staff may be justified by future savings, she said.

The study demonstrates that unstructured teaching programs now under way in some hospitals do not appear to be effective. Twenty-nine of the 83 patients tested received some in-hospital education about heart disease, yet did not do significantly better on the questionnaire than those who had no teaching.

Patients under fifty scored highest on the test. Educational level, social class and sex had little to do with how much the patients knew about their disease.

The patients in the study took a multiple-choice quiz before leaving the hospital. They were asked questions about cholesterol, exercise, smoking, diet and the structure and function of the heart.

Although the average score on the test was 63 percent, Barbarowicz said the scores could be higher with more effective teaching.

Beginning in January she will continue her study, funded by a grant from the American Heart Association, with an audio-visual program on heart disease for patients at Stanford and three other local hospitals. She will determine if people really learn from such a program, and more important, whether their attitudes and behavior change with increased knowledge.

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Mailed Wednesday, November 10, 1976

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
(415) 497-2558

TWO STORIES: Barbara Battino, 497-6911
Geri Todd, 854-1941

122/4,5

FOR IMMEDIATE RELEASE
STANFORD –

Dr. Paul Bruce Beeson, professor of medicine at the University of Washington School of Medicine in Seattle, will deliver the seventh Louis and Dorothy Kovitz visiting professorship lecture at Stanford School of Medicine on Wednesday, Nov. 17.

Dr. Beeson's topic will be "Some Personal Views on American Medical Education and Practice," at 4 p.m. in the new Fairchild Auditorium of the Medical School.

Physicians and other health professionals in the community are invited to attend.

Dr. Beeson plans to discuss not only issues of the rising costs of medical care and the maldistribution of doctors in this country, but also his experiences in the British National Health Service.

His interests have been in infectious diseases and general medicine, and between 1954 and 1974 he served as Nuffield Professor of clinical medicine at Oxford University, England.

The Kovitz lectureship was established in 1969 by Dr. and Mrs. Kovitz of Los Altos to bring outstanding lecturers in medical and surgical fields to the Medical School.

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FOR IMMEDIATE RELEASE
STANFORD –

Members and guests of the Associates of the Stanford University Libraries will join in a "walk around" of three of the science libraries of the University at 3 p.m., Nov. 14.

Jack B. Pooler, chief librarian of the science department, will be the host. Highlighing the tour will be an exhibit of the original Klystron tube, invented by W.W. Hansen and the Varian brothers, on loan for the occasion to the Physics library.

Starting point for the tour will be at the Falconer library in Herrin Hall (Biological Sciences Building).

Falconer, physics, and Branner earth sciences libraries will be visited, with a reception and refreshments in the Branner library concluding the afternoon.

Reservations are required and may be made by phoning (415) 497-2016.

– 30 – cr

11/9/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

EDITORS: Photo available upon request if not included with story.

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD –

Cancer researchers at Stanford University School of Medicine are successfully treating small surface tumors in animals by applying an old idea—heat.

Preliminary results must be interpreted with caution, say the researchers. But findings have been encouraging enough in treating tumors in mice, that trials are now under way on spontaneous tumors in dogs, cats, and other animals referred by veterinarians.

Clinical trials in selected patients may begin next year, according to Dr. George M. Hahn, associate professor of radiology, and Dr. Jane Marmor, assistant clinical professor of medicine (oncology).

Dr. Hahn discussed his work at a Radiation Therapy Oncology Group meeting recently in Buffalo. The group is developing protocols for 11 institutions that will be treating metastatic lesions with combined radiation and heat.

For the current animal studies, Hahn said, volunteer pets such as dogs and cats with diagnosed incurable tumors are needed. Deep-seated as well as surface tumors may be treated.

The animals are seen as outpatients, with ultrasound heat treatments given three times a week for two weeks.

According to Dr. Marmor good results have been obtained so far in achieving regression of some tumors in the animals.

"About 50% have response of the heated areas," she says. "Those with squamous cell cancers seem to do very well."

The researchers have reported that certain tumors heated locally in mice have been virtually "flattened" in 48 hours. Fifty to 100% have been cured within a week, with little or no damage to adjacent normal tissues.

Although the idea of using heat to treat tumors is not new, there has been a lack of methods to accurately apply the heat locally.

The Stanford team uses ultrasound and radiofrequency electromagnetic fields to heat the tumors. Specially designed needle probes inserted into the tumor sites provide constant monitoring of temperature.

Mice were treated for specific flank tumors at temperatures of 108°F to 110°F (43° to 44°C) from 10 to 40 minutes, using radiofrequency electromagnetic fields. Tumor cure rate was a function of temperature and of duration of heat exposure.

In the study, all mice were cured of their tumors when exposed to 44°C heat for 20 minutes or longer. Approximately 50% cure rates were achieved with five minutes exposure at 44°C, with ten minutes exposure at 43.5°C, and with 30 minutes exposure at 43°C.

A puzzling finding, says Dr. Hahn, is that during the treatment heat kills fewer tumor cells than radiation or chemotherapy. Yet tumors continue to regress until cure is accomplished.

The researchers are conducting further studies to determine if an additional mechanism, such as stimulation by heat-treated cells of an immune system, could be responsible for rejection of the tumor.

Hahn feels that "radiofrequency and ultrasound heating may prove to be useful in the treatment of some malignancies even before we understand in detail the biology of thermal cell and tumor inactivation."

The current research is supported primarily by the National Cancer Institute.

– 30 – cr 11/8/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT Spyros Andreopoulos 415. 497-6911

(ADVANCE) FOR PM RELEASE MONDAY, NOVEMBER 8, 1976

STANFORD –

-Stanford Medical School researchers have succeeded for the first time in recording electrical signals from within nerve cells of the human brain.

The new development, said the researchers, will pave the way for study of single nerve cells to increase understanding of brain disorders such as epilepsy.

Drs. David Prince and Philip Schwartzkroin reported their research Monday, November 8, at the meeting of the Society for Neuroscience in Toronto, Canada. Details of their work also appear in the current issue of *Brain Research,* a scientific journal.

"Most of our knowledge about nerve cell function has been obtained from animal experiments," said Prince, professor and chairman of the Department of Neurology. "It has been impossible to study important questions such as the function of nerve sell membranes and the details of communication between cells in man."

Information about disorders in nerve cell function in conditions such as epilepsy has also been derived from animal studies, Prince added.

By applying newly developed techniques, and microelectrodes with glass tips smaller than 1/25,000 of an inch, the Stanford researchers recorded electrical signals from within nerve cells in small pieces of brain removed from patients undergoing operations for epilepsy and other disorders.

Prince explained that the brain tissue used in the research had to be removed as part of the operation for the disease. The experimental studies in no way affected the patients' surgical treatment.

The researchers placed bits of the brain tissue in a special chamber bathed by a solution containing sugar, salts, and oxygen so that nerve cells remained alive for hours.

The microelectrodes were then sunk into the nerve cells whose size averages .04 millimeters. The electric signals generated from within each cell are amplified and displayed on an oscilloscope screen or stored on tape for replay.

The technique can also be used for detailed studies of responses of nerve cells to drugs used in treatment of neurological disorders, said Prince.

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11/5/76

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Stanford University Hospital's successful Pre-Hospital Care Program for Paramedic Training has been expanded and now includes training in different parts of the San Francisco Bay Area.

Training is underway at Los Medanos Community College in Contra Costa County for 24 persons, most of whom are employees of ambulance companies or fire departments in that county.

Similar training through the Stanford program likewise will begin early next year in Marin County for a group of firefighters in the Novato and Marin fire districts.

According to Dr. Michael Eliastam, director of Emergency Services at Stanford Hospital and paramedics program director, the goal is to train approximately 100 paramedics in the next 12 months. Almost all of them are expected to work in emergency care programs in the Bay Area.

Eliastam explained that the paramedics training was recently decentralized in order to take the "skill and expertise of the Stanford program to remote communities while utilizing the resources and facilities available in those communities."

Students receive classroom training from Stanford instructors and local community physicians. The students then train in community hospitals under the supervision of those local physicians and nurses, as well as from the Stanford staff. They also receive practical experience by performing as paramedics (under supervision) in the field.

After completing the course, students must be certified by the county health officer in order to perform as licensed paramedics in that county.

Since the paramedics training program was initiated at Stanford Hospital in 1973, most of the training has been conducted at Stanford. Seventy-eight students, including two women, have graduated from the three paramedics classes held to date.

This is the first time that all of the paramedic training will be held in individual Bay Area communities where the paramedics are expected to work.

Eliastam noted: "We are attempting to see whether it is possible to decentralize a highly intensive program. Up to now, communities have found it difficult to obtain funds and to set up training programs for the small number of paramedics that each needs."

While paramedic training will begin in Marin County early in 1977, similar classes will also be underway at Stanford Hospital to train paramedics for Santa Clara and San Mateo counties.

Mailed Wednesday, November 3, 1976

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Robert Fisher, a sixth-year medical student at Stanford University Medical School, has been named co-winner of the Hans Berger Award by the American Electroencephalographic Society.

The award honors one of the early researchers of brain waves in man. It is made annually to the young researcher whose work represents an outstanding contribution to the understanding of brain waves.

Fisher obtained his Ph.D. in neurological sciences at Stanford in June. He is now in clinical training for the M.D. degree. Enrolled in the Medical Scientist Training Program at Stanford, Fisher hopes to combine his interests in clinical care and in research.

Working in the laboratory of Dr. David A. Prince, chairman of the department of neurology, Fisher studied the neurophysiology of petit mal, one of the more common forms of epilepsy. He studied the relationship between the activity of individual brain cells and the surface EEG waves commonly used to diagnose epilepsy.

The experiments will be published in the scientific journal, Electroencephalography and Clinical Neurophysiology.

Fisher is from Fort Lauderdale, Florida, and received his B.S. degree from California Institute of Technology in 1971.

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Mailed Tuesday, November 2, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. John A. Collins, an expert on traumatic shock and blood replacement, has been named professor and chairman of the department of surgery at Stanford University School of Medicine.

Collins' appointment will be effective April, 1977, according to Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine.

Currently a professor of surgery at Washington University in St. Louis, the 43-year-old surgeon was responsible for organizing the Army surgical research team in Vietnam which studied shock and derangements of blood clotting mechanisms in wounded personnel.

Collins' research in the battlefield helped define basic mechanisms of the body's response to severe injury, and are valuable to physicians responsible for the care of severely ill patients.

"Dr. Collins is expected to play an important role in the continuing development of surgery at Stanford," said Rich. "Rated a superior teacher by both students and residents, he is also recognized nationally as an excellent clinical surgeon and administrator."

Collins will succeed Dr. James B.D. Mark, professor of surgery and acting department chairman for two years.

A native of New York City, Collins received his undergraduate education at Fordham in 1955, his medical degree from Columbia University, College of Physicians and Surgeons in 1959, and completed his residency training in surgery at Columbia-Presbyterian Medical Center, New York, in 1965.

As a captain in the U.S. Army Medical Corps from 1965 to 1967, he served in the Department of Experimental Surgery at Walter Reed Army Institute for Research, and as chief of the U.S. Army Surgical Research Team in Vietnam.

He presently serves on the editorial boards of three prestigious journals in the field of surgery as well as major committees including the expert panel on review of blood and blood products of the U.S. Food and Drug Administration, and as chairman of the Pre- and Postoperative Care Committee of the American College of Surgeons.

Collins and his wife, the former Mary Julia Sheil, are the parents of four children.

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Mailed Tuesday, December 28, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Oleg Jardetzky, professor of pharmacology at the Stanford University School of Medicine, has been named recipient of an Alexander von Humboldt Award.

The award of $15,000 recognizes Dr. Jardetzky's pioneering work on the application of nuclear magnetic resonance to the understanding of protein structure and dynamics. It will be presented at a ceremony in Bonn, Germany, February 20, 1977.

Dr. Jardetzky is currently on sabbatical leave at Oxford University. The Stanford laboratory which he directs was among the first to introduce the use of the technique which allows a close-up view of nature.

The method of nuclear magnetic resonance makes it possible for researchers to pinpoint all the atoms in a complex protein molecule. Moreover, it allows them to observe exactly how the atoms move through space and time.

Dr. Felix Bloch of Stanford and Dr. E. Purcell of Harvard first described the phenomenon of nuclear magnetic resonance in 1945.

Dr. Jardetzky is a graduate of Macalester College, St. Paul Minnesota, and holds M.D. and Ph.D. degrees from the University of Minnesota. He has held appointments at the California Institute of Technology, Harvard University, and the Merck Institute for Therapeutic Research.

The Alexander von Humboldt Foundation which made the award was created in 1860 under the Board of Trustees of the Prussian Academy of Science in honor of Naturalist Alexander von Humboldt. Its objective is to encourage international academic cooperation.

The foundation was reconstituted in 1953 under the auspices of the government of the Federal Republic of Germany. Its awards program for senior U.S. scientists was inaugurated in an address at Harvard in 1972 by Willy Brandt, then West German chancellor.

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Mailed Thursday, December 16, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

EDITORS: The Healing Arts is available upon request if not included

STANFORD--Divorced parents involved in disputes over the custody of their children can now be helped by a new service established by the Child Psychiatry Clinic at the Stanford University Medical Center.

Called the Family Law Consultation Service, the new clinic makes recommendations to the courts in difficult custody and domestic legal disputes. It is believed to be the only one of its kind in northern California.

The custody clinic is staffed by a team of psychiatrists, psychologists and social workers who frequently work in consultation with lawyers.

The work of the clinic is detailed in the current issue of The Healing Arts, a publication of Stanford University Medical Center. The issue describes social service activities both at the medical center and in the community.

Social worker Ursula Moore, a member of the team, says, "This is a relatively new approach, because the awareness that this kind of service was necessary has been slow in coming."

She explains, "The intact family used to be thought of as the norm, but with today's high divorce rate that just doesn't exist as often as it used to." And when parents divorce, the children sometimes become the victims of their parents battles with each other.

Team members see the children and each adult involved in the situation. Adults can include parents, grandparents, present or future spouses of the parents, housekeepers, or any other adult who is significant in the children's lives.

The team also observes the present family unit and each potential one in a variety of settings to see how the individuals interact.

Each parent in the dispute must be willing to cooperate with the team to find the best solution to their custody problem, with the children's welfare their ultimate concern.

After careful consideration the team makes recommendations to the courts. But their responsibility doesn't end once their recommendations are made and they will explain their decision to the family.

"We help them understand and accept our reasoning for the sake of their children," Moore explains. "For some people this is sufficient and the battles over the children end."

Other people may require further therapy to help them adjust to the court's decision or to resolve the hurt and anger being directed into the custody dispute.

Moore admits "at times there can be no 'right' decision. The only thing you can do is to help everyone accept 'a' decision and not harm the children any further."

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Mailed Wednesday, December 8, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

EDITORS: Photo available if not included

STANFORD--Dr. Ronald W. Davis, assistant professor of biochemistry at Stanford University School of Medicine, has been awarded an educational and research grant by the Camille and Henry Dreyfus Foundation.

Davis is one of 15 persons selected nationwide for the grants, which total $515,000. The grants are given to young faculty members with proven interest and ability in the fields of biochemistry, chemistry and chemical engineering. Nominees were selected by their own academic institutions.

Earlier this year, Davis, 34, was presented the Eli Lilly Award in Microbiology and Immunology. The Lilly Award is annually presented to an outstanding scientist under 35, and includes a medallion and $1,000.

The Dreyfus grant program was begun in 1969 upon recommendation of an advisory group whose chairman is Frederick E. Terman of Stanford.

A widely-recognized electron microscopist, Davis received a postdoctoral fellowship to Harvard, where he was involved in DNA and virus molecular biology.

In graduate work at California Institute of Technology (CIT), Davis developed the electron microscope heteroduplex method of investigating the sequence of nucleic acids, and analysis which has had significant uses in mapping sequences in DNA molecules.

Davis came to Stanford in 1972 as an assistant professor of biochemistry, where his research emphasis has been on gene manipulation.

Davis earned a B.S. degree in 1964 from Eastern Illinois University and undertook graduate studies at CIT, where he had an NIH (National Institutes of Health) predoctoral traineeship from 1964 to 1970.

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Mailed Wednesday, December 8, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415 497-6911

STANFORD--The quality of surgical care in the nation's hospitals varies to such an extent from one hospital to another that it constitutes an important public health problem.

That is one finding in a continuing national study being conducted by investigators at Stanford University School of Medicine.

The researchers looked at the mortality rates from 15 surgical procedures in 1,224 hospitals. Procedures included cholecystectomy, gastric surgery for ulcer, repair of fractured hip, and amputation.

Their aim was to determine whether hospitals do have different rates of mortality and morbidity after surgery, and what hospital factors influence those rates. In their study they took into account differences in the initial condition of patients and type of surgery performed.

Preliminary findings from a study of 17 of the hospitals also suggest that various hospital characteristics predict differences in morbidity and mortality.

Researchers measured such aspects of hospital organization as the division of labor, variety of services offered, training of personnel, and methods of coordinating activities. Similar measures were used to examine the organization of surgical wards, operating rooms, medical staff and laboratory services.

The project is conducted by the staff of the Stanford Center for Health Care Research, who are members of the departments of anesthesia, sociology, and family, community and preventive medicine. Dr. William H. Forrest, Jr., associate professor of anesthesia, is director of the center.

The study began in 1973 with a grant from the National Academy of Sciences-National Research Council, funded through the National Center for Health Services Research, Department of Health, Education and Welfare.

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222--Hospital Differences Study

Articles in the current issues of the journals Health Services Research, and Inquiry describe the technical designs of the study and initial findings.

These preliminary findings, for example, show that the differences in quality of care may be related to the amount of control exercised by the medical staff over its members at the time hospital privileges are granted.

Another important predictor of quality of care was the proportion of registered nurses involved in direct patient care.

The findings suggest that registered nurses have their impact on quality of care not only through direct patient care efforts, but also through the type of organization they create.

The amount of expenditures by the hospital per patient is also important. Results suggest that the greater the average expenditures per patient, the better the quality of care.

Forrest cautions, however, that data on hospital characteristics are still being analyzed, and results are tentative at this point.

The data do not reveal the identities of the individual hospitals. According to Forrest, "The aim was, and continues to be, not determining which hospitals are best or worst, but rather, what are the factors that influence the quality of care provided."

The Institutional Differences Study (IDS) was done as a follow-up of an incidental finding of the National Halothane Study that its 34 participating hospitals had markedly different overall surgical mortality rates, even after compensating for different surgical loads and patient characteristics.

The Halothane Study was begun in 1963 by the National Research Council to examine the relation between halothane, a commonly used anesthetic agent, and massive liver necrosis.

The IDS consists of two overlapping projects. One studied mortality rates for 14 operations on 314,060 patients in 1,224 hospitals. In the second study, data were specially collected in 17 of these hospitals for 8,593 patients in 15 surgical categories.

The larger survey used data from two sources: per patient data from the Professional Activities Study of the Commission on Professional and Hospital Activities; information on structural characteristics of hospitals is based on the annual survey conducted by the American Hospital Association.

In the 17-hospital study, data were collected on patients' conditions preoperatively, their general health status, and extent of their surgical disease. Patient questionnaires requested information about recent stressful events in their lives, their income level, insurance plans, and other data. Hospital data were obtained by interviews and questionnaires from administrative, nursing, and medical staff throughout the hospital.

As the studies continue, there will be further checks on the reliability of data sources and more complete analysis of hospital differences, the researchers said. Further analyses will be done to determine whether hospitals tend to have higher quality for certain procedures than for others.

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Mailed Monday, December 6, 1976

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 497-6911

STANFORD--Dr. Sophie Alway has been appointed coordinator for Women in Medicine at Stanford University School of Medicine.

Her appointment was announced by Dr. Clayton Rich, vice president for medical affairs and dean of the medical school.

Alway, who will work parttime at the new position, will help women who are working in training programs in the medical school. Currently, about 30 percent of Stanford Medical School's students are women.

Alway said her position is designed to help her "identify problems unique to the women here, to be a resource for information of special interest to women, and to be an advocate for their special concerns."

A 1941 graduate of Yale Medical School, Alway has served as coordinator of the Stanford program in human biology since its inception. She was formerly on the housestaff of the University of Minnesota Hospitals and at the University of Utah Hospital in Salt Lake City, specializing in pediatrics. She was also a pediatrician in the San Mateo County Health Department.

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Mailed Thursday, January 20, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Gary Mecklenburg, associate superintendent of the University of Wisconsin Hospitals, has been named deputy director of Stanford University Hospital and Clinics, effective March 1.

The appointment was announced by Paul B. Hofmann, director of the Hospital and Clinics. The deputy director position had been vacant since Hofmann, who held the post from 1972 to 1974, was appointed to his current position.

Mecklenburg, 30, has been associated with the University of Wisconsin Hospitals in Madison since 1970, serving as associate superintendent since March 1976, assistant superintendent, and administrative assistant.

In 1974 he was recipient of the "Harold M. Coon, M.D. Award of Merit" of the Wisconsin Hospital Association, as Wisconsin's Young Administrator of the Year.

He has served as administrative extern at Presbyterian-St. Luke's Hospital in Chicago, and admitting officer at Central Dupage Hospital in Winfield, Illinois.

A native of Glen Ellyn, Illinois, Mecklenburg received his master's degree in business administration from the University of Chicago in 1970, and his bachelor's degree in anthropology from Northwestern University, 1968.

He and his wife Lynn have two children, ages 2 and 3 years.

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Mailed Tuesday, January 18, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Two public meetings dealing with recombinant DNA technology and its potential benefits and risks have been scheduled at the Stanford University School of Medicine January 31 and February 1.

The meetings are being co-sponsored by the University's administrative panel on recombinant DNA molecules and the Academic Council's committee on research.

The 12-member panel was formed last October to monitor and maintain safeguards for research on recombinant DNA at Stanford. It includes a public representative and an outside expert on biosafety.

Dr. David S. Hogness, professor of biochemistry, will speak at the first meeting January 31 at 8 p.m. in Room M114 of the Medical School. He will focus his remarks on what recombinant DNA research involves and why it is of interest to biomedical investigators.

The meeting, February 1 (same site and time) will be an open forum for interested members of the University and local community. The program will consist of questions and viewpoints on potential benefits and risks associated with the use of recombinant DNA technology.

Those interested in speaking at the February 1 meeting should submit a brief written notification to Anthony J. Sidlow, Department of Health Physics, Encina Hall.

The technique of genetic recombination involves transplantation of genes from one species to another in a form they can be easily studied. It can be done in such a way that the recombined genes can be reproduced in a host bacterium.

By combining genetic material from different species--such as humans and bacteria--new opportunities are provided for studying human genes. For example, recombinant DNA technology may allow production of scarce substances which can be used in treating human diseases.

Since this technology was developed four years ago, scientists have expressed concern about potential dangers associated with it. For example, genes responsible for certain human diseases could be reproduced in an uncontrollable fashion in bacteria.

As a result, scientists involved in recombinant DNA research agreed to place a voluntary moratorium on the research until federal guidelines could be established to insure the safety of research personnel and the public.

Last July the National Institutes of Health (NIH) issued the guidelines based on recommendations submitted by a panel of nationally-recognized scientists in the field, including Dr. Hogness.

Stanford is among many institutions that have adopted these research guidelines involving recombinant DNA molecules.

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Mailed, Tuesday, January 18, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Citing disturbing public trends and federal policies toward medical education, a Stanford committee has recommended steps that would bring Medical School tuition in line with other educational programs of the University.

"It would be wise and defensible to have tuition payment assume a larger portion of the cost of medical education," said the committee in a report released Wednesday, Jan. 19.

The committee on tuition policy of the School of Medicine was headed by Dr. Lewis Aronow, former professor of pharmacology, now in Bethesda, Maryland.

The present tuition in the Medical School, which compares favorably with Harvard, Yale, Columbia, and other schools, is $4,470 per year. It will go up to $4,932 in the fall.

The committee did not set a dollar value for future tuition increases, but made these points:

"The cost of education per medical student at Stanford, estimated from 1972-73 data, ranges between $13,500 and $21,200 per year. Only 14 to 23 percent of the cost is recovered through tuition.

"By comparison University undergraduate programs recover 50% of their costs from tuition."

The remaining 77 to 86% of the Medical School's income comes from federal instructional grants, clinical income, endowment, and gifts.

The gap between revenue and expenses for the Medical School is growing and will continue, the report said. It is clear tuition revenues will materially raise the amount of funds the School needs.

But even that will not be enough, the committee said, because it allows a 1.2% increase in income needed to maintain the quality of medical education offered at Stanford.

Tuition increases may have to be coupled with other methods of fiscal management to meet the School's goals. Included are reinvestment of savings, increased professional income, and reduction in expenses.

The committee expressed concern that tuition increases in the future might restrict medical education at Stanford to children of the wealthy.

To offset this, the present policy which promises all admitted medical school applicants financial assistance to see them through their careers at Stanford should continue, the report said.

The committee set four constraints for determining future tuition increases:

* timing and magnitude of the increase should not have a major effect on currently enrolled students.
* the increase should not be so great as to lessen Stanford's competitive position for high quality applicants.

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tuition 2-2-2

* as tuition rises there should be commensurate efforts to increase scholarship funds and loans.

* to the extent that outside funding is still available, it may be possible to slow down the pace of tuition increases.

The committee questioned whether the Medical School should comply with recent regulations which set forth conditions for federal educational support.

One of these requires medical schools to set aside a percentage of residencies in primary care. Another involves persuading a certain number of admitted applicants to agree to practice in the National Health Service Corps in underserved areas in exchange for scholarships.

"Coercion of the student body to make premature professional judgments was undesirable," the committee said. "And the School does not want to be put in a position of restricting admission to applicants willing to make such commitments."

The report added, "Stanford's reputation is for high quality research and patient care and for the production of specialists.

"An emphasis on primary care may be inappropriate and would change drastically the type of student Stanford attracts and the nature of facilities, faculty, and curriculum. Even in the context of a need for primary care physicians, the need for specialists will continue to exist."

If Stanford rejects these federal constraints, tuition should compensate for lost government instructional grants, the committee said.

The committee also recommended that:

* Graduate students working for the M.S. and Ph.D. degrees in the Medical School should continue to pay tuition levels set by the University's Graduate Division.

* Attention should be paid to developing a more cost-conscious approach to medical education.

* A plan for deferred tuition payments should be developed.

The report commented that physicians were among the highest paid professionals. "In light of this, taxpayers are becoming unwilling to subsidize medical students, feeling they should be able to borrow against their high future earnings."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder or Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Assembling a geometric puzzle can exert greater stress on the heart than either a personal interview or watching a videotape of erotic or traumatic scenes.

This is the conclusion of a study conducted by the cardiology rehabilitation program of the Stanford University School of Medicine.

Dr. Robert F. DeBusk, director of the program, and Dr. Margot McNeil, program psychologist, in a study prepared for publication this month, tested the effect of three presumably stressful stimuli on the heart rate and blood pressure of 20 patients six to seven weeks after they had suffered heart attacks.

The stimuli included interviews which probed issues such as sex, job, and reaction to the attacks, time-pressured attempts to assemble a geometric puzzle, and videotape viewings of erotic and traumatic scenes.

The tests were arranged in sequence and separated by periods of relaxation exercises.

No matter what the order of the stimuli in the sequence, said McNeil, the puzzle elicited the greatest increase in heart rate and blood pressure, followed by the interview. The videotape viewing had little effect. The relaxation exercises resulted in a decrease in the heart rate and blood pressure below the values recorded before the sequence was initiated, she said.

Puzzle assembly induces stress, said McNeil, because it is a self-imposed, self-competitive activity similar to the kind of pressure found at work.

The stressful element of the interview may be the patient-therapist interaction it involves. "This particular group (of patients) is very sensitive to social interactions and other people's expectations of them," she said.

Videotape viewing did not seem to affect the patients even when it depicted individuals having a heart attack. This may be because many patients deny that they've even had an attack, said McNeil, and therefore do not apply the viewing to themselves.

McNeil said that the project was one of the few which attempts to correlate psychological stress factors with physiological effects in heart disease. "We are interested in rehabilitation in the total sense of word," she said.

She said that the testing will enable the program to evaluate patients for their psychological readiness to go back to work. It gives them "a personal prescription" of how much stress they can take, she said.

Teaching patients body awareness and relaxation provides them with techniques to help them adapt to the situations which cause excessive heart rates, said McNeil.

"We suggest that instead of the ten-minute coffee break they take a ten-minute relaxation break," she said.

McNeil intends to expand the project to include follow-up studies of patients who have gone back to work.

The study was supported by the National Heart and Lung Institute, and by the George Frederick Jewett Foundation of St. Paul, Minnesota.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Harriet Baumgarten, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. John J. Conley, an internationally known specialist in cancer of the head and neck, will be the first annual George Kiperash Visiting Professor at Stanford School of Medicine, January 20.

Dr. Willard E. Fee, Jr., assistant professor of surgery at Stanford, says the professorship was established by Mr. Kiperash "to bring a national or international figure to the area for continuing education purposes and to enhance residency training at Stanford."

Dr. Conley is clinical professor of otolaryngology at Columbia University's College of Physicians and Surgeons. He is chief of the head and neck departments at Columbia-Presbyterian Medical Center, St. Vincent's Hospital, and the Pack Medical Foundation, all in New York. In addition, he serves in an advisory capacity to numerous hospitals in the New York area.

Conley will lecture on "Malignant Neoplasms of Salivary Gland Origin" in the Forum Room of the J. Henry Meyer Memorial Library on the Stanford campus, Thursday, Jan. 20, at 8 p.m.

Mr. Kiperash, a former Stanford patient, is a native of San Jose. He is in the ranching business and is associated with Modern Ice and Cold Storage Company of San Jose. Kiperash and his wife, Thelma, have four children.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--A $40,000 grant to support an attempt to develop a leukemia virus vaccine for mice has been awarded to Stanford University School of Medicine by the San Francisco Foundation.

Dr. Henry S. Kaplan, D'Ambrogio professor of radiology, and his staff will try to modify a virus known to produce lymphomas and leukemias in mice in such a way that it is capable of acting as a vaccine, but without it tumor-inducing potential.

The fact that similar viruses are known to cause leukemias and lymphomas in cats, cattle and subhuman primates has suggested that human leukemias and lymphomas may also be due to a virus belonging to the same family.

This preliminary work with an animal vaccine could provide the basis for the development of a human cancer vaccine, if it is determined that such a virus is also the cause of human leukemia. However, extensive work must be done before a safe and effective cancer virus vaccine can be developed, Dr. Kaplan cautioned.

A pioneer in cancer research, Dr. Kaplan discovered in 1959 that leukemias and lymphomas in mice are actually induced by a latent leukemia-causing virus which is "triggered" into action by X-rays or certain chemicals.

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Mailed Wednesday, January 5, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--The Max C. Fleischmann Foundation has awarded a $1.5 million grant to the Stanford University School of Medicine to support cancer research. The grant was announced by Dr. Clayton Rich, vice-president for medical affairs and dean of the medical school.

The grant will be used to complete and partially equip the third floor of the new Sherman Fairchild Center for the use of two groups involved in cancer research.

The addition to the Fairchild building will provide laboratory space for researchers in immunology and animal virology. The building already houses the Departments of Structural Biology and Neurobiology.

The immunologists, led by Dr. Hugh McDevitt, a pioneer in the investigation of genetic controls of the immune response, will continue to study how the normal immunological mechanisms of the body protect against cancer. They will also determine how modification of these mechanisms can possibly treat or cure cancer.

The animal virologists, part of the Department of Medical Microbiology, study the fundamental aspects of cell behavior. They will particularly look at the actions of viruses which produce diseases in animals, including man.

The potential contributions of these researchers to basic knowledge hold great promise for the prevention and cure of cancer, Dr. Rich said.

The Max C. Fleischmann Foundation has aided in the construction of a solar observatory on the Stanford campus and the Max C. Fleischmann Laboratories and the Laboratories for the study of Cardiovascular Diseases at the medical school.

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Mailed Wednesday, January 5, 1977

STANFORD UNIVERSITY MEDICAL CENTER
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Mailed Wednesday, January 5, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Jack D. Barchas, a pioneer in the study of neurochemical aspects of psychiatry, will be the first holder of the Nancy Friend Pritzker Professorship in Psychiatry and Behavioral Sciences at the Stanford University School of Medicine.

The new endowed chair was established by a generous gift from the Pritzker Foundation of Chicago, announced Dr. Clayton Rich, vice-president for medical affairs and dean of the school.

The gift also will establish the Nancy Pritzker Laboratory of Behavioral Neurochemistry, Dr. Rich said.

Dr. Barchas and his associates are studying the biochemical and pharmacological aspects of depression and schizophrenia.

Nancy Friend Pritzker was a Stanford graduate, Class of 1970. She died in 1972. She was the daughter of Mr. and Mrs. Jay A. Pritzker of Chicago. Well known in the financial and investment fields, the Pritzker family has made notable contributions in support of education. Among these is the Pritzker School of Medicine of the University of Chicago.

Mr. Pritzker is a trustee of the University of Chicago and Michael Reese Hospital, and Mrs. Pritzker is a truestee of Grinnell College.

Dr. Barchas has been on the Stanford faculty since 1966. He was promoted to professor this year. His research has been concerned with chemicals which act as transmitters between nerve cells or as modulators of nerve cell activity.

These compounds, collectively called neuroregulators, are now recognized as being important in normal and abnormal behaviors including severe psychiatric disorders.

Dr. Barchas' work has demonstrated that adrenaline, originally thought to be formed by the adrenal glands, could also be formed in the brain. The work received the A.E. Bennett Award of the Society of Biological Psychiatry.

A native of Los Angeles, Dr. Barchas was educated at Pomona College and holds his medical degree from Yale Medical School. He received internship training at the University of Chicago's Pritzker School of Medicine in 1961.

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Mailed Wednesday, January 5, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--A data bank to be used in the studies of liver disease will be established at Stanford University School of Medicine.

The data bank will be part of an inter-hospital cooperative program for liver studies funded by a three-year, $211,607 grant from the John A. Hartford Foundation of New York. The grant was announced jointly by foundation president Harry B. George and Dr. Clayton Rich, vice president for medical affairs and dean of Stanford Medical School.

Dr. Peter B. Gregory, assistant professor of medicine (gastroenterology) and project coordinator, said the liver studies will be conducted at Stanford, Santa Clara Valley Medical Center in San Jose and at Veterans Administration Hospital in Palo Alto. Two private physicians will also collaborate on the project.

The "major thrust" of the program is to organize a computer-based data bank for liver disease, Gregory said. Information from patient histories, physical examinations and laboratory tests will be fed into the data bank.

Gregory said the accumulated information will then be used in improving the care of patients with liver ailments and to support specific treatment trials. Acute and chronic hepatitis and cirrhosis are the major liver diseases that will be studied under the grant, Gregory noted.

The grant will also support continued education in the field of liver disease for physicians in training, as well as for practicing community doctors.

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Mailed Thursday, February 24, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
or UCSF Michela Reichman, 666-2557

EDITORS: Story is released jointly with University of California Medical Center in San Francisco.

FOR IMMEDIATE RELEASE

STANFORD –

A prominent Soviet endocrinologist, now serving eight years in a Soviet labor camp, has been invited to lecture at the Stanford University School of Medicine and the University of California Medical Center in San Francisco.

Scientists at both institutions have asked the Soviet government to allow Mikhail Shtern to visit Stanford and UCSF this spring.

The invitation, the scientists said, was issued in the interests of furthering international exchange. The ultimate aim, however, is to win the release of the Soviet Jewish physician.

The letter from Stanford is signed by Dr. Arthur Kornberg, a Nobel Laureate in medicine and professor of biochemistry; and Dr. Daniel D. Federman, an endocrinologist and chairman of the Department of Medicine.

The invitation from UCSF was issued by Drs. Isidore S. Edelman, professor of medicine; Robert Jaffe, chairman of the Department of Obstetrics and Gynecology; and Melvin Grumbach, chairman of the Department of Pediatrics.

Shtern was invited to discuss his research on "Hormonal Mechanisms in Sexual Development in Man."

Letters about Shtern's invitation also have been sent to Dr. Boris Petrovsky, minister of health of the Soviet Union; and Soviet Ambassador in Washington Anatoly Dobrynin.

"We are writing to ask for your help in this matter in the interests of furthering international scientific exchange, a concern which we know you share with us," said the letter to Petrovsky.

Last year the Endocrine Society endorsed a resolution appealing to the Soviet government to release Shtern. "We find future scientific cooperative efforts obstructed by thoughts of Dr. Shtern's continued imprisonment," the resolution said.

In January, 90 concerned scientists, including Nobel Prize winners David Baltimore, Baruch Blumberg, Arthur Kornberg, Joshua Lederberg, Howard Temin, and George Wald signed an advertisement in the *New York Times* appealing for Shtern's release.

Shtern was educated at Vinnitsa Institute in the Ukraine. In 1947 he became head of the Endocrinological Center at Chernovtsi.

In 1974, when he was arrested, Shtern was director at the Vinnitsa Provincial Endocrinological Center.

According to a story in the *San Francisco Chronicle,* last December, Shtern's case attracted considerable attention in the West, when he was sentenced by a Ukrainan court on Dec. 31, 1974, to eight years at hard labor on charges of bribe-taking.

Jewish dissidents, however, said the charges against Shtern had been brought against him because his sons had applied to emigrate to Israel, and some accounts said that he, too, had sought an exit permit.

A book about Shtern entitled, *An Ordinary Trial in the U.S.S.R.,* will soon be published in the U.S., by one of his sons, a physicist who received an exit permit to go to Israel.

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Sent Business Wire 2/18/77.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Bettino 415: 497-6911

STANFORD--Dr. Marcolino G. Candau, former director-general of the World Health Organization (WHO), will speak on "Priorities in International Health" on Monday, February 28, at Stanford University Medical Center.

Dr. Candau's lecture at 4 p.m. in the Sherman Fairchild Auditorium is open to the public.

Candau was elected to the top position at WHO in 1953, and held the post for 20 years, developing strategies of health control now effective in many developing countries.

He is currently a visiting lecturer for the winter quarter at UC Berkeley. His Stanford lecture is sponsored by the Department of Family, Community and Preventive Medicine in the Medical School.

The recipient of many honors, Candau received the Leon Bernard Foundation Medal and Prize in 1974 from WHO for his contributions during that organization's formation.

He is well-known for his work in WHO's collaborative international research program, and for the expansion of environmental health programs.

He was born in Rio de Janeiro, Brazil, and served as assistant director of the Department of Health in the state of Rio de Janeiro. He has been professor of hygiene at the school of medicine there since 1938.

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Mailed Wednesday, February 16, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--A Stanford researcher is looking for people who want to stop smoking and who won't mind if they don't enjoy it.

Dr. Brian Danaher needs healthy men or women who smoke at least a pack of cigarettes a day to participate in a smoking cessation study.

The clinical research will evaluate some techniques, such as smoke aversion, that may be unpleasant to participants. Danaher emphasizes there will also be enjoyable and informative aspects too, such as learning deep muscular relaxation and other skills to maintain nonsmoking.

The program is for people who want to stop smoking entirely, not just reduce the amount of smoking.

Participants should be able to attend five sessions, meeting once a week, each lasting not more than 30 minutes, at Stanford Medical Center.

The sessions will not be large group-sharing experiences, but individual discussions with the program consultant.

Danaher plans lots of homework for those who take part, including audio tapes and workbooks.

The aim of the study is not to test any specific new techniques, he says, but rather to evaluate whether the total program can be put into a format that doctors can use with their own patients.

Most of the techniques are already in use in academic medical centers throughout the country.

"We want to know whether we can develop a set of procedures a doctor can use when his patient asks, 'What should I do to stop smoking?' The doctor or other health professional would maintain close supervision of the patient throughout the program."

The techniques to be used "show promise of being the most effective methods available," says Danaher. They include some smoke aversion, such as smoking at different rates, which may cause some unpleasantness.

Participants will learn how they can breakup old smoking patterns by recognizing their particular situations that lead to smoking. They will develop skills to cope with smoking urges, and substitutes for smoking, such as other activities and exercise, says Danaher.

"We'll talk about how a person's thoughts can influence his smoking: rationalizing, proscrastinating, talking yourself out of particular behaviors, and being nostalgic about smoking."

Persons interested may call Danaher at 497-0323 between 10 a.m. and 4 p.m. Monday through Friday for the next two weeks.

The study is supported by a heart disease prevention fellowship to Danaher from the National Institutes of Health, and additional support from the American Cancer Society.

Participants will be charged an attendance deposit and a nominal fee. ###

Mailed Wednesday, February 16, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT:
Spyros Andreopoulos, 497-6911

EDITORS: Following is a commentary by Dr. Stanley N. Cohen, a molecular geneticist and professor of medicine at the Stanford University School of Medicine. He and his collaborators developed the basic techniques for recombinant DNA research, and in 1973 carried out the first successful gene transplantation experiments. His article is adapted from *Science*, Feb. 18, 1977, and is distributed with permission.

RECOMBINANT DNA: FACT AND FICTION

by Stanley N. Cohen

Almost three years ago I joined with a group of scientific colleagues in publicly calling attention to possible biohazards that might stem from certain kinds of recombinant DNA research. This technique for propagating hereditary material from diverse sources in bacteria was new and relatively simple. We were concerned that experiments involving some genetic combinations that seemed hazardous might be performed before adequate thought had been given to potential risks.

Guidelines already protect laboratory personnel and the general public against hazards associated with the handling of chemicals, radioisotopes, and disease-producing microorganisms. Because of the newness of recombinant DNA techniques, no guidelines were yet available for this research.

During the past two years much fiction has been written about "recombinant DNA research." What are the facts?

First of all "recombinant DNA research" is not a single entity. It is rather a *technique* used for a wide variety of possible experiments. Recombinant DNA techniques, like chemicals on a shelf, are neither good nor bad *per se:* certain experiments using these methods seem likely to be hazardous (just as certain experiments done with chemicals taken from the shelf will be dangerous). There is universal agreement that such recombinant DNA experiments should not be done.

Other experiments, such as taking apart a DNA molecule and using gene stitching techniques to put segments of it back together again, can be done without concern.

And there is the area in between—experiments for which there is no evidence of hazard, but no certainty that there is not a hazard. For these experiments, guidelines have been developed attempting to match a level of containment with a degree of *hypothetical* risk.

This is the single, most misunderstood point in the controversy about recombinant DNA research. Discussion of "risk" in the middle category of experiments relates entirely to hypothetical possibilities. It has nothing to do with expected consequences or even phenomena likely to occur on the basis of what we know. Unfortunately, this speculation has been interpreted as fact.

There is nothing novel about matching a level of containment with a level of anticipated hazard. Containment procedures used for disease-causing bacteria and viruses, toxic substances, and radioisotopes attempt to do this.

However, the measures used in these areas cover known hazards. In developing guidelines for recombinant DNA research we have attempted to protect ourselves against hazards not known to exist. This unprecedented act of caution is so novel that it has been widely misinterpreted as implying the likelihood of danger.

Critics of the research have made much of the fact that even if a particular recombinant DNA molecule shows no evidence of being hazardous now, no one can say for certain that it will not be dangerous some years hence.

(more)

This kind of statement is akin to saying that a vaccine that seems safe today *could* lead to infectious cancer in 20 years, an epidemic caused by a fatal traveler-borne virus *could* devastate the U.S. next month, or a new hybrid plant species *could* become an uncontrollable weed some time hence and destroy the world's food supply.

We have no reason to expect that any of these things will happen, but we are unable to say for certain that they will not happen. Similarly, we are unable to guarantee that efforts to influence the weather, explore space, modify crops, or cure disease will not carry with them the seeds for mankind's destruction.

Can we in fact point to any area of human activity where we can be certain there is no risk? Clearly we can develop plausible "scare scenarios" about virtually any type of research, and these would have as much (or as little) basis in fact as most of the scenarios involving recombinant DNA.

Unfortunately, the public has been led to believe that hazards described in these scenarios are likely outcomes of the research. "If the scientists themselves are concerned enough to raise the issue," goes the argument, "the problem is probably much worse than anyone will admit."

However, the simple fact is: there is no evidence that a bacterium carrying any recombinant DNA molecules poses a hazard beyond what we can predict from the known components of the recombinant. And experiments with gene combinations that pose known hazards are prohibited.

Yet the critics charge, "The time has come for scientists to abandon their long-held belief that they should be free to pursue new knowledge regardless of the consequences."

The fact is, no one has proposed that freedom of inquiry should extend to scientific experiments that endanger public safety. Instead, the history of this issue has been one of self-imposed restraint by scientists from the start, despite the conjectural nature of the risks.

Some critics have argued that construction of recombinant DNA molecules threatens the master plan of evolution. However, there is no reason to think that the evolutionary process is presently delicately controlled by nature.

To the contrary, man has long ago modified evolution, and biological evolution continues to be influenced by man. Primitive man's domestication of animals and cultivation of crops provided an unnatural advantage to some biological species and a perturbation of evolution.

The creation by man of hybrid plants and animals has resulted in the propagation of new forms of life that are not the natural products of evolution. In the microbiological world the use of drugs to treat bacterial infections and the use of mass immunization programs against viral disease have made untenable the claim of delicate evolutionary control.

One well-known critic of recombinant DNA research asks, "Have we the right to counteract irreversibly the evolutionary wisdom of millions of years. . . .?" It is this "evolutionary wisdom" that gave us the gene combinations for bubonic plague, smallpox, yellow fever, typhoid, polio, and cancer.

The acquisition and use of all biological and medical knowledge constitutes an intentional and continuing assault on evolutionary "wisdom." Is this the "warfare against nature" that some critics fear?

How about the benefits? Are they equally speculative or is there some factual basis for expecting them?

In the short space of three and a half years the use of recombinant DNA technology has led to important advances in basic knowledge. Using these techniques, we have begun to learn how genes of complex cells are organized into chromosomes and how gene expression is controlled. With this knowledge we can discover how defects in structure can alter gene function in human disorders such as cancer and diabetes.

On a more practical level, recombinant DNA techniques may enable the construction of bacterial strains that produce biologically important substances such as insulin and other hormones, or antibodies and vaccines to treat presently uncontrollable viral diseases.

We can expect recombinant DNA techniques to revolutionize the production of antibiotics, vitamins, and medically and industrially useful chemicals. And we can anticipate the development of antimicrobial agents that are not inactivated by drug-resistant bacteria.

(more)

Other benefits from this research in the areas of food and energy production are more speculative. However, even in these areas there is a scientific basis for expecting that the benefits will someday be realized.

The limited availability of nitrogen fertilizers and the potential hazards associated with their excessive use presently restricts the yield of certain crops. It would be possible, agricultural experts suggest, to use the techniques of gene transplantation to modify grains and other food crop plants so that they will not require nitrogen fertilizers for growth.

For years scientists have modified their heredity of plants by comparatively primitive techniques. Now there is a means of doing this with greater precision than has been possible previously.

It is ironic that some of the vocal opposition to this research has come from environmentalists. Yet the ability to manipulate microbial genes promises a more effective use of renewable resources for mankind's food and energy needs.

Even if hazards are speculative and the benefits are significant, wouldn't it be better to carry out the research under an added measure of safety? This is exactly what is required by guidelines issued by the National Institutes of Health. Most recombinant DNA experiments must be done under physical containment conditions at least as strict as those used for work with bacteria that cause typhoid fever and Asiatic cholera.

Other experiments require containment facilities of the type designed for the most dangerous natural viruses known.

Such conditions are required for recombinant DNA experiments in which the evidence of danger is nonexistent and the possibility of hazard is remote. Moreover, the use of biologically weakened bacteria reduces even further the chance of propagation of recombinant DNA molecules outside the laboratory.

These containment procedures have made it difficult for the public to appreciate that most hazards under discussion are conjectural. The safety measures are perceived as evidence that dangers from this research are clear-cut and imminent.

However, many billions of bacteria containing a wide variety of recombinant DNA molecules have been propagated in the U.S. and abroad without any known hazard. Most of these experiments were carried out prior to the stringent containment procedures now specified in the federal guidelines.

Nevertheless, one can validly argued that unknown hazards may remain. Conjecture has no limit; the studies that can be done to establish the absence of hazard are finite in number.

The public can reasonably expect a mechanism for dealing responsibly with hazards known to exist or which appear at all likely on the basis of known information. Beyond this, scientists can and should exercise caution in any new research activity.

Today, as in the past, there are those who would like to think that there is freedom from risk in the *status quo*. Yet, even the status quo presents unknown risks, as well as a large collection of known hazards. Humanity continues to be buffeted by ancient and new diseases, and by malnutrition and pollution; recombinant DNA techniques hold the promise of a partial solution to these problems.

We must ask, then, whether we can afford to let preoccupation with hypothetical risks limit our ability to deal with hazards that *do* exist. Let us distinguish vague fear of the unknown from fear that has some basis in fact.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Heinrich Rose, emeritus senior scientist in ophthalmology at Stanford University School of Medicine, has been name recipient of an Alexander von Humboldt Award.

The award recognized Dr. Rose's long career in physiological optics research, particularly the effects of visible light and laser radiation on the eye.

In conjunction with the award, Dr. Rose spent the past eight months in research at the University Eye Clinic, Essen, Germany.

The foundation which made the award is operated under the auspices of the government of the Federal Republic of Germany, and was created to honor naturalist Alexander von Humboldt. Its objective is to encourage international academic cooperation.

Dr. Rose received his M.D. from the University of Munich in 1933. He trained in ophthalmology, was a practicing ophthalmologist, and involved in optics research applied to aviation medicine with the German Air Force.

He was a researcher for the U.S. Air Force from 1945 to 1959, and has been associated with Stanford since 1961. He has been on the fulltime staff since 1966.

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Mailed Monday, February 14, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder or Spyros Andreopoulos 415: 497-6911

STANFORD--Men whose mothers took stilbestrol, a synthetic form of estrogen, during their pregnancy are being sought by Stanford University urologists for a study of the relationship between exposure to the hormone and the development of abnormalities in the reproductive system.

Drs. Robert Andonian and Robert Kessler of the Division of Urology at the Stanford University School of Medicine are conducting the study. Men who know they were exposed to the hormone while their mother was pregnant should contact the division concerning a free evaluation.

According to the physicians, a recent NIH-supported study at the University of Chicago found that genital abnormalities and pathological semen quality occur with a greater incidence in exposed males as compared to unexposed controls.

Twenty-six percent of the exposed males had genital abnormalities such as cysts in the area at the back of the testes, and underdeveloped testes compared to six percent of the controls.

The average value of the sperm count was about two times lower in the exposed group.

Severely pathological semen quality, determined on the basis of sperm count, motility of sperm, and physical abnormalities, occurred in twenty-eight percent of the exposed males, but not in any of the controls.

The combination of genital abnormalities and pathological semen quality was observed only in the exposed group.

No cancer was discovered in any of the males examined.

Until now abnormalities were thought to occur only in women who had been exposed in the uterus to stilbestrol.

Stilbestrol was administered in the early 1950's to prevent or decrease complications during pregnancy, and to correct deficiencies in the production of hormones by the placenta.

However, subsequent studies found that stilbestrol did not reduce the incidence of miscarriage, premature or postmature birth, or perinatal death (occurring at birth), and its use was discontinued.

In 1971, physicians at the Massachusetts General Hospital found a rare form of vaginal cancer in seven women whose mothers had taken stilbestrol during their pregnancy.

In a similar nationwide study in which Stanford has participated, 300 cases of the clear cell type carcinoma of the vagina have been reported. Two thirds of the women with cancer who had prenatal records had been exposed to stilbestrol in the uterus.

At Stanford, Dr. Eugene Sandberg, associate professor of gynecology and obstetrics, and his colleagues examined 499 exposed women. Two thirds of them "have some very minor anatomical variations of the cervix and vagina, benign 'badges' of stilbestrol exposure," he said.

None, however, had developed cancer. ###

Mailed Monday, February 14, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415-497-6911

STANFORD--New governing bylaws which clarify the authority of Stanford University Hospital's board of directors and the president of the University have been adopted by the Stanford University Board of Trustees.

The trustees took the action in their capacity as the general members of the non-profit hospital corporation.

The revisions, many of which were required by the Joint Commission on Accreditation of Hospitals and regulations of the State Department of Health, will not alter the present policies of the hospital, but they delineate the duties and responsibilities of the two governing bodies, said Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

The president of the university through his appointed chief executive officer will be responsible chiefly for the operation and management of the hospital.

The nine-member board of hospital directors will have authority over medical staff membership, and will advise the president through his designate, and the board of trustees on planning matters, budget, rates, and needs of the hospital.

The hospital board, as in the past, will be appointed by the general members and will continue to include at least three persons who are residents of Palo Alto and not employees of the hospital or the university.

Stanford University has a 40-year contract with the city of Palo Alto which gives priority for use of 370 beds in the 618-bed hospital to Palo Alto patients of community physicians.

None of the provisions of this contract are affected by the new bylaws, Rich said.

The medical staff will be self-governing with respect to the professional work performed in the hospital. Its bylaws and organization will be subject to hospital board approval, as required by law.

The hospital board will also hear appeals by members of the community staff when disputes regarding staff privileges and performance arise.

A joint committee of community and faculty physicians is currently drafting new bylaws for the medical staff, according to Rich.

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Mailed Friday, February 14, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT Barbara Battino 415 497-6911

STANFORD--A specific imported herbal medicine pill may cause lead poisoning according to doctors at Stanford University Hospital.

Persons taking Chrysanthemum-brand "Rheumatism Pills" and who have symptoms of lead poisoning, should contact their physician for examination and laboratory tests.

Drs. Johnson B. Lightfoote and H. Joseph Blair treated one patient recently for lead poisioning apparently caused by the pills. The patient, the only reported case of illness from the pills, is now recovering satisfactorily at home.

The "Rheumatism Pills," imported from Hong Kong, are sold in a box bearing a yellow and red label in Chinese. They are brick red, spherical, about 4 millimeters in diameter, about the size and shape of a pea.

Symptoms of lead poisoning, according to the doctors, include constipation, abdominal pain, muscle aches and weakness. Anemia and elevated levels of lead in the blood and urine are found in laboratory tests.

The pills are apparently taken as treatment for joint and muscle pains.

They contain 0.2 to 0.5 milligrams of lead per pill. The patient treated at Stanford had been directed to take 30 pills per day, and was receiving about 12 mg of lead per day Toxic accumulation can occur at an intake of less than 1 mg per day, say the doctors.

The San Francisco herbalist dispensing the pills was unaware of their lead content, according to John Rynd, director of investigations at the San Francisco district office of the Food and Drug Administration. FDA officials say the herbalist has contacted his patients who may have the pills.

Both the San Francisco Department of Public Health and the FDA have contacted herbalists and others in the Bay area who are most likely to have the pills, and report they have not found any.

In addition, the Hong Kong manufacturer is being advised of the problem, and all herbal medicines being imported will routinely be analyzed for lead content, according to the FDA.

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Thursday, February 10, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Dr. Barry G.W. Arnason, professor and chairman of the Department of Neurology at Pritzker School of Medicine, University of Chicago, will present the first George A. Zimmermann Lecture on Feb. 11 at Stanford University School of Medicine.

Arnason will speak on "Immunological Aspects of Multiple Sclerosis." The lecture will begin at 5 p.m. in Room M-106 of the medical school and physicians and other health professionals in the community are invited to attend.

Arnason is widely recognized for his immunological studies of several neurological diseases, including M.S. Prior to assuming the chairmanship of the University of Chicago's Neurology Department last year, Arnason was associate professor of neurology (1971-76) at Harvard Medical School. He received his M.D. from the University of Manitoba in 1957.

The lectureship, which will be held annually, was established by the Stanford Neurology Department. It is part of a $500,000 gift by the late George A. Zimmermann for multiple sclerosis research and treatment at Stanford.

A longtime San Francisco businessman, Zimmermann died in late 1974. He bequeathed virtually all of his estate to various charities and for medical research.

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Mailed Friday, February 7, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. James Dewey Watson, Nobel laureate and codiscoverer of the double helical structure of genetic material (DNA), is visiting professor at Stanford University School of Medicine during the Winter quarter.

Watson is professor of biology at Harvard University, and director of the Cold Spring Harbor Laboratory.

At Stanford he is delivering a series of lectures for graduate students on "The Transformed Cell," dealing with the nature of cancer cells.

Watson received the 1962 Nobel Prize in medicine with Britishers F.H.C. Crick and M.H.F. Wilkins, for discoveries concerning the molecular structure of nucleic acids and how genetic information is replicated.

He is the author of "The Double Helix" in 1968, and the text, "Molecular Biology of the Gene" now in its third edition. Watson holds the Eli Lilly Award in biochemistry, 1959, the Albert Lasker Prize, 1960, and the John J. Carty Gold Medal from the National Academy of Sciences, 1971, among others.

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Mailed Thursday, February 3, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder or Spyros Andreopoulos 415: 497-6911

STANFORD –

The recently issued guidelines by the National Institutes of Health are not adequate to ensure the safety of recombinant DNA research.

This was the general consensus of a group of scientists and community members from across the country who presented their views on recombinant DNA Tuesday night, Feb. 1, in the Fairchild Auditorium of the Stanford University School of Medicine.

Nearly 500 people attended the forum, which was sponsored by the University's panel on recombinant DNA and the Academic Council's Committee on Research.

The purpose of the meeting was to discuss the risks involved in the controversial research that combines genes from different organisms in order to study heredity, and to allow the public to take its own look at the potential benefits and possible harm from the genetic research.

Dr. Richard Goldstein, a Harvard microbiologist, said that the guidelines cannot guarantee containment of genetically modified bacteria in the laboratory.

In most experiments, the guidelines specify the use of a weakened K2 strain of *E. coli* bacteria, which is "highly unlikely to survive out of the laboratory or to exchange DNA with other cells," said Dr. Paul Berg, professor of biochemistry at the Medical School.

But, according to Goldstein, the addition of genes from other organisms may confer on the *E. coli* the ability to survive.

"Literally tens of thousands of genes which have never been studied before are being put into *E. coli*. There's no predictability there, and that's the dilemma," he said.

Even if the enfeebled bacteria are unable to survive in the normal human, they may be able to infect people whose resistance is low.

"*E. coli* infections are increasing at a steady rate today in enfeebled hosts, such as the elderly, those with chronic disease, or those who have been treated with drugs which diminish the immune response," said Dr. Halsted Holman, professor of medicine.

He called attention to the danger of conducting recombinant DNA research close to hospitals. He said workers involved in recombination studies "walk through the wards everyday where those compromised patients are.

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"Certain elements of prudence dictate that we ought to take a look at" the juxtaposition of low-immunity populations to recombinant DNA research.

Dr. Henry Levin, an economics professor in the School of Education, questioned whether physical containment specified under the guidelines is adequate.

Quoting from an article in *Science,* he said, "the incidence of laboratory-acquired infections was 5,000 in the last 40 years in laboratories with special containment facilities."

Berg argued the guidelines assign recombination experiments to various degrees of physical containment depending on the potential risks involved.

"Certain experiments, like the introduction of botulins or diphtheria toxin from virus into bacteria, are prohibited and can't be done anywhere in this country," he said.

Experiments between species not known to exchange DNA must be done under stringent conditions, he said. Laboratories must have double-door entrances, negative air pressure, and special air filtration devices.

For experiments between species which naturally exchange DNA, or "for which there is virtually no risk," less stringent conditions are required, Berg said.

Other speakers criticized the guidelines because they did not regulate research done by industry.

Dr. Leslie Grimm, a Mountain View biologist, expressed concern about commercialization in the area of recombinant DNA research before all the facts are known about its dangers.

"There are six major drug companies actively involved in this field," she said. "Applications for patents in technology development are pending. One biochemist has formed his own company to exploit the procedure commercially."

"The pharmaceutical industry is a highly profit-oriented and competitive one," said Mark Noble, a Stanford predoctoral student in genetics.

"I don't think they're going to follow the guidelines without being required by federal regulation," he said.

Holman said it was improper that Stanford and the University of California had filed application to patent the recombinant DNA procedure. "We cannot be credible as an institution if we stand to profit by the research," he said.

Some of the speakers thought the scientists should be responsible for the consequences of their findings.

But William F. Massy, vice-provost for research, said that consequences are becoming more difficult to see, because the complexity of the studies is increasing.

(more)

"We have tended to find that it simply doesn't work very well to try to predict all the things that could be done with the discovery," he said.

Attempts to classify all the possible ills and then use it as a justification to burn books will not further the cause of mankind, he said.

"That's a totally irresponsible position," remarked Mark Lappe of the state Department of Health.

"The fact of the matter is we now know how perfectly innocent quests for knowledge" can be used in harmful ways, he said.

Most of the speakers believed that more input from the public was needed for regulation.

David Thom, a member of the Stanford Alliance for Radical Change, said, "The control of recombinant DNA research is far too important to leave in the hands of an elite group of people who stand to profit from it."

"I simply do not trust the Harvards or the MITs or the Stanfords to police their own," said David Clem, a member of the Cambridge, Massachusetts, city council.

Clem said the NIH guidelines represented a conflict of interest. "An agency charged with promulgating research cannot be charged with regulating that research," he said.

He used Cambridge as an example of active participation by the public. The citizen's board was set up by Mayor Alfred E. Velucci to review recombinant DNA research conducted at Harvard and MIT.

"Don't shut the door on involving the public in a meaningful way," he said. "They are up to it."

Most speakers advocated a slowdown in research until the consequences and hazards can be more accurately assessed.

But according to Berg, the slow down has already begun.

"The guidelines seriously impede the progress of research. There are important experiments which can't be done today because of the guidelines."

He said that in the recombinant DNA matter scientists demonstrated they could provide the early warning system for alerting society to the potential benefits and risks of their discoveries. Accusations of self-interest, arrogance or even manevolance do little to encourage further efforts of that kind.

"I think it's reasonable to wonder if we haven't already squelched the concerned scientists of tomorrow," he said.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

The likelihood of a hazardous accident occurring because of genetic manipulation research is as remote as the chance of being struck by lightning, a Stanford biochemist says.

Dr. David Hogness told an audience of more than 700 at Stanford School of Medicine Monday night, Jan. 31, that potential longterm benefits from such research may outweigh any possible dangers associated with it.

The public meeting was one of two cosponsored by the University's administrative panel on recombinant DNA and the Academic Councils committee on research, dealing with the potential benefits and risks of the technology.

Hogness is professor of biochemistry at Stanford, and helped to draw up guidelines for research with hybrid or recombinant molecules. The technique, developed in the last few years, permits scientists to join together genetic material (DNA) from bacterial and animal cells or viral sources in the laboratory.

Hogness said fears that some of the new kinds of molecules could escape accidentally and become established in the population, with unknown effects, are imagined fears and not based on facts.

"There is no data to demostrate that these random colonies (carrying recombined genetic material) have ever hurt anyone.

"Hundreds of thousands of clones, or recombinant molecules, have been handled in laboratories in the U.S., in Switzerland and in the USSR in the last three and a half years," he said, "and no one has been hurt."

An epidemic of drug-resistant bacterial strains in humans, said Hogness, is highly unlikely, since in most cases the new hybrids cannot compete with original strains occurring in nature, and would die outside the laboratory environment.

In addition, containment conditions in laboratories doing such work are extraordinarily tight, said the biochemist. Researchers must work under conditions similar to hospital laboratories dealing with infectious diseases like diphtheria.

Studies that call for inserting human DNA into bacterial strains are not possible now, he says, because the necessary containment facilities are not available. It is not likely that one could be built for at least two years, he indicated.

Hogness said the potential benefits for human health problems from such research could be "remarkable." He listed one such "nonspeculative benefit" would be the development of bacterial strains to supply medically useful materials, such as insulin. The technology for such a "straight-forward experiment," he said, is available now, though the process would take two to three years.

The technique of joining together genetic material from different sources, says Hogness, allows scientists for the first time to isolate segments containing a small number of genes. Investigators can then map where particular genes are located on chromosomes.

What can we learn from an isolated gene? "We have an enormous ignorance about how genes are regulated in higher organisms—how different ones are turned on and off.

"Many human diseases occur because of breakdowns in genetic regulation, such as in cancer, where cells no longer operate under normal processes of control. To fix such breakdowns, said Hogness, scientists must first understand the basic framework and what needs to be "fixed."

The meeting at 8 p.m. Tuesday, Feb. 1, in the Fairchild Auditorium, will feature a forum of speakers, including David Clem, city councilman from Cambridge, Mass., Dr. Richard Goldstein, Harvard microbiologist, and Dr. Halsted Holman of Stanford's department of medicine. Also scheduled to speak are Dr. Henry Levin, a psychologist, and Dr. Jack Frumin, a Stanford clinical professor.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia 233/5

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Richard Lamerton, an advocate of the hospice concept of health care for the terminally ill, will present a public lecture Monday, April 4, at Stanford University School of Medicine.

Lamerton, who serves as director of studies at St. Joseph's Hospice and clinical assistant at St. Christopher's Hospice, both in London, will talk on "Hospice—Care of the Dying." His address will begin at 8 p.m. in the Sherman Fairchild Auditorium.

Hospice is a term revived from the Middle Ages which refers to facilities that provide spiritual, emotional and physical support for the sick and dying.

Lamerton, whose research has centered on pain relief, will speak on alternatives to hospital treatment and what patients in a hospice setting can expect as part of their care.

A medical graduate of St. Bartholomew's Hospital in London, Lamerton served as a family physician before joining St. Joseph's. He is chairman of the Human Rights Society of England and is author of the book *Care of the Dying* and coeditor of *The Hour of Our Death* with Dr. Sylvia Lack, who is medical officer to Hospice Inc. of Connecticut.

Lamerton previously lectured in the Bay Area in 1975 and again last year at hospitals, medical centers, and other medical and religious facilities.

"The hospice concept seems to be a reaction to the dehumanization of some areas of medicine," noted Dr. Count D. Gibson Jr., professor and chairman of the Department of Family, Community, and Preventive Medicine at Stanford. "It is an institution and organization committed to the support of the dying."

Gibson said there is a growing national interest in the hospice concept. "Lamerton will present a sharp challenge to some ideas of regular medical care," he added.

Lamerton will answer questions from the audience at the end of his address.

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3/29/77 cr

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--New administrative changes at the Stanford University Medical Center were announced Monday, March 28, by Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine.

John J. Schwartz, assistant vice-president and counsel for medical affairs, has been promoted to associate vice-president.

Peter J. Levin, an associate commissioner in the Department of Health, New York City, has been appointed associate vice-president for medical affairs.

The two changes, according to Dr. Rich, represent a realignment of duties previously held by Peter Carpenter and Schwartz who in his new position will take up additional responsibilities.

Carpenter, executive director of the Center, resigned last fall to become a vice-president of Alza Corporation in Palo Alto.

Rich said that Levin's responsibilities will be concentrated mainly on the Stanford University Hospital and Clinics and on administrative services that mainly support the hospital. Among administrators reporting to Levin will include the directors of the hospital, finance, and facilities.

Schwartz will be responsible for general nonacademic administration, including the office of personnel, legal affairs, and a new office of government relations.

Levin is a 38-year-old Harvard graduate, with a masters degree in public health from Yale University, and a doctor of science (medical care and hospitals) from the Johns Hopkins School of Hygiene and Public Health.

Before becoming associate health commissioner in New York, he served as executive director of New Haven Health Care, Inc., and acting executive director of the Bronx Municipal Hospital Center, New York.

He held positions in the Department of Health and Mental Hygiene in the state of Maryland, and was administrator of the Public Health Service Indian Hospital at Blackfeet Reservation, Browing, Montana.

In addition, Levin taught at Albert Einstein College of Medicine, New York University, and Yale.

Levin will assume his duties at Stanford April 27.

Schwartz, formerly a special assistant to Stanford University President Richard W. Lyman, was appointed counsel for medical affairs at the Medical Center in 1973, and to assistant vice-president for medical affairs in 1975.

A graduate of Cornell University, he received his law degree from Harvard in 1958 and obtained a Ph.D. in physics from the University of Rochester in 1965.

He practiced law in Phoenix, Arizona and taught physics at the University of Rochester before coming to Stanford in 1969 as assistant professor of physics. He was admitted to the California State Bar in December, 1974.

Mailed Monday, March 28, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--Dr. Arthur J. Atkinson, Jr., a noted clinical pharmacologist, will be the William N. Creasy Visiting Professor of Clinical Pharmacology at Stanford University School of Medicine during the week of March 28, 1977.

Atkinson will present the Creasy Memorial Lecture on the use of drugs for cardiac arrythmias at 8:30 p.m. on Thursday, March 31 in Room M-106 of the medical school. The title of his talk is "N-acetylprocainamide: Impact of an Active Metabolite on Procainamide Therapy."

The remainder of Atkinson's five days at Stanford will include medical rounds with professors nd the hospital's house staff, research and case conferences, and seminars at Stanford as well as at the Palo Alto Veteran's Administration Hospital.

Atkinson is associate professor of medicine and pharmacology and director of the clinical pharmacology unit at Northwestern University Medical School. His research has centered on antiarrythmic and anticonvulsant drugs with a particular interest in drug metabolism and the development of new methods to study drugs.

The Creasy professorship is sponsored by the Burroughs Wellcome Fund. Creasy, a graduate pharmacist who died in 1974, was President and Chairman of the Board of Burroughs Wellcome and Company for 23 years from 1945-1968. The program was established to further his goals for the advancement of clinical pharmacology as a discipline.

Dr. Clayton Rich, dean of the medical school, expects the visiting professorship "to provide a much wider recognition of the role of clinical pharmacology in medical teaching and practice at our school."

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Mailed Thursday, March 24, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

ADVANCE FOR RELEASE AFTER 11 A.M. TUESDAY, MARCH 22, IN CONJUNCTION WITH DR. DANAHER'S TESTIMONY.

LOS ANGELES –

A new program to help pregnant women stop smoking was described Tuesday, March 22, by a Stanford researcher in testimony before the American Cancer Society's National Commission on Smoking and Public Policy.

Hearings were held in the Federal Building in Los Angeles, the first of eight to be held across the country. Their aim is to collect ideas for a future nationwide antismoking program.

In his testimony, Dr. Brian Danaher, director of the Stanford program, called attention to studies associating maternal smoking during pregnancy with reduced birth weight and increased chance of infant mortality.

"Simply, the greater the number of cigarettes smoked, the more significant the infant weight reduction," he said.

"Smoking has been shown to produce a clear and lethal byproduct when it occurs during pregnancy. . .the transmission of toxic components to the fetus, a disturbance of vitamin metabolism, and possibly reducing oxygen available to the fetus."

Research literature, he said, shows that pregnant women who are able to stop smoking in their first trimester (before the fourth month) have no more risk to their child than if they never smoked before.

In the Stanford program, women will be scheduled to begin treatment preferably before their fourth month of pregnancy. Groups of eight to 12 women will participate in discussion sessions to learn skills to stop smoking. The treatment will last six weeks. Each participant will return for follow-up maintenance sessions after the birth of her child.

The program brings together several behavior modification procedures used in other smoking cessation classes. This will be the first time in this country that the comprehensive program has been offered to pregnant women smokers, according to Danaher.

The treatment consists of initially getting the participant to stop smoking by increasing her sensitivity to unpleasant aspects of the habit.

Once cessation is achieved, says Danaher, participants will focus on developing self-control skills to deal with lingering smoking urges. These skills include deep muscular relaxation, used as a substitute for smoking and as a means of coping with stress.

Participants will keep diaries and learn how to change their daily routines to reduce their smoking urges. Other strategies are included in a workbook and audio cassette tapes for home use.

Danaher was optimistic that pregnant women could be successful in stopping smoking, since "they are already prone to making substantial everyday changes in their habits, and there is an increased concern with matters of health."

He called attention to the steadily increasing numbers of women smokers of childbearing age. American Cancer Society figures show that the percentage of heavy smokers (at least one pack per day) among young women under 35 increased from 20 to 22 percent since 1969. Teenage girl smokers increased from 22 to 25 percent, with heavy smokers up from 2.2 to 10.8 percent. "This increase in heavy smoking in teenage girls who may bear children seems particularly ominous," he said.

Danaher noted that expectant mothers interested in participating in the Stanford study may call him at 497-0323.

END ADVANCE FOR RELEASE AFTER 11 A.M. TUESDAY, MARCH 22, IN CONJUNCTION WITH DR. DANAHER'S TESTIMONY.

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3/21/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Terrence F. Blaschke of Stanford University has been named recipient of the 1977 Burroughs Wellcome Scholar Award in Clinical Pharmacology.

The $175,000 award for five years from The Burroughs Wellcome Fund to Dr. Blaschke and the Stanford University School of Medicine was announced by Dr. George Hitchings, president of the Fund, and Dr. Clayton Rich, vice-president for medical affairs and dean of the school.

The award, one of two given by the Fund for 1977, will support teaching and research in the Division of Clinical Pharmacology at Stanford. The other recipient of a clinical pharmacology award is Dr. Russell L. Miller of Howard University College of Medicine.

The Fund, headquartered at Research Triangle Park in North Carolina, is a nonprofit organization established by Burroughs Wellcome & Co., pharmaceutical manufacturer. The Fund has distributed more than $6 million since 1959 for the advancement of medical knowledge, research, and other scientific and scholarly purposes.

Dr. Blaschke, a 34-year-old assistant professor of medicine, is the second Stanford faculty member to receive the scholar award. The first was Dr. Stanley N. Cohen, professor of medicine, who founded the Division of Clinical Pharmacology.

Dr. Blaschke is a graduate of the University of Denver, and received his medical degree from Columbia University College of Physicians and Surgeons in 1968. He received residency training in internal medicine at UCLA Center for the Health Sciences in Los Angeles, and has served as clinical associate in the metabolism branch of the National Cancer Institute in Bethesda, Maryland.

From 1972 through 1974 he was an NIH postdoctoral trainee in the division of clinical pharmacology at the University of California Medical Center in San Francisco.

At Stanford, Dr. Blaschke has been investigating the mechanisms and significance of certain drug interactions, and the effect of liver diseases on the disposition of drugs eliminated by the liver.

In addition, he supervises Stanford medical students electing clerkships in clinical pharmacology, and teaches medical students and postdoctoral fellows.

The goals of the Division of Clinical Pharmacology over the next five years is to stregthen its involvement in the areas of patient consultation and medical student and house staff education, and to increase its role in the training of physicians for careers in clinical pharmacology, according to Dr. Cohen, head of the division. ###

Mailed Monday, March 21, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Emile F. Holman, a professor of surgery emeritus whose distinguished career at Stanford University had spanned nearly 50 years, died Saturday, March 19, at 86.

Dr. Holman, a San Francisco resident, passed away at Children's Hospital.

The son of a minister, Dr. Holman received his A.B. from Stanford in 1911. His academic career was full of promise and his potentialities were recognized by David Starr Jordan, then Stanford president, who selected him as his secretary.

He accompanied President Jordan on his peace mission through the Balkans in 1914, and at the end of that year he became a Rhodes Scholar and studied at Oxford University until 1917.

At Oxford, Dr. Holman came under the instruction of some of the greatest men of medicine of the day, including such notables as Charles Sherrington and Sir William Osler.

Osler wrote in a letter recommending Dr. Holman for admission to the Johns Hopkins Medical School: "He is an A-1 student and will be a great credit to the School. I don't think there is any doubt that he will have done enough work to warrant admission to the fourth year."

Dr. Holman graduated from the Johns Hopkins Medical School in 1918. He then became assistant in surgery in the Surgical Hunterian Laboratory, the research laboratory of the noted physician, W.S. Halsted.

By 1922, when Halsted died, Dr. Holman knew he wanted to enter academic medicine. He took additional training at The Peter Bent Brigham Hospital in Boston under Dr. Harvey Cushing, then worked for a period with Dr. Elliot Cutler at Western Reserve University in Cleveland.

In 1925 he returned to Stanford as associate professor to become professor of surgery and chairman of the department in 1926, a position he held until his retirement from the faculty in 1955.

Dr. Holman liked to explore novel ideas in the laboratory, and he was known as the predominant authority on arteriovenous fistulas, research which won him the coveted Gross prize in surgery in 1930. In 1972 he was honored by the International Congress of the Transplantation Society for his pioneering work in the field of skin grafting and graft rejection.

In addition, he contributed to the development of the surgical treatment of "blue babies" and was the first to perform the delicate operation on the West Coast.

In 1952 Dr. Holman received the Rudolph Matas Award in Vascular Surgery, generally regarded as the world's highest recognition for surgery of the heart and blood vessels. He authored three books, contributed to others, and published 187 articles in medical journals.

At Stanford, Dr. Holman was honored by having an endowed professorship named after him. The Emile Holman Professorship of Surgery was established in 1972 by a bequest from the estate of Deane and Louise Dart Mitchell, lifelong friends of Dr. Holman.

Dr. Holman is survived by his wife, Dr. Ann Peril Purdy, clinical professor of pediatrics emeritus at Stanford; three sons, David, Halsted and Shawn Holman, and nine grandchildren.

In accordance with his wishes, there will be no funeral service. His ashes will be scattered at sea.

The family has requested the memorial donations be sent to the Department of Surgery, Stanford University School of Medicine.

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3/21/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Guidance counselors from 38 high schools and community colleges on the San Francisco Peninsula are expected to attend Stanford University Medical Center's first Health Careers Day Friday, March 25.

The day-long program in the new Sherman Fairchild Auditorium will include presentations by medical-health professionals at the medical center and information booths on health careers.

According to Larry Esquibel, associate director for medical center personnel, the event is designed to inform counselors of the most recent developments in the health careers field and to provide them with the opportunity to meet professionals working in the field. This interchange, Esquibel noted, will help counselors in their advice and assistance to young people planning health careers.

The addresses will be given by Dr. Michael Eliastam, director of Stanford Hospital's Emergency Services, who will speak on "Career Options in Medicine," and Wendy Squyres, manager of education and development in medical center personnel, whose talk is on "The Role of the Educator in Career Counseling."

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Mailed Monday, March 21, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Following is a commentary by Dr Arthur Kornberg, Nobel Laureate and professor of biochemistry at the Stanford University School of Medicine. He discusses why society's long-term commitment to the advancement of scientific knowledge must be free of political partisanship. The article is adapted from the winter 1977 issue of *Stanford M.D* magazine.

THE FRAGILITY OF BASIC RESEARCH SUPPORT
by Arthur Kornberg, M.D.

There has been in our lifetime a revolution in biology! Do we appreciate this revolutionary change and do we respond to it? Certainly laymen don't They don't understand biology, and they are justifiably skeptical, having heard claims of revolutionary changes in everything from deodorants to space travel.

Yet today we write precise chemical formulae for the genetic substance, and we synthesize and manipulate it in our laboratories We understand in simple biochemical terms how the gene is expressed and reproduced. We do see the cell in some of its molecular detail in the electron microscope, and we see it even down to atomic dimensions by spectroscopy These techniques and insights have brought a confluence of genetics and chemistry, anatomy and physiology Understanding the structure and function of the cell and organism is becoming a single, unified scientific enterprise with a coherent logic.

Realistically I know that only a tiny fraction of our fellow citizens share these visions of nature and the passion to enlarge them There is, however, an area of interest, closely related to science, which we do share with informed citizens It is the concern that we get a proper product for the money spent on health care in this country. We spend 120 billion dollars on health care annually, but we are not getting our money's worth. We waste much of what we spend on the prevention and treatment of cancer, heart disease, diabetes, and mental illness because the available knowledge and procedures are so primitive and ineffective. The only sure way to improve these procedures is to understand the cell and organism well enough to deal rationally with pathologic changes. No sensible person will consign an ailing watch or car to mechanics who are ignorant about their working parts. It stands to reason we cannot maintain or repair a human machine we don't understand.

How then can we inform and persuade people of the importance of the advances in biology and the opportunities they present for our future welfare? It has been and will remain an exceedingly difficult and frustrating problem. One approach is to educate the public about science. We can show that the pathway to practical benefits started from fundamental science and that the pathway was circuitous and took many years to traverse. We can point out that the key discoveries which made X rays, penicillin, and polio vaccine possible were not related to research on disease. These medical miracles came from the curiosity of physicists, bacteriologists, biochemists, and cell biologists about basic scientific questions unrelated to medicine. Once the insights and techniques were discovered, the applications to medicine were rapid and dramatic. Conversely, crash and costly programs directed to the curing of diseases have invariably failed when the basic knowledge needed for application was lacking.

(more)

When I realize the long and extensive exposure these Senators have had to good advice about the need for long-term support for basic research, I am convinced of the futility of the approaches we have taken to educate the public and our legislators.

People and politicians see the current problems and want quick solutions. Despite all that the history of medical science has taught us, there is an irresistible urge to gamble on a quick payoff. It makes little sense to legislators to fund something as esoteric as my own studies of the replicative life cycle of bacteriophage ØX174 in E. coli when cancer ravages their relatives and constituents. They don't know that such studies inform us of the cellular chemistry of DNA, knowledge essential for understanding and preventing cancer.

What strategies can we adopt to assure the vigorous and sustained support for the scientific effort needed to advance basic biology and its applications to clinical medicine? This problem has vast social, economic, political, and scientific complexities. Frankly, it is quite beyond the abilities, capacities, and inclinations we have as scientists. Sporadic appeals to the public and Congress may have averted a few disasters, but they are ineffectual in the long run. What would work is a law committing the federal government to invest a fixed percentage of the gross health product in the research needed to improve it. For example, spending 5 or 6% of the health industry dollar for research to make it more technologically reliable would seem to be a prudent and conservative investment. An investment of this size would call for an immediate expansion of biomedical training and research rather than the retrenchment which has taken place and is being planned for the future.

Few of us can or wish to engage in the political process needed for such a long-term commitment for basic and applied biomedical research. Yet there is something we can all do. We can show in our daily lives that we believe science is important. The majority of biomedical scientists, although highly competent and fully deserving of support, do not display the conviction, the absolute dedication—in short, the passion—that the advancement of knowledge is the most important facet of their professional lives. Without such conviction, their pleas for support of science are dissonant and muted. Their shiftlessness is transparent.

I have elaborated on some of the elementary guidelines for a rational scientific enterprise that I used to think could be taken for granted. Unfortunately, we cannot take these truths to be self-evident.

We must keep informing others, but even more important, reinforcing our own convictions that you can't teach what you don't know, you can't solve problems by wild guessing. Understanding nature in the broadest and most basic terms is the most economical and conservative way, the only way, to solve the practical problems of maintaining health and curing disease.

I am convinced that the approaches we have used to persuade our fellow citizens and legislators to support biomedical science, research, and training at a rigorous and basic level will not work. We need a long-term commitment free of political partisanship, but I am unable to suggest effective political mechanisms for scientists to achieve this by themselves. It will taken full-time, sustained, professional political help and guidance to do it. What we as scientists *can* do for ourselves is to practice good science and give it our unequivocal devotion.

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Unfortunately, educating the citizen and the legislator of the importance of basic research has never been a confident and sustained undertaking; partial efforts in this direction have generally failed. The massive federal support of basic research in the postwar era was hidden under the cloak of defense agencies and the numerous categorical disease institutes of the National Institutes of Health (NIH). The bulging muscle of this basic research effort was skillfully disguised by expert tailoring by administrators of these government departments. It was recognized and winked at by a few dedicated and influential congressmen and then sold by them to their colleagues.

But inevitably these disguises became too worn and obvious. I recall an exchange between the late Congressman John L. Fogarty, the patron saint of the NIH and of medical research in the House (just as Lister Hill was in the Senate), and Dr. Fred Stone, then director of the National Institute of General Medical Sciences. It took place in 1966 shortly before Fogarty died; it was at a hearing on NIH appropriations before the subcommittee which he chaired. Fogarty asked Stone, and I quote from the Congressional Record:

Mr. F: "What is the difference between DNA and RNA? I don't understand either of them although they have been explained to me four or five times now."

Dr. Stone: "I share some of your confusion, sir. DNA is Deoxyribonucleic Acid. The other is Ribonucleic Acid. The difference between the two lies in a difference in the ribose sugar."

Mr. F: "I don't know any more than when you started."

Forgarty went on in the same hearings to complain that scientists were coming up with more and more interesting questions but not enough answers. He was concerned that there might be a lag in the application of basic knowledge to disease.

Also in 1966 President Lyndon Johnson expressed his concern that basic research was not paying off. He said, "Presidents need to show more interest in what the specific results of research are in their lifetime and *in their administration*. A great deal of basic research has been done but I think the time has come to zero in on the targets by trying to get our knowledge fully applied. We must make sure that no life-saving discovery is locked up in the laboratory."

One of the Johnson legacies tha Richard Nixon eagerly accepted was his impatience with basic research. His administration called for crusades to vanquish cancer and heart disease without regard for the fact that we lacked the weapons to conduct such major wars at that time.

During these past 10 years we heard a barrage of increasng ferocity against basic research. Turn research to the service of man. Develop strategies to cure disease. Do health-oriented or disease-oriented research. Give us answers, not questions.

The latest volley was fired last summer by Senators Edward Kennedy and Richard Schweiker. In their review and examination of public policy in biomedical research they began by sharply questioning the President's Biomedical Research Panel and the Panel's report. Kennedy complained that medical research seemed to be dedicated to uncovering new knowledge—for science's sake (for the amusement of the scientist)—not for the conquest of specific diseases or development of new technologies. He was fed up with giving the NIH money to *understand* disease; it was time they concentrated on their mandate: namely, the prevention, diagnosis, and treatment of disease.

Schweiker was even more specific. With a particular zeal for diabetes, he demanded an all-out effort to develop an artificial pancreas for each of the nation's millions of diabetics. The device is an implanted reservoir designed to deliver insulin automatically. I presume it is supposed to respond to computer directions based on constant analysis of blood glucose and insulin levels. Do we know enough about diabetes to warrant such a crash program at a staggering cost? Even more serious is the danger of such an implanted device. Would you today accept an implant with a multilethal dose of insulin? I wouldn't.

(more)

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--A new textbook on infectious diseases that can affect the fetus and newborn infant has been compiled by Dr. Jack S. Remington, M.D., professor of medicine in the division of infectious diseases at Stanford University School of Medicine. His co-author is Dr. Jerome O. Klein, associate professor of pediatrics at Harvard Medical School.

The book, Infectious Diseases of the Fetus and Newborn Infant (W.B. Saunders and Company, Philadelphia, 1976. 1121 pages, $45.00), is a summary of major advances in biology and medicine over the past two decades in infectious diseases which occur in fetus' and newborns in the United States and Europe.

It is directed to medical students, practicing physicians, microbiologists and other health care workers, and provides a complete, critical and contemporary review of existing information on infectious diseases that can be acquired in utero, during delivery and in the early months of life.

The book's twenty chapters were written by people who are recognized authorities in their fields. Each has made significant contributions to the understanding of infection in the fetus and neonate.

Included are chapters on immunology, rubella, neonatal diarrhea, herpes simplex, syphilis, hepatitis, fungal and bacterial infections and the pharmacology of antibacterial agents.

Dr. Remington is chief of the division of allergy, immunology and infectious diseases at the Palo Alto Medical Research Institute. Dr. Klein is associate director of the Department of Pediatrics at Boston City Hospital.

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Mailed Wednesday, March 16, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. William P. Creger, associate dean for student affairs, has resigned from his part-time administrative post.

Dr. Creger will continue as professor of medicine (hematology), on the Stanford medical faculty.

As associate dean, which was in addition to his demanding clinical responsibilities and teaching schedule, Dr. Creger has advised students about their clinical training, especially their internship plans since 1968.

Dr. Creger once described his administrative role as a "matchmaking service which collates the characteristics of those medical students who are about to graduate, and is sent to hospitals which are about to select next year's residents."

"There's little that regulates this function, not a handbook, not a certifying specialty board, and it may not be an analyzable function," he wrote.

Dr. Creger will be on sabbatical leave in Europe for the next three months.

No successor for the part-time administrative post has yet been named, according to the Dean's Office.

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Mailed Tuesday, March 15, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

City Editors: This sidebar supplements the main story of the dedication ceremonies mailed today.

STANFORD--Research ranging from studies of the molecular basis of vision to genetic controls of the immune system will be among projects carried out in the Sherman Fairchild Science Building of the Stanford University School of Medicine.

The multimillion dollar center, dedicated Saturday, March 12, consists of a four-story science building and a 386-seat auditorium located adjacent to the medical school.

The research which will be housed in the building was discussed at a morning symposium by the scientists who will direct the work, beginning with Dr. Lubert Stryer, chairman of the Department of Structural Biology.

He described his studies in the mechanism of visual excitation in the rod cells of the retina, which convert light into nerve impulses.

There are some 100 million rods in the human retina, Stryer explained, which are responsible for black and white vision. Each rod contains a stack of about 1,000 discs which contain molecules called rhodopsin to absorb light coming into the eye.

When light strikes a rhodopsin molecule, it changes shape and sends a signal to the outer envelop of the cell. Most remarkable, said Stryer, is that rods can be excited by receiving a single quantum of light. This initial acknowledgment that light has been seen has been measured at faster than one millionth of a second.

Stryer said he is trying to learn the precise function of the rhodopsin molecule to determine how it recognizes light and transmits this information to the cell. He is also studying the structure of the molecule because its physiology is inevitably connected to its architecture.

Stryer, like other scientists who will work in the Fairchild building, feels it is important to understand what happens at this stage of the visual process in order to look further.

Nobel Laureate Arthur Kornberg, sitting in the audience, suggested it would be a good idea to study rhodopsin molecules in simpler organisms than animals.

Such molecules are found in the membranes of brine bacteria in the salt ponds of San Francisco Bay, he said. "It is such basic, apparently irrelevant, studies that will ultimately be of great benefit for human diseases of vision and cell growth."

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Another scientist, Dr. Eric Shooter, spoke about work involving nerve growth factor. Shooter, who heads the Department of Neurobiology, and his colleagues, have isolated and recently crystallized this protein that affects the development, differentiation, and maintenance of certain nerve cells.

Shooter said nerve growth factor is necessary for the development of nerve cells.

He said there are probably a number of diseases of the nervous system that have a direct connection to nerve growth factor.

Work on the genetic controls of the immune system was described by Dr. Hugh McDevitt, head of the division of immunology. His group has discovered that the genes controlling the ability of the body to respond to infection are clustered together on one chromosome in the mouse and are closely linked to the genes responsible for destroying foreign grafts.

"Existence of these genes, called immune response genes, has opened up a whole new approach to certain diseases," said McDevitt. Studies with animals have indicated that different transplantation antigens are associated with different diseases.

"Similar associations in humans could mean that immune response genes determine susceptibility or resistance to certain diseases," he explained.

In recent years, McDevitt said, investigators have found striking associations between a particular transplant antigen and disorders thought to be the result of an abnormal immune response. These include ragweed hayfever, several autoimmune diseases and arthritis, multiple sclerosis, psoriasis and cancers such as acute lymphocytic leukemia in children and Hodgkin's disease.

A link between disease susceptibility and transplantation antigens can help identify persons who are prone to certain diseases because of their genetic makeup, he said.

The Fairchild Center was built with the support of an $8.25 million gift from the Sherman Fairchild Foundation of Greenwich, Connecticut, named for the founder of Fairchild Camera and Instrument Corporation and Fairchild Industries.

Additional funds came from Mrs. George A. Winzer of La Jolla, California, a longtime benefactor of the medical school. The Max C. Fleischmann Foundation of Reno, Nevada, recently provided a $1.5 million grant for completion of the top floor of the science building.

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Mailed Monday, March 14, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Basic research, the lifeline of medicine, is now threatened by strong social, economic and political pressures, Dr. Arthur Kornberg, Stanford's Nobel prize winning biochemist, said Saturday, March 12.

"These pressures come from within institutions as well as from outside," he said. "They discourage financial support of basic research and question its importance.

"They drive scientists to undertake excessively complex problems in a gamble for quick payoffs. They make scientists into enterpreneurs and administrators."

Kornberg, speaking at the dedication of the Sherman Fairchild Science Building at the Stanford University School of Medicine, said "it is just such times that test our temper."

The scientist or practitioner of medicine, said Kornberg, must adhere to the fundamental discipline of science by asking discrete and well defined questions and persist at it doggedly year in and year out.

"It is out of these small, but sustained contributions to knowledge that we build the grand edifices of nature," he said.

One of the problems, Kornberg said, has been the impatience of the politicians with basic research. They have called for crusades to vanquish cancer and heart disease without regard to the fact that we lacked the weapons to conduct such major wars.

More recently, he added, "we have a guru in Sacramento who preaches an ethic of lowered expectations, a philosophy that would discourage us from bold and innovative explorations of the frontiers of knowledge.

"And in our California State Health Department, the governor employs a full-time bioethicist whose current occupation is fanning the hysteria developing about recombinant DNA research."

Kornberg stressed the gene-splicing technique "is not a health hazard or a weapon. Its use and development bear no resemblance to that of nuclear fission and producing bombs."

"Its potential to become a menace is exceedingly remote," he said. "Compared to existing menaces, about which we need to worry--overpopulation, over and underconsumption of food and energy, carcinogens, nuclear weapons--I would not list recombinant DNA among the top 25 or even the next 100."

Kornberg said research is essential for advances in medicine. "Unless it advances, medicine regresses. Medicine regresses because the status quo is continually challenged with new problems--novel toxins, resistant organisms, regressive attitudes, such as astrology, food fads and other witchcraft.

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"There will be no solutions to major disease problems for which we lack basic knowledge, short of acquiring that knowledge."

Another speaker, David Hamburg, president of the Institute of Medicine of the National Academy of Sciences, said that excellence in research is no longer in question.

"The U.S. has the greatest health research establishment in the world," said Hamburg. "But there are broad concerns about the relationships of this excellence to health."

There is a need for research to evaluate effectiveness of many therapies, and to face the dilemma of the relationship of personal behavior to health, he said.

American medicine, said Hamburg, has also a moral commitment to do something about the health problems of developing countries where infectious diseases heightened by malnutrition are still rampant.

About 400 persons attended the dedication of the Sherman Fairchild Science Building. The departments of structural biology (formerly anatomy) and neurobiology are housed in the four-story multimillion dollar building, located adjacent to the medical school.

The building, which is constructed around an atrium, contains laboratories, conference rooms, and administrative offices. The Fairchild auditorium has been built adjoining the science building. This 386-seat facility will be used for medical school classes and lectures as well as events to which the public is invited.

The Fairchild Center is the result of an $8.25 million gift from the Sherman Fairchild Foundation of Greenwich, Connecticut named for the founder of Fairchild Camera and Instrument Corporation and Fairchild Industries.

Additional funds came from Mrs. George A. Winzer of La Jolla, California, a longtime benefactor of the medical school. The Max C. Fleischmann Foundation of Reno, Nevada, recently provided a $1.5 million grant for completion of the top floor of the science building.

Participants at the ceremonies included Walter F. Burke, president of the Sherman Fairchild Foundation; Dr. Peter S. Bing, president of the Stanford board of trustees; President Richard W. Lyman, and Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

The new building and auditorium were designed by the San Francisco architectural firm of Stone, Marraccini and Patterson. Turner Construction Company of San Francisco was the general contractor. Landscaping was done by A. and J. Shooter and Associates of Mountain View, California.

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Mailed Monday, March 14, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

EDITORS: Photo available if not included.

STANFORD--If Dr. Paul D. Thompson wants to be dressed for work he has to literally run for his clothes each day.

Puzzled? Actually, it's a well-devised plan by Thompson to get part of his daily exercise into an otherwise jammed work schedule.

Thompson, a fellow in the Division of Cardiology at Stanford University Medical School and a staff member of the Stanford Heart Disease Prevention Program, purposely keeps his clothes in his office so he can run to work from his home in Escondido Village on campus. At night he reverses the process, often taking a circuitous route on campus in order to get in more exercise.

"This system works for me," Thompson noted. "Because of my schedule I don't always get to run when I want. But, when I do, I've never had a run where I didn't feel good at the end of it."

Probably because of the nature of his work, Thompson strongly advocates the "benefits" of exercise and he wishes more people would take the time to do it.

"I'm committed to the prevention of heart disease and I believe it's important to reduce the 'risk factors' of heart disease, such as smoking, high cholesterol counts, stress and excess body weights. The 'strength' of exercise is that it helps reduce some of these risk factors."

Thompson estimates that between 40 and 60 percent of those who have initial episodes of cardiovascular disease will die within one year from it.

Aside from the medical benefits of exercise, Thompson says he runs because he enjoys it.

"I've been running since I was about 14 and I ran in high school and college. I continued to run after I was out of school and I guess you could say I've incorporated it into my lifestyle."

Thompson was captain of cross country teams in high school and college and was named athlete of the year at Tufts University and in eastern Massachusetts. He received both his Bachelor of Science degree and his M.D. from Tufts (Medford, Mass.)

Since college, Thompson has also participated in various races, including the Dipsea Race last summer in Marin County, the Boston Marathon and the 26-mile Paul Masson Marathon in Saratoga last January, which he won. Thompson says he hasn't decided yet whether he will enter the Annual Bay-to-Breakers Race sponsored by the San Francisco Examiner on May 15.

However, although he enjoys the running competition, Thompson believes it is more important that the masses take up regular exercise.

"Even though I know I am not good enough to win in the Olympics I wish I could do so," he said, "because it would provide a great opportunity to publicize the value of fitness for every individual."

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Mailed Monday, March 14, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Stanford University Hospital will have a new emergency room on Tuesday, March 15.

The switch to the expanded facilities in the new wing of the hospital will take place at 12:01 a.m. Tuesday, according to Dr. Michael Eliastam, director of the emergency department.

The new emergency room will be located on the first floor of the new wing. The unit is located just off Quarry Road, near the access road to the former emergency room.

Direction signs have been posted inside the hospital and in the surrounding area, and ambulance companies have been notified of the change of location.

Patients arriving anytime Monday before midnight will be treated in the existing facilities. Patients arriving after midnight will be directed to the new location. Medical staff will continue to provide care in the old area as long as patients remain there.

The new facility will provide more space as well as improved equipment, according to Eliastam.

The new unit will be about twice the size of the old, with 18 treatment rooms and a special acute resuscitation room featuring modern wall-mounted equipment panels. One area has been designated a family room, where families of patients may confer with doctors privately.

There are expanded observation areas, a waiting room, nurses lounge, X ray facilities, and a special room for psychiatric care.

Dr. Eliastam notes that the new unit will be closer to the heliport, to the intensive care unit, and to blood bank and radiological services.

The emergency room represents the first patient care activity to begin in the new hospital wing. Surgical pathology and blood coagulation and transfusion laboratories were moved into the wing last December. In the future, the building will also include 25 intensive care beds, plus needed support facilities, including radiology, cardiology, surgical and postanesthesia recovery areas.

The former emergency room on the hospital's ground floor will be renovated to accommodate a new oncology day care center for treatment of cancer patients.

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Mailed Friday, March 11, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

"Human Rights and Science in the Soviet Union" will be the topic of a public lecture by Soviet biologist Edward Trifonov at noon Monday, March 14, in Room M114 of the Stanford University School of Medicine.

Dr. Trifonov was a member of the Biological Department of the Kurchatov Institute of Atomic Energy in the Soviet Union. He recently joined the staff of the Weizmann Institute of Science in Rehovot, Israel.

His visit to the United States is sponsored by the Committee for Concerned Scientists, New York. His talk at Stanford is being sponsored by the Department of Biochemistry.

The Soviet Jewish scientist credits his release from the Soviet Union to an international letter-writing campaign by fellow scientists.

According to a press statement from the Weizmann Institute, Dr. Arthur Kornberg, Nobel laureate in medicine and professor of biochemistry at Stanford, was among the many who addressed letters to Prof. Anatoly Alexandrov, president of the Soviet Academy of Sciences.

Dr. Kornberg, a member of the Institute's board of governors, wrote, according to the press release, "I regard these harsh restraints on Soviet scientists as a serious restriction on the whole international community of scientists. . . .It is only in the free movement of creative people between our various cultures and societies that we can hope to achieve peace, understanding, and prosperity."

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3/9/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

Editors: This story is released jointly by the Stanford Primary Care Associate Program and the UC-Davis Family Nurse Practitioner Program. Contact person at UC-Davis is Nancy Johnson, 916: 453-3550.

STANFORD--A new program to train both physician's assistants (PAs) and nurse practitioners with the same curriculum is now underway in two California communities.

The cooperative venture combines the resources of both Stanford University Medical Center's Primary Care Associate Program and the University of California at Davis's Family Nurse Practitioner Program. The Robert Wood Johnson Foundation has provided three-year support for the project totaling $198,573.

Seventeen physician's assistants and nurse practitioners in Redding and nine in Stockton are now undergoing the first joint clinical training.

Virginia Fowkes, project director at Stanford, notes that the functions of the two practitioners are quite similar, despite the different backgrounds and titles.

"There is substantial evidence that the two programs provide similar educational experiences and produce graduates who practice in comparable settings with similar responsibilities," she says.

Both family nurse practitioners and PAs work with physicians delivering a variety of services, including history-taking, physical examination, basic laboratory techniques, minor diagnostic and therapeutic procedures, and patient counseling and education.

The aim of the Stanford PA program has been to recruit from and train practitioners in health care shortage areas with the expectation that graduates will remain in these communities for practice.

Preclinical course work is provided at community colleges in Eureka, Redding, Modesto, Salinas and Bakersfield as well as at Foothill College in Los Altos.

The Davis Family Nurse Practitioner Program has similar goals and is also decentralized with a network of training programs established throughout northern and central California. Mary O'Hara-Devereaux of UC-Davis is codirector of the new project.

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222--Primary Care Associate Program

"We think this will be a more cost-effective approach to training," says Virginia Fowkes. "We feel that we are in a unique position to combine resources and to put aside the political and emotional differences traditionally encountered among those two professions."

In awarding the grant, the Robert Wood Johnson Foundation noted that "the number of nurse practitioner and PA training programs has proliferated in recent years, with each being conducted under a separate curricula. This has led to a wasteful duplication of physician teaching time and clinical training sites."

Faculty for the project includes Stanford and UC-Davis physicians, family practice residents in the communities, family physicians on the staff of the universities, and graduates of both programs.

In the Stockton program, students are located in areas within a two-hour traveling distance of Stockton. They gather once each week for classes at San Joaquin General Hospital, and during the remainder of the week work with individual family physicians in the rural areas who serve as preceptors.

Because of the greater distances involved near Redding, students there meet once a month for three days on a weekend for classes held at Shasta General Hospital. In addition, smaller interim teaching seminars are held once a month in the Redding and Eureka areas.

In addition to the Robert Wood Johnson grant, the project is supported by Song-Brown funds administered by the California Health Manpower Policy Commission and the Bureau of Health Manpower, Department of Health, Education and Welfare.

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Mailed Wednesday, March 9, 1977

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
(415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers
FOR IMMEDIATE RELEASE
STANFORD –

Lane Medical Library at Stanford now has a collection of materials on recombinant DNA which is open to the general public, Vice-Provost William F. Massy reported to the Faculty Senate last week.

The library is open from 8 a.m. to midnight Monday through Thursday, from 8 a.m. to 10 p.m. Friday and Saturday, and from 10 a.m. to 10 p.m. Sunday.

Massy said the administrative panel on recombinant DNA plans to have every fourth meeting open to the general public. Times and places will be announced later. The panel's minutes are available to the public at Lane Library and at Meyer Undergraduate Library, which has a smaller collection of DNA reading materials.

At a public hearing last month, several persons questioned the pending Stanford-UC application for a patent on certain processes in this field. Massy noted that Stanford has made "an administrative decision" to require that any licensees follow the National Institute Health guidelines for this field, together with any additional constraints established by the University.

(In a letter to State Assemblyman Barry Keene, Jan. 27, Stanford Vice-President Robert Rosenzweig said: "As it became clear that recombinant DNA was a controversial subject, it became evident, too, that an attempt to seek a patent would be caught up in that controversy.

("Since members of the Stanford faculty were and are prominently involved in the debate over the conditions under which the research should proceed, we had to face the possibility that their participation would be compromised by charges—no matter how unwarranted they might be—of a conflict of interest.

("Therefore, we returned to NIH with a request that they consider again the legitimacy of our moving to seek patent protection. After extensive deliberation and wide consultation, NIH reaffirmed its approval. The present situation is that we are proceeding with our patent application. We have put it abeyance, however, any plans to move to commercial licensing of the invention.")

Massy told the Faculty Senate that Prof. Stanley Cohen of the Medical School already has assigned his share of any patent income to the School. Massy said he saw no conflict of interest in Cohen's membership on the panel, whose composition is in accord with government guidelines.

At present, Massy noted, the panel's top priority is consolidating monitoring policies and practices, using the NIH guidelines and any additional directives the panel itself may establish.

University health and safety monitors have "full responsibility" to see that policies and procedures are carried out on a continuing basis, he said. This includes access to the laboratories and all the information that the principal investigator or anyone else can provide.

In response to questions, Massy said monitoring of recombinant DNA is probably harder than that for radiological hazards.

Several types of monitoring may be needed. One would be "very sophisticated" and "very difficult," checking to see whether anything has escaped into the atmosphere of the laboratory. While this "probably is impossible to do on a wide scale. . .it can be done specifically" in small areas, he said.

Another, simpler type of monitoring has to do "with people's adherence to procedures, whether in fact work is being done in safety cabinets. . .whether proper safeguards are being taken." This can be enforced through random visits to laboratories, among other methods.

Should it prove necessary, the monitors have the authority to halt work on a project or to close an entire laboratory.

Massy said his own analysis of presently available data indicates that "the probabilities of difficulty are very low indeed. . . However, it is important that no one person goes off in a corner and makes that judgment" alone.

He noted that the administrative panel is "a Stanford entity. . .to help us exercise our institutional responsibility, which we take very seriously." While its membership includes individuals from surrounding communities who "provide an important view," they are not "representative. . .in a political sense."

The panel is headed by Prof. Allen Campbell, biology.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--Cancer will be the topic of a series of four lectures which will begin at 7:30 p.m., Wednesday, May 4, in the Sherman Fairchild Auditorium of Stanford University Medical Center.

The lectures are open to the public.

The first lecture, "What Causes Cancer?" will be delivered by Dr. Henry Kaplan, Maureen Lyles D'Ambrogio professor of radiology and director of Stanford's Cancer Biology Research Laboratory. Dr. Kaplan is an internationally-known pioneer in cancer research, especially in the fields of human lymphomas and leukemias.

Dr. Kaplan will be introduced May 4 by Dr. Joshua Lederberg, chairman of the department of genetics. Lederberg initiated the Progress in Medicine Lecture Series in 1966 to provide an opportunity for leaders in academic medicine at Stanford to share information, insights and perspective with members of the community.

The three other lectures scheduled in the cancer series are as follows:

May 11: "New Ways to Diagnose Cancer: The Impact of Technology," by Dr. I. Ross McDougall, associate professor of radiology, division of nuclear medicine, and Dr. Leslie M. Zatz, professor of radiology, division of diagnostic radiology and chief of radiology at the Palo Alto Veterans Administration Hospital.

May 23: "Treatments for Cancer: New Therapies," by Dr. Saul A. Rosenberg, professor of medicine and radiology and chief of the division of oncology, and Dr. Sarah S. Donaldson, assistant professor of radiology, division of radiation therapy.

June 1: "Cancer and the Individual: The Effect on Patient and Family," a panel discussion moderated by Dr. Don R. Goffinet, assistant professor of radiology, division of radiation therapy. Members of the panel are: Suzanne S. Miller, R.N., clinical oncology nurse coordinator; Dr. Frank E. Stockdale, associate professor of medicine, division of oncology; Dr. Frederic J. VanRheenen, clinical assistant professor of psychiatry; Isabel Walker, R.N., M.S.W., clinical social worker, division of oncology; and Ernle W.D. Young, chaplain to the Stanford University Medical Center and instructor of medical ethics.

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Mailed Thursday, April 28, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

A charge of unfair labor practices against Stanford University in connection with an employee survey held recently at Stanford Medical Center has been dismissed by the National Labor Relations Board (NLRB) in San Francisco.

The charge had been filed with the NLRB by United Stanford Employees (USE).

In a letter to USE president Anne Schlagenhaft, NLRB Regional Director Natalie P. Allen said the Board had decided not to issue a complaint against the University in the case. Allen explained that the NLRB had found "no reason" to believe the National Labor Relations Act had been violated by the University, and that Stanford "did not interfere, restrain, or coerce its employees by conducting the employee opinion survey."

USE will have until May 2 to appeal the decision, in writing, to the NLRB's General Counsel in Washington, D.C.

USE had charged that the survey, which was conducted in February at Stanford Hospital and Clinics and Stanford Medical School, was a possible violation of the National Labor Relations Act by attempting to "supplant the union."

Although the survey forms were answered anonymously, USE complained that some worker identities could be determined because of the demographic nature of the questions.

According to Ron Twomey, Medical Center director of personnel, the survey was designed to examine 16 major categories of employee opinions, ranging from job satisfaction to supervisory practices.

"It was not a scorecard or a report card, but data from employees which can be very helpful to the administration in planning for a better hospital," Twomey said.

Although the results from the Hospital survey are being analyzed by Medical Center personnel officials, information from the survey in the Hospital clinics and the Medical School are still being computerized.

USE represents about 1,350 technical maintenance and service employees on campus, including about 260 of the approximately 5,000 employees in the Medical Center.

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4/26/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University Hospital has received a one-year accreditation under the consolidated survey program of the Joint Commission on Accreditation of Hospitals (JCAH) and the California Medical Association (CMA).

JCAH-CMA surveyors inspected the hospital in January. Included on their list of recommendations identifying areas for improvement were the hospital's corporate bylaws, medical staff bylaws, service responsibilities within the medical staff, departmental meetings, medical records, and aspects of physical facilities.

In a report to the hospital, Dr. A. Walter Hoover, JCAH acting program director, noted that many of the problems cited by surveyors have been corrected.

Hoover wrote that the commission and the CMA "commends the work that you have done thus far toward achieving accreditation, but recognizes...that some specific areas deserve special attention."

Paul Hofmann, director of the hospital and clinics, said all concerns of the surveyors are now being addressed. Two receiving special attention are deficiencies due to the high utilization of the hospital and a lack of space.

He said, for example, a study of facilities is under way to determine remodeling costs for specific areas which may not comply fully with new state regulations for acute care hospitals.

Representatives for the California State Health Department also participated in the survey for licensing purposes. Their report is expected in the near future, according to Hofmann.

The purpose of the JCAH-CMA consolidated survey is to help hospitals maintain the highest quality patient care.

Surveyors spend one to three days at a hospital reviewing the medical staff's organization, the treatment of patients, and the documentation and evaluation of medical care.

The maximum accreditation a hospital can receive is two years.

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Mailed Tuesday, April 26, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: - Harriet Baumgarten 415: 497-6911

SCIENCE WRITERS: Science roundup describing new developments and research in progress at Stanford University School of Medicine will be issued from time to time to encompass short items not covered in regular press releases. The items below cover developments in the neurosciences.

Photos available upon request.

STANFORD--Even though the eye is one of the finest instruments of which science has any knowledge, it is only recently that researchers have begun to unravel the secrets of vision at the molecular level.

Dr. Lubert Stryer of Stanford University School of Medicine wants to know what is the mechanism of visual excitation in the rod cells of the retina, which convert light into nerve impulses.

There are some 100 million rods in the human retina, Stryer explains, which are responsible for black and white vision. Each rod contains a stack of about 1,000 discs which contain molecules called rhodopsin to absorb light coming into the eye.

When light strikes a rhodopsin molecule, it changes shape and sends a signal to the outer envelope of the cell. Most remarkable, says Stryer, is that rods can be excited by receiving a single quantum of light. This initial acknowledgment that light has been seen was measured at faster than one millionth of a second.

Stryer says he is trying to learn the precise function of the rhodopsin molecule to determine how it recognizes light and transmits this information to the cell. He is also studying the structure of the molecule because its physiology is inevitably connected to its architecture.

Studies of vision at the molecular level, Stryer says, have been made possible by sophisticated technology which permits scientists to isolate cells and assemblies of molecules and to obtain highly magnified images of their structure.

These studies are giving scientists the most fundamental insights into the structure and function of the retinal membrane. Ultimately, Stryer hopes, they may lead to understanding of human diseases of vision and new treatments.

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When most people think of brain surgery, they assume that the procedure is always major surgery involving a craniotomy or removal of part of the skull to reach the brain.

Neurosurgeons today, however, have devised procedures where brain surgery can be done through the nose or cheek with no incision required in the head at all.

Dr. John Hanbery, head of neurosurgery at Stanford, describes two of these procedures. One involves the removal of the pituitary gland to relieve severe pain in certain patients with cancer of the breast or prostate. This procedure is only used on patients whose cancer has spread to the point where radiation therapy and chemotherapy are no longer effective. Removal of the pituitary leads to a very dramatic relief of pain in some patients thought to be due to the manipulation of hormones, Hanbery explains.

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"Surgery to remove the pituitary is done through the nose using a microscope and image intensifier. This is a relatively minor procedure which no longer involves a formal craniotomy," says Hanbery.

Tic Douloureux is another disorder now being treated without major brain surgery. The disease is an extremely painful nervous disorder involving the trigeminal nerve of the face. Some patients are treated successfully with drugs, but those who do not respond to drugs or who are bothered by side effects now have an alternative.

Instead of the major surgery used until a few years ago which involved a craniotomy to section a portion of the nerve at the base of the brain, a minor procedure is performed with the same result.

With the patient only lightly asleep, Hanbery explains, a needle electrode is inserted through the cheek. With the help of an image amplifier the electrode is passed to the base of the brain where the trigeminal nerve is located. The patient is awakened and a small electrical current is passed through the electrode, causing a tingling in certain parts of the face. When the patient feels the sensation in the part of his face affected by Tic Douloureux, he is put back to sleep and a stronger electrical charge is used to destroy the nerve.

"The patient often leaves the hospital the following day, free from pain," says Hanbery.

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The body may produce its own tranquilizer. Dr. Avram Goldstein, professor of pharmacology at Stanford University and director of the Addiction Research Foundation in Palo Alto, has been studying the effects of endorphins, a morphine-like substance produced naturally by the body.

Endorphins have already been shown to be involved in the suppression of pain, especially during acupuncture. Acupuncture stimulates the release of endorphins which then circulate as harmones and block nerve pathways, anesthetizing parts of the body.

But Goldstein and his colleagues are also looking at how endorphins affect mood. Normal people were put into a stressful, anxiety-producing situation. Some were given a drug called naloxone which blocks the effects of endorphins. Others were given a placebo. The group receiving the placebo experienced a relaxation response once the stressful situation ended; those given naloxone remained keyed-up and anxious.

"Maybe we all carry our own dope around in our heads," Goldstein comments.

***

Severe depression may be biological in origin as well as psychological, according to a Stanford psychiatrist.

Dr. Jack Barchas, professor of psychiatry and behavioral sciences says, "We are starting to be able to determine the different biochemical systems involved in various kinds of depression. The time may come when you can go to a psychiatrist and he will do a neurochemical analysis to determine what medication you need to help with your depression in addition to psychotherapy which may still be valuable."

Different types of depression appear to be related to imbalances in various biochemical systems, he says. A low level of norepinephrine, a chemical in the brain, may be connected to one type of depression by causing altered activity among certain nerve cells which produces the symptoms of depression in the patient.

A traumatic psychological event can induce biochemical changes that result in depression. Grief is one example of this interaction. Barchas explains that unresolved grief can trigger a biochemical change which causes severe depression. This specific type of depression is both psychological and biochemical in nature and should be treated as such.

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Today's scientists use a variety of tools, including computers, to study the brain. Dr. Leslie Dorfman, assistant professor of neurology, says, "Computer analysis is being used with increasing frequency to learn more about the electrical activities of the nervous system and also as a diagnostic aid for neurologic disease."

Dorfman's research is in multiple sclerosis which involves the deterioration of the myelin, an insulating substance over nerve cells. Without this insulation, Dorfman explains, the neurons lose some of their electrical properties--electrical signals get jumbled and the normal rate of electrical impulses is slowed.

Using the EEG (electroencephalograph) which records brain patterns and an EMG (electromyograph) which records the electrical activity in the limbs and muscles, along with the computer, Dorfman is able to measure the time it takes for a signal to pass from the nerves in the limb to the brain. This is helpful in the diagnosis of M.S. and aids in determining the disease's progression over time. The effectiveness of a specific medication on the speed of nerve transmission is also measurable in this way.

Once this information is stored in the computer, Dorfman can program the machine to analyze it in various ways in order to understand more about the nerve signalling process.

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Epilepsy is a neurologic disorder affecting as many as four million people in the United States today. Most respond favorably to medication, but about 50% still have seizures with some regularity and many are significantly disabled by the disorder.

"The major goals of epilepsy research," says David Prince, professor and chairman of the Department of Neurology, "Are to discover the basic abnormalities in the nerve cells which underlie seizures, and to develop new drugs to treat patients whose attacks are resistant to available therapies."

Prince explains that epilepsy, like many other neurologic disorders, involves an abnormality in communication between neurons or nerve cells. "Instead of the brain processing signals in an orderly way, large groups of neurons occasionally begin to discharge. These have an excessive excitatory influence on larger and larger groups of neurons. Without the braking effect of normal processes which quite nerve cells, an epileptic seizure would result," he says.

Scientists still do not understand what exactly causes epilepsy. "We can produce epilepsy artificially in animals' brains using many techniques, but we don't know which abnormalities are present in the brain of a patient with epilepsy," Prince says.

He and his colleagues in Stanford's epilepsy research group are constantly studying the processes which may occur before epilepsy develops so that they might be able to intervene and halt the disordér before it begins. They are also looking at the possible detrimental effects of epileptic discharges on the developing brain.

Treatment of patients with epilepsy has improved over the past few years with the development of new drugs which are effective in helping control seizures for more people. Also, doctors are better able to observe the frequency of seizures over a long period by having patients use a portable tape recorder-like device developed at Stanford to measure the patients' brain waves for 24 hours. In addition, the device is useful in determining the effectiveness of a particular drug in reducing the number of seizures.

Techniques for measuring exact levels of anticonvulsant drugs in the bloodstream have also allowed significant improvement in controlling attacks in many patients. Everyone metabolizes drugs at a different rate. Measurement of blood drug levels may help guide therapy by allowing doctors to determine if the drug dosage is at the correct level for an individual.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--Stanford University scientists engaged in recombinant DNA research have devised experiments which may prove scientifically that many of the feared hazards of the controversial gene-splicing technique do not exist and that ways can be found to avoid potential risks.

Ronald Davis, assistant professor of biochemistry at Stanford University School of Medicine, said experiments done under controlled conditions negate the fear that scientists could create an organism in the laboratory that could take over the world.

Davis and his colleague, John Cameron, in an experiment described in the current issue of Science, combined genes from a simple organism, baker's yeast, with a virus that can grow in bacteria called lambda bacteriophage.

Their purpose was to see if any one gene or group of genes would make the bacteriophage grow better than the original organism. To do this, they inserted virtually every gene from the yeast, a common organism known to be harmless to humans, into the bacteriophage chromosome.

They then grew the resulting organisms containing recombinant DNA for many generations until the strongest one emerged. That one gene, from the perhaps 10,000 genes in yeast, allowed the bacteriophage to grow best.

However, when the original organism was also added to those containing recombinant DNA it always emerged as the strongest organism. Therefore, no recombinant DNA can be made from yeast that will result in better growth for the organism, Davis and Cameron conclude.

Davis said scientists have suspected that the effects of DNA recombination on the growth of organisms ranges from having no effect at all to having a detrimental one. Davis' and Cameron's work demonstrates this in an absolute, scientific way for one organism--yeast. But Davis said that preliminary experiments with higher organisms show that they, too, make bacteria grow worse, not better.

Davis and W. David Benton, as well as Luis Villarreal and Paul Berg, all of the Department of Biochemistry, in two separate experiments described in the same issue of Science, have demonstrated methods for screening DNA recombinations. The advantage of this technique is that scientists will now be able to find the sequence they're looking for quickly, without a random search. By minimizing the number of gene manipulations, the potential hazards that might be present are greatly decreased, Davis said.

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Mailed Monday, April 18, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--On an average day at Stanford University Hospital, 66 new patients check-in and another 65 undergo surgery.

More than a thousand prescriptions are filled in the hospital's pharmacy in a day, and more than 4,000 laboratory tests performed.

The average patient in the hospital in 1960 stayed about 13 days; today the average stay is 7.5 days.

These facts and figures about Stanford Hospital, Clinics, and Medical School have been published in a new 24-page leaflet, called "Facts," now available to the public.

The 618-bed hospital today admits more than 24,000 patients annually, compared to 9,700 in 1960, its first year of operation.

The number of visits to the outpatient clinics has risen steadily from 20,000 in 1960 to more than 130,000 in 1976.

In the medical school, 5,117 students applied for admission in the current first-year class, but only 86 were enrolled--58 men and 28 women. Twenty are minority students (Black, Chicano, or Native American).

A total of 409 students are studying for their M.D. degrees at the medical school; 160 more are studying for other advanced degrees. There are also 268 postdoctoral trainees pursuing advanced studies in the medical school.

Tuition for medical students stands now at $1,644 per quarter. It had been just $50 in 1920, when the medical school was located in San Francisco. It was $335 in 1960 when the school moved to the Stanford campus.

The students' sources of support include loans (43%), scholarships (32%), their parents (8%), their own income (5%), and spouses income (5%).

Fulltime faculty members in the school number 419, and there are another 1,261 voluntary clinical faculty, community physicians in the area who donate a portion of their time to teaching in the school.

Patient care is also supported by 750 medical staff, 395 interns and residents, and almost 3,000 hospital employees.

The hospital is a private nonprofit corporation, owned and operated by Stanford University. According to the "Facts" booklet, 98 percent of hospital revenue comes from patient services. Total revenue for the hospital amounted to $66,511,000 during fiscal 1976.

The annual budget for the school of medicine and the clinics totaled $58,474,576, including more than $26 million in sponsored research and $2 million for plant improvement.

Federal support accounted for 15% of those funds; professional service income 36%; endowment income 10%; tuition and fees 7%; and gifts and grants 15%.

The funds were spent primarily on instruction (41%), patient care (36%), student aid (11%).

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Mailed Monday, April 18, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

"Too often a physician's treatment doesn't work because of a gap in doctor-patient communication," said Dr. Barbara Korsch, professor of pediatrics at the University of Southern California.

She delivered her remarks at the fourth annual Katharine D. McCormick Distinguished Lecture, Thursday, April 14 at Stanford University School of Medicine.

"If doctors fail to meet their patients' expectations, and patients do not feel the physician has understood their concerns, they are less likely to follow the doctor's orders," Korsch said.

Modern patients see themselves as consumers of medical care, are better-educated and demand more from their doctors, she said. They want to take part in the decisions about their own medical care. And doctors need to be equipped to deal with this modern patient.

Communications training should begin in medical school, she said. "All experienced physicians feel they have good rapport with their patients and think they can teach this to medical students by example. But this doesn't work. Communication is a learned skill that involves the brain as well as the heart," Korsch said.

She said doctors should use open-ended questions and a non-judgmental approach in talking with patients. Instead of asking, "Are you giving your child the medicine I prescribed?" to which most parents would answer "yes" automatically, she suggested asking, "How much of the medicine was your child able to take?"

This type of questioning elicits a more honest response and doesn't put anyone on the defensive, Korsch explained.

The key, Korsch feels, is that doctors must determine what the patient needs to communicate in addition to being concerned about what the doctor needs to know.

Dr. Korsch obtained her M.D. degree at Johns Hopkins University. She has been on the faculty at Cornell Medical College and at UCLA, and has been professor of pediatrics at USC since 1969.

The McCormick Lectureship was established in 1974 by the Professional Women of Stanford Medical School with the aim of bringing outstanding women physicians and scientists to Stanford.

The lectureship honors the late Katharine Dexter McCormick, who left a large bequest to the Medical School in 1967 particularly "for the encouragement and assistance of women in pursuing the study and teching of medicine and medical research."

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Mailed Friday, April 15, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--The use of anesthetics may make possible deep sea diving without the nervous system disorders caused by high pressure, according to a study conducted by researchers in the Department of Anesthesia of Stanford University School of Medicine.

Deep sea divers descending below 650 feet often develop tremors and other nervous disorders known as High Pressure Neurological Syndrome. It is thought the effects may be due to the pressure itself.

Researchers Joan J. Kendig, James Trudell and Ellis N. Cohen suggest that addition of anesthetic gases such as halothane and methoxyflurane to the breathing mixture of divers may reduce or eliminate the nervous disorders.

Dr. Kendig said gaseous anesthetics seem to restore fluidity to nerve cell membranes made rigid under high pressure.

"Anesthetics are thought to depress impulse conduction by impairing the flow of ions across the nerve cell membrane," explained Dr. Kendig. Ion flow sets up the electrical impulses which code neuronal messages.

"The anesthetics may disrupt this process by introducing disorder into the lipid components of the cell membrane, or by causing conformational changes in proteins within the membranes," Dr. Kendig said.

She feels that high pressure may oppose these actions either by making the cell membranes more rigid, or by compressing the membrane proteins back into a shape more favorable for transmission.

To confirm either theory, the Stanford scientists are studying the changes in the structure of artificial membrane preparations under high pressure conditions and applied anesthetic agents.

A device called the electron paramagnetic resonance spectrometer measures the motion and angle of rotation of labelled fatty acids in the membranes by recording the spectra of the labels. These two parameters are a measure of the fluidity, or relative disorder, of the cell membrane.

"The effects we observe on the membrane occur somewhere above thirty atmospheres (500 pounds of pressure per square inch)," said Kendig. "That corresponds to about 1,000 feet below sea level."

She said further studies are in progress to determine if these findings are relevant to the problems of deep sea diving.

The research is funded by the U. S. Navy and the National Institutes of Health.

Kendig said the Navy is interested in the application of the study to very deep dives as well as to submarine and diving accidents, where people sometimes must be treated for injuries before they are decompressed.

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Mailed Friday, April 15, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten (408) 497-6911

STANFORD--An educational program for diabetic patients at Stanford University Medical Center has been implemented by the Diabetic Patient Teaching Committee and Nursing Service.

Members of the committee who compiled the program and other nurses at Stanford have found that many diabetics know very little about their disease. Lack of knowledge can frequently result in complications requiring hospitalization which might otherwise be avoided.

To help keep diabetics out of the hospital, committee members designed an educational program for any diabetic who is admitted for diabetes or any other cause.

The committee has supplied each nursing unit with a Diabetic Reference Guide which contains a thorough review of all aspects of the disease for nurses, as well as teaching material for use with patients. Once the physician orders diabetic teaching, the patient's knowledge of the disease is assessed by means of a questionnaire. Nurses then individualize instruction to suit the patient's needs. A patient's progress becomes part of his medical record so that if he is readmitted the education program can be continued where it left off.

Topics in the course range from diabetic coma to the various types of drugs used by diabetics, complications of the disease, advice on diet, travel and exercise, and a discussion of the psychological effects of diabetes. A reading list is also included.

Members of the Diabetic Patient Teaching Committee are: R.N.s Elizabeth Donahue, Susan Franklin, Karen Girton and Sarah Gregg; public health nurse Elizabeth Taft; and dietician Patricia Wood. Doctors from the medical school and the community provided guidance in the preparation of the program.

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Mailed Thursday, April 14, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911 246/2

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Robert A. Chase has resigned as president and director of the National Board of Medical Examiners, and will be rejoining the faculty of Stanford University School of Medicine in September 1977.

A world leader in surgery of the hand, Dr. Chase will have joint appointments as holder of the Emile Holman professorship of surgery, and professor in the department of structural biology.

Chase's appointment was announced recently by Dr. Clayton Rich, dean of the school of medicine and vice-president for medical affairs.

Chase specializes in reconstructive surgery of the hand, and is also well known for his teaching and leadership in medical curriculum innovation, residency training, and continuing medical education.

He served as chairman of the department of surgery at Stanford from 1963 until his appointment to the Board in 1974. He also served as acting chairman of the anatomy department during 1974.

A native of Keene, N.H., he is a graduate of the University of New Hampshire (1945) and Yale University School of Medicine (1947).

As a member of the department of structural biology, Chase will participate in the teaching of human anatomy, and will be involved in developing new methods and materials for that subject.

He expects to combine knowledge of anatomy and surgery and his interest in audio-visual tools toward the development of new programs for postgraduate education.

Chase is a member of the Institute of Medicine of the National Academy of Sciences, past chairman of the surgical council of the American Board of Medical Specialties, and the international relations and graduate education committees of the American College of Surgeons.

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4/13/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--One of the most stressful things in life that people have to cope with is serious illness or injury to themselves or a member of their family.

How humans deal with these situations is the theme of a book of writings by various experts edited by Dr. Rudolph H. Moos, professor of psychiatry and behavioral sciences at Stanford University School of Medicine.

The book, Coping with Physical Illness (Plenum Medical Book Company, New York, 1977. 440 pages, $25), written in collaboration with Vivien Davis Tsu, is designed to help those in nursing, medicine and public health to work more effectively with patients and their families who are experiencing serious illness.

Personal essays by people who have coped with illness are included. Among these is a description of how Marvella and Birch Bayh coped with breast cancer, how a family in Maine dealt with a diagnosis of Lou Gehrig's disease and one fifteen-year-old's experience with chronic kidney disease, dialysis and transplant.

Sections on coping with stillbirth and birth defects, cancer, cardiovascular disease, severe burns and chronic illness are included. The emotional strain on professional staff and issues related to death and dying are described also. The stress of medical treatment is explored, emphasizing the importance of unusual hospital environments and radical new treatments such as transplants.

Dr. Moos is chief of psychiatric research at the Palo Alto Veterans Administration Hospital. He was awarded the Hofheimer Prize by the American Psychiatric Association in 1975 for his book, Evaluating Treatment Environments: A Social Ecological Approach.

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Mailed Wednesday, April 6, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Barbara Korsch, professor of pediatrics at the University of Southern California, will present the fourth annual Katharine D. McCormick Distinguished Lecture Thursday, April 14, at 4:15 p.m. in the Fairchild Auditorium at Stanford University School of Medicine.

She will discuss "Gaps in Doctor-Patient Communication." Members of the medical community and the public are invited to attend.

Korsch plans to discuss "communication gaps," such as doctors' failure to fully explain the nature of patients' illnesses and the needs for particular treatments. Lack of communication, she has reported, may account for many instances of treatment failure. Korsch will describe her investigations of doctor-patient communication with videotape illustrations.

Born in Germany, she received her secondary education in Sweden and the U.S., and attended Smith College. She obtained her M.D. degree at Johns Hopkins University, and served internship and residency at Bellevue, the Mary Imogene Basset Hospital, and the Menninger Clinic.

She has been on the faculty at Cornell Medical College and at UCLA, and has been professor of pediatrics at USC since 1969.

Korsch received the Dart Award for academic innovation at USC in 1974, and in 1973 she delivered the George Armstrong Memorial Lecture of the Ambulatory Pediatric Association. The Texas Pediatric Society has made her an honorary citizen of Texas.

The McCormick Lectureship was established in 1974 by the Professional Women of Stanford Medical School with the aim of bringing outstanding women physicians and scientists to the School.

The lectureship honors the late Katharine Dexter McCormick, who left a large bequest to the Medical School in 1967, particularly "for the encouragement and assistance of women in pursuing the study and teaching of medicine and medical research."

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4/5/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Combining the use of an amphetamine, commonly know as "speed," with morphine can substantially relieve pain in surgical patients, while minimizing the side effects of morphine alone, according to a recent study.

Reporting in the current issue of *The New England Journal of Medicine,* researchers in the Cooperative Analgesic Study Program said pain relief was definitely improved with lesser amounts of morphine as amphetamine was added.

In addition, the greater pain relief was without the undesirable side effects often associated with morphine, such as nausea, respiratory depression and general lethargy

Authors of the report are Drs. William H. Forrest, Jr., Bryon W. Brown, Jr., and Colin R. Brown of Stanford University School of Medicine, and eight other researchers from Tufts, Yeshiva, Indiana, and Miami schools of medicine. Forrest is chairman of the Cooperative Analgesia Study, which has been underway in six Veterans Administration hospitals for several years.

In the study, a group of 450 young patients in the veterans hospitals, mean age of 35, were given morphine or morphine plus dextroamphetamine to relieve severe pain of abdominal or orthopedic operations.

Dextroamphetamine is a white crystalline compound that is a central nervous system stimulant. Morphine, on the other hand, acts as a sedative.

The dose combinations, researchers reported, were considerably more successful than expected.

"It seems clinicians have overlooked a truly effective combination that comes much closer than any existing single compound to offering ideal pain therapy for this group of patients," according to the report.

The authors note that the drug combination could be particularly important for physicians, since it should enable postoperative patients to resume some activity more rapidly, reducing the chance for respiratory or circulatory problems.

Although there were similar findings in studies done 30 years ago, the drug combination has never become a clinical tool for relief of pain.

The authors say this might be because "physicians do not want to subject their patients to the risk of abuse if these drugs are used."

Yet, they report, "it is rare for analgesic drugs to lead to abuse in patients with acute postoperative pain."

Forrest admits he is puzzled why this particular combination was never used clinically, but says current research has been in the direction of using stimulants, or mood-altering drugs, as analgesics.

In an editorial in the same issue, Dr. Leroy D. Vandam of Peter Bent Brigham Hospital, Boston, cautioned about possible cumulative effects and addiction. whether the combination would be safe for the elderly, and whether patients might really want postoperative alertness.

But he noted that the knowledge of mechanisms at work should be useful to future trials, and called for further such work.

The research was supported in part by grants from the Veterans Administration and the National Academy of Sciences-National Research Council.

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4/1/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 415: 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Alumni of the Stanford University School of Medicine will gather for their spring reunion day on Saturday, June 4, at the Medical School.

In a morning clinical symposium, speakers will be Dr. John G. Nicholls, professor of neurobiology, on "Cellular Organization of the Brain"; Dr. Eric M. Shooter, chairman of neurobiology, on "Nerve Growth Factor"; and Dr. Dora B. Goldstein, adjunct professor of pharmacology, on "Drug Tolerance and Physical Dependence."

Dedication of an "alumni green" and reminiscences of the old school, formerly located in San Francisco, and the present school of medicine, will be held at noon, with luncheon following for alumni, associates, spouses and faculty.

The afternoon keynote address will be given by Dr. Victor Fuchs, professor of economics at Stanford and vice-president for research and codirector of the west coast branch of the National Bureau of Economic Research. His topic will be "From Bismarck to Woodcock: The 'Irrational' Pursuit of National Health Insurance."

An open house and tours of laboratories in the Sherman Fairchild Center will be held in the afternoon.

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5/31/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--The Robert Wood Johnson Foundation has awarded a $272,498 grant to Stanford University Medical School in support of a three-year research and training program in ambulatory pediatrics.

The study is under the direction of Dr. Ruth T. Gross, chief of the pediatric outpatient clinic at Stanford and director of the division of ambulatory pediatrics at the medical school. Co-investigator is Dr. Thomas F. Anders, associate professor of psychiatry and pediatrics and head of child psychiatry at Stanford.

According to Gross, pediatricians frequently continue to treat patients into adolescence, yet may not be equipped to handle the special problems of this age group. In order for the pediatrician to best help the adolescent, Gross says, the issue of what content is needed in training programs for pediatric residents must be resolved.

The research and training program is an outgrowth of a planning project, also funded by the Robert Wood Johnson Foundation, in which investigators worked in conjunction with the Palo Alto Unified School District.

The three-year program will add to existing knowledge about school-related adolescent health problems, including methods for diagnosis and treatment of these problems. A small number of future clinical faculty will be trained in adolescent pediatrics and the course content of training programs for child health providers will be expanded to permit them to more adequately meet the need of adolescents.

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Mailed Thursday, May 26, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Harriet Baumgarten, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

The fourth and final lecture of the Progress in Medicine series on cancer will be held at 7:30 p.m., Wednesday, June 1, 1977 in the Sherman Fairchild Auditorium of the Stanford University Medical Center.

The lecture, "Cancer and the Individual: The Effect on Patient and Family," will be a panel discussion moderated by Don R. Goffinet, M.D., assistant professor of radiology. The lecture is open to the public.

Members of the panel are: Suzanne S. Miller, R.N., clinical oncology nurse coordinator; Frank E. Stockdale, M.D., associate professor of medicine and biological sciences, division of oncology; Frederic J. Van Rheenen, M.D., clinical assistant professor of psychiatry; Isabel Walker, R.N., M.S.W., clinical social worker, division of oncology; and Ernle W.D. Young, Ph.D., chaplain to the medical center.

The Progress in Medicine lecture series was initiated in 1966 to provide an opportunity for leaders in academic medicine at Stanford to share information and insights with members of the community.

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5/26/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino 415. 497-6911

STANFORD –

Stanford University Hospital's new north wing, which houses an intensive care unit, new emergency department, X-ray facilities, and other laboratories, is now open and receiving patients.

The new Hospital addition is located to the left of the medical center's main entrance. New diagnostic radiology facilities, the emergency department, and blood transfusion and coagulation laboratories are located on the first floor. On the second floor are the intensive care unit, cardiovascular and special radiology facilities, surgical pathology laboratories, and the postanesthesia recovery area.

Although only eight beds are initially in use in the new North ICU, the unit will eventually accommodate 25 beds. This will increase the total number of ICU beds in the Hospital to 47, according to ICU medical director Dr. Myer H. Rosenthal.

North ICU beds are reserved for cardiovascular surgery patients, says Rosenthal, while other surgical and medical patients are treated in the original ICU.

"The new unit provides us much more flexibility," comments Rosenthal, "because it has much more space than our other unit. It also contains the latest monitoring equipment. There is a brighter environment overall, which is good for the patients and staff alike."

An open spaciousness characterizes the new facility, which has been designed with extensive use of glass, both as part of the exterior and within patient areas.

The new emergency department, for example, is almost twice the size of the old, with 18 treatment rooms and a special acute resuscitation room featuring modern wall-mounted equipment panels.

Both the new ICU and the emergency have designated special areas where families of patients may confer with doctors privately. The comfortably furnished Leonard Consultation Room and Lounge adjacent to the ICU is named for W. Drew and the late Mrs. Leonard, former Stanford Hospital patients.

Both inpatients and outpatients will be accommodated in the radiology area, according to Dr. William H. Northway, director of the division of diagnostic radiology. The unit is designed in the pattern of concentric "c's" with convenient access for outpatient general radiography, and interior rooms for inpatient procedures such as tomography, head and body scanning, and ultrasound. At the center of the unit are processing areas and radiographic viewing areas.

"Besides the increased space and new equipment, there is a real benefit in better work flow and more efficient patient care," comments Sandra Noon, chief technologist. "This should mean much less waiting time for patients."

The new blood transfusion and coagulation laboratories were constructed in the new wing with a grant from the William Randolph Hearst Foundation.

The transfusion service is the largest in California. Its purpose is to ensure the compatibility and safety of all blood transfused at the Hospital and at Children's Hospital at Stanford.

The coagulation laboratory staff makes rapid identification of coagulation deficiencies in surgery patients and consults on medical and presurgical cases, the treatment of hemophilia, and dosage control of patients receiving anticoagulants.

Laboratories and patient-care services in the new wing will continue to be phased into operation as equipment is installed during coming weeks.

Still under construction is a level bridge linking operating rooms in the original building with the new wing's postanesthesia recovery area. The bridge is expected to be completed early this summer.

In addition, plans for utilization of shell space will be developed.

According to Paul Hofmann, director of the hospital and clinics, the "catch up" expansion will relieve overcrowding in laboratory, X-ray, and other hospital support departments.

As departments have relocated out of the original building, work has begun in renovating those areas. The former emergency area is now being designed to accommodate a new oncology day-care center for treatment of cancer patients. Central services on the ground floor of the hospital and clinical laboratories on the second floor are also being expanded.

Total cost of the project is $18.1 million. Original plans called for a construction budget of $12.6 million, excluding activation and new program costs. However, a variety of code and licensing deficiencies caused delays and increased costs. These are being contested in a claim for an undisclosed amount against the architectural firm of Caudill Rowlett Scott of Houston.

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5/25/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A state health department official said Friday, May 20, that Stanford University Hospital "has no serious hazards" despite a checklist of "deficiencies" found by inspectors last January.

Thomas Callahan of the State Department of Health district office in San Jose, after a meeting with hospital officials, said that most of the deficiencies listed in a state report already have been corrected or are in the process of being resolved.

The report listed 43 items, many relating to longstanding problems of insufficient space at the hospital for its annual full load of patients and the needed supplies and equipment.

During the Friday meeting, Callahan deleted five of the items because, he said, the inspection team that toured the hospital in January had insufficient or inaccurate information.

One item mentioned in the report included the need to separate contaminated linen from incoming supplies in loading areas and corridors.

But Peter Levin, associate vice president for medical affairs, noted it was not a matter of incoming and outgoing materials coming into direct contact, since "everything is wrapped and covered."

In addition, a partition has been constructed down the wide corridor in question, thus creating two one-way corridors, he said.

Hospital deputy director Gary Mecklenburg said he feels it is "important to note that the quality of patient care has not been questioned" in the report. Callahan agreed.

Many of the items related to record keeping, a problem which has been addressed, Mecklenburg said.

For example, one item that cited 2,150 "delinquent records for discharged patients" meant that records had not been closed within the mandated 14-day period. Many of the delinquencies were just a few days, and since the survey in January the total has been reduced to about 500, said Mecklenburg. This is appreciably lower than the acceptable rate suggested by the Joint Commission on Accreditation of Hospitals.

Both Mecklenburg and Levin said some of the space items cited in the report will be around for several years, but others are in the process of being resolved. A central storage area for sterile items has been created in the basement of the new hospital wing which opened this spring.

Plans are under way to renovate the neonatal intensive care nursery, and a review is under way of all areas needing upgrading, officials said.

Mailed Monday, May 23, 1977

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. David P. Rall, director of the National Institute of Environmental Health Sciences and an assistant surgeon general, will speak at Stanford University Medical Center Thursday, May 26.

His address, which is entitled "The Environment, Human Health, and the Medical School," will begin at 4:30 p.m. in the Sherman Fairchild Auditorium and is open to the public.

A clinician's response to Rall's address will be delivered by Dr. Daniel Federman, professor and chairman of the Department of Medicine at Stanford.

Rall's talk honors Dr. Rodney R. Beard, a member of the Stanford medical faculty since 1940, who is retiring.

Beard, a Stanford graduate with both his A.B. degree and medical degree, has distinguished himself in the fields of environmental and preventive medicine and occupational health.

He was chairman of the Department of Preventive Medicine from 1949 to 1969, shared in the development of the five-year curriculum at Stanford Medical School, and organized the Stanford Rehabilitation Service.

Beard has specialized in studies of the effects of toxic agents on human behavior (particularly carbon monoxide). He is a consultant for federal and state air pollution control groups, environmental epidemiology and occupational health, and the education of preventive medicine specialists.

Rall earned his M.S., Ph.D. and M.D. from Northwestern University. He has coauthored and authored over 100 published papers relating to comparative pharmacology, cancer chemotherapy, blood-brain barrier, blood CSF barrier, pesticide toxicology and drug research and regulation.

Rall formerly served as associate scientific director for experimental therapeutics of the National Cancer Institute (1966-71).

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5/20/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--Dr. Henry S. Kaplan has been selected to receive the Leopold Griffuel Prize, awarded by the Association for the Development of Cancer Research at Villejuif, France.

Mr. Jacques Crozemarie, president of the association, will formally present the prize to Kaplan at Villejuif, on the outskirts of Paris, June 21. He will be honored at a reception at the French consulate in San Francisco, May 20.

Dr. Kaplan, Maureen Lyles D'Ambrogio professor of radiology and director of Stanford's Cancer Biology Research Laboratory, is an internationally-known authority in clinical and basic cancer research. He conceived the use of the linear accelerator for medical purposes and helped to design it. His pioneering radiotherapy techniques have resulted in dramatic gains in the treatment of certain cancers, particularly Hodgkin's disease and other malignant lymphomas.

Kaplan is now involved in research which will expand his earlier discovery that radiation-induced leukemias in mice are caused by a latent virus triggered by the radiation exposure. He is looking at several aspects of the biology of human malignancies, with emphasis on the possible role of viruses as the cause of cancer.

Among Kaplan's honors are the 1969 Atoms for Peace Award and election in 1972 to the National Academy of Sciences. He was made a Chevalier de la Legion d'Honneur by the Republic of France and has received Italy's Order of Merit.

The Griffuel prize, established in 1970, is awarded annually for accomplishments in cancer research. It is named for the late Leopold Griffuel who was born in Paris in 1870 and held a doctorate in law in addition to being an M.D. After his death in 1950, Mrs. Griffuel founded the Association for the Development of Cancer Research which awards the 100,000-franc ($20,000) prize.

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Mailed Friday, May 20, 1977
Sent Business Wire Friday, May 20, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

CITY DESKS: A press conference in connection with the book, *Costs, Risks, and Benefits of Surgery*, will be held at 10 a.m., May 23, 1977 in the President's Room of the National Press Club, Washington, D.C. Dr. John P. Bunker of the Stanford University School of Medicine will discuss the book and comment on the need for new approaches to the evaluation of surgical care.

ADVANCE FOR RELEASE MONDAY, MAY 23, 1977.

STANFORD –

American medicine should adopt a new model for judging the net benefits of surgical care, a Stanford University professor urged Friday, May 20.

The current popular model, which categorizes operations as necessary or unnecessary, was appropriate when surgery—and medicine as a whole—was devoted mainly to the treatment of life threatening diseases, said Dr. John P. Bunker, professor of anesthesia and director of Stanford's Division of Health Services Research.

Now, however, most of these diseases of the past have become curable, and much of surgery is devoted, quite properly, to attempting to improve the quality of life—to relieve discomfort, disfigurement and disability, he said.

"The potential benefits of such treatment may be small," Bunker noted, "but nevertheless important. Similarly, the risks may be relatively small but they also are important."

To measure small benefits or risks requires much more sophisticated methods than were needed to assess treatments for life-threatening conditions of an earlier era, he said.

The Stanford professor also said that a campaign to educate the American public that health care is sometimes faulty would be quite proper.

Bunker expressed his views in remarks prepared for delivery Monday, May 23, at a press conference in Washington, D.C. He will discuss the book, *Costs, Risks, and Benefits of Surgery* to be published next week by Oxford University Press.

Edited by Bunker and Harvard's Benjamin A. Barnes, a surgeon, and Frederick Mosteller, a statistics professor, the 400-page book provides the most comprehensive critique yet of surgical care in the United States. The need for new data on surgery and methods for collecting them are major areas of the book.

"Data which are available, however, and the analyses presented are consistent with the notion of surgical utilization leading to diminishing marginal benefits," Bunker said.

"Since most dollar costs are not borne by patients, risks, when they are small, are largely ignored," he added.

Bunker stated that certain operations, when subjected to cost-benefit analysis, are shown to have little or no effect on life expectancy or improvement of the quality of life.

As an example, he said, elective gall bladder surgery for silent gallstones in a 49-year-old man in good preoperative physical condition will increase his life expectancy by 16 days, in comparison to the predicted life expectancy for the same patient managed medically.

Another study, however, shows that at age 60 the advantage of surgical over medical management for males in good preoperative condition is reduced to seven days. And a poor risk 60-year-old woman has been estimated to lose 14 days of life after elective gall bladder surgery.

Bunker said that for the nation as a whole the difference in cost between radical and simple mastectomy with radiation treatment is probably more than $100 million a year. Yet there is no evidence that the costlier procedure increases life expectancy.

(more) 5/19/77

"The quality of life following radical mastectomy is, in fact, distinctly poorer compared to simple mastectomy if one takes into account its psychic and social costs," he said.

Variations in surgical procedures, according to Bunker, entail substantial costs in dollars and morbidity.

Public and professional attitudes toward surgical care will have to change, he asserted. There is the belief that human life is priceless. No cost should be spared.

"But medical triumphs have created new moral and economic issues," Bunker said. "Coronary artery bypass surgery or kidney transplantation, for example, may be treatments that cost more than society is willing to pay."

Bunker listed four urgent needs that will have to be addressed in making choices for the future:

* Appropriate studies of the effectiveness of surgical treatment should be carried out for selected conditions, particularly when uncertainty leads to professional disagreement.

* Research to obtain reliable data, and improve cost-benefit analysis of surgical procedures should be stepped up.

* Methods of cost-benefit evaluation should be a part of the curriculum of medical schools and incorporated into clinical practice and continuing medical education.

* Information should be compiled and properly presented to the public.

"Pioneering surgeons devised operations primarily on intuition and assessed them by trial and error," Bunker said. "This era produced many brilliant operations, but also some which were discarded after years of application and a large cost in dollars, morbidity and even mortality.

"This was at a time when there was no extensive knowledge in the basic biological sciences or experimental designs that permit logical conclusions from multiple clinical experiences."

The randomized clinical trial should be more widely adopted in surgical research, Bunker said. Even though there are ethical questions in carrying out experiments in humans, there are also serious ethical problems when operations are carried out without proper evaluation.

According to the studies, the costs in dollars and lives of a poor experiment or of no experiment, were often much greater than those of a well-designed and executed clinical trials, Bunker said.

As an example he cited the widespread adoption of gastric freezing for treatment of duodenal ulcer, and of internal mammary artery ligation for relief of anginal pain.

"Both procedures were promptly discarded when they were proved ineffective in a randomized clinical trial," Bunker said.

Commenting on the role of the public, Bunker said:

"Some physicians feel no useful purpose can be served by a campaign to convince the American people that health care is sometimes faulty. Elaborate disclosure is, to be sure, apt to be inappropriate in the presence of immediately, life-threatening disease.

"But the public must be informed of the limits of medical and surgical intervention, especially for those conditions where benefits and risks appear small, and individual personal values are apt to play a decisive role."

END ADVANCE FOR RELEASE MONDAY, MAY 23, 1977.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--The lipids, or fats, of nerve cell membranes may be keys to understanding how alcohol affects the human body, according to Stanford researchers.

Recent studies indicate a new emphasis on membrane lipids as a site of long-term drug action. If such lipids are involved, say the scientists, then dietary fats may turn out to be important in the treatment or prevention of alcoholism as they are in heart disease.

Studies of cell membranes may also be useful in discovering how the human body develops tolerance to prolonged use of alcohol, according to Dr. Dora Goldstein, adjunct professor of pharmacology at Stanford University School of Medicine, and Dr. Jane H. Chin, senior research associate, writing in a recent issue of Science.

Their data suggest that membrane lipids are able to adapt to alcohol. This is in contrast to other drugs, such as morphine, which are thought to cause an adaptation involving proteins rather than lipids.

In one study, the researchers fed one group of mice a diet that included a high proportion of ethyl alcohol. The other group of mice had the same diet without the alcohol.

At first, the alcohol-drinking mice looked drunk, but later they developed tolerance to the alcohol.

When alcohol was added to the membranes from the tolerant mice, there was little change, just as their behavior did not show the effect of the alcohol.

The mice also developed physical dependence, meaning that they would go into convulsions when they sobered up completely.

Membranes of red blood cells and of nerve cells from the tolerant mice appeared normal when washed free of alcohol. No change was observed in the membranes that would explain the convulsions, say the researchers.

The response to alcohol that was measured was a change in fluidity of the cell membranes.

According to Goldstein, normal cell membranes have a certain degree of fluidity that must be exactly right for the cell to function properly, especially in the brain.

Alcohol made the membranes of normal mice more fluid, a change that might cause the brain to malfunction. However, the membranes of mice on the high alcohol diet were relatively resistant to this fluidizing effect of the alcohol, suggesting they had adapted to the drug.

Goldstein notes that more studies are needed to examine chemical composition of the alcohol-tolerant membranes.

The research is supported by the National Institute on Alcohol Abuse and Alcoholism.
Mailed Thursday, May 19, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Harriet Baumgarten 415: 497-6911

STANFORD--"Treatments for Cancer: New Therapies" will be the topic of the third in a series of four lectures about cancer, to be held at 7:30 p.m., Monday, May 23 in the Sherman Fairchild Auditorium of Stanford University Medical Center.

The lecture is open to the public.

Speakers will be Dr. Saul A. Rosenberg, professor of medicine and radiology and chief of the division of oncology, and Dr. Sarah S. Donaldson, assistant professor of radiology.

Dr. Rosenberg is also president and chairman of the board of trustees of the Northern California Cancer Program. He has made significant contributions to cancer research, particularly in treating patients with lymphoma. Rosenberg has won several teaching awards, among them the first Arthur Bloomfield award for excellence in teaching. He will be director of Stanford's oncology day care center which is scheduled for Fall opening.

Dr. Donaldson serves in the division of radiation therapy at Stanford. She is involved with radiotherapy-chemotherapy interactions, particularly as applied to children. Among her accomplishments is the development of a special diet to help manage severe intestinal complications which may result from radiation therapy and chemotherapy in children with cancer. She has recently been involved in the study of pregnancies of women who have been treated with radiation therapy for the treatment of Hodgkin's disease.

The Progress in Medicine lecture series was initiated in 1966 to provide an opportunity for leaders in academic medicine at Stanford to share information and insights with members of the community.

The last lecture of the series is a panel discussion on "Cancer and the Individual: The Effect on Patient and Family," June 1, 1977.

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Mailed Tuesday, May 17, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--A memorial service for the late Dr. Emile F. Holman, whose career at Stanford University spanned more than 50 years, will be held Saturday, May 21, starting at 5:30 p.m. at Stanford's Memorial Church.

Holman, a professor of surgery emeritus, died March 19 at age 86.

Friends and members of the Stanford community are invited to attend the service.

Participants in the memorial service will include Ernle Young, associate dean of Memorial Church and chaplain of Stanford Medical Center; Dr. Victor Richards, president of the Stanford Medical Alumni Association Board of Governors; Dr. James B.D. Mark, professor and head of the Division of Thoracic Surgery, Stanford Medical School; and Peter Olch, deputy chief of the National Library of Medicine.

Olch, who has interviewed leading physicians in the country, will play taped recordings of his interviews with Holman.

A graduate of Stanford with an A.B. degree in 1911, Holman was a Rhodes Scholar and received his M.D. from Johns Hopkins before returning to Stanford in 1925 as an associate professor of surgery. A year later he became professor of surgery and chairman of the department, a position he held until his retirement from the faculty in 1955.

Holman was considered the predominant authority on arteriovenous fistulas and was a major contributor to the development of the surgical treatment of "blue babies." He was the first to perform the operation on the West Coast.

An endowed professorship was named after him at Stanford Medical School--the Emile Holman Professorship of Surgery, established in 1972.

The family has requested memorial donations to sent to the Department of Surgery, Stanford Medical School.

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Mailed Monday, May 16, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Dr. Edwin G. Krebs, newly appointed chairman of the Department of Pharmacology at the University of Washington School of Medicine in Seattle, will present the fourth annual Windsor C. Cutting Memorial Lecture at Stanford University Medical School.

The lecture, which is open to the medical community, will be given Thursday, May 19, starting at 4:15 p.m. in the Fairchild Auditorium. Krebs will speak on "Protein Phosphorylation Reactions: New Sites for Regulation by Chemical Agents."

On July 1 Krebs will officially become an investigator of the Howard Hughes Medical Institute and Pharmacology Department chairman at Washington. Until then he is serving as a visiting professor of biological chemistry at the University of California, Davis.

A graduate of the University of Illinois, Urbana, Krebs received his medical degree at Washington University School of Medicine, St. Louis, Mo. in 1943.

In 1966 Krebs became professor of biochemistry and assistant dean for planning at the University of Washington Medical School in Seattle, and in 1972 he was appointed chairman of the Division of Basic Sciences at U.C. Davis School of Medicine.

Krebs has concentrated his research into the regulation of carbohydrate metabolism and related studies in glycogenolysis, which is the splitting up of glycogen in body tissues that yield glucose.

Krebs is a member of the National Academy of Sciences and was a recipient of the Distinguished Lectureship Award of the International Society of Endocrinology (1972), and the Annual Faculty Research Lectureship at U.C. Davis (1975-76).

The Windsor Cutting Lectureship was established in 1973 by the faculty of the Department of Pharmacology and is supported by private contributions. It honors the memory of Dr. Cutting, professor and former chairman of the department, who also served as dean of Stanford Medical School, 1953-57, and as dean of the University of Hawaii Medical School, 1963-71. Dr. Cutting died in 1972.

The lectures, which feature speakers prominent in the field of pharmacology, are given annually.

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Mailed Wednesday, May 11, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Program plans for renovating and upgrading Stanford University Hospital's neonatal intensive care nursery were approved by the University Board of Trustees at their meeting Tuesday, May 10, 1977.

The Board also gave its approval to preliminary plans for expanding certain molecular biology laboratories involved in recombinant DNA research in the School of Medicine.

Renovations in the nursery will increase space for bassinets and support services as required by new State Department of Health standards, and also provide needed space for the comprehensive services of the unit, according to Paul Hofmann, director of Stanford University Hospital and Clinics.

More than 750 critically ill infants are admitted annually to the unit from throughout the western states. There are 25 bassinets, including four in the premature clinical research center.

The unit conducts comprehensive teaching programs in developmental biology and neonatology for postdoctoral Ph.D. and M.D. trainees, fellows, residents, and medical students.

Research projects in the unit include studies in extrauterine growth and adaptation, regulation of enzyme action during development, and sudden infant death

According to Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine, the expansion of molecular biology laboratory space will allow continued development of research programs in bacterial plasmids. The laboratory space will be utilized by Dr. Stanley Cohen, professor of medicine, and by faculty of the Department of Genetics.

The project calls for added laboratory space for Dr. Cohen on the third floor of the Lane Building of the Medical School, near the Department of Genetics.

Included in the plan is a P-3 facility, to be located on the third floor of the adjacent Grant Building. P-3 refers to the degree of physical containment required by National Institutes of Health guidelines for laboratories conducting specific types of recombinant DNA research.

Further plans for design and funding of both nursery and laboratory projects will be under way during the next several months.

Projected cost of the nursery remodeling is in the range of $900,000 to $1,000,000. Gift funds are expected to support a portion of the costs.

The molecular biology laboratories and associated relocation of other facilities is expected to be in the range of $800,000 to $950,000, to be supported by Medical School resources and gifts.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--As employees of Stanford University Medical Center's Finance Department sit around enjoying sack lunches they have often been treated to strains of Haydn's "Divertimento in C Major" or Bozza's "Trois Mouvements."

And, although some employees may compare them with the New York Woodwind Quintet or even the Melos Ensemble of London, they are actually the finance department's "adopted" woodwind quintet.

As yet, the group does not have a name. Nevertheless, its members believe they will soon be performing publicly.

"We're serious about our music," noted group co-founder Lisa Lawrence, a systems analyst in medical center finance. "But we don't want to be so serious that we don't enjoy what we're doing. We have a lot of fun."

Lawrence, along with Linda Wilson, a forms analyst in finance, were both music majors in college (Lawrence at Pomona College in Claremont, Calif. and Wilson at Ohio State). Neither had played seriously for four years when they struck up an acquaintance in the finance office and eventually decided to organize a musical group.

"We thought it was a good idea to start up our musical playing again," Wilson recalled, "And once we started we discovered how much we actually enjoyed it."

Originally a duet, Lawrence (flute) and Wilson (clarinet) gave a recital for five "close and uncritical friends" and later performed as part of a church service. They also played at an employee Christmas party held last year at Stanford Hospital.

"Our ultimate goal was to form a quintet because the repertoire for flute and clarinet is very limited," Wilson explained. So they eventually added three new members--Leonard Winograd, a photographer in the Dermatology Department in the medical center (oboe); Jack Johnstone, a graduate student in music at San Jose State (bassoon); and Lloyd Banta, an electrical engineer at Varian Associates (French horn).

Once a quintet, the "no name" group had problems lining up suitable practicing sites.

"For a while we practiced in the (Stanford Hospital) print shop," Lawrence noted. "It was the only place nearby where everyone cleared out at lunchtime with no one next door for us to bother. Of course, sometimes we did have to practice with the machines running, which was difficult because those darn machines wouldn't follow our tempo." (As a duet Lawrence and Wilson had also practiced outside the university mausoleum--burial site for Sen. Leland Stanford, his wife Jane and son Leland Jr., which is near the medical center).

The quintet, which ranges its repertoire from classical to contemporary selections, also practices in the finance complex on occasion. But it usually meets once a week alternating between members' homes. ###

Mailed Tuesday, May 10, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911
Nicki Marx 408: 423-5672

STANFORD--"Eye Dazzler," a mural composed of over 200,000 pheasant feathers, has been installed in the Sherman Fairchild Center Auditorium at Stanford University Medical Center.

The feathers derive from the Lady Amherst and Golden Pheasant varieties that have been stapled and glued to the mural's plywood backing.

The mural, which is enclosed in plexiglass and measures approximately 12 feet by eight feet, was created by artist Nicki Marx of Santa Cruz. Marx was commissioned by the medical center to assemble the art work for the auditorium, which is part of the new Fairchild complex for neurosciences research. The complex opened late last year.

The mural's feathers, which are from non-endangered pheasants raised commercially, are assembled to reflect an "optical, in-motion quality," Marx noted. "The name 'Eye Dazzler' is also a reference to the unique Navajo rugs of the late 1800s which have the quality of motion in design and the use of vivid colors," she said.

Marx, who is represented in Palo Alto by Smith-Andersen Gallery, said her work is also a "personal celebration of life, and an exploration of natural materials. The work is connected to ancient traditions from many lands, yet is unique in its application of materials to modern forms and ideas."

Selection of the mural for the Fairchild Auditorium was coordinated through an art committee appointed by Dr. Clayton Rich, vice-president for medical affairs and dean of Stanford Medical School. Committee members are Dr. Joseph Kriss and Henry Kaplan, radiology, and William Fielder, clinical assistant professor of surgery at Stanford. Consultant to the committee is Dr. Albert E. Elsen, art history.

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Mailed Tuesday, May 10, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Stanford University School of Medicine has received a gift of $1 million from the James G. Boswell Foundation of Los Angeles for rehabilitation and expansion of departments within the Boswell Clinic Building of the medical center.

The funds will allow major improvements to be made in the 18-year-old facility for both outpatient care and clinical research programs, according to Dr. Clayton Rich, vice-president for medical affairs and dean of the school of medicine.

Most of the medical center's 60 outpatient clinics are located in the building, including general medical clinics, pediatrics, gynecology and obstetrics, surgery, and radiology treatment areas. They receive more than 130,000 patient visits each year.

One of the first uses of the new gift will be the remodeling and expansion of gynecology and obstetrics areas on the third floor, according to Dr. Rich.

The Boswell funds will be earmarked for other clinical areas in the next several months, according to Dr. Rich, as needs are identified.

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Mailed Wednesday, May 4, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--"New Ways to Diagnose Cancer: The Impact of Technology" will be the topic of the second in a series of lectures about cancer, to be held at 7:30 p.m. Wednesday, May 11, in the Sherman Fairchild Auditorium of Stanford University Medical Center.

The lecture is open to the public.

Speakers will be Dr. I. Ross McDougall, associate professor of radiology, and Dr. Leslie M. Zatz, professor of radiology.

Dr. McDougall has served in the Division of Nuclear Medicine at Stanford since July 1976, and was formerly lecturer in medicine at the Glasgow Royal Infirmary, Scotland. His clinical interests are related to endocrine diseases, organ imaging and detection of cancer. His research has focused on methods of computer-assisted imaging and portable techniques which can be used at the bedside.

Dr. Zatz, chief of radiology at the Palo Alto Veterans Administration Hospital, also serves in the Division of Diagnostic Radiology at Stanford. His subspecialty interest is neuroradiology. Since coming to Stanford in 1958 his research has been in developing new tools and instruments for diagnosis. He has worked with experimental ultrasound cameras and assisted in development of computerized tomography.

The Progress in Medicine lecture series was initiated in 1966 to provide an opportunity for leaders in academic medicine at Stanford to share information and insights with members of the community.

Future topics will include "Treatments for Cancer: New Therapies," May 23, and "Cancer and the Individual: The Effect on Patient and Family," June 1.

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Mailed Tuesday, May 3, 1977

Science writers: This story describes an important step in cancer virus research. The research, however, is incomplete. There is not yet proof that the virus isolated by Dr. Kaplan and his colleagues at Stanford is a human cancer-causing virus. I direct your attention to the fourth paragraph. Because of these limitations, we ask that you treat this preliminary report cautiously until all the evidence is in.

Spyros Andreopoulos

STANFORD--A team of Stanford University scientists has successfully isolated and purified a virus from the tumor cells of a patient with diffuse histiocytic lymphoma.

The disease is one of the most malignant cancers of the lymphoma group.

The researchers said this was the first reported instance of the spontaneous and sustained release of a virus by a permanently established human cancer cell line.

Dr. Henry S. Kaplan stressed in an interview there is not yet proof the agent is a human cancer virus. "The finding, however, lends plausibility to a search for causation," he added.

Kaplan, professor of radiology, directs Stanford's Cancer Biology Research Laboratory.

The research was reported in the June issue of the Proceedings of the National Academy of Sciences. Kaplan's collaborators are Robert S. Goodenow, Alan L. Epstein, Susanne Gartner, Alain Decléve, and Peter N. Rosenthal.

The scientists said they have confirmed the agent in question is a "C-type" virus containing the genetic material RNA (ribonucleic acid).

The virus has a density identical to known animal C-type viruses that cause leukemias and lymphomas in animals. And it contains an enzyme called "reverse transcriptase" that shows some relatedness to

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similar enzymes found in several monkey viruses.

This enzyme transcribes the RNA of the virus into a DNA copy, which is then integrated into the cell where the virus can reexpress itself at a later time. Simply stated, it adds to the cell an extra set of genes.

In collaboration with Dr. Jack Griffith of the Department of Biochemistry, the researchers said they had obtained electron microscope pictures of the virus showing similarities to other mammalian RNA viruses.

Moreover, the scientists have shown the virus can change the growth behavior in the test tube of normal cells from Rhesus monkeys and to some extent from man. The human cell experiments, however, are not yet completed.

Monkey cells transformed by the virus," explained Kaplan, "contain chromosome numbers different from normal." This is an important criterion of malignancy.

However, many more steps are required to prove conclusively that the virus has cancer-causing potential, he said.

Among these is an experiment to show that normal cells transformed by the virus will propagate indefinitely as a cell culture, in short, become immortal. Another study involves injecting the cells into "nude" mice, a mutant species permissive for tumor cell growth. The purpose is to show whether the altered cells would grow as a tumor.

In addition, the Kaplan group plans studies by a procedure called molecular hybridization. These would show if the transformed cells had acquired DNA sequences from the genetic material of the tumor cells in which the virus was present.

(Continued)

These experiments, according to Kaplan, would help exclude any possibility of cross-contamination by other viruses and would add weight to the view that the virus may be human.

Kaplan said the search for the virus was facilitated by the establishment at Stanford two years ago of permanent cell lines from the tissue of patients with a diagnosis of histiocytic lymphoma.

Scientists had previously isolated C-type RNA viruses from leukemia patients, but they did not come from permanently established cell cultures. The cells died out, and, in order to be propagated, the virus had to be passed through other species of animal cells. This procedure, however, often alters the virus so that scientists can no longer be certain if it is identical ~~with~~ to the original isolate.

The Stanford cell lines provide a renewable source for many repeat experiments. The cancer cells can be frozen away, thawed and grown as needed, he said.

The scientists began to pick up evidence of particles in the cytoplasm of these cells about two years ago.

"This in itself was a good lead," said Kaplan. "When you find particles containing RNA within the cell, then you have two pieces of evidence pointing you in the right direction."

It was not, however, until the scientists had improved the sensitivity of their biochemical tests that they knew they had isolated a virus with active reverse transcriptase, that the enzyme met all the scientific criteria, and that copy DNA could be made with it in the test tube.

The scientists also confirmed viral activity through co-cultivation of the lymphoma cells with a rat cell known as XC. This is a cell line

(continued)

which carries a defective chicken virus. When XC cells contact some C-type viruses from a mammalian source, they are fused into one giant cell containing many nuclei, "and this is one hallmark of their action", said Kaplan.

Kaplan said his team has concentrated its efforts on RNA viruses because they are known to be the cause of lymphomas and leukemias in certain kinds of mammalian species and chickens.

But replication of RNA viruses is complex, said Kaplan. They hide within the cell and require sophisticated biochemical techniques to get at them.

The test requirements in fact turned out to be somewhat different from those used to detect other enzymes, he said.

The research is supported by grants from the National Cancer Institute, and gifts to the Joseph Edward Luetje Memorial Fund for Lymphoma Research.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Bottino 415: 497-6911

STANFORD--The first Charles and Gertie Thuss Lecture, sponsored by the division of plastic and reconstructive surgery at Stanford University School of Medicine, will be held at the medical school on Tuesday, June 28.

Dr. Erle E. Peacock, Jr., professor of surgery at the University of Arizona College of Medicine, will discuss "Biological and Pharmacological Control of Healing and Regeneration" at 4:15 p.m. in the Sherman Fairchild Auditorium.

Members of the medical community and the public are invited to attend.

Dr. Peacock is a well known surgical biologist, a plastic surgeon, and specialist in hand surgery. He has done extensive study in the field of wound healing, in the healing of collagen, the protein of skin, bone and connective tissue, and in the altering of collagen by pharmacologic means.

He served as chairman of surgery at Arizona from 1969 to 1974, and was formerly associated with the University of North Carolina. A graduate of Harvard Medical School (1949), Peacock has authored numerous publications and is active in many national professional organizations.

The lectureship has been established by Dr. Charles J. Thuss, Jr., who is associated with South Texas Pathology Associates in San Antonio, Texas, and Mrs. Thuss, a member of the Stanford class of 1966.

It honors his father, Charles J. Thuss Sr., and his mother, the late Gertrude Noble Thuss, a former registered nurse. Dr. Thuss is in plastic surgery practice at Kaiser Hospital, Santa Clara, and is clinical associate professor of surgery at Stanford Hospital.

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Mailed Wednesday, June 22, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Physicians on Stanford University Hospital's medical staff have approved new medical staff bylaws, it was announced Monday night (June 20).

A total of 494 physicians cast mail ballots, with 345 voting in favor of the bylaws, according to hospital officials. There are about 700 physicians on the medical staff.

The bylaws provide a new formal framework for the organization of the medical staff. The bylaws were drafted by a committee composed of faculty and community physicians.

Under the new bylaws the medical staff is responsible to the Hospital Board of Directors for the policies of professional medical care.

Membership on the Medical Board which is the executive committee of the staff has been expanded to include an elected president of the medical staff, five physicians elected by the medical staff at large, the hospital's medical director, and director of nursing services.

In addition, now serving on the Medical Board are the service chiefs, the chief of staff, five deputy chiefs (community) and the hospital director.

The bylaws provide for a closed single medical staff with both community physicians and faculty subject to the same rules covering conduct and discipline.

The new bylaws no longer require that a chief of service (a Stanford Department Chairman) must approve a physician's application for staff membership.

They make it clear that recommendations of the service chief with regard to the physicians' qualifications pertaining to competence, character and ethics will be submitted to the Credentials Committee, then Medical Board, and the Hospital Board of Directors where final decision is made.

A procedure has been added by which the medical staff may override actions of the Medical Board on medical care policy, including the adoption of rules and regulations governing the medical staff.

The new bylaws also provide that future amendments may be made by combined action of the medical staff and the Hospital Board of Directors. The bylaws will become effective after they are approved by the Hospital Directors.

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Mailed Tuesday, June 21, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

Editors: This release is issued jointly with the University of California-San Francisco School of Medicine.

STANFORD--A new course about common illnesses, called "Mundane Medicine."

A new community-run health service.

A computer databank designed to improve the care of arthritic patients.

These practical projects are among many initiated as part of a joint training program at Stanford Medical School, the University of California-San Francisco School of Medicine, and UC-Berkeley.

The young physicians who designed them are part of the national Clinical Scholars Program, supported by the Robert Wood Johnson Foundation of Princeton, New Jersey.

The foundation recently approved a $799,674 grant for three years to continue the program. There are 15 clinical scholars, nine at Stanford and six at UC.

The scholars have received their M.D. degrees, and have established skills in clinical medicine when they enter the program. The aim is to enrich their future medical work with knowledge in nonbiological subjects--economics, sociology, organization and management, ethics--which they can apply to improve health care.

An advisory committee at each medical school draws on faculty from throughout both universities. Scholars work together in seminars and individually on their own projects with a faculty advisor.

According to Dr. Halsted Holman, professor of medicine and director of the Stanford portion of the program, most of the physicians are interested primarily in the areas of organization of health care, medical sociology and economics, and medical education.

A principal aim, says Holman, "is to bridge the gap between medicine and the community."

One of the major new community programs to result in part from the Clinical Scholars Program is the Mid-Peninsula Health Service (MHS), an independent community-based, cooperatively-run health service. Holman is president of the board of directors. Douglas A. Rund, a former clinical scholar, was the first medical director, and many scholars contribute to its programs.

The aim of MHS, says Holman, is to provide primary, and some specialty, care in ways that will "improve health outcomes, control or reduce costs, and give patients more satisfaction." There is emphasis on self and home care, patient education, reduction of indecisive or redundant

-more-

medical procedures, team care, and the use of nonphysician personnel.

Scholars are also serving in other area health clinics. Dr. June Fisher was an internist at the Charles R. Drew Neighborhood Health Center in East Palo Alto, and is directing its hypertension program.

Fisher is a graduate of Sarah Lawrence College, Barnard College at Columbia, and New York's Downstate Medical Center. During her two years in the Stanford program, she completed a training manual for nurses about hypertension assessment and management, and originated the "Mundane Medicine" course.

Matthew Liang is writing "Mundane Medicine: A Manual for Primary Care," a book directed to medical students and housestaff concerning the 20 most prevalent diagnoses for office-based physicians. He, Fisher, and medical student Michael Crouch, designed and teach the class which has now been expanded to a two-semester subject.

With his preceptor, Dr. James Fries, assistant professor of medicine at Stanford and former clinical scholar, Liang is analyzing methods for management of rheumatic diseases.

One of the aims is to develop cost containment strategies for patients with such longterm illnesses. The computer databank, says Fries, provides for more accurate prognoses and more effective therapeutic programs as well.

Charles Irwin and members of the UCSF faculty have created a model treatment program for adolescents with learning problems as well as physical and emotional difficulties. Funded by the San Francisco Board of Education, the program is now in effect in five schools. Irwin has been appointed to the San Francisco Youth Guidance Center Medical Advisory Committee.

Lawrence Horowitz recently completed three years as a clinical scholar at Stanford, and has been appointed director of staff for the Senate Subcommittee on Health and Science chaired by Senator Edward Kennedy.

Horowitz worked with the subcommittee on questions of public participation in decisions on science policy, and also conducted a study on relationships between medical school activities and federal health objectives.

"This activity reflects concerns which lie at the heart of the reasons for the clinical scholars program," says Holman.

"It is a large and unusual task. Introducing nonbiological disciplines into medical thinking and practice will not by itself resolve the problems in health care...nonetheless these disciplines can yield understandings and methods which can greatly enrich and facilitate the search for better solutions."

The Robert Wood Johnson Foundation program is based on early pilot projects developed by Stanford and four other medical schools. In 1974 the Stanford program was integrated with UCSF and UC-Berkeley. "By combining the resources of our schools," says Holman, "we avoid duplication and provide greater breadth."

Five physicians have completed the training at Stanford; four have regular faculty positions, three of which are at Stanford. Three physicians completed the program at UCSF in June.

There are 10 programs nationwide. According to Dr. John C. Beck, director, the objectives include preparation of young physicians for careers in which they combine superior clinical skills with the ability to examine and think critically about medicine.

"Former scholars are in academic medicine, developing and managing health care institutions and delivery systems. They are also in a variety of public and private institutions involved in health-related public policy," says Beck. ### Mailed, Monday, June 20, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. David A. Rytand, Bloomfield Professor of Medicine emeritus at Stanford and chief of cardiology at Santa Clara Valley Medical Center in San Jose, is new president of the Stanford University Medical Alumni Association. New officers were named at the June meeting of the Board of Governors of the association.

Dr. Joseph W. St. Geme, Jr., professor and chairman of pediatrics at the Harbor General Hospital campus of the UCLA School of Medicine, was named president-elect.

Dr. Rytand, a member of the class of 1939, will serve as president through June 1978, succeeding Dr. Victor Richards of San Francisco.

Dr. Rytand, a specialist in renal and cardiovascular medicine, has been a member of the Stanford faculty for more than 35 years. From 1954 to 1960 he was executive head of the Department of Medicine. He has served several terms as secretary-treasurer of the Alumni Association.

President-elect Dr. St. Geme, Jr. has been associated with Harbor General Hospital since 1966. He had formerly been associate professor with the University of Minnesota Medical Center in the fields of pediatrics, microbiology, and laboratory medicine, and served as medical director of the diagnostic microbiology laboratory.

Dr. Don Goffinet, class of 1964, and assistant professor of radiology at Stanford, has been reelected secretary-treasurer of the medical alumni group.

New members of the Board of Governors are Dr. Lawrence S. Barnett, class of 1962, of Orange; Dr. Donald J. Prolo, class of 1961, of San Jose; and Dr. Ronald W. Thompson, class of 1965, of Los Angeles.

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Thursday, June 16, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--U. S. District Court in San Francisco has dismissed a suit filed by a former staff member at Stanford University School of Medicine who claimed she was discriminated against because of her sex.

Dr. Helene Rauch based her suit, which she asked the court to consider as a class action matter, on the university's decision not to appoint her to the medical faculty. She served as a research associate in Stanford's Department of Medical Microbiology from 1964 to 1975.

Rauch is now an associate professor of immunology and microbiology at Wayne State University in Detroit.

She was considered, but was turned down, by the department for a faculty appointment in 1970-71 and again in 1972.

U. S. District Court Judge William H. Orrick Jr. granted two motions filed by Stanford which agreed that the class action aspect of the Rauch suit be stricken, and that the suit be dismissed on summary judgment.

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Mailed Wednesday, June 15, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Community-based health education which relies heavily on the mass media can persuade people to change their life style and to improve their health status, according to a three-year Stanford University study.

Results of the study, which was funded by the National Heart, Lung and Blood Institute of the National Institutes of Health "strongly suggest that mass media campaigns directed at entire communities may be very effective in reducing the risk of cardiovascular disease."

The project is the first time that news media have been so extensively involved in a scientific behavior change effort at the community level.

Results are reported in the June issue of Lancet, a British scientific journal.

Dr. John W. Farquhar, director of the Stanford Heart Disease Prevention Program, says the project represents the type of preventive effort needed to help stem the epidemic of heart disease which claims the lives of more than 600,000 Americans per year.

"Most deaths of people under 65 in the U.S. due to coronary disease are preventable," he says. "We believe that success in achieving substantial behavior change at the community level lies at the root of any future national campaign to reduce premature mortality from heart disease and stroke."

The study began in 1972 with pre-campaign surveys conducted in three northern California communities--Watsonville, Gilroy and Tracy.

The researchers gathered data from about 500 randomly-selected men and women, aged 35 to 59, in each town. They measured knowledge about heart disease risk factors, daily intake of cholesterol, saturated and polyunsaturated fats, sugar and alcohol, and the daily rate of smoking. They also measured plasma cholesterol and triglyceride concentrations, blood pressure and body weight.

Two follow-up surveys took place at annual intervals. A random sample of residents in Tracy was surveyed each year as a control, but received no media campaign.

Fifteen percent of the Watsonville participant sample, at high risk for coronary heart disease, were selected for more intensive individual and group counseling in addition to the mass media campaign.

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From 1972 through 1974, the mass media in Watsonville and Gilroy urged residents to change high risk habits such as cigarette smoking, to improve their diets, and to exercise. The campaign included more than 50 television spots, 100 radio spots, several hours of television and radio programming, newspaper advertisements and stories, billboards, posters, and printed material mailed to community residents. The campaign was conducted in both English and Spanish.

The researchers found that in the control community, Tracy, the risk of cardiovascular disease increased moderately over the two years. In the treatment communities, however, there was substantial and sustained decreases in cholesterol and triglyceride levels and in blood pressure; fewer respondents reported they smoked; and their knowledge about risk factors increased.

Compared to no treatment, overall risk of cardiovascular disease (heart attack and stroke risk) was reduced 25 percent in Watsonville and 24 percent in Gilroy after two years of the media campaign.

Compared with the control community, systolic blood pressure dropped 6 to 9 percent in the two towns.

In Watsonville, 32 percent of the intensively counseled high risk respondents had given up smoking by the end of the first year, and 44 percent had done so at the end of the second year.

This degree of change in smoking is, according to Dr. Farquhar, "unusually large; particularly since the change occured in a random sample rather than in the usual volunteers for smoking cessation clinics."

The combination of media and face-to-face intensive instruction of high risk subjects in Watsonville was more effective in altering smoking behavior than was mass media alone, according to the Lancet report.

The initial improvement was greater in this high risk group, but at the end of the second year the decrease in risk was similar in both treatment communities.

"The mass media," according to Dr. Farquhar, "are potentially much more cost-effective than face-to-face education methods. But we believe that media effects could be considerably enhanced if they could help stimulate and coordinate interpersonal instruction programs in natural community groups, such as towns and factories.

"We think our results to date already provide a basis for planning and carrying out community-based risk reduction," says Farquhar.

In future work, researchers hope to find ways to provide such instruction programs and longterm social support in the communities so as to help maintain the changes in life styles already initiated.

Farquhar, professor of medicine at Stanford's School of Medicine, heads the interdisciplinary research team. Dr. Nathan Maccoby, professor of communication, and Dr. Peter Wood, professor of medicine, are coprincipal investigators. ###

Mailed Tuesday, June 14, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

ADVANCE FOR RELEASE TUESDAY, JUNE 14, 1977

EDITORS: Release date of this story is set to coincide with Dr. Kalman's testimony at 9 a.m. Tuesday, June 14.

STANFORD--More evidence is needed before over-the-counter sedatives, sleep aids and stimulant drugs can be determined safe and effective, says a Stanford scientist.

A medical review panel of the Food and Drug Administration found that none of the daytime sedatives or nighttime sleep aids on the market can be judged safe on the basis of available evidence, according to Dr. Sumner Kalman, professor of pharmacology at Stanford Medical School, and member of the panel.

Kalman discussed the panel's findings in testimony prepared for the Senate Select Committee on Small Business on Tuesday, June 14.

He said that bromides, considered a serious health hazard, and belladonna alkaloids, currently subject to abuse as street drugs, should not be marketed for casual use as sleep aids.

There is little evidence, he said, that antihistamines are effective sleep aids in the doses currently available. The panel placed those drugs in the category as requiring more evidence before the scientists could make a decision about their effectiveness and safety.

Only one drug, caffeine, appeared to be safe and effective as a central nervous stimulant that would restore attention and wakefulness in a tired person, he said. The drug will not, however, confer ability greater than the person normally has, he pointed out.

According to Kalman, the panel had difficulty in determining whether daytime sedatives helped relieve anxiety or simple nervous tension.

"We were not at all sure that there was demonstrable benefit from the use of these drugs. The only controlled studies that we saw showed no benefit of these substances over a placebo."

The Stanford scientist felt that daytime sedatives should be removed from the market, but the majority of the panel voted to give manufacturers the opportunity to do additional studies.

In his testimony, he noted "I think that if a suspicion exists about the ineffectiveness or the lack of safety of a drug or of both, it should be withdrawn." If marketing and advertising cannot be stopped, he says, then advertising claims about safety or effectiveness should not go beyond those found by the panel which reviewed it.

The casual use of drugs should be discouraged, he says. "Many of the indications for drug use are trivial ones, and most drugs are so poorly understood that we may, by taking them for the relief of transient discomfort, subject the body to severe poisoning which may not be manifest for a long time."

Persons should consider the possibility that they may not need drugs for trivial symptoms, he said. "Occasional nervousness or anxiety is a normal part of living and does no harm. . . . Occasional sleeplessness is a normal response to extra pressures."

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Mailed Monday, June 13, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Stanford University School of Medicine awarded 169 degrees during its annual commencement exercises Sunday, June 12.

The ceremonies also honored seven medical school faculty members for outstanding achievements in teaching.

Medical degrees were presented to 107 men and women. The medical school also awarded 17 Ph.D's, 38 masters' and seven bachelor of science degrees.

The diplomas were presented during ceremonies in Stanford Medical School's Grant Courtyard following the university's 86th annual commencement rites at Frost Memorial Amphitheater.

Dr. Clayton Rich, vice president for medical affairs and dean of Stanford Medical School, and Dr. Roy Maffly, professor of medicine (nephrology), presented the diplomas.

Dr. Elisabeth Kubler-Ross, psychiatrist, author and widely-recognized authority on care of the dying, presented the guest address.

Maffly was singled out by the medical students for two teaching awards. The students voted him as recipient of the Arthur L. Bloomfield Award for recognition of excellence in teaching of clinical medicine, and the Henry J. Kaiser Award for excellence in teaching.

Four other faculty members were also selected by the students for Kaiser teaching awards, including Dr. Michael Jacobs, assistant professor of ambulatory medicine, who was named for the second straight year. Also selected were Drs. Gerald Levine, assistant professor of pathology; Norman Blank, professor of radiology; and William Watson, assistant professor of dermatology.

The Henry J. Kaiser Awards for outstanding and innovative contributions to medical education were presented by Dean Rich to Drs. Duncan Govan, professor of surgery (urology) and Jon Kosek, professor of clinical pathology.

Lucille Daniels, emeritus professor of physical therapy, was named recipient of the first Lucille Daniels Recognition Award for Outstanding Contributions to Physical Therapy. The award will be given annually. ### Mailed Monday, June 13, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Dr. Tag Eldin Mansour has been appointed chairman of the Department of Pharmacology at Stanford University School of Medicine.

His appointment was announced by Dr. Clayton Rich, vice president for medical affairs and dean of the medical school.

Mansour, a professor of pharmacology, has served as acting department chairman since the fall of 1976, following the resignation of Dr. Lewis Aronow.

A member of the Stanford medical faculty since 1961, Mansour has concentrated his research into three general problems within the field of cell regulation and the effect of drugs on cellular control mechanisms.

He received a doctor of science degree in biochemistry from the University of Birmingham, England, for his research on phosphofructokinase, an enzyme crucial in sugar metabolism of the heart.

Mansour earned his bachelor of veterinary science, medicine and surgery degree from the College of Veterinary Medicine at the University of Cairo, Egypt. He studied physiology and pharmacology at Edinburgh University in Scotland and in 1949 he earned a Ph.D. in pharmacology from Birmingham University Medical School in England.

In 1952-54 Mansour was a senior instructor and research associate in the Department of Pharmacology at Western Reserve University Medical School in Cleveland, Ohio, and during 1955-61 he was on the medical faculty in the Pharmacology Department at Louisiana State Medical School in New Orleans.

Mansour presently serves on the editorial boards of Biochemical Pharmacology and Archives Internationales de Pharmacdynamie et de Therapie.

He is a member of the American Society for Pharmacology and Experimental Therapeutics, the American Society of Biological Chemists and a fellow of the American Association for the Advancement of Science. He served as an adviser to several national and international health organizations.

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Mailed Monday, June 13, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia 415:497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Paul B. Hofmann, director of Stanford University Hospital and Clinics, has announced the departure of associate directors John A. Kneepkens and Howard J. Wooling.

Kneepkens has requested early retirement while Wooling will be accepting another position elsewhere, Hofmann said.

Kneepkens is an associate director of the Hospital and Clinics having responsibility for the Clinics, Reservations, Rooming and Information, Social Services, and Patient Placement Services. In addition, he has had responsibility for emergency services and the operating rooms.

Previously, Kneepkens served as business manager for the Department of Surgery at Stanford Medical School.

Before coming to Stanford in 1967, he served with the U.S. Army on the faculty of the Command and General Staff College at Ft. Leavenworth, Kansas. He holds a B.A. degree from San Jose State.

Wooling has been at Stanford since 1972 and has served as associate director since 1974. His duties have covered many of the Hospital's services, including EEG, drug assay, and EMG laboratories, dietary, immunology, infection control, infectious disease laboratory, medical records, clinical labs, coagulation, pathology, radiology, virology lab, transfusion, cardiology, and chaplaincy service.

Wooling previously served as assistant director of the Hospital. He holds a master's degree in public health from the University of California at Berkeley, another master's from Boston College, and a B.A. degree from Eastern Nazarene College.

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Mailed 7/29/77

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Stanford University School of Medicine will begin a review to revise its medical service plan, Dr. Clayton Rich, vice president for medical affairs and dean of the School, announced Wednesday.

At the same time, Rich said he was advised by Dr. Norman E. Shumway, chairman and professor of the Department of Cardiovascular Surgery, that he will resume billing patients for professional services.

A story in the Palo Alto Times Monday reported that Shumway and his associates had discontinued billing patients because of their concerns over certain aspects of the medical service plan, including the possibility that the plan may be in conflict with state law.

Dean Rich said the university remains confident that the present medical service plan is in conformity with state law.

He said the chairmen of the clinical departments, including Dr. Shumway, will begin meeting regularly to review and make appropriate revisions to the existing plan relating to the method of allocating funds received by the university which are subject to the plan.

Dr. Rich said the plan was last revised in 1974 with the expectation that it would be reviewed again in 1977.

He said the proposed revision may be completed in about three months.

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Mailed Wednesday, July 27, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--A total of 140 scientists, six from Stanford University, have signed a statement calling pending legislation on recombinant DNA research "unwarranted and imprudent."

The scientists urge Congress to avoid unnecessary legislation that could deny society of needed improvements in public health, agriculture, industry and environmental protection.

The statement emerged from a recent conference on biological regulatory mechanisms held in New Hampshire. Among the Stanford signers are Professors Ronald Davis, Dale A. Kaiser and Charles Yanofsky, and George Bennett, Frank Lee and Richard Lifton.

"We believe that the bills presently before Congress would impose unjustifiable controls over many important areas of scientific inquiry," the statement said.

Two bills presently before each house would make guidelines, issued by the National Institute of Health, binding throughout the United States and would provide serious penalties for violations.

A basic difference between the two bills is that the version sponsored by Senator Edward M. Kennedy (D-Massachusetts) calls for a national commission, with its chairman appointed by the President, to regulate and monitor all recombinant DNA research in the United States.

The second bill sponsored by Rep. Paul G. Rogers (D-Florida) would give the regulatory task to a special advisory committee under the secretary of Health, Education and Welfare.

Both bills would preempt state or local laws limiting recombinant DNA research.

The field of recombinant DNA research or gene splicing has been controversial for several years because of fears that organisms and viruses created by the research may spread quickly and without warning to persons, agricultural plants and products.

"The premise on which these bills are based derives from exaggerations of hypothetical hazards that go far beyond reasoned assessment," the scientists said.

"The experience of the last four years is important. Despite a vigorous search to identify the degree and nature of any actual public health or environmental hazard, no indication of actual danger has been uncovered. Many conjectured dangers have been shown not to exist.

"It is evident that dramatic advances in fundamental knowledge have already emerged from the application of these techniques.

"We are concerned that the legislative measures will set up a bureaucratic machinery so inflexible and unwieldy as to severely inhibit the development of many fields of knowledge."

The statement said it would be unwise to legislate against hazards which do not exist and shown to be improbable.

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Mailed Monday, July 25, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

The 21 Northern Californians who finished Stanford University Hospital's paramedic training program this week bring to 150 the number of persons who have completed the program since it began in 1973.

All of the recent graduates are members of fire departments or ambulance companies, except for one graduate who works for the National Park Service in Yosemite.

The paramedic trainees received over 200 hours of lecture and 300 hours of clinical work from Stanford physicians and nurses.

The graduates received diplomas during ceremonies Thursday, July 21, in Sherman Fairchild Auditorium at Stanford Medical Center. Each has been recommended for certification as a paramedic in his or her individual county.

Graduates include Paul Buenrostro, Robert Davidson, and Mike Maier, Palo Alto Ambulance Company; Vi Croop, Jerry Hamm, Susan Jackson, John Rowles, Vince Schweitzer, and Gerry Wood, Medevac of San Mateo; Gene Gantt and Lynn Norman, Vacaville Fire Department; Paul Gantt, Pomeroy Ambulance Company of Walnut Creek; and Mark Sgambati, San Jose Ambulance Company.

Also, Jack Goode, Bob Makjavich, Chris Shinseki, and Bob Wall, Palo Alto Fire Department; Terry Gritton and Greg Joseph, Aptos Fire Department; Ron McCluskey, Solano Ambulance Company of Vallejo; and Mead Hargis, National Park Service at Yosemite National Park.

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7/21/77

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Elections to determine whether employees at Stanford University Hospital and Clinics prefer union representation for collective bargaining will be held once again, this time on Feb. 2-4, 1978, according to a settlement agreement reached by Stanford and a Stanford employee union.

The National Labor Relations Board (NLRB) approved the elections agreed upon by the university and United Stanford Employees (USE), Local 680, Service Employees International Union, AFL-CIO. The settlement agreement was reached prior to a hearing on the matter before an NLRB administrative law judge in San Francisco.

The settlement sets aside only those results of previous secret ballot elections in which USE participated. In the elections, held two years ago and conducted by the NLRB, more than 1,000 of 1,200 eligible employees overwhelmingly rejected any union representation.

The new elections are the result of an unfair labor practice complaint and election objections filed by USE against the hospital and the university, alleging that two minority employee groups--La Alianza Latina and the Black Advisory Committee--were unlawfully assisted and directed by the hospital. Both employee groups have been active in affirmative action efforts.

USE said the assistance included time off to attend meetings, the use of meeting rooms, a budget covering materials and supplies, and occasional advice by certain administrators.

Charges of unfair labor practices were filed by USE in connection with the election, held April 10-12, 1975.

In a letter mailed to Stanford Hospital and Clinics employees last week informing them of the new election, director Paul B. Hofmann also described legal proceedings prior to and following the first elections.

He noted that USE had attempted to have the NLRB call off the original elections the day before they were to take place. The NLRB refused.

Hofmann further noted that USE had filed objections after the election asking that they be rerun, but that none of the other participating unions had filed objections.

In his letter, which was written in English and Spanish, Hofmann said the NLRB also rejected a USE complaint that the medical center "had dominated" La Alianza Latina and the Black Advisory Committee that directed their pre-election campaign against USE.

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"Both the hospital and the university have always considered the most important issue in this matter to be their right to continue to communicate with employees, including minority and women's groups," Hofmann said.

In addition to USE, other groups that were rejected in the 1975 election were the Stanford University Housestaff Association, Stanford United Medical Technologists, and the California Licensed Vocational Nurses Association.

A fifth union, the Stanford University Medical Center Engineering Association, withdrew prior to the election.

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STANFORD--Roland S. Merchant has been appointed as a special assistant to Peter J. Levin, associate vice-president for medical affairs at Stanford University Medical Center.

Merchant recently served as assistant administrator and acting administrator at West Adams Community Hospital in Los Angeles.

He previously was the director of health and hospital management in the City of New York's Department of Health, and in the administration at Roosevelt Hospital in New York.

Merchant, who holds masters' degrees from Columbia, is a member of the American Hospital Association, New York Academy of Sciences, and American Public Health Association.

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Mailed Monday, July 18, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Two Stanford University Hospital security guards and a supervisor were treated for minor injuries in the emergency room early Friday morning following an incident with employees in the hospital's east wing.

The incident took place at 1:30 a.m. as the night shift of housekeeping employees was getting off enroute to the parking lot.

The guards, Don E. McQuillis and Jerald Ingersoll, and hospital security supervisor, George F. Whitfield had asked one of the employees carrying a tape player to turn the music down because it was disturbing the patients.

According to the incident report, McQuillis was struck in the jaw by one of the employees. A fracas ensued and Palo Alto police were called in. There were no arrests.

The guards, employees of Sentry Security Service, have filed personal assault and battery charges against two suspects.

Hospital officials said this morning they are investigating the incident.

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Called to Palo Alto Times
San Jose Mercury

Friday, July 15, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

FOR RELEASE WEDNESDAY, July 13, PM PAPERS.

Editors: Release date for this story is set to coincide with presentations from the Lipid Research Clinics Program of the National Heart, Lung, and Blood Institute, to be made on Wednesday, July 13, at the National Institutes of Health, Bethesda, Maryland. Nationwide data will be presented at that meeting; this story concerns data collected from a study of 4,300 Stanford University faculty and staff.

STANFORD--Considerably more women employees at Stanford over age 25 smoke cigarettes than men of the same age.

--Risk factors for heart disease appear to be more common among individuals with less formal education than among college graduates.

--On the average, Black employees smoke more than other racial groups, have higher blood pressures, but lower blood lipids (fats).

--Women employees may have lower cholesterol levels than men up to age 45, but after that their cholesterol levels average higher than men.

These are some of the preliminary findings from a study of 4,300 Stanford University faculty and staff initiated four years ago to evaluate their risks for developing heart disease.

The screening project is part of the Stanford Heart Disease Prevention Program, and funded by the Lipid Research Clinics Program of the National Heart, Lung and Blood Institute. Fifteen clinics located in the U.S., Canada, Russia and Israel are gathering similar data in a collaborative effort to determine the frequency of selected heart disease risk factors in various populations.

Dr. William Haskell, Stanford physiologist with the program, reported that three out of four eligible Stanford employees participated. Approximately 5,900 employees 26 years of age or older were eligible.

For most employees the screening consisted of a 15-minute health evaluation, including a brief medical questionnaire, height, weight and blood pressure measurements, plus cholesterol and triglyceride analysis of a blood sample.

Almost 1200 of these employees returned for a second, more extensive evaluation, including a brief cardiovascular examination by a physician, an electrocardiogram recorded at rest and during treadmill exercise, and more extensive blood chemistry tests.

Results of both examinations were made available to the participants and on request to their physicians.

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All employees over age 30 who participated in 1973-75 will be recontacted again beginning in September 1977 to determine changes in their health status. Future surveys may be conducted at several year intervals.

One of the most surprising findings of the Stanford survey, says Haskell, is that 35 percent of women in the study smoke cigarettes compared to 22 percent of men. "This seems to reflect the national downward trend in cigarette smoking by men, and the upward trend for women," says Haskell.

He also reported the frequency of smoking was closely related to the person's level of education. For example, among male college graduates only 18 percent smoked, compared to 36 percent among high school graduates.

Generally, risk factor levels tended to be higher among the less educated. In the Stanford study, college graduates tended to be leaner, have lower blood pressures, lower blood fats, and smoke less than age-matched individuals with less education. These differences exist for both men and women.

However, the Stanford study revealed that levels of risk factors were the same wherever people work, at SLAC, the School of Engineering, Humanities and Science, or the Medical School. "Despite their proximity to health services, employees of the Medical School fared no better than the rest of the University," says Haskell.

According to the data, 50 percent of participating Black employees smoke, compared with 30 percent of all other groups. Among men, Blacks tend to have higher blood pressures but lower blood lipid levels, especially triglycerides.

Haskell noted that diet programs for heart health should be directed not only toward men, but women as well, since after age 45 women had even higher cholesterol levels than the men.

"We also measured a definite blood fat elevating effect with synthetic harmones," says Haskell. One-third of the women participants reported they take oral contraceptives or synthetic estrogens for other purposes.

"In the 25 to 45 age group, triglyceride levels are substantially elevated while there are modest elevations in cholesterol in women using oral contraceptives," he says.

This was also a finding at the other centers. The medical significance of elevated blood fats associated with the use of oral contraceptives has not been established, according to Haskell.

He cites the "tremendous cooperation" the study received in the Stanford community. Because of the large number of participants additional studies are being conducted or planned for the future. For example, one study started last fall involves evaluation of women prior to their use of oral contraceptives, and of changes in their risk factors after they begin using the pill.

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The immediate families of 200 persons from the initial study also were screened for their risk characteristics. Parents, spouses, siblings, if they lived anywhere in North America, were asked to answer questionnaires and have blood lipid tests.

An average of seven persons per family are being screened, for a total of about 1400 individuals. Other cooperative centers are also studying the relationship between genetic and environmental factors in heart disease.

In addition, about 300 persons from the first study were invited back for evaluation of heart function using ultrasound, or echocardiography. This is a harmless and painless method of using radar-like echo soundings to determine the size and movement of specific heart structures during various phases of the heart cycle.

Some employees were identified as high risk candidates for heart disease, although they were totally unaware of it, says Haskell. As a result of survey findings, medical treatment could be started. For example, a 24-hour ambulatory electrocardiogram is performed on those found to have atypical heart rhythms during treadmill exercise tests.

According to Haskell, "one of the biggest benefits of the survey to participants has been the discovery of high blood pressure in many individuals who were not aware they had this problem."

The aim of this longterm study, says Haskell, is to establish normal values for characteristics associated with the risk of heart and blood vessel disease for the different sexes, ages, and ethnic groups, and to determine the frequency of certain abnormalities in lipid metabolism.

"As the result of longterm follow-up of participants at each center, a better understanding of which environmental factors are most closely related to heart disease risk can be established for men and women of all ages," says Haskell. Data then will be available to formulate strategies for more effective heart disease prevention programs in the future, he says.

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Mailed Tuesday, July 12, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Although computers are used increasingly to predict patients' medical outcomes, such as recovery from coma, a Stanford researcher says their predictions may not be better than those of a good clinician.

Dr. Alan Shapiro has suggested a new way to analyze how doctors and computers predict medical outcomes.

Previous studies have generally claimed that computer performance is often comparable to that of clinicians. But Shapiro, in the Department of Medicine at Stanford and a Robert Wood Johnson Clinical Scholar, found that no computer program did as well as experienced clinicians when analyzed by his method.

It should not be surprising, he writes in a recent issue of The New England Journal of Medicine, that computers do not outperform a physician "who can use many variables, can take correlation of symptoms into account, and most important can adjust to the context of a particular patient's illness."

But a good computer predictor, he says, might also be worthwhile in assisting physicians in their judgments.

In a study with 20 Bay Area rheumatologists, Stanford faculty, fellows, and students, Shapiro presented a patient's case history, clinical history and laboratory results. He asked each participant for their judgments about how the patient would fare: death in one year, kidney failure, and other outcomes.

After the doctors answered the questions, they were told what a computer predicted for the same patient. They were allowed to change their answers if they wished, using the computer as they would an outside consultant.

Shapiro found that the computer did only average in its predictions.

But the physicians who had initially done worse than the computer, did better after consulting with it.

"Accurate prediction of outcomes is an essential skill in medical practice, and has been neglected as an object of study," he says. He feels that better analyses of doctors' predictive ability could be applied in evaluating new aids to physicians.

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222--Medical Predictions

Traditionally, the most widely used method of evaluation is to look at a physician's "error rate." If the physician predicts that a patient will be cured by surgery and the patient is not cured, then the doctor has, in retrospect, made an error. The proportion of such errors is the error rate.

The error rate is a very insensitive measure, according to Shapiro. It does not take into account the magnitude of mistake. "Decisions can be considered right or wrong; probabilities are never right or wrong but are best considered as more or less accurate," he explains.

A decision is made up of a number of separate predictions, such as potential relief of symptoms, adverse reactions, or other individualized outcomes.

Using Shapiro's method, the doctor who assigns the highest probability to what actually happens receives the highest score. The method offers a graded means of evaluating a physician, in contrast to the right-or-wrong measure used traditionally.

When the method was tested on physicians and students at Stanford, Shapiro found that, in general, predictive skill was closely related to level of training. Faculty scored higher than fellows, who scored higher than residents, who in turn outscored students.

According to Shapiro, a physician may make an inaccurate prediction because of incorrect information, or because he failed to adapt that information to the unique characteristics of his patient.

"Effective individualization of predictions requires consideration of the social and psychological as well as biological characteristics of a patient," he says.

Shapiro says his method can analyze how well a physician performs in both aspects.

The same approach can be applied in assessing the value of diagnostic test results to a doctor. "A physician who abandons his clinical judgment in deference to the results of a new test that he understands only imperfectly may suffer a decrease in predictive accuracy," says the researcher.

Shapiro's work is supported by a grant from the National Center for Health Services Research to the American Rheumatism Association Medical Information System.

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Mailed Monday, July 11, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. George H. Houck, professor of medicine emeritus who helped establish the Stanford Student Health Service, died Tuesday, July 5, of a heart attack. He was 75.

Dr. Houck came to Stanford in 1946 with Dr. John Eckert, now a retired local physician, to begin a student health service.

A brain child of Dr. Russel V. Lee, the service made Palo Alto Clinic physicians available to Stanford students on a contract basis and was considered a unique medical development at the time.

Dr. Houck was born in Roseburg, Oregon. He attended the University of Oregon, graduating in 1923, and Harvard Medical School where he received the M.D. degree in 1927.

In the summer of 1926, he worked with Dr. Paul Dudley White, the noted heart specialist and presidential physician, and interned at Peter Bent Brigham Hospital in Boston from 1927-29.

Dr. Houck received his residency training at Stanford Hospital in San Francisco under the famed Dr. Arthur Bloomfield.

In 1931 he entered the practice of medicine in Los Angeles. During World War II he served in the Army Air Medical Corps as a colonel, and he remained active as a reservist for many years.

Dr. Houck retired in 1967. During his active career he was a member of the Palo Alto Medical Clinic staff as well as a member of the Stanford medical faculty.

For the past year, Dr. and Mrs. Houck lived in Channing House in Palo Alto. His wife, Flora, is a pediatrician, and a graduate of the University of Oregon.

Dr. Houck was a member of the Palo Alto Club and of the Palo Alto Rotary Club.

His medical affiliations included the Santa Clara County Medical Society, the Los Angeles Academy of Medicine, and the California Academy of Medicine. In 1939 he served as president of the Los Angeles Heart Association.

Besides his widow, Dr. Houck is survived by two children, a daughter, Mrs. John (Janet) Boretta, of Orinda, and a son, George, of Olympia, Washington.

No funeral services are planned. The family suggests that memorial gifts be made to the Palo Alto Medical Research Foundation.

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Mailed July 6, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Stanford heart surgeons hope to increase the number of donor hearts available for transplants by using a technique for transporting hearts outside of the body.

The technique enables them to fly hearts from as far away as Los Angeles. Three hearts have been flown this way since 1973, one from Los Angeles and the others from Oakland and Marin County.

Hearts are transported under a new cooperative arrangement with the Regional Organ Procurement Agency for Southern California. The agency, based at University of California at Los Angeles, also provides organs for kidney and liver transplant programs in California, Nevada, and Colorado.

"The program gives us access to a greater number of donor hearts than we've ever had before," says Lois Christopherson, chief social worker in the Department of Surgery.

Christopherson hopes the program will find donor hearts more quickly for recipients. An average of one out of four potential recipients dies before an appropriate donor heart becomes available, she says.

"This year we had several patients die while waiting." Presently three patients at Stanford are waiting for hearts, she says.

According to Dr. Eugene Dong, Jr., a member of the Stanford transplant team, donor and recipient hearts are matched on the basis of blood and tissue types. This information can be relayed by phone when the donor and recipient are in different locations, he says.

The major difficulty with the transport technique, says Dong, is that the heart is without a blood supply during transport.

Usually the heart is transplanted directly from the donor to the recipient. When the body of a donor is transported to Stanford, says Dr. Bill Baumgartner, chief resident in cardiovascular surgery, the blood flow through the heart is maintained almost continously.

"The heart is beating up to the second it is removed," he says. "Within 45 minutes it is reconnected in the recipient."

When the heart is transported out of the body, it may be without blood supply for as long as three hours. To keep it in healthy condition for the transplant, the heart is flushed with and stored in an electrolyte solution, then cooled to near freezing.

The technique slows down the metabolic activity of the heart and preserves it during transport, says Baumgartner.

Transported hearts have been doing fine after transplantation, he says.

To what distances doctors can travel for donor hearts depends on how long they can remain viable outside the body. This time period is still unknown for human hearts.

"In animal experiments," says Baumgartner, "the cooled heart will remain viable for transplant up to 24 hours. But we're putting a four-hour limit on human hearts."

The Las Vegas vicinity is one of the farthest areas Stanford surgeons will travel for the organ. The kidney procurement program in Las Vegas can also obtain donor hearts.

According to Christopherson, the ability to transport hearts outside the body will take some of the pressure off donor families. "Sometimes families are more comfortable if a specific organ is transported rather than the whole body," she says.

Stanford performed its 128th heart transplant in late August. Fifty-one recipients are still alive. The longest survivor, a 48-year-old man from Mill Valley, received his heart in January 1970.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Harold Christian Zweng, internationally renowned ophthalmologist and pioneer in the treatment of eye diseases with the laser, died Friday, August 26, at Stanford University Hospital of complications due to a stroke. He was 54.

Memorial services will be held Tuesday, August 30, at 10 a.m. in Stanford Memorial Church. Friends are welcome to attend.

Zweng and his associates began developing a ruby laser photocoagulator in 1962, treating the first patient a year later. While thousands of patients were treated with the instrument during the next 10 years, Zweng pioneered in developing an argon laser.

The argon laser has been one of the most effective methods of treating diabetic retinopathy, a disorder of the blood vessels of the retina. In 1970 a commercial version of the prototype instrument was developed, and more than 600 such photocoagulators are now in use for patient care around the world.

Zweng was clinical professor of surgery (ophthalmology) at Stanford University Medical School. Since 1971 he and his associates have conducted courses to introduce the techniques of laser photocoagulation to physicians throughout the U.S. and in other countries.

He authored two books and more than 70 articles on laser photocoagulation.

A graduate of Stanford University (1945) and Stanford School of Medicine (1949), he was a veteran of both World War II and the Korean War.

Zweng practiced at the Palo Alto Medical Clinic from 1954 to 1975, and was a member of its executive board from 1969 to 1974.

In 1975 he joined two other Clinic retinal specialists and formed the Palo Alto Retinal Group, in which he practiced actively until his illness. He was also instrumental in founding the Palo Alto Retinal Research Foundation.

He was elected to the Palo Alto City Council in 1959 and served until 1965. He was chairman of a fund-raising effort to establish Foothill Junior College, and was made honorary trustee in 1958.

He was trustee of the Palo Alto Medical Research Foundation from 1965 until his death.

He is survived by his wife, Jean, and children Joe, Nancy, Tom, Paul, Carol, and Peter.

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8/29/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Cost cuts applied 'across the board' to all medical services won't help solve the nation's major cost problems, says a Stanford physician.

Cost reductions can be achieved by such methods, but the quality of care is not likely to be improved, says Dr. James F. Fries, assistant professor of medicine at Stanford University School of Medicine, and coauthor of a popular consumer's guide to medical care.

Such administrative responses as "putting a lid on costs," says Fries, only perpetuate maldistributions by impacting all services equally.

He calls instead for more efficient medical care. "The bulk of unproductive efforts probably occur in rather ordinary medical settings," he says.

"Unfortunately, with finite limits, resource allocations and human lives are part of the same equation," he writes in the current issue of *Stanford MD,* journal of the Stanford Medical Alumni Association.

"Expenditures for penicillin shots for colds could have been used instead to educate for physical fitness and habit moderation. . .costs of hospitalizations for tests could have been an investment in basic medical knowledge for the next century."

According to Fries, the major cost problems come from what he calls 'physician-generated' costs. The physician is the one who decides who will be hospitalized and for how long, which tests will be performed, and what treatments will be given.

But Fries believes that both physician cost-generating behavior and patient behavior can change.

No differences in patient outcomes have been established, he says, for physicians who generated greater or lesser amounts of laboratory tests or X rays for their patients.

In one study, when the differences in costs were presented to doctors, there was a shift of physicians who generated high costs toward the mean or even below it.

"In one clinic paying particular attention to laboratory and drug use over a five-year period, costs decreased by one-third while outcome in the specific disease studied improved."

In his article, Fries cites several examples of new medical approaches that not only saved money, but improved care to patients, without coercion or regulation. These include the decrease from three drugs to two for standard antituberculosis therapy, when it was shown that patient outcome was just as good with fewer drugs.

Elaborate evaluations of the hypertensive patient have been simplified, he says, as a result of identifying factors relevant to patient outcome.

And screening programs for diabetes and the use of oral hypoglycemic drugs were reduced after studies suggested no benefit or even harm from them.

In the effort to improve the national health outcome, he calls for more investigation in subjects like economics, sociology, and other social sciences, pharmacology, physiology and traditional clinical research techniques.

Fries, coauthor of the consumers guide, *Take Care of Yourself,* says "the health delivery system in a finite world cannot be humane unless it is efficient."

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8/24/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497 6911
FOR IMMEDIATE RELEASE
STANFORD –

There is a pressing need to improve the treatment of serious injury, according to Dr. John Collins, professor and chairman of the Department of Surgery at Stanford University School of Medicine.

"The number of people suffering from a major injury in the United States continues to be appallingly high," he says. "Many of the complications occurring after serious injury are a result of how the patient is taken care of initially."

Collins, 43, is well known for his work on traumatic shock and blood replacement. Before his appointment to the Medical Center in April he was professor of surgery at Washington University in St. Louis.

Collins began studying how the body responds to severe injury as a captain in the U.S. Army Medical Corps in Vietnam. He organized the first Army surgical research team, sent there in 1966.

Studies of combat casualties conducted by the team made important contributions to present knowledge of resuscitation and blood transfusion.

For instance, the researchers found that the lungs of injured soldiers were bearing the brunt of many of the posttraumatic complications, including build up of fluids. The complications resulted from the injuries in part, but also from the way fluids were used for resuscitation.

Greater caution in the use of fluids has helped to reduce pulmonary complications in serious injuries over the last 10 years.

Collins also found that the body, even when seriously injured, can neutralize the increased acidity of stored blood which is given as a transfusion. Administration of a neutralizing solution to protect against acidosis is not necessary and may be detrimental.

Collins says that the military provided an excellent emergency system of transportation and treatment which helped reduce the number of lives lost during the war.

"On-the-spot treatment by well trained young men who were not physicians but who knew how to treat injuries well in the initial phase was backed up by a very well-organized system of transportation and communication," he says.

"It was an old saw over there that you had a better chance of surviving if you were wounded in the middle of a jungle in Southeast Asia than if you were hit by a taxi in Manhattan."

The same quality of care can be provided in a civilian setting, he says, where there are a good paramedic training program, a unified communications system, and some degree of regionalization among health centers.

Collins plans to continue his research on transfusions and the complications of blood loss, in addition to his administrative duties at Stanford.

As head of the Department he is responsible for the quality of patient care, education of medical students, and research in several divisions of medicine, including neurosurgery, ophthalmology, orthopedics, otolaryngology, plastic and reconstructive surgery, and urology.

One of his current concerns is the need for more space both in Hospital and Medical School surgical facilities. "The expanded intensive care facilities are helpful," he says, "but we are very seriously in need of additional operating rooms."

Collins would like to increase the research involvement of the Department in areas such as immunology and infectious diseases.

"I'd like to get Stanford into renal transplantation," he says. "Not only is it an important patient service, but it is a clinical subject that this institution should be involved in."

"The opportunities for productive research at Stanford are very great," says Collins. "The basic science departments in the Medical School and the University are superb. And the system has excellent clinicians, providing first-rate care to patients."

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8/22/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Dr. Cicely Saunders, founder of the modern-day hospice program in England, will speak on various aspects of terminal care Thursday, Aug. 25, at Stanford University Medical School.

Her address, sponsored by the Department of Family, Community and Preventive Medicine, begins at 10 a.m. in Room M-106. It is open to the public.

A former nurse and social worker, Dr. Saunders received her medical degree in 1957.

From 1958 to 1965 she worked at St. Joseph's Hospice in London and laid the foundations for the care of terminally ill patients. She is the founder of St. Christopher's Hospice, whose concepts have been emulated by institutions for terminal care in the U.S. and the United Kingdom.

Hospice is a term revived from the Middle Ages which refers to facilities that provide spiritual, emotional and physical support for the sick and dying.

Dr. Saunders has authored articles on the care of the dying. Earlier this year she was awarded a Lambeth Doctorate of Medicine from the Archbishop of Canterbury, Frederick Donald Coggan. She also holds an honorary doctorate degree from Yale.

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Mailed Thursday, August 18, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Pottery, paintings and photography will be among the art work on display August 22 through 26 at the Stanford University Medical Center Art Show.

The show will be held in the Sherman Fairchild Auditorium lobby, and is open to the public. Hours are Monday, Wednesday and Friday from 7 a.m. to 3:30 p.m. and Tuesday and Thursday from 9 a.m. to 5:30 p.m.

Faculty and staff members of the Medical Center have submitted more than 100 entries in categories of painting, sculpture, pottery, photography, stitchery, jewelry and glasswork.

First, second and third place ribbons in each category will be presented by a team of judges.

Among the entries are welded copper and bronze sculpture, several manzanita burl carvings, papier mache sculptures and stained glass.

The show was a popular annual event several years ago, and is now being revived.

Those attending will be able to cast votes for the one entry they consider the "best of the show." This award will be presented on Thursday, August 25, at 5 p.m. by Stanford Hospital Director Paul Hofmann.

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Mailed Thursday, August 18, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Stanford University Hospital charges will increase an average of 8.5 percent in the new fiscal year starting September 1.

The new rates, according to Paul Hofmann, director of the Hospital and Clinics, reflect increases in wages and benefits, utilities, malpractice insurance, and other costs such as medical supplies. He noted that this is the lowest price increase for the Hospital in recent years.

Rates were approved by the University after the Hospital Board of Directors reviewed the annual budget on Tuesday, August 16, recommending rates for the new fiscal year.

Medical and surgical room rates, which are charged to most hospitalized patients, will increase approximately 7.5 percent from those set one year ago.

The new rates will be $144 per day for ward accommodations, $157 for a semiprivate room, and $177 for a private room.

Medical and surgical patients utilizing the services of house staff physicians will pay $14 more than the above rates. The patient's attending physician determines whether such services are utilized.

Based upon related costs, the level of rate increases will be higher for specialized units, such as the intensive and coronary care units, psychiatry, and the nurseries.

Rates for X-ray, laboratory, and other ancillary services, which represent about one-half of all charges to patients, will be increased selectively, averaging about 7 percent.

"We are well aware of nationwide concern about hospital costs," Hofmann noted, "and we are pleased to be able to report that in our own institution the rate of increase in costs is being slowed."

He pointed out that the new rates compared favorably with those charged by similar highly specialized teaching facilities.

More than 98 percent of the hospital's funds, he said, come from patient revenues. The hospital has no tax support or endowment income.

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8/18/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

In order to make significant advances in the treatment of leukemia, "we need new concepts, ideas, and research to build on," says Dr. Joseph V. Simone, new director of pediatric oncology and hospital physician-in-chief at Children's Hospital at Stanford. Simone's appointment became effective August 1.

Simone, 41, came to Children's Hospital from St. Jude Children's Research Hospital in Memphis, Tennessee, where he gained prominence for his work in childhood leukemia. During the 10 years he spent at St. Jude he served as chief of hematology and chief of hematology-oncology.

According to Dr. Irving Schulman, chairman of the Department of Pediatrics at Stanford University School of Medicine, "Dr. Simone is universally regarded as one of the true leaders in the field of pediatric hematology in this country."

Progress in the treatment of the disease over the last 10 years, says Simone, has increased the chances of 8-year leukemia-free survival from less than 1 percent to 50 percent.

But despite improvement in the chances for survival, "there have been no significant advances in the treatment of leukemia over the past several years," he says. There is a need for more research, and that, for Simone, is the challenge he'd like to help Children's Hospital meet.

Simone has been on the job less than two weeks, but already he is brimming with ideas for the Hospital. A major effort during the next few months, he says, will be made to organize the oncology services so that optimum patient care, education for medical students and residents, and research are provided as efficiently and productively as possible.

According to Simone, this is a new direction for Children's Hospital, which years ago served as a convalescent care facility. The Hospital, located on land adjacent to Stanford Medical Center, is administratively independent. But it is affiliated with the Department of Pediatrics and is staffed by faculty physicians. Simone will hold an appointment as professor of pediatrics.

"This institution was originally built as a convalescent home, when the best treatment for chronic illnesses such as rheumatic heart disease was thought to be long-term hospitalization," says the physician.

"This has changed, because chronic diseases and treatment concepts have changed," he says. "We now minimize hospitalization time with more effective outpatient facilities so children can be at home most of the time. Also, we are dealing with diseases such as leukemia for which there are no uniformly effective treatments. It is our obligation to improve treatment through scientific study and research."

Simone denies that patient care suffers in a health facility involved in research. In fact, "there is a clear indication that the results of cancer treatment are superior in centers where research is being done," he says.

There are two basic types of research, says Simone. In a clinical investigation the physician designs a research protocol to apply treatments in an organized and systematic way, without necessarily involving any laboratory research. The second type, fundamental research in the laboratory, studies the disease process itself with potential benefit to patients in the more distant future.

"We have a young staff capable of doing the first type of research," says Simone. "We need people to do fundamental work and we will look for them over the next year or two."

Meanwhile, Children's Hospital will maintain the excellent patient care it now provides, he says. The parent-sharing program, where parents can live in with their children during hospitalization, will continue. And Simone hopes to increase the involvement of community physicians in the care of patients they have referred to the Hospital.

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8/18/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Acupuncture offers nothing unique in relieving pain over other treatments such as hypnosis or biofeedback, according to Bernard Millman, assistant professor of anesthesia and director of the Department of Anesthesia's Nerve Block Clinic.

Millman who has headed the Clinic for four of the five years it has operated, has taken courses in acupuncture, but does not employ the technique in treating patients.

"It's not the acupuncture but the patient that reduces the pain," he says. "Most patients can control their own pain. They just need a tool to help them."

Helping patients find tools to reduce their pain, or at least find ways of coping with it, is the job of the Nerve Block Clinic. Millman and his associates evaluate the psychological as well as physiological backgrounds of the 10 to 20 patients they see each week to determine the best treatment for their pain.

Unlike other pain management clinics throughout the country which bring a variety of treatments to bear on chronic pain conditions, the Nerve Block Clinic employs only one diagnostic technique, the blockage of nerve conduction by local anesthetics such as lidocaine. This method can determine the pathway of pain transmission.

The Clinic members then recommend treatment which may involve taking or eliminating drugs and surgery or injections to destroy the involved nerves. Most chronic pain cannot be treated with nerve blocks alone. Many patients are therefore referred to specialists in the Medical Center and the community. Millman calls the Clinic "primarily a diagnostic resource for the community physician," similar to the hospital X-ray service.

The Clinic receives patients only on referral from their physicians, and when accompanied by complete medical records. And they also must take a psychological examination to determine what emotional factors, if any, are contributing to the pain.

Psychological testing also helps Millman and his associates to see what coping resources a patient has. "After six months of chronic pain, severe personality changes can take place in a patient," says Millman. Most patients come to the Clinic depressed and anxious, he says, and very concerned about illness. The presence of pain often affects their whole life styles, including interpersonal relationships.

"Many of these patients are seeking reassurance," says Millman. "They need help passing through the crisis period caused by the pain." Often, consultation can handle most of the emotional problems, and elaborate treatments may not be necessary.

Millman cites studies in which pain was reduced in 30% of the cases where placebos, drugs or procedures which have no physiological effect, were administered. Lessening of pain often results not so much from the type of medicine used as from the way it is administered. For instance, Millman said most patients respond better when drugs are injected than when they are taken orally. Even surgery may provide pain relief on a placebo basis.

Surgical destruction of nerves to treat pain is becoming less and less necessary, says Millman. "It is becoming more apparent that by controlling aggravating factors in the environment, the level of pain can be reduced," he says.

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8/17/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

A new element was added to Stanford's internationally famous Executive Program this summer—executive health!

Along with their studies of computers, economic management, international finance, and marketing, the participants learned about health management techniques, volunteered for a medical examination and regular supervised exercise, and received diet counseling.

The new feature of the Stanford Executive Program was cosponsored by the Stanford University Medical School and the Graduate School of Business.

The well-known Business School program has been held during the summers since 1952. This year 185 senior level executives, ages 35 to 50, were enrolled, including 62 from 24 foreign countries. The program, conducted by the faculty of the Graduate School of Business, ended August 11.

The health enhancement program was conducted by Drs. Robert DeBusk and William Haskell of the Stanford Medical School's Division of Cardiology and by other faculty of the School of Medicine.

Topics ranged from physical fitness, diet, and stress management to discussions of family and personal goal-setting. Because many health issues relate to the whole family, some of the lectures were scheduled during the final week of the program when spouses were invited to attend.

Most participants volunteered for a medical examination which included an evaluation of health-related habits and behavior, blood cholesterol, and triglyceride levels.

As in past years, participants were urged to use the University facilities for exercise and recreation. For the first time, this summer's group could volunteer for a special early-morning exercise program, conducted by Stanford Heart Disease Prevention Program personnel.

This special group of about 30 executives was screened to determine how much physical exercises would be appropriate for each. Then Dr. Haskell and his staff supervised warm-up exercises and a one- to four-mile jog through campus every morning.

"Good physical health is critical to executive effectiveness," says Professor James Howell, director of the Stanford Executive Program. "As a group, executives lead a life that is prone to stress and related health problems."

Program directors reasoned that the two-month change in routine would provide an ideal opportunity for executives to develop new health habits.

Says Haskell, "The participants are old enough to realize they are not invincible. They are successful and headed toward even more productive careers. . .we wanted to give them some useful tools for maintaining good health."

Those who participated in the daily supervised exercise will be asked in several months to evaluate the effectiveness of the program and its impact on health habits after they return home.

"I have the best of intentions to continue this at home," says Peter Frey, general manager of an insurance company in Munich. "It has been a great change for me, since I had never exercised, except for sailing once a year."

Phil Oxley, an oil executive from Houston, cited the value of "the peer group that would frown at you if you didn't show up" for the 6 a.m jogging.

David Eller, a beef industry executive from Houston, reports that the program gave him the confidence to pursue a strong exercise program based on physical examination and medical supervision. "We found our 'floorboard' capabilities, the maximum exertion your body should take. . .and we learned to take our pulse rate during exercise and understand what it means."

Eller cited a "tremendous change" because of the regular exercise. "I've taken off some weight and am in better condition."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Stanford University School of Medicine officials have told the federal government they would rather forfeit $410,000 in federal educational support than agree to accept students who do not meet Stanford's standards for admission.

Stanford's intentions were spelled out by Dean Clayton Rich of the School of Medicine in a letter accompanying the school's application for funds under the Health Professions Educational Assistance Act of 1976.

The Act requires medical schools to waive their own academic standards in order to admit American medical students enrolled abroad who would pass the basic science portion of the national board examinations. No other academic qualifications could be considered. The law is in effect for three years, and any school refusing to accept this provision would lose its educational subsidies.

In his letter, Rich said the University must take exception to the requirements imposed by the law with respect to the admission of students who do not meet the School's own standards for admission.

"We believe it is essential for the academic integrity and independence of universities that the critical judgments about standards for admission and the quality of applicants be made by the University and not given over to an agency of the government," Rich said.

In a separate statement, Stanford University President Richard W. Lyman said Dean Rich has acted to protect the interests of the entire University.

He said in requiring that medical schools waive their normal admission standards to qualify for educational subsidies, the Congress inadvertedly had established a precedent.

"The University cannot accept this without giving up its own self-determination of basic academic decisions," Lyman said. "If, as a result, we must do without $410,000 a year, that will be painful, but in the long run far less so than the consequences of accepting this unfortunate provision.

"Our job now is to help those in the Congress who want to change the law. I hope that can happen without delay."

Rich said that Representative Paul G. Rogers (D-Fla.), chairman of the House subcommittee that handles health manpower legislation, had introduced a bill to modify the law.

Rogers' proposal would require that schools expand third-year enrollment by 5% or 10 students, whichever is greater, but would remove the requirement that each school set aside its own criteria for selection of students.

His aim, he said, in a letter to colleagues, is to make the provisions more feasible to administer, and remove the features to which medical schools object.

"Those efforts will have my enthusiastic support," said Rich. "Stanford's participation in the important programs of the Act would be to everyone's benefit.

"I hope in the near future it will be possible to provide assurances that do not compromise the University's central academic values."

Stanford officials said they are waiting to see the outcome of the Rogers' proposal as it moves through Congress. If it fails and the Act remains intact, they believe it could be challenged on legal grounds.

Last year when the Act was passed Dr. Rich and several other deans had protested the potential loss of their schools' control over admissions. And the council of deans of the Association of American Medical Colleges at a meeting in San Francisco voted unanimously to protest the government's "intrusion into academic processes."

–30– 8/15/77

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos 30/2
FOR IMMEDIATE RELEASE

Science Writers: Following is a sidebar concerning the role of Stanford University researchers in a national study of treatment of serious viral diseases.

STANFORD –

Medical practice may be entering a new era of antiviral therapy, a Stanford University researcher said Thursday, Aug 11.

Dr. Thomas C. Merigan, professor of medicine and head of the Division of Infectious Diseases, was commenting on a government announcement showing the first successful drug treatment of patients with herpes encephalitis.

The drug used–adenine arabinoside, or ara-A–significantly reduced both neurological damage and deaths due to this highly fatal brain infection, according to a press release issued by the National Institute of Allergy and Infectious Diseases in Bethesda.

In the carefully controlled, double-blind study comparing ara-A and a placebo, ara-A treatment reduced mortality from 70 to 28 percent, according to the story. In addition it significantly decreased the degree of debilitating after-effects in those who survived.

Merigan's group was one of 15 university investigative teams that participated in the study. "We are quite pleased at the beneficial results of the drug," he said.

He added that ara-A appears to have beneficial effects in the treatment of other virus infections being treated at Stanford

"We are developing agents to treat viral disease which will have the same potential of the early efforts to control bacterial infections with antibiotics," Merigan said.

At Stanford, the researcher said, ara-A is being studied concurrently with another substance called human interferon. These are first generation effective antiviral agents that Merigan hopes will be added to medicine's weapons against viral disease.

Last year Merigan and his colleagues reported the most significant clinical result thus far with interferon in treatment of chronic hepatitis B infection.

In the U.S. about 10 percent of patients hospitalized with acute hepatitis B become chronically infected–that is, they continue to carry the virus in their blood, and are potential transmitters of the infection.

No effective treatment has been available and spontaneous recovery from hepatits B infection is rare.

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8/11/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD –

The reputation of Stanford University School of Medicine is listed among the top in a comparison of 87 medical schools in the nation, according to a recent report.

The study examined the reputations of American medical schools for quality of faculty and effectiveness of training, as assessed by a survey of physicians and scientists of the schools

Jonathan R. Cole and James A. Lipton of Columbia University reported the work in a recent issue of the journal *Social Forces*.

Harvard ranked first in the survey, followed by Johns Hopkins and Stanford, both rated at the same level.

Characteristics of the medical schools that were instrumental in determining the ratings, according to the researchers, include the eminence and size of the faculty, training and research grants available, research and publications, and perceived effectiveness of training.

To obtain the ratings, questionnaires were sent to 2,049 full-time faculty in clinical and basic science departments. They were asked to rate medical schools for the quality of their faculty and training programs, and what factors they considered important in making the evaluations

The investigators reported that medical school reputations depended largely on their performance as scientific and research organizations. "Schools with the greatest resources in support of research, with faculty producing the most research, and with faculty recognized and honored for their research performance, were rated most highly,"they report.

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Mailed Wednesday, August 10, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Eight Bay area community leaders and six Stanford faculty members and administrators have been named to the Stanford University Medical Center Council.

Their appointments were announced by Stanford University trustee William E. Ayer, council chairman.

Formed recently, the council sponsors and coordinates efforts to develop private gift support for the Medical Center.

According to Dudley Kenworthy, director of development, this is the first centerwide high-level fund raising group in existence at the Medical Center since the mid-1950's. At that time, a similar committee, led by the late Herbert Hoover and San Francisco community leader Parmer Fuller directed the fund drive for the construction of the Stanford Medical Center complex.

Ayer said the medical center provides highly specialized and technologically sophisticated medical care for a wide California area. For the treatment of some diseases, patients come to Stanford from all over the United States and from abroad.

He said fund raising is receiving top priority at the center because the hospital is overcrowded. Some new space is needed along with remodeling of present space in which to develop the particular programs of patient care, teaching, and research conducted at Stanford.

In addition to helping with funding for new facilities, the council will seek program support. Patient fees contribute minimally to construction and the teaching and research functions. Unlike most California hospitals, Stanford has no local or state tax income for these purposes.

The leaders named to the council have been active in other efforts associated with the medical center. They are: Dr. Victor Richards, San Francisco, Medical Alumni Association; Dr. David Rytand, Atherton, Stanford Medical Alumni Fund and Medical Alumni Association; Mr. and Mrs. James G. Shennan, Jr., Atherton, Stanford Program for Pediatrics; Jack L. Shepard, Atherton, Medical Center Friends; Mrs. Marie Strain, Menlo Park, Medical Center Auxiliary; Melvin C. Ury, San Francisco, Friends of Radiology; and Mrs. O. Meredith Wilson, Palo Alto, Board of Hospital Directors.

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Faculty are represented by Dr. Jack D. Barchas, Nancy Friend Pritzker Professor of Psychiatry; and Dr. Thomas C. Merigan, professor of medicine and head, Division of Infectious Diseases.

Medical center administrative staff on the council includes Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine; Peter Levin, associate vice president for medical affairs; Paul B. Hofmann, director of the hospital and clinics; and Dudley C. Kenworthy.

Several additional members will be appointed to the council in the near future, Ayer said.

During the coming year the council will sponsor a number of public events including the Progress in Medicine Lectures.

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Mailed Monday, August 8, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911 49/3-4

Science Writers: This story is released in conjunction with presentation of a scientific report at the Academy of Ophthalmology and Otolaryngology Oct. 3 in Dallas, Texas. Photos available on request if not included with story.

ADVANCE FOR P.M. RELEASE MONDAY, OCTOBER 3, 1977

STANFORD –

A television test for visual screening of the viewing public has been devised by ophthalmologists at the Stanford University School of Medicine.

The screening consists of a brief videotaped sequence combining two eye tests—one for visual acuity, the other for visual field. The test is devised to be effective regardless of the size of the viewer's television screen.

Each eye will be tested separately. The visual acuity part of the test is dependent upon the viewer's ability to see letters of varying sizes on a television screen. For visual field testing the viewer is instructed to look at a dot in the middle of the picture while spots located strategically around the screen rapidly blink off and on.

The test, along with the necessary introductions and explanations, runs 20 minutes and the viewer grades his own results. If he passes, fine. If he fails, he will be urged to see an ophthalmologist.

Examples of diseases which could be detected by these screening tests are glaucoma, retinal degeneration, cataracts, and disorders of the central nervous system, such as brain tumors.

The television eye test was developed by Drs. Milton Flocks, a clinical professor of ophthalmology, A. Ralph Rosenthal, head of the division of ophthalmology, and Jerry Hopkins, working under a grant from the National Society for the Prevention of Blindness.

The Stanford researchers described the test Monday, Oct. 3, at the meeting of the Academy of Ophthalmology and Otolaryngology in Dallas, Texas.

Dr. Flocks said the two most valuable and effective visual screening procedures in the past have been the testing of vision in school children and the testing of automobile drivers by state licensing bureaus. These agencies normally disover and refer for eye examinations large numbers of persons.

"It occurred to us," said Flocks, "that the medium of television with its unparalleled potential for reaching the public might be used as a convenient and inexpensive means for visual screening."

There are large numbers of people who have visual field defects and decreased visual acuity in one or both eyes who are unaware of their abnormality, he said. Serious efforts should be made to identify and treat these individuals.

Flocks said the videotaped sequence was tested at the Stanford Eye Clinic under controlled conditions in 156 individuals, all of whom had undergone an eye examination. Of those tested 88 had known visual abnormalities while the remainder were normal.

"The comparison of results of the screening tests with clinical opthalmologic examination indicated that TV testing could detect about 90% of those individuals with a significant visual abnormality. Conversely, in the clinic 10% of the normal individuals failed the test.

The authors state the eye test could be compared to the breast self-examination performed by women on a widespread basis which is undoubtedly of great value in spite of some false positive and false negative results.

Flocks and Rosenthal suggested that the vision test could be first made available to small communities so that its effect on the public can be studied before more widespread broadcasting.

At some later date with proper publicity and network broadcasting of the vision test, an enormous audience could unquestionably be reached.

END ADVANCE FOR P.M. RELEASE OCTOBER 3, 1977

9/30/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

The Stanford University School of Medicine has been granted $500,000 for five years from the Bristol-Myers Company to support basic and clinical cancer research, the Company announced Wednesday, Sept. 28, in New York.

Dr. Saul A. Rosenberg, professor of medicine and head of the Division of Oncology, said Stanford will use the grant primarily to expand programs in clinical pharmacology, and in the development of "combined modality therapy." This involves the use of one or more anticancer drugs in combination with other types of treatment such as surgery, radiation, and the still-experimental field of immunotherapy.

There is increasing evidence, said Rosenberg, that combined modality therapy "may be one of the most effective approaches to the treatment of some forms of the disease, including childhood cancers, leukemia, and lung cancer."

Initially, Stanford's research will be on malignant lymphomas, of which the best known is Hodgkin's disease. Pioneering therapy for Hodgkin's disease developed at Stanford has already resulted in highly effective treatment of up to 90% of patients when treatment is initiated at an early stage.

Stanford's grant is one of a $2.5 million program for the next five years initiated by Bristol-Myers. Other schools receiving grants are Yale, Johns Hopkins, Chicago, and Baylor, the company said.

"Our objective is to provide these schools with funds on a no-strings basis to encourage excellence and innovation in cancer research, and to permit them to explore promising leads in depth," said Richard L. Gelb, chairman of Bristol-Myers.

In addition, Bristol-Myers announced the establishment of an annual $25,000 Bristol-Myers prize to a research scientist who has made an outstanding contribution to progress in cancer research. Recipients will be selected by a committee made up of the heads of the cancer programs in each of the medical schools receiving grant funds.

Medical schools and cancer research centers throughout the country will be invited to nominate candidates for the first year's prize in the spring of 1978, the Company said.

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9/28/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino 497-6911 53/1
FOR IMMEDIATE RELEASE
STANFORD –

Duane D. Walker, R.N., M.S., has been named associate director of Stanford Hospital and director of Nursing Service.

Walker, 39, has served as assistant administrator and director of nursing at the University of Utah Medical Center since 1975. He will begin new duties at Stanford on January 9, 1978.

Walker succeeds Margaret Neill, who resigned in December 1976. In the interim Lois Williams and Richard Pettingill have been acting codirectors of Nursing Service.

In announcing the appointment, Paul Hofmann, director of Stanford Hospital and Clinics, commented that "we are delighted to be able to fill such a vital position with someone with qualifications and experience as impressive as Walker's."

Walker received his undergraduate degree from Weber State College, Utah, in 1964. He served as administrator with Pioneer Memorial Hospital in Brigham City, Utah, before entering the U.S. Army Nurse Corps as an in-service education instructor.

He served as assistant administrator and director of nursing services at Holy Cross Hospital in Salt Lake City from 1970 to 1975. He is currently an instructor of nursing in the University of Utah College of Nursing, as well as assistant administrator for patient care services at the University of Utah Medical Center.

Walker is active in several nurses' associations and community organizations. He has a strong interest in research activities, and has authored several papers in the nursing field. His master of science degree in 1975 from the University of Utah is in psychiatric nursing.

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9/27/77

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD –

Two Stanford researchers expressed shock and surprise Monday, Sept. 27, on learning that their work during the late 1950s had been covertly sponsored by the Central Intelligence Agency.

Dr. Marion Smith, now an adjunct professor of neurology, and Dr. William Hofmann, associate professor of neurology, both said they were certain that their colleague, Dr. Wallace Lane Chan, had served as the CIA's liaison at Stanford.

Contacted at the Norwood-Foxboro Health Clinic in Massachusetts, Chan flatly denied having worked for the CIA while at Stanford, either directly or indirectly. He said he had been employed by the agency overseas from 1953 to 1957.

At a campus news conference, Smith said it was common knowledge that her studies of alcohol absorption, conducted with the late Dr Henry Newman, had been funded by the Geschickter Fund for Medical Research, Inc. This has been publicly identified by its founder in U.S. Senate hearings as a CIA conduit.

Hofmann, who succeeded Newman as acting head of the neurology division in 1959, said he was "quite shocked" to learn about the CIA involvement and had "worried about Chan" years ago. Currently on leave in Munich, Germany, Hofmann first learned of the CIA's role during a phone call from Dr. David Prince, chairman of neurology, Monday afternoon.

Chan said he didn't remember Smith, but had worked with Newman on alcohol studies and with the late Dr. Windsor Cutting on pharmacological studies involving fish in 1958.

He replied affirmatively when asked if he and Cutting were studying "the neurophysiological and pharmacological effects of central nervous system antagonists and synergists."

These words are identical to those used in an internal CIA document to describe a project conducted at Stanford as part of the CIA's Project MK-ULTRA during 1957-58.

In a file memo, Sidney Gottlieb, CIA's director of technical services, noted that while the work would be done in the Stanford Department of Pharmacology, a faculty member from the Department of Medicine "will be able to monitor, direct, and actively participate in this project" from the standpoint of agency interests. (Payments totaling $41,382 subsequently were made to the University through a covert CIA foundation conduit it for the pharmacology project.)

On the same day—May 1, 1957—Gottlieb wrote another file memo concerning a separate MK-ULTRA project which subsequently led to the direct payments of $28,800 to an unidentified assistant clinical professor of medicine at Stanford between September, 1957, and June, 1961, mostly in the form of cashier's checks for $800 per month.

This period corresponds with Chan's employment at Stanford in that field at that rank. He vigorously denied having either requested or received such funds. "I never got $800 checks. I had to earn every penny," Chan declared.

(more)

Gottlieb's memo on the direct payments said this project's purpose was to enable the agency "to continue the utilization of (name deleted), presently at the Department of Medicine, Neurology Division, Stanford."

The unnamed individual's responsibilities included monitoring the Newman studies on alcohol and the pharmacology project. Chan confirmed his involvement in both projects to Stanford News Service and told *The San Francisco Chronicle* he knew Gottlieb.

Gottlieb's memo on the direct payments project said this person also would "plan, monitor, and direct research and development of a miniaturized polygraph," and conduct "clinical testing and evaluation of various antiinterrogation preparations."

Chan flatly denied having done any such work.

Further file memos on the same project in 1959 and 1960 expanded its scope to include "review of overt Chinese and Japanese pharmacological and physiological literature," In a standard "memorandum of agreement," signed July 1, 1957, the recipient pledged "never to divulge, publish, nor reveal" information about the project.

At the news conference, Smith said the source of funds for the alcohol studies was "never very clear," although Newman had indicated it was government sponsored when he employed her on the project.

Smith said she was told there were "practically unlimited funds available to work on anything concerning the rate of alcohol metabolism." Over the ensuing five years "everything I did was published" in about 10 professional journal articles.

No human volunteers were involved in her studies, which were limited to dogs, rats, and mice. Chan saw copies of her work and "I knew he was the liaison for funding," but there was no attempt to influence her findings or their publication, Smith said.

"I was happy to have a job, to do what I wanted, and get published a lot." Prince described the quality of her scientific work as "outstanding," a view shared by other scholars at Stanford.

Smith recalled that Newman had done some studies on the effect of alcohol on sleep involving human volunteers. He found that alcohol probably made people sleep less well. Whether this was part of MK-ULTRA was not completely clear.

Newman, who died in 1959, "was very friendly, a nice man, very honest," Smith said. He was nationally known for his alcohol studies.

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD –

Between 1953 and 1961 the Central Intelligence Agency covertly spent nearly $390,000 on Stanford faculty research as part of its nationwide project MK-ULTRA "to identify materials and methods useful in altering human behavior."

Of this total, more than $347,000 was paid through a foundation conduit for five University projects. Cashier's checks were used to pay faculty more than $40,000 directly for two smaller-scale efforts.

The first of these, running from May 1953 through January 1957, provided $11,478 for "services as a contact and cut-out for projects in the MK-ULTRA field" to a "practicing psychiatrist" on the Stanford medical faculty, which then was based in San Francisco.

(Personal diairies of the late George Hunter White, a former federal narcotics agent and CIA liaison, mention his drug experiments with Dr. James Hamilton, a psychiatrist now retired from the Stanford clinical faculty in San Francisco. Dr. Hamilton has declined to respond to numerous press inquiries.)

The seven projects at Stanford were among 135 or more nationally. They included research on alcoholic intoxication, analysis of sedatives for Project Knockout, development work on a miniaturized lie detector, and a literature search on blood groupings, among others.

All involved Medical School faculty, mostly in the Division of Neurology. These activities declined sharply following the death of Prof. Henry Newman, the division chairman, in 1959 and the School's move from San Francisco to Palo Alto the same year.

These broad, tentative conclusions emerge from a preliminary overview of more than 500 pages of CIA documents provided the University at the request of President Richard W. Lyman. Received Friday, Sept. 23, they have been duplicated and made public.

Stanford has barred secret research since 1969.

The CIA documents have most names deleted. They provide little evidence of what research was actually conducted. The great bulk of the documents is financial.

The largest single project was a study of alcohol and tranquilizers originated by Newman. CIA authorized $147,255 for this during 1956-60, apparently using a foundation conduit.

This study was aimed, in part, "at permitting consumption of larger amounts of ethyl alcohol without an increase in nervous system depression." While Newman is not named, he was the only person to have the titles used in correspondence concerning the project. Well known for his research on alcohol, he was a Stanford graduate (A.B., 1927, M.D., 1931) and faculty member from 1932 until his death.

The second largest project was funded through a foundation for $114,373 from 1957 to 1961. Its objective was "fundamental information" necessary for "a highly potent, quick-acting substance that will render an individual helpless and immobile, preferably in an unconscious state."

Part of Project Knockout, it included study of the sedative effects of certain species of ticks. "As a byproduct of Project Naomi, a sizable amount of this neurotropic substance is being isolated," one report noted.

While the "cut-out and cover" organization was editorially obliterated, one internal memo boasted that "(blank) will monitor and direct and actively participate as principal investigator. . .arrangements have been made for his appointment."

During 1957-58 MK-ULTRA used a foundation conduit for $42,065 in research "on the neurophysiological and pharmacological effects on central nervous system antagonists and synergists."

(more)

An internal memo indicates this may have been lodged in the Department of Pharmacology in San Francisco but an individual in the Department of Medicine, which then included neurology, "will be able to monitor, direct, and actively participate. . . ."

From 1957 to 1961, direct payments totaling approximately $28,800 were made "to continue the utilization of (a physician), presently located at the. . .Neurology Division. . .on project activities."

Its objectives included participation in clinical testing and evaluation of drugs useful in resisting interrogation, review of overt Chinese and Japanese pharmacological and physiological literature, and "report on general scientific and medical meetings attended," among others.

On this and several other projects, investigators had "top secret" clearance and signed a standard "memorandum of agreement" with CIA. This states, in part:

"I solemnly pledge my word that I will never divulge, publish, or reveal either by word, conduct, or by any other means such information or knowledge (gained from research). . .unless specifically authorized to do so."

The CIA interest in portable polygraphs and blood typing is explained in an internal memo which states: "Today, because of rapid changes and reassignments of our overseas case officers and the continuing operation of agents (words deleted) for long periods of time, the paramount question arises upon the exfiltration of the agent(s): Is the agent 'bona fide;' is he the same person we started with?"

Besides lie detectors, blood groups, and biographic files, the CIA author suggests that radioisotopes or radiologically opaque foreign bodies might be selectively implanted in agents to help solve this problem.

The same memo notes that "The very way clandestine services operate. . .involves highly complicated 'tradecraft' techniques, clandestine agent recruitment and handling, nets and subnets, security and reliability of communications, and so on.

"Isolated by the security barrier, the perfecting of these techniques sometimes threatens to become an end in itself."

The CIA documents show the agency spent $41,382 for development of three miniaturized lie detectors at Stanford, using the foundation as conduit. Results of this 1958-59 project in the Division of Neurology were assessed as "satisfactory."

The smallest project was for a literature survey and information on minor blood groupings. Channeled through a foundation, it resulted in payment of $1,040 to "a leading investigator on blood groups in man" in 1958.

In describing the qualifications of the initial, direct-payment operative in 1953, an internal memo said he had served as chief neuropsychiatrist at one institution, chief of the psychiatric section at another, and had World War II experience with the Office of Strategic Services (OSS), a CIA predecessor.

"He has been of value in the general MK-ULTRA field as an overall adviser and consultant, he has been of value in contacting individuals. . .and he has done work himself which has contributed to the MK-ULTRA field," the memo noted.

The CIA records show this individual was directly reimbursed for payments to five informants during 1956 totaling $1,680. These were approved by Sidney Gottlieb, chief of CIA technical services and one of the most prominent agency officials to be identified in the current Senate probe of MK-ULTRA.

The New York Times, which broke the first major story on this research, said some 86 institutions were involved in the national program, which cost an estimated $25 million over 25 years.

Copies of the documents sent Stanford by the CIA have been distributed to several University officers, major newspapers with a continuing interest in the disclosures, the Stanford Library, and Stanford Archives.

attention: Michela Reichman

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

A man masquerading as a Stanford physician was discovered by paramedics after a ride in an ambulance Thursday morning. He was arrested later by officers of the San Mateo Sheriff's Department.

Lieutenant Brendan Maguire of the Departmentsaid the man, identified as Edward Ingram, was cited for impersonating a physician and possession of a physician's name tag.

Ingram contacted two paramedics of the Medivac ambulance service of San Mateo in Stanford's emergency department Thursday morning, according to John Scott, chief paramedic at Medivac.

He was wearing a white lab coat with the name tag of Dr. Morris O. Daily, a pathology intern, said Scott. He identified himself as Dr. Daily, and asked if he could ride along.

Scott said physicians commonly ride along with paramedics without assisting in medical care to get an idea of what is involved in field emergency treatment.

Ingram only observed, except to take some blood pressures, said Scott.

Ingram also had ridden with Medivac paramedics late Monday night, he said.

The paramedics notified the Sheriff's Department after discovering he was not Daily. Ingram was picked up by officers at 2 p.m. Thursday in a Menlo Park restaurant, Maguire said.

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9/23/77

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Hugh O. McDevitt, professor of medicine and member of the division of immunology at the Stanford School of Medicine, has been named winner of the annual Borden Award for outstanding research from the Association of American Medical Colleges (AAMC).

The award consists of $1,000 and an inscribed gold medal. It will be presented to McDevitt Nov. 8 at the annual AAMC meeting in Washington, D.C. Dr. John A.D. Cooper, AAMC president, announced McDevitt's selection Wednesday, Sept. 21.

McDevitt, 47, was cited for his pioneering work on the genetic controls of the immune response.

His group discovered that the genes controlling the ability of the body to respond to foreign materials are clustered together on one chromosome in the mouse, and are closely linked to the genes responsible for the transplant rejection reaction.

Rejection of transplants is elicited by markers produced by these genes, called transplantation antigens, which are located on the surfaces of cells.

"In the past five years investigators throughout the world have found that over 30 human diseases are associated with particular transplantation antigen types," says McDevitt.

"It is apparent that this complex set of (immune response) genes clustered in one small region on the sixth human chromosome is a major regulator of immune responsiveness," he says.

A native of Cincinnati, Ohio, McDevitt obtained an AB with honors from Stanford (1952) and his M.D. from Harvard Medical School (1955). He taught bacteriology and immunology at Harvard before coming to Stanford in 1966.

McDevitt became interested in the inheritance of immune responses in 1963 while doing research at the National Institute for Medical Research in Mill Hill, England.

He continued his work at Stanford, where he found that the immune responses of mice were closely correlated with the transplantation genes.

This discovery led to the identification of some 30 immune response genes.

McDevitt's group is now studying how the normal immunological mechanisms of the body protect against cancer, and how modification of these mechanisms might possibly treat or cure the disease.

Recently McDevitt, his coworkers, and Dr. Peter Stastny of Dallas have found genetic markers in the white blood cells of patients with rheumatoid arthritis.

The Borden Award, presented annually since 1947 by the AAMC in cooperation with the Borden Company Foundation, is given in recognition of "outstanding research in medicine conducted by a member of the faculty of an affiliated college."

Other Stanford faculty members who have received the award are Dr. Arthur Kornberg, Merner professor of biochemistry (1968), for his work on synthesizing DNA, and Dr. Thomas C. Merigan, professor of infectious diseases (1973), for developing techniques to treat virus infection with interferon.

Last year's winner was Dr. Roger C.L. Guillemin, resident fellow and research professor at the Salk Institute in La Jolla, California, and adjunct professor of medicine at UC-San Diego.

He was cited for research in neuroendocrinology, in which he and a colleague isolated and synthesized three hormones produced by the hypothalamus in the brain

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911 45/4-5
FOR IMMEDIATE RELEASE
STANFORD -

Birth marks, beauty spots, strawberry patches, port wine stains!

These colorful names for pigmented skin lesions, and objects of concern for mothers of newborn infants, were discussed at a Pediatric Dermatology Symposium at Stanford Medical School Friday, September 16.

''A small number of such skin lesions may develop into malignant melanoma,'' said Dr. Robert Walton, a clinical professor of dermatology. Malignant melanoma is a particularly virulent form of cancer that can spread rapidly through the body.

But if it is diagnosed at an early stage, he said, it is a curable disease.

Moles should be removed, said Walton, when they show any ''progressive change, including increase in size or shape, change in color, the way they feel, or whether they scale, crust, or bleed.''

But it's difficult to tell the difference between normal changes in moles which accompany the growth of the child and pathological change, he said.

Some lesions have a greater risk of becoming malignant and should be biopsied, said Walton. These include lesions which cover large portions of the body, so-called garment lesions. About 10 percent of these become malignant, he said.

However, physicians do not know what constitutes a ''large'' lesion and therefore a higher risk of cancer, Walton said. ''If it is sufficiently large to be noticeable, it should be biopsied,'' he said.

Walton said lesions in certain locations have higher risks of malignancy and should be biopsied as a matter of course:

-In mucous membranes in the female genital region, moles are 70 times more prone to develop malignancy than in other areas.

-Under the finger or toe nail, although rare, moles give rise to about 3 percent of all malignant melanomas.

-On the palms and soles, moles have a 20 percent greater chance of becoming malignant that other parts of the body.

Physicians do not know why some moles become malignant, while others remain benign all through life. They do know that irritating or scratching moles will not cause them to develop cancer.

Walton and Dr. Alvin Jacobs, professor of dermatology, did the first study of the effect of controlled trauma on moles. They found deliberate cauterization caused no significant change in moles even 20 years afterward.

They also pioneered in research on the percentage of babies born with pigmented lesions. They examined over 1,000 babies, and found that 4 percent of them had pigmented lesions present at birth.

None of these appeared to be potentially malignant, Walton said, although two lesions showed changes which could be interpreted as similar to those of the garment-type lesion.

Follow-up studies for a period of years are needed on these children, said Walton, to determine what percentage, if any, of the moles present at birth become malignant.

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9/19/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497 6911
FOR IMMEDIATE RELEASE
STANFORD –

A major program will be instituted at Stanford University Medical Center to help counter the claim that "in arthritis, nothing can be done."

The Stanford Arthritis Center, with a three year $335,000 grant from the National Institutes of Health, will conduct studies to determine what methods of therapy are most effective and which health personnel can best provide that care.

Stanford is one of 15 institutions in the nationwide program established under the National Arthritis Act of 1975.

According to Dr. Halsted Holman, professor of medicine and director of the new Arthritis Center, the skepticism that little can be done about arthritis is not valid.

But, he says, a system is needed to evaluate the effectiveness of particular methods of treatment.

Specific aims of the Stanford Center include designing a system to evaluate patient outcomes, the usefulness of patient education programs and self-care, the effects of rheumatologic surgery such as total joint replacement, and the benefits of new medications.

Even without introducing new therapies, says Holman, there can be meaningful improvement in patient outcomes.

He cites such improvements as shorter hospital stays for some diagnoses, prehospital testing, noninvasive measurement techniques, recall of some drugs and decrease in use of others, and mandatory consultation in some circumstances.

Needing attention, he says, are items like redundant and expensive procedures without benefit, side effects from nonindicated medications, unnecessary surgery, and unneeded office visits, laboratory, or X-ray procedures.

For example, he says, some physicians feel that bed rest in rheumatoid arthritis, in a hospital, will decrease inflammation and symptoms, and allow the disease to be managed with fewer drugs. Others say such treatment increases the rate of bone loss and muscle atrophy, and the benefits will not last longer than the hospitalization.

"Obviously, such controversy is of major importance; the answer must lie in evaluation of the effects of the treatment over the long term. Such outcome has not been adequately studied," says Holman.

Holman notes that Stanford has long been involved in such questions. During the past six years in the Stanford Arthritis Clinic, cost per patient and per patient visit has decreased by more than 25 percent, principally because of more selective laboratory procedures.

During the same period the number of patients has doubled, the number of hospitalizations halved, and mortality in systemic lupus erythematosus and other connective tissue diseases has decreased, without change in treatments.

Another aspect of the Stanford program will be evaluation of what kinds of health personnel can provide the most effective care.

Roles of the nurse-practitioner, the physical therapist, social worker, patient advocate, and others will be examined. A further study will compare patient outcomes achieved by such a multidisciplinary group and by treatment from a physician alone.

Another part of the program will involve examining the outcome of 300 adults who were afflicted with arthritis as children.

The Stanford program will utilize the American Rheumatism Association Medical Information System (ARAMIS). Dr. James Fries, assistant professor of medicine and associate director of the Stanford Arthritis Center, is director of the ARAMIS nationwide data bank.

Its aim is to make available to physicians information about a cross section of patients, their treatments and outcomes. Such information, says Fries, provides for more accurate prognoses and therefore more effective therapeutic programs.

Portions of the new program will be conducted at Stanford and at affiliated hospitals, including the Palo Alto Veterans Administration Hospital, Santa Clara Valley Medical Center, and Children's Hospital at Stanford. Physicians in private practice and groups such as the Mid Peninsula Health Service will also be involved.

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9/20/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911 45/6

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Ralph S. Paffenbarger, Jr., a leading figure in the field of epidemiology, has been appointed professor of family, community and preventive medicine at Stanford University School of Medicine.

He will head a new division of epidemiology at Stanford.

Paffenbarger's appointment was announced by Dr. Clayton Rich, vice-president for medical affairs and dean of Stanford Medical School.

Paffenbarger has studied a wide range of infectious and noninfectious diseases, including cancer, heart, and mental diseases.

He plans to continue his present research on the relation of vigorous exercise to the development of heart disease in San Francisco longshoremen. He will also continue investigating the pathogenesis of disease in former college students, and the causes of certain types of cancer.

Paffenbarger, 54, left a post as adjunct professor of epidemiology in the University of California School of Public Health he held since 1969.

Previously he taught biostatistics and epidemiology at Harvard. He served as medical director in the U.S. Public Health Service for 21 years until his retirement in 1968.

Paffenbarger is past chairperson of the epidemiology section of the American Public Health Association. Currently he is the associate editor of the s,American Journal of Epidemiolog

A native of Columbus, Ohio, Paffenbarger did his undergraduate studies at Ohio State University. He received his medical degree from Northwestern University Medical School, and his doctorate in public health from Johns Hopkins University School of Hygiene and Public Health.

Paffenbarger is married and has six children, the youngest of whom is a freshman in college.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497 6911 44/4-5

FOR IMMEDIATE RELEASE

STANFORD –

There's little you can catch from your family pet, says a Stanford researcher.

Dr. George H. Muller, well known pioneer in the field of small animal dermatology, says "children are quite safe with a pet. A visiting aunt can give them a cold more easily than the puppy who kisses them."

Muller spoke at a pediatric dermatology symposium at Stanford School of Medicine Wednesday, Sept. 14. He is clinical professor of dermatology at Stanford, and specializes in small animal dermatology in his veterinary practice.

The dog or cat who has been a household pet for years will almost never transmit a contagious disease to its owners, says Muller.

Most animal skin problems are not contagious, he says, and all are curable.

"Humans catch diseases from other humans, and puppies from other puppies," he says. Common scabies infections are contracted from fleas, ticks, and lice, usually from poor sanitary conditions while the animal is young.

Muller says it's okay for children to hug and carry their pets in their arms, if some preliminary rules are observed.

Pets, he says, should only be bought from a reputable dealer who has good sanitation practices.

Every new pet should be taken to a veterinarian for a check-up as well as immunizations, to spot any diseases.

Muller's final rule is that the owner should carefully look the animal over, too, since skin diseases are observable.

Fleas, ticks, and lice, he says, may infect an animal, but will only enter human skin by accident and then leave after a day or so.

Mites may invade human skin temporarily too, he says, but once the animal is treated, the human disease will disappear too.

"The cure of canine scabies in man is accomplished by eradicating the mites from the affected dog," says Muller.

The veterinarian described a recently identified mite, now seen in growing numbers, called Cheyletiella. It is commonly called "walking dandruff," since it is so large it can be seen fairly easily.

The Cheyletiella mite can produce skin disease in man by direct contact with infected pets. But constant animal contact is usually needed to maintain the human infection.

The mite is highly contagious, especially between puppies, and is often found in litters or pet shops where sanitation is poor. Adult dogs are usually lightly infected, even when in contact with infected puppies.

Muller says the animal infection is easy to treat.

Other skin diseases in animals, such as ringworm, hookworm, and fungal infections, he says, are rare, and can be treated.

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9/15/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Washing your face and avoiding chocolate will not keep you from getting acne.

Dr. Robert Roth, a Modesto dermatologist and clinical assistant professor of dermatology at Stanford, feels the avoidance of certain foods and the role of hygiene have been overstressed in treating acne.

Roth spoke at the Wednesday session of the Pediatric Dermatology Symposium in the Fairchild Auditorium of the Medical School. The symposium was presented by the Department of Dermatology.

Nearly every child develops at least one manifestation of acne, said Roth, from whiteheads and blackeads to severly inflamed cysts.

Most cases of acne will clear up in time. But, he said, it is important to treat acne, not only to prevent permanent physical scarring, but for the emotional well-being of the patient.

White heads are clumps of shed skin cells, fats, and a bacteria in hair follicles which are associated with sebaceous glands. Sebaceous glands produce the fatty acids which help give skin its oily appearance.

Blackheads are those clumps which are open to the air. Roth said the black color is not due to dirt, but may be the result of fatty acids oxidizing when exposed to air.

Pimples, cysts, and other inflammations associated with more advanced stages of acne are thought to occur when the hair follicle ruptures, spilling its contents into surrounding tissue, said Roth.

Some fatty acids can rupture hair follicles. Roth said the bacteria in the clumps may produce these fatty acids by breaking down larger fat molecules.

Acne can be controlled if the clumps of fats and bacteria are removed from the skin, or if the bacteria are killed with an antibiotic, Roth said.

Roth cautioned against pinching or squeezing white heads and black heads, because this can rupture the hair follicle and cause other acne eruptions.

Vitamin A, called "retin A," is the most effective agent presently available for removing the clumps from the skin, said Roth.

"Retin A is the only agent applied to the skin which does prevent blackhead and whitehead formation," he said.

(more)

Abrasive soaps generally are not effective he said, and can rupture the follicles.

The most effective antibiotic in treating acne is tetracycline, said Roth. The drug, which is usually taken orally, is also the least expensive antibacterial treatment available and has the fewest side effects, he said.

Benzoyl peroxide is an effective antibiotic when applied to the skin as a gel, Roth said, especially in combination with Ret A.

Antibiotics are ineffective in treating severe acne, said Roth, because the inflamed pimples have gone beyond the involvement of bacteria. In this case, the use of steriods, either taken orally or injected into acne cysts, can help reduce inflammation, he said.

Hormones are also an effective acne treatment, said Roth. Estrogen causes a decrease in the formation of fats by the sebaceous gland.

Roth said acne treatment can sometimes be combined with birth control, as long as the pill contains enough estrogen. Some pills contain progesterone, a hormone which may make the acne worse.

Roth does not favor this treatment because the effects of long-term estrogen use as yet are unknown.

"None of these treatments are consistently effective for all types of acne without acne surgery," Roth said.

Acne surgery is the removal of whiteheads and blackheads, and the drawing of fluid from papules and cysts. This can be done without scarring, he said, with the use of special instruments.

Ultraviolet light and x-rays are useful peeling agents, Roth said, but don't seem to be effective in ridding the skin of the clumps. Long-term use of these treatments may be dangerous, he said.

"If patients receive enough ionizing radiation they can develop skin cancer 30 years later," he said.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911 43/4

FOR IMMEDIATE RELEASE

STANFORD –

A new technique which may help scientists understand how the visual system works has been developed by Stanford Medical School researchers.

The technique allows scientists to measure the electrical response of the retina to single photons, the particles of which light is composed.

Light is converted by cells in the retina, called photoreceptors, into electrical signals. After processing in the retina, the signals from many photoreceptors travel to the brain where they produce the sensation of vision.

The technique, developed by Dr. Denis Baylor, associate professor of neurobiology, and his colleagues, Drs. King-Wai Yau and Trevor Lamb, was reported in the Sept. 1 issue of *Nature*, a scientific journal.

It involves measuring the electrical signal produced by rod cells, the photoreceptors responsible for vision in dim light, when a single photon of light arrives.

While viewing with a special microscope, Baylor and his associates suck the light-sensitive portion of a single rod cell from a toad retina into a recording electrode. The inner diameter of the electrode is six micrometers, about one-tenth the diameter of a human hair.

They adjust a thin bar of bluish-green light so that only one or a few photons hit the rod and then measure the resulting change in electrical current flowing across the rod's surface.

"We've been able to observe, for the first time, the electrical response of a vertebrate photoreceptor to a single photon," says Baylor. "This should help us to understand several of the processes involved in seeing."

Baylor and his colleagues plan to continue examining the properties of the signals. They hope to get more information about how photoreceptors convert light into electrical signals and how the signals are transferred to the brain.

The work is supported by a grant from the National Eye Institute.

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9/14/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911 43/1-3

FOR IMMEDIATE RELEASE

STANFORD –

"I'd like a place where we can have a baby safely so we don't have to have it at home."

"I'd like a room with windows so I can have a sense of the passage of time."

"I want a place where a woman who is having a demonstrably normal birth is permitted to make the decisions of how or in what position she gives birth, and who is with her."

These are some of the desires expressed in a forum on alternative birth concepts held at the Stanford Medical Center this week.

The forum, organized by eight Palo Alto women, brought together about 100 parents, nurses, alternate birthing educators, and physicians from the community and the Stanford faculty, to examine the labor and delivery policies at the hospital.

Pat Koenig, spokesperson for the organizers, said Stanford was chosen for the discussion because "we live in this community and Stanford is our community hospital.

"Stanford is a good hospital," she added. "There are creative and progressive people here."

The hospital was represented by a panel including Paul Hofmann, hospital director, Dr. Robert Alway, medical director, Judy Schmidt, R.N., perinatal coordinator, and Barbara Petree, R.N., clinical nursing coordinator for labor and delivery. Dr. Roger Levin, a community internist, acted as forum moderator.

Several people in the audience felt an alternative birth center was needed in the hospital The center would be an area where a woman can labor and deliver in the same room with her partnter present, whwere she can keep her baby close by, and where her other children can visit.

According to Schmidt and Petree, Stanford already offers several alternative birth procedures. These include allowing two persons in the delivery room with the consent of the obstetrician, allowing two persons in the labor room, and allowing labor and delivery in the same room.

The husband can be present during caesarean section except during an emergency.

After birth, the mother and baby can recover together in the same area where labor and delivery took place whenever possible.

Rooming in with the baby is allowed on the postpartum floor of the hospital.

Stanford offers classes in baby care, postpartum self-care, and physical therapy during the period after birth.

Many of the new procedures were implemented Sept. 1 on the recommendation of the Alternate Birth Committee. The Committee operated as a subset of the existing Perinatal Care Committee to "provide modification of traditional practices, maintenance of the integrity of the family unit, and the greatest safety to mother and infant."

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However, lack of space in the hospital so far has restricted alternate birthing to a modification of procedures rather than the establishment of a center, said Petree.

Stanford is a tertiary care hospital. That means it provides a higher level of care and treats patients with more complex diseases than the average hospital. It has a high-risk obstetrical center, and an intensive-care nursery.

The establishment of an alternative birth center at Stanford, said Hofmann, must be viewed in the context of Stanford as a regional care center, with a major proportion of care committed to high-risk cases.

"About 30-40% of deliveries at Stanford are high risk," says Schmidt. "More and more patients are being transported here from other hospitals before delivery so the babies can have as great a chance as possible of survival.

"We have more than an 80% occupancy rate on the postpartum floor. The beds which aren't filled by postpartum patients are usually occupied by postsurgical gynecology patients," she said.

Nevertheless, said Hofmann, "we are looking at the possibility of taking a private room in the postpartum unit" for use in alternative birthing.

"We also have modified our charging structure to reflect the fact that our costs are lower in alternative birthing," he said.

Some forum participants expressed concern that there was no way for them to become involved in changing hospital policies.

Hofmann referred them to their personal physicians for special requests concerning their own delivery.

"Issues regarding changes in policy are reviewed by the perinatal care committee and by members of the obstetrical service," he said.

"Such changes are referred to the medical board, which is the executive committee of the medical staff, and then to the hospital board of directors."

Although only physicians and hospital staff members can sit on the perinatal care committee, Alway said it is free to call on ad hoc consultants for input.

Alway suggested the community provide input to the Health Services Agency for Santa Clara County, in addition to examining hospital policies. The HSA, he said, develops a health service plan for the county and considers requests by hospitals for major changes in existing services.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Lawrence G. Crowley has been appointed professor of surgery and deputy dean in the Stanford University School of Medicine.

His appointment, announced Wednesday, Sept. 14, by Dr. Clayton Rich, vice president for medical affairs and dean of the medical school, will be effective November 15.

Crowley, 57, is currently professor of surgery and dean of the University of Wisconsin Medical School in Madison.

"Dr. Crowley," Rich said, "has previously distinguished himself as a national leader in academic surgery, as a researcher in the field of oncology, and as a highly effective administrator."

As deputy dean, according to Rich, Dr. Crowley will play a major role in the development of policy and in the administration of the academic programs of the Dean's Office. These include faculty, student and clinical affairs, planning, facilities, budget and research.

Crowley was born in Newark, New Jersey. He is a graduate of Yale University (1941), and of the Yale University School of Medicine (1944).

He was professor of surgery at Stanford, and has served as chief of surgery in its affiliated Palo Alto Veterans Administration Hospital from 1964 to 1972. Prior to joining Stanford, he had been in practice with the Southern California Permanente Group, was in the private practice of surgery as well as having taught and done research at Yale, Southern California and Stanford.

As associate dean for planning at Stanford from 1972 to 1974, Dr. Crowley was responsible for the publication of the Comprehensive Stanford Medical School long range academic plan.

In addition to his administrative responsibilities at Stanford Dr. Crowley will participate in the teaching, research and patient care activities of the Department of Surgery, Rich said.

Dr. Crowley's research has been mainly on the study of hormone-dependent tumors, the management of patients with endocrine-sensitive tumors, and the effects of radiation on function and strength of small intestinal anastomoses.

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Mailed Tuesday, September 13, 1977

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911
EDITORS: Copies of Stanford MD are available on request if not included.
FOR IMMEDIATE RELEASE
STANFORD –

Inventions produced by medical researchers at Stanford provide an important source of income used to support academic functions.

According to Niels Reimers, manager of the Office of Technology Licensing, license and patent royalty payments exceeded $1 million last year. Most of the money, he said, is used in support of research and "to reduce the ever-increasing cost of education."

Reimers and his associate, John Poitras, are responsible for determining the marketability and patentability of inventions, negotiating licenses, and securing patent rights.

Research comprises a vital part of the University's functions. Within the medical school alone the volume of government-sponsored research was $28.6 million for fiscal year 1976. The University's operating budget for that year was $80 million.

Inventions in medical fields, such as the Optacon reading device, which translates printed matter into the tactile stimuli of Braille code, have had significant impact on medicine and have garnered for the University nationwide attention.

But the benefits of medical research cannot be realized unless inventions make it to market. Since the University is an educational and research institution, it can publicize its inventions, but it can not produce or sell them. The transfer of technology from the clinical laboratory to the marketplace must be done by outside sources such as the government or private industry.

This process is detailed in the current issue of *Stanford MD,* the journal of the Medical Alumni Association.

Government grants constitute a major portion of research development and funding, but actual production is usually handled by industry. The University gives companies the right to make, use, and sell its inventions by granting licenses in return for royalties which are determined as a percentage of sales. Often the negotiated license is exclusive for a period long enough to enable the company to recover its investment.

The Office of Technology Licensing has negotiated nearly 50 agreements for developing and marketing its inventions since its inception in 1970. Six inventions related to the medical field are now produding earned royalties.

For example, Stanford has arranged an exclusive license with the Hewlett-Packard Corporation to develop and produce a coronary care unit (CCU) monitoring system.

This system provides a continuous computerized monitoring of electrocardiograms (ECGs) of up to 16 patients. It analyzes the ECGs and alerts the staff to abnormalities which might endanger the patient. A series of visual and auditory alarms indicate varying degrees of seriousness.

Clinical testing has shown a decrease in the number of abnormal events missed during manual monitoring from 40-60 percent to 15-20 percent.

According to Bill Sanders, cardiology research associate who developed the system, "the CCU system has been enormously successful. More than 110 have been sold since they were first offered in the spring of 1975."

To encourage the investment of capital and equipment by industry, often the University will seek patent rights. Patents provide an additional competitive advantage by ensuring exclusivity in development and production for 17 years.

Patents also provide an additional source of income for the University. Last year patent royalties totaled $300,000.

The government has realized the importance of patents, not only in furthering research but also in protecting its own inventions.

(more)

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According to Clive Liston, patent and copyright manager in the University's Sponsored Projects Office, the government's policy is one of "defensive patenting." The SPO is responsible for disclosing inventions to the government and determining the rights and obligations of inventors.

"If diligence isn't observed in reporting its inventions and filing for patents, the same idea could be conceived somewhere else. It could be patented, and the government would have to pay royalties on something they had discovered first," he says.

One result of the government's defensive patenting policy is the institutional agreements which Stanford has with the Department of Health, Education, and Welfare (HEW) and the National Science Foundation. These agreements ensure that Stanford has the first option on any invention which results from agency-supported research.

"HEW has one of the best patent policies," says Reimers. "They really want to see that research gets out."

The strongest earned royalty income source from the Medical Center at present is the fluorescence activated cell sorter (FACS).

Developed in 1971 by Dr. Leonard Herzenberg, professor of genetics, and his associates, the FACS separates cells on the basis of the fluorescent label they carry by passing a liquid stream of cells through a laser beam. The device has been patented, and is used primarily as a research tool.

Patents rarely create monopoly situations. "A good patent stimulates further research," says Reimers. "It is simply one way of accomplishing an objective."

Patents are not suitable for every project. Many inventions are not patented because they would not make enough in royalties to cover the time and expense of filing (an average of $2,000 is now required to file and follow a patent through to issuance) or because they fail to meet patent criteria.

For example, an infant transporter is being developed and produced under license agreement, although it is not patented. Engineered by Dr. Alvin Hackel of the Department of Anesthesia and Pediatrics and Prof. Robert Moffat of the Thermosciences Division of Mechanical Engineering, the transporter provides the increased care and warmth required by newborns during transport.

Patents do not guarantee production. Sometimes a company which has been developing an invention will decide to let its exclusive license lapse, even though the patents on it by then have been secured.

Reimers estimates 1 project in 100 survives the development phase to enter production, and those that do often take years to reach the market.

When industry is reluctant to fund the development of a project, inventors can seek support from the government or go it alone.

After two pharmaceutical firms failed to become interested in their development of a collagen bioimplant material, Dr. John Daniels, assistant professor of oncology, and his partners formed their own corporation.

The bioimplant is a purified and immunogenetically-altered form of collagen, a structural body protein. It is used to correct tissue contour defects such as severe acne scarring. Within days after injection the implant is colonized by cells, vascularized, and becomes living tissue indistinguishable from the skin around it.

Many inventions at Stanford are developed as part of a program of university-government cooperation called the Biomedical Applications Team (BATeam).

The Stanford BATeam is one of four established in 1966 by the National Aeronautics and Space Administration (NASA) specifically to transfer aerospace technology to the solution of biomedical problems.

During the past two years NASA engineers and workers at the Children's Hospital at Stanford have been cooperating in the development of a miniaturized transmitter which can monitor the electromyograms (EMGs) produced by spastic muscles in children with cerebral palsy.

The transmitters pick up the EMG signal from underlying muscles and convert it to radio waves which are relayed to a receiver. Analysis of the EMGs improves the accuracy of diagnosis and increases the success of corrective surgery.

The development of medical technology plays an important role in improving health care. In fact, according to Drs. Robert L. White and James D. Meindl of the University's Institute of Electronics in Medicine, "the quality and availability of health care are becoming increasingly dependent on radically new diagnostic instruments."

But these devices are very expensive, often costing in the tens of thousands of dollars. The equipment and capital provided by companies like Hewlett-Packard and by government programs like the BATeam make it possible to develop and produce technology which otherwise would be too expensive for the inventor or the University alone to handle.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911 37/1-2
FOR IMMEDIATE RELEASE
STANFORD –

"The psychological adjustment to a mastectomy takes longer and is much more difficult than physiological recovery," says Dr. Netta Grandstaff, a psychologist in the Department of Family, Community and Preventive Medicine.

Grandstaff and Dr. David Kaplan, director of the Department's division of clinical social work, are conducting a study to develop a more effective coping strategy for breast cancer patients and their families.

The study, supported by a grant from the American Cancer Society, is part of a larger effort by Kaplan to help people deal with serious illness.

Breast cancer is the most common cause of death among women between the ages of 40 and 65. Of the 90,000 new cases of cancer which occur each year, 30,000 women die. One treatment of the disease is mastectomy or surgical removal of the breast. About 110 mastectomies are performed at the Medical Center each year.

Kaplan and Grandstaff have found that about 50 percent of the breast cancer patients they see have problems coping with the surgery.

One goal of the study, says Kaplan, is the identification of maladaptive responses to the discovery of cancer so that counselors can intervene before surgery. Coping problems are treated as if symptoms of an acute disease, requiring immediate care.

This is a departure from the traditional psychoanalytical approach to counseling, says Kaplan. Psychoanalytical counseling involves examinations of the patient's historical background, and treats problems on a more chronic, long-term basis, he says.

Kaplan and Grandstaff utilize problem-solving and decision-making techniques to develop better coping strategies.

"It is inappropriate to use only the psychoanalytical approach for this kind of crisis intervention," says Grandstaff. "Patients need to work on the here and now."

Problem solving involves learning to recognize and deal with the fears and emotions which inevitably arise in crises.

"The way you help people who are facing loss is by so-called grief work," says Kaplan. "You help them to recognize and feel the pain of loss, whether it is a loved one or a part of their body."

Grandstaff counsels patients on a regular basis. Most women she sees have their surgery done at the Medical Center, although she accepts some referrals from outside the Stanford community.

She counsels women and family members or partners together whenever possible. "The most important source of support available to anyone in a crisis situation is the family," she says. "You can't consider the patient alone.

"For instance, the 55-year-old widow who lives alone and has few close friends will have more difficulty adjusting to the surgery than the woman surrounded by a close family."

Often family members have as much or more difficulty than the patient herself, and need counseling too, says Grandstaff.

Today, the woman with breast cancer has more options open to her than she did even three years ago, she says.

"For example, breast reconstruction following mastectomy is now often discussed and planned with the patient by the surgeon and plastic surgeon before breast surgery is performed," she says.

Many mastectomies are performed immediately after the biopsy, particularly if the biopsy is done under general anesthesia in an operating room. But some biopsies are done under local anesthetic on an outpatient basis, and surgery can wait for a few days.

According to Dr. Frank Stockdale, associate professor of oncology, the wait does not seem to effect prognosis.

Grandstaff and Kaplan are trying to determine if the extra time gained between biopsy and surgery helps some patients prepare better for the loss of a breast.

– 30 – 9/6/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD--Dr. Paul H. Ward, professor of surgery and chief of the division of head and neck surgery (otolaryngology) at UCLA Medical School, will deliver the second George S. Kiperash Lecture Thursday, September 8.

His talk, "Progress in the Diagnosis and Treatment of Laryngeal Cancer," begins at 8 p.m. in Stanford's Tresidder Union Large Lounge.

The lecture is being presented by the division of otolaryngology of Stanford School of Medicine.

A graduate of Anderson, Ind. College, Ward received his M.D. in 1957 from Johns Hopkins Medical School in Baltimore, Md. He is certified by the American Academy of Ophthalmology and Otolaryngology, and the American Board of Otolaryngology.

Ward had previously served on the staff of the University of Chicago Hospitals and Clinics and at Vanderbilt University Hospital in Nashville, Tenn.

The Kiperash Lecture was established to bring national and international figures to Stanford and to enhance continuing education and residency training.

It is named after George S. Kiperash Jr., a former Stanford patient and native of San Jose. Kiperash is in the ranching business and is associated with Modern Ice and Cold Storage Co. of San Jose.

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STANFORD--"Health Care Research in Geriatrics" will be discussed by Dr. Jerry Salon on Tuesday, September 6, starting at 4 p.m. in Room M114 at Stanford University School of Medicine.

His address is open to the public.

Until he retired recently, Solon was program planning officer for the National Institute on Aging in Bethesda, Md. His talk is being jointly sponsored by the Department of Family, Community and Preventive Medicine at Stanford Medical School and the Geriatric Research, Education and Clinical Center (GRECC) at Veterans Administration Hospital in Palo Alto.

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Mailed Friday, September 2, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

"The potential for epidemiological research on cancer is greater in China than nearly anywhere else in the world," according to Dr. Henry S. Kaplan, D'Ambrogio professor of radiology at Stanford University Medical Center.

The study of the incidence, distribution, and control of cancer in the vast population of that country could offer clues to the causes of various forms of the disease, he said in a Medical School lecture Oct. 20.

Kaplan recently led a U.S. cancer delegation to China to learn about cancer research, diagnosis, and treatment there.

The group, which included radiation therapists, chemotherapists, immunologists, surgeons, pathologists, and epidemiologists, was part of a cultural and scientific exchange program sponsored by the Committee on Scholarly Communication with People's Republic of China.

The highest incidence of oral, or nasopharyngeal, cancer (NPC) in the world is found in Chung Shan County in Southern China, said Kaplan. NCPs are cancers which involve the nasal cavity and upper throat.

The incidence of NPC in Chung Shan is 14.7 per 100,000 population, Chinese officials told Kaplan. The mortality rate is 12.5 per 100,000.

One cause for this high rate of cancer may be air pollution, said Kaplan. "There are no chimneys in the homes of peasants in Southern China," he said. "The soot from kitchen fires is deposited on the walls."

Pigs, which are often kept in stalls in the kitchen, also show signs of NPC. However, Kaplan said, men, who do very little of the cooking, are afflicted by the disease two and a half times more than women.

The highest incidence of esophageal cancer in the world is found in Linhsien County in North Central China, said Kaplan. The incidence rate, 139 per 100,000, is higher than the incidence for all types of cancer in Shanghai, a city of 12 million people. The death rate from esophageal cancer in Linhsien is 127 per 100,000.

The high incidence of this cancer may be related to a mulch of vegetables which is commonly eaten by people in the region after it has been allowed to sit and grow a cover of mold, said Kaplan.

(more)

The mulch is very acidic. Acidic conditions permit conversion of the high levels of nitrates and amines found in the soil and water of Linhsien into nitrosamines, which are potent cancer-causing agents in rats, he said.

Officials in China told Kaplan that few studies were being done on the relation of occupational factors to these cancers.

Early diagnosis of esophageal cancer is done in China by having patients swallow a mesh-wrapped balloon and then pulling it back through the throat. The mesh scrapes mucous membrane off the esophagus which then is examined under the microscope for the presence of cancer cells.

Early diagnosis of liver cancer, which has the third highest cancer incidence in Shanghai, is done with a radioimmune assay, said Kaplan. The assay measures the level of protein markers in the blood which are secreted by immature cancer cells in the liver. The assay is also used to monitor the response of patients to surgery.

Twenty years ago China had only one cancer hospital, said Kaplan. Now it has five, and six more are in construction.

Each hospital in China has two pharmacies, said Kaplan. One dispenses Western medicine and the other Chinese herbal medicine. Herbal medicine is used with other forms of therapy, and alone when other treatments have failed, he said.

"Chinese surgery is very impressive," said Kaplan. "The surgeons are first-class and their training is excellent."

Acupuncture is used as anesthetia prior to the surgical removal of tumors, but only very selectively, said Kaplan. Western anesthetics are employed, but the Chinese clinicians don't like to use inhalation anesthesia, he said.

The study group found that much of the radiology equipment was about 20 years old, and that radiotherapy clinics were often cramped.

However, one clinic treated 555 patients every 24 hours, in four rotating shifts, said Kaplan. In comparison, Stanford treats an average of 120 patients a day with radiation therapy.

For the treatment of lymphomas, the eighth most common cancer in China, no lymphangiography or laparotomy is performed, said Kaplan. These x-ray and surgical techniques are used in the US to stage, or determine, the precise location of the tumor in the lymphatic system and the extent of its spread to other parts of the body.

Kaplan attributes the poor survival rate in patients with lymphomas in China to inadequate diagnosis and staging prior to treatment.

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD--Dr. Lawrence G. Crowley has been appointed chief of staff of the Stanford University Hospital and Clinics, it was announced Thursday, October 20.

Crowley, currently dean of the University of Wisconsin Medical School, will return to Stanford on November 18 as deputy dean of the School of Medicine. He will hold both positions.

Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine, said the chief of staff will work closely with the faculty and community members of the Medical Staff and with the clinical practice in the Hospital.

"It is our intention to bring a considerably greater emphasis to Medical Staff affairs," said Dr. Rich.

He also indicated that the responsibilities of the chief of staff and of medical director of the hospital and clinics will be combined.

Present medical director of the Stanford University Hospital is Dr. Robert H. Alway, professor of pediatrics. He will become professor emeritus at the end of the year.

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STANFORD--Conrad F. Gullixson, Palo Alto attorney, has been named new president of the Board of Directors of Stanford University Hospital.

Frank H. Roberts of Palo Alto served as president of the board since 1971, and will continue to serve as a member of the board.

Dr. Alejandro Zaffaroni of Atherton was reappointed as vice president of the board, and John Santana, Jr. of Palo Alto will continue to serve as secretary-treasurer.

Others reappointed to the nine-member board are Dr. Edward L. Ginzton, Kenneth R. Hansen, both of Los Altos Hills; Carroll J. Rousch of Portola Valley; Mrs. O. Meredith Wilson of Palo Alto; and Dr. Clayton Rich, vice president for medical affairs and dean of the school of medicine.

The board members were reappointed by the Trustees of the University at their October meeting.

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Mailed Thursday, October 20, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

The Psychiatric Clinical Research Center at Stanford has been awarded a two-year $500,940 grant by the National Institute of Mental Health (NIMH) to study the biological correlates of mental illness.

The Center, which is administered by the Department of Psychiatry and located in the Palo Alto Veterans Administration Hospital, will investigate various kinds of hormonal and neurochemical changes associated with depression and schizophrenia.

Stanford is one of eight psychiatric research centers now funded by the NIMH. The others include centers at the University of California at Los Angeles, San Francisco, and San Diego; Camarillo State Hospital in California, the University of Chicago, the University of Pittsburgh, and Yale University.

The grants provide funds for expanding already existing centers and for establishing new centers "for the conduct of clinical and laboratory research on scientific questions concerning severe mental disorders by scientists of different disciplines."

Stanford's Psychiatric Clinical Research Center (CRC) was established by the Department of Psychiatry in 1973 under the direction of Dr. Philip Berger, assistant professor of psychiatry and behavioral sciences.

In July 1974 the CRC moved to its present facilities in the VA Hospital. The 12-bed inpatient unit generally carries a patient load of 8-10 and is staffed by four physicians.

The grant will enable the CRC to enlarge its staff and increase both its research and the time devoted to patient care, says Berger, who is the principal investigator.

"The organizing principle for the CRC is that an interaction between environment, or the events of life, and brain biochemistry is responsible for mental illness," he says.

In addition to environmental factors, says Berger, researchers have found roughly two dozen chemicals in the brain which may affect behavior. These chemicals include neurotransmitters, which relay electrical signals between nerve cells, as well as factors which modify their action.

"We know very little about them," he says. "Any of them may play a role in mental disorders."

The CRC will analyze the biological fluids (blood, urine and spinal fluid) of patients to see if levels of these chemicals are related to their illnesses, says Berger.

Center researchers hope to identify mental illness in terms of both its biochemistry and clinical symptoms. This will aid physicians in predicting the response of patients to drugs and the outcome of treatment, he says.

"The ultimate goal of our unit is to find more effective and safer treatments for hospitalized patients with severe mental diseases such as depression and schizophrenia," says Berger.

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10/19/77

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

A Stanford University report on government relations warns that the regulation of academic medical centers may be the precursor of much deeper and more pervasive controls to come affecting the entire university.

Increased concerns for safety, cost containment, protection of human subjects, and pressures to broaden the scope of medical education have produced tangible benefits, but also a costly regulatory nightmare for the Medical Center, according to the report.

"We are not conjuring up nightmare visions or parading fears about a remote future," the report says. "In the world of the Medical Center the future that concerns us is here and more is coming.

"The University must attend to what is happening to one of its parts."

The study is part of a scrutiny of the relationships of the Stanford University Medical Center and the government. It was conducted for the Sloan Commission on the government and Higher Education. Coauthors of the report are Robert Rosenzweig, vice president for public affairs, Christopher Wilkes and Nancy Freedman.

The Medical Center was chosen for the study, Rosenzweig wrote, because it "is both a kind of a university in its own right and something else that universities typically are not—a purveyor of a consumer service of enormous public importance.

"That combination makes it the object of the social forces that affect the main institution, as well as its unique role as supplier of health care to the public.

"In every department we studied, we found increases in personnel and other costs in order to anticipate, interpret and comply with government rules. Some entire sections—for example, the Center's health planning group—exist for no other reason.

"And it is not too much to say that the need to deal with the government effectively has produced a new subspecialty—the medical lawyer."

Five years ago the Medical Center borrowed half the time of one attorney from the University administration, the report noted. Today the legal department of the Medical Center consists of four lawyers. In addition, malpractice suits are handled by insurance company lawyers, and virtually all other litigation is handled by outside counsel.

The legal department practices what might be best described as "preventive law," the report said. The lawyers' duties fall into four main areas—academic, patient care, general business law, and government regulations.

"The head of the office spends about 75% of his time on evaluating, interpreting and insuring compliance with federal laws and regulations," Rosenzweig said. "He acts as interpreter, advisor and prophet."

Some years ago the relationship of the Medical Center to the government was regarded as a partnership—an important element for the conduct of medical training, research, and patient care, the report said. That relationship has changed.

"It is now the case that the performance of those functions at Stanford and other similar institutions cannot be carried out without the federal government," said Rosenzweig.

"The government now stands, in its various guises, as patron, customer, monitor, regulator, supplicant, seducer, and director. . .in the operations of the modern university medical center," he added.

(more)

The Medical Center, the report said, like the rest of the University, interacts with the government in ways that have little to do with teaching, research, and patient care."

The National Labor Relations Act, the Social Security Act, the Employee Retirement Income Security Act, the Fair Labor Standards Act and a host of others affect medical centers and universities not as specialized institutions, but rather as institutions doing business in an increasingly regulated economy, according to the report.

Yet despite this impressive sweep of federal mandates, the report also notes some positive accomplishments.

"Almost without exception, those to whom we talked spoke of the benefits of the government programs with which they worked," the researchers said. "That is perhaps not surprising in an area like student services, where the benefits of government activity are visible every day in the lives of students.

"It is more surprising in those areas where the interaction is primarily regulatory. Even in those parts of the institution there was a broad recognition of the desirability of regulation and the benefits of altered practices which have resulted from it.

"Better personnel policies, more careful treatment of human subjects in research, improved animal care, tighter financial controls, improved building and operating safety—all of these are seen as healthy results of governmental initiatives."

But the report cautions that it is not easy to strike a balance of pluses and minuses. "If many of the results are in themselves desirable," Rosenzweig said, "the pace at which they come, the costs that accompany them, and the sheer difficulty of managing them are often far less so."

The report cited several examples:

* In the Facilities Department, the unit responsible for the physical plant, an estimated $280,000 is being spent this year attributable to the incremental impact of government. The department has to deal with 32 separate codes—some federal, state, or local—each with its own machinery for enforcement, inspection and reporting.

* Stanford hospital stood to lose $4 million simply by being grouped with Santa Clara County hospitals for purposes of Medicare and Medicaid reimbursements. The hospital is located 500 yards from San Mateo County, and its costs of operation are similar to those of the San Francisco metropolitan area. After lenghty negotiations Stanford was granted exceptional status, and was reimbursed at a higher level. Even so, this mode of classifying hospitals has led to a direct loss to the hospital of $500,000 if pending appeals fail.

* Increasing numbers of Medicare and Medicaid patients have exacerbated the natural increase in paper work. The gap between public and private levels of health care reimbursement is also increasing. At present this gap is 18%. Since federally funded patients at Stanford now constitute 40% of the patient load, this gap represents considerable and direct cost to the hospital.

* In personnel, about 25% of staff activity relates to compliance with federal regulations. About 750-man hours have been added and $100,000 spent just for implementing the Employee Retirement Income Security Act of 1974.

* The Health Professions Educational Assistance Act of 1976 requires medical schools to waive their own academic standards in order to admit American students enrolled in schools abroad. The law is in effect for three years, and any school refusing to accept this provision will lose its educational subsidies. The Medical School stands to lose $410,000 in federal support if current bills to amend the law fail to pass.

"In part, such problems arise from the sheer size and clumsiness of the federal establishment," Rosenzweig said. "In further part, however, they are the product of the process by which such rules are devised.

"That process consists of organized and articulate groups pressing for the redress of a perceived injustice. Their force, both political and moral, frequently overwhelms such complications as questions of timing, the capacity of institutions to respond and the relationship among problems and the remedies.

"All such questions tend to be seen merely as excuses for delay. But if justice delayed is justice not done, it is also true that both the cause of justice and of the institutions that must be the instruments of justice can be undone by thoughtless haste.

"Somehow, the process of policy-making must balance both of those truths better than they have done so far."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--A comprehensive treatment program for persons concerned about their alcohol use is now available through the new Alcohol Clinic at Stanford University School of Medicine.

The clinic offers a wide range of outpatient services for alcholics and their families, including comprehensive diagnostic procedures, individual counseling and psychotherapy, group therapy, sexual counseling, family therapy and childrens' services. In addition, an education program is offered to all patients.

The clinic services focus on living problems and emotional difficulties, as well as specific problems patients have with alcohol, according to Stephanie Brown, Ph.D., associate director of the clinic.

Brown says that people concerned about their own alcohol intake or that of a family member, may call the clinic directly for referral to the program. Once patients have called, a series of interviews are arranged, including detailed clinical assessment, psychological testing, and medical evaluation, if necessary. Once these are completed a specific treatment plan, appropriate to each individual, is drawn up by a team of professionals.

The Stanford Alcohol Clinic, which is directed by Dr. Irvin D. Yalom, professor of psychiatry and behavioral sciences, also encourages patients to use Alcoholics Anonymous (AA) and other resources.

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Mailed Tuesday, October 18, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Dr. Clayton Rich has been named the Carl and Elizabeth Naumann Professor and Dean of the School of Medicine.

Rich is the first holder of the new chair. It was endowed by gifts from Mr. and Mrs. Carl Naumann of Beverly Hills. Mrs. Naumann attended Stanford and received her A.B. in philosophy in 1919.

This is the third endowed deanship at Stanford and the first in the medical school.

"The designation of Dr. Rich is a most fitting recognition of his significant contributions to the University," said the announcement from the Board of Trustees. "He has guided the continuing development of the academic program of the school with remarkable success."

Rich has been vice-president for medical affairs and dean of the medical school at Stanford since 1971. He is responsible for the planning and construction of the new Sherman Fairchild Center and other key facilities designed to strengthen the basic and clinical sciences. Last year in a study of 87 medical schools, Stanford ranked among the top three in the United States.

He also has become nationally known for his leadership in questioning the widening intrusion of federal bureaucracy into academic-decision making.

A graduate of Cornell, Rich became an established teacher, administrator and researcher in clinical medicine. He specialized in endocrinology and has conducted his principal work in the areas of calcium metabolism and bone mineralization.

Prior to coming to Stanford, Rich was professor of medicine and associate dean for clinical affairs at the University of Washington School of Medicine in Seattle.

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Mailed Friday, October 17, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Barbara Battino, 497-6911
Marcia Tanner, 497-3812

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Paul A. Ebert, renowed cardiac surgeon, professor and chairman of surgery at UC Medical Center in San Francisco, will present the eighth Louis and Dorothy Kovits visiting professorship lecture at Stanford School of Medicine Tuesday, Oct. 25.

Dr. Ebert will speak at 4:30 p.m. in the Fairchild Auditorium of the Medical School. His topic will be the pathophysiology of pulmonary embolus, the methods of treatment and role of surgery in patients with long-standing pulmonary artery occlusions.

Physicians and other health professionals in the community are invited to attend.

Dr. Ebert is a well-known pediatric cardiac surgeon. He successfully developed the technique for connecting the pulmonary artery with the right ventricle of the heart in infants less than six months old.

Prior to joining UCSF in 1975, he was professor and chairman of surgery at Cornell University Medical College. He received his M.D. degree from Ohio State University in 1958, and holds several awards, including Johnson & Johnson Professor at Cornell in 1972, and Markle Scholar at Duke University Medical Center in 1967.

The Kovitz lectureship was established in 1969 by Dr. and Mrs. Kovitz of Los Angeles to bring outstanding lecturers in medical and surgical fields to the Medical Center.

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FOR IMMEDIATE RELEASE

STANFORD –

Visiting Prof. Dr. Walter Ducloux will lecture on Verdi's grand opera "Aida" in the last of his "Exploring Opera" series at 4:15 p.m. Thursday, October 27, in the Large Lounge at Tresidder Memorial Union.

Tickets for this lecture are $2 general, $1 for students.

"Exploring Opera" is the first in a series of public lectures to be sponsored by the Music Guild at Stanford. Proceeds support lesson scholarships for Stanford music students.

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10/17/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

SCIENCE WRITERS: This story is released in conjunction with the presentation of a scientific report at the International Congress of Dermatology October 20 in Mexico City. Photo available on request if not included with story.

ADVANCE FOR PM RELEASE THURSDAY, OCTOBER 20, 1977.

STANFORD –

Fat-producing cells in the skin which are involved in the development of acne have been successfully grown outside the body for the first time by a Stanford researcher.

Isolated sebaceous gland cells may provide important information about how abnormalities in the glands result in acne, said Dr. Marvin A. Karasek, associate professor of biochemistry in the Department of Dermatology.

Karasek presented his findings Thursday, Oct. 20, at the International Congress of Dermatology in Mexico City.

The function of the sebaceous glands in humans is not known, said Karasek. Other researches think that abnormalities in fat production by the glands may cause acne.

Karasek isolates sebaceous glands from extra tissue obtained from patients who have undergone plastic surgery, and from the ears of rabbits. He separates the glands from surrounding tissue by exposing it to an enzyme which breaks down proteins.

The glands are grown on collagen gels using standard growth media.

The difficulty in the technique, said Karasek, is isolating glands under gentle conditions very rapidly so that they remain viable.

The cultured gland cells retain their ability to synthesize and accumulate fats in patterns similar to the intact gland, he said. But they respond differently to some hormones.

Estrogen, a circulating sex hormone, inhibits fat production by sebaceous glands in the body. However, it stimulates production among isolated gland cells. Karasek doesn't know why there is a difference between cells in the body and in culture.

"The clinical applications of this study may be very large," he said.

"When we know the details of the biochemistry of the glands, we can begin to look for methods of controlling fat production and gland cell growth."

Karasek eventually wants to look for differences between the sebaceous glands of "normal" subjects and those with acne.

"We'd also like to see if the serum from patients with acne accelerates fat production in normal isolated glands," he said. Hormones may play a role in the development of acne, he said.

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10/17/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Editors: Photos available on request if not included.

FOR INFORMATION CONTACT: Bill Snyder, 497-6911 76/1-5

FOR IMMEDIATE RELEASE

STANFORD –

Stanford University School of Medicine is moving rapidly into a new field—the comprehensive treatment of babies before they are born.

The new program is spearheaded by Dr. W. Leroy Heinrichs, a tall 45-year-old Oklahoman who became chairman of the Department of Gynecology and Obstetrics last year.

"The risks of dying once one is born never are as great as during birth—until one is 85 years old," says Heinrichs, who joined Stanford from the University of Washington in Seattle.

He says that in the last 10 years, a number of dramatic advances have revolutionized the science of birth. There are new medications, obstetrical methods, new clinical apparatus, and diagnostic tools.

Medicine, Heinrichs feels, is now challenged to regard the unborn fetus as a patient and to get to work curing its ills.

By such progress, he says, a disturbing lack of progress in reducing infant mortality may be corrected. In the future, he predicts, care of the fetus will rest with obstetric-pediatric teams assisted by biomedical engineers. Stanford is especially suited for this research role because of its programs in engineering and medicine.

Several techniques to monitor the well-being of the fetus are currently utilized in Stanford's High Risk Clinic.

For instance, physicians can detect birth defects, sex, and the maturity of lungs of the unborn baby by examining fluid taken from the womb. This procedure is called amniocentesis.

Ultrasound aids in locating the position of the fetus, measuring its heart beat, and estimating its size and age.

Physicians measure changes in the heart rate of the fetus when it is stressed by uterine contractions. A decreased heart rate indicates fetal distress.

During delivery the heart rate of the baby is monitored by placing a scalp electrode under the skin of its head. Blood is drawn from the fetus in some cases to see if it is tolerating labor well.

Most of the babies born in the U.S. each year arrive in bouncing good health, but some 30,000 babies get sick in their mother's wombs, or die before they are born.

Heinrichs is critical of the current trend in home birthing because of the risk of problems arising during delivery.

The danger of home delivery, he says, is the "risk that only can be identified as the baby moves through the birth canal. Home deliveries aren't geared to watch for this."

It is the job of the obstetrician, he says, to identify these risks and prevent their impact.

Heinrichs has made three recent appointments he hopes will strengthen Stanford's role in perinatal medicine.

All of the new appointees are specialists in the care of the fetus during pregnancy and at the time of birth.

Dr. Kent Ueland, from the University of Washington in Seattle, this month was appointed professor of gynecology and obstetrics and director of the section of maternal-fetal medicine. He is researching chemical means to prevent premature labor.

Dr. Paul A Hensleigh, associate professor from the University of Kansas in Kansas City, is testing biochemical methods of evaluating the maturity and well-being of the fetus during pregnancy.

Dr. W. Desmond McCallum, assistant professor from the University of Washington, is using ultrasound techniques to measure fetal blood flow. measure fetal blood flow.

"Currently there are not too many good methods of measuring fetal well-being," says McCallum, who received both medical and research degrees from The Queen's University of Belfast, Northern Ireland, before coming to Seattle.

McCallum has been working on estimations of fetal blood flow and velocity for the past few years.

He is now developing computer methods to measure fetal-placental blood dynamics by analyzing Doppler ultrasound signals.

Doppler ultrasound projects a low-energy beam of sound through the abdominal wall of the mother at cardiovascular structures such as the umbilical blood vessel. Part of the beam is reflected back, but at a different frequency depending on the velocity of blood in the vessel. The change in frequency is called the Doppler effect.

(more) 10/13/77 cr

McCallum hopes this method will provide a more detailed record of the fetal heart than present techniques.

Hensleigh has been involved in the evaluation of placental compromise. Compromise refers to a decrease in the blood flow through the uterus and placenta to the fetus which may result in fetal malnourishment and sometimes intrauterine death.

Hensleigh tested the blood of women suffering from hypertension during their pregnancies. He measured the levels of a hormone produced by the placenta and an enzyme thought to aid protein transport from mother to fetus.

Hypertension is often associated with retardation of fetal growth, he says. Low serum levels of the hormone or enzyme could indicate placental compromise.

He found that 75% of babies born malnourished would have been predicted by the test.

According to Hensleigh, these tests are less cumbersome and time-consuming than other methods of monitoring placental function.

His latest interest is measuring the amount of heat which is dissipated by the fetus through the mother.

"Any living fetus is warmer than its mother," he says. "The only way to rid itself of metabolic heat is through her."

Initial studies with sheep indicate a correlation between changes in temperature and uterine blood flow. If the flow is constricted, the temperature of the fetus rises in seconds. This shows the fetus is retaining its heat, he says.

Hensleigh hopes to be able to relate uterine blood flow to effects on fetal functions such as heart rate.

Ueland is well-known for his work on cardiovascular changes in women during pregnancy. He and Dr. James Metcalfe at the University of Oregon found that cardiac output, heart rate and blood volume changed significantly during pregnancy and at delivery, and related these factors to heart disease.

Recently, Ueland has been evaluating ritodrine, a drug used to prevent premature labor.

Ueland says the drug appears to be very successful in preventing uterine contractions so far in clinical tests. He will continue his studies at Stanford.

"The leading cause of perinatal death in the world is prematurity," he says. "If we can stop the premature deliveries which need to be stopped we can cut perinatal mortality significantly.

"But the biggest dilemma now facing us is knowing which premature labors to stop. At least one third of all early labors are triggered by underlying causes, such as the partial separation of the placenta or an infection, and should not be stopped."

Ueland, who received his medical degree from the University of Illinois in Chicago, has spent 17 years at the University of Washington. There he served as professor of gynecology and obstetrics, and established and directed the division of maternal-fetal medicine.

Heinrichs' own research is in the physiology, biochemistry, and metabolism of sex hormones. Most recently he has been investigating how hormones produced by the fetus before birth determine the regulation of metabolism in adulthood.

For example, Heinrichs and his associates have studied biochemical and hormonal changes and abnormal development in animals exposed to DDT immediately after birth.

In addition to research, the department is supporting the establishment of a regional perinatal project, with two high-risk obstetric referral units, one at Stanford and one at Santa Clara Valley Medical Center in San Jose. Funds for the project have been requested from the California State Department of Health.

The high risk centers would be responsible for assessing maternal and fetal care, research to improve education and management of high-risk atients, and education of professionals in the region, says Hensleigh.

Hensleigh was involved in the development of a statewide perinatal care program in Kansas.

Perinatal deaths in Kansas dropped from a relatively constant figure of 24 deaths per 1,000 in 1974, when the program began, to 15 in 1976, says Hensleigh. California had 18.8 perinatal deaths per 1,000 in 1975, close to the national average, he says.

"In general the institution of regional programs is associated with a reduction in perinatal mortality of 30-40% over two to three years," he says.

The reduction in deaths is due mainly to the way physicians handle complications in pregnant and newborn patients, says Hensleigh, recognizing problems, seeking consultation without hesitation, and referring severely ill patients to the appropriate facilities.

"Emphasis is on the transport of the mother rather than the baby," says Hensleigh. "The outcome is better when the baby is delivered in an institution with optimal neonatal care."

Barbara Battino

[redacted] or Andreopoulos

STANFORD -- Stanford University officials said Wednesday they are confident the medical practice system at the School of Medicine conforms with state law.

The statement was issued by Spyros Andreopoulos, public information officer, in response to allegations made yesterday by the Union of American Physicians (UAP).

The UAP charged that Stanford is in violation of California State Law, section 2008 of the Business Code, by charging patients for medical services performed by physicians on the medical center staff.

"The charge presents nothing new to the suggestions made in past years by others that all medical services provided in teaching institutions be rendered free," said Andreopoulos.

"As in past statements," he said, "the university reiterates its position that it uses the same system as most medical schools.

"This system is in full compliance with all laws and is even routinely evaluated by federal and state agencies."

Andreopoulos said the medical center is subjected to routine audits by governmental agencies. Professional fee billings [redacted] must conform to standards established by these agencies.

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Transmitted on Bus Wire
10/12/77

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Victims of accidents or heart attacks in the Bay Area no longer have to wait until they get to the hospital before receiving emergency medical care.

Now they can receive treatment at the scene from paramedics trained by the Stanford Hospital.

"I think the paramedics are the best thing that has happened in our community in a long time," says Bill Korff, chief of the Palo Alto Fire Department, which now has 15 certified paramedics.

"We were aware of the need for something like this for a long time. We'd go to the scene of an accident and be frustrated that we couldn't help very much," says Korff, who helped organize Palo Alto's paramedic program.

The paramedic training program at Stanford Hospital is the only regionwide program in the Bay Area. Paramedics from Palo Alto, San Jose, South San Francisco, and East Bay communities have participated in the program. One Stanford-trained paremedic works for the National Park Service at Yosemite National Park.

Dr. Michael Eliastam, director of Emergency Services, heads the program, which has graduated 150 persons since it began in 1973.

Paramedic students receive six weeks of classroom training from Stanford instructors and local physicians in the communities where they are expected to work.

Students learn the characteristics and field treatment of common problems they will encounter, including the collapsed and unconscious patient, major burns, severe emotional disturbances, major trauma, and cardiac problems.

They then receive four weeks of training in community hospitals and six weeks of field training. During this time they practice administering medications, perform venipuncture, initiate intravenous therapy, carry out airway management, participate in cardiopulmonary resuscitation (CPR), apply dressings and slints, perform defibrillation, and allocate treatment among patients in a mass disaster situation (triage).

Once the students have completed the program they must be certified by the public health officer in the county where they intend to work.

(more)

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paramedics 2- 2- 2-

Paramedics always deliver emergency care under the radio supervision of a physician or a certified mobile intensive care nurse (MICN). The MICNs have been specially trained in radio communication and specific problems that paramedics encounter.

MICN nurses in Santa Clara County must have at least six months experience as RNs in the emergency department and must be certified in Advanced Cardiac Life Support.

They also must accompany paramedics on at least six field trips, to get a better idea of what can and cannot be done in the field.

"If someone is trapped in an automobile wreck and the MICN tells the paramedic to start an IV line and after a minutes or so starts yelling at him for not getting it started, she isn't helping him," says Barbara Behrens, RNs, who directs the Stanford MICN training program.

"The nurse needs to realize that the paramedic may be trying to work through a window that's only slightly open or may be trying to pry the car's door open. She can only appreciate this if she actually has gone to the scene of an accident."

Perhaps the greatest difficulty for the MICN or physician in the emergency department is having someone else be their eyes and ears, says Behrens. Eliastam hopes eventually for a method of transmitting a television picture of the patient from the scene to the hospital.

People who need emergency medical care should dial the emergency telephone number in their area. In Palo Alto the number is 911.

"It doesn't do any good to have paramedics if you don't know how to get help," says Charlene Souza, RN, paramedic training program coordinator at Stanford.

Dialing the operator is not the right thing to do, she says. If you are calling from Palo Alto, you could be connected with an operator in Oakland, who has no idea of available medical services in Palo Alto.

Within two minutes of receiving a call, says Korff, a fire engine is at the scene and firefighters trained as Emergency Medical Technicians (EMTs) begin life-saving procedures. The EMTs have had 100 hours of training in basic life support. Paramedics arrive 2-4 minutes later.

According to Souza, there are no figures which reflect the impact of paramedics on emergency medical care in Palo Alto. However, in Seattle, which has perhaps the nation's most comprehensive emergency medical system, 655 almost clinically dead people were saved in the past six years. This high figure, says Souza, reflects the early CPR given in emergency situations by many citizens, as well as medical personnel.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911 68/1-4
FOR IMMEDIATE RELEASE
STANFORD –

Dr. Robert H. Alway, medical director of Stanford Hospital and former dean of the Medical School, recently announced his retirement, effective Dec. 31.

Alway, whose mission it was to move the Medical School from San Francisco to the Palo Alto campus during his term as dean, ends a 26-year association with the School..

During his years at Stanford, although one critic accused him of having no ceremonial front, he nonetheless earned the admiration of those who worked with him.

A native of Nebraska, Alway took his undergraduate degree, an M.B. and M.D. all at the University of Minnesota. He interned at Jersey City Medical Center and was pediatric fellow and resident at the University of Minnesota from 1940-43.

Alway taught at the University of Utah Medical School before coming to Stanford in 1949. Four years later Xhe accepted a position as head of the pediatrics department at the University of Colorado. After two years he returned to Stanford to head its pediatric department.

At this time the University was attempting to resolve conflicts over the planned move of the Medical School from its century-old dwellings in San Francisco to Palo Alto.

Many faculty members did not want to leave the San Francisco area, and Lower Peninsula physicians feared the move would intrude in the care of their patients.

"We were as cursed for leaving as we were generally unwelcome down here," says Alway.

The new Medical School had to find new sources of patients to satisfy its teaching requirements. To do that it had to cooperate with community physicians and develop contacts with agencies, hospitals, and resources in the area.

In fall 1956, the late Windsor Cutting resigned as dean of the Medical School. Alway accepted the deanship, first in an acting capacity, and then full-time in spring 1958.

When Alway took the job, Stanford President J.E. Wallace Sterling made it clear that the department heads were expected to resign to leave a clean slate for the new dean. They did, and Alway began his six-year leadership of a moving and building medical school.

Alway's small office in the Hospital is graced by one 8 X 10 black and white photograph of the old Medical School in San Francisco. It seems to signify that singular goal which has characterized much of Alway's professional life, bringing medical education into the realm of the humanities.

Alway shares the conviction that "the physicians for the future must work in an environment strengthened by the humanities, the social sciences, and the natural sciences."

This is what he hoped the move would attain, an increase "in the breadth and effectiveness of medical teaching and education."

One of Alway's first acts after the new Medical School opened in 1959 was the appointment of top scientists to department head positions.

Nobel prize winner Joshua Lederberg from the University of Wisconsin became the chairman of the newly established department of genetics. Dr. Arthur Kornberg, who received his Nobel Prize in 1959, was appointed chairman of the biochemistry department, and brought with him several members from his department at Washington University in St. Louis. Dr. Norman Kretchmer came from Cornell University to head the pediatrics department.

At the same time Alway was cultivating contacts with the Palo Alto medical community to orient it to the needs of the Medical School. By the end of his term as dean the patient load at the School had risen, and had satisfied many of the requirements of undergraduate clinical teaching.

Under Alway's leadership the faculty size doubled. Three new departments, genetics, anesthesia, and dermatology were created. Research funds were tripled.

Stanford received funds from the National Institutes of Health in 1962 for the establishment of the first clinical research center for premature infants in the U.S. Among the research programs which developed at this time were those in radiotherapy and organ transplantation.

— more —

Alway is the first to deny sole responsibility for the success of the move to Palo Alto.

"I didn't do these things," he says. "I was blessed with a rabbit's foot, and a superior faculty.

"The reputation which Stanford was rapidly expanding through President Sterling and Provost Terman and many others certainly didn't hurt us in attracting faculty and, even more so, in attracting a quality of student body which was clearly superior, and continues to be so."

During Alway's term the Medical School experimented with a special five-year curriculum which combined University and Medical School courses.

"Students could complete their baccalaureate requirements in their first three years while at the same time getting under way with the basic science studies in the Medical School," says Alway.

Some students took advanced degrees in other fields, such as anthropology. Others did basic medical research. And some combined their medical studies with electives in music or poetry.

"The faculty hoped to achieve the development of an introduction to clinical medicine which would combine most effectively the capacity for communication, caring, and curing," says Alway.

The program was later discontinued for financial reasons, but concern for the humanistic element in medical education has remained, says Alway.

"I often congratulated entering classes on beginning a physician's career, and expressed hope that some of them would also become doctors," he says with a wry smile. "In the original usage, doctor meant learned person and teacher."

Alway resigned as dean in fall 1964. In a memo to the department heads he said, "Without you and each member of the Medical School faculty, the School would not have the national prominence it now enjoys."

He again took up the duties of a professor of pediatrics, but this wasn't the end of his administrative role at Stanford.

In 1975 Alway was appointed medical director of the Hospital and associate dean for clinical affairs. He also became a member of the regional Medical Quality Review Committee serving Santa Clara County, and served on the board of the county Professional Standards Review Organization.

Alway, who has watched the Medical Center grow literally from the ground floor up, sees the next few years as a period of "happy maturation."

Some things the Medical Center does very well, he says, but in other areas it has a long way to go. "That's the nature of a vital and growing place," he says.

The most urgent need at present, he says, is space.

"Our most serious handicap is the lack of space to comfortably and effectively cope with even the present demands.

"Government controls, controls on remodeling and building, and on the availability of funding all loom large in holding back the speedy and effective meeting of these needs," he says.

Medical education in the next few years will feel the weight of a movement for the production of family practitioners, he says.

Alway is cautious in his support of holistic medicine, while recognizing unmet needs for primary care.

He has always stressed the need for humanism in the practice of medicine. "Much of what gives us dis-ease and even a good deal of disease requires at least as much psychosocial support as physiological."

But he feels society must carefully evaluate the roles that deliverers of primary care can play in medicine, and determine how resources will be allocated between the nurse-practitioner and the physician.

Alway's immediate plans include retiring to a new home on the San Juan Islands, north of Seattle, Washington. There, with his wife, he will "devote as much time as is necessary to permit sedimentation, allowing again more clear vision.

"You know computers blow out their fuses sometimes. Well, I think I have input overload," he says.

For Alway, who manages to combine the friendly faced general practitioner with the tough administrator who minces few words, retirement is not an end to work, but R and R, preparing him for his next mission in life.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911 64/1-3

FOR IMMEDIATE RELEASE

EDITORS: Photo available on request if not included with story.

STANFORD –

Sleep therapy and acupuncture to control itching, lasers to remove skin tumors and tatoos, and fasting to treat psoriasis are some of the innovative treatments for skin disorders used in the Soviet Union.

Dr. Eugene M. Farber, director of the Department of Dermatology at Stanford, observed these techniques in several Moscow clinics and hospitals during a recent visit.

Farber's trip was part of the U.S.-Soviet Cooperative Program in Health. The program, designed to exchange scientific information between the two countries, is administered in the U.S. by the Department of Health, Education and Welfare, the Public Health Service, and the National Institutes of Health.

Farber was the first American dermatologist to participate in the program.

The Soviets are acquainted with the current PUVA photochemotherapy for psoriasis which is being clinically tested in the U.S., says Farber, and they are planning to evaluate it.

PUVA stands for psoralen, a drug which sensitizes the skin to light and ultraviolet light. The combination of drug and light treatment appears to slow down and break up the disease process. Stanford is one of 16 U.S. medical centers conducting clinical trials on the photochemotherapy.

Soviet physicians use some therapies which rely less on drugs than those in the U.S., says Farber.

Patients with itching problems are sometimes put to sleep with low fequency sound waves transmitted through a helmet they wear, he says. This is called electrotherapy.

The patients fall asleep within 10-15 minutes and can remain in that state for hours, he says, although sleep treatments generally last 3-4 hours.

They awaken with no hangover, and the treatment does not interrupt or shorten their usual sleep cycle at night.

Soviet scientists told Farber that the induction of sleep interrupts the itching cycle, and that they prefer this kind of treatment to sedation.

Acupuncture also is being tested as a treatment for itching in the Soviet Union. One researcher believes he has identified the itching center for the entire body, but there is some skepticism about this, says Farber.

Psoriasis has been treated with fasting, says Farber. One professor at the First Medical Institute of Dermatology and Venereal Disease in Moscow put 2,000 psoriasis patients on a diet of mineral water and vitamins for two weeks. The patients also received daily enemas.

They generally lost 9-10 kilograms (about 20 pounds) and showed some initial improvement, but relapsed shortly after they returned home.

(more)

Dr. Farber feels the improvement was due to lowered protein intake and a reduction in stress during the hospitalization period.

A small portable laser unit is sometimes employed to remove skin tumors and tattoos, says Farber.

Balneotherapy, or bathing parts of the body in water which has been ionized or had oxygen bubbled through it, is used to increase the permeability of the skin to ointments. The therapeutic effect of balneotherapy is nonspecific and partly psychological, he says.

The Russian people suffer from the same diseases we do. However, fungus infections seem to be more common. Soviet scientists attribute this to the widesperead use of antibiotics, he says.

Fungus infection of the finger and toenails is treated with a plaster which dissolves the infected part but not the good part of the nail. "We're just starting to use this here," says Farber.

In another part of the Soviet Union, Farber visited a unique group of people referred to as "long livers." About 15,000 people over the age of 90 live in the Caucasus Mountains of the Soviet Republic of Georgia.

Farber found them to be in good health. Hearing, pulse rate, and memory usually are good. They are alert. They have the skin of 55-65 year olds, he says.

Genetic factors contribute to longevity in this area, says Farber, but social factors such as part-time agricultural work and the closeness of the family unit also are considered to be important by Georgian scientists.

Men in the Soviet Union retire with full pension at age 60 and women at age 55, he says. An Academy of Sciences study on the health of men who retired on pension and who changed environments found that their ability to adapt at age 55-65 was poor. The aging process suddenly accelerated, a phenomenon the researchers call "pension disease."

They also found that among retired people who didn't work, 87% were able to work.

What distinguishes the long livers in Georgia is that they have continued to stay physically active, says Farber.

In addition "they feel needed by their families and society and their families in turn consider them important and necessary to their lives," he says.

The chief of the Gerontology Department of the Academy of Sciences in Tsbilisi, Georgia, told Farber that humans are genetically programmed for 120 years of living.

"But he told me that diet, climate, and physical activity won't make much difference if a person is socially isolated from his family or society," he adds.

Researchers at the Georgia academy found that 90% of the long livers smoke and drink, but in moderation. They are not overweight, but have no special diet. They eat largely what they grow themselves; squash, nuts, grapes, bread, cheese, chicken, boiled lamb, and wines.

They live at 500 to 1,200 meters (1,600 to 4,000 feet) above sea level, and the air is clean, says Farber.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

STANFORD –

New ways to get patients to take their medicine, finding out how the liver forms cholesterol, and how nerve cells develop—these are some of the topics under study by three young Stanford scientists recently named Andrew W. Mellon Fellows.

The researchers will be supported in part by a $325,000 award to Stanford by the Andrew W. Mellon Foundation of New York. The purpose is "to assist young postdoctoral scholars of demonstrated achievement and exceptional promise to continue their advance toward careers in teaching and research."

The fellows bring to 12 the number of Stanford scientists supported by the three-year award which was given by the Foundation in 1976. The appointments were named recently by Dr. Clayton Rich, vice-president for medical affairs and dean of the school of medicine.

According to the Mellon Foundation, "the chief purpose of the grants is to help minimize the loss to medical education and to research in the basic medical sciences which is certain to occur if individuals. . .are forced by lack of support to turn to other careers."

Stanford is one of 15 private medical schools to receive such funds under the Mellon Foundation Program. A similar three-year grant from the Foundation was given to the University in 1973.

The new Mellon Fellows are Dr. Allen Cooper and Dr. Peter Rudd, assistant professors of medicine, and Bruce Wallace, Ph.D., assistant professor of neurobiology.

Dr. Cooper is studying cholesterol metabolism in isolated livers and intestines of rats.

Cholesterol is a common type of body fat which researchers think may help maintain the structure of most cell membranes.

Cholesterol is produced primarily by the liver and intestine. In particular, the liver is responsible for getting rid of cholesterol and directing its movement through the body, says Cooper.

Defects in the mechanisms which control transport of cholesterol and its deposition in body tissues in man lead to abnormalities such as atherosclerosis, in which cholesterol is deposited in blood vessels. The details of these mechanisms are still unknown.

"If we can understand the basic aspects of how its synthesis and transport are regulated," says Cooper, "we may be able to develop more effective therapies to lower cholesterol levels in the blood."

Dr. Rudd, who came to Stanford, from the University of Chicago Aug. 1, has initiated studies on patient compliance and professional adherence for hypertension.

Recognizing that more than 20 million Americans have high blood pressure, and that most of them either are unaware of their condition or are not taking adequate medication, Rudd believes there is a great need for intervention.

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"There is little use in detecting, evaluating, or prescribing for the disease if patients do not comply with treatment over the many years needed for prevention of hypertensive complications," says Rudd.

"Most professionals are notorious overestimators of their patients' compliance," he says.

Rudd is developing an "optimal" antihypertensive regimen which he hopes will produce better patient compliance and improved clinical outcomes than traditional care.

The regimen is a package of motivational aids such as simplified, once-daily medication. Scheduling, special medication packaging to help patients remember pill-taking, feedback to patients about their past success as compliers, and patient self-monitoring with home blood pressure cuffs.

Rudd will evaluate the cost-effectiveness of each component in the package, and help clinicians implement the improved methods of antihypertensive care.

"To be successful, the package must be relatively inexpensive and readily acceptable to most patients and physicians," he says.

Hypertension is a useful model for other chronic diseases which require daily medication and for which compliance is a problem, says Rudd.

"If we can make a real impact on hypertensive management," he says, "I think many of the lessons can be extended to other diseases."

Dr. Wallace is studying the development of cells in the nervous system of leeches.

The leech lends itself easily to studies of developing neurons, says Wallace, because its central nervous system consists of a chain of identical nerve bundles, or ganglia, each containing 350 cells.

Wallace also is trying to determine how the nerve cells accumulate neurotransmitters during development. Neurotransmitters are the chemical messengers which transport electrical signals across gaps, or synapses, between the cells.

All 12 Mellon Fellows are assistant professors in the Medical School. The nine who retain their fellowship appointments from last year include Dr. Paul Cipriano, radiology; Dr. Leslie Dorfman, neurology; Dr. Donald Goffinet, radiology; Dr. Mark Hilberman, anesthesia; Dr. Paul Pitlick, pediatrics; Dr. David Schurman, surgery; Dr. Gerald Silverberg, surgery; Douglas Wallace, Ph.D. genetics; and Dr. Roger Winkle, medicine.

STANFORD UNIVERSITY MEDICAL CENTER
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EDITORS: Photos available on request if not included.
FOR IMMEDIATE RELEASE
STANFORD –

Research with a protein isolated by Stanford Medical School scientists several years ago is opening the door to better understanding of the development of the nervous system and the regeneration of damaged nerves.

Dr. Eric Shooter, professor of neurobiology, has been working with the protein called nerve growth factor (NGF) since it was isolated in 1967 from the salivary glands of the adult mouse.

Eight years later, in 1975, one of his colleagues, Dr. Alex Wlodawer, successfully crystallized the protein.

Nerve cell growth during development is determined by different signals, says Shooter.

One signal, in the form of an electrical impulse, determines the development of sympathetic and sensory nerve cells. Sympathetic nerves carry messages from the brain to the heart, blood vessels, smooth muscle of various organs, and glands.

NGF provides another signal in the form of a circulating soluble protein, he says.

The presence of NGF in a variety of tissues and species was detected in the early 1950s by an Italian scientist, Dr. Rita Levi-Montalani.

She showed that injection of NGF into nerve ganglia of chicks causes them to balloon up to 12 times their normal size, and stimulates nerve fiber growth tremendously. If antibody to NGF is given to eliminate the factor, growth of the sympathetic nervous system is stopped completely, Shooter says.

NGF is specific for sympathetic and sensory nerves, he says, but it is also found in the central nervous system, including the brain. "We don't yet know what role it plays here," he says.

Once development of the organism is completed, says Shooter, NGF is important in maintaining the viability of the nerve cells whose development it controls.

"It's been known for a long time that nerve cells can sense what's going on in the periphery (at the end organ)," says Shooter. NGF provides information enabling the nerve to make connections with the correct end organs, he says.

Dr. Jack McMahan, newly appointed professor of neurobiology from Harvard University Medical School, has found that the severed muscle nerves of frogs grow back to the muscle, precisely into channels left by the old degenerated nerve fibers.

McMahan believes that some factor may be directing the growth of the nerve to a specific location, although it may not be associated with the target organ itself.

Shooter, with Drs. Keith Hodgson and Julia Goodfellow of the Department of Chemistry, is continuing studies to work out the three-dimensional structure of NGF.

The factor demonstrates certain similarities to insulin, a circulating protein chich facilitates uptake of sugar by cells.

"There is a limited but significant similarity in the amino acid sequence between NGF and insulin," he says. Amino acids are the molecules which make up protein chains.

In addition, Dr. Edward Berger, a member of Shooter's group now at the Worchester Foundation in Massachusetts, has isolated a pro-NGF molecule involved in the biosynthesis of NGF, just as proinsulin is a precursor in the biosynthesis of insulin.

It has been known for some time, says Shooter, that NGF, like many other protein messengers, acts by attaching itself to a receptor on the membranes of responsive nerve cells.

Shooter and his associates, Drs. Sutter, Riopelle, and Harris-Warwick, recently discovered there are two different NGF receptors which vary in their location and binding strength. Only one of these is involved in the generation of nerve fibers, says Shooter.

So far, studies relating NGF to diseases such as tumors of the nervous system have been inconclusive, says Shooter. But the similarity to insulin, he says, suggests that abnormalities in NGF production, like insulin deficiency, may result in disease.

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SCIENCE WRITERS: This story is released in conjunction with the presentation of a scientific report at the American Academy of Ophthalmology and Otolaryngology October 3 in Dallas, Texas.

ADVANCE FOR P.M. RELEASE MONDAY, OCT. 3, 1977.

STANFORD –

Tumors of the head and neck are now being treated with platinum chemotherapy by Stanford physicians.

Platinum, a heavy metal also used in treating cancer of the testes and ovary, caused tumor shrinkage in 75% of patients treated with advanced head and neck tumors, said Dr. Charlotte Jacobs, acting assistant professor of medicine.

Platinum is thought to act by attaching to DNA, the genetic material of cells, and preventing cell division.

Jacobs reported her findings Oct. 3 before the annual meeting of the American Academy of Ophthalmology and Otolaryngology in Dallas, Texas.

Head and neck tumors account for 5% of all cancers.

"They are one of the most deforming and debilitating of any cancer," said Jacobs.

Jacobs conducted the study with Dr. Willard Fee and Dr. Richard Goode, department of surgery; Dr. Don Goffinet, department of radiology, and Dr. Joseph Bertino, of the Yale University School of Medicine.

Sixteen patients were given 24-hour infusions of platinum, repeated every 3 weeks. The patients received 1-5 courses of treatment.

Ten of the patients had received prior surgery, radiation, or chemotherapy and had recurrent disease. The other six had received no prior treatment.

Some shrinkage of tumors occurred in 75% of the patients, said Jacobs. One patient had complete remission, and five had over 50% shrinkage of the tumors. The response rate was not influenced by location or size of the tumor, or by prior treatment, she said.

In comparison, methotrexate, another common cancer fighting drug, produces shrinkage in 30-50% of head and neck tumors. Most tumors treated with this drug recur after 2-4 months, said Jacobs.

However, Jacobs cautioned that only a longer period of time will determine if platinum is more effective than methotrexate in treating head and neck cancer.

Both drugs have side effects, including nausea and vomiting, and low blood counts. High doses of the drugs can damage the kidneys, she said.

Jacobs said she planned to continue testing platinum in patients with recurrent and advanced disease. It will be used in addition to surgery and radiation therapy in patients who have less than 50% chance of cure.

She also planned to test platinum with methotrexate to see if the combination is more effective than either drug alone.

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END ADVANCE FOR P.M. RELEASE MONDAY, OCT. 3, 1977. 9/29/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Employee elections scheduled Feb. 2-4, 1978, at Stanford University Hospital may be canceled.

The reason is new legal issues that have emerged between United Stanford Employees (USE) and Stanford University.

According to Priscilla Wheeler, associate staff counsel at Stanford, the elections could be conducted only if USE officially requests that they proceed, or if the union withdraws its unfair labor practice charge in connection with a recent employee opinion survey at Stanford Medical Center.

The unfair labor practice charge alleges that the survey, which was conducted by the Hospital earlier this year, was designed to influence employee feelings on whether to select USE or other labor organizations as their collective bargaining agents.

Although the 20th region of the National Labor Relations Board (NLRB) in San Francisco found the USE charge without merit and refused to issue a complaint, the NLRB Office of Appeal in Washington, D.C., overruled the decision to dismiss and directed the San Francisco office to issue a complaint on the matter so that all issues could be heard.

The appeal to Washington had been filed by USE.

The matter will now be heard and resolved in a hearing before an administrative law judge.

Two years ago similar elections were held in the Hospital and Clinics. The balloting was conducted by the NLRB, and more than 1,000 of 1,200 eligible employees voted overwhelmingly to reject any union representation.

However, the results of those elections were set aside after an unfair labor practice complaint and election objections were filed with the NLRB by USE.

The USE complaint alleged that two minority employee groups—La Alianza Latina and the Black Advisory Committee—were unlawfully assisted and directed by the Hospital. Both employee groups have been active in affirmative action efforts.

USE, which is Local 680 of the Service Employees International Union, AFL-CIO, also claimed that Hospital assistance given the groups, including time off to attend meetings and the use of meeting rooms, was unlawful.

The NLRB rejected the USE claim that the groups had been "dominated" by the Hospital.

The setting of new elections resulted from the settlement of this dispute by Stanford and USE earlier this year.

However, as a result of USE's new charges, those provisions are no longer valid, says Paul B. Hofmann, director of Stanford Hospital and Clinics. The elections cannot be scheduled unless all outstanding legal matters are resolved, he said.

The employee opinion survey in question was held "when no union organizing campaign was under way and no election scheduled. The survey had been planned for a long time and without regard to any possible union elections," Hofmann added.

USE would be actively involved in any such elections. It represents about 1,350 technical maintenance and service employees at Stanford, including Stanford Linear Accelerator Center (SLAC). About 260 of approximately 5,000 employees at Stanford Medical School are USE members.

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11/30/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

STANFORD –

Stanford's original medical linear accelerator, the first to be used for treatment of cancer patients, will be on display beginning Dec. 1 in a major exhibit at the Smithsonian Institution's Museum of History and Technology in Washington.

"Atom Smashers: 50 Years," tracing the history of high energy particle accelerators, will be located on the Museum's main floor, and will remain open for several years.

After treating an estimated 8,000 patients during 16 years of use, the first medical accelerator was dismantled and donated to the Smithsonian in 1971 by Dr. Henry Kaplan, who had initiated its development.

The pioneering apparatus was used to destroy tumors by bombarding them with X-ray radiation produced from electrons. It was designed and built jointly by researchers in the Medical School's Radiology Department and the University's Microwave Laboratory, with grants from the American Cancer Society and the National Cancer Institute.

It was first installed in 1955 at Stanford's former teaching hospital in San Francisco, then moved to the Stanford campus with the Medical School in 1959.

Dr. Kaplan, then chairman of the Department of Radiology, first proposed the application of high energy X rays in the treatment of cancer. In the early 1950s existing megavoltage machines were far more expensive to install and operate than standard X-ray machines of the time, and were very cumbersome to use. The goal was to design one practical for cancer treatment, that could move and be aimed at different parts of the patient.

Edward L. Ginzton, then director of the Microwave Laboratory in the Physics Department, designed much of the machine and supervised its construction. He is now chairman of Varian Associates' Board of Directors, a Stanford University trustee, and a member of the Stanford Hospital board of directors.

Kaplan provided the medical specifications for design, and put it to its initial test.

For medical purposes, the electrons injected into a vacuum cylinder are accelerated by microwave power to a high velocity, then aimed at a specific tumor tissue, or used to produce penetrating X rays.

(more) 11/29/77 cr

One of Dr. Kaplan's first patients successfully treated with the apparatus was a two-year-old boy with retinoblastoma, a tumor of the retina in the eyes of young children that can lead to blindness.

The original model was particularly suited for treating cancers of the head and neck, prostate, or bladder, according to Kaplan. The young boy had lost the vision in one eye, but his other eye was saved when doctors were able to destroy the tumor with radiation from the accelerator.

Until that time most cancer radiotherapy used X-ray machines for essentially palliative treatment, to slow cancer growth and relieve pain temporarily, but was not able to destroy the cancer.

With the advent of megavoltage therapy, many malignancies once fatal began to experience higher cure rates. Today megavoltage accelerators are found in cancer centers around the world, and have contributed to high cure rates for cancers such as Hodgkin's disease, related lymphomas, and cancer of the prostate and bladder.

As Kaplan was thinking of ways to use megavoltage for medical treatment in the '50s, physicists on campus had already initiated development of the Stanford Linear Accelerator Center (SLAC). SLAC has also supplied the Smithsonian with a number of exhibits, and a significant portion of the "Atom Smashers" exhibit will trace 30 years of electron linac development at Stanford.

Individual units include high frequency cavity oscillators devised by William Hansen in the mid 1930s, illustrating the basic concept underlying microwave linear accelerators.

The Nobel Prize diploma awarded to Professor Burton Richter in 1976 will also be displayed, as well as his research log books of the epochal discovery of the unknown subatomic particles.

Superconductivity is represented by a section of the Stanford superconducting linac at the Hansen Laboratories on the Stanford campus.

Among the exhibit's objects are several historic accelerators, entire bubble chambers, spark chambers, and superconducting magnets used in experiments to study atoms and their interaction with other kinds of atomic particles.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE
STANFORD –

Stanford University School of Medicine has been advised by the Bureau of Health Manpower (BHM) that it will not receive federal educational support next year because it has failed to comply with the so-called Guadalajara clause of the 1976 health manpower law.

This provision requires medical schools to guarantee slots for Americans transferring from foreign medical schools. Students are to be admitted under standards set by HEW rather than each school's own academic criteria.

Stanford Medical School, in its application for funds earlier this year, told the BHM that it could not comply with this provision.

"We believe it is essential for the academic integrity and independence of universities that the critical judgments about standards for admission. . .be made by the university and not given over to an agency of the federal government," wrote Dr. Clayton Rich, dean of the School of Medicine.

The loss of funds to Stanford would be more than $400,000 next year.

Stanford was among 14 medical schools that received letters informing them that they would not be included in the capitation program as presently authorized.

According to the Association of American Medical Colleges (AAMC), they include University of California's five medical schools, Yale, Northwestern, University of Chicago, University of Illinois, Johns Hopkins University, Duke University, Case-Western Reserve, and Baylor College of Medicine.

The Bureau of Health Manpower, according to the AAMC, took steps to implement the present law, even though Congress is moving toward a major revision of the objectionable provision. If the provision is amended by Congress and becomes law, all schools, including the 14, could decide whether to reapply for the funds.

BHM sent telegrams to all medical schools last month asking for a final decision on the matter. Three schools, Harvard, St. Louis University, and Indiana University, which previously objected to the law, were mentioned in news reports as having decided to comply to receive the funds.

But Patricia Perry, special assistant to the dean of Harvard Medical School, told the Stanford Medical Center News Bureau that Harvard's position remained unchanged. "Harvard has reserved the right to challenge the constitutionality of the requirements in court, and to withdraw from further consideration in light of future changes. . .if they were not in the School's best interests," said Ms. Perry.

Dean David Chaloner of St. Louis University School of Medicine said his School applied for the funds because it has qualified for a waiver. The School faces physical limitations and cannot admit additional students.

"However," said Chaloner, "if the government insists on our adding more students to our entering class, then we will have to reject capitation."

Indiana University Medical School spokesman Joseph Lehman said the news reports were in error. "We will not accept any capitation if it means changing our admission standards," he said.

If Congress fails to amend the law, sources at the AAMC said deans of several schools are considering filing a suit, based on the First and Fourteenth Amendments of the Constitution, asking the courts to enjoin HEW from carrying out the law—that is, require the Department to award the funds to all schools which apply, and at the same time prohibit it from apportioning U.S. foreign medical graduates to any school.

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11/28/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD--A new book about the application of statistical techniques to medicine and biology has been coauthored by Byron William Brown, Jr. of Stanford University, and Myles Hollander of Florida State University.

Statistics: A Biomedical Introduction, just published by John Wiley & Sons ($15.95), is based on lectures offered by Stanford and Florida State. The contents are designed for medical students, undergraduates in the natural sciences, and graduate students in biomedical fields.

Brown is professor and head of the Division of Biostatistics at the Stanford University School of Medicine. Hollander who received his Ph.D. in statistics from Stanford is professor of statistics at Florida State University.

The 456-page book covers topics taught in most beginning statistics courses, but the focus of the subject matter is an actual data analysis situations that arise in biomedical research.

Statistical techniques, according to the authors, allow the scientist to measure the strength of his conclusions, in terms of probability, and in a language that can be commonly understood by his peers around the world.

The book gives many examples on the application of statistical concepts to randomized clinical trials, medical surveys, clinical tests, and other procedures.

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Mailed Monday, November 21, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

Editors: Review copies of the book available on request if not included with story.

STANFORD--A common-sense parents' guide to the medical problems of children--from birth through adolescence--has been coauthored by a Stanford University physician and two associates formerly from Stanford.

Taking Care of Your Child: A Parents' Guide to Medical Care (Addison-Wesley Publishing Co., 409 pp., $10.95 cloth) was coauthored by Drs. Robert H. Pantell, James F. Fries, and Donald M. Vickery.

A sequel to their successful Take Care of Yourself for adults, the new book is aimed at parents to help them make sound decisions when problems arise.

When to treat ailments at home and when to seek a physician's advice--a question that troubles parents--is a central theme of the book.

The authors describe a wide range of childhood injuries, allergies, problems and diseases--from cuts, burns, broken bones and poisoning, to croup, mumps, chicken pox and German measles.

Instructions for home treatment are provided. In addition, they discuss what kinds of diagnostic tests and treatment may be expected at the doctor's office, and the medical history the physician will require from the patient.

Decision charts, in large readable type, summarize the most pertinent questions and symptoms.

When a visit to a physician is recommended instead of home treatment, the charts indicate different levels of urgency--from "see physician now" to "make appointment with physician." Emergency signs which overrule the charts and dictate that medical help should be sought immediately are described.

In addition to guidance for the most common childhood medical problems, the authors discuss subjects that they have found to be of greatest concern to parents.

One section deals with self-care during pregnancy, infant feeding, home or hospital delivery, medications used during labor, delivery room procedures for newborns.

Care of the infant at home, physical growth and personality development are touched on. References are provided for further reading. Toilet training, eating habits, crying, temper tantrums and parent frustrations are discussed as well as day care centers, school problems and sexual development.

-more-

The authors provide a detailed explanation of immunizations: how effective they are; possible reactions and side effects; how long immunity lasts; whether boosters are necessary, and when they should be given. An immunization schedule is outlined.

Of special interest to parents is the book's discussion of upper respiratory infections.

Studies have revealed that the average child has between six and nine viral illnesses per year. In some children, these viral illnesses are so mild that the parent may not notice any symptoms except for a cough or runny nose.

"We do not think of these viral infections as illnesses," the authors state, "but rather as immunizations that serve to protect children against the more serious consequences of these illnesses at a later age."

The authors note, "There are at least 60 different viral strains against which most adults are partly immunized because of childhood illnesses. The sooner the child develops these immunities, the sooner the relatively illness-free years of the adult can begin."

They deplore the tendency of schools to send children home from school at the first sign of a cold since "the cold can serve to immunize the other children against that virus."

The authors' stress on self-reliance and conservative treatment is evident in their discussion of the "home pharmacy." "The vast majority of all medical problems resolve themselves without the use of any medication.... For nearly every advertised drug, there is a cheaper alternative that is just as good or better; in many instances, the preferred alternative is nothing at all."

In their discussion of commonly used drugs for colds, the authors point out both the beneficial and adverse effects of antihistamine compounds, oral decongestants, cough syrups, aspirin and others. Moreover, they stress that "only for bacterial infection does the doctor have more effective treatment than is available at home...viral infections and allergies do not improve with treatment by penicillin or other antibiotics.... Colds are almost invariably caused by viruses and do not...respond to antibiotic treatment." To distinguish between strep throats which should be treated with an antibiotic and viral sore throats, they advise that a throat culture should be obtained.

The most important medicine of all, the authors advise, is "tincture of time." Inappropriate reliance on drugs means that "although time will take the symptom away, the drug will take the credit. The child fails to learn that the body is strong, and thinks instead that health is frail and only precariously maintained by an intake of chemicals." The choice lies between "drug dependence or personal independence."

Pantell, an assistant professor of family practice and pediatrics at the Medical University of South Carolina, is a former Robert Wood Johnson Clinical Scholar at Stanford. Fries, also a Johnson Scholar, is an assistant professor of medicine at Stanford. Vickery who received residency training at Stanford is now president of the Center for Consumer Health Education, Inc. He is also affiliated with Georgetown Medical School.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Stanford University has filed suit against the state treasurer and controller, claiming the State of California owes it $448,800 in capitation support for increasing enrollment in medical school.

Originally filed with the California Supreme Court, the suit was transferred to the Third District Court of Appeal in Sacramento recently by the high court.

The University claims the state agreed to pay up to $12,000 for each student enrolled above a number fixed by the school's 1970-71 enrollment. The state contribution is determined after deducting the amount paid per student by the federal government. The state's contribution should have been $10,200 per student.

According to the suit, the reimbursement agreement was set up by the California legislature for the purpose of encouraging colleges and universities to increase enrollment in their medical schools.

Both the state and Stanford agree that the Medical School did increase its enrollment over the 1970-71 base year by 35 students in 1973 and 26 students in 1974. The University submitted its application for funds to the state for those increases and was paid, the suit says, but when a similar application was submitted for 44 students enrolled in 1975-76, it was not paid.

The state controller has refused to pay Stanford's latest bill in spite of legislation specifically approving such appropriations to private schools, according to the suit. The controller claims such payments may violate the state constitution.

The reimbursement provisions to medical schools were established, the suit said, because the state found existing medical schools could provide physicians and surgeons at a cost substantially lower than would be required to build new medical schools.

Stanford and the University of Southern California, the only two private institutions in the program, have both expanded their medical school enrollments beyond the levels called for in their contracts, according to the State Scholarship and Loan Commission, which administers the program.

The constitutional question about state subsidies to private schools was first raised in April 1975 by an attorney general's opinion concerning Loma Linda University. The opinion said the commission could not give money to Loma Linda because the school is run by the Seventh Day Adventist Church and is not publicly controlled.

The opinion cited a section of the California Constitution which covers all private institutions, not just those with church ties.

Article 9, Section 8 of the Constitution says, "No public money shall ever be appropriated for the support of any sectarian school or denominational school, or any school not under the exclusive control of the officers of the public schools."

The University argues that *bona fide* contracts serving important public purposes are not "support" under the terms of the California constitution.

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11/21/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD-- Two administrative appointments have been announced at Stanford University Hospital and Clinics.

Effective Dec. 11 David Mendelow will become associate administrator, while Kenneth G. Hill will serve as assistant administrator, beginning Jan. 9.

According to Peter J. Levin, associate vice president for medical affairs and executive director of Stanford Hospital and Clinics, Mendelow will be primarily responsible for the clinics and emergency services.

Hill, Levin said, will have responsibilities in the professional and patient care areas, including quality assurance programs, risk management, housestaff and medical staff.

Both Mendelow and Hill will report to Gary A. Mecklenburg, who will become administrator of the hospital and clinics on Dec. 16.

Levin also announced that John Kneepkens, who currently serves as associate director and who had previously indicated his intention to retire, will remain on the staff in an administrative capacity in the clinics.

Mendelow, 35, is currently a senior consultant for Arthur D. Little, Inc., of Cambridge, Mass.

In addition to consulting projects for several medical institutions in the U.S., he recently served as project director at the 1,000-bed University Hospital at the Federal University of Rio de Janeiro. He headed a team which designed the organizational and operational systems of the hospital.

Previously, Mendelow held various administrative positions at Albert Einstein College of Medicine in New York and the Bronx Municipal Hospital Center. He received his B.A. from Michigan State in 1963, and his M.B.A. in health care administration from George Washington University in 1967.

Hill is currently the assistant director of ambulatory services at Nassau County Medical Center in East Meadow, N.Y. He received his A.B. degree in political science from City University of New York in 1973, and his M.P.H. in hospital administration from Yale University in 1975.

Hill completed his administrative internship at St. Luke's Hospital Center and his residency at Kings County Hospital Center, both in New York City.

Hill, 29, has been responsible for programs, budget and planning of the ambulatory services of Nassau County Medical Center during his two-year term as assistant director. ### Mailed 11/21/77

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. John A. Luetscher, professor of medicine at Stanford University School of Medicine, recently received the 1977 CIBA Award for Hypertension Research for his role in the discovery of aldosterone, a hormone important in maintaining blood pressure.

Luetscher shares the $5,000 award with two other contributors to the discovery, Drs. James F. and Sylvia Tait of Britain.

The award is given each year by the American Heart Association's Council to recognize "important and meritorious research" toward better understanding and treatment of high blood pressure.

Aldosterone is a hormone secreted by the adrenal glands, which causes retention of sodium by the body. It is essential in maintaining the balance of body fluids and salts, says Luetscher, and must be replaced in order to ensure survival after the adrenal glands are removed or destroyed by disease.

Too much aldosterone can result in edema, or swelling of body tissues due to fluid retention, he says. It can also cause high blood pressure. People with high blood pressure have an increased risk of heart and kidney disease.

Luetscher and his associates noticed a relation between edema and salt retention in patients in the early 1950s. They later showed that the urine of these patients contained a material which behaved like an adrenal hormone and caused sodium retention in rats.

The material was crystallized and shown to be identical to the hormone isolated from the adrenal glands by the Taits.

Presently, Luetscher is exploring ways to regulate aldosterone, and developing methods to diagnose and treat patients with edema or high blood pressure and loss of body potassium.

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11/17/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Gary A. Mecklenburg has been appointed administrator of Stanford University Hospital and Clinics.

His appointment, effective Dec. 16, was announced Wednesday, Nov. 16, by Peter J. Levin, associate vice-president for medical affairs and executive director of the Hospital Cnd clinics.

Mecklenburg, 31, succeeds Paul B. Hofmann who has resigned to become the administrator and chief executive officer at Emory University Hospital in Atlanta, Ga.

Mecklenburg was appointed deputy director of Stanford University Hospital and Clinics in March 1977. Prior to that he was associated with the University of Wisconsin Hospitals in Madison from 1970 to 1977 as administrative assistant and later as associate superintendent.

He received his B.A. degree in anthropology from Northwestern University in 1968 and his M.B.A. degree in hospital administration from the University of Chicago in 1970. He served as an administrative extern at Presbyterian-St. Luke's Hospital in Chicago.

Mecklenburg received the Harold M. Coon, M.D. Award of Merit of the Wisconsin Hospital Association in 1974 recognizing him as Wisconsin's Young Administrator of the Year.

He and his wife Lynn have two children, ages 3 and 4, and live in Los Altos.

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11/16/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

The Big Game medical alumni meeting, sponsored by the School of Medicine and the Stanford Medical Alumni Association, is planned for Friday, Nov. 18.

Dr. W. Leroy Heinrichs, professor and chairman of the department of gynecology and obstetrics, will introduce the morning postgraduate course, "Disease Detection in the Early Fetus."

To be held in the Sherman Fairchild Auditorium, the course will feature Drs. Howard M. Cann, professor of pediatrics and genetics, W. Desmond McCallum, assistant professor of gynecology and obstetrics, and Paul A. Hensleigh, associate professor of gynecology and obstetrics.

A noon reception and luncheon for alumni, associates, faculty, and spouses will be held in the Palo Alto Holiday Inn. Featured speaker will be Charles L. Gould, executive director of the Hearst Foundations, on "Uncle Sam, the Medicine Man." Reservations are necessary for the luncheon.

A spouses' program in the morning will include an address by Dr. Gunther Nagel on his most recent book, *Jane Stanford: Her Life and Letters.* There will also be a tour of the Hanna-Honeycomb House on the Stanford campus.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

The present NIH guidelines regulating recombinant DNA research are too restrictive and don't involve the public in questions of research policy in the right ways.

This was the consensus of a group of scientists meeting with Senator Edward Kennedy at Stanford University Medical Center Friday, Nov. 11.

Kennedy, chairman of the Senate Subcommittee on Health, visited Stanford as part of a fact-finding tour on various health and science policies.

"It's a charade," said Dr. Arthur Kornberg, Merner professor of biochemistry and Nobel prizewinner, referring to the guidelines. "You go through the guidelines knowing they are unnecessary, but the bureaucracy demands it."

Kornberg, who won his Nobel prize for synthesizing DNA, said tha the guidelines, established in the summer of 1976, were "unnecessarily strenuous."

"If you throttle the research here, it will be done somewhere else, and it will become a dark age here," he said.

Kennedy, who had sponsored legislation to regulate recombinant DNA research, said earlier he would withdraw the bill because of recent findings that suggest the research is not as dangerous as previously thought.

"We have had a great deal of experience with recombinant DNA research, and all the data point to the fact that there is no novel danger," said Dr. Stanley Cohen, professor of medicine and genetics.

Paul Ehrlich, professor of biology, said the dangers involved with the research are "trivial" when compared to other dangers "society is happily accepting all the time."

Cohen suggested that presently existing mechanisms regulating research in pathological organisms are adequate to govern recombinant DNA research.

"There is no rabies research act of 1978, or encephalitis act of 1979," he said. "Yet we don't see any epidemics of these organisms taking over the country."

Dr. Halsted Holman, Guggenheime professor of medicine, disagreed with the consensus of the group. He said he supported the legislation which Kennedy had proposed.

"The issue (of public involvement in research) has to do with the increasing power of science and technology over the health and well-being of individuals and clusters of individuals," he said.

"This is the first step on the route to being able to modify mammalian cells and do genetic engineering," he said.

Holman drew an analogy to informed consent in patient treatment. "If the physician has the technology that makes it necessary for the patient to be involved in the decision, because the physician can't know everything about the outcome, some form of societal analog is necessary for all technologies that can influence clusters of people."

Most members of the group confirmed the need for public input in research policy decisions, but they could not agree how to bring the public into the decision-making process.

Kennedy said people need to be involved at all stages of research, from "take-off" to "landing."

But some scientists felt that efforts to legislate research while it is evolving would stifle it.

"There is no way to predict what the next event in the laboratory or in a person's mind will be," said Dr. Joshua Lederberg, chairman of the Department of Genetics. "If you try to stifle the take-off, you'll have to stifle all research."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

EDITORS: Text available on request.

FOR IMMEDIATE RELEASE

STANFORD –

Sen. Edward M. Kennedy (D-Mass.) told a Stanford University audience Friday, Nov. 11, that Congress should guarantee stable and continuing support for biomedical and behavioral research instead of the changes in research priorities that have occurred in recent years.

"Upheavals are unfair to research scientists who have dedicated themselves in good faith to the directions mandated by Congress," Kennedy said.

"We must develop a greater capacity for the systematic allocation of health dollars among the health sciences."

Recently, Kennedy said, Congress enacted programs to combat heart disease, cancer, diabetes, and arthritis among others. In addition, commissions have been created to study federal programs in Huntington's disease, epilepsy, and multiple sclerosis.

"It is no wonder that Congress is now called the Disease-of-the-Month Club, "Kennedy said.

In establishing the national cancer program, he said, "it was never the intention of Congress to starve other areas of medical research to feed the cancer effort."

One of the priorities, the Senator said, is to correct the present funding imbalance at the National Institutes of Health, without curtailing the progress in the war on cancer.

Kennedy stressed, however, there are challenges in public policy which the research community must face as well.

"The public must be accepted as an active partner in the development and evaluation of biomedical research," he said.

The debate over recombinant DNA research is "the beginning of a new and more sophisticated interaction between science and society," he said.

"This is a constructive development that should be welcomed by the scientific community," Kennedy said. "We have an opportunity to broaden public understanding of science."

Kennedy said this concept of public participation in science policy has unsettled many members of the scientific community.

"They see it as a threat to the freedom of scientific inquiry," he said. "But the truth is just the opposite. The greatest threat to science is the lack of public understanding."

Kennedy was critical of the peer review system by which scientists sit on committees which dispense federal research funds.

(more)

He charged that broad areas of research have been ignored, giving nutrition, behavioral research, and research into the epidemiology of cancer as examples.

"The research community should be coming to us," he said. "You should be telling us there are important areas of medicine which are not now receiving the kind of support they deserve."

Kennedy also had some good news for Stanford officials. He said it is likely the new law which requires American medical schools to accept all U.S. students studying in foreign medical schools would be amended. Stanford has refused to accept this requirement as a matter of principle, thereby jeopardizing $410,000 in federal educational support for the Medical School.

The Senator called the provision an "unwarranted intrusion by the federal government into academic medicine."

But, he said, even if that particular provision is withdrawn, "federal prodding will continue and the constructive tension between the Congress and the nation's medical schools will continue."

Kennedy made clear that the taxpayer will support medical education and research if it is relevant to social needs. This includes continuing to subsidize medical education at an institution like Stanford only if the school turns out doctors who treat basic illnesses—not just researchers or sophisticated superspecialists.

Kennedy visited Stanford as part of a fact-finding tour seeking citizen input related to health and science policies. He is chairman of the Subcommittee on Health of the Senate.

Earlier in the afternoon he met with faculty, staff, and students, including scientists involved in recombinant DNA research and some who are critical of it.

The scientists were almost unanimous in assuring Kennedy that recombinant DNA research is basically safe. The Senator, who had sponsored a bill placing restrictions on such research, has now withdrawn the legislation, convinced that the research is not as dangerous as first believed.

"I consider the dangers to be quite trivial compared with other things that society lives with," commented biology Prof. Paul Ehrlich.

Dr. Halsted Holman, professor of medicine, told Kennedy that he supports the bill the Senator withdrew. He said that while he does not believe that recombinant DNA research is dangerous in itself, he warned it is part of the larger issue of the "increasing tolerance of science and technology, and it requires public debate."

At Stanford Kennedy also was briefed on the Stanford Health Project in Central California, a preventive effort to reduce the risk factors in heart disease.

Dr. John W. Farquhar, project director, told Kennedy that the federal investment in preventive medicine research should be expanded, with more funding for demonstration projects that stress health education.

Farquhar called for consideration of the formation of a federal institute of preventive medicine to carry out such programs.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

The case filed by Dr. William Hayden against Stanford University Hospital has been sent back to the Board of Hospital Directors for a hearing.

Santa Clara County Superior Court Judge J. Barton Phelps ruled Monday, Nov. 7, that the hearing must occur within 75 to 90 days, implementing new hearing procedures adopted by the hospital board on Oct. 4, 1977.

In addition, the court instructed the hospital board to consider certain educational and patient care criteria in resolving the issues raised by the case.

According to University officials, Dr. Hayden, a community radiologist, applied for membership on the medical staff of the hospital and requested privileges in the division of diagnostic radiology.

The privileges involved use of facilities generally used only by staff radiologists.

While his original application was still pending before the hospital board, Hayden filed suit, contending that the hearing procedures established by the board would not afford him a fair hearing.

The hospital consistently argued during the court proceedings that the matter should be returned to the board for further hearings.

The hospital will begin immediately to arrange for Hayden's hearing, University officials said today.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

CITY DESKS: If you plan to cover Senator Kennedy's speech, please contact the Medical Center News Bureau. Because of limited space in Fairchild Auditorium, we would like to know how many reporters will attend so that we can reserve seats.

FOR IMMEDIATE RELEASE

STANFORD –

Senator Edward M. Kennedy (D-Mass.) will speak at Stanford University Friday, Nov. 11.

Kennedy will discuss "Biomedical Research Policy" at 5:30 p.m. in the Sherman Fairchild Auditorium of the School of Medicine.

His visit, according to the Senator's office in Washington, is part of a fact-finding tour seeking citizen input related to health and science policies.

Kennedy is chairman of the Subcommittee on Health of the Senate. During his visit at Stanford Kennedy will hold meetings with faculty, staff, and students.

His talk is sponsored by the Robert Wood Johnson Foundation's Clinical Scholars Program at Stanford.

Clinical scholars are young physicians, skilled in clinical medicine, and pursuing added studies in nonbiological subjects. Among them are health care economics and organization, national health and science policy, and the relationship of science to the public.

Kennedy is the sponsor of a bill (S. 1217) which seeks to restrict the conduct of recombinant DNA research. At a speech recently in New York Kennedy said he had decided to withdraw the bill indefinitely and to replace it with a bill to extend the NIH guidelines for this research to the private sector for one year.

During this time a 50-member commission, privately sponsored, will examine the issue and report its recommendations for future legislation to the Congress.

Stanford Medical School officials expect considerable public interest in the Kennedy speech. Classroom M106 in the Medical School, equipped with closed-circuit television, will be used in the event of an overflow audience in Fairchild Auditorium.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Some blind people appear to live as if they were in an underground bunker, says a researcher at Stanford University Medical Center.

Dr. Laughton Miles, physician specialist at the Sleep Disorders Clinic and chief of chronobiological research at the Institute for Medical Research in Santa Clara, and his associates found that a blind man with a severe cyclic sleep-wake disorder had circadian biological rhythms which were longer than 24 hours and indistinguishable from the period of the lunar day (24.8 hours).

The study was reported in the October 28 issue of *Science* magazine.

Most people are geared to live 24-hour days, even though their natural biological rhythms are closer to 25 hours, says Dr. Miles.

"If you put them in an underground bunker and isolate them totally from time and social cues, most people will begin to follow a circadian rhythm of about 25 hours," he says.

"In this sense, our patient does not have an abnormal rhythm. It's as if he were in an underground bunker."

The patient, who was totally blind from birth, had difficulty gearing himself to a 24-hour time frame. At regular intervals he suffered from insomnia and excessive day-time sleepiness.

When he did not force himself to go to sleep and awaken the same times each day, he spontaneously adopted a sleep-wake cycle of 24.9 hours. Cyclic rhythms of the patient's body temperature, alertness, and performance on psychological tests also had 24.9-hour periods.

The researchers found that some of his body functions exhibited the same rhythmic pace. The serum level of cortisol, and levels of certain minerals excreted in the urine, rose and fell in cycles that were 24.9 hours long.

"Almost any bodily function undergoes rhythmic changes," says Dr. Miles, "and almost certainly will have a circadian rhythm with a rise and fall during each 24-hour period."

Biological rhythms may be determined by so-called biological clocks, primitive time-keepers which are thought to exist in every organism, says Dr. Miles. They may also be influenced by the environment, the rising and setting of the sun, the moon, and the earth's electromagnetic field, he says.

The researchers observed that the onset of sleep in their patient coincided with the local low tide at the time of the experiment.

The patient continues to have problems imposing a 24-hour day on his 24.9 hour natural clock, despite several forms of therapy, including hypnotic and stimulant drugs, says Dr. Miles.

Dr. Miles and his associates surveyed 50 people with varying degrees of blindness and found that 38 of them complained of some type of sleep-wake disorder. Forty percent of the disorders were described as cyclic or epidosic.

Dr. Miles cautions that the survey involved a selected group and was not necessarily representative of the total blind population. The incidence of cyclic sleep-wake disorders among the general population is totally unknown, he say.

"It is natural to assume that the disorder is somehow related to our patient's lack of vision," he says. "However, studies have shown that not all totally blind people have this disorder. Under certain circumstances it may also occur among sighted people."

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11/7/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder 101/5

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Stanley N. Cohen, professor of medicine and genetics at Stanford University School of Medicine, and Dr. Herbert W. Boyer, of the University of California, San Francisco, have jointly received the 1977 V.D. Mattia Lectureship Award for developing techniques for recombining DNA, the genetic material present in every organism.

The $5,000 award recognized "the discovery of an immensely powerful approach to the basic and applied molecular genetics of higher organisms—based on the development of procedures for transferring the genetic information of any organism into the DNA of another living organism."

In 1973 a team of scientists lead by Boyer and Cohen reported the first procedure for constructing biologically active recombinant DNA molecules outside of living cells.

The next year they reported the first successful propagation of animal genes in bacteria. The animal genes are carried into the bacteria by plasmids, where they become part of the bacteria's genetic make-up in subsequent generations.

Plasmids are circular bits of DNA in bacterial cells which can reproduce independently of cellular reproduction.

The researchers introduce new genes into the plasmids by using an enzyme to cut the DNA into fragments with sticky ends. Gene fragments from different organisms can then be "stuck" together, or recombined.

This technique has become a useful tool in the study of basic genetics and the mechanisms of genetic control. It may also enable researchers to construct new strains of bacteria useful in medicine and agriculture.

Specific genes may be introduced into common bacteria for the synthesis of insulin or antibodies, or to cure certain hereditary diseases. Recombination in plant cells may produce new, more desirable plant types.

The V.C. Mattia Lectureship was established in memory of the late Dr. Mattia, former president of Hofmann-LaRoche Inc. It is administered by the Roche Institute of Molecular Biology in New Jersey.

Among previous recipients is Dr. Paul Berg, Willson professor of biochemistry, who was recognized for "fundamental discoveries in protein synthesis" in 1972.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder 101/5

FOR IMMEDIATE RELEASE

STANFORD –

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11/7/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT Bill Snyder, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Skin cancers are being treated by heat in clinical trials conducted by Stanford University Medical Center researchers

"We think our results are encouraging," says Dr Jane Marmor, assistant clinical professor of medicine. "Heat certainly isn't a cure for cancer, but it may increase the effectiveness of other forms of treatment."

Marmor is conducting the trials with Dr. George M. Hahn, associate professor of radiology. Her remarks were based on a presentation given at the annual meeting of the American Society of Therapeutic Radiologists in Denver, November 3

Since the study began in March, 1977, 17 patients with recurrent cancers on the surface of their skin who had heavy radiation therapy in the past have been treated with heat produced by an ultrasound device.

The tumors, which are no larger than four centimeters in diameter, are heated to 42-44 degrees Centigrade (106-110 degrees Fahrenheit) with a special ultrasound device. Some shrinkage of tumors occurred in 50% of the patients after six 30 minute treatments, says Marmor.

Thirteen patients with surface cancer which had spread from elsewhere in the body were treated with heat and radiation The tumors were heated to 42-44 degrees Centigrade before and after irradiation. About 50% of the tumors regressed more than those which received radiation alone, she says.

The majority of patients with squamous cell carcinoma of the head and neck showed a favorable response to heat, says Marmor "This cancer is probably more sensitive to heat," she says.

Marmor says Hahn has found that hypoxic tumor cells, which are resistant to radiation, are more sensitive to heat than cells with an adequate oxygen supply The combination of heat and irradiation, she says, may be effective in killing both types of cancer cells.

The big problem will be developing methods of treating deep seated and large tumors safely and effectively, says Marmor Present methods limit treatment to surface tumors with a maximum diameter of four centimeters, she says

Another problem is that tumors do not have a uniform blood supply. The smaller the blood supply, the greater amount of heat delivered to cells in a region of the tumor. This means that temperature may vary over the whole tumor, says Marmor

The clinical trials began this year after the relative success obtained in animal trials. So far, 22 dogs and cats with spontaneous surface tumors have been treated with heat Approximately 50% of them had a positive response, she says

Again, animals with squamous cell carcinomas responded better than those with other kinds of skin cancers

Hahn and Marmor are now testing the potentiating effect of heat of chemotherapy in mice. Three common anticancer drugs, bleomycin, adriamycin, and nitrosourea, increase killing of cancer cells in tissue culture when heat is applied, says Marmor

The clinical trials and animal studies are part of a nationwide study, and are supported primarily by the National Cancer Institute

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11/2/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911
EDITORS: Photos available upon request
FOR IMMEDIATE RELEASE
STANFORD –

Correcting cosmetic defects, growing new skin for grafts in burn patients, repairing breaks in nerves-these are some of the applications of the purified collagen developed and now being produced by Stanford researchers.

"Collagen is the fundamental structural protein of the body in all higher organisms," says Dr. John R. Daniels, assistant professor of medicine. "It makes up 60% of all body protein and 98% of the cortex of bone."

Daniels and his associates have developed a technique for liquefying collagen from animals and stripping away the antigens, or protein markers, which elicit rejection when placed in other organisms.

The liquid collagen is injected under the skin to correct tissue contour defects such as severe acne scarring.

"The body accepts this material as itself," says Dr. Terry R. Knapp, one of the codevelopers. "Within two weeks it repopulates the implant with its own cells and feeds it with its own blood supply." The implant becomes living tissue indistinguishable from the skin around it, he says.

Knapp is a plastic surgeon practicing in Eureka, California, and also a member of the Stanford clinical faculty

So far 101 patients have been treated for tissue contour defects with injections of the purified collagen. In most cases, says Knapp, implantation has resulted in lasting and substantial correction of the defects.

This technique has been patented by Stanford University, and another patent is being sought for the purification process

In 1975 Daniels and Knapp joined with Ed Luck and Dr. Rod Perkins, who were also experimenting with purified collagen, and formed a corporation to finance the development of a whole family of collagen structures.

Luck, on leave from the University of Washington Medical School, and Perkins, a Palo Alto physician who specializes in diseases of the middle and inner ear, were working on the development of collagen structures which could be implanted in the ear One of these, an implantable ear drum, is now in clinical use.

The Collagen Corporation presently is purifying collagen on a large scale to be used in a widespread clinical trial of its effectiveness as an implant

Dermatologists and plastic surgeons in Palo Alto, San Francisco, Los Angeles, Ann Arbor, Michigan; Madison, Wisconsin; Syracuse, New York; and New York City will be involved in testing the implant, says Knapp.

Knapp and Dr Russel Pardoe, head of the burn unit at Santa Clara Valley Medical Center (SCVMC) and assistant professor of surgery at Stanford, also have used purified collagen as a dressing for burns.

Burns are dressed usually with grafts taken from the patient or with pig's skin. These dressings are rejected by the body because of foreign proteins they contain, and must be replaced every 2-4 days unitl a permanent skin graft is done, says Luck

The collagen membrane needs to be replaced only once prior to grafting because it is highly purified of all contaminants Limited clinical trials have shown it to be as effective as the patient's skin and more effective than pig's skin in preventing water loss and providing a protective barrier, says Knapp.

The dressing has been tested at SCVMC, St Francis Hospital in San Francisco, and Parkland Hospital in Dallas, Texas Further work is planned to develop a burn covering which could be retained permanently, and would become part of the patient's own skin, says Knapp

Dr. Ernest Kaplan, associate professor of surgery, has been participating in the clinical trials of the implanted collagen, and also is using collagen membrane as a template on which to grow new skin.

(more)

collagen in solution 2- 2- 2

Small pieces of the outer layer of skin, the epidermis, are placed on collagen membrane in a tissue culture medium. Because the collagen is similar to dermis, the deeper layer of skin, the epidermis patch grows onto it and forms a larger sheet of new skin.

Transplantation into the animals from which the epidermis patch was taken has been done without rejection, says Kaplan, and clinical trials are planned for patients.

New skin grown in this way could be used instead of grafts in patients with burns over large parts of their bodies, he says.

Joseph Rosen, fourth-year medical student at Stanford, and Kaplan are using collagen membranes to repair severed nerves in the legs of rats.

Nerves are surrounded by a membrane which contains collagen and which gives them structural support. Severed nerves are usually repaired by placing sutures through this membrane.

Rosen and Kaplan wrap a square piece of purified collagen membrane around the break in the nerve instead. The membrane sticks to the nerve like a piece of tape.

The extent of regrowth in nerve fibers after repair is measured by counting the number of fibers which fire, or display an electrical signal, when stimulated at various points on either side of the break, says Rosen.

In a normal, uninjured nerve, 100% of the nerve fibers within it fire when stimulated. If the nerve has been cut and sutured back together, only 50-60% of the fibers regain their capacity to fire. But if the severed nerve is wrapped with collagen membrane, nearly 90% of the function returns, says Kaplan.

The collagen membrane may aid nerve regrowth by preventing branching of nerve fibers, the in-growth of scar tissue, or by acting as a protective membrane, says Kaplan.

In addition, he says, "all sutures are foreign bodies that cause inflammation and scarring, both of which decrease nerve viability. The sutureless method prevents destruction of tissue due to inflammation."

Clinical applications of this work may be in improving the regrowth and therefore functionality of nerves which have been severed, says Rosen. Now, for example, suture of the severed medial or radial nerves in the wrist results in only partial recovery of use in the hand.

Kaplan and Rosen recently were awarded a two-year grant from the National Institutes of Health to continue their study.

Since every tissue in the body is either made out of or supported by a collagen structure, there are other applications for purified collagen. Perhaps one day heart valves, tendons, membrane surrounding the brain, parts of the eye, cartilage, and even bone will be made from purified collagen, says Knapp.

The bionic man is theoretically possible, he says.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Paul Hofmann, director of the Stanford University Hospital and Clinics, plans to leave his post to become administrator and chief executive officer of Emory University Hospital in Atlanta, Georgia.

Hofmann, 36, also will be an associate professor in the department of preventive medicine and community health at Emory medical school

The appointments are effective January 1, 1978.

In a letter to Peter J. Levin, associate vice-president for medical affairs, Hofmann said he was leaving Stanford "with considerable ambivalence . . . My five-and-a-half year association has been a very challenging and rewarding experience."

During Hofmann's tenure Stanford completed planning and construction of a new hospital wing and hemodialysis center. It developed plans for major renovation of the nursery to provide needed space for the comprehensive neonatal services of the unit. It initiated a chaplaincy program, and a Northern California-wide training program for paramedics.

Hofmann also was responsible for starting a management systems engineering program credited for improving productivity and reducing costs

In 1976 Hofmann was presented the Robert S. Hudgens Memorial Award of the American College of Hospital Administrators "as the outstanding young hospital administrator of the year."

Hofmann received his bachelor of science and master of public health degrees from the University of California at Berkeley

He joined Stanford as deputy director in 1972, becoming director of the Hospital and Clinics in 1974. Prior to his appointment he was the associate administrator of San Antonio Community Hospital in Upland and a faculty member in hospital administration at UCLA

At Stanford Hofmann also taught in the department of family, community, and preventive medicine

As an administrator Hofmann has been concerned with the legal and ethical dilemmas of modern hospital care. He was a strong advocate and supporter of the Natural Death Act enacted by California in 1976

He also has been active in state and national hospital organizations, including the chairmanship of the American Hospital Association's council on research and development

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Peter J. Levin, formerly an associate commissioner in the Department of Health, New York City, is the new executive director of the Stanford University Hospital and Clinics.

The appointment was announced recently by Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine.

Levin came to Stanford in 1977 as an associate vice-president for medical affairs, a position he will hold in addition to his new duties.

Levin is a 38-year-old Harvard graduate, with a masters degree in public health from Yale University, and a doctorate in hospital administration from the Johns Hopkins School of Hygiene and Public Health.

Before becoming associate health commissioner in New York, he served as executive director of New Haven Health Care, Inc., and acting executive director of the Bronx Municipal Hospital Center, New York.

He also taught at Albert Einstein College of Medicine, New York University and Yale.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Dr. Roger D. Kornberg has been appointed professor of structural biology in the Stanford University School of Medicine.

His appointment, announced Monday, Dec. 19, by Dr. Clayton Rich, vice-president for medical affairs and dean of the Medical School, will be effective Jan. 1.

Kornberg, 30, is currently assistant professor of biological chemistry at Harvard Medical School.

His father, Dr. Arthur Kornberg, is Merner professor of biochemistry and winner of a Nobel prize for DNA research in 1959.

Dr. Roger Kornberg is studying the expression of genetic information contained in the long, helical molecules of DNA. DNA exists in the cells of organisms as a complex with proteins. The complex, called chromatin, permits packaging of DNA molecules into a small area, and prevents them from becoming entangled when they are reproduced.

In 1974 Kornberg proposed a three-dimensional model of chromatin structure which has now become widely accepted, according to Dr. Lubert Stryer, chairman of the structural biology department.

His studies may help scientists understand how the chromatin structure and the proteins which bind the DNA affect the expression of genes.

A native of St. Louis, Mo., Kornberg received his B.S. in chemistry from Harvard (1967) and his Ph.D. in chemistry from Stanford (1971). He did postdoctoral work at the MRC Laboratory of Molecular Biology in Cambridge, England, before coming back to Harvard. In 1973 he was a junior fellow of the Society of Fellows of Harvard University.

Kornberg has authored numerous papers, and is a member of the editorial board of the *Journal of Cell Biology.*

His long-range research interest is cell ultrastructure and morphogenesis, the growth and formation of cells.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

EDITORS: Photo available if not included with story.

FOR IMMEDIATE RELEASE

STANFORD –

Children will be allowed to visit their newborn brothers and sisters in the maternity unit at Stanford University Hospital beginning Christmas Eve, Dec. 24.

Under the supervision of a responsible adult, siblings of the newborn may visit with both mother and baby during regular visiting hours, 6:30 to 8 p.m. daily.

Previously, children under 16 years could only visit outside the maternity unit in the solarium.

The new policy allows children to view the newborn through the nursery window, and also to visit with the mother and newborn in the mother's room.

The Hospital Medical Board recently approved a three-month trial period for the practice. According to Dr. William Aronson of Palo Alto, chairman of the Hospital's Perinatal Care Committee, the visitation policy may become established practice after the initial evaluations.

The Birth Action Council, a group of parents in the community who have given birth at Stanford during the past year, consulted with the Hospital committee to draw up the new policy.

Suzanne Arms of that group noted that the parents worked as a resource group, and see the new policy as "a very positive move to meet the normal, spontaneous needs of healthy mothers and babies."

The new rules call for a responsible adult to accompany and supervise the child at all times. Parents will be responsible for the safety of the newborn while siblings are present.

Rules also call for children to wash their hands before touching the infant.

According to Dr. Aronson, "it is essential that parents make sure that children with infections, such as colds, coughs, or those who have been exposed to communicable diseases, do not visit the mother or baby."

Dr. W. Leroy Heinrich, chairman of the Department of Gynecology and Obstetrics, notes that "family bonding around the newborn is one of the most important considerations in the new practice. . .sibling visits confirm that parent-child relationship at a time when the newborn may create anxiety for the other children in the family."

Dr. Heinrichs says the policy is consistent with the increased interest new parents are expressing in relating pregnancy, birth, and parenthood in terms of the whole family.

In addition to children's visits, the Medical Board also has approved rules that will allow fathers to assist at Caesarean deliveries.

Ms. Arms, author of "A Season to be Born," and "Immaculate Deception," calls the new policy "a recognition of that fact that all births are primarily family events." Sibling visits, she says, "are an answer to problems raised by leaving the other children at home who may feel abandoned."

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12/20/77 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

New state guidelines for teaching doctors about human sexuality are being opposed by officials at Stanford University School of Medicine.

The concerns focus on whether a state agency should draw up detailed guidelines for teaching human sexuality in medical schools.

While agreeing that physicians should have adequate instruction in the subject, Dr. Clayton Rich, dean of the Medical School and vice-president for medical affairs, objects to the specific teaching standards proposed by the Board of Medical Quality Assurance of the Division of Licensing.

"These proposed standards constitute a fundamental departure from the principle of academic self-determination which traditionally has afforded universities the right to establish academic policy free from governmental intervention," says Dr. Rich.

Such detailed standards are not listed for other required subjects, like pediatrics or surgery.

The legislation, AB 4179, was introduced by Assemblyman John Vasconcellos and signed into law in 1976.

All medical schools in California already teach the subject, and there is general agreement about the importance of such a course. But there has been widespread concern over the way the legislation is being implemented.

Several other medical schools, including the University of Southern California, Loma Linda, UC-Los Angeles, UC-San Diego, UC-San Francisco, and UC-Davis, have written to the Division of Licensing expressing objections to the proposed guidelines, but concurring with the intent of the law.

These guidelines require at least one identifiable and separate course on human sexuality, taught by a multidisciplinary faculty. The course must be at least 30 hours long, cover a list of specific topics, and include explicit sexual material. At the end of the course the student should be able to take a sexual history and develop a patient management plan.

The Stanford curriculum meets almost all these standards, and has pioneered in developing teaching in the field, says Dr. Michael Jacobs, assistant professor of medicine. He is instructor of the course, "Sexual Matters in Medical Practice." Nevertheless he objects to a state regulatory agency proposing standards in such detail, traditionally a matter left to the faculty of the school.

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"As a teacher of a relatively new subject, I object to an agency telling me how to teach, especially when the standards are based only on what has been done previously in the field," says Jacobs.

"It's like taking a redwood sapling and making it a bonsai," he comments. "The requirements would constrain future development of the course, for example, by precluding development of a single competent faculty."

At the present time Stanford is examining the possibility of legislative relief from the requirements, possibly by substitute amendments. In letters to several legislators, Dr. Rich has supported the inclusion of human sexuality in the curriculum, but he has objected to having a regulatory agency set forth in such detail any part of that curriculum.

He notes that "if the state is prepared to regulate the details of the curriculum in one area, it can and may do so in others. This would establish a precedent and possibly a trend that seriously threatens the quality of all the public and private universities in this state."

A less drastic course, says Rich, may achieve the objectives intended by the law, and make extensive state requirements unnecessary.

In addition to the specific course on sexuality, Stanford offers a variety of instruction in the subject, including segments of courses in physiology, anatomy, embryology, physical diagnosis, and others. Portions of many clinical clerkships cover topics like counseling and therapy for sexual dysfunctions, pharmacologic causes, and physical disability.

Jacobs' course is offered every other year to first- and second-year medical students by the Division of General Internal Medicine. A popular course, it has received high ratings in evaluation questionnaires, and attracts more than 100 students, plus their spouses or guests.

Guest speakers include psychiatrists and sex therapists, pediatricians, nurses, social workers, and others. Representatives of alternative sexual life-styles are invited to speak, including prostitutes, homoxesuals, lesbians, sadomasochists, and transsexuals.

Jacobs notes that earlier this year medical schools formed a consortium to pool resources for reviewing the teaching of the subject. That task force, he says, has been a positive outgrowth of the early concerns about adequate instruction.

He notes that a high percentage of the state's physicians receive their training in medical schools in other states, and then come to California. Specific curricular requirements, he says, might compromise the ability of non-California graduates to be licensed in the state.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD--Five university presidents Thursday, Dec. 8, in a joint statement praised Congress for acting "decisively to restore our autonomy in the university admissions process."

The statement was issued after the House of Representatives yesterday gave final passage to a bill repealing the so-called Guadalajara clause of the 1976 health manpower law.

The bill was approved unanimously and sent to the President for his expected signature.

"We regard this explicit recognition of the principle of academic freedom in university admissions as a reaffirmation of the basic values that have made American universities strong and independent," the statement said.

Previously the law required medical schools to guarantee slots for Americans transferring from foreign medical schools. The students were to be admitted under an allocation formula set up by the secretary of the Department of Health, Education and Welfare without consideration of their academic qualifications.

Medical schools were to admit such students as a condition of receiving capitation or federal educational support.

Under the new law, medical schools are now asked to give assurances that they will seek to increase their third-year enrollment by five percent, but the increase need not come solely from foreign transfer students or from any other particular source.

The schools are free to apply their own admission criteria in evaluating applicants to achieve increased enrollment.

In addition, the new law contains a provision inserted at the request of Stanford and other California medical schools by Sen. S.I. Hayakawa, which insures that students will be eligible for federally insured loans regardless of their school's eligibility for capitation support.

The university presidents who issued the statement are Terry Sanford, Duke; Derek Bok, Harvard; Steven Muller, Johns Hopkins; Hanna Gray, Yale; and Richard W. Lyman, Stanford.

It said in part: "We are pleased that Congress has acted to repeal the provisions of the Public Health Service Act that would have made receipt of capitation funding dependent upon the schools' willingness to admit an unknown number of students...without regard to their academic qualifications....

"For the past year we have voiced our strong objection to these provisions as a violation of a university's basic academic freedom: the right to apply its own admission criteria, including academic requirements in selecting its students.

"Despite the financial costs of being declared ineligible for capitation support, we then notified appropriate members of Congress that, while we were prepared to take steps to increase our enrollments of qualified transfer students, we could not abdicate our responsibility to determine those qualifications.

"Congress has now responded positively to those objections.... The schools are free to apply their own admissions criteria in evaluating applicants and in attempting to achieve the increased enrollment."

Last month 14 schools, including Stanford, were notified by the Bureau of Health Manpower that they would not be included in the capitation program as previously authorized. The loss of funds to Stanford would have been more than $400,000 next year, and more than $11 million for the 14 schools.

Under the new law it is expected that Stanford as well as other medical schools will reapply for funds.

Mailed Thursday, December 8, 1977 ###

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Thomas J. Fogarty, Palo Alto heart surgeon, has been elected president of the medical staff at Stanford University Hospital.

Dr. Fogarty was elected to a two-year term by mail ballot of the active medical staff, according to Dr. Lawrence Crowley, chief of staff. The new post of president was adopted in accordance with new bylaws of the medical staff.

The president will serve as the representative of the medical staff to the Medical Board, to the chief executive officer and the Hospital Board of Directors. He will preside at medical staff meetings, serve as a member of the Medical Board, and participate in the joint conference committee, a forum for discussion of Hospital policies and practices.

Dr. Fogarty has been in the private practice of cardiovascular surgery since 1973.

He received his M.D. degree from the University of Cincinnati College of Medicine in 1960, and served internship and residency at the University of Oregon Medical School. After a post as clinical associate at the National Heart Institute in Besthesda, Md., he was a research fellow, chief resident and instructor in surgery at Stanford.

He has served as assistant professor of surgery, and assistant clinical professor of surgery at Stanford.

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Mailed Monday, December 5, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

Editors: Photo available on request if not included with story.

STANFORD--There is an unusual school at Stanford Hospital.

Sponsored by the Palo Alto Unified School District (PAUSD), the school meets the educational needs of hospitalized children.

Pupils in the program range from kindergarten through sixth grade, with an occasional junior or senior high school student.

Length of stay in the program varies from several days to several months, but the average is about one week, according to Rosemary Clark who has been the teacher at the Stanford hospital school for more than four years. An average of 10 children are in the program at any one time.

Mrs. Clark tries to meet each child's individual needs by maintaining contact with the child's regular teachers. Conferences with attending nurses keep her informed about the physical condition of the child. If the child cannot come to the classroom, she goes to the student's bedside.

To motivate hospitalized children is a challenge, notes Mrs. Clark. She uses a wide variety of educational tools such as games, painting and drawing, music, filmstrips, tape cassettes, puzzles and cards.

The hospital teacher, who must have a special credential to teach orthopedically handicapped or health-impaired children, is hired by PAUSD. Secondary school teachers may be called upon to tutor children in math, sciences, and other specialized subjects.

The hospital school at Stanford was started in 1968 by Dr. Catherine Leland, chief resident in pediatrics. By providing children with an actual school room where they could go for their lessons--even if they had to be wheeled in on a gurney,--Leland hoped to lessen the trauma of hospitalization and create a link between the hospital and the outside world.

PAUSD offers a similar program at Children's Hospital at Stanford, an independent center affiliated with the medical school. Three full-time teachers work with patients being treated for chronic illness. Because of the nature of their disabilities, these children may be hospitalized several times a year. Additional teachers are called upon, when needed.

Attendance at the hospital schools is not required, but most children want to come, says Katherine Croke, former coordinator of the PAUSD department of education for physically handicapped children.

"Children fear being left behind--that their classmates will be going on without them," said Mrs. Croke. "Knowing that they are keeping up with their class provides a tremendous

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psychological comfort for the children.

"The very act of going to school enables a child to keep a healthy, active and optimistic image of himself."

The pediatrics department at Stanford hospital also includes a recreation therapy program especially designed to alleviate the trauma that can occur through hospitalization and illness.

"Play is a vital part of a child's life. The sooner children return to normal activities, the sooner they get well," says Betty Lovelace, pediatrics recreation director. "By recognizing the needs of the healthy part of each child, the school and recreation staffs work closely together to provide psychosocial support for each patient."

Children are encouraged to go to the playroom--whether by walking, in wheelchairs, or on their beds--so that they can participate in activities normal for their age group and interact with other children.

Special activities may be devised to meet the child's needs. If leg muscles need strengthening, the child takes part in kick-target games. If a youngster is in traction and unable to move, substitute mobility is designed. A basketball hoop may be attached to the end of his bed and the ball tied to a string to provide independent retrieval. Children who require a special diet learn to prepare foods and plan party refreshments. All activities are designed to increase the child's self-confidence and independence, even in the face of a new disability, notes Lovelace.

Prior to admission, children are encouraged to attend a special show, "A Visit to the Hospital". Opportunities are provided to explore other parts of the hospital and to handle equipment.

After children enter the hospital, a miniature toy hospital, complete with doctors, nurses, and an operating room, helps prepare them for surgery.

"Anxiety is a normal reaction to stress. We find that children who are well-prepared are better able to cope with each aspect of the hospital experience," says Lovelace.

To alert staff to the children's needs, young patients are asked by the teacher to write or dictate a story about themselves. These are a few examples:

"There is a tube coming from my heart which is constricted. I am scared that I am going to have a lot of pain."

"Having shots is the worst thing about being in the hospital."

"The hospital is scary because you don't know what is going to happen."

"I wish I could stay awake so I could see what is inside of me."

"I came ...to have my heart fixed. Sometimes I get tired when I run. Sometimes I get tired when I jump rope. When I walk to school I get very tired."

"It's nicer to be home than any other place, especially the hospital."

Mailed Thursday, December 1, 1977 ###

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD--Patient occupancy at Stanford University Hospital during the last three months is 10 percent lower than the level anticipated in the budget, according to Paul Hofmann, hospital director.

Lower occupancy means more people are either staying out of the hospital or getting out more quickly, but it creates problems for administrators who must also be concerned with the economic well-being of the hospital.

"On the one hand, we are pleased with the general indicators that suggest that people are healthier and in less need of hospitalization," says Hofmann. "On the other hand, we must be concerned economically as a major employer."

Beds used for patient care by members of the Medical School faculty are 84.2 percent occupied. However, only 58.1 percent of the beds reserved for patients of community physicians presently are in use.

As a result, the hospital is taking steps to reduce the economic impact of decreased patient occupancy. A 32-bed unit in Hoover Pavilion was closed October 21, and the staff assigned to other units.

Hoover Pavilion is located across Quarry Road from the Stanford Shopping Center. It supplies 177 of the 643 beds in the hospital. Patients under the care of community physicians use 150 of the Hoover Pavilion beds.

According to Hofmann, another unit in Hoover Pavilion will be closed in anticipation of the decrease in admissions which usually occur during the holiday season.

In addition, staff are being encouraged to take vacation time and absent time. New and vacant personnel positions are being left unfilled unless needed by increased workload.

The drop in occupancy, however, has not relieved the demand for use of operating rooms, says Hofmann. There are 14 operating rooms in the main hospital and two at Hoover Pavilion available to faculty and community physicians.

The problem stems from an increase in patients receiving surgery who require more acute care, he says.

Other hospitals in the Bay Area, including Marin General Hospital in Marin County and University of California, San Francisco, Medical Center, have also experienced a decline in occupancy over the past three months.

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Seven percent fewer beds were occupied at Peninsula Hospital in Burlingame during this period than were expected from last year's figures, according to hospital administrator Charles Mason.

"Doctors at the Menlo Medical Clinic in Menlo Park have told me they're not hospitalizing as many patients as they have in the past," says Henry Burget, clinic administrator. Most of the physicians at the clinic hospitalize their patients at Stanford.

Community physicians who are members of the medical staff at Stanford hospital can use up to 370 beds for care of their patients, according to the 1968 contract by which Stanford University bought Palo Alto's share of the hospital. Priority of admissions to these beds is given to patients who live in Palo Alto.

The difference between occupancy of beds reserved for community physicians and those used by the faculty reflects differences in the conditions of their patients and length of stay in the hospital, says Hofmann.

Many faculty members treat specialized, acute disorders in patients referred by other physicians, he says. These patients tend to require more complex diagnostic and therapeutic procedures, and usually stay longer in the hospital than patients treated by community physicians.

Hofmann cites several reasons for the decrease. With the advent of self-care, more people are taking care of themselves, rather than going to physicians.

Improvements in medical care, particularly in the use of antibiotics, also have reduced the need for hospitalization for a variety of conditions, such as pneumonia.

Once admitted to the hospital, patients stay for shorter lengths of time. The average length of stay at Stanford is one week. This may reflect actions of the concurrent review committee of the hospital, a group of physicians on the medical staff who evaluate admissions and length of stay, says Hofmann.

Increasingly, insurance is covering medical procedures performed on an outpatient basis. Previously, these procedures were not covered unless they were done in the hospital.

"The cost of health care is high," says Hofmann. Most patients have some sort of insurance, but few have total coverage. "Many people postpone going to the doctor."

Community surgical centers, which perform outpatient surgical procedures, can provide a more efficient, less costly alternative to inpatient admission in a hospital, says Hofmann.

Hofmann says the increased emphasis on reducing expenses at Stanford hospital is designed to continue providing a cost-effective service without compromising the quality of medical care.

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Mailed Monday, December 5, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Patients who undergo coronary artery bypass surgery may experience symptoms of coronary artery disease again several years later, according to a recent Stanford study.

An earlier study of 350 former Stanford bypass patients showed that recurrence of symptoms is not uncommon. In a recent sample of 19 patients, representative of the larger group, studied six years after surgery, progression of disease was found in both bypassed and unbypassed vessels, accounting for the recurrence of symptoms.

Despite the recurrent angina, or chest pain, "most patients still retained some symptomatic benefit from their prior surgery," say the researchers. "Onset of these symptoms was usually gradual and it tended to occur late in the postoperative period, with an average onset of 54 months after surgery."

Authors of the report are Drs. Edward W. Robert, Diana F. Guthaner, Lewis Wexler, and Edwin L. Alderman of the division of cardiology and cardiovascular radiology at Stanford Medical Center. Supported in part by a grant from the National Institutes of Health, the study was reported at the annual meeting of the American Heart Association this week in Miami Beach, Fl.

When coronary arteries are narrowed, blood flow to the heart is reduced, producing symptoms such as angina pectoris (a type of chest pain long associated with coronary artery disease).

The bypass surgical technique, developed in 1968, involves removing a vein from the leg and attaching it to the aorta and the coronary artery beyond the obstruction. This bypass graft then increases the blood flow to the heart, relieving the angina.

Six years after surgery, 86 percent of the coronary artery grafts were still open in patients in the smaller study sample.

But more than half of the 19 patients showed progression of disease in either major unbypassed vessels or beyond the point where the bypass graft was made.

The authors conclude that the recurrent angina is more commonly associated with the progression of disease, rather than with failure of a graft.

All of the 19 patients noted improvement in their status one year after surgery. Five years later, only nine patients remained free of symptoms and the remainder reported moderate or severe angina.

The researchers reported that "despite the high incidence of deterioration, the symptoms were generally less severe than they had been before surgery...no patient considered himself clinically worse. The recurrent angina generally developed gradually after a long, relatively symptom-free, interval."

The physicians commented that the disease progression reflected risk factors that had originally caused the narrowing of the coronary arteries. More attention needs to be paid to such factors as smoking, hypertension, and fat consumption, they said. ### Mailed Thursday, Dec. 1, 1977

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

United Stanford Employees (USE) has withdrawn from union representation elections scheduled Feb. 2-4 at Stanford University Hospital and Clinics.

However, the election involving 33 licensed vocational nurses (LVNs) at the Hospital and Clinics will proceed as scheduled unless the California Licensed Vocational Nurses Association (CLVNA) decides to withdraw.

According to Gary A. Mecklenburg, administrator of Stanford Hospital and Clinics, the National Labor Relations Board (NLRB) granted USE's request to withdrawn from the elections, which would have involved approximately 1,200 service, technical and patient care employees, and pharmacists. These employees would have voted to determine whether or not they wished to select USE as their exclusive bargaining representative, or no union at all.

In the LVN election, LVNs will be able to choose between USE, the CLVNA, or "neither"—meaning no union.

Mecklenburg said in a letter distributed to Hospital and Clinics employees Tuesday, Jan. 31, that USE will now be prevented from petitioning for another election for service, technical and patient care employees, and pharmacists for at least six months.

In its newsletter also distributed to Hospital employees, USE claimed the elections were "postponed because of joint actions of Stanford and the NLRB."

USE, which is Local 680 of the Service Employees International Union, AFL-CIO, also claimed in the newsletter that a recent decision by NLRB regional director Michael Taylor for the elections to proceed did not provide the union with at least 30 days notice of the election. USE says this violates NLRB rules.

USE further claims that Stanford failed to deliver names of the voters until Jan. 16—three days late by NLRB rules. The NLRB rejected these contentions, however.

The elections which were scheduled this week were given the green light by the NLRB in early January.

According to Priscilla Wheeler, associate staff counsel at Stanford, the withdrawal by USE "brings an end to legal proceedings which have been ongoing between USE and Stanford since similar elections were held in 1975."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--"Rape" will be the subject of the next lecture Thursday, Feb. 2, in a series on women and their health being presented at Stanford University Medical School.

The winter quarter series, which is being held on Thursdays at noon in Room M-104, is open to the public free of charge.

Barbaraterry Kurtz of the Santa Clara County Mental Health Department in San Jose will present the Feb. 2 lecture.

The lecture series is being sponsored jointly by the Department of Family, Community and Preventive Medicine of Stanford Medical School and the Stanford Center for Research on Women. It is being coordinated by Dr. Netta Grandstaff, senior research associate, and Leona McGann, assistant professor in Family, Community and Preventive Medicine.

According to Grandstaff, the series is designed to inform women and help them deal with health matters that may directly effect them. Lectures to date have dealt with alcohol abuse, psychotrophic drugs and menopause.

Future lectures include:

Feb. 9, "Battered Women," by Susan Hanks, a social worker in private practice in Oakland.

Feb. 16, "Childbirth: Alternatives in Care," by Margaret Bean, who is with the Mid-Wife Alternative Birth Center. She is also on the nursing staff at San Francisco General Hospital and in the Department of Obstetrics at the University of California in San Francisco.

Feb. 23, "Breast Care: Risk Factors for Breast Cancer," by Helen Crothers, assistant director of service and rehabilitation, California Division of the American Cancer Society.

March 2, "Female Sexuality" (lecturer to be announced).

March 9, "Aging Women and Health Care," by McGann and Dr. Halsted Holman, Guggenheim Professor, Department of Immunology, Stanford Medical School.

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Mailed Thursday, January 26, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

A new division of gerontology has been established in the Department of Medicine at Stanford University Medical Center.

Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine, made the announcement last week.

The division will be directed by Dr. Gerald M. Reaven, currently head of the division of endocrinology.

In 1975, 10.5% of the population of the U.S. was over 65 years old. That figure may reach nearly 12% by the year 2000, according to the U.S. Bureau of the Census.

As the number of older people increases, so does the need to attend to medical problems which are unique to their age group. However, according to the American Medical Association, only 27 medical schools in the U.S. report they offer teaching programs in geriatric medicine.

"The need for programs of this type is overwhelming," says Reaven, "but the response of medical schools so far has been inadequate."

Stanford's program combines research and teaching in both geriatrics and gerontology, he says. It will be affiliated with the Geriatric Research, Education, and Clinical Center (GREC) at the Veterans Administration Hospital in Palo Alto.

"Geriatrics focuses on the clinical problems of the older patient," says Reaven, who directs GREC. "Gerontology is the study of aging, as biological, sociological, and psychological processes."

The division will conduct clinical and basic biomedical research. Through a clinical service at the VA Hospital, it will also examine the problems of health care delivery among the aged.

Faculty will be recruited from various departments, such as psychiatry, pathology, and medicine.

Reaven, 49, has been teaching at Stanford since 1960. His major research interests include carbohydrate and lipid metabolism as it relates to diabetes and atherosclerosis.

One of his studies concerns the deterioration of glucose tolerance with age. Glucose tolerance is the ability of the body to absorb sugars from the blood. Other studies have related this phenomenon to the increased incidence of diabetes and heart disease among older people.

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1/23/78 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD--An international symposium to commemorate the achievements of Claude Bernard, a 19th century French physiologist, physician, and founder of modern experimental biology, will be held at Stanford University Feb. 10-12.

The three-day session, sponsored by the National Institutes of Health (NIH) and Stanford's Department of Physiology, will be held in Fairchild Auditorium at Stanford Medical School beginning Friday (Feb. 10) at 4 p.m.

Among the participants will be Francois de Laboulaye, French ambassador to the United States, and Nobel laureates Andre Cournand, Columbia University; Arthur Kornberg and Joshua Lederberg, Stanford; and Roger Guillemin, Salk Institute. President Richard W. Lyman of Stanford will welcome the guests at the opening session.

A number of leading scientists in the fields of biochemistry, biology, genetics, medicine and physiology will participate. They include Jean Bernard, University of Paris; J.P. Changeux, Pasteur Institute; Julius Comroe, University of California, San Francisco; Jack Orloff, National Heart Institute; Jonas Salk of the polio vaccine fame; Dan Tosteson, dean of Harvard Medical School, and others.

"Claude Bernard was one of the greatest figures in the history of experimental physiology and medicine," commented Dr. Eugene D. Robin, acting chairman of Stanford's Department of Physiology and organizer of the meeting.

"The purpose of the conference," he said, "is to review Bernard's accomplishments, to provide links between his work and modern developments in regulatory biology, and disseminate this knowledge."

The conference will consist of presentations by invited speakers. They will discuss their own work and review the "state of knowledge" in research areas where Bernard's contributions have been most significant--notably the internal regulatory mechanisms by which living things respond to changes in the environment. Among these are fluid and electrolyte balance, acid-base regulation, temperature regulation, and metabolic controls.

Bernard's most original contribution to theoretical biology was his concept of the "milieu interieur," the internal environment, said Robin. "He conceived of this as the blood, and much of modern medicine is based on studies of this fluid."

An important component of the symposium will be a review of the historical period--the cultural and scientific milieu--in which Bernard lived.

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The conference will also focus on a current problem in regulatory biology--the relation between the various levels of organization at which biologic regulation occurs, and how these levels may be studied.

"Bernard's contributions," Robin noted, "are pertinent to many areas of current research and culture. The conference will serve as a link between the history of physiology, its present state and future directions."

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The symposium is open to the medical community, scientists and students. It is free of charge, but advanced registration is required. Attendance applications should be submitted by Jan. 25 to Dr. Eugene Robin, Department of Medicine, Room C352, Stanford University School of Medicine (Tel. 497-5956).

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Mailed Monday, January 23, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

EDITORS: Photos available if not included with release.

FOR IMMEDIATE RELEASE

STANFORD –

New evidence that narcolepsy, a chronic sleep disorder, can be inherited in dogs has been reported to the American Narcolepsy Association (ANA) by Dr. William C. Dement, director of the Stanford Sleep Research Center.

The announcement was made last week at Stanford University Medical Center, during the world premiere of a film of narcolepsy, "Keep us Awake," presented by the ANA.

"All offspring of a pair of narcoleptic dogs have exhibited unequivocal signs of the disease," said Dement, "promising us a tremendous breakthrough in the search for the causes of narcolepsy."

Dement said the "reliably reproducing strain" of canine narcolepsy will provide a base for future observation and research.

Narcolepsy is a disease of REM (rapid eye movement) sleep which afflicts humans as well as dogs. Approximately 250,000 Americans have the disease, according to the ANA.

The disease is characterized by continuous sleepiness, and strange seizures of total paralysis, called cataplexy, said Dement.

"Very little is known about the cause of narcolepsy," he said, "and there presently is no cure for it."

In 1972 the disease was found to occur in dogs. Dement and his colleagues published their first report on canine narcolepsy a year later. Sincy then the Sleep Research Center has conducted a nationwide search for dogs afflicted with the disease.

The parents of the narcoleptic pups are two Doberman pinschers, Dobie and Bettina. Bettina gave birth to a litter of seven pups in December, 1977. Within six weeks all seven showed signs of narcolepsy.

"The development of narcolepsy in these pups is solid evidence of the genetic origin of the disease," said Dement.

Dement said narcolepsy may be the result of one or more recessive genes. That would explain why narcoleptic dogs, when mated to dogs which do not have the disease, do not produce narcoleptic offspring, he said.

Dement said he plans to test this theory by performing backcrosses, mating a normal son with his narcoleptic mother.

The breeding program is being directed by Dr. Luigi Cavalli-Sforza, professor of genetics at Stanford.

The narcolepsy studies have been supported by a grant from the National Institutes of Health.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

ADVANCE FOR AM PAPERS, THURSDAY, JANUARY 19, 1978.

STANFORD –

Prof. Joshua Lederberg, Nobel Laureate and chairman of the department of genetics at the Stanford University School of Medicine, has been elected president of Rockefeller University, New York City.

He will succeed Dr. Frederick Seitz, who retired in 1976 but has continued in office until a search committee could recommend a successor.

Lederberg, 52, will be the institution's fifth president, a Rockefeller University announcement said Thursday, Jan. 19.

The announcement said Lederberg is one of the band of pioneers who have laid the foundation for developing the genetics of microorganisms into a comprehensive field of research.

Patrick E. Haggerty, chairman of the Rockefeller University board of trustees, also praised Lederberg for his leadership qualities, and "deep concern for strengthening communication between science and the society it serves."

Lederberg and his family plan to move to New York Sept. 1.

Rockefeller University is devoted exclusively to research, postdoctoral training, and graduate education primarily in the biological and biomedical sciences and the related behavioral, physical, and mathematical sciences.

Founded in 1900 by John D. Rockefeller, Jr., as the Rockefeller Institute for Medical Research, it has played a key role in bringing the U.S. to the forefront of modern medical sciences.

Lederberg, a native of Montclair, New Jersey, and a product of New York City public schools, Columbia University, and Yale, won a 1958 Nobel Prize "for studies on organization of the genetic material in bacteria."

He taught for 12 years at the University of Wisconsin before coming to Stanford School of Medicine in 1959. At Stanford he serves as Joseph D. Grant professor of genetics and director of the Lt. Joseph P. Kennedy, Jr. Laboratories for Molecular Medicine, dedicated to basic research in genetics, developmental biology, and neurobiology.

He also has related responsibilities for research programs in instrumentation, computers for laboratory use and in study of artificial intelligence, and the detection of planetary life.

Lederberg is a member of the National Academy of Sciences.

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END ADVANCE FOR AM PAPERS, THURSDAY, JANUARY 19, 1978.

1/18/78 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--A new treatment center for cancer patients will be formally dedicated at Stanford University Medical Center in ceremonies Saturday, Jan. 21.

The Debbie Probst Oncology Day Care Center, which has actually been open and receiving patients since last fall, is located on the ground floor of Stanford University Hospital.

Director Dr. Saul A. Rosenberg says the center is helping Stanford provide "the most modern cancer care in a manner that is comfortable for the patient yet safe and efficient. Our concern is not only for the patient's survival but also the quality of survival."

The oncology center is named after the late Debbie Probst, a former patient and donor. It more than doubles the present cancer clinic facilities at Stanford.

The center, which cost approximately $300,000 including equipment, was funded by numerous individuals and organizations, including a grant from the National Cancer Institute.

Dr. Charlotte Jacobs, who is chief of the oncology center with responsibilities for clinic services, says the center has been specially-built with the cancer patient in mind.

"Our center is unique in the atmosphere we have created for the comfort and pleasant surroundings for the patient," she said. "This includes treatment rooms for long-term intravenous infusions, which normally in the past would have required hospitalization."

The oncology center also has a television monitoring system for regulating patient flow, patient blood counts and future appointments, television sets in some treatment rooms and a stereo system, she said.

Thirteen patients can be seen simultaneously in the new oncology center, which also has two special injection rooms, two long-term holding rooms and seven examination rooms.

The unit, which contains 5,000 square feet of space, also has its own pharmacy, where the drugs for treatment are prepared, a hematology laboratory, which does all of the blood work on patients, a social worker's station and patient records room.

Treatment at Stanford, which involves drugs, alone or in combination with surgery and radiotherapy, has been found to be successful in the management of certain malignant diseases, Rosenberg noted.

Last year the Division of Oncology, which handles chemotherapy, had approximately 7,000 patient visits. That number is expected to double with the opening of the Oncology Day Care Center.

Previously, the oncology clinic had to share quarters with other medical specialties at Stanford.

Jacobs said the Oncology Day Care Center is designed to meet the specialized needs of cancer outpatients and their doctors.

These patients may need to be seen daily for brief injections and blood counts, or they may require lengthy (six to eight hour) chemotherapy infusions (a procedure which has customarily involved hospitalization).

Many of Stanford's cancer patients are referred by physicians in the community and remain primarily under their care while their condition is being diagnosed or treated. ###

Mailed Friday, January 20, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD--Thelma Moore, a housewife from a small town near Fresno and a mother of three, began radiation therapy at Stanford Medical Center last July.

The drive from her home to the hospital takes about five hours, says Mrs. Moore.

Initially, she and her family stayed in motels, but soon found that "the weekly charge of $120 to $140 a week, not including meals, used up our savings in a few weeks."

Now when Mrs. Moore arrives for a six-week session of therapy, she leaves her husband and children, and rents a room in a private home. American Cancer Society volunteers provide transportation to and from Stanford hospital. The cost of a room is about $35 a week, says Mrs. Moore, which represents a considerable saving.

Mrs. Moore is one of many outpatients seen at Stanford hospital who require long-term treatment but who live outside the immediate area, according to Margie Lutzker, a clinical social worker in the division of radiation therapy.

When patients and their families arrive at Stanford, they look for housing close to the hospital. If they come by plane or do not drive, getting to and from the medical center poses a major problem because of the lack of adequate public transportation.

Unlike some other major medical centers which are surrounded by large old homes with rooms to rent, housing in the Stanford area is scarce and expensive, says Lois Christopherson, chief clinical social worker in the department of surgery.

Stanford hospital does not maintain a special facility to house outpatients and their families as do some large teaching hospitals. For example, at the University of Minnesota, patients and families may rent rooms, at a cost of $8 to $10 a day, in a converted dormitory adjacent to the university hospital, according to Terry Severson of the University of Minnesota Hospitals.

But at Stanford the problem of finding suitable housing for patients is complex, social workers agree, and there are no simple solutions.

For patients without private transportation, motels on El Camino Real, where there is regular bus service, seem to be the most convenient choice. Those who drive and have access to a car may try to rent a furnished studio apartment.

Patients who cannot afford to maintain two residences look for rooms to rent.

"Patients living in motels and furnished apartments must cope with loneliness and isolation in unfamiliar and sometimes cheerless surroundings," says Lois Christopherson. On the other hand, those living in private homes may lose privacy and be faced with the added burden of "keeping up a brave front," she notes. Unless their home is unusually large, the host family faces the loss of some privacy and, in addition, may find that the time and support patients require, create difficulties in their own family.

The task of finding accomodations for patients in private homes falls largely upon the hospital social workers who rely on an informal network of friends, nurses, aides and other employees to keep them informed of what is available.

Local church groups are participating in a program to provide housing for patients and their families among congregation members, according to Dr. Ernle Young, chaplain to the medical center. -more-

"Originally the program was aimed at providing support for the families of patients who sit for hours and hours in waiting rooms," says Nan Wentworth, a coordinator for Valley United Presbyterian Church, but the urgent and unmet needs of the patients, themselves, have caused a shift in focus.

When a young South American woman working on the Peninsula became ill, she found herself jobless and with no place to stay. During a five month period while she received radiation therapy, the church referral service placed her in three different homes. Since then, she has found permanent housing, but still remains in close touch with her former host families, visiting with them during Thanksgiving and the Christmas holidays, according to Wentworth.

Each day about 130-150 patients are treated in the division of radiation therapy, reports Lutzker. Approximately ten percent of the patients drive more than two hours a day to and from therapy, which is not easy to do when one is sick and fatigued, notes Lutzker. About a quarter of all patients rent facilities or stay with relatives or friends in the area. Length of total treatment, including chemotherapy, can range from several weeks to a year.

Patients who come to the medical center for evaluation as potential heart transplant recipients number about fifty a year, says Christopherson. Of these, about forty are from outside the immediate area.

Those found to be suitable candidates for a transplant wait several days to months for the operation. If their home town has access to good transportation, the waiting period may be spent at home. If not, they must remain in the Stanford area. After they leave the hospital, they remain as outpatients for about two months before they are ready to go home, says Christopherson.

"Heart transplant candidates and their families are warned about the poor housing and transportation situation before they come to California and are given maps, motel and apartment lists when they arrive," notes Christopherson. "Even so, our lack of nearby, low-cost housing does pose a serious additional stress for these patients."

The need for some kind of housing on campus for outpatients and their families is recognized by virtually all of those involved in their care. Stanford University has considered the possibility of building a hoptel on campus, but the project has been deferred because of a lack of funds.

When asked about interim solutions, various suggestions have been offered.

Dr. Young believes an older home on campus might be converted into outpatient housing. It could be run by students and serviced by a shuttle bus.

Christopherson wishes that donations to the University might make it possible to purchase one of the hotels in downtown Palo Alto so that the rooms and club kitchen facilities could be used, at cost, by medical center patients and their families.

Lutzker would like to see a facility with access to transportation made available at a nominal cost to patients who must remain in the area longer than two weeks. Ideally, it would offer a range of accommodations--food preparation, cleaning and laundry services--according to individual patient's needs.

Development of a trailer park is another pressing need, according to Young. Since the least expensive way of living away from home is in a mobile home, many outpatients and their families arrive in trailers. Local trailer parks are often full, however, and they must resort to using parking lots and side streets--a practice which is illegal notes Hilary Ryniewicz, director of safety and security at the hospital.

Individuals who have rooms or furnished apartments which they would like to make available to patients and their families, may send such listings to the Stanford Medical Center News Bureau, Room TC-135, or phone 497-6911.

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Mailed Wednesday, January 18, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

A new division of family medicine has been established in the Department of Family, Community, and Preventive Medicine at Stanford University Medical Center.

Dr. Clayton Rich, vice-president for medical affairs and dean of the School of Medicine, announced its creation.

"The creation of a division of family medicine at Stanford is the culmination of efforts over the past 10 years," said Dr. Count D. Gibson, Jr., Department chairman.

"Stanford now joins all of the other medical schools in California in committing itself to teaching family medicine," he said.

The new division is directed by Dr. William C. Fowkes, Jr., associate professor of clinical family medicine and clinical medicine. Fowkes, 47, currently directs the residency program in family medicine at San Jose Hospital.

Fowkes, who received his M.D. from Stanford in 1955, also coordinated Area III of the now defunct California Regional Medical Program for several years.

"The family physician is not just another name for general practitioner," according to Dr. Lee Blanchard, clinical associate professor at Stanford.

"The old GP was concerned about taking care of all disease processes. Family practice, on the other hand, emphasizes the person, rather than the disease process. The family physician provides continuous, comprehensive care for every member of the family, from infant to the aged."

In addition, the family physician coordinates the services of consultants and allied health personnel in the care of his patients, he said.

Blanchard, a 1937 graduate of the Medical School, practices family medicine in San Jose. Formerly he was secretary to the residency review committee for family practice of the American Medical Association (AMA). He is currently on the Departmental staff, assisting in program development.

Family medicine was recognized as a specialty by the AMA in 1969. But there still is a great need for physicians who provide primary care, said Fowkes. "Several hundred counties in the U.S. have no doctors at all," he said.

The Mid-Peninsula has one of the highest densities of physicians in the country, yet family physicians in the area are swamped with patient loads, said Gibson.

"In this very overspecialized era, families cry for a physician who will specialize in them," he said.

Fowkes said the new division will provide training in family medicine at all levels.

Medical students with few clinical skills will be able to observe the family practice of community physicians. As they become more skilled, they can work with the physicians in preceptorships.

This part of family medicine training will continue to be directed by Leona M. McGann, assistant professor in the Department of Family, Community, and Preventive Medicine.

Recently the Department received a $106,000 renewal grant from the Department of Health, Education, and Welfare to support the preceptorship program.

Teaching duties in the division are shared by Dr. Joseph R. Hopkins, clinical assistant professor. A 1973 graduate of the Stanford Medical School, Hopkins directs the Mid-Peninsula Health Service.

Education of residents will take place in a community hospital. Gibson said the Department plans to arrange a cooperative teaching and research arrangement with San Jose Hospital.

"Residency education in community hospitals is appropriate because this is where families come for treatment, rather than to tertiary care centers like Stanford," he said.

Gibson said that while family physicians are relatively few, "there is a new surge of young doctors with broad commitments on the way.

"The key to a rational health care system is a strong cadre of family physicians throughout the country who can help create appropriate patterns of care in collaboration with specialists," he said.

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1/17/78 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Hepatitis B infection is a significant occupational risk for physicians and other health-care workers, according to a study published in the recent *Journal of the American Medical Association.*

The risk of acquiring this viral infection was more than five times greater for physicians than for a comparison group of volunteer blood donors, according to researchers from the Center for Disease Control in Phoenix.

A coauthor of the report, Dr. Joseph L. Smith, now at Stanford University School of Medicine, says that exposure to blood and blood products, rather than patient contact, appears to be the major risk factor.

Hepatitis viruses cause inflammation of the liver. There are at least three types: hepatitis A which usually occurs in epidemic fashion and is associated with poor hygiene conditions; hepatitis B which is commonly associated with blood transfusions or unsterile needles used in injections; and nonA-nonB type which has been described following blood tranfusions, but can also occur as sporadic community-acquired illness.

About 10% of those who develop acute hepatitis B continue to carry the virus in their liver and blood.

The researchers surveyed 1,200 physicians attending American Medical Association conventions in 1975 and 1976. Physicians were tested for antibody to hepatitis B virus, which would indicate if they had ever been exposed to the virus. They were not tested for evidence of current infection.

Smith says that doctors with antibodies to the disease are noninfectious, and will not pass the infection on to patients.

According to the report, evidence of previous infection was found in 18.5% of the physicians who volunteered for the study. The prevalence in the nonphysician group was 3.5%.

The report indicated that only 31% of the physicians with evidence of previous infection recalled having the disease. "This suggests that a majority of cases were either asymptomatic, or symptoms were unrecognized," says Smith.

Purpose of the survey, he says, was to determine if particular types of physicians are more at risk than others, and might benefit most from immunization with vaccine now being developed in U.S. laboratories.

They found that surgeons and pathologists had the highest prevalence rates. Twenty-eight percent of surgeons and 27% of pathologists had evidence of previous infection.

Infection rates for those in internal medicine, anesthesiology, obstetrics and gynecology, pediatrics, and family practice were similar to those for all physicians.

In addition, they found increased frequency of exposure for those practicing in large metropolitan areas. Another finding was that Oriental physicians were almost three times as likely to have the antihepatitis B antibody as whites.

The rate of exposure was highest in the early years of clinical activities, including the years of hospital-based postgraduate training and the early years of private practice.

The report concluded that "more effective control measures are needed to prevent occupationally acquired infection among health care professionals. . . . The best approach will likely be through vaccine-induced active immunity."

Smith, a postdoctoral fellow in the Division of Infectious Diseases, works with Drs. Thomas Merigan and William S. Robinson on treatment of chronic hepatitis B infections with antiviral agents, such as interferon.

Coauthors of the report are Drs. Alexander E. Denes, James E. Maynard, Kenneth R. Berquist, and Irene L. Doto of the Center for Disease Control; and Dr. Asher J. Finkel of Chicago.

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1/16/78 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Edgar Haber, a Harvard cardiologist well-known for his biochemical and immunological work, will present the annual John Kent Lewis Memorial Lecture at Stanford University School of Medicine on Monday, Jan. 23.

Dr. Haber will discuss "Specific Antibodies as In Vivo Diagnostic and Therapeutic Agents" at 4:30 p.m. in the Fairchild Auditorium. Physicians and other health professionals in the community are invited to attend.

Chief of the cardiac unit at Massachusetts General Hospital, Dr. Haber is also professor of medicine at Harvard Medical School.

His work has focused on developing radioimmunoassays for drugs and hormones, and their applications in understanding the basic pathological mechanisms in hypertension.

He has also developed radioactive labeling techniques enabling doctors to identify damaged heart muscle.

Dr. Haber received his A.B. from Columbia College (1952) and M.D. from Columbia College of Physicians and Surgeons (1956). He did postgraduate work at Massachusetts General Hospital, and has been on the faculty of the Harvard Medical School since 1963.

The John Kent Lewis Lectures are presented annually in honor of the former chief of the Stanford Medical Service at San Francisco General Hospital. A 1922 graduate of Stanford Medical School and noted pioneer in heart research, Lewis died in 1961.

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STANFORD--The Division of Ophthalmology at Stanford University Medical School has been awarded a grant of $5,000 from Research to Prevent Blindness, Inc.

According to Dr. Jules Stein, chairman of the organization, the grant is one of 50 made in 1977 to medical institutions in the U.S. by the New York-based voluntary foundation.

Dr. A. Ralph Rosenthal, head of the Division of Ophthalmology, said the unrestricted grant is designed to stimulate and support the total research effort.

"The funds are especially valuable," he said, "because they encourage pioneering research, the exploration of the most promising new concepts."

Ophthalmology research at Stanford is primarily in the fields of glaucoma, ocular toxicology and corneal physiology, said Rosenthal.

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Mailed Monday, Jan. 16, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD –

Stanford University Medical Center officials have denied charges made by Dr. Robert Weinmann, president of the Union of American Physicians, Local 7402, that Stanford charges improperly for services to Medicare patients.

Weinmann distributed copies of documents at a press conference Monday, Jan. 9, showing that both Blue Cross and Blue Shield had sent notice of payments to a patient concerning a single visit to a Stanford Clinic in July 1977.

Blue Cross and Blue Shield are under contract with the federal government to handle different parts of the Medicare program in Northern California. Blue Cross is responsible for "institutional reimbursement" and Blue Shield is responsible for professional fees (doctor bills).

"The two notices sent to the patient result from long-standing billing procedures required of us by Medicare for services rendered on an outpatient basis" said James H. Stanford, Medical Center Finance Director. "It does not represent improper billing."

For most Medicare patients seen in the Clinics, Medicare will pay a professional fee to the faculty physicians for the services they render, according to Medical Center officials. These fees are paid by Blue Shield.

However, there are some costs of operating the Clinics which Medicare will not reimburse on a professional fee basis due to restrictions in the Medicare law. Since Medicare will not pay professional fees to cover these costs, it instead reimburses the Medical Center for the actual costs incurred. This reimbursement is paid by Blue Cross.

Stanford agrees that the current system may be confusing to Medicare patients since both Blue Cross and Blue shield send notices of payments.

This process was established and approved several years ago by Medicare officials at the intermediary level and at the Bureau of Health Insurance in Baltimore, the federal government agency responsible for administering the Medicare program.

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1/12/78 cr

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Employee elections at Stanford University Hospital and Clinics, which National Labor Relations Board (NLRB) officials had considered postponing, are officially on again.

The secret ballot elections, to be held Feb. 2-4, will allow eligible service, technical and patient care employees to decide whether or not they prefer United Stanford Employees (USE), as their exclusive bargaining representative. Eligible licensed vocational nurses (LVNs) will also be able to vote on whether they wish representation by either the California Licensed Vocational Nurses Association, or USE.

In a letter sent today (Tuesday, Jan. 10) to Stanford Hospital and Clinics employees, hospital administrator Gary A. Mecklenburg says the elections were ordered to proceed by Michael Taylor, director of the NLRB's Region 32.

USE, which is Local 680 of the Service Employees International Union, AFL-CIO, had filed an unfair labor practice charge last spring. It claimed that an Employee Opinion Survey distributed at Stanford Medical Center was designed to influence employees whether to select USE as their collective bargaining representative. Because of this charge the NLRB's regional director had considered postponing the elections.

Taylor has now directed the elections to go ahead as scheduled, and says that distribution of the survey would not affect the employees free choice in such balloting.

When the survey charge was initially filed by USE, the NLRB's regional office found the charge meritless and refused to issue a complaint on the matter so that the legal issues could be heard before an administrative law judge.

In his letter to employees, Mecklenburg says the medical center's administration "agrees with the regional director (Taylor) that distribution of the Employee Opinion Survey would not affect the exercise of employee free choice in such an election."

He added, "(The administration) continues to believe employees should have the opportunity to express their preference in the election in accordance with (the) arrangements and schedule agreed upon by the medical center, the NLRB and USE last summer."

Similar elections were actually held in April, 1975, in the hospital and clinics. Balloting was conducted by the NLRB and more than 1,000 of 1,200 eligible employees voted overwhelmingly to reject any union representation.

Following this election USE filed unfair labor practice charges and election objections.

USE charged, in part, that two minority employee groups--La Alianza Latina and the Black Advisory Committee--were unlawfully assisted and dominated by the hospital. Both employee groups have been active in affirmative action efforts.

USE also protested alleged time off to attend meetings and the use of hospital meeting rooms for members of La Alianza Latina and the Black Advisory Committee by the hospital.

The NLRB rejected USE's claim that the groups had been "dominated" by the hospital. Last summer, the medical center, NLRB and USE entered into a settlement resolving the outstanding election charges and objections. The new election dates were then set as a part of this settlement. ###

Mailed Tuesday, January 10, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino (415) 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Stanford physicians have issued a warning against collecting and eating wild mushrooms, as a result of several serious cases of mushroom poisoning admitted to Stanford University Hospital recently.

The patients, five young adults and two children, remain in guarded condition after eating the species *Amanita phalloides.* This species grows in abundance in the San Francisco Bay Area after the fall rains and through the winter and spring.

Dr. Mark G. Perlroth, associate professor of clinical medicine, said that the *Amanita* varieties can be distinguished from harmless mushrooms only with difficulty. He urged that mushrooms be bought from markets, and not picked wild.

Effects of mushroom poisoning, says Perlroth, may lead to severe liver and kidney damage and possible death.

As the poison is absorbed by the body, a patient may have no symptoms during the first few hours, he said. Then, 6 to 24 hours later, victims may suffer from nausea, vomiting, abdominal pain, and diarrhea.

As the toxin binds to the cells in the liver, there is little the body can do to get rid of it. After a period of apparent improvement, some two to nine days after ingestion, patients may begin to show signs of liver, kidney, and central nervous system damage, with life-threatening consequences.

Evidence of the effects of the mushroom poison on the patients' nervous system include confusion, coma, visual disturbances, and abnormal reflexes, said Perlroth.

Recovery depends upon the amount of toxin the body absorbs, as well as the variety of mushrooms eaten, said the physician.

He noted there is no specific therapy for mushroom poisoning other than careful supportive care. He said that Stanford phsycians are treating the current patients with thioctic acid, an experimental substance obtained from National Institutes of Health laboratories. Thioctic acid acts on the metabolism of cells in the liver and is thought to be useful in treating the poisoning.

Perlroth noted a further problem for amateur mycologists—the toxin content within various species of mushrooms may vary widely with the seasons, environment, and age of the mushrooms. One which is harmless at one time and place might be lethal at another, he said.

– 30 – cr 1/6/78

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Leonard Lopez has been appointed associate administrator of Stanford University Hospital and Clinics, beginning Jan. 16.

Since 1974 Lopez has served on the management staff at The Johns Hopkins Medical Institutions where he recently was administrator of the Department of Laboratory Medicine.

According to Gary Mecklenburg, administrator of Stanford Hospital and Clinics, Lopez will have responsibilities for a number of patient-related services. These include the Drug Assay Lab, EEG and EMG Labs, Neuromuscular Lab, Immunology, Infection Control, Cardiology Services, Core Clinical Laboratory, Infectious Diseases Lab, Pathology, Radiology, Transfusion Service and the Virology Lab.

From 1969 to 1974 Lopez served at Washington University Medical School in St. Louis, Mo., where he was supervisor of the Division of Nuclear Medicine and director of the post-graduate program in nuclear medicine technology at Mallinckrodt Institute of Radiology.

He is a certified medical technologist (ASCP), which he received at Northwest Texas Hospital in Amarillo. In addition, he was certified as a nuclear medicine technologist at Washington University Medical School.

Lopez received both his B.S. degree in business administration and his master's in health administration from Washington University.

He is married and has two children.

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Mailed Monday, January 9, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--A three-year, $300,000 grant has been awarded to Stanford University Medical Center for the training of emergency medical personnel.

The grant, which was awarded by the Department of Health, Education and Welfare (HEW), will fund the Stanford METRO Program (which stands for Medical Emergency Training and Resource Opportunity).

According to Dr. Michael Eliastam, director of emergency services at Stanford, METRO involves training for physicians in emergency care, plus courses for physicians, nurses, paramedics, and instructors involved in all phases of emergency medicine.

At the same time, Eliastam noted, Stanford will participate in regional testing programs for emergency medical technicians, or paramedics, in cooperation with the San Francisco regional governmental agency known as ABAG (the Association of Bay Area Governments). ABAG recently received a grant from the Kaiser Foundation to establish testing procedures for emergency skills.

The inclusion of these training programs will coincide with the development of a residency program to train emergency medicine physicians at Stanford, Eliastam said. The first group of resident physicians will begin their training July 1, completing a two-year post-internship residency.

Stanford already operates a comprehensive training program for paramedics. It is the major certified paramedic program in Northern California with paramedic graduates presently employed by fire departments, law enforcement agencies, ambulance companies and the National Park Service.

Under the METRO program, Stanford will serve as a resource center for professionals in the emergency care field. It will provide continuing education programs for these professionals, as well as serving as a circulation center for emergency medicine, periodicals, journals and audiovisual aids.

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Mailed Friday, January 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--A series of weekly public lectures on women and their health will be presented during the winter quarter at Stanford University School of Medicine.

The free lectures will be presented each Thursday at noon in Room M104 of the medical school.

"Family Planning: The Status of Birth Control" will be the subject of the first lecture Thursday, Jan. 5, by Dr. Katherine Finseth, a consultant in Health Sciences Research and director of the Family Planning Center in Santa Clara County.

A Harvard graduate, Finseth formerly served on the faculty at Yale Medical School.

According to Dr. Netta Grandstaff, senior research associate in the Department of Family, Community and Preventive Medicine in the medical school, the women and health care series is being sponsored by the Stanford Center for Research on Women, and Family, Community and Preventive Medicine.

She noted that each of the lectures will be presented by "recognized authorities in their designated fields."

Future topics for the Thursday series include: "Childbirth: Traditional and Current Modes of Care," "Menstruation, Menopause and the Use of Estrogen," "Women in Psychology: Psychotrophic Drug Use," "Rape," "Battered Women," "Women and Alcohol Abuse," "Female Sexuality," "Breast Care and Breast Cancer," and "Aging Women and Health Care."

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Mailed Tuesday, January 3, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

Editors: Photos available if not included with story.

STANFORD--Plastic surgeons have now developed techniques to reconstruct the human ear, a procedure long considered to be the most difficult operation they might attempt.

The best method involves transplanting the patient's rib cartilage to form the contours of the ear, according to Dr. Burt Brent, assistant clinical professor at Stanford University Medical Center.

During surgery, Brent obtains several inches of flexible rib cartilage, carves and sculpts it to form an ear, then implants it under the skin.

Brent has successfully performed more than 150 ear reconstructions in this way during the last four years in patients referred to him from throughout the world.

One of his more well-known patients is J. Paul Getty III, whose kidnappers received $3 million ransom in Italy upon severing his ear four years ago and sending it to his family.

Getty, 21, has undergone two operations this year, says the plastic surgeon, and some further work will be necessary to complete the restoration. His hearing was not impaired in the incident.

One child in every 6-10,000, says Brent, is born without an ear. When caused by birth defect, absence of the ear occasionally results in a hearing deficit, which can be improved by a combined effort with an otolaryngologist.

Often a dramatic psychological change occurs in patients after the restoration, says Brent. Young Getty, whom Brent describes as a pleasant, cooperative patient, has begun to "mature" since the surgery began, he says.

Brent, who originally thought of pursuing a career in art, enjoys the technical challenge of his work, but says, "the real thrill is helping the patient and his family psychologically."

In a typical case, a young boy born without an ear may appear well adjusted until he begins school, says Brent, when cruel ridicule begins. "I have seen many teenagers with uncorrected congenital defects who also have severe emotional scars."

For that reason, Brent likes to perform the surgery before a child begins school. He has developed the technique to routinely perform the cartilage graft at age four.

A child's ears are 85 percent grown to their adult size by age three or four, he says. Since transplanted cartilage will grow slightly in a youngster, the reconstructed ear can be matched to the opposite normal ear so that both will be proportionate in size when the child is an adult.

Brent has performed the reconstruction on children as young as three and adults as old as 58. "The only restriction in young patients is the size of the rib cartilage which serves as the sculpting medium," he says.

In the first and major stage of the operation, Brent removes several inches of cartilage from the front portion of the patient's ribs. This flexible portion of the rib allows expansion and contraction of the chest wall during breathing. Removal of several rib cartilages merely creates additional "floating ribs," and does not create a functional disability, says the surgeon. -more-

While the patient is still anesthesized, the surgeon sculpts the flexible, elastic-like cartilage to form an ear framework, then implants it under the skin where the ear should be. He refers to subsequent operations as minor "touch-ups" and refinements.

Brent says he "became intensively involved in this fascinating facet of reconstructive surgery because of my hobbies in art and sculpture, and also because I feel an obligation to help the many children with this deformity."

Although he enjoys all aspects of plastic surgery, the majority of his practice is limited to the reconstruction of missing body parts.

Born into a medical family, Brent decided reconstructive plastic surgery would enable him to use his artistic abilities while also helping people. His artistic hobbies include painting, sculpting, and drawing his own medical illustrations. On completion of his general surgery training he took one year off to restore valuable artifacts in museums in Britain and Spain before returning to complete training in plastic surgery.

Ear reconstruction was first illustrated in 1597 by Tagliacozzi, and Italian surgeon. Brent cites Dr. Radford Tanzer, Professor Emeritus of Dartmouth Medical School, as the father of modern day ear surgery.

Methods other than use of rib cartilage have been developed by several other surgeons, including the use of a silastic ear framework developed by Dr. Thomas Cronin of Houston, and the use of ear cartilage from the opposite normal ear by Dr. Mark Gorney of San Francisco, a Stanford clinical faculty member.

Brent received his M.D. in 1963 from the Chicago Medical School and had plastic surgery training at Loyola University.

There are far more adults with missing ears than children, he says, due to auto accidents, dog bites, burns, and postsurgical deformities caused by diseases such as cancer. He developed techniques for work with adults at the Hines Veterans Hospital in Chicago, where he treated many Vietnam victims.

Prior to joining Stanford, Brent received a fellowship for further study at Canniesburn Hospital in Glasgow, Scotland, which is the largest plastic surgery unit in the world.

Since completion of his training in 1973, Brent has received several national awards for his work. This year he was awarded first prize in clinical research from the Educational Foundation of the American Society of Plastic and Reconstructive Surgery. The research concerned growing special skin grafts which grow their own underlying cartilage support. Coauthor of that work is Dr. Richard Ott, a Stanford resident in plastic surgery.

Three years ago, Brent received the same prize for his work in ear reconstruction.

Brent devotes at least two days each week to laboratory investigation of cartilage and other tissue transplantation, which he calls the "building blocks to successful clinical work with patients.

"The longterm result depends upon living tissue," he says. "And in this way ear reconstruction differs from basic woodworking...just as the sculptor must know the woods he uses--their grains, consistency, stresses and colors--so we must know the basic human tissue we work with, to create a pleasing, lasting reconstruction."

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Mailed Tuesday, January 3, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos

FOR IMMEDIATE RELEASE

STANFORD—

Stanford University Medical Center officials Friday, Feb. 24, said they have started a review of the policies regarding professional staffing and billing in the Emergency Department, and have delayed billing doctors' fees until the review is completed.

Dr. Lawrence Crowley, chief of staff and deputy dean of the School of Medicine, said the review will be completed in about two weeks.

He explained the review was part of a normal procedure made necessary by recent Medicare rulings. He also expressed hope that the review would clear the air concerning allegations of double-billing made last fall by the Union of American Physicians (UAP).

UAP had charged that Stanford billed patients for services by teaching physicians when all the work had been performed by interns and residents.

Stanford had replied that billings for Medicare and Medi-Cal patients have been audited regularly by the government's fiscal agents and were in full compliance with the guidelines then in force for teaching physicians.

Crowley said, "Quite aside from federal guidelines, it is Stanford's policy that teaching physicians should charge a fee only if they have provided an identifiable medical service to the patient. They must provide the service personally or in a direct supervisory role," he said.

At Stanford, a teaching institution, the rendering of patient services includes the participation of residents as well as faculty attending physicians.

Crowley said the new Medicare rulings became effective Feb.15. They require different documentation of a teaching physician's participation in the care of the patient than previously existed.

He said the new documentation requirements were spelled out in detail in a memo sent to the faculty of the clinical departments recently. These must be met before payment by the federal programs can be justified.

Crowley said that although the ruling applies to Medicare at this time, "we wish to maintain the same standards of care and a consistent policy regarding documentation in the rendering of services for all patients regardless of the source of payments."

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2-24-78

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD--Six women scientists at Stanford University School of Medicine doing basic research in the fields of immunology, molecular biology and physiology have been named Katharine McCormick Scholars.

The postdoctoral fellowships honor the late Katharine Dexter McCormick who left a large bequest to the Medical School, particularly "for the encouragement and assistance of women in pursuing the study and teaching of medicine and medical research."

The new awards bring to 26 the number of women scientists who have been supported by the Stanley McCormick Fund since its inception in 1969.

The McCormick Scholars are: Jeanette Chen, Department of Physiology; Jane Gillen, Genetics; Diane Rein, Pharmacology; Janet Schottel, Medicine and Genetics; Virginia Scofield, Pathology; and Rhona Simmons, Pathology.

* * *

Further information about the research of the McCormick Scholars follows:

Jeanette Chen received her Ph. D. in psychology from Rutgers University and is a fellow in the laboratory of Dr. Julian Davidson in the Department of Physiology.

Chen is studying sexual differentiation and hormonal changes during development in squirrel monkeys. In another project she observes how prenatal alcohol treatment of female rats affects sexual differentiation among the offspring.

Jane Gillen received her Ph. D. in bacteriology from the University of California at Berkeley and is a fellow in the laboratory of Dr. A. T. Ganesan in the Department of Genetics.

Gillen is studying the initiation of DNA replication in bacteria and bacterial viruses. She is working with a virus that infects a particular bacterium. The virus apparently modifies the replication machinery of the host cell in such a way that it will specifically replicate the virus's genetic material.

"This kind of control mechanism may also play a role in certain viral infections of animal cells," Gillen said. "By studying this process in a relatively simple bacterial system, we hope to shed light on similar processes in higher organisms."

Diane Rein received her Ph. D. in developmental biology from the University of Cincinatti and is a fellow in the laboratory of Dr. Henry Epstein in the Department of Pharmacology.

Rein, who works with nematodes, or roundworms, is studying the muscle structure of a particular mutant in which abnormal muscle development results in gradual paralysis.

"With a life cycle of 10 days, the nematode provides a model system for determining the biochemical and molecular mechanisms of this process of paralysis," she said. The results of such research may provide some insights into understanding the development of muscular dystrophy in human beings, Rein noted.

Janet Schottel received her Ph. D. in biology from Washington University in St. Louis, Missouri, and is a fellow in the laboratory of Dr. Stanley Cohen in the Departments of Medicine and Genetics. She is studying plasmid-determined heavy metal resistances in bacteria.

"Plasmids are small circles of hereditary material (DNA) that are present in many kinds of bacteria," she explained. Some plasmids carry genetic information that causes bacteria to develop resistance to a variety of antibiotics and heavy metals such as silver and mercury salts.

-more-

Silver salts are used in the treatment of burn wounds, Schottel noted. Mercury has many industrial uses and, as a consequence, is the source of the present mercury pollution problem.

"Understanding the mechanisms by which bacteria develop resistance to heavy metals is of great clinical importance," according to Schottel.

Virginia Scofield received her Ph. D. in biological sciences from the University of Texas at Austin and is a fellow in the laboratory of Dr. Irving Weissman in the Department of Pathology.

Scofield is studying the mechanisms and molecular structures of transplantation reactions in a class of animals called protochordates.

She is studying marine animals known as tunicates at the Hopkins Marine Station of Stanford University.

"By studying the gene systems of these animals, we hope to learn more about the evolution of gene systems which control transplantation reactions and immune responses in vertebrates," said Scofield.

Rhona Simmons received her Ph. D. in medical microbiology from Stanford University and is a fellow in the laboratory of Dr. Errol Friedberg in the Department of Pathology. She is studying the enzymology of DNA repair in bacteria.

"DNA damage can occur for many reasons, including exposure to X rays, ultraviolet light and various chemicals," Simmons explained. Certain enzymes recognize when an alteration has taken place in the DNA, and correct it. Abnormal repair occurs when the enzymes that should recognize the damage are absent, or are present, but not capable of functioning normally.

"This abnormal repair may result in the formation of mutant cells," Simmons noted. "Such mutations may possibly be linked to the production of cancerous cells."

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Mailed Wednesday, February 22, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Stanford faculty and staff who have mild hypertension may participate in a new study involving non-drug management of the disorder.

According to Dr. Stephen P. Fortmann of the Stanford Heart Disease Prevention Program, the benefits and risks of lifelong drug therapy for mild hypertension are still under debate. An effective non-drug program might be useful for such individuals, he says.

To participate in the study, volunteers from the Stanford campus and surrounding community should have blood pressure measurements of 145-165 systolic and 85-105 diastolic. Volunteers, between 21 and 65 years of age, must not be taking blood pressure medication.

After initial screening, volunteers will be randomly divided into two programs. The behavioral therapy program involves weight control, salt restriction, and relaxation techniques. The second program involves intensive monitoring of blood pressure during the study.

Stanford faculty and staff who participated in the risk survey done in 1973-75 and whose blood pressure at that time fell within the mild hypertensive range, will be invited by letter and telephone to participate.

Volunteers who are selected will need to visit the Stanford Heart Disease Prevention Program clinic on Welch Road several times for check-ups, to measure blood pressure, weight, blood lipids, and take urine tests and an electrocardiogram.

Participants will be given results of the check-ups at no cost.

According to Fortmann, hypertension is one of the major causes of cardiovascular diseases. "As we are continuously reminded of the dangers of chronic exposure to chemicals of many sorts, we must question the wisdom of lifelong chemotherapy for patients with mild hypertension.

"At present, people with mild hypertension are either followed through time or given drugs," says Fortmann. "We want to compare an intensive follow-up procedure with certain non-drug treatment--diet, weight control, and relaxation therapy. Although these can lower blood pressure, no one has compared a combination of these techniques with a follow-up in a group not taking medications."

The behavioral group and their spouses will attend 10 weekly 90-minute group sessions, where they will be taught relaxation therapy, moderation of salt intake, and weight control.

Homework assignments will be given, including daily practice of relaxation for 20-30 minutes, and daily monitoring of eating habits. -more-

The monitoring group will receive four weekly evaluations every three months involving blood pressure determinations and blood and urine tests.

A recent Stanford study of the effects of relaxation therapy with patients on medication found that it resulted in a significantly larger decrease in systolic pressure compared to drugs alone, and a trend toward a larger reduction in diastolic pressure. In that study, therapy involved daily home practice of progressive relaxation, guided by a cassette tape played while relaxing, and by instructions given during weekly sessions with a therapist.

The hypertension study is an outgrowth of the Three Communities Study, done under the direction of Dr. John Farquhar, in which a mass media campaign aimed at lowering residents' risks of heart disease.

According to Farquhar, a program such as the hypertension study could be applied in a community-level intervention for the prevention of hypertension and cardiovascular disease.

"If effective, this method could provide the cornerstone for a public health approach to blood pressure control," says Farquhar.

Persons interested in more information about the study, or who think they may be eligible, may call Dr. Fortmann or Dr. Rolf G. Jacob at 497-6051.

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Mailed Tuesday, Feb 21, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911
FOR IMMEDIATE RELEASE
STANFORD –

Stanford researchers have found that the measurement of the magnetic fields of the heart provides information about the conduction of impulses not reflected in conventional electrocardiography.

The technique may increase reliability in the diagnosis of heart disease.

Results of initial clinical studies using a SQUID differential magnetometer were reported in the Dec. 16 issue of *Science* magazine by Drs. William Barry, William Fairbank, Donald Harrison, and their associates.

The device measures magnetic fields produced by the flow of charged particles, called ions, through heart muscle cells. Ionic flow, which occurs during muscle contraction, also generates the electric fields measured in the electrocardiogram (EKG).

The differential magnetometer cancels out exterior magnetic fields which otherwise would interfere with the reading of the heart fields.

SQUID stands for superconducting quantum interference device. It amplifies the cardiac magnetic signals so they can be measured. The signals are processed and displayed in graphic form similar to the EKG.

According to Dr. Harrison, head of the division of cardiology and holder of the endowed William G. Irwin Professorship of cardiology, the EKG cannot diagnose certain heart conditions which involve abnormal electrical conduction through the heart.

Harrison conducts clinical testing of the device with Drs. Richard Meltzer and Jerry Griffin.

"Magnetocardiography may be helpful in diagnosing potential heart attacks which result from these conduction abnormalities," says Harrison. "It will complement but not replace the EKG.

"Many of the cellular properties related to the spread of impulses in the heart are not understood," he says. "The magnetocardiogram (MCG) will provide new insight into these properties."

The magnetic fields produced by the heart are very difficult to measure because they are one million times weaker than the earth's magnetic field, says Mark Leifer, graduate student in applied physics.

Leifer directs the development of magnetometry techniques with Prof. William Fairbank in the Department of Physics.

Previous efforts to pick up the tiny cardiac fields were hampered by magnetic interference, including power-line noise and even magnetic noise from cars driving along the street outside.

At Stanford this background noise was eliminated by placing the patient at the bottom of a 25-foot well lined with magnetic shielding.

The new SQUID magnetometer allows measurement at ground level without magnetic shielding, says Leifer.

Magnetocardiography is also being tested in Finland, France, and the Massachusetts Institute of Technology, says Leifer. Case Western Reserve University in Cleveland, Ohio, recently purchased a device for research.

So far the Stanford group is the only one which has "quantitatively demonstrated the accuracy of the measurement technique and ability of MCG to detect cardiac events not reflected in EKG," says Leifer.

In addition the Stanford researchers measure the magnetic field of the heart in three planes which are at right angles to each other.

This unique technique more accurately reflects events occurring in the heart, says Leifer, and can be used quickly and easily in a clinical setting.

The Stanford magnetometer was built by the S.H.E. Corporation of San Diego. Dr. John P. Wikswo, Jr., did much of the design when he was a graduate research associate in physics at Stanford. Wikswo presently is a member of the Department of Physics and Astronomy at Vanderbilt University in Nashville, Tennessee.

Stanford plans to conduct cooperative studies with Wikswo in the future, says Leifer.

The SQUID magnetometer in its present form can be adapted for hospital use, says Harrison. Because it is completely noninvasive and does not require the attachment of electrodes to the body like electrocardiography, it would make mass screening for cardiac problems easier, he said.

The device is expensive ($26,000) and requires the use of a computer. However, once it is manufactured on a mass scale the cost would be comparable to other diagnostic equipment, says Harrison.

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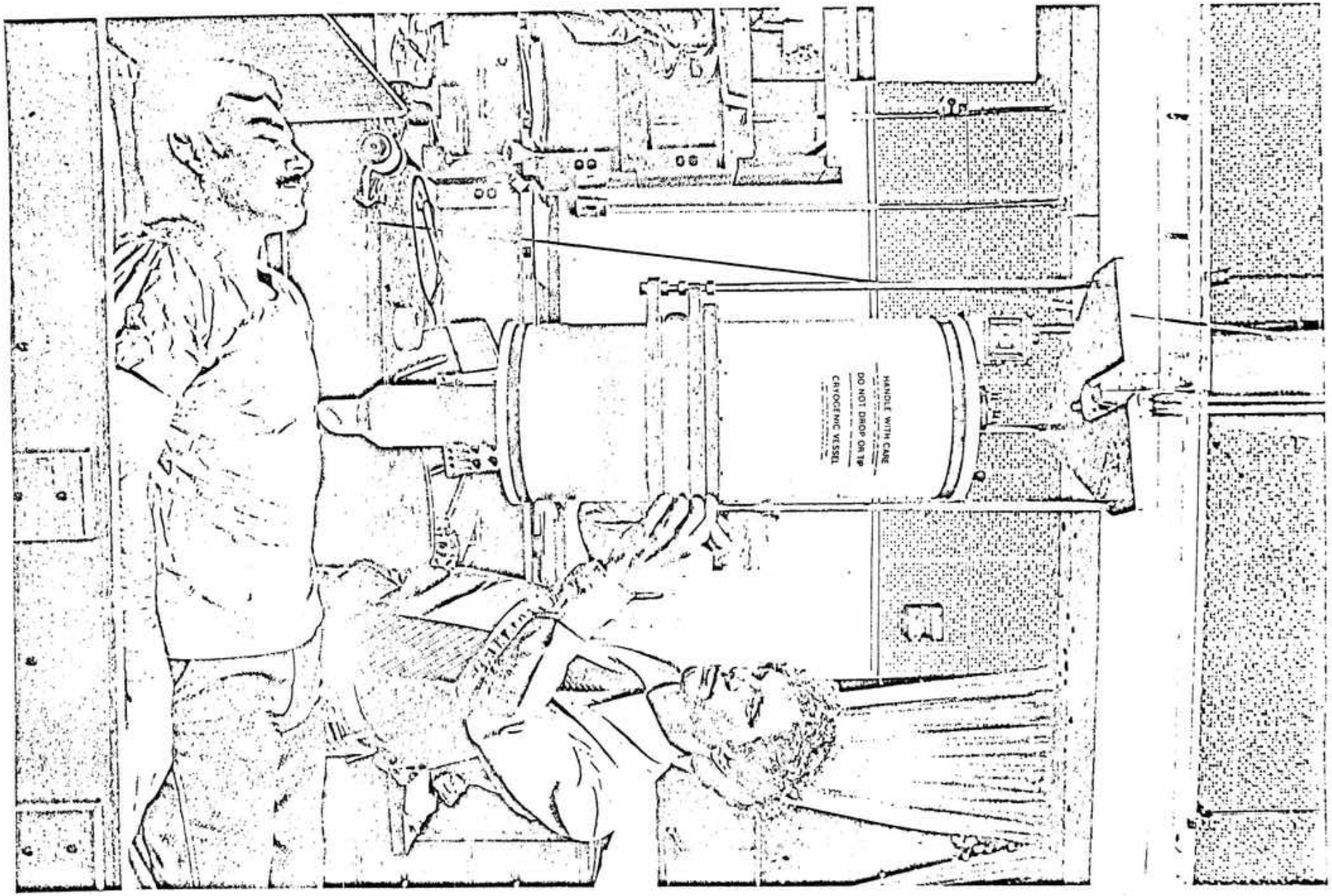
2/16/78 cr



"Mark Leifer, graduate student in applied physics, adjusts the magneto meter in a mock treatment set-up"

PLEASE SEND MAGNETO METER PRINT TO: NAME _____

PUBLICATION _____ ADDRESS _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD--Richard T. Johnson, professor of neurology and microbiology at The Johns Hopkins University School of Medicine, will present the second annual George A. Zimmermann Lecture at the Stanford School of Medicine on Wednesday, Feb. 22.

Dr. Johnson will discuss "The Possible Viral Etiology of Multiple Sclerosis" at 5 p.m. in Room M106 of the Medical School. The lecture is open to the medical community and the public.

Dr. Johnson, who holds the Dwight D. Eisenhower-United Cerebral Palsy Professorship at Hopkins, is an authority on the causes of viral infections of the nervous system, including those caused by rabies, myxovirus and herpes.

Dr. Johnson received his M. D. from the University of Colorado in 1956. Prior to joining the Department of Neurology at Johns Hopkins in 1969, he held positions in England and Australia, and was on the faculty of Harvard Medical School and Case Western Reserve University in Cleveland, Ohio.

The Zimmermann Lectureship was established in 1977 by the Department of Neurology at Stanford University School of Medicine. It is part of a $500,000 gift by the late George A. Zimmermann for multiple sclerosis research and treatment at Stanford.

A longtime San Francisco businessman, Zimmermann died in 1974. He bequeathed virtually all of his estate to various charities and for medical research.

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Mailed Thursday, Feb. 15, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--Dr. Theodore Fainstat, a pioneer in gynecologic endocrinology, has been appointed professor of gynecology and obstetrics in the Stanford University School of Medicine.

His appointment, announced Tuesday, Feb. 14 by Dr. Clayton Rich, vice-president for medical affairs and dean of Medical School, will be effective March 1.

Dr. Fainstat has been visiting professor in the medical school, and director of obstetrics and gynecology at Santa Clara Valley Medical Center, since July 1977. He will continue to direct the program at Valley Medical Center, a Stanford-affiliated hospital.

Dr. Fainstat pioneered in developing the ovarian organ culture systems as a classic technique for studying ovulation and defining the factors that influence it.

He demonstrated that progesterone acts directly on the ovary to produce ovulation, rather than through the hypothalamus and pituitary gland as previously believed.

A native of Montreal, he obtained his M.D. from McGill University in 1955, and his Ph.D. from Cambridge University in 1970.

Before joining Stanford, he served as professor of gynecology and obstetrics at Kansas University Medical Center. He has also been associated with Northwestern University Medical Center, and Harvard Medical School and Boston City Hospital.

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Mailed Wednesday, February 15, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD--Licensed vocational nurses (LVNs) at Stanford University Hospital and Clinics have overwhelmingly rejected any union representation for purposes of collective bargaining.

In three days of voting conducted last week by the National Labor Relations Board (NLRB), 26 votes were cast. Twenty voted for "no union," while three voted for the California Licensed Vocational Nurses Association (CLVNA), and two for United Stanford Employees (USE). One vote was "challenged."

Two days before similar elections were to begin for about 1,200 service, technical and patient care employees and pharmacists, USE withdrew. These employees would have voted for USE as their exclusive bargaining representative, or for no union at all. USE is Local 680 of the Service Employees International Union, AFL-CIO.

The NLRB accepted USE's withdrawal "with prejudice," according to Gary A. Mecklenburg, administrator of Stanford Hospital and Clinics.

"This means that no petition for an election may be filed concerning the unit for at least six months," Mecklenburg wrote in a letter sent to hospital and clinics employees Monday, Feb. 6.

"USE must obtain newly signed authorization cards from at least 30 percent of the employees in the unit in order to file a petition with the NLRB for another election," Mecklenburg added.

Mecklenburg said the LVN vote represents an "affirmation of trust and confidence in our medical center" by employees.

At the time it withdrew from the major part of the elections, USE said in a newsletter that the elections were actually "postponed because of joint actions of Stanford and the NLRB."

However, the NLRB rejected USE contentions that Stanford had failed to provide the union with at least 30 days notice of the election, and that Stanford had failed to deliver the names of voters until Jan. 16, which USE said was three days late by NLRB rules.

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Mailed Monday, February 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911
EDITORS: Details follow asterisks.
FOR IMMEDIATE RELEASE

STANFORD—Seven young scientists at Stanford University Medical Center recently have been selected to receive funding by the Biomedical Research Support Grant for the year 1977-78.

The Grant is provided by the National Institutes of Health each year "to enhance the effectiveness and efficiency of biomedical and behavioral research" at medical institutions.

The Grant money is distributed by a faculty committee appointed by Dr. Clayton Rich, dean of the Medical School. Dr. Eric Shooter, professor of neurobiology, chairs the committee.

The grantees, all assistant professors, include Christos Constantinou, Ph.D. (urology), Raymond Hintz, M.D. (pediatrics), K. Alan Kelts, M.D., Ph.D. (neurology and pediatrics), Lawrence Mathers, Ph.D. (structural biology), Bryan Myers, M.B., Ch.B. (nephrology), Bruce Wallace, Ph.D. (neurobiology), and Douglas Wallace, Ph.D. (genetics).

* * * * * * *

Constantinou is studying the rate at which urine is propelled into the bladder by successive contractios of muscles which surround the kidney and ureter (peristalsis). The rate can be determined by recording with a microphone the sounds produced as the bladder fills.

Recently Constantinou was awarded the 1977 C.-E. Alken Price at the meeting of the German Society of Urology for his investigation of the pyeloureteral pacemaker system. The pacemaker initiates peristalsis in a manner similar to the stimulation of muscle contraction by pacemakers in the heart and stomach.

Hintz is attempting to isolate a protein which binds to somatomedin in the blood. Somatomedin is a circulating peptile hormone which is involved in the control of cell growth. Study of the binding protein may reveal how it effects the physiological actions of the hormone.

Kelts is studying the development of brain and nerve mechanisms which control the movements of the stomach and intestines in humans.

Mathers is studying how populations of nerve cells affect each other during growth in the chick embryo. In the chick there is a critical period during which the absence of a functioning eye results in degeneration and death of certain regions of the brain. This doesn't occur after hatching. Mathers is searching for a property or factor manufactured in the eye which is responsible for development of brain cells during this period.

Mathers is studying acute renal failure in patients who have had open heart surgery. He calculates the filtration rate of their kidneys by measuring excretion of inulin, a sugar, in the urine, and disappearance of the sugar from the blood. Inulin is excreted from the body only by filtration through the kidneys. This method may provide a means of monitoring postoperative patients, and detecting renal failure more quickly than conventional laboratory techniques.

Bruce Wallace is trying to determine how nerve cells accumulate neurotransmitters during development. Neurotransmitters are the chemical messengers which transport electrical signals across gaps, or synapses, between the cells.

Douglas Wallace is studying inherited disorders of mitochondria in humans, such as Luft's hypermetabolic syndrome. Mitochondria are tiny structures inside cells which provide the cell's source of energy. The mitochondria in patients with Luft's syndrome are defective, and cause muscle weakness, increased sensitivity to heat, and an enormous appetite. Related symptoms are found in other mitochondrial diseases. Wallace is trying to determine the genetic bases of these diseases and how the mitochondrial defect is expressed.

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2-6-78

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD--Dr. Jean-Pierre Changeux of the Pasteur Institute in Paris will present the fifth annual Windsor C. Cutting Memorial Lecture at Stanford University School of Medicine on Thursday, Feb. 9.

Dr. Changeux, a professor at the College de France, will discuss "Structure and Functional Properties of the Acetylcholine Receptor Protein" at 4:15 p.m. in the Fairchild Auditorium of the Medical School. The lecture is open to the medical community and public.

The Windsor Cutting Lectureship was established in 1973 by the faculty of the Department of Pharmacology and is supported by private contributions. It honors the memory of Dr. Cutting, professor and former chairman of the department. Dr. Cutting, who died in 1972, also served as dean of Stanford Medical School, 1953-57, and as dean of the University of Hawaii Medical School, 1963-71.

The lectures, which feature speakers prominent in the field of pharmacology, are given annually.

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Mailed Friday, February 3, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

RELEASED IN CAMPUS REPORT, FEBRUARY 1, 1978

REPORT OF PUBLIC MEETING OF STANFORD ADMINISTRATIVE PANEL ON RECOMBINANT DNA MOLECULES ON FRIDAY, JANUARY 27, 1978

STANFORD -- Recombinant DNA research, the gene splicing experiments which aroused controversy during the last few years, continues at Stanford University under close public scrutiny.

Since September, 1976, an administrative panel on recombinant DNA molecules has reviewed all proposals and research activities which involve the transfer of genetic material between different organisms.

The 16-member panel, which includes University professors and staff, an expert in biosafety, and a public representative, ensures that such research complies with safety guidelines issued by the National Institutes of Health (NIH) in 1976.

The guidelines prohibit certain experiments which involve toxic substances and human cells. Other experiments are permitted, but only when specific safety precautions which correspond to their potential hazards are taken.

The panel is responsible for reporting any potential or apparent violation of these policies to University officials.

There are 19 Stanford scientists engaged in recombinant DNA research which is reviewed by the panel. Three of these scientists are also panel members; Paul Berg, Willson professor of biochemistry, Stanley Cohen, professor of medicine and genetics, and Ronald Davis, associate professor of biochemistry.

The panel meets about once a month. Every fourth meeting is open to the public. However, the minutes of every meeting are public record and are available at University libraries.

An open meeting last week at the Meyer Undergraduate Library at Stanford provided an example of how the review process works. About 20 people attended.

Most of the panel's business concerned review of research proposals. Berg outlined a proposal for growing recombinant DNA molecules from bacteria, yeast and fruit flies in mammalian cells.

"Ultimately, we'd like to be able to introduce specific animal genes into the chromosomes of mammalian cells and study how they are expressed," he said.

-more-

Berg said he intends to introduce new DNA into monkey or rodent cells by using the viruses, SV40 and polyoma, which naturally infect such animals.

The NIH guidelines require that viruses used to transfer new DNA into animal cells are made defective so they can not reproduce by themselves. In Berg's experiments, segments of the viral DNA necessary for reproduction are cut out and replaced with the new DNA.

A second precaution requires that the experiments are done under special laboratory conditions, designated P3, to prevent contamination outside the lab.

In addition, the new DNA must be purified so that no novel viruses containing unknown, toxic agents are produced. Purification is done by cloning, or growing the desired DNA segments in bacteria prior to combining them with viral genes.

"Do you have a P3 facility?" asked panel member Michael Arnush, an undergraduate student in anthropology.

"Yes," said Berg. "All experiments involving the growth of recombinant DNA in mammalian cells are done in this facility."

"How pure is the material you're putting into the viruses?" asked John Kaplan, professor of law.

The material to be combined with SV40 "is by definition homogeneous, as it has been purified by cloning," said Berg. All of the gene segments are identical. "Cloning is the most rigorous procedure for purification now available on this earth."

The requirements for purifying DNA which is then combined with polyoma are less stringent, he said, because, unlike SV40, the virus is not known to infect humans.

When the discussion had ended, Berg left the meeting room. A vote was called for, and the research was approved unanimously.

John Brauman, professor of chemistry, chairs the panel. Faculty staff members not involved in the research include Brauman, Kaplan, David Perkins, professor of biological sciences, Lucille Rasmussen, research associate in infectious diseases, Burton Richter, professor at the Stanford Linear Accelerator Center, Nathan Rosenberg, professor of economics, and Kenneth Vosti, professor of infectious diseases.

Panel members from outside Stanford are Mark Chatigny, chairperson of the University of California Biological/Environmental Department, Naval Biomedical Research Laboratory, Richmond, and Richard Rosenbaum, a former Palo Alto city councilman and research engineer at Lockheed.

Ex-officio members are John Bernard, occupational health and safety officer at the Medical Center, Patricia Devaney, assistant to the vice-provost for research, and Jack Sidlow, University manager of safety and health.

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STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Dr. William Hayden, a radiologist who filed a law suit against Stanford University Hospital, will be recommended for appointment to the medical staff, according to the terms of an agreement ratified Tuesday, Jan. 31, by the Board of Hospital directors.

The agreement was reached by the Hospital and Hayden shortly before the Hospital board was scheduled to hold extensive hearings on the issues raised by the Hayden case.

Under the agreed settlement, Hayden will be granted certain clinical privileges subject to approval by the Credentials Committee and Medical Board of his professional competence.

Hayden will participate in the teaching of medical students, interns, residents, and fellows as requested by the Department of Radiology, and will cooperate in departmental research.

Hayden agreed to drop his suit against the Hospital now pending in Santa Clara County Superior Court.

Conrad Gullixson, president of the Board of Hospital directors, said he was pleased the dispute with Hayden was resolved.

At the same time, the Board issued a statement which said in part:

"The Board of Hospital Directors reaffirms its dedication to providing high quality care to all patients at a reasonable cost while maintaining strong educational and clinical research programs within the Hospital under the direction of the full-time faculty of the Medical School.

"The Board is particularly concerned with maintaining excellence in patient care, teaching, and clinical research within the Hospital-based clinical services where issues of quality control, coordination, standardization and cost efficiencies are critical.

"Because of this concern, during the next few months the board will examine carefully the operation of these Hospital-based clinical services where issues of quality control, coordination, standardization, and cost efficiencies are critical.

"Because of this concern, during the next few months the board will examine carefully the operation of these Hospital-based clinical services. This examination will include the desirability of maintaining closed staffs for such services and a review of all existing exceptions and special arrangements.

The Board said it will not accept applications for membership of privileges in Hospital-based clinical services while its review is under way. The Board intends to complete its review within the next four months. The Board also indicated that it will seek advice from various sources, including Hospital and medical school administration, and the medical staff.

According to Dr. Clayton Rich, dean of the School of Medicine and a member of the Hospital Board, "the radiology service of the Hospital has operated under a closed staff rule, but this rule has not been reviewed for many years. The Board wants to reassess the closed staff rules in all Hospital-based services, including pathology, anesthesiology, and radiology, but it has decided this must be done outside the context of an adversarial hearing."

The Hayden case emerged when the Palo Alto radiologist applied for membership on the medical staff of the Hospital and requested privileges in the division of diagnostic radiology.

While his original application was pending before the Hospital board, Hayden filed suit, contending that the hearing procedures would not afford him a fair hearing.

The Hospital had argued in court proceedings that the matter should be returned to the board for further hearings.

Last November, Santa Clara County Superior Court Judge J. Barton Phelps ruled that Hayden be granted a hearing before the Hospital Board.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

An exhibition of paintings, drawings and sculptures spanning 20 years by Dr. Joseph P. Kriss will be on display April 4-May 19 at the Syntex Gallery in Palo Alto.

Kriss, who is professor of medicine and radiology, and director of the Divison of Nuclear Medicine at Stanford University Medical School, has been painting for the past 30 years. His one-man show at Syntex, which is entitled 'Joseph Kriss: A Retrospective, 1957-77," is the first showing of his works since 1974.

Exhibits in Kriss's new show include oil paintings, single line pen drawings, and sculptures in cast resin and bronze using the lost wax process. The bronze pieces were completed in 1971 and the cast resins three years later.

A set of eight paintings in the show were completed in 1977 and are entitled the Cabo San Lucas Series. According to Kriss these paintings deal with "resolve, death, struggle, triumph, harmony and peace."

Kriss, whose first show was held in 1955 in San Francisco, has works in many private collections and in corporate offices in the San Francisco Bay Area, and in other parts of the country.

"I have not sought to achieve any special goal or style in my painting," Kriss says, "but the following considerations are dominant: I am a colorist, I am intrigued more by people and man-made objects than by natural scenery, I am aware of trying to create a mood in the paintings, and I want the viewer...to see new things with each new look."

Kriss, who has been on the Stanford Medical School faculty since 1948, was recently named one of eight Distinguished Alumni of Penn State University.

The Syntex Gallery is at 3401 Hillview Avenue in Palo Alto's Stanford Industrial Park. Hours are 10 a.m. to 4 p.m., Mondays through Fridays, and 1 to 4 p.m. Saturdays.

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Mailed Friday, March 31, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Dr. Tag E. Mansour has been appointed the Donald E. Baxter Professor of Pharmacology at Stanford University School of Medicine.

His appointment to the endowed chair was announced by Dr. Clayton Rich, vice president for medical affairs and dean of the medical school.

Mansour, who is chairman of the Department of Pharmacology, is a widely recognized researcher, concentrating his investigations in the field of cell regulation and the effects of drugs on cellular control mechanisms.

A member of the Stanford faculty since 1961, Mansour was awarded an honorary doctor of science degree in 1974 by his alma mater, the University of Birmingham, England, for his work on enzymes that convert glucose to lactic acid within the cell.

Mansour received his bachelor of veterinary science, medicine and surgery degree from the College of Veterinary Medicine at the University of Cairo, Egypt. He studied physiology and pharmacology at Edinburgh University in Scotland, and in 1949 he earned a Ph.D. in pharmacology from the University of Birmingham, England.

In 1952-54 Mansour was a senior instructor and research associate in the Department of Pharmacology at Western Reserve University Medical School in Cleveland, Ohio, and during 1955-61 he was on the medical faculty in the Pharmacology Department at Louisiana State Medical School in New Orleans.

Mansour serves on the editorial boards of *Biochemical Pharmacology* and *Archives Internationales de Pharmacodynamie et de Therapie.* He is also consultant to the World Health Organization and the U.S. Public Health Service.

The Donald E. Baxter Professorship is named after the late physician, scientist and engineer who founded the Baxter Co. The company was acquired by the American Hospital Supply Corp. following Baxter's death.

The Baxter Foundation has also funded medical research and provided student financial aid at Stanford Medical School. In addition, it has helped fund construction and furnishing of diagnostic cardiology laboratories and related areas in Stanford University Hospital's new wing.

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Mailed Wednesday, March 29, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—

The Stanford Arthritis Center is launching a long-term survey of persons with rheumatoid arthritis.

The researchers hope that 1,000 patients with rheumatoid arthritis throughout Santa Clara Valley will participate in the ten-year study which will provide vitally needed information about the course of this important disease.

The survey will be conducted by mail and by telephone and no physical examinations are involved. Patients will be asked a series of questions about how they are getting along with the arthritis, how much pain and stiffness they are having and how well they can do their daily activities. They will be contacted at approximately six month intervals during the study period.

The study does not provide treatment or advice. Survey assessors will not be able to answer questions about the disease and will refer the patient to his own doctor for such information.

The Stanford Arthritis Center, operating under a grant from the National Institutes of Health, was established under the National Arthritis Act of 1975.

Dr. Halsted Holman, professor of medicine at Stanford, is director of the Center and Dr. James Fries, associate professor of medicine, is associate director. Fries is director of the American Rheumatism Association Medical Information System, a nationwide data bank.

According to the investigators, they will examine both the medical costs of the disease and the social costs, such as interference with work activities. The role of different treatments in changing long term outcomes for patients will be evaluated.

Both patients and their physicians will receive reports of the survey at periodic intervals. No physician or patient names will be included in the reports of the study.

Persons with rheumatoid arthritis who wish to participate or learn more about the survey may call the Arthritis Center, (415) 497-5138. Local pharmacies also will be posting information about the study.

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Mailed Wednesday, March 29, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911
City Editors: Photo available on request if not included with story.

STANFORD—

Some of the least visible, yet important members of the Stanford University community are the postdoctoral scholars engaged in clinical and basic research.

"Postdocs" are individuals with an M.D., Ph.D. degree, or both, who are seeking further training in their specialty.

Postdoctoral scholars engaged in basic research carry out experiments and play a major role in the research programs of the faculty. Physicians who are receiving advanced training in a subspecialty may be actively involved both in clinical research and in patient-care.

Almost as large a group as the medical students, postdoctoral scholars in the School of Medicine number over 300. Unlike other students, 'postdocs" apply directly to the department and individual with whom they wish to work. Financial support is obtained from government sources such as the National Institutes of Health, private foundations and foreign governments. Length of stay at Stanford is about two years.

Approximately one out of every three postdoctoral scholars is from abroad. They come from more than 25 countries. Scholars from the United Kingdom, West Germany, France, Israel, Switzerland, Taiwan, Canada and Japan account for well over half of the fellows from abroad.

Britta Hardy, a postdoctoral fellow in the Division of Hematology, is from Israel. Born in Russia at the end of World War II, she and her family moved to Israel when Britta was three years old.

As a young girl, Hardy was fascinated by biology. "I have always been interested in understanding how the body functions—not only as one living unit, but as a complex machine composed of millions of single cells, each with their own unique role and molecular structure.

Dr. Hardy received a Ph.D. in cell biology from the Weizmann Institute of Science in 1975. She and her husband, Amos, a visiting scientist in the Department of Physics, came to Stanford University the following year.

Working in the laboratory of Dr. Stanley Schrier, professor of medicine, Hardy is studying one of the major proteins which make up the red blood cell membrane. Using immunobiochemical methods to purify and analyze the protein, Hardy hopes to determine if it is responsible for the shape changes that red blood cells undergo as they circulate through the body.

"When red cells cannot undergo these necessary shape changes, they are eliminated from the circulation," Hardy noted. "Diseases such as certain types of anemia may result from the premature death of these cells."

The Hardys and their two children, ages 8 and 5, live on campus in Escondido Village. A babysitter takes care of Einat when she comes home from school. Irit attends a day-care center.

The Hardys find their two-year stay in the United States a welcome change in pace from the highly charged atmosphere of daily life back in Israel.

"I am fascinated by the politeness of people in the streets...the nice manners," Hardy explained. "The atmosphere here does not have high tension. It has been a good time for both of us."

Tao-shih Hsieh, a young biochemist working in the laboratory of Dr. Douglas Brutlag, is from Taiwan.

At 22, Hsieh came to the United States to continue his studies. After receiving a Ph.D. in Chemistry from UC Berkeley in 1976, Hsieh entered Stanford as a postdoctoral scholar in the Department of Biochemistry.

(more)

Why did he choose Stanford? "The research environment in the Department of Biochemistry is one of the best in the country," Hsieh replied. "There is close contact and cooperation between the various groups."

Dr. Hsieh is studying the structure and function of heterochromatin of fruit flies. Heterochromatin is part of the cell nucleus and may be involved in the proper pairing of chromosomes in the reproductive cells, known as germ cell lines. Various genetic diseases are caused by improper pairing of chromosomes, Hsieh noted.

"Generally, the postdoctoral period is a very good, productive time for a scientist," Hsieh observed. "When I was a graduate student, I had to fulfill various requirements, as well as teach undergraduate courses. Now I have no other responsibilities and can concentrate on my research."

Dr. Hsieh's schedule is determined by the nature and schedule of his experiments. He works long and irregular hours—often until midnight. "I was married last year, however, and now I'm trying to work more regular hours," he added. Hsieh's wife, also a Berkeley graduate, works at Syntex.

Fiona Rubin, a physician from Glasgow, Scotland, is taking a postdoctoral fellowship in child psychiatry. She and her husband, Peter, a physician and postdoctoral scholar in clinical pharmacology, arrived at Stanford last summer.

As a practicing physician in the English Midlands, Rubin became aware of the lack of pediatric psychiatric facilities in Great Britain and "the crying need for people with a greater understanding of children's problems."

Working on the pediatric wards, she observed "the inability of pediatricians to deal adequately with the emotional turmoil of parents of sick children.

"Coping with the parents of a desperately ill newborn, of a child born with Down's syndrome, or some other severe disease, usually falls to the lot of the pediatric resident and calls for training that he has not had," Rubin noted. "Pediatricians need input on what to expect from parents' reactions and how best to handle them."

At Stanford, Dr. Rubin spends most of her time seeing patients ranging in age from early childhood to adolescence. She finds the program a great challenge. It has come as a major cultural shock, however, to Rubin that in the United States one must consider the patient's ability to pay for care when making recommendations for treatment.

"Issues regarding treatment are clearer when there are no financial considerations for patient or doctor," she believes.

The American way of life with its high level of affluence, loose lifestyles, and stress on individual self-fulfillment appears to be achieved at the expense of other values, Rubin observed.

Speaking slowly and searching for the correct words to describe her impressions, Rubin mused, "It is a strange kind of existence here for us. In the Midlands where we worked, we were an essential part of the hospital...of the community.

"Here, what we do does not appear to be as important...In Britain people go into medicine, perhaps for power, the idea of self-sacrifice, but certainly not for financial rewards. They expect demands to be made upon them and hard work, and, in return, there is the reward of a job well done."

The Rubins, who live in Escondido Village, have observed that Americans spend many more hours in organized activities and sports.

"At home, people tend to gravitate more to the homes of friends or to the hospital mess. Here, superficial contacts with American colleagues are easily made," she noted, "but, with a few major exceptions, they rarely progress beyond that.

"The British have a reputation for being cold and withdrawn, but, in fact, we've found that friendships are a much more important part of our lives."

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Mailed Wednesday, March 29, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—

A public information forum on the subject of sleep research will be held on Wednesday, April 5 in conjunction with the 18th annual meeting of the Association for the Psychophysiological Study of Sleep (APSS), sponsored by the Stanford Sleep Disorders Clinic and Research Center.

The information forum will begin at 9 a.m. at the Elks Club, 4249 El Camino Real, Palo Alto. APSS sessions will be held through April 9 at Rickeys Hyatt House, Palo Alto.

Several well-known sleep researchers are expected to participate in the information forum, including Dr. William C. Dement of Stanford; Dr. Daniel F. Kripke of the Department of Psychiatry at UC-San Diego School of Medicine; Dr. Elliot D. Weitzman of the Department of Neurology at Montefiore Medical Center, New York; Dr. Ismet Karacan, director of the Baylor College of Medicine Sleep Disorders Center, Houston, Texas; and Dr. Milton Kramer, director of the sleep laboratory at the Veterans Administration Hospital, Cincinnati, Ohio.

The panel will discuss public health aspects of sleep research, including the abuse of drugs used to induce sleep, insomnia, the diagnosis and treatment of sleep disorders, basic research directions, and the need for sleep disorder centers.

Other researchers, including Dr. Rosalind Cartwright of Chicago, well-known dream researcher, and Dr. J. Allan Hobson, director of the neurophysiology laboratory at Harvard Medical School, will also be available.

Note to Editors:

You are invited to attend the information forum and a press conference following.

A brief tour of the Stanford Sleep Disorders Clinic and Research Center is planned for the media following the press conference.

A press room will be available at Rickeys Hyatt House during the meetings.

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Mailed Wednesday, March 29, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Plans for establishing an alternate birth center at Stanford University Hospital are being evaluated by hospital administrators.

In the meantime, "we're definitely going ahead with the design and decoration of two private rooms which can be used as necessary for alternate birthings," said Duane Walker, R.N., associate administrator of the hospital and director of nursing services.

The rooms are located in the postpartum unit in the hospital's west wing. Hopefully, they will be ready by mid-April, 1978, he said.

"The hospital's administration is receptive to the idea of an alternate birth center because of the need for one expressed by the community," said Walker.

Final plans will be drawn up in April, he said.

Stanford already offers several alternate birth procedures. These include allowing two persons in the delivery room with the consent of the obstetrician, allowing two persons in the labor room, and allowing labor and delivery in the same room.

After birth, the mother and baby can recover together in the same area where labor and delivery took place whenever possible.

Rooming in with the baby is allowed on the postpartum floor.

This year, the Hospital Medical Board approved three further procedures on a trial basis.

Husbands now can be present during caesarean deliveries except during an emergency.

Properly supervised children now can visit their mother during labor and after birth, they can visit their new brothers and sisters in the maternity unit.

Previously, childen under 16 years old could only visit outside the maternity unit in the solarium.,

The alternate birth center will centralize these procedures in a single location. Women who choose alternate birthing will be able to labor and deliver in a pleasant environment with their families around them.

Some of the procedures were implemented on the recommendations of the Hospital's Perinatal Care Committee, and the Birth Action Council, a group of parents in the community who have given birth at Stanford.

According to Dr. W. Leroy Heinrichs, chairperson of the Department of Gynecology and Obstetrics, "family bonding around the newborn is one of the most important considerations of the new practice...and sibling visits confirm that parent-child relationship at a time when the newborn may create anxiety for the other children in the family."

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Mailed Wednesday, March 29, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD—

Dr. Errol C. Friedberg of Stanford University School of Medicine and Dr. Dale Oxender of the University of Michigan School of Medicine, who will take his sabbatical leave at Stanford, have been named Macy Faculty Scholars for 1978-79 by the Josiah Macy, Jr. Foundation.

Friedberg, an associate professor of pathology, will spend his sabbatical leave at the University of Goteborg Medical School in Sweden. He will study molecular mechanisms of repair of damaged DNA.

A 1961 graduate of Witwatersrand University School of Medicine in Johannesburg, South Africa, Friedberg came to the United States in 1965. Before joining the Stanford faculty in 1971, he was at The Walter Reed Army Institute of Research in Washington, D.C. and at Case Western Reserve University in Cleveland, Ohio.

Oxender, a professor of biological chemistry, will be in the Department of Biological Sciences at Stanford. His area of research is cell-free synthesis of membrane transport proteins from bacteria. He will arrive at Stanford in July.

Oxender received a doctorate in biochemistry from Purdue University. He has been a member of the faculty at Michigan since 1959.

The awards are made annually by the Josiah Macy, Jr. Foundation to support research of "outstanding faculty members of schools of medicine" on sabbatical leave.

Since the program's inception in 1972, the Foundation has made 155 awards totalling more than $3 million to faculty members from 56 institutions.

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Mailed Thursday, March 23, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911
EDITORS: Photos available if not included with story.

STANFORD—

Improvements in the use of bone cement have helped solve two major problems with hip joint replacement, according to three Stanford researchers whose work was recently honored by The Hip Society.

The major problems with the surgery are infection and loosening of the artificial joint from the bone, says Dr. David J. Schurman, assistant professor of surgery.

Both problems are related to a failure in the bone cement, the substance used to attach the artificial joints to the skeleton, he says.

Studies conducted by Schurman, Dr. Robert Piziali, associate professor of engineering, and Lyle Swenson, Jr., research associate in orthopedic surgery and mechanical engineering, suggest that infection can be effectively prevented by mixing the bone cement with antibiotic prior to applying it to the skeleton.

In addition, mechanical strength of the cement can be improved by ensuring that liquid, air or blood does not mix with the cement during application.

The researchers received the award for their work at the February 22, 1978 meeting of the American Academy of Orthopedic Surgery in Dallas, Texas.

The award, a $1,000 honorarium, was presented by The Hip Society "in recognition of preeminent excellence...of thermal, mechanical and antibiotic studies of bone cement relating to total hip replacement surgery."

Joint replacement surgery is one of the most common operations performed in the U.S. Over 100,000 total hip joint replacements and 30,000 total knee joint replacements are done in this country each year.

Most infections occur because the artifical joints do not have a natural blood supply.

Infections occurring near them are not readily fought by the body's immune system.

In Europe, an antibiotic called gentamicin is commonly added as a powder to the bone cement before the joint is put in place. The antibiotic leaches from the cement after it hardens and forms a protective barrier around the joint.

This procedure has not been approved in the U.S., but antibiotics can be given by injection or washed through the wound at the time of surgery, says Schurman.

The Stanford group tested the cement-antibiotic mixture in rabbits which had received knee joint replacements. When challenged by infectious agents, all of the rabbits were able to resist infection completely. Ninety percent of control rabbits, which did not receive antibiotic, developed infection after the challenge.

The antibiotic which leached from the bone cement did not reach toxic levels in the rabbits' blood. After a few days, it fell below clinical levels in the urine, says Schurman.

Mixing antibiotic in powder form with bone cement also did not affect the mechanical strength of the cement as shown in studies performed by mechanical engineering's design division.

"These studies suggest that mixing antibiotic with cement is a safe and effective means of protecting against infection," says Schurman.

Mechanical strength was affected, however, when liquid antibiotic, air, or blood from the bone mixed with the cement during the operation. "This causes very important decreases in strength," says Schurman.

The Stanford group also explored the theory that bone cement releases heat as it hardens and may kill bone tissue adjacent to it. Scar tissue which forms in the dead area may result in the cement loosening from the bone.

The researchers performed experiments with computers using clinical data from Stanford and other centers. These demonstrated that "bone cement is very safe and very unlikely to contribute to the thermal death of bone cells," says Schurman.

Therefore, heat factors probably do not contribute to loosening, he says.

The Stanford studies have been included in an application to the Federal Drug Administration to allow clinical trials of the antibiotic-bone mixture in patients undergoing joint replacement, says Schurman.

The research was supported in part by grants from the National Institutes of Health, the Orthopedic Research and Educational Foundation, and the Schering Corporation.

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Mailed Thursday, March 23, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Mervin G. Morris, a department store chain executive, has been appointed by Stanford University Trustees to the Stanford Hospital Board of Directors.

Morris, a native Californian, is chairman of the board and chief executive officer of Mervyn's a chain of 42 department stores in California and Nevada. The Mervyn's chain is headquartered in Hayward.

Morris succeeds Mrs. O. Meredith Wilson, a member of the hospital board since 1970 who is moving from the area.

As a boy Morris worked in his father's department store in Delano before founding his own retail business in San Lorenzo in 1949. From that two-employee store he has built the Mervyn's chain which today employs more than 9,000 persons.

Morris is active in several national retailing organizations and is on the board of PG and E. In addition, he is a member of the board of the School of Business at the University of California in Berkeley, and an Associate at USC, and also on that school's Board of Councilors. He resides in Atherton.

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Mailed Thursday, March 23, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

A new technique is being used to detect the toxic effects of an anti-cancer drug on the hearts of cancer patients at Stanford University Hospital.

The technique, called endomyocardial biopsy, originally was developed to monitor rejection of transplanted hearts.

It involves removal of tissue from inside the heart and examination under the microscope.

The biopsy is performed by inserting a catheter, with a clipper at the end into the patient's jugular vein and threading it down into the heart, where it snips off a small piece of tissue.

"We feel that the endomyocardial biopsy provides a useful means of monitoring toxicity of the anti-cancer drug adriamycin in the heart," said Dr. Margaret Billingham, assistant professor of pathology, at the 13th annual San Francisco Cancer Symposium March 3, 1978.

Billingham is conducting the research with Drs. John Daniels, assistant professor in oncology, Jay Mason, assistant professor in cardiology, and Michael Bristow, postdoctoral fellow.

The biopsy procedure is done with a wire device called a bioptome. The bioptome was developed at Stanford from a Japanese model by Dr. Philip Caves in 1973. Caves presently is head of the department of cardiovascular surgery at the University of Glasgow, Scotland.

The procedure is done under local anesthetic and the insertion is viewed through a fluoroscope. It can be repeated many times on an outpatient basis if necessary.

Over 1500 biopsies have been taken at Stanford hospital without one death, said Billingham. Two-thirds of them were done to monitor rejection in heart transplant recipients.

Billingham said the technique has also been used at Stanford in 75 cancer patients who have received adriamycin. The researchers are now seeking ways to prevent the effects of adriamycin on the heart.

Adriamycin is an antibiotic used to treat various forms of cancer. The drug kills fast-growing cancer cells by interrupting the manufacture of their genetic material.

In high doses, however, adriamycin also damages heart muscle cells and can lead to heart failure. Prior to the biopsy technique, detection of drug-related damage was made by changes in the EKG and clinical changes in heart function.

The biopsy can detect damage to cells before these other symptoms occur. In older patients, "the biopsy offers the only reliable method" of determining whether changes in heart function result from the effects of adriamycin or other conditions, such as coronary artery disease, said Billingham.

Biopsy studies in patients treated with radiation prior to adriamycin demonstrated that "previous radiation to the heart enhances the danger of toxicity from adriamycin," she said.

Adriamycin also produces a "recall" phenomenon in these patients, changes in their hearts similar to acute radiation damage even though the radiation was years prior to treatment.

Repeated biopsies can help physicians determine the dosage of adriamycin which is effective in fighting cancer, but which does not damage heart tissue, she said.

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Mailed Thursday, March 16, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Carsen
FOR IMMEDIATE RELEASE

STANFORD—

Rev. Ernie Young knows what it means to face what he calls "ultimate questions." He has to help people do it all the time.

Young is chaplain at Stanford University Medical Center. His chaplaincy service helps patients deal with matters of life and death.

Young sees his job as religious "only in the broadest sense." The emphasis, he says, is on "faith—that life is a good gift and has meaning" rather than "belief in any particular relgious creed."

Young and his Catholic counterpart, Rev. John Hester, who also is a chaplain at Stanford Medical Center, counsel virtually thousands of patients each year.

Young says counselors simply reinforce faith and hope which are "immensely important to critical and terminal patients. The chaplaincy is available to simply care without ulterior motives. It is very tangible," Young says.

This kind of caring takes many forms—flying a man's daughter to be here with him before he dies, providing clothing for a patients soon to be discharged, arranging accomodations for families from out of town, or simply being with people when they need someone to care. Older people especially need this attention as their "support often dwindles in size," Young notes.

The chaplaincy office is directed by Young. He and Hester are assisted by secretary Louise Melle, who also provides occasional counseling to patients and family members.

The unique idea of a chaplaincy program in a nonreligious affiliated hospital, such as Stanford, was organized in 1974 by Young. Later that year he was joined by Hester, a Roman Catholic priest. The program involves close coordination wih community clergy as well.

Hester has developed a team of lay counselors to help him with the approximately 140 Catholic patients who are in the hospital daily. At least five of these lay counselors are skilled in counseling techniques, administer sacraments, and refer Hester to those patients who request him or who have special needs. Hester also spends considerable time in emergency, intensive care units, and the coronary care unit.

Young is responsible for patients of all other faiths. He has a ream of nine assistants, all skilled in counseling, and some of whom are working toward counseling degrees. Training courses are held for all volunteers.

Each day the chaplaincy is provided information on new patients. It then selects those patients who will be seen and decides which patients will be called upon first, Young explains.

Patients and their families are not the sole beneficiaries of the program. Young says he is pleased with the opportunity to combine clinical experience with teaching, and being able to bring this experience into the classroom. Courses dealing with biomedical ethics are offered to Stanford Medical School students, and in April a weekend course is planned dealing with emotions and death.

Medical students often accompany Young on his rounds to get a different insight into the patients and patient care. Young believes this experience has a profound effect on the students, and he notes that some students have made specialty choices based on relationships developed with patients in this manner.

The chaplaincy service will also provide its first clerkship for a medical student this year, Young said.

The chaplains also make an effort to be available to doctors and nurses to help deal with their ethical dilemmas and emotional drain. Support is provided to nursing staff on an in-service basis. For example, if a nursing unit is having a "low morale" period, the chaplains will discuss questions or issues which have brought the staffers to a low point.

Seminars are also offered through the chaplaincy for community clergy, and a chaplain's advisory committee meets monthly to make the service more effective, Young says. This continuing liaison with community clergy includes local clergy and physician representatives, medical faculty and staff.

The referral demand from physicians, nurses, and social workers is encouraging to Young. "It means that the kind of counseling and care provided by chaplaincy service is being recognized as an important part of the health care team."

Young's hope for the future is that patients will have their spiritual and emotional needs cared for, as well as their physical needs to ensure a "positive healing experience. We need to develop a holistic approach to health," he urged.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD —

Faced with an operating deficit of $700,000 for fiscal 1978-79, Stanford Medical School officials are taking steps to bring school expenses in line with revenues.

In a memo to departments, Dr. Clayton Rich, vice-president for medical affairs and dean of the school, said "it is necessary to make decisions now that will prevent an operating budget deficit increasing in future years."

Rich said his goal was to achieve savings "in a way least damaging to the academic programs."

The dean said he had asked department chairmen to identify additional methods of affecting savings, and advise about the extent to which some of his own suggestions might be implemented.

He said if measures to reduce the deficit are not taken, it would grow to $2 million in the next four years.

The budget gap has been caused by a combination of factors. They include sharp increases in operating costs and at the same time a decline in clinical income and overhead cost recovery on some research projects. An example of operating costs changes is an 85 percent hike in utilities next year.

Rich said he has set a budget ceiling of $18,250,000 for the school's operating budget, representing an increase of 8.6 percent over this year's budget. Operating budget includes administration and general expense, operations, maintenance, and salaries. It is a part of a total medical school and clinics budget totalling more than $63 million.

The proposed budget includes increasing faculty salaries 8 percent instead of 10 percent in 1978-79, reducing operating costs by $100,000 and reducing administrative costs 2 percent below projected levels in 1978-79, and maintaining a freeze in some faculty positions.

"In considering reduction of faculty positions," said Rich, "it is extremely important to be sure that it is done in a way that interferes least with the long-term academic strength of the school."

He said an analysis of each department and program is now under way to determine how best to accomplish this.

Rich said he had appointed a committee headed by Dr. Thomas A. Gonda to make recommendations about tuition. Among alternatives under consideration is a "one time increase" of $1000 for 1979-80 tuition beyond the university's annual tuition increase. This rise in tuition without additional financial aid considerations would increase the operating budget by $408,000 in 1979-80.

"We have set the tuition for medical students at 105 percent of the amount charged for undergraduate and graduate students elsewhere in the university," said Rich. "However, this amount is far below the actual costs of medical education and what a number of comparable schools now require."

He said he had asked the committee to advise him about the method of setting tuition for future years, and to what extent there should be provisions to help with student aid as part of such a revised policy.

Three-quarter tuition for regular undergraduate students in 1978-79 would jump from its present $4,695 to $5,130. For medical students it would be approximately $240 more per year.

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3-13-78

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos

FOR IMMEDIATE RELEASE

STANFORD—

Stanford University School of Medicine has received regular seven-year accreditation, according to Dr. Clayton Rich, vice-president for medical affairs and dean.

The Liaison Committee on Medical Education surveyed the medical school recently and has issued the results. "I am pleased to report that the survey team was very positive about almost all programs for the school," Rich said.

For the past five years Stanford medical school has had three- and two-year accreditations because of vacancies in key departmental chairmanships. Most of these have been filled.

Rich said a major problem still remaining and in which the committee expressed concern is the appointment of a department chairman in physiology, and the development of adequate facilities for this department. Efforts toward this end are under way.

The Liaison Committee is composed of members of the council on medical education of the American Medical Association and the execuive council of the Association of American Medical Colleges.

Accreditation of medical schools requires a proper balance between the number of students in each class, the resources of the institution, inlcuding faculty, facilities, and budget.

The survey team report commended the school for "an exceptionally strong emphasis in research, particularly on fundamental biomedical investigations carried on in the basic science and clinical departments."

It also noted the "high degree of interaction between the faculty of medicine and the faculty of the university as a whole, expressed as collaborative research and joint educational ventures."

The report said Stanford has highly individualized M.D. and Ph.D. programs, a large graduate medical training program (house staff and clinical postdoctoral fellows) with emphasis on subspecialty training.

These were appropriate objectives for the mission of the school, the survey team said, "and the objectives are being attained."

The report comments that the present organizational structure of the medical school, the hospital, and the university appeared appropriate.

"The medical school is looked upon by all components of the university as a major intellectual asset," the survey team commented. "It is also regarded as a professional school that is anomalously large, accounting for almost half of the total expenditures of the university, and employing about one-third of the university faculty.

(more)

"It has recognized differences from other schools in it goals, requirements and programs, and in its financial and administrative operations, it is largely decentralized.

"There is a firm assumption throughout the university, shared by the medical school, that the school should generate its own income and not require university unrestricted funds."

The survey team said the School of Medicine deserves commendation for the qualifications of its faculty. But it added, "If true that policies with regard to tenure impede the recruitment of faculty necessary for sound educational experience in affiliated hospitals, a review of these policies should be undertaken."

The report notes that, in spite of a period of inflation and recession, the School had made "remarkable progress" in expanding its physical plant. But clinical departments were still experiencing a shortage of space. These were surgery, cardiovascular surgery, anesthesiology, pediatrics, medicine, neurology, pathology, and radiology.

Additional facilities will be needed, the report urged. They are expansion of the hospital and supporting laboratory and ambulatory services, and a new science building to meet "critical long-range needs of physiology, microbiology, and other basic science and clinical departments."

The report found Stanford's admission procedures, counseling and evaluation of students "to be well done by capable and diligent members of the faculty."

Among favorable comments obtained by the survey team from students included:

. A lack of destructive competition among students, while preserving excellence, as measured by National Board scores and internship matching;

. a spirit of cooperation and minimal stress because of the pass-fail system;

. an elective curriculum which affords opportunities to pursue special interests in research or additional academic work;

. student participation in medical school committees;

. responsiveness of the Stanford medical school to needs of minorities;

. Stanford's ability to attract outstanding students.

The students, according to the survey team, listed several areas in which improvements were needed. These include a more centralized control of academic departments which tend to act as independent fiefdoms, elimination of course scheduling conflicts, monitoring of the quality of teaching in affiliated hospitals.

The administration was fully aware of these shortcomings and was seeking solutions, the surveyors said.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Stanford researchers have found that memory can be improved by drugs which increase the transmission of a chemical messenger in the brain.

In a recent study to be published in *Science* magazine, "normal persons showed a significant improvement in their ability to learn new information after taking physostigmine," said Dr. Ken Davis of the Department of Psychiatry.

"We're now giving another drug, choline, to older people to see if it will reduce the loss of memory which often occurs during aging," he said.

The drugs, physostigmine and choline, increase the activity of nerve cells which contain acetylcholine. Acetylcholine is a chemical messenger which transmits electrical signals across gaps between nerve cells.

In the double-blind study, 19 subjects received a dose of physostigmine or saline, and then were given a list of 20 items orally to memorize. They wrote down what they could remember, and at the end of the trial were reminded of the items they missed. The test was repeated six times.

Persons who received physostigmine had significantly better recall than those who had gotten saline.

Those who performed the worst on the first trial, showed the most improvement after taking the drug, said Davis.

Physostigmine is a short-acting drug, remaining in the blood stream for one hour. However, it causes several side effects, including decreases in heart rate and arterial blood pressure, nausea and vomiting.

Because of the side effects, physostigmine is not being tested in older people.

Choline, a safer and longer-lasting drug, is being tested in these patients. Choline remains in the blood stream for six hours without causing side effects.

Preliminary trials in older people using choline so far have been unsuccessful in producing significant effects on their memory. Further work, using varying doses of the drug, is planned, said Davis.

The research is being conducted in the Clinical Research Center at the Palo Alto Veteran's Administration Hospital by members of the Department of Psychiatry including Dr. Davis, Leo Hollister, Bert Kopell, Richard Mohs, Philip Berger and Jared Tinklenberg.

"Autopsies of persons who suffered from senile dementia, a mental deterioration associated with old age, have shown that there is a loss of nerve cells which contain the chemical messenger acetylcholine," said Davis.

Drugs which reduce the activity of these nerve cells can produce a memory disorder identical with senile dementia, even in young people.

"These studies suggest that memory may be improved by increasing transmission in acetylcholine-containing nerve cells," said Davis.

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Mailed Tuesday, March 14, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

TO: CITY EDITORS AND SCIENCE WRITERS

STANFORD—

Sleep researchers from throughout the world will meet April 4-9 in Palo Alto to present their latest findings about topics such as the function of sleep, snoring, treatments for insomnia, and the role of sleep in children.

The press is invited to attend sessions of the 18th annual meeting of the Association for the Psychophysiological Study of Sleep (APSS), to be held at Rickey's Hyatt House under the direction of the Stanford Sleep Research Center.

A Public Information Forum, followed by a press conference, is scheduled for Wednesday, April 5. A panel of well-known sleep researchers, including Dr. William C. Dement of Stanford, will conduct an educational session on the public health aspects of sleep research, such as the abuse of aspirin and other drugs used to induce sleep, and apnea or episodes of stopped breathing during sleep.

Workshops during the week will focus on issues such as sudden infant death syndrome, narcolepsy, and other sleep disorders.

New research is expected to be presented about the association of sleep apnea to hypertension, whether certain patterns of snoring may predict obstructive sleep apnea, and whether a child's need for sleep changes with age.

One workshop is planned on the chemistry of sleep. It includes polypeptides and sleep, relating new knowledge on encephalins and endorphins and consideration of a sleep polypeptide.

Among the 200 researchers expected to attend are Rosalind Cartwright, well-known for her work on dreams, and Elliot Weitzman of the Sleep-Wake Disorders Unit at Montefiore Hospital, New York.

More than 65 presentations will be on exhibit at a "science fair," located at Rickey's. Also planned is a "film festival," entertaining movies on sleep, plus the showing of a new film on narcolepsy.

Concurrent with the meetings will be the San Francisco Exploratorium exhibit "Dreamstage." Visitors to that exhibit, located at the Palace of Fine Arts, will view a sleeping human subject, selected by Stanford's Sleep Disorders Center, whose brain, eye and muscular movements will be translated into color, sound, and music. In the learning center portion of the exhibit, sleep experts will be on hand to answer questions.

The News Bureau will handle press arrangements during the APSS meetings. A detailed program and abstracts will be available soon. If you plan to cover, please return the form attached.

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3-8-78

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Approval to license development of a recombinant DNA research technique has been granted to Stanford University by the National Institutes of Health (NIH).

Dr. Donald S. Fredrickson, NIH director, said in a March 2, 1978, letter to Robert Rosenzweig, Stanford vice-president for public affairs, that development of the technique can continue if the licensee complies "with the physical and biological containment standards set forth in the NIH guidelines."

The guidelines, established in 1976, ban hazardous experiments and allow others under strict containment procedures. They presently apply to federally funded research only.

According to Rosenzweig, the University is investigating the licensing question and has made no decisions. "We don't want to do anything that would interfere with legislation relating to recombinant DNA research now before Congress," he said.

The legislation would require that the guidelines also apply to private researchers, including industry.

The technique was developed by groups headed by Dr. Stanley Cohen, professor of medicine and genetics at Stanford University School of Medicine, and Dr. Herbert Boyer of the University of California-San Francisco. They published their findings in 1973 and 1974.

The technique involves transplanting genes from higher organisms into the bacterium *E. coli* by means of a plasmid carrier. Plasmids are small DNA segments carried by and sometimes transferred between bacteria.

Scientists hope to use the technique to introduce genes into easy-to-grow bacterial cells, converting the bacteria into factories of biological substances such as insulin and hormones.

The research by Cohen and Boyer was funded by the NIH, the American Cancer Society, and the National Science Foundation. These agencies agreed the technique should be administered under an institutional patent agreement between Stanford and the NIH.

The agreement allows the University to grant licenses for continued development of the technique, and gives it sole patent rights.

A patent application has been filed by Stanford and UC, and is now being considered by the U.S. Patent Office, according to Niels Reimers, manager of Stanford's technology licensing program.

"We have the right to patent and license this technique under our agreement with the NIH," says Rosenzweig. "But because of the controversial nature of recombinant DNA research, we asked for specific approval from the NIH before taking any further action."

In this letter to Rosenzweig, Fredrickson confirmed Stanford's rights to license and patent the technique, but only on the condition that companies which develop it under the license adhere to the NIH guidelines.

Under these conditions, licensing would benefit the public interest by requiring adherance to the guidelines within industry.

However, Fredrickson said "use of the institutional patent agreement as a means of obtaining compliance with the NIH guidelines is not an adequate substitute for legislation.

"If legislation is passed, these safety standards will be mandated by the law for all who conduct or support recombinant DNA research."

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3-8-78

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia 497-6911

FOR IMMEDIATE RELEASE

STANFORD --

Dr. Victor W. Sidel, an internationally-recognized authority on health care delivery systems, will present two free public lectures Wednesday, March 15 at Stanford Medical School.

Sidel will speak on "Medical Care and Medical Education in Cuba: New forms of Socialized Medicine" at noon in Room M-104, and "Medicine in China Revisited, 1971-77" at 8 p.m. in Fairchild Auditorium.

Sidel is professor and chairman of the Department of Social Medicine at Montefiore Hospital and Medical Center, and at Albert Einstein College of Medicine in the Bronx.

He has served as instructor in biophysics at Harvard, consulting physician in medicine for the Family Health Care Program at Boston Children's Hospital, and head of Community Medicine at Massachusetts General Hospital in Boston.

Currently, Sidel is concentrating his teaching and research in community health, particularly in the Bronx.

Sidel has studied health care in many foreign countries, including China. His book Serve the People: Observations on Medicine in the People's Republic of China was written with his wife Ruth. Sidel's latest book A Healthy State: An International Perspective on the Crisis in U.S. Medical Care compares medical care in the U.S. with that in sweden, England, Russia and China.

Last year Sidel served as a consultant on health services research to the World Health Organization in Geneva, Switzerland. Among his many world trips was one to China in 1977, his third as a guest of the Chinese Medical Association in the past six years. Earlier this year he visited Cuba at the invitation of the Cuban Ministry of Health.

Sidel received his A.B. (cum laude) from Princeton and his M.D. from Harvard in 1957.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

Editors: Photos available if not included with story.

FOR IMMEDIATE RELEASE

STANFORD—

Changes in the pressure of fluid surrounding the brain can now be monitored continuously and noninvasively in humans with a device developed by Stanford physicians and engineers with the National Aeronautics and Space Administration (NASA).

Increases in intracranial, or brain fluid pressure which result from head injuries, tumors, surgery, or fevers can damage the brain and may be fatal.

Early detection and treatment of these pressure rises may prevent brain damage and increase the patient's chance of recovery.

The device, called an intracranial pressure monitor, converts pressure signals into radio waves and relays them to a receiver. The transmission of physiological signals in the form of radio waves is known as biotelemetry.

The first implant of this device in a patient on the West Coast was performed Feb. 16, 1978 by Dr. Gerald Silverberg, assistant professor of surgery at Stanford University Medical Center.

"This is one of the few workable telemetry devices which is accurate and stable," said Silverberg.

The patient was a young man who required surgery to remove a brain cyst. Sivlerberg said he implanted the monitor because of the risk of the brain swelling and increased fluid around the brain as a result of the surgery.

The pressure values obtained by the device were checked against spinal fluid pressure readings. "The values matched extremely well," said Silverberg.

"The surgery worked out beautifully," he said, "and the pressure in the brain did not increase."

The device was removed from the patient after five days. It will be recalibrated, sterilized, and used again in patients who have a high risk of increased intracranial pressure.

In the past, pressure has been measured by inserting a catheter into the brain, a technique that is difficult and can be risky.

The intracranial pressure monitor, on the other hand, provides a safer way of measuring pressure changes without puncturing the membrane which surrounds the brain.

The thimble-sized device is fitted through a 16 millimeter hole drilled in the skull so that it touches the brain membrane but does not pierce it. The device is then covered by the scalp.

Radio signals sent by the device are picked up by an external coil placed above the scalp. After processing by a computer, the signals are displayed on a chart in graphic form.

(more)

The device is externally powered by radio frequency waves, eliminating the need for wire connections or batteries.

Arterial blood pressure, blood gases, and heart rate, which are related to intracranial pressure values, are monitored separately.

The intracranial pressure monitor was developed by Thomas fryer, a NASA engineer at the Ames Research Center in Mountain View. Part of the device consists of a transducer used in advanced aircraft and space flight experiments at Ames.

NASA engineers and Stanford physicians have been cooperating in the development of the device as part of the Stanford Biomedical Application Team (BATeam).

The Stanford BATeam is one of four established by NASA in 1966 specifically to transfer aerospace technology to the solution of biomedical problems.

Dr. Donald Harrison, Dr. Eugene Schmidt, and Harry Miller of the division of cardiology direct the BATeam.

Three monitors built by Konigsberg Instruments, Inc., of Pasadena, California, "have performed adequately in long-term bench and animal tests," said Dr. Schmidt," and are approved by the Human Subjects Committee for use in patients."

Drs. Silverberg, Steve Corbin, biomedical engineer, and Allen Ream, assistant professor of anesthesia, are conducting clinical evaluation of the device.

According to Schmidt, the BATeam has contracted with a Southern California company to produce additional monitors.

The present devices are expensive (about $3,000 each) and require processing of the monitor signal to obain pressure readings.

Eventually, said Schmidt, a cheaper, more simplified device will be developed which can be used in any hospital.

The present devices are not designed for permanent implantation. However, it is possible to house the transmitter in a titanium alloy, for instance, which can be left in the body for many years, said Schmidt. Titanium is an inert metal frequently used in heart pacemakers. It is not rejected by the body.

Permanent implantation would permit long-term monitoring in patients with conditions such as hydrocephalus, abnormal buildup of fluid in the brain, said Schmidt.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Premature ventricular beats (PVBs) in patients with heart disease "are harbingers of sudden death," and should be treated with drug therapy, according to Dr. Donald C. Harrison, head of the division of cardiology at Stanford University Medical Center.

PVBs are a form of abnormal heart rhythm characterized by contractions of the ventricles prior to the normal beat.

Harrison, holder of the endowed William G. Irwin professorship of medicine in the School of Medicine, adressed the 27th annual meeting of the American College of Cardiology in Anaheim Tuesday, March 7. The meeting highlighted current controversies in cardiology.

Over 600,000 people die of heart disease in the U.S. each year, many from acute heart attacks. About 60% of deaths from heart attacks occur suddenly, within an hour after symptoms begin and before the victim can reach a hospital.

In many cases death results from a failure of electrical conduction in the heart. Heart muscle cells, which usually contract in unison, begin to beat independently, and prevent the heart from pumping efficiently. This is called fibrillation. The heart in this state has been described as "a can of worms."

Evidence from published studies demonstrating the link between frequent or complex PVBs and sudden death in patients with heart disease is"overwhelming at this time," said Harrison.

Antiarrhythmic drugs which control abnormal heart rhythms should be given to these patients and "perhaps to all patients who are recovering from acute heart attacks," he said.

Harrison cited studies in Britain and Sweden which showed a reduction in deaths among heart patients who received the drugs.

Antiarrhythmic therapy should continue for up to a year after the heart attack, he said.

Heart attacks kill about 10% of patients who have had previous attacks or abnormal rhythms within a year after leaving the hospital, according to a study conducted by Harrison, Dr. John Schroeder, and Irene Lamb, R.N., of the division of cardiology.

"We must concentrate on reducing deaths which occur outside the hospital," said Harrison. Monitoring patients during exercise can help define those with heart disease and abnormal rhythms who are susceptible to sudden death, he said, and for whom drug treatment will be beneficial.

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3-7-78

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT Joanna Cohen 415: 497-6911

STANFORD—

Among the most widely cited authors of scientific papers--"citation super-stars"--are four scientists at Stanford University, according to a recent survey.

Carl Djerassi, professor of chemistry; Nobel laureates Paul J. Flory, professor emeritus of chemistry, and Arthur Kornberg, professor of biochemistry; and Seymour Levine, professor of psychology in psychiatry and behavioral sciences,are listed among the 250 most-cited primary authors, based on a survey of the *Science Citation Index* 1961-75.

Assuming that over one million scientists worldwide have published during this period,these 250 authors account for less than one percent, according to Eugene Garfield of the Institute for Scientific Information.

Authors of scientific papers acknowledge prior work by citing it in their own papers. These acknowledgements are regularly compiled in the *Science Citation Index,* Garfield noted.

"The number of citations is positively correlated with the scientific value of the cited work," he believes. "Papers which receive a large number of citations are usually found to have reported significant new scientific knowledge. And the most-cited authors are likely to be scientists who have had significant impact on the development of science."

Every author included on the list has been cited more than 4,000 times, or a yearly average of at least 266. Since the average cited author receives about 8 citations per year, each of these 250 authors is clearly a "citation super-star," according to Garfield.

Djerassi is the principal developer of oral contraceptives. Flory won the 1974 Nobel prize in chemistry for his pioneering research on polymers. Kornberg received the Nobel prize for his discovery of the mechanisms involved in biologic synthesis of DNA. Levine's research is in the areas of physiological and behavioral development, including stress, hormones and varieties of infantile experience, as they affect behavior.

Because older scientists have been publishing, and therefore accumulating citations longer than younger ones, the average age of the most-cited authors was 63 and none were younger than 40.

The list of most-cited authors was based only on primary author data--that is, a citation to a paper with three authors would be credited only to the first author, Garfield said. Because of the growing number of multi-author papers, future citations will be credited to all co-authors of a given publication, and a whole new data base will be assembled, he said.

Mailed Monday, March 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD

Heart transplant pioneer Dr. Norman E. Shumway will present the second in a series of public lectures on the heart on Wednesday, May 3, at 7:30 p.m. in the Sherman Fairchild Auditorium.

Shumway's topic will be "Heart Surgery: Accomplishment and Prospect." He will discuss current cardiovascular surgery, including coronary bypass, valve replacement, and transplants, and the possibilities of further advances.

Shumway holds the endowed Frances and Charles Field Professorship and is chairman of the Department of Cardiovascular Surgery at Stanford. Aside from his well-known work with cardiac transplantation, Shumway's major accomplishments have been in the field of open heart surgery, particularly in the transplantation of valves.

The lecture is open to the public, and there is no admission fee.

The Progress in Medicine Lectures are presented as a community service by the dean and faculty of the School of Medicine and by members of the Medical Center Council.

Future programs will be held on May 10, " After the Heart Attack: Rehabilitation," by Dr. Robert F. De Busk, and on May 17, "Heart Disease Prevention: A Way of Life," by Dr. John W. Farquhar.

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Mailed Friday, April 28, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Joanna Cohen, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Dr. Philip Schein, professor of medicine at Georgetown University, will present the second Frederick Hurd Welland Memorial Lecture at 4:45 p.m. Tuesday, May 2, in the Fairchild Auditorium of Stanford University School of Medicine.

Schein, chief of the division of medical oncology at Georgetown and the Vincent Lombardi Cancer Center in Washington, D.C., will discuss "Therapeutic Management of Gastrointestinal Cancer." Members of the medical community and the public are invited to attend.

Schein formerly headed the clinical pharmacology section at the National Cancer Institute, and is a leader in the field of endocrine tumors, gastrointestinal cancer and new drug development.

A graduate of Upstate New York Medical School, he received advanced training and held positions at Harvard Medical School, the National Cancer Institute and Oxford University.

Schein is at Stanford as a visiting professor sponsored by the Northern California Cancer Program.

Dr. Welland, a Palo Alto physician who had been chief resident in medicine and a fellow in oncology at Stanford, died in 1973. The lectureship was established in his memory by family and friends.

4-26-78 —30— 15

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 414: 497-6911

STANFORD—

Up to 18 percent of all poverty may be caused by disability, says a Stanford researcher.

Overall at least 30 percent of all poor families with a disabled adult are poor because of the disability. In families with a disabled white man, the proportion who are poor because of disability rises to 75 percent.

These are among the findings described by Harold S. Luft, assistant professor of health economics at Stanford, in his new book, *Poverty and Health: Economic Causes and Consequences of Health Problems* (Ballinger Publishing Co., Cambridge, Massachusetts, 1978, 157 pp.)

According to Luft, disabled people with less education, those initially in low paying jobs, blacks, and women are more likely to be adversely affected by a health problem and suffer greater reductions in job earnings.

Luft's studies are based on data from the 1967 Survey of Economic Opportunity and the 1966 Survey of Disabled Adults, conducted for the Social Security Administration.

The national sample included about 30,000 households, which were asked whether there was a disabled adult in the home. Disability was defined as "a limitation in the kind or amount of work resulting from a chronic health condition or impairment lasting three or more months."

Using these data, Luft examined disability for various categories of people by race, age, and income. He also estimated earnings losses for different groups.

"There is substantial evidence that the incidence of health problems is not random and that, in fact, the poor and less well-educated do have higher rates of disabling conditions," says Luft.

He found that income and disability rates are related. A poor person is at least twice as vulnerable to being afflicted with a chronic health problem than one in the $8,000 and over income class.

The probability of an on-the-job disability, even when controlled for a number of job characteristics, is greater for those with less schooling.

Thus, the average man with 10.5 years of school would have twice the risk of disability if he had only 5.5 years of formal education.

Luft's figures show that about 17 percent of the U.S. population between the ages of 18 and 64 have some disability. He estimates that $22 billion, or about 6 percent of all wage and salary earnings in the U.S., were lost by disabled persons in 1967.

"The magnitude of the problem is large and growing," he says. "A seventh of the working age population is disabled. While more can and should be done to offset income losses, the primary focus...is to prevent health problems and to reduce their severity."

Luft feels that a new system of disability compensation should replace the fragmented systems in use now. He calls for vocational rehabilitation that focuses on those who need it most.

A system that places responsibility for disability compensation at the local or regional level, rather than with the federal government, would be more effective and have consumer involvement, he says.

A region, he says, should be of a size where problems can be more readily identified and changes made.

"A region should be sensitive to its own disability and medical care budget, so it can start to promote, for example, a jogging program, nutrition classes, or environmental protection, or organize in other ways to make changes they see as necesary," says Luft.

This should not be just more rehabilitation and wage subsidies, he says, but rather a comprehensive system, with incentives and feedback mechanisms.

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Mailed Tuesday, April 25, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—

The first successful treatment of chronic active hepatitis B infection with a synthetic antiviral drug has been reported by Stanford University Medical School researchers.

Treatment with vidarabine (adenine arabinoside) led to a significant decrease in the virus particle markers for hepatitis B infection in two patients, they reported.

Vidarabine, which inhibites replication of certain DNA viruses in tissue culture, previously has been shown to significantly reduce mortality in herpes simplex encephalitis patients. It is licensed for local use in herpes simplex infection of the eye.

A report of the hepatitis study appears in the April 21 issue of the *Journal of the American Medical Association*. Authors are Drs. Richard B. Pollard, Joseph L. Smith, Thomas C. Merigan and William S. Robinson of the division of infectious diseases, and Drs. Peter B. Gregory and F. Andrew Neal of the division of gastroenterology.

According to Pollard, 10 additional patients have been treated with vidarabine, including several with a combination of vidarabine and interferon, and antiviral agent normally formed in the body in response to viral infection.

The Stanford group first reported the effect of interferon on chronic hepatitis B infection in 1976.

Some patients, however, may not respond completely to interferon treatment, says Pollard. Better responses may be expected for some patients, he says, if current studies indicate that combined treatment is effective.

Physicians with patients having chronic hepatitis B infection who wish them to participate in therapy trials during the coming months are encouraged to contact the Stanford division of infectious diseases.

Hepatitis B virus cannot be grown in tissue culture, says Pollard. Experimental antiviral agents must therefore be clinically tested in patients.

Hepatitis B virus causes inflammation of the liver. About 10 percent of those who develop the acute infection continue to carry the virus in their liver and blood. It has been estimated that 175 million persons in the world today are chronically infected with the virus and therefore are potential transmitters of the infection.

Spontaneous recovery is rare. Eradication or control of the infection appears to depend on the development of antiviral drugs, say the researchers.

They say further investigations are necesary to determine how regular and permanent the effects of vidarabine will be.

Because the drug produced side effects in their study patients, they caution that its use in patients with more severe or acute infection should be avoided until further studies are completed. Side effects include transient nausea, weight loss, constipation and abdominal cramping.

The Stanford group is supported in this work by the Antiviral Substances Program of the National Institute of Allergy and Infectious Diseases.

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Mailed Friday, April 21, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Dr. Rodney Porter, Nobel laureate and pioneer in the field of antibody structure and function, will speak on complement fixation at the Stanford University Medical Center, Room M104, Monday, April 24 at 12 p.m.

Porter, head of the biochemistry department, Oxford University, England, shares the 1972 Nobel prize in medicine with Dr. Gerald Edelman for working out the structure of the antibody molecule.

Antibodies are protein molecules involved in the body's immune responses against foreign agents, such as bacteria and viruses. These molecules combine with, or fit, their target agent in specific ways, just as a round peg fits only a round hole.

The binding of antibody to agent sets off a chain of reactions involving other serum proteins, called complement. This causes the foreign agent to dissolve.

Porter has worked out the mechanism of initiation of the complement-aided reaction.

The lecture is sponsored by the Division of Immunology and is open to the public.

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Mailed Friday, April 21, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911
EDITORS: Photos available if not included with story.
STANFORD—

Two years after receiving a heart transplant at Stanford University Hospital, Louis Bonesio could barely walk. His heart was fine, but he had developed an arthritic condition in his hips so severe that he was in constant pain.

Bonesio suffered from a side effect of one of the drugs he was taking to prevent rejection of the foreign heart tissue by his body.

Prednisone, a drug used to suppress the body's immune responses, is associated in some patients with progressive deterioration of their joints.

The relationship between the drug and joint disease is not completely understood. It is not known how frequently this condition occurs in heart transplant patients, but it has also been observed in patients with transplanted kidneys.

The only alternative to a wheel chair for Bonesio was total hip joint replacement.

Joint replacement surgery is one of the most common operations performed in the U.S. Over 100,000 total hip joint replacements are done in this country each year.

Since 1971, nearly 450 total hips have been replaced at Stanford's Hip Clinic. The Hip Clinic is directed by Dr. David S. Burton, associate professor of clinical surgery. Joint replacements also are performed at the Surgical Arthritis Clinic, directed by Dr. David J. Schurman, assistant professor.

Over ninety percent of the operations are successful, says Burton, but patients with transplanted hearts are at greater risks from the surgery.

The immunity suppressing drugs they are taking make them more susceptible to infections than other patients. Transplanted hearts are without nerves and may respond poorly to anesthesia.

However, "with proper management and careful monitoring, the risk of anesthesia can be reduced to reasonable levels," says Burton.

Bonesio decided to take the risks. In two successive operations, Burton replaced the worn-out and dying bone of Bonesio's hips with new stainless steel and plastic joints. Bone cement was used to attach the artificial joints to the skeleton.

After each operation, Bonesio spent one day in the intensive care unit where his heart was carefully monitored. Then he was moved to a regular hospital ward, given antibiotics, and "treated just like any other patient," says Burton.

The second day after the last operation, Bonesio was on his feet. Within a week he was walking with just a cane to support him. Today, over eight months later, he is without pain and has essentially full range of motion in both hips.

The results of total hip joint replacement in two other transplant patients were reported in the January-February 1978 issue of *Clinical Orthopaedics and Related Research* by Burton and Drs. Robert M. Mochizuki and Alan A. Halpern.

Both patients have responded well to surgery, and have full use of their hips one year and two years after their operations.

Burton and his colleagues are now studying how prednisone may cause hip joint degeneration, and with what frequency it occurs in heart transplant patients.

Bonesio is not letting a transplanted heart and artificial hips deter him from enjoying life. Retired from a family winery, his leisure pursuits include backpacking and hot air-ballooning. "My goal is to be around for a long time," he says. "I want to be the world's oldest living cardiac transplant."

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Mailed Tuesday, April 18, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—

Noted Stanford cardiac physicians and researchers, including transplant pioneer Dr. Norman E. Shumway, will present a new series of public lectures on the heart, the accomplishments of heart surgery, and heart disease prevention and rehabilitation.

The Medical Center's Progress in Medicine Lectures will begin Wednesday, April 26, at 7:30 p.m. in the Sherman Fairchild Auditorium, and will be held at the same time on the three succeeding Wednesday evenings.

The public is invited, and there is no admission fee.

Dr. Roger A. Winkle, assistant professor of medicine (cardiology), will present the first program, "The Heart: Anatomy and Function." He will discuss how disease affects heart functions and how heart disease is diagnosed.

Winkle has been involved in the treatment of patients with cardiac arrhythmias and the evaluation of new drugs to treat arrhythmia. He received his M.D. degree from the University of Cincinnati, and has been at Stanford since 1973.

Dr. Shumway will deliver the second lecture, May 3, on "Heart Surgery: Accomplishment and Prospect." He will provide a look at current cardiovascular surgery, including coronary bypass, valve replacement, and transplants, and the possibilities of further advances.

Shumway holds the endowed Frances and Charles Field Professorship and is chairman of cardiovascular surgery at Stanford. Aside from his well-known work on cardiac transplantation, Shumway's major accomplishments have been in the field of open heart surgery, particularly in the transplantation of valves.

He also developed techniques for total surgical correction of "blue baby" heart defects.

Future programs will feature:

On May 10: "After the Heart Attack: Rehabilitation," by Dr. Robert F. De Busk, assistant professor of medicine (cardiology). De Busk is director of Stanford's comprehensive cardiac rehabilitation program, and will discuss present techniques to facilitate a heart patient's return to normal activities. The rehabilitation program uses exercise testing and training, physical therapy, psychological and dietary counseling.

On May 17: "Heart Disease Prevention: A Way of Life," by Dr. John W. Farquhar, professor of medicine. Farquhar will discuss high risk factors in heart disease, and effective ways to control them.

Director of the Stanford Heart Disease Prevention Program, Farquhar developed the Three Communities Study in northern California, in which a mass media campaign aimed at lowering residents' risks of heart disease.

The Progress in Medicine Lectures are presented as a community service by the dean and faculty of the School of Medicine and by the members of the Medical Center Council.

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Mailed Monday, April 17, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

The third annual Joe DiMaggio-Executive Pro-Am Golf Tournament will be played Friday, May 5, at the Half Moon Bay Golf Links.

Proceeds from the event will be donated to the Department of Dermatology at Stanford University Medical School for psoriasis research.

Tournament coordinator Rich Fancher estimates that about 180 golfers will enter. Entry fee is $175 and over $10,000 in prizes will be presented to the winners. In addition, a 1978 Cadillac Seville, donated by a Menlo Park auto dealer, will be awarded to any golfer hitting a hole-in-one at the 13th hole.

Entertainer Tennessee Ernie Ford will serve as master of ceremonies at the awards banquet to be held the night of the tournment. Also at the event, DiMaggio will present a tournament proceeds check to Dr. Eugene Farber, chairman of the Dermatology Department at Stanford.

The Half Moon Bay Golf Links at Ocean Colony is located about 28 miles south of San Francisco on U.S. Hwy. 1. The 7,105 yard course opened in 1973 and is considered among the most difficult in California.

The tournament honors DiMaggio, a former baseball great with the New York Yankees and a member of professional baseball's Hall of Fame. DiMaggio has received many honors and awards over the years and in 1969 he was named baseball's greatest living player by sportswriters and fans.

Additional tournament information may be obtained from the Half Moon Bay Golf Links at (415) 726-4438.

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Mailed Monday, April 17, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Classical homeopathy will be the subject of a free public lecture at Stanford University School of Medicine's Fairchild Auditorium April 27, 1978 at 7:30 p.m.

Homeopathy is a highly controversial approach to the treatment of diseases. People with certain diseases are treated with specially prepared doses of plant, mineral or animal substances which produce symptoms of the same diseases in healthy people. Its philosophy of "like cures like" dates back to the time of Hippocrates.

The lecture will be given by George Vithoulkas, director of the School of Homeopathic Medicine in Athens, Greece, and by Dr. William Gray, Mill Valley physician, nutritionist and homeopath. Gray is a Stanford medical school alumnus.

The lecture is sponsored by the Stanford Medical Students Association, the Bay Area Homeopathic Association and New College of California.

Vithoulkas will also deliver a series of lectures on the philosophy and methodology of homeopathy April 29-May 1 at New College in San Francisco. Continuing education credit is available for physicians and nurses. Persons interested in the lecture series should call (415) 383-5343.

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Mailed Monday, April 17, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415:497-6911

STANFORD

Two rooms at Stanford University Hospital have been redecorated and remodeled for future use as an alternative birth center.

Women who choose alternative birthing will be able to labor and deliver in a pleasant environment with their families around them, when the unit is opened in several weeks.

The renovation and furnishings are gifts of Saudi Arabian Prince Alwaleed Alsaoud, 21, of Atherton, a student at Menlo College.

They are dedicated to his wife, Princess Dalal Saoud Alsaoud, who is expecting their first child, who will be born at Stanford. The rooms are not now ready to be used as an alternative birth center, and will be used initially by the donor family for a traditional birth.

"The hospital's administration is receptive to the idea of an alternate birth center because of the need for one expressed by the community," according to Duane Walker, R.N., associate administrator of the hospital and director of nursing service.

The rooms feature carpeting, oil paintings, and easy chairs that rock. One room has a standard hospital bed, with blue linens and comforter, a home-like chest of drawers and lighting fixtures, decorative ceramic figures, and window blinds that match the decor.

The other room includes a sofabed and refrigerator.

According to Karen Richards, R.N. who coordinated the redecorating project, the Prince wished to renovate the rooms for the use of all patients desiring alternative birthing, and to redecorate them as an appropriate and tasteful environment for other patients.

His offer, according to Ms. Richards, coincided with the hospital's plans already underway for an alternate birth area.

Added equipment and cabinetry will be necessary to enable the rooms to be used for that purpose. All materials, says Ms. Richards, will comply with hospital quality and standards.

She noted that donations toward equipment, research, or renovation of physical space in the hospital have always been welcome. She cited similar donations by former patients and their families of waiting rooms for intensive care and cardiac care areas.

Stanford already offers several alternative birth procedures, including rooming in and visits by children. Some of the procedures were implemented last year on the recommendations of the Hospital's Perinatal Care Committee, and the Birth Action Council, a group of parents in the community who have given birth at Stanford.

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Mailed Friday, April 14, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD—

Dr. Elizabeth D. Hay, professor of anatomy at Harvard Medical School, will present the fifth annual Katharine D. McCormick Distinguished Lecture on Thursday, April 20 at 4:15 p.m. in the Fairchild Auditorium of Stanford University School of Medicine.

She will discuss "Tissue Interaction in the Developing Cornea." Members of the medical community and the public are invited to attend.

Hay has pioneered in the use of the electron microscope to investigate the biochemical processes of differentiation. Among her important studies is the synthesis of collagen in embryonip tissues, such as the cornea.

A graduate of The Johns Hopkins University School of Medicine, Hay held positions at Hopkins and Cornell Medical College before coming to Harvard in 1960. She has been chairman of the Department of Anatomy at Harvard since 1975.

Hay is a member of the American Academy of Arts and Sciences, and president of the Society for Developmental Biology. She has served as editor-in-chief of *Developmental Biology* and is a former president of the American Society for Cell Biology.

The McCormick Lectureship was established in 1974 for the purpose of bringing outstanding women physicians and scientists to Stanford.

The lectureship honors the late Katharine Dexter McCormick, who left a large bequest to the Medical School, particularly "for the encouragement and assistance of women in pursuing the study of medicine, in teaching medicine, and in engaging in medical research."

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Mailed Friday, April 14, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

A $1.2 million damage suit has been filed against Stanford University Hospital by a current employee who claims he was demoted and another who claims he was forced to resign.

The suit, which was filed in Santa Clara County Superior Court by employee Conroe C. McGee and ex-exmployee Frank P. Petta, seeks $100,000 in general damages and $500,000 in punitive damages for each of the men, as well as any special damages decided upon by the court.

In addition to the hospital and 20 John Does, three men named as defendants in the case are facilities director James P. McNally, chief engineer William G. Ferguson, and general foreman David M. Dominguez.

Stanford Hospital officials denied that the Hospital has acted improperly in dealing with the personnel actions taken concerning Petta and McGee.

McGee, who has been a hospital employee since 1968, alleges in the suit that he was asked to accept a demotion by McNally on Jan. 24 so that Dominguez could be named general foreman. McGee refused, although Dominguez was later named to the post.

In the suit Petta alleges he was forced by McNally to resign as chief engineer on January 13. Petta had joined the hospital staff in August 1976.

Because of an alleged poor job performance rating given by McNally, Petta claims he has been unable to find work.

The suit also alleges that the defendants McNally, Ferguson, and Dominguez "agreed among themselves to engage in a systematic process of diverting materials and labor from Stanford University Hospital construction projects for their individual and mutual use and benefit and to assist one another in obtaining positions of higher authority within Stanford University Hospital."

McNally, Ferguson, and Dominguez also have denied charges of any wrongdoing.

4-7-78 —30— 11

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

A court ruling which declares state capitation grants to private medical schools unconstitutional will be appealed, according to a Stanford University official.

"I expect that the University will request the State Supreme Court to review the matter," said John J. Schwartz, University counsel.

The unanimous ruling Monday, (April 10), came in a suit filed by Stanford against the state treasurer and controller to collect $448,800 in capitation support owed to the University for increasing its medical school enrollment.

The ruling by the Third District Court of Appeal struck down the program run by the State Scholarship and Loan Commission which pays up to $12,000 for each student enrolled above a number fixed by the school's 1970-71 enrollment. The program was set up by the California Legislature for the purpose of increasing the number of physicians in the state.

Stanford did increase its enrollment by 35 students in 1973 and 26 students in 1974 and was paid. But when a similar application was submitted for 44 students enrolled in 1975, the state controller cut off the funds.

The controller claimed the payments may violate the state constitution which prohibits state support to schools with church ties or to any school not under the exclusive control of the state.

Stanford, which expanded its medical school enrollment beyond the levels called for in its contract, argued that bona fide contracts serving important public purposes were not "support" under the terms of the California constitution.

The state program was established when the Legislature found it would be cheaper to train physicians in existing medical schools than to build new ones.

Stanford has received $600,000 in state funds so far.

4-12-78 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD--Two surgeons at Stanford University School of Medicine have been appointed to endowed professorships.

Dr. John A. Collins is the holder of the Walter Clifford Chidester and Elsa Rooney Chidester Professorship in Surgery, and Dr. James B. D. Mark has been named to the Johnson & Johnson Chair in Surgery.

Collins headed the U. S. Army surgical research team in Vietnam which studied shock and derangements of blood clotting mechanisms in wounded personnel. His research helped define basic mechanisms of the body's response to severe injury.

Collins, who is chairman of the Department of Surgery, received his medical degree from Columbia University, College of Physicians and Surgeons in 1959. He completed his residency training in surgery at Columbia-Presbyterian Hospital, New York in 1965.

Before joining the Stanford faculty in 1977, Collins held appointments at Washington University, St. Louis, Mo., Columbia University and the Walter Reed Army Institute of Research.

He presently serves on the editorial boards of three prestigious journals in the field of surgery as well as major committees including the expert panel on review of blood and blood products of the U. S. Food and Drug Administration, and as chairman of the Pre- and Postoperative Care Committee of the American College of Surgeons.

Mark, who heads the Division of Thoracic Surgery, has a special interest in pulmonary and esophageal surgery.

A 1953 graduate of Vanderbilt University School of Medicine, Mark completed his residency training in thoracic, cardiovascular, and general surgery at Yale-New Haven Hospital, Connecticut in 1960.

Prior to coming to Stanford in 1965, Mark held appointments at Yale University School of Medicine and in the U. S. Public Health Service. Awarded a Fulbright-Hays fellowship, Mark spent the 1972 academic year as visiting professor of surgery at the University of Dar es Salaam in Tanzania.

Mark is president of the executive committee of the California Academy of Medicine and a member of the governing body of the Health Systems Agency of Santa Clara County. He is past president of the Santa Clara County Medical Society, a former chairman of the department of surgery at Santa Clara Valley Medical Center, and was acting chairman of the department of surgery at Stanford from 1974-77.

Funds for the Chidester professorship were donated by the late John Hartman Chidester in memory of his parents, Dr. Walter Clifford Chidester and Elsa Rooney Chidester.

Dr. Chidester supervised the construction and activation of Mills Memorial Hospital in San Mateo and was chief of staff until the time of his death in 1936. Mrs. Chidester graduated in 1906 from the Lane Hospital Training School for Nurses conducted by Cooper Medical College--later to become the Stanford University School of Medicine. She died in 1972.

The Chidester chair was previously held by Dr. Roy B. Cohn, emeritus professor of surgery.

The Johnson & Johnson professorship was established in 1975 by the health care firm in order to help improve the quality of patient care, reduce hospital costs and develop a high level of medical proficiency and skill.

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Mailed Wednesday, April 12, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Sleep research scientists honored science fiction writer Ursula K. Le Guin during the annual meeting of the Association for the Psychophysiological Study of Sleep on April 7.

Le Guin was recognized for the "best portrayal of sleep research in a work of fiction."

This was the first time the 200-member group of sleep researchers from throughout the world chose to honor a novelist, rather than one of their own members.

Le Guin was cited for two novels: *The Lathe of Heaven* (1971) an adventure story describing sleep laboratories and the life of the sleep researcher, and *The Word for World is Forest,* (1976), about the function and potential of dreaming.

Daughter of the Alfred Kroebers, Le Guin is a native of Berkeley, and has published nine science fiction novels since 1966, including *The Left Hand of Darkness* 1969, and *The Dispossessed,* 1974. Both received a Hugo Award for best novel.

Of some 14 volumes of fiction, her most recent is a short story collection, *Orsinian Tales.*

According to Dr. Rosalind Cartwright, leading dream researcher, "after 20 years of work we have found the answers to the big questions about dreams hard to come by. We are still asking, do dreams have any function?

"Ursula Le Guin has taken these questions and written 'what if' answers: what if people could use their dreams to regulate their feelings; what if dreams did change the world, and could occur on demand, preprogrammed?"

Cartwright suggested the researchers take up the challenge of Le Guin, to "recognize we have an inner world of emotional responses to explore, and the tools to do it."

4-10-78 —30— 11

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Two new behavioral studies to help people stop smoking and lose weight at home are being conducted by the Stanford Heart Disease Prevention Program.

If they are successful, the studies could provide a more cost-effective way to reduce risk factors in the development of heart disease among the general population.

"Traditionally, self-help strategies were used in clinics," says Dr. Brian Danaher, director of the studies. "But it's too expensive to have professional consultants always seeing people.

"In addition, surveys have shown that a significant group of people would rather cut their smoking and weight at home. They're more likely to participate when they don't have to make a weekly trip to the clinic."

The studies begin April, 1978, and will run for eight weeks. Participants will come into the clinic for an initial evaluation and receive materials in self-help which they can follow at home.

Smoking cessation consists of three phases. In the first phase, participants prepare to stop smoking by learning relaxation techniques and monitoring the number of cigarettes smoked and the number of urges to smoke.

Next, they learn to stop smoking by focusing on the unpleasant aspects of normal smoking.

After they have stopped, they learn to deal with and eliminate lingering smoking urges. This is the maintenance phase.

Weight reduction emphasizes learning new skills to balance the energy in food which enters the body with that which is used up through exercise.

"We recommend that participants cut down caloric intake at the same time they increase their physical activity," sas Danaher. "But this balance depends on the particular needs of the individual."

Participants will be evaluated three and six months after the end of the studies. The results of the studies will be compared with those usually obtained in clinics, says Danaher.

Danaher says 60 volunteers are needed for each self-help program. Persons interested in participating should call the Stanford Heart Disease Prevention Program, 324-8147 or 324-8018.

4-11-78 —30— 11

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—

Hypnotic, or sedative, drugs are overprescribed for the treatment of sleep problems, according to Dr. William C. Dement, director of the Stanford Sleep Research Center.

"Treatment with any hypnotic drug is often inappropriate and sometimes harmful," says Dement. Recent studies indicate that the use of hypnotics might be associated with 0.6 percent or more of total population mortality.

More than 40 million Americans suffer from, or at least complain of, insomnia, Dement reported at the opening session of the annual meeting of the Association for the Psychophysiological Study of Sleep on April 5.

Sedatives may be appropriate treatments for only the minority of persons who complain of insomnia, says Dement.

Commonly, he says, insomnia is associated with depression, and antidepressant treatments or psychotherapy may be more effective than sleeping pills.

"Current data suggest that some popular hypnotic drugs are sufficiently dangerous that they should not usually be chosen to treat insomnia. These include pentobarbital, amobarbital, secobarbital, phenobarbital, glutethimide, ethchlorvynol, methyprylon and methaqualone.

Dement called for a "clear consistent rationale for treatment of insomnia," and said more research is needed into the longterm safety and efficacy of sleep-inducing drugs.

Dement was recently named to serve on the Institute of Medicine's Committee on Appropriate Use of Barbiturates: Options for Medical Practice. The study will deal with the overuse of drugs in general, and recommendations will be made to the Office of Drug Administration Policy of the National Institute of Drug Abuse.

Clinical longterm assessments of hypnotic drugs should be given immediate research priority, says Dement. He called for both studies using all-night sleep recording equipment, and larger-scale studies of morbidity and mortality.

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Mailed Thursday, April 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911
EDITORS: Trasmitted on Business Wire 4-5-78.
FOR IMMEDIATE RELEASE
STANFORD—

Sleeping and dreams are an "emotional thermostat" which contributes to feelings and performance during the waking hours, according to two noted American sleep researchers.

This thermostat may get "stuck" during traumatic events, and can result in prolonged periods of depression, said Drs. Rosalind Cartwright, professor of psychology at Rush Presbyterian-St. Luke's Hospital and Medical Center in Chicago, and Milton Kramer, director of the sleep laboratory at the Veteran's Administration Hospital in Cincinnati.

The researchers reported their findings at the 18th annual meeting of the Association for the Psychophysiological Study of Sleep April 5 at Stanford.

One common example of emotional trauma which can linger for a long time is the death of a woman's husband. In addition to depression, the woman's dreams may be very disrupted, said Cartwright.

She may have a series of repeating dreams which relive her husband's death. These may be followed by dreams in which she denies the death, and by masochistic dreams in which she blames herself. This "mourning period" can last for months, and even years.

"If dreams function to work through emotional material," said Cartwright, "they are not working very well in these depressed women. If we could get at the unconscious material while it is in action, during the dream, and change the program, we may be able to shorten the mourning period."

Cartwright calls the reprogramming "dream shaping." It's a way of helping these women leave the past behind and orient to the future.

Cartwright first asks a woman who has been having a disturbing repetitive dream to choose a "happy ending." If her husband has died recently, she may choose an ending in which she finds a new husband, or work which will keep her busy.

The woman then sleeps in Cartwright's laboratory. A microswitch is taped to her palm. When she begins the repeating dream, she signals the researchers by pressing on the switch.

The researchers respond with an audible tone. This signals the woman to change the ending of her dream.

This technique has been tested in both normal and depressed subjects. Cartwright said the sleeping subjects were able to signal when they were dreaming twice as accurately as the researchers who were measuring rapid-eye-movement (REM) sleep with a polygraph. REM sleep is associated with dreams.

Using this technique, "we've been tailor-making happy endings for post-divorce women who are depressed and who are having disturbing dreams," said Cartwright.

Cartwright cautioned that the study was preliminary. "We're still trying to develop methods of dream shaping," she said.

It has been know for many years that persons can reshape their own dreams, said Kramer. But this knowledge is largely anecdotal. Cartwright's work is important because "it will help us know if we're dealing with a general process of one so highly variable that it could happen by chance."

Repetitious dreams resulting from trauma are like a needle stuck in a single groove in a record, said Kramer. Dream shaping "is a way of lifting up the needle and letting the record play itself out more effectively," he said.

4-6-78 —30—

STANFORD UNIVERSITY MEDICAL CENTER
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SCIENCE WRITERS: This story is released in conjunction with the meeting of the Association for the Psychophysiological Study of Sleep April 4-9 at Stanford.
FOR IMMEDIATE RELEASE

STANFORD—

When children lose a full night's sleep, their performance the next day is significantly impaired, Stanford sleep researchers say.

Another finding from the Stanford Summer Sleep Camp is that teenagers seem to need more sleep than younger children.

The findings were reported at the 18th annual meeting of the Association for the Psychophysiological Study of Sleep, being held April 4-9 in Palo Alto.

During the past two summers, groups of children ages 10 to 14 volunteered to spend several days living on the Stanford campus while sleep researchers monitored their naps and night time sleep patterns with polygraph machines.

The project is one of the first investigations of children's sleeping behavior. Funded by the Spencer Foundation of Chicago and the William and Flora Hewlett Foundation the study was sponsored by Drs. William C. Dement, professor of psychiatry and behavioral sciences, and Thomas Anders, head of child psychiatry in the medical school.

The children, according to Mary Carskadon, research assistant for the project, were healthy and had no sleep problems. By studying them, she said, researchers hope to be able to define normal sleeping behavior.

Each group of children spent six days at the "camp." Three times a day they took performance tests involving addition, word-memory, and listening skills. When not being tested, they were kept entertained with a variety of games and activities.

Researchers found that one night of total sleep loss in children significantly impaired their performance and resulted in an increased sleep tendency.

According to Carskadon, sleep tendency was measured at two-hour intervals during the day, with subjects at those times instructed to "close your eyes, lie quietly, and try to fall asleep."

Although several performance measures showed complete recovery after one full night of sleep (10 hours), sleep tendency and performance on an addition test did not return to previous levels until after two full nights of recovery sleep.

In another study, the sleep of 19 children ages 10 to 14 was compared to that of college students aged 18 to 21. Preliminary results suggest that an increased sleep tendency accompanies the physical maturation of adolescence.

"This really just affirms an old wives' tale," says Carsdakon, "that teenagers seem to need more sleep than younger children."

4-4-78 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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SCIENCE WRITERS: This story is released in conjunction with the meeting of the Association for the Psychophysiological Study of Sleep April 4-9 at Stanford.
FOR IMMEDIATE RELEASE

STANFORD—

Persons with hypersomnia sleep apnea one day may be identified by the way they snore.

Dr. Elliot D. Weitzman and his colleagues at the Sleep-Wake Disorders Unit of New York's Montefiore Hospital have found that time-related patterns of snoring differ between normal persons and those with sleep apnea.

This study was reported at the 18th annual meeting of the Association for the Psychophysiological Study of Sleep April 4-9 at Stanford.

Sleep apnea, or frequent cessation of breathing during sleep, afflicts an estimated 100,000 people in the U.S., according to Dr. William Dement, director of Stanford's Sleep Research Clinic.

The condition is characterized by excessive day-time sleepiness, loud snoring and often by high blood pressure and an abnormal heart beat during sleep. In adults it typically occurs in middle-aged, overweight males.

In extreme cases, breathing may stop during sleep for two minutes or more, but most patients stop breathing for 30 to 50 seconds. The condition may result in heart attacks or sudden death during sleep.

"It is important to evaluate snoring patterns in order to diagnose what might be termed 'malignant' from more benign forms of snoring," said Weitzman.

Weitzman and his colleagues indicate that snoring patterns in patients with sleep apnea were serious because the illness is associated with high blood pressure, a risk factor in the development of heart disease, as well as cardiac rhythm abnormalities.

Hypertension may be caused by sleep apnea, he said, since reversal of the condition in some patients results in a rapid lowering of blood pressure.

Sleep apnea is identified by measuring changes in physiological signals of various body functions during sleep with a technique called a polysomnograph.

The polygraph machine used to make these measurements simultaneously and continuously records changes in the electrical activity of the heart (EKG), brain waves (EEG), eye movements, muscle tone, respiratory pattern and oxygen blood levels as the patient sleeps.

Weitzman and his colleagues have studied more than 50 patients with polysomnographic recording. It was found that those with severe obstructive sleep apnea have a type of apnea in which the throat muscles repeatedly open and close during sleep and obstruct the flow of air in and out of the lungs.

Audio tape recordings were made of breathing and snoring patterns in seven individuals for three to three and a half hours during sleep.

Three of the seven patients with sleep apnea had snoring patterns which were clearly distinguishable from the normal subjects.

The abnormal patterns consisted of snoring followed by relatively silent periods during which the patients did not breathe but had brief gasping sounds produced by ineffective attempts to breathe.

In normal subjects who snored during sleep, a snoring sound was present with each breath. Their patterns did not exhibit the silent periods nor brief gasping sounds.

These preliminary results suggest that audio records of snoring may be a practical and easy method for the initial screening of patients who complain of sleep apnea symptons or individuals with severe night-after-night snoring, said Weitzman.

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FOR INFORMATION CONTACT: Bill Snyder, 497-6911

SCIENCE WRITERS: This story is released in conjunction with the meeting of the Association for the Psychophysiological Study of Sleep April 4-9 at Stanford.
FOR IMMEDIATE RELEASE

STANFORD—

The cyclic recurrence of dreams during sleep may be due to the opposing actions of two groups of nerve cells located in the brain stem.

Studies by researchers in the neurophysiology laboratory at Harvard Medical School support this theory. Drs. Ennio Vivaldi, J. Allan Hobson and Robert L. McCarley have found that drugs which affect these cells can either extend or shorten the periods of dreaming, or rapid-eye-movement (REM) sleep.

The Harvard group reported their findings at the 18th annual meeting of the Association for the Psychophysiological Study of Sleep April 6, 1978 at Stanford.

The brain generator for dreaming is like an electric motor controlled by an "on" switch and an "off" switch. When the "on" switch or nerve cells are turned on, dreaming sleep begins. When the "off" switch or nerve cells are turned on, dreaming sleep stops.

Nerve signals are carried from the brain stem to the cerebral cortex, the conscious part of the brain, by electrical impulses and by chemical messengers, called neurotransmitters. Neurotransmitters bring the electrical signals across gaps between the nerve cells.

"If this model of REM sleep is accurate, we ought to be able to increase the REM periods by turning on the 'on' cells," said Hobson. The researchers did this in cats by injecting a drug which mimics the chemical messenger of the "on" cells. The drug, carbachol, "produces a very dramatic enhancement of REM sleep," he said.

The researchers also enhanced REM sleep by giving a drug which prevented the natural breakdown of the "on" chemical messenger.

With another drug which blocks the actions of the "off" cell chemical messenger, "we see a three to four fold enhancement of REM sleep," said Hobson. The drug effectively disconnects the "off" switch of the dream motor.

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The researchers are developing a new technique which will improve the study of drugs and dreaming sleep. They use an ionophoretic pump to propel very small and measureable quantities of drug into the brain. The pump is actually a micropipette charged by an electric current.

According to Hobson, the technique will enable them to determine exactly how much drug can stimulate a change in REM sleep, and whether injection of drug in a single cell can stimulate the whole group of cells to switch on. "We can bring pharmacology to the cellular level," he said.

These findings will have practical applications in understanding and treating narcolepsy, said Hobson. Narcolepsy is characterized by excessive daytime sleepiness. Persons afflicted with the disorder can suddenly collapse into REM sleep, especially when they are excited.

The present treatment of narcolepsy is based on increasing the activity of the "off" cells by giving amphetamines which mimic the "off" cell chemical messenger. The on-off switch model of dreaming sleep may provide further insights to understanding the disorder, said Hobson.

But the significance of the model goes "far beyond the realm of sleep," he said. "This is the first explicit model of a neural clock in mammals. It may indicate the way a number of other neural rhythms work, such as respiration and circadian rhythms.

"By providing a physical basis for dreaming, the model may also help us understand and treat psychoses."

The next fascinating question is why the recurrence of dreams occurs only during sleep. "It may be that the oscillators are damped during the waking hours," said Hobson. "But the mechanisms by which the dreaming sleep deactivator is deactivated remain to be investigated."

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FOR INFORMATION CONTACT: Barbara Battino, 497-6911
SCIENCE WRITERS: This story is released in conjunction with the meeting of the Association for the Psychophysiological Study of Sleep April 4-9 at Stanford.
FOR IMMEDIATE RELEASE

STANFORD—

It's common to have repetitive dreams, says a leading sleep researcher, and the unpleasant ones seem to outweigh the pleasant two to one.

Dr. Rosalind D. Cartwright of the University of Illinois, Chicago reported these findings during the 18th annual meeting of the Association for the Psychophysiological Study of Sleep underway in Palo Alto. The meeting is sponsored by the Stanford Sleep Disorders Clinic.

In examining dreams described by 167 normal women, aged 18 to 55, the psychologist found that 65% reported having repetitive dreams—a same dream experienced three or more times.

Of the 220 dreams the subjects described, 61 were classified by Dr. Cartwright as pleasant and 159 as unpleasant.

Researchers also found a predominance of unpleasant dreams in an earlier study of 87 normal students, mean age 20.

In that study (coauthored with Dr. Irwin Romanek), 64% of the women and 54.5% of the men reported having repetitive dreams and could describe them. Bad or unpleasant dreams predominated, 63%, according to Cartwright.

In that smaller study, 77% of the women's repetitive dreams were unpleasant, but only 48% of the male's dreams.

The themes of the bad dreams included being attacked or threatened with injury or death—40%— and in 9% the subject was a helpless onlooker.

In 25% there was a "personal failure in some social role," and in another 25% there was some supernatural or other unpleasant experience.

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Cartwright describes a "rough developmental or age sequence" of dreams. They are identified according to whether the cause or "agency" is inside or outside the dreamer, and whether the effect is good or bad.

"Bad-outside" dreams, she says, begin earliest, ages 5 to 12. Then "good due to own efforts" predominate at ages 9 to 12. "Bad due to personal inadequacy" dreams come later, ages 15 to 25.

Cartwright further classifies dreams into four categories: those concerning physical sensations, those with psychological components, social interactions, and others such as strange or supernatural dreams.

The commonest, or most frequent, of all dreams seems to be of the unpleasant social interaction type, she says.

These, she says, seem to begin early, ages 4 to 9, as aggression type dreams, such as being threatened by a tornado or a monster.

Psychological unpleasant dreams which begin in childhood rise to a peak at ages 16 to 21. In these the dreamer is frequently in competition, such as taking an exam, or in stress, such as having a school locker that won't open.

In older people, Cartwright has found "restitution" dreams, concerning visits with family or others who have died.

Cartwright believes that "dreams are not accidental—the interactions between dreams and the waking world are there."

Repetitive dreams, particularly, she says, are "indicators of areas of emotional importance, such as difficulties not being coped with adequately during waking.

"Dreams may be important in establishing the stable memory concepts to which new experiences are referred, and which help shape responses," she says.

She calls this processing of information "our regular night-shift work."

The psychologist plans future studies to examine the function of repetitive dreams of those who are under particular stress.

A future study will involve depressed, recently divorced women who have repetitive dreams.

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FOR INFORMATION CONTACT: Barbara Battino, 497-6911

SCIENCE WRITERS: This story is released in conjunction with the meeting of the Association for the Psychophysiological Study of Sleep April 4-9 at Stanford.

FOR IMMEDIATE RELEASE

STANFORD—

An aspirin or two may help you sleep if taken occasionally, says a sleep researcher. But aspirin won't help sleep if it's taken habitually for more than three nights.

Drs. Peter J. Hauri and Peter M. Silberfarb of Dartmouth Medical School, Hanover, N.H., reported these findings at the 18th annual meeting of the Association for the Psychophysiological Study of Sleep underway April 4-9 in Palo Alto. The meeting is sponsored by the Stanford Sleep Disorders Clinic.

The researchers measured how fast study subjects fell asleep and how often they awoke during sleep after taking two aspirins nightly for up to two weeks.

Subjects were all serious insomniacs, says Hauri, who were without pain. Because the study was "double blind," subjects were not aware when they were receiving aspirin or a placebo, a similar-looking but inert substance.

According to Hauri, the sleep-inducing effects of the aspirin gradually lessened after three nights and finally disappeared.

"We conclude that two tablets of aspirin were an effective hypnotic medication during the first few nights of administration. However, aspirin lost much of its sleep inducing potency when used chronically for two weeks," they reported.

"This is exactly what happens with many other sleeping pills," says the researcher, though he indicates that the sleep inducing effect may last up to a month or two with some other drugs.

What Hauri called "rebound insomnia" seemed to be as pronounced with aspirin as with some other hypnotic drugs. "Rebound insomnia" is associated with withdrawal of the patient from the drug.

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STANFORD UNIVERSITY MEDICAL CENTER
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EDITORS—Cancer grabs the headlines as persistently as any movie star or politician. The word carries enormous emotional weight. It has been called the scourge of the Twentieth Century, killing more than 350,000 people in the United States each year.

Cancer is not one disease, but a collection of 100 to 200 of them. In the U.S., the afflictions range from lung cancer, which kills more men than any other cancer, to breast cancer, the top cancer killer among women, and leukemia, a cancer of the blood which strikes about 1,500 children annually.

This series of four articles deals with cancer care in the Stanford University Medical Center. Its purpose is to give an impression of the complexity of cancer and the whole array of medical forces lined up against it. The articles are: Hodgkin's disease— revolution in treatment, breast cancer—treatment for mind and body, research in immunology—seeking to resist cancer, and the Northern California Cancer Program—organizing the fight against cancer.

STANFORD—For the past four years, Jeanne McLane has been in and out of Stanford University Hospital frequently. She had lost an eye because of iritis, and then in June, a routine chest X-ray picked up a lump in the lymph glands in her chest. A biopsy was taken from the lump. The pathologist discovered Reed-Sternberg cells in the tissue sample. These peculiarly enlarged cells identified her lump as Hodgkin's disease.

Hodgkin's disease is a cancer of the lymphoid system which usually strikes between the ages of 20 and 40. About 8,000 new cases are expected in the United States this year. It frequently appears as a lymph node enlargement in the neck, chest, or abdomen, but it can involve many other tissues and organs.

"With my vision problem, I felt I had been dealt a rotten hand," says McLane. "But I said to myself, I can either turn to the wall and die or I can fight it. I've always been a headstrong person. I just decided it wasn't going to beat me."

Luckily, McLane has access at Stanford to the most up-to-date treatment for Hodgkin's disease presently available. As soon as the malignancy was confirmed by the pathologists, a team of specialists began to help her fight it.

First McLane went to diagnostic radiology for a lymphangiogram. This test uses an opaque dye, injected into the small lymph channels of the feet, to highlight the lymph nodes in the abdomen in X-rays. The test was negative.

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Then she had a laparotomy and a splenectomy. These techniques involve surgical incision in the abdominal region to remove tissue samples from the liver and lymph nodes near the spine, and to remove the spleen for biopsy. They were all normal. The disease was limited to her chest.

These tests are called staging the disease. "In almost every cancer it is important to precisely stage the disease," says Dr. Ronald Castellino, chief of diagnostic, oncologic radiology. "A reasonable decision about treatment can be made only when the extent of the tumor is known.

"Under-treatment may result in the death of the patient. Over-treatment means overexposure to X-rays or drugs, or needless surgery, and may in itself affect the health of the patient."

Laparotomies were introduced as a diagnostic procedure for Hodgkin's disease at Stanford in 1961. Later, Dr. Henry Kaplan, D'Ambrogio professor of radiology, found that the spleen was a "silent seat of disease" that was being missed in treatments. Removal of the spleen does not affect the body functions and now is done routinely in the treatment of this disease. Surgical staging also is improving the treatment of other cancers, such as prostate cancer.

Because her cancer was caught early, McLane could receive treatments as a outpatient, commuting back and forth from her home. Her first treatment consisted of high-voltage radiation. She received 23 treatments from her head to her waist during a four-week period.

Three weeks later, she began taking four drugs used in the MOPP therapy for Hodgkin's disease. MOPP stands for the first letter of each drug; mustard, Oncovin (vincristine), procarbazine and prednisone.

This treatment program is the result of 15 years of work by Drs. Kaplan and Saul A. Rosenberg. It combines two major forms of cancer therapy—radiation and chemotherapy.

Dr. Kaplan helped design the first linear accelerator used in the treatment of cancer in patients in the Western Hemisphere in the late 1950s. "Radiotherapy now stands right along-side surgery as a major method for the permanent cure of many kinds of cancer," he says.

Dr. Rosenberg who directs the division of medical oncology helped establish the value and role of the MOPP treatment program. The division of oncology is now one of the largest in internal medicine.

Radiation and drug treatments have had a major impact on Hodgkin's disease. In the 1940s, only 25 percent of Hodgkin's victims survived five years. Today almost 90 percent of patients, including those with advanced cancer, are alive, without disease, five years after treatment.

"These results reflect the proper use of both chemotherapy and radiation therapy," says Rosenberg, "and even more than that, the teamwork of many disciplines working together."

Jeanne McLane probably will continue chemotherapy until June or July 1978. Then she will be able to take up a normal life again, but she will be watched by her physicians to make sure the cancer has been arrested.

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Mailed Monday, April 3, 1978

Northern CA Cancer Prog

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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EDITORS: This is part four of a four part series on cancer care at Stanford University Medical Center. This article deals with the Northern California Cancer Program, organizing the fight against cancer.

STANFORD— "We have the ability and scientific knowledge to cure half the people with cancer today. We don't get every bit of knowledge to every patient, and, so we only cure about one-third.

"But even if we did that, we'd still lose half the patients with cancer. So, it is the role of research to try to close the gap from 50 to 100 percent," says Dr. Stephen Carter, director of the Northern California Cancer Program (NCCP).

Carter's goal is to close that gap and achieve 100 percent cure. His tool is the NCCP, a consolidation of 17 medical institutions which serve communities in Northern California and Northwestern Nevada.

"The NCCP, established in 1974, was a way of bringing together all cancer-related programs into a common family," says Dr. Saul A. Rosenberg, chairperson of NCCP's board of trustees.

"Many of the institutions dedicated to cancer research, care, teaching and training had never worked together before. They often duplicated each other's efforts. They were competitive, and often ignorant of each other," says Rosenberg.

Rosenberg, who also heads the division of medical oncology at Stanford University School of Medicine, directed the NCCP until Carter took over in 1976. Carter, 40, was former deputy director of the National Cancer Institute's cancer treatment division.

Carter calls the NCCP a center without walls. "We don't have beds or laboratories of our own," he says. "There is no need to build new resources if we can maximize the interaction of the resources we have in this region."

The NCCP is supported in part by grants from the National Cancer Institute. Some of the projects are still in the planning stage, but NCCP intends to launch a three-pronged attack on cancer through clinical research, basis science, and disease control.

Member institutions with clinical facilities including Stanford are initiating about 15 unified treatment programs for various cancers. If they are successful, says Carter, "these programs hopefully will bring forth newer and better treatment which ultimately can be applied to the general public."

Clinical research within the NCCP is done by the Northern California Oncology Group.

Stanford developed two treatment programs, those for head and neck cancer and oat cell cancer of the lung. A program for stomach cancer is being done jointly with the Japanese. It is the first example of a joint cancer study between U.S. and Japanese institutions.

The second NCCP front in the cancer battle is basic scientific research, specifically, the development of new anti-cancer drugs. Four member institutions, Stanford, University of California, San Francisco, University of Nevada, Reno, and SRI Internatinal in Menlo Park, are participating.

"Our aim is to develop resources through the interaction of NCCP members which none could develop on their own, a two-plus-two-equals-five arrangement," says Carter. Dr. Martin Apple of UCSF directs the drug studies program.

One of the first projects will be improving the effectiveness of the anthracycline drugs, such as adriamycin, and eliminating their side effects.

The third aim of the NCCP is cancer control. This is the field work, the application of research developments to reduce cancer deaths.

Cancer control will be mediated through six regional units (Sacramento, Reno, Santa Clara County, East Bay, Fresno, and North Counties), and by interaction programs. These include community outreach, education, rehabilitation, communications, epidemiology, and evaluation.

"We can't sit here in Palo Alto and know what is best for Reno which is different from Sacramento which is different from Fresno," says Carter. "They've got to do that themselves. We can hopefully offer them expertise and centralize resources."

Ideally, says Carter, "we will develop a new drug, do the clinical research to see that it's effective, and if so, see that it gets to every cancer patient in the state of California."

Some of the big cancers remain killers. There has been essentially no improvement in survival rates among patients with lung and pancreatic cancer for the last 30-40 years. Yet the lessons learned from other cancers such as Hodgkin's disease are being applied to other forms of the disease. "What has been accomplished in Hodgkin's disease could be called a revolution in the prognosis, or outcome, of that kind of lymph tumor," says Dr. Henry Kaplan, D'Ambrogio professor of radiology at Stanford. "We are continuing with out efforts to improve the outcome of other lymph tumors. We will not be finished until we are able to cure them all."

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STANFORD UNIVERSITY MEDICAL CENTER
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EDITORS: This is part two of a four part series on cancer care at Stanford University Medical Center. This article concerns breast cancer—treatment for mind and body.

STANFORD—

When K.Kay Lewis found that she might have breast cancer, she was terrified. "I walked 50 blocks from the doctor's office to the hotel so I wouldn't start screaming in the taxi," she says. Lewis, 34, teaches high school English in San Jose. Last May a lump in her breast was discovered during a visit to New York. Her husband, Bill, was visibly shaken when she told him that her mammogram, or breast X-ray, looked suspicious. "He looked like an animal in a cage," she said.

Breast cancer strikes about 90,000 women in the U.S. each year. Only 62 percent of them will be alive for five years. Ten year survival drops to 49 percent.

The Lewises came to Stanford for further testing because both of them had lived in the area for 10 years and they felt she would get better care here. Extensive tests, including blood work, bone scans, and X-rays, showed that the tumor had not spread from her breast.

During the three days of testing, the Lewises sought the advice of physicians for the best treatment. They talked with radiotherapists about her pathology reports and X-rays, and discussed the possibility of radiation treatments, including a new treatment—the radiation implant.

The implant technique involves placing beads of radioactive iridium into parallel rows of nylon tubes which have been pulled through the breast. In this way, a high dose of radiation, which would damage adjacent tissue if given as an external beam, is presented to the localized area of the tumor.

Dr. Don Goffinet and Alvaro Martinez of the division of radiation therapy have implanted radiation beads around tumors of the breast, head and neck, lung, prostate gland and abdominal region for the past three and a half years. The success rate for control of localized tumors which have not been treated previously is close to 100 percent.

"Implants offer an alternative to very radical surgery which may alter function or produce a deformity," says Dr. Martinez. "Survival is important. But so is the quality of survival."

But Lewis chose to have the mastectomy (surgical removal of the affected breast tissue). "I was more afraid of the side effects of radiation than surgery," she said."I didn't fully understand the devastating psychological side-effects of mastectomy at that time."

The operation, performed by Dr. John L. Wilson, professor of surgery, and chief surgery resident, Dr. F. Anthony Marzoni, Jr., was a modified radical mastectomy. The diseased right breast and lymph nodes, but none of the chest muscle, were removed.

"I did beautifully," says Lewis. "I was the bravest patient Dr. Wilson had. The morning after surgery, I was up with my makeup on having tea before the doctors arrived on rounds."

Then the brave act began to fall apart. Bill left for an accounting job in Brazil. The household was spread between California and New York. And Lewis felt very alone.

"I would cry often," she says. "I stopped sleeping and eating. I'd tell myself I was all right, but I didn't feel all right. Everything became very vague. When people called my name, I felt like turning around and saying, 'she's not here.' "

Then she called Dr. Netta Grandstaff, a psychologist with the division of clinical social work. Dr. Grandstaff counseled her on a one-to-one basis, and brought her into a support group of women who had also had mastectomies.

"There is a large sisterhood among women who have had this surgery," says Lewis. "There is strength in realizing you are not alone."

Dr. Grandstaff's work began about four years ago and complements the reach to Recovery Program, in which breast cancer patients are visited in the hospital by women who have also had mastectomies.

In addition, social workers in medicine, oncology, surgery and radiology give support to patients with other forms of cancer. "The social worker is a valuable part of the health care team," says Dr. Frank Stockdale, professor of medicine, who treats many breast cancer patients.

The social worker helps the physicians plan a therapy which will treat the whole patient, not simply his or her disease.

"Dr. Wilson put my body back together," says Lewis, "but Dr. Grandstaff made me well."

Lewis is now living in New York with her husband. They will return to San Jose this year, and she plans to resume her teaching. She also will be actively involved in the support group at Stanford.

"It is unlikely that the disease will come back," she says. "But even if it does, I now have the emotional support to cope with it."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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EDITORS: This is part three of a four part series on cancer care in the Stanford University Medical Center. This article concerns reearch in immunology—searching for ways to prevent cancer.

STANFORD—

One person out of four in this country will get cancer sometime in his of her lifetime. That person may smoke a lot, or work in a coal mine, or eat large quantities of fish. He or she may have been exposed to aniline dyes used in early color photography or to high levels of radiation. Or the person's genes may allow a cancer to gain a foothold in the body and grow.

It is becoming more apparent to scientists that genes and the immune responses they control to some extent determine the susceptibility and resistance to several diseases, including cancer.

Indirect evidence of this is found in the association between other diseases and antigens, markers which are found on cell surfaces in all tissues. The presence of antigens on red blood cells can be determined by blood cell typing.

The antigens are like badges which enable white blood cells to distinguish between body tissues and foreign materials such as bacteria, viruses and organ transplants. When a foreign agent is identified, an immune response is mounted against it.

But markers on the surfaces of white blood cells also are associated with 35-40 diseases, including ragweed hay fever, arthritis, juvenile onset diabetes, multiple sclerosis, psoriasis, and cancers such as acute lymphoblastic leukemia and Hodgkin's disease.

Perhaps the best example is ankylosing spondylitis, a rheumatic condition which can result in the fusion of the lower spine. Over ninety percent of the persons afflicted with this disease carry cell surface antigens called B27.

The B27 marker also is associated with Reiter's syndrome, a form of arthritis which can follow bacterial infections such as Shigella dysentary. "Eighty percent of persons with Reiter's syndrome which developed after Shigella dysentary carry the B27 type," says Dr. Hugh McDevitt, professor of medicine at Stanford

Carriers of the B27 markers are like pre-set fuses. A bacterial infection simply lights the fuse that explodes into disease.

Another example is juvenile onset diabetes, a form of the disease which occurs early in life. "There is suggestive evidence that this form of diabetes occurs in persons with a certain cell surface antigen marker (D3) after they have been exposed to a common virus infection," says McDevitt.

Eventually, says McDevitt, it may be possible to interfere with the pre-set program by immunizing against the viruses and bacteria associated with the diseases in susceptible persons, those with markers like B27 or D3.

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"However, nobody knows the cause of diabetes or arthritis, or many of the disorders, called autoimmune diseases, which involve an attack by the body upon itself," says McDevitt.

"In addition, we haven't yet worked out methods of tissue typing as well as red blood cell typing techniques."

Red blood cell typing is a chemical test which can be performed in minutes to detect the presence of certain antigens on red blood cells. Complete tissue typing of white blood cell markers, on the other hand, requires the use of 100-150 typing sera, and culturing the patient's blood with that of 15 other patients of known type for five days. It is too expensive and time-consuming to perform on a mass scale.

"The real progress in preventing these diseases will be made when we can get to the root of the problem—the genetics," says McDevitt.

In the early 1960s, McDevitt discovered that immune responses in mice were controlled by genes which were closely correlated with genes responsible for the transplant rejection reaction. The transplantation genes also determine the structure of the white blood cell antigen markers.

These "immune response" genes discovered by McDevitt have also been identified in humans, and, as in the mouse, they are associated with the white blood cell antigen types.

In 1964, Dr. Frank Lilly, currently the head of the Department of Genetics at Albert Einstein School of Medicine in New York, discovered that susceptibility to a leukemia virus in mice was linked to these antigens.

Recently, Dr. Dan Meruelo, a postdoctoral fellow in McDevitt's lab, has found that two distinct forms of a single white blood cell antigen can connote either suscepibility or resistance to a leukemia virus expressed in mice after radiation exposure.

Other studies suggest that genes may actually suppress the immune response to some tumors. Meruelo has located an immune response gene in mice which actively suppresses resistance to a leukemia tumor through a cell it produces. "This is one of the first discoveries of dominant immune suppression by a gene," says McDevitt.

Dr. Baruj Benacerraf of the Harvard Medical School has developed an anti-serum against these immune response genes which prevent their suppressive action. After injecting the anti-serrum in mice with implanted tumors every day for several days, he found that the tumors had disappeared and were replaced by inflammatory cells.

"It is not known if the anti-serum will work against already existing tumors," says McDevitt. At least five more years of study in the mouse are needed to validate these findings before scientists can think about applying it to humans, he says.

"We cannot promise any panacea," he says. "We are studying the regulation of the immune response at a fundamental level. But if we could work out all of the different white blood cell types, it is theoretically possible to alter the regulation and turn the immune response up or down to help people resist tumors or fight disease."

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Mailed Monday, April 3, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT Bill Synder 415/ 497-6911

EDITORS: This is part four of a four part series on cancer care at Stanford University Medical Center. This article deals with the Northern California Cancer Program, organizing the fight against cancer.

STANFORD— "We have the ability and scientific knowledge to cure half the people with cancer today. We don't get every bit of knowledge to every patient, and, so we only cure about one-third.

"But even if we did that, we'd still lose half the patients with cancer. So, it is the role of research to try to close the gap from 50 to 100 percent," says Dr. Stephen Carter, director of the Northern California Cancer Program (NCCP).

Carter's goal is to close that gap and achieve 100 percent cure. His tool is the NCCP, a consolidation of 17 medical institutions which serve communities in Northern California and Northwestern Nevada.

"The NCCP, established in 1974, was a way of bringing together all cancer-related programs into a common family," says Dr. Saul A. Rosenberg, chairperson of NCCP's board of trustees.

"Many of the institutions dedicated to cancer research, care, teaching and training had never worked together before. They often duplicated each other's efforts. They were competitive, and often ignorant of each other," says Rosenberg.

Rosenberg, who also heads the division of medical oncology at Stanford University School of Medicine, directed the NCCP until Carter took over in 1976. Carter, 40, was former deputy director of the National Cancer Institute's cancer treatment division.

Carter calls the NCCP a center without walls. "We don't have beds or laboratories of our own," he says. "There is no need to build new resources if we can maximize the interaction of the resources we have in this region."

The NCCP is supported in part by grants from the National Cancer Institute. Some of the projects are still in the planning stage, but NCCP intends to launch a three-pronged attack on cancer through clinical research, basis science, and disease control.

Member institutions with clinical facilities including Stanford are initiating about 15 unified treatment programs for various cancers. If they are successful, says Carter, "these programs hopefully will bring forth newer and better treatment which ultimately can be applied to the general public."

Clinical research within the NCCP is done by the Northern California Oncology Group.

Stanford developed two treatment programs, those for head and neck cancer and oat cell cancer of the lung. A program for stomach cancer is being done jointly with the Japanese. It is the first example of a joint cancer study between U.S. and Japanese institutions.

The second NCCP front in the cancer battle is basic scientific research, specifically, the development of new anti-cancer drugs. Four member institutions, Stanford, University of California, San Francisco, University of Nevada, Reno, and SRI Internatinal in Menlo Park, are participating.

"Our aim is to develop resources through the interaction of NCCP members which none could develop on their own, a two-plus-two-equals-five arrangement," says Carter. Dr. Martin Apple of UCSF directs the drug studies program.

One of the first projects will be improving the effectiveness of the anthracycline drugs, such as adriamycin, and eliminating their side effects.

The third aim of the NCCP is cancer control. This is the field work, the application of research developments to reduce cancer deaths.

Cancer control will be mediated through six regional units (Sacramento, Reno, Santa Clara County, East Bay, Fresno, and North Counties), and by interaction programs. These include community outreach, education, rehabilitation, communications, epidemiology, and evaluation.

"We can't sit here in Palo Alto and know what is best for Reno which is different from Sacramento which is different from Fresno," says Carter. "They've got to do that themselves. We can hopefully offer them expertise and centralize resources."

Ideally, says Carter, "we will develop a new drug, do the clinical research to see that it's effective, and if so, see that it gets to every cancer patient in the state of California."

Some of the big cancers remain killers. There has been essentially no improvement in survival rates among patients with lung and pancreatic cancer for the last 30-40 years. Yet the lessons learned from other cancers such as Hodgkin's disease are being applied to other forms of the disease. "What has been accomplished in Hodgkin's disease could be called a revolution in the prognosis, or outcome, of that kind of lymph tumor," says Dr. Henry Kaplan, D'Ambrogio professor of radiology at Stanford. "We are continuing with out efforts to improve the outcome of other lymph tumors. We will not be finished until we are able to cure them all."

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News Bureau Stanford, California 94305

Mailed Monday, April 3, 1978

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—

The Stanford Arthritis Center is launching a long-term survey of persons with rheumatoid arthritis.

The researchers hope that 1,000 patients from throughout the Santa Clara Valley will participate in the ten-year effort to obtain information about the course of this disease.

The survey will be conducted only by mail or telephone, and no physical examinations are involved. Patients will be asked a series of questions about how they are getting along with the arthritis, how much pain and stiffness they are having, and how well they can do their daily activities. They will be contacted at approximately six-month intervals throughout the study period.

The study does not provide treatment or advice. Survey assessors will not be able to answer questions about the disease, and will refer the patient to his own doctor for such information.

The Stanford Arthritis Center, operating under a grant from the National Institutes of Health, was established under the National Arthritis Act of 1975.

Dr. Halsted Holman, professor of medicine at Stanford, is director of the Center, and Dr. James Fries, associate professor of medicine, is associate director. Fries is director of the American Rheumatism Association Medical Information System, a nationwide data bank.

According to the investigators, they will examine both the medical costs of the disease, and the social costs, such as interference with work activities. The role of different treatments in changing long-term outcomes for patients will be evaluated.

Both patients and their physicians will receive reports of the survey at periodic intervals. No physician or patient names will be included in the reports of the study.

Persons with rheumatoid arthritis who wish to participate may call the Arthritis Center, (415) 497-5138. Local pharmacies also will be posting information about the study.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—Two researchers in the clinical pharmacology division of the Stanford University School of Medicine have been awarded grants from the Pharmaceutical Manufacturers Association Foundation.

Dr. Robert L. Blum, a postdoctoral fellow, is the recipient of a two-year grant scheduled to begin in July.

The project funded by the grant involves the development of methods for using computers to help diagnose and treat patients.

The project will use knowledge from expert clinicians as well as information from computerized patient records. The techniques used will be from a new branch of computer science called artificial intelligence, which utilizes the capabilities of the computer to manipulate symbols in order to simulate human reasoning processes.

The program will make therapeutic decisions by weighing costs and benefits of therapy.

Blum also will be working towards a doctoral degree in computer science.

David M. Carlisle, a second-year medical student working with Dr. Terrence Blaschke, has been awarded a medical student research fellowship.

Carlisle plans to study the interaction between warfarin, an anticoagulant, and vitamin K, required for the synthesis of certain blood clotting factors. He hopes to discover the mechanism by which warfarin interacts with vitamin K and interferes with normal clotting.

Carlisle hopes to pursue a career in academic medicine after completing medical school.

According to the Pharmaceutical Manufacturers Association Foundation, grants have been awarded to 57 individuals this year, and the Foundation has aided over 470 individuals since 1965. This year, awards total almost $1.2 million, distributed to university research and training programs.

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Mailed Wednesday, May 31, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Hart or Spyros Andreopoulos 415: 497-6911

STANFORD—Dr. Boris Peterlin, a resident in the division of immunology at Stanford University School of Medicine, has been granted a two-year,$31,000 special fellowship by the Leukemia Society of America, Inc.

Dr. Peterlin was "one of ten highly skilled individuals chosen for the award this year," the Society said.

Peterlin will be woking in the field of genetics, focusing on the study of immune-response genes in rats as they relate to leukemia.

A native of Yugoslavia, Dr. Peterlin received a bachelor of science degree in chemistry and physics from Duke University, his M.D. from Harvard in 1973, and did his postdoctoral work here at Stanford. He was a research assistant at the National Institutes of Health until 1975 and returned to Stanford in 1977 as a resident in Medicine, his current position.

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Mailed Wednesday, May 31, 1978

FOR FURTHER INFORMATION CONTACT: Susan Hart or Spyros Andreopoulos 415: 497-6911

STANFORD—"Stanford's Contribution to Medical Science" is the theme of this year's Medical Alumni Reunion Day Program to be held Saturday, June 3. The all-day program begins at 8:15 a.m. with registration in Fairchild Auditorium.

"National Health Insurance and the Cost of Medical Care" will be discussed at 1:30 p.m. in a keynote address presented by Alain C. Enthoven, Eccles Professor of Public and Private Management at Stanford's Graduate School of Business.

Special feature for the program is "The Barefoot Doctors of Rural China," a film and discussion at 3 p.m. by Victor H. Li, Shelton Professor of International Legal Studies at Stanford School of Law.

Morning lectures include "Heart Transplantation Ten Years Later," by Dr. Norman E. Shumway, Frances and Charles Field Professor and Chairman of Cardiovascular Surgery, at 9 o'clock, and "Endorphins" by Dr. Avram Goldstein, professor of pharmacology, at 10:30. Endorphins are brain peptides that mimic the activity of opiates. These compounds are providing clues that may serve to increase the understanding of emotional behavior, the biochemistry of analgesia, and narcotic addiction.

Dr. Hugh McDevitt, professor of medicine, will discuss "H-LA and Disease" at 11:30. His report will describe immune-response genes in man. These may be important factors in an individual's resistance or susceptibility to neoplastic, auto-immune, and infectious diseases.

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Mailed Wednesday, May 31, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD— Innovations in surgical procedures should be more closely monitored in order to permit "prompt and reliable evaluation of their efficacy and safety," according to a group of researchers writing in *Science* magazine.

Controls and regulations such as those imposed on new drugs, are not presently required for new operations, and a long-term program of surveillance for both new and established operations is lacking, according to Dr. John P. Bunker of Stanford University Medical School, Dr. D.W. Hinkley of the University of Minnesota and Dr. W. V. McDermott of Harvard Medical School.

The authors recommend a four-phase program designed to facilitate early evaluation and subsequent monitoring of surgical procedures. The program would be supervised by a proposed "Institute of Health Care Assessment."

The first phase of the proposed program would involve "feasibility studies" for new surgical techniques. During this phase of evaluation, the operation would be restricted for use at only a few selected institutions, and would be closely supervised and perhaps refined.

Following this initial phase, a second phase of evaluation would continue at a larger number of institutions, providing information on the "outcome of surgery carried out by surgeons with varying degrees of training and experience and in a variety of clinical settings."

The operation would be available for general use during the third phase of evaluation. During this period, observations would continue and data would be stored, providing valuable information on factors such as "age, sex, operation and discharge status."

Although the procedure would be in general use at this stage, it would still be confined to "institutions demonstrating personnel and facilities appropriate to the complexity of the procedure."

The fourth phase would involve low-level, long-term surveillance. Not only new procedures would be monitored in this way, but also "old procedures where professional uncertainty persists."

The authors illustrate the need for such a program with several examples.

In the case of the coronary artery bypass operation introduced in 1969, systematic monitoring could provide "data on the basis of which the relative success of all institutions can be judged," resulting in less duplication of health care facilities.

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The small intestinal bypass operation used for treatment of extreme obesity is an example of an operation with an associated high mortality rate and serious possible side effects, according to the article. It is a tricky procedure which shortens the intestine, with the result that less food is absorbed. It is performed only in extreme or life-threatening situations. There is uncertainty among doctors as to whether to perform this bypass or the newer gastric bypass.

If comprehensive data were available for such competitive procedures, more sound decisions could be made on which operation to use, the authors add.

A type of surgery called portacaval shunt, used in the treatment of hypertension, illustrates how an operation may be performed for many years before it is recognized to be relatively ineffective.

This operation, designed to control hemorrhage, involves the creation of a passage between the portal vein and the vena cava. Complications from the surgery may be as serious as the original condition, but the limited value of the operation is just now becoming clear after several decades of widespread use. Systematic monitoring should prevent such a delay in evaluation, the doctors said.

Under the proposed program, all evaluation phases would be monitored by the "Institute of Health Care Assessment," which might be under the purview of either a private agency such as the Institute of Medicine or the American College of Surgeons, or a government agency such as the National Center for Health Services Research.

Advancement through each phase would be recommended by the Institute, as would selection and funding of institutions during the initial phases of review. Funding would be awarded to institutions on a competitive basis.

However, one danger the authors point out is "overly rigid control which may lead to premature evaluation." New procedures which show initial problems may, upon modification, become effective and successful.

Although evaluation is needed, the authors warn, "We must not overlook the central role of innovation."

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Mailed Wednesday, May 31, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder or Joanna Cohen 415: 497-6911
EDITORS: Photos available if not included with story.

STANFORD—A new center designed to apply engineering technology towards solving the problems of the handicapped has been established at the Palo Alto Veteran's Administration Hospital.

Called the Rehabilitative Engineering Research and Development Center, it represents a joint effort between physicians at the VA Hospital and engineers at Stanford University. Specific projects are contracted to University engineers by the VA.

The association between physicians and engineers at Stanford in the past has produced inventions such as the Optacon reading aid for the blind, an ultrasonic imaging system, and computerized monitoring of heart functions.

"The new center is putting 'Star Wars' technology directly into helping the human being," says Dr. Franklin G. Ebaugh, chief of staff for professional services at the VA Hospital.

"The goal of the center is to help the amputee, the blind and deaf person, and the patient with major physical disabilities to function more normally and more competitively," says Ebaugh.

Ebaugh, who is also professor of clinical medicine at Stanford medical school, helped prepare the proposal for establishing the center, one of two in the U.S. The other is located at Heins VA Hospital outside Chicago.

The Palo Alto center is supported this year by a $183,000 grant from the Veteran's Administration. Dr. Larry Leifer, associate professor of mechanical engineering at Stanford, is coordinator. The staff includes an engineer, an orthopedic surgeon, a research physical therapist, and an administrative assistant. According to Leifer, the center's proposal calls for an enlarged staff of 30 and a budget of $1 million by 1981.

One of the current projects involves adapting a robotic arm to the needs of handicapped people. The arm was developed by Victor Scheinman, an engineer at Unimation, Inc., and has been used by Leifer as a teaching tool in his product design course at Stanford. Students have programmed it to bake a cake, flip pancakes, pour a glass of wine, type and use the telephone.

The computer programming of the arm is now done through a keyboard, but eventually it will be done by voice command, says Leifer. In coming months, the arm will be introduced to patients at the VA Hospital and "we will begin to explore its usefulness in providing for patient needs," he says.

A portable personal information system which will enable a visually impaired individual to process, store and retrieve information, as well as communicate more efficiently with others, is being developed by John G. Linvill, professor and chairman of electrical engineering at Stanford, and Gregory L. Goodrich, staff psychologist at the VA Blind Rehabilitation Center, in collaboration with Martin Morf and John T. Gill from the Stanford school of engineering.

The system will employ a micro-computer equipped with programs for editing and text processing. Input devices will include both a standard typing keyboard and a Braille keyboard. One method of output will allow the visually impaired individual to "read" printed material shown on a TV-type screen with the aid of an Optacon, a device which translates light images into tactile images. Another system presents the output, one line at a time, in braille.

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A major participant in the project is Greg Fowler, a blind graduate student in electrical engineering, who will utilize the test system for his own educational professional needs.

Goodrich is also working with Drs. James D. Meindl and Dave Dameron of the Stanford Electronics Laboratory, in developing an ultrasonic mobility aid for the blind. Essentially a miniature sonar system, fitted in thin strips across the lens of glasses, the device will sweep a column of sound in front of the user, and provide information about the distance and shape of on-coming objects. Echoes returning from the sound column will be translated into audible or tactile signals. The device would be used to complement guide dogs or long canes.

Dr. Inder Perkash, chief of the VA Spinal Cord Injury Service, and Professor Robert Piziali of mechanical engineering are studying methods of spine stabilization which ensure that the disrupted spine remains stable and heals without deformity, while at the same time allowing the patient early mobilization. These methods include the use of braces, body casts, and implantable traction rods.

"The basic concept of rehabilitative engineering is to have engineers and physicians working side by side," says Perkash, also associate professor of surgery at Stanford. The center is unique in that it involves not only engineering faculty but their students as well, he says.

Graduate students have met with therapists and patients at the VA Hospital to determine ways of solving the problems of disability through engineering.

Several student-built rehabilitative aids have resulted from these meetings, and are currently being tested by patients at the VA Hospital. These include a two handled spoon which can be used by persons with cerebral palsy, and a kitchen designed for patients confined to a wheel chair.

"These are relatively simple ideas," says Leifer, "but they probably would not have been investigated without the support of a program such as this." Leifer says extensive testing (three to eight years) is required before these devices are ready for distribution to the public.

The center initially will be geared to research, says Ebaugh. As the technology is tested clinically, residents and medical students at Stanford Medical Center will have a greater opportunity to work in rehabilitative engineering programs.

"These programs will create new interest among physicians in what has been a seriously neglected field," says Ebaugh. "With the advances in technology, the care of handicapped patients has become as exciting and challenging as the care of more acute patients."

A problem yet to be solved is how to get the technology from the clinical lab to the market place. "It doesn't do one bit of good to develop these devices if we can't get them manufactured or marketed," says Ebaugh. "To interest manufacturing firms in our devices, we must have licensing and patent agreements to ensure them a profit."

According to Ebaugh, the Veteran's Administration presently has no such agreements with the developers of rehabilitative devices, but it could follow a model used by Stanford and the Department of Health, Education and Welfare (HEW).

Under institutional patent agreements, Stanford has first option to license or patent any invention which results from research supported by the HEW. Income from royalties is used to support further research and education.

Although the initial expense of developing and implementing these rehabilitative devices will be high, says Ebaugh, "I predict they will more than pay for themselves in the long run by helping handicapped people become more self-sufficient."

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Mailed Wednesday, May 31, 1978

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

Editors: This news story is released in conjunction with the meeting of the American College of Sports Medicine in Washington, D.C. May 24-27. This story is based on a report to be presented on May 26.

STANFORD--Athletes should have the least exposure to smog as possible just before a competitive event, so their performance won't be impaired, says a Stanford researcher.

Long distance runners, for example, may not have decreased performance during smoggy conditions if they undergo normal training but limit their exposure on the day of the event.

William M. Savin, formerly of the Human Performance Laboratory, Department of Physical Education at UC-Davis, reported on the effects of air pollution on strenuous exercise at the May 26 meeting of the American College of Sports Medicine in Washington, D.C. Savin is now a research assistant in cardiology at Stanford University School of Medicine.

The study measured exercise performance in ozone levels which would be classified as "alert" or "warning" smog levels. Savin described these as realistic levels, which have been exceeded on some days in Los Angeles.

Ozone is the primary constituent of photochemical smog, produced by the interaction of sun on auto exhausts. The ozone occurring naturally in the upper atmosphere is of a different source.

The study involved nine healthy men who pedaled a stationery bicycle as long as they could while breathing ozone concentrations of zero, .15 or .30 ppm.

The volunteers' mean age was 26, all had extensive athletic backgrounds, and were running competitively or jogging regularly at the time of the study. None smoked.

The men were not aware of the ozone concentration, if any, being administered.

Results show that exposure to as much as .30 ppm ozone during graded exercise resulted in no significant change in performance, although subjects reported symptoms of discomfort more frequently with increased ozone levels.

According to Savin, "The effects of ozone depend upon both the duration and concentration of exposure.

"Well-trained, motivated individuals experience physiologically measurable changes and report symptoms before any change in their duration of performance becomes apparent." Mailed 5/25/68

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

CITY DESKS: Photos available upon request if not included with story.

STANFORD—One Sunday afternoon, a month before his 22nd birthday, Robert A. Johnson was riding a motorcycle in a cycle park when, as he recalled, "I lost control and was thrown off, hit a tree and broke my back."

The accident left him paralyzed from the chest down and confined to a wheel chair. More fortunate than other victims of spinal cord injuries, Johnson retained the use of his arms.

Now 29 and living in Santa Cruz, Johnson drives to Palo Alto in a car equipped with hand controls for a periodic checkup at the Spinal Cord Injury Center of the Veterans Administation Hospital. Affiliated with Stanford University School of Medicine, the center provides hospital, outpatient and home care for persons with spinal cord injuries.

Road accidents involving autos and motorcycles are the leading cause of spinal cord injury, according to Dr. Inder Perkash, chief of the VA Spinal Cord Injury Center and associate professor of surgery at Stanford medical school. Bicycle related injuries account for a growing proportion of road accidents.

Diving into shallow water, falling from heights, and sports such as football and skiing cause spinal cord injuries. Combat injuries account for a small percent of the total, but in Veterans hospitals they have been highly significant in inspiring improvements in patient care.

"Rehabilitation, both physical and psychological, and reintegration of the veteran into the community, with concern for the quality of life" are the primary aim of the center, according to Perkash.

Immediately after injury, a medical team composed of a neurosurgeon, orthopedist, physiatrist (rehabilitation physician), internist and urologist provides acute medical care.

Stanford faculty and residents see patients at the center under an agreement between the VA and the university.

The center serves veterans primarily from Northern California, Oregon and Washington, but patients are flown in from as far as Alaska.

After the patient's condition is stabilized, the services of a plastic surgeon, physical and occupational therapists, psychologist and social worker are mobilized.

Depending upon the severity and location of the injury, spinal cord damage may cause varying degrees of paralysis. Paraplegia is paralysis of the legs and lower part of the body; quadriplegia involves paralysis of both arms and legs.

"Most patients were extremely active people who were prone to injury," noted occupational therapist, Daryl Wright. Therefore, tremendous physical and psychological adjustments must be made by the patients and their families.

While physical therapists work with patients in repositioning, strengthening and reeducating muscles and joints, occupational therapists, with the aid of specially designed self-care devices, help them relearn such seemingly simple tasks as eating, dressing and bathing.

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Johnson, now a student at the University of California, Santa Cruz, emphasized that rehabilitation teaches patients how to live with their disability. Normally, people take body functions for granted, he said. Disabled persons must constantly monitor themselves to prevent complications from developing.

Articulate and outspoken, Johnson is vice-president of the Santa Cruz County Chapter of the California Association of the Physically Handicapped. Through CAPH, Johnson works to build support in his community for legislation and programs that will help "bring the disabled into the mainstream of society."

"As a youth, I didn't see many disabled persons," he said. "They were hidden. I didn't see them at social functions, concerts or parties. After I was injured, I realized it wasn't that they did not want to be in the mainstream of society, but that society discriminates against the disabled. There are transportation, architectural and attitudinal barriers."

Always interested in competitive sports, Johnson has not let his disability prevent him from engaging in athletics.

Last year, he was the only wheel chair entry in the six mile Wharf-to-Wharf race from Santa Cruz to Capitola. This year he will take pledges from donors in support of CAPH for each mile that he travels, and is encouraging other members to participate.

A serious problem associated with spinal cord injury is bladder dysfunction which may cause serious urinary tract infection and death. Catheterization, in which tubing is passed through the urethra to drain the bladder, may result in additional complications.

Perkash is known for his work in bladder rehabilitation. About 95 percent of all patients seen at the center return home catheter free--either through a program of intermittent catheterization which results in bladder rehabilitation, or by the surgical procedure of a sphincterotomy.

Reuben Day was 21 years old and in the Navy when, diving into a reservoir in the San Joaquin Valley, he hit the bottom and broke his neck.

Paralyzed from the neck down, Day was hospitalized at a VA hospital in Southern California for 14 months. Chronic bladder dysfunction so weakened Day who is 6 feet 2 inches tall, that his weight dropped to 115 pounds. Discharged from the VA hospital but unable to return home because of his poor physical condition, he moved into an apartment with an attendant, then into a "para-vet" home, and finally into a convalescent home.

The turning point for Day was when he heard about the Spinal Cord unit at the Palo Alto VA Hospital. After Perkash performed a sphincterotomy "my health shot up. Since then, everything has been going up hill. I began to live," Day recalled. Regaining his strength, Day returned home.

To help veterans such as Day and Johnson function independently and at their full potential, the center does research in collaboration with Stanford's schools of medicine and engineering, as well as Children's Hospital at Stanford. By utilizing the latest advances in scientific technology and medicine, increasingly effective procedures and devices are developed. Graduate students in the school of engineering are working on rehabilitative devices as part of their doctoral research. A new rehabilitative engineering research and development center will be developed at the Palo Alto VA Hospital as a result of such collaborative efforts.

Orthotic devices to provide corrective support and brace weak muscles and joints are continually being improved. A specially contoured seat that provides optimal weight distribution and prevents the development of skin damage and infection in paralyzed patients, has been developed by Wallace Motloch of the Rehabilitation Engineering Center at Children's Hospital.

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Biofeedback devices monitoring otherwise imperceptible changes in muscle tension are used experimentally to increase patient awareness and muscle control, according to psychologist Michael Dunn.

"Environmental systems," controlled by sucking or blowing into a tube, enable quadriplegic patients to call a nurse, raise or lower a bed, operate a TV, wheel chair, or dial a telephone number.

The 30-bed spinal cord center which opened in 1974, admits about 250 patients a year. It is one of two in the country that offer physicians postresidency training in spinal injuries. Average length of stay at the center for newly injured paraplegics is four months. Quadriplegics remain about 6-7 months.

Non-veterans may be admitted to the center on a space-available basis, under a shared service agreement between the VA and Stanford. In practice, however, the unit has difficulty accomodating private patients because the demand among veterans for its services is so great, Perkash noted.

In addition, 800-900 outpatients are seen at the center. "With spinal injury patients, one never terminates their care," Perkash commented. To prevent rehospitalization, former patients are seen in the outpatient clinic for periodic checkups. As a result, the center has the lowest readmission rate in the entire VA system, according to Perkash. In a recent nationwide survey of patient satisfaction in VA hospitals, the Palo Alto Spinal Cord Injury Center received the highest rating.

To ease the transition from hospital to home, the center operates a program of "hospital based home care." A physician, nurse, health technician and social worker visit patients and their families who live within 50 miles of the hospital.

Furniture arrangements, bathroom fixtures, kitchen appliances and utensils, telephones are evaluated for accessibility and ease of operation, and may be redesigned, if necessary.

Patient and family are given an opportunity to discuss any problems that may have arisen since discharge. "Anxiety levels are high. We try to provide emotional support," nurse Vicki Wolfe noted. "Often, letting them know you care means more than changing a dressing."

The social worker makes sure that available benefits are received by the family and that community resources are mobilized. Discharged patients often fear to go out and face the community, social worker Elise Richter acknowledged, but "once out, the majority don't want to come back."

Reuben Day now lives in Stockton in a home designed by himself that is especially adapted to meet his needs. Highly motivated and determined, Day is a science and math major at San Joaquin Delta College. After graduation he plans to pursue a career in business.

Day has limited use of his arms and hands. However, tendon transfers performed by a plastic surgeon have improved his hand function, and he hopes to drive a specially equipped van.

But for Reuben Day, because of the severity of his injury, learning to live with his disability has been difficult and remains a daily struggle.

"When I wake up in the morning and realize that I can't get up without help, sometimes I wonder if it is really worth getting up," Day said. "Once I'm up and on my way, though, I'm fine. That part is behind me and I don't think about it any more."

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Mailed Thursday, May 25, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Modern medical instruments have had a profound impact on the quality of health care, but that impact is not always easy to determine, according to Dr. Allen Ream, assistant professor of anesthesia at Stanford University Medical School.

Analysis of the value of instruments includes often conflicting criteria, says Ream, including need, speed of performance, results in terms of lives saved, and cost.

Future development is coming more and more under the control of government regulations. "Whether this influence becomes a serious impediment to future innovation remains to be seen," he says.

Ream, director of the Institute of Engineering Design in Medicine, made his remarks in the May 26 issue of *Science* magazine.

"The most significant developments in medical instrumentation are improvements in time and scale (instruments tailored to individual needs and locations)," says Ream.

For example, measurement of blood gas concentrations is moving from the laboratory to the bedside, and can be done in minutes instead of hours. This helps decrease economic costs, by making the test more efficient, and non-economic costs, by reducing delay in treatment.

The computer has significantly aided medical care, expecially in diagnosis.

"The modern cardiac catheterization laboratory could not function without it," says Ream. In addition, preprocessing by computer improves the ease and efficiency of monitoring the electrocardiogram (EKG).

Computers also can improve the accuracy and frequency of non-invasive diagnosis, which is more convenient and involves less risk than invasive techniques.

For instance, computer-assisted axial tomography (CAT scanning), by providing more accurate diagnosis, may avoid exploratory brain surgery in some patients.

The promise of computers "is to simplify, not to complicate our professional lives," says Ream.

However, procedures such as CAT scanning have been criticized for the large capital investment they require. (A typical CAT scanner costs over $500,000.)

The greatest costs of CAT scanners are in the data-processing equipment, and these are rapidly decreasing, says Ream. In addition, one study suggests that the costs will be offset by reductions in the use of high-risk and expensive diagnostic procedures.

When use of medical instrumentation increases operating expenses, a hospital can be partially reimbursed for its investment by government or private insurance.

However, instruments, such as a computerized hospital information system which cuts costs, may cause the level of reimbursement from insurance companies to actually drop. It therefore pays the hospital to invest in the more expensive CAT scanner, for example, which garners greater reimbursement

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"The current system of reimbursement to health care facilities rewards the hospital which improves care by increasing definable cost and penalizes the hospital which improves care by reducing operating costs," says Ream.

"Financial incentives must be permitted to encourage applications of instrumentation which may reduce health care costs in an acceptable way."

Another potential impediment to the development of medical instruments is increasing governmental regulation. Medical devices must now be classified and reviewed by the Food and Drug Administration prior to marketing. In addition, California is implementing a law to permit device regulation at the state level.

Concerns about regulation are shared by manufacturers, many of whom are small firms, and by the physicians who use the instruments and contribute to their development.

"Collaborative effort (between manufacturers and physicians) in instrument development is essential," says Ream. "If the device law fosters effective collaboration, it will be an important influence for the good. If it hinders that collaboration, the negative effects will be profound but not immediately evident."

Ream says that as medical instruments change the practice of medicine, previously acceptable evaluation techniques will be inadequate. As a result, new and economically attractive techniques may not be recognized.

"We must be careful to avoid permitting analytic concerns to preclude an effective trial of innovation and application," he says.

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Mailed Thursday, May 25, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Young adults, as well as children, should be sure they are immunized against the "childhood" diseases, says a Stanford pediatrician.

Dr. Ann Yeager, assistant professor of pediatrics, warns that young adults who may not have been immunized as children against diseases such as polio or measles may now be at risk, especially when traveling to other countries.

Speaking on "Childhood Immunizations: Successes and Failures" recently, Dr. Yeager noted that some young people may not have had measles or mumps vaccines, only available in the last decade. They may have "benefited" from the immunizations of others by having less exposure, but if they did not get the disease as children, they are still susceptible.

"We have no natural immunity against the diseases we vaccinate against," says Yeager.

"We are either completely protected or completely susceptible."

Susceptibility is not age-related, she says, but severity of disease is. Many of the childhood diseases, including mumps and measles, are worse in an adult than in a child, and can often complicate existing disorders.

In recent years, measles outbreaks have occurred in junior and senior high schools. Many had never been immunized, or had received the vaccine before they were one year of age or before 1969.

If there is doubt about whether a person has been immunized against measles, Yeager recommends reimmmunization.

Doctors, she said, are particularly watchful for today's college age person who received killed virus vaccines for measles during the early 1960s. Early protection in some of those cases later reversed to create an allergic reaction.

During the last 10 years live measles, mumps, and rubella vaccines are given instead. With these, a small amount of virus is given resulting in a mini-infection without symptoms, which stimulates antibody and protects the person indefinitely.

Vaccine for rubella, formerly called "German" or three-day measles, is the only one given to protect someone else's health, said Yeager, "benefiting future generations and the community as a whole."

Although rubella only causes a mild disease, it can cause severe defects in the fetus if contracted during pregnancy. Since 1972 most children under 12 in California have received rubella vaccine.

Last year the Department of Pediatrics sponsored a mass rubella screening program for girls in three Palo Alto high schools. An average of 25 percent of the 270 juniorb and seniors tested were found to be susceptible to rubella. They were referred to their own physicians for the vaccine.

Yeager also noted that many young people may also have missed the mass immunizations of oral polio vaccine during the early 1960s. She urges them to obtain that protection before traveling outside the U.S.

Since 1972 California law has required that each child entering school be vaccinated against polio, diphtheria, pertussis, tetanus and measles. Immunization against rubella and mumps is also recommended by the State Health Department.

Dr. Yeager's lecture, sponsored by the Stanford University Hospital and Clinics, and by the Department of Pediatrics, was held in conjunction with the national "Immunization Initiative" of the Department of Health, Education and Welfare (HEW) and the American Hospital Association.

HEW has estimated that 40 percent of U.S. children today are not receiving the vaccines available against preventable diseases.

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Mailed Thursday, May 25, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

Editors: This news story is released in conjunction with the meeting of the American College of Sports Medicine in Washington, D.C. May 24-27. This story is based on a report to be presented on May 26.

STANFORD—Athletes should have the least exposure to smog as possible just before a competitive event, so their performance won't be impaired, says a Stanford researcher.

Long distance runners, for example, may not have decreased performance during the smoggy conditions if they undergo normal training but limit their exposure on the day of the event.

William M. Savin, formerly of the Human Performance Laboratory, Department of Physical Education at UC-Davis, reported on the effects of air pollution on strenuous exercise at the May 26 meeting of the American College of Sports Medicine in Washington, D.C. Savin is now a research assistant in cardiology at Stanford University School of Medicine.

The study measured exercise performance in ozone levels which would be classified as "alert" or "warning" smog levels. Savin described these as realistic levels, which have been exceeded on some days in Los Angeles.

Ozone is the primary constituent of photochemical smog, produced by the interaction of sun on auto exhausts. The ozone occurring naturally in the upper atmosphere is of a different source.

The study involved nine healthy men who pedaled a stationery bicycle as long as they could while breathing ozone concentrations of zero, .15 or .30 ppm.

The volunteers' mean age was 26, all had extensive athletic backgrounds, and were running competitively or jogging regularly at the time of the study. None smoked.

The men were not aware of the ozone concentration, if any, being administered.

Results show that exposure to as much as .30 ppm ozone during graded exercise resulted in no significant change in performance, although subjects reported symptoms of discomfort more frequently with increased ozone levels.

According to Savin, "The effects of ozone depend upon both the duration and concentration of exposure.

"Well-trained, motivated individuals experience physiologically measurable changes and report symptoms before any change in their duration of performance becomes apparent."

Mailed May 25, 1978

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Professor Theodore T. Puck, recognized as one of the "fathers" of research in mammalian cells, will speak on the nature of cancer Thursday, June 1, 1978 at noon at the Fairchild Auditorium of Stanford University School of Medicine.

Puck is director of the Eleanor Roosevelt Institute for Cancer Research and professor of biophysics and genetics at the University of Colorado Medical School, Denver. He is a visiting professor in the department of pharmacology at Stanford this spring.

Puck is well known for developing methods for clonal growth of mammalian cells, and for his studies on the effect of radiation on the genetic material of cells.

His honors include membership in the Institute of Medicine, National Academy of Sciences, the Lasker Award (1958), life-time professorship in the American Cancer Society, and fellowship in the American Academy of Arts and Sciences.

The lecture is sponsored by the department of pharmacology and is open to the public.

5-23-78 —30— 20

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—R. Gordon Gould, Ph.D., emeritus professor of medicine at Stanford University School of Medicine, died Friday, May 19, of cancer.

Funeral services are private, and a date for memorial services has not yet been set.

Gould, who was 68, was an expert on the metabolism of blood fats and proteins. His major research interests included the regulation of cholesterol synthesis and the role of cholesterol in the development of atherosclerosis.

He found that cholesterol ingested in the diet regulates production and metabolism of the substance by the body. This discovery has widely influenced the development of treatments to prevent atherosclerosis and related disorders.

A native of Chicago, Illinois, Gould, was educated in New York City and received his Ph.D. in organic chemistry from Harvard in 1933. He held teaching and research positions at Harvard, Rockefeller Institute, University of Illinois, and Los Alamos (New Mexico) Scientific Laboratory before coming to Stanford in 1960.

Gould served as director of the clinical chemistry laboratory of Stanford University Hospital until 1969. He was named professor emeritus in 1974, but continued teaching and research activities until shortly before his death.

He is survived by his wife, Edda von Renouf Gould, two children, five grandchildren, and a sister.

Memorial donations should be sent to Stanford University or to the Natural Resources Defense Council, Inc., 122 E. 42nd St., New York, NY, 10017.

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Mailed Monday, May 22, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Hart or Spyros Andreopoulos 415: 497-6911

STANFORD— Body cooling, hypothermia, is now being used by Stanford University pediatricians to help save drowning victims.

To lower a patient's temperature, the physicians pack the entire body in ice. After the temperature reaches about 31 degrees centigrade, the patient is connected to a respirator and kept under sedation for the next 48 hours.

Placing the patient in a state of restricted animation possibly helps to reduce the risk of brain damage, a common problem in drowning victims, according to Dr. Edward Alderete, chief resident in pediatrics.

The procedure, Alderete said, should be initiated as soon as possible after an accident. Lowering the body temperature reduces tremendously the oxygen demands of the brain thus further helping to prevent permanent brain damage, he asserted.

Alderete believes three patient's lives were saved last year at Stanford through the use of the technique. "They probably would not have gone home at all if we used traditional methods for treating drowning," he added.

Hypothermia for drowning victims has been used now for two years, said Alderete. Physicians began to notice that people who had drowned in cold rivers and lakes revived after prolonged submersions in water. This did not happen if the accident occurred in warm waters.

The hypothermia technique has been used for a long time on parts of the body, such as the heart, during surgical procedures involving adults, said Alderete. Hypothermia, especially "total body" hypothermia, is new to pediatrics and drowning victims.

(Also recently surgeons at the University of California Medical Center in San Francisco reported they had used hypothermia in infants to perform delicate heart surgery).

Alderete said physicians do not know why, but the procedure works better on children than on adult drowning victims.

It may be because "children have a much greater capacity to recuperate from brain injuries than adults," he said.

There are only four or five hospitals in the Bay Area using hypothermia on drowning victims, said Alderete. "The smaller medical centers lack the equipment and staff to perform the procedure. The entire process involves up to five physicians and three or four highly skilled nurses," he said.

Alderete plans to publish a report on the technique this summer based on clinical research performed here at Stanford.

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Mailed Tuesday, May 16, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD— A free public debate dealing with today's medical care issues will be held Monday, May 22, from 1:30 to 3 p.m. in Fairchild Auditorium at Stanford University Medical School.

The debate, sponsored by the Stanford Medical Student Association, will feature four speakers discussing alternative solutions to the problems of equity, quality of care, organization of services and financing.

The speakers include Robert R. Alford, professor of sociology at the University of California in Santa Cruz and author of *Health Care Politics;* Dr. Frank A. Rogers, a Stanford graduate, practicing surgeon in Whittier and former president of the American Association of Physicians and Surgeons; Alain Enthoven, Marriner Eccles Professor of Economics at Stanford Graduate School of Business and special consultant to Joseph Califano, secretary of Health, Education and Welfare, and author of *New Consumer Choice Health Plan;* and Dr. Robert Burnett, former president of the Santa Clara County Medical Society.

The session is actually an extension of a medical school course, "Health Care and Society," taught by Dr. Count Gibson, professor and chairman of the Department of Family, Community and Preventive Medicine at Stanford.

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Mailed Tuesday, May 16, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415:497-6911

STANFORD—Hospitals providing the most services to their patients and discharging them soonest have the lowest death rates, according to a Stanford study.

Those hospitals providing the least services and keeping their patients longest, have the highest death rates.

In a two-year study, Stanford researchers calculated the expected outcome, length of stay, and intensity of service should be for 600,000 patients, based on the type of disorder and the admission characteristics of the patient. They compared these expected values with the actual values to obtain measures for comparison of hospitals.

"These results, if valid, are of great importance. They have the appeal that goes with the belief that intensive service should yield better care," say researchers from the Stanford Center for Health Care Research in a 650-page report to the National Center for Health Services Research, Department of Health, Education and Welfare.

Authors of the $250,000 study are Dr. William H. Forrest, Jr., director of the Stanford Center for Health Care Research, and Drs. Byron W. Brown, Jr., W. Richard Scott, Wayne Ewy, and Ann Barry Flood, members of the departments of anesthesia, sociology, and family, community and preventive medicine.

The work was an outgrowth of the center's original Study of Institutional Differences in Postoperative Mortality (1974). They concluded in that study that the quality of surgical care in the nation's hospitals varies to such an extent from one hospital to another that it constitutes an important public health problem.

Data for the current study came from abstracted discharge information on 600,000 patients in 17 short-stay hospitals during the four year period 1970 to 1973. These institutions were a stratified random sample from approximately 1300 hospitals that participate in the Commission on Professional and Hospital Activities data system.

Among the patient services studied were diagnostic radiological and clinical laboratory examinations, and such therapeutic services as operations performed, intensive care, drugs prescribed, and blood transfusions. They found substantial differences among hospitals in services provided, even after adjusting for patient populations served.

The team also studied many hospital organizational factors which tested for possible association with the findings concerning services, length of stay and outcome of surgery.

Greater than expected service was associated with larger hospitals, more facilities, high occupancy rates, and several measures of coordination of work at the ward level.

This coordination of patient care activities at the ward level was also associated with shorter lengths of stay and the best outcomes.

Fewer services than expected were correlated with greater experience of the surgeon (years of service) and with tighter control of physicians by the medical staff.

Greater than expected length of stay was associated with high administrative influence, and also with higher hospital costs per patient.

Beyond these findings, Forrest emphasizes the implications of the study's methodology.

"The feasibility of establishing large scale monitoring to evalute the costs and quality of health care in hospitals can be of the greatest importance for national health policy."

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Mailed Monday, May 15, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—"Childhood Immunizations: Successes and Failures" will be the subject of a free public lecture in Fairchild Auditorium on Tuesday, May 23, at 8 p.m.

Speaker will be Dr. Anne Yeager, associate professor of pediatrics at Stanford.

Dr. Yeager authored the principal study in 1976 determining that the best age for measles immunization is 15 months, instead of one year.

The program is being sponsored by the Stanford University Hospital and Clinics, and by the Department of Pediatrics. It is in conjunction with the national "Immunization Initiative" of the Department of Health, Education and Welfare (HEW) and the American Hospital Associaton.

Goal of the national program is to focus on the continuing need for immunizations, the availability of vaccines to prevent childhood diseaes, and the dangers for non-immunized children.

HEW estimates that 40 percent of U.S. children today are not receiving the vaccines available against preventable diseases such as polio, measles, German measles, diphtheria, pertussis (whooping cough), and tetanus.

In studying a large outbreak of measles in Northern California in 1975, Dr. Yeager and her colleagues discovered that a number of children who had been immunized came down with measles anyway. It became apparent that the vaccine was less effective when it was given at the age of one year or younger.

The American Academy of Pediatrics and the U.S. Public Health Service issued new recommendations in 1976 that the immunization be postponed until the age of 15 months.

Dr. Yeager will answer questions from the audience following her talk. Free immunization record cards and fact sheets will be distributed.

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Mailed Monday, May 15, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—"Heart Disease Prevention: A Way of Life" will be the subject of the fourth and last lecture in a series on the heart, to be held Wednesday, May 17 at the Stanford School of Medicine.

The Progress in Medicine lecture will begin at 7:30 p.m. in the Sherman Fairchild Auditorium. The public is invited, and there is no admission charge.

Dr. John W. Farquhar, professor of medicine and director of the Stanford Heart Disease Prevention Program, will discuss high risk factors for heart disease and effective ways of controlling them.

Farquhar directed the Stanford Health Project in Central California, a three-year preventive effort to reduce cardiac risk factors.

Results from that study indicate, says Farquhar, that community-based health education in conjunction with mass media campaigns, can persuade people to change their life style and improve their health status.

That project, he notes, represents the type of preventive effort needed to help stem the epidemic of heart disease which claims the lives of more than 600,000 Americans per year.

The Progress in Medicine lectures are presented as a community service by the dean and faculty of the School of Medicine and members of the Medical Center Council.

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Mailed Friday, May 12, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 497-6911

STANFORD—

Hyperthermia is being tested as a treatment for superficial skin cancers at Stanford University Medical Center. Hyperthermia is localized heating by high frequency sound waves (ultrasound).

According to Dr. Elaine K. Orenberg-Anderson, senior research associate in the Department of Dermatology, the study is the first time hyperthermia has been applied to these cancers without complementary radiation or drug treatments. Hyperthermia has been used for several years as an experimental treatment for other cancers in animals and humans.

Orenberg is conducting the study with Dr. Eugene Farber, department chairperson, and Dr. David Deneau, assistant professor of dermatology. The research is supported by a one year grant from the American Cancer Society.

"Preliminary results are encouraging," says Farber. Hyperthermia has resulted in shrinkage of tumors in the eight patients treated so far.

"Our ultimate objective is to see if hyperthermia is lethal to these cancer cells," he says. "If it is effective, this technique may provide a painless, non-surgical method of removing skin tumors."

Present treatments of skin cancer include surgical removal and electrodesiccation, a technique in which the tumor is scraped off and the underlying skin is cauterized by a needle. Both treatments leave scars, and are cosmetically undesirable, says Orenberg, particularly if the tumor is located on the face or neck.

The hyperthermia treatments are performed with special ultrasound equipment designed and constructed in the laboratory of Dr. George Hahn, associxte professor of radiology.

Hahn and his associates have found that tumor cells seem to be more sensitive to elevated temperatures than normal cells. Studies in animals and humans have shown that hyperthermia by itself can cause shrinkage in certain cancers, and increase the effectiveness of radiation and drug treatments.

Farber said his group plans to expand their studies and has applied for a second year of funding by the American Cancer Society.

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Mailed Tuesday, May 9, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—

"After the Heart Attack: Rehabilitation" will be the subject of the third in a series of public lectures on the heart to be held Wednesday, May 10 at the Stanford School of Medicine.

The Progress in Medicine lecture will begin at 7:30 p.m. in the Sherman Fairchild Auditorium.

The public is invited, and there is no admission fee.

Dr. Robert F. DeBusk, assistant professor of medicine (cardiology), will discuss present rehabilitation techniques aimed at returning a heart attack victim to normal activities.

DeBusk is director of Stanford's comprehensive cardiac rehabilitation program. The program makes use of exercise testing and training, physical therapy, psychological and dietary counseling.

DeBusk began his rehabilitation program at Stanford in December 1973. He directed one of the first major U.S. studies using exercise testing as soon as three weeks after a heart attack.

A Stanford alumnus (A.B. 1960, M.D. 1964), he served internship and residency at Boston City Hospital, Harvard Medical School.

Dr. John W. Farquhar, professor of medicine, will discuss "Heart Disease Prevention: A Way of Life" at the final lecture in the series on Wednesday, May 17.

The lectures are presented as a community service by the dean and faculty of the School of Medicine and members of the Medical Center Council.

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FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Dr. Luigi Cavalli-Sforza, professor of genetics at Stanford University School of Medicine, has been elected a foreign associate of the National Academy of Sciences.

Cavalli-Sforza, 56, is world known for his research in bacterial genetics and human population genetics. A native of Italy, he was professor of genetics at the University of Pavia, Italy, before coming to Stanford in 1970.

Election to the NAS is one of the highest honors given to American scientists of engineers.

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Mailed Friday, May 5, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

The review of recombinant DNA research conducted at Stanford University has been criticized for inadequately educating research personnel to the potential hazards of the experiments and for "hampering public involvement" in the review process.

The complaints were raised by a group of citizens at the May 4 meeting of the Administrative Panel on Recombinant DNA Molecules at Stanford. About 50 people attended the meeting.

The panel, which includes members of the university faculty and staff, a student, and a community representative, was set up in 1976 to ensure that all research dealing with recombination of genetic material conforms to safety guidelines established by the National Institutes of Health (NIH).

Attendance at the meetings "has been a very frustrating experience," said Nancy Pfund, research assistant in the Division of Health Services Research at Stanford. Often the policy issues are put off in favor of reviewing research proposals, she said.

Only one meeting in four is open to the public, and even though the minutes of each meeting are supposed to be made available at university libraries, they often were not. The panel was criticed for not supplying minutes to the last four or five meetings.

Several citizens expressed concern that lab personnel who worked near recombinant DNA experiments were not given proper information in handling biohazardous materials.

Diana Dutton, assistant professor of sociology, and community and preventive medicine, suggested that a biohazard task force be created to develop educational and health monitoring programs. As part of health monitoring, regular blood samples could be taken from lab workers and analyzed for exposure to microorganisms.

"I'm not sure what we would analyze if we were to collect sera," said Stanley Cohen, professor of clinical pharmacology and panel member. "We don't know what to monitor for.

"I agree it is important to ensure worker and public safety, but it is also our responsibility not to frighten the public in instances where there is no basis for such fear."

John Kaplan, professor of law, disagreed. "As long as I am on this committee, I am committed by the guidelines to look at this stuff as if it were extremely dangerous."

According to members of the panel, education of technicians and support personnel is being done in several laboratories conducting recombinant DNA research.

The university health and safety office reviews laboratories engaged in recombinant DNA research to enure compliance with the NIH guidelines. As part of the review, safety officers make sure that lab workers are familiar with the research and with the guidelines, said panel member Jack Sidlow, health and safety office manager.

In addition, the panel is preparing a statement to be signed by lab workers indicating their awareness of the research and guidelines.

Presently there is no task force on other biohazardous materials, such as viruses, at Stanford, but according to panel member Pat Devaney, assistant provost, the university committee on research will discuss the possibility of forming one at an open meeting May 19.

Dutton suggested several means of improving public involvement in the review of recombinant DNA research which have been employed at other universities. These included increasing the number of public representatives on the panel, making minutes and other materials more available, and opening every meeting to the public.

The panel response to these suggestions was mixed. John Brauman, professor of chemistry and panel chairperson, apologized for the delay in providing minutes of all the meetings and promised to make them available as soon as possible.

Cohen said that some of the meetings were closed to the public to protect research ideas reviewed by the panel from being stolen. "If the information were not treated as privileged communications, I suspect people would be less complete in what they provided to the committee," he said. "There is a trade off."

However, Burton Richter, professor at the Stanford Linear Accelerator Center, did not feel closed meetings were necessary. In the field of high energy physics, all proposals are made public upon receipt by the review committee, he said. The priority of similar grant proposals is determined simply by the dates stamped on them.

"I think the idea of keeping research ideas secret is totally specious," said Richter. "We should have more open meetings, and I will raise this issue at the next meeting."

The next meeting of the panel, which will be closed to the public, will be set sometime in the next two to four weeks.

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Mailed Friday, May 5, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—

The State Supreme Court will be asked to review whether state capitation grants to private medical schools are constitutional or not.

The Third District Court of Appeal Wednesday (May 3) denied Stanford University's petition for a rehearing on the matter.

That court had ruled unanimously on April 10 that state capitation grants to private medical schools violate the California constitution.

The ruling came in a suit filed by Stanford against the state treasurer and controller to collect $448,800 in capitation support owed to the University for increasing its medical school enrollment.

The appellate court ruling struck down the program run by the State Scholarship and Loan Commission. The program was set up by the California Legislature for the purpose of increasing the number of physicians in the state.

According to John J. Schwartz, University counsel, the University intends to petition the State Supreme Court this month. It is expected that the court will take several weeks to decide whether to accept the petition or not.

In cutting off funds, the state controller claimed that the payments may violate the state constitution which prohibits state support to schools with church ties or to any school not under the exclusive control of the state.

Stanford, which increased its enrollment in 1973 through 1975, argued that bona fide contracts serving important public purposes were not "support" under the terms of the constitution.

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Mailed May 5, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

ADVANCE FOR P.M. PAPERS THURSDAY, MAY 4, 1978.
EDITORS: This story is released in conjunction with publication in *The New England Journal of Medicine* May 4.
STANFORD—

Interferon, a virus-fighting agent produced by the body, can prevent in cancer patients the spread of herpes zoster, a virus which causes chicken pox and shingles, according to Stanford University Medical Center researchers.

Virus infections are more frequent and severe in cancer patients, because their immune responses have been reduced by the anti-cancer drugs and radiation treatments they receive. Complications arising from these infections can be life-threatening.

In recent studies of infected cancer patients, early administration of interferon "prevented the spread of shingles and promoted healing," says Dr. Thomas C. Merigan, head of the division of infectious diseases. "Treated patients have had fewer complications and less pain than controls."

Merigan and his associates reported their findings in the May 4, 1978 issue of the *New England Journal of Medicine*. The research is supported by a contract from the National Institute of Allergy and Infectious Diseases (NIAID).

Interferon is a protein produced in animals and humans by white blood cells which interferes with the growth of several viruses. In addition to herpes zoster, Merigan and his colleagues have found that interferon can prevent the common cold, specifically, respiratory infections caused by rhinovirus. Interferon also improves the condition of patients with chronic hepatitis B infection.

The protein also stops the growth of tumors in animals, but it is not known if it has a similar anti-cancer effect in humans.

Previously, the Stanford researchers had observed that low blood levels of interferon were associated with the spread of herpes zoster infection (shingles), and that the levels increased during recovery.

"We found interferon only in the very late stages of disease in the tissues that were healing," says Merigan. "We felt that early and continued administration of interferon to increase blood levels might create resistance to the spread of infection."

The study involved 90 cancer patients with herpes zoster virus infection. In three trials, different doses of interferon were given during the first or second day of infection for seven to eight days. Patients were randomly selected to receive the protein or serve as controls.

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The highest dose was most effective. "We found that early treatment with large quantities of interferon is necessary to arrest disease or to block the spread of infection and complications," says Merigan.

Merigan's group is now studying the effect of interferon in controlling chicken pox in children with leukkemia.

According to Dr. Ann Arvin, postdoctoral fellow, children with leukemia are highly susceptible to serious complications of chicken pox. "We're dealing with a life-threatening illness," she says, "which kills close to seven percent of its victims and often involves the lungs, liver or nervous system."

Preliminary studies by Arvin and her associates indicate that interferon may prevent spread of the disease in these patients.

Other infections which may be effectively treated by interferon include rabies, viral infections in newborns, and viral hemorrhagic fevers, says Merigan. Interferon also may be used to prevent the spread of infections in patients who have received organ transplants, he says.

The major obstacle in developing interferon as a medication is the high cost of obtaining it from human white blood cells. The interferon used at Stanford is prepared and purified from white blood cells in a Finnish laboratory and supplied by the NIAID.

So far, chemists have been unable to synthesize, or make the protein from scratch.

As an alternative, the Stanford researchers are testing a virus-fighting drug, adenine arabinoside, in patients with hepatitis B virus and cytomegalovirus (CMV) infections. CMV infections can result in blindness.

Recently, the group reported encouraging results in treating hepatitis B virus infection with the drug.

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Mailed Wednesday, May 3, 1978
END ADVANCE FOR P.M. PAPERS THURSDAY, MAY 4, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—

A bill which repeals some controversial requirements for the teaching of human sexuality in medical schools has been passed by the State Senate Committee on Business and Professions.

The new legislation would still require that physicians in California receive adequate instruction in human sexuality. But medical school faculties would determine what, how, and who should teach, as they do in all other areas of medical knowledge.

Appearing in support of the measure at the committee hearing April 26 was Dr. Lawrence G. Crowley, deputy dean of the Stanford School of Medicine; Irwin Feinberg, chairman of the statewide committee on academic freedom of the UC Academic Senate; and Alan Goldfein, associate dean of the University of California School of Medicine at San Francisco.

Senate bill 1763 was introduced by Senator John Foran. It passed the committee by a vote of 6 to 1, and is expected to go to the Senate floor soon.

The Foran bill would repeal much of AB 4179, which was sponsored by Assemblyman John Vasconcellos and signed into law in 1976

That law added human sexuality to the list of subjects that physicians must be taught. For the first time it also required the state division of licensing to determine the length and content of the instruction. This was a sharp departure from the practice of faculty determining length and contant of courses, and it brought vigorous opposition from all medical schools in the state.

All the medical schools are supporting the Foran bill.

"We agree that there is a need to provide this kind of instruction," Clayton Rich, dean of the Medical School and vice-president for medical affairs, wrote the committee recently.

"However, rigid and detailed requirements will not ensure effective teaching.... The most effective way to encourage proper education and sensitivity to concerns involving human sexuality is to have the faculty of the medical schools determine the content and design of the curriculum just as they do for the other subjects required for a medical degree," said Rich.

In a statement prepared for the committee, UC officials argued that "State-determined course content could infringe academic freedom to the disadvantage of faculty and students alike.

"What we have here...is a governmental agency, pursuant to legislative direction, designing and dictating virtually every detail of the related educational curriculum. This seems to us an unreasonable precedent for intrusion into the responsibility of educational institutions."

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Mailed Monday, May 1, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415:497-6911

STANFORD[8]

A simple history may be as effective in identifying a patient's gastrointestinal problem as a series of costly x-ray tests, according to a Stanford Medical School study.

After interviewing 483 patients undergoing upper GI tests at a large prepaid health plan and two Veterans Administration hospitals, researchers concluded that the test is often ordered inappropriately, usually does not lead to changes in therapy, and has little relationship to the patients' improvement.

But the study also found that patients place a high value on the tests. Sixty-five percent indicated they very much wanted to have the test. When asked later, 78 percent said the test had allayed their own uncertainty and 51 percent would have requested the test had their physician not ordered it.

Most felt that a large number of tests was the mark of an excellent physician.

These findings were presented May 1 by Drs. Keith I. Marton and Harold C. Sox, Jr., both at the Palo Alto Veterans Administration Hospital, and Dr. J.H. Wasson of White River Junction, Vermont at the joint annual meeting of the Association of American Physicians, the American Society for Clinical Investigation, and the American Federation for Clinical Research, being held in San Francisco.

The patients were men and women aged 9 to 84 from all education and economic levels. Each had seen a doctor because a symptom suggested a GI problem, or an abnormality had been seen on another test or on examination.

Results of the upper GI series showed that in 75 percent of the patients there were either no abnormalities or minor ones. More than 50 percent had normal x-rays. A significant abnormality was revealed in 21 percent.

Many patients said they had the test to look for cancer; but in none of the patients was cancer found.

According to Marton, if a diagnostic test is useful it should be associated with treatment or outcome changes for the patient, or assist in the physician's diagnosis.

But only 7 percent of the patients in the study had their treatment changed as a result of the test. Researchers found no relationship between improvement of symptoms and the results of the x-ray test.

They concluded that more than one-third of the tests were not ordered according to appropriate criteria.

"We determined that the test is not a bad test; we question how it is being used by physicians," says Marton.

The team devised "decision rules" to enable doctors to determine whether the GI series should be ordered for a particular patient. They found that if these criteria were used, there would be a 19 percent decrease in the number of GI tests, allowing a 5 percent error rate in diagnosis.

The rules they established are based on the patient's history: those likely to have abnormalities indicated by the test usually have a history of ulcer, are over 50 years old, have pain that is helped by food or milk, or pain that occurs soon after meals.

Marton intends to examine the effectiveness of other similar diagnostic tests, develop "decision rules" for their use, and then test those rules.

"I hope our study will stimulate others to do similar work," he says. "Our technology is outstripping our ability to use it, and in the meantime it is raising medical costs."

Marton feels that his recommendation for fewer tests will not be hindered by doctors who practice defensive medicine, ordering many tests to avoid malpractice suits.

Litigation, he says, almost never occurs because a physician failed to order a test early enough, if he adequately examined the patient.

"Our goal," says Marton, "is to establish rigorously accurate estimates of the tests' benefit for a particular patient, so the doctor will be comfortable in applying that criteria."

He also points out the patient is able to ask for a particular test if he feels it would be worthwhile, even if the doctor does not.

The authors point out that patient attitudes towards tests may confound attempts at cost controls, and are thus deserving of more careful studies.

In the future, they plan to examine the sources of patients' attitudes, and the role of non-physician factors, such as sex, education level, and age.

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Mailed Monday, May 1, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415:497-6911

STANFORD— Dr. Christian de Rouffignac, a pioneer in studies of renal function, will be guest speaker at the Harris-Kwong Lecture in Nephrology July 6 at 5 p.m. in room M106 of the Stanford University School of Medicine.

Chief of the Renal Physiology Group at The Center for Nuclear Research in Saclay, France, de Rouffignac is visiting Stanford for several weeks. He will speak on renal transport of phosphate.

This subject is of medical interest since the kidney's regulation of phosphate balance may be lost with kidney failure. Loss of phosphate regulation leads to serious bone disease, including wasting away of bone, pain and fractures.

The Harris Lectureship Fund was established in 1976 by Mr. and Mrs. Rachford Harris in memory of their daughter Alexandra. The fund supports visiting scholars at Stanford University who lecture and consult with faculty and students in the Division of Nephrology.

The Sik Lun Kwong Fund was established in their father's memory by his children, and is used to sponsor guest lectures in the field of renal disease and renal physiology at Stanford University Medical School.

The lecture is open to members of the medical community and to the public.

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Mailed Thursday June 29, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD— Dr. Rose Payne, a prominent immunologist, and Dr. Norman E. Shumway, a Stanford heart-transplant pioneer, were among six scientists who received awards from the American Tentative Society.

The society, established by the late Associated Press Science Writer Rennie Taylor to encourage independent scientific thinking, presented the $2,5000 awards at a luncheon in New York, June 22.

The society, according to its President Alton Blakeslee, advocates a philosophy which may facilitate quicker acceptance of valid new ideas. "All ideas," Blakeslee said, "should be regarded as tentative. Otherwise we become prisoners of yesterday, stuck with dogmas."

The thinking and careers of Drs. Shumway and Rose Payne "seemed to us and to the advisory committee to exemplify this philosophy," Blakeslee said.

Shumway was honored for his work in the field of heart transplantation. Shumway and his associates were the only team to continue with heart transplants after other surgeons, discouraged by the high postoperative failures, dropped out of the field.

Today at Stanford, because of the progress of controlling rejection and infection, 70 percent of patients survive a year or more, and there is a resurgence of new interest in the procedure in other U.S. centers.

Dr. Payne ranks among a handful of individuals on the international level who are responsible for the discovery of the system of genetic markers in man. These are the antigens which often differ between unrelated individuals and which may provoke a rejection of transplanted organs.

These antigens are used in selelcting indivisuals for transplantation of human organs. They also provide clues for determining which individuals may be susceptible to certain diseases.

Other scientists honored by the Tentative Society included Jocelyn Bell Burnell, who as an astronomer student at Cambridge in 1967 noticed the precisely timed signals from what later were identified as pulsars; Astronomer Frank Drake, who began the first serious quest for extraterrestrial intelligent life; Edwin Land, who invented instant photography; and J. Tuzo Wilson, the Canadian geophysicist who championed continental drift before many of his conservative colleagues would even consider his theories.

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Mailed Wednesday, June 29, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Dr. Leland B. Blanchard, leading San Jose physician and longtime advocate of family practice medical care, died Monday, June 26, in San Jose, of an apparent heart attack. He was 66.

The funeral will be held on Thursday, June 29, 10 a.m., at Trinity Episcopal Church, Second and St. John Streets, in San Jose.

A memorial service will be held at Stanford Memorial Church on Thursday, June 29 at 5 p.m.

Clinical associate professor at Stanford School of Medicine, Blanchard had recently been involved in developing the training program for Stanford's new divison of family medicine. He served as associate director of the family medicine preceptorship program, in the Department of Family, Community and Preventive Medicine.

He practiced family medicine in San Jose since receiving his M.D. degree from Stanford in 1937.

He was a charter member and past president of both the Society of Teachers of Family Medicine, and the American Academy of Family Physicians, Santa Clara County chapter.

In 1974 he received the American Academy of Family Physicians' Award of Merit, acknowledging his "outstanding and singular contribution to education for family practice."

Blanchard authored many publications concerning family medicine training for physicians. He served on the Santa Clara County Medical Society's liaison committee to medical schools.

He had long been an active member of the Stanford Medical Alumni Association, serving as its president in 1959 and chairman of the annual fund 1968 to 1970.

He was a member of the staffs of San Jose Hospital, Santa Clara Valley Medical Center, and Alexian Brothers Hospital in San Jose.

Survivors include his wife, Virginia, son Timothy and daughter Sarah, and three grandsons.

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Mailed Tuesday, June 27, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

EDITORS: Copies of *The Healing Arts* available if not included with story.

STANFORD— Major improvements in the care of heart patients has been made through the use of biotelemetry, according to physicians at Stanford University Medical Center.

Biotelemetry refers to the space-age technology which detects and measures various body functions over distance. Its application to cardiology is discussed in the current issue of *The Healing Arts* magazine, a publication of the Medical Center.

In the coronary surveillance unit, biotelemetry has enabled heart patients to get out of bed more quickly and has speeded their recovery.

The electrocardiograms (EKGs) of these patients are continuously monitored during the first few days after their attack to detect abnormal beats which can lead to a further attack or sudden death.

The EKGs are converted into radio waves by a battery-powered unit which can be worn about the waist, and transmitted to the monitor. This frees the patients of cumbersome electrical cables, and enables them to walk about the halls of the unit.

Exercise, such as walking, is essential to speedy recovery of heart patients, according to Dr. John Schroeder, director of the coronary care unit. Long-term bed rest "can be devastating to the body," he says. "The patient loses strength very rapidly. Blood pools in the veins and can contribute to the formation of blood clots."

The telemetry devices are part of a computerized monitoring system designed by cardiology research associate Bill Sanders and installed in January 1978 by the Hewlett-Packard Corporation of Palo Alto.

Biotelemetry is also used in the care of patients with pacemakers. Regular check-ups are necessary to ensure that the pacemakers are performing adequately.

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However, "the average age of our patients is over 65, and many find it difficult to come long distances to the clinic," says Dr. Jerry Griffin, head of the pacemaker clinic.

These patients transmit their EKGs and pacemaker data over the telephone using a small battery-powered converter. The electrical signals are translated into audible tones, fed into the telephone, and decoded into the EKG printout at the hospital.

Telephone transmission has been used at Stanford for over a year. It has made it easier for physicians to follow the nearly 200 patients who receive pacemakers each year, says Griffin.

In the future, biotelemetry will be used to monitor a wide variety of cardiac functions. Dr. Donald Harison, chief of the division of cardiology, Professor James Meindl, director of the Stanford Electronics Laboratory, and their associates are developing implantable telemetry packages which can measure blood flow, blood pressure, EKG, and pace the heart from specific points in the heart muscle.

These packages, the size of electronic watches, are being used in animal studies to better understand how drugs affect conditions such as conduction failure and heart attack. Eventually, they may improve the treatment by drugs of human heart patients.

Research in biotelemetry is part of a larger effort to improve the detection of life-threatening heart conditions. The majority of deaths due to heart disease (60 percent) occurs suddenly, before patients can be brought to the hospital.

"To save some of these people we must define those with heart disease and abnormal rhythms which are susceptible to sudden death," says Harrison. "Presently we don't have a high enough predictable value."

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Mailed Wednesday, June 28, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415:497-6911

Editors: Details follow asterisks.

STANFORD—High blood pressure therapy, control of anxiety, inhibition of brain tumor growth and spleen regeneration are among the projects of five scientists recently awarded grant support at Stanford University Medical School.

Funding is from the Biomedical Research Support Grant, sponsored by the National Institutes of Health.

Funds are distributed each year to junior faculty members to assist them in establishing research programs.

Dr. Eric Shooter, chairman of the Department of Neurobiology, heads the committee which selects the grantees. The most recent recipients join seven others announced earlier this year.

The grantees are Drs. A. Crane Charters, acting associate professor of surgery, Frances K. Conley, assistant professor of surgery, David D. Oakes, assistant professor of surgery, Peter Rudd, assistant professor of medicine, and Craig Barr Taylor, acting assistant professor of psychiatry.

* * * * * * *

Charters will be studying the control mechanisms of tissue regeneration in the liver and in the spleen. Information about the controls governing cell division and replication may lead to a fuller understanding of the loss of control over cell growth which occurs in cancer.

Conley will investigate immunological aspects of cancer in the central nervous system. In her studies, she plans to alter the environment of certain immunologic functions in mice. She then will examine the way in which this altered immunologic state allows cells to accumulate around brain tumors, inhibiting their growth. Further knowledge of immunological defenses against brain tumors could lead to methods of preventing their growth in humans.

Oakes will examine the effects of injecting spleen tissue into rats which have had their spleens removed. If spleen function could be restored, protection might be provided against bacterial infection, a major risk following removal of the spleen.

Rudd is developing a simplified daily regimen for patients with high blood pressure. He is studying the possibility of administering the drug propranolol once a day, rather than three or four times a day, the current practice. He hopes to show that the drug's effectiveness is maintained without an increase in side effects.

Taylor is examining alternatives to medication for treatment of general anxiety. He will be comparing the effects of techniques such as relaxation and biofeedback to tranquilizers. Computerized psychological and physiological tests will be given to patients. Results will be based on the outcome of these tests and self-reported changes in anxiety and drug use.

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Mailed Tuesday, June 28, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415:497-6911

STANFORD—After 18 months of planning, Stanford University Hospital will launch an intensive and broad-based program on July 1 designed to train emergency medicine physician specialists.

The first group to undergo the training is comprised of six resident physicians who were recruited nationally.

"Our objective is to train emergency medical specialists for two main areas," explained Dr. Michael Eliastam, director of the program and director of the Department of Emergency Services at Stanford Hospital.

"These objectives are to provide faculty for other emergency medical training programs, and to train academically-oriented emergency medicine practioners who will serve as the link to their nearest academic medical center."

In addition to actual emergency and intensive care training at Stanford, Eliastam says, the doctors will also receive surgical training at Santa Clara Valley Medical Center in San Jose, and anesthesia, cardiology and psychiatric training at Veterans Administration Hospital in Palo Alto. They will also receive emergency medicine and pediatric training at Kaiser Hospital in Santa Clara.

The physicians will also teach in and be briefed about Stanford's paramedic and moble intensive care programs, and actually ride with trained paramedics on duty.

Furthermore, Eliastam noted, the physicians will participate in department meetings and be trained in administration, reimbursement and billing procedures.

Faculty for the emergency medicine physician training program will be "in-house" at each participating hospital, Eliastam added, with program funding coming from existing hospital funds. No federal funds are being used, he said.

Although there is no current national specialty examination to certify the physicians as emergency medicine specialists Eliastam anticipates such an exam will be in existence by September. Such certification would be made by the American Board of Medical Specialties.

The doctors in the program and their medical schools: Paul David, University of Nebraska, Omaha; Jacob L. Sofsky, Hershey, Pa.; Joan Gates, Texas, San Antonio; Mark Hauswald, California, San Francisco; Robert Hook, Wisconsin; Howard Davis, Pennsylvania.

6-27-78

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

CITY EDITORS:The following statement was issued by Stanford University Hospital and CRONA (the Committee for Recognition of Nursing Achievements).

STANFORD—

"Negotiations began April 25, 1978, on a new collective bargaining agreement between Stanford University Hospital and CRONA, the professional organization representing the Hospital's non-supervisory registered nurses. The current agreement will expire June 30, 1978.

"In a joint statement released today by the Hospital and CRONA, the community has been apprised that CRONA has served the Hospital and the Federal Mediation and Conciliation Service with the required notice of intent of strike and picket effective 6:45 a.m. on July 2, 1978, if a new agreement has not been reached by that time. In the remaining ten days, numerous negotiation sessions are scheduled. The Hospital is continuing to provide full services to the community and both the Hospital and CRONA have pledged their best efforts to successfully complete negotiations before the July 2 deadline."

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Mailed Friday, June 23, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD—A step-by-step behavioral approach for smokers who are trying to "break the habit" has been authored by a Stanford researcher.

Become an Ex-Smoker (Prentice-Hall, Inc., 226 pp., $4.95 paper, $10.95 cloth) by Brian G. Danaher, Ph.D., of Stanford School of Medicine's Heart Disease Prevention Program and Edward Lichtenstein, professor of psychology at the University of Oregon, is intended as a self-help guide and for use in group smoking cessation programs.

"The vast majority of smokers don't attend smoking clinics," Danaher said. "More than 20 million Americans have managed to stop smoking without ever having seen a consultant. One of our goals in writing this book is to provide research-tested skills and strategies that can increase their chances of permanent behavior change."

Designed partly as a workbook with spaces provided for recording personal responses, the volume outlines a series of procedures that have received extensive examination in research and education programs at Stanford University and other centers.

"Old-fashioned personal effort and hard work on the part of the smoker are still needed for the program to be successful," Danaher warns. "The book should be read actively by writing on the work pages and performing suggested tasks."

The program is divided into three phases: preparation, "calling it quits" and remaining an ex-smoker.

The initial phase includes training in how to track personal smoking behavior—smoking urges and number of cigarettes smoked. Deep muscular relaxation techniques that can be used later as a substitute for smoking are also learned.

In the second phase, four different methods for actually stopping all smoking are described. They range from making a personal contract for quitting, to the use of a rapid smoking procedure that can transform the act of smoking into an unpleasant experience.

The final phase in the program includes strategies the novice ex-smoker can use to achieve lasting success.

"Almost everyone continues to experience smoking urges after stopping," says Danaher. "The ability to attack these urges and systematically reduce their frequency and intensity is the key to permanent behavior change."

Alterations in daily routines and the use of substitute behavior and self-rewards may be necessary, Danaher notes.

A resource appendix discusses the use of hypnosis or drugs in smoking cessation, the risks of smoking during pregnancy, smoking and weight gain, and efforts to develop a "safe cigarette."

Innovative smoking control programs in business settings and school health classes are also described. The role of legislation and the health care community in encouraging more widespread smoking control is discussed.

An in-depth review of the research literature on behavioral approaches to smoking cessation is included.

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Mailed Thursday, June 22, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—Indiscriminate use of antibiotics is creating serious consequences which may limit their therapeutic value in the future, according to Dr. Jack S. Remington, professor of medicine at Stanford University School of Medicine.

Bacteria that cause serious disease and have gained resistance to antibiotics are one part of the problem. An associated rise in the number of patients who become infected while hospitalized, is equally alarming, says Remington, who is also chief of Allergy, Immunology and Infectious Diseases at the Palo Alto Medical Research Foundation.

Writing in the June issue of *Human Nature*, Remington warns, "unless we can limit the prescribing of antibiotics to their proper uses, we will see increases in the number of antibiotic-resistant bacteria and in the needless suffering and death of patients infected with them."

There are several reasons behind the widespread indiscriminate use of antibiotics, which Remington presents in his article.

- antibiotics are so effective when properly administered, it has taken us many years to recognize their negative possibilities.
- pressure from drug manufacturers, and misleading advertising have contributed to misuse of antibiotics.
- preventive use of antibiotics in hospitals, for patients whose resistance may be lowered or who may be undergoing surgery with risk of infection. Remington believes "there are few circumstances in which prophylactic antibiotics are warranted."
- pressure from patients to receive a prescription after each visit to a doctor.
- lack of supervision, worldwide, which leads Remington to add, "the overuse of antibiotics is a global problem, and by comparison with certain European and South American countries where antibiotics can be bought without a prescription, our controls are stringent."

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Remington cites studies indicating that 100,000 deaths each year may occur in the United States from "hospital-acquired" infections caused by resistant strains of bacteria.

Remington also names several types of bacteria which have developed resistant strains and are "cause for international concern." the diseases caused by these types of bacteria include gonorrhea, typhoid, pneumonia and meningitis.

Once the decision is made to treat a patient with antibiotics, Remington says that proper administration is often haphazard. Choice of the most suitable antibiotic for an individual case may be neglected, for example.

Side effects and allergies related to antibiotics are also increasing, Remington points out, as overuse of antibiotics continues.

There are ways to combat resistant strains of bacteria. Natural antibiotics which are no longer potent may be altered synthetically, regaining their effectiveness against some resistant strains.

Combinations of two or more different types of antibiotics may work against bacteria which have developed resistance to one antibiotic alone.

But these are stopgap methods, and the real need is for closer supervision, Remington says, explaining, "in the past we were able to keep up with the development of bacterial resistance. . . there was always another antibiotic we could produce from organisms in the soil or another chemical modification of an existing antibiotic we could make in order to save lives. . .that time may be drawing to an end."

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Mailed Wednesday, June 21, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Blood donor services of the Stanford University Blood Bank will be reactivated at Stanford Hospital in July.

To be available on a mobile basis throughout the Hospital, the new service will enable students, Medical Center employees and staff, patients' families, and members of the community to donate blood in the Medical Center.

The service has not been offered since 1972. At that time, responsibility for blood donations at the Medical Center was temporarily assigned to the Palo Alto subcenter of the Central California Red Cross, while the Hospital's Transfusion Service was expanded to meet specialized compatibility testing and processing needs.

With the reactivation of Stanford's blood donor service, all blood donations at the Medical Center will again be drawn under the Stanford Blood Bank license.

According to Dr. F. Carl Grumet, medical director of both the Red Cross subcenter and the Hospital's Transfusion Service, the new Stanford donor service will supplement blood which the Hospital receives from the Red Cross and Peninsula Memorial Blood Banks. All blood collected in the Hospital will be used for patients at Stanford.

Initially, blood drawing will be done twice a month in the same locations as the Red Cross mobile unit has previously served: in the new Hospital wing lobby, Hoover nurses' cottage, and the medical student lounge, at times that will be announced.

The long-term goal is for more frequent and flexible hours to meet the convenience of staff and visitors, according to Betsy Hafleigh, chief technologist with the Transfusion Service. Increased effort to recruit donors will also be underway in departments throughout the Medical Center.

The expansion of Stanford Blood Bank functions to again include blood drawing will better meet the academic and patient care needs of the Medical Center, says Grumet.

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"This should enhance our capabilities to innovate, implement new ideas, and provide the close, detailed evaluation and monitoring appropriate for blood banking at a major medical center. Such processes are more difficult and cumbersome to perform in either a community or a large national blood program."

For example, Grumet and Hafleigh have collaborated with Dr. Anne Yeager of the Department of Pediatrics to develop and evaluate a reliable screening technique for cytomegalovirus. The virus is transmitted by blood transfusion, and one out of every eight premature babies who have received blood acquire it. A blood test would ensure that only blood from donors who do not carry the virus is used for such infants.

Special lipid-rich blood units are also available from the Transfusion Service for newborns with special needs. An added patient benefit is possible cost savings by using processing reagents developed in the Stanford Blood Bank.

"We want to produce a better product for our patients at no more cost than a community blood bank," says Grumet. As with Red Cross blood, no replacement fee will be charged to patients.

The Hospital's original blood bank and drawing facilities were dedicated in 1966, financed with a gift from the Hospital Auxiliary.

In 1976, new blood transfusion and coagulation laboratories were constructed in the new wing of the Hospital with a $100,000 grant from the William Randolph Hearst Foundation.

Currently, the Transfusion Service handles the second largest volume of blood in California.

Persons who wish to schedule blood donations may call Julie Young in the Transfusion Service, 497-6444. To qualify, donors must be in good health, between the ages of 18 and 66.

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Mailed Wednesday, June 21, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—"Two hundred miles on a bicycle in a single day!"

That's how the brochure described the "1978 Heart of California Double Century Bicycle Tour," held recently near Davis.

Two intrepid Stanford Medical School students—David Carlisle and David Sartoris—decided that the tour would be "a good diversion from medical school." What they didn't bargain on was having to deal with a few medical problems along the way.

The 200 mile route had to be completed in 24 hours or less, according to the rules of the tour. The registration fee of $10 entitled participants to food and drinks at the nine rest stations, as well as at the lunch stop 100 miles into the ride. Also provided was "sag wagon" backup for those having mechanical difficulties, injuries, and for just plain exhausted riders.

Like many Stanford students, Carlisle and Sartoris ride their bikes to and from the medical school regularly. Neither did much extra training for the event. As Carlisle explained, "We didn't enter it with the idea that it was a race. I just considered it a long bicycle ride."

The pair set out from Stanford at 1 a.m. Saturday, in order to be ready for the start. Sartoris took off first and settled into a steady pace. Carlisle, who started later, began to have trouble with his right knee around the 50-mile point.

"There were several times when we felt like giving up," Sartoris recalled, "but we kept encouraging each other to go on just a bit further."

The lunch stop at the top of Mt. St. Helena was a welcome relief for everyone.

After filling up on such foods as oranges (for the sugar), bananas (to replenish potassium), peanut butter, raisins and lemonade, the riders collapsed on a nearby grassy hill to nap for an hour.

"That was a mistake. I shouldn't have stopped because my knee really stiffened up," Carlisle recalled.

(more)

More than 100 miles in, and a few hills later, Carlisle's knee became too painful and he decided it would be best to stop and hitch a ride back to Davis on the sag wagon.

Sartoris continued on until twlight, and while resting at one of the stops he debated whether to continue on in the darkness. There were 45 miles left, all downhill, and seven hours remaining within the time limit.

Then a messenger arrived at the stop with news that a cyclist had been injured and was lying in the middle of the road. Sartoris went back to help administer first aid until an ambulance arrived.

The injured cyclist had a concussion, and was conscious but incoherent. No one knew if he had been hit by a car, or had just taken the spill on his own.

When the ambulance finally arrived it was 11 p.m. Sartoris was over come with fatigue, and felt shaken up by the accident. He decided to take the sag wagon back to Davis, arriving five hours later.

Taking turns at the wheel, Carlisle and Sartoris drove home, finally returning to Stanford at 8 a.m.

Both cyclists agreed that the experience had been great, but Sartoris isn't sure he will try again next year.

"Now that I know the hills, it would be twice as hard," he explains.

Carlisle feels that next year, with a little more preparation, he will be back in the tour. In addition to enjoying the fresh air and the countryside, Carlisle says, "It was a lot of fun. I like bicycle riding and a ride like this has gotten me back into it."

Sartoris agrees, adding "The greatest part of the ride was the bond of friendship between the two of us."

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Mailed Tuesday, June 20, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Dr. Henry S. Kaplan, internationally-known authority in cancer research, has been selected to receive the Lila Gruber Memorial Cancer Research Award.

The award will be presented to Kaplan at the annual meeting of the American Academy of Dermatology, December 4 in San Francisco.

The award and special lectures program was instituted in 1971 by the Lila Gruber Research Foundation under the auspices of the Academy.

Dr. Kaplan, holder of the Maureen Lyles D'Ambrogio professorship in radiology, is director of Stanford's Cancer Biology Research Laboratory.

Both his laboratory and clinical interests have focused on the malignant lymphomas and leukemias. His pioneering radiotherapy techniques have resulted in dramatic gains in the treatment of certain cancers, particularly Hodgkin's disease and other lymphomas.

With his colleagues, Kaplan was responsible for initiation of staging laparotomy with splenectomy in the evaluation of Hodgkin's disease patients.

He also pioneered the use of combined modality therapy, employing both multi-drug combination chemotherapy and total lymphoid radiotherapy for patients with such cancers.

More recently, Kaplan has been involved in establishing permanent cultures of human lymphomas and leukemias and in the isolation of C-type RNA viruses from established cell lines.

Among Kaplan's honors are the 1969 Atoms for Peace Award and election in 1972 to the National Academy of Sciences. In 1977 he was awarded the Leopold Griffuel Prize by the Association for the Development of Cancer Research.

The Gruber award of $5,000 recognizes outstanding contributions in the field of cancer research.

The awards are made possible through a gift of Murray Gruber, in memory of his late wife. Recipients are selected by the Council on Scientific Assembly of the American Academy of Dermatology.

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Mailed Tuesday, June 20, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Dr. Kenneth L. Melmon, 43, an internationally known clinical pharmacologist, has been named professor and chairman of the department of medicine at the Stanford University School of Medicine.

His appointment, which culminates an eight-month search, becomes effective September 1, Dr. Clayton Rich, vice-president for medical affairs and dean, announced Friday, June 16.

Melmon will lead the school's largest department, including 12 divisions from cardiology to respiratory medicine. The department has responsibility for the clinical medical training of students, house staff, and postdoctoral fellows at Stanford.

A Stanford undergraduate, Melmon holds the M.D. degree from the University of California Medical School in San Francisco (Class of 1959), and he currently is a professor of medicine and chief of the Division of Clinical Pharmacology there.

"Dr. Melmon has demonstrated exceptional ability as an educator and academic administrator by establishing one of the most highly regarded training programs in clinical pharmacology in the nation," said Rich.

His research has led to 173 publications and to the editorship of the next edition of *The Pharmacological Basis of Therapeutics*, a text book in the field.

Melmon and his co-workers at USCF have recently identified the chemical receptors for histamine on the surface of white blood cells. They also have developed important new concepts concerning relationships between immune and inflammatory processes and their regulation.

He received his residency training in medicine at the University of California Medical Center, and the University of Washington in Seattle, and was a clinical associate in the Experimental Therapeutics Branch of the National Heart and Lung Institute in Bethesda, Md.

Melmon is recognized as one of the founders and leading figures in the field of clinical pharmacology. He was elected president of the American Federation for Research in 1973-74, and president of the American Society of Clinical Investigation for 1978-79.

He is a consultant to the Office of Technology Assessement's committee on generic drugs, U.S. Senate Health Subcommittee, and chairman of the Joint Commission on Prescription Drug Use.

Melmon succeeds Dr. Roy Maffly, professor of medicine, who became acting chairman when the former chief of the department, Dr. Daniel Federman, left to join Harvard Medical School.

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Mailed Monday, June 19, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—Citing "erosion of the moral basis of our profession," a noted physician called on the graduating class of medical students at Stanford University to "transcend the title you have, see through the privileges that come with it automatically" and "reconstruct" a more humanistic foundation for the medical profession.

Speaking during commencement exercises on Sunday, June 18, Dr. Edmund D. Pellegrino, professor of medicine and president and chairman of the board of directors of Yale-New Haven Medical Center, Inc., called on the 94 assembled future doctors to "eradicate the mystique of our words" so that patients may participate with physicians in a "joint decision."

"The gift that you are being given today is a gift that you should return to the patient who comes to you," Pellegrino concluded as a hot sun beat down on 157 graduating students and their families in Grant Courtyard of Stanford University Medical School.

In addition to 94 medical degrees, the medical school awarded 21 Ph.D's, 31 masters' degrees, 10 bachelor of science degrees, and one bachelor of arts degree.

Seven awards honoring excellence in teaching were presented to medical school faculty members.

The recipient of the Arthur L. Bloomfield Award is Dr. Allen B. Barbour, professor of clinical medicine at Stanford. Dr. Barbour was cited for "excellence in the teaching of clinical medicine." He has been named to the Bloomfield Award three times in the past. The Bloomfield award recipient is chosen by the graduating class of medical students at Stanford.

The Henry J. Kaiser Awards were presented to five individuals, also selected by medical students.

Dr. Robert Chase, Emile Holman Professor of Surgery and professor in the Department of Structural Biology, was selected for innovative and outstanding contributions in medical education.

Dr. Norman Blank, professor of radiology, and Dr. Jane A. Morton, physician specialist in pediatrics, were recognized for excellence in clinical teaching.

Dr. Otto A. Mortenson, visiting professor in the Department of Structural Biology, and Dr. Gerald A. Levine, assistant professor of pathology, were named for excellence in preclinical teaching.

The Lucille Daniels Award for Outstanding Contributions to Physical Therapy was presented to Dr. Helen Blood, adjunct professor and director of the Division of Physical Therapy. Dr. Blood was chosen by students in the division's master's degree program.

The diplomas were presented during the ceremonies in Grant Courtyard by Dr. Clayton Rich, dean of the medical school, Dr. Roy Maffly, professor of medicine, and Barbara Kent, acting director of the Division of Pysical Therapy.

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Mailed Monday, June 19, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Pulmonary embolism, or blockage of blood vessels in the lungs by clots of foreign material, is overdiagnosed and overtreated, especially among women who take oral contraceptives, according to Dr. Eugene D. Robin, professor of medicine and physiology at Stanford University School of Medicine.

Overtreatment by anticoagulant drugs, such as heparin, may have serious side effects, including internal hemorrhaging and even death.

"It is no coincidence that heparin is the most common cause of in-hospital, drug-related deaths in reasonably healthy patients," said Robin.

"In addition, a spurious diagnosis of pulmonary embolism may lead to unwarranted major social and medical consequences in the lives of individual patients," he said.

For instance, women with this condition may be advised against having children or taking oral contraceptives.

Robin made his report in a recent issue of *Annals of Internal Medicine.*

Pulmonary embolism commonly occurs in chronically ill, malnourished and bedridden patients, and in those with congestive heart failure. It has also been related in some studies to the use of oral contraceptives.

The frequency of the disorder among relatively healthy patients, and among women on the pill is unknown, said Robin. But it was assumed to be similar to that of the seriously ill population.

This assumption, compounded by the use of diagnostic procedures which are nonspecific and unreliable, has resulted in overdiagnosis and, consequently, overtreatment of pulmonary embolism.

Most hospitals employ measurement of blood gases, and perfusion and ventilation scanning in diagnosing the disorder.

However, further tests by angiography, or X-rays taken after injecting an opaque dye into the blood stream, are frequently necessary to confirm the presence of the clot in relatively healthy patients, said Robin.

About 80 percent of nearly 1100 patients with suspected pulmonary embolism were shown to be free of clots when tested with angiography during recent studies at several medical centers.

"Had angiograms been unavailable," said Robin, "most of these patients would have been treated for pulmonary embolism."

To prevent overdiagnosis, pulmonary angiography should be made available at hospitals, said Robin. If that is not possible, both physicians and patients should be "aware of the tentative nature of the diagnosis and include an element of uncertainty in planning therapy."

Angiography is not unconditionally correct and has its own problems, said Robin, but it is the most accurate method of diagnosis currently available.

"There are so many elements of uncertaintly in the diagnosis, life history, and management of pulmonary embolism that no universal diagnostic and therapeutic strategy can be currently formulated," he said.

"A searching reexamination of the problem is badly needed for proper patient care."

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Mail Tuesday, June 20, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Persons enrolled in health maintenance organizations (HMOs) have 10 to 40 percent lower medical costs than those with other health insurance, according to a Stanford study.

Most of the cost differences are due to lower hospitalization admission rates, according to Harold S. Luft, Ph.D., assistant professor of health economics at Stanford, writing in a current issue of the *New England Journal of Medicine.*

Luft defines HMO as an organization that has a contractual responsibility to provide health services to a voluntarily enrolled population. Members pay a fixed premium, which is the HMO's major source of revenue.

While confirming that "medical care expenditures are lower for HMO enrollees than for people with conventional insurance," Luft also calls for more detailed studies of how those savings are actually obtained.

In his study, luft found that most of the cost differences are due to hospital admission rates about 30 percent lower than rates of those conventionally insured.

His findings are based on a comprehensive review of studies published between 1951 and 1975, that provide 51 comparisons of HMO enrollees and those in conventional plans.

The differences in expenditure between prepaid and fee-for-service groups seem to reflect differences in practice patterns, according to Luft.

"HMOs typically offer more extensive coverage for ambulatory care, thus increasing demand for these services. If there is a choice between providing care on either an inpatient or outpatient basis, the HMO will probably choose the less costly outpatient mode....

"These findings support the expectation that HMO enrollees receive at least as many or more ambulatory visits as those in conventional plans. They also suggest that HMOs do not save money by reducing ambulatory visits."

Luft found no difference in the average length of hospital stay for HMO enrollees and comparison groups.

He also found that HMOs do not reduce hospital admissions only in discretionary or "unnecessary" categories of care.

"The case in favor of HMOs would be substantially strengthened if it could be shown not only that they reduce utilization of expensive services but also that reduction comes in categories thought to be medically unnecessary." The data, however, suggest lower admission rates across the board.

Because HMOs are receiving renewed interest from policy makers as a method to control medical care expenditures, Luft cautions that until more detailed studies are done to identify how HMOs really obtained their savings, "it is best to move cautiously and carefully to separate rhetoric from evidence."

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Mailed Monday, June 19,, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Extensive efforts are underway to make Stanford University Hospital more accessible to disabled persons, according to hospital officials.

These activities are part of a continuing university-wide program to aid disabled students, visitors and employees.

According to hospital planner and architect Richard Pierce, $37,000 has been spent during the last two years to make restrooms, ramps and telephones in the hospital easier to use by deaf and blind persons, and those confined to wheelchairs.

Restrooms in the clinic areas (Boswell and Edwards buildings) have been fitted with free swinging doors, and stalls and fixtures have been modified to permit easier access by persons in wheelchairs.

Ramps have been placed from sidewalks to the street. Telephones have been lowered, and extra volume controls have been installed for deaf persons.

The hospital has received bids for installation of automatic doors in the rear of the clinic, and is now waiting for budget approval before beginning construction.

Other changes are being investigated, including lowering drinking fountains, lowering buttons in the elevators and installing braille numbering on the elevator panels.

In addition to changes in hospital facilities, the personnel department is actively soliciting suggestions for improving the working conditions of disabled employees.

All applicants for jobs in the hospital are asked to indicate voluntarily whether they consider themselves disabled, and what special accommodations they may require. Similar questionnaires will be sent to all current employees in the near future, according to employment manager Joseph Breen.

The personnel department consults with Bay Area organizations representing the disabled, and will hold public meetings in the future to involve disabled employees in evaluating the employment situation, says Breen.

Modifications in facilities and employment conditions are being made in accordance with the requirements of sections 503 and 504 of the Rehabilitation Act of 1973, which prohibit institutions receiving federal funds and contracts from discriminating against disabled persons.

Efforts to expose physicians to the needs of the disabled also are underway at the medical school. The department of family, community and preventive medicine sponsors a course on medical and community aspects of spinal cord injury.

Now in its fifth year, the course allows medical students to leave the lecture hall and interact with disabled patients on a social as well as clinical level.

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Mailed Friday, June 16, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—A hiring freeze on personnnel in the Stanford University School of Medicine and the Stanford University Clinics has been ordered by Dr. Clayton Rich, effective immediately.

The problem, according to the vice-president for medical affairs and dean of the school, is that clinic expenses have been rising much faster than income.

In a letter to the faculty, Rich explained: "No commitments are to be made for new positions or replacement of faculty or other physicians, including house staff and fellows, who are paid in whole or in part from clinic funds."

The freeze applies to both the medical school and the clinic because the budgets of the two units are related. Besides faculty, it covers all personnel in administrative service departments. The freeze will remain in effect until the budgets and the programs of each clinic operation are reviewed, he said.

Rich also announced that he is appointing an Advisory Committee on Programs and Resources "to advise me on those steps that must be taken now and in the future to assure financial equilibrium...and to maintain the essential academic strengths of the school."

"Each clinic operation and supporting administrative program will be examined," Rich said. "This is for the purpose of developing a plan for fiscal 1978 and beyond that meets the academic and financial needs of the school.

"Once the review for each department has been achieved, the freeze will be lifted and that department can proceed along the lines of the established plan."

Rich said that if vacancies must be filled to avoid disruption in certain operations, special clearance can be obtained from appropriate administrators.

The projected clinic revenue next year is expected to go up 2 percent, but expenses will increase 16 percent, according to estimates. The planned clinic budget for the next year is $19 million.

"The present trends will cause a deficit in the clinic operation in a couple of years unless steps are taken now to reduce expenses," Rich said.

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Rich explained that it is not feasible to support clinic deficits with medical school general funds. "The school's budget is under great pressure already and has been maintained only because of a number of steps taken early in spring," he said.

The medical School has reduced its operating budget by more than $700,000 in a series of projected cuts to prevent a deficit next year.

"It is necessary to restructure the clinic operation so as to preserve its most important teaching services, but also maintain its financial integrity," Rich said.

Besides cost reductions, the dean said he anticipates involving faculty in the development of long-range plans to build up new clinical programs where academic needs exist, and there is an opportunity for expansion.

Rich attributed the fiscal difficulties in part to a reduction nationally in the number of office visits and hospital admissions, which affect both doctors in private practice and academic medical centers.

"This, coupled with tight price controls and regulations affecting payment for medical services, are forcing major changes in the operation of academic centers," he said.

"It's critical that those measures we are taking to reduce expense be selected in such a way that the school's fundamental qualities of excellence in education and research are preserved," Rich said.

Stanford University Clinics are a teaching unit of the medical school. Staffed by faculty members and assisted by resident physicians and advanced students, they provide outpatient services in more than 60 specialties and subspecialties.

The faculty practice involved 85,000 patient days of hospitalization and 135,000 outpatient visits last year. The professional service income of the faculty comprises 39 percent of the medical school's budget, excluding sponsored research and plant improvements.

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Mailed Monday, June 12, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Paul Berg, Willson professor of biochemistry at Stanford University School of Medicine, has been selected as one of four recipients of the newly-established Sarasota Medical Awards.

The other recipients include Eugene Braunwald, professor of medicine at Harvard Medical School, Robert A. Good, president and director of the Sloan-Kettering Institute for Cancer Research, and Nobel laureate Rosalyn Yalow, chief of Nuclear Research Studies at the Veterans Administration Hospital, Bronx, New York.

The awards, which include a specially-designed medallion and $10,000 for each recipient, will be presented at the first Sarasota Medical Awards Conference in Sarasota, Florida, April 1979. All four recipients will present papers at the conference.

Sponsored by the Sarasota Memorial Hospital Foundation, the conference and awards are designed "to recognize extraordinary achievement in all areas of medicine and related fields, and to provide a forum for outstanding individuals in these fields," said Harlow J. Heneman, chairman of the board of the Foundation.

Award winners were selected by a panel of Florida physicians, including the deans of the three Florida medical schools.

Berg has made important contributions to the understanding of how living cells make proteins.

Proteins are long chains composed of chemical units called amino acids. Berg found that certain enzymes were responsible for activating specific amino acids and for insuring that they were assembled in the proper sequence for the formation of a particular protein.

This work earned Berg the Eli Lilly Award in Biochemistry in 1959, and the California Scientist of the Year Award for 1963. In 1972, he was designated Harvey Lecturer and awarded the V.D. Mattia Prize of the Roche Institute.

Berg is a member of the American Academy of Arts and Sciences, the National Academy of Sciences and Institute of Medicine, the American Society of Bacteriologists, and former president of the American Society of Biological Chemists.

A native of New York City, Berg did his undergraduate work at Pennsylvania State University, and received his doctorate in biochemistry from Western Reserve University in 1952. This year he received the honorary doctor of science degree from the University of Rochester and Yale University.

He taught at Washington University in St. Louis before coming to Stanford in 1959. He served as chairman of the department of biochemistry at Stanford from 1969-1974. His reputation as an excellant teacher earned him the Henry J. Kaiser Award in 1969 and 1972.

Berg is noted also for his research involving recombinant DNA, the so-called gene-splicing experiments. He was one of the first scientists to raise questions about the potential dangers of the experiments in 1971. He headed the National Academy of Science committee which called for a temporary halt of certain experiments until their potential risks were analyzed.

Mailed Monday, June 12, 1978

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—A new training program in cancer biology will be offered to graduate and postdoctoral students at Stanford University this fall.

Supported by a $1.5 million grant from the National Cancer Institute for the first five years, the program is a unique attempt to provide training in and improve collaboration between different cancer-related fields, says program director Robert F. Kallman.

The interactions of specialists working as a medical team has made great strides in the treatment of certain cancers, such as Hodgkin's disease and leukemia.

For instance, the treatment of Hodgkin's disease represents the combined expertise of cancer biologists, diagnostic radiologists, surgeons, pathologists, radiotherapists and medical oncologists.

Kallman believes this cooperative effort can be enhanced if the specialists receive training in the other disciplines.

"We're not trying to make a jack-of-all-trades," says Kallman. "We're trying to get cross-fertilization across a number of different fields."

Presently, 34 faculty members from several departments in the schools of medicine and humanities and sciences are participating in the program.

They include Merton Bernfield, professor of pediatrics and chairman of the Human Biology Program, Stanley Cohen, professor of medicine and pioneer in recombinant DNA research; Errol Friedberg, associate professor of pathology; George Hahn, assistant professor of radiology and well-known researcher of hyperthermia; Philip C. Hanawalt, professor of biological sciences; Kallman, who also directs the division of radiobiology; Henry S. Kaplan, D'Ambrogio Professor of Radiology and director of the Cancer Biology Research Laboratory; Tag Mansour, chairman of the department of pharmacology; and Eric Shooter, chairman of the department of neurobiology and well-known researcher of nerve growth factor.

The program is open to students wishing to pursue a doctorate degree in cancer biology, and to qualified medical students desiring a combined degree.

Students may apply to do research under one of the participating faculty members. In addition, a special course in cancer biology will be offered starting in the winter quarter.

More complete information about the program and procedures for admissions can be obtained from Kallman and from the other faculty members.

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Mailed Wednesday, May 7, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD— Joan Mersch, this year's recipient of the annual Dr. Thomas A. Gonda Employee-of-the-Year Award at Stanford University Hospital, sees nursing as a multifaceted profession. Mersch believes that nurses should provide their patients with more than technically proficient care.

"You need a warm, caring human being as well as a dextrous technician," she says.

Mersch was presented with the award by Gary Mecklenburg, director of the hospital, capping the annual awards banquet held recently at Rickey's Hyatt House in Palo Alto.

As clinical nursing coordinator in the coronary care unit of Stanford University Hospital, Mersch comes into contact with critically ill patients who may be confronting the possibility of death for the first time and, often, they are reassessing their priorities in life.

"Sensitivity to the patient's expressions about death is very important," she says, and an empathetic nurse can help a patient towards spiritual recovery as well as physical recovery.

Mersch feels that nurturing plays a large role in nursing and the personal contact is an essential part of treatment.

"You can't establish a therapeutic relationship if you don't get to know people," she adds.

Mersch believes that the stresses of daily life and the pressures of "getting ahead" contribute to many health problems today. Recognizing this stress, she feels, is an initial step towards a healthier lifestyle.

For this reason, she finds it gratifying to watch a patient make the decision to ease up on external commitments. In particular, she recalls one young man, highly respected in the business community, with children still in grade school, who made the decision to slow down in his career. "I want to see my youngest graduate from high school," he told her.

However, a nurse must also be sensitive to the fact that some people wouldn't be happy altering their way of life, and, according to Mersch, this decision from a patient is more difficult to accept.

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Mersch did her undergraduate work at the College of St. Teresa in Winona, Minnesota, and gained clinical experience in Rochester, Minnesota. She has worked in Denver at the University of Colorado Medical Center as a staff nurse and as a head nurse, and she received her graduate degree from the University of Colorado.

Mersch came to Stanford in the fall of 1971. She worked for one year on a medical surgical unit before joining the coronary care unit and cardiac surveillance area, where she is now responsible for patient care around the clock.

Mersch says she likes to think that the Gonda Award was not given to her as an indvidual, but was meant for her staff.

"Perhaps I represent nursing services," she says, "and we were given the award. I like to think of it that way."

After work, Mersch follows her own advice and enjoys running to help reduce some of the stress built up during the day. She runs four days a week and plays tennis on weekends.

One change she hopes to see at Stanford is the establishment of a college of nursing.

The Gonda Award was established in 1975 in honor of Dr. Thomas A. Gonda, former director of Stanford Hospital and now chairman of the Department of Psychiatry and Behavioral Sciences in the School of Medicine at Stanford.

Mailed Friday, June 2, 1978

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

EDITORS: Copies of *The Stanford Magazine* available if not included with story.

STANFORD—In the world of television, bionics is associated with superhuman strength and speed, telescopic vision, and easily replaceable body parts.

In the real world, bionics means helping people who have been crippled, injured or disfigured by disease or accident to attain fairly normal physical appearances and functions. Bionics is the science which designs instruments and systems modeled after living organisms.

Physicians at Stanford University Medical Center employ bionics to replace crippled hip joints and reconstruct facial and other body defects. They are currently testing an electronic hearing aid and a circulatory assist device which may help save dying hearts.

These projects are described in an article in the current issue of *The Stanford Magazine*, a publication of the Stanford Alumni Association.

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A boy who was born without thumbs undergoes surgery to move his index finger to the thumb position. Now he can grasp objects.

A breast removed because of cancer is restored with a lump of silastic, a silicon rubber material, implanted under the skin. A new nipple is formed from skin and cartilage grafts taken from the ear. The reconstructed breast looks remarkably like the natural one.

The son of a famous millionaire has his ear taken off by kidnappers. A piece of cartilage taken from his ribs, sculptured, and placed under the skin restores the ear to its former likeness.

These are examples of operations performed at Stanford's division of plastic and reconstructive surgery to correct disfigurements caused by birth, disease or injury.

Many of the reconstructions are made possible by microsurgery, the use of tiny instruments, suture materials and a microscope to repair nerves, blood vessels and tendons.

In the future, artificial hands operated by nerves in the forearms may be able to detect temperature and touch, says Dr. Robert Chase, Emile Holman Professor of Surgery. And it may become possible to transplant entire limbs from one person to another. "The technology is here," says Chase. "The only problem is rejection of transplanted tissues by the body."

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Arthritis afflicts 20 million persons in the United States, causing pain, crippling joints, and sometimes resulting in death. Although there is no cure for the disease, drugs are now available to relieve the pain and stiffness, and artificial parts can restore function to crippled joints.

Stanford is a major center for hip joint replacement. Since 1971, nearly 450 total hips have been replaced with artificial ones at the Hip Clinic. The new hips consist of spherical plastic sockets fitted with stainless steel ball joints. These are attached to the skeleton with bone cement during surgery.

There is some problem with infection, but most patients have responded well to the surgery, and have recovered essentially full use of their hips, says Dr. David S. Burton, Hip Clinic director.

The joints show little evidence of wear even five years after replacement, says Burton. Hip joint replacement previously was performed only in persons over 60, but today the longer-wearing parts are placed in children who can't move their hips because of rheumatoid arthritis.

Artificial parts to replace other joints such as knees, elbows, wrists and shoulders are now being developed.

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Electronics is being investigated at Stanford as a means of overcoming acquired deafness, that which occurred because of injury, illness, or other trauma.

Dr. Blair Simmons, director of the division of otolaryngology, and Professor Robert White, vice-chairman of the Department of Electrical Engineering have been collaborating for over 10 years in the development of a tiny electrical package which can be implanted behind the ear.

Sound picked up by the package is converted into electrical impulses and transmitted to the auditory nerve, bypassing damaged portions of the ear.

The device can transmit frequencies of sound between 50 and 600 cycles per second. This is only a small part of the range used in human speech (300-3,000 cycles per second), but is in the range required for meaningful communication between partially deaf children.

"The sounds provided through the implant are not high fidelity, but they are functional," says Simmons. "They will enable people to talk and to distinguish the beat of music."

The success of the implant depends on the ability of the hearer to recognize what is being sent through the electrodes. For this reason, only persons who lost their hearing after they learned to speak are being tested with the implant.

In two volunteers recently implanted, the device has improved their ability to read lips and recognize simple tunes. Further work is necesary, says Simmons, before the device will be an effective conversation aid.

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Electronics also may provide a means of circulatory assistance which is stronger and can be used longer than any current technology.

Artificial heart assistance refers to devices outside of the heart which aid in the pumping function. These include the heart-lung machine used during open-heart surgery, the intra-aortic balloon pump which helps weak hearts recover from failure or surgery, and left-ventricular assist devices.

Of these, only the last device can provide the long-term circulatory support needed by the many patients who now die of pump failure.

The left-ventricular assist device draws blood from the left ventricle and pumps it into the aorta to maintain the circulation. Most of the present models are powered by a compressed air source located outside the body. However, this arrangement restricts patient mobility, and allows the possibility of infection through the external connections.

Stanford researchers and Andros, Inc. of Berkeley are developing a left ventricular assist device powered by electricity. Electrical energy will be transmitted through the skin to the internal pump by induction coils, thus eliminating the need for external connections.

The device has been tested at Stanford only in calves for periods as long as six weeks. According to Dr. Philip Oyer, assistant professor of cardiovascular surgery, it will not be ready for clinical testing in humans for at least two years.

"Initially," says Oyer, "the device would be used after heart surgery to aid only those patients who can't be separated from the heart-lung machine because their hearts are to weak to support circulation.

"If it is successful in these patients, the device may then be used in others who can't be helped by any other surgical or medical treatment. And, at Stanford at least, it may buy time for those patients who are waiting for a heart transplant."

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Mailed Tuesday, June 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Dr. Hugh O. McDevitt, professor of medicine in the division of immunology at Stanford University School of Medicine, has been appointed to the National Advisory Allergy and Infectious Diseases Council.

The council is the primary advisory body for the National Institute of Allergy and Infectious Diseases. McDevitt's appointment is effective through 1981.

McDevitt, 47, is well-known for his pioneering work on the genetic controls of the immune response. His group discovered that the genes controlling the ability of the body to respond to foreign materials are clustered together on one chromosome in the mouse, and are closely linked to the genes responsible for the transplant rejection reaction.

A native of Cincinnati, Ohio, McDevitt obtained a bachelor's degree with honors from Stanford (1952) and his doctorate in medicine degree from Harvard Medical School (1955). He taught bacteriology and immunology at Harvard before coming to Stanford in 1966.

His many honors include election to the National Academy of Sciences and the 1977 Borden Award for outstanding research from the Association of American Medical Colleges.

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Mailed Monday, June 5, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415:497-6911

CITY DESKS: Picnic photos available on request if not included with story.

STANFORD—A picnic may seem like an unusual addition to a course at Stanford Medical School, but this picnic was special.

A group of medical students here invited a dozen severely disabled students from Berkeley to the outdoor event, as the windup to a course offered by Dr. David Kaplan of the Department of Family, Community and Preventive Medicine and Dr. Sheldon Berrol, acting director of the rehabilitation program at Santa Clara Valley Medical Center.

The course, "Spinal Cord Injury: Medical and Community Aspects," consists of a one-day field trip to several spinal cord injury rehabilitation programs in the Bay Area.

Designed to expose Stanford medical students to the medical and social problems of the severely disabled, the course was started five years ago, and is offered each quarter during the school year. It is a popular course, accommodating about fifteen medical students every quarter.

According to Kaplan, "What happens when medical students take the course is a turnaround in their attitude toward severe disability, from tragedy to optimism."

The picnic idea came up during a follow-up session to the course when the students were discussing their experiences from the long, intense day.

In the morning, the class traveled to Santa Clara Valley Medical Center, which houses the largest spinal cord injury rehabilitation program in Northern California, according to Berrol, acting director of the program. He introduced the program goals, telling the students, "The concepts of independence for the disabled are different from what they used to be. The goal of the acute care program is to maximize residual function."

As patients progress, Berrol explained, they are encouraged to return to a productive, independent life. This may take several years, with medical supervision and counseling. Among the social difficulties facing the handicapped are family reintegration, sexuality, and vocational problems.

Next, the class traveled to Berkeley, making their first stop at the Center for Independent Living (CIL), an organization which provides services and training to disabled individuals, emphasizing self-sufficiency. CIL offers services such as wheelchair repair training, computer training, attendant referral, legal counseling, transportation and housing assistance.

During their discussions at CIL, the medical students heard that the attitude among the handicapped towards the medical profession is not altogether positive. Later, one medical student commented, "The experience was both jarring and frustrating. Jarring not because of what I saw, but because of the reception we received as future physicians. The people we talked to literally pelted us with complaints of lack of understanding and inadequate care administered by members of the health profession."

Berrol had commented earlier in the day, saying "Most health professionals have not been exposed to the severely disabled and are frightened by them." This lack of exposure and lack of understanding often results in inadequate care and an insensitivity toward disabled patients, according to Berrol.

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Expressing frustration at "this gap in our medical education," most of the medical students felt that the course had provided an opportunity for positive exchange.

The final stop of the day was a dormitory where disabled students live together with able-bodied students. This residence program is part of the Physically Disabled Students Program at the University of California.

Sue O'Hara, coordinator of the residence program, summarized its purpose, saying, "Our goal is to set up the minimum structure to facilitate independence." As students become less dependent, they are encouraged to move out and find accessible houses or apartments near the campus.

The Stanford medical students were guests at a dinner hosted by the Berkeley students.

According to Karen Collins, a first-year medical student, "Being able to sit side by side and just chat with our hosts and hostesses was the best part of the day."

Karen Collins, Bill Quick, and several other students decided to reciprocate the hospitality they received at Berkeley by inviting the disabled students to Stanford. Anna Maria Storniolo, another first-year student, expressed her gratitude by saying "This was my first exposure to people with such severe physical disabilities, and I was bursting with questions. I really appreciated the candor with which all of our questions--even the most personal--were answered."

It was warm and breezy when the vans from Berkeley pulled into parking spaces reserved for the handicapped, next to the Fairchild Building at Stanford.

Quickly renewing acquaintances, the group enjoyed a lunch on the lawn, a feast of cheese and meat sandwiches, potato salad, fresh deviled eggs, cake and strawberries.

"It's the first time so many of us have been together outdoors," noted Sue O'Hara, coordinator of the residence program.

Everyone was interested in seeing the Stanford campus, so the group later embarked on a tour, a fleet of wheelchairs and walkers moving across campus.

"They introduced us to the importance of their chair," Karen commented. With the help of the wheelchairs, the group was able to travel several miles around campus. A few obstacles were encountered along the way, although the route had been carefully planned.

Soon after leaving the medical school, the group discovered a dead-end sidewalk, without a ramp leading down to the street. By backtracking one block, this obstacle was bypassed. Many of the inaccessible buildings had to be viewed from outside.

Along the way, conversation was varied. Someone commented on the fact that the premiere of a new film, "Coming Home," took place in a theater inaccessible to wheelchairs. The film is about a quadriplegic Vietnam war veteran.

Mary Ann Hiserman, a second-year graduate student in architecture at Berkeley, took many photographs of the campus. Built into her wheelchair is a special tripod attachement for her camera.

Upon arrival back at Fairchild Auditorium, the group enjoyed cooling drinks before the Berkeley students had to depart. The picnic had been a success.

One medical student who wrote an evaluation of the course, managed to sum up the feelings shared by all the participants at Stanford. She said, "I realized that, without being aware of it, I'd always dealt with severely disabled persons on less then a one-to-one level. Instead I was either condescending or too uncomfortable to carry on the same kind of conversationn that I do with able-bodied persons.

"The experience of conversing with--and especially of learning from-- these people was invaluable. This won't be fully appreciated until I begin to interact with disabled people in my professional career."

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Mailed Friday, June 2, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder, 497-6911

STANFORD -- A new blood fat analyzer for premature infants has been given to Stanford University Hospital by the Palo Alto-Menlo Park Soroptimist Club.

Dr. Philip Sunshine, professor of pediatrics and director of the Premature Infant Research Center, received a check for $1200 to cover the costs of the device May 23 from Soroptimist Club members Mary Phares, Mary Esther Cander, and Mrs. Robert Rose.

According to Sunshine, the analyzer will be used to monitor levels of triglycerides (fats) given intravenously to low birth weight and premature infants.

Fat is a high energy fuel which is added to the glucose and protein diets of these tiny infants in many centers throughout the country.

However, little is known about the ability of the infants to metabolize, or use fats. Inefficient use will result in high levels of fats in the blood. This can be avoided by careful monitoring.

The new device makes it possible to determine fat levels from a drop of blood in minutes without leaving the infant's bedside. Alternate methods may require hours of laboratory work and large quantities of serum.

Improved monitoring will help investigators plan the best diet for underweight infants, said Sunshine, one that is rich in nutrients, and at the same time easy for their bodies to use.

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Mailed Monday, June 5, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder, 497-6911

STANFORD -- Research in pediatric cardiology at Stanford University Medical Center has been supported for the third straight year with a gift of $1700 from the Palo Alto alumnae chapter of the Alpha Phi sorority.

The money will be used to continue animal studies of the effects of oxygen deficiency on fat and carbohydrate metabolism.

"These studies have important implications for children with heart defects which result in oxygen deficiency," says Dr. David Baum, chief of the division of pediatric cardiology. Disruption of metabolism, the processes by which energy is provided to the body, can affect growth, impair temperature regulation, and lower the activity level of these children, he says.

So far, Baum has found that lowered oxygen levels in the blood suppress the release of insulin, a hormone which promotes uptake of sugar by body tissues.

The drop in insulin increases blood levels of sugar, and makes more of it available to the brain, which is primarily dependent on this fuel. This may help protect the brain during the period of oxygen shortage, says Baum.

The Alpha Phi sorority supports cardiology research nationwide. In the last two years, the local chapter has supported the study of ventilation and adipose (fat) tissue in pediatric cardiology at Stanford. The money is raised through the group's annual lollipop sale.

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Mailed Monday, June 5, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Astronauts who spend a long time in space may suffer skeletal weakening similar to the effects of old age or long-term confinement to bed, according to researchers at National Aeronautics and Space Administration (NASA).

This phenomenon, called osteoporosis, has caused concern among scientists and physicians because weakened bones break easily and take a long time to heal. Also, there is no effective remedy for the condition.

Engineers and physicians at Stanford University and NASA's Ames Research Center in Mountain View are studying the disorder in an attempt to provide better means of diagnosis and treatment.

Experiments conducted at Ames have shown that healthy humans confined to bed and experimental animals restrained in a sitting position for several weeks lose minerals such as calcium from their bones.

"We have found in these studies that dietary calcium supplements will not stop the loss of bone mineral," says Dr. Don Young, NASA physiologist at Ames. Vigorous exercise and high calcium diets also did not arrest the loss of mineral from the bones of astronauts on the last Skylab mission, he says. That voyage lasted 84 days.

It is not known why osteoporosis occurs during long periods of inactivity or weightlessness, says Young, but the phenomenon may be related to the reduced weight bearing and stress placed on the skeletal system.

"These studies suggest that the loss of bone minerals is one of the major limiting factors for long-term space flight," he says.

Young and Professor Charles Steele of the department of aeronautics and astronautics at Stanford University are testing a new technique which measures bone strength in patients at Stanford Hospital's orthopedic surgery clinic.

The technique involves measuring the bending stiffness of bone in response to an applied vibrational force. Stiffness is related to the integrity and strength of the bone.

"Preliminary results are very exciting," says Steele. In the 50 persons tested so far, there is a good correlation between bone stiffness and a subjective evaluation of physical condition. Strong and healthy persons tend to have high stiffness values, whereas injured or ill persons tend to have low values.

"The technique is expected to provide a quantitative measure of bone health, and a non-invasive diagnosis of osteoporosis," says Dr. Donald Nagel, chief of orthopedic surgery at Stanford. Other diagnostic methods include biopsy, or removing bone fragments for examination under the microscope, and X-rays.

In addition to diagnosing osteoporosis, the vibrational technique may aid in testing methods of treating the disorder, says Nagel.

One experimental treatment involves electrical stimulation of bone by placing it in an electromagnetic field.

It is known that when an electrical current is induced in bone with electrodes, bone material will move from one electrode to the other, similar to the way a battery works.

Researchers are now trying to produce the same effect by placing bone in electromagnetic fields. Dr. Andrew Bassett of Columbia College of Physicians and Surgeons in New York has reported that 85 percent of fractures which had not healed within eight months of breakage healed with electrical stimulation.

Nagel recently began testing this treatment on patients at the Stanford orthopedic surgery clinic.

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Mailed Thursday, June 1, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—The major obstacle to reducing illness throughout the world is not a lack of medical knowledge about diseases, but the difficulties in applying it within the constraints of environment, culture, economics and politics, according to a new book by Dr. Paul F. Basch, associate professor of family, community and preventive medicine at Stanford University School of Medicine.

An authority on tropical diseases, Basch recently published an extensive examination of the world health field entitled *International Health* (1978, Oxford University Press).

Half of the world's population has no access to health care, and millions die each year of readily preventable sickness, quotes Basch from a 1976 testimony to the U.S. House of Representatives.

The greatest portion of people in developing countries live in rural areas, yet most of the medical care, including physicians, is provided in the cities.

"Known scientific and technical advances are seen to have no beneficial impact on the lives of most people," says Basch.

The inequity of medical services and the dearth of primary care supplied on an international level are due in part to political and economic conditions, but these can be overcome.

Basch points out that the "barefoot doctor" of the People's Republic of China has helped to improve health conditions without massive infusions of money or sophisticated technology.

"Perhaps the most important lesson to be learned from China is that it is not impossible for a poor country to mount successful efforts against the most pervasive and damaging threats to health, that large amounts of money or of medical research are not necessarily prerequisites, and that lack of either should not be accepted as justification for official inaction," he says.

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Success on the international level requires an understanding of the circumstances that lead to disease and death in each country, including local environment, genetics, culture and behavior.

For instance, stomach cancer is relatively common in Japan, but rare in the United States. The incidence of the disease decreases among Japanese immigrants to the U.S., and, among their American-born children, it resembles that of Caucasian-Americans. This suggests that dietary or environmental factors may play a role in the development of that cancer.

Comparative studies of how diseases are represented in different countries provide important information about their cause and development, and aid in prevention efforts.

However, a major block to health care planning is simply inadequate information. In many areas of the world, for instance, even basic census data are lacking.

International health care workers not only must take into account all the variables, but avoid "cultural blind spots", the assumption that what works in one country will work in another.

A dramatic example of this is the introduction of bottle feeding into developing countries. As a result, many women have stopped breast feeding, even though their own milk is richer in nutrients than the formula, and they do not have the sanitation necessary to keep the bottles and nipples clean. Consequently, malnutrition and infection have increased markedly among their babies.

Basch does not recommend any one plan for improving world health, "but it is essential to know the experiences of others, to extract and apply lessons from their successes, and to avoid the mistakes of their failures.

"International health is largely an extension of public health," says Basch, with the same goal as that of the local doctor—"improving the quality of life for individual human beings."

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Mailed Monday, July 10, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Stanford University Hospital has received full two-year accreditation by the Joint Commission on Accreditation of Hospitals (JCAH), according to Gary A. Mecklenburg, hospital administrator.

The accreditation is based on a survey completed in April by members of JCAH, the California Department of Health and the California Medical Association.

Two years is the maximum period of accreditation granted by JCAH.

Mecklenburg attributed the favorable survey findings to "significant achievements in providing a high standard of operation, and to an ongoing committment of the Hospital staff to deliver the highest quality of patient care.

"Patient services are of the highest quality, and the JCAH survey confirms that high standard."

The JCAH report outlined several recommendations and comments. Mecklenburg notes that many of these have already been addressed, or are in process.

JCAH is a nongovernmental organization operating under the auspices of the American College of Surgeons, the American Hospital Association, and the American Medical Association.

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Mailed Monday, July 31, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

EDITORS: This release is issued jointly by the Stanford School of Medicine and by the Palo Alto Medical Clinic.

STANFORD—Stanford University School of Medicine and the Palo Alto Medical Clinic have formed a liaison committee to further mutual interests in medical care and education.

Formation of the new committee was announced today by Dr. Clayton Rich, dean of the School of Medicine and vice-president for medical affairs, and Dr. Robert Jamplis, director of the Palo Alto Medical Clinic.

Committee members include Drs. Jamplis, Hewlett Lee, George Janetos, Maurice Fox, and Sidney Hecker, of the Palo Alto Medical Clinic.

Members from Stanford include Dr. Rich, Dr. Lawrence Crowley, deputy dean of the School of Medicine; Dr. Irving Schulman, chairman of the department of pediatrics; Dr. Malcolm Bagshaw, chairman of radiology; and Dr. John Collins, chairman of the department of surgery.

The committee will be meeting at regular intervals to explore mutual areas of interest and concern.

A major area of common interest is how to strengthen the educational resources of the two institutions, and broaden the scope of the educational programs of the School for both medical students and postdoctoral trainees.

Mailed Wednesday, July 26, 1978

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STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

TO: CITY EDITORS AND SCIENCE WRITERS

STANFORD—The applications of advanced technology to diagnosis and treatment of heart disease will be the subject of two international conferences held at Stanford University School of Medicine September 11-14, 1978.

The press is invited to attend sessions of the meeting on non-invasive cardiovascular measurements, September 11-12, and the fifth annual computers in cardiology conference, September 12-14. Both will be held in the Medical School's Fairchild Auditorium.

Workshops will focus on echocardiography, methods of blood flow detection, magnetocardiography, advances in computer tomographic (CT) scanning, nuclear imaging, computerized arrhythmia and intensive care monitoring, image processing and computer databases.

A training tutorial for physicians on computer interpretation of electrocardiograms (EKGs) will be given Monday, September 11.

Dr. C.A. Syvertson, new director of the National Aeronautics and Space Administration (NASA) Ames Research Center in Mountain View, California, will deliver the opening address of the first meeting on non-invasive cardiovascular measurements.

This conference, sponsored by NASA and Stanford's division of cardiology, represents the cooperative efforts of engineers and physicians at the two institutions in developing space-age technology for the diagnosis of heart disease.

The second conference, computers in cardiology, brings together scientists from 16 countries for a discussion of their work and interchange of ideas, according to Dr. Donald C. Harrison, director of the division of cardiology.

The computer conference is sponsored by the division of cardiology, the National Institutes of Health, and the Institute of Electrical and Electronics Engineers (IEEE).

Both meetings are open to the public, but require advance registration with the division of cardiology by Friday, August 11. Inquiries should be directed to Ms. Droni Moo, Stanford University School of Medicine, 701 Welch Road, Suite 3303, Palo Alto, CA 94304. She can be called at (415) 497-7507.

Press arrangements will be handled by the News Bureau. If you plan to cover or would like a program of the conferences, please return the form attached.

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Mailed Tuesday, July 25, 1978.

MAIL TO: Bill Snyder

Stanford Medical Center

News Bureau

Room TC-135

Stanford, CA 94305

I plan to cover the meetings on non-invasive cardiovascular measurements and computers in cardiology September 11-14, 1978. _____

Send me the complete program _____

NAME _____ ADDRESS _____

PUBLICATION _____ CITY, STATE _____ ZIP _____

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415 497-6911

STANFORD—A clinic to treat alcoholics after they stop drinking is now underway at Stanford University Medical Center.

The emphasis of the clinic is to help the alcoholic and the person's family face long-term life problems, says Dr. Stephanie Brown, associate director of the program.

"We don't see ourselves as a replacement for Alcoholics Anonymous," she says. "In our group therapy the emphasis is on discussing concerns and worries...it is intensive psychotherapy and often the people who do best in these groups are people using other support programs such as AA."

The Stanford Alcohol Clinic is one of four specialty clinics within the Department of Psychiatry and Behavioral Sciences. These are the Couples and Family, Sleep Disorders and Stress Reduction clinics, in addition to the Alcohol Clinic.

The concept of these interacting clinics is unique, says Brown, because they recognize that patients often seek help for a complex web of problems.

This collaboration enables alcoholics to consult specialists about related problems such as anxiety, sleep disorders or marital conflicts.

"We are also interested in raising people's awareness of alcoholism...we need to legitimize the problem in our culture where drinking is the norm," Brown explains, adding that the wide acceptance of drinking as desirable social behavior means that overdrinking is often overlooked.

One of the challenges in treating alcohol-related problems, says Brown, is helping people acknowledge, initially, that drinking is a problem. "People are embarrassed--they think it is a weakness," she says.

There are also deeper inhibitions towards seeking treatment, she notes. "Many alcoholics are terrified of stopping drinking, although they recognize their self-destruction and want to stop."

Brown thinks adolescents need special attention.

"Adolescence is a time of transition when peer culture is very important," she says, stressing the usefulness of the clinic's group therapy techniques.

Another group which Brown would like to reach includes the adult children of alcoholics. She feels her program, with its focus on long-term problems , is especially suitable for dealing with the "emotional problems left over from growing up in a chaotic and inconsistent environment" with alcoholic parents.

The Alcohol Clinic sponsors a free education lecture series open to the public. The ten lectures will begin again in August, and Brown hopes to schedule an evening series in the fall.

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Mailed Monday July 17, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415 497-6911

STANFORD—The public's role in policy decisions concerning medical research and innovation is the subject of a project launched recently at Stanford University Medical Center.

The study is directed by Dr. Diana Dutton with Dr. John Bunker, and is funded by a three-year grant from the Ethics and Values in Science and Technology (EVIST) program of the National Science Foundation.

The researchers are currently seeking active participation in their study by interested citizens and public groups and will begin a series of workshops in the fall.

Dutton hopes that through the public's involvement, the study will gain a better perspective on problems in biomedical research policies and possible remedies.

Based in the Department of Family, Community and Preventive Medicine, the study also involves students and faculty from many disciplines including history, law, sociology, anthropology, philosophy, political science, economics and others.

The researchers will examine four controversial medical innovations:

* the national swine flu vaccination program
* DES(diethylsilbestrol) administered during pregnancy to prevent spontaneous abortion
* the artificial heart program
* recombinant DNA research

Bunker, who has written widely on the costs and benefits associated with surgical innovations, explains that often in the past, individuals have absorbed the costs which may accompany new technology. The study will explore other ways for society to absorb these costs and perhaps to avoid future unexpected adverse outcomes.

"More direct representation in decision-making of the individuals likely to suffer costs and risks might help to lessen these dangers," Dutton suggests.

The project conclusions will be published in articles and reports, and in a book for general readership.

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Mailed Tuesday July 18, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—Mary Catherine Krawec has been appointed to the new post of associate administrator for operational planning at Stanford University Hospital and Clinics.

According to Gary Mecklenburg, administrator of the Hospital and Clinics, Krawec will be responsible for coordinating and directing projects and programs to improve the operation of the Hospital and Clinics.

Her first project, Mecklenburg said, will be to plan additional Hospital operating rooms.

Krawec, who begins at her Stanford post Aug. 1, will also have specific responsibilities for the Health Services Planning Group.

In addition she will coordinate the Hospital program for continued compliance with the standards of the Joint Commission on Accreditation of Hospitals (JCAH), the California Health Department, California Medical Association, and other regulatory agencies.

Furthermore, Mecklenburg noted, Krawec will coordinate Stanford's involvement with appropriate health systems agencies.

Currently Krawec is director of regional operations of the New York City Health and Hospitals Corp., where she participated in developing and implementing the organization's emergency three-year fiscal plan.

She previously served as director of planning and as associate executive director at Greenpoint Hospital in Brooklyn.

Krawec is also a past assistant director at Bronx Municipal Hospital Center. She is a graduate of Catholic University in Washington, D.C., and holds a master's degree from Fairfield, CO, University.

7-17-78 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—The major obstacle to reducing illness throughout the world is not a lack of medical knowledge about diseases, but the difficulties in applying it within the constraints of environment, culture, economics and politics, according to a new book by Dr. Paul F. Basch, associate professor of family, community and preventive medicine at Stanford University School of Medicine.

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Basch points out that the "barefoot doctor" of the People's Republic of China has helped to improve health conditions without massive infusions of money or sophisticated technology.

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Success on the international level requires an understanding of the circumstances that lead to disease and death in each country, including local environment, genetics, culture and behavior.

For instance, stomach cancer is relatively common in Japan, but rare in the United States. The incidence of the disease decreases among Japanese immigrants to the U.S., and, among their American-born children, it resembles that of Caucasian-Americans. This suggests that dietary or environmental factors may play a role in the development of that cancer.

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International health care workers not only must take into account all the variables, but avoid "cultural blind spots", the assumption that what works in one country will work in another.

A dramatic example of this is the introduction of bottle feeding into developing countries. As a result, many women have stopped breast feeding, even though their own milk is richer in nutrients than the formula, and they do not have the sanitation necessary to keep the bottles and nipples clean. Consequently, malnutrition and infection have increased markedly among their babies.

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"International health is largely an extension of public health," says Basch, with the same goal as that of the local doctor—"improving the quality of life for individual human beings."

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Mailed Monday, July 10, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD— Heart transplants may be done in 8 to 10 medical centers across the country within the next five years, predicts Dr. Edward B. Stinson, Stanford cardiovascular surgeon.

"Our record has encouraged a resurgence of serious interest by other centers," says Stinson.

Dr. Norman E. Shumway, who pioneered the transplant program at Stanford in 1968, says the surgery will remain "the ultimate therapeutic procedure" for patients with advanced heart disease who cannot be helped by other means.

The Stanford program has remained the only consistently active one in heart transplantation at the clinical level. Currently 146 patients have received new hearts at Stanford; 61 are now living.

Shumway cites steady improvement in survival rates, from 22 percent one-year survival in 1968 to 69 percent for current recipients. This success is comparable or superior to that attained in kidney transplants from unrelated donors, he says.

Recently, the School of Medicine was awarded a five-year federal grant for more that $5 million for continued clinical research.

The grant, funded by the National Heart, Lung, and Blood Institute, is the largest in the history of heart transplant research, according to NIH officials.

The funding will support the screening and selection of cardiac recipients, and hospitalization costs for the surgery and immediate postoperative period.

It will also support related research in pathology, transplantation biology, physiology, pharmacology, hematology, infectious disease, biomedical engineering and psychosocial studies.

Focus will be on immunological studies of transplant recipients before surgery, on ways to diagnose and treat rejection, on control of the body's immune response, and new ways to assess the capacity of the transplanted heart.

In addition to the clinical work, other research will examine the feasibility of a combined heart-lung transplant.

Heart transplant alone cannot be an alternative in many congenital heart problems, says Stinson, because of vascular and pulmonary impairment in addition to the heart problem.

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Pilot studies of the combined heart-lung transplant are underway, he says, and work will begin soon in dogs. He foresees clinical application within 3-5 years.

Rejection remains the single most challenging problem of the transplant program. Immunosuppression has successfully prevented rejection in many patients, but leaves them susceptible to infections which can become life-threatening, says Stinson. The problem could be solved by an agent or technique which would make the body tolerant to the transplanted tissue without suppressing the body's defense to infection.

One research direction will be to study the control of immune response by use of total lymphoid irradiation before transplant. This form of radiotherapy has been used extensively to treat malignant lymphomas, such as Hodgkin's disease. Stinson terms the work "promising," and says study is underway in primates to evaluate its role as an immunosuppressive agent.

Researchers will continue to study and produce rabbit antithymocyte globulin (RATG), the immunosuppressive agent used for heart transplant patients since 1973. Studies have shown that rejection has been significantly less severe in those receiving RATG than in those who received equine antilymphocyte globulin.

Other Stanford laboratories are attempting to identify white blood cell factors which influence the acceptance or rejection of an organ transplant.

Histocompatibility (tissue typing) antigens, controlled by what is called the HLA system in man, are under study. There is some evidence that patients whose white cells mount a vigorous attack to a test panel in the laboratory may have more severe rejection episodes.

Unfortunately, says Stinson, simple matching of antigens of donor and recipient is not an answer to successful organ transplants, because so many other factors also govern rejection.

"There are no easy solutions to rejection," he says. "It will take careful, hard work, one step at a time."

Other research will examine the role of blood platelets and coagulation in transplantation, and recurrent, sometimes accelerated, coronary artery disease in longterm recipients.

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Team members list development of the heart muscle biopsy technique as a key advance contributing to the success of the program. Essentially, a piece of wire with a clipper at the end is inserted into the patient's jugular vein and threaded down into the transplanted heart to obtain a small sample of the tissue. The sample can then be studied for early evidence of rejection or disease, enabling earlier treatment.

Another project is a broad analysis of the physiology and pharmacology of the transplanted heart, and its overall function.

Myocardial markers, tiny metal coils, made at the Palo Alto Medical Research Foundation, are implanted in the heart during surgery. With X-rays, physicians can then monitor changes in the heart over time.

They can also study the short-term recovery process after surgery, the effects of drugs and exercise, and the effects of the rejection process.

The renewed NIH grant also supports referral and evaluation of potential recipients, and their care while waiting for transplantation. Patient selection, says Stinson, has played an important role in assuring success.

Stanford receives more than 300 referrals a year for transplant, with 80 percent unable to meet the stringent measures of selection. Of the 20 percent evaluated at Stanford, 15 percent are accepted as candidates. Twelve percent of referrals survive to receive a transplant.

Besides the therapeutic and research aspects, Stinson describes the program as "an international demonstration project."

"One of our major goals is to refine the methodology so that others will not be doomed to failure, but have a chance for success they didn't have in 1968."

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Mailed Wednesday, July 5, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD— The Northern California Infant Medical Dispatch Center has been given $20,000 by the March of Dimes Foundation to support emergency transport of seriously ill infants.

Funding of the center by the State Department of Health expired June 30, and was not renewed pending examination of the impact of Proposition 13 on the state budget.

The center, located at Stanford University, coordinates intensive care resources of 10 hospitals in the 97,000 square mile region from the Oregon border to the Tehachipi Mountains.

A similar center, based at the University of Southern California, serves the southern part of the state. The centers were established in 1975.

"It is very important to get to the babies as quickly as possible," says Dr. Alvin Hackel, of the Northern California dispatch center.

"In the past, we've spent up to two hours finding an appropriate intensive care nursery to take them. We feel this extra time compromised the ultimate outcome of these patients," he says.

By coordinating intensive care nurseries, the dispatch centers reduced the search for empty beds to a matter of minutes.

According to Hackel, 120,000 infants were born in Northern California in 1977, and 2,200 required emergency transport. Of the requests for transport, 14 percent were handled by the dispatch center.

In addition to babies, the center transports pregnant women who are at high risk for complications during delivery. Last year, 65 women were transported to Stanford. That number has increased to 8-10 referrals each month, says Dr. Kent Ueland, professor of gynecology and obstetrics in the medical school.

Transports over 250 miles by air and surface ambulances are not uncommon.

A bill to provide funding for the infant transport program for one year is being considered by the state legislature. Sponsored by Assemblyman Leroy Greene (D-Sacramento), the bill would allocate $83,000 to the Northern California center, $95,000 to Southern California, and $75,000 for the development of a computerized data system.

The data system would speed the bed checking process even further, by keeping track of the number of available beds automatically. Presently, the center staff telephones hospitals with intensive care beds every eight hours, or more often in case of emergencies. In addition, the system would provide an efficient means of reviewing the effectiveness of the program.

Initially, the program was to have been given $540,000 for the next 18 months. As a result of the passage of Proposition 13, the funding was reduced to $253,000 for one year, as provided in the bill.

The bill presently is before the Senate Health Commmittee, and may not reach the floor of the Senate until sometime in August, according to Greene's office.

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Mailed Monday, July 3, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION: Spyros Andreopoulos 415: 497-6911

CITY DESKS: Transmitted by phone Friday, June 30, 1978.

STANFORD— Registered nurses at Stanford University Hospital represented by CRONA (Committee for the Recognition of Nursing Achievements) have reached final agreement on a new two-year contract with the hospital.

The agreement provides for a seven percent wage increase for the first year and an additional seven percent adjustment the following year.

In addition, it provides increased retirement benefits and educational opportunities such as specialty cross-training, educational grants and nursing licensure programs.

CRONA and the Hospital had engaged in collective bargaining since April 25. Tentative agreement was reached Thursday, and was ratified by an overwhelming majority of the nurses Friday, June 30.

In a joint statement the Hospital and CRONA negotiators described the contract as reflecting "a proper balance between the parties' desire to reward and support the excellent performance by the nurses and at the same time respond to concerns with health care costs."

CRONA said it was pleased with the course of negotiations and ultimate agreement and is anxious to take advantage of the Hospital's willingness to further open channels of communication between nurses and the hospital.

The hospital had received notice June 21 from CRONA indicating its intention to strike if an agreement was not reached by July 2.

However, once an early tentative settlement was reached, the notice was withdrawn.

Hospital officials praised the nurses for the manner in which they carried out their duties during the notice period and their offer to work with the hospital to care for critically ill patients in the event of a strike.

The hospital was represented by Joe Ross, associate director of Labor-Employee Relations, Priscilla Wheeler, Duane Walker, Carol Sasso, Carol Hoshour, and Susan Cabral.

CRONA was represented by Attorney Peter Fortune, and nurses Linda Simpson, CRONA president; Charlene Plourde, Barbara Duci, Joanna Nelson, and Marcie Singhaus.

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Mailed Monday, July 3, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 496-6911

STANFORD—University Hospital room rates will increase an average of $15-16 in the new fiscal year starting September 1.

The new rates, according to hospital administrator Gary Mecklenburg, reflect increased wages, utility costs, and the need to upgrade facilities.

Rates were approved by the University after the Hospital Board of Directors reviewed the annual budget on August 22, recommending rates for the new fiscal year.

Medical, surgical and gynecology room rates, which are charged to most hospitalized patients, will increase 9-10 percent from those set a year ago.

The new room rates will be $159 per day for ward accomodations, $172 for a semiprivate room, and $192 for a private room, up $15 from last year.

Patients utilizing medical, surgical and gynecology services of house staff physicians will pay $15 more than the above rates.

The level of rate increases will be approximately 12 percent for some specialized units, including the intensive and coronary care units and the nurseries.

Rate increases for psychiatry, obstetrics, and pediatrics will be similar to the average room rate increase of 10 percent.

Rates for X-ray, laboratory, and other ancillary services will be increased an average 13 percent.

The rate structure of the Emergency Department will be changed significantly, said Mecklenburg, by establishing several levels of charge depending on the severity of illness.

"For less serious illness and routine visits, Emergency Department charges will not increase and in some cases will actually decrease," he said.

In addition to meeting increased operating costs, the hike in patient charges is necessary to provide money for improving facilities and meeting code requirements, said Mecklenburg.

Over the next five years, additional funds may have to be raised or borrowed to meet expected capital needs, he said.

Full, two-year accreditation was granted the hospital by the Joint Commission on Accreditation of Hospitals this year, but further remodelling is required by the state Department of Health.

At the same time, the hospital has cut expenses in response to a reduction in patient census which is not completely offset by increases in the intensity of illness treated here, said Mecklenburg.

More than 98 percent of the hospital's funds, he said, come from patient revenues. The hospital has no tax support or endowment income.

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Mailed Tuesday, August 29, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—The American Cancer Society announced Wednesday, Aug. 30, in New York that it plans to spend up to two million dollars for clinical testing to determine the possible value of human leukocyte interferon in the treatment of advanced cancer.

Dr. Thomas C. Merigan of Stanford University, a pioneer in interferon research, and Dr. Jordan Gutterman of the M.D. Anderson Hospital and Tumor Clinic of Houston, Texas will co-chair the scientific committee which will meet in New York next month to work out the details for the clinical trials.

"Interferon is a natural body substance which has been shown to reduce the size of tumors in animal experiments as well as in few scattered applications to human cancer patients," said an ACS statement. "Its ultimate usefulness against cancer has yet to be proved."

The ACS indicated that the society's involvement in interferon trials will be limited to purchase of the material, monitoring of the trials, and dissemination of the results.

Nearly all the world's supply of interferon is produced in Finland. Scarcity of the material probably will limit the trials to no more than 150 advanced cancer patients, the ACS said.

For scientific validity these will be randomly selected at institutions participating in the tests. These have not yet been selected.

Clinical testing with interferon has been done primarily in Sweden. At the Karolinska Institute in Stockholm, 34 patients—children and young adults—have survived osteogenic sarcoma after being treated with high doses of the substance.

The survival rate of these patients, according to the ACS, has been reported to be 70 percent over a period of three years, compared to normal expectations of 10 to 30 percent in patients treated by surgery alone.

In the United States 15 breast cancer patients have been treated with interferon at M.D. Anderson Hospital and Tumor Institute in Houston, and six lymphoma patients have been treated at Stanford University Medical Center.

Early indications suggest that interferon may have the capacity to bring about objective tumor reduction, said the ACS statement.

At Stanford, interferon also has been used successfully by Dr. Merigan and his associates to prevent in cancer patients the spread of herpes zoster, a virus which causes chicken pox and shingles. Such a virus infection is more frequent in cancer patients because their immune responses have been reduced by chemotherapy and radiation treatment.

Interferon occurs naturally in the body, and is believed to be non-toxic. It was first identified in 1957 by Alick Isaacs of Great Britain and Jean Lindenmann of Switzerland. They described it as a protein substance produced by a virus-infected animal cell, and observed that inteferon seemed to make surrounding cells resistent to infection by the same virus.

The substance is primarily species specific. That is, mouse interferon will work only in mice; human interferon will work only for humans. Interferon produced by one species will not work well or at all in another.

White blood cells are extracted from whole blood and exposed to a virus in order to produce human leukocyte interferon. The blood is obtained in procurement drives of the Finnish Red Cross, and processed by the Red Cross at laboratories in Helsinki.

'Interferon has not been synthesized nor has the gene for its production been isolated. Work is in progress in both areas.

Mailed Tuesday, August 29, 1978 8208

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Spinal fusion and a stiff neck are the characteristics of an enigmatic disease called ankylosing spondylitis, which may strike as many as three million Americans, according to researchers at the Stanford University Medical Center.

Most of the victims of this disease are undiagnosed and inadequately treated, say Drs. Andrei Calin and James F. Fries, who have recently published a review of the subject, entitled *Ankylosing Spondylitis—Discussions in Patient Management* (Medical Examination Publishing Co., Inc., NY, 117 pages, $10).

The disease usually appears in the early twenties, with chronic pain in the lower back. The discomfort is usually worse in the morning and improves with exercise. Over a period of years, the pain and accompanying stiffness may spread to the upper back, neck, hips and shoulders.

In advanced cases, the spine, neck and even the ribcage become inflexible. The disease may also involve the eye, aortic valve, lung and skin. Complications arising from these heart and lung disorders may lead to death.

The pain and stiffness of ankylosing spondylitis result from inflammation and progressive increases in fibrous tissue and bone in the spine, ribcage and joints. The symptoms may be relieved at any stage of the disease by postural exercises, anti-inflammatory medication, and, occasionally, radiation therapy.

However, "accurate early diagnosis and appropriate conservative clinical management do not prolong life and may not prevent later complications," say Calin and Fries.

The discovery of more effective therapies depends on a better understanding of the cause and mechanism of the disease, they say.

It is not known what causes ankylosing spondylitis, but it can be inherited. Ten percent of the immediate family (parents, siblings, offspring) of a patient with the disease are likely to have it.

The key to the disease seems to be a white blood cell marker or antigen known as HLA B27. Over 90 percent of persons afflicted with the disorder carry the B27 marker.

A 1975 survey by Calin and Fries of 2400 healthy individuals found that 20 percent of males with the B27 marker and 17 percent of the females "had definite and symptomatic ankylosing spondylitis. These figures are ten times the expected frequency in males and 80 times in females."

Since B27 occurs in approximately seven percent of the Caucasian population, this finding indicates that the disease is present in about one percent of that group.

B27 is also associated with Reiter's syndrome, a form of arthritis which can follow bacterial infections such as Shigella dysentary.

A 1977 follow-up study of Shigella victims by Calin and Fries found that 20 percent of B27 positive individuals developed Reiter's syndrome following infections with the Shigella bacterium.

"Whether the same 20 percent subset of the B27 population are at risk of developing ankylosing spondylitis following an unspecified environmental event remains unknown," say the authors. At present, the disease has no known link with infection.

Calin and Fries caution against using the presence of B27 as a marker for disease. "B27 detects a genetic marker and not a clinical syndrome," they say. "Four out of five patients who are B27 positive will not have ankylosing spondylitis nor will they ever develop it."

The search for causative agents and mechanisms continues and may reveal a complex relationship between several white blood cell antigens and environmental events, say the authors.

In the meantime, "the technology of the present can provide major benefits for the recognized patient with ankylosing spondylitis."

Mailed Monday, August 28, 1978

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION PONTACT: Bill Snyder 415: 497-6911

STANFORD—A dog suffering from a rare sleep disorder was reported missing Thursday, August 17, by the Sleep Research Center at Stanford University Medical Center.

The dog, an adult male Doberman pinscher, disappeared Wednesday night from a home in the vicinity of Castro St. and El Camino Real in Mountain View.

"We're very anxious to recover the dog," said Dr. William C. Dement, director of the center. "It is a crucial part of an on-going research project at Stanford to study this disease."

The dog suffers from narcolepsy, a disorder characterized by frequent attacks of complete paralysis. The disease, which is estimated to afflict 250,000 Americans, is not painful, but is disabling to humans, said Dement.

The black and tan colored dog has cropped ears and tail and is wearing a choke chain and flea collar but no tags.

Persons with information regarding the dog should call the Stanford Sleep Research Center (497-6601). A reward is offered for return of the dog, no questions asked.

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Mailed Thursday, August 17, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Deficiencies in some of Stanford University Hospital's supplemental services noted during a recent survey by the state Department of Health reflect the need to upgrade facilities in accordance with state law, and will not affect patient care, according to hospital officials.

Under new state law Title 22, permits to operate the outpatient, coronary care, intensive care and newborn intensive care services had been temporarily withheld because of the need for a plan to correct space and organizational deficiencies found during the deparment's survey in April.

"Once the health department receives an acceptable plan of corrections of these deficiencies, it will approve the permits necessary for continued operation of the services," said Guy Seaton, health facilities evaluator at San Jose.

"I see no problem with licensing of the services,"said hospital administrator Gary Mecklenburg. "I view the report of the health department's April survey as a positive one. The department noted a positive response on the part of the hospital to previous recommendations it made in last year's survey."

Stanford has already announced plans to remodel its intensive care nursery, and has indicated to the health department that it will take action to fully comply with its requirements.

The health department survey was conducted in conjunction with the survey by the Joint Commission on Accreditation of Hospitals (JCAH). The JCAH, which received the recommendations of both the California Medical Association and the state health department, granted Stanford hospital full, two-year accreditation.

The department report of deficiencies "does not reflect a problem with the quality of patient care at Stanford," said Seaton, "but primarily was a matter of space requirements, and overcrowding in critical care areas."

The basic problem is one of providing up-to-date services in a physical plant which doesn't lend itself to expansion, he said. Stanford hospital was built 20 years ago.

Other hospitals in the area have encountered similar difficulties with space, said Seaton, and are planning their own building projects.

Under the new law, the coronary care, intensive care and newborn nursery services at Stanford hospital will require extensive remodeling.

Current law also requires that outpatient clinics either be licensed separately or as part of the hospital. Stanford clinics have been a part of the hospital.

In clinics which operate as part of a hospital, practicing physicians must be part of the medical staff that has hospital privileges.

At present, Mecklenburg explained, there is a small number of clinical faculty members who teach in the clinics on a voluntary basis but who are not members of the medical staff and do not admit patients.

A decision to license the clinics either separately or as part of the hospital will be made soon, he said.

Mecklenburg added that other citations, including those in dietetics and laundry services, and in medical records, are being corrected.

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Mailed Wednesday, August 16, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Legislation which would have clarified existing law governing billing of professional fees by salaried faculty physicians has been deferred at the request of Stanford and University of Southern California officials.

According to Robert E. Freelen, director of government relations, the reasons are timing and because Stanford and USC officials have concluded it is an important public policy issue that should be fully debated before a law is passed.

Freelen said that based on recommendation from Stanford and USC, Assemblyman Gordon Duffy (R-Hanford), sponsor of the proposed legislation, has agreed to conduct interim hearings in December.

"By handling it in this manner," Freelen said, "the State Assembly Health Committee will hear from all individuals and groups who have an interest in this matter before the bill is reintroduced in the next legislative session."

The legislation was an amendment to Assembly Bill 1551. It would have clarified the law under which faculty physicians who practice in clinics operated by private university medical schools charge for professional services rendered to patients.

Stanford clinics currently operate on this basis, but the legality of the practice is under investigation by the State Bureau of Medical Quality Assurance. The investigation was brought about by formal charges filed by the Union of American Physicians, and Dr. Eugene Dong, Jr., an associate professor of surgery.

They have alleged the faculty professional practice plan violates section 2008 of the California Business and professions Code which states that medical schools may employ salaried physicians and surgeons "if no charge for professional services rendered patients is made by such institution...."

However, Stanford maintains that its practice plan does not violate this section of the law since it is the faculty physicians, and not the institution, that determine when and how to treat the patients, and when and how much to charge the patients for the services rendered.

Furthermore, Stanford attorneys have pointed out that in cases which have dealt with this issue, the courts have never held that this section of the Business and Professions Code applies to faculty practice plans at medical schools.

Freelen said Stanford supports legislation that would remove any doubt which exists regarding the propriety of medical schools or their faculty physicians to charge fees for care they render patients.

"Direct clinical care to patients is an obvious and necessary part of teaching medical students, interns and residents," Freelen said. "In this process, faculty physicians provide services to patients. A system of charging for such services has been in existence in all of the medical schools of California and the nation in one form or another for years.

"No medical school in the country provides, or could provide, these services free of charge."

Freelen emphasized the proposed legislation is intended to clarify the issue, not to allow institutions to interfere with the manner in which faculty physicians conduct their clinical practice.

"It will not change the fact that faculty physicians are personally responsible for the professional services rendered patients," he said.

The change sought by Stanford and USC has been narrowly written to include only physicians on the faculties of university medical schools which operate clinics for the purposes of medical education, he said.

"The public policy of the State of California will not be changed by such an amendment," Freelen noted. "It would simply incorporate into the statutes the existing, long-standing manner in which faculty physicians of California's medical schools conduct their clinical practice with teaching patients."

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Mailed Wednesday, August 16, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD--The Stanford Heart Disease Prevention Program has been awarded a $6.5 million grant over the next five years to study the effect of comprehensive health education campaigns on the health of California communities.

The new study will be known as the Stanford Community Health Projects. Dr. John W. Farquhar, professor of medicine and director of the Heart Disease Prevention Program, is principal investigator.

Monterey County, as well as other cities and counties in the state, will participate in the projects.

The new study is based on experience gained from the recently concluded Stanford Three Community Study. According to that study, community-based health education which relies heavily on mass media can persuade people to change their life style and improve their health status.

In the new project, investigators from the School of Medicine, the Department of Communication and the School of Education will develop mass media education programs to be used in several cities with populations of 50-150,000.

In addition, both youth and adult group health education will be organized.

According to Farquhar, researchers will work with interested organizations within the cities so that the educational effort will be run to a considerable extent by the cities themselves.

The health of residents will be continuously monitored for cardiovascular risk: including blood pressure, relative weight, plasma lipoprotein levels and smoking, exercise and dietary habits.

In addition, a team from the Medical School will carry out surveillance studies for death and disability due to cardiovascular disease. Changes in community knowledge, attitudes and behavior related to health will also be recorded.

The former Three Community Study had shown that risk factors associated with heart disease could be significantly reduced in communities receiving comprehensive health education.

Focus of the new study, according to Dr. Peter Wood, co-principal investigator, is to determine for the first time the effect of such health education campaigns on actual heart attack and death rates in entire communities.

A clear decline in U.S. cardiovascular disease rates in recent years, says Farquhar, is attributed in part to healthful changes in lifestyle such as reduced tobacco consumption, improved dietary habits and increased exercise levels.

"This important new funding should enable us to refine, strengthen and pretest cost-effective mass media methods to accelerate this welcome national trend towards better health," says Farquhar.

Such education methods, he says, then will be available for wider use nationally.

The Stanford Heart Disease Prevention Program is now funded for various multidisciplinary research activities at a direct cost level of $2.1 million per year, making it one of the largest national research programs in the prevention of heart disease.

Dr. Nathan Maccoby, professor of communication, is co-principal investigator of the study. Other researchers include Janet Alexander of the Department of Communication; and Drs. Carl Thoresen and Thomas Coates of the School of Education.

The Medical School team includes Drs. Stewart Agras, Byron W. Brown, Jr., Stephen Fortmann, William Haskell, Stephen Hulley, Ralph Paffenbarger, and Barr Taylor.

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Mailed Monday, August 14, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—A charge of unfair labor practices regarding an employee opinion survey held at Stanford Medical Center has been dismissed by an administrative law judge of the National Labor Relations Board (NLRB).

United Stanford Employees (USE) had filed the charge with NLRB a few days after the survey was underway in February 1977.

In April 1977, NLRB regional office in San Francisco found the charges without merit, and refused to issue a complaint.

USE appealed the decision to the NLRB's General Counsel in Washington, D.C. for hearing before an administrative law judge.

Judge Stanley Gilbert has now dismissed the complaint "in its entirety," finding all charges without merit.

Anne Schlagenhaft, then president of the union, had charged that the employee survey would bypass the union in dealing with employees the union represents, and that it would undermine the union's organizational efforts among unrepresented employees.

According to Ron Twomey, Medical Center director of personnel, the survey was not designed to interfere with union rights; elections would not be held for some time and no organizational activities were underway.

The judge confirmed that the surveys were not administered in a "preelection context" and did not violate the NLRB act.

Gilbert also noted that administering the surveys did not constitute "direct dealing" with employees represented by the union.

"There is nothing in the record as a whole that would warrant a finding that the surveys were calculated to interfere with, restrain or coerce employees in the exercise of their rights...".

Twomey said the survey was designed to examine major categories of employee opinions, including job satisfaction and supervisory practices.

The hospital, he says, "not only has a right, but also a responsibility to ask employees for their opinions in order to manage more effectively the Medical Center and its important patient care functions."

The judge pointed out actions taken as a result of the survey include upgrading the quality of food and expanding the seating capacity of the cafeteria, upgrading the Medical Center *Memo* publication, and providing more information about affirmative action.

Another primary result of the survey, says Twomey, was the improvement and expansion of the supervisory development program.

None of these actions violated the NLRB act, according to the judge.

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Mailed Wednesday, August 9, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415 497-6911

STANFORD—Patients with chronic hepatitis B virus infections may participate in ongoing therapy trials at Stanford University Medical School, testing two antiviral drugs.

"Encouraging results suggest that a combination of these two drugs, interferon and vidarabine (adenine arabinoside), may be more effective in treating chronic hepatitis B infections than either drug alone," says Dr. Richard B. Pollard of the division of infectious diseases.

Interferon, a protein which inhibits viral growth, is normally produced by the body in response to viral infection. Vidarabine, known to inhibit replication of certain DNA viruses in tissue culture, has been used by the Stanford researchers in the treatment of two patients with hepatitis B infections.

Fourteen patients were recently treated with the two drugs in combination, with very encouraging results, says Pollard, but more studies are needed.

To date, there is no other treatment available for chronic hepatitis B infection.

Interested patients may contact the division of infectious diseases at (415) 497-5715.

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Mailed Wednesday, August 9, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—Three of four causes of action in a $1.2 million damage suit filed against Stanford University Hospital have been dismissed by Santa Clara County Superior Court Judge Marilyn Pestarino Zecher.

No ruling was made, however, on a fourth cause of action involving a former employee, allowing further action on the matter by the court.

The suit had been filed earlier this year by Conroe C. McGee, a current employee, and former employee Frank P. Petta.

In addition to the hospital and 20 John Does, three persons were named as defendants, including former Facilities Department director Jim McNally, and chief engineer William Ferguson and general foreman David Dominguez.

The court's ruling dismisses all action against both Ferguson and Dominguez.

McGee and Petta had each sought $100,000 in general damages and $500,000 in punitive damages.

Judge Zecher dismissed McGee's claims. McGee, a hospital employee for 10 years, had alleged he was asked to accept a demotion by McNally earlier this year so Dominguez could be named general foreman. McGee refused, although Dominguez was later named to the post.

The court did not rule on Petta's charge that McNally gave him a poor performance rating, which he said prevented him from obtaining other employment after he left the hospital.

When the suit was filed last April, Stanford Hospital officials denied that the hospital had acted improperly in dealing with personnel actions taken concerning Petta and McGee.

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Mailed Thursday, August 3, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Stanford University Hospital should continue to maintain a closed medical staff restricted to faculty physicians in the hospital-based clinical services, the board of directors has decided after six months of hearings and deliberations.

The board, however, endorsed the hospital's long-standing "open-staff" policy regarding physicians who admit patients to the medical and surgical services of the hospital, and said "it should be continued in the foreseeable future."

Hospital-based clinical services include anesthesia, cardiology, neurology and pathology laboratories, and the radiology service with its diagnostic, nuclear medicine, radiotherapy divisions and all other specialized laboratories.

Generally, these services have been operated under a closed staff restricted to medical school faculty. Some physicians, however, have maintained that these services should be opened to community specialists in these fields.

The hospital board, headed by Palo Alto attorney Conrad Gullixson, released its long-awaited decision Tuesday (Aug. 1.).

The decision calls for restricting future staff privileges in the hospital-based clinical services to the full-time and part-time paid faculty of the Stanford University School of Medicine.

The board granted some exceptions. They include community physicians who presently hold privileges in hospital-based clinical services, and community physicians who qualify under the city contract.

These exceptions, the board explained, are required to avoid undue personal hardship for community physicians presently on the medical staff and to honor fully Stanford's obligations. The city contract, signed in 1968 when Stanford purchased Palo Alto's holdings in the hospital, contains provisions relating to the organization of the medical staff.

In addition, the board said it would consider extending eligibility for privileges in these services to physicians who become extensively involved in teaching and research in affiliation with the School of Medicine under the direction of the faculty.

The board said it recognized that a closed staff policy may be a serious problem for community physicians who specialize in fields encompassed by the hospital-based clinical services, and for a full-service group medical practice such as that of the Palo Alto Medical Clinic which wishes to have full access to a well equipped hospital.

However, the board said it was persuaded by arguments that "a closed staff policy is essential to the successful. . .research and teaching missions of the School of Medicine."

The board commented that at Stanford University Hospital the open and closed staff concepts in hospital-based clinical services are mutually exclusive.

"While it would be possible to construct a compromise position between an open and closed staff policy, the board is convinced that no compromise is available which would serve the objectives of both a closed and an open staff.

"Any compromise would probably serve the objectives of neither position. The board. . .must choose between the two opposing positions."

The board gave these reasons for endorsing a closed staff policy in the hospital-based clinical services:

- more -

• Stanford acquired Palo Alto's interest in the hospital to enhance the research and teaching missions of the School of Medicine. These activities are important in advancing medical knowledge and improving medical care locally, nationally and internationally and are enhanced by a closed staff rule. The hospital is required by its articles of incorporation and bylaws to support these missions.

• The board was satisfied that a closed staff in these special services fosters high quality patient care.

• Hospital-based services in teaching and research hospitals are operated almost without exception under a closed staff restricted to medical school faculties. They are responsible for the design, acquisition, maintenance and operation of such services, and for the research and teaching programs conducted there.

• Stanford University or the hospital have no legal obligation to provide community physicians "an open-staff" hospital with respect to hospital-based clinical services. Nor do they have any "moral obligation to furnish such a hospital to community physicians when the research and teaching activities of the School of Medicine might be jeopardized."

The board said it conducted the review because no evaluation of staff privileges in hospital-based clinical services had been made since the city contract was signed. There were complaints from the medical staff, and a law suit concerning staff privileges in the division of diagnostic radiology was brought against the hospital by a community radiologist, Dr. William Hayden.

After the case was settled by Hayden's appointment to the medical staff, the board felt it could proceed with its review without concern about the impact of its findings on a pending law suit.

Of the 550 community physicians on the medical staff, 41 hold privileges in hospital-based clinical services.

"It is fair to state," said the board, "that during the past 10 years privileges with respect to these services have been granted sparingly to community physicians, and in many cases have been subject to limitations."

The board commented that it has also considered the hospital's "open-staff" policy that has existed for 10 years regarding admitting physicians.

"This policy can and should be continued at Stanford for the foreseeable future," the board declared. "The board does not contemplate any restrictions or limitations on membership or privileges in the admitting services for community physicians. . ."

In the future, however, the board indicated it might take steps to increase the involvement of community physicians and their patients in teaching activities.

Gullixson said "the board has carried out a very thorough review of a very difficult issue. It feels its decision is the best that can be made under the circumstances to further the teaching and community service roles of the hospital."

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Mailed Tuesday, August 1 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—A vasectomy candidate should consider the operation permanent, says a Stanford urologist, despite the increasing number of reverse vasectomies.

"If a man does change his mind later, he must accept the fact that the reversal operation is still only about 25 to 33 percent successful," says Dr. Robert Kessler, assistant professor of surgery at Stanford University School of Medicine.

Vasectomy is a surgical interruption of the flow of sperm by cutting the tubes, called vas deferens, that carry the sperm.

Approximately 50 to 75 vasovasectomies, or reverse vasectomies, are performed at Stanford yearly. Because of recent microsurgical techniques to join the cut ends of the tubes together again, doctors will virtually assure that there will be sperm in the man's semen.

However, the pregnancy rate for women whose husbands have had a reversal is only about 25 to 33 percent.

The problem, says Kessler, is that men who have had vasectomies build up antibodies to their own sperm. The antibodies cause the sperm to either agglutinate or become immobilized.

Because many patients seeking the reversal surgery come to Stanford, doctors here have launched a study of antibody levels in patients prior to and following vasovasectomy.

Stanford is also one of the few centers in the country able to perform tests to detect these antibodies in the blood (called the Kibrick test for agglutination and the Isojima test for immobilization).

Antibodies are not normally formed because the sperm never reaches the blood system. After a vasectomy, however, they are absorbed into the blood through capillaries where they are treated as foreign to the body's systems.

With the antibody tests, researchers hope to be able to identify those patients with high levels of antibodies prior to surgery.

Kessler also hopes that future research will develop methods and/or medications to reduce the number of antibodies formed.

It is still not known, he says, whether the production of antibodies may be only a temporary condition.

Despite the odds for success, many more men are requesting the reversal surgery, says Kessler. He sees that as an effect of people considering the procedure reversible.

The most common reason men seek reversals, he says, is because they have been divorced and remarried and want to have children with their new wife.

The reversal surgery takes about an hour to perform, and is generally done on an outpatient basis. Sutures finer than human hair, used with the aid of a magnifying lens, have greatly improved the operative procedure.

But because the reversal may not work to cause a pregnancy, Kessler says "the most important advice for vasectomy candidates is to consider the operation permanent."

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Mailed Thursday, September 28, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—A concert featuring pianist Corinne Barkin will be held Saturday, Oct. 14 at Stanford in memory of the late Dr. Judith Graham Pool, noted Stanford hemophilia researcher.

Mrs. Barkin, a friend of the researcher, is a well-known Bay Area pianist. She will perform works by Liszt, Ravel, Scriabin and Beethoven, at 8 p.m . in Dinkelspiel Auditorium.

Proceeds from the concert and any additional donations will go to the Judith Graham Pool Fund to support students and physicians studying in the field of hematology.

Dr. Pool was professor of medicine at Stanford at the time of her death in 1975. She was internationally known for developing a simple method for extracting from normal blood the protein needed by hemophilic patients.

Availability of the missing clotting factor has enabled hemophiliacs to treat themselves at home with injections, reducing both the length of hospitalization and treatment costs.

She had also been active in promoting opportunities for women in medicine.

The Pool Fund, comprised of private contributions, is administered by Dr. Stanley L. Schrier, professor of medicine and head of the division of hematology at Stanford.

Mrs. Barkin, a resident of Menlo Park, studied at the Juilliard School of Music and Oberlin Conservatory, and has a master of music degree from the Manhattan School of Music. She performed at Carnegie Hall before moving to the Bay Area.

Concert tickets are available at all leading ticket agencies.

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Mailed Wednesday, September 27, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Drs. Ruth T. Gross and John W. Farquhar of the Stanford School of Medicine faculty have been elected to membership in the Institute of Medicine of the National Academy of Sciences in Washington, D.C.

Dr. Gross holds the Katharine Dexter and Btanley McCormick endowed professorship in pediatrics and is director of ambulatory pediatrics at Stanford.

Dr. Farquhar, professor of medicine, division of endocrinology and metabolic diseases, is also director of the Stanford Heart Disease Prevention Program.

Members of the Institute serve five year terms, and are enlisted to examine various policy matters involving public health.

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Mailed Wednesday, September 27, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415 497-6911

EDITORS: Photo available upon request if not included with story.

STANFORD—In school, simple tasks such as figuring out what an assignment requires, how to write an outline, and how to organize a report can be stumbling blocks to the person with a speech and language problem.

Sometimes, children with learning disorders are given special class placement. Those who don't require special classes may not get the extra attention they need.

For these children with underlying developmental speech and language disorders, an academic tutoring program is now underway at the Stanford speech and language clinic.

The tutoring program differs from usual clinic therapy. The focus is on specific learning problems children bring from school, such as homework or concepts they cannot understand, says Donna Dagenais, director of the clinic's preschool.

"These children need repetition. They need more than the average amount of practice in order to apply new things which they learn," says Dagenais.

Jeffrey is one of several children who are benefitting from the new program.

Jeffrey first came to the Stanford speech and language clinic with language difficulties when he was two-and-a-half.

After many months of individual and classroom attention, his therapists recognized that he still would be a high risk case in school.

In kindergarten and first grade, learning demands grew and Jeffrey had difficulty associating sounds with letters and coordinating the skills required in writing. His mother arranged for additional private tutoring.

"Fortunately, Jeffrey's tutor was tuned in to the language aspects inherent in learning tasks," explains Dagenais. Now he is doing well, and is entering third grade.

Dr. Kathryn Beadle, director of the clinic, says that speech and language disabilities often show up as learning disorders in school. Many children with such learning disorders need supplemental help intermittently throughout their school careers, she adds, and tutoring of the kind Jeffrey received at Stanford can make the difference between success and failure in school.

"Reading and writing are simply extensions of a child's oral speech development. If speech does not develop normally, the child is faced with trying to learn to read unfamiliar sounds and words. Learning to understand speech and to talk are the primary prerequisites to learning to read and write," says Beadle.

Amanda, a bright young student of 16, had been in speech therapy for articulation since kindergarten.

She was highly motivated in school, according to Dagenais, and worked long hours, often finding it necessary to read assignments many times in order to grasp the words and ideas.

She was able to get passing grades because of her diligence, but her understanding was poor, and her limited success only masked the depth of her problems, says Dagenais.

Amanda will enter the tutoring program this fall. Meeting her specific needs, her tutor will emphasize reading comprehension and "school survival skills," says Dagenais.

Amanda's tutoring will also include some career guidance and help in decision-making. She recently became a cheerleader at her high school, her first extracurricular activity. But she is intent on keeping up with her work and maintaining good grades, since she is determined to attend college.

Clinic staff members involved in the tutoring program are Kathleen Jacobson, who has a masters degree in learning disabilities, Dagenais and Shirley Nanevicz, both of whom have primary training in speech and language pathology and also have credentials as learning disabilities specialists, and Beadle, director of the clinic.

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Mailed Wednesday, September 27, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—John C. Dumas, 51, former deputy director of Stanford University Hospital, was among the victims of the Boeing 727 air disaster in San Diego Monday.

Dumas had served as deputy director from 1966 through 1968 when the hospital was under joint Palo Alto-Stanford University ownership.

After the hospital was purchased by Stanford, he became a partner of Herman-Smith Associates, a hospital management consulting firm. He headed its west coast operations.

He was currently a vice president for planning for the Southern California Region of Kaiser-Permanente Medical Care Program in Los Angeles.

Survivors include a wife and five children.

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Mailed Tuesday, September 26, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—What causes arthritis?Which patients benefit most from total joint replacement? How can bone and muscle infection be effectively treated and prevented?

These and other questions are being studied in a new orthopedics research laboratory at Stanford University School of Medicine.

Research at the laboratory is supported by grants from the National Institutes of Health, the Arthritis Foundation, and the Orthopedic Research and Education Foundation.

The laboratory is equipped with complete tissue culture, microbiology and biochemistry facilities. A computer terminal which ties into eight other arthritis centers across the U.S. is available for data studies. Animal studies are performed at the laboratory, but patient studies are done in the orthopedic surgery clinic.

The laboratory brings together the expertise of orthopedic surgeons, immunologists, biochemists, computer scientists and mechanical engineers to search for better treatment and prevention of this debilitating joint disorder and the complications of surgery, said laboratory director Dr. David Schurman.

"Arthritis means inflammation of joints," he said, but it also involves destruction of cartilage.

Inflammation can be reversed by drugs, but once the cartilage is destroyed, it never can repair itself, he said.

It is still not known what causes arthritis, and why some people get it while others don't. But the inflammatory and destructive processes of the disease seem to be related to the body's immune system.

Recently, workers in the division of immunology found that radiation treatments of the lymphoid system can prevent the progress of arthritis in experimental animals.

Radiation, particularly to sites of lymphocyte (white blood cell) production, can "shut off the inflammatory processes and stop further development of arthritis in these animals," said Schurman.

The radiation technique was developed by Dr. Henry Kaplan, D'Ambrogio professor of radiology, to treat lymphomas. Kaplan and Dr. Samuel Strober, assistant professor of immunology, also are applying the technique to prevent rejection of transplanted tissues in experimenal animals.

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Lyle Swenson, Jr., a research associate in mechanical engineering, is developing a computer model which describes in mechanical, electrical and chemical terms the strength of cartilage. With the model, Swenson can predict which biochemical event is necessary for the destruction of cartilage.

Biochemists under the direction of Dr. Robert Lane Smith, associate laboratory director, are studying the mechanism of cartilage breakdown to improve Swenson's model, and to develop new methods of preventing and treating arthritis.

"Over 130,000 total hip and knee joint replacements are performed each year in the U.S. alone," said Schurman, an orthopedic surgeon who performs these operations regularly. Yet it is not known which patients benefit most from surgery, he said.

To solve this problem, Stanford is developing a prototype data base on patients with arthritis related to the impact of surgery.

The data base will tie into ARAMIS (American Rheumatism Association Medical Information System), a data base covering the area of internal medicine in arthritic patients and directed by Dr. James Fries, associate professor of medicine.

The Stanford Arthritis Center is conducting a survey of patients with rheumatoid arthritis to evaluate the medical and social costs of the disease and the effectiveness of different treatments.

"If the data base is successful," said Schurman, "we will be better able to define the risks of surgery, for example. The physician will be in a much better positon to decide which, if any, operation is best for the patient."

Age, weight, height, sex, diagnosis and percent involvement of the disease of a particular patient can be matched with 30-50 similar patients from the computer within minutes. The outcome of these patients, compared to the average patient, can be calculated.

Infection is one of the leading causes of failure of total joint replacements, noted Schurman. "It is more catastrophic than other complications."

The orthopedics research laboratory is "one of the few centers in the U.S. where musculoskeletal infections related to surgery are studied," he said.

One study led to improvements in the use of bone cement, the substance used to attach artificial joints to the skeleton. That study won a $1000 award from The Hip Society earlier this year.

Other studies include the pharmacology of antibiotics and the mechanism of joint infection, which is providing information about the development of inflammatory arthritis, Schurman noted 312

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Mailed Monday, September 25, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Too much salt is bad for your health, says a Stanford physician.

Everyone, not just those with high blood pressure, should lower their salt intake by two-thirds, said Dr. John W. Farquhar, professor of medicine and director of the Stanford Heart Disease Prevention Program. He made his remarks in testimony prepared for delivery Monday, Sept. 25, before the Select Committee on GRAS (generally recognized as safe) Food Substances.

The Committee, meeting in Bethesda, Md., is evaluating the safety of salt as a food ingredient, and will make recommendations to the Food and Drug Administration. Farquhar is a member of the executive committee of the American Heart Association (AHA) Council of Epidemiology, and of the nutrition committee. He spoke as a representative of the AHA.

"Cardiovascular disease risk is a function of blood pressure at all pressure levels," he said, and lowering salt intake lowers blood pressure in a wide range.

The benefits, therefore, would affect the majority of Americans, including those with blood pressures in the "normal," but still higher than preferred, levels.

Hypertension, he said, is not a problem with clear distinctions between normal and abnormal levels of blood pressure.

Farquhar called for a gradual and phased approach to lowering salt intake from current levels of 12 gramsay to 4 gramsay.

He said studies have shown that moderate limitation of salt intake to 4 gramsay resulted in important reductions of blood pressure among hypertensive patients. He called this level "quite readily achievable in this country," which could be maintained without hardship or loss of palatability.

"We recommend that public health education be the main method of attaining this goal," said Farquhar.

He described Stanford experiments that tested individual's abilities to "step down" their salt intake. In those studies, "adults with mild hypertension were readily trained to prefer lower salt levels after a few weeks of graduated withdrawal."

Farquhar reported that moderate decreases in salt intake were achieved following a two-year health education campaign in three Northern California towns to reduce heart disease risk factors. In that project, called the Stanford Three Community Study, the salt decreases "were the strongest predictor of blood pressure lowering among the factors observed."

With a gradual approach, Farquhar noted, the "natural demands for lowered salt products would create opportunities for food producers."

The AHA, he said, also recommends that labeling of salt contents of processed food should become a common practice.

In addition, he said, the AHA is planning to support public health education about salt intake, and teach ways to prepare low salt meals.

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Mailed Monday, September 25, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Many more patients with hardening of the arteries could benefit from advances in vascular surgery, according to Dr. D. Craig Miller of the Stanford University School of Medicine.

Because of a communications gap within the various specialties of the medical profession, sizable numbers of these patients are not being referred or referred to late to vascular surgeons, said Miller.

Vascular surgery refers to operations on the blood vessels. It has become more important as life expectancy increases and more patients develop atherosclerotic conditions. Today developments in arterial grafts and arterial reconstruction make it possible to treat pativnts for problems which were considered insoluble in the past.

"Vascular surgery can save limbs, extend productivity and life expectancy, ameliorate hypertension (high blood pressure), and prevent stroke more reliably and with less risk than ever before," Miller said.

Miller's comments were made in a report scheduled for publication in the Sept. 29 issue of the Journal of the American Medical Association. His article is co-authored by Dr. Randall B. Griepp, formerly of Stanford and now chairman of the department of surgery at the State University of New York Downstate Medical Center in Brooklyn. Miller is assistant professor and chief of cardiovascular surgery at the Palo Alto Veterans Administraton Hospital.

Many primary physicians, general internists and cardiologists simply are not fully aware of the rapid advances that have been achieved in peripheral vascular surgery during the past ten years, said the surgeon.

"As the subspecialty of vascular surgery has matured, it is incumbent upon general physicians and vascular surgeons alike to develop appropriate channels that can transmit clinical concepts, educational information, and clinical results as well as patient referrals," Miller said.

Many more patients, for example, could benefit from surgery to replace blocked arteries in the legs, he said. "Vascular surgery for limb salvage as an alternative to amputation should be considered in all cases," Miller said.

He cited "surprisingly good" 50 to 70 percent five-year limb salvage rates now being reported from major vascular centers.

Other procedures in which surgeons have become adept concern the treatment of high blood pressure caused by hardening of the renal (kidney) arteries. Some renal arteries which have become obstructed can be bypassed by the application of a bypass graft. Such a graft is attached above and below the obstruction in the clogged artery to restore normal or near normal blood flow.

In cases where many small vessels are occluded the kidney can be temporarily removed from the patient, the vessels repaired and then reimplanted.

Current operative risks for renal artery reconsruction are about 1 percent for those patients without generalized atherosclerosis and 5 percent for those afflicted with generalized disease, Miller said.

Before the advent of successful vascular surgery, many patients with atherosclerosis were forced to lead restricted, incapacited or shortened lifes, he said.

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Mailed Monday, September 25, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—Women with high risk pregnancies who are likely to go into premature labor, now are arriving at Stanford Hospital in emergency air ambulances much more frequently than in the past.

During 1976, the hospital accepted 12 maternal transports. This year, to date, 66 mothers have been received, says Dr. Kent Ueland, professor of gynecology and obstetrics at Stanford Medical School.

"We would like to avoid complicated transports involoving newborn premature infants whenever possible," says Ueland, who views the rise in numbers of maternal transports as a good trend.

It is advantageous for both the mother and the infant if the premature birth occurs in a hospital with a well-equipped intensive care nursery rather than during transport or at a facility unprepared to handle premature infants, he says.

Dr. Jan Ehrenwerth, assistant director of the Northern California Medical Infant Dispatch Center agrees that transport of the mother is preferable to transporting a newborn premature infant, despite sophisticated equipment now available for care of such infants.

"Mother is still the best incubator," he says.

The dispatch center coordinates both maternal and newborn transports throughout northern California between the Oregon border and the Tehachapi mountains.

The center keeps track of bed availability in 10 intensive care nurseries in northern California hospitals, coordinates travel arrangements for the emergency infants and mothers, and maintains close air to ground communication with the transport units during emergency flights.

Some of the hospitals in the network, including Stanford Hospital, allow the woman's private obstetrician to accompany her and deliver the infant at the receiving hospital, says Ehrenwerth.

State funding to the dispatch center has just been renewed and will continue through June, 1979.

Mailed Monday, September 25, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Group therapy for patients with advanced cancer can be exceptionally effective, two psychiatrists have learned after five years of working with cancer patients at Stanford University Medical Center.

Patients in the group were helped by helping one another, and by finding they have much of value to share and to teach, according to Drs. David Spiegel and Irvin D. Yalom writing in the International Journal of Group Psychotherapy.

"We believe," said Yalom, "that group therapy is a valuable modality for the treatment of terminally ill patients and that much can be learned from such groups for the everyday therapy of the living."

The Stanford program began in an effort to provide emotional support for cancer patients. "We assumed that the group members would profit from continued close contact with others facing the same tragic experience," said Yalom. "Sharing, open communication, and the opportunity to be helpful to others would be an antidote to the bitter isolation experienced by dying patients."

Initially, the group was made up of patients with breast cancer which had spread. Now, however, under a gift from a former patient, the late Mrs. Eva L. Goitein of Belmont, the group has been expanded to include patients with all forms of metastatic cancer.

The meetings are held Mondays from 1:30 to 3 p.m. in Stanford's Department of Psychiatry and the Behavioral Sciences. Participation is free of charge. According to Drs. Spiegel and Yalom, the therapists and the group members worked together to determine the direction of the program.

They met weekly for 90 minutes. At times, special one-hour sessions preceded the group meetings during which training in self-hypnosis or meditation had been offered.

The group was open and members could come as often as their physical condition permitted and as long as they continued to benefit from participation.

Most were outpatients, and some attended while they were hospitalized. The number of patients attending the meetings averaged six to seven.

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"We have found the maximum effective size is seven," said Spiegel and Yalom. "When more than eight members have attended, we have often divided the patients into two small groups for an hour and reconvened as a large group for the final 30 minutes."

The psychaitrists have recorded variations in the responses of group members to their experience with the therapy. But they also found striking similarities in the results among them.

"There is, in general, a decrease in denial about having cancer," said the psychiatrists. "Time is seen as precious, too precious to be wasted on unwanted social commitments or 'pleasing others.'

"Very often the women have felt they were treated as objects by their physicians and they were not given the information they felt entitled to have.

"Many patients reported improved communications with their doctors, and several of the women who had been engaged in constant struggles with their husbands reported they had made major improvements in their marriages."

Some patients, the psychiatrists said, reported improved communication with their families. Others with less rewarding family ties used the group as an alternative to counter their sense of loneliness and isolation.

"Many patients found new meaning in their lives in the sense that how they lived the remainder of their lives became important and how they died came to seem insignificant," concluded Spiegel and Yalom. "They were able to plan and live with an enhanced sense of meaning and dignity."

Patients have entered the Stanford program by referral from other patients or from organizations such as the American Cancer Society.

"At first, physicians were reluctant to refer patients to the program from fear that a group which discussed death and dying would severely unsettle them," the authors noted. "However, after observing that the group was life-oriented and that patients found it enormously supportive, many physicians have sent their patients."

Over 50 patients have participated in the program since its inception.

Patients with advanced cancer may obtain information about the program by calling the Department of Psychiatry and Behavioral Sciences at Stanford, Tel. 497-6352.

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Mailed Thursday, September 21, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—The Center for Integrated Electronics in Medicine at Stanford University has been awarded a $4.6 million five year grant by the National Institutes of Health to "continue to study the applications of this advanced technology in preventing, identifying and treating disease," according to center director Professor James D. Meindl.

The center, one of three in the U.S. established by the NIH in 1974, combines the expertise of electrical engineers in the Stanford Electronics Laboratory (SEL), and physicians at the School of Medicine in designing electronic instruments for use in a wide range of medical fields.

Current projects of the center include the development of an ultrasonic imaging system in ophthalmology, a Doppler shift flowmeter, and implantable telemetry systems.

High frequency sound waves used in the ophthalmic imagery device enable doctors to "see" into and behind eyes which have become clouded by cataracts, hemorrhaging or detached retinas.

The device, which consists of 35 transducers in linear array, produces a moving picture of the eye on a video screen without moving itself. Most ultrasound devices must be moved across the surface being scanned.

Because it remains motionless, this new device can safely be used to examine damaged eyes and those of very young children and elderly people. It is currently being tested in patients at Stanford hospital.

"This device is the first of its kind," says Dr. Alan Susal, clinical assistant professor of ophthalmology, who produced it with Drs. Roger Melen and Terry Walker of the SEL.

"It represents the culmination of several years of work on integrated circuits in medicine, and it shows that the engineers here can build a superb clinical instrument as well as advance the state of medical diagnosis," he says.

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Ultrasound devices which can examine the heart and abdomen also are being developed at Stanford. One device, developed by Levy Gerzberg and Charles Hottinger in the SEL, detects the velocity of blood flowing through vessels by bouncing high frequency sound waves off red blood cells.

The echoes, or returning sounds, change in frequency depending on the velocity of blood flow. This is known as the Doppler shift principle.

The flowmeter is being prepared for testing in patients by Drs. Thomas Nelsen of the Department of Surgery and William Brody of the Department of Radiology. It provides a noninvasive alternative to placing catheters in blood vessels to measure flow, a procedure which can be risky in some patients, says Meindl.

Drs. Donald Harrison and Jerry Griffin the division of cardiology at the Medical School are using biotelemetry to study the response of the heart to drugs and other environmental conditions such as stress. Biotelemetry is the transmission of physiological information by radio waves.

Transducers, developed by Drs. James Knutti and Henry Allen in the SEL, are implanted in the heart and blood vessels of experimental animals, and transmit up to six different cardiovascular values, such as blood flow and pressure, continuously.

Stanford is well suited for investigations of electronics in medicine, not only because of its strength in medical research but in electrical engineering as well, says Meindl.

Stanford is one of the leading universities in electronics research (others include MIT and University of California at Berkeley), and it draws from the rich industrial expertise of the Santa Clara Valley, he says.

"We therefore have a poweful capability to serve medical users," he says. "Integrated electronics can be of enormous benefit to the quality and availability of health care. We feel it is important to make a contribution."

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Mailed Thursday, September 21, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Research at the Stanford Outdoor Primate Facility is changing directions this fall.

The study of chimpanzees in this semi-natural setting on Jasper Ridge, just west of the Stanford University campus, is being discontinued in favor of study of other monkey species.

The decision of move the chimps was made because of difficulties in handling these large primates and limitations in the data which can be collected, according to facility director Dr. Seymour Levine.

Levine and other members of the Department of Psychiatry and Behavioral Sciences met last week with Provost William Miller and other university administrators.

The ultimate fate of the chimps has not yet been decided, although Levine said he would like to see them moved and kept intact as a breeding group elsewhere.

In a memorandum to public affairs director Robert Rosenzweig, Levine suggested the facilities be used to house groups of Rhesus macaques for breeding purposes, and to "permit intense investigation of the biology of social behavior and developmental problems."

Last year, several Asian countries banned the export of Rhesus and other monkey species, seriously curtailing their availability for research.

In addition, the macaques are smaller in size and breed faster than chimpanzees, making them easier to handle and study.

"Although we have made considerable progress, and have produced data that are interestng in terms of understanding chimpanzee behavior, we believe that in the future the program will have diminishing returns," he said.

Studies of the relationship between hormones and behavior are stymied by the great difficulty in obtaining blood samples from the animals.

"Chimpanzees are very unpredictable," said Levine. They can be dangerous in an enclosed setting and must be anesthetized prior to taking blood samples.

"The trauma involved in obtaining samples is so great as to make any conclusions regarding the relationship between levels of circulating hormones and behavior meaningless," he said.

As an alternative, hormone studies are being conducted in squirrel monkeys, which are much smaller and therefore easier to handle than chimps.

The Stanford Outdoor Primate Facility was originally conceived by Dr. David Hamburg, former chairman of the psychiatry department and now president of the Institute of Medicine of the National Academy of Sciences.

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The facility was established in 1974 to provide a "simple psychobiologic evolutionary model of human behavior," in conjunction with studies at the Gombe Stream Research Center in Tanzania by world-famous ethologist Jane van Lawick-Goodall, said Levine.

The facility would also provide training for students who wished to do research at the Africa field station.

But in May, 1975, four of the Stanford personnel at the station were kidnapped by Zaire guerillas. Although they were later released unharmed, the Tanzanian government closed the facility to all students and scientists except Goodall.

Further problems plagued the chimpanzee program. Three of the original 17 animals developed serum hepatitis and had to be removed from the group. Five infants have died this year, three of the deaths occurring at birth.

"These losses have, at least for the moment, impaired research on mother-infant relations," said Levine.

In 1976, the chimps received attention from suggestions of Stanford researchers that they may be able to predict earthquakes.

Prior to a single swarm of minor earthquakes in June, 1976, the animals were observed to be more restless than usual, and spent more time on the ground than on climbing structures and nesting areas.

However, the facility does not experience enough isolated quakes to confirm the hypothesis, and the studies remain incomplete.

Currently, Levine is studying social behaviors among squirrel monkeys in his laboratory at the Medical Center. He has found that certain social behaviors in these monkeys are determined by the environment.

For instance, the initiation of sex behavior by the male monkey depends on the level of estrogen in the female, and has nothing to do with testosterone levels in the male. "The male is synchronized by the female," said Levine.

During the establishment of hierarchy among squirrel monkeys, the leader has higher levels of testosterone, but when the struggle is over, he has no more than any other group member. "Dominance alters testosterone levels, not the other way around," he said.

"Some behaviors are under rigid biological control, while others are more influenced by the environment. This suggests the importance of the group in integrating the behaviors of its members," he said.

These studies are providing information about social interaction among humans. Recent evidence by other investigators indicates that hormones may play a role in human status rank behaviors.

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Mailed Wednesday, September 20, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 497-6911

STANFORD—Catecholamines, the brain chemicals involved in a wide range of human behaviors, will be the subject of an international conference at Asilomar in Pacific Grove, California September 18-22, 1978.

The press is invited to attend the meeting, which draws 750 scientists from around the world, including East Europe and Russia.

The meeting is sponsored by the National Institute of Mental Health (NIMH) and by the Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine.

"Catecholamines are a remarkable class of compounds which includes adrenaline, noradrenaline and dopamine," says Dr. Jack Barchas, director of the Nancy Pritzker Laboratory of Behavioral Neurochemistry at Stanford.

These compounds carry electrical impulses across the gaps, or synapses, between nerve cells. For this reason they are called neurotransmitters.

The theme of the conference, says Barchas, is frontiers in basic and clinic science.

"Basic science has repeatedly resulted in major progress in the clinical arena," he says. For instance, dopamine was discovered in the brain only 20 years ago. Today, dopa, a natural precursor of dopamine, is used to treat Parkinson's disease, which results from a deficiency of that neurotransmitter.

In addition, knowledge of catecholamines has revolutionized treatment of patients with severe mental illnesses such as schizophrenia and depression. The development of effective drug therapies during the last 25 years has enabled many patients to leave the hospital and be treated in the community.

Among the papers presented during the five-day conference are studies of the role of catecholamines in severe mental illnesses, in hypertension, in nerve growth factor and in alcoholism.

Nobel laureate Julius Axelrod of the NIMH will report on the concept of receptor control. Receptors are chemical sites on the ends of nerve cells through which neurotransmitters exert their effects. Regulation of receptors is an important factor in chemical transmission.

Other NIMH participants in the conference include Dr. Irwin J. Kopin, conference chairman and director of the Laboratory of Clinical Science, and Dr. Earl Usdin, of the Psychopharmacology Research Branch.

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Mailed Monday, September 18, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415 497-6911

STANFORD—A new course on sports medicine will be offered this fall at Stanford University Medical School.

Designed by Dr. Alfred Spivack, clinical professor of medicine at Stanford, the course will examine medical aspects of exercise covering a wide range of physiologic conditions.

Spivack feels that physicians should have adequate knowledge of sports in order to advise their patients about exercise. He adds, "the emphasis will be on the basic physiology, proper training and conditioning, and the importance and selection of proper equipment."

The course is not designed to cover treatment of sports-related injuries. Spivack primarily hopes to encourage safe participation and enjoyment in sports.

Noted physicians from Stanford will present lectures on a variety of topics in their areas of expertise.

Classes will be taught by the following faculty members.

• Exercise physiology—Dr. William Haskell, clinical assistant professor of medicine and well known exercise physiologist.

• Endurance sports—Dr. Peter Wood, adjunct professor of medicine. Wood is writing a book on endurance sports, and he is a marathon runner himself.

• Fluid balance and nutrition—Dr. Roy Maffly, professor of medicine, expert on fluid and electrolyte balance.

• Altitude sports—Dr. Herbert Hultgren, professor of cardiology and noted researcher in the area of altitude-related health problems.

• Racquet sports—Dr. Kenneth Campbell, clinical assistant professor of surgery and author of a textbook on tennis injuries.

• Contact sports and other land sports—Dr. Richard Swett, clinical instructor of surgery and orthopedic surgeon trained in sports medicine.

• Underwater sports—Dr. Alfred Spivack, diving enthusiast and organizer of the course.

The new course is scheduled to meet on Fridays from 3 to 4 p.m., and it will be open to medical students and human biology students.

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Mailed Monday, September 18, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Dr. David A. Prince, chairman of the department of neurology at Stanford University School of Medicine, is the 1978 recipient of the Lennox Award given by the American Epilepsy Society "in recognition of his important contributions to the field of epilepsy."

Prince received the $2500 prize September 11 at the annual AES meeting in Vancouver.

Prince, 46, has been studying epilepsy since the early 1960s in an effort to understand the cellular processes involved in the disease, and to apply this knowledge to the problems of patients.

Epilepsy is a symptom of abnormal brain activity caused by excessive electrical firing of groups of nerve cells. These cells can set off an "avalanche" of firing involving large areas of the brain and resulting in seizures or convulsions.

The disease afflicts an estimated three million Americans. Anti-epileptic drugs are available, but they can control the symptoms effectively in only 60 percent of the cases.

In 1971, Prince and his colleagues at the Max Planck Institute in Munich, Germany reported the first accurate measurement of changes in potassium levels during the course of epileptic activity using highly sensitive microelectrodes.

Electrically charged molecules, or ions, of potassium are involved in the conduction of electrical signals down the long arms of nerve cells, the axons.

Three years later, Prince and his associates at Stanford found that there was a local potassium build-up in the spaces between nerve cells during experimental epilepsy which could reach three to four times normal levels.

Recently, the Stanford group has been studying calcium, another ionic salt involved in electrical and chemical transmission.

According to Prince, changes in both calcium and potassium ions could act upon the nerve membrane to "increase excitability and cause the nerve cell and its axon to fire repeatedly."

The results of recent experiments by the Stanford group, reported at the Vancouver meeting, provide new evidence for these ionic effects, says Prince.

In 1976, Prince and his associates reported the first measurements of electrical activity from within a single living human nerve cell.

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The recording was accomplished by inserting microelectrodes into slices of brain tissue which has been surgically removed as part of the treatment for epilepsy. The tissue was kept alive in a special chamber containing a solution of salts, sugar, and oxygen.

"This technique will allow us to identify exactly those cells which are involved in epileptic discharge," says Prince. By studying the same cells under the microscope, "we will be able to decide whether they differ structurally from normal nerve cells," he says.

Using similar techniques and animal brain tissue, the Stanford group has been able to produce experimental epilepsy in brain slices by treating them with chemicals, ions or drugs.

"Studies of the behavior of nerve cells in these brain slices have led us to propose that cells have a potential for generating epileptic discharges which is normally inhibited," says Prince.

Certain drugs and chemicals seem to remove this inhibition, resulting in excessive bursts of activity. The development of epilepsy after a brain injury may also be related to removal of nerve cell inhibition, he says.

Recently, Prince and his colleagues have begun to study how anti-epileptic drugs act. "We don't know if these drugs work differently in normal and epileptic cells," he says.

It also is not known whether chronic drug use produces changes in nerve cell activity, particularly in the developing nervous system. In many instances, epilepsy begins during childhood, and affected children may take drugs for several years.

"These studies could improve our knowledge of how existing drugs work, and lead to the development of new drugs that might be useful," says Prince.

Prince, a graduate of University of Pennsylvania School of Medicine, has been at Stanford since 1963. He has published widely, and has received numerous grant awards in support of his research, including a Guggenheim Fellowship in 1971.

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Mailed Thursday, September 14, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415)497-6911

STANFORD—Dr. Kenneth L. Melmon, professor and chairman of the Department of Medicine at Stanford University Medical School, has been appointed to the Arthur L. Bloomfield Endowed Professorship.

Melmon, 44, is an internationally known clinical pharmacologist. He heads the medical school's largest department, which includes 12 divisions, and has responsibilities for the clinical medical training of medical students, housestaff physicians and postdoctoral fellows.

He became department chairman on Sept. 1, succeeding Dr. Daniel Federman, who is now at Harvard Medical School. Federman previously occupied the Bloomfield endowed chair.

A Stanford undergraduate, Melmon received his M.D. from the University of California in San Francisco (UCSF), and prior to joining Stanford he was a professor of medicine and chief of the Division of Clinical Pharmacology at UCSF.

His research has led to 195 publications, including editorship of a recent edition of *The Pharmacological Basis of Therapeutics*, a textbook in the field.

Melmon is recognized as one of the founders and leading figures in the field of clinical pharmacology. He was elected president of the American Federation for Research in 1973-74, and president of the American Society of Clinical Investigation for 1978-79.

At UCSF Melmon and his associates identified the chemical receptors for histamine on the surface of white blood cells. They also developed important new concepts concerning relationships between immune and inflammatory processes and their regulation.

The Arthur L. Bloomfield Professorship honors one of Stanford's most distinguished physicians.

Bloomfield retired as head of the Department of Medicine in 1954 after 26 years on the Stanford Medical School faculty. He continued to serve as director of the historical collection at the school's Lane Medical Library until his death in 1964.

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Mailed Wednesday, September 13, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Stanford University School of Medicine faces a potential loss of up to $2.3 million in Medicare payments this year, according to Dr. Clayton Rich, vice president for medical affairs and dean of the school.

Rich said the problem was the result of new guidelines by the Department of Health, Education and Welfare concerning the professional fees of teaching physicians.

Under the new ruling, professional fees of salaried faculty physicians that are turned over to the medical school to support operations are treated as restricted funds, and must be deducted from Medicare claims.

"Stanford does not agree with this interpretation," said Rich, "and it will be evaluating various steps to obtain appropriate reimbursement for its services".

He emphasized that professional fees of faculty physicians are not restricted and are commonly employed to support a wide variety of medical school programs.

Previously, the medical schools could claim part of faculty salaries from Medicare in their institutional costs. This was the portion of faculty time devoted to teaching interns and residents. However, the amount of the claim had to be reduced to the extent that there were funds such as grants and gifts restricted to paying faculty salaries. The effect of the new interpretation is to classify physicians fees among these restricted funds.

Stanford has a medical practice plan which is similar to those of many medical schools. The physicians are salaried by the School. Their professional fees are turned over to the medical school fund, and distributed to departments and the school's reserve.

Rich said Stanford was informed two weeks ago that most or all of the expenses in its 1977-78 claim for institutional cost recovery come under the new interpretation.

The $2.3 million figure is an estimate, he said, based on Stanford's preliminary understanding of what costs will be influenced by the ruling. It will be modified by the time Stanford's claim is submitted in November.

However, until the matter is clarified, "we will not be able to spend any of the $2.3 million previously expected," Rich said. "This will create very serious difficulties for the clinics and the medical school."

The loss of income will have immediate impact on departmental funds, and will cause in the medical school an operating budget deficit of nearly $900,000 for fiscal 1978-79, he said.

Stanford received information about Medicare's new policy in April. Several university medical centers, including Stanford, asked for clarifications. Blue Cross of Northern California, the fiscal intermediary for Medicare, obtained the answers from the Medicare Bureau in Washington, D.C. two weeks ago.

Stanford's faculty practice plan is currently under investigation by the Board of Medical Quality Assurance on grounds it may be in conflict with a section of the state's business and professions code, and by Medi-Cal because of allegations of double billing.

Medical school officials have denied the allegations, pointing out that the faculty practice plan is in use in about half of the nation's medical schools.

However, Stanford is concerned, they said, about these investigations and has employed Arthur Andersen Co., an accounting firm, to make an independent assessment of the billing practices in the hospital and clinics.

Faculty practice plans also have been the subject of national attention in recent months, according to the Association of American Medical Colleges. The plans are caught in the conflict between the federal government attempting to head off escalating health care costs, and the medical schools that rely on faculty income as an essential support of medical school programs.

An AAMC study, released last year, shows that income from such plans provides vital support for medical faculty compensation.

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Mailed Monday, September 12, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

CITY DESKS: Photo available upon request if not included with story.

STANFORD—Childbirth—an exhausting and exhilarating experience for most parents—can be transformed into uncertainty and fear when parents learn their newborn is ill.

Infants born prematurely may suffer from severe respiratory distress or heart disease. Others may have birth defects such as Down's syndrome (mongolism), spina bifida (malformation of the spinal cord) or hydrocephalus.

Stanford University Hospital has developed a special program to help parents cope with these problems.

The intensive care nurseries at Stanford serve an area extending from the Oregon border to the Tehachapi mountains. Approximately 1,000 critically ill infants are admitted each year.

When a child is born with a congenital illness or abnormality, explains pediatric social worker Rose Grobstein, parents often react with disbelief. Later they may ask, "Why did it happen to me? What did I do wrong?" Both parents may become depressed. If the disability is severe and cannot be corrected they may secretly wish for the death of the infant.

The Stanford program provides professional counseling to help parents resolve feelings of grief and guilt. It assists them in planning for future care of the child and encourages them to help one another through mutual support groups.

At Stanford there are self-help groups for parents of infants in intensive care, for those whose children have spina bifida and for parents of children who have died.

Twice a month, parents of children in the intensive care nursery meet in a nearby conference room. Attending one Sunday session were two couples from San Jose and Modesto, a mother and her parents from Santa Maria, Grobstein and nurse Dupi Gomez.

The setting was informal, the parents eager to talk about their children.

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All three infants were premature. The child from San Jose had hyaline membrane disease, a respiratory ailment that afflicts babies whose lungs are not fully developed. The mother and child from Santa Maria had flown to Stanford by air ambulance. The couple from Modesto previously lost one child when it was 11 days old and another in a miscarriage. When the mother went into labor almost two months early, she was rushed to Stanford Hospital.

The babies were doing well, now. The parents, however, were "sitting on pins and needles." "We're hoping for the best, but expecting things to go wrong," confessed Susan Machado, the young mother from Modesto.

They listened intently to each other's story: the onset of labor, trip to the hospital, complications of delivery, and finally the birth itself. At one home a kindly neighbor, who had rushed over to care for the older children, fainted upon the kitchen floor moments after her arrival. They shared their fears. Each time the telephone rang—and it rang often as friends and relatives called—they wondered if it was the hospital calling.

And they shared their triumphs: the infant from San Jose had been transferred to the "Romper Room," a nursery for infants who are not acutely ill, but require long-term hospital care.

What was their reaction to the intensive care nursery, Grobstein asked. "They try to prepare you but still it's a total shock," said Robert Machado. "All the needles and blood...a slap in the face."

"I couldn't believe it," said a father when a nurse asked him to hold and feed the baby. To ease the trauma of hospitalization for parent and child, Stanford encourages parents to take part in the care of the infant.

"Nurses have to convince parents that their babies are not as fragile as they look," explained Grobstein.

The parents expressed satisfaction with the staff. "I admire their honesty and integrity," said Robert Machado. "They are right up front with you and tell everything like it is."

The meeting over, parents returned to the nursery and the waiting. As one mother said earlier: "The wait seems so long...like it will take forever for the baby to start growing."

How did the meeting help? "You learn about everybody else's problems, what other parents are going through," said Susan Machado. "At first you felt like you were the only one."

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Mailed Monday, September 11, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Three administrative appointments have been announced in the Stanford University School of Medicine by Dr. Clayton Rich, vice president for medical affairs and dean.

Effective immediately, David Mendelow will become associate dean for administration while David S.P. Hopkins will be assistant dean for administration.

Marion Knox will become assistant to the associate dean for faculty affairs.

Mendelow, 36, an associate hospital administrator since December, 1977, has been primarily responsible for the Stanford University Clinics and emergency services. He will continue to carry out his responsibilities in the clinics.

Hopkins, 35, has been a senior staff associate in the University's Academic Planning Office since 1975. He will direct academic and resource planning, and will be responsible for several administrative units within the medical school.

Mendelow came to Stanford from Arthur D. Little, Inc., where he was a senior consultant. He received the M.B.A. in health care administration from George Washington University, and held positions at the Albert Einstein College of Medicine and the Bronx Municipal Hospital Center in New York. He also served as project director for the programming of the 1,000-bed University Hospital at the Federal University in Rio de Janeiro.

Hopkins, a Harvard graduate, holds degrees in statistics and the Ph.D. in operations research from Stanford. He held posts as a systems analyst with IBM, the University of California, and was IBM postdoctoral research fellow in the Department of Operations Research at Stanford in 1971-72. His functions in the Provost's Office included budget planning, development of computer models for use in long range planning, and studies of such areas as faculty tenure and retirement planning.

Knox has served as administrative assistant in the dean's office of the Medical School since 1973. She is a graduate of Northwestern University, and has held posts in the School of Engineering at Stanford, and the personnel office of the University of Chicago Hospitals and Clinics.

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Mailed Thursday, September 7, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Personnel working in many hospitals, dental offices and veterinary clinics are exposed to possibly harmful levels of anesthetic gases, because "all available measures to minimize levels of exposure have not been taken," according to Dr. Charles Whitcher, professor of clinical anesthesia at Stanford University School of Medicine.

"It is believed that most hospitals have installed scavenging equipment which vents excess gases from the anesthesia machine, but unless the air is monitored there is no assurance that anesthetic exposure is actually reduced," he says.

Whitcher will speak on the control of occupational exposure to inhalation anesthetics Friday, September 8, at the Stanford Anesthesia Conference in the Medical School's Fairchild Auditorium.

Chronic exposure to inhalation anesthetics is a suspected cause of several health problems, including spontaneous miscarriage, cancer, liver disease, and birth defects.

Slightly increased rates of these disorders were found among operating room personnel during a 1975 epidemiological survey conducted jointly by the National Institute of Occupational Safety and Health (NIOSH) and an ad hoc committee of the American Society of Anesthesiologists.

On the basis of the survey findings and lab evidence, NIOSH drafted a standards criteria document recommending universal use of all control measures. This document currently is being reviewed by the Occupational Safety and Health Administration (OSHA).

As yet no federal regulations regarding control of anesthetic gases have been formally enacted.

Exposure to anesthetic gases is not a proven health hazard, and contributory causes, such as stress, cannot be excluded, says Whitcher. But neither can the possibility of harmful effects of the gases be ignored.

In a preliminary study reported in 1975, Dr. Ellis Cohen and his associates at Stanford found increased frequency of liver disease among dentists using inhalation anesthetics more than three hours per week, and increased spontaneous abortion among their wives, compared to dentists who did not use the agents.

"Because the vast majority of dentists use nitrous oxide alone, it is likely that this is the causative agent," says Whitcher. A detailed study of dentists and their female assistants is currently underway.

Control of occupational exposure to anesthetic gases includes preventive maintenance of anesthetic equipment, leak testing procedures, and scavenging. Scavenging refers to the collection of waste gases at the anesthetic breathing system and their disposal outside of the building.

These techniques do not provide sufficient control. The amount of gas taken by the scavenging equipment, for instance, "may be an inconsequential part of the total level, depending on the presence of other sources," says Whitcher.

Control is assured only when the air is monitored."We have found significant leakage in several hospitals which could have been present since the buildings were first constructed," he says.

The basic air monitoring device, an infrared spectrophotometer, costs about $2,000, plus additional expenses involved with operating the instrument and record keeping.

The cost and sketicism about the dangers of anesthesia exposure may be reasons why many hospitals and dentists have not invested in monitoring equipment, says Whitcher.

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Mailed Thursday, September 7, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD-The most outstanding feature of the Chinese is their personal cleanliness and freedom from many diseases which continue to plague Westerners, says Dr. Eugene Farber, chairman of the dermatology department at Stanford University School of Medicine.

"Venereal diseases have been virtually eliminated," says Farber, who recently returned from a three and a half week trip to mainland China. "So have malaria, cholera and other infective diseases spread by insects and rodents.

"There is no alcoholism in China, and no drug problem," he says. "The Chinese have a mania for cleanliness." Everything from the streets to the water they boil continuously, is immaculate, he says.

Farber and Dr. Robert Goltz of the University of Minnesota are the first dermatologists invited to China by that country's Academy of Sciences under a program of scientific exchange.

Their visit included tours of seven major cities, including hospitals, dermatology clinics, factories, agricultural communes, and historial sites.

During his visit, Farber met with Dr. George Hatem, the man credited with eradicating venereal disease in China in less than 10 years.

Hatem, a Lebanese who attended college in the U.S. and medical school in Switzerland, was a personal physician of the late Chairman Mao Tse-tung, and now is advisor to the Chinese Ministry of Medical Sciences.

Hatem came to China in 1939 to study tropical disease. He found a country ravaged by venereal diseases. An estimated three to five percent of city dwellers carried VD, and the incidence was as high as 10 percent in the war zones. Infectious diseases such as cholera, typhoid and dysenteries were epidemic, and had killed millions of people.

"I saw children dying in the streets," said Hatem during a visit to Stanford last week. Prostitution of both women and children was widespread, as was child labor.

"These things stimulated me to think about what it meant to be a doctor," he said. "I began to feel that medicine was not quite the answer to China's problems."

Accordingly, Hatem decided "to join the Red Army and fight for liberation." He dropped out of sight and would not return to the U.S. for 45 years.

(more)

After the revolution, Hatem became involved in the attack on infectious diseases. Since insects were known to carry disease, the people were organized in a massive insect-killing campaign. Today there are no insects in China.

Snails were known to carry schisto somiasis, a parasite which causes anemia, enlarged liver and spleen, and death among workers in the rice paddies. So the people killed snails. By the 1970s, 99 percent of the snails had been destroyed.

"There is a new sense of what we call in China 'socialist epidemiology,' " said Hatem. "Without any change in medical care, if you teach people not to take anything uncooked by mouth, to boil water, to keep their hands clean, your population will become immune to gastrointestinal infections."

Veneral disease presented a greater challenge, because it was spread by sexual promiscuity and prostitution. Its elimination required a change in the social system, said Hatem.

The change involved rounding up prostitutes of all known brothels, treating them medically, and indoctrinating them. They were given jobs, as laborers, as nurses, and as propagandists against VD. By 1966, venereal disease had been wiped out.

Today, sexual activity outside of marriage is strongly discouraged, and persons engaging in prostitution are punished by hard labor at low pay.

Hatem said that the Chinese experience can serve as a lesson for other countries, including the U.S., which have high rates of VD. "The cause and treatment of venereal diseases are known. They can be eradicated," he said. Regardless of the political or social order, "once you know that, you can find ways to do it."

According to Farber, pregnant women are no longer tested for VD, and protective drops are not put in the eyes of newborns. In the 20 hospitals he visited, "none of the young doctors had ever seen a case of VD. Only the older ones had."

Although great advances in medical care have been made in the last two decades, much remains to be done. "There is a tremendous volume of patients at the clinics, and too few doctors," he says. For example, nearly 500 patients are seen each day at the average dermatology clinic.

"Many physicians in China are behind in their research," says Farber, "but they are conscious of it and want to catch up."

Chinese herbal medicine is still practiced widely and taught in medical school. However, "it is now subjected to closer scrutiny and to scientific discipline to determine its role in the treatment of disease," he says.

In addition, Chinese officials plan to send thousands of their physicians to foreign schools for further training, he says.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—The 11th annual Symposium on Renal Disease will be held Friday, Sept. 15, at Stanford University Medical School.

The day-long event, which is sponsored by the Kidney Foundation of Northern California, will provide physicians and other medical personnel with updated information on renal function, and diagnosis and treatment of renal and urinary tract disorders.

Simultaneous sessions will be held for doctors, nurses, technicians, social workers, dieticians and other medical personnel. Lectures will be held in Fairchild Auditorium and in M106 of the medical school.

Among the symposium participants will be Drs. Rex L. Jamison, head of the Division of Nephrology at Stanford; Floyd C. Rector Jr., professor of medicine at the University of California in San Francisco; Norman Kaplan, professor of internal medicine at the University of Texas in Dallas; Fredric L. Coe, professor of medicine at the University of Chicago's Pritzker School of Medicine; Elliot Aronson, professor of psychology at the University of California in Santa Cruz; and Eli A. Friedman, professor of medicine at Downstate Medical Center in Brooklyn, N.Y.

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Mailed Wednesday, September 7, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD—Five young scientists at Stanford University School of Medicine recently have been selected to receive Biomedical Research Support grants for 1978-79.

The funds are provided by a grant from the National Institutes of Health each year "to enhance the effectiveness and efficiency of biomedical and behavioral research" at medical institutions.

The awards are made by a faculty committee chaired by Dr. Eric Shooter, professor of neurobiology.

The grantees, all assistant professors, are Roland Ciaranello, M.D. (psychiatry), S. David Holtzman, M.D. (neurology), Abdul Matin, Ph.D. (medical microbiology), James Rothman, Ph.D. (biochemistry), and Stuart W. Young, M.D. (radiology).

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Ciaranello will study the genetics of the dopamine receptor in the mouse brain. "Dopamine is a substance that transmits nerve impulses from one nerve cell to another," explained Ciaranello. "Target cells within the brain that receive dopamine may play an important role in the pathology of schizophrenia."

Holtzman is studying how the astrocyte uses oxygen and gains energy for growth and other metabolic functions. "The astrocyte is a cell that appears during brain development," said Holtzman. "It contributes to the properties of a mature brain, and may be important in determining the brain's ability to resist toxic or noxious agents."

Matin is studying regulation of membrane processes that occur during energy generation and consumption by microorganisms. "Living cells generate energy by the expulsion of protons through their membranes during respiration," said Matin. "We hope to determine what aspects of membrane permeability are involved in the regulation of proton expulsion."

Rothman is studying how cell membranes are formed. Membranes surrounding the cell and various structures within the cell carry out distinct functions and contain different enzymes, noted Rothman. "We are trying to understand how the correct enzymes are directed to specific membranes during cellular growth and division."

Young is attempting to affect the blood flow to malignant tissue and surrounding normal tissue by the administration of drugs.

"A selective increase in blood flow and delivery of radiographic contrast agents to the malignant tissue should improve the diagnostic precision of computerized tomography scanning," Young noted. Cancer treatment also would be improved if there was more selective delivery of drugs to the tumor.

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Mailed Wednesday, September 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Joanna Cohen 415: 497-6911

STANFORD—A Stanford University Medical School researcher has been awarded federal grants totalling over $250,000 to study regulation of enzymes thought to play an important role in human behavior and mental illness.

Dr. Roland Ciaranello of the Department of Psychiatry and Behavioral Sciences has received a three-year grant from the National Institutes of Health to study genetic regulation of enzymes that synthesize catecholamines. Catecholamines are chemical substances that act as neurotransmitters in the brain.

"Changes in enzyme levels are associated with different behavioral states," noted Ciaranello. We have evidence that the factors which provoke these changes are genetically determined."

A two-year grant by the National Science Foundation will support his research on regulation of the hormone, adrenaline, which is important in the way people respond to stress.

"We want to learn how the enzyme that synthesizes adrenaline is turned on and off by steroid hormones," Ciaranello said.

Ciaranello, who received his M.D. degree from Stanford in 1970, is assistant professor of Child Psychiatry and director of the Laboratory of Developmental Neurochemistry.

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Mailed Wednesday, September 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

EDITOR: The following is an announcement of two up-coming conferences on advances in the diagnosis of heart disease September 11-14 at Fairchild Auditorium, Stanford University Medical Center. Press arrangements are being handled by the News Bureau, Room TC 135, Stanford University Medical Center, Stanford, CA 94305. Programs of the conferences are available upon request.

STANFORD—Computerized tomography (CT scanning), measurement of blood flow with ultrasound, and a nuclear "stethoscope" are some of the recent developments in cardiology which will be discussed at Stanford University during two international conferences September 11-14, 1978.

Advances in microelectronics and computerized signal processing have provided physicians with "an increasing range of diagnostic tools and techniques for obtaining quantitative information about the heart and blood vessels in health and disease," say Drs. Donald Harrison and Gene Schmidt of the Stanford division of cardiology, which is hosting the conferences.

The first conference, September 11-12, concerns noninvasive cardiovascular measurements using ultrasound, nuclear scanning and magnetocardiography. It is co-sponsored by the National Aeronautics and Space Administration, and will be followed by the fifth annual conference on computers in cardiology September 12-14.

Some of the topics to be discussed at the two conferences include:

• a "nuclear stethoscope." This device monitors heart function by measuring the radioactivity present in the left ventricle after injection of a radioactive tracer. With the aid of a microprocesser, or small computer, it can measure left ventricle function at rest and during exercise, and after a heart attack, without having to place catheters in the patient's blood vessels and heart chambers.

• computerized tomographic (CT) scanning. Existing CT scanners are too slow to freeze the action of the heart unless scanning is done in synchrony with the heart rhythm. Stanford researchers are working on the technique, which can detect heart attacks in experimental animals.

• blood flow measurement by Doppler ultrasound. The velocity of blood moving through a vessel can be related to changes in the frequency of sound bounced off the vessel. This phenomenon is known as Doppler shift. The non-invasive technique potentially can provide more information about the dynamics of blood flow than catheterization.

• computer enhancement of angiography. Angiography refers to the injection of dye into blood vessels and heart chambers to make them more visible to X-rays. The risks of this procedure can be considerably reduced if the dye is injected through smaller vessels in the arms or legs. Computer signal processing increases the contrast and clarity in angiograms taken with this less invasive technique.

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Mailed Wednesday, September 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Stanford University Hospital nurses Tuesday, Oct. 31, withdrew their resignations following discussions with administrators to resolve problems surrounding the newborn intensive care nursery.

The nurses said they decided to withdraw their resignations that would have become effective Nov. 7 after hearing details of plans for improvements in space and staffing in the nursery.

Catherine Van Buren, staff nurse on the unit, said a factor in the decision was the "cooperation of the hospital in providing temporary measures for additional space, and better staffing by physicians and nurses."

Renovation is scheduled to begin on Wednesday, Nov. 1 to widen the patient care area. Construction of a new nursery should be underway next year.

Gary Mecklenburg, hospital administrator, said he is pleased with the nurses' action and that the hospital has shared their concerns for improving space and staffing.

"We are confident that the measures in process will provide immediate and long-term resolution of the problems," he said.

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Mailed Tuesday, Oct. 31, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Stanford University Hospital nurses and administrators held another round of talks Friday, Oct. 27 and reported progress toward solving some of the problems surrounding the newborn intensive care nursery.

"There was positive discussion, and we feel we have received concrete proposals for action," said Kathy Gesley, staff nurse.

Most of the nurses on the unit had submitted their resignations on Oct. 19, to become effective Nov. 7, protesting insufficient space for providing care, and the need for more intensive coverage by physicians.

"We have been promised 24-hour housekeeping coverage, an additional room, and specific renovation to widen the patient care area immediately," said Gesley.

The nurses have not withdrawn any resignations at this time, but will be meeting on Sunday and Monday to discuss this possibility.

Gary Mecklenburg, hospital administrator, said, "We will be proceeding to implement improvements in the facilities while plans for construction of the new nursery are underway.

"I am confident that the problems will be resolved mutually without reason to curtail patient admissions," he said.

Plans call for tearing down some walls in the unit in order to widen the patient area. This renovation should be underway by Wednesday, Nov. 1. Patients will be cared for in other areas of the nursery while the construction is underway.

Earlier this week the nurses reported progress in their discussions with staff pediatricians. Provisions were made, they said, for more medical coverage at all times in the nursery.

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Mailed Monday, October 30, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Stanford University School of Medicine should provide incentives so that medical students can graduate in five years or more, according to the curriculum evaluation subcommittee of the Faculty Senate.

Chaired by Dr. Robert A. Chase, the subcommittee will discuss its report before the Medical School's Faculty Senate at 3:30 p.m. Nov. 17 in Room S102 of the Medical School.

"Because students have increasingly opted for a four instead of a five-year curriculum," the report said, "they have not been able to make use of some of the unique characteristics of Stanford."

These include a small student body, high faculty to student ratio and "an extremely talented faculty," the report declared.

Graduating in four years "has also meant that students have had less time to pursue scholarly investigative efforts," said the report.

The medical school should take steps "to reverse these unfortunate trends and to maximize the educational opportunities assuring that all students gain experience in problem solving in the medical sciences," the report recommended.

"The committee supports all efforts to generate incentives for students to spend five or more years matriculated as medical students at Stanford," the document added.

This could be achieved by removing the main disincentive, the extra cost involved.

"The committee strongly endorses a global tuition fee for work at Stanford Medical School toward the M.D. degree, regardless of whether it be achieved over four, five or six year-period," the report said.

In addition, the committee recommended a preceptorship requirement which would culminate in both an oral presentation and written report.

"The committee feels these two proposals would rejuvenate the exciting academic atmosphere and strengthen the relationship of students to faculty" without jeopardizing the present elective curriculum, the report said.

The report said there should be both external and internal evaluation of student competence. Presently Stanford medical students must pass the National Board examination according to the School's requirements for the M.D.

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"The committee feels that in addition there should be intramural evaluation of student achievement and learning on a continuous basis . . . to determine the extent to which the student has met the educational objectives established by the faculty." said the report.

In 1959 the Stanford medical curriculum was completely rebuilt to improve the training of future physicians. It spread their studies over five years instead of four, taught them principles instead of mastery of specific detail and emphasized the unity of biology and basic medical sciences.

In 1968 that curriculum was prematurely changed, according to critics, on the basis of a few crucial decisions.

These included the development and sale of the four-year track to incoming students, the decision to charge five-year students 25 percent more tuition than four-year students, the arguments for federal capitation grants to increase class size, and the "false idea" that a small faculty would massively increase its teaching and administrative functions.

The committee endorsed the objectives of the 1959 curriculum because "it represents ideals which this medical school should continue to espouse."

The committee said: "In the light of experience of almost two decades, it is apparent that strategies to meet these objectives must be tailored to realistic expectations placed on a Medical School faculty and students."

The committee said that Stanford's most important aims should remain

. the encouragement of student individualty.

. the fostering of a graduate approach to medical education.

. encouragement of interest towards an academic career in medicine.

. training of physicians who in the course of their career will continue to adhere to the scientific method.

. the promotion of student awareness of the place of medicine in society.

"The School provides the type of environment in which its faculty members and students can fulfill what they consider to be an imperative obligation to enlarge their field of knowledge." the committee said.

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Mailed Monday, October 30, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415:497-6911

STANFORD—"Good Health Habits: A Way of Life" will be the topic of the second lecture in the Progress in Medicine series of the Stanford University School of Medicine, to be held Wednesday, Nov. 1.

The lecture is open to the public at no charge, and will begin at 7:30 p.m. in the Sherman Fairchild Auditorium.

Dr. Ralph S. Paffenbarger, Jr., professor and head of the division of epidemiology, will discuss health habits worth cultivating. His research has focused on long-term studies of disease patterns, particularly the relationship of vigorous exercise and heart disease.

His most recent study of Harvard alumni received wide public attention. That work showed that there were fewer heart attacks among those who participated regularly in strenuous sports activities than among less active persons.

Paffenbarger joined the new division of epidemiology at Stanford last year. He formerly served as adjunct professor of epidemiology at the University of California School of Public Health in Berkeley. He has taught at Harvard, and was medical director of the U.S. Public Health Service for 21 years.

Progress in Medicine lectures are presented as a community service by the dean and faculty of the School of Medicine and by the members of the Medical Center Council.

Future speakers will discuss "Early Disease Detection: Designing a Personal Screening Program," by Dr. David M. Eddy on Nov. 8, and "How to Choose and When to See the Doctor" by a panel of physicians on Nov. 15.

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Mailed Friday, October 27, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415:497-6911

STANFORD—Stanford University School of Medicine ranks seventh in the nation in its ability to attract minority students, according to an institutional profile report just released by the Association of American Medical Colleges.

The report, which covers the 1976-77 academic year, shows that non-Caucasian students in the medical school constituted 25 percent of the student body.

This year 20 percent of the students in the entering classes represent minorities--black, Chicano, and native American.

These percentages are similar to those of past entering classes, according to the office of student affairs.

Earlier this month the Medical School faculty senate overwhelmingly affirmed its satisfaction with the current level of minority admissions and the school's continuing commitment to minority admissions under the Bakke guidelines.

The senate backed that commitment by enlarging the Admissions Committee to include more minority representatives, and by creating a special panel to engage in active recruiting of qualified minority applicants.

Stanford also ranked fourth among the nation's medical schools that are dependent on federal support, and 41st in the degree to which the school depends on revenues from faculty medical practice.

The school ranked high on such areas as student/faculty ratios, expenditures of faculty support for research, and emphasis in research.

But it scored low on the list in terms of the number of faculty who hold tenured appointments, and the extent to which it trains resident physicians in primary care.

The institutional profile report is generated annually by the Association of American Medical Colleges. It highlights rankings of each school in comparison to others. The report covers 114 medical schools, but they are not identified by name.

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Mailed Thursday, October 26, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—SUMEX, the national computer network based at Stanford University, recently received $500,000 for each of the next three years from the National Institutes of Health (NIH) to continue studying the applications of artificial intelligence to medicine.

Artificial intelligence refers to the emerging capabilities of computers to reason symbolically with the use of knowledge.

The renewed funding comes during a time of change for SUMEX (Stanford University Medical EXperimental computer), which was established by the NIH in 1973.

A co-founder, Professor Joshua Lederberg, recently left Stanford to take up the presidency of Rockefeller University in New York. His colleague, Professor Edward Feigenbaum, will take over administration of the computer system.

This also is a time of rapid change in computer technology. "The computing capacity of a machine which 10-15 years ago cost a million dollars today can be bought for $75,000, and within 10 years, it will be a $25 vest pocket calculator," says Lederberg.

Computer facilities such as SUMEX are currently quite costly, but advances in technololgy, and sharing the computer between several investigators, is "significantly reducing the cost per project," says SUMEX director Thomas Rindfleisch.

The advantage of a large, time-shared system like SUMEX is that it permits rapid interactions and cooperation between many research groups, says Rindfleisch. Currently, SUMEX provides the hardware for 15 problem solving projects nationwide, in fields ranging from organic chemistry to medical diagnosis.

Fifteen years ago, explorations in artificial intelligence were limited to mathematical exercises and games of chess. In the mid-1960's, researchers began to apply the computer's "brain" to solving tough problems in chemistry and biology.

One problem explored by Lederberg and Feigenbaum was the determination of molecular structures from mass spectrometry data in organic chemistry.

With the help of chemistry professor Carl Djerassi, who supplied his expertise about the behavior of organic molecules, and computer scientist Bruce Buchanan, they constructed a computer program which could generate unerringly all possible structures of a molecule based on the knowledge and spectrometry data supplied to it.

The program, called DENDRAL, has become an important tool for generating and checking structure proofs, a chemist's "intelligent assistant."

"Humans find the single answer well, but they can't give a guarantee that there are no other possibilities," says Buchanan. "The computer can."

DENDRAL's success stimulated investigations in other areas of science, notably medicine. MYCIN, an expert program in infectious diseases, emerged from the concern of Dr. Stanley Cohen of Stanford and Dr. Stanton Axline, now at the University of Arizona, about the indiscriminate use of antibiotics.

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Employing the expertise in bacterial infections and antibiotics of the two physicians, computer scientists Buchanan and Edward Shortliffe, who later earned his medical doctorate at Stanford, developed a program which could make recommendations about diagnosis and treatment in a straight forward, easily understood manner.

"We had to design a program which could communicate in simple English, which could understand questions posed by physicians, and could explain its decisions in a way they can understand," says Shortliffe.

Programs like MYCIN are often regarded by physicians with skepticism, some of whom feel the machine is invading their relationship with patients.

"It was important for us to respond to these feelings," says Shortliffe. "We're not trying to replace the use of reason by physicians, but simply add to the available tools and procedures which make their practices more effective.

"I do not see physicians choosing the computer over the human expert if they are side by side," he says. "But the computer is more accessible. It can be reached in the middle of the night. A portable terminal can be tied into a central facility from remote rural areas, submarines, even from space."

Other projects began at Stanford, including MOLGEN, a program which assists the design of experiments and data analysis in molecular gemetics, and PUFF, a respiratory disease specialist developed by researchers at Stanford and San Francisco's Pacific Medical Center.

By the early 1970s, other groups throughout the country had established research programs in artificial intelligence. The need for a larger facility at Stanford, and the high cost of duplicating computer programs for use at other locations, led the Stanford group to propose the formation of a national research resource. That proposal was granted by the NIH in 1973.

Today, the SUMEX computer aids research at other centers, such as the Rutgers University glaucoma consultation system, and INTERNIST, an expert in internal medicine at the University of Pittsburgh.

In addition to its usefulness in problem-solving activities, artificial intelligence is improving understanding about the way knowledge can be organized. "Our work has made us realize the huge knowledge base people use in solving apparently simple problems," says Thomas Rindfleisch. "Our main job has been learning how to acquire and represent that knowledge."

"We've found out that a great deal of expertise is based on good guesses and plausible reasoning," says Feigenbaum.

"In the long run, the important result of our work may be the ability to explain a private body of knowledge so it can be taught, discussed, and built into consensus."

Bruce Buchanan puts it more simply: "If we can capture the knowledge of a thin slice of molecular genetics that Lederberg, for example, has in his head, we will have done a big service for students now and in the future."

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Mailed Thursday, October 26, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia, 497-6911
FOR IMMEDIATE RELEASE
STANFORD—

Plans are under way to establish a Life Support Training Center for the teaching of cardiac life-support techniques for doctors, nurses, and the general public at Stanford University Hospital.

The Center, which will be the first of its kind in California, will help meet the growing need for training in cardiopulmonary resuscitation (CPR) and advanced life-support systems, Dr. Michael Eliastam, director of emergency Services at Stanford told a group of mid-Peninsula service club members Thursday (Oct. 26).

In addition to CPR training equipment, Eliastam says the facility will contain the required sophisticated electronic teaching equipment used in the training of advanced life support. The Center will be housed in Stanford Hospital's new wing.

"The need for this training center is clear," Eliastam explained. "Both the American Red cross and the American heart Association are unable to keep up with the demand for training among the lay public and professional health groups.

"This (Center) is truly a university-community combined venture, and the Center will be available not only to Stanford's medical community, but also to other physicians and nurses and interested groups in the community," Eliastam said.

Instruction will be provided by faculty members at Stanford Medical School, including physicians in emergency medicine, anesthesia, and cardiology. Instructors from the lay community also will be major instructors in the CPR program, Eliastam said.

"Life-support training will be especially helpful for physicians and nurses since it will provide them with a thorough, updated review of their knowledge and skills of resuscitation techniques."

Eliastam said the Stanford Center will also be available to the Red Cross and American Heart Association as a training site for lay people.

Advanced cardiac life-support techniques involve the use of drugs and sophisticated technology, as well as basic life-support procedures.

These procedures or techniques may often mean the difference between life and death for a heart-attack victim, or between disability and good health.

Stanford officials estimate renovations in the Hospital wing to accommodate the new Center will cost about $17,000.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—The United States is falling behind other countries in terms of the rate at which scientific work is done and in the general level of competence of researchers, a committee of scientists warned Wednesday, October 25.

In a report released in Washington, the committee blamed part of the problem on the accelerating decline in the quantity and development of scientific instruments available for research in the U.S., particularly in the chemical, biological and medical sciences.

It called for development of regional facilities and "wider sharing technology resources."

The committee, headed by Oleg Jardetzky, professor of pharmacology at Stanford University School of Medicine, cited studies which show that:

. the quality of scientific equipment at research centers has deteriorated.

. the number of top-notch research centers is declining.

. researchers are tending to avoid risky or more innovative projects because of the tight money environment.

. research opportunities for young scientists have diminished.

. training of young scientists is deteriorating, because generally available technology is rapidly becoming obsolete.

"Many young people are not now being properly trained because many universities have no access to first-rate modern instruments," said Jardetzky.

In addition, "a number of practical discoveries which can be made with modern instrumentation is likely to be made somewhere else, and the potential for commercial exploitation is likely to be lost from this country," he warned.

The committee report states that funding for instrumentation by the federal government has remained at a constant level since 1967, and that "an adequate net increase in funds from Congress to remedy the instrumentation problem is difficult to expect in the present economic climate."

Given the lack of funds, a reversal of the decline in the quality of scientific equipment is possible only through "wider sharing of technology resources."

"We do not have enough money, nor will we have enough in the foreseeable future to buy an instrument for every scientist who can justify a research need for one," said Jardetzky.

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2-2-2 The committee made its report to Frank Press, director of the Office of Science and Technology Policy; Richard Atkinson, director of the National Science Foundation; Philip Handler, president of the National Academy of Sciences; William Raub, associate director of the National Institutes of Health, and representatives of the Office of Management and Budget.

The committee's recommendations have been sent to several congressional leaders, said Jardetzky, and they will appear as an editorial in the October 27 issue of Science magazine.

Jardetzky said the national ad hoc committee was formed following a recent meeting of directors of several regional instrumentation facilities "to examine the situation and seek some practical solutions."

Committee members included E.R. Blout, Harvard University; D.M. Grant, University of Utah; W.D. Phillips, Washington University; and K.R. Porter, University of Colorado.

The committee specifically recommended that the budgets of agencies responsible for funding regional and shared facilities be increased or redistributed.

In addition to calling for a commitment by the federal government to greater regionalization, Jardetzky said the committee may "seek a Congressional mandate for increasing or redistributing the budgets of these agencies."

"Neither the NSF nor the NIH are currently set up to fund many regional facilities," he said.

The NSF's division of chemical instrumentation has recently announced a new program to establish regional laboratories but funding has as yet been secured for only one year. No parallel program for biological instrumentation exists.

"The bulk of funding goes through categorical research grants to specific individuals for specific research projects," said Jardetzky. This only encourages scientists to seek expensive equipment for their own use rather than share it with other research groups, he said.

Sciences such as biology and chemistry did not have funding problems 20 years ago, when government grants were more plentiful, and researchers worked on an individual basis with relatively simple equipment, said Jardetzky.

But new technology, which permits a more sophisticated approach in science, is often tremendously expensive.

Instruments such electron microscopes, nuclear magnetic resonance (NMR) spectrometers, laser and X-ray installations usually over $100,000 per item, said Jardetzky.

Jardetzky, director of the Stanford Magnetic Resonance Laboratory, helped design the world's first 360 MegaHertz NMR spectrometer in 1974. That instrument enables researchers to examine the magnetic properties of atoms in a molecule, and provides information about their spatial relationships and movements.

The Stanford machine is shared with scientists from other institutions, and to date, only two other machines have been made publicly available in the country.

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Mailed Wednesday, October 25, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Nurses in the newborn intensive care unit at Stanford University Hospital have reported progress in their discussions with staff pediatricians, following a meeting Monday, Oct. 23.

"The medical staff has made a positive response to our requests," said Rose Anne Petersen, unit staff nurse. "It has shown a good faith effort to solve the problems," she said.

Thirty-four nurses in that unit had submitted their resignations last week, to be effective Nov. 7, protesting insufficient facilities and staffing.

No resignations have been withdrawn at this time. "Individual staff members will make any decisions about whether they will withdraw resignations and when," she said.

Dr. Irving Schulman, chairman of pediatrics, affirmed at the meeting with the nurses that there will be more medical coverage, said Petersen, with a senior physician available at all times to the nursery. Previously, the physician coverage was shared with other nursing units.

In addition, provisions have been made for senior staff to plan an intensive orientation program for all new resident physicians entering the nursery.

Representatives of the nurses will continue to meet with hospital administrators in the next few days concerning nursing staffing and facilities.

The nurses had cited insufficient space for providing care in the specialty unit, and the need for more registered nurses and medical staff.

According to Gary Mecklenburg, hospital administrator, plans for a new intensive care nursery are underway to relieve the currently overburdened facilities.

Mecklenburg also said that recruitment of specialized nurses for the unit is continuing.

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Mailed Wednesday, October 25, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Treating patients in two of Stanford University hospital's specialized day care centers has cut the costs of their care in half, according to hospital officials.

As a result, the services will be covered by Medicare, the officials said.

The cost savings apply to cancer patients receiving long-term chemotherapy in the new Oncology Day Care Center and severe psoriasis patients in the Dermatology Day Care Center.

Only those patients who formerly would have been admitted to the hospital for their long-term drug treatments are covered by the Medicare benefit.

In a recent letter to the hospital, Blue Cross officials wrote "...we have concluded that the costs (for day care patients) are approximately one-half of other patients receiving oncology services. We are pleased to inform you that the Oncology Day Care Center is approved for Medicare purposes."

The Medicare approval for the oncology center is similar to that received last year for the Dermatology Day Care Center.

According to John Kneepkens, clinic manager, oncology patients were admitted to the hospital for at least two days, at a basic room rate of $187 per day. That cost, he says, has been reduced by half because of the new day care facilities which now provide the same services, including intensive nursing care.

The cost-cutting efforts were successful last year in persuading Blue Cross, Medicare, Medi-Cal, and several other insurance companies to accept day care as a benefit for dermatology patients.

Kneepkens said he is hopeful that other carriers will also accept the same billing procedure for oncology center patients. He said he will be working with patients and their insurance carriers to achieve this.

"It is a serious attempt to reduce medical care costs," says Kneepkens. "the goal is to provide inpatient services on an outpatient basis at the lowest possible cost consistent with good medical practice."

Oncology patients arrive in the morning and receive chemotherapy over a six to eight hour period. During this time they require close supervision, with monitoring of vital signs and intensive nursing. These patients may return once every week for an average of six months.

Formerly they were seen in the oncology out-patient clinic, then were admitted to the hospital for more than two days a week.

Besides the reduced cost, patients now have less administrative forms to deal with, such as registration and insurance. They also have a pleasant home-like atmosphere, a familiar staff for each visit, and modern comfortable treatment facilities.

The center operates both as a clinic and as a day care center, accommodating normal clinic patients as well as those requiring long-term infusion of chemotherapy drugs.

In the Dermatology Day Care Center, patients who previously would have been hospitalized now report to the center in the morning five days a week. Their therapy sessions last seven or eight hours, enabling them to return home in the late afternoon.

The average treatment in the dermatology center lasts about 10 days. Costs, says Kneepkens, are about half what they had been for hospital care before the center opened.

Most of the patients have 50 to 75 percent of their bodies involved with psoriasis, with lesions too extensive to treat at home. The center also meets the needs of those who cannot afford to spend time away from their families or jobs for hospital treatment.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—Children who are victims of child abuse are likely to grow up to become abusive parents, a group of Stanford medical students and medical professionals learned recently at a one day workshop on child abuse held at Stanford University Medical School.

"Child abuse is a language of pain," a panelist told the group. "Many abusive parents are desperate for help themselves, and they strike out to express their pain."

The workshop was organized by a group of medical students seeking exposure to the social, legal and medical implications of child abuse.

Sponsored by the department of pediatrics, the workshop featured films and a panel discussion with a group of experts. They included Dr. Frederick Lloyd, associate clinical professor of pediatrics; Rose Grobstein, chief of pediatric social services at Stanford Hospital; Ken Kondo, juvenile officer from the Palo Alto Police Department; Betty Lin, social worker from the protective services agency of Santa Clara County; Judge Eugene Premo from the California superior court; and a parent of an abused child.

A diagnosis of child abuse is a "discouraging and emotionally laden" one for physicians, said Lloyd, and "reluctance to make the diagnosis is a stumbling block" to cure.

"But this is an area of medicine where preventive measures are clearly effective and the results of treatment can be very gratifying," Lloyd told the students.

Although a dramatic rise in child abuse has been observed recently, Lloyd attributes this to greater awareness of the problem and increased reporting of incidents.

"We have been abusive as long as we've been a species," he said.

Treatment depends on the interaction of many people and institutions, including hospitals, social service agencies, the courts and the family, the panelists agreed.

Families of abused children are often isolated, Grobstein explained, and 85 percent of abusive parents cannot identify a person they can turn to in times of stress.

Although divorced or single parents are more at risk, child abusers occur in all socioeconomic groups, in all age brackets, and generally cut across all walks of life, Grobstein said.

"I am uncomfortable with the idea of 'we' and 'they'," Lin told the students "because all of us are potential child abusers."

Usually, a crisis triggers the abuse, and one parent is the abuser while the other parent, either passively or actively, goes along with the act, said Grobstein.

The parent who spends most time with the child is more likely to be the abuser, and mothers are four times more likely than fathers to mistreat children, according to Grobstein.

Abused children are often seen as "different" by the parents, said Grobstein. Children who are smart, retarded, hyperactive, children with birth defects or those born prematurely, are more likely to suffer abuse, she said.

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Ignorance of normal stages of development or unrealistic expectations of children may also lead to abuse, Grobstein added.

"A child who cries frequently, an infant who soils his diapers, or a two year old who has trouble making his own breakfast," are all examples of children Grobstein has seen who have been abused by parents with unrealistic expectations.

But those trying to help must not respond angrily to parents, Grobstein warned. More effective treatment is to help parents find relief from the stressful situation which led to abuse, she said.

This often requires counseling from a social worker like Lin, who said "my job is to teach my clients how to gain self-respect and listen to their own needs."

"We want to help them find some joy in life," Grobstein added.

In Santa Clara county, doctors are legally required to report any suspicion of child abuse to the protective services agency or the probation department, Premo explained.

Kondo outlined the role of the police department in child abuse problems. When the police receive a report of a suspected case, Kondo visits the home with a co-worker from the protective services agency. Together, they make a determination of the immediate family situation and acquire evidence which may be used at a later time.

With the aid of social workers, many cases are resolved informally at this stage.

If the case proceeds to a formal court hearing, the child could be placed temporarily in a foster home or a children's shelter in an extreme case, said Premo.

At the hearing, both the child and the parent have a right to legal counsel, and the final decision depends on "a preponderance of evidence," Premo explained. If a child is finally removed from home, a plan for his welfare must be submitted.

Juvenile cases have highest priority in the judicial system, with a maximum period of 15 days between initial report and court hearing, added Judge Premo, who previously served on the juvenile court for three years.

The panelists stressed their common goal of helping parents and attempting to reunite the family.

"The best place for a child is in the family, if parents can be helped not to abuse," Grobstein said.

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Mailed Monday, October 23, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

(ADVANCE) FOR MONDAY, OCTOBER 23, 1978
City Desks: Release date set by American Cancer Society

STANFORD—Stanford University Hospital will be one of five research institutions selected to carry out clinical trials to test the possible anti-tumor effect of interferon.

The names of institutions were released Monday, Oct. 23, by the American Cancer Society which has allocated up to $2 million toward purchase of the material for use in the tests.

Interferon is a natural body substance which has been shown to reduce the size of tumors in animal experiments as well as in a few scattered applications to human cancer patients. "Its ultimate usefulness against cancer has yet to be proved," an ACS statement cautioned.

The Society also named six kinds of cancer against which the interferon will be tested. Each kind will be studied by at least two institutions.

According to Dr. Thomas A. Merigan, professor and head of the Division of Infectious Diseases at Stanford, the clinical trials in the Stanford hospital will concentrate on non-Hodgkins lymphoma.

The work will be carried out by the Oncology Division headed by Dr. Saul A. Rosenberg, professor of medicine and radiology, in collaboration with the Merigan group noted for its work in interferon research.

The ACS has stressed that because of the scarcity and extreme high cost of interferon the research will be limited to 25 patients for each type of cancer, a total of 150 patients.

The University of Texas M.D. Anderson Hospital and Tumor Institute of Houston, Texas, will work on five of the cancer types—breast cancer, melanoma, multiple myeloma, squamous cell cancer of the lung, and non-Hodgkins lymphoma, according to the ACS statement.

Sloan-Kettering Institute for Cancer Research in New York City will work with four types of cancer—non-Hodgkins lymphoma, melanoma, squamous cell cancer of the lung, and cancer of the bladder.

Roswell Park Memorial Institute in Buffalo, New York, will study breast, melanoma and bladder cancers, and the Columbia University College of Physicians and Surgeons in New York City will conduct trials on patients with multiple myeloma.

Dr. Frank J. Rauscher, Jr., ACS senior vice president for research, has issued a note of caution against undue optimism about research results.

"Speculation which raises high hopes because of the Society's unusually large financial commitment is premature,"Rauscher said. "Interferon needs to be checked out because its value has not yet been proved."

Rauscher said the Society was concerned about hundreds of cancer patients and their families who have volunteered to participate in the clinical tests since August when ACS announced its intention to fund the project.

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"Unfortunately, there is absolutely no way that this can be arranged, either by the Society or the participating institutions,"he said. "The number of patients who will be studied is small. Their selection by the institutions will follow objective research protocols which exclude bias of any kind."

The ACS said the first shipments of interferon for use in the clinical tests have been made, and that initial studies should be underway in at least some of the participating institutions by mid-November.

However, because of the limited availability of the material, the project may not become fully operative for another 12 to 18 months.

The material is being imported from Finland, which at this time is the world's primary source of supply.

Interferon, first identified in 1957 by Alick Isaacs of Great Britain and Jean Lindenmann of Switzerland, is extracted from white blood cells. When produced by cells infected by a virus, it appears to protect neighboring cells from infection by the same virus.

First clinical studies were conducted in Sweden. In addition to the American study now being launched, clinical testing also is underway or in planning stages in Great Britain, France, Germany, Austria and Japan.

At Stanford, interferon has been used successfully by Dr. Merigan and his associates to prevent in cancer patients the spread of herpes zoster, a virus which causes chicken pox and shingles. Such a virus infection is more frequent in cancer patients because their immune responses have been reduced by chemotherapy and radiation treatment.

Interferon has not been synthesized nor has the gene for its production been isolated. Work is in progress in both areas.

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Mailed Friday, October 20, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415:497-6911

STANFORD—Thirty-two nurses who work in the newborn intensive care unit of Stanford University Hospital have submitted their resignations, to be effective Nov. 7. They have protested insufficient facilities and staffing on the unit.

Hospital administrator Gary A. Mecklenburg said the hospital shares the nurses' concerns, and "we are hopeful we can provide additional support to persuade them to reconsider their action."

The nurses' action came Thursday, Oct. 19, and hospital administrators, medical staff members, and nursing department representatives are now meeting to resolve the problems.

The nurses cited insufficient space for providing care in the specialty unit, and the need for more registered nurses on the unit as well as more intensive coverage by physicians.

Catherine Van Buren, staff nurse on the unit, said the major issue is inadequate medical staff support. She said space and staff have been inadequate for years.

She compared the unit to other intensive care units in the hospital which also have a similar number of beds but a greater number of nursing staff.

"The current facilities are overburdened and require replacement," says Mecklenburg.

"We are now in the final design process with architects for a new, more spacious intensive care nursery. Initial plans for the new unit, submitted this Fall, had to be redesigned, and we are now awaiting final approval by state licensing agencies. Construction should be underway early next year."

Interim steps to provide space relief for the staff are underway, such as providing conference rooms and additional storage space, he says.

Recruitment of specialized nurses for the unit is continuing, he says. Many recently hired nurses are still in orientation, but will be on the unit soon.

The nurses also said the number of physicians on the unit is inadequate.

According to Dr. Irving Schulman, chairman of Pediatrics, three fulltime faculty neonatologists, three junior-level neonatologists, and four fulltime resident physicians, all MDs, are assigned to the unit. According to Schulman, the physician staffing patterns are being reevaluated in an attempt to provide still more physician involvement.

Stanford is recognized as a leader in the field of intensive care for infants. The unit has facilities for 21 intensive care bassinets, and is usually at full occupancy. A total of 72 nurses normally staff the unit.

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Mailed Thursday, October 19, 1978

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
(415) 497-2558

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—An appeal of the dismissal of several causes of action in a damage suit against Stanford University Hospital has been filed by the two plaintiffs in the case.

In their appeal, current hospital employee Conroe C.McGee and former employee Frank Petta, have asked Judge Marilyn Pestarino Zecher of Santa Clara County Superior Court to rescind her ruling of last summer.

In that decision Judge Zecher dismissed three of four causes of action in the case, which involves claims of job harassment and demotion. However, no ruling was made on a fourth cause involving Petta.

In addition to the hospital and 20 John Does, three persons were named as defendants, including Jim McNally, former director of the hospital's Facilities Department, chief engineer William Ferguson and general foreman David Dominguez.

The court's ruling had dismissed all action against both Ferguson and Dominguez.

McGee and Petta had each sought $100,000 in general damages and $500,000 in punitive damages, or $1.2 million total.

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Mailed Thursday, October 19, 1978

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Professor Paul Berg of Stanford University yesterday, October 18, revealed his attempts to transplant functioning genes from one mammalian species to another.

The discussion of his work was in response to reporters' questions preceding an address on genetic manipulation to the clinical congress of the American College of Surgeons.

He did not intend to make public the details of his work which is being submitted for publication in a scientific journal.

But because of the premature announcement in the newspapers he has agreed to make the following statement.

Berg and his associates, Richard Mulligan and Bruce Howard, spliced a segment of DNA that codes for the beta chain of rabbit hemoglobin into SV40 virus DNA.

African green monkey cells were then infected with the hybrid virus DNA to permit the newly incorporated gene segments to be amplified, said Berg.

The Stanford researchers found that rabbit beta hemoglobin was synthesized in these infected cells.

This is the first instance in which a mammalian gene of one species has been made to function in another mammalian cell species using recombinant DNA techniques, said Berg.

In his earlier speech before the American College of Surgeons, Berg spoke about the background and recent developments in the recombinant DNA field.

Berg said these kinds of experiments have "opened the way to understanding the molecular organization of chromosomes and the mechanisms of gene expression in health and disease."

This understanding may shed light on the genetic basis of many diseases such as hemoglobin disorders, diabetes, etc., and may provide the basis for more rational therapies.

"It is quite clear that the isolation of genes and the ability to manipulate them puts us at the threshold of a new form of medicine, the treatment of crippling genetic diseases through replacement of defective genes by their normal counterparts," said Berg.

"There is no doubt that the development and introduction of the recombinant DNA techniques has opened a new era of scientific discovery, one that promises to influence our future in myriad ways.

"Yet this great leap forward has revealed, or perhaps created, an underlying apprehension about probing 'the nature of life itself.'"

Berg, Willson professor of biochemistry at Stanford, was one of the first scientists to raise questions about the potential dangers of recombinant DNA research in 1971.

Berg said the concern about these experiments expressed by him and other scientists "triggered a scientific, public and governmental debate which has raged for the past three years. It is still not ended." However, "I and my colleagues meant to raise for scrutiny and analysis the issue of whether recombinant DNA experiments are safe," he said.

"I and most scientists believe that our initial concerns were premature and unwarranted," he said.

Presently, guidelines established by the National Institutes of Health in 1976 require that recombinant DNA research follow strict procedures of physical and biological containment.

Berg's experiments, for instance, are conducted in a carefully controlled laboratory environment designated P3, using SV40.

"While a case can be made that some vigilance in performing those experiments is prudent, the bulk of research in this field should be relieved of the bureaucratic restraints that now stifle it," said Berg.

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Mailed Business Wire Thursday, October 19, 1978

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—The Northern California Infant Medical Dispatch Center has received $83,000 from the State of California to continue emergency transport of seriously ill infants to intensive care nurseries.

The center, based at Stanford University Hospital, coordinates the intensive care resources of 10 hospitals from the Oregon border to the Tehachipi Mountains. A similar center, at the University of Southern California, serves the southern portion of the state.

The money is part of $300,000 given to support the state-wide program of emergency infant transport for the year beginning July 1, 1978.

The Southern California center will receive $100,000, and the remainder will be given to the State Department of Health Services to cover the administrative and evaluation costs of the program, according to Dr. Alvin Hackel, director of the Northern California center.

"We feel very fortunate to have this support in light of the financial problems brought about by Proposition 13," said Hackel, also associate professor of clinical anesthesia and pediatrics at Stanford University School of Medicine.

Funding of the program by the State expired June 30 and was not renewed pending examination of the impact of Proposition 13 on the State budget.

During this period, the March of Dimes Foundation gave $20,000 to support the Northern California center. That money will now be returned to the Foundation, said Hackel.

"We deeply appreciate these emergency contingency funds, which allowed us to continue the program until the necessary legislation was passed," he said.

During the next year, the transport program will be evaluated by the State Legislative Analyst for its effectiveness in improving the outcome of babies who require transport to intensive care nurseries, said Hackel.

"In the past, up to two hours have been spent just finding an intensive care nursery with an available bed for these babies," he said. "We feel this extra time compromised the ultimate outcome of these patients."

In comparison, the dispatch centers have reduced the search for empty beds to a matter of minutes, by coordinating intensive care nurseries.

The results of the evaluation will be forwarded to the State Legislature and taken into consideration when the funding of the program comes up for renewal next July, said Hackel.

Also this year, a computerized bed locator system which keeps track of available beds automatically, will be added to the program. Presently, the center staff telephones hospitals with intensive care beds every eight hours, or more often in case of emergencies.

"This system will be the first of its kind in the U.S.," said Hackel, "and has evoked considerable interest in other states."

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Mailed Wednesday, Oct. 18, 1978

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—In Poland, a doctor's career is not as prestigious as in the United States, and doctors may earn one third the salary of bus drivers, says a Stanford physician who recently returned with observations on many aspects of social medicine in Poland.

Dr. Iris Litt, associate professor of pediatrics and director of adolescent medicine at Stanford Hospital, was one of nine doctors in a U.S. delegation of pediatrics specialists who visited Poland in September.

The delegation's visit was part of a six year exchange program between the two countries to explore issues in medical education and manpower.

The trip was sponsored by the international division of the department of HEW.

The delegation's Polish hosts were from the medical academies in the cities of Lublin and Cracow.

Polish students graduating from high school ranked their career choices, and engineering came out on top while physicians were 16th on a list of 30, Litt learned.

Presently, 90 percent of Poland's physicians are women, but in an effort to recruit more men, admissions committees now tack on ten extra points to any man's score.

One woman pediatrician stated, "the man must make the important decisions," in explaining to Litt why a man chaired the pediatrics department at her medical academy, despite figures indicating that 98 percent of Polish pediatricians are women.

The six year training program for doctors includes traditional medical courses, Litt's group learned, as well as training in social medicine, ethics, health care delivery, school health and occupational health.

In each province, three seperate systems provide health care, each with its own set of medical records:

- ambulatory care is delivered through rural health stations in the countryside, primary care centers in towns, hospital outpatient departments, and polyclinics where specialists may be consulted
- school health systems
- emergency hospitals, which handle all medical problems after hours

Litt feels that the lack of a unified system and the duplication of medical records are two obstacles to efficient health care delivery in Poland.

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Government physicians work seven hours per day, five days per week, and five hours on Saturday. After hours, they may work in private practice, but have no access to government facilities.

The group learned that approximately 20 percent of the population still consults a private physician.

Continuity of care is a strong point of health care delivery in Poland, according to Litt. Individuals continue to see the same physician, even though not on a private basis. The system also permits home visits, and dental care is provided.

Continuing medical education for physicians is emphasized. An increase of salary is guaranteed to those who participate for two weeks each year.

A shortage of physicians in the countryside has prompted the government to take action, including favoring rural candidates for medical school, and offering cars and houses as incentives to lure doctors into the countryside.

When Litt and her colleagues exchanged information, she learned that suicide attempts are common among Polish teenagers, as they are here.

Drug abuse occurs with cleaning fluids, other inhalants and alcohol, while opiates are not a problem, as they are in the U.S..

Litt's colleagues told her there are no rapes, no child abuse, and teen pregnancies are so rare as to be an insignificant social or medical problem.

Although abortions are available, Litt was unable to obtain information about them and she observed anti-abortion posters in numerous Catholic churches which she visited.

Birth control pills are available but the rhythm method of contraception is encouraged, and IUD's and diaphragms are seldom used, the group was informed.

Conditions in the hospitals Litt visited varied from bleak and crowded to modern and cheerful. One obstetrical hospital was particularly dreary, Litt reports, and she was dismayed by the lack of attention to issues such as maternal-infant bonding and breast feeding.

However, Litt learned that under the Polish system of health care, mothers receive four months paid leave following delivery, and two years unpaid leave beyond that, with their same position guaranteed upon return.

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Mailed Wednesday, October 18, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—A new series of four public lectures on "You and Your Health: Options for the Medical Consumer" will begin Wednesday, Oct. 25 at the Stanford University School of Medicine.

The weekly presentations will be held at 7:30 p.m. in the Sherman Fairchild Auditorium. They are free of charge.

"Taking Care of Yourself: A Strategy for Health" will be the subject of the first lecture, presented by Dr. James F. Fries, associate professor of medicine, Division of Immunology.

Fries is coauthor of the popular consumer's guide to medical care, *Take Care of Yourself,* and a similar book on pediatric care, *Take Care of Your Child.*

He is national director of the American Rheumatism Association Medical Information System, and has been involved in medical decision analysis. He will discuss ways an individual may assume personal responsibility for health, monitoring important conditions, and seeking medical advice when appropriate.

Other lectures are:

NOVEMBER 1: "Good Health Habits: A Way of Life," by Dr. Ralph S. Paffenbarger, Jr., professor and head, division of epidemiology, Department of Family, Community and Preventive Medicine. Dr. Paffenbarger will suggest some habits worth cultivating based on his long-term studies of disease patterns. His research has focused on the relation of vigorous exercise and heart disease, particularly in former college students, and the causes of certain types of cancer.

NOVEMBER 8: "Early Disease Detection: Designing a personal Screening Program," by Dr. David M. Eddy, associate professor, Departments of Engineering Economic Systems and Family, Community and Preventive Medicine. Eddy will discuss annual physical exams, screening tests for cancer and other health maintenance topics.

NOVEMBER 15: "How to Choose and When to See the Doctor," presenting a panel of physicians who will suggest guidelines for selecting a doctor and outline some conditions that call for medical consultation. Panel members include Dr. William C. Fowkes, Jr., associate professor of clinical medicine and head of the division of family medicine; Dr. Keith I. Marton, assistant professor medicine; and Dr. Harold C. Sox, Jr., assistant professor of medicine and head of the division of general internal medicine.

The Progress in Medicine lectures are presented as a community service by the dean and faculty of the School of Medicine and by the members of the Medical Center Council.

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Mailed Tuesday, October 17, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—A distinguished panel will discuss "Legal and Moral Aspects of Health Care: Informed Consent" in a free public session Wednesday, Oct. 18, at Stanford.

The session is being sponsored by the Stanford Workshops on Political and Social Issues (SWOPSI) and the Stanford Medical Students Association. It will be held from 7:30 to 9:30 p.m. in Room 112 of the Center for Educational Research at Stanford (adjacent to the law school).

Panelists include Sheryl Brown of the Coalition for Medical Rights for Women; Dr. Roy Cohn, Chidester Professor (emeritus) of Surgery at Stanford; Dr. Halsted Holman, Guggenheim Professor of Medicine at Stanford; Dr. Andrew Jamiton, Health Policy Program at the University of California in San Francisco; and John Levin, lawyer and chairman of the Human Subject Review Committee of the Northern California Cancer Group. Moderator will be Jinnet Fowles, a Ph.D. candidate for Communication Research at Stanford.

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Mailed Friday, Oct. 13, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Legal action to ensure continued access for community physicians to Stanford University Hospital's clinical services will be taken if necessary, according to a newly formed group of private practice physicians.

"We will exhaust every other means before we go to court, but we also will not negotiate to death," said Dr. Paul Cooney, chairman of the Community Physicians for Patient Care, to the nearly 150 members of the group attending its first general meeting Thursday night, Oct. 12, at the Medical Center's Fairchild Auditorium.

Attorneys have been retained by the group to help with organization and to determine the legal subcommittee, although "there are no plans for litigation now."

Over $18,000 has been raised to support the group in the last two months, most of the money coming from the $150 dues charged members. To date over 150 community physicians have joined the group.

According to Dr. Sidney Hecker of the Palo Alto Medical Clinic, the Clinic's executive committee has pledged to support the group, and is encouraging Clinic members to join on an individual basis.

In addition, members of the group have met with Palo Alto Mayor Scott Carey and the City Council, and with Dr. Peter Bing, chairman of the Stanford University Board of Trustees.

The City Council is "committed to preserving the concept of a community-access hospital," said Cooney, who practices hematology and internal medicine in Palo Alto and is a member of the clinical faculty at the Medical School.

The community physicians group was formed in response to the Aug. 1 decision by the Hospital Board of Directors reaffirming a closed medical staff policy in the Hospital-based clinical services restricted to faculty physicians.

In its decision, the Board said it was persuaded by arguments that "a closed-staff policy is essential to the successful. . .research and teaching missions of the School of Medicine."

The Hospital-based clinical services in question include anesthesia, cardiology, neurology, and pathology laboratories, the radiology service, and all other specialized laboratories.

These services have been restricted to full-time and part-time paid faculty, except for 41 community physicians who qualify for privileges under the 1968 Palo Alto city contract which granted full control of the Hospital to Stanford University.

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Medical and surgical services are open to community physicians who are members of the medical staff and admit patients to the Hospital. There are 550 community physicians, including the 41 with access to clinical services, who are members of the medical staff.

Under the contract, clinical privileges to community physicians will gradually diminish as the 41 members of the "affinity group" retire.

The prospect of diminishing privileges to laboratories and specialized equipment has been a source of concern for many community physicians who specialize in fields encompassed by the clinical services.

"The board's memorandum (reaffirming the closed medical staff rule) says, 'You may not practice the new technology of medicine in this community', " said Cooney.

As a result young physicans will not come here to practice, and private clinics, such as Palo Alto Medical Clinc, will have difficulty in renewing their medical staffs, he said.

"The variety and quality of medical care will diminish," he said, as will the freedom to choose one's doctors and consultants. "In the future, the use of house staff and students will be mandatory for all patients who enter Stanford Hospital."

When there is no competition from private clinics, Stanford "will be able to spread the cost of teaching and research to the patient," said Cooney. The increase in the cost of medical care at Stanford "is tempting, almost irresistible, inevitable," he said.

Cooney said we would like to see the present membership of the affinity group maintained at present levels, with community physicans who have access to the clinical services replaced as they retire.

"Stanford is a unique place where community and academic medicine are practiced under the same roof," said Cooney.

"We regret that a new administration is retreating from this high ground to an arena of fiscal control and political dominance," he quoted from the group's official aims and purpose statement.

"We object to the concept that private physicians and their patients have suddenly become a hindrance to academic pursuits."

The concerns of the community physicians group will be discussed at a meeting Thursday, Oct. 19, between Mayor Carey and Councilman Roy Clay, and University President Richard Lyman, Dr. Clayton Rich, vice-president for medical affairs and dean of the Medical School, and Robert M. Rosenzweig, vice-president for public affairs.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Dr. Joseph P. Kriss, pioneer in nuclear medicine at Stanford University School of Medicine, has been presented the Society of Nuclear Medicine's Western Regional "Distinguished Scientist" award.

The award was made Friday, Oct. 13 at the third annual western regional meeting of the society in Vancouver, B.C. Dr. I. Ross McDougall, associate professor of radiology and medicine, was selected to present the honor, which is given to one individual annually.

Kriss, professor of radiology and medicine, has been on the faculty of the School of Medicine since 1948. He has served as director of the division of nuclear medicine since 1958.

He has authored more than 130 full manuscripts on a wide spectrum of nuclear medicine topics, including research on bone scanning, bone marrow scanning, hematological studies, renal evaluation, Gallium scanning for tumors, pulmonary scanning and nuclear cardiology.

His heart research work is internationally recognized. Kriss was instrumental in promoting the use of a specialized computer for dynamic cardiac studies.

He has also received recognition in the diagnosis and treatment of thyroid diseases, and has made major contributions in understanding the cause of Graves' disease and the prominent eyes associated with this condition.

His reputation is well-known in the management of all thyroid disorders, and patients are referred to him from throughout the U.S.

Kriss is vice chariman and founding member of the American Board of Nuclear Medicine, and currently serves as chairman of the examination committee of the Board.

He is past recipient of the Henry Kaiser Award for teaching at Stanford.

Kriss received his B.S. from Pennsylvania State College, and his M.D. from Yale University. Earlier this year he was named one of eight distinguished alumni of Penn State.

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Mailed Friday, Oct. 13, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

Editor-Photos available if not included with story

STANFORD—The family birth program is now underway at Stanford University Hospital.

Beginning Monday, October 16, two rooms are available for women who wish "to labor and deliver in a natural setting, surrounded by their families and close friends, but within the security of modern hospital facilities," says Judy Schmidt, R.N., program coordinator.

"Our goal is to provide an emotionally satisfying, yet medically safe, birth experience.

"The family birth rooms resemble warm, cheerful bedrooms in a home," says Schmidt. The rooms, located next to the delivery suite and postpartum nursing unit, have carpeted floors, private baths with showers, and other home furnishings.

Any woman may use the family birth rooms unless her physician anticipates problems with labor and delivery.

She may have any adults present that she wishes, but visitors are expected to be free of any communicable illness or infection.

During a six-month evaluation period, children may be present during labor and delivery, but must be attended by a responsible adult other than the father or labor support person.

Children may not visit newborns or patients other than their family.

Experienced professional nurses, as well as obstetricians and neonatologists, are present to assist during labor and delivery.

Women who choose to deliver in the family birth rooms should receive prenatal education, and must attend orientation sessions at the hospital. Appointments for the orientation can be made by calling 497-5458.

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Mailed Thursday, October 12, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—The American Red Cross-Stanford University Blood Center is making plans to move its facility from the current site in the Stanford Industrial Park to a new location adjacent to the Stanford University Medical Center.

The move has been in response to academic program needs within the School of Medicine, and the desire of the Red Cross to have its blood center operations more closely integrated with major teaching centers, according to Dr. Clayton Rich, vice president for medical affairs and dean of the medical school.

The University Board of Trustees has approved the academic program for the center. It involves research and teaching in immunogenetics and immunohematology under the auspices of the Department of Pathology.

Also the trustees Tuesday, Oct. 10, approved a recommendation of the committee on land and buildings to lease with an option to buy the Redwood Building at 800 Welch Road for the blood bank relocation. A budget request for building renovation will be submitted to the University trustees at a later date.

Dr. Donald Avoy, director of the American Red Cross Blood Services for the Central California Region said, "the ultimate beneficiary of the proposed move will be not only the Stanford University Hospital patients served by the Blood Center, but also to some degree all of the patients covered within the four-county region.

"This move is consistent with our goals of having our blood centers well integrated into major medical teaching complexes. We hope ultimately to move the San Jose Center closer to the Santa Clara Valley Medical Center."

The blood center, located at 3330 Hillview Avenue in Palo Alto, was created six years ago as a combined effort of Stanford University Medical Center and the Central Regional Red Cross Blood Services Program.

The center's medical director is Dr. F. Carl Grumet, and the associate director is Dr. Edgar Engleman, both members of the Department of Pathology. Currently, they are engaged in research supported by the National Institutes of Health concerning transplantation antigen testing and the genetic control of immunity.

According to Grumet, the center has dual objectives of providing the highest quality clinical banking services along with intensive research efforts in blood banking sciences.

Presently the Blood Center supplies about two-thirds of Stanford hospital's blood product needs, he said. It also conducts specialized blood cell testing for Santa Clara, Santa Cruz, San Benito and Monterey counties.

Grumet said the relocation adjacent to the Medical Center "will vastly improve our communication with colleagues and will facilitate access to specialized programs and equipment available in other medical school departments.

"In addition, the closeness to the hospital should also improve patient care by reducing delivery time of specialized blood products to patients."

Plans for the proposed relocation at Stanford include a marked upgrading of research laboratory space, and a greater effort on the part of Stanford personnel in the recruitment and processing of blood from volunteer donors, according to Grumet.

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Mailed Wednesday, October 11, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Linda R. Meier of Atherton and Dean O. Morton of Palo Alto have been appointed by Stanford University Trustees to the Stanford Hospital Board of Directors.

Meier, a 1961 Stanford alumna, has been active in community activities on the Peninsula, and is currently a member of the board of directors of Children's Hospital at Stanford.

Morton is executive vice president of Hewlett-Packard Company.

The new members succeed Dr. Alejandro Zaffaroni of Atherton who has served on the Board since 1965, and Carroll J. Roush of Portola Valley who has served since 1974.

Meier is president of the board of trustees of the Peninsula Center for the Blind, and is on the board of directors of Children's Hospital at Stanford Family Center. She is vice chairman of the Founding Board of the Cardinal Club of Stanford, and past president of the Junior League of Palo Alto.

Morton received an electrical engineering degree from Kansas State University, and a master's degree in business administration from Harvard University. He has served as general manager of Hewlett-Packard's Medical Electronics Division in Waltham, Mass. and general manager of the Medical Products Group. In 1977 he was elected executive vice president and director of the company.

Conrad F. Gullixson of Palo Alto will continue to serve as president of the Board, and John M. Santana, Jr. of Palo Alto will continue as secretary-treasurer.

Frank H. Roberts of Palo Alto will replace Zaffaroni as vice president.

Others reappointed to the nine-member board are Dr. Edward L. Ginzton of Los Altos Hills, Kenneth R. Hansen of Los Altos Hills, Mervin G. Morris of Atherton, and Dr. Clayton Rich, vice president for medical affairs and dean of the School of Medicine.

Members serve terms of one year, but may be reappointed.

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Mailed Thursday, October 12, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415:497-6911

STANFORD—Abnormalities in the reproductive systems of men exposed to DES in the womb do not occur any more frequently than in unexposed controls, according to a preliminary study by researchers at Stanford University School of Medicine.

DES is a synthetic form of estrogen originally used during the early 1950's to prevent miscarriages. The hormone was later shown to be ineffective in prolonging pregnancies, and its use for this purpose has since been discontinued.

Some studies have found increased rates of vaginal cancer among the female children of women who took DES during pregnancy, and increased rates of genital and possible semen abnormalities among the male children.

However, the studies in males have not been confirmed by the work done at Stanford.

Drs. Robert Kessler and Robert Andonian of the division of urology found no difference in the incidence of genital cysts and pathological semen quality among 25 DES-exposed men compared to 25 unexposed controls in a recent double blind study.

Kessler and Andonian reported these findings at last year's Pacific Coast Fertility Society meeting, and plan to continue the study.

"There is still a question about what effect DES has on males," says Kessler. "This preliminary study suggests that it has no effect, but only 25 men were examined."

In addition, the possible increase of testicular cancer among these men reported in some studies should be investigated, he says.

Men who know they were exposed to DES and would like to participate in the study should contact the division of urology, 497-5746.

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Mailed Wednesday, October 11, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415:497-6911

STANFORD—A Philadelphia man has received his third heart transplant in two and a half years, according to Stanford University Hospital surgeons. This is the first time that any patient has received three heart transplants.

The third transplant was performed on Jerome Young, 43, early Friday morning, Oct. 6, 1978. He is in stable condition, and he now has "fairly good chances of longterm survival," according to cardiovascular surgeon Dr. Edward Stinson.

Young's first transplant was performed May 12, 1976 because of extensive coronary artery disease of his own heart.

His second transplant was done Tuesday, Oct. 3, 1978 because of recurrence of the original disease. Stanford surgeons have now performed second transplants for nine patients, and feel the procedure is "clearly appropriate" for unremitting rejection of the heart or return of the disease.

But Young's second heart failed to function strongly and was not contracting sufficiently to maintain body functions. According to Stinson this is a rare phenomenon, but has happened at least once before.

Stinson says such a third transplant may be a "reasonable alternative" in critical situations where the heart cannot function properly and a donor heart is available.

Since 1973 Stanford has transported hearts, outside the body, from donors as far away as Los Angeles. In the present patient, both his second and third hearts were obtained from outside the Bay Area.

The heart is transported by plane with Stanford surgeons accompanying it. It is flushed with and stored in an electrolyte solution, then cooled to near freezing. The technique slows down the metabolic activity of the heart and preserves it during transport.

More than 20 hearts have been transported in this way in recent years.

Since 1968, Stanford surgeons have performed heart transplants in 155 patients, with 66 currently living.

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Mailed Friday, October 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—A settlement for an undisclosed amount has been reached in Stanford University's claim against the architectural firm that designed the new wing of Stanford University Hospital.

"A satisfactory resolution of the dispute has been reached," according to John Schwartz, University legal counsel. He declined to disclose the amount of the claim.

"The architectural firm insisted as a condition of the settlement that its terms remain confidential," said Schwartz.

In the claim, the University contended the Texas firm of Caudill Rowlett Scott was responsible for delays in the project, design failures in the building, and that the project was substantially over budget.

The new hospital wing, which now houses intensive care beds and various services including radiology, surgical pathology and postanesthesia recovery, was begun in 1973. It was scheduled to be completed in May, 1975.

Because of code deficiencies and construction delays, patients were not actually admitted until late in 1976. Planning is still underway to complete the building's shell space.

Originally Phase I construction of the wing was to have a total project cost of $9.1 million.

That budget was increased several times, raising the project cost to approximatly $12.7 million.

The total cost of Phase I has been made more than $18 million, due to equipment, activation and new program costs, correction of code and licensing deficiencies, and increased finance charges.

The University filed a demand for arbitration in 1977, and an arbitration panel had been selected during the summer. According to Schwartz, the settlement was reached during discussions in September.

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Mailed Wednesday, October 4, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
FOR IMMEDIATE RELEASE
STANFORD—

The Stanford Medical School Faculty Senate Monday night, Oct. 2, voted "to sustain its commitment to minority admissions" and to eliminate its Minority Admissions Committee in favor of a single, expanded Admissions Committee.

The new policy becomes effective immediately.

The Faculty Senate reviewed the School's admissions policy in light of the July U.S. Supreme Court ruling in *Regents of the University of California vs. Bakke.*

In the Bakke case, the court held strict racial quotas to be unconstitutional while leaving ample room for the continuation of affirmative-action programs in effect on many campuses.

Stanford Medical School has had a minority admissions program since 1968. The Faculty Senate had set a minimal goal of at least 20% of each entering class from minority groups, specifically blacks, Mexican-Americans, and American Indians.

The Minority Admissions Committee had been responsible for the separate processing, screening, and accepting of these minority students into the entering class.

The new single Admissions Committee will consider both minority and nonminority candidates. Also, while the earlier committee had 12 faculty members and three student members, The new group can have up to 14 faculty members with additional minority representation.

In revising the admissions policy to conform with the guidelines of the Bakke case, the Faculty Senate said it had accomplished these objectives:

• The selection process assures that all positions in the entering class are open to competition among all applicants.

• It assures that the initial screening and the final selection process possess sensitivity and perception to recognize promise and potential among a diverse number of applicants.

• It can adequately evaluate each candidate's special qualities from the standpoint of the School's needs for a diverse and intellectually superior class.

Three panels separate from the Admissions Committee will aid in the selection process: a general panel, a newly created minority panel, and a panel that reviews applicants for the School's Medical Scientist Training Program (MSTP).

application folders will be reviewed by a panel member (general, minority, or MSTP), according to their category, and by a second member from another panel. The purpose is to select about 600 candidates who will be granted interviews.

Interview reports obtained by panel members for both minority and nonminority applicants will be submitted to the single Admissions Committee which will narrow down the final selection to 250 candidates. From this pool the selection of 86 members of the entering class will be made.

The Faculty Senate stipulated certain factors that should be taken into account in selecting the final group of applicants.

They include grades and Medical College Admissions Test (MCAT) scores, other evidence of scholarly achievement, leadership qualities, minority status, gender, and distance traveled in the context of social or economic disadvantages.

"The aim," said the Senate, "will be to obtain a pool of superior candidates who will be about equally qualified and sufficiently diverse to permit the final selection of a balanced, diversified class."

The Faculty Senate, however, voted to form a committee to investigate in more detail the feasibility and possible mechanism of a weighting system for the selection criteria.

In addition, the Senate asked the Admissions Committee to take into account the existence, within the applicant pool, of about 50 to 60 outstanding candidates who will merit immediate acceptance.

Based on past experience, the Senate said, these "super-accepts" will occupy about 30 places in the entering class.

Stanford University School of Medicine receives more than 5,500 applicants a year.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—A five-point program to help resolve present differences between community physicians and Stanford University Hospital has been proposed by a community physicians group.

The group has announced it will hold a meeting to discuss its proposals at 8 p.m., Oct. 12 in Fairchild Auditorium in the Stanford University School of Medicine.

In addition, Palo Alto Mayor Scott Carey and Councilman Roy Clay will meet October 19 with three top Stanford administrators to discuss problems associated with the hospital and the community.

The administrators are President Richard W. Lyman, Dr. Clayton Rich, vice president for medical affairs and dean of the medical school; and Robert M. Rosenzweig, vice president for public affairs.

The physicians formed the group in protest against the hospital's restrictions on medical staff privileges in the hospital-based clinical services.

These include anesthesia, cardiology, neurology and pathology laboratories; the radiology service with its diagnostic, nuclear medicine, and radiotherapy divisions; and all other specialized laboratories.

The board of hospital directors touched off the controversy when it reaffirmed a long-standing policy of restricting staff privileges in these services to faculty physicians.

The board said it based its decision on arguments that "a closed staff policy is essential to the successful research and teaching missions of the School of Medicine."

The decision did not affect any community physicians now holding privileges in these specialized services, and did not alter the hospital's "open staff" policy regarding physicians who admit patients to the hospital's medical and surgical services.

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The latter group comprises the majority of the hospital's 550 community doctors. Provisions for appointment of community physicians to the medical staff are stipulated in a contract signed in 1968 when Stanford purchased Palo Alto's holdings in the hospital.

In a letter to community physicians, Dr. David P. Cooney of Palo Alto criticized the board for placing "great stress on the teaching and research missions of the hospital" and clearly placing "less emphasis on patient care, especially by community physicians."

Cooney, who heads the steering committee of the Community Physicians Group, said the local private physicians are concerned about the effect of the board's new attitude on the quality, cost, and freedom of choice of medical care for the citizens of this community.

He said the aims of the group include:

• to preserve and improve the quality of medical care available to the citizens and to preserve their freedom of choice.

• to urge the hospital board to recognize that the hospital is both a community and academic facility.

• to have the hospital board decision with respect to hospital-based clinical services withdrawn.

• to revise the hospital staff by-laws to create a truly self-governing medical staff and establish community representation in the planning and delivery of all hospital services.

• to create regular communication between the medical staff and the hospital board.

The hospital medical staff by-laws were revised last year to conform with recommendations of the Joint Commission on Accreditation of Hospitals. The new by-laws provided a new framework for the organization of the medical staff. They were drafted by a committee composed of faculty and community physicians.

Under the revised by-laws membership of community physicians on the medical staff's executive committee, the Medical Board, was increased.

Mailed Tuesday, October 3, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911
EDITORS: Photos available if not included with story.

STANFORD—Classes began Wednesday, September 27 for 86 first year medical students at Stanford University School of Medicine.

Over 50 undergraduate institutions and five foreign countries are represented in the class, which was chosen from a pool of 5600 applicants, according to Karl Gray, director of student affairs.

Universities which contributed four or more students to the first year class include Stanford, Harvard, Yale, University of California at Berkeley, and Cornell.

The half dozen foreign students come from Barbados, United Kingdom, Vietnam, Mexico and the Republic of China.

Twenty percent of the students represent minorities--black, chicano, and native American. Thirty percent are women.

These percentages, as well as the class size, are similar to those of past years, said Gray.

The average age of the students is 23, although a handful of this year's class are in their 30s.

The in-coming class brings to 385 the number of students in all classes of the medical school. Most students will take lecture courses their first two years, and begin clinical work their third year of medical school.

This year, the first clinical year class was increased by five students to 90, in response to a new federal law requiring a once-only five percent increase in this class for all U.S. medical schools.

The law permits the transfer of students from foreign medical schools, or from American schools that have only two-year programs.

According to Dr. John Steward, associate dean of student affairs, the five transfers at Stanford are all U.S. citizens, although three have done work in foreign medical schools.

Two are graduate students with experience equivalent to that of Stanford students beginning clinical work.

Steward said the increase will have "no major financial impact on the school."

Medical students this year pay a total of $1807 each quarter in tuition and fees. Tuition for next year (1979-80) has not yet been determined, said Gray.

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Mailed Monday, October 2, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—Self-defense against heart attack or stroke is the subject of a new skills training book by a Stanford University Medical School professor.

"Because our environment surrounds us with deleterious influences, we need skills to use in our self-defense," says Dr. John W. Farquhar.

The book, *The American Way of Life Need Not Be Hazardous To Your Health*, (208 pp., W.W. Norton, New York, $9.95), teaches individuals how to gain control over their health by introducing them to skills for stress management.

These skills are used later to tackle other health risk areas, including exercise, nutrition, weight control and smoking.

Farquhar, professor of medicine, has directed the Stanford Heart Disease Prevention Program for more than five years. Many of the techniques recommended in the book already have been used successfully in this program and elsewhere.

"There are books on smoking cessation, books on weight control, books on stress management and books on exercise, but generally they have concentrated on why change is needed, not on how to achieve it," says Farquhar. "Relating all of these risk factors to one another is also new," he adds.

Armed with background information on why changes in the average American life-style are necessary for good health, the reader then may pursue Farquhar's practical program for achieving "self-directed change."

The book helps readers to make gradual but permanent changes in everyday living habits, through a series of steps:

- identifying the problem
- building confidence and commitment to change
- becoming aware of negative behavior patterns
- building a personal action plan
- evaluating progress regularly
- maintaining the new life-style

"We often live as if our habits don't matter. They do," says the author, adding "the overwhelming majority of fatal and near-fatal episodes of premature heart attack and stroke are preventable."

The techniques introduced in the book include relaxation exercises to relieve tension, self-contracts for change, achieving support from others, substituting constructive thinking patterns for negative attitudes, and self-rewards for progress.

Farquhar acknowledges that making permanent living changes is not simple, and accepting slow progress is part of the battle, he says.

"It's all right to go three steps forward and two steps back. People must learn to treasure that one step forward," he says.

Farquhar thinks that books may provide one method of effective public health education.

"There is a definite place for health action in this country, but you need a well-informed public," he says.

"It is my deepest hope that someday the quality of public health education will be so excellent, and our society so supportive of healthful life-styles, that we will find it simple to retain our natural birthright of good health. Until that time, this book is one man's attempt to work toward that goal," Farquhar states in his introduction.

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Mailed Thursday, November 30, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos 415-497-6911

FOR IMMEDIATE RELEASE

STANFORD—

If the increase in the number of surgeons in the U.S. continues unchecked, the result will probably be higher fees and also more operations, according to a study published by the National Bureau of Economic Research (NBER).

Conducted by Professor Victor Fuchs of Stanford University and NBER researcher, the study provides "considerable support" for earlier research that surgeons shift the demand for operations.

"Other things equal, a 10% increase in the surgeon/population ratio results in about 3% increase in the number of operations and an increase in price," writes Fuchs in the *Journal of Human Resources'* special supplement on "The Economics of Physician and Patient Behavior."

Fuchs notes that differences in supply of surgeons seem to have "a perverse effect" on fees, raising them when the supply increases.

"Surgeon supply is in part determined by factors unrelated to demand," Fuchs says. Surgeons prefer attractive areas in which to live and practice.

Evidence that some variation of Parkinson's law may be at work in the field of surgery in the United States was presented nine years ago by Dr. John P. Bunker of the Department of Family, Community and Preventive Medicine at Stanford.

In his study Bunker observed there were twice as many surgeons in proportion to population in the U.S. as there are in England and Wales, and proportionately they did twice as many operations.

Another study by Dr. Charles Lewis of U.C.L.A. compared operation rates and surgeons among 11 population regions in Kansas and made the startling observation of three-to four-fold variations in rates for a dozen common operations. Included among them were such operations as appendectomy, cholecystectomy, herniorraphy, and tonsillectomy.

The numbers of operations were shown to vary directly with the number of surgeons and hospital beds, and Lewis suggested that it might reflect a sort of Parkinson's law.

Yet these and other earlier studies were challenged by skeptics on the basis that the meaning of the difference in statistics was not clear.

Fuchs' approach used a much wider data base to conduct a statistical analysis of differences in the supply of surgeons and the demand for operations across the nation as a whole in 1963 and 1970.

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His research used data on the frequency of 11 common operations obtained in the Health Interview Survey conducted by the National Center for Health Statistics. The physician supply figures came from the directory published by the American Medical Association, "Distribution of Physicians in the U.S.," considered reliable.

The relationships of variables that determine physician choice of location, consumer demand, educational level of population, complexity and necessity of procedures, and the effect of supply on price were taken into account.

Fuchs concludes that an increase in the supply of surgeons in a given area results in an increase in demand for operations.

This effect is true even if one takes into account the weakness of some of the data, he says. "Indeed, it should be noted that some of the weaknesses serve to understate rather than exaggerate the extent to which surgeons can shift the demand for their own services."

The finding that when the number of surgeons goes up the operations increase also was true for 1970 and 1963, the years compared.

The effect was present and even stronger when metropolitan and nonmetropolitan areas were studied separately.

The effect of supply of surgeons on the demand for operations was negatively correlated with the level of education of the population. (The higher the educational level, the weaker the effect on demand).

The supply of surgeons affected more strongly a demand for procedures deemed less urgent and less necessary by physicians.

"Surgeons have considerable discretion in choice of location. Their distribution is determined partly by their preferences as consumers," says Fuchs. "Their preference for metropolitan living may reflect the professional attraction of the medical environment."

As a result the distribution of the supply of surgeons is partly unrelated to the underlying demand for operations.

Fuchs also found that when surgeons are plentiful in an area, not only the demand for operations goes up, but also the prices.

"But why don't they raise them even higher in areas where surgeon/population ratios are low?" he asks.

Fuchs suggests a possible explanation: "Their incomes are already satisfactory because of their higher (but not excessively high) workloads, and they have less incentive to induce additional demand."

"The implication for national policy of these results seems striking," he says. "If the surgeon/population ratio should increase (this seems likely if no action is taken), the result will probably be higher rather than lower fees, and also more operations."

Fuchs, professor of economics and family, community and preventive medicine at the Stanford School of Medicine, is presently on leave at the Center for Advanced Study in the Behavioral Sciences at Stanford.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—William L. Evans has been appointed director of the Department of Facilities at Stanford University Medical Center.

Evans begins his duties Dec. 7, according to Peter J. Levin, executive director of Stanford University Hospital and Clinics.

Evans, 46, will assume control of a department which is responsible for the maintenance of buildings, grounds and equipment at the medical center. The Department of Facilities has an approximate operational budget of $6 million annually, and about 125 employees.

Since 1973 Evans has served as director of facilities at Fairchild Semiconductor in Mountain View. While there he has managed the operation, rearrangement and expansion of more than one million square feet of space, including planning, engineering, maintenance and plant operations.

At Fairchild he has managed two local and four remote construction projects which are now complete, and two additinal projects underway.

Evans was also a founding partner of the Tech V Corp. of Santa Clara, and is a former facilities manager at Memorex Corp., also of Santa Clara. He is also a former senior facilities engineer at IBM in San Jose and development engineer at Aerojet General Corp. in Sacramento.

A graduate of Cal Poly, San Luis Obispo, Evans succeeds James McNally, who resigned June 30.

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Mailed Monday, November 27, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Dr. Lars M. Vistnes, associate professor of surgery at Stanford University School of Medicine, has been awarded an honorary fellowship by the American Society of Ophthalmic Plastic and Reconstructive Surgery.

Vistnes, who also is chief of surgery at the Palo Alto Veterans Administration Medical Center, was awarded the fellowship for his work in reconstructing the orbits, or eye sockets, of persons who have lost an eye so that they can wear a prosthetic eye.

The award was presented October 27 at the Society's annual meeting in Kansas City, Missouri. Dr. George Paris, an ophthalmic plastic surgeon at the Menlo Medical Clinic and clinical assistant professor at Stanford, accepted the award in the absence of Vistnes.

According to Paris, Vistnes is one of only four physicians who have received fellowships by the Society.

Another awardee, Dr. Ray N. Berke, clinical professor emeritus of surgery at Stanford, received a Society fellowship in 1974 for his work on ptosis, drooping eyelids.

Vistnes, 51, is a native of Stavanger, Norway, and received his undergraduate and medical education in Canada. He spent his residencies in surgery and plastic surgery in San Francisco hospitals, and was a lecturer in surgery at the University of Manitoba before coming to Stanford in 1971.

In addition to his work on orbital reconstruction, Vistnes initiated the use of a water bed treatment for spinal cord injury patients. He showed that the water bed was more effective than other treatments in relieving pressure which leads to bed sores.

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Mailed Tuesday, November 21, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Compared to the rate in other industrialized countries, about half as many doctors in the United States become general practitioners, while a large number specialize in a single area of medicine.

But this pattern may be changing, since more than 350 training programs across the country now produce family specialists, according to Dr. William C. Fowkes, Jr., associate professor of clinical medicine and head of the division of family medicine at Stanford University Medical School.

Fowkes, one member of a panel of physicians who discussed the issues of how to choose and when to see a physician, said the first step in choosing a doctor is deciding what type of doctor you want.

Dr. Keith I. Marton, assistant professor of medicine, and Dr. Harold C. Sox, Jr., assistant professor of medicine and head of the division of general internal medicine, were the other panelists at the final lecture in the fall quarter Progress in Medicine lecture series at Stanford.

Fowkes advised finding a single primary care provider for the whole family and he stressed the importance of a continuous, ongoing relationship between patient and doctor.

"Health care is very complex," he said, "and you often need someone there to advocate your value system, as well as to 'quarterback' or refer you to the appropriate specialists. Your doctor should help you negotiate with the health care system."

Fowkes named some factors which enter into the choice of a doctor. These include locale, the hospital which the doctor uses, ethnic background, and religion.

"Most people feel more comfortable when their doctor shares some of their values," he said.

Fowkes outlined three styles in doctor/patient relationships which the patient should consider in making a choice; the authoritarian doctor who gives orders to the patient; the doctor who counsels, giving advice and seeking cooperation from the patient; and the mutual partnership where the patient is in control.

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"When buying a car or repairing a house, as consumers we examine the product or service carefully. But when we go to a doctor, we usually passively surrender ourselves. We have to break down the awe towards the physician provider," Fowkes added.

He suggested making a preliminary visit to a prospective doctor's office. During the visit, the patient might look over the facilities and ask questions.

Marton explained that there are no simple rules for deciding when to see a doctor, but he suggested following a few basic principles:

. severity of symptoms - those which do not interfere with daily activities are less likely to require a physician's care

. the test of time - a waiting period will allow an individual to recognize a significant proportion of self-limited symptoms

. therapeutic trial - symptoms which respond to simple therapies, such as home remedies, are less likely to be serious.

Marton added that 85-90 percent of illnesses such as colds and flu, will go away without the intervention of a physician.

Fowkes addressed the problem of medical records in a mobile society. "I always examine carefully the record of a new patient, and I usually give a letter to any patient of mine with a health problem, who plans to travel."

Noting that a significant number of patient visits to the doctor's office arise from nonorganic problems with a social or psychological origin, the panelists referred to the current emphasis on training doctors in allied medical skills such as counseling.

Marton commented that the current trend is away from annual checkups, routine screening and lab tests, towards less frequent examinations.

The Progress in Medicine lectures are presented as a community service by the dean and faculty of the School of Medicine and by the members of the Medical Center Council.

The next series of lectures will begin in February.

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Mailed Thursday, November 16, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415:497-6911

STANFORD—Progress in understanding rheumatoid arthritis and related diseases will be the subject of a regional meeting of the American Rheumatism Association hosted by Stanford University School of Medicine November 16-18.

The press is invited to attend the meeting, which will be held at the Palo Alto Holiday Inn.

Immunologists from several institutions throughout the western half of the United States and Canada will present their research on the causes and treatment of diseases such as arthritis, systemic lupus erythematosus (SLE), and Reiter's syndrome.

SLE is a generalized tissue inflammation which occurs predominantly in young women. Reiter's syndrome, which involves arthritis, inflammation of tendons, eyelids and urethra, and ulcers of the mouth, is most common among men.

It is becoming more apparent to scientists that genes and the immune responses they control to some extent determine the susceptibility and resistance to several of these diseases.

Indirect evidence of this is found in the association between other diseases and antigens, markers which are found on cell surfaces in all tissues.

The antigens are like badges which enable white blood cells to distinguish between body tissues and foreign materials such as bacteria, viruses and organ transplants. When a foreign agent is identified, an immune response is mounted against it.

But markers on the surfaces of white blood cells also are associated with 35-40 diseases, including ragweed hay fever, arthritis, juvenile onset diabetes, multiple sclerosis, psoriasis, and cancers such as acute lymphoblastic leukemia and Hodgkin's disease.

What determines whether or not a person carrying these markers will develop disease? One theory is that the disease is triggered by an environmental event, such as infection by bacteria or viruses.

For instance, the development of Reiter's syndrome often follows infection by Shigella bacteria.

If this is the case, it someday may be possible to prevent disease in susceptible persons by immunizing against viruses and bacteria.

That is a long way in the future, warn immunologists at Stanford. In the meantime, the search for causative agents and mechanisms continues.

Mailed Wednesday, November 15, 1978

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Dr. Stanley N. Cohen, professor of genetics and medicine, has been appointed chairman of the Department of Genetics at Stanford University School of Medicine.

The appointment was announced Tuesday (Nov. 14) by Dr. Clayton Rich, vice president for medical affairs and dean of the medical school.

Cohen has been at Stanford since 1968. He served as head of the division of clinical pharmacology from 1969 to 1978.

He replaces Professor Joshua Lederberg, who left Stanford recently to become president of Rockefeller University in New York.

Dr. Terrence F. Blaschke, assistant professor of medicine and pharmacology, has been appointed the new head of clinical pharmacology.

Cohen is internationally known for his contributions to recombinant DNA research.

In 1973, a group of scientists led by Cohen and Dr. Herbert Boyer, of the University of California at San Francisco, reported the first procedure for constructing biologically active recombinant DNA molecules outside of living cells.

The next year, Cohen and his associates reported the transplantation of genes between different species of bacteria, and the first successful propagation of animal genes in bacteria, using plasmids to transfer the genes.

Plasmids are circular bits of genetic material which can be transferred between bacterial cells. They thus can be used as carriers of new genetic information.

Cohen and Boyer were awarded the 1977 V.D. Mattia Lectureship in recognition of this "immensely powerful approach to the basic and applied molecular genetics of higher organisms."

Cohen's group recently has reported methods for transferring animal genes into bacteria in such a way that biologically active proteins are produced.

This may aid scientists in constructing "bacterial factories," clones of bacteria containing mammalian genes which can mass-produce valuable substances such as insulin and other hormones.

In addition to his gene-splicing work, Cohen directed the development of the clinical pharmacology program at Stanford. He received the 1970 Burroughs Wellcome Scholar Award in Clinical Pharmacology, which supported research and teaching in the new division.

A native of Perth Amboy, New Jersey, Cohen received his bachelor's degree from Rutgers University in 1956, and his medical doctorate in 1960 from the University of Pennsylvania School of Medicine.

He served on the staff of the National Institutes of Health, and was a member of the Department of Developmental Biology and Cancer at Albert Einstein College of Medicine before coming to Stanford.

Cohen is a member of the American Academy of Arts and Sciences, and numerous professional societies. In 1975, he was chosen as a faculty scholar of the Josiah Macy, Jr. Foundation.

He has been involved with the development of safety guidelines for research with recombinant DNA molecules, and served on the committee of the National Academy of Sciences that in 1974 recommended deferral of certain kinds of gene transplantation experiments.

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Mailed Wednesday, November 15, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Diseases caused by impaired communication among cells, and the usefulness of interferon will be among the topics discussed at the Big Game medical alumni meeting at Stanford University School of Medicine Friday, November 17.

Three morning symposia will be held at the Sherman Fairchild Auditorium of the Medical School beginning at 8:30 a.m.

Edward Rubenstein, M.D., professor of clinical medicine and associate dean of postgraduate medical education, will discuss the dysfunction of a previously unrecognized mechanism of cellular self-government which accounts for many common diseases, including obesity, diabetes, hyperthyroidism and even cholera.

The usefulness of interferon as an antiviral and antitumor agent will be discussed by Thomas C. Merigan, Jr., M.D., professor of medicine and head of the division of infectious diseases.

Interferon is a natural body substance which is being tested as a treatment for herpes zoster infection, chronic hepatitis, and some forms of cancer.

Paul F. Basch, Ph.D, associate professor of family, community and preventive medicine, and director of the division of international health, will present advice to travelers about microbial infections.

A noon reception and luncheon for alumni, associates, faculty and spouses will be held in the Palo Alto Holiday Inn. The featured speaker will be William H. Clark, M.D., a physician in internal medicine at the Palo Alto Medical Clinic. Reservations are necessary for the luncheon.

The Big Game meeting is part of the Medical School's postgraduate medical education program and is sponsored by the School and the Stanford Medical Alumni Association.

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Mailed Monday, November 13, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—For the person over 65, modern medical care provided by hospitals can "inadvertently prolong death" as easily as it can relieve suffering or restore health.

American medicine has produced thousands of medical and surgical "miracles." But this same emphasis on using science to cure has produced a steady stream of elderly patients "who were saved by science only to end up in a convalescent hospital," says Dr. Louis Shattuck Baer, clinical professor of medicine emeritus at Stanford University School of Medicine.

Baer, a family practitioner for over 30 years, has written a practical guide to help these patients, entitled *Let the Patient Decide—A Doctor's Advice to Older Persons* (The Westminster Press, 1978, $4.95).

"My older patients are nearly unanimous in telling me that 'the real enemy' they most fear is total senility, or total invalidism or confinement in a nursing home, not a sudden death or a short final illness," he says.

Unfortunately, the technological imperatives in many large American teaching hospitals "drive medical practitioners to intervene 'because they can, not because they should.' "

In case of cardiopulmonary arrest the prevailing social mores demand that "if you do not know positively that the patient's brain is permanently damaged, or that he is obviously dying, you must give him the benefit of the doubt and immediately institute vigorous, and if necessary, prolonged attempts at cardiopulmonary resuscitation," says Baer.

Baer says that "it is you the patients alone who can teach your doctor how you want to die."

Elderly patients can do this in several ways:

. they can prepare a living will, spelling out the limits of treatment, and direct that it be kept at the front of their medical records.

. On entering the hospital, they can alter the conditions of admission, and add directions concerning prolonged resuscitation to the surgeon's and anesthetist's permit to operate and give anesthesia.

. and they can wear a Medi-Alert bracelet that "speaks for you if your brain is so damaged or diseased that you cannot speak for yourself."

"To choose what treatment you desire, you must know the facts," says Baer. "You must also understand the way your doctor feels about you. And you must understand how you feel about your own act of dying."

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Mailed Monday, November 13, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—Dr. Thomas A. Raffin has been appointed medical director of respiratory therapy at Stanford University Hospital, according to Dr. James Theodore, chief of the Division of Respiratory Medicine at Stanford University Medical School. Raffin succeeds Dr. Lawrence Simon, assistant professor of medicine.

In addition, Raffin has assumed responsibilities as associate director of the hospital's intensive care units (North-ICU, Medical-ICU and Surgical-ICU).

Raffin, assistant professor of medicine in the division of respiratory medicine, is now co-director of respiratory therapy with Antonius Van Kessel, who is technical director.

As medical director of respiratory therapy, Raffin is responsible for the overall quality of respiratory care delivered by the department.

"The department serves a vital function in the hospital," he says, "providing respiratory care to approximately 100 patients each day, ranging from critically ill patients requiring ventilatory support to patients with chronic lung disease."

Along with clinical and teaching responsibilities in internal and respiratory medicine, Raffin is actively engaged in scientific investigation and has published over 20 papers and abstracts. His primary research interests deal with the effects and mechanisms of oxygen toxicity on cloned lung cells.

In addition to his basic research, Raffin is involved in clinical investigation in intensive care.

Raffin has been associated with Stanford for the past 14 years with a two-year hiatus during his internship and residency at Peter Bent Brigham Hospital in Boston. Upon his return he was a postdoctoral fellow with the division of respiratory medicine for three years. He received his B.A. from Stanford University in 1968 and his M.D. from Stanford University Medical School in 1973.

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Mailed Monday, November 13, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—A panel of Stanford physicians will discuss guidelines for selecting a doctor at a free public lecture at the Medical Center on Wednesday, Nov. 15.

The fourth and final lecture in the Progress in Medicine lecture series is set for 7:30 p.m. in the Sherman Fairchild Auditorium.

"How to Choose and When to See a Doctor" will be discussed by Dr. William C. Fowkes, Jr., associate professor of clinical medicine and head of the division of family medicine; Dr. Keith I. Marton, assistant professor of medicine; and Dr. Harold C. Sox, Jr., assistant professor of medicine and head of the division of general internal medicine.

Fowkes received his M.D. from Stanford in 1955, has coordinated Area III of the California Regional Medical Program, and currently directs the residency program in family medicine at San Jose Hospital.

Marton received his M.D. from Stanford in 1970, and has served at the Center for Disease Control's Epidemiology Intelligence Service in Los Angeles. A former Robert Wood Johnson clinical scholar, his research interest is in evaluating clinical decision-making and medical technology.

Sox has served at the National Cancer Institute, and joined Stanford in 1973. His research interest has been in finding ways for physicians to make more effective use of information in clinical diagnosis.

The Progress in Medicine lectures are presented as a community service by the dean and faculty of the School of Medicine and by members of the Medical Center Council.

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Mailed Friday, November 10, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

ADVANCE FOR RELEASE MONDAY, NOVEMBER 13, 1978

STANFORD—New clues to the destruction of heart muscle by certain cancer-fighting drugs have been found by Stanford University reseachers.

Their work may someday enable physicians to prevent this serious side effect of cancer chemotherapy.

The researchers presented evidence that histamine and catecholamines, body substances involved in the maintenance of blood pressure and heart rate, may play role in heart muscle damage, called cardiomyopathy, which follows the use of adriamycin.

Dr. Michael Bristow, postdoctoral fellow in cardiology, conducted the research with Drs. Robert H. Scott, Margaret E. Billingham and John R. Daniels of the Stanford University School of Medicine.

Bristow reported the results at the 51st scientific session of the American Heart Association in Dallas, Texas, Monday, November 13.

"Adriamycin is the best single agent in cancer chemotherapy." said Bristow. It has an extremely broad spectrum of activity, and is used to treat both solid tumors and leukemia.

However, its side effects on the heart restrict long-term administration of the drug. "The heart falure it produces is a worse disease than the cancer it is used to control," he said.

Adriamycin exerts all of its acute side effects by stimulating the release of histamine and catecholamines.

High levels of histamine were detected in the blood of experimental animals within minutes of giving adriamycin, said Bristow. Histamine caused blood vessels to dilate, and a corresponding drop in blood pressure.

This in turn stimulated a compensatory increase in catecholamine levels, which increased heart rate. Catecholamines are known to damage heart cells, and many of the known effects of histamine suggest that it too might cause tissue damage.

Bristow and his colleagues found that the acute cardiac effects of adriamycin, as well as some of the late destruction of heart tissue could be prevented by drugs which block the actions of histamine and catecholamines.

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They are continuing their studies to determine the relative role of histamine, catecholamines and adriamycin itself in the long-term harmful effects on the heart.

"Our major fear was that the cardiac side effects were linked to the antitumor response of the drug," said Bristow. But if histamine and catecholamines are the culprits, "we may be able to take care of that with appropriate blocking agents, and possibly eliminate cardiomyopathy in this group of patients."

Bristow said that damage to heart muscle occurs to some extent in every patient who takes adriamycin, and that the damage is irreversible.

Usually the damage is subclinical, and the patient doesn't feel any symptom of heart problem. However, once the symptoms occur, the patient's life is in jeopardy. Mortality is 50 percent in patients with symptoms, said Bristow.

To prevent heart failure, every patient receiving adriamycin as part of treatment for cancer at Stanford is checked carefully.

Biopsies and catheterization studies are performed in patients with symptoms of heart trouble, as well as those who have received radiation therapy in addition to adriamycin. Radiation seems to increase the drug's effects.

Careful evaluation of patients has enabled the Stanford group to prevent heart failure due to adriamycin-induced damage, said Bristow.

However, many physicians, particularly those who do not have access to comprehensive diagnostic procedures, are becoming more reluctant to use the drug. As a result, "adriamycin may not be used as much as it should be," he said.

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Mailed Thursday, November 9, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
FOR IMMEDIATE RELEASE
STANFORD—

Dr. Clayton Rich, vice-president for medical affairs and dean of the Stanford University School of Medicine since 1971, has requested to be relieved of his administrative responsibilities, University President Richard W. Lyman said Wednesday, Nov. 8.

Dr. Rich advised President Lyman of his desire to step down as vice-president and dean to provide the School with the "opportunity for new leadership."

The dean's resignation will be effective Jan. 1, 1979. He plans to work on issues of public and institutional policy for academic medicine.

Lyman announced that Dr. Lawrence G. Crowley will become acting vice-president and dean of the School of Medicine in January. The president said he would soon form a search committee to conduct a nationwide search for Dr. Rich's successor.

Crowley is a professor of surgery and currently deputy dean of the School of Medicine.

Expressing his personal regret at the dean's decision, President Lyman noted that Dr. Rich's term of office was marked by significant achievements.

These included the development of the programs in Structural Biology and Neurosciences, the building of new facilities in the basic and clinical sciences, and the attraction to Stanford of new faculty leadership in the core scientific and clinical fields.

"These are major achievements, accomplished at a time of rapid change and great stress for medical research and education everywhere," Lyman said. "They testify to Dean Rich's commitment to the proposition that scientific excellence is the essential underpinning for educational and clinical excellence.

"That has been the tradition of the Stanford Medical School, and it must remain its distinguishing characteristic."

In his letter to Lyman, Dr. Rich said that "the changing external environment and the pressures these changes have brought forth, have caused divisions and differences within the School.

"I must regretfully conclude that these can best be resolved and our serious problems dealt with if the School has the opportunity for new leadership."

Dr. Rich came to Stanford from the University of Washington in Seattle where he was professor of medicine, and had served as associate dean for research and clinical affairs, and as chief of staff of the Veterans Administration Hospital.

Dr. Crowley was professor of surgery at Stanford from 1964 to 1974. He became dean of the University of Wisconsin Medical School in Madison that year, but he returned to Stanford in 1977.

11-7-78

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Following is a Nov. 7 letter from Clayton Rich, Vice-President for Medical Affairs and dean of the Stanford School of Medicine, to University President Richard W. Lyman:

I have now been dean and vice-president at Stanford for more than seven years, and consider it a privilege to have been associated with this faculty and university in this way. I believe that a great deal has been accomplished for the School, which now stands as one of the finest academic institutions in the country.

However, the changing external environment and the pressures that these changes have brought forth have caused divisions and differences within the School. I must regretfully conclude that these can best be resolved and our serious problems dealt with if the School has the opportunity for new leadership.

In order to create that opportunity, I am resigning my administrative appointments as vice-president and dean on Jan. 1, 1979. My own plans will be to work on issues of public and institutional policy for academic medicine.

It has been a great pleasure to work with you and many others at Stanford, and with the faculty of the School during these past seven years.

* * *

Following is a statement issued in response to Dean Rich's letter by President Lyman:

Clayton Rich has served as Vice-President for Medical Affairs and Dean of the Medical School since 1971. In that time he has never wavered from the highest standards of intellectual and personal integrity or from devotion to the central purposes of a great university Medical Center.

The accomplishments of Dean Rich's tenure in office will benefit Stanford for many years to come. To mention only a few is to risk overlooking others, but among his important achievements are the development of the programs in Structural Biology and Neurosciences, the building of new facilities in the basic and clinical sciences, and the attraction to Stanford of new faculty leadership in the core scientific and clinical fields.

These are major achievements, accomplished at a time of rapid change and great stress for medical research and education everywhere. They testify to Dean Rich's commitment to the proposition that scientific excellence is the essential underpinning for educational and clinical excellence. That has been the tradition of the Stanford Medical School, and it must remain its distinguishing characteristic.

Clayton Rich's decision to step down as vice-president and dean was made, as he said, to provide the School with the "opportunity for new leadership." His service to Stanford leaves us all in his debt; the view of the Stanford Medical School which he held will continue to guide us in the future.

11-7-78

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Dr. Harry A. Oberhelman, Jr., professor of surgery at Stanford University School of Medicine, has been elected president of the State Board of Medical Quality Assurance (BMQA) for the year 1979, according to the BMQA.

Oberhelman, 54, has the longest tenure of any board member, serving since 1970. He recently was appointed to his third term by Governor Jerry Brown.

A graduate of the University of Chicago School of Medicine (1947), Oberhelman was an instructor and associate professor of surgery there before coming to Stanford in 1960.

In addition to his teaching duties, he is head of the division of general surgery, and has authored numerous publications on gastric secretion, peptic ulceration, and Crohn's disease, an inflammatory disorder of the colon.

Oberhelman is a member of the American Medical and Surgical Associations, and the California Medical Association, and the Santa Clara County Medical Society. He also is a director of the Institute for Medical Research in San Jose.

Also from Stanford, Dr. James P. Lockhart, clinical assistant professor in the department of family, community and preventive medicine, was elected president of the BMQA's division of medical quality.

Mailed Monday, November 6, 1978 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—"Designing a Personal Screening Program" will be the subject of the next Progress in Medicine lecture at the Stanford University School of Medicine, on Wednesday, Nov. 8.

The lecture is the third in a series dealing with "You and Your Health: Options for the Medical Consumer." It is open to the public at no charge, and will begin at 7:30 p.m. in the Sherman Fairchild Auditorium.

Dr. David M. Eddy, on the Stanford faculty in both the Department of Engineering Economic Systems and the School of Medicine, will discuss screening tests for cancer, the annual physical examination, and other health maintenance topics.

Eddy received his Ph.D. in engineering-economic systems at Stanford, and his M.D. from the University of Virginia. He has served as a consultant on health screening plans for many organizations, including the National Cancer Institute. His major research has been involved in applying mathematics and economics analyses to clinical decision-making.

The fourth and final lecture in the series is scheduled for Wednesday, Nov. 15, featuring a panel of physicians on the topic, "How to Choose and When to See the Doctor."

The Progress in Medicine Lectures are presented as a community service by the dean and faculty of the School of Medicine and by the members of the Medical Center Council.

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Mailed Friday, November 3, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Normal bacteria found in the human intestine may alter the therapeutic or toxic effects of various drugs, according to Dr. Peter Goldman, Maxwell Finland Professor of Clinical Pharmacology at Harvard University Medical School.

Goldman will discuss his research on the subject in the 1978 Pfizer Lecture in Clinical Pharmacology at the Stanford University School of Medicine Thursday, November 9.

In studies in rats, "we've shown that there is a difference in the metabolism (breakdown) of drugs given to rats with normal intestinal bacteria, compared to those with no bacteria," says Goldman.

Sulfasalazine, a drug used to treat ulcerative colitis in humans, is broken down by the rat intestinal bacteria into two components, an antibacterial and an antiinflammatory agent.

"The therapeutic action of this drug could be related to its metabolism," says Goldman.

Metronidazol (trade name Flagyl) is a widely used antiparasitic drug which is known to cause cancer in rodents.

"We've shown that the intestinal bacteria in the rats carry out a metabolic reaction that may be implicated in carcinogenesis (development of cancer)," says Goldman.

In his lecture, Goldman will discuss how this research might be applied to increasing the safety and efficiency of medication in human patients, and in reducing some side effects of needed drugs.

The lecture will be held in Room R358 of the Medical School at 4 p.m. It is open to the public.

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Mailed Thursday, November 2, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Barbara Battino 415: 497-6911

STANFORD—Nuclear imaging may be far superior to other low-risk techniques for early evaluation of coronary artery disease, according to Stanford nuclear medicine physicians.

However, the nuclear imaging is not recommended for all patients with coronary disease symptoms, nor is it yet recommended as a screening procedure for large numbers of people.

Nuclear imaging involves the injection of radioactive substances in chemical solution into the body, which allows visualization of particular organs or tissues.

Dr. Michael L. Goris, associate professor of radiology, discussed the Stanford work at the recent western regional meeting of the Society of Nuclear Medicine held in Vancouver, B.C.

Since 1976, radioactive Thallium-201 has been used in 207 patients at Stanford. Thallium imaging correctly identified 97 percent of the significant coronary lesions in these patients. In contrast, electrocardiography (EKG) recognized 84 percent.

Thallium is absorbed selectively by the heart after injection into the blood stream. The gamma rays emitted are measured and processed to form images of the heart.

Stanford researchers have been in the forefront of developing computer processing of these images, resulting in clearer, more precise measurement of abnormalities.

"Comparing our results to recent reports, we conclude that computer processing and interpretation of processed data improves the sensitivity of this technique," said Goris.

One of the limiting factors in the use of nuclear imaging for mass screening is the cost of producing the radioactive isotopes, said Goris.

He sees the technique as particularly valuable for those patients with atypical chest pain.

The procedure may be able to rule out the necessity for coronary angiography, which involves inserting a catheter, or narrow tube, through the patient's vein and into the coronary artery.

Angiography is done under sterile conditions and requires admitting the patient to the hospital. Nuclear imaging, on the other hand, may be done as an outpatient procedure with less risk to the patient.

Both procedures involve the same amount of radiation to the patient.

Both procedures involve the same amount of radiation to the patient.

Mailed Wednesday, Nov. 1, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—A chemical sprayed on forested areas to prevent the growth of brush can be poisonous to animals and humans and its use should be banned, according to Stanford University pharmacologist Sumner M. Kalman.

Exposure to the so-called phenoxy acid herbicides is associated with headaches, visual and nervous disorders, and a persistent scarring disease of the skin called chloracne, said Kalman, in a report before the North Coast Regional Water Quality Control Board last week.

Relatively low doses of these agents also cause developmental defects, liver damage and death in experimental animals and in accidentally exposed livestock.

In addition, a contaminant of one of the herbicides, TCDD, "is one of the most poisonous chemicals known," said Kalman, only slightly less lethal than botulinus toxin. A dose of TCDD as low as two parts per billion can cause death in monkeys.

Smaller doses of TCDD are known to cause infertility in monkeys and cancer in mice. Certain types of cancer have been found to occur more frequently among Swedish foresters who were exposed to the herbicides 10-20 years previously, suggesting a possible but inconclusive relationship between cancer in humans and the herbicides, he said.

"To put a known carcinogen and toxic substances into land, plants and animals, and water is non-rational," said Kalman.

"The advantage of spraying forest floors with these herbicides over other methods of selective growth would have to be of an extraordinary magnitude in order to outweigh the risks," he said.

Phenoxy acid herbicides were introduced in the 1940s to kill certain plants selectively on grazing and crop lands, and in gardens. During the Vietnam War, the Air Force used a combination of these chemicals, called Agent Orange, as a defoliant. Later, this practice was discontinued due to protest by American biologists.

Then the chemicals came into use "to suppress certain tree growth and the natural resurgence of brush in forests that have been logged," said Kalman.

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Liberal spraying of the chemicals from planes and helicopters enables foresters and logging companies to prevent the growth of brush in favor of new timber.

However, such spraying "ensures contamination of water," said Kalman, through leaching of the herbicides and the contaminant TCDD out of the soil by rain. Smaller organisms take up TCDD, concentrate it, and pass it on to higher organisms.

People, livestock, and wildlife down wind and downstream from the spraying inevitably will be exposed to contamination or poisoning.

"The toxicity appears to be cumulative," said Kalman. "Hence, even small exposures over a long time will cause damage."

TCDD is thought to exert its effects by inducing the formation of enzymes in the liver which in turn convert potentially toxic substances into highly reactive and damaging chemicals.

"If this is the mechanism of its effect, then a single (TCDD) molecule may be enough to cause an irreversible effect on genetic material," said Kalman.

Kalman, professor of pharmacology at Stanford University School of Medicine, has been concerned with environmental contamination by chemicals for several years.

In the late 1960s, he was active in seeking more stringent control of chemical weapons used in law enforcement, such as MACE, and participated in hearings which lead to the ban on DDT use in California. He also has supported the elimination of lead from gasoline.

Kalman's report on the herbicides was made during public hearings in Arcata, California on a proposed change for more stringent water controls on the use of these herbicides.

These hearings will continue for another two weeks, after which the water quality control board will decide whether or not to make the regulations more stringent.

If they are made more stringent, use of the herbicides effectively will be banned, because the users cannot guarantee that no contamination of water will occur, said Kalman.

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Mailed Wednesday, November 1, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Dr. Henry S. Kaplan of Stanford University has been awarded the first Medal of Honor of the Danish Cancer Society for his pioneering work on Hodgkin's disease and other human lymphomas.

Queen Margrethe II of Denmark presented the medal to Kaplan October 26 during the celebration of the 50 year anniversary of the Society in Copenhagen.

During the scientific meeting which preceded the award, Kaplan spoke on the advances in the treatment of Hodgkin's disease.

Kaplan, holder of the Maureen Lyles D'Ambrogio professorship in radiology at Stanford University School of Medicine, is internationally known for the radiotherapy techniques he developed which have lead to dramatic gains in the treatment of cancers of the lymphatic system, such as Hodgkin's disease.

Kaplan and his colleagues are responsible for initiation of staging laparotomies and splenectomy, surgical procedures which have improved the evaluation of Hodgkin's patients.

In 1959 Kaplan discovered that lymphomas which developed in mice after exposure to X-ray or chemical agents were in fact caused by latent viruses stimulated by the agents.

Since then, he has extended his study of cancer-causing viruses to humans.

As director of the Cancer Biology Research Laboratory, Kaplan has recently been involved in establishing permanent cultures of human lymphomas and leukemias, and in isolating C-type RNA viruses from established cell lines.

Among Kaplan's honors are the 1969 Atoms for Peace Award, and election in 1972 to the National Academy of Sciences. In 1977 he was awarded the Leopold Griffuel Prize by the Association for the Development of Cancer Research, and the next year he received the Lila Gruber Memorial Cancer Research Award.

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Mailed Wednesday, November 1, 1978

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STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Interferon has been used successfully to reduce tumors of the lymphatic system, so-called lymphomas, in patients in a preliminary study by Stanford University researchers.

Reporting in the December 28, 1978, issue of the *New England Journal of Medicine*, the researchers found that injections of the natural body substance resulted in "significant regressions" in three patients with B-cell lymphomas.

B lymphocytes are white blood cells produced by the bone marrow which play a role in the body's immune responses. A cancer in this system is characterized by proliferation of B cells and the formation of malignant growths, or lymphomas, in the lymphatic system.

The research was conducted by Drs. Thomas C. Merigan, Jr., Karol Sikora, James H. Breeden, Ronald Levy, and Saul A. Rosenberg of the Stanford University School of Medicine.

"These observations are preliminary, and additional studies are needed" to establish the usefulness and safety of interferon in treating lymphomas, stated the authors.

However, the response of this particular form of disease was "very consistent with respect to the time of drug administration," said Merigan.

The patients had received no prior treatment, and it was highly unlikely that spontaneous regression occurred in all three cases at the same time, he said.

Two of the three patients have been followed for a number of months, "and remain well, with no evidence of progression of disease," stated the authors.

The study was supported by the National Cancer Institute. It is a forerunner of a $2 million nationwide trial supported by the American Cancer Society to determine the effectiveness of interferon in treating human tumors.

The Stanford study is the first U.S. study to report results, said Merigan.

According to the study, three other patients with a different, rapidly advancing form of lymphoma failed to respond to the interferon treatments. They had previously received drug and radiation treatments. Their disease was unresponsive to further chemotherapy and two of the patients later died.

The inability of interferon to control this form of lymphoma in these patients may have been due to the rapidly advancing nature of their disease, and to their exposure to extensive prior cancer therapy, stated the authors.

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Previous therapy "could compromise the ability of immune elements to cooperate with interferon in a tumor-suppressing action."

Interferon is produced by white blood cells when they encounter foreign substances in the body. Presently, most of the world's supply of interferon is produced from human cells by a laboratory in Finland. Efforts are underway to synthesize the material or isolate the gene for its production.

In addition to its antitumor properties, interferon is a known antiviral agent, capable of improving herpes zoster and hepatitis B infections.

It is not known how interferon causes tumor shrinkage, said the authors. However, there is increasing evidence that it may act either by inhibiting malignant cell growth or by aiding destruction of tumor cells by the immune system.

The importance of interferon in controlling lymphomas is not that it causes greater tumor shrinkage than conventional X-ray treatments or chemotherapy, they stated, but that it works by a different mechanism, perhaps as part of the immune system or via bolstering natural body defenses.

The authors recommended studying the effectiveness of interferon in treating other cancers of the lymphatic system, including Hodgkin's disease, Burkitt's lymphoma, and acute lymphocytic leukemia.

In the meantime, the Stanford group is "continuing to treat other patients with B-cell lymphomas with interferon, both alone and in combination with standard chemotherapies, to see if it can decrease disease and prolong life in these patients," said Merigan.

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Mailed Thursday, December 28, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—An ointment for removing diseased fingernails and toenails without surgery, has been developed by physicians at Stanford University Medical Center.

Dr. Eugene Farber, professor and chairman of the department of dermatology and Dr. David South, acting assistant professor of dermatology reported in the December issue of *Cutis* that 35 patients have been treated successfully with the new ointment.

The active component in the ointment is urea, which painlessly dissolves the bond between the diseased portions of the nail and the skin underneath, called the nailbed.

First, the ointment is applied to the nail and left in place for a week under a waterproof dressing. The nail is then easily removed, exposing the nail bed, which may be treated with medication, if necessary.

After exposure, the nail bed hardens within 24 hours, forming a surface almost as hard as another nail.

The standard method used in the U.S. for removal of nails is surgery, says South. However, surgery can be painful and expensive for patients, he says. Anesthesia is required and patients generally lose a day or two from work.

The new ointment has the advantage of being painless, inexpensive, and patients may return to work immediately, he adds.

The process is useful for a wide range of nail disorders including psoriasis, fungal diseases, bacterial and yeast infections and traumatic injuries.

The idea of urea ointment treatment came to Farber during a recent visit to the Soviet Union. There, similar ointments have been used in the removal of fungal nails.

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Mailed Monday, December 18, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911
CITY DESKS: The following is an announcement of a forum on recombinant DNA to be held at Stanford on January 13, 1979. The forum is free and open to the public.

STANFORD—A public forum on recombinant DNA research and the relation between science and the public will be held January 13, 1979 from 10a.m. through 5p.m. in Fairchild Auditorium of Stanford University School of Medicine.

The controversial issues in recombinant DNA research and the public's role in developing and enforcing science policy will be the focus of the forum.

Morning session speakers will cover topics such as benefits and risks associated with recombinant DNA research, who makes the decisions on guidelines and controls of research, the relationship of federal regulations and legislation to local control, and the public's role in decision-making.

Afternoon workshops are scheduled to encourage participants to discuss the policy and science issues in small groups with the speakers.

Some workshop topics are science policy issues for educators, the public and science, worker safety and training, and approaches to regulation.

Speakers will include Ronald Cape, chairman of the Board, CETUS corporation; Dr. Ronald Davis, associate professor of biochemistry at Stanford University; Andrew Jameton, lecturer on bioethics, University of San Francisco Health Policy Program; Richard Knox, medical editor of *The Boston Globe*; Dr. Robert Sinsheimer, chancellor at the University of California, Santa Cruz; Susan Wright, historian of science at the University of Michigan, Ann Arbor; and Burke Zimmerman, science consultant in the U.S. House of Representatives.

A broad coalition of organizations is sponsoring the event. Among those involved are the Palo Alto Human Relations Commission, the League of Women Voters of Palo Alto, Common Cause, Consumers Union West, the Palo Alto PTA council and the Department of Family, Community and Preventive Medicine at Stanford.

The forum is funded by the California Council for the Humanities and Public Policy, and is free and open to the public.

Further information and preregistration materials may be obtained by phoning the Stanford University Division of Health Services Research at (415) 497-6426.

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Mailed Monday, December 18, 1978.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD --How do germs, insects and cells learn to withstand the assault of drugs or chemicals?

This is one of the important questions to which medical scientists are devoting much thought and effort.

The ability of organisms to develop resistance to antibiotics, insecticides and other chemicals is a widespread and serious problem, and one which will increase unless humankind changes the way these agents are used.

New research which helps explain how resistance develops was published in the Dec. 8 issue of *Science*by a team of scientists at Stanford University.

They believe it offers clues to the mechanisms involved, and, warns Dr. Robert T. Schimke, unless the methods of chemical and drug use are changed, the world may "essentially run out of effective insecticides and antibiotics."

Schimke, professor and chairman of the department of biological sciences at Stanford, conducted the research with Randal J. Kaufman, Dr. Fred W. Alt, and Dr. Rodney F. Kellems.

The researchers found that resistance develops by a process of gene amplification.

In this process, genes which enable organisms to survive in the presence of normally lethal chemicals are produced in greater quantities.

Resistance is not a one-step process, says Schimke. It is acquired when chemicals are given at low doses until some organisms show resistance, and then in increasing step-wise increments.

In the experiment reported in *Science,*the researchers studied the development of resistance in cultured mouse cells to the anti-cancer drug methotrexate.

Methotrexate kills cells by inhibiting an enzyme, dihydrofolate reductase (DHFR), which is involved in the synthesis of protein and nucleic acids.

The researchers found that cells which became resistant to the drug had increased production of DHFR.

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The more enzyme produced, the greater chance that some of the enzyme would escape inhibition by methotrexate, and enable the cells to grow.

The increased enzyme was due to increased production of the genes which code for the enzyme.

This process of increased gene production is probably a general characteristic of all living organisms, says Schimke, "and there is no reason to think that resistance won't also occur in human cells."

In fact. methotrexate resistance has been a serious problem in clinical treatment of human tumors, he says.

A similar mechanism operates in the development of bacterial resistance to penicillin, and of many instances of insect resistance to chemical agents.

Many antibiotics and insecticides are administered in precisely the same way as methotrexate was in the Stanford studies--first in low doses until resistance appears, and then in increasing step-wise increments.

This method of administration provides "excellence conditions for resistance to develop," says Schimke.

In a sense, the use of chemicals in this way furthers the development of drug-resistant organisms, he says.

It would be useful to be able to stop gene amplification in these organisms, but it is unclear how this process occurs in bacteria and in higher organisms. It is a fundamental process, "presumably related to evolution," the extent of which was only recognized a few years ago, says Schimke.

At present, the best way to prevent this form of resistance is to modify the use of chemicals and drugs, state the researchers.

This would include using multiple drugs, treatment for only as long as necessary and with drugs not retained in the environment, and using a second set of multiple drugs if resistance develops.

Countering resistance is an important part of ensuring humankind's survival, says Schimke. "Many people may think of humans as the dominant species, but we're actually in a tenuous long-run battle with the insects and the bacteria,"he says.

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Mailed Monday, December 18, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—Research to Prevent Blindness (RPB), Inc. has presented the Division of Ophthalmology at Stanford University Medical School a $7,500 grant to continue its studies into various eye diseases.

The award brings to $42,500 that RPB has donated to Stanford in the past 10 years.

Dr. A. Ralph Rosenthal, head of the Division of Ophthalmology, said such grants are aiding eye research in saving the sight of thousands who once would have been blinded by common eye disorders. He noted that similar research has resulted in developments in ophthalmic surgery and medical therapy.

Stanford is one of more than 50 medical schools in the U.S. to receive RPB funding. To date, more than $36 million has been distributed by RPB and is the world's leading voluntary organization in support of eye research.

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Mailed Friday, December 15, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

EDITORS: Photos available if not included with story.

STANFORD—"We were very pleased with the way it went at Stanford." That's the way Hardwin and Oriana Mead described the birth of their second child recently in the family birth room at Stanford University Hospital.

Theirs was the first birth in the new rooms, which opened Oct. 16. Located near the postpartum unit on the third floor of the hospital, the two rooms are available for any woman who wishes to have her baby with her family and friends around her, and whose doctor doesn't anticipate any complications.

Mrs. Mead had her first child, Lowell, at home. But when the second came along, the doctor who had been present at the first birth was no longer in the area. So the Meads decided to try Stanford.

"We doubted it could come off as well the second time," explained Mrs. Mead. "I've never had a hospital birth, but I have seen them, and usually the doctors and nurses tend to dominate the situation.

But in the family birth room, Mr. Mead was allowed to act as labor coach, aiding his wife in her breathing and pushing. A friend who was present recorded the birth on film.

The delivery was attended by Dr. Don Creevy, a community obstetrician, and nurse Marie Smith. Resuscitation equipment was in the room, and back-up help from hospital pediatricians was available in case of sudden complications.

For the most part, Creevy and Smith stayed in the background. Only when the membranes ruptured, and meconium, or infant fecal material, was found in the water which had surrounded the baby did they intervene.

Creevy was concerned that the baby may have breathed meconium with the water, potentially causing an infection in his lungs.

Usually, the mother is taken quickly to a regular delivery room when complications like this arise. But in this case there was no time. "The baby was already crowning," said Mr. Mead. "Two more pushes and he was out."

Immediately, Creevy called in the pediatricians. They examined the baby's lungs for meconium with a tube inserted through his trachea. The lungs were clean.

Fifteen minutes later, new-born Paul was in his mother's arms, and two-year-old Lowell had joined them on the bed.

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"This is a complication far more desirably handled in the hospital than at home," said Creevy. "In my experience, people who do home births generally have neither the expertise nor the equipment to handle problems like this."

"We would have been worried about this complication had we been at home,"said Mr. Mead, who is a medical student at Stanford. "We were glad we were at Stanford."

The baby needed to stay in the hospital overnight for observation, so after a couple of hours, Mrs. Mead and he were moved to the postpartum unit. The family birth rooms can be used for up to six hours of recovery if no other woman is waiting to deliver.

So far, nearly 20 women have given birth in the new rooms, and several couples are on the waiting list, according to Judy Schmidt, R.N., family birth room coordinator.

Women wishing to use the rooms are required to attend orientation sessions at the hospital given by a nurse. Perinatal care courses offered in the community are also recommended.

Creevy has attended four births in the family birth rooms, and "all have been excellent and delightful," he said.

"The nurses I have worked with are among the very best." They have shown great warmth and empathy for the family, "which is important in a setting where people are interested in the quality of the birth experience," he said.

In addition, all four families seemed to be delighted with the experience, he said. What makes the family birth room so congenial to them is the privacy and the presence of a window, and being able to choose whom they want to be present, he said.

"One woman in the midst of labor looked around the room and said, 'Gosh, this is just like being at home!'" said Creevy.

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Mailed Thursday, December 14, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

A liaison committee to review the relationships of the Stanford University School of Medicine and community physicians has been formed, according to Dr. Lawrence G. Crowley, deputy dean.

The purpose of the committee is to make recommendations that "can preserve and build an effective relationship between the School and the practicing physicians in the community," he said.

Among the items for review will be a controversial decision made by the Stanford University Hospital board of directors last August. The board affirmed an existing policy which restricts access to certain hospital-based services and laboratories to faculty only.

"It is obvious that an early focus will be upon the circumstances, applications, and problems resulting from the policy decision of the board of Hospital directors," said Crowley.

"However, I hope we can broaden our discussions to include all relevant aspects of the relationship between the School and the community physicians," he added.

Relationships between the Medical School and community physicians have been strained since the board's ruling on the Hospital-based clinical services. Present medical staff members are not affected by the decision, but the prospect of diminishing privileges to laboratories and specialize equipment has been a source of concern for many community physicians who specialized in fields encompassed by these services.

The community physicians who practice in Stanford University Hospital last August formed Community Physicians for Patient Care to carry out discussions with Stanford on the closed-staff policy and other issues.

Crowley announced Stanford's desire to form the committee in a letter to Dr. David P. Cooney, chairman of the steering committee of Community Physicians for Patient Care.

The liaison committee is expected to begin its deliberations in January, 1979, Crowley said. Its membership will include community and faculty physicians who will be joined by Hospital Executive Director Peter Levin and University Vice-President Robert Rosenzweig.

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Crowley wrote that Stanford University President Richard W. Lyman is interested in fostering the activity of this committee and has designated Rosenzweig to attend its meetings. The board of Hospital directors is similarly interested. It is likely one or more members of the board will participate.

"The goal of the committee," wrote Crowley, "is to review and make appropriate recommendations regarding the relationship of the School of Medicine—in particular its overall educational program—with the community physicians practicing at Stanford University Hospital, most of whom already participate in the educational programs of the School.

"I hope that we would be approaching all these relevant issues from the broad perspective of how we can preserve and build an effective relationship between the School and the practicing physicians in the community."

Earlier this year the Community Physicians for Patient Care issued a statement of its aims and purposes. "Twenty years ago Stanford Medical School entered this community with the unique and high-minded philosophy that a combined and community facility offered great benefits to all affiliated groups," the statement said.

"In an atmosphere of mutual respect and cooperation this daring idea worked. We hold that this ideal is still valid."

In view of the new developments, talks between Stanford and the Palo Alto Medical Clinic concerning a possible formal educational affiliation have been postponed indefinitely, Crowley said. Palo Alto Clinic physicians will now serve on the new committee.

But the discussions with the Clinic, held over the past six months, "have been relevant and helpful toward providing a better understanding of the goals, dynamics, and problems of our two institutions," he said.

Community physicians on the liaison committee are Walter Arons, Walter Bortz, David P. Cooney, Robert W. Jamplis, and Burt McDowell.

Faculty members are John A. Collins, Lawrence G. Crowley, Philip C. Larson, Kenneth L. Melmon, and William Northway, Jr.

Crowley in his letter suggested that the committee might be expanded to include one community physician who might not be a member of Community Physicians for Patient Care.

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Mailed Thursday, December 14, 1978

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD—

The Stanford Board of Trustees has approved an 8.9% increase in general tuition, room and board rates for 1979-80, but softened a proposed 27.6% increase in tuition for new M.D. students.

At its regular meeting Tuesday, Dec. 12, the board approved administration recommendations for an increase in general tuition to $5,595 from $5,130 a 9.1% hike, and an increase in room and board to $2,354 from $2,169, an 8.5% gain.

Developed in accord with President Carter's wage-price guidelines, the 8.9% overall increase compares with a 9.5% hike for the current academic year.

Tuition in the M.D. program of the School of Medicine will increase to $6,174 from $5,388 for continuing students, a 14.6% gain.

The administration had recommended a 27.6% tuition increase to $6,873 for first-year M.D. students, indicating this was needed to restore past relationships between Medical School educational costs (estimated at $35,200 for 1978-79) and tuition (which provided about 21% of these costs in 1972).

Deferring final action on M.D. tuition, the board said the rates should "be set so as to meet the tuition objective proposed over a three-year period."

The final formulation will be subject to approval by Board President Peter Bing, University President Richard W. Lyman, Finance and Development Committee Chairman William Timken, and Academic Affairs Committee Chairwoman Barbara Finberg.

In the School of Law tuition will increase to $5,744 from $5,280 an 8.8% gain.

Wage-Price Guidelines

A background paper circulated to the Trustees states the University has made a "good faith" effort to follow the President's wage-price guidelines even though these raise "serious conceptual and calculational difficulties."

The weighted average of Stanford tuition and room and board rate increases over the two-year base period set by the guidelines is 10.7%. This has been reduced by 0.5% in accord with the national formula on prices and by an additional 1.1% "wage decelerator" detailed in the guidelines, yielding an overall figure of 9.1%.

While some increases are above this figure and others below, the weighted average for the entire package is 9.1%. This is within the guidelines "insofar as we have been able adequately to understand and apply (them) to Stanford's recent past and present plans," the background paper notes.

Undergraduate Admissions

For several years Stanford has been the first major private university to announce its tuition rate increase. The current (1978-79) costs of attending Stanford and those independent institutions most often selected by undergraduates admitted here compares as follows:

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Tuition, mandatory fees, room and board 1978-79

Harvard	$7,505
Yale	7,500
MIT	7,435
Stanford	7,300
Brown	7,240
Princeton	7,217
Dartmouth	7,145
Northwestern	7,025
Cornell	6,890
Cal Tech	6,447
Pomona	6,444
USC	5,878

Stanford will continue to meet the demonstrated financial need of all freshmen admitted to the University. Admissions decisions are made without regard to financial need.

About 55% of all undergraduates receive financial aid. This currently totals about $14 million annually. About $11 million comes in grants and scholarships, while $3 million represents subsidized loans and jobs during the school year.

Despite increasing tuition, recent studies at Stanford have shown that families at the $20,000 and $30,000 income level are expected to contribute a smaller percentage of their income toward University costs than was true in 1970-71. This reflects adjustments made in College Scholarship Service need-assessment formulas adopted in 1975 and followed by Stanford.

Nationally and at Stanford the newly passed Middle Income Student Assistance Act will provide additional support to students and parents. The Basic Opportunity Grant provision has raised the family income limit for recipients to $25,000 from $15,000.

The Guaranteed Student Loan program provides an interest subsidy with no family income limit nationally.

M.D. tuition

Medical School officials have indicated that increased financial assistance will be available to assure that students are not prevented from attending Stanford for financial reasons.

In accord with recommendations from a faculty committee, tuition will be charged M.D. students for 13 quarters, regardless of the number of quarters registered up to a total of 16. (Three quarters constitutes a normal academic year.)

In recent years, Stanford M.D. graduates have averaged 13 quarters, with many students cutting short their education to save money. The new policy will encourage stuents to participate more fully in elective scholarly activities.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Using gene splicing techniques, Stanford University scientists have achieved the first biological expression of mammalian genes in bacterial cells.

Their research, reported in the October 19 issue of *Nature*, is an important step aiding scientists in constructing "bacterial factories," clones of bacteria containing mammalian genes which can mass produce valuable substances such as insulin and other hormones.

A public statement on the research is being released now in response to queries from press organizations.

The research was conducted by Annie C.Y. Chang, Jack H. Nunberg, Randal J. Kaufman, Henry A. Erlich, Robert T. Schimke, and Stanley N. Cohen. The research was supported by grants from the National Institutes of Health, the American Cancer Society and the National Science Foundation.

The transfer of genes from higher organisms to bacteria has been possible for several years using recombinant DNA (gene splicing) techniques, but this is the first time a biologically active protein was produced in bacteria by transferred mammalian genes.

Previous attempts have resulted in the production of "hybrid" proteins, molecules which contain bacterially-derived as well as mammalian sequences.

When the mammalian components of such proteins were separated from the bacterial components, they sometimes were immunologically reactive. In other words, they reacted with antibodies made against the natural protein.

However, data presented in the *Nature* article indicate that only a small part of the protein is necessary to get reaction to the antibodies. On the other hand, biological activity requires that the proteins function as they would naturally.

The Stanford group experimented not with a hormone, but with an enzyme, dihydrofolate reductase (DHFR), which is involved in DNA metabolism.

The aim was to introduce the mouse gene for DHFR into cells of the bacterium *E. Coli*, and to test whether the bacteria would then produce mammalian DHFR.

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Some of the bacteria into which the mouse gene for DHFR had been introduced could grow in the presence of the antibiotic trimethoprim, which normally inhibits the growth of bacterial cells.

This suggested that the surviving bacteria were not only capable of decoding the mouse DHFR gene but that the protein produced by the bacteria was biologically active.

Protein isolated from these bacteria "has enzymatic properties, immunological characteristics, and molecular size characteristic of the mouse dihydrofolate reductase," wrote the researchers.

According to the article, the production of this biologically active and functional protein was a matter of having the correct DNA sequences which allow production of a separate rather than a hybrid protein.

Knowledge of these correct DNA sequences should enable scientists to get biologically functional expression from other genes, and help define factors that influence biological expression of genetic information in both higher and lower organisms.

The research was carried out in the laboratories of Stanford scientists Stanley N. Cohen and Robert T. Schimke.

Schimke, professor and chairman of the department of biological sciences, is known for his earlier work in developmental biology and for his studies of the mouse dihydrofolate reductase gene.

Cohen, professor of genetics and medicine, and chairman of the department of genetics, is well-known for his contributions to the field of genetic recombination.

In 1973, a group of scientists led by Cohen and Dr. Herbert Boyer, of the University of California at San Francisco, reported the first procedure for constructing biologically active recombinant DNA molecules outside of living cells.

The next year, they reported the first successful propagation of animal genes in bacteria.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

NEW VISTAS IN PSYCHIATRY:

THE NEW BEHAVIORAL THERAPIES

One recent arrival to the battery of psychiatric tools is behavioral therapy. Essentially, it is a means of helping patients change behaviors which are destructive, undesirable, or otherwise debilitating. Behavioral therapies are commonly used to help people stop smoking, lose weight, or cure them of insomnia. Relaxation training can relieve a variety of symptoms which result from stress. This is the third of three articles on how behavioral therapies are used to help patients at Stanford's department of psychiatry.

STANFORD—How do you lower your blood pressure, relieve chronic anxiety, asthma and headaches, eliminate phobias, insomnia, nervous tics and some sexual problems?

By learning how to relax.

Many of these problems are symptoms of stress—fast-paced living, competition, sex role confusion—and can be relieved simply by easing the stress.

"Relaxation is a way of reducing stress and anxiety that have multiple effects on all body systems," says Dr. Alan Brauer, director of the Stanford Stress Reduction Clinic.

Patients at the clinic are taught a variety of relaxation techniques, including exercises in which muscles are sequentially tensed and relaxed, autogenic training (talking to different parts of the body silently), self-hypnosis, meditative and breathing techniques, and biofeedback.

According to Brauer, biofeedback is the most popular among patients. "Biofeedback has certain advantages over the other techniques," he says. "It gives precise information about what happens during relaxation in a way that is very appealing to many patients."

Electrodes placed on the forehead and hands send body signals to a computer, which records them graphically and plays them back as audible tones.

The tones drop in frequency when the patient relaxes, reflecting decreased muscle tension, slower heart beat, and warmer skin temperature.

Handwarming is particularly useful in relieving headaches. "Sometimes just teaching handwarming can reduce migraine pain in persons who have been suffering for 25 years," says Brauer.

When combined with medication, relaxation has also been effective in bringing down high blood pressure, according to studies conducted by Dr. Stewart Agras of psychiatry and the Stanford Heart Disease Prevention Program.

"We don't know what the relaxation response is, but its results seem to be similar to the effects of transcendental meditation and hypnosis," says Agras.

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The group is currently testing the effect of relaxation, lowered salt intake, and weight loss on mild hypertensives who are not on medication to see if the combined approach is powerful enough to take the place of drugs in these patients. Other behavioral techniques are used to treat anorexia nervosa, an eating disorder characterized by excessive dieting to the point of starvation.

Patients, most commmonly teen-aged girls, are taught to control their weight by counting the number of bites they take during meals and plotting them on a graph opposite weight gain. From the graph, they can tell how much they have to eat in order to gain weight.

Similar techniques are used to produce the opposite effect, weight loss, in obese people.

However, in the case of anorexia, behavioral techniques are not enough. Excessive dieting is often a symptom of deeper family problems, such as dissension or unhappiness between parents, says Dr. Joellen Werne, a Palo Alto psychiatrist who treats anorexic patients at Stanford. Family therapy is therefore required to successfully resolve the symptoms.

Family and group psychotherapy is also used at Stanford to treat severe psychiatric disorders, to resolve communication problems between couples, and to help patients with life-threatening illness face the prospect of death.

Group therapy operates on the principle that most people who seek professional psychiatric help have some significant problem in relating to others, says Dr. Irvin Yalom, professor of psychiatry at Stanford.

Through group interactions, patients are helped to understand and correct maladaptive interpersonal behaviors and improve communication with others.

In the case of cancer patients, group therapy enables them to confront death, and "move into a mode of existance that is richer than the one they experienced prior to their illness," says Yalom.

"They are able to trivialize the trivial, to assume a sense of control, to communicate more openly with families and close friends, and to live entirely in the present rather than in the future or past."

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(End of series)

Mailed Wednesday, December 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Mailed Wednesday, December 6, 1978

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

EDITORS: Photos available if not included with story.

NEW VISTAS IN PSYCHIATRY:
STRENGTHENING THE MOTHER-INFANT BOND

One of the current frontiers of psychiatric research is focussed on the period immediately after birth. Researchers are exploring both the waking and sleeping lives of newborns for clues to life-threatening physical disorders, such as apnea (ceasing to breathe), and to behavioral problems which may emerge later in life. This is the second of three articles on research conducted by Stanford's department of psychiatry.

STANFORD—If a baby is touched and picked up often, will he be a happier baby than if he is left in the crib all day?

Will hanging bright mobiles over the baby's crib help increase his intelligence?

Are day-care centers beneficial to children?

There are compelling arguments to support both sides of these questions. Fact is, no one knows for sure what effects early stimulation has on human development.

However, research is beginning to shed light on the importance of some kinds of stimulation in physical development and in the mother-infant bond.

In studies begun in 1967, Dr. Herbert Leiderman, professor of psychiatry at Stanford, and his colleagues found that early separation of premature infants from their mothers had an adverse effect on the way the mothers later handled their children and on the way they felt about themselves.

Five years later, a follow-up of 25 families with premature and full-term infants found no long-term effects on either the mother or child, says Leiderman.

However, prematurity itself seems to be associated with a higher incidence of adjustment problems among these children as they grow older.

These studies helped to "revolutionize the psychosocial atmosphere of care-taking of high risk infants," says Leiderman. Today, Stanford and most hospitals in the U.S. allow families to observe and hold their infants in premature nurseries.

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Other studies conducted at Stanford have found that moving and touching babies are important in aiding cognitive development and improving their ability to deal with stress.

Dr. Annellese Korner and her colleagues have found that "when a crying baby is picked up and put to shoulder, it promptly stops crying and becomes visually alert. Under these circumstances, most infants will begin to scan the environment, including their mother."

Korner contrasted the effects of body contact and movement stimulation, and found that movement was the most potent factor in soothing and making the infant visually alert.

As an outgrowth of these studies, Korner developed gently oscillating waterbeds for premature infants to compensate for the movement stimulation they would have had in the uterus.

One benefit of the waterbeds has already been established, says Korner. They reduce the frequency of apneic episodes, periods when these infants stop breathing.

Korner and her associates are now studying the effect, if any, of waterbed stimulation on the infants' maturation and development.

Early physical contact also seems to be important for later abilities to cope with stress.

Researches in Dr. Seymour Levine's lab at Stanford have found that rats which are handled soon after birth deal with later stress better than those which are left alone.

These findings "suggest that infantile stimulation endows the organism with the capacity to make finer discriminations of relevant aspects of the environment," says Levine, "enabling it to respond more appropriately to the demands of the environment, including making appropriate responses to stress."

Physical stimulation does not only have come from the mother. Mother's helpers, whether they be grandparents, neighbors, or siblings, "also have a distinct contribution to make to the social development of children," says Leiderman.

In studies of children in Kenya, Leiderman found that multiple caretakers enhance the cognitive development and learning of infants during the first year of life, even under the most economically deprived conditions.

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(Tomorrow: reducing stress by biofeedback and other behavioral therapies.)

Mailed Wednesday, December 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

EDITORS: Photos available if not included with story.

NEW VISTAS IN PSYCHIATRY:
EXPLORING THE HEREDITARY FACTOR

Psychiatry has made dramatic advances in the last 25 years, particularly in the development of new drug therapies for patients with mental illness. Knowledge of brain chemistry is providing clues to the relation between behavior, physiology and genetics. This is the first of three articles on how these developments are being reflected in the work of Stanford's department of psychiatry.

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STANFORD—What determines behavior? Are feelings such as anger, fear or anxiety the result of environmental conditioning, or are they programmed in the genes?

There is no definite answer to these questions. However, evidence is accumulating which suggests a clear role for genes in the development of certain behaviors, and environment in the development of others.

In 1974, researchers at the National Institutes of Health found that two groups of a single mouse strain which had been separated since 1947 had developed two very different behaviors. The mice of one group were extremely aggressive and fought any intruder, while the mice of the other were docile and tolerated high crowding.

The mice retained their behaviors, even when they were raised as pups in the litter of the other group.

"This was an astonishing difference in behaviors," says Dr. Roland Ciaranello, professor of psychiatry at Stanford who directed the study. "There was nothing muddy about it. It was due to a genetic mutation."

Similar differences among mouse strains have also been observed in the catecholamine system, a class of body chemicals which controls the response to environmental stress, and which may play an important role in psychiatric illness.

Ciaranello and his colleagues have found that this system is clearly under genetic control. In particular, the group is studying control of the enzymes which synthesize these brain chemicals,and regulation of the hormone adrenaline. Continuation of this work is being supported with over $250,000 in grants from the National Institutes of Health and the National Science Foundation.

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In humans, certain behavioral disorders, such as alcoholism, antisocial behavior, and hyperactivity in children also seem to run in families.

"Are there individuals by virtue of genetic controls who respond too much or too little to stress and consequently exhibit maladaptive behaviors?" asks Ciaranello.

"Our work may give insights into the possible genetic bases of depressive psychosis, manic illness, and schizophrenia," he says.

However, he cautions, "we don't want to label people as having tendencies toward biological illnesses, and pre-ordain them to a specific behavior pattern.

"Even where there is a biological substrate for behavior, environmental influences may be even more important. For instance, simple drug treatment is not as effective as a combination of medication and psychotherapy in producing long-term or permanent changes.

"We should not try to define all human behavior in terms of definite biological systems," he says.

Ciaranello's caution is echoed by Dr. Seymour Levine, director of the Stanford Outdoor Primate Facility. Levine has found that certain social behaviors in the squirrel monkey are determined by the environment.

For instance, the initiation of sex behavior by the male monkey depends on the level of female hormone (estrogen), and has nothing to do with levels of male hormone (testosterone). "The male is synchronized by the female," says Levine.

During the estalishment of a hierarchy among squirrel monkeys, the leader has higher levels of testosterone, but when the struggle is over, he has no more than any other group member. "Dominance alters testosterone levels, not the other way around," says Levine.

Similar alterations in hormonal levels have also been observed in human groups.

"Some behaviors are under rigid biological control, while others are more influenced by the environment. This suggests the importance of the group in integrating the behaviors of its members," he says.

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(Tomorrow: Effects of early stimulations of infants on development and the mother-infant bond).

STANFORD UNIVERSITY MEDICAL CENTER
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FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

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(End of series)

Mailed Wednesday, December 6, 1978

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Striking declines in deaths from heart attacks and strokes during the last 10 years have saved an estimated 164,000 American lives, according to Dr. Robert I. Levy, director of the National Heart, Lung and Blood Institute.

"If we had had the same death rates in 1976 which we did in 1968, we would have had 164,000 more deaths in 1976,"said Levy December 2 during a visit to the Stanford Heart Disease Prevention Program at the Medical Center.

Deaths from strokes have dropped over 33 percent in the 10 year period, and continue to decline an average three percent each year. Heart attack deaths have dropped 20 percent in the same period, and each year fall an additional two percent.

"This is a relatively unique phenomenon," said Levy. Western European countries have, at best, steady heart disease-related death rates, and in some countries the rates have actually increased.

Levy cited improvements in emergency resuscitation techniques and coronary care as responsible for some of the decrease in heart disease mortality.

But the greatest factor in the change is related to changes in lifestyle, he said.

"People are more attentive to blood pressure today," he said. Seven or eight years ago, 50 percent of people with high blood pressure were not aware of their condition. Today, 10 million hypertensives are taking effective blood pressure controlling medication.

In addition, the proportion of people in the U.S. who smoke has decreased. Smoking has only increased among adolescent females, said Levy.

Diet has also changed. In the last 10-15 years, consumption of whole milk, butter, eggs and animal fats has dropped. A 50 percent drop in animal fat consumption has been nearly matched by increased consumption of vegetable fats.

"And, today, the biggest leisure habit seems to be exercise," said Levy.

This situation is contrasted with European lifestyles, in which risk factors for heart disease "are not being attended to," said Levy.

Europeans seem to be smoking as much, if not more, than ever. There is no government directed program to lower blood pressure. And consumption of fatty foods is also high.

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Even with the decline, heart disease is still the number one killer in the U.S., said Levy. The American Heart Association estimates that over one million Americans will die in 1978 from all forms of cardiovascular disease.

Levy's visit to Stanford came at the mid-point of a national clinical trial to determine whether reducing cholesterol levels in the blood can prevent or slow down the development of heart disease and heart attacks.

Stanford's Lipid Research Clinic, under the direction of Dr. John W. Farquhar, is one of 12 clinics in the U.S. and Canada participating in the study, which was begun in 1974.

A total of 3,800 healthy male volunteers with high levels of cholesterol are participating in the study, 350 of them at Stanford.

Half of the group are being given therapeutic diets to reduce their cholesterol levels. Cholesterol is being lowered even more in the other half of the group with addition of the drug cholestyramine to their diets.

Cholestyramine is a "roto-rooter sequester," which prevents absorption of dietary cholesterol by the digestive tract, said Levy.

"We do know that when one stops smoking or lowers his blood pressure, the risk of heart disease drops," said Levy. "But what about cholesterol? That's what we're trying to find out."

Levy said that although some of the participants have been followed for five years, preliminary results are not being released because they may jeopardize the rest of the study.

The trial is randomized and double blinded, which means that the doctors conducting it do not know which participants are on the diet alone and which are on diet plus medication. Levy said the findings may not be in until 1983, when all participants have been followed for at least five years.

The Stanford Heart Disease Prevention Program is well-known for its "three communities study," a comprehensive health education campaign which showed that the risk of heart disease could be reduced in the general population.

Recently the program was granted $6.5 million for the next five years by the National Heart, Lung and Blood Institute to study the effect of mass media education programs in cities with populations of 50-150,000.

According to Peter Wood, co-principal investigator of the program, the study may determine for the first time the effect of mediated health education campaigns on actual heart attack and death rates in entire communities.

Mailed Monday, December 4, 1978

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: · Laura Hofstadter 415: 497-6911

STANFORD—

Concern over reports of violent political repression in Argentina recently led Dr. Henry S. Kaplan of Stanford University and other prominent cancer researchers from all over the world to boycott the twelfth International Cancer Congress held October 5-11 in Buenos Aires.

Many of the scientists attended a "counter congress" held in Paris, France during the first two days of the meeting in Argentina.

Kaplan, D'Ambrogio professor of radiology at Stanford University Medical Center, said that many "top researchers in the cancer field" attended the Paris counter congress where about 300 participants discussed both advances in cancer research and repression in Argentina.

Sanctioned by the French Minister of Health, one purpose of the counter congress was to publicize the situation in Argentina, Kaplan explained, but some of the major news services did not attend the counter congress press conference.

One year earlier, Kaplan was one of 700 U.S. doctors and biomedical scientists who signed a petition requesting that the International Union Against Cancer (UICC) change the site of the meeting to a more politically neutral location.

The UICC, a Geneva based group, sponsors the widely attended meeting every four years, according to Kaplan.

Officials of the UICC refused to consider a change, although the request was submitted one year in advance, Kaplan said.

"Many scientists do not like the idea of a boycott," Kaplan explained, "and feel it's more effective to protest within the country in question.

"I don't quarrel with this idea," he added, "but it's counterproductive to debate the merits of each type of protest.

"If one goes and protests, that could be very effective, but to go and remain silent is not."

Kaplan was also a member of a five-person delegation which visited Argentina in late September to express humanitarian concern for more than 4000 individuals who are alleged victims of the present regime.

The delegation carried a list of individuals' names, which they wished to present to government officials. However, the officials, who had agreed in advance to meet with the delegation, refused to do so when they arrived in Argentina, Kaplan explained.

"We couldn't transmit the list directly, but we urged the president of the UICC to request the release of those doctors and biomedical scientists who are in custody, as a major gesture of goodwill," said Kaplan.

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Although the delegation had names of 4000 people of all occupations, a list of 185 medical professionals represented "a constituency we could speak for," Kaplan noted.

According to Kaplan, many doctors have been targets of the military government in Argentina, particularly psychologists and psychiatrists.

"The regime is deeply suspicious of these people," said Kaplan.

When it became clear that Argentine authorities had reneged on their agreements to meet with the delegation members, American, Dutch, British and French embassy officials all made attempts to arrange other interviews, but to no avail, said Kaplan.

The delegation left the list and a strongly worded letter with officials of the UICC, to be transmitted to government officials during the congress.

Kaplan has since received no formal communication from UICC officials confirming that the documents were presented to government authorities.

French lawyer Colette Auger, another delegation member, drew up a special writ of habeas corpus on behalf of the entire list of 4000 people, said Kaplan.

"No charges had been filed against these individuals, none has been brought to trial, and many are thought to have been tortured and executed," he explained.

"The writ said that on this vast scale, under the authority of the court of human rights in Strasbourg, these actions constituted a violation of the Nuremberg laws," Kaplan continued.

"We registered the writ in federal court in Buenos Aires 15 minutes before the court closed on Friday, September 29, and then were escorted to the airport in the French consul general's car to leave Argentina immediately.

"This document formally places the judiciary on notice and places them under an obligation to investigate or become accomplices.

"It's the strongest document of its kind formally lodged in such a country, and it's the most important thing that our delegation accomplished," he said.

Kaplan's only contact with the U.S. government was when he consulted the human rights division in the State Department before his departure from the U.S..

Kaplan said that he doesn't know what to expect now, but he hopes some international pressure will be brought to bear on Argentine authorities.

He also plans to ask "member organizations of the International Council of Scientific Unions, an umbrella group for hundreds of scientific societies, to agree not to sponsor congresses in countries known to be flagrantly violating human rights."

"I have no selective feeling against Argentina," he added, "but the opportunity to express humanitarian concern clearly presented itself at this time," he said.

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Mailed Monday, December 4, 1978.

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD—

Following President Carter's wage-price guidelines, Stanford's general tuition, and room and board rates probably will increase 8.9% next fall, student leaders were advised Monday, Dec. 4.

This compares with a 9.5% increase for the current academic year.

The Board of Trustees will take final action Tuesday, Dec. 12, on recommendations developed by the administration.

These call for an increase in general tuition to $5,595 from $5,130, a 9.1% hike, and an increase to $2,354 from $2,169, an 8.5% gain.

Tuition in the M.D. program of the School of Medicine will increase from its present uniform rate of $5,388 to $6,174 for continuing students, a 14.6% gain, and to $6,873 for entering students, a 27.6% hike. (*See details below.*)

In the School of Law, tuition will increase to $5,744 from $5,280, an 8.8% gain.

Wage-Price Guidelines

A background paper circulated to the Trustees states the University has made a "good faith" effort to follow the President's wage-price guidelines even though these raise "serious conceptual and calculational difficulties."

The weighted average of Stanford tuition and room and board rate increases over the two-year base period set by the guidelines is 10.7%. This has been reduced by 0.5% in accord with the national formula on prices and by an additional 1.1% "wage decelerator" detailed in the guidelines, yielding an overall figure of 9.1%.

While some increases recommended are above this figure and others below, the weighted average for the entire package is 9.1%. This is within the guidelines "insofar as we have been able adequately to understand and apply (them) to Stanford's recent past and present plans," the background paper notes.

Undergraduate Admissions

For several years Stanford has been the first major private university to announce its tuition rate increase. The current (1978-79) costs of attending Stanford and those independent institutions most often selected by undergraduates admitted here compares as follows:

Tuition, mandatory fees, room and board 1978-79

Harvard	$7,505
Yale	7,500
MIT	7,435
Stanford	7,300
Brown	7,240
Princeton	7,217
Dartmouth	7,145
Northwestern	7,025
Cornell	6,890
Cal Tech	6,447
Pomona	6,444
USC	5,878

- more -

Stanford will continue to meet the demonstrated financial need of all freshmen admitted to the University. Admissions decisions are made without regard to financial need.

About 55% of all undergradutes receive financial aid. This currently totals about $14 million annually. About $11 million comes in grants and scholarships, while $3 million represents subsidized loans and jobs during the school year.

Despite increasing tuition, recent studies at Stanford have shown that families at the $20,000 and $30,000 income level are expected to contribute a smaller percentage of their income toward University costs than was true in 1970-71. This reflects adjustments made in College Scholarship Service need assessment formulas adopted in 1975 and followed by Stanford.

Nationally and at Stanford the newly passed Middle Income Student Assistance Act will provide additional support to students and parents. The Basic Opportunity Grant provision has raised the family income limit for recipients to $25,000 from $15,000.

The Guaranteed Student Loan program provides an interest subsidy with no family income limit nationally.

In 1977 Stanford started its own Parent Loan Program, charging 8.75% interest, adjustable annually, on loans for tuition and room and board expenses.

The number of participants in this program during 1978-79 totals 121, compared to 116 in its initial year. The average annual loan amount is $4,750, compared to $3,961 a year ago. The maximum loan available this year is $7,000, compared to $6,000 a year ago. The proportion using the maximum has dropped to 34% from 39%. The median adjusted gross family income of borrowers is $35,000 to $40,000.

Studies conducted at Stanford since 1972 have shown that about three out of four students admitted to the University as freshmen who actually enrolled elsewhere chose private institutions of comparable costs. This year the proportion was 77%.

The most frequently selected private institutions were Harvard-Radcliffe, 165; Yale, 89; Princeton, 72; MIT, 45; Brown and Dartmouth, 20 each; Cal Tech 15; Pomona, 14; Northwestern, USC, Cornell, and Georgetown, 10 each. Among public institutions, the leader was Berkeley, 43, followed by UCLA, 18.

M.D. Tuition

The unusually high tuition recommendations for M.D.s in the School of Medicine are designed to restore previous relationships between tuition and the cost of medical education. In 1978-79 this cost is estimated at $35,200 per student per year. The recommended figures of $6,873 for entering students comprises about 21% of the estimated cost next year, the same ratio as found by the Institute of Medicine at Stanford in 1972.

Combined with an anticipated increase in living expenses, the new M.D. tuition will require an additional $400,000 in financial aid. This need can be met from available scholarship and loan funds in the School for the next two years, but additional support may be needed in subsequent years.

According to Deputy Dean Lawrence Crowley, "It is the intention of the School to ensure that attendance here is not prevented by inadequate financial assistance."

In accord with recommendations from a faculty committee, tuition will be charged M.D. students for 13 quarters, regardless of the number of quarters registered up to a total of 16. (Three quarters constitutes a normal academic year.)

"In recent years, Stanford M.D. graduates have averaged 13 quarters, with many students cutting short their education to save money. The new policy will encourage stuents to participate more fully in elective scholarly activities."

The new M.D. tuition rate probably will place Stanford among the 10 to 15 most expensive institutions nationally.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

An elderly woman selling her furniture to pay for medical expenses, when she actually qualified for MediCal.

A man who was entitled to Medicare benefits, but didn't know he could collect for laboratory expenses.

A 76-year old woman carrying four supplementary policies costing over $750 each year.

People such as these now may find help from a new manual on health insurance for people over 65.

The book provides guidance on Medicare and MediCaid coverage, how to choose supplementary health insurance policies, alternative sources of health care in the community, and how to set up a local health insurance counseling program for seniors.

The authors are Leona McGann, assistant professor, and Elizabeth Taft, lecturer, both from the department of family, community and preventive medicine at Stanford University School of Medicine, and Anthony Puentes, a former Stanford undergraduate.

Responses from a survey in a local retirement complex convinced the authors that most seniors need more information about health insurance. Many of these elderly people knew little about their coverage and eligibility for benefits, how to submit bills or how to collect payments due them, according to McGann.

McGann and Taft initiated a local training program for health insurance counselors, from which this book developed. The training program now is expanding throughout California and other states with the aid of a grant from the Luke B. Hancock Foundation.

Only 38 percent of medical care costs of the elderly are paid for by Medicare, according to the authors, but many seniors have no supplemental insurance to fill in the gaps. Others have too much coverage, duplicating services with unnecessary expense.

"People expect Medicare to cover everything, but it's not a panacea," explained Taft. "We are teaching people to fill in the holes in Medicare coverage with other policies which will maximize their benefits."

Insurance counselors also help seniors collect their benefits, fill out complicated forms and re-file for coverage when mistakenly turned down.

The elderly are particularly vulnerable to the rising costs of health care because many have fixed incomes. The extra burdens of prolonged illness and decreased mobility often add to their difficulties, the authors say.

The authors hope the new manual will encourage the establishment of health insurance counseling programs, and help the 22.9 million people over 65 in the U.S. to be "advocates for change in the field of health care and coverage."

The book was sponsored by a grant from the Administration on Aging in Washington, D.C., through the Council on Aging of Santa Clara County, Inc. It is available in looseleaf format from the Council on Aging of Santa Clara County, 277 W. Hedding, San Jose, CA 95110. The cost is $10.

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Mailed Wednesday, January 31, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—An international effort of scientific research and drug production is needed to control widespread, communicable diseases such as malaria, schistosomes (blood flukes), and leprosy, says Stanford University pharmacologist Tag Mansour.

As many as 250 million people have malaria, and an equal number are infected with blood flukes, largely in tropical, underdeveloped countries.

Other parasitical infections, including sleeping sickness, Chagas' Disease and leishmania, afflict millions of people, yet very little is being done either to treat or prevent these diseases.

In the United States, for example, less than one percent of the research budget of the National Institutes of Health is provided for tropical diseases, and a similar situation exists in the drug industry.

Why? Because there is little incentive to study diseases which are not a major problem in Western countries, says Mansour, chairman of the pharmacology department at Stanford Medical School.

In addition, economic, political and regulatory problems make it difficult for drug companies to investigate and develop new treatments.

Mansour is participating this week in a conference on drugs for developing countries, sponsored by the Institute of Medicine of the National Academy of Sciences.

The conference, held January 29-31 at the NAS in Washington, D.C., will explore the problems of tropical diseases, and seek solutions to them.

Participants include David Hamburg, president of the Institute of Medicine; Joshua Lederberg, president of Rockefeller University; Donald Kennedy, commissioner of the Food and Drug Administration; Senators Edward Kennedy, Jacob Javits; and Richard S. Schweiker, and several other prominent scientists and leaders in government and industry.

Mansour will address the problem of research to develop new drugs January 31.

"There have been remarkable advances in the fields of biochemistry and molecular biology in the past 25 years," he says, "but the drug treatment of parasitic infections has not kept up."

No effective vaccine exists for any of the major parasitic infections, and there are only a few drugs available for treatment or prevention of these diseases.

Mansour has worked for over 25 years to uncover the unique biochemistry of parasites such as the liver fluke and other flatworms. This knowledge may help researchers develop new and more effective drug treatments.

For instance, "we've found that the ability of the parasitic worm to move about is important for its survival in the body, and that the natural chemical serotonin seems to play a role in the control of movement," he says

"If we can block the action of serotonin, we may be able to interfere with the parasite's ability to move, thereby preventing successful infections."

Mansour says research in this area is slow. His group is one of only a handful conducting the research in the U.S.

Even if research produced an effective anti-fluke agent, regulations, economic and political constraints might hinder its production by drug companies and introduction in countries where it is really needed.

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Mailed Monday, January 29, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—A three-session course on "Growth and Development," for girls 11 to 13 years old will be led by Dr. Paula Duke, a pediatrician at Stanford University School of Medicine, beginning February 6.

The course is designed to help adolescent girls feel more comfortable about discussing changes taking place at puberty.

Topics will include height and weight changes, diets, nutrition, development of secondary sex characteristics, menstruation and acne.

A session to brief parents on the subject matter in the course will take place on Monday, February 5 at 7:30 p.m. in room A335 at Stanford Medical Center.

The girls' sessions will be held on three consecutive Tuesdays, February 6, 13 and 20 between 4:30 and 6:00 p.m. in room C358 at the medical center.

The course is part of a research project being conducted by Dr. Duke. A similar course for adolescent boys will be held at the end of February.

Interested individuals may obtain more information on enrollment by calling Dr. Duke at 497-6891.

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Mailed Monday, January 29, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911
City desks: Photo and copies of *Stanford MD* magazine available on request if not included with story.

STANFORD—This is the story of Donald L. Bedney, a black student who had a dream.

Bedney's childhood dream was to become a doctor. But unlike many people of his age, he did not have the early education and encouragement to achieve his goal.

His story is typical of many youths in American society. But you never read about them in supreme court decisions and college affirmative action manuals. These never tell you what it is like to be poor, black and disadvantaged.

As Bedney tells it in the current issue of the Stanford medical alumni magazine, his struggle was like the Greek legend of Sisyphus. He was condemned forever to roll a huge stone up a hill until it reached the top. As the stone rolled back, his work increased.

Bedney's education began in a ramshakled elementary school in Monrovia, CA. In 1934 it was anything but a profitable experience.

"The teachers seemed concerned only with play periods and keeping the pupils amused," he recalls. "At age 14, I had not yet learned to read."

With this background, Bedney failed the first semester of junior high school. He was sent to a retired teacher for tutoring in basic English, writing and arithmetic. He repeated the courses and passed.

"But my early failure represented a psychological setback," says Bedney, "especially in view of my ambition to become a doctor."

Bedney's father did many things to earn a living. He was in the trucking business, dealing in scrap iron. He worked in peach orchards supervising Mexican farm laborers. At one time he operated a used furniture store. Young Bedney in his upbringing worked at numerous jobs.

Bedney married Gloria Marie Tillman of Kansas City, Mo., in 1952. She had an associate arts degree in English.

"Naturally that made me more keenly aware of my lack of a high school education," says Bedney.

He audited courses in Pasadena City College and the University of Southern California, then petitioned City College and was granted a high school diploma.

"I had scotched that Sisyphian stone one more time," says Bedney.

Admitted to La Sierra College at Riverside, Bedney began premed courses in in 1954.

"We now had a young baby, and in my second semester I learned my wife was expecting another child," he says. During their years in La Sierra the Bedneys had four more children. Mounting pressures, family responsibilities again prevented his graduation.

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The stone rolled back.

At the same time his father died. The Bedneys returned to Los Angeles to take over the family car wrecking business. He had to secure other jobs to pursue his ambition while supporting a big family.

So he organized a house cleaning business.

In two years he had saved enough money to go back to school, receiving a bachelor's degree in physical therapy from Loma Linda University.

He worked at Patton State Hospital in San Bernandino when he asked about the possibility of admission to Loma Linda medical school.

"The dean pointed out that I now had a profession, and should be satisfied," Bedney says. "But I insisted one day I would study medicine."

The opportunity came when a friend suggested the Autonomous University of Guadalajara.

The Bedneys made the 1,549-mile trip to Mexico only to learn that the classes were conducted in Spanish.

Bedney who knew a bit of Spanish from childhood associations decided to take a chance. He moved with his family to Guadalajara and began to study medicine.

"Eight months later I was able to understand and speak the language," he says. "The course work was reasonably easy, but money problems began to plague me again.

"My loyal supportive wife and our children had to return to the United States. The cost for our children's private school in Mexico was greater than the cost of medical school.

"The greatest expense was for the apartment, food, transportation and insurance.

"At least once every two months I drove home to visit my family and procure funds to keep myself in school. My wife did all she could to help with expenses working as a secretary in Riverside.

"At the end I had made 44 roundtrips from Guadalajara to Riverside."

But Bedney learned that if he finished his training in Guadalajara, he would have to go to Canada for his internship. Mexico has no reciprocity with U.S. medical schools.

This prospect forced him again to look elsewhere. In 1968 he was driving to San Francisco on Highway 101 when he noticed a sign to Palo Alto. Remembering that he had a friend doing a pathology residency at Stanford University Medical Center, Bedney stopped to visit him.

"I was awed by this outstanding facility," Bedney recalls. "Our setup in Mexico was primitive in comparison."

He talked to Stanford medical school officials and was encouraged to apply. He was admitted in 1969 and was assisted by the loan office of Stanford and scholarships from the Riverside County Medical Society.

Two years later at commencement Donald L. Bedney, M.D. proudly walked down the aisles to receive hid diploma.

Says Bedney: "I remember how I said to myself over and over—in something of a mournful triumph—'I'm a doctor! I'm a doctor!' It was hard to believe that after 18 years I'd finally pushed that Sisyphean stone to the top of the hill."

Bedney is now in general practice in Huntsville, Alabama. He also is an emergency room physician for Redstone Arsenal Army Hospital, and a student health service physician at Oakwood College.

His children are studying to enter health and law careers.

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Mailed Monday, January 29, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911
EDITORS: Details follow asterisks.

STANFORD—Development of the visual system, how hormones work, some possible clues to treatment of senility, and factors causing arthritis, are among the subjects being studied by young scientists at Stanford University School of Medicine.

Their research is funded by the Biomedical Research Support Grant provided to Stanford by the National Institutes of Health, and administered by a Stanford faculty committee.

The grant helps young scientists to establish research programs in widely varying areas of both basic and clinical research.

The six assistant professors recently awarded one-year grants are Andrei Calin, M.D. (medicine); Thomas B. Horvath, M.D. (psychiatry); Gordon M. Ringold, Ph.D. (pharmacology); Carla Shatz, Ph.D. (neurobiology); Stephen J. Shochat, M.D. (surgery); and James P. Whitlock, Jr., M.D. (pharmacology).

* * * * *

Calin will study Reiter's disease, one of many forms of arthritis which afflict millions of people.

Several years ago, it was discovered that a certain hereditary factor is linked with the development of Reiter's disease, says Calin. But the disease also seems to be triggered by infections with some types of bacteria.

He hopes to determine which varieties of bacteria help cause Reiter's disease, and he will analyze them to discover which components of the cell wall are responsible in triggering the disease.

Horvath will study how a drug affects one aspect of brain function, measured by a brain wave called P300. This wave is believed to indicate the brain's speed in simple decision-making, according to Horvath.

He will measure volunteers' delayed responses to unexpected sounds. Scientists know that delay of the P300 increases as people get older. Also, they have shown that subjects who receive choline, a drug resembling the body's natural neurotransmitter, show significant memory improvement.

Horvath wants to know if choline also helps improve a person's ability to make simple judgements. This could lead one step closer to helping old people or those with memory problems, he says.

Ringold's research is in steroid hormones and the role they play in regulating the characteristics of each cell in the body. He will examine how hormones called glucocorticoids help regulate this task.

Shatz is working on the organization of the visual system—how its complex structure is set up, how cells in the retina make orderly, unscrambled connections with cells in the brain, and what genetic and environmental factors control these processes.

Shochat and his colleague, Dr. Andrew Ford, are interested in a condition of the intestine which develops in many premature babies subjected to extreme stresses such as severe cold, infection, or respiratory distress.

Sometimes these small babies must have portions of the affected intestine surgically removed and it takes months for the remaining intestine to grow back enough to function normally.

Shochat and Ford will study rats to determine the conditions which affect the intestine's rate of growth, including the age at which the surgery is performed and the effects of different methods of feeding following surgery.

In the cells of animals and man, DNA, the genetic material of all living things, is organized with proteins into a complex structure called chromatin.

Whitlock will study how cancer-causing chemicals interact with chromatin. These chemicals are believed to directly modify the chromatin complex, and clues to chromatin structure may come from studying the process.

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Mailed Wednesday, January 24, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911
or John Hargraves 415: 497-5785

STANFORD—At last count an estimated 40,000 Americans who, because of kidney failure, require regular hemodialysis treatments or face certain death.

The physical, emotional and financial facts and problems endured by these men, women and children will be the subject of a comprehensive public seminar on Saturday, Feb. 10, at Stanford University Medical School's Fairchild Auditorium.

The day-long seminar, "What is Hemodialysis?" is being sponsored by the Northern California chapter of the American Association of Nephrology Nurses and technicians and the Kidney Foundation of Northern California.

Hemodialysis, explains seminar coordinator John Hargraves, is more than just the cleansing of the blood by artificial kidney apparatus. For patients needing it, hemodialysis "is a whole way of life."

Hargraves added, "if anyone has a friend, neighbor or relative who is or will be on dialysis, or for those people who simply want to know more about dialysis then this siminar is exactly what they are looking for."

Hargraves, who is chief technician at Stanford's Hemodialysis Center, noted that a wide range of topics involving hemodialysis care will be covered in the seminar. Among these will be federal support and funding, mechanical devices, causes of renal failure, side effects, treatment, options, ultrafiltration and diffusion, and kidney transplantation.

In addition to Hargraves, speakers will include Jan Whitman and Steve Gumina of Stanford; Arlene Sukolsky, regional director of End Stage Renal Disease Network Coordinating Council; Margaret Robinson, in-service coordinator for dialysis at Herrick Hospital in Berkeley; Lee Luckenbill, social worker in the artificial kidney unit at El Camino Hospital in Mountain View; Sandy Wells of the Medical Bureau in San Francisco; Robbie Law of the Artifical Kidney Center at Veterans Administration Medical Center in Palo Alto; and Elaine McCaw, head nurse at the South County Self Care Center in Hayward.

Hemodialysis patients are generally treated three times a week, Hargraves explained, requiring about four hours per session. The treatments, in turn, are expensive, he noted.

For each patient dialyzed in a hospital the cost is approximately $30,000 a year, about 80 percent of which is paid by medicare and the remainder by the patients or their insurance companies. Home dialysis care costs about $10,000, much of which is covered by Medicare.

Through improving medical techniques life expectancy for dialysis patients is becoming markedly better, Hargraves said.

He further noted that similar medical advances have made it possible for young patients to undergo kidney transplants. In Northern California transplants are performed at Pacific Medical Center and the University of California, both in San Francisco, and at the University of California in Davis.

Those interested in the Stanford seminar should call or write the Stanford Hemodialysis Center, Stanford Medical Center, Stanford 94305, (415) 497-5785. Registration deadline is Feb. 4.

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Mailed Monday, January 22, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

EDITORS: Photos available if not included with story

STANFORD—Reggie Kriss has lived with cancer for 22 years. "I can't forget I've had it," she says. "I'm always aware that I'm living with something which at any time is capable of destroying me."

Yet, for Kriss this knowledge is not a sentence of death, but an invitation to life.

She is clear-eyed and energetic, and speaks openly about her disease and the meaning she finds in helping other women with breast cancer.

"It took cancer to help me find out my life can mean so much. I have dedication I don't think I would have had before."

For the past three years, Kriss, who is a licensed counselor, has been leading groups of cancer patients in therapy with Stanford psychiatrists Irvin Yalom and David Spiegel.

So far, over 50 women have participated in the groups, which are held in the department of psychiatry at Stanford University School of Medicine.

Kriss finds that she has a special kinship with the women she helps in therapy. They know she understands how they feel, because she has been through it herself.

Cancer struck Kriss not once, but twice. The first lump was discovered in her breast during a trip to England with her family in 1957. The breast was removed and subsequent radiation treatments left her right arm swollen, her hand numb. She was 31 years old, a mother of two children aged four and seven, and she felt very alone.

At that time there were no prostheses or breast reconstructions, and "cancer was something people didn't talk abut." So Kriss kept her cancer a secret, even from her children.

But instead of brooding, Kriss decided to make every minute of her life count. "I was aware that my life was going to be shorter because of the cancer," she says. "As a result, I did more things than I ever thought I could."

When the family returned to the States, Kriss trained for a masters degree and credential in high school counseling, and took a job at a predominantly black high school. It was a "demanding, but very exciting position." Within five years, Kriss had established a college workshop for the students, and was bringing in blacks from a variety of professions to talk about their jobs. Her classes were always crowded, and she still receives letters from some of her students.

Then cancer struck again. A lump was found in the other breast, and a second mastectomy was done.

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Kriss slid into depression. "I had no energy. I felt that my life was over," she says. But she began to talk about her disease to her friends, and revealed for the first time in 14 years that she had had cancer before.

Eventually, she went back to school for a license in marriage and family counseling. During her internship, she took a class in death and dying at Stanford from Dr. Irvin Yalom.

"I had confronted death several times," she says. "I wanted to know more about it so I could deal with it, and use it in a way that would make my life more meaningful."

Yalom asked her to join him in leading a group of women with breast cancer. "At first I was afraid," she said. "My husband, Dr. Joseph Kriss, head of nuclear medicine at Stanford, was concerned that it would be too depressing for me and possibly for him."

But instead, Kriss found the group to be exciting. Here were women sharing feelings they had never revealed to anyone, about their pains, and their fears of being disfigured, dependent, unwanted.

"The most devastating thing to a woman is to have her sexual image damaged," says Kriss. "Cancer patients are terribly afraid of frightening other people. They feel frightened themselves and alone."

Group therapy first shows women that they are not alone, she says. By sharing their feelings and fears, they begin to help each other, and their self-esteem grows. "It's not so bad to need help. After all, each of us is dependent on the other."

In this atmosphere of compassion and warmth, many of the women find they can open up for the first time to their friends and families. Families also meet together, "for they too need to know they are not alone in their experiences."

But the greatest lesson of the therapy is an existential one, says Kriss. "I have learned that one does not confront death until it is imminent. It is like trying to catch the message of a barely audible lecturer; you don't really hear what is being said until you are in the front row."

That confrontation is sudden and traumatic for the patient with cancer, but necessary. It is as if "an invisible screen divides cancer patients from those who are disease-free and unaware of their mortality. Once they realize that, patients are able to break through the barrier, and begin to adjust to a more effective life with themselves and others."

Originally, the groups included only women with breast cancer. They have since been opened to all patients with advanced cancer. For further information about the groups, contact Reggie Kriss, 497-6352.

Group therapy seems to be a formula which works for these patients. For many, including Kriss herself, it is a source of strength and hope. If cancer should strike a third time, "I won't feel alone. I will draw from other patients I've known the strength to help me in my own struggle. Already my life has been richly enhanced simply by associating with these women in the group."

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Mailed Monday, January 22, 1979

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD—

The Bay Area and Boston probably have the highest ratio of physicians to population of any area in the U.S., Acting Dean Lawrence Crowley of the Stanford Medical School told the Faculty Senate Thursday, Jan. 18.

Increased competition for patients may already have led to a decline in personal income for some local physicians, he said. Government unwillingness to support the costs of medical education directly associated with the costs of providing patient care have created a growing financial problem at the School.

Both locally and nationally, improved methods of treatment and closer professional review of medical practice has led to shorter hospital stays. Crowley added. One result is that Santa Clara County now has about 800 unused hospital beds daily.

Advances in medical care itself, slower population growth, and the emergence of "antimedical feelings" among the public also have added to the problems of practitioners.

Both Crowley and Dr. Robert Chase, professor of surgery, criticized the growing reluctance of government to support any part of medical teaching through patient care reimbursement.

Where there once was "a fair amount of piggy-backing of teaching off of research," Crowley said, this has now become a "no-no."

Research support is "flattening" and federal funds for medical training have been eliminated.

Where capitation grants once were used to encourage expansion of M.D. programs, "now we're being decapitated," he quipped.

Simultaneously, government agencies have exerted "very serious cost containment pressures" on patient care, Crowley said.

He emphasized that there is "no inherent, absolute conflict" between research and patient care. In fact, "excellent clinical research and clinical teaching absolutely requires strong patient care."

Charges that Stanford is violating state law concerning the corporate practice of medicine if sustained, could leave the University unable to bill for any professional services rendered patients by its full-time faculty.

"Obviously, that's completely untenable," Crowley said. "It would require a significant organizational change (for Stanford physicians) or a challenge of the decision in court."

While the Medical School faces a potential deficit of $1 to $2 million annually, "we're alive and basically healthy, with a tremendous reservoir of faculty talent," Crowley said. The present "time of troubles" contains within it "seeds for development of an even stronger center" for medical care, teaching, and research.

Two recent surveys have ranked Stanford second only to Harvard nationally in the caliber of medical faculty.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Women who smoke heavily during pregnancy significantly increase the risks of having spontaneous miscarriages and birth defects in their children, according to a report from Stanford University School of Medicine.

In a survey of nearly 28,000 women in the medical profession, miscarriages were found to occur one and a half times as often among smokers, and the rate of birth defects actually doubled in some groups of smoking women compared with their nonsmoking counterparts.

"This is one of the first studies which has demonstrated a statistically significant increase in birth defects in children of women who smoke heavily (a pack or more of cigarettes a day)," said Dr. Byron W. Brown, Jr., professor of biostatistics at the Medical School.

Brown conducted the research with Mr. David U. Himmelberger, of the Stanford Center for Drug Addiction, and Dr. Ellis N. Cohen, professor of anesthesia. Their report was published in the December 1978 issue of the *American Journal of Epidemiology*.

The researchers conducted a mail survey of women anesthesiologists, nurse anesthetists, operating room nurses, techicians, and members of the American Nursing Association.

The women reported about 13,000 pregnancies during the period 1963-1972. Of these, 10,500 had resulted in live births.

Rates of miscarriage and birth defects were greater among smokers in every age group.

Among both smokers and nonsmokers, older women had a greater rate of miscarriage. However, higher rates of birth defects occurred among children of younger women, especially those in their first pregnancy.

This was a surprising finding, said Brown, but it has been confirmed by studies conducted at other centers.

Though it is true that Down's syndrome, or mongolism, occurs more frequently in children born to women over the age of 35, this condition makes up only a small fraction of the possible birth defects, which may include defective hearts, lungs, bones, and intestinal, urinary and nervous disorders.

"It may be that women whose pregnancies result in disastrous births are less likely to try again," said Brown. Therefore, the highest birth defect rate would be expected to occur in the first pregnancy.

Older women who smoked had the highest rates of miscarriage. Children of younger women in their first pregnancy who smoked were at greatest risk of having birth defects.

The research on smoking grew out of a study by the American Society of Anesthesiologists on the effects of trace anesthetic gases on the health of operating room personnel.

This study, reported in 1974, suggested that exposure of anesthesiologists, nurse anesthetists, and technicians to anesthetic gases in the operating room may be responsible for increased incidences of cancer, liver disease, spontaneous miscarriage, and birth defects observed in these groups.

The smoking study provides additional support to these findings, and indicates the risks to operating room exposed women who also smoke.

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Mailed Thursday, January 18, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Aspirin may one day be used to prevent rejection of transplanted organs and arteriosclerosis in humans, according to researchers at Stanford University School of Medicine.

Rejection occurs in two ways. The first involves invasion and destruction of the transplanted tissue by white blood cells.

The second form of rejection is marked by rapid development of arteriosclerosis (hardening of the arteries) in the organ, often within months of transplantation.

Dr. Stuart Jamieson, research fellow in cardiovascular surgery at Stanford, and his colleagues have found that both forms of rejection in rats are associated with the presence of platelets, transparent cells which play a role in coagulation and repair of injured tissue.

The researchers were able to prevent rejection by giving aspirin and other drugs known to lower blood levels of platelets.

Jamieson reported these findings January 15 at the National Science Writer's Forum in Dallas, sponsored by the American Heart Association.

Currently, acute rejection by white blood cells can be prevented by drugs which suppress the body's immune responses. Unfortunately, the drugs also knock out the body's defenses against other foreign materials, including common germs.

The second form of rejection, hardening of the arteries, is more difficult to control. "Accelerated arteriosclerosis is the main cause of death in long-term survivors of heart transplantation," said Jamieson. Six patients at Stanford have had second transplants because of this condition.

The Stanford group studied the development of arteriosclerosis in closely inbred strains of rats which had received transplanted hearts.

They found that platelets began to aggregate on the insides of the blood vessels in the hearts soon after transplantation.

Later, the blood vessel lining was damaged, apparently by the platelets themselves. Other platelets then piled up on the damaged site, eventually clogging the vessel.

The researchers found that they could prevent platelet build-up by giving aspirin and other anti-platelet drugs soon after transplantation.

The drugs also helped prevent early rejection of the hearts by white blood cells.

According to Jamieson, damage done by platelets may leave breaks in blood vessels, through which white blood cells can infiltrate and reject the heart tissue.

By preventing the build-up of platelets, the drugs seemed to protect the blood vessels from invasion by white blood cells.

Jamieson is now testing the drugs in transplanted dogs and monkeys under grants from the American Heart Association and the British Heart Foundation.

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Mailed Wednesday, January 17, 1979.

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

TWO STORIES: Dave Fulton, 497-4902 Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD—

Dwain N. Fullerton, director of corporate relations in Stanford's Office of Development, has been named associate vice-president for medical development, a newly created position.

Fullerton's appointment was announced by Dr. Lawrence G. Crowley, acting vice-president for medical affairs, and by Joel P. Smith, the University's vice-president for development.

The appointment, effective Jan. 22, followed a national search and reflects an increased commitment by the University and its Medical Center to a comprehensive development effort for both the School and the Hospital. The Center faces many major capital and programmatic needs which must be addressed in the next several years.

A Stanford alumnus and long-time Palo Alto resident, Fullerton has headed the University's corporate relations program since 1969. During the period there has been a steady growth in gifts from corporations, which now amount to 12% of the University's annual gift totals.

Prior to his corporate position Fullerton worked with the Graduate School of Business as associate director of the International Center for Advancement of Management Education, and as associate dean of a business school in Lima, Peru, modeled after the GSB.

His first fund-raising experience was in Stanford's annual fund, starting in 1960.

Fullerton earned his A.B. from Stanford in 1958 and his MA in 1960. In addition he attended the National University of Chile as a Fulbright scholar.

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FOR IMMEDIATE RELEASE

STANFORD—

Psychology Prof. Phil Zimbardo of Stanford will discuss "prisons of the mind" and "the psychology of evil" on the nationally syndicated Phil Donahue show from 11 am to noon Monday, Jan. 22, on KTVU (Channel 2).

The program will be shown in over 70 cities during the next two months.

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers
FOR IMMEDIATE RELEASE
STANFORD—

Stanford, Berkeley, Harvard, and Michigan have the nation's most highly regarded faculties in across-the-board strength, a new national survey indicates.

Involving more than 4,000 faculty at four-year colleges and universities, the survey was conducted by Profs. Everett C. Ladd Jr. of the University of Connecticut and Seymour Martin Lipset of Stanford, both of whom hold appointments at the Hoover Institution.

Their findings are reported in the Jan. 15 *Chronicle of Higher Education.*

Questionnaires distributed in 1977 asked respondents to "name the five departments nationally in your discipline that have the most distinguished faculties," in order of their importance.

Both Stanford and Berkeley were ranked among the top five by 10% or more of the respondents in 17 of the 19 fields covered. Harvard was similarly ranked in 16 fields, Michigan in 15.

They were followed by Yale and Chicago, 12 each; Illinois, 11; Columbia, 10; and Princeton and MIT, 8 each.

(While not directly comparable, a 1969 survey of scholars in 36 graduate fields sponsored by the American Council on Education found Berkeley ranked among the top five in 32, followed by Harvard, 27; Stanford 16; Chicago, 14; Yale, 13; MIT, Michigan, and Princeton, 12 each; and Cal Tech, 11.)

In the 19 fields covered in the latest survey, Harvard was ranked first in seven—biological sciences, chemistry, economics, history, medicine, philosophy, and political science.

Stanford ranked first in three fields—business, education, and psychology—and second in both engineering and medicine. (Several other surveys in recent years have reached similar conclusions.)

Yale led in three disciplines—English, foreign language, and law. Berkeley led in two—physics and the combined field of mathematics and statistics.

Individual leaders in other fields covered by the survey were: Cornell—agriculture and forestry combined; MIT—engineering; Indiana—music; and Chicago—sociology.

Stanford has no program in agriculture or forestry, and was not cited by 10% of the respondents as among the top five in music.

In other fields, when judged by the frequency of being cited among the five best institutions, Stanford ranked as follows:

Biological sciences, fourth behind Harvard, Berkeley, and Wisconsin;

Chemistry, third behind Harvard and Berkeley;

Economics, sixth behind Harvard, MIT, Chicago, Yale, and Berkeley;

Engineering, second behind MIT;

English, sixth behind Yale, Harvard, Berkeley, Chicago, and Princeton;

Foreign languages, eleventh behind Yale, Berkeley, Harvard, Wisconsin, Princeton, Texas, Columbia, Indiana, Michigan, and North Carolina;

History, seventh behind Harvard, Yale, Berkeley, Princeton, Wisconsin, and Michigan;

Law, fourth behind Yale, Harvard, and Chicago;

Mathematics and statistics, fourth behind Berkeley, Princeton, and Harvard;

Philosophy, eleventh behind Harvard, Princeton, Michigan, Pittsburgh, Berkeley, UCLA, Cornell; Yale, Pennsylvania, and Chicago;

Physics, fifth behind Berkeley, Cal Tech, Harvard, and MIT;

Political science, fifth behind Harvard, Yale, Berkeley, and Michigan; and

Sociology, eighth behind Chicago, Berkeley, Harvard, Wisconsin, Michigan, Columbia, and North Carolina.

Copies of a technical report on methods used in the survey are available from Ladd at the Social Science Data Center, University of Connecticut, Storrs, CT 06268.

1/16/79 —30—

THE CHRONICLE OF HIGHER EDUCATION January 15, 1979

How Professors Rated Faculties in 19 Fields

Following are ratings of faculties in 19 fields, based on a survey of faculty members conducted in 1977 by Everett Carll Ladd, Jr., and Seymour Martin Lipset. The first column includes all departments that were rated among the top five nationally by at least 10 per cent of the respondents. The second column indicates the percentage of respondents listing the department as being the "best" in the nation.

AGRICULTURE & FORESTRY

	One of the 5 Best	The Best
1. Cornell U.	42%	13%
2. U. of Wisconsin, Madison	38%	10%
3. Iowa State U.	36%	9%
4. Michigan State U.	31%	10%
5. Purdue U.	30%	3%
6. U. of California, Davis	27%	4%
7. U. of California, Berkeley	26%	8%
8. North Carolina State U., Raleigh	23%	7%
9. U. of Illinois, Urbana	23%	5%
10. U. of Minnesota	22%	4%
11. Texas A&M U.	20%	3%
12. Ohio State U.	13%	1%
13. Oregon State U.	12%	4%
14. Colorado State U.	12%	3%
15. U. of Nebraska, Lincoln	12%	3%

BIOLOGICAL SCIENCES

	One of the 5 Best	The Best
1. Harvard U.	54%	24%
2. U. of California, Berkeley	33%	10%
3. U. of Wisconsin, Madison	31%	6%
4. Stanford U.	30%	11%
5. Yale U.	19%	2%
6. U. of Michigan	19%	1%
7. Massachusetts Institute of Technology	18%	6%
8. Cornell U.	14%	5%
9. U. of Illinois, Urbana	14%	2%
10. U. of California, Los Angeles	14%	1%
11. U. of Washington	11%	2%
12. Rockefeller U.	10%	1%

BUSINESS

	One of the 5 Best	The Best
1. Stanford U.	67%	28%
2. Harvard U.	47%	21%
3. U. of Chicago	35%	6%
4. U. of Pennsylvania	32%	4%
5. Northwestern U.	25%	10%
6. U. of Illinois, Urbana	25%	5%
7. U. of Texas, Austin	23%	3%
8. Massachusetts Institute of Technology	20%	3%
9. U. of California, Berkeley	20%	2%
10. U. of Michigan	17%	1%
11. U. of California, Los Angeles	15%	1%
12. Columbia U.	10%	1%
13. Michigan State U.	10%	1%

CHEMISTRY

	One of the 5 Best	The Best
1. Harvard U.	79%	43%
2. U. of California, Berkeley	65%	9%
3. Stanford U.	53%	18%
4. California Institute of Technology	50%	9%
5. Massachusetts Institute of Technology	45%	6%
6. U. of Wisconsin, Madison	26%	0%
7. U. of Illinois, Urbana	18%	3%
8. Columbia U.	18%	2%
9. Cornell U.	15%	1%
10. U. of Chicago	15%	0%

ECONOMICS

	One of the 5 Best	The Best
1. Harvard U.	89%	39%
2. Massachusetts Institute of Technology	87%	39%
3. U. of Chicago	86%	14%
4. Yale U.	55%	3%
5. U. of California, Berkeley	40%	1%
6. Stanford U.	29%	1%
7. Princeton U.	23%	1%
8. U. of Michigan	12%	0%
9. U. of Wisconsin, Madison	10%	1%

EDUCATION

	One of the 5 Best	The Best
1. Stanford U.	32%	11%
2. Ohio State U.	31%	9%
3. Indiana U.	25%	6%
4. U. of Illinois, Urbana	23%	6%
5. U. of Wisconsin, Madison	23%	4%
6. Harvard U.	20%	8%
7. U. of Chicago	20%	4%
8. Columbia U.	18%	3%
9. U. of California, Los Angeles	17%	4%
10. U. of California, Berkeley	14%	2%
11. U. of Michigan	12%	3%
12. Michigan State U.	12%	2%
13. U. of Oregon	11%	2%
14. Pennsylvania State U.	11%	2%

ENGINEERING

	One of the 5 Best	The Best
1. Massachusetts Institute of Technology	63%	32%
2. Stanford U.	57%	14%
3. U. of California, Berkeley	56%	9%
4. U. of Illinois, Urbana	44%	10%
5. U. of Michigan	25%	3%
6. California Institute of Technology	23%	4%
7. Purdue U.	20%	2%
8. U. of Wisconsin, Madison	14%	4%
9. Cornell U.	12%	4%
10. U. of Minnesota	12%	2%

ENGLISH

	One of the 5 Best	The Best
1. Yale U.	79%	52%
2. Harvard U.	70%	20%
3. U. of California, Berkeley	64%	6%
4. U. of Chicago	37%	3%
5. Princeton U.	27%	1%
6. Stanford U.	19%	2%
7. U. of Virginia	19%	1%
8. Johns Hopkins U.	18%	1%
9. Columbia U.	14%	1%
10. U. of Michigan	13%	0%
11. U. of North Carolina, Chapel Hill	10%	0%

FOREIGN LANGUAGES

	One of the 5 Best	The Best
1. Yale U.	48%	21%
2. U. of California, Berkeley	46%	10%
3. Harvard U.	43%	17%
4. U. of Wisconsin, Madison	32%	5%
5. Princeton U.	28%	10%
6. U. of Texas, Austin	28%	4%
7. Columbia U.	24%	7%
8. Indiana U.	22%	1%
9. U. of Michigan	22%	1%
10. U. of North Carolina, Chapel Hill	21%	2%
11. Stanford U.	21%	1%
12. U. of Pennsylvania	13%	0%
13. U. of Illinois, Urbana	12%	1%

HISTORY

	One of the 5 Best	The Best
1. Harvard U.	82%	45%
2. Yale U.	70%	20%
3. U. of California, Berkeley	59%	7%
4. Princeton U.	40%	3%
5. U. of Wisconsin, Madison	32%	2%
6. U. of Michigan	29%	2%
7. Stanford U.	23%	2%
8. U. of Chicago	22%	5%
9. Columbia U.	22%	1%
10. Johns Hopkins U.	12%	1%

LAW

	One of the 5 Best	The Best
1. Yale U.	92%	14%
2. Harvard U.	89%	61%
3. U. of Chicago	57%	8%
4. Stanford U.	51%	3%
5. U. of Michigan	46%	3%
6. Columbia U.	43%	3%
7. U. of California, Berkeley	24%	0%
8. U. of Pennsylvania	11%	3%

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MATHEMATICS & STATISTICS

	One of the 5 Best	The Best
1. U. of California, Berkeley	65%	20%
2. Princeton U.	55%	22%
3. Harvard U.	51%	13%
4. Stanford U.	44%	11%
5. U. of Chicago	44%	6%
6. Massachusetts Institute of Technology	40%	6%
7. U. of Wisconsin, Madison	20%	3%
8. U. of North Carolina, Chapel Hill	16%	2%
9. U. of Michigan	14%	1%
10. Yale U.	14%	0%
11. U. of Illinois, Urbana	12%	1%

MEDICINE

	One of the 5 Best	The Best
1. Harvard U.	65%	31%
2. Stanford U.	34%	9%
3. Yale U.	29%	5%
4. Johns Hopkins U.	24%	2%
5. U. of California, Los Angeles	22%	6%
6. Columbia U.	22%	0%
7. Washington U. (Mo.)	21%	2%
8. U. of California, San Francisco Med. Ctr.	18%	4%
9. Duke U.	13%	1%
10. U. of Pennsylvania	13%	0%
11. U. of Washington	12%	1%

MUSIC

	One of the 5 Best	The Best
1. Indiana U.	67%	33%
2. U. of Rochester	54%	9%
3. The Juilliard School	50%	20%
4. U. of Michigan	44%	4%
5. U. of Illinois, Urbana	39%	9%
6. Yale U.	28%	0%
7. U. of Southern California	20%	0%
8. Oberlin C.	15%	0%
9. Northwestern U.	13%	0%

PHILOSOPHY

	One of the 5 Best	The Best
1. Harvard U.	85%	40%
2. Princeton U.	63%	23%
3. U. of Michigan	53%	10%
4. U. of Pittsburgh	53%	10%
5. U. of California, Berkeley	35%	3%
6. U. of California, Los Angeles	28%	0%
7. Cornell U.	20%	0%
8. Yale U.	15%	0%
9. U. of Pennsylvania	10%	3%
10. U. of Chicago	10%	0%
11. Stanford U.	10%	0%

PHYSICS

	One of the 5 Best	The Best
1. U. of California, Berkeley	66%	25%
2. California Institute of Technology	66%	20%
3. Harvard U.	60%	15%
4. Massachusetts Institute of Technology	58%	11%
5. Stanford U.	46%	11%
6. Princeton U.	43%	4%
7. U. of Illinois, Urbana	24%	2%
8. Cornell U.	21%	6%
9. U. of Chicago	16%	0%
10. Columbia U.	14%	2%

POLITICAL SCIENCE

	One of the 5 Best	The Best
1. Harvard U.	81%	29%
2. Yale U.	78%	32%
3. U. of California, Berkeley	63%	9%
4. U. of Michigan	56%	13%
5. Stanford U.	36%	3%
6. U. of Chicago	35%	4%
7. Princeton U.	30%	2%
8. U. of Wisconsin, Madison	14%	1%
9. Massachusetts Institute of Technology	14%	0%

PSYCHOLOGY

	One of the 5 Best	The Best
1. Stanford U.	74%	34%
2. U. of Michigan	56%	17%
3. Harvard U.	46%	9%
4. U. of California, Berkeley	33%	4%
5. Yale U.	33%	2%
6. U. of Illinois, Urbana	24%	4%
7. U. of Minnesota	18%	6%
8. U. of Pennsylvania	15%	4%
9. U. of California, Los Angeles	13%	1%
10. U. of Wisconsin, Madison	11%	1%
11. Rockefeller U.	10%	4%

SOCIOLOGY

	One of the 5 Best	The Best
1. U. of Chicago	71%	17%
2. U. of California, Berkeley	68%	25%
3. Harvard U.	59%	17%
4. U. of Wisconsin, Madison	56%	17%
5. U. of Michigan	55%	5%
6. Columbia U.	36%	5%
7. U. of North Carolina, Chapel Hill	23%	0%
8. Stanford U.	10%	1%

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Stanford University has received a three-year, $350,000 grant from the Kaiser Family Foundation to develop analytical tools to help solve complex medical problems.

According to Dr. David Eddy, associate professor in the schools of engineering and medicine, and program director, 26 medical, engineering and business students will tackle complicated medical problems such as the importance of annual check-ups and other preventive measures, the use of expensive and risky diagnostic tests, and the preferred therapy for certain diseases.

They will focus both on solving real problems and on developing techniques that can be used to analyze other problems, he said.

Their findings will be submitted to appropriate organizations such as the State Department of Health, the Food and Drug Administration, or the American Hospital Association.

Quantitative techniques have been used for years to help solve problems in other fields, said Eddy, but their use in decision-making in clinical medicine is less well established.

This is due in part to the kind of training physicians traditionally get, and in part to the nature of clinical medicine. For example, in the business world, outcomes can be measured in dollars and cents. But in medicine, qualitative factors, such as how much a procedure decreases pain or improves the patient's ability to work, must also be considered.

Other factors which complicate medical problems include the seriousness of outcomes, such as death and disability, the variability of individual patients, and the rapid rate at which medical technology changes.

"The ultimate objective of the program," said Eddy, "is to improve the quality and lower the cost of medical care by helping physicians in the decision-making process."

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Mailed Tuesday, January 16, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—Arguments over recombinant DNA research are "sparks from local collisions of deep underlying forces" of science and society, said one speaker at a public forum held January 13 in Fairchild Auditorium at Stanford University School of Medicine.

Dr. Robert Sinsheimer, chancellor of the University of California, Santa Cruz, spoke before several hundred participants in a forum on the public's role in the conduct of scientific research.

The day-long forum focused on research involving gene splicing techniques and recombinant DNA, the subject of controversy among scientists and non-scientists since the early 1970's.

At that time, some scientists expressed concerns over possible dangers arising from widespread use of the techniques. Dr. Ronald Davis, associate professor of biochemistry at Stanford, was one of the first scientists to voice initial concerns.

Speaking at the forum, Davis said "none of the hypothetical hazards has come true, and there are now no known hazards" in recombinant DNA research.

"Everything we do in the test tube happens in nature," he said.

Davis said that guidelines issued by the National Institutes of Health regulating federally funded recombinant DNA research have been "a disaster" and have delayed progress in this area.

The guidelines have forbidden use of newer and possibly safer methods and have hampered progress in risk assessment experiments, Davis claimed.

"But the real disaster is that they have demoralized young scientists," he said.

Among the conjectured biological hazards of recombinant DNA work, Sinsheimer cited the accidental escape of novel organisms into the environment and the emergence of resistant strains of bacteria.

But other types of hazards must be acknowledged, he said.

"The potential long-term ecological, social and moral hazards of new technology can't be dismissed," he declared, adding that scientists have been reluctant to address these issues.

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The recombinant DNA debate "illustrates our lack of means to address such problems," Sinsheimer said, agreeing that the NIH guidelines have not been a good solution.

Sinsheimer suggested that a "visible platform close to the centers of political power," such as a presidential commission, is needed to deal with these matters.

Burke Zimmerman, science consultant in the U.S. House of Representatives, suggested that "the way the issue of recombinant DNA was introduced to the public may have created polarization."

"The debate got out of hand during the inital stages and was characterized by fear on both sides," he said.

Ronald Cape, chairman of the board of CETUS corporation in Berkeley, said future applications of recombinant DNA technology might include production of human insulin, interferon (an anti-virus and possible anti-cancer agent), and antibodies to fight specific diseases. He also hinted at the possibility of future agricultural and energy applications.

But public participation in the uses of this new technology is desirable, said Richard Knox, medical editor of the *Boston Globe*. "The public wants to accompany scientists down the road," he said.

Following the forum, a group of participants passed a resolution to send a delegation to the California state legislature. The group plans to advocate specific rules in choosing public members of institutional biosafety committees which oversee recombinant DNA research at institutions receiving federal funding.

New NIH guidelines on recombinant DNA research took effect January 2 of this year. The new guidelines are less stringent than previous regulations.

But the revised guidelines call for twenty percent of the members of institutional biosafety committees to "represent the interest of the surrounding community with respect to health and protection of the environment."

The guidelines do not specify how such members are to be chosen.

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Mailed Monday, January 15, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD[8]Stanford supports legislation to clarify the manner in which faculty physicians in medical schools bill their patients, Dr. Lawrence G. Crowley, acting vice-president and dean of the Stanford University School of Medicine, said Monday, Jan. 15.

In testimony before the State Assembly Committee on Health, Crowley said that direct clinical care to patients is "an obvious and necessary part"of the process of teaching medical students, interns and residents.

Faculty physicians provide medical care to patients, he said. A system of charging for such services has been in existence in all of the medical schools of California and the nation in one form or another.

"No medical school in the country provides, or could provide these services free of charge," he said.

The Committee on Health held a hearing in Sacramento to determine if California law dealing with the corporate practice of medicine should be amended to specifically authorize physicians on medical school faculties to charge professional fees.

Scheduled to testify at today's hearing were also represehtatives from the University of California, University of Southern California, officials from the State Department of Health, the Board of Medical Quality Assurance, and others.

There is a difference of opinion whether the present law which prohibits the corporate practice of medicine applies or was intended to apply to medical schools. Assembly Bill 19 would clarify the question.

The problem emerged as a public issue because of complaints filed by the Union of American Physicians and Dr. Eugene Dong, Jr., a Stanford associate professor of cardiovascular surgery.

The complaints have alleged that Stanford is engaged in the corporate practice of medicine by having salaried faculty physicians who charge fees and turn them over to the medical school. They claim that Section 2008 of the California Business and Professions Code prohibits physicians who are employed by unlicensed corporate entities to charge fees for their services.

In addition, they have alleged the system leads to "double billing," and inferior patient care.

Their complaints are now under investigation by the Board of Medical Quality Assurance and Medi-Cal.

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Crowley said Stanford is neither in violation of the spirit or letter of the law.

At Stanford it is the individual physician who exercises the discretion to charge or not charge a professional fee, not the institution, he explained.

"The corporate interference in the practice of medicine through the profit incentive which (the law) intended to prevent is simply not present in Stanford's system," Crowley said.

Crowley termed the allegations that Stanford provides inferior patient care as "simply not true."

He explained that 28,000 patients are admitted annually to Stanford University Hospital, and there are more than 134,000 visits in the clinics, and 29,000 emergency visits.

"Isolated cases in which patients are not satisfied with some aspect of their care are bound to exist in any facility that treats as many patients as Stanford," he said.

"But Stanford's reputation for providing excellent care and our record of patient satisfaction is at least the equal of any other medical center of its size in the nation," he said.

Stanford, Crowley said, serves as a major referral center for patients with rare and difficult medical problems from thoughout the United States.

That other physicians refer so many patients to Stanford is an important testimony to the high esteem they hold regarding Stanford's services, he said.

Commenting on the billing allegations, Crowley said every aspect of Stanford's billing system since the beginning of Medicare and Medi-Cal was approved annually by the appropriate agencies and auditors.

"Nothing has been hidden," he said. "The problems with which we are now dealing are based on practices that have been on the record and approved at every stage.

"Nevertheless, these allegations are serious and they are being treated seriously. Stanford is making every effort to insure that they are fully investigated.

"It is in our best interest to see that the allegations, which involve extremely complex regulatory issues, are resolved."

Crowley said faculty physicians now must comply with many legal requirements before a fee is charged.

These include the requirements of Medicare, Medi-Cal, the Board of Medical Quality Assurance, and the Department of Consumer Affairs.

"If you act favorably on this legislation," Crowley said, "you will in no way have changed these legal requirements."

The proposed change, he added, is also so narrowly written to include only physicians on the faculties of nonprofit university medical schools which operate clinics for the purposes of medical education.

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Mailed Monday, January 15, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Dr. Eugene M. Bricker, emeritus professor of clinical surgery at Washington University in St. Louis, will present the ninth *Louis and Dorothy Kovitz* visiting professorship lecture at Stanford University School of Medicine Friday, January 19.

Bricker will speak at 4 p.m. in Room M-106 of the Medical School on the role of radical surgery for pelvic cancer.

Physicians and other health professionals in the community are invited to attend.

Bricker has been active in developing surgical treatments for cancer since the 1940s. In particular, he is well known for radical, or extensive surgery to control cancers of the pelvic region.

In addition to his position at Washington University, Bricker is associate director of surgery at Ellis Fischel State Cancer Hospital in Columbia, Missouri.

He received his medical doctorate from Washington University School of Medicine in 1934, and holds several awards, including the Amory Prize from the American Academy of Science, and the Ferdinand C. Valentine Medal and Award from the New York Academy of Medicine.

He has authored or edited over 40 publications, including 10 books.

The Kovitz lectureship was established in 1969 by Dr. and Mrs. Kovitz of Los Altos to bring outstanding lecturers in medicine and surgery to the Medical Center.

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FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Nobel laureate William N. Lipscomb of Harvard University will present the sixth annual Linus Pauling lecture at Stanford University School of Medicine Wednesday, January 17.

The lecture is entitled "How Do Enzymes Work?" and is open to the public. It will be held at 4 p.m. in the Medical School's Sherman Fairchild Auditorium.

Lipscomb, Lawrence Professor of Chemistry at Harvard, is a well-known physical chemist, who has determined the chemical structure of boron hydrides and two enzymes. The hydride work earned him a Nobel prize in 1976.

He studied under Linus Pauling while at the California Institute of Technology, and received his Ph.D. in chemistry there in 1946. Later, he taught at the University of Minnesota for several years before coming to Harvard in 1959.

The Pauling lectures were established in 1973 to honor professor Pauling, who retired from Stanford that year. Sponsored by the Departments of Biochemistry, Biology, and Chemistry, and by the Stanford Magnetic Resonance Laboratory, the lectures were designed to "bring to Stanford distinguished speakers in the fields of molecular biology and molecular pharmacology."

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Mailed Friday, January 12, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Stanford University's chimpanzees were moved Thursday, January 11 to their new home at the University of Texas in Austin.

Their departure from Stanford brings to a close four years of behavioral studies which once included the resources of internationally-known ethologist Jane Goodall.

The chimpanzees will be kept as a group for breeding and behavioral studies at the Texas facility under a grant from the National Institutes of Health. Dr. Mike Keeling, a veterinarian, directs the facility.

According to Dr. Seymour Levine, director of the Stanford Outdoor Primate Facility which housed the chimpanzees, this is the only group of chimpanzees in the United States used primarily for breeding purposes.

Breeding chimpanzees in captivity is important, not only for the behavioral knowledge which can be obtained from one of humankind's closest relatives, but because the supply of research animals from their native habitats has been sharply curtailed in recent years.

The Stanford facility was established in 1974 to permit behavioral and biological studies of chimpanzees in conjunction with similar studies at the Gombe Stream Research Center in Tanzania by Dr. Jane Goodall.

Goodall served as co-director of the facility with Dr. David Hamburg, former chairman of the Stanford psychiatry department and currently president of the Institute of Medicine of the National Academy of Sciences.

The facility also provided training for students who wished to do research at the Africa field station.

But in May 1975, four of the Stanford personnel at the station were kidnapped by Zaire guerrillas. Although they were later released unharmed, the incident resulted in the termination of the association between the station and Stanford.

The loss of the Gombe center prevented researchers at Stanford from comparing the behavior of chimpanzees in captivity with those in the wild.

In addition, difficulties in obtaining funds for the research and problems in handling the animals led the researchers to consider closing the program.

"Although we have made considerable progress, and have produced data that are interesting in terms of understanding chimpanzee behavior, we believe that in the future the program will have diminishing returns," said Levine, in September 1978.

It has been recommended that the primate facility be used to breed and study rhesus macaques, which breed more quickly than chimpanzees and are more suitable for biobehavioral research.

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Mailed Thursday, January 11, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

CITY DESKS: Photos available on request if not included with story.

STANFORD--A young Modesto housewife is alive and well thanks to a new emergency transport system operated by Stanford University Hospital.

Mrs. Debbie Avrett had checked into Modesto City Hospital for a Caesarean delivery. When she awoke in the recovery room, her new daughter was brought in so she could see her.

"Suddenly I started choking and couldn't breathe," she recalled. "That's all I remember."

Mrs. Avrett's physician phoned Stanford for assistance. A special medical team trained in emergency transport procedures was dispatched in a specially-equipped air ambulance.

Within a few hours, she was flown to Stanford where more intensive care could be provided.

"Mrs. Avrett had a blood clot in her lung which led to respiratory arrest and heart failure," explained Dr. Myer Rosenthal, director of intensive care medicine at Stanford. "We were able to provide the intensive monitoring she needed, as well as fresh personnel, around the clock."

Now, the young woman has recovered and is home, reunited with her husband, her parents and her new daughter.

Mrs. Avrett was the first patient in a new program of ground and air ambulance transportation now bringing critically ill patients to Stanford University Hospital.

The new "adult transport service" was created to lessen the dangers of transport for patients whose care would benefit from a move to Stanford, according to Rosenthal.

"Not every hospital has the staff or equipment to deal with critically ill patients, particularly with the increasing sophistication and cost associated with such care," he explained.

"We hope that this program will be beneficial to patients in this area as well as in adjacent counties," he added.

Stanford Hospital currently receives one or two patients each week from other medical facilities although not all of these patients are critically ill, Rosenthal explained.

"The patients we receive through the new service are severely ill patients that physicians have been reluctant to transport," he noted.

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Hospital staff maintain close communication with doctors concerning their patients, according to Rosenthal, and the transition from the community to Stanford, and back again, proceeds without interruption of care.

Rosenthal named some specific benefits the service offers:

. availability of subspecialists in every area of medicine on a 24-hour basis

. monitoring and cardiac support with the most sophisticated equipment available

. hemodialysis for critically ill patients

. a medical team of doctors, interns, residents and nurses, available on a 24-hour basis.

"These days there are controls over facilities expansion, and not every hospital can be all things to all patients," Rosenthal said.

By decreasing the need for duplication of expensive equipment and services, Rosenthal thinks that the ultimate savings to the region might be considerable.

The service works this way. A physician requesting transport phones a dispatch center at Stanford. The dispatcher contacts a physician from Stanford's intensive care unit or emergency department, who acts as coordinator.

The decision to transport a patient is made only after the patient (or the patient's family) consents to the move, and Rosenthal said that medical insurance covers the expense.

The transport team assumes full responsibility for the patient's care as soon as they arrive at the patient's bedside. Transport is by ground ambulance, if within 50-75 miles of Stanford, or by air and ground ambulance if the distance to Stanford is greater.

One member of each team is a physician, and trained nurses from the intensive care and emergency units at Stanford Hospital also participate. Occasionally, a monitor technician accompanies the team.

Standard equipment includes a respirator, sophisticated heart monitoring tools, and drugs to handle any type of medical crisis, said Rosenthal.

A similar service for newborn and pediatric patients has been in operation at Stanford for several years.

The new program, which has been in planning for three years, will be reviewed regularly, according to Rosenthal. Purchase of special transport vehicles may be considered in the future, he said.

Such vehicles might enable the hospital to offer an emergency rescue service with "management and transport of critically ill or injured patients directly from the scene of accidents," he added.

There are a few private air transport services already in operation, but not many are hospital-based, said Rosenthal. A rescue air transport run by the state has been operating for several years in Maryland, he noted.

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Mailed Tuesday, January 9, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Two young faculty physicians at Stanford University School of Medicine have been awarded a two-year grant for $150,543 from the American Cancer Society to study the effects of radiation and drug therapy on kidney growth, structure and function.

Dr. Sarah Donaldson, associate professor of radiology and pediatric radiation therapist, and Dr. Peter Moskowitz, assistant professor of radiology and pediatric diagnostic radiologist, became interested in this problem several years ago when they noted x-ray findings suggesting abnormal kidney growth in children who had been successfully treated for Wilms' tumor.

A cancer of the kidney which occurs in young children, Wilms' tumor is the most common abdominal tumor, accounting for about seven percent of all malignancies seen in children, according to Donaldson.

"Fortunately, we can cure over 80 percent of all Wilms' tumor cases," she added. The treatment involves surgical removal of the diseased kidney, followed by radiation therapy and chemotherapy with a combination of two or three drugs.

Normally, when a kidney is removed, the body's other kidney grows in size in order to compensate for the functions originally accomplished by the two kidneys.

Moskowitz found that compensatory growth did not occur in the remaining kidneys of several children treated for Wilms' tumor with abdominal radiation and chemotherapeutic drugs.

Finding little information available on the effects of radiation and drug therapy on normal and compensatory kidney growth and function, Moskowitz and Donaldson decided to pursue their observations experimentally.

"This is the way a lot of medical knowledge is acquired," they noted. "A clinical observation is made, and then we go to the laboratory to learn more about it."

"The current drugs effective against Wilms' tumor include vincristine, actinomycin D and adriamycin, which are used with radiation therapy," Moskowitz explained.

Preliminary studies, funded by the Stanford Research Development Fund, Adria Labs, and the American Cancer Society, California Division, showed that, in mice, radiation alone and each of the drugs alone, inhibits compensatory kidney growth and overall body growth. Kidney function was not examined, Moskowitz said.

Their new study will examine the effects of these drugs, alone and in combination with radiation therapy, on kidney growth, structure and function in baby mice, a good model of the mammalian system, according to Moskowitz.

Normal kidney growth will be studied in mice with both kidneys intact, and compensatory growth in mice which have had one kidney removed, mimicking the type of treatment used for Wilms' tumor in humans.

"As cancer therapy becomes more aggressive, there is more awareness of the complications to normal tissues," explained Moskowitz. "Normal tissue injury develops slowly. Although such therapy may not be harmful during the treatment period, will children receiving therapy develop other kidney troubles later in life?"

"Since this is a highly curable cancer in humans, there will be many long term survivors," Donaldson said. "All anti-cancer therapy has side effects, and the complications of treatment must be recognized as well as those of the disease," she added.

"These studies may be applicable to other conditions in which combination chemotherapy and abdominal radiation therapy is used, such as in some other abdominal tumors," Donaldson said.

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Mailed Monday, January 8, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

CITY DESKS: The following is an announcement of a public forum on recombinant DNA to be held at Stanford on January 13, 1979. On the day of the forum, interviews with the speakers may be arranged by telephoning (415) 497-7264.

STANFORD—A public forum on recombinant DNA research and the public's emerging role in policy decisions governing scientific research will be held January 13 at Stanford University School of Medicine.

The forum will take place in Fairchild Auditorium from 10 a.m. to 5 p.m., with a program of speakers in the morning and informal workshops in the afternoon.

Recombinant DNA techniques enable researchers to manipulate the genetic material basic to life, splicing genes from one species to another.

The benefits and risks of such research have been the subject of much debate among scientists, many of whom now feel the risks have been exaggerated.

As a result, revised guidelines regulating federally funded research were recently issued by the Department of Health, Education and Welfare.

The new guidelines also require increased public participation in decisions regarding the conduct of recombinant DNA research.

Local institutional biosafety committees must now select at least 20 percent of their members from the public.

Compliance with the revised membership guidelines is required by January 31 of this year.

One focus of the forum will be the role of the public on such committees.

Other issues to be addressed at the forum include the relationship of federal regulations and legislation to local control of research, and the benefits and risks associated with recombinant DNA research.

Speakers will include Ronald Cape, chairman of the board, CETUS corporation; Dr. Ronald Davis, associate professor of biochemistry at Stanford; Dr. Robert Sinsheimer, chancellor of the University of California, Santa Cruz; and Burke Zimmerman, science consultant in the U.S. House of Representatives, who contributed to the new guideline formation.

Among the topics of the workshops are the citizen's role in science policy, approaches to regulation, worker safety and training, and science policy issues for educators.

Many community organizations are co-sponsors of the event, which is funded by the California Council for the Humanities and Public Policy.

Attendance is free, and the public is invited to participate.

For more information, or for preregistration materials, call the Stanford University Division of Health Services Research at (415) 497-6426.

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Mailed Monday, January 8, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Breast reconstruction will be the subject of the first in a series of free public lectures on women's health beginning Tuesday, January 9 at Stanford University School of Medicine.

Nine lectures will be presented each Tuesday at noon in Room M104 of the medical school. The annual series is sponsored by the Department of Family, Community and Preventive Medicine.

Dr. Netta Grandstaff, senior research associate in the department, will give the first lecture. Grandstaff is well-known locally for her work with breast cancer patients, and has directed workshops on breast reconstruction for several years.

The second lecture, on January 16, is entitled "Teenage Pregnancies: Current Status and Birth Control." The speaker will be Dr. Vickie Hufnagel, of the obstetrics and gynecology department of Los Angeles' Cedar Sinai Hospital.

Future topics include: "New-Old Techniques in Childbirth"; "DES Daughters—Where are they"; "Menopause and Depression"; "Female Sexuality—Past, Present, and Future"; "Legal and Moral Issues of Informed Consent"; "Family Planning—A Cross Cultural Study"; and "Health and Socially Related Risk Factors Among Older Women."

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Mailed Tuesday, January 2, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Stanford University medical students are performing less well on the National Board Examinations compared with previous years, according to a letter distributed Monday, Feb. 26, to the faculty and students of the Stanford University School of Medicine.

The letter, issued by Dr. John P. Steward, associate dean for student affairs, states that 37 percent of the medical students who took Part I of the examination in 1978 failed all or part of it. By comparison the failure rate on Part I for 1977 was 27 percent, and for 1971 was 12 percent.

Steward said the recent pronounced downward trend in student performance on Part I began in 1977 and is a phenomenon also noted in other medical schools with which Stanford frequently compares itself.

"The reasons for this decline are neither simple or obvious," he said. "But an analysis of possible reasons is essential."

Passing the National Board Examinations is a requirement for the medical degree at Stanford. The tests, which can be retaken, are administered in June and September by the National Board of Medical Examiners. Part I tests students for their knowledge in the basic sciences, and Part II in clinical sciences.

Steward said the performance on Part II of the Stanford graduates has been relatively constant since 1974, but was higher prior to that year.

For years when the National Board of Medical Examiners ranked medical schools based on the performance of their students, Stanford frequently placed among the top six schools in the U.S. Such rankings are no longer prepared by the Board of Medical Examiners, Steward noted.

The 1978 mean score for Stanford medical students is equivalent to the 54th percentile in basic sciences and 63rd percentile in clinical sciences for the appropriate national standard reference group.

Steward said his office released these data because it is important that they be considered in the deliberatons of the Medical School's faculty senate. A faculty senate committee chaired by Dr. Ruth T. Gross, professor of pediatrics, is currently making recommendations for improvement of the evaluation of student performance.

In a preliminary report to the senate Friday, Dr. Gross stated the majority of the faculty were dissatisfied with the present system of evaluating student performance in the Medical School.

"One fourth of the faculty think students now enter their clinical clerkships with basic science preparation below standard and also that Stanford is graduating a significant number of students whose knowledge is below acceptable standards," she said.

Dr. Gross outlined several remedies. They ranged from improved counseling of students with marginal performance, better procedures to inform them of their progress, to dropping under certain conditions the failing students from the M.D. program.

The Gross committee report is expected to be published in a few weeks.

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Mailed Monday, February 26, 1979

Table 1

Performance on Part I of National Board Examination Taken by Stanford Medical Students (1971-1978)

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	1971	1972	1973	1974	1975	1976	1977	1978
No. students who took exam*	83	88	87	73	98	98	83	71
No. students failing exam overall	3	6	2	6	3	3	5	11
No. students who passed exam overall, but failed 1 or more sub-sections	7	5	10	9	12	8	17	15
% students failing all or part of the exam	12%	13%	14%	21%	15%	11%	27%	37%
No. students who performed at or above the 83rd percentile (%)	34 (41%)	38 (43%)	31 (36%)	23 (32%)	38 (39%)	37 (38%)	26 (31%)	16 (23%)

*Includes all students, irrespective of whether exam taken after 2,3,or 4 years of medical school; students repeating exam not included.
Note: Passing score overall, as well as for each subsection, represents approximately the 13th percentile for appropriate national Standard Reference Group.

Table 2

Performance of Stanford Medical Students on National Board Examinations

	1971	1972	1973	1974	1975	1976	1977	1978
Mean scores (total test) for medical students taking Part I after 2 yrs preclinical work	596 (82)*	573 (75)	565 (73)	538 (62)	588 (79)	562 (72)	547 (66)	515** (54)
Part II mean scores (total test) for Stanford graduates	N.A.†	571 (76)	569 (75)	549 (66)	551 (68)	552 (65)	537 (62)	543 (63)

*() represent approximate equivalent percentile for appropriate national Standard Reference Group.
**Excluding scores of students taking exam before completing basic sci.courses.
†Different scoring system used prior to 1972.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

Editors: Photo is available if not included with the release

STANFORD—"Mars in 3-D," a dramatic movie based on image data taken by the Viking Mission to Mars will be screened twice on Thursday, March 1, at 7 and 9 p.m. in Fairchild Auditorium at Stanford University School of Medicine.

The movie is open to the public at no charge. As the title indicates the movie is in 3-D and the audience will be given special glasses to get the full effect.

Subtitled "Images from the Viking Mission," the movie was developed by Dr. Elliot C. Levinthal, adjunct professor of genetics at Stanford, using advanced computer techniques. It is complete with a stereo sound track of computer-generated music composed by Michael McNabb and William Schottstaedt of the Center for Computer Research in Music and Acoustics at Stanford.

"Mars in 3-D" was made possible because both the Viking orbiter and two landers provided views from cameras in different positions. The movie is basically presented in three parts—scenes from the orbiter, the science test lander, and scenes of the Martian surface.

According to Levinthal, "ridges, outcrops and eroded drifts of the Lander One terrain are clearly shown. The closing scenes show the rock types and troughs that surround Lander Two."

In the film canyons the size of the Grand Canyon are shown in full relief while surface features on the ground near the landers are dramatically shown into the foreground. Many background crater rims and rocks are seen as clearly etched topographical features.

Levinthal produced the film and Kenneth L. Jones, working at the Jet Propulsion Laboratory at California Institute of Technology (Cal Tech), directed it. Uri Geva, a graduate student in the communications Department at Stanford, was film advisor and editor.

Commissioned by the National Aeronatics and Space Administration (NASA) as part of the Viking project, the movie was shown last month at the Second International Colloquium on Mars held at Cal Tech in Pasadena.

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Mailed Thursday, February 22, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Dr. Orland A. Soave, director of the division of laboratory animal medicine at Stanford University School of Medicine, has announced his retirement at the end of this month.

He will be succeeded by Dr. James H. Dewson, III, who will serve in an acting capacity while a search for a new permanent director is conducted.

Dewson is an associate professor of hearing and speech sciences in the Department of Surgery. He is currently serving a term as chairman of the university-wide Administrative Panel for Laboratory Animal Care.

As director of the medical school's animal facilities, Soave has been responsible for supervising the care of animals used for teaching and research.

"In the course of his 19 years of dedicated service to Stanford Dr. Soave has been responsible for setting up professional standards for laboratory animal care facilities throughout the nation," said Dr. Lawrence G. Crowley, acting vice president for medical affairs and dean of the medical school.

Soave was a member of the Animal Care Panel in the early sixties commissioned by the National Institutes of Health to develop standards for animal care and management in the nation's biomedical research facilities.

The standards led to improvements in the training of qualified personnel to supervise animal facilities, and development of proper housing for laboratory animals.

Soave came to Stanford in 1960 from the State Department of Public Health at Berkeley. He is a specialist in veterinary medicine and viral diseases in animals, and a clinical associate professor in the Department of Medical Microbiology.

He has served as consultant in laboratory animal medicine for the Pan American Health Organization, the National Aeronautics and Space Administration, and as editor of the Journal of Laboratory Animal Care.

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Mailed Thursday, February 22, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

Editors:Photos are available if not included with the release

STANFORD—"The Coming of Age," a series of public talks by Stanford physicians on the physical and emotional aspects of growing older, will be presented on three successive Wednesdays beginning Feb. 28 at Stanford University School of Medicine.

Among the six lecturers will be Dr. Russel V. Lee, clinical professor of medicine, emeritus, at Stanford, and and founder of the Palo Alto Medical Clinic.

The lectures are part of the medical school's Progress in Medicine Series. Each is free and begins at 7:30 p.m. in the school's Sherman Fairchild Auditorium.

The lectures are:

• Feb. 28, "The Body in Which We Journey," a discussion of the biology of aging and on current research at Stanford on the aging process by Drs. Lawrence M. Crapo and Gerald Reaven. Crapo is assistant professor of medicine in the division of Gerontology, and Reaven is profesor of medicine, head of the Gerontology Division, and director of the Geriatric Research, Education and Clinical Center (GRECC) at Veterans Administration Center in Palo Alto.

• March 7, "Aches and Pains," or what happens to the bones and joints in humans as they grow older, by Drs. Thomas B. Okarma and Robert A. Marcus. Okarma is staff physician in gerontology, while Marcus is assistant professor of medicine in gerontology.

• March 14,

"Growing Old Gracefully," and the experiences of age in sexuality, moods and other emotions, by Dr. Leo Hollister and Dr. Lee. Hollister is professor of medicine, psychiatry and the pharmacology, and director of psychopharmacology research at V.A.

The Progress in Medicine lectures are presented by the dean and faculty of Stanford Medical School and by the Medical Center Council. This particular series is being cosponsored by V.A. in Palo Alto, which is associated with the medical school.

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Mailed Tuesday, February 20, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415:497-6911
ADVANCE FOR RELEASE TUESDAY, FEBRUARY 20, 1979

STANFORD—Health of children and adolescents and training of pediatricians to deal with children's common medical problems will be the focus of a $842,604 grant to Stanford University from The Robert Wood Johnson Foundation.

Stanford was one of six institutions selected by the foundation to receive grants totaling $4.8 million, it was announced Tuesday, February 20. Six-year training and research programs will be established at the institutions, with funding already awarded for the first four years.

In announcing the awards, Robert Wood Johnson Foundation president, Dr. David E. Rogers said, "We hope the program will catalyze major changes in the field, and, in the final analysis, improve the health of children in this country. It is a particularly important goal to stress in this Year of the Child."

According to Dr. Ruth T. Gross, professor of pediatrics and director of the new program at Stanford, there is a need for qualified teachers and faculty in general pediatrics, an area which has been neglected in medical education.

"There is now universal recognition that pediatrics extends far beyond the hospital-based practice where most training occurs," she said.

Young pediatricians become familiar with the rare and highly complicated diseases seen in hospitals, but are not skilled in handling the more common problems of children and adolescents seen in general practice. There is a need for faculty members and teachers with expertise in this area, she explained.

With the help of the grant, training for pediatricians planning to enter academic medicine will be expanded in the department of pediatrics at Stanford, to include two fellows each year in a two-year training program. The fellows will participate in patient care programs, coursework, and in research projects.

According to Gross, research and training opportunities will be broad. Among the faculty already in the program are Dr. Iris Litt, associate professor of pediatrics and director of adolescent medicine, and Dr. Thomas F. Anders, associate professor of psychiatry and pediatrics and director of child psychiatry.

Other pediatric specialties in the department, the Boys Town Center for the study of youth development at Stanford, and the Palo Alto School District will also be involved.

Examples of some areas of research are the effects of early and late physical maturation upon achievement in adolescence, and adolescents' compliance with medication for such problems as acne, neurological disorders and birth control.

By emphasizing research and training of new faculty members, medical education will be better equipped to train future physicians to handle everyday health problems of children and youth, according to Gross.

The other five institutions receiving funds are Duke University, The Johns Hopkins University, Medical Associates Research and Education Foundation (the University of Pennsylvania, Children's Hospital of Philadelphia), the University of Rochester, and Yale University.

The Robert Wood Johnson Foundation, based in Princeton, New Jersey, supports projects aimed at improving access to general medical care services.

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Mailed Friday, February 16, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder: (415) 497-6911

STANFORD—Impotence. The word conjures up feelings of guilt and shame, yet it is a major medical problem, afflicting an estimated 10 percent of the male population.

Today there are therapies and treatments available to the impotent man, including biofeedback and surgically implanted devices which simulate erection.

The majority of impotence (80-90 percent) results from psychological and emotional problems, according to Dr. Alan Brauer, director of the Stress Reduction Clinic at Stanford University School of Medicine.

Often, men become impotent because of stress, or problems in their relationships with wives or girl friends.

Behavior therapies and other forms of counseling which include the partner, and biofeedback, can be effective in removing the source of impotence, said Brauer.

Biofeedback teaches patients to relax by providing visual and audible signals about heart rate, blood pressure, muscle tension, and temperature.

By relaxing, patients reduce the "stress and anxiety that have multiple effects on all body systems," he said.

For the highly motivated patient, psychological treatment is successful 60-75 percent of the time.

However, treatment is less effective if the emotional problems are deep-seated, such as a life-long depression, or hatred of women going back to early childhood.

Deep-seated emotional problems can cause impotence as complete as that resulting from diabetes, stroke, neurological disease; excessive drug or alcohol use, or old age.

The solution in these cases is not psychotherapy, but surgery, to implant devices which simulate erection.

At Stanford, Dr. Robert Kessler of the Division of Urology has implanted about 100 of these devices since 1975.

Most of his patients have impotence resulting from disease, but one quarter of them have been referred by psychiatrists after treatment of their emotional problems failed.

Kessler implants two types of devices. One consists of two rods of silicone (a plastic material not rejected by the body) which are inserted in the penis and hold it erect.

The other is an inflatable device consisting of two silicone tubes placed in the penis and a small pump in the scrotum. By squeezing the pump, patients can draw fluid from a reservoir fitted under the abdominal muscles into the tubes, causing erection.

This device, developed in 1972 by Dr. Brantly Scott of Baylor School of Medicine, simulates erection more naturally, and eliminates erosion of the penile tissue which can complicate insertion of the rod device.

Kessler most often implants the inflatable device, with only minor complications, such as leakage of fluid.

Completely implantable, both devices can make patients' lives more normal. Unless the ejaculatory function has also been damaged by disease, they enable previously impotent men to produce children.

"For the 35-year-old man with diabetes, impotence is a major tragedy," said Kessler. "No longer is it something to be ashamed of."

As a result, more men are bringing their problems to doctors. In addition, most insurance companies now provide coverage for the cost of the device and surgery.

Mailed Thursday, February 15, 1979

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Stanford University President Richard W. Lyman announced Thursday, Feb. 15 that he will separate the position of Vice President for Medical Affairs and Dean of the School of Medicine.

Lyman made the announcement in a letter to the committee searching for a successor to Dr. Clayton Rich who resigned in January. Rich held both administrative positions.

"I am asking you to search for a Vice President for Medical affairs at a time when it is increasingly clear that the incumbent will have different responsibilities from the last two holders," Lyman wrote.

"Specifically, we are moving toward a greater degree of de facto separation between the Hospital and the Medical School," he continued. "To put it somewhat differently, there are compelling reasons to believe that both entities will fare better if each has strong, independent leadership."

Lyman said such a leadership will consist of a Dean for the Medical School to whom (academic) departments will report, and a director for the Hospital whose authority will be independent of the Dean's.

"Both of these persons will report to the Vice President for Medical affairs, who will need to have substantial management abilities as well as keen sensitivity to issues of biomedical policy, federal, state and local, and the capacity to define and articulate the institution's positon on them," Lyman said.

"Inevitably, he added, "the precise duties of the position will be defined in part by the qualities of the individual who takes it."

Lyman noted that "this is an important time in the history of the Stanford Medical Center.

"Every university medical center in the country is actually or potentially at risk because of the uncertainties afflicting national policies with respect to medical education, research, and health care."

Lyman's letter constitutes the formal charge to the search committee whose membership was announced last week.

The committee is headed by Dr. Thomas C. Merigan, professor of medicine and head of the division of infectious disease in the Medical School.

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Mailed Thursday, February 15, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—Biologists at Stanford University have used for the first time a high energy physics instrument to measure the movements of proteins and obtain a split second picture of molecules in motion.

The successful demonstration was carried out by scientists from the Stanford School of Medicine working in the Synchrotron Radiation Laboratory (SSRL) of the Stanford Linear Accelerator Center.

Using extremely brief light pulses to "freeze" protein movements in the same way a strobe light stops the motions of dancers, the scientists have demonstrated successfully that proteins change shape in less than a billionth of a second.

The use of the instrument in biological research is important, according to the scientists, because flexibility of proteins is vital in their ability to perform many biological functions.

Some protein motion, however, occurs over tiny moments of time in the realm of billionths of seconds and until now, such rapid movements had not been measured.

Dr. Lubert Stryer, chairman of the department of structural biology in the Sherman Fairchild Center at Stanford, Dr. Ian Munro of Daresbury Laboratory in England, and Dr. Israel Pecht of the Weizmann Institute in Israel, reported their research in an article in the January issue of the *Proceedings of the National Academy of Sciences*.

Taking advantage of the storage ring for electrons at SSRL, where electrons whirl in a circular orbit at the speed of light, the scientists obtained pulsed light, or synchrotron radiation, in bursts of extremely short duration.

When these pulses of light hit specific amino acids (the chemical "building blocks" of proteins) within the proteins being examined, fluorescent radiation was observed. The patterns of radiation were analyzed for evidence of amino acid motion independent of the rest of the protein. Such rapid flexing motions had been predicted theoretically for many proteins but never observed before.

According to Stryer, the biological significance of these rapid movements is not understood in detail, but he believes they may trigger certain cell responses to stimuli such as light and hormones.

For instance, understanding these protein motions may give clues to how the body's immune system successfully combats infections.

White cells, which produce antibodies in the immune system, are triggered by certain foreign chemicals called antigens. Protein receptors on the surface of the white cells detect the presence of antigens, and motion of these receptor proteins may be critical for triggering the antibody production, he suggested.

The proteins studied thus far have been serum albumin, a blood protein which scavenges waste products in the body; azurin, a bacterial protein with a "fluid-like" central structure which undergoes large changes of shape in time periods of billionths of seconds; and myelin, a flexible protein found in nerves.

The research was supported by a grant from the National Institute of General Medical Sciences, and the National Science Foundation which supports SSRL.

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Mailed Wednesday, February 14, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—An eye test, developed by ophthalmologists at Stanford University School of Medicine, was given recently to television viewers in their homes in Columbus, Ohio.

Subscribers to the QUBE Cable TV station took the test on February 6 and 7, and responded through computer consoles attached to their sets.

Ophthalmologists at Ohio State University will now clinically examine those who failed the test, and a certain proportion of those who passed, to determine how accurate the TV test is in screening for vision problems.

"This is the first time medical testing has been attempted on television with audience response," said Dr. A. Ralph Rosenthal, head of division of ophthalmology at Stanford University School of Medicine.

Previously, a program of breast self-examination for cancer was aired nationwide, but no measurement of audience response was done.

Rosenthal, Dr. Milton Flocks, a clinical professor of ophthalmology and Jerry Hopkins developed the test over a year ago under a grant from the National Society for the Prevention of Blindness.

They conducted the test in Columbus in cooperation with QUBE and the department of ophthalmology at Ohio State College of Medicine.

The Cable TV station QUBE was chosen for the testing because it is the only station in the country with computer feedback, said Rosenthal.

Viewers simply pressed a button near their set to respond to questions such as whether they passed or failed the test, what their age and sex was, and what they felt about the test.

The test consists of two parts. In the first, viewers are instructed to stand about 12 feet away from the TV screen and read standard eye chart letters with one eye at a time.

In the second part, viewers are told to sit at a distance from the set equal to the diagonal measure of the TV screen, and stare at a spot in the center of the screen while other dots blink on and off. This tests peripheral vision. Again, each eye is tested separately.

The test runs about 12 minutes and the viewers compare their responses to the correct ones. If they fail the test, they are urged to see an ophthalmologist.

So far in testing at the Stanford Eye Clinic and in a small field trial of 200 individuals, the TV test has been shown to be about 90 percent accurate, said Rosenthal.

That is, 90 percent of the viewers with normal vision, as determined by an ophthalmic examination, passed the TV test; and 90 percent of those with defective vision failed.

"The findings of the Ohio test will be made available in a few months," said Rosenthal.

"If the accuracy of the test is still about 90 percent then broadcasting from conventional stations will soon begin—at first by local TV stations and then perhaps a nationwide test," said Flocks.

Until now, the principal visual screening of the general population has been carried out by the public schools, motor vehicle licensing bureaus, and the military service.

However, there are large numbers of people unaware of their visual defects who could be easily screened through their television sets, said Flocks.

"Other countries have asked for copies of the test," said Rosenthal, "and it may have particular relevance to people in developing countries who may have television, but no regularly provided eye examinations."

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Mailed Thursday, February 8, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—A year-long state investigation into alleged "double-billing" by Stanford University Medical Center has been closed after Stanford and State officials reached agreement on the method that should be used to pay faculty physicians for services provided to Medi-Cal patients.

Stanford agreed to lower by about $100,000 a year its cost claims to Medi-Cal for three years, 1975 through 1977, during which Medi-Cal paid Stanford about $9 million per year.

The exact amount of the readjustment will not be known for about three months, when routine audits for those years are concluded.

The State informed Stanford that no adjustments are necessary to the professional fees which Stanford faculty physicians have charged Medi-Cal for the direct medical and surgical services rendered to Medi-Cal patients.

Announcement of the agreement was made Thursday, Feb. 8 in a press release issued by the State Department of Health Services in Sacramento.

Robert C. James, deputy director of the Department's Audits and Investigations Division, said the agreement "resolves a complicated reimbursement problem in a constructive, equitable manner."

He announced "that settlement of these cost reimbursement principles brings to completion the...investigation of Stanford's Medi-Cal professional fee and cost-reimbursement system."

Dr. Lawrence G. Crowley, acting vice president for medical affairs and dean of the School of Medicine, said Stanford is pleased with the agreement.

"Adjustments are not uncommon in claims of that size in an extremely complex two-part reimbursement system," said Crowley.

The agreement covers the principles and the method which Stanford should utilize in preparing its annual cost report to recover the cost of indirect patient services provided by its faculty physicians.

Under Medi-Cal, teaching institutions are authorized to recover the costs of their faculty providing indirect patient services. Such services include medical administration, medical direction and supervision of the services rendered by interns and residents.

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In addition faculty physicians are authorized to bill Medi-Cal professional fees for the separate, direct medical and surgical care provided to patients.

The agreement covers these areas:

• For purposes of Medi-Cal reimbursement, faculty patient care efforts will be determined by use of an effort report prepared by the individual faculty members.

• Direct medical and surgical professional services to Medi-Cal patients will be reimbursed exclusively through payment of a professional fee.

• Indirect faculty effort to providing professional services to Medi-Cal patients will be paid for by Medi-Cal to the institution through the hospital cost reimbursement mechánism.

Stanford's cost reports for the years 1976 and 1977 will be adjusted to apply the methods agreed upon, said Crowley.

In addition, although the Medi-Cal cost report for fiscal 1975 was previously audited by the state and closed, Stanford agreed to reopen that cost report and adjust it according to the agreed upon principles.

The Medi-Cal investigation of Stanford was touched off by allegations of "double-billing" made last year by the Union of American Physicians.

Still to be resolved is another issue currently being investigated by the State Board of Medical Quality Assurance (BMQA). It concerns the legality of Stanford faculty's medical practice plan.

Crowley stressed that the matter being investigated by the BMQA is entirely separate from the Medi-Cal issue being concluded as a result of the agreement with the state.

A complaint filed with the BMQA by Dr. Eugene Dong, Jr., an associate professor of cardiovascular surgery, has alleged that the faculty practice plan violates a section of the California Business and Professions Code.

The code allegedly prohibits salaried faculty physicians employed by medical schools in the state from charging professional fees.

But at a recent hearing in Sacramento, California medical schools, including Stanford, have asked the legislature to clarify the law "because no medical school in the country provides, or could provide medical services free of charge."

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Mailed Thursday, February 8, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Improving patient services, upgrading physical facilities, cost containment, and better communication all are part of Stanford University Hospital's "commitment to excellence" in patient care and management.

These goals are part of the introduction of the Stanford University Hospital budget for 1979-80. It was prepared by Dr. Peter Levin, associate vice president and executive director of Stanford University Hospital, and Gary Mecklenburg, hospital administrator.

Mecklenburg presented the goals statement Monday, February 5 at a meeting of hospital managers in the Medical School's Fairchild Auditorium.

The primary component of a commitment to excellence in patient care is a commitment to excellence in management, read the statement.

"It challenges our entire management team to establish specific goals and objectives for 1979-80, and identify the necessary resources to accomplish them.

"The past 18 months have been enormously demanding on the Hospital and Medical Center organization. In many instances organizational problems have been resolved through 'crisis management.'

"Together, we have successfully responded to accreditation and licensure, and continuous financial pressures. Throughout it all, Stanford University Hospital has provided outstanding patient care, which we will continue" in the future.

The statement listed the following goals and objectives:

- expanding and upgrading physical facilities according to an "action plan," to create a better environment for both giving and receiving care.
- implementing an effective cost-containment program.
- improving communications, and the access of hospital services to the public and physicians.
- improving employee and managerial excellence, so that a "humanistic" attitude is achieved at all levels of the hospital organization.

To resolve space and functional problems in the hospital, the San Francisco consulting firm of Stone, Marraccini and Patterson recently was hired to develop an action plan.

The plan, which is scheduled for completion in July, 1979, may include renovation of patient care units, construction of new areas and solutions to functional deficiencies and code citations identified in last year's accreditation survey.

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Construction has already begun on the renovation of the intensive care and normal newborn (West) nurseries.

To improve communication, the hospital has initiated a survey of medical staff, patients and the community.

The financial planning process is being reviewed in response to "demands for efficiency and effectiveness in financial and hospital management," according to the statement.

Other projects include a computer-based information system, materials management program, and an improved patient admitting system.

At the same time, cost containment continues to be a major concern at the hospital.

"Despite our efforts at cost containment, the average cost per patient per day at Stanford has increased substantially during the past five years," read the statement.

"It appears that this increase is leveling, but there is still concern that the hospital will be faced with additional controls which may limit its financial resources."

Some of these controls include mandatory cost containment, which will be proposed by the Department of Health Education and Welfare if voluntary containment is not successful, and possible cuts of $400 million in reimbursements for care given to Medicare and Medical patients.

"Although cost containment legislation seems imminent," read the statement, "we cannot allow ourselves to be overwhelmed by the influence of external control.

"The emphasis should be to control the rate of increase through our own sound management performance."

To that end, the hospital is developing a comprehensive cost containment program.

While meeting the health needs of the community is the hospital's first priority, "we cannot lose sight of the fact that we are part of a leading medical center and great university with which we share the additional goals of teaching and research," read the statement.

"We can most effectively support these goals by assuring outstanding patient care programs in a well-run hospital."

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Mailed Tuesday, February 6, 1979

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

TWO STORIES: Bob Beyers
FOR IMMEDIATE RELEASE
STANFORD—

Stanford trustees have approved a 13.5% increase in Medical School tuition, effective this fall.

The new rate will be $2,038, compared to $1,796 currently per academic quarters.

A similar rate of increase can be expected during 1980-81 and 1981-82.

This will conform with the Board of Trustees decision in December to phase in a return to the historical relationship between tuition and the cost of medical education over a three-year period. This cost is now estimated at more than $35,000 per student annually.

Taken in conjunction with other tuition increases within the University, the 1979-80 rate for future M.D.s falls within President Carter's wage price guidelines.

The increase is half that initially proposed for entering students by the University administration in December, when a 27.6% boost was recommended. It is slightly below the 14.6% increase suggested at that time for continuing students.

At their December meeting the trustees voted that "tuition for 1979-80 in the Medical School be set so as to meet the tuition objectives proposed over a three-year period." This meant restoring the ratio between tuition and costs which prevailed in 1972.

The board authorized Trustee President Peter Bing, Academic Affairs Committee Chairwoman Barbara Finberg, and Finance and Development Committee Cochairmen Roger Lewis and William Timken to approve a modified increase.

Financial aid funds will be increased to assure that attendance at Stanford Medical School is not prevented by inadequate assistance.

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FOR IMMEDIATE RELEASE
STANFORD—

Dr. Thomas C. Merigan, professor of medicine, will head the search for a successor to Dr. Clayton Rich at the Stanford Medical Center, University President Richard W. Lyman has announced.

Dr. Rich resigned his administrative posts as vice-president for medical affairs and dean of the Medical School Jan. 1.

Besides Merigan, who heads the division of infectious diseases, those serving on the search committee will include Dr. John A. Collins, chairman of surgery; Dr. Kenneth L. Melmon, chairman of medicine; Dr. Hugh O. McDevitt, professor of immunology; Dr. Irving L. Weissman, associate professor of pathology and chairman of the Medical School Faculty Senate; Dr. Joseph Kriss, professor of radiology and head of the division of nuclear medicine.

Also: Dr. Ruth T. Gross, professor of pediatrics and head of ambulatory pediatrics; Dr. Stanley N. Cohen, chairman of genetics; Dr. Robert I. Lehman, chairman of biochemistry; Arthur Walker, associate professor of applied physics and associate dean of graduate studies; William F. Miller, professor of computer science and of management; Dr. Walter Bortz, clinical assistant professor of medicine and physician at the Palo Alto Medical Clinic; and Joshua Prager and Tony McCain, medical students.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

Editors: Photo of Ingelfinger available if not included.

STANFORD—"The Medical Press, Professional and Lay" will be the subject of three public lectures Feb. 12, 14 and 15 at Stanford University School of Medicine.

The talks by Dr. Franz J. Ingelfinger, editor emeritus of the *New England Journal of Medicine,* will be given under auspices of the 23rd Herzstein Lecture Series. Each lecture is free and will begin at 5:30 p.m. in Sherman Fairchild Auditorium.

Ingelfinger's lectures will be: "Medical Journals Today" Feb. 12, "The Race for News" Feb. 14, and "Medical Communication in the Future" Feb 15.

Ingelfinger is visiting lecturer on medicine at Harvard Medical School and Professor of medicine, emeritus, at Boston University Medical School.

He had a long and distinguished career after graduating from Yale (A.B. 1932) and Harvard (M.D. 1936), including the editorship of several medical journals and the editorial board membership on several others. He was a member of the editorial board of the *New England Journal of Medicine* during 1961-67 and editor in 1966-67.

He holds many awards, lectureships and honorary degrees, including the Distinguished Teacher Award for Leadership in Medical Education from the American College of Physicians (1975), the Abraham Flexner Award for Distinguished Service to Medical Education, Association of American Medical Colleges (1976), the Thannhauser Medal (1978) and is a Kober Medal designate of the Association of American Physicians (1979).

The Morris Herzstein Lectures were established in 1929 to honor the late San Francisco physician. The lectures, which are alternated between the University of California Medical School in San Francisco and Stanford Medical School, are designed to attract scientists "of outstanding achievement."

A humanitarian, Herzstein (1854-1927) founded the first fully-equipped clinical laboratories in San Francisco upon return from his native Germany in 1891.

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Mailed Monday, February 5, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415-497-6911

Editors: Photos available if not included with story.

STANFORD—Heating by ultrasound caused shrinkage in nearly 70 percent of superficial head and neck tumors, and in 50 percent of a variety of surface tumors in patients treated at Stanford University Medical Center.

Ultrasound heating may be particularly useful in treating squamous cell carcinomas (solid tumors) of the head and neck, either by itself, or combined with surgery and radiation, according to researchers Jane B. Marmor, M.D., Douglas Pounds, Ted B. Postic, and George M. Hahn, Ph.D.

However, they cautioned, most of the responses were partial, and the patients were followed for an average of only five weeks.

Their findings were reported in the January 1979 issue of the journal *Cancer*.

In the study, 30 patients were given ultrasound treatments three times a week for two weeks.

Ultrasound energy (of a frequency of one to three megahertz) was directed through a four centimeter transducer held over the central part of the tumor. Thermocouple needles placed in the tumors recorded the increase in tissue temperature as they were heated.

In an initial patient group, tumors were heated to 43 degrees Centigrade (108 degrees fahrenheit) for 30 minutes during each treatment. Later groups were treated at 44 and 45 degrees.

Changes in the size of the tumors were recorded after each teatment.

Better responses were obtained in patients who had received no prior treatment or radiation alone than in those who had received chemotherapy.

The treatments were given with minimal side-effects. Five treatments resulted in small superficial burns, and some of the patients reported significant pain during treatment.

More precise delivery of the ultrasound with improved equipment should help overcome this problem, stated the researchers.

The use of ultrasound as a treatment for cancer was investigated in the 1930s and shortly after World War II, but the role of heating was not completely understood, and there was little interest in it until the 1970s.

In 1976, Marmor and Hahn reported that ultrasound caused shrinkage in 50 percent of surface tumors in dogs, cats and mice.

The Stanford group is now developing multiple transducer systems which will enable them to treat larger and some deep-seated tumors. Their research is supported primarily by the National Cancer Institute.

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Mailed Monday, February 5, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—Construction crews will begin interior completion of the third floor of Stanford Medical School's Sherman Fairchild Building later this month.

The building, which already houses the school's Departments of Structural Biology and Neurobiology, was actually completed in 1976. However, the structure's top floor has remained a shell until funding became available.

Stanford University Trustees have authorized $2.1 million for completion of the floor, which has 20,800 gross square feet of space. The floor will accommodate laboratories, offices and support facilities for the Department of Medical Microbiology. Included among the labs will be P-3 biosafety facility to be used in recombinant DNA research.

The project was designed by architect planners Stone, Marraccini and Patterson of San Francisco under supervision of university project manager Elvia Garwood. The contractor is Carl W. Olsen of Menlo Park.

Most of the project cost ($1.5 million) is being funded by a grant from the Max C. Fleischmann Foundation of Reno, Nev. Additional funding is coming from the Horton Gift Fund and an "anonymous" donor.

During construction about 35 parking stalls will be lost to accommodate a work staging area.

The Fairchild Building, which is built around an atrium, is part of a two-structure complex which also includes a 386-seat auditorium. The building already houses laboratories, conference rooms and administrative offices.

The $10 million building and auditorium are the result of an $8.25 million gift from the Sherman Fairchild Foundation of Greenwich, Conn., and is named for the founder of the Fairchild Camera and Instrument Corp. and Fairchild Industries.

Additional funds came from Mrs. George A. Winzer of La Jolla, Calif., a longtime benefactor of the medical school.

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FOR FURTHER INFORMATION CONTACT: Bob Tapia

STANFORD—The February meeting of the Stanford Faculty Women's Club will feature an address on sleep and sleep disorders by Dr. William Dement, director of Stanford's Sleep Disorders Center.

The meeting, which is open to the public at no charge, will be held in Fairchild Auditorium at Stanford Medical School on Thursday, Feb. 8, starting at 8 p.m.

Dement's talk, "Sleep: A Cure, a Blessing or Both?" will be an explanation of how sleep does its job best. He will also discuss how sleep can kill, and explain why snoring is considered a disease. The amount of optimal sleep and insomnia will also be highlighted.

Dement is professor of psychiatry and behavioral sciences at Stanford Medical School.

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Mailed Friday, February 2, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD--A San Francisco consulting firm has been hired to develop an "action plan" for renovation and construction at Stanford University Hospital over the next five years, according to Mary Catherine Krawec, associate administrator for operational planning.

Stone, Marraccini, and Patterson was chosen because of its experience in health planning, and prior work at Stanford, including design of the Sherman Fairchild building in 1974, said Krawec.

The firm will develop a comprehensive plan during the next six months to resolve problems of functional deficiencies, code citations, and major building systems.

Stanford hospital received a full two-year accreditation by the Joint Commission on Accreditation of Hospitals (JCAH) in July 1978.

That accreditation, based on a survey in April by the JCAH, the California Department of Health, and the California Medical Association, requires that a plan be developed and implemented to correct deficiencies noted in the survey.

The next accreditation survey is scheduled for spring, 1980.

In the action plan, construction projects will be "packaged" in a logical sequence, taking into account code citations, hospital priorities, costs, and in ways which reduce disruption of hospital operations, said Krawec.

Once completed, the plan will be reviewed by the University Board of Trustees, and by the appropriate governmental agencies.

"Our goal is to improve the functioning of the hospital in terms of patient care and working environment, solving physical problems," said Krawec.

"Having an action plan will keep us from creating new problems as we attempt to solve others."

High priority projects include planning for completion of the Phase 1 building and construction of new operating rooms.

However, "There is very little of the hospital which is not going to come under review," she said.

The action plan will be prepared as a joint effort by the consultants, hospital administration and staff, and a committee of physicians representing equally community and faculty doctors.

In addition, hospital and medical staff members and community physicians are urged to contact Krawec with any suggestions to the plan. She can be reached at 497-5377.

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Mailed Thursday, February 1, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD--Researchers at Stanford University School of Medicine have developed a technique which may one day improve corneal transplantation.

The cornea is a transparent, dome-shaped membrane made up of five layers which covers the iris and pupil of the eye.

The innermost layer, the endothelium, pumps fluid out of the cornea, keeping it thin and clear. In some eye diseases, this layer breaks down, and fluid accumulates in the cornea, blurring vision.

Presently, these conditions are treated by transplanting all five corneal layers from the eye of a donor into that of the patient.

The new technique would remove only the damaged endothelial layer from the patient's cornea, "seed" the cornea with new cells grown in culture, and replace the cornea with its new endothelium back in the eye.

This would avoid the need for donated corneas in treating endothelial diseases. It may also reduce rejection of the foreign tissue by the body, since only a single layer is replaced rather than the entire cornea.

The researchers, Drs. David M. Maurice and James P. McCulley, and Marcia M. Jumblatt, so far have limited their studies to rabbits, and admit that testing in humans is several years away.

But their work, reported in the December 1978 issue of Investigative Ophthalmology and Visual Sciences, is the first demonstration that endothelium grown in tissue culture can regain normal function when replanted in the eye.

In the report, endothelial cells were grown in culture, and then placed on rabbit corneas from which the native endothelium had been removed. The new cells were allowed to grow over the surface of the corneas for one to three days, and the corneas were then transplanted into rabbit eyes.

The grafted corneas were examined daily by a microscope technique, and their thickness measured.

Only four of 19 attempted grafts were successful, that is, they did not swell with fluid or become cloudy. Fluid build-up indicated that the endothelium was not working.

The failed grafts may represent problems with the culture used to grow the cells, stated the researchers.

Currently, the Stanford group is trying to speed up the process of "seeding" the corneas, so that it can be done in minutes instead of hours.

One possibility involves lining the inside of the cornea with a porous membrane covered with a layer of endothelium which has been grown in culture. This would allow physicians to "stick" a new layer onto the cornea quickly.

"Our ultimate aim is to have eye banks grow and maintain endothelium which could provide on demand the tissue for transplantation," they said. ###

Mailed Thursday, February 1, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD--Preliminary drawings for the renovation of Stanford Hospital's Neonatal Intensive Care Unit (ICU) have been approved by the State Offices of Development and Licensing.

Construction is due to begin in July, 1979, according to Mary Catherine Krawec, associate administrator for operational planning.

San Francisco architects Kaplan, McLaughlin and Diaz are now working on the final drawings, which will then be reviewed by the state prior to beginning construction, she said.

Temporary renovation of the unit, including knocking down two walls and providing additional storage areas, was completed in December.

The unit had been chronically short on space, and the nursing staff threatened to resign en masse in October unless renovations were made.

To accomodate the Neonatal ICU during construction, the normal newborn (West) nursery will be remodeled beginning February, said Krawec.

Several patient rooms near the nursery will be converted for the care of normal newborns, according to a plan by Palo Alto architects Almeter and Finley.

Once the construction is completed, the normal newborns will be moved back into the upgraded nursery, and the remodeled patient rooms will be made available for use by high-risk mothers.

The University Board of Trustees approved $1 million for the renovation of the neonatal ICU over a year ago although the final figure has not yet been determined.

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Mailed Thursday, February 1, 1979

Dean / VP for Med Affairs

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—Stanford University President Richard W. Lyman announced Thursday, Feb. 15 that he will separate the position of Vice President for Medical Affairs and Dean of the School of Medicine.

Lyman made the announcement in a letter to the committee searching for a successor to Dr. Clayton Rich who resigned in January. Rich held both administrative positions.

"I am asking you to search for a Vice President for Medical affairs at a time when it is increasingly clear that the incumbent will have different responsibilities from the last two holders," Lyman wrote.

"Specifically, we are moving toward a greater degree of de facto separation between the Hospital and the Medical School," he continued. "To put it somewhat differently, there are compelling reasons to believe that both entities will fare better if each has strong, independent leadership."

Lyman said such a leadership will consist of a Dean for the Medical School to whom (academic) departments will report, and a director for the Hospital whose authority will be independent of the Dean's.

"Both of these persons will report to the Vice President for Medical affairs, who will need to have substantial management abilities as well as keen sensitivity to issues of biomedical policy, federal, state and local, and the capacity to define and articulate the institution's positon on them," Lyman said.

"Inevitably, he added, "the precise duties of the position will be defined in part by the qualities of the individual who takes it."

Lyman noted that "this is an important time in the history of the Stanford Medical Center.

"Every university medical center in the country is actually or potentially at risk because of the uncertainties afflicting national policies with respect to medical education, research, and health care."

Lyman's letter constitutes the formal charge to the search committee whose membership was announced last week.

The committee is headed by Dr. Thomas C. Merigan, professor of medicine and head of the division of infectious disease in the Medical School.

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Mailed Thursday, February 15, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
FOR IMMEDIATE RELEASE
STANFORD—

Is Stanford University School of Medicine becoming antiintellectual and antiscience?

Forty-one senior faculty members think so. They have signed a letter asking others to join them to help "bring about the necessary changes in Medical School policies and procedures."

The faculty members are concerned because of the falling scores of medical students on the national boards. Thirty-seven percent of the students tested for their knowledge of basic medical science in 1978 failed all or part of the test.

The Faculty Senate of the School is considering recommendations of the Committee on Student Evaluation for developing and enforcing more rigorous student performance standards.

The letter was authored by Dr. Avram Goldstein, an eminent pharmacology professor. It was signed by both clinical and basic science faculty, including a Nobel laureate, seven department chairmen, and the chairman of the faculty senate.

Goldstein wrote: "If we had set out deliberately to lower our academic standards and the performance of our students, here are some of the things we might have done:

* "Institute a totally elective curriculum, without structure and without required sequence, essentially a chaotic array of course offerings, with no obligation for the student to demonstrate competency in any of the basic areas of medical science.
* "Abolish letter grades and all special recognition of superior performance such as honors, the Alpha Omega Alpha honor society, Dean's list etc.
* "Permit students to drop courses at any time before a final examination, or allow students to decide not to take a final examination whenever it suits their convenience not to do so.
* "Refuse to record failures on the student's record, and set up a committee on academic performance that refuses to terminate any student, regardless of how incompetent or inept he or she may be.
* "Abandon the faculty's responsibility to direct the academic programs of the School, and give undue weight to the opinions of students, forgetting how brief is their passage through the School, and how poorly equipped they are with the perspective, experience, and wisdom needed to know what is really best for their own medical education.
* "Respond passively or not at all to attacks upon scientific investigation and intellectual pursuits in general as 'elitist.'
* "Eliminate some of the most intelligent and promising applicants for admission because they have too strong an interest in science.
* "Denigrate scientific medicine, and dignify antiscience, by offering a platform to the practitioners of fads, superstitions, and magic."

Goldstein said many refuse to acknowledge that "the unique primary mission of this medical school—what our faculty is best equipped to do—is to train the next generation of clinical investigators, basic medical scientists, and academicians."

"As we have sown, so have we reaped," he concludes.

One of the letter signers, Dr. Arthur Kornberg, professor of biochemistry, echoed similar concerns in an article published in the Stanford medical alumni magazine last fall.

"It is imperative," he wrote, "that medical scientists and their institutions, faced with diminishing resources, work even more devotedly and single-handedly to strengthen the scientific fiber and foundations of medicine. "We must have affirmative action for scholarship. Otherwise medicine will revert to empiricism, which means it will be approaching witchcraft once again."

3/29/79 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415:497-6911

Editors—Photos available if not included with story.

STANFORD—

Dr. Marcus A. Krupp, director of the Palo Alto Medical Research Foundation, has been appointed director of the Department of Medicine's community teaching service in the east wing of Stanford University Hospital.

His three-year appointment, effective April 15, was announced by department chairman Dr. Kenneth L. Melmon Thursday, March 29.

Krupp, a member of the Medical School's clinical faculty, replaces Dr. Lawrence V. Basso, clinical faculty member and endocrinologist at the Palo Alto Medical Clinic.

Basso resigned recently after directing the service since 1976.

"Dr. Krupp is considered by the house staff and medical students to be one of the best attending physicians in the service," said Melmon.

"He has had continuous interest in the Department. For example, he helped establish a position on the Stanford faculty for Dr. Jack Remington."

Remington, a well-known researcher in infectious diseases, is a member of the Research Foundation staff.

"In addition," said Melmon, "Dr. Krupp has received strong support from community physicians who use the service. It is hard to think of another person better suited for the job."

The service, located on the first floor of the hospital's east wing, is one of two community teaching services in the Department of Medicine which provide bedside training of medical students and house staff by community physicians who admit their patients to the hospital.

The other service is located on the second floor of Hoover Pavilion. It is called the Bloomfield Service, in honor of the late Dr. Arthur L. Bloomfield, who chaired the department in the 1950s.

Dr. Lenore Sheridan, clinical faculty member and head of pulmonary medicine at the Palo Alto Medical Clinic, is director.

At any one time, 10 residents, interns and medical students receive instruction from the community physicians who admit patients to the services.

The east wing service was established in 1969 to enlarge the clinical experiences of house officers and students, and to increase the working relationship between community physicians and faculty.

Krupp, who has taught on the service for several years, said it is an example of "good University-community relations."

"Many community physicians are happy to have their patients on a teaching service, where they benefit from some of the best young minds on our house staff, and from 24-hour coverage," he said in an interview.

As director, "I want to see to it that the high standards of patient care and teaching provided by the service under Dr. Basso are maintained."

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Mailed Thursday, March 29, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415:497-6911

STANFORD—

Comprehensive regional programs in perinatal education for both mothers and health professionals are being developed by doctors and nurses at Stanford University Hospital and Santa Clara Valley Medical Center in San Jose.

The programs, which will be directed by faculty of the Stanford University School of Medicine, are designed to improve the outcome of high risk pregnancies throughout the central coast region of California.

Women at high risk for complications during pregnancy include those with diabetes, hypertension, histories of medical problems, and social or emotional problems.

Certain age and racial groups also are at higher risk for complications, particularly if they do not receive adequate prenatal care.

For instance, the California Department of Health Services has reported recently that babies born to women under 15 are two to four times more likely to have neurological abnormalities than those born to women aged 20-25.

Yet, 45 percent of these mothers fail to receive prenatal care in the first trimester of pregnancy.

In addition, the infant death rate may vary by a factor of six between two different socioeconomic groups in neighboring communities, the report stated, depending on the availability of health care.

Regional perinatal care is already available at Stanford and Valley Medical Centers. Services include emergency transport of high-risk mothers and seriously ill infants to intensive care facilities, and coordination of intensive care nurseries throughout Northern California by an infant medical dispatch center based at Stanford.

One of the new programs will provide perinatal outreach services to hospitals in 13 communities from San Mateo County to Santa Maria in Southern California.

The aim of the program is to reduce rates of death and illness associated with high-risk pregnancies, improve the early acute care of critically ill infants, and enhance the ability of nurseries in community hospitals to care for sick infants during recovery, says program coordinator Dr. Alvin Hackel, associate professor of clinical anesthesia and pediatrics at Stanford.

To accomplish these goals, Stanford physicians and nurses will conduct seminars in the participating communities four times each year, and will continue a lecture series at Stanford on perinatal care and infant resuscitation,

Nursing teams from Stanford's obstetrics and pediatrics units will provide consultation and bedside teaching in the care of sick infants for the nursing staffs of participating hospitals.

Community physicians may also obtain consultation from medical staff at Stanford.

Closely associated with the outreach program is an educational program for high risk mothers directed by Dr. Kent Ueland, professor of gynecology and obstetrics at Stanford.

This program will provide educational materials on nutrition, risk factors, and basic guidelines to good prenatal care for patients at stanford and in outlying communities

It is the first organized prenatal education program at Stanford, says Ueland.

The outreach and education programs are being supported this year by Stanford, and by grants from the Mead Johnson Foundation and the National Foundation of the March of Dimes.

Santa Clara Valley Medical Center also is developing a health education program for high risk mothers, geared to fit their individual needs.

High risk mothers will be interviewed, and will receive an "educational prescription," which may include nutritional counseling as well as instruction in prenatal care, says program director Dr. Paul Hensleigh, associate professor of gynecology and obstetrics at Stanford.

The Valley Medical Center program is supported this year by a $219,000 grant from the State of California.

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Mailed Thursday, March 29, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Young women who suffer from menstrual cramps are invited to participate in a Stanford University Medical Center study of a drug which may control the pain.

Menstrual cramps, known as dysmenorrhea, occur in nearly 50 percent of all adolescent women, and are responsible for the majority of short-term school absenteeism in females, according to Dr. Jerry Klein, postdoctoral fellow in pediatrics, who is conducting the study with Dr. Iris Litt, associate professor and director of adolescent medicine at Stanford.

According to Klein, body substances called prostaglandins recently have been found to cause dysmenorrhea, whose symptoms are not only cramps, but may include nausea, vomiting, fatigue, headache and muscle stiffness.

Over a four-month period, Klein will be studying a prostaglandin inhibitor effective in adults, to see if adolescents will also obtain relief.

Due to the design of the study, Klein prefers that the drug's identity not be disclosed ahead of time to study participants, but it is a commonly used over-the-counter drug.

Volunteers should be under 21 years of age. For more information call Dr. Klein or Lynda Spencer at 497-6891.

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Mailed Tuesday, March 27, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

Editors—Photographs and copies of *The Healing Arts* available if not included.

STANFORD—

The role of the nurse is changing.

From cancer chemotherapy to hemodialysis, nurses are performing functions today once exclusively reserved for doctors. This is the conclusion of a special report on nursing at Stanford published in *The Healing Arts*, a magazine of the Stanford University Medical Center.

For example, in the early 1960's when dialysis was still experimental, doctors performed the treatments, and "all the nurse did was bring coffee and doughnuts," recalls Pam Simmons, clinical nursing coordinator of the Stanford Hemodialysis Center. Today, most of hemodialysis at Stanford is done by nurses.

The nurse's role also has expanded in the areas of intensive and emergency care, the magazine found.

At Stanford, one and sometimes two nurses stay continuously at the bedside of patients who have had open heart surgery, checking vital signs, adjusting the instruments which breathe for them or help pump their blood, and alerting physicians to changes in condition.

"This is highly technical care," says Laurie Gunderson, clinical nursing coordinator of the North Intensive Care Unit (ICU). "Nurses used to be recorders of patient data, and were not expected to help in diagnosis and patient evaluation.

"Today, they must know what the numbers mean and how to change them."

In the emergency department, nurses may be helping doctors bind a wound one moment, and calming a psychiatric patient the next.

"They form the cornerstone of patient care in cases of rape or child abuse," says emergency department director Dr. Michael Eliastam.

"They may be responsible for staying with the patient during the physical examination, talking with the family, arranging follow-up with appropriate health professionals, and even providing some counseling themselves.

"They are there from beginning to end."

A relatively new specialty for nurses is oncology, cancer chemotherapy. Five nurses at Stanford are certified to give cancer-fighting drugs intravenously, and to teach patients how to take their other medications at home.

But the technical expertise required of these nurses is only part of their job.

"We will spend anywhere from 20 minutes to two hours with patients while giving their drugs, and during this time we can often discover what problems they and their families may be facing," says Linda Dodds, head nurse of the Oncology Day-Care Center at Stanford.

"Cancer is a frightening disease that carries with it many myths and misunderstandings," says Dodds. "We provide important support to patients, often by simply talking to them on the telephone."

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2-2-2 Patient education has become another important part of the nursing role, particularly as more people are being treated as outpatients, and as those who are hospitalized are sent home earlier.

"In the hospital, the environment is regulated—diet, exposure to sunlight, exercise—but at home, patients must do this regulation themselves," says Vera Waechter, R.N., manager of clinical patient services in Stanford University Clinics.

"To do this, they must understand their disease. Their families must also understand, so they can be supportive," she says.

In the Oncology Day-Care Center, nurses help patients minimize the nausea and other side-effects which often accompany chemotherapy by showing them how to take their medications properly.

Nurse Ann Schreier has developed an audiovisual program to tell patients with Hodgkin's disease and their families about the disease and what to expect during treatment.

Other education programs are in use in the coronary care unit and the dermatology clinic.

"We are involved in patient education every day," says hemodialysis nurse Pam Simmons. "We've grown up a lot from being very demanding of patients, to recognizing that they have the right to make their own decisions.

"If they are to make those decisions, we must give them information."

There has been real progress in the nursing profession in the last 10 years, says Jeanne DeJoseph, R.N., Ph.D., assistant nursing service director at Stanford. "But we have not yet come to where we need to be."

Paralleling the increased roles for nurses as technical experts, educators and counselors, has been a 300 percent increase in salaries for nurses in California during the past decade. The 1977 annual wage, according to the California Hospital Association, was about $10-15,000.

Yet California is plagued by a chronic shortage of nurses. A 1978 report by the CHA indicates that nearly half of all registered nurses quit their jobs each year, and that 9,000 nursing positions in hospitals and nursing homes are vacant.

Relocation is cited by the CHA report as a major reason for the large turnover. Nurses may relocate because of family moves, but "reality shock" is another factor.

Crowded working conditions, long hours, and the monotony of some aspects of day-to-day patient care have all had their toll on the profession.

Stanford is not immune from the problems of staff shortage and high turnover rates, but it has a high caliber of nurse, and in some units, turnover is close to zero.

Nursing service director Duane Walker cites opportunities for learning, plus the "glamorous"aspect of working with physicians on several frontiers of medicine for attracting nurses to Stanford.

In addition, the nursing service is developing programs to improve incentive and job satisfaction.

Peer groups and psychiatric liaison services are available to help nurses cope with stress.

The promotion system rewards nurses with greater and more varied responsibility as they gain knowledge and experience.

And nurses can do research in areas such as the physiological and psychosocial responses of patients to nursing care, and the role of nursing in care of the premature infant.

"Research is not the answer to all of our problems," says Walker, "but it will contribute to the quality of patient care here, and to the practice of nursing nationally."

Emergency department nurse Barbara Behrens demonstrates the use of the defibrillator during inservice training at Stanford.

Oncology nurses participate in physician conferences, and contribute to patient care as part of the medical "team."

Nurses work with doctors, respiratory therapists and paramedics to transport seriously ill infants and adults to Stanford's intensive care units from all over Northern California.

Nurse Lynn Hewett conducts an exercise treadmill test of a patient with suspected coronary artery disease. Until last year this test was performed exclusively by doctors.

To order photos return form to:
News Bureau, Stanford University Medical Center, TC 135, Stanford, CA 94305

Name_____ Publication_____

Address_____

Check photos desired: ☐ Nurse training ☐ Oncology conference

☐ Emergency transport ☐ Heart monitoring

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Sir Bernard Katz, a Nobel laureate in physiology and medicine, will deliver the Lane Lectures on April 2,4 and 5 at Stanford University School of Medicine.

Each lecture is open to the public and begins at 5 p.m. in the school's Sherman Fairchild Auditorium.

Katz, emeritus professor of biophysics at University College, London, is widely recognized for nerve and muscle studies, particularly on the physicochemical mechanisms of neuromuscular transmission.

His first lecture on Monday, April 2, is entitled "Elementary Units and Synaptic Functions." It will be followed on Wednesday, April 4, by "The Vesicular Hypothesis of Transmitter Release" and "The Properties of Post-Synaptic Ion Channels" on Thursday, April 5.

Katz shared the Nobel prize for medicine in 1970 with Ulf von Euler of Sweden and Julius Axelrod of the U.S.

In 1939 Katz joined J.C. Eccles Laboratory in Sydney, Australia, where he collaborated with Eccles and S.W.Kuffler in neuromuscular research. He was appointed to University College, London, in 1946 as assistant director of research and the Henry Head Research Fellow (who is appointed by the Royal Society). He became professor of biophysics there in 1952.

Katz, who received his M.D. from the University of Leipzig and a Ph.D from London University, was knighted in 1969. In 1967 he was awarded the Baly Medal from the Royal College of Physicians and the Copley Medal from the Royal Society.

The Lane Lectures, which were first given in 1896, were established by Dr. Levi Cooper Lane, one of the founders of Stanford Medical School. The school was originally known as Cooper Medical College until it moved from San Francisco to the Stanford campus in 1959.

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Mailed Tuesday, March 27, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Stanford University School of Medicine should establish and enforce more rigorous student performance standards, a committee of the School's faculty senate recommended Friday, March 23.

The committee endorsed the elective curriculum and pass-fail system, but it urged the senate to develop procedures for dealing with the marginal performers.

"The faculty of every course must identify those students whose performances are marginal by a uniform standard," the committee said.

And each department should establish an "appropriate" performance standard for judging student work.

Headed by Dr. Ruth T. Gross, professor of pediatrics, the committee said it expects its proposals to address the dissatisfactions of both faculty and students with the present evaluations.

In a related move, the School's executive committee, acting in response to the falling National Board scores of Stanford medical students, adopted a strong recommendation to the faculty senate calling for tougher standards.

The recommendation would require each basic science department to obtain from all students a demonstration of competence in basic sciences prior to graduation.

A majority of the faculty polled by the Gross committee indicated that the present system provides inadequate information to evaluate student performance and fails to satisfy student needs.

"One fourth of the faculty think students now enter their clinical clerkships with basic science preparation below standard," the committee said. In addition, some believe Stanford is graduating a significant number of students whose knowledge is below acceptable standards.

Under the proposal, students who fail to meet the standard set by each department and the Committee on Courses and Curriculum would get a letter of marginal performance.

The students would then be required to meet with the faculty to discuss measures for achieving an unqualified "pass," the committee said.

Students receiving more than one letter of marginal performance in preclinical or clinical subjects will be counseled by the Student Affairs Office, and the Committee on Student Performance.

The committee may exercise several options.

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According to the recommendations, no student would be allowed to drop a course in the clinical or preclinical years without the consent of the instructor.

The penalty for droping a course without consent will result in failure of the course, said the committee.

Prior to the end of the first clinical year, students would be required to pass Part I of the examination administered by the National Board of Medical Examiners. Passing Part II of the test would be required prior to graduation.

Part I tests students for their knowledge in the basic sciences, and Part II in clinical sciences. They are requirements for the medical degree at Stanford under the current system.

The committee recommendations describe in detail the mechanisms for improving feedback about examinations from faculty to students, designation of responsibility for clerkships and preclinical courses, and appeal mechanisms to resolve grievances and maintain the rights of students to due process.

The committee unanimously rejected the reinstitution of honor grades, academic awards, including the Alpha Omega Alpha Honor Society.

"Honor grades, particularly in the clinical clerkships, cannot be based on statistically sound methods of evaluations and they are not advisable," the committee said.

"Methods for recognizing excellence exist in the present and in the proposed system, and our students express satisfaction with the current approach."

Committee members included Duncan Govan, professor of surgery, ex-officio; Dale Kaiser, professor of biochemistry; Bernd Kutzcher, third-year student; Paul C. Letourneau, assistant professor of structural biology; Bob Loitz, fourth-year student; Saul Rosenberg, professor of medicine and radiology; and Kenneth Vosti, professsor of medicine, ex-officio.

The recommendations will be discussed by the faculty senate April 6 at 3:30 in Room S-102 of the Medical School.

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Mailed Monday, March 26, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

EDITORS: Photo available on request if not included with story.

STANFORD—

Stanford University researchers have taken a first step towards development of a simple blood test to screen pregnant women for fetal genetic abnormalities as early as 15 weeks into pregnancy.

"At present, it's a basic research finding which could turn out to have enormous practical significance," said Dr. Leonard A. Herzenberg, professor of genetics at Stanford University School of Medicine.

Herzenberg and his colleagues, Diana Bianchi, medical student, Jim Schroeder and G. Michael Iverson, research associates in genetics, and Howard Cann, professor of pediatrics and genetics, reported their findings in the March issue of the *Proceedings of the National Academy of Sciences.*

"We have shown that as early as 15 weeks into pregnancy, small numbers of fetal cells are present in the mother's bloodstream," Herzenberg said, an idea suggested previously but not proved conclusively until now.

The group used an instrument developed several years ago in Herzenberg's laboratory—the fluorescence-activated cell sorter (FACS)—to separate fetal cells from the mother's cells on the basis of their cell surfaces.

By examining chromosomes (the hereditary material) in cells obtained from the fetus, the geneticists said they can recognize certain abnormalities of the fetus at an early stage of pregnancy.

Currently, this is accomplished in the process of amniocentesis, where a needle is inserted through the woman's abdomen into the uterus to remove a small sample of cells from the amniotic fluid which surrounds the fetus.

But, "amniocentesis is an expensive, potentially risky procedure which is not applied to the population at large, and is reserved for pregnancies with a high risk of finding genetic abnormality," Herzenberg said.

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In addition, amniocentesis must be performed by an experienced obstetrician, a fact which limits its availability to many women, Cann said.

Although pregnant women over 35 have a higher risk of giving birth to infants with chromosomal defects, a simple procedure for routine prenatal screening of pregnant women under 35 is also needed.

"Widespread screening is desirable because the relatively large number of pregnancies in women below 35 years means that they bear the majority of children with chromosomal abnormalities despite the relatively low risk of such abnormalities in pregnancies in this age group," the researchers said.

Among the remaining problems to be solved before the technique can become available is inducing the isolated fetal cells to divide.

Normally, chromosomes are spread out in the cell and are not visible under the microscope. Only when the cells divide, do the chromosomes condense enough to become visible.

"No one has yet succeeded in getting the fetal cells to divide in blood," Herzenberg explained.

Aside from Down's syndrome (mongolism), other conditions which can be detected by examining fetal cells are those defects due to chromosomal abnormalities such as extra chromosomes, missing chromosomes or chromosomal rearrangements, Cann said.

Since all the pregnant women in the study had fetal cells in their bloodstreams by 27 weeks into pregnancy, and many as early as 15 weeks, the researchers expect that it is a normal process rather than accidental leakage of cells into the mother's circulation.

However, Herzenberg added, "if there is a reason for this cell passage, we don't yet know what it is."

The National Institutes of Health and the National Foundation (March of Dimes) support the research.

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Mailed Monday, March 26, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Thousands of students each year who make the decision to attend medical school are not admitted because they simply don't have all the vital information they need.

At least this is the opinion of Donald J. Solomon, who went through the whole process himself before being accepted. Now a third year student at Stanford University School of Medicine, Solomon has collected first-hand experiences into a book which serves as a comprehensive guide to all the "do's" and "don'ts" of applying for admission to medical school.

The book, *Getting Into Medical School* (167 pp., W.B. Saunders Co, Philadelphia, $5.75 paperback), represents a long-term project for Solomon, who began keeping notes and records on the process while still in college.

The book provides the reader with a step-by-step examination of the very important decision of whether or not to become a doctor, what courses should be taken in high school and college, and what marks are most important.

Furthermore, it discusses the New Medical College Admissions Test (MCAT), when, where and how to apply to medical school, how to prepare the necessary essay, the interview (including typical questions and corresponding answers), and expenses.

Solomon, who intends to enter academic medicine and research cites personal examples of friends and acquaintances throughout the book and the mistakes they made that ruined their chances for medical school.

One case history Solomon cites is Brian, who presented medical schools with a beaming 3.9 grade point average. Yet, he wasn't admitted anywhere. The reason: "Medical schools are not interested in students who do nothing but study. They do not consider high grades a just compensation for a paucity of extracurricular activities."

Solomon says he began writing the book during his senior year of college, "after I had attended all my interviews, received acceptances from all but one of the medical schools in which I was interested, and watched as the aspirations of many of my pre-med friends slowly went down the drain."

He points out that it is the disappointment of his friends that served as the impetus for writing the book.

He sums up the book by urging prospective medical students with this poignant advice: "Aim as high as you can, and assess reasonably how high you can aim. Prepare yourself as outlined in this book, become competitive to the point of receiving numerous offers of admission, and you'll be able to ensure at least one acceptance."

Solomon received a B.A. magna cum laude in biochemistry from Brandeis University in 1976, where he was awarded the Snyder prize in chemistry and elected to Phi Beta Kappa. While an undergraduate he was a Westinghouse Science Talent Search scholar.

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Mailed Wednesday, March 21, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Heart disease, the major killer among patients with diabetes, may be related to abnormal fat metabolism (breakdown), according to Stanford University researcher Dr. Gerald Reaven.

The relationship may be particularly applicable to diabetics who do not require daily injections of insulin for their survival, the so-called "insulin-independent" diabetics, said Reaven, head of the division of endocrinology and metabolism at Stanford University School of Medicine.

These patients have abnormally high blood levels of sugar and fats, but their insulin levels are essential normal.

It is thought that their tissues may be resistant to insulin, preventing transport of sugars from the bloodstream, or that the hormone is not otherwise working properly.

Reaven and his associates have found that the livers of insulin-independent diabetics produce abnormally high levels of triglycerides (fat molecules).

Excess triglycerides, in turn, "produce fatty deposits in the arteries, and atherosclerosis (heart disease)," said Reaven.

Reaven reported these findings at a recent meeting of the American Federation for Clinical Research in Carmel, California.

In the study, the researchers measured insulin, free fatty acids, and triglyceride levels in 17 insulin-dependent diabetics, and in 20 insulin-independent diabetics.

Free fatty acids are the building blocks of triglycerides.

Although levels of sugars and free fatty acids were similar between the two groups, the insulin-independent diabetics had higher insulin levels than their insulin requiring counterparts, and three to four times the levels of triglycerides in their blood.

This finding suggests that in the presence of normal insulin and high free fatty acid levels, the liver will produce increased amounts of triglycerides, said Reaven.

"The next step is to find a way to treat these patients," he said.

Losing weight is one way these patients can be helped, since many of them are overweight, said Reaven. In addition, changing the quantity or type of carbohyrates taken in the diet can significantly alter blood levels of glucose and insulin.

The Stanford group recently was awarded a one year, $104,000 grant by the National Heart, Lung and Blood Institute to continue its studies of blood fat metabolism in diabetics.

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Mailed Wednesday, March 21, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

A local premiere of the new musical "Hosea" will be held Friday, March 30 to benefit Stanford University Hospital's proposed Life Support Training Center.

The show is sponsored by the Palo Alto Rotary Club and will be held at 8 p.m. in the Palo Alto Community Theater.

The proposed center, the first of its kind in California, will help meet the growing demand for training in cardiopulmonary resuscitation (CPR) and advanced life support, according to Dr. Michael Eliastam, director of emergency services at Stanford University Hospital.

CPR may mean the difference between life and death for a heart attack victim, said Eliastam. The basic skills are not difficult to learn, he added, but the techniques must be practiced and reviewed regularly.

The facility will house the mannequins, oscilloscopes and other equipment used in training and practice and would be equipped to handle basic training courses for laypersons as well as advanced life support training for physicians, nurses and paramedics.

"The need for this training center is clear," explained Eliastam. "Both the American Red Cross and the American Heart Association are unable to keep up with the demand for training among the lay public and professional health groups."

Instruction will be provided by faculty members in emergency medicine, anesthesia and cardiology from Stanford as well as by instructors from the community, Eliastam said.

A $10 donation per person is requested at the premiere which includes a wine and hors d'oeuvres reception with the show's writer, director and cast members before the performance.

For reservations and tickets, call Jack Pluth of the Rotary Club at Widemans in Palo Alto, phone 328-4170.

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Mailed Tuesday, March 20, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

"Multiple Sclerosis--1979" will be discussed Thursday, March 22, at Stanford University Medical School by Dr. Guy M. McKhann.

The address, open to the medical community and the public, is the third annual George A. Zimmermann Lecture. The talk will begin at 5 p.m. in Room M-106.

McKhann, a former faculty member at Stanford, is Kennedy professor of neurology and neurologist-in-chief at The Johns Hopkins University School of Medicine in Baltimore, Md.

McKhann was associate professor of medicine at Stanford before leaving in 1969 to join Hopkins. He received his M.D. from Yale Medical School in 1955.

Much of his research was started at Stanford and continued at The Johns Hopkins, including methods of judging and diagnosing multiple sclerosis, and isolation of cells for the study of neurologic disease.

Multiple sclerosis, or MS, is a disease marked by patches of hardened tissue in the brain or spinal cord, often involving partial or complete paralysis and jerking muscle tremor.

The Zimmermann Lectureship was established in 1977 by the Department of Neurology at Stanford Medical School. The lecture is part of a $500,000 gift by the late George A. Zimmermann for multiple sclerosis research and treatment at Stanford.

A longtime San Francisco businessman, Zimmermann died in 1974. He bequeathed virtually all of his estate to various charities and for medical research.

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Mailed Monday, March 19, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Motivation is the prime ingredient for youthfulness, especially in old age, according to Dr. Russel V. Lee, professor emeritus of medicine at Stanford University School of Medicine.

"I retired at age 65, but I didn't stop," said Lee Wednesday night, March 14. "In the first three years of my retirement, I made $5 million, more than I had made in over 50 years of medical practice."

Lee is well known as founder of the Palo Alto Medical Clinic, and as an often controversial advocate of group practice, prepaid health insurance, and Medicare.

Now 83, he continues to play an active role in the community. He helped establish the Palo Alto Medical Research Foundation, and Channing House, a retirement apartment complex near the clinic, "after I was supposed to be senile and retired," he said.

"People should never 'retire,' " he said. "I never intend to. I begin each year preparing for the future.

"My present ambition is to lose a paternity suit," he added with characteristic wit.

Lee spoke to about 500 people at the final lecture in the Progress in Medicine series on aging, sponsored by the School of Medicine and the Medical Center Council.

He was joined by Dr. Leo Hollister, professor of medicine, psychiatry, and pharmacology, and director of psychopharmacoloy research at the Palo Alto Veterans Administration Medicial Center.

Lee credited advances in medicine during the last 30 years for much of his longevity.

"When I came to the Stanford campus in 1918, the principle cause of death in the United States was tuberculosis," he said. "We don't even list it anymore."

The discovery of insulin made it possible to save the lives of diabetics. And the discovery of antibiotics wiped out other infectious diseases.

Syphilis and gonorrhea are still prevalent, however. Lee noted that during the last 10 years, 25 percent of local high school girls have had venereal disease.

With effective drugs like penicillin around, the continued presence of venereal disease in this country is "an insult to human intelligence," he said.

Today, the major disease killers, such as heart disease and cancer, are those which come with the process of aging.

But even these can be avoided, said Lee. A lean diet, adequate exercise, and avoidance of known cancer-causing agents all help people live long and healthy lives.

"We know that tobacco is a lethal substance," he said. "Anyone in this day and time and in light of what we now know who still smokes is either illiterate or despondent."

As medicine continues its progress, and life styles improve, more and more people are becoming old, said Lee.

In 1900, only four percent of the U.S. population lived to be 65. This year, that figure is 15 percent, and by the year 2000, Lee estimated, over 50 percent of the population will be over 65.

"I venture to say that we'll have 50 million 100-year-olds in the U.S. by the year 2000," he said.

"I'd like to live long enough to see if my prediction was right."

Lee said that dealing with these people is a very serious matter for society.

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But they can have a place. Some of the residents of Channing House, for example, have been teaching persons half their age to read and write.

Older persons can be artists, and poets. They have the patience for these tasks that younger people don't, he said. Lee noted Grandma Moses, the famous painter, and his former Stanford professor, the bacteriologist Dr. Hans Zinsser, who wrote a book of poetry in his later years.

Lee himself is the author of several books, including *No Gravy on the Vest,* about "the art of growing old in style."

Older people also continue to have a valuable role in the family, said Lee, who calls himself a strong proponent of the "old-fashioned" family. Lee's five children all followed his lead and received their medical doctorates. Two of them practice at the Palo Alto Medical Clinic.

Old age can be very good, said Lee. "I find this period of old age has been enormously pleasurable for me. I wake up every morning glad to be alive."

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FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Dr. Paul Berg, Willson professor of biochemistry at Stanford University School of Medicine, has been elected to the council of the National Academy of Sciences.

Berg is widely known for his contributions to understanding how living cells make proteins, and recombinant DNA research.

According to the Academy, three other newly elected councilors who will begin serving three-year terms in July are Herbert Friedman, chief scientist of the E.O. Hulburt Center for Space Research at the U.S. Naval Laboratory; William A. Nierenberg, director of Scripps Institution of Oceanography; and Lewis Thomas, president and chief executive officer of the Memorial Sloan-Kettering Cancer Center.

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Mailed Thursday, March 15, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

A group to develop a long-range plan for the continued development of the Stanford University Medical Center has been appointed by Acting Vice-President and Dean Lawrence G. Crowley.

"A basic issue that must be addressed is how can the Medical Center maintain its excellence and continue to develop as a major academic medical center in the 1980s," said Crowley.

"This effort," he added, "is especially important in light of emerging economic and social pressures, changing health care delivery systems at national, state and regional levels, and altering goals, sources and mechanisms for financing of medical education and biomedical science."

Crowley noted that planning is already underway by the Hospital to correct its major physical deficiencies stemming from new code requirements and standards for hospitals.

"Before the final selection among the correction options is made, it is important that the entire Medical Center develop a long-range strategic plan based upon a full review of its current programs and a sound analysis of potential future programmatic initiatives," he said.

Recommendations of the group will be reviewed by the administration of the Medical Center and University, the executive committee of the School, and the board of hospital directors.

The group will be chaired by Crowley with Peter J. Levin as vice-chairman. Levin is associate vice-president for medical affairs and executive director of Stanford University Hospital and Clinics.

Members include Paul Berg, professor of biochemistry; Robert A. Chase, professor of surgery; Alain C. Enthoven, professor of public and private management, Stanford Graduate School of Business; Maurice Fox, Palo Alto Medical Clinic physician, and clinical assistant professor of medicine; Kenneth R. Hansen, consulting economist and member, Hospital board of directors; Henry S. Kaplan, professor of radiology; David Korn, professor and chairman, Department of Pathology; Kenneth L. Melmon, professor and chairman, Department of Medicine; and James H. Stanford, director of Medical Center Finance.

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Mailed Thursday, March 15, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

The panel charged with overseeing recombinant DNA research at Stanford University recently added two members from the community to its ranks.

Dr. David Rammler and Dr. Robert Stephens have been appointed by university president Richard W. Lyman to the Stanford University panel on recombinant DNA molecules. They join Dr. Richard Rosenbaum as panel community members.

Guidelines concerning the conduct of federally funded recombinant DNA research issued by the Department of Health, Education and Welfare were revised recently. One change requires institutional biosafety committees overseeing gene-splicing research to have not less than 20 percent of their members "represent the interest of the surrounding community with respect to health and protection of the environment."

Rammler is director of new technologies at Syntex Corporation in Palo Alto, Rosenbaum is an engineer with Lockheed Missiles and Space Company and Stephens is manager of the cellular biology program at SRI International in Menlo Park.

According to Andrew Doty, director of community relations at Stanford, "we looked for people with a track record of defending community interests, a record of civic activities and an ability to make objective judgements concerning the university."

Stephens is a former mayor and a council member in Menlo Park. Rosenbaum is a former city council member from Palo Alto.

The panel meets once monthly according to Anthony Sidlow, manager of health and safety at Stanford, with every fourth meeting open to the public. Minutes from the meetings are available at Lane Medical Library and at Meyer Undergraduate Library on campus, he added.

The panel has 15 members who are appointed to renewable one-year terms, with a maximum tenure of three years, Sidlow said.

Three ex officio members representing the medical center and university safety offices and the sponsored projects office also sit on the committee.

Duties of the committee include reviewing and approving recombinant DNA research proposals, reviewing physical facilities, monitoring research projects conducted at Stanford, adopting emergency plans in case of accidents, and reporting any problems with guideline compliance to HEW.

The other committee members are Ronald Davis, associate professor of biochemistry; Marianne Dieckmann, research associate in biochemistry; Wray Huestis, assistant professor of chemistry; John Kaplan, professor of law; and Roger Kornberg, professor of structural biology.

Also, Perry McCarty, professor of civil engineering; David Perkins, professor of biological sciences; Burton Richter, professor at SLAC; Nathan Rosenberg, professor of economics; Robert Simoni, professor of biological sciences and panel chairman; Dave Thom, undergraduate in human biology; and Charles Yanofsky, professor of biological sciences.

Ex officio members are Edward Barrera from the office of sponsored projects; Jean Bernard from the medical center's health and safety office; and Anthony Sidlow, university manager of health and safety.

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Mailed Wednesday, March 14, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415:497-6911

STANFORD—

Stanford University School of Medicine expects to sustain a $290,000 operating budget deficit, and a $400,000 deficit in the faculty practice budget in 1979-80.

This is the forecast based on the Operating Budget Guidelines for the coming year approved by the Stanford University Board of Trustees, Tuesday, March 13.

The deficit can be met by the Medical School's own reserves. The School is currently engaged in a two-year effort to restore budget equilibrium.

The process, according to Acting Vice President and Dean Lawrence W. Crowley, will focus on clarifying each department's programmatic missions and determining those activities which are most essential and those which are least essential.

In addition, certain School-wide initiatives aimed at reducing expense are under consideration.

In accord with the federal government's wage-price guidelines, the budget document anticipates an increase in faculty and staff salaries at a cost of about $765,000 including benefits.

Funding of presently unfilled faculty positions, including support costs, would require about $600,000.

Other highlights include:

• Maintenance, security and custodial services are expected to increase by $200,000 in line with salary adjustments.

• Utilities will be increased $425,000 because of new University charges; the rate of utility inflation is expected about 9 percent, with total utility costs up about $540,000.

• About $150,000 per year of new utility and maintenance costs will be added with the opening of the third floor of the Sherman Fairchild Building now under construction.

• Library acquisition costs, expendable materials and services, and other non-personnel categories of expense will be about $350,000.

The School of Medicine is fully responsible for operations and maintenance of its facilities. Its budget relates to the operating costs, faculty medical practice which produces professional income, restricted funds such as government grants and contracts, and costs associated with activities performed by School personnel in the hospital.

The 1978-79 total budget is $73.5 million.

Long-range forecasts by the Medical School in 1978 predicted a mounting deficit in the combined operating and faculty practice budgets next year if no action were taken. This is primarily the result of new regulatory interpretations by Medicare and Medi-Cal.

While, according to the document, the exact impact may not be known for some time, it is clear that the amount ultimately received will be significantly reduced if not lost entirely.

Consequently it "must be regarded as conditional income not available to meet ongoing operating needs," the document said. However, sufficient Medical School reserves exist to cover projected deficits.

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Mailed Wednesday, March 14, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Stanford researchers have compiled a library of the normal magnetic tracings in the human heart, and they believe these readings may lead to a more accurate diagnosis of heart disease.

The library was introduced Monday, March 12 before the American College of Cardiology in Miami.

Dr. Jerry Griffin, acting assistant professor of cardiology, and Mark Leifer, graduate student in applied physics, presented the data which they and cardiology fellow Dr. Richard Meltzer began recording last August.

"Now that we have defined normal we can identify readings that indicate an abnormal state," Griffin explained.

The researchers used a differential magnetometer to record the normal heart. This device, which can pick up tracings one million times weaker than the earth's magnetic field, measures the magnetic field produced by charged particles flowing through heart muscle cells. It also cancels out other environmental magnetic fields that would interfere with the heart readings.

Before developing the differential magnetometer, researchers had no way of subtracting these environmental magnetic readings from those of the heart. In order for researchers to obtain fairly precise tracings, patients were lowered into a 25-foot well lined with magnetic shielding.

The differential magnetometer was built in 1977 by the S.H.E. Corporation of San Diego. It is currently at Vanderbilt University in Nashville, Tenn. where it is used by Dr. John P. Wikswo, Jr., who helped design it while he was at Stanford as a graduate research associate in physics.

"It is now up to the cardiologists to put the physicist's work to practical use," Griffin said.

In diagnosing some heart diseases, the magnetometer may be more effective than the electrocardiogram (ECG) which measures the flow of electricity through the heart. For example, abnormalities in cardiac impulse conduction can be detected by an ECG but may be more evident in the magnetocardiogram.

Conduction disorders cause the heart to beat irregularly and are sometimes fatal.

The magnetometer can also identify areas where normal conduction has been hampered as a result of a heart attack or an injury, Griffin said.

In addition, the magnetometer may be more efficient than the ECG in helping physicians diagnose emphysema and other diseases involving air, fat or fluid insulators around the heart.

Because both techniques can sense information that may be fully or partially hidden from the other, Griffin believes the magnetocardiogram will never replace the ECG, but only complement it.

"Unfortunately there is probably some information that is not being picked up in either technique," he said.

According to Dr. Donald Harrison, director of the research project, mass screening of cardiac problems would be easier with the magnetometer because it is a completely noninvasive device. ECGs require the attachment of electrodes to the patient's body.

"It's a thought for the future," Griffin agreed. "But we still need several more years of experiments and analysis of the magnetometer before it can be utilized on a wide scale."

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Mailed Monday, March 12, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

"Growing Old Gracefully," the third and final public lecture in the current Progress in Medicine Series, will be presented Wednesday, March 14, at Stanford University School of Medicine.

Speakers will be Dr. Russel V. Lee and Dr. Leo E. Hollister.

Lee is clinical professor of medicine, emeritus, at Stanford, and founder of the Palo Alto Medical Clinic. Hollister is professor of medicine, psychiatry and pharmacology, and director of psychopharmacology research at Veterans Administration Medical Center in Palo Alto.

The lecture is free and begins at 7:30 p.m. in Sherman Fairchild Auditorium.

This Progress in Medicine Series has been titled "The Coming of Age," and has featured a series of talks by Stanford physicians on the physical and emotional aspects of growing older.

In 1976 Lee authored the book, *No Gravy On The Vest*(subtitled "The Art of Growing Old in Style"), in which he examines his life, including the five decades spent as a practicing physician. He also writes about health and illness, and the vast spectrum of problems associated with aging. But, he also advises his readers on what they can do for themselves both physically and emotionally in order to enjoy a fuller, more rewarding life during the later years.

As he writes in his introduction, "I hope to show that these later years can be the best of life."

Hollister is an internationally recognized researcher in clinical pharmacology. For years he has researched the similarities between basic pharmacology of psychoactive drugs and their clinical use, and has been one of a few scientists to successfully bridge the gap between research and therapy.

Hollister pioneered methods of patient selection and data analysis necessary for scientific clinical research with psychotherapeutic agents. Furthermore, he has made important contributions to the understanding of certain drugs, particulary marijuana, and their treatment when abused.

His book, *Chemical Psychoses, LSD and Related Drugs* (published in 1973), is considered a definitive work on the subject. It represents two decades of clinical experience and experimentation with psychotherapeutic drugs. The book is considered recommended reading at many medical schools.

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Mailed Monday, March 12, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia at 415: 497-6911, or Jeff Cibili at 408: 996-8581.

STANFORD—

Mime, the classic theatrical art form based on stories without words, will be presented by Pianomime in a benefit performance Saturday, March 17, for the Premature Infant Research Fund at Stanford Medical Center.

The performance will begin at 8 p.m. in the Little Theater on the Stanford campus. Tickets are $3.50 each and are on sale at Stanford's Tresidder Box Office. Tickets will also be available at the door.

Pianomime is an amateur troupe of eight members. It was formed in 1975 by Stella Bensadon, a mime instructor. She is a performer in the troupe, along with Lisa Pincus, Peter Lelieveld, Kazuko Yamamoto, Jeff Cibili, Dolores Harrison and Helene Davis. Pianist is Dave Gollub.

The troupe has had many area performances, and in 1976 it presented a similar benefit performance for Stanford's Premature Infant Research Fund. Several members of the troupe performed at Stanford's annual Christmas Faire last December.

Several of Pianomime's members have performed in foreigh countries. Bensadon, for example, is a former student of the wife of Marcel Marceau, as well as Etienne Decroux. Cibili has likewise performed abroad, including Venezuela (where he was on Caracas television), Brazil, France, Puerto Rico and Mexico.

Pianomime's next performance will be Friday, March 23, at the Palo Alto Cultural Center, also beginning at 8 p.m.

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Mailed Monday, March 12, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Two common diseases of the elderly, arthritis and osteoporosis, a gradual depletion of bone, may be slowed by controlling diet and exercise, two Stanford University physicians said Wednesday night.

A combination of pain-killing and anti-inflammatory drugs with a program of exercise are the major tools currently available in treatment of arthritis, said Dr. Thomas B. Okarma, staff physician in the division of gerontology.

However, recent discoveries on the causes of arthritis may lead to more effective treatment of the disease, he suggested.

Arthritis afflicts 85 percent of the population over 75, Okarma reported, and the extra amount of mobility resulting from a planned exercise program can make the difference between an independent life and institutionalization, he said.

It is important to break the debility cycle, he said, where pain encourages the individual not to use the joint, causing muscle atrophy from disuse and further immobility and pain.

In arthritic disease, cartilage, the "shock absorber" between bones the body's joints, is destroyed, explained Okarma.

Because cartilage lacks nerves, an individual may not be aware of its destruction until the cartilage is all gone, and bone rubs bone.

The pain associated with arthritis is caused by trauma, swelling or inflammation in association with cartilage breakdown.

The key to future control of arthritis is the recent discovery that one of our normal body enzymes is responsible for the initial breakdown of cartilage.

"We don't yet know what triggers this enzyme's destructive action," said Okarma, "but current research is focused on looking for substances which will inhibit the enzyme's action, and prevent the initial cartilage breakdown from occurring."

Osteoporosis is "the end result of a gradual depletion of bone which begins early in life," explained Dr. Robert A. Marcus, assistant professor of medicine.

Bone depletion leads to pain, fractures and deformity. "It's a public health problem of major proportions," he said, and effective therapy can't be initiated after the fact.

"We must identify susceptible individuals and help control the risk" with proper exercise and dietary calcium, he said.

Marcus described how osteoporosis occurs. Bone serves several functions in the body, he explained. It is a weight bearing support, and it is also the body's reservoir of calcium, drawn on in times of need when insufficient calcium is present in the blood.

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The concentration of calcium in body tissues is regulated by several organs in the body, and is under the control of parathyroid hormone.

"The concentration of calcium in the blood is so crucial that it can be taken from bone when needed, even at the cost of sacrificing the bone itself," Marcus stressed.

This illustrates why inadequate amounts of calcium in the diet may lead to osteoporosis or bone mass depletion, Marcus explained.

From age 50 on, both sexes experience this loss of bone. However, men start out with a higher bone density and so are relatively free from debilitating osteoporosis, he said. Blacks also have a high initial bone density and do not frequently experience the disease.

"Thin white women who smoke" are in the highest risk group for serious osteoporosis, Marcus said. Because osteoporosis cannot be detected with x-rays in its early stages, knowing the factors which limit progression of the disease may be the best way to stave off a severe affliction, he said.

Physical activity helps maintain bone density, Marcus said. Even simple walking late in life is beneficial.

Diet also plays an important role. Marcus noted tha the minimum daily recommended allowance of calcium is 800 milligrams but recent evidence suggests that women entering menopause need up to 1200 milligrams, or close to the amount of calcium contained in one quart of milk.

A complicating dietary factor is revealed in studies of animals, Marcus said, where optimum bone strength was obtained when calcium and phosphorus were available in the diet in equal quantities. When phosphorus intake was increased, the bones weakened.

"We are a phosphorus consuming society," cautioned Marcus. Meats have phosphorus, he said, and unless prepared in stews with the bones, meats have relatively little calcium. Dairy products contain equal amounts of calcium and phosphorus, he said, and soda drinks are very rich in phosphorus.

For high risk people who cannot tolerate dairy products, Marcus advised eating calcium rich foods such as bean curd, stews prepared with bones, shrimp, crab and almonds.

Estrogen therapy may reduce bone mass decay, according to recent evidence, Marcus reported, but the risks of such therapy must be balanced against the benefits with the help of a physician, he suggested.

And although the connection between smoking and osteoporosis is not understood, Marcus noted that women who smoke are at greater risk than those who don't.

Okarma and Marcus spoke before a capacity crowd in Fairchild Auditorium at the second evening of the Progress in Medicine lecture series on aging sponsored by the school of medicine and the medical center council. The last lectures in this series will be held at 7:30 p.m. in Fairchild on March 14. Drs. Leo Hollister and Russel Lee will discuss "The experience of age: sexuality, mood and other emotions."

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Mailed Thursday, March 8, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

The vastness and organization of the Chinese population provide "exciting opportunities" for international cooperative research on the causes and treatment of cancer.

That is the concensus of a group of U.S. cancer specialists after a visit to China in 1977.

Their findings have recently been published as a book, entitled *Cancer in China* (Liss, New York, 1978), edited by Dr. Henry S. Kaplan, D'Ambrogio professor of radiology at Stanford University, and Patricia Jones Tsuchitani, of the National Academy of Science's Committee on Scholarly Communication with the People's Republic of China.

The 24-day visit by the U.S. delegation was cosponsored by the Committee and representatives of the Chinese government.

The strong point of the Chinese cancer effort is in early detection and prevention of disease, reported the American observers.

"According to Chairman Mao Tse-tung's teachings, in medicine as in other fields, emphasis should be placed on activities for the masses, especially peasants, with special attention to prevention," said delegate member Dr. I. Bernard Weinstein, professor of medicine at Columbia University.

"Mass surveys for health care come naturally to the Chinese, and they undertake such screenings, sometimes involving skillful maneuvers, on large numbers of people."

For instance, in Shanghai, 690,000 vaginal smears have been done among textile workers since 1958, uncovering cancers of the uterine cervix in the early stages.

"Deaths from this form of cancer among textile workers have been virtually eliminated," the group was told, largely because of early detection.

The Chinese are also making impressive gains in early detection and treatment of cancer of the esophagus, a 2000-year-old disease that strikes a greater proportion of people in the northern Linshien County than anywhere else in the world.

In particular, they have "come close to identifying a natural carcinogen (cancer-causing agent) in certain foods," stated the delegates.

The people of Linshien County commonly eat a mulch of vegetables which has been stored at room temperature and is covered with mold.

The mulch is very acidic. Acidic conditions permit conversion of the high levels of nitrates and amines found in the soil and water of the region into nitrosamines, potent cancer-causing agents in laboratory rats.

High rates of esophageal cancer are also found among the chickens of these people, which are fed the mulch.

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Further support to the theory comes from a study of 50,000 workers who had moved 360 miles away from the region. Despite the change in environment, they continued to have high rates of cancer, and continued to eat the mulch.

Moreover, the chickens they brought with them began to develop esophageal cancer, apparently from their diet of table scraps.

As for diagnosis and treatment, the Chinese have "improvised effectively techniques for mass screening and educating the public to take measures to prevent cancer or detect it early," reported the delegation.

Early diagnosis of esophageal cancer is done by having patients swallow a mesh-wrapped balloon and then pulling it back through the throat. The mesh scrapes mucous membrane off the esophagus which is then examined under the microscope for the presence of cancer cells.

This approach, combined with surgical treatment, achieved a five-year survival rate of 43 percent in one group of 1300 patients.

Progress in treating other cancers is not as dramatic, however.

Cancer of the lung is the number two cancer killer of both men and women in China, just behind stomach cancer.

The incidence of lung cancer has doubled in Shanghai in the last decade, and is paralleled by a rapid increase in cigarette smoking since the late 1940s.

Yet the Chinese emphasize early detection, rather than prevention of this disease.

"Indeed, cigarettes were routinely offered with tea at all but one of the major hospitals" visited by the delegates, "and smoking by males, especially young adults, was excessive."

There are 11 cancer hospitals in China, compared with only one 20 years ago.

The delegation found the surgical suites were immaculate and well-lighted, if sparsely equipped. The surgeons were well-trained and expert.

However, radiation departments are constrained by out-dated equipment, lack of trained personnel, and enormous caseloads, they reported.

An average clinic may treat as many as 500 patients per day, in multiple shifts around the clock, using equipment which is 20 years old.

Both Western and Chinese herbal medicines are employed in chemotherapy, and currently, the Chinese are determining the cancer-fighting ingredients of many herbs used to treat the disease.

Acupuncture is used as anesthesia prior to surgical removal of tumors, but only very selectively.

Although familiar with the Western clinical trials as a means of testing new therapies and techniques, the Chinese must still be convinced of their importance, said Kaplan.

"The design and conduct of randomized clinical trials could perhaps be more effectively and readily implemented in China than elsewhere," he said.

"The improved regimens stemming from such clinical investigations would benefit cancer victims throughout the world."

Mailed Wednesday, March 7, 1979

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STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob beyers

FOR IMMEDIATE RELEASE

STANFORD—

Associate Prof. Zoltan J. Lucas of the Stanford Department of Surgery has been officially reprimanded by President Richard W. Lyman and suspended for 12 weeks without pay for professional misconduct in his research work.

The suspension took place March 5 and will run to May 25.

A specialist in transplantation immunology, Dr. Lucas has admitted that 18 citations of his scientific papers were in error between 1967 and 1977.

In 10 instances the papers he cited concerning his work already had been rejected. In five instances they had never been submitted for publication. In three, the wrong journal was cited.

An internal study completed by the University last August concluded there was "persuasive evidence" that five other citations by Dr. Lucas concerning his own work were in error.

A complete review of Dr. Lucas' citations was made after a 1977 study showed errors in eight out of 10 citations of scientific papers had been made by Dr. Lucas in grant applications to the National Institutes of Health.

"Repeated reporting of inaccurate citations, be it careless or intentional, constitutes serious professional misconduct and warrants sanctions," former Vice-President Clayton Rich and Vice-Provost Gerald Lieberman told Lyman.

"The fact that this inaccurate reporting occurs over a period of many years, coupled with the conclusion that Dr. Lucas knew or should have known of these inaccuracies, argues for a very substantial sanction."

Allegations of scientific impropriety in Dr. Lucas' research were reviewed in 1975 by faculty members, who concluded there were deficiencies in his teaching, research, and laboratory management.

In November 1977 James W. Schriver of NIH wrote Rich asking for an investigation of allegations by Dr. Eugene Dong of the Stanford Medical School concerning apparent discrepancies in tables submitted by Dr. Lucas in an NIH contract proposal and other documents.

An independent review of these allegations concluded one error was due to oversight without intent to misrepresent data while another, at minimum, represented a failure to meet acceptable standards in transcribing and editing scientific data.

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Replying to another inquiry from NIH, prompted again by Dr. Dong, Dr. Lucas conceded last April there were three errors in a research table describing his work in an applicaton to NIH in 1972.

"There has been no conclusion that your research results have been seriously affected," Lyman told Dr. Lucas. "The trouble with carelessness in research, however, is that one has no way of knowing when it may have devastating consequences. . . .

"Because of the chronic nature of your professional misconduct and incompetence over a period of many years, the University must exercise some prospective controls to ensure that your behavior in this respect is not continuing."

For this reason, after two years, the head of surgery and the Medical School dean will conduct a formal review of Dr. Lucas' research, including experimental design, recording, and reporting of data and publications.

A finding of either professional misconduct or substantial and manifest incompetence at the end of this period could result in separation from the University.

Lyman said the University plans to make a comprehensive report of its findings and actions to the NIH without delay.

Lucas holds a degree in biochemistry from MIT and an M.D. from Johns Hopkins. After interning at Barnes Hospital, St. Louis, where he specialized in surgery, he joined Washington University's Department of Molecular Biology as an NIH fellow.

He continued research work in molecular biology at Stanford during 1963-65, then taught at Duke for two years before returning to join the Stanford faculty.

While suspended from the University, Dr. Lucas may not continue as a principal investigator on research projects. He currently holds both a contract and a grant from the National Cancer Institute and a grant from the American Cancer Society. Both are being notified of his suspension.

While suspended, Dr. Lucas may not participate as a faculty member in any departmental, school, or University bodies or have access to office space, laboratories, or other facilities not open to the public. this does not include Lane Medical Library.

During his suspension Dr. Lucas will not have practice privileges at Stanford Hospital as a faculty physician but he may apply for staff privileges as a nonfaculty physician.

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—The second in a series of public talks by Stanford physicians on the physical and emotional aspects of aging will be presented Wednesday, March 7, at Stanford University School of Medicine.

Drs. Thomas B. Okarma and Robert A. Marcus will discuss "Aches and Pains," or what happens to the bones and joints in humans as they grow older. The address begins at 7:30 p.m. in Fairchild Auditorium at the medical school.

The lectures are part of the medical school's Progress in Medicine Series. This particular series is being cosponsored by Veterans Administration Medical Center in Palo Alto in association with the Medical Center Council.

In all, six lecturers are featured in this series, which is entitled 'The Coming of Age."

Okarma is staff physician, and Marcus assistant professor of medicine, both in the Division of Gerontology.

The third and final lectures in this series will be presented Wednesday, March 14, by Drs. Leo Hollister and Russel V. Lee on "Growing Old Gracefully." Hollister is professor of medicine, phychiatry and pharmacology, and director of psychopharmacology research at V.A. Lee is clinical professor of medicine, emeritus, at Stanford, and founder of the Palo Alto Medical Clinic.

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Mailed Monday, March 5, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911
Editors—Photos available if not included with story

STANFORD—Dr. James Silverman has been appointed chief of staff of the Stanford University Hospital and associate dean for clinical affairs, acting Vice President for Medical Affairs Dr. Lawrence G. Crowley announced Friday, March 2.

Currently the clinical director of diagnostic radiology, Silverman succeeds Crowley, who became acting vice president and dean of the Medical School January 1 after the resignation of Dr. Clayton Rich.

"Dr. Silverman is an experienced clinical radiologist who has shown an excellent grasp and understanding of patient care issues throughout the hospital," said Crowley.

"He has also exhibited strong leadership qualities and we are looking forward to his joining the professional administrative leadership of the hospital and school."

His duties include coordinating the activities of the chiefs of service and the medical directors of special units, advising the dean on hospital clinical matters, and directing the hospital professional standards and quality assurance programs.

In an interview, Silverman said his primary goal will be to improve communication between the medical staff and the administration.

"The biggest challenge we face is to bring together all of the medical community as a viable and equal group," he said. "They should all feel secure and believe they have a voice in the future affairs of the hospital.

"The hospital will flourish only if the whole medical community is behind it."

In addition to his position in diagnostic radiology, Silverman is chief of the cardiac radiology section, co-director of the cardiac catherization laboratories, and associate professor of clinical radiology in the Medical School.

He also participates in several hospital activities, including the quality assurance, credentials, and ambulatory care committees.

Improving communication has long been one of Silverman's goals.

Recently, he and his associates in diagnostic radiology inaugurated a new reporting system. It is designed to transmit rapidly important clinical information, "while retaining the successful teaching method of the diagnostic radiology residency program which is one of the most sought after in the country," said Silverman.

The group is now working on a computerized coronary arteriogram reporting system which will enable referring physicians to review graphic reports within hours after the studies are completed.

A native of Pittsburgh, Pa., Silverman received his medical doctorate in 1961 from Philadelphia's Hahnemann Medical College. After four years in general medical practice, he returned for training in diagnostic radiology.

He served as a cardiovascular fellow at Stanford in 1970, and joined the medical staff the following year.

In 1978, Silverman was a Sloan Fellow at the Stanford Graduate School of Business, and received his masters degree in business management.

The first physician to complete this program at Stanford, Silverman said he felt the training would be invaluable in his new position.

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Mailed Friday, March 2, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415:497-6911

STANFORD—Scientists may be able to alter the aging process within the next 100 years, according to Stanford University gerontologist Dr. Lawrence M. Crapo.

"The implications of being able to extend the human life span are staggering, to say the least," said Crapo.

Crapo, assistant professor of medicine, and Dr. Gerald M. Reaven, head of the division of gerontology at Stanford, spoke on the biology of aging Wednesday night to an overflow crowd of about 600 people at the Medical School's Fairchild Auditorium.

The lecture was the first of three in the Progress in Medicine series on aging sponsored by the School of Medicine and the Medical Center Council. The remaining lectures will be delivered Wednesday nights, March 7 and 14 at 7:30 p.m. in Fairchild Auditorium.

People throughout the ages have sought various elixirs, however, the maximum human life span has remained fixed at about 100 years since antiquity, said Crapo.

Neither diet, nor life-style, nor even modern medicine can extend life much beyond the 100 year mark, he said.

Medicine has helped to markedly increase human life expectancy at birth, said Crapo, but "any future progress in this area can only come from an understanding of the process of aging."

For instance, if all cancer was eliminated, life expectancy would increase only two years. Eradicating all heart disease would add eight or nine more years.

This is not to say cancer and heart disease should not be eliminated, said Crapo, for with them would go a lot of human suffering.

But it means that even if all disease was eliminated, people would still die.

The secret to aging lies in the genes, said Crapo.

In the 1960's, Dr. Leonard Hayflick, former professor of medical microbiology at Stanford, demonstrated that normal human body cells age when grown in the test tube.

"They seem to have a fixed, finite life span of about 50 doublings," said Crapo.

This phenomenon, known as the Hayflick limit, has been verified in hundreds of laboratories. "It is the prototype for human aging at the cellular level," said Crapo. "Aging may be intrinsic to cells."

Tissues also demonstrate aging. When skin from an old rat is transplanted to a young rat, the skin retains its original age, that is, it decays and dies while the young rat lives on, said Crapo.

Other evidence for the genetic role in aging comes from rare, so-called rapid aging syndromes, in which children exhibit some of the characteristics of very old persons, such as wrinkled skin and atherosclerosis. They usually die at an early age from heart attacks or strokes.

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Recently, two researchers in England, R. Holliday and T.B.L. Kirkwood, have presented an alternative to the Hayflick limit theory, said Crapo.

They suggest that not all cells grown outside the body age at the same rate. Some may live beyond 50 doublings. Their hypothesis has not yet been proven.

While investigators attempt to determine the cellular basis for aging, others are focussing attention to the genes.

Two theories attempt to explain how and why cells age. In the first theory, aging is programmed in the genetic material of the cells, just as fetal development is. When the cellular machinery reads the instructions encoded in the genes, development and aging occur.

However, there is no data to support this theory, said Crapo, and it is questionable that natural selection would have chosen a genetic program which leads to death of the organism.

The second theory maintains that aging results from an accumulation of errors in the production of proteins from the genes. Proteins produced by error eventually lead to an "error catastrophe," said Crapo, and cell aging.

The production of errors is thought to be a natural process which allows organisms to adapt to changes in their environment.

According to the theory, "cell machinery is error prone," said Crapo. "It had to be for us to survive. The price we pay is aging, because errors accumulate.

"Aging thus results from what we are, and is part of life. But that is something we know already."

If this theory is correct, scientists may be able one day to alter the aging process, with gene manipulations aimed at preventing the accumulation of errors, said Crapo.

Reaven's talk concerned patient care, teaching and research in the division of gerontology and at the Geriatric Research Education and Clinical Center, located at the Palo Alto Veterans Administration Medical Center (VAMC).

The center, directed by Reaven, conducts research into diseases which occur more frequently among older people, and provides training for medical students, resident physicians, postdoctoral fellows and outside health professionals.

In addition, a new 12-bed clinical unit specifically designed to study problems unique to aging is being planned, said Reaven.

"We also plan to establish a model outpatient clinic at the VAMC, to provide medical care for older individuals and medical training. It will enable us to evaluate ways of providing the best possible care," he said.

Reaven is well known for his studies of carbohydrate and lipid metabolism as it relates to diabetes and atherosclerosis.

He and his associates have found a relationship between the decline in the body's ability to absorb sugars from the blood which occurs with age, and a defect in the secretion of insulin.

"We have defined a very basic defect in insulin secretion associated with aging," said Reaven. "This doesn't prove that a lack of insulin is the cause of high levels of blood sugar in the older individual. The insulin itself may not function normally."

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Mailed Thursday, March 1, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

(Editors: Although this program is to be aired nationally by PBS on May 6, some stations may show it at different times and dates. KQED-TV, Channel 9, in San Francisco, will broadcast it on Saturday, May 26, from 9:30 to 10:30 p.m. It will be repeated on San Francisco's Channel 32 (UHF) on Sunday, May 27, from 10:30 to 11:30 p.m.)

STANFORD—

"Being Human," an hour-long documentary focusing on what sets the human species apart from other creatures will be televised by the Public Broadcasting Service (PBS) on Sunday, May 6, from 2 to 3 p.m. (EDT).

This special documentary is the first to be produced for the general public by the Office of Postgraduate Education at Stanford University School of Medicine. The program features the views of 16 accomplished artists and scientists.

The program was written and produced by Dr. Edward Rubenstein, professor of clinical medicine and associate dean of postgraduate medical education.

Participants in the production are Judith Blegen and Frederica von Stade of the Metropolitan Opera; Norman Cousins, author and editor of*Saturday Review;* Dr. David Hamburg, president of the Institute of Medicine of the National Academy of Sciences (and currently on leave of absence from the Stanford faculty); Dr. Robert Hofstadter, physicist and Nobel laureate at Stanford; and vocalist Ella Fitzgerald.

Also, Dr. Rene Dubos, biologist at Rockefeller University; Dr. Philip Handler, president of the National Academy of Sciences; concert violinist Yehudi Menuhin; Dr. Joshua Lederberg, Nobel laureate and president of Rockefeller University; sculptor Henry Moore; Dr. John Nicholls, neurobiologist at Stanford; Dr. Linus Pauling, Nobel laureate and director of the Linus Pauling Institute for Science and Medicine; Ava Helen Pauling; concert pianist Arthur Rubinstein and Mrs. Arthur Rubinstein.

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Mailed Monday, April 30, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

Editor's:—Photographs of Drs. Nicholls, Dewson and Prince are available if not included with the release.

Recent medical findings involving the human brain will be discussed by three Stanford neuroscientists in the spring Progress in Medicine Lecture Series on successive Tuesdays May 2, 9, 16 at Stanford University School of Medicine.

Drs. John G. Nicholls, David A. Prince and James H. Dewson will present the public lectures, each of which begins at 7:30 p.m. in Fairchild Auditorium of the medical school.

Nicholls, who is professor of neurobiology, will give the first lecture May 2 entitled "From Nerve Cell to Brain," or how individual nerve cells contribute to the workings of the brain.

On May 9 Prince will discuss "The Brain as an Imperfect Machine." His talk will center on advances in understanding epilepsy and other brain disorders. Prince is professor and chairman of the Department of Neurology.

"How do Monkeys' Use Their Heads?" will be the subject of the address May 16 by Dewson. The talk will highlight studies of monkeys' abilities to remember what they've heard. Researchers have found similarities in the left-right organization of the human brain.

Dewson is associate professor of speech and hearing sciences in the Department of Surgery, and acting director of the Division of Laboratory Animal Medicine.

Nicholls is considered one of the country's leading neurophysiologists. He joined the Stanford faculty in 1973.

Co-author with S. W. Kuffler of the book *From Neuron to Brain--A Cellular Approach to the Nervous System,* Nicholls is an adjunct fellow at the Salk Institute in La Jolla and the advisory board of the National Paraplegia Foundation.

Prince is a widely-recognized researcher of epilepsy, a disease in which the victim suffers seizures or convulsions due to abnormal brain activity.

Last year he was awarded the Lennox Prize by the American Epilepsy Society for his contributions in the field.

Dewson's research with monkeys led to the discovery in 1976 that these primates possess a type of brain which had earlier been associated with man's specific intellectual capacities.

Prior to that, researchers had generally determined that monkeys had brains with two operationally equal halves.

The Progress in Medicine Lectures are presented by the dean and faculty of Stanford Medical School, and by the Stanford Medical Center Council.

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Mailed Thursday, April 26, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Dr. Alf A. Lindberg, a Swedish scientist well-known for his research on bacteria of the *Salmonella* group, some of which cause typhoid fever and food poisoning, will present the Fifth Edwin W. Schultz Memorial Lecture on Thursday, May 3.

Entitled "*Salmonella* O Antigen: From Phage Receptor To Synthetic Vaccine," the lecture is scheduled for 4:15 p.m. in the Stanford Medical School Room M-104.

Health professionals in the area are invited to attend.

Lindberg has been an associate professor in bacteriology at the National Bacteriological Laboratory in Stockholm since 1971. His research may lead to a *Salmonella typhi* vaccine which is effective in preventing typhoid fever but does not cause a sore arm or other unpleasant side effects.

Common in areas with contaminated water supplies, typhoid fever raged throughout the United States in the 19th century. Leland Stanford Jr., in whose memory the University was founded, died in Italy in 1884 from this disease.

Typhoid has been virtually eliminated in the United States except for occasional outbreaks such as the 1973 epidemic in Florida in which 222 persons were infected.

In underdeveloped countries, however, several thousand cases are still reported yearly.

Salmonella bacteria also cause serious diseases in farm animals and are a common cause of food poisoning in humans.

Lindberg graduated from the Karolinska Institute Medical School in Stockholm in 1961 and presented his thesis on the structure of lipopolysaccharides in *Salmonella* in 1971.

He did postgraduate work from 1972 to 1974 in the Department of Medical Microbiology at Stanford and at the Walter Reed Army Institute of Research in Washington, D.C.

The Schultz Memorial lectures began in 1972, one year after the death of Edwin W. Schultz, a researcher in virology who taught at Stanford for 34 years.

The lectures are supported by a memorial fund established by his friends and family.

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Mailed Wednesday, April 25, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Jeanne D. Kennedy, director of resources development and special assistant to the president of the Institute of Medicine, Washington, D.C., has been appointed director of community relations at Stanford Hospital, effective Aug. 1.

Her appointment to the new position was announced by Peter Levin, executive director of the Hospital.

Kennedy will work closely with Hospital staff members in developing more personalized services. She also will interpret Hospital programs to area doctors, civic groups, and other interested citizens.

She will report primarily to Hospital Administrator Gary Mecklenburg.

Kennedy served as associate director of development for the Stanford Medical Center and as associate general secretary of the University during 1976-77.

Her present responsibilities at the Institute include fund-raising in the private sector, especially foundations and corporations; developing financial reports; and handling administrative responsibilities as assistant to the president, Dr. David Hamburg, on leave from the Stanford Department of Psychiatry.

During 1961-76 Kennedy compiled indexes to scholarly books. She also was a financial and accounting consultant for book publishing firms and community service organizations in the Peninsula area.

A 1954 graduate of Smith College, she worked with the Committee for Art at Stanford for several years before becoming its chairman in 1968-70. She initiated and directed planning for a docent program and museum bookshop, helping to raise more than $250,000 for the Art Department and Museum over a three-year period.

She is married to Donald Kennedy, a Stanford professor. They have two daughters, Page and Julia.

4-17-79 —30— 14

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Dr. Henry S. Kaplan of the Stanford University School of Medicine has been selected to receive the first Charles F. Kettering Prize for his research in Hodgkin's disease, the General Motors Cancer Research Foundation announced Thursday, April 12, in New York.

Kaplan, D'Ambrogio professor of radiology and director of Stanford's Cancer Biology Research Laboratory, was cited for his leadership in research that led to understanding of the biology of this type of cancer, and for the development of a treatment for Hodgkin's disease, the foundation said.

Kaplan was one of three researchers selected to receive the annual General Motors Cancer Research Prizes. Each of the prizes are named in honor of distinguished former GM executives.

The other recipients are Sir Richard Doll, regius professor of medicine, Master of Green College, Oxford University, England; and George Klein, professor of tumor biology at the Karolinska Institute, Stockholm, Sweden.

Dr. Doll will receive the Charles S. Mott Prize for his leadership in research concerning the environmental causes of cancer. Dr. Klein will receive the Alfred P. Sloan Jr. Prize for his pioneering studies on the inter-relation of cancer and the immune system in mammalian species, including human cancer.

The three researchers will receive their prizes, each consisting of a gold medal and a $100,000 tax-free award, at a presentation ceremony and dinner in Washington, D.C., May 2.

The award recipients were selected by the Awards Assembly of the GM Cancer Research Foundation established last September. It is composed of 25 internationallly prominent basic and clinical scientists and physicians.

"Each prize winner was chosen by the Awards Assembly after exhaustive analysis of their work by specialists in their separate fields," the foundation statement said.

More than 600 nominations, the foundation said, were received from 17 countries.

The awards to Drs. Kaplan, Doll, and Klein were announced by Dr. Joseph G. Fortner, president of the General Motors Cancer Research Foundation.

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"This marks the beginning of a historic occasion in the field of cancer," Dr. Portner told a news conference this morning in New York.

"For the first time, individuals who have made hallmark contributions to our understanding of the cause, nature, treatment and prevention of cancer are being recognized in a manner commensurate with that afforded other scientific fields.

"The prizes are important to the individual, but they serve a second and equally important purpose in that they bring to the attention of the people of the world that highly significant progress is being made in an area which was once considered hopeless."

Hodgkin's disease, a cancer of the lymph glands, was invariably fatal and the best that could be done for patients was to make their remaining days comfortable.

"Although no single person is never wholly responsible for a particular scientific advance," the foundation statement said, "Dr. Kaplan is considered as the dominant figure in the reversal of this grim future for Hodgkin's patients.

"Today, Hodgkin's disease is one of the most curable of all cancers."

In the 1950's Kaplan conceived the use of the linear accelerator for medical purposes. After working with Stanford physicists to design the necessary apparatus, he set standards for its use.

As treatment advances were being made, Kaplan developed methods showing how other organs of the lymph system are involved in the cancerous process. He proposed diagnostic procedures, including special exploratory surgery, to meet these aims and allow the treatment of patients whose disease was more advanced.

Kaplan also demonstrated that the radiation activates a latent cancer-causing virus and that this was the genesis of leukemia in mice. "This was a major contribution," the foundation statement said, "showing that, at least in mice, some cancers are partly caused by viruses."

The General Motors Cancer Research Foundation was established in 1978 with an initial $2 million grant from the General Motors Corporation to fund the three annual awards.

The awards are named in honor of three men associated with General Motors. Mr. Kettering was inventor, manufacturer, researcher and former GM director, and pioneer in the establishment of GM laboratories. Mr. Mott was a longtime GM officer and director and renowned philanthropist; and Mr. Sloan, president and chairman of General Motors for 33 years, was responsible for establishing the Sloan-Kettering Institute for Cancer Research.

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Mailed Thursday, April 12, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

A leading critic of nuclear power and armaments will discuss the biological and political implications of the nuclear industry on Friday, April 20 at Stanford University School of Medicine.

Dr. Helen Caldicott, a pediatrician at Children's Hospital Medical Center in Boston will speak at 8 p.m. in Fairchild Auditorium, and will discuss medical issues relating to the recent nuclear accident at Three Mile Island.

She has been an active opponent of the nuclear industry both in the U.S. and in her native Australia, and has written a book entitled *Nuclear Madness* on these topics.

The lecture is open to the public as part of Environment month at Stanford, cosponsored by a student committee, the Associated Students Speakers Bureau, the Stanford Energy Information Office and the Stanford Workshops on Political and Social Issues (SWOPSI).

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Mailed Wednesday, April 11, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Stanford University Hospital's Pathology Laboratory has been accredited by the College of American Pathologists.

In a letter to Gary Mecklenburg, administrator of Stanford Hospital and Clinics, the national pathology organization said the accreditation runs through Dec. 13, 1980.

Dr. John K. Duckworth, chairman of the organization's commission on inspection and accreditation, said Stanford's most recent inspection "indicates a high level of medical laboratory performance."

In order to receive accreditation from the College of American Pathologists, institutions such as Stanford must participate in annual surveys conducted by the pathology organization.

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STANFORD—

"Obstacles in the Development of Health Planning" will be discussed Thursday, April 12, in a public lecture by Dr. Jose Laguna, Mexico's subsecretary of health at Stanford University School of Medicine.

The address, which begins at noon in Room M-106, is being presented by the Department of Family, Community and Preventive Medicine as part of its series on international health topics.

Laguna is former dean of the University of Mexico's School of Medicine, where he was also a professor of biochemistry. The medical school is located in Mexico City.

Laguna received his graduate training at Peter Bent Brigham Hospital in Boston and in Edinburgh, Scotland.

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Mailed Friday, April 6, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Stanford University Hospital has been certified as a participant in the California Voluntary Cost Containment Program.

Hospital administrator Gary Mecklenburg said that certification is a way of demonstrating that the hospital and its medical staff are committed, as part of an organized state and national effort, "to keep hospital costs as low as possible."

Certificates are granted those hospitals in California which endorse the goals of the Voluntary Program, and which agree to participate in the program's data collection activities.

Mecklenburg said that Stanford hospital has been attempting to hold down costs for the past two years.

In 1978, hospital costs increased 11.0 percent, down from an average yearly increase of 19.1 percent for the period 1973-77, he said.

And in the first six months of the current fiscal year, beginning September 1978, the rate of increase dropped to 8.5 percent.

Nationwide, $1.48 billion in hospital expenditures were saved during 1978, according to the National Steering Committee of the Voluntary Effort.

The figure is based on a reduction of the rate of increase in hospital costs, from 15.6 percent in 1977 to 12.8 percent last year.

The goal, proposed by the Carter administration, is a yearly cost increase of 9.7 percent by 1980.

In its resolution endorsing the Voluntary Program, the Stanford hospital board of directors stated that it "is strongly committed to voluntary action as the key to cost containment, and desires to play a leadership role in demonstrating the value of voluntary action in cost containment."

The resolution pledged "the use of all reasonable means to keep operating expenditures and capital budgets at the lowest reasonable levels on a continuing basis, consistent with sound medical practice in a teaching setting."

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Mailed Friday April 6, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

A three-session course on growth and development to be held at Stanford University School of Medicine beginning April 17 is now open for enrollment to adolescent boys between 12 and 14 years of age.

The course will be led by two pediatricians in the division of adolescent medicine, Dr. Jerry Klein and Dr. Paula Duke. Topics to be covered include height, weight and muscle changes, diets, nutrition, development of secondary sex characteristics, and acne.

"Many young teenagers have concerns about their physical development," says Dr. Duke, "and we are trying to devise ways to help them through this transition period."

A briefing session for parents will be held Monday, April 16 at 7:30 p.m. in room A335 at the Medical Center, and the boys' sessions will take place on two consecutive Tuesdays, April 17 and 24 from 4 to 5:30 p.m. in room C358. The last session will be scheduled at a later date.

The course is part of a research project being conducted by Dr. Duke. A similar course for adolescent girls was held in February.

For more information on enrollment, call Dr. Klein or Dr. Duke at 497-6891.

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Mailed Wednesday, April 4, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415:497-6911
Editors: Photos available if not included with story.

STANFORD—

Physicians at Stanford University Medical Center are testing the laser as a means of treating recurrent ear infections in children.

The new technique may make it possible to treat children without using general anesthesia and at half the cost, according to Dr. Richard Goode, associate professor of surgery at Stanford.

Goode reported on the technique April 3, at the national meeting of the Triologic Society in Los Angeles.

Recurrent ear infections are common among children and some adults who cannot clear their ears well. Fluid often accumulates in their middle ears, providing a perfect "swamp" for bacterial growth, and can impair hearing, said Goode.

Currently, most patients are treated by putting a hole in their eardrums, and inserting tubes to allow their ears to drain. The tubes can later be withdrawn, and the eardrums heal.

In adults, the procedure can be done under local anesthesia. But children are usually placed under general anesthesia, and the tubes inserted in the operating room.

"Children can't take being stuck with three to six needles in the ear to anesthetize it, especially those between three to five years old," said Goode.

"That's why most of them are put under general anesthesia."

The laser technique, on the other hand, involves numbing the eardrum without needles, and thus without the pain.

Goode places a solution of anesthesia into the ear canal, and drives it into the eardrum with an electric current. The procedure takes about 11 minutes, said Goode, and causes only a tingling sensation in the ears of some patients.

Next, Goode positions a carbon dioxide laser over the ear, marks a spot on the eardrum with a red light beam, and touches a foot pedal to activate the laser.

The laser produces a beam of bright light absorbed by tissue of all colors. At a relatively low power setting, 12 to 14 watts, it focusses light so intensely that its beam literally vaporizes the spot of eardrum tissue in a tenth of a second.

All the patients hear is a "pop" as the laser beam cuts a tiny hole one to two millimeters in diameter in their eardrum. They feel no pain. No tubes are inserted, as the hole stays open for about one month during healing.

So far, the laser technique has been applied successfully in laboratory animals, in several adult patients, and in two children, said Goode. He and his associates are now determining whether one month is long enough to drain the ears.

"The technique is still experimental," he said, "but preliminary success in adults encourages us to continue testing in children."

Goode estimated that the technique can be performed in the outpatient clinic for $200 to $300. Tube insertion in the operating room may cost $750.

Infection is a possible complication of the laser technique, said Goode, and of any procedure in which the eardrum is pierced. Patients therefore are cautioned not to get water in their ears until the eardrum heals over, and are given antibiotic eardrops.

So far, infection following laser surgery has occurred in only one patient, he said.

Another concern is that excess laser energy passing through the eardrum may damage the delicate structures of the middle and inner ear.

This is unlikely, said Goode, because the fluid which has collected in the ears of most patients completely absorbs excess energy.

"Ultimately, the laser technique may make it easier to treat at least half of patients with decreased hearing or recurrent ear infections due to fluid in the middle ear," he said.

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Mailed Tuesday, April 3, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415:497-6911

STANFORD—

Seventy percent of medical students graduating from Stanford University School of Medicine this year have been matched to one of their top three choices for internship.

Fifty three percent of the 79 graduates seeking internships next year obtained their first choice, the highest percentage in the past 14 years, according to Dr. Kenneth L. Vosti, associate dean for student affairs.

The high match rate probably reflects a number of variables, said Vosti, including the students' clinical performance, and a counseling program which helps them apply for programs most appropriate to their abilities and career desires.

"For instance," he said, "some of our strongest students may not match with their first three choices, particularly if they choose to compete for positions at prestigious institutions to which hundreds of other highly qualified graduates apply."

To qualify for internship programs, medical students must first satisfy the graduation requirements of the Medical School, which include passing Parts I and II of the National Board Examinations, as well as the necessary course requirements of the Medical School, said Vosti.

Most of the graduates (33) will take graduate training in internal medicine. The remainder have been accepted, in descending order, by programs in pediatrics, surgery, family practice, psychiatry, pathology, anesthesia and dermatology.

This is typical, said Vosti. "Each year, nearly half of our students take internships in internal medicine or closely related fields."

In addition to the students' obvious interest in internal medicine, the discipline offers them greater flexibility than many others, he said, and provides an excellent foundation for further training in most other specialties.

Nevertheless, the internship programs chosen by students are good indicators of the general fields in which they eventually will practice, says Vosti.

This year's class has been accepted by programs from Los Angeles Children's Hospital to Johns Hopkins University in Baltimore.

The majority, 14 graduates, will be interning at Stanford, where they will make up over one fifth of the 65 internships offered this year.

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Mailed Tuesday, April 3, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

If King Tuthankamen were alive today, he probably would know what an enema is.

He would use honey as a dressing for his wounds, and he might believe that the poppy seed is useful for relieving intestinal gas.

But he would also be familiar with some aspects of current medical practice.

King "Tut" lived during the height of medicine in ancient Egypt, about 1350 B.C., according to Dr. Fernando G. Vescia, clinical assistant professor of medicine and medical historian at Stanford University School of Medicine.

Vescia, a gastroenterologist at the Palo Alto Medical Clinic, spoke on "Tuthankamen's Medicine" recently at the Medical School.

There are eight or nine known papyri which describe the practice of medicine 15 to 18 centuries before Christ.

"They record, for the first time in the history of the world, the beginnings of a rational medical system, based on the taking of a history, medical examination, diagnosis and treatment—much the same way it is practiced today," Vescia said.

There were two types of healers in ancient Egypt, he said, priests, who practiced magic, and physicians. But the line between them was only beginning to be drawn.

The priests were responsible for embalming and mummifying the remains of the pharaohs who had passed to the "other world."

They developed the surgical techniques for extracting the internal organs, including the brain, and preserving them separately.

However, surgery was not used to treat disease in living patients, Vescia said.

Instead, the physicians used a variety of herbal remedies to treat conditions ranging from open wounds to hemorrhoids.

For example, a preparation of acacia leaves was prescribed for disorders of the anus, and as a contraceptive.

Today, physicians know that acacia leaves produce lactic acid. Similarly, demulcents, or oily substances, are used in current hemorrhoidal ointments, and contraceptive foams work because of their acidifying action, Vescia said.

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The Egyptians also applied a mixture of one part honey and two parts grease as a salve for wounds.

Honey contains small amounts of gluconolactone, a mild antibiotic, and hydrogen peroxide, a sterilizing agent, introduced during honey production by bees, he said. Recent studies have shown that mixtures of honey and butter can completely sterilize cultures of bacteria such as *E. coli* and *Staphylococci.*

The poppy seed has been used since antiquity for the pain relieving and hallucinogenic properties of the opium obtained from it.

However, the Egyptians used it to prevent intestinal gas. "Today, we use codeine, an opiate derivative, to relieve not only intestinal cramping, but pain elsewhere in the body," Vescia said.

The central idea in medicine at the time of the pharaohs was that disease originated from unclean residues in the body, such as "ukedu" (stools), phlegm, bile, and even sperm.

"Ukedu was the main concern of the Egyptians," he said, "hense the popularity of the water enema." By removing the unclean part of the body, they believed that they could prevent disease.

This belief was passed on to the Greeks, and persisted into the 20th Century, when blood-letting was still used to treat a variety of illnesses, Vescia said.

Another practice, that of wearing precious metals to ward off evil and disease, is evident today, he said, in the popular belief that wearing copper bracelets will reduce the symptoms of arthritis.

However, some ornamentation, such as the green eye liner used by the Egyptians, actually had medicinal value. The make-up was produced from copper sulphates, which have sterilizing qualities, dissolved in alcohol.

The preparation was later modified by the Arabs to a black eye make-up commonly known as mascara in the West.

In some ways, "the magic of King Tut is as evident today in general society as it was then at court," Vescia said.

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Mailed Wednesday, May 23, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Mother alone is not the ideal caretaker for young children, says a Stanford University professor who has been studying early child care over the past 10 years.

Although in our society, it's considered "ideal" for a child's development when a mother cares exclusively for her child, the brothers, sisters and friends who share in caretaking significantly enhance a child's intellectual and emotional development, says Dr. Herbert Leiderman, professor of psychiatry and behavioral sciences.

Based on studies conducted in a Kikuyu community outside Nairobi, Kenya, Leiderman found that, particularly in lower economic groups, multiple caretaking affected childrens' learning abilities.

Among the Kikuyu, young girls and occasionally young boys take over a substantial portion of the daily care of infants as young as five months old while the mother labors away from home.

Leiderman compared cognitive and emotional test scores of infants raised primarily by a mother and infants who received as much as 75 percent of their daily care from siblings or older peers.

In families from the village's lower economic group, Leiderman observed that infants cared for by a mother alone produced the lowest scores while the presence of alternate caretakers significantly improved an infant's test performance.

Older peers or siblings may provide unique forms of social stimulation not given by an adult which contribute to the enhanced learning observed.

In addition to contrast from the primary caretaker's attitudes, stimulating play, often lacking in the adult/infant relationship is a distinctive feature of such associations, Leiderman says.

A more intuitive understanding of the gaps in a young child's experience as well as less formidable stature and less forbidding approach may also contribute to the enhanced learning effect achieved by the infants' caretakers, the study suggests.

Few societies apart from those of the United States and western Europe depend so heavily on a single figure for rearing children early in life, says Leiderman. "The importance of a single, stable figure for optimizing subsequent growth has always been assumed in western society," he notes.

Cautious about applying these results directly to child-rearing in the United States, Leiderman suggests that the mother/child relationship as the only accepted standard deserves further scrutiny.

Denying that his findings necessarily promote large families with many children, Leiderman suggests that very young children and infants could benefit from interactions with older peers other than their siblings.

Strict grade stratification prevalent in American schools may not be ideal for childrens' development, he adds.

Leiderman described his research at a recent seminar on child psychiatry sponsored by the Friends of Psychiatry and Behavioral Sciences and held at the Children's Hospital at Stanford.

He is continuing his studies of multiple caretaking in more varied communities in Kenya and in the United States.

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Mailed Tuesday, May 22, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

You can defeat arthritis.

So says Dr. James F. Fries to patients in his new book, *Arthritis—A Comprehensive Guide*, (Addison-Wesley, Mass., $6.95).

Fries, associate professor of medicine at Stanford University School of Medicine, says the idea that "nothing can be done for arthritis" is not true.

On the contrary, "the battle against certain forms of arthritis is nearly won," he says.

No longer need patients with rheumatoid arthritis, for example, accept the pain, crippling and grotesque deformities once associated with the disease.

"Both arthritis and deformity can be prevented by sound use of present medicines and surgery together with your hard work," he says.

Fries, who has co-authored two other self-help books entitled *Taking Care of Yourself* and *Taking Care of Your Child*, says that treatment of arthritis, like other illnesses, begins in the home.

"Your knowledge is critical to your health," he says. "Your doctor will be a great help to you. But you have to make the decisions and carry them out."

In the first part of the book, Fries describes several of the over 100 forms of arthritis, and helps patients determine which form they have and what the best treatments are for it.

In every case, he advises patients to seek help early.

"Even the worst form of rheumatoid arthritis tends to get better with time. However, deformities don't improve. Therefore, it is extremely important to treat the disease correctly in the early years," says Fries.

In the second part of the book, Fries details ways of managing and preventing arthritis.

"Presently available drugs (such as aspirin and the anti-inflammatory agents) are truly excellent when used in combination with a sound overall program," he says.

But patients must understand that every drug has side effects, and that some, like aspirin, must be taken for weeks before they begin to control inflammation. Often, doctors must try a variety of medications before they find the best agent. "The treatment for your arthritis will ultimately be unique to you," says Fries.

Steer clear of pain relievers, like Tylenol, he says. They only deaden the pain without controlling the inflammatory processes which can lead to joint destruction.

In addition to taking medication, exercise, advises Fries. Activities, such as walking and swimming, build strength in the bones and ligaments surrounding arthritic joints, and help preserve their flexibility. Activity also is the way cartilage, which has no blood supply, obtains food and oxygen. Without it, the cartilage will begin to deteriorate.

"There is no special diet for arthritis," says Fries. "There are many kinds of arthritis, and there cannot be a single cause or cure for all kinds.

"It is tempting to accept a simple answer to a complicated problem, but it just isn't that easy."

The search for a simple answer has led over half of arthritis patients to try quack remedies, such as flu shots, or wearing copper bracelets.

The attitude of many patients is, "What's the harm? What do I have to lose?"

Plenty, says Fries. Several hundred million dollars each year are spent on quack treatments, and that doesn't account for the loss of confidence, dignity, function, and occasionally life itself when useless and sometimes dangerous remedies are tried.

Proper management of arthritis also includes taking care of the financial side, says Fries. He provides tips on buying generic rather than the more expensive brand name drugs, and on avoiding unnecessary lab and X-ray tests, and hospital stays.

In the third part of the book, Fries discusses how patients can cope with everyday problems, such as pain, medication side effects, getting around, sex, and work.

Decision charts are included to help patients decide whether to treat these problems at home or to see a health professional.

Some patients with arthritis suffer depression. "Perhaps this is because many of us associate arthritis with long-term pain, encroaching old age, or inevitability and hopelessness," says Fries.

However, all patients can lead satisfying lives.

"If your arthritis is serious," he says, "it may represent the greatest challenge of your life. Meeting that challenge may be your greatest satisfaction. You need a bit more will and determination and self-discipline than others. But the future is still yours."

Mailed Tuesday, May 22, 1979 —30— —310

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Basic research on the causes of alcoholism should receive more support, according to a Stanford University professor of pharmacology.

Dr. Dora Goldstein, commenting on her recent election as president of the Research Society on Alcoholism, explained that "the recent emphasis on treatment of alcoholism has done a lot of good, but at the same time, it may have persuaded people that the causes of alcoholism are well understood."

This is not so, she added, and as president of the Research Society on Alcoholism, Goldstein will seek support for basic research with the long range goal of determining the biochemical basis of alcholism and finding a medical treatment for the condition.

Goldstein said that although Health, Education and Welfare Secretary Califano has put alcohol just behind tobacco as a national health problem, research support on alcoholism still hasn't been boosted.

Biochemistry, neurochemistry, liver disease and genetics are some of the promising areas in which alcoholism research is active, said Goldstein, and her own research during the past eight years has focused on the molecular basis of alcohol addiction.

Goldstein and her associate, Dr. Jane Chin, have evidence that alcohol affects the lipid, or fat, component of nerve cell membranes, increasing membrane fluidity.

The lipid layers hold vital proteins in the membrane and the precise degree of fluidity is crucial for the proteins' proper function.

Goldstein and her colleagues have observed mice which have developed tolerance to high levels of alcohol. Membranes from these mice are subtly altered in structure and contain notable increases in cholesterol levels.

Furthermore, these "tolerant" membranes do not increase in fluidity as do the normal membranes when more alcohol is applied.

Since humans also develop tolerance to alcohol after prolonged use, further investigation of this altered membrane structure is necessary, according to Goldstein.

If membrane lipids and cholesterol are the key to alcohol's long-term effects, then "we may be able to manipulate alcoholism by dietary means" as in heart disease, Goldstein suggested.

The Research Society on Alcoholism, a component group of the National Council on Alcoholism, is composed of about 300 active researchers. The goal of the organization is to increase support for alcohol research and to enhance communication among alcoholism researchers, said Goldstein. The group holds regular conferences and publishes a quarterly journal entitled *Alcoholism: Clinical and Experimental Research*.

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STANFORD—

Dr. John W. Farquhar, professor of medicine at Stanford University School of Medicine, has been appointed to the Advisory Committee for the Division of Health Promotion and Disease Prevention of the Institute of Medicine, (National Academy of Sciences) in Washington, D.C..

Acknowledging a new importance in "the promotion and protection of health," the division will devote attention to such issues as the effectiveness of prevention methods, techniques for educating the public on health matters, and legal and ethical issues in health protection policy formulation.

Farquhar received his M.D. degree from the University of California School of Medicine and has been at Stanford since 1962. He is director of the Stanford Heart Disease Prevention Program, and is actively involved in studies on the causes and prevention of cardiovascular disease.

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Mailed Monday, May 21, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

*Editors:*Photos available if not included with story

STANFORD--

A resident physician in neurology at Stanford University Medical School is the recipient of the S. Weir Mitchell Award by the American Academy of Neurology.

Dr. Lawrence Steinman received the award and a $500 honorarium April 27 at the academy meeting in Chicago for research into the causes of nervous system diseases such as multiple sclerosis.

The award, named after a famous American neurologist, is given annually for excellence in research by resident physicians.

Steinman's work was conducted at the Weizman Institute near Tel Aviv, Israel from 1975 to 1978. The work was supported in part by the National Institutes of Health.

Multiple sclerosis is a progressive disease characterized by muscle weakness, incoordination, and other symptoms.

It is related to a loss of myelin, the protective sheath which covers nerves. Scientists believe it may be due to an attack by the body's immune system which destroys the myelin.

However, the cause of the disease is not well understood, and there is no cure.

Steinman studied the influence of myelin protein on the development of experimental de-myelinating disease in animals.

Previous investigators had shown that a soluble form of myelin protein (one which dissolves in water), prevents the disease in animals.

In addition, Dr. Jonas Salk, of the Salk Institute in San Diego, has been testing myelin protein in patients with multiple sclerosis.

The rationale for using myelin protein is that it may supply a target for the immune responses, redirecting them away from the nerves, said Steinman.

Steinman, now in his second year at Stanford, is continuing his studies in animals. He said his goal is to understand better what causes diseases such as multiple sclerosis and how they may be controlled.

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Mailed Tuesday, May 15, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

The third and final in a series of public lectures by Stanford neuroscientists on the human brain will be presented Wednesday, May 16, at Stanford University School of Medicine.

Dr. James H. Dewson III, will discuss similarities researchers have found in the left-right organization of the human brain and in the brain of monkeys. His talk, "How Do Monkeys Use Their Heads?" will also highlight studies of how primates remember what they've heard.

The address begins at 7:30 p.m. in Fairchild Auditorium at the medical school.

Previous talks in the Spring Progress in Medicine Lecture Series have been by Drs. John G. Nicholls and David A. Prince.

Dewson is associate professor of speech and hearing sciences in the Department of Surgery, and acting director of the Division of Laboratory Animal Medicine.

His research with monkeys led to the discovery in 1976 that these primates possess a type of brain which had earlier been asociated with man's specific intellectual capacities. Prior to that researchers had generally determined that monkeys had brains with two operationally equal halves.

A graduate of the University of Arizona, Dewson received his Ph.D. from Stanford in 1961. His professional career has been at Stanford since he began as a postdoctoral fellow in the Department of Psychiatry in 1961.

The Progress in Medicine Lectures are presented by the dean and faculty of Stanford Medical School, and by the Stanford Medical Center Council.

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Mailed Monday, May 14, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

"Being Human," an hour-long special documentary produced by the Office of Postgraduate Education at Stanford University School of Medicine, will be broadcast in the San Francisco Bay Area May 26-27.

The program, which focuses on the unique characteristics that set the human species apart from other creatures, will be telecast by KQED-TV, Channel 9, at 9:30 p.m. on Saturday, May 26, and at 10:30 p.m. on Channel 32 (UHF) on Sunday, May 27.

The views of 16 accomplished artists and scientists are featured on the documentary, which is narrated by Eric Sevareid.

Dr. Edward Rubenstein, professor of clinical medicine and associate dean of postgraduate medical education, wrote and produced the program, which is the first to be produced for the general public by the Office of Postgraduate Medical Education. It was originally telecast nationwide by the Public Broadcasting Service (PBS) on May 6, but it was not carried by KQED.

Participants in the production are Judith Blegen and Frederica von Stade of the Metropolitan Opera; Norman Cousins, author and editor of *Saturday Review;* Dr. David Hamburg, president of the Institute of Medicine of the National Academy of Sciences (and currently on leave of absence from the Stanford faculty); Dr. Robert Hofstadter, physicist and Nobel laureate at Stanford; and vocalist Ella Fitzgerald.

Also, Dr. Rene Dubos, biologist at Rockefeller University; Dr. Philip Handler,president of the National Academy of Sciences; concert violinist Yehudi Menuhin; Dr. Joshua Lederberg, Nobel laureate and president of Rockefeller University; sculptor Henry Moore; Dr. John Nicholls, neurobiologist at Stanford; Dr. Linus Pauling, Nobel laureate and director of the Linus Pauling Institute for Science and Medicine; Ava Helen Pauling; concert pianist Arthur Rubinstein and Mrs. Arthur Rubinstein.

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Mailed Monday, May 14, 1979

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News Bureau Stanford, California 94305

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Editors-photos available if not included with story.

STANFORD—

A device developed by Stanford University scientists for detecting hearing loss in newborn infants has shown that seriously ill babies are 19 times more likely to be deaf than healthy ones.

The device, called a crib-o-gram, has been tested in 12,000 infants at Stanford University Hospital since 1970. So far, it has detected deafness in 11 healthy babies of a total of 10,400, an incidence of one per 1,000.

However, 31 out of 1,600 seriously ill babies in the intensive care nursery were found to be deaf, or one in 52.

"This is the first study which has shown a high incidence of deafness among babies in an intensive care nursery," said Dr. F. Blair Simmons, head of the Medical School's division of otolaryngology.

Simmons reported the findings April 3 at the meeting of the American Triological Society in Los Angeles.

The research was supported in part by grants from the National Institute of Neurological Diseases and Stroke.

The crib-o-gram, developed by Simmons and Frederica Jones, R.N., monitors infant movements before, during and after a test sound is emitted from a microphone.

Slight changes in movement, even breathing and heart beats, are detected by a transducer located near the infant, and relayed to a microprocessor.

The microprocessor grades the infant's response to 30 test sounds given over a three to six hour period. If the infant responds in a statistically significant way, a green light goes on, indicating that he or she has passed.

If the infant fails to respond reliably, a red light goes on, indicating failure. An amber light means that testing is in progress.

Infants who fail the test are called back to the clinic at seven months of age for further screening. Those who again fail are referred to an audiologist.

Simmons analyzed the medical records of the ill babies who were deaf, and found that 74 percent of them had histories of fetal distress during labor or delivery, or had suffered severe apnea episodes, periods during which they stopped breathing, during the first week of life.

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"It would thus appear that anoxia, lack of oxygen, or the results of it, is the underlying factor in a majority of neonatal deafness," said Simmons.

"This is the first clue we've had to the real causes for deafness other than genetics."

Simmons said some babies appeared to become progressively deaf after they left the hospital, and that the crib-o-gram failed to detect hearing losses later discovered in two infants.

However, he said, one of the infants appeared to have rubella at birth (a condition known to cause deafness), and the other had a history of respiratory distress during its first weeks of life.

In addition, Simmons found the average incidence of deafness in ill and healthy babies combined was about 3.5 per thousand, similar to national estimates of the incidence of deafness among six-year-olds.

"I think genetic delayed-onset hearing losses are quite rare during the first 18 months," he said. "We have yet to encounter one."

Simmons said this finding gave increased importance to newborn hearing tests.

Hearing rehabilitation is most successful if it is begun around six months of age, he said. However, severe hearing problems in most children currently are not picked up until they are over two years old.

"There is solid data showing that even lesser degrees of hearing loss can have a tremendous impact on language and learning behavior," he said.

The crib-o-gram is an efficient and inexpensive method of performing newborn hearing tests, said Simmons.

The device costs $4,700, and requires very little training or time to operate. Costs to the hospital would amount to about $5 per test, he said.

In comparison, brain stem audiometry equipment, which measures changes in brain waves in response to test sounds, may cost a hospital $15,000, and requires a skilled technician to run it. Each test per patient may cost between $70 to $90, said Simmons.

The crib-o-gram is being manufactured by Telesensory System, Inc., under a patent agreement with Stanford University. The device is available to intensive care nurseries throughout the country.

The Palo Alto firm, which also produces the Optacon reading aid for the blind, helped design early prototype models of the crib-o-gram, and designed and developed the microprocessor model.

Simmons said the crib-o-gram has also been tested in about 6,000 infants in 14 hospitals throughout the U.S. and in Nova Scotia. The results of the study, which began in 1976, will be made available within a year, he said.

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Mailed Monday, May 14, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Laura Hofstadter 415: 497-6911

STANFORD—

The discoverer of nerve growth factor, a protein that regulates development of nerve cells, will present the sixth annual Katharine D. McCormick Distinguished Lecture on Monday, May 21 at 5 p.m. in Fairchild Auditorium at Stanford University School of Medicine.

Dr. Rita Levi-Montalcini, director of the Cell Biology Laboratory, Consiglio Nazionale delle Ricerche in Rome, will discuss "Recent developments in the study of nerve growth factor."

A graduate of the University of Turin in 1936, Levi-Montalcini observed in 1951 that some tumors produced a substance that caused rapid growth of nerve cells.

Since her initial discovery, a large field of research on nerve growth factor has developed to which Levi-Montalcini continues to make important contributions.

She is the recipient of numerous awards for outstanding scientific achievement and is a member of the National Academy of Sciences.

The McCormick Distinguished Lectureship was established in 1974 for the purpose of bringing outstanding women physicians and scientists to lecture at Stanford Medical School.

The lectures honor the late Katharine Dexter McCormick, who left a large bequest to the medical school, particularly "for the encouragement and assistance of women in pursuing the study of medicine, in teaching medicine, and in engaging in medical research."

The lecture is open to the medical community and to the public.

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STANFORD-

Dr. Irvin D. Yalom, professor of psychiatry and behavioral sciences at Stanford University School of Medicine, has been awarded a Foundations' Fund Prize for Research in Psychiatry from the American Psychiatric Association.

A prominent researcher in the field of group psychotherapy, Yalom was specifically cited for his books on research in psychiatry.

These include *The Theory and Practice of Group Psychotherapy* (Basic Books, New York, 1975), considered a classic text in the field; *Encounter Groups: First Facts* (Basic Books, 1972); and *Every Day Gets a Little Closer* (Basic Books, 1974), an examination of the patient-psychiatrist relationship written with a former patient with the pen name of Ginny Elkins.

In addition to his work in group psychotherapy, Yalom is known for his studies on the relationship of hormones to behavior and the counseling of dying patients.

In 1974, Yalom received the Edward Strecker Award from the Institute of Pennsylvania Hospital for outstanding contributions to the field of psychiatric care and treatment.

A graduate of Boston University Medical School, Yalom has been at Stanford since 1963.

Yalom and two other award winners were presented with $500 awards and commemorative plaques at the Convocation of Fellows during the annual meeting of the American Psychiatric Association in Chicago on May 14.

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Mailed Monday, May 14, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD--

Night terrors, some forms of bed-wetting, and sleep walking in children may be due to an immaturity in the neurologic mechanisms involved in sleep, according to Dr. Thomas Anders, associate professor of psychiatry and pediatrics at Stanford University School of Medicine.

"These problems are probably due to a defect in sleep, and are not related to family or emotional problems, as previously thought," he said.

Anders discussed research on the sleep of children Thursday, May 10, at a seminar on child psychiatry at Children's Hospital at Stanford.

The seminar was sponsored by the Friends of Psychiatry and Behavioral Sciences, a community group which supports the department.

Night terrors are common in children between the ages of two and five, said Anders.

Usually, the child wakes up, screaming inconsolably. His heart is beating rapidly. He is perspiring, and is clearly in distress.

But, said Anders, the child is not awake. After one or two minutes, the child falls back into quiet sleep, and cannot remember the episode in the morning.

Night terrors can be clearly distinguished from nightmares, he said, which usually wake children up and which can be recalled.

Sleep walking is a related problem which occurs in 15 percent of all children, usually between the ages of five and 11. Frequently, the child who had night terrors also walks in his sleep, said Anders.

These children may walk for as long as 30 minutes, during which they cannot be aroused. Eventually, they go back to bed, and have no memory of the episode.

"Sleep walking is purposeless," said Anders. "Persons who walk in their sleep are not acting out their dreams. Their motions are repetitive and poorly coordinated."

But sleep walking can also be very dangerous, he said. The first treatment for sleep walking is "child-proofing" the house for safety, to prevent children from falling down stairs or out of open windows.

Like night terrors and sleep walking, talking during sleep and some forms of bed-wetting also occur in some children during the shift from quiet to active sleep.

All of these problems share several common characteristics, including family history of sleep disorders, and a higher incidence among males. According to studies by Dr. William C. Dement and his associates at the Stanford Sleep Research Center, there is also evidence of neurologic immaturity, said Anders.

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Another sleep problem studied at Stanford is sudden infant death syndrome (SIDS), also called crib death, in which previously healthy babies die suddenly during the night.

"SIDS is the leading cause of death among infants between one week and one year of age," said Anders. Three to six infants per 1000 die of SIDS each year.

Anders said SIDS may be related to a type of sleep apnea, a condition in which adults as well as infants stop breathing at times during sleep.

There seems to be an obstruction in the air canal of these people, preventing the flow of air even though the diaphragm is contracting. However, no obstruction can be found when patients are examined while they are awake.

Repeated episodes of apnea drastically reduce the level of oxygen in the blood, and can lead to abnormal heart rhythms and death, he said.

Dement and Dr. Christian Guilleminault have identified a population of "near miss" infants who had stopped breathing, but who were revived by their parents. These infants seem to outgrow the sleep apnea by their first birthday, said Anders.

"The first year is the critical period," he said.

Anders has also been studying normal sleep in infants.

With the help of an infrared video camera and time lapse photography, Anders and his colleagues recently studied 40 infants while they slept in their own homes.

"This is the first study which looks at the data of what happens in the night at home," said Anders.

The researchers found that two-week-old infants spent 50 percent of the time in active sleep, confirming earlier laboratory studies which had measured rapid eye movements (REM) and brain waves.

In addition, half of babies in the study between two weeks and nine months old awoke during the night, while the other half slept through the entire recording period.

Daytime sleepiness in adolescents is being studied at the Stanford Summer Sleep Camp, directed by Dement and research assistant Mary Carskadon.

Some studies have indicated that teenagers suffer from chronic sleep deprivation. In fact, Anders, Carskadon and Dement have shown that by the age of 13, most children sleep an hour more during the weekend than they do during week nights.

However, daytime sleepiness still occurred among residents of the sleep camp despite the fact they were asleep 10 hours each night. This suggests that hormonal changes accompanying puberty may also play a role in the sleepiness of adolescents, he said.

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Mailed Friday, May 11, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Despite the high incidence of epilepsy in the United States, not enough money is being spent on research related to its causes and treatments, a Stanford University physician told a full house in Fairchild Auditorium on campus Wednesday night.

"Epilepsy is one of the most common maladies a neurologist treats, affecting between two and four million Americans," said Dr. David Prince, professor and chairman of the department of neurology.

"As recently as 1975, when over $3 billion were spent on the whole problem of epilepsy, less than one percent of this amount was devoted to research," he added.

Although there are many effective drugs available to treat the disease and many epileptics lead normal, productive lives, about 20-25 percent of all epileptics still cannot be adequately treated with the available methods, he said.

"These people are waiting for us to develop more knowledge about epilepsy," he said, and find more effective agents to control the condition.

Prince explained that although epilepsy is typified by rapid uncontrolled firing of nerve cells in the brain, we still don't understand what causes the phenomenon.

During an epileptic seizure, abnormal waves are seen on an electroencephalogram (EEG), a standard test in which electrical signals representing the activities of many nerve cells in the brain are recorded from electrodes glued on the scalp.

Future research on how the brain functions and regulates itself may hold promise for better understanding of epilepsy, said Prince, and a number of new approaches are being applied in this area.

Prince explained that the brain itself produces substances which have been shown to cause epilepsy in animals. Minute quantities of endorphins, the body's natural anti-pain substances, injected into brain tissue cause EEG changes characteristic of epilepsy, he said.

"Perhaps the problem in some kinds of epilepsy is that the brain has lost its ability to regulate how much of these or other regulatory substances are made," he suggested.

Prince added that future research also will focus on finding natural or synthetic compounds which can limit the uncontrolled cell firing.

Prince concluded by noting that at least one form of epilepsy is preventable. "The incidence of post-injury epilepsy has fallen considerably since the lowering of the speed limit," and the widespread use of seatbelts in automobiles, he said.

Prince's talk was the second in the spring Progress in Medicine lecture series on the brain, presented by the dean and faculty of Stanford Medical School and by the Stanford Medical Center Council.

The last lecture in the series will be held Wednesday, May 16 at 7:30 p.m. in Fairchild Auditorium when Dr. James H. Dewson will discuss "How do monkeys use their heads?"

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Mailed Thursday, May 10, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Stanford University scientists have found new evidence that an eye disorder which can cause protruding eyeballs, double vision, and loss of sight results from an attack of the body's immune system on eye muscles.

Their work demonstrates the feasibility of an immune attack by lymphocytes, a type of white blood cell, on an artificial membrane outside the body.

The technique employed in their work has fundamental importance, because it may help scientists understand the mechanisms involved in cell-mediated immunity, as well as so-called auto-immune diseases and cancer, said Dr. Joseph Kriss, head of the division of nuclear medicine at Stanford University School of Medicine.

The eye disorder, called Graves ophthalmopathy, is characterized by an infiltration of white blood cells into the muscles of the eye, causing massive swelling, poor muscle function, and forward protrusion of the eyeball.

It can lead to substantial loss of sight.

Usually, the disease is accompanied by excess production of a protein, thyroglobulin (Tg), by the thyroid gland, and also by production of antibodies, immune system molecules which combine with the protein.

The thyroid protein has been found on the membranes of eye muscle cells, but not on skeletal muscle elsewhere in the body.

Scientists believe that complexes of thyroid protein and its antibody form on the surface of eye muscle cells, stimulating attack by white blood cells on the eye muscle.

However, researchers have been unable to confirm this theory, because of the inaccessibility of human eye muscles, which lie deep within the orbit behind the eyeball.

For this reason, Kriss and research associate Dr. S. Qasim Mehdi constructed artificial membrane vesicles, tiny spheres made of phospholipid molecules and eye muscle membrane protein, and containing a radioactive marker.

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The spheres were incubated in a solution of white blood cells from patients with the disease, and thyroid protein or the protein-antibody complex.

The attack of white blood cells was measured by the extent of release of radioactivity from ruptured or damaged spheres.

Kriss and Mehdi found that eye muscle protein was a necessary ingredient of the sphere membrane for attack by white blood cells. Even in the presence of thyroid protein, spheres made without eye muscle protein were not ruptured.

Thus, the researchers found that an attack by white blood cells is probably responsible for the swelling and damage observed in Graves ophthalmopathy, and that both thyroid protein and a factor in the eye muscle membrane are required for the attack to occcur.

Their work was reported in the April issue of the *Proceedings of the National Academy of Sciences.* It is supported by a grant from the National Institute of Arthritis, Metabolism, and Digestive Diseases.

"It may be that a component of eye muscle membrane, as yet unidentified, provides a means of attaching the thyroid protein, which then activates the attack by white blood cells," said Kriss.

Kriss said the work was important because it provided the rationale for a current treatment of the eye disease, orbital supervoltage radiation therapy.

The treatment was pioneered at Stanford 10 years ago by Kriss, Dr. Sarah Donaldson, associate professor of radiology, and Dr. Malcolm Bagshaw, chairman of the department.

It employs a fine beam of X rays aimed at the eye muscles in order to kill off the attacking white blood cells without damaging delicate adjacent structures.

So far, about 200 patients have been treated at Stanford, with a marked improvement in 65 to 70 percent of the cases.

The work by Kriss and Mehdi also opens the possibility of using membrane vesicles to study immune reactions under a variety of clinical conditions.

For instance, said Kriss, workers in his laboratory, Drs. Nurit Hollander and Irving Weissman of the department of pathology, and Dr. Harden McConnell, professor of chemistry, are using the spheres to study factors influencing cellular immune attacks against viral-induced cancer in mice.

"Eventually, we hope to be able to test to what extent patients with cancer develop cell-mediated immunity against their own tumors," he said.

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Mailed Thursday, May 10, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Bedwetting among adolescents is frequently a sign of other serious problems which can affect a teenager's self-image and social life, according to a study by researchers at Stanford University School of Medicine.

Dr. Ruth T. Gross, McCormick professor of pediatrics, presented recent data on the multi-handicapping condition of enuresis at last week's joint national conference of the American Pediatric Society and the Society for Pediatric Research in Atlanta, GA.

"Both parents and pediatricians have taken the attitude that enuresis is something the adolescent will outgrow," Gross said. "But the true impact of enuresis has not been appreciated. It goes beyond the nuisance and embarrassment of wet sheets. The symptom may be an indication of other seriously handicapping problems."

Data collected from a National Health Examination Survey which sampled almost 15,000 children and teenagers in the United States, revealed that bedwetting is more frequently found in males, in blacks and in lower socioeconomic groups.

Interviews with school personnel also revealed that these teenagers were perceived to be more often the lower one-third of their class in academic ability and achievement, had higher rates of absenteeism, were less popular with their peers and often needed more discipline than non-enuretics.

Of the 3600 males and 3500 females aged 6 to 11 sampled in the survey, 22.9 percent of the boys and 12.2 percent of the girls reported wetting their beds. The incidence decreased among similar numbers of adolescents sampled, with 5.5 percent of the males aged 12 to 17 and 3.1 percent of the females reporting enuresis.

"Our data reinforce an earlier British study which found correlations between enuresis, sex and age," Gross said. "However, enuresis seems to be more common in the United States than in most countries, and we don't know why."

There is also no confirmed explanation for the increased frequency among males than among females, though Gross suggested one explanation.

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"I tend to believe enuresis is one part of broader developmental delay," she said. "There is an association between enuresis and late physical and sexual maturation, and this may relate to the higher frequency among males, who more commonly have developmental delays."

The study also revealed that parents tend to have negative feelings toward their enuretic children. Parents demonstrated lower educational expectations, and they considered the adolescents to be nervous.

"We were particularly struck by the finding that a much higher percentage of parents of non-enuretic than of enuretic males expected their children to attend college, and the difference increased with the age of the children," Gross said.

This difference was even more striking in parents of female enuretic and non-enuretic children, she added.

The negative attitudes seemed to be gradually passed on to the teenagers. However, these lower expectations were not expressed by the children until age 14 in females and 15 in males.

"Indeed, at earlier ages, they are likely or more likely to expect to attend college," Gross said.

Other problems such as difficulty walking, insomnia, bad dreams and tenseness were also reported more often by enuretics than by non-enuretic children and teenagers.

"In light of these findings, pediatricians and parents must make sure that there is an investigation into the children's other difficulties," Gross said. "Bedwetting must not be seen as an isolated or unimportant symptom. It is a potential component of a multi-handicapping condition."

Other Stanford researchers who worked on this project were Dr. Paula M. Duke, Robert Wood Johnson clinical scholar; John A. Martin, postdoctoral fellow in psychology; J. Merril Carlsmith, professor of psychology and Sanford M.. Dornbusch, professor of sociology.

The study was partially supported by the Boys Town Center for the Study of Youth Development at Stanford and the Robert Wood Johnson Foundation.

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Mailed Friday, May 11, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Heating by ultrasound is being tested as a treatment for psoriasis by Stanford University researchers.

In a preliminary study of 21 psoriatic lesions, localized heating by ultrasound (hyperthermia) resulted in complete clearing of 13 lesions, or 62 percent.

"We are not suggesting that hyperthermia is a new treatment for psoriasis at present," cautioned Dr. Elaine K. Orenberg, senior research associate in the department of dermatology, Stanford University School of Medicine.

Additional studies are needed to determine the potential application of the technique. However, "hyperthermia may help us better understand the mechanisms associated with the psoriatic disease process," she said.

Orenberg conducted the research with Dr. David G. Deneau, assistant professor of dermatology, and Dr. Eugene M. Farber, professor and chairman of the department.

She reported the findings May 9 at the national meeting of the Society of Investigative Dermatology in Washington, D.C.

In an interview, Farber said this was the first study of controlled hyperthermia in psoriasis, a common skin disorder which produces itching, scaling, and redness.

He said he had observed that patients with psoriasis improve in the summer, whether they are exposed to sunlight or not. This suggested that heat may have a role in the improvement.

In the study, lesions up to four centimeters in diameter were chosen for hyperthermia treatments. None of the patients had received other drugs or ointments for one to three months prior to hyperthermia, and no medications were used on the lesions during the study.

The lesions were heated to between 43 and 44.5 degrees centigrade for 30 minutes, for a total of six to 10 treatments using an ultrasound transducer operating at a frequency of five megahertz.

"This form of therapy is non-toxic, and non-invasive, and none of the patients in the study suffered burns as a result," said Orenberg.

At the end of the study, 13 of the treated lesions, or 62 percent, had cleared completely. Six lesions had a partial response to hyperthermia, and the lesions in two patients were unchanged. These two lesions also were unresponsive to other psoriasis treatments.

The response seems to be temporary, said Orenberg. Some of the lesions remained clear for two to three months.

Farber said it was too early to compare hyperthermia with other treatments for psoriasis. Although most of the lesions improved substantially, response was limited to the two centimeter square area exactly under the ultrasound transducer.

"This may mean that hyperthermia would be more useful in treating localized plaques than extensive lesions covering large areas of the body," he said.

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FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Ronald D. Twomey has resigned as director of personnel at Stanford University Medical Center to become director of human resources at Parkview Memorial Hospital in Ft. Wayne, Ind.

Twomey, 44, will depart Stanford June 15.

Since 1976 he has directed a combined personnel section for Stanford Medical Center, serving Stanford Hospital and Clinics, and Stanford Medical School.

He previously worked for the Arthur Young Co. of Chicago, a consulting firm, and the University of Chicago Hospitals and Clinics as associate administrator.

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Mailed Wednesday, May 9, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Men whose mothers took DES, a synthetic form of estrogen, during their pregnancy, are being sought by Stanford University Medical School researcher Dr. Robert Kessler.

Kessler, assistant professor of surgery, is attempting to confirm a suspected link between DES and reproductive system abnormalities, including sterility and genital tumors.

If the link is confirmed, he and his associates in the division of urology will study ways of reversing the damage, he said.

In a preliminary study of 50 DES-exposed males, Kessler said he found no increase in abnormalities compared with non-exposed controls.

However, other institutions have recently reported a correlation between exposure to DES in the womb and increased rates of genital tumors, abnormal semen quality, and low sperm count.

DES was used during the early 1950s to prevent miscarriages and other problems of pregnancy. The hormone was later shown to have no effect on these problems, and its use was discontinued.

In 1971, physicians found a rare form of vaginal cancer in women whose mothers had taken DES during their pregnancy.

According to Kessler, the hormone was given to over one million women. That means that at least as many children were exposed to it in the womb, 50 percent of them male, he said.

Men who know they were exposed to DES and who desire a free evaluation should contact the division of urology, 497-5746.

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Mailed May 8, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Dr. Charles E. Rackley, director of the Specialized Center of Research for Ischemic Heart Disease, will present the 14th John Kent Lewis Memorial Lecture on Monday, May 14, at Stanford University School of Medicine

The public talk, which will begin at 4:30 p.m. in the school's Fairchild Auditorium, is entitled "Clinical Application of Hemodynamic Studies in Patients with Acute Myocardial Infarction."

Rackley is also professor of medicine at the Specialized Research Center at the University of Alabama in Birmingham.

He has served as director of the center since 1975, and he previously directed a myocardial infarction research unit, and a research and training center for cardiovascular disease. Both of these centers are at the University of Alabama.

Rackley received his M.D. from Duke University in 1958. He is a three-time recipient of the Susan and Theodore Cummings Award of the American College of Cardiology.

The John Kent Lewis Lectures are presented annually in honor of the late professor of medicine and chief of the Stanford Medical Service at San Francisco General Hospital. A 1922 graduate of Stanford Medical School, Lewis was a pioneer in heart research. He died in 1961.

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Mailed Monday, May 7, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Verla Lunger has been named Stanford University Hospital's Employee of the Year.

Lunger, a unit clerk on the Medical Intensive Care Unit (M-ICU), was presented with the 1979 Dr. Thomas A. Gonda Award, which is annually given to the most outstanding employee in Stanford Hospital and Clinics.

An 18-year hospital employee, Lunger is the fourth recipient of the Award which is named after the former director of Stanford Hospital and currently chairman of the Department of Psychiatry and Behavioral Sciences at Stanford Medical School.

"Verla has provided outstanding support to both management and staff," commented hospital administrator Gary Mecklenburg. "Her attitude and genuine concern for individuals and her unit are reflected by her high productivity and sensitivity to the needs of others."

Also honored during the hospital and clinics' 21st annual awards banquet recently were five employees who were presented with special service awards. They are Emil Strom, Ruth Ware, Molly Palmer, Kay Rupp and Helen Rantz.

A total of 394 other employees were given service pins ranging from five to 30 years. In all, these employees have given 2,980 years of service to the hospital and clinics.

Lunger joined the hospital staff in 1961 when her husband Bill was laid off from work shortly after they moved to the Palo Alto area from Pennsylvania.

Initially, she "floated" between intensive care and another nursing unit. Then, except for a six month stint in surgery, she has worked continuously in intensive care.

"I like the unit very much," commented Lunger, a mother of two children. "It's a challenge and it provides me with a variety of unexpected things. I also like the people I work with because they are professional, dedicated and compassionate."

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Mailed Monday, May 7, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

"The Brain as an Imperfect Machine," the second in a series of three public lectures on the human brain, will be presented by Dr. David A. Prince on Wednesday, May 9, at Stanford University School of Medicine.

The lecture begins at 7:30 p.m. in Fairchild Auditorium.

Prince, who is professor and chairman of the Department of Neurology at Stanford, will discuss medical advances in the understanding of epilepsy and other brain disorders.

Prince is a widely-recognized researcher of epilepsy, a disease in which the victim suffers seizures or convulsions due to abnormal brain activity.

Last year he was awarded the Lennox Prize by the American Epilepsy Society for his contributions in the field. He is also a past recipient of a John Simon Guggenheim Memorial Foundation award for his contributions in researching abnormalities of single nerve cells in epilepsy.

Prince received his M.D. from the University of Pennsylvania in 1956. He was on the neurology staff at Mt. Sinai Hospital in New York City before joining Stanford in 1962.

Prince's address is one of three Spring Progress in Medicine Lectures being presented by Stanford neuroscientists. The next lecture Wednesday, May 16—"How Do Monkeys Use Their Heads?"—will be given by Dr. James H. Dewson III, associate professor of speech and hearing sciences.

The Progress in Medicine Lectures are presented by the dean and faculty of Stanford Medical School, and by the Stanford Medical Center Council.

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Mailed Monday, May 7, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

A nerve growth hormone, purified by Stanford University scientists 12 years ago, may exert a more profound influence on nerve cell development than scientists had previously thought.

The hormone, called nerve growth factor (NGF), may modify the cell's genetic program so that it begins to produce new and greater amounts of proteins, according to Dr. Eric Shooter, professor and chairman of the neurobiology department at Stanford University School of Medicine.

Previously, it was thought that NGF exerted its actions through receptors on the surfaces of nerve cells which bound the hormone.

Recently, however, Shooter and medical student Bruce Yankner have found that NGF is also present in the cell nucleus, mixed with the genetic material.

Shooter explained that there is evidence that the nerve cell early in development is a "generalist," capable of producing a wide range of proteins and performing a wide variety of functions.

However, after the cell matures, it becomes a "specialist," with a definite set of proteins to produce and functions to perform.

NGF may be involved at the early stage in determining which proteins the cell produces, and hence, what kind of specialist it becomes.

It thus may "reprogram" the cell, said Shooter.

A report of his and Yankner's work appears in the March issue of the *Proceedings of the National Academy of Sciences.*

NGF was discovered in a variety of tissues and species in the early 1950s by an Italian scientist, Dr. Rita Levi-Montalcini.

She showed that when NGF is injected into nerve ganglia of the chick, it causes them to balloon up to 12 times their normal size, and stimulates tremendous growth of nerve fibers.

If antibody against NGF is given to eliminate the hormone, growth of the sympathetic nervous system is stopped completely.

Much remains to be learned about NGF, for example, its presence in humans has not yet been confirmed.

However, it is providing information on how other, similar hormones work.

NGF is specific for sympathetic and some sensory nerves. Recently, other factors have been discovered which stimulate the growth of different nerves and some tissues.

NGF is similar in structure to insulin, a hormone well known for its ability to facilitate transport of sugars from the blood stream into the cell. Both NGF and insulin seem to be made in a similar fashion, cleaved from a larger molecule by a digestive enzyme.

Other investigators have found insulin in the nuclei of rat liver cells suggesting that it too may interact with the genes.

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Shooter said that future research at Stanford will center on determining how NGF gets into the nuclei of nerve cells, and how it acts.

Recently, he and his associates have found that NGF binds to two different receptors on the surfaces of nerve cells. Only one of the receptors is involved in the stimulatory effects on growth.

Binding to receptors may be an important first step in bringing NGF into the cell, said Shooter.

Binding may stimulate the cell membrane to engulf NGF and its receptors, similar to the way in which an amoeba swallows its food.

Once inside the cell, NGF could migrate to the nucleus and mix with genetic material.

This model is supported by the fact that NGF can be seen under the microscope inside mature nerve cells, he said.

Research on NGF may have a bearing on the understanding, not only of nerve development, but of certain human diseases, said Shooter.

For example, some scientists believe that neuroblastoma, a common brain tumor in children, results from abnormalities in the action or production of a human NGF.

However, treatment of these tumors with NGF isolated from the mouse so far has been unsucccessful, said Shooter.

"We need to understand better how it acts before we begin to treat disease," he said.

The research at Stanford is supported by grants from the National Institute of Neurological Diseases and Stroke and the Alfred P. Sloan Foundation.

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Mailed Thursday, May 3, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

A memorial service for Dr. Harold K. Faber, an internationally known Stanford pediatrician, will be held Monday in San Francisco.

Dr. Faber, professor of pediatrics emeritus at Stanford University School of Medicine and a founder of the Children's Hospital at Stanford, died Friday (April 27) in San Francisco.

He was 94.

A noted polio researcher, Dr. Faber was professor of pediatrics and chairman of the department from 1923 until his retirement in 1949. He had also served as pediatrician-in-chief of Stanford University Hospital in San Francisco.

Dr. Faber was born in Westfield, New York, and took his A.B. at Harvard and his M.D. degree at the University of Michigan. Prior to joining Stanford he was resident pathologist, Babies Hospital in New York, and a Fellow of the Rockefeller Institute for Medical Research.

He served as president of the American Pediatric Society in 1946. He contributed over 140 scientific papers on pediatrics to leading medical journals, and in 1956 he received the Society's prestigious Howland Medal.

In 1917, in collaboration with the Reverend D. Charles Gardner, Stanford University chaplain, and members of the Campus Auxiliary of the Stanford University Clinics, then located in San Francisco, they conceived the idea of establishing a home-away-from-home for convalescent children.

This unique concept, was in time, to develop into the formal founding of what was then known as the Stanford Home for Convalescent Children ("Con Home" to old timers) in 1919. The opening of the Leland Stanford residence in 1920 was the first unit of what is today the Children's Hospital at Stanford.

Dr. Faber served as medical director of the Stanford Convalescent Home from 1923 to 1956. In 1942 he was appointed to the board and elected vice-president in 1946. He served as a trustee until 1965.

Dr. Faber lived in San Francisco. His wife, Mary, died earlier this year. There are no survivors.

The memorial service Monday will be at 11 a.m. in St. Mary the Virgin Episcopal Church, 2325 Union Street.

For those wishing to make a contribution in Dr. Faber's memory, donations were suggested to the Faber Professorship Fund at Stanford University, the Faber Pediatric Library Endowment Fund at Stanford, the Institute of Medical Sciences in San Francisco, or the San Francisco Symphony Association.

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Mailed Thursday, May 3,1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

EDITORS: Photo of Dr. Motulsky available if not included with story.

STANFORD—

Dr. Arno G. Motulsky of the University of Washington, Seattle, will present the sixth annual Windsor C. Cutting Memorial Lecture at Stanford University School of Medicine on Thursday, May 10.

Dr. Motulsky is professor of medicine and genetics, and director of the Division of Medical Genetics and the Center for Inherited Diseases at the University of Washington. He will discuss "Human pharmacogenetics and ecogenetics" at 4:15 p.m. in Fairchild Auditorium.

The Windsor Cutting Lectureship was established in 1973 by the faculty of the department of pharmacology, and is supported by private contributions. It honors the memory of Dr. Cutting, professor and former chairman of the department.

Dr. Cutting, who died in 1972, also served as dean of Stanford Medical School, 1953-57, and as dean of the University of Hawaii Medical School, 1963-71.

The lectures are presented annually by speakers prominent in the field of pharmacology, and they are open to the medical community and to the public.

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Mailed Tuesday, May 1, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

EDITORS: Photo of Dr. Motulsky available if not included with story.

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Mailed Tuesday, May 1, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Dr. James B. Snow, Jr., internationally-known specialist in cancer of the head and neck, will deliver the third George Kiperash Lecture, Tuesday, May 8.

His talk, entitled "Randomized Preoperative and Postoperative Radiation Therapy of Head and Neck Carcinoma," will be given in the Fairchild Auditorium of Stanford University Medical School at 8:00 p.m.

The lecture is open to the public and is sponsored by the Medical School's division of otolaryngology.

Snow is professor and chairman of the department of otorhinolaryngology and human communication at the University of Pennsylvania School of Medicine in Philadelphia.

Snow is best known for his work in surgical treatment of head and neck cancers and in the management of ear diseases. He is the author of over 100 scientific publications.

He has been an active contributor to the continuing education programs of the American Academy of Otolaryngology and the American College of Surgeons.

He has served as chairman-secretary of the U.S. Group of Collegium, an international honor society of otolaryngologists, and currently is chairman of the surgical committee of the Radiation Therapy Oncology Group.

A graduate of the University of Oklahoma, Snow received his medical doctorate from Harvard University in 1956.

The Kiperash Lecture was established to bring national and international figures to Stanford and to enhance continuing education and residency training.

It is named after George S. Kiperash, Jr., Stanford patient and native of San Jose. Kiperash is in the ranching business and is associated with Modern Ice and Cold Storage Co. of San Jose.

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Mailed Tuesday, May 1, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Mother's milk is a "dowry of immunity," which protects newborn infants from a contaminated world, according to Dr. Alan E. Beer, chairman of the department of obstetrics and gynecology at the University of Michigan.

If infants did not receive "ready made" immunity in the form of antibodies and lymphocytes from their mothers, they might succumb to massive infection before their own immune defenses developed, Beer said.

Beer spoke during a three-day conference on nutrition for the high-risk infant at Stanford Medical School's Fairchild Auditorium Tuesday, June 26.

The conference, for continuing education of health professionals, was sponsored by the department of pediatrics.

Human milk actually is a suspension of immune system cells in a highly nutritive medium, Beer said. Milk has been found to react against bacteria, mumps, measles, rubella, herpes and other virus infections.

Several studies have shown lower mortality rates among breast-fed infants compared with those who received only artificial formulas.

Breast-fed infants have fewer infections, fewer milk-related allergies and skin rashes, and a lower incidence of sudden infant death syndrome, or crib death, Beer said.

In addition, studies in animals suggest that mother's milk can pass resistance to tumors on to the infant.

The immune system cells provided by maternal milk are not transported into the infant's blood stream, but seem to give protection at the intestinal barrier, he said.

Immune cells marked by fluorescent dye can be detected in the gut lining of baby animals for as long as three weeks following feeding. The high buffering capacity of milk protects the cells from digestion, said Beer.

These studies are "beginning to mount cogent arguments that milk-dispensed immune cells can fulfill important immunologically protective functions which are denied the formula-fed infant," he said.

Physicians have begun to recognize the value of psychological bonding between mother and infant at birth. Similarly, Beer recommended that "microbial bonding" be allowed to occur in the delivery room.

By breast feeding their babies soon after birth, and perhaps even by kissing them, mothers can "innoculate" them against organisms which their bodies already have anticipated, he said.

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Mailed Wednesday, June 27, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Stanford University Hospital has been cited for violations of state health and safety standards, one involving the use and storage of a chemical carcinogen.

The violations, which carry a total fine of $1,800, were discovered during a routine inspection in March by the State Division of Occupational Safety and Health (DOSH), according to Hilary Ryniewicz, director of safety and security at the hospital.

Ryniewicz said DOSH inspectors found that a registered carcinogen, alpha naphthylamine, was improperly stored in the infectious disease laboratory. However, this chemical had been rarely used.

In addition, some laboratory personnel, according to DOSH, had not been formally instructed concerning the dangers of carcinogens.

The inspection, Ryniewicz said, also revealed five general violations that do not carry fines.

The inspectors found that the restroom facilities available to the hospital blood bank were inadequate for the number of employees.

They also cited the need for shower facilities in closer proximity to the clinical laboratories where some personnel handle corrosive materials, and the need for improved ventilation in a paint spray booth in the paint shop.

The problems are being corrected, said Ryniewicz. And the alpha naphthylamine in the infectious disease laboratory has been removed because there are other safe compounds that can be used in its place.

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Mailed Friday, June 22, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Stanford University has been awarded a grant of $426,000 for three years by the Henry J. Kaiser Family Foundation to support studies on improving the quality and efficiency of teaching general internal medicine.

Dr. Robert J. Glaser, president of the Foundation, recently announced the award in a letter to Dr. Kenneth L. Melmon, chairman of the Stanford Medical School's department of medicine.

The grant focuses on three areas:

- expanding a program to train physicians for teaching careers in general internal medicine;
- evaluating and improving the effectiveness of bedside teaching;
- studying the costs of running a department of medicine.

According to Dr. Harold C. Sox, Jr., assistant professor of medicine and director of the division of general internal medicine, the new grant reflects the need for more primary care physicians while controlling the skyrocketing costs of medical care.

General internists are often the first physicians to see patients with new medical problems, Sox says. They are responsible for making the initial diagnosis, coordinating the contributions of subspecialty consultants, and providing continuous and comprehensive patient care.

As a result, "general internists have a great deal to contribute to new knowledge about how medicine is practiced and how it can be improved," he says.

Stanford began a program to train teachers of primary care physicians three years ago under a pilot grant from the Kaiser Family Foundation.

Under the present grant, four Kaiser fellows will be trained in essential clinical teaching skills, Sox says.

They also will be prepared for careers as clinical investigators in health services research, he says. Their research efforts will add to several on-going projects in the division of general internal medicine, such as developing methods of screening patients with chest pain for heart disease, and evaluating the use of computers in making clinical diagnoses.

The Kaiser grant also supports an evaluation of current clinical teaching in the department of medicine.

Dr. Kelley Skeff, a physician and graduate student in education, and a former Kaiser fellow, has developed a questionaire for evaluating bedside instruction given by faculty physicians. The results will then be provided to the faculty as feedback, and the impact on teaching performance will be determined.

"The implications for improving patient care, by improving teaching, are obvious," Sox says.

The goal of the third study, on costs, is to develop a business approach to the financing of medical education, according to Melmon.

Dr. David Chin, a fellow in medicine and student in the School of Business, will lead a study which will "dissect" the activities of department members, and define how these activities are paid for. Chin will be assisted by faculty members in the Schools of Medicine, Business and Economics.

"In the past, academic medicine felt it deserved to get anything it needed to do anything it wanted," Melmon says.

But attitudes are changing. The public still supports medical schools, but "it is clear it no longer can afford them at present levels."

In a time of uncertain and shrinking support from the federal government, medical schools must control more carefully what they spend, and seek alternative means of financing medical education, he says.

The study of the department of medicine is a first step in that direction.

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Mailed Monday, June 25, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

EDITORS: Photo available on request if not included with story.

STANFORD—

A promising new technique to help cancer specialists visualize tumors and the effects of treatment longer than is now possible is being developed by a Stanford University scientist.

The scientist is Dr. Stuart Young, an assistant professor of radiology. Young has been studying compounds known as contrast agents.

When injected into the body, these agents enhance the density differences between normal and cancerous tissues, so tumors appear as white images on x-rays or computed tomography (C.T.) scans, Young said.

C.T. scans enable physicians to reconstruct a three-dimensional picture of the body from x-rays, with the aid of a computer.

Available contrast agents or dyes are useful for brief periods lasting only a few minutes, since these substances quickly leak into both normal and abnormal tissues, he said.

Using compounds made of large molecules in combination with metallic salts, Young has obtained C.T. scans and x-rays highlighting inflammatory tumors and abscesses in rabbits for as long as seven weeks.

"Within days and for several weeks following injection of the agents we see dense rings around tumors and abscesses," he explained.

"When we examine the tissue through the microscope, we find the visible particles in white blood cells called macrophages," he continued.

Macrophages are cells produced in response to inflammatory tumors and they scavenge foreign particles as part of the body's defense mechanism.

The macrophages probably absorb the macromolecules and migrate into the tumor where they cause it to appear as dense material on the C.T. scans or x-ray, he explained.

The work is still highly experimental, he noted, and several substances are being tested that show some promise. Once suitable compounds are found, "it might even be possible to tag the macromolecules with therapeutic substances which could be delivered directly to the tumor," he suggested.

The compounds Young has tested in rabbits have toxic components, limiting their use in humans.

Additional substances being examined by Young and his colleagues are microemulsions that also appear to collect in macrophages. Another large molecule being tested is albumin, a protein found in many animals.

Young's interest in contrast agents developed from his work on controlling local blood flow with pharmaceutical and mechanical agents.

If flow could be increased to tumors, he said, therapeutic agents could be selectively delivered to the growths.

If flow could be decreased in tumors, application of a device such as an ultrasonic probe could locally heat the tissue, possibly devastating some cancers, he added.

Young presented his preliminary results on contrast agents at a meeting of the Association of University Radiologists last month.

His work on contrast agents is funded by the Cancer and Medical Research Foundation of Berkeley. The National Cancer Institute and the American Cancer Society also provide support.

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Mailed Friday, June 22, 1979.

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News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

EDITORS: Photo available on request if not included with story.

STANFORD—

When Carolyn Adorni, 26, discovered that she had cancer of the lymph nodes, known as Hodgkins disease, her doctor in Eureka referred her to Stanford Medical Center where she now is undergoing an 18-week course of radiation therapy.

Like many cancer patients from out of town, Carolyn not only had to come to terms with her disease, but faced the additional hardship of finding housing in the expensive and crowded midpeninsula.

But Carolyn is more fortunate than many patients in her predicament. She was chosen to participate in a pilot program of subsidized housing for long-term outpatients at Stanford University Medical Center. The effort was initiated and supported by the Assistance League of Santa Clara County, a national non-profit volunteer service organization.

Kay Clair, chairwoman of the Assistance League's HOME (Housing of Medical Emergencies) committee, describes how the project began.

"Many of our members had personal experiences with family and friends with cancer. Being at the hospital day after day, seeing relatives living in the waiting rooms, we became aware of the desperate need for patient and family housing near the hospital," she recalls.

Stanford Medical Center has no housing accomodations for long term outpatients or families of inpatients. The problems associated with this are "one of the hidden costs of medical care," according to Flora Finney, assistant director in the division of clinical social work.

"The cost of staying in a motel for weeks on end, renting a car to go back and forth to the hospital for daily treatments, and eating out several times each day can be astronomical," adds Clair.

The emotional costs may be equally high for patients and families dealing with serious illness far from home.

About four years ago the HOME committee began examining possible solutions to the patient housing problem, writing to several major medical centers across the country to get ideas.

Previous attempts at Stanford such as finding moderately priced rooms for patients in private homes had not been successful, reports Clair, in part because "even the most generous people are unable to cope with serious illness in their home for any length of time."

Local apartment complexes are leery of the turnover involved in rentals of a few weeks or months duration, Clair explains, and the demand from local industry keeps them constantly full.

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After many months of investigation, the Assistance League found two one-bedroom apartments in the Oak Creek apartment complex just across Willow Road from the hospital.

Clair feels that one reason Oak Creek Apartments was receptive to their cause was "because their administrator died of cancer last year and they saw the many months of treatment required."

"Our apartments are aimed at people caught in the middle of the financial squeeze," notes Clair, "particularly those not receiving financial assistance of any kind."

Patients are screened by social workers from the oncology and radiation therapy divisions, and those recommended may stay for up to nine weeks, with a minimum charge of $10 per day, "substantially below the rates of most motels in the area," Clair points out.

Stays are limited to nine weeks per patient in order to make them available to a greater number of people, according to Finney.

Carolyn and her sister, Mona Vaughn, are grateful for the help they have received.

In the small but comfortably furnished living room Carolyn explained some of the conveniences.

Receiving treatments four days a week, she continually feels drained and nauseated, she said, so the proximity of the apartment to the hospital is a great advantage. In fact, one of the other tenants was actually able to walk the distance daily, she said.

"Because of my nausea," she added, "I can't eat much and being able to cook at home what I want when I want it is wonderful."

Oak Creek apartments are close to public transportation and the Stanford Shopping Center while providing quiet and peaceful surroundings, Carolyn pointed out, and facilities such as the swimming pool have given Mona something to do.

On weekends, when Carolyn gets a break from her treatment schedule, she and Mona make the six-hour drive home to Eureka to join their husbands and Carolyn's four-year-old son.

Before they moved into the apartment, they had to switch motels each week when they returned and found that their previous motel had filled up.

"It's been great," said Carolyn, but she is apprehensive about their next move when the nine week rental ends. "I guess we'll just have to go back to staying in motels unless something else comes up while Carolyn completes her last six weeks of therapy," said Mona.

Since February when the program began, seven patients and their families have been helped but "this is just a drop in the bucket compared to the need," Clair admits.

Presently, there are always at least five patients on each waiting list and this doesn't include patients from other divisions such as cardiology and dialysis, notes Clair.

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Mailed Thursday, June 21, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Dr. Orland Soave, who retired earlier this year as director of the Division of Laboratory Animal Medicine at Stanford University, has accepted a position with the National Institutes of Health in Bethesda, Maryland.

Soave will be an expert consultant in biomedical sciences to the Library of Medicine and will help develop a program on collection and computer storage of biological data on experimental animals.

The appointment becomes effective July 1.

"The Laboratory Animal Data Bank (LADB) will provide information on the physiology, anatomy, pharmacology, toxicology, pathology and diseases of animals used for cancer research, toxicology, drug testing and nutrition," Soave said.

"The data bank will be of great value to pharmaceutical companies, research institutes, and universities in comparing their test results with the normal biological values of thousands of other animals tested," he added.

Soave announced his retirement at Stanford in March after 19 years of service. He is a specialist in veterinary medicine and viral disease in animals.

In the early sixties he served as a member of the Animal Care Panel of the National Institutes of Health which developed standards for animal care in the nation's biomedical research facilities.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Stanford University School of Medicine presented 142 degrees during its annual commencement exercises Sunday, June 17.

The ceremonies also honored seven medical school faculty members for outstanding achievements in teaching.

Medical degrees were presented to 80 men and women. The medical school also awarded 25 Ph.D's, 33 masters' and four bachelor of science degrees.

The diplomas were presented during ceremonies in Stanford Medical School's Grant Courtyard following the university's 88th annual commencement at Frost Memorial Amphitheater.

Dr. Myer H. Rosenthal, assistant professor of anesthesia and director of intensive care medicine at Stanford, was singled out by the medical graduates as recipient of the Arthur L. Bloomfield Award for excellence in the teaching of clinical medicine.

Five other faculty members voted by the medical students to receive Henry J. Kaiser Awards for excellence in teaching were Drs. Lawrence H. Mathers, assistant professor of structural biology; Norman Blank, professor of radiology; Robert Neil Sladen, assistant professor of anesthesia; Keith Marton, assistant professor of general internal medicine; and Sylvia H. Friedberg, lecturer in structural biology.

The Henry J. Kaiser Award for outstanding and innovative contributions to medical education was presented to Dr. Roy H. Maffly, professor of medicine.

It marked the fourth time that Maffly had received a Kaiser Award for either preclinical or clinical teaching. He was also the recipient of the Bloomfield Award in 1977, and the Outstanding Teaching Award by the medical graduating class of 1971.

Robert L. Simpson, a registered physical therapist at Menlo Medical Clinic, was awarded the annual Lucille Daniels Recognition Award for Outstanding Contributions to Phyical Therapy. Simpson is a clinical instructor in the medical school's Division of Physical Therapy.

The medical school commencement address was delivered by Dr. Richard Selzer, a surgeon and author in New Haven, Conn., and a member of the Yale Medical School faculty.

Diplomas were presented by Dr. Lawrence G. Crowley, acting vice-president and dean of the medical school. He was assisted by Dr. William P. Creger, professor of hematology, and Barbara E. Kent, adjunct professor of physical therapy.

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Mailed Monday, June 18, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

A study recently completed at Stanford University Medical Center indicates that 25 percent of the patients seen in the General Medical Clinic do not know the precise purpose of the medications they take and 38 percent are misinformed about how frequently to take them.

Fewer than 10 percent of the patients in the study knew all four components useful for proper medication consumption and reporting: the name, dose, frequency and purpose.

However, only 7 percent of the patients wanted more information about their medical problems and only 2 percent wanted more complete information on their medications.

Dr. Peter Rudd, assistant professor of medicine, and two research assistants, Viviana Tul and Barbara Beilstein, conducted the survey of patient knowledge as part of a larger study on doctor/patient communication.

"Communication with the patient is one of the most important components of being an effective clinician," says Rudd. "But teaching physicians how to communicate effectively is difficult," he adds.

Rudd and his assistants tested one method of changing physician behavior using the patients as self-advocates.

The study results showed that physicians responded minimally to patients' suggestions to perform additional services. However, physicians responded favorably to similar suggestions from clinic staff offered in problem-oriented sessions, according to Rudd.

"The best way to induce changes in physician behavior remains controversial," Rudd says. "But improving doctor/patient communication would be one critical area for applying new methods."

Rudd presented the findings at the national meeting of the American Federation for Clinical Research in Washington, D.C. last month.

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Mailed Friday, June 15,1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Dr. I. Robert Lehman, professor of biochemistry, has resigned as chairman of the department of biochemistry at Stanford University School of Medicine.

The resignation, effective August 31, was announced Wednesday, June 13, by Dr. Lawrence G. Crowley, Acting Dean of the Medical School.

Lehman, chairman of the department since 1974, said he is relinquishing his administrative responsibilities to return to teaching and research.

Crowley said that a committee headed by Dr. Eric Shooter, professor and chairman of the department of neurobiology, has been appointed to search for a successor.

Lehman is best known for his research on the mechanisms of DNA synthesis, repair and recombination.

An alumnus of Johns Hopkins University, Lehman received his Ph.D. in biochemistry in 1954.

He was a fellow at the McCollum-Pratt Institute of Johns Hopkins, and was on the faculty of the department of microbiology at Washington University School of Medicine in St. Louis, before coming to Stanford in 1959.

The author of numerous scientific publications, Lehman has served as associate editor of the *Journal of Biological Chemistry*. He is a fellow of the American Academy of Arts and Sciences, and is a member of the National Academy of Sciences.

Lehman has also received the Henry J. Kaiser Award for excellence in teaching at Stanford Medical School.

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Mailed Wednesday, June 13, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Dr. Thomas A. Stamey of Stanford University School of Medicine, has been selected as a Royal Society of Medicine Foundation Visiting Professor.

Stamey, professor of surgery and head of the division of urology, is one of three awardees chosen by the New York based Foundation whose primary purpose is to sponsor exchange of medical information between the United States and Great Britain.

As a visiting professor, Stamey will spend one month in Britain during May, 1980, under the auspices of the Royal Society of Medicine, and he will receive a commemorative medal.

During his stay, he will present lectures before the Society in London and will confer with British colleagues.

Stamey was nominated for the honor by the section on urology of the Royal Society of Medicine. He is noted for his extensive research of recurrent urinary infections in women.

Urinary tract infections are the most common bacterial infections in humans, according to Stamey, and his study has focused on why some women are more susceptible than others.

He has found that susceptible women lack certain antibodies (molecules responsible for the body's bacterial defense mechanism) in the vaginal area, leaving them open to infection.

Stamey received his M.D. degree from Johns Hopkins University School of Medicine and has been at Stanford since 1961.

He is the first physician from the West Coast selected to participate in the visiting professor exchange, according to the Foundation.

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Mailed Thursday, June 7, 1979.

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FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

EDITOR: Photos available upon request if not included with story

STANFORD--

A device developed by a team of engineers and anesthesiologists at Stanford University is being tested for its ability to make surgery safer.

The device apparently has solved the problem of electrocautery interfering with monitoring equipment during surgery.

Electrocautery is the use of a high voltage electric current to cut through tissue and stop bleeding by cauterizing, or searing closed blood vessels.

The electric current is delivered through a thin metal probe with an insulated handle, called a surgical cauterizing knife.

While electrocautery has enabled physicians to perform major surgeries of the heart, skeleton and brain by stopping bleeding which otherwise would be uncontrollable, the technique wreaks havoc with the electronic monitoring of vital functions.

"The surgical cauterizing knife is like a gigantic radiotransmitter, sending potent radio waves from the point of contact throughout the patient's body," says Dr. William New, assistant professor of anesthesia at Stanford University School of Medicine.

"It creates overwhelming electrical interference of any signal (EKG, blood pressure, etc.) which attempts to monitor body function during the operation," he says.

Often, the surgeon turns on the current for as long as two minutes, during which time the anesthesiologist has to "fly blind," with nothing but the most primitive means, such as taking a pulse, of monitoring the patient.

Deaths during surgery are rare, but it has been well documented that they occur when patients are not being monitored, or when the monitors are useless (during electrocautery, for example), says New.

Drs. New and Mark Yelderman, also assistant professor of anesthesia, and four masters candidates in electrical engineering now have developed a modification of monitoring techniques which enables them to filter out the interference caused by electrocautery.

The students, Ed Hesler, Jeff Leddy, John Cioffi, and John Brennan, designed the new equipment as part of a masters degree project in computer applications under the direction of Professor Bernard Widrow, of the Stanford Electrical Engineering Department.

About 10 years ago, Widrow demonstrated that computers can be programmed in such a way that they can automatically "learn" to eliminate certain portions of an electrical signal, leaving the rest intact.

With the emergence of the microprocessor, it became practical to apply this computer capability to clinical medicine.

The students designed circuits which collect the EKG signal, or electrocardiogram, while eliminating much of the interference.

Recently, the equipment was tested successfully in the operating room, says Yelderman. A clear EKG signal was obtained even when the cauterizing knife was being used.

The device promises to make surgery safer, he says, because anesthesiologists will be able to monitor patients continuously.

The Stanford group plans to conduct further clinical trials this summer. According to Yelderman, the device could be commercially available within two years.

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News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

EDITORS: Photos available if not included with story.

A SPECIAL REPORT—ARTHRITIS

STANFORD—Though not a killer like cancer or heart disease, arthritis is said to cause more pain, more work loss, and more poor functions in daily life than any other human illness.

An estimated 32 million Americans suffer from some form of arthritis, and over five million are disabled by the disease.

As yet there is no cure, but scientists are beginning to find clues to the factors which may cause arthritis. In addition, the combination of drugs, exercise, and sometimes surgery can control the symptoms and often alter the course of the disease.

The following article, the first in a three-part series on arthritis treatment and research at Stanford University Medical Center, tells the story of a couple who have "fought the good fight" against their disease.

Mailed Wednesday, July 25, 1979

Part I—Never Give Up the Fight

John Gothan celebrates his 30th anniversary this year. It is not a wedding anniversary, but a count of the years he has lived as a victim of poker spine. The disease, known by the scientific name of ankylosing spondylitis, is an insidious form of arthritis striking the back and often immobilizing its victims.

The disease has compressed and fused the vertebrae of John's back, so that he can turn only with difficulty, by swinging his whole torso around. And he is shorter. "I used to be five foot eleven," he says. "Now I'm five foot three."

His wife, Ruth, suffers from rheumatoid arthritis and vasculitis, an inflammation of blood vessels. The arthritis has attacked her hands, deforming the joints so badly she has difficulty performing the kitchen tasks she once found easy.

"Imagine what it would be like going through life with a catcher's mitts on your hands," says John. "That's what it's like for Ruth."

His wife agrees with the analogy, except to add that the clumsiness caused by the disease is accompanied by almost constant pain. "I have to laugh at the television commercials that talk about the minor pains of arthritis," she says. "I have the pain, but I have never felt it was minor."

Yet neither John nor Ruth Gothan consider themselves invalids. John had to retire at age 40, but he and his wife keep busy, and they visit frequently with several family members who live near their San Mateo home.

The Key is Good Medical Care

The key to coping with arthritis is good medical care, physical therapy, and most important, a cheerful and determined attitude, they say.

"Never give up the fight" is John's motto, and it has seen him through the years he has had the disease.

When John first got ankylosing spondylitis, doctors didn't know what it was. Radiation and heat lamp treatments had no effect, and bed rest only made it worse. Today, as a patient at the Palo Alto Veterans Administration Medical Center, he receives drugs to reduce the inflammation of his joints and relieve the pain.

John is also taking cortisone, a hormone produced by the body which reduces the immune responses thought to underlie the disease. Cortisone has several possible side effects, including infection, bone deterioration, and rarely, mental difficulties, and therefore is given only in low doses. But he says, "I don't regret taking it. It was the lesser of two evils. I took it in the hope that the doctors someday will find something better."

In 1976 John received an artificial hip joint, made of stainless steel and plastic, to replace the right hip which had pained him since 1949, and forced his retirement 16 years later. "Today, my leg is better than it has been since 1959," he says.

Ruth, too, had surgery to replace the knuckle joints in her right hand. The fingers have straightened out, there is less pain, and she has regained some function in the hand. She is a patient of Dr. Melvin Britton, a rheumatologist at the Palo Alto Medical Clinic.

Day Begins with Exercise

An important part of every day at the Gothan household begins with exercise. Ruth does clenching and extending exercises to keep her fingers supple. John does isometrics and stretching exercises to retain as much flexibility as possible in his back, and to strengthen the ligaments, muscles, and bones of his arms and legs.

"We have to do this every day," says Ruth. "The minute you stop, the muscles begin to deteriorate."

The exercise time also gives the Gothans a chance to work out their frustrations. "We do a lot of yelling," admits John, smiling good-naturedly at his wife.

"I guess we are easily pacified," he adds. "We have a very full life. And we have learned to adapt."

Next... the attack of the body upon itself.

Editors: This article, the second in a three-part series on arthritis, concerns advances made by researchers at Stanford University Medical Center in understanding the disease as an "attack of the body upon itself."

Part II—New Hope for Painful Joints

STANFORD—Research at Stanford University Medical Center is improving understanding about the causes and development of rheumatoid arthritis that may one day lead to prevention or cure.

For several years scientists have believed that diseases such as rheumatoid arthritis involve an attack of the body on itself.

The theory is that in these diseases, the immune system has gone awry, and produces antibodies against the body's own tissues.

Many of the current therapies for rheumatoid arthritis support this theory.

Severe cases of the disease are treated with drugs such as azathioprine and cortisone, which suppress immune responses. Less powerful drugs which affect immunity, including gold compounds and penicillamine, can reduce inflammation and other rheumatoid symptoms in some patients.

At Stanford University Medical Center, radiation treatments are being tested in patients with severe forms of rheumatoid arthritis who are not helped by conventional therapy.

The program, directed by Dr. Samuel Strober, associate professor of medicine, developed out of observations that radiation therapy causes a reduction in some of the body's immune defenses, presumably by killing certain types of white blood cells, without increasing susceptibility to most infections.

Strober's group recently reported limited success in treating six patients with radiation, but the researchers caution that the procedure is still experimental.

While most of the treatments for rheumatoid arthritis suppress the disease, they do not provide a cure. In fact drugs such as cortisone and azathioprine may result in side effects in some patients, including toxic reactions, infection, bone degeneration, and the development of other diseases such as cancer.

Hereditary Predisposition

Recently, the discovery that several forms of arthritis are linked to the presence of markers on white blood cells, has generated considerable excitement among scientists.

These markers, called human leukocyte antigens (HLAs), enable white blood cells to distinguish between body tissues and foreign materials such as bacteria, viruses, and organ transplants.

When a foreign agent is identified, an immune response is mounted against it.

But the markers also are associated with an inherited susceptibility to diseases such as multiple sclerosis, juvenile diabetes, acute lymphocytic leukemia, Hodgkin's disease, as well as arthritis.

Not everyone who carries the markers will get disease. But they are at greater risk, particularly after being exposed to environmental factors, such as bacterial or viral infections.

Thus, persons who inherit certain white-cell markers are like preset fuses. An infection simply lights the fuse that explodes into disease.

The implications of this discovery are enormous, Stanford scientists believe. The HLA system may one day provide a means of screening persons susceptible for various diseases.

If an infectious agent is found to be responsible, these people could be innoculated against it, thereby preventing the disease. Alternatively, the immune system could be manipulated to correct the "defect" which permits disease to develop.

The strongest link between a hereditary disposition and disease is that which has been found between a marker called B27 and ankylosing spondylitis, the so-called "poker spine" disease.

B27 is carried by seven percent of the white population, and by a slightly lower percentage of blacks. However, it is found in well over 90 percent of patients with the disease.

Ankylosing spondylitis was once believed to be a rare disorder, afflicting perhaps one in 1,000 whites, the majority of them male. But a 1975 survey by Stanford immunologists James Fries and Andrei Calin revealed that 20 percent of the males and 17 percent of the females who carried the marker B27 had the disease—10 times the expected frequency in males and 80 times the frequency in females.

From this study, Fries and Calin estimated that ankylosing spondylitis may strike as many as three million Americans.

The Environmental Link

The same year, the Stanford researchers demonstrated that development of at least one genetically linked disease resulted from exposure to bacterial infection.

They were investigating the case of the U.S. Navy cruiser *Little Rock*. During a tour of the Mediterranean in 1962 an epidemic of dysentery swept through *Little Rock*'s crew.

The infectious agent was identified as *Shigella* bacteria. Two weeks later 10 of the infected men developed Reiter's syndrome, characterized by inflamed eyes, swollen joints, skin lesions, and urethritis.

Calin and Fries set out to find if these men carried a marker for disease susceptibility.

In a search that took over a year to complete, the researchers tracked down six of the men. All six were afflicted with Reiter's syndrome, and five carried the marker B27. Three of the men had ankylosing spondylitis as well.

Since then, bacterial infections have been linked to other diseases caused by hereditary predisposition.

Evidence from Australia suggests that a particular strain of bacteria, *Klebsiella*, may be the culprit in ankylosing spondylitis.

Rheumatoid arthritis is associated with another hereditary marker, DRW4, and "our hunch is that like ankylosing spondylitis, it may be caused by infection in susceptible individuals," says Calin.

"So far we have no clues," he adds, "but this is where the answer will lie—in the relationship between genes and the environment."

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Next—improving patient care

Editor: This article, the third in a three-part series on arthritis, features the efforts of the Stanford Arthritis Center, one of 15 in the U.S. established by Congress to improve the treatment of the disease.

Part III—Improving the Care of Patients

STANFORD—The Stanford Arthritis Center has launched a comprehensive attack on arthritis.

Several studies by health professionals at the Stanford University School of Medicine and in the community are being conducted with the aim of improving patient care.

Which tests are most valuable for making a diagnosis?

Which treatments are most effective in patients with a particular disease, age, and physical condition?

The answers to these questions can benefit patients, by avoiding unnecessary and sometimes risky procedures, and by reducing the cost of their care.

Artificial Joints

Dr. David Schurman, associate professor of surgery, is evaluating the impact of artifical joint replacement, both in terms of physical benefits and financial costs.

Last year in the U.S., 100,000 hips and 30,000 knees were replaced by steel and plastic joints. The hip operation, developed in the early 1960s, is highly successful. According to Schurman over 90 percent of patients have less pain and improved mobility following surgery.

However, despite its success, the operation costs about $8,000 and physicians have not yet determined if it is beneficial to all patients who are disabled by the disease.

The Team Approach

Dr. Andrei Calin, assistant professor of medicine, is leading a study of the usefulness of a team approach in treating arthritis.

The team may include the patient's physician, a specialist (rheumatologist or immunologist), social worker, orthopedic surgeon, physical and occupational therapists, and even a financial consultant.

"The benefits of having a variety of health professionals rather than a single practitioner are obvious," Calin says.

"However, this approach is expensive, time-consuming, and there is a concern that we may be encouraging an even greater dependence on the medical system than now exists."

Not Just for Adults

Rheumatoid arthritis is not just a disease of adults. An estimated 70,000 to 200,000 children in the U.S. exhibit symptoms such as rashes, fevers, and inflamed joints suggestive of the disease.

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Fortunately, many children seem to eventually outgrow their symptoms. However, no one knows how the disease has affected their social and emotional development, not to mention physical growth.

To find out, Drs. John Miller and Gordon Williams have begun a survey of the 350 children treated at Children's Hospital at Stanford since the 1950s. So far 230 children, most of them under age 18, have been located.

Two thirds of the patients report that their disease is inactive. The researchers are now examining whether the disease has affected the ability of these children to find employment as adults.

Patient Education.

According to Dr. James Fries, associate director of the Arthritis Center, between 40 and 50 percent of patients followed by the Center have tried unorthodox remedies, such as exotic diets, flu shots, copper bracelets, and trips to U.S.-Mexican border clinics.

The Arthritis Foundation estimates that $950 million is spent on unorthodox remedies by patients every year.

"The fact that patients try these treatments and go to quacks is an indictment of medical care," says Fries. "It smacks of poor communication on the part of physicians, lack of results, and a failure to deliver hope to patients."

To improve this situation, the Arthritis Center, together with the Midpeninsula Health Service, has begun a study of the value of comprehensive patient education.

Classes involving several hundred patients provide special exercise sessions, information on medications and side effects, advice and practice on how to consult effectively with doctors and other health professionals, and group discussions on how to cope with the physical and emotional problems caused by arthritis.

The primary goals of the study, says health educator Kate Lorig, R.N., are to help patients become responsible for their own health, and to determine whether education on the management of arthritis should be provided routinely as part of patient care.

"No physician has 14 hours a day to spend in patient education," she says. "And yet, patients need to learn what they can do for themselves, and how they can get the best care at the lowest cost."

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Where to find help

A directory of resources for the patient with arthritis

The Arthritis Foundation, a charitable organization committed to improving treatment, research and education of the disease, can provide a wealth of information and support services. Some of the programs include a patient treatment service, to aid patients who cannot pay for their own medical care and who are ineligible for medical insurance, and a referral list of doctors specially trained to treat arthritis.

The Northern California Chapter of the Arthritis Foundation is located at 399 Buena Vista Avenue East, San Francisco, CA 94117. Phone (415) 621-3976. Branches are located in San Jose, Oakland, Fresno, Concord, and La Selva Beach, Santa Cruz County.

Other programs are listed below:

Arthritis centers

- Stanford Arthritis Center, 701 Welch Rd., Suite 2208, Palo Alto, CA 94305. Call Pat Spitz, (415) 497-5138.
- University of California at San Francisco, Arthritis Center, 1442 Fifth St., San Francisco, CA 94143. The center provides patient education, community programs, and a resource library. Contact Sandra Lewis, program coordinator, (415) 666-1192.

Arthritis clinics

- Highland General Hospital, 1411 E. 31st St., Oakland, CA. Contact Marie Norton, patient services coordinator, (415) 621-3976.
- Children's Hospital Medical Center, 51st and Grove, Oakland, CA. Arthritis clinic for children under 18. Contact Douglas Stokes, (415) 654-5600 ext. 234, or Marie Norton, (415) 621-3976.
- John Muir Memorial Hospital, 1601 Ygnacio Valley Rd., Walnut Creek, CA. (415) 939-3000 ext. 388.

Education programs

- "Learning to Live with Arthritis," a series of classes at O'Connor Hospital, 2105 Forest Ave., San Jose, CA. (408) 298-3900 ext. 435.
- Santa Clara Valley Medical Center, San Jose. Contact Jayne Donohue, (408) 279-5552.
- "I Have Arthritis—Now What?" sponsored by the Arthritis Foundation in Santa Cruz County. Contact Brenda Schmida, (408) 688-3866, or Gaye Kihorany, (408) 426-6758.

Clubs

- Arthritis Club, Fresno Branch, Northern California Chapter of the Arthritis Foundation. Contact Elizabeth Weatherby, (209) 264-8205.
- Adolescent Rap Group for teenagers with arthritis, and Parents Club for parents of children with the disease meet at the Children's Hospital Medical Center in Oakland. Contact Herman Pugh, (415) 654-5600, ext. 266, or Marie Norton, (415) 621-3976.
- "Living it Up with Arthritis," at the Santa Clara Valley Medical Center. Contact Adrienne Herman, (408) 287-8764.
- Arthritis Club, University of California at San Francisco. Contact Marie Norton, (415) 621-3976.
- Marin County Lupus Club, College of Marin, Kentfield, CA, (415) 457-1454.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. Lubert Stryer, Winzer professor of cell biology, has resigned as chairman of the department of structural biology at Stanford University School of Medicine.

The resignation, effective August 31, 1979, was announced recently by Dr. Lawrence G. Crowley, acting dean of the Medical School.

"Dr. Stryer has made a very effective start in building a strong department of structural biology," Crowley said, "particularly with recruitment of several outstanding senior faculty members."

Stryer, who is also professor of structural biology, has chaired the department since its formation in 1976. It incorporated the old anatomy department, and its scope was broadened to reflect study and teaching of all levels of structural biology, from organs to molecules.

Stryer said he has resigned his administrative position to devote more time to research.

Crowley said that a committee headed by Dr. Eugene Robin, professor of medicine and acting chairman of the physiology department, has been appointed to search for a successor.

Stryer is well known for his studies of biological structure at a molecular level, studies fundamental to a better understanding of cell organization and function.

Currently he is studying the molecular aspects of visual excitation, how the absorption of light by visual pigments in the eye leads to nerve impulses.

A native of Tientsin, China, Stryer received the bachelor of science degree with honors from the University of Chicago in 1957, and the M.D. degree magna cum laude from Harvard University in 1961.

He was assistant professor in the department of biochemistry at Stanford from 1963 to 1966, and associate professor from 1966 to 1969.

He then served as professor of molecular biophysics and biochemistry at Yale University from 1969 to 1976, when he returned to Stanford.

Stryer is a recipient of the Eli Lilly Award of the American Chemical Society in biology chemistry (1970), and is a fellow of the American Academy of Arts and Sciences.

The endowed professorship he holds is named for Mrs. Frances Nunnally Winzer of La Jolla, California, a longtime major benefactor of the medical school.

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Mailed Monday, July 30, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

James H. Stanford, director of finance at Stanford University Medical Center, has resigned to become treasurer of Acurex Corporation in Mountain View.

The resignation, effective September 14, was announced recently by Dr. Lawrence G. Crowley, acting vice-president for medical affairs and dean of the Medical School.

Stanford will assume his new position in October.

"The Medical Center is very grateful to Mr. Stanford for his six years of service as director of finance," Crowley said. "He has played a very important and productive role in the overall management and planning of the center."

Stanford, 41, came to the Medical School facilities planning staff in 1967 from General Mills, Inc., in Minneapolis, where he had been assistant to the financial vice president.

He was active in the negotiations which led to the University's purchase of the City of Palo Alto's interest in the Hospital, and in July 1968 was one of three top administrators installed when the University assumed management of the Hospital.

From 1970 to 1973, Stanford served as finance director of San Jose Hospitals and Health Center, Inc.

He is a graduate of Stanford University, where he received his bachelor of arts degree (1961), and his M.B.A. from the Graduate School of Business (1964).

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Mailed Monday, July 30, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. Louis Kovitz, a retired physician from Los Altos, California, died Sunday, July 22 at Stanford University Hospital.

He had been ill for several months with heart disease.

Dr. Kovitz and his wife Dorothy established a visiting professorship in their name at Stanford University School of Medicine in 1969, to bring outstanding lecturers in both surgery and medicine to the school.

A native of Baltimore, Maryland (he was born in 1904), Dr. Kovitz received the bachelor of arts degree from the University of Missouri in 1924, and the medical doctorate from the Washington University School of Medicine in St. Louis in 1929.

He entered general practice in 1932 in Kansas City, Missouri, later specializing in general and industrial surgery.

In 1954, he was made a Fellow of the Industrial Medical Association.

His industrial affiliations in Kansas City included the Hotel Muehlebach, Brown-Strauss Corp., Keystone Trailer and Equipment Company, Woolf Brothers, Burd and Fletcher Company, and Harzfeld's, where he served as medical director.

He was also a member of the Masons, Shriners, and DeMolay.

In 1955, Dr. Kovitz moved to Los Altos, where he continued to practice medicine until his retirement in 1963.

He is survived by his wife and two children, Suzi Kovitz Kohan, of Los Altos, and Louis Kovitz, Jr., of Santa Barbara.

Memorial services will be held Thursday, July 26, at 2:00 p.m., at Roller and Hapgood and Tinney funeral home, 980 Middlefield Rd., Palo Alto.

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Mailed Tuesday, July 24, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

A new technique developed in Switzerland to open blocked arteries is being used by doctors at Stanford University to enlarge narrowed arteries in legs of patients with peripheral vascular disease.

Popularly known as "balloon dilatation," the procedure involves the insertion of a tube, or catheter, in an artery in the patient's groin.

A special plastic balloon is moved through the catheter to the site of the obstruction and then inflated, compressing the fatty deposits to the artery walls and reopening the vessel to normal blood flow.

According to Dr. Lewis Wexler, associate professor of radiology and chief of the cardiovascular radiology service at Stanford, there is definite promise in the new procedure which, so far, has been used on about a dozen patients, all treated successfully.

Follow-up after nine months shows that the patients' arteries are still wide open, Wexler adds.

Peripheral vascular disease is one result of atherosclerosis, the buildup of fatty deposits in the arteries.

The same type of deposit causes blockages in arteries feeding vital organs such as the heart and kidneys. Heart attack or angina may be the result, or in the case of kidneys, hypertension may follow.

The balloon catheter is currently being evaluated as treatment for these conditions in Europe and in the United States.

In peripheral vascular disease, the blocked arteries feed body extremities, such as the legs, and severe pain on exercise is one result. In more serious cases, gangrene in the toes may set in and amputation of toes or legs may be required.

The condition arises most often in older individuals but others, such as diabetics, are also at risk.

Traditional treatment has been surgical grafting of a new blood vessel, either the patient's own vein or one made of woven dacron, around the blocked portion of the artery. In some cases, the fatty deposits can be removed directly.

However, this is major surgery, notes Wexler, requiring hospitalization for up to a week. Balloon dilatation can be accomplished without general anesthesia and with only one day's hospitalization following the procedure, he says.

"It's important to remember that atherosclerotic disease is progressive and requires continual monitoring and treatment," notes Wexler. "Therefore, any time we can treat the condition with minimal intervention it is advantageous for the patient."

Not everyone with peripheral vascular disease should receive the treatment, Wexler cautions. It works best when large vessels are blocked. Also, if the obstruction is so severe that the balloon cannot penetrate, the procedure can't be used.

"A combination of surgery and balloon dilatation may be beneficial in many cases," he adds.

Dr. Diana Guthaner, assistant professor of radiology, has also performed the procedure on patients at the Veterans Administration Medical Center in Palo Alto.

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Mailed Monday, July 23, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Senate Bill 1113, which clarifies California Law regarding the corporate practice of medicine, passed the State Assembly Thursday, July 19, by a 72 to 2 vote.

It will become law in 12 working days unless first vetoed by Governor Jerry Brown.

The bill, sponsored by Senator Barry Keene (D-San Rafael), removes the ambiguity in present law on whether faculty physicians employed in medical schools in California can charge professional fees when they treat patients.

Last Monday, July 9, the Assembly Committee on Health voted nine to zero for passage of the bill with one amendment, that a medical school may bill for services only if the faculty physician who provided the services approves of the charge.

The amended bill was brought to the Assembly floor yesterday by Health Committee chairman Art Torres (D-Los Angeles) who, with Robert Naylor (R-San Mateo), spoke in favor of passage.

After the Assembly vote, Keene brought the amendment to the Senate, and obtained concurrence by a vote of 28 to zero.

The bill had stimulated a vigorous debate during the past months.

Among its most outspoken opponents were Dr. Robert Weinmann, president of Local 7402 of the Union of American Physicians, and Dr. Eugene Dong, a Stanford associate professor of cardiovascular surgery.

Weinmann and Dong maintained that employment of salaried physicians by universities constitutes corporate practice of medicine, which is prohibited in California, and has led to "double billing" and "ghost surgery."

Supporters of the bill, which included Stanford University President Richard W. Lyman, and representatives of the University of California and University of Southern California, argued that preventing the collection of professional fees by salaried faculty physicians would have no beneficial effect.

"The one thing that would be accomplished if the critics had their way would be the outlawing of this method of organizing the clinical activities of medical school faculties," Lyman said at the July 9 hearing of the Assembly Health Committee.

"That is the only thing that would be accomplished—not cost control, not quality control, not an end to abuses which, to the extent that they exist at all, are in any case illegal," he said.

In addition to Lyman, Dr. Lawrence G. Crowley, acting vice-president and dean of the Medical School, and Dr. Irving Schulman, chairman of the department of pediatrics, submitted testimony at the hearing.

They were joined later in the week by the other chairman of the School's clinical departments in calling for the passage of the bill.

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Mailed Friday July 20, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

A bill which repeals some controversial requirements for the teaching of human sexuality in California medical schools has been signed into law by Governor Jerry Brown.

The new legislation still requires that physicians in California receive adequate instruction in human sexuality. But medical school faculties determine what, how and who should teach, as they do in all other areas of medical knowledge.

Senate bill 40 was introduced last year by State Senator John Foran (D-San Francisco). It repeals much of AB 4179, which was sponsored by Assemblyman John Vasconcellos and signed into law in 1976.

That law added human sexuality to the list of subjects that physicians must be taught. For the first time it also required the state division of licensing to determine the length and content of instruction. This was a sharp departure from the practice of faculty determining the length and content of courses, and it brought strong opposition from all medical schools in the state.

Former dean of Stanford Medical School, Dr. Clayton Rich, vigorously protested against the law in 1976, calling it a threat to medical curriculum.

Opposition to the law was also voiced by editorials in several California newspapers, including the *Palo Alto Times* (now *Peninsula Times Tribune*), the *San Jose Mercury*, the *San Francisco Chronicle*, and the *Los Angeles Times*.

"Repeal of the human sexuality requirements owes much to the efforts of Dr. Rich, and other medical schools, as well as the newspapers, for bringing the issue to the public and legislature's attention," said Robert Rosenzweig, vice-president of public affairs at Stanford University.

The new law was first introduced as Senate bill 1763 by Foran in 1978. Though passed the Senate and reached the floor of the Assembly, it was not considered before the session ended last fall, and Foran reintroduced it as SB 40

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Mailed Friday, July 20, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Two grants, totalling $279,000, have been awarded to Stanford University by the National Institute of Aging for studies of physical and chemical changes, and diseases of older persons.

One of the grants, for $179,000, will support studies of the endocrinology of aging, changes in the secretion of hormones and body chemicals which may be related to problems of old age.

The other grant provides $100,000 for three years for the study of an autoimmune reaction in older people which is caused by commonly used drugs.

Autoimmunity refers to an attack by the body's immune defenses against its own tissues.

Both studies will be conducted in cooperation with the Geriatric Research, Education and Clinical Center (GRECC), based at the Palo Alto Veterans Administration Medical Center.

"There is a pressing need to improve the quality of health care provided to the older person," said Dr. Gerald M. Reaven, director of GRECC and the Stanford Medical School's division of gerontology.

For too long have problems such as diabetes, brittle bones, and decreased sexual activity been considered as natural and unavoidable consequences of aging, he said.

Reaven said the grants are part of a comprehensive program in gerontology at Stanford and the VA, designed to improve understanding of the aging process, and the quality of life of older people.

The endocrinology grant will focus on five areas described below:

• Dr. Julian Davidson, associate professor of physiology, will examine the relationship between aging and sexual behavior.

"It may be that low testosterone (hormone) levels in the older male are related to decreased sexual activity," Reaven said. "If this is so, doctors could apply a medical approach to the problem, rather than telling patients, 'You're too old to be playing around.'"

• Dr. David Feldman, assistant professor of medicine, will examine the effect of age on the absorption of calcium by the gut. Low calcium levels in the blood have been suggested as one cause of the increased rate of osteoporosis, or brittle bone disease, among older people.

• Reaven is exploring the link between changes in the breakdown of glucose and insulin which occur during aging, and glucose intolerance, a decline in the ability to transport sugars from the blood into body tissues.

"This intolerance may be responsible for elevated blood levels of fats, which are associated with atherosclerosis," he said.

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• Dr. Herbert Schwartz, professor of pediatrics, will test older people for the presence of a glucose-containing hemoglobin molecule, A1c.

This molecule is elevated in the blood of diabetics, and is thought to reflect control of abnormal metabolic processes which may underlie complications of the disease, including blindness, kidney failure and other vascular problems.

The presence of A1c in the blood of older people may provide clues to the increased incidence of degenerative disease in that age group, Reaven said.

• Dr. Raymond Hintz, associate professor of pediatrics, will test the response of tissues from patients of various ages to somatomedin, a hormone involved in the stimulation of growth. The studies are aimed at answering basic questions of why and how cellular aging occurs, Reaven said.

The second NIA grant is directed by Dr. Thomas Okarma, staff physician in the division of gerontology.

According to Okarma, 10 to 15 percent of patients given certain drugs to treat conditions such as high blood pressure or abnormal heart rhythms develop symptoms or blood test abnormalities similar to a form of arthritis called systemic lupus erythematosus (SLE).

SLE is characterized chemically by the presence of complexes of immune molecules in the blood, and clinically by skin rashes, joint swelling, and inflammation of internal organs. It is thought to be an autoimmune disease.

Unlike SLE, the drug-caused symptoms occur more frequently among older people, and usually disappear when the drugs are withdrawn, Okarma said.

What is important about the drug reaction is that it provides a model in humans of the way autoimmune diseases may develop, he said.

In addition, "study of this phenomenon in older people may provide insight into the molecular biology of cellular aging, and potentially may provide clues to understanding the uncontrolled cell growth which characterizes tumors," he said.

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Mailed Monday, July 16, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

EDITORS: Photos available if not included with story

STANFORD—

A major research program on nerve disease has been established jointly by Stanford University and the Palo Alto Veterans Administration Medical Center (VAMC).

The program is supported by grants from the National Institutes of Health (NIH), the Veterans Administration and the Kroc Foundation.

It includes the first axonal disease laboratory in the U.S.

Axons are the nerve fibers which transmit messages within the nervous system. They are involved in a wide range of diseases, including multiple sclerosis, leprosy, and alcoholism.

The driving force behind the new program is its soft-spoken, enthusiastic director, Dr. Stephen G. Waxman.

At the age of 33, Waxman is an international authority on diseases of nerve fibers. His achievements include authoring more than 85 scientific papers, membership in several societies, including the American Association for the Advancement of Science, and the Annual Trygve Tuve Memorial Award for outstanding contributions in biomedical sciences from the NIH.

The product of Harvard College and Albert Einstein College of Medicine, where he received both his M.D. and Ph.D., Waxman taught at Harvard and the Massachusetts Institute of Technology before coming to Stanford in 1978.

He currently is professor of neurology at Stanford Medical School, and chief of the Neurological Unit at the VAMC.

Waxman conducts visitors through his laboratory at the VAMC with the pride of a new father in a maternity ward.

Though not yet complete, the lab eventually will house an electron microscope, banks of computers, a dark room, and working quarters for Waxman's colleague, Dr. Jeffrey D. Kocsis, five research associates, and support personnel.

"This lab is bringing together scientists from a variety of disciplines—neurologists, morphologists, biophysicists, engineers, biochemists, physiologists—to look at diseases of the axon," Waxman says.

"We'll be examining the molecular structure of the nerve cell membrane with electron microscopy and freeze-fracture methods, recording electrical signals from single nerve fibers, and simulating behavior of normal and diseased nerve fibers with a computer—all to better understand disease."

The root of many nerve diseases and injuries is destruction of the insulation of nerve cells, called the myelin. When the insulation is destroyed, electrical conduction can be completely disrupted, causing muscle weakness, pain, paralysis, and other problems.

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"Myelin is destroyed in a number of disorders of nerves peripheral to, or outside of the brain and spine," Waxman says. "These include diabetes, which afflicts over one million people in the U.S., and alcoholism."

A common disease seen primarily in underdeveloped countries is leprosy. "The disease affects nerves running to the limbs and face," he says, "and the medical toll here is tremendous."

Loss of myelin also occurs in diseases which strike the central nervous system, the brain and spinal cord. The most familiar example is multiple sclerosis (MS), which may afflict as many as 100,000 people in the U.S., most of them in their 20s to 40s.

"In the case of MS, a degree of spontaneous recovery often occurs, yet we know little about the physiological and biochemical mechanisms underlying this recovery," Waxman says.

There are indications that MS may be related to an inborn error in the body's immunologic machinery, such that the body begins to attack itself. Possible exposure to a virus has also been suggested as a cause.

Yet, so far, no specific treatment has been found for MS. Waxman and his group have concentrated on studying the molecular architecture of the nerve fiber membrane, and the mechanisms of spontaneous recovery, in the hope that they will find therapies for stimulating recovery from diseases such as MS.

But, Waxman adds quickly, "We cannot promise a cure for axonal diseases in one year, or two years, or even five years. Each month, however, we come a bit closer to understanding the disease processes.

"In the long run, cures for many axonal diseases will be found."

One of the most intriguing projects underway at the axonal disease lab is the study of the black ghost knife fish, *Sternarchus*.

This South American fresh water fish has the unusual ability for regrowing its spinal cord after it has been completely severed.

Spinal cord injuries are one of the most devastating of any nervous disorder, often resulting in irreversible paralysis.

For some reason, nerves of the spine and brain in most animals, including humans, are less plastic than those in the limbs. They do not regenerate well. Waxman says the difference may have something to do with the way central nerve cells produce their insulation.

The myelin covering each peripheral nerve fiber is produced by a single Schwann cell, in close proximity to the nerve, whereas central nerve myelin is produced by another type of cell, called an oligodendrocyte, which may supply as many as 50 different nerve fibers.

"The connections are more tenuous in the central nervous system," says Waxman, "and possibly are disrupted more easily."

Waxman believes that by unravelling the mysterious regenerative properties of the black ghost knife fish and related species, he and his associates may be closer to understanding what determines function of central nerve fibers, and how they may be encouraged to regrow after an injury.

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Mailed Thursday, July 12, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bill Snyder

FOR IMMEDIATE RELEASE

STANFORD—

The California Assembly Committee on Health voted nine to zero for passage of Senate Bill 1113 at a hearing Monday, July 9, which included testimony by Stanford University President Richard W. Lyman.

The bill, sponsored by State Senator Barry Keene (D-San Rafael), removes the ambiguity in present law on whether faculty physicians employed in medical schools in the state can charge professional fees when they treat patients.

The bill now goes to the floor of the assembly, according to University director of government relations Larry Horton.

However, the bill took one amendment during the hearing, that a medical school may bill for services only if the faculty physician who provided the services approves of the charge.

The bill, which was passed last May by the Senate, also will be returned to that body for approval of the amendment, Horton said.

During the 90 minute hearing, testimony in support of the bill was given by Lyman, Dr. Lawrence G. Crowley, acting vice-president and dean of the Medical School, and Dr. Irving Schulman, professor and chairman of the department of pediatrics.

Also present and supporting the bill were Dr. Alan Mathies, dean of the University of Southern California School of Medicine, and Steve Arditti, legislative representative for the University of California.

Opponents of the bill presenting testimony at the hearing included Dr. Robert Weinmann, president of Local 7402 of the Union of American Physicians, and Dr. Eugene Dong, a Stanford associate professor of cardiovascular surgery.

Weinmann and Dong have maintained that employment of salaried physicians by universities is illegal, and Weinmann also has alleged the practice led to "ghost surgery," "double-billing," and "double-dipping" into public programs such as Medicare and Medi-Cal.

In response, Lyman said at the hearing that while medical schools are far from perfect, "they are not peopled with money-grubbing and inhuman villains, either."

In testimony prepared for the committee, Schulman stated that professional fees charged by faculty physicians are provided to the Medical School "as a contribution to the support of the academic effort (teaching, research, and patient care) as a whole.

"I believe that (this practice) has resulted in very high quality medical education for the physicians of the future, and in a system of exemplary medical care for the patients we are privileged to serve," he said.

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Mailed Tuesday, July 10, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

TWO RELEASES

STANFORD—

Two postdoctoral researchers in the department of pathology at Stanford University School of Medicine will receive two-year fellowships from the Leukemia Society of America to support basic research on causes and prevention of leukemia.

Dr. Rolf H. Joho, research assistant, has been awarded a $31,000 grant and Douglas P. Tapper, currently completing his graduate education at Harvard University, will receive a $25,000 fellowship when he arrives in December.

Leukemia is a malignant disease striking about 55,000 Americans each year. Among diseases leukemia is the number one killer of children, according to the society.

Joho will examine the organization and expression of immunoglobulin genes during white blood cell formation.

Understanding the normal process of white blood cell maturation may provide a basis for preventing the abnormal process that occurs in leukemic cells, he suggests.

Tapper will study the replication of genetic material (DNA) found in mitochondria, the energy producing bodies of cells.

Abnormal mitochondrial DNA is associated with granulocytic leukemia in humans, he explains.

Joho and Tapper are among 132 scientists supported by the Leukemia Society at 60 institutions in the U.S. and abroad. Annual funding for the grants, according to the society, is over $2 million.

The Leukemia Society also supports patient aid programs and education programs through local chapters across the U.S..

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STANFORD—

Vansen R. Wong, a recent Stanford graduate, has been awarded a $1,500 three-month student research fellowship from the American Liver Foundation.

Wong will work this summer with Dr. Allen D. Cooper, assistant professor of medicine in gastroenterology at Stanford University Medical Center.

The award was made on the basis of a national competition, according to the foundation, and Wong, a native of Piedmont, was one of eight students selected for a fellowship.

He will study aspects of liver cancer in rats.

Normally, the liver responds to a high cholesterol diet by decreasing synthesis of cholesterol, Wong explains. But in rats, cancerous liver tissue does not display this type of feedback inhibition.

Cholesterol is carried in particles called lipoproteins. Wong and Cooper think the cancer cells may have altered lipoprotein receptors. This could be useful for diagnostic or therapeutic purposes, they add, providing a way to distinguish the cancer tissue from normal tissue.

The American Liver Foundation is a national voluntary health agency, concerned with the understanding, prevention and cure of liver diseases.

This is the first year of a new research training program for young investigators, the foundation said.

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Mailed Tuesday, July 10, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Stanford University President Richard W. Lyman Monday urged passage of Senate Bill 1113 because it would enable medical schools in California to proceed with their work in the interests of the public, "free of the wearisome, repetitive and baseless round of attacks" made by some critics.

Lyman expressed his views in testimony prepared for delivery before the California Assembly Committee on Health in Sacramento.

The bill, sponsored by State Sen. Barry Keene (D-San Rafael), would remove the ambiguity in present law on whether faculty physicians employed by medical schools in the state can charge professional fees when they treat patients.

Two critics of the bill, Dr. Robert Weinmann, president of Local 7402 of the Union of American Physicians, and Dr. Eugene Dong, a Stanford associate professor of cardiovascular surgery, have maintained that employment of salaried physicians by the universities constitutes corporate practice of medicine explicitly prohibited in California.

Moreover, Dr. Weinmann has alleged that employment of salaried physicians by the schools has led to "ghost surgery," "double-billing," and "double-dipping" into public programs such as Medi-Cal and Medicare.

"Our universities, and the medical schools within them, are far from perfect," Lyman said. "But they are not peopled with money-grubbing and inhumane villains, either."

"The purpose of the corporate practice of medicine law," Lyman said, "was to prevent commercial exploitation of the medical profession for profit.

"It is not and never was to prevent the employment of faculty physicians who draw salaries from their universities and spend a portion of their time providing patient care, in return for fees that then can revert to the employing university.

"The one thing that would be accomplished if the critics had their way," Lyman said, "would be the outlawing of this method of organizing the clinical activities of medical school faculties.

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"That is the only thing that would be accomplished--not cost control, not quality control, not an end to abuses which, to the extent that they exist at all, are in any case illegal."

The effect of lack of legislation in this matter, Lyman said, would be that the so-called "full-time" system in which faculty doctors draw salaries instead of being compensated directly in professional fees, would be cut off.

"If that should happen," he said, "it will not be the end of the world. But neither will it be advantageous for the citizens of California."

A medical school faculty, he explained, comes to academic life because of interest in teaching and research, in addition to clinical care for patients.

"Faculty members, were they mainly concerned with making money, would never have taken up academic life in the first place," Lyman said. "They could make a lot of money outside, in private practice, charging their own fees and, of course, pocketing them.

"Yet somehow their decision to enter academic medicine is being converted, by the opponents of S.B. 1113 into a kind of illegitimacy.

"It is to be made illegitimate for them to practice their profession under an agreement that to the extent that they bill for their services (and we at Stanford do not determine that extent), the fees paid shall go back to the School that pays their salaries."

Lyman said if S.B. 1113 does not pass, universities will have to contract for clinical care with new corporations consisting of their faculties.

"Those corporations will do their own billing," he said. "I do not believe that any serious observer will conclude that such a change in how faculty members are compensated would even begin to address, let alone remove, the forest of evils that the critics of this bill have so ingeniously managed to summon out of their own fevered imaginations."

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Mailed Monday, July 9, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

A program on "The Impact of Stroke on the Family" will be held at the Speech and Language Clinic at Stanford on Tuesday, July 10 at 7:30 p.m..

Dr. Kathryn R. Beadle, clinic director, will open the program with a presentation of basic information on the causes and effects of strokes.

A discussion will follow, led by three stroke victims who have attended the clinic.

The program is offered as a community service and it is open to the public.

The clinic is located at 600 Willow Road, at the west end of the parking lot of the Children's Hospital at Stanford.

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Mailed Thursday, July 5, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Stanford University Hospital faces a $2.4 million cut in its annual revenue, as a result of new government regulations which set lower limits on reimbursement for hospital services to Medicare and Medi-Cal patients.

For the same services provided currently to patients for $191 per day, the government will now reimburse Stanford and other similar sized California hospitals $168 per day beginning next year, said Dr. Peter J. Levin, executive director of the hospital.

Medicare and Medi-Cal patients make up between 47 and 49 percent of the hospital patient population.

"Considering inflation this past year, the impact of the decrease is even greater," Levin said.

In addition, "these new regulations make it impossible for hospitals to plan rationally, based on their expectations of reimbursement for coming years," he said.

According to the California Hospital Association, nearly 50 percent of California hospitals will be adversely affected by the regulations.

Last week, 36 California congressmen, in a letter to Joseph Califano, head of the Department of Health, Education and Welfare (HEW), protested the "inequitable bias" which the regulations cause against California and certain teaching hospitals.

The letter stated that the per day limits do not sufficiently reimburse California hospitals, which have "substantially shorter" hospital stays than the national average.

Shorter stays indicate a more intensive level of care, and thus a higher cost per day, but lower overall hospital and Medicare costs.

In addition, the congressmen argued that the regulations made inadequate provision for the costs associated with teaching and delivering intensive care to large numbers of patients in teaching hospitals.

The congressmen recommended changes in the limits to recognize the savings from shorter days and the additional costs borne by teaching hospitals.

Unless the requested relief is provided, concluded the congressmen, "hospitals have no alternative but to pass unmet costs on to the non-government payers."

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Beginning September 1, hospital administrators are faced with three alternatives:

• raising prices charged to non-Medicare patients to make up for the loss in revenue (the government already pays 18 percent less than charges to non-government patients),

• accepting the revenue loss, which may mean badly needed equipment and new construction will not be financed, or

• cutting expenses further, thus compromising the quality of patient services.

"The government is forcing us into an untenable position," Levin said.

Substantial amounts of money for capital investment are needed over the next few years for routine and preventive maintenance, and for up-grading the 20-year-old building to meet current government codes, he said.

Yet, according to hospital administrator Gary Mecklenburg, the hospital already has cut the annual rate of increase of hospital costs to nine percent, below both the national average (14 percent) and the President's guidelines (9.7 percent).

To hold down costs, hospital administrators and department heads have been asked to streamline their operations and carefully review their budget requests for the coming year.

Mecklenburg said the administration is considering several options to meet the contingency of lost revenue, prior to submitting the 1979-80 budget to the Hospital Board of Directors for approval in August.

"And we are fighting the regulations," he said.

Stanford officials so far have not received a response to the letter sent to HEW last week, although Levin said they are hopeful the regulations will be changed.

In the meantime, the hospital has an alternative to file for an exception with HEW's Health Care Financing Administration, to permit it to exceed the limits of reimbursement.

However, said Levin, "according to past experience, exceptions have been very difficult to obtain."

—30—315

Mailed Thursday, July 5, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Clinical chairmen in the Stanford University School of Medicine have endorsed 8 to 2 a bill now before the State Assembly intended to clarify how faculty doctors in the state's public and private medical schools charge professional fees.

The clinical subcommittee of the School has voted to support SB 1113, scheduled for hearings beginning July 9 by the Assembly Health Committee, and passed by the State Senate in May under the sponsorship of State Sen. Barry Keene (D-San Rafael).

The clinical subcommittee, made up of the chairmen of the School's 11 clinical departments, said it supported the bill with the understanding that its passage "would remove the ambiguity in the present law."

The law in question is Section 2008 of the Business and Professions Code which stipulates that medical schools in California may employ salaried faculty physicians provided that they see patients free of charge.

The passage of SB 1113, the subcommittee said, "would enable the faculty of Stanford University Medical School to continue its long standing practice (20 years) of submitting bills for professional services they provide."

The clinical subcommittee said that if SB 1113 became law, they had been assured that the University had no intention of changing its policy regarding who has the right to charge professional fees for the clinical services provided by the faculty.

Last week, writing to Senator Keene in opposition of SB 1113, Dr. Norman E. Shumway, professor and chairman of the cardiovascular surgery department, said the new law "interferes substantially with, if it is not totally obliterative of, the doctor-patient relationship."

"The very last or bottom line of that relationship," wrote Shumway, "is the time honored or traditional bill. To assign this prerogative to the administrative agent of financially stressed institutions is to guarantee invariably the rendering of a bill at the highest level."

In a letter to Acting Vice President and Dean Lawrence G. Crowley, Stanford University President Richard W. Lyman wrote:

"This is to reaffirm, as strongly as I can, that the University has absolutely no intention of changing the current policy.

"The current policy is that it is within the sole discretion of the faculty physician to determine if a bill for his or her professional services should be submitted to a patient, and how much the charge, if any, should be.

"This has been the policy of the University since the current system was established in 1959, and the University fully intends to continue this policy in the future."

SB 1113 is backed by Stanford, the University of Southern California, and the UC system of medical schools.

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Mailed Thursday, July 5, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Anesthetics will soon be tested in the breathing mixtures of deep sea divers to counteract effects of high pressure nervous syndrome, a disorder often experienced by divers at great depths, according to a Stanford University researcher.

Dr. Joan J. Kendig, associate professor of biology in anesthesia, says it has been known for some time that high pressure and anesthetic action are antagonistic.

This antagonism may be a valuable tool to help scientists discover the cellular basis of how anesthetics work, she suggests. It also has practical applications for deep sea diving.

Normally, divers supplement their breathing mixture with 10 percent nitrogen to minimize effects of high pressure nervous syndrome.

But nitrogen is soluble in blood and can cause another diving hazard known as the bends, or formation of nitrogen bubbles in the blood. Anesthetics are less soluble, eliminating this danger, she says.

Kendig and her colleagues are currently determining precise concentrations of anesthetics required to replace the nitrogen.

Deep sea divers then test the anesthetics during actual dives in special pressure chambers at various institutions across the country (including Duke University), she says.

In addition, there is a multinational effort involving France, Britain and the United States, spurred on by commercial interests with operations in deep water such as oil rigs in the North Sea, she adds.

Kendig explains that studies of cell membranes have revealed that the lipid (fat) component of the membrane acts like a fluid.

Proteins embedded in this lipid layer carry out important cell membrane functions such as controlling passage of molecules in and out of the cell, she adds.

In nerve cells, the passage of charged particles through the membrane is responsible for nerve cell firing.

Proteins in the membrane require a precise degree of fluidity in order to function properly, she says.

Anesthetics seem to increase the fluidity of the membrane while high pressure rigidifies the structure, according to studies carried out by Kendig and her colleagues.

Still to be discovered is the exact way anesthetics alter the membrane fluidity and how this disturbs the nerve cell function, she explains.

Kendig's research also focuses on the important clinical finding that local anesthetics applied intravenously in small concentrations will stop arrhythmic disturbances in the heart.

"The more rapidly a nerve is carrying impulses, the deeper the local anesthetic block appears to be," she says.

"Local anesthetics may actually prevent cardiac muscle from generating impulses at higher than normal frequency," she adds.

Kendig presented recent results of her research at the Symposium on Molecular Mechanisms of. Anesthesia held in Seattle last month.

Her research is supported by the National Institutes of Health and by the U.S. Navy.

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Mailed Thursday, July 5, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

If you want to help medical science in its fight against kidney disease, here is your chance:

Stanford Medical School researchers are seeking adult volunteers for a study of a new technique for measuring kidney function.

The technique, developed at Stanford, measures the flow of different sugars through the kidney's filters, and their appearance in the blood and urine.

"This new test may be important in understanding kidney diseases, as well as improving their early diagnosis and treatment," said Dr. Bryan D. Myers, assistant professor of medicine.

Myers is directing the study under a grant from the National Institutes of Health with Dr. Stefan A. Unterhalter, a fellow in the division of nephrology.

Volunteers are needed to help establish the normal range of sugar filtration by the kidney, Myers said.

Kidney problems can accompany several diseases, including diabetes and some forms of cancer. In addition, kidney failure can follow open-heart surgery.

The most common and earliest sign of disease is the appearance of protein in the urine, he said. By measuring the filtration of sugar "markers" similar in size to proteins, physicians may be able to detect disease earlier, and evaluate therapy better than is now possible.

In addition, Myers said the test may provide clues to the defect in the kidney filter which allows proteins to seep through.

The study will be conducted on an outpatient basis. Volunteers will be given two polysaccharides, composed of the sugars fructose and glucose, and samples of their blood and urine will be collected during a three hour period.

Volunteers will be paid.

Persons wishing to participate in the study should contact Dr. Unterhalter, at the Stanford Hemodialysis Center, 497-7256.

—30—312

Mailed Tuesday, July 3, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Scoliosis, an abnormal curvature of the spine, is the most common handicap among children, according to a Stanford University researcher who recently launched a long-term study to discover if abnormalities in the body's posture control system cause one form of the disease.

Two out of 100 children are afflicted, according to Dr. Eugene Bleck, professor of clinical surgery at Stanford and chief of pediatric orthopedics at Children's Hospital at Stanford.

If left untreated scoliosis may progress, causing disfigurement and other problems such as breathing difficulties and impaired circulation.

There are many types of scoliosis, explains Bleck, and some are associated with other diseases. But for a large number of patients with scoliosis, there is no clear cause for the condition. This type is known as idiopathic scoliosis.

Current treatment for idiopathic scoliosis involves mechanical support with various types of braces worn for a period of years, from the time the curvature is discovered until the patient's skeleton matures.

But not all curves are severe enough to warrant treatment, Bleck says, and one problem he wants to solve is how to identify those cases likely to "progress" or worsen.

In a recent study of children with scoliosis, it was shown that about half had progressively worsening curvature while the other half spontaneously recovered, he notes.

Although mechanical braces do help control severe cases, many children may be needlessly exposed to years of unnecessary bracing since progressive cases cannot currently be identified.

On the basis of pilot studies he has completed, Bleck suspects that idiopathic scoliosis could be a neurological disorder involving an abnormality of the body's posture control system.

To test this idea, he plans to measure balance reflexes of children with scoliosis and those of a group of normal children. During follow-up studies over several years, he will record patients' spinal curvature and balance reflexes to detect a possible correlation between neurological posture control and scoliosis.

A neurological abnormality seems plausible, since it is known that idiopathic scoliosis is neither a muscular nor a skeletal disorder, Bleck explains.

Bleck and his colleagues are also testing two new methods of treatment of scoliosis. One uses direct electrical stimulation of the spine muscles during sleep. The other is an augmented feedback plastic brace that reminds the child to shift the trunk at regular intervals during the day.

If the basis of idiopathic scoliosis is abnormal neuromuscular control, then this new brace could be particularly effective, he suggests.

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Mailed Wednesday, August 29, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Researchers at Stanford University have begun a study of the long-term effects of relaxation training on high blood pressure.

The four-year study is supported this year with a $100,000 grant from the National Heart, Lung and Blood Institute.

According to study director Dr. Stewart Agras, professor of psychiatry at the Medical School, several reports have shown that relaxation training can cause reductions in blood pressure.

The decreased blood pressure may last as long as one year without close follow-up training, he said.

Relaxation training is particularly important for 40 percent of hypertensive patients, whose blood pressure is not completely controlled by medication alone, Agras said.

However, doctors do not know how long the technique remains effective once it has been learned, or whether a few minutes of relaxation in the morning can keep blood pressure down for the rest of the day.

To answer these questions, Agras and his colleagues will follow 260 persons with essential hypertension requiring medication who have been recruited from local industries.

All of the subjects will remain on their medication, but, in addition, half of them will receive training in relaxation techniques, such as sequential muscle tensing and relaxing.

These subjects will be instructed to practice the techniques at home every day, and whenever they feel tense.

An automatic monitor worn by some of the subjects during certain phases of the study will provide a record of blood pressure throughout the day.

Further training will be given every two months to some of the subjects who were taught the techniques initially, to make sure they are consistently practicing relaxation.

Agras said the study is a first step in determining the role of relaxation training in the management of essential hypertension, a disorder which afflicts an estimated 23 million Americans.

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Mailed Wednesday, August 29, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

University Hospital room rates will increase an average of $20 in the new fiscal year starting September 1.

Medical, surgical, and gynecology room rates, which are charged to most hospitalized patients, will increase an average of 11.6 percent from those set a year ago.

The new rates, according to Dr. Peter J. Levin, executive director of the hospital, reflect increased wages and operating costs, and an anticipated reduction in reimbursement from the government for care given to Medicare and Medi-Cal patients.

"They also reflect our ability to hold down costs in a time of rapid inflation," Levin said.

For example, he said, hospital expenses will rise by 9.3 percent this year, well within the voluntary guidelines for cost containment, and "much better" than the industry average, 13 percent.

The new room rates were approved by the University after the Board of Hospital Directors reviewed the annual budget on August 21, recommending rates for the fiscal year 1979-1980.

These rates may be increased later this year, Levin said, unless new government regulations reducing reimbursement for hospital services to Medicare and Medi-Cal patients are softened.

The current schedule of limitations, set this summer by the Health Care Financing Administration, result in a reduction of about $2 million in the hospital's annual revenue.

Officials of the California Hospital Association, the Association of American Medical Colleges, and Stanford are trying to get the government to ease the regulations, Levin said, and they have received the support of the California congressional delegation.

"At this time, however, we cannot be certain that the regulations will be eased," he said.

Beginning September 1, the new room rates will be $178 per day for ward accommodations, $192 for a semiprivate room, and $214 for a private room, up an average of $20 from last year.

Medical, surgical and gynecology services of house staff physicians are offered to patients for $16 more than the above rates.

The level of rate increases will be an average of 12.8 percent for some specialized units, including the intensive and coronary care units and the nurseries.

Rates for psychiatry, obstetrics, and pediatrics will increase 11.5 percent.

Rates for X-ray, laboratory, and other ancillary services will be increased an average 11.4 percent.

In addition to meeting increased operating costs, and partially recovering the loss in government reimbursement, the increase in room rates is necessary to provide money for improving facilities and meeting code requirements, Levin said.

Current projects include renovation of the neonatal intensive care unit, completion of the "Phase 1" building (in the hospital's North wing), and planning long-term construction needs.

Patient revenues make up 99 percent of the hospital's funds, Levin said. The hospital has no tax support or endowment income.

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Mailed Wednesday, August 29, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Dr. Wilbur E. Mattison, a Menlo Park physician since 1958, has been elected president of the medical staff at Stanford University Hospital.

Mattison succeeds Palo Alto heart surgeon Dr. Thomas J. Fogarty, and will take office on September 1 for a two-year term. He was recently elected by mail ballot of the active medical staff, comprising about 900 faculty and community physicians, according to Dr. James F. Silverman, chief of staff.

As president, Mattison will serve as representative of the medical staff to the Medical Board, to the chief executive officer and to the hospital's Board of Directors.

"My primary goal is to assist in the activation of the medical staff and to improve communication among members," he said. "A well organized medical staff is vital to the smooth operation of any hospital."

Mattison received his M.D. degree from the Johns Hopkins University Medical School in 1952 and served his internship and residency there until 1958, when he set up medical practice in Menlo Park at the Menlo Medical Clinic.

He has been a staff member at Stanford University Hospital since 1958, and is clinical associate professor of medicine at Stanford University School of Medicine. He also has served on numerous hospital committees.

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Mailed Wednesday, August 29, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Researchers at Stanford University Medical School and the National Aeronautics and Space Administration (NASA) are looking for 12 able-bodied men aged 45-55 to help them prepare for the first launching of the space shuttle.

The volunteers simply will be put to bed at Stanford University Hospital, while the researchers study changes in their hearts, kidneys, circulatory and hormonal systems.

Long-term bedrest simulates the effects of weightlessness, which occurs during space flight, explained Dr. Danielle Goldwater, scientist at the NASA Ames Research Center in Mountain View, and member of the clinical faculty at Stanford Medical School.

Blood volume decreases, and the heart and blood vessels may lose tone during weightlessness, leading to drops in blood pressure and exercise capacity on return to the Earth's gravity. In addition, drugs may affect the body differently when it is weightless or horizontal for long periods, Goldwater said.

"In the near future, NASA plans to open up space flight to people middle aged and older," she said. (The first space shuttle launch is expected in the summer of 1980).

Middle-aged people are susceptible to heart disease, high blood pressure, mild diabetes, and other problems, Goldwater said, and therefore it is important to know how this age group responds to simulated weightlessness, and how to reverse the deconditioning effects.

In addition to its usefulness to the space program, Goldwater said the study may shed some light on the effects of long-term bedrest here on Earth, as during an illness.

For instance, she said, heart attack patients usually are treated with eight to 10 days of bedrest. But that treatment may add to the disabling effects of the heart attack, by making patients even weaker.

The Stanford study is an outgrowth of five years of investigations into weightlessness by Dr. Harold Sandler, director of the Ames' Biomedical Research Division.

It is supported by grants from NASA and the National Institutes of Health.

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Other Stanford investigators include Drs. Donald C. Harrison, Richard L. Popp, and Robert E. Kates of the division of cardiology, Robert F. DeBusk, director of the Cardiac Rehabilitation Program, John A. Luetscher, Jr., of the division of endocrinology, and Michael L. Goris of the nuclear medicine division.

The study is scheduled to begin September 4, and will run through November, Goldwater said.

Two volunteers at a time will be admitted to the Hospital's Clinical Research Center for 14 days. They will stay active for the first four days, to establish a baseline of their cardiovascular and hormonal functions, and the remaining 10 days they will be confined to bed.

Blood tests will monitor changes in the metabolism of the men, and in their response to certain drugs.

At the end of the 10 days, a special device which exerts a negative pressure on the lower body will be used to test heart and circulatory functions. In addition, the ability of the heart and muscles to use oxygen efficiently will be tested as subjects pedal a stationary bicycle.

Once released from the hospital, the volunteers will resume normal activities. Half of them, however, will exercise an additional 30 minutes each day, to determine if extra activity helps them recover more quickly from their time spent in bed.

Healthy, middle-aged males interested in participating in the study should call Mr. Bob Peterson, of Management Systems Associates in San Jose, at (408) 286-0460.

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Mailed Monday, August 27, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. Samuel C. Ballon, well known authority on reproductive cancers in women, has been appointed associate professor of gynecology and obstetrics at Stanford University School of Medicine.

Ballon also will head the newly-established section of gynecologic oncology, which will provide comprehensive care and study of cancers of the reproductive tract, including the ovary, vulva, vagina, cervix and endometrium (uterus).

The appointment was announced recently by Dr. Lawrence G. Crowley, vice president and acting dean of the Medical School.

"Dr. Ballon is an extraordinarily well-trained man," said Dr. Joseph Portnuff, clinical professor of gynecology and obstetrics, who taught Ballon as a resident and who encouraged him to take the new job. "He is an outstanding addition to the Department."

A native of Montreal, Canada, Ballon, 34, was educated at that city's McGill University, receiving his bachelor of arts degree with honors in 1965, and his M.D. in 1969.

He served as resident and chief resident in gynecology and obstetrics at Stanford from 1971 to 1974, and was a fellow in gynecologic oncology at the Memorial Sloan-Kettering Cancer Center in New York from 1974 to 1976.

He then moved to the University of California at Los Angeles, where he was associate professor of obstetrics and gynecology, and associate director of the division of gynecologic oncology until leaving for Stanford this year.

Ballon is a member of several professional societies, including the New York Academy of Sciences, the American Radium Society, and the Society of Gynecologic Oncologists. He is a fellow of the American College of Surgeons and the American College of Obstretricians and Gynecologists.

He was awarded the Galloway Fellowship by the Memorial Hospital for Cancer and Allied Diseases in 1973, and received a certificate of appreciation from the California Division of the American Cancer Society in 1978.

A self described "workaholic," Ballon said he came to Stanford for the challenge of building a top-notch program in gynecologic oncology.

"We can provide an important service to the women of the South Bay Area," he said.

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Specialists in female reproductive cancers can deliver primary care to women whose treatment is often "fragmented," Ballon said, because as gynecologic oncologists they have received training in surgery, radiation therapy, and chemotherapy, as well as gynecology.

Ideally, they can help make the patient a part of her own treatment team, he added, by teaching her about her disease and what to expect from therapy. Patient education will be an important goal of the new program, he said.

Over 100 physicians nationwide have been certified in gynecologic oncology since the field was established by the American Board of Obstetrics and Gynecology in 1972.

Ballon would like to prepare future doctors for the field, by establishing resident and fellowship training programs. Physicians will develop competence in radiation therapy, chemotherapy, immunology and basic research, as they pertain to female reproductive tract tumors, he said, and they will be well grounded in principles of diagnosis, staging and management of the cancers.

At the same time, Ballon plans to develop active research programs to improve cancer diagnosis and treatment.

Ovarian cancer strikes over 17,000 and kills 11,000 women in the United States each year, and survival rates have not improved since 1949. Recently, new drugs such as cis-platinum have been found to be effective in treating ovarian cancer, but the most needed research is in finding a test which can make the diagnosis early, before the cancer has spread to other parts of the body.

Ballon's other research interests include reconstructive surgery of parts of the body damaged by cancer and cancer treatments, chemotherapy, and hyperalimentation, or high nutrient intravenous feeding.

A principal investigator in the national Gynecological Oncology Group, Ballon said he also expects to contribute to the research efforts of the Northern California Cancer Program.

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Mailed Thursday, August 16, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Governor Jerry Brown recently signed into law a bill which provides permanent funding for the California Infant Medical Dispatch Centers.

Assembly Bill 810, introduced by Assemblyman Leroy Greene (D-Carmichael), provides $207,000 annually for support of two centers, one based at Stanford University and the other at the University of Southern California.

The centers have helped physicians locate intensive care nursery beds for critically ill babies, and have arranged transport of the babies, since they were established on a pilot basis by the State Legislature in 1975.

"I am delighted," said Dr. Alvin Hackel, director of the Northern California Dispatch Center.

"We should be particularly pleased as this program was pioneered at Stanford, and provides an important service to the California perinatal community.

"The support of the National Foundation of the March of Dimes is especially appreciated," Hackel said, "as it guaranteed funding of the Northern California center for two months in the event the bill did not pass."

The Northern California Dispatch Center serves a 200,000 square mile region from the Oregon border to the Tehachipi Mountains. About 120,000 infants are born in the 168 hospitals in the area each year, of which over 2,000 require transport to intensive care or intermediate intensive care nurseries.

There are 250 intensive care beds in 10 hospitals in the region, but at any one time, only five may be available. Prior to the establishment of the Dispatch Centers, Hackel said, doctors spent as long as two and a half hours on the phone just locating an available bed.

"We consider this similar to having a patient in shock lying in an intersection, not receiving the type of care he needs," he said. "We feel this extra time comprises the ultimate outcome of these patients."

Today, the time it takes to locate a bed has been cut to 20 minutes. At Stanford, for instance, dispatchers under the direction of Tricia Robertson and Jennifer Whited call the regional intensive care nurseries for an up-date on bed availability three times a day.

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When a call comes into the center, the dispatchers find the intensive care bed closest to the referring hospital, and coordinate transport by ambulance or airplane.

In 1978, the Dispatch Center arranged nearly 600 transports, some for the distances over 250 miles.

An air-to-ground communications system developed by Dr. Jan Ehrenwerth, associate director of the center, enables physicians to maintain continuous contact with the transport crew during flights.

Hackel said the new funding would allow the program to decrease the time it takes to locate a bed even further through the use of computers.

Plans include installation of automatic bed counters at each intensive care nursery. Eventually, said Hackel, every hospital in the region will have its own computer terminal. Doctors then could call up the latest bed availability information without having to phone the dispatch center, much in the same way that travel agencies can call up seat availability on airlines.

The addition of memory and data processing capabilities to the computer will also enable the center to evaluate the effectiveness of the dispatch program, Hackel said.

The ultimate goal of the program, he said, is to coordinate emergency transport, not only of critically ill infants, but of high risk mothers and adult patients as well.

Already, Stanford transports pregnant women who are at high risk for complications during pregnancy, and adult patients are transported under the Stanford Emergency Transport Service.

At the State level, Senator Barry Keene (D-San Rafael) is sponsoring a bill which would require the Department of Health Services to develop a regional perinatal transport system for both mothers and infants.

The bill, SB 775, passed the Senate on June 20 and is now awaiting action in the Assembly Ways and Means Committee.

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Mailed Monday, August 13, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Governor Brown has signed into law Senate Bill 1113, which clarifies the manner in which faculty physicians in medical schools bill their patients.

The bill, sponsored by State Senator Barry Keene (D-San Rafael), was signed Wednesday night, August 1. It had passed the State Assembly by a 72 to 2 vote on July 19. Assemblyman Art Torres (D-Los Angeles) carried the bill on the floor of the Assembly.

"We are extremely pleased by the size of the vote supporting SB1113, and by the Governor's signature," said Robert Rosenzweig, vice-president of public affairs at Stanford University, which had strongly supported the bill.

"It suggests that we succeeded in demonstrating that the way in which we have been operating at Stanford is responsible and consistent with sound medical practice," he said.

"We are glad this issue is behind us," said Dr. Lawrence G. Crowley, acting vice-president and dean of the Medical School. "It has been very time-consuming for all concerned.

"There are many important and positive things to be accomplished at the Medical Center, and resolution of this matter will allow us to devote more of our energies to them," he said.

Passage of SB1113 means that the existing practice at medical schools such as Stanford is considered legal under present law, which prohibits the corporate practice of medicine.

The problem emerged as a public issue because of complaints filed by the Union of American Physicians and by Dr. Eugene Dong, Jr., a Stanford associate professor of cardiovascular surgery.

The complaints alleged that Stanford's system violated the law because its faculty physicians charge professional fees for services rendered to patients, and then turn the fees over to the medical school to help finance the school's clinical teaching program.

They claimed that Section 2008 of the California Business and Professions Code prohibited physicians who are employed by medical schools in the State from participating in this kind of system.

Dr. Robert Weinmann, president of the Union's local 7402, and Dong spoke in opposition of SB1113 at hearings conducted by the Assembly Health Committee on July 9.

Presenting testimony at the hearing in favor of passage were Stanford University President Richard W. Lyman, Crowley, and pediatrics department chairman Dr. Irving Schulman.

In addition to Stanford, the bill was strongly supported by the University of California and the University of Southern California.

The bill passed the committee by a vote of 11 to zero with one amendment, that a medical school may bill for services only if the faculty physician who provided the services approves of the charge.

That amendment received the concurrence of the Senate by a vote of 28 to zero on July 19, the final legislative step before going to the Governor.

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Mailed Thursday, August 2, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Partners of couples enrolled in a home study weight loss program can be very influential in assisting their mates in losing weight, according to a new Stanford University study.

Dr. David R. Black of the Stanford Heart Disease Prevention Program said the results of the study involving 33 couples were "surprising" because it was previously believed that it is the participant **not** his or her spouse who could best influence weight loss.

"The partner's beliefs and expectations about doing certain things to help the participant and the importance of these tasks . . . were the best predictors of the spouse's weight loss after three months of participation."

Black and co-investigators Dr. Craig K. Ewart and Judy K. Black found that 40 percent of the couples in the program had unhappy relationships. However, the status of the relationships had no significant influence on weight loss, but was "suggestive" of how much weight would be lost, he said.

The amount of weight loss for all participants was about a third more than would be expected by conventional behavior weight loss methods that did not involve the spouse. Black cautioned, however, that the real objective is to reach an "ideal" weight and maintain it. Data are currently being gathered on this issue.

If the preliminary findings from the study are upheld, Black said there are several possible implications. For example, he said, for couples with unhappy relationships better communication methods should be included in the treatment program. In addition, partner attitudes seem worthy of more attention and ways to heighten both partner and participant beliefs and expectations should be developed, Black explained.

Results of the Stanford study were presented by Black at a recent meeting of the American Psychological Association in New York City.

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Mailed Friday, September 28, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

A new program for women who have had mastectomy for treatment of breast cancer will be offered this fall at the Stanford University School of Medicine.

The goal of the program is to diminish or prevent the "sexual disability" which results from loss of a breast in many women.

"This is a long-neglected area of treatment," says Reggie Kriss, a licensed counselor who will direct the program.

Learning to face death has been the main focus of psychological counseling of breast cancer patients. Yet, Kriss says, being able to cope with an altered self-image is equally important to post-mastectomy women.

Kriss is seeking 100 women who have had a mastectomy to participate in a year-long program of group counseling.

Beginning in November, two groups of 10 women each will meet every week for the first six months, and monthly thereafter during their year in therapy.

Two new groups will start at six month intervals over a five year period.

A questionnaire developed by Kriss and Dr. Helena Kraemer, associate professor of psychiatry, will measure how effective the therapy is in helping women reconstruct healthy images of themselves and their sexuality.

The program is supported this year by funding from the Department of Psychiatry and Behavioral Sciences and by private donations.

Kriss says that the association between mastectomy and divorce or break-up is well known.

"I believe that if women view themselves as damaged goods, they will give nonverbal signals which may adversely affect relationships," she says.

"Sexuality is a global concept—an essential part of one's feeling of aliveness."

Unfortunately, Kriss says, society teaches women that sexuality is only associated with certain parts of their bodies. "Women have regarded themselves as they think the male sees them," she adds, "never as they see themselves."

Yet it is only women who can make themselves feel whole again after mastectomy.

The advantage of group counseling, Kriss says, is that "feelings come out in the open that women have never expressed before, even to themselves."

In addition, women can help each other find ways of dealing with sexual or marital conflict, and they can encourage each others' self growth.

Kriss is well suited to lead the program, for she has had two mastectomies herself. She has led groups of breast cancer patients with Drs. Irvin Yalom and David Spiegel in the Department of Psychiatry for the past four years, and recently completed training in the sex and disability unit at the University of California School of Medicine at San Francisco.

Ideally, she says, the program will provide new information to help women prepare for the adjustments they will have to make after surgery.

In addition, the program may provide a more effective means of dealing with changes in body images and sexuality which result from all kinds of surgery, injury or disease, she said.

Women interested in participating in the program should call Reggie Kriss at 415: 321-2030.

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Mailed Thursday, September 27, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

Details follow asterisks

STANFORD—

Treatment of brain abscesses, biochemical causes for depression and overcoming some forms of diabetes are among the projects of seven young scientists at Stanford University School of Medicine.

Their research is funded by the Biomedical Research Support Grant provided to Stanford by the National Institutes of Health, and administered by a Stanford faculty committee.

The grant helps young scientists establish research programs in areas of basic and clinical research.

The seven assistant professors recently awarded one-year grants are Dieter Enzmann, M.D. (radiology); Richard Mamelok, M.D. (medicine); Abdul Matin, M.D. (medical microbiology); Ronald Merrell, M.D. (surgery); Peter Sargent, Ph.D. (structural biology); Howard Schulman, Ph.D. (pharmacology); and Robert Fowles, M.D. (medicine).

* * * * *

Treatment for brain abscesses often requires surgery but the early inflammation responds to simpler antibiotic therapy. Enzmann is testing computerized tomography scanning (a new method of imaging using x-rays and computers) for distinguishing stages of brain abscess development. Reliable diagnosis of the inflammatory stage could make antibiotic treatment possible more frequently.

Adriamycin, a potent anti-cancer drug, is useful in treating many tumors, lymphomas and leukemias. But a side effect sometimes causes muscle tissue in the heart to undergo permanent changes that may lead to heart failure. Fowles will examine why this happens, how it might be prevented and whether there are possible antidotes that could be administered with adriamycin to counteract these effects.

Mamelok hopes to characterize transport systems in kidney cell membranes, particularly those systems that transport drugs. This could provide additional information on drug therapy in patients with kidney failure, and how to avoid damage to the kidneys when administering potentially toxic drugs.

Matin is examining structurally and functionally similar bacterial proteins known as isoenzymes to discover how and why their synthesis is regulated in cells. When grown in a nutrient-rich environment, one form of enzyme is synthesized but in a less rich environment another form takes over. He will explore how and why such dual systems function.

Sometimes the pancreas must be surgically removed to control certain types of infections—diabetes is the result. Merrell is working on a technique to isolate the healthy, insulin-producing tissue from the pancreas (known as islet tissue) and eventually restore it by injection in the portal vein of the bloodstream. The healthy islet cells lodge in the liver where they produce normal insulin, reversing the diabetic condition.

Sargent studies the formation of synapses, the areas where nerve cells come into close proximity and influence each other across gaps of just one millionth of an inch. Learning how synapses are formed during development will increase knowledge of how they function, the key to understanding how the brain works, according to Sargent.

Many mental diseases may be associated with defects in the process of synthesizing neurotransmitters, chemicals used by nerve cells to transmit information. There is evidence that histamine, a neurotransmitter in the brain, may be involved in depression. Schulman will be studying the synthesis and localization of histamine in the brains of rats.

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Mailed Wednesday, September 26, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD--Dr. Norman E. Shumway and members of the heart transplant team at Stanford University Medical Center this week urged the federal government to officially approve coverage by Medicare of the costs involved with heart transplantation.

In a letter to Henry Hehir, director of medical services policy at the Health Care Financing Administration (Health, Education and Welfare Department) dated September 17, the physicians argued that cardiac transplantation represents the only effective treatment for a select group of patients with end-stage heart disease.

"Furthermore," theystated, "it is absolutely necessary for their survival beyond a few months."

The letter was signed by Shumway and Drs. Edward B. Stinson, Philip E. Oyer, Bruce A. Reitz, and John S. Schroeder.

The costs of heart transplantation have never been covered officially by Medicare, but it has paid for selected aspects of the care of patients receiving the surgery for several years.

Recently, however, the Medicare Bureau began to question whether it can continue to cover a procedure which is considered in many centers to be "experimental," and therefore not "reasonable and necessary for the diagnosis and treatment of illness."

As a result of the uncertainty, independent third party insurance carriers, including Blue Cross and Blue Shield, in some states have decided to discontinue to pay for heart transplantation.

What this means, at Stanford at least, is that patients who are not covered by insurance, and who have limited financial resources, are not eligible to be evaluated for possible heart transplant.

-more-

ATTENTION: LARRY ALTMAN

NEW YORK TIMES

Sent business wire
Sept 20

The hospital costs associated with heart transplantation include laboratory, medicines and operating room costs, and a hospital stay of several months, and can total $60,000 per patient.

Some of these costs are paid for by a $1 million-a-year government research grant to Stanford University.

In addition, none of the doctors associated with the transplant program at Stanford charge professional fees for their services to patients receiving transplants. That could add as much as $20,000 extra to the bill, says Shumway.

Nevertheless, costs to the patient can run into the tens of thousands of dollars.

"It is simply not fair or ethical for ability to pay to be a factor in determining whether a patient is evaluated for heart transplant or not," said Lois Christopherson, chief clinical social worker in charge of the cardiac transplant program.

But this is what is happening, she added. Some patients referred to Stanford for evaluation have not been able to come because they were not covered by insurance.

Without continued government and private insurance coverage, the number of patients receiving heart transplants at Stanford each year conceivably could drop from 20 to only four, she said.

Cardiac transplantation has been performed in humans for only 12 years. Many centers which took up the procedure in the early 1970s later abandoned it, because of lack of success. However, survival rates of patients transplanted at Stanford have remained consistently high during the past five years.

Sixty-five percent of patients are alive one year following transplantation; five year survival is 50 percent.

In comparison, over 90 percent of 28 patients who were accepted as candidates but for whom no donor hearts could be found died within three months of their acceptance, stated the doctors in the letter.

The doctors added that cardiac transplantation can be considered to be more successful than cadaver kidney transplantation, which is covered by Medicare.

One year survival of human cadaver kidneys, according to the 1977 Human Renal Transplant Registry, was 46 percent, compared with 65 percent one-year survival of cardiac transplant patients at Stanford the same years.

(Survival of the patient, of course, implies that the transplanted heart has survived).

Congress requires that Medicare cover kidney transplantation, which costs between $15,000 and $25,000 per patient for the first year.

But whereas heart transplantation is the only effective treatment in patients selected for such, hemodialysis is a possible alternative to kidney transplant in most patients with end-stage kidney disease, the doctors stated.

Finally, heart transplantation may actually save society money, by enabling recipients to return to work.

"Among the 78 patients (transplanted since 1974) who survived for greater than one year after operation, more than 90 percent were considered rehabilitated both physically and emotionally," they stated.

"They had the real option of returning to their former mode of employment or engaging in some other productive endeavor."

Examples include one recipient who is a professional bowler, and another who teaches at a state university.

Shumway and his colleagues have not yet received a response from the government to their letter. However they have sent letters to other heart transplant programs throughout the U.S., urging them to make similar appeals to the government, to decide in favor of covering the procedure under Medicare.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Stanford University School of Medicine has been successful, despite changes in admissions procedures related to the Supreme Court decision in the Bakke case, in attracting qualified minority applicants for the entering class this fall.

Twenty-two percent of the students in the 86-member incoming class represent minorities--black, chicano, and native American.

(The University previously reported a record number of blacks and chicanos enrolling as freshmen and as law students this year).

"The Medical School has made a good adjustment to the Bakke decision," said Acting Vice-President and Dean Dr. Lawrence G. Crowley.

"Presently there is a single admissions committee incorporating the selection of all students. By all indications we continue to attract highly qualified minority applicants," he added.

In addition, 31 percent of the students in the entering class are women. The percentages for both minorities and women are slightly higher to those of past years.

Coupled with Crowley's announcement, a study of minority admissions published in the current issue of the *New Physician* magazine ranks Stanford fourth in performance among 121 medical schools in the area of minority admissions.

The study is based on enrollment figures compiled by the Association of American Medical Colleges directory for 1978-79.

"Only 10 of the 121 predominantly white medical schools in the country enroll over 15 percent minorities, and 43 percent have minority enrollments under five percent," the magazine reported.

Among the medical schools listed by the magazine as having the best score card in minority admissions are University of California-Irvine, University of New Mexico, Michigan State, and Stanford. The University of California-San Francisco ranked seventh, and Harvard eighth.

The study excluded medical schools that are predominatly black—Meharry, Howard, and Morehouse.

In June 1978 the U.S. Supreme Court delivered a 154-page decision declaring the University of California-Davis quota system illegal and ordered 38-year-old Allan Bakke admitted to medical school.

The decision was not a clear-cut one because even though the court rejected outright quota systems, it upheld the use of affirmative action programs in general to improve educational opportunities for minorities.

As a result of the Bakke decision, Stanford as well as other medical schools abolished their special admission committees established to screen and admit minority applicants, and placed all admitting functions into a single committee.

There was apprehension at that time among minority groups that this move would signal the end of affirmative action in medical school admissions.

But Dr. John Steward, associate dean for student affairs, said that concern in the case of Stanford Medical School does not appear to have been justified. He said the school received 5,850 applications this year—300 more compared to previous years. More than 580 of the applicants were minority students compared to 489 the previous year.

"In recent years most medical schools have been experiencing a decline in the overall applicant pool," he added.

Steward characterized the minority students in the entering class as "exceptionally strong with regard to academic preparation, and academic potential for creative careers in the health sciences."

More than 48 undergraduate institutions are represented in the total incoming class. Universities which contributed four or more students to the class include the University of California-Berkeley; University of California, San Diego; Yale, Harvard, MIT, Princeton, and Stanford.

Ten of the students in the first-year class have advanced degrees (M.A., Ph.D.) in other fields.

The incoming class brings to 372 the total number of students in all classes of the Medical School.

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Mailed Thursday, September 20, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

Editors: Photos available if not included with story.

STANFORD—

A new device, developed by Stanford University engineers, is aiding scientists at Stanford Medical School and the Palo Alto Veterans Administration Medical Center to understand human liver diseases such as cirrhosis.

The device is called a pulsed Doppler flowmeter, and it works by bouncing sound waves of a certain frequency off red blood cells moving through the vessels which supply the liver, and analyzing the changes in frequency of the echoes.

Cirrhosis is the progressive killing and hardening of liver tissue caused by overuse of alcohol and other drugs, or viral infections such as hepatitis.

The disease can lead to high blood pressure, or hypertension, in the portal vein which feeds into the liver, as it meets increasing resistance to blood flow.

If untreated, this hypertension can result in "catastrophic hemorrhaging" due to overloading and rupture of small vessels outside the liver, says Dr. Malcolm F. Anderson, assistant professor of radiology at the Stanford Medical School.

One third of the deaths due to cirrhosis, he says, is due to massive internal bleeding.

Anderson and his colleagues at the Palo Alto VA Medical Center are studying the development of high blood pressure in the portal veins of dogs, as a model of the human condition.

Blood flow through the portal vein and hepatic artery of the liver is monitored by the flowmeter, which can be completely implanted in the animals.

The 16-cubic-centimeter unit is powered by tiny batteries and transmits its information in the form of electromagnetic waves to an external receiver.

The transmission of physiological information is known as biotelemetry.

The device was designed by Drs. Henry Allen and James Knutti, and Professor James Meindl, engineers at the Stanford Center for Integrated Electronics in Medicine, under a grant from the National Institute of General Medical Sciences.

The great advantage of the new flowmeter, says Anderson, is that it permits measurement of long-term changes in the liver's blood flow.

Previous methods of recording blood flow usually were doneduringsurgery, when the animals were anesthetized, or else required the placement of wires through the skin, increasing the chance of infection.

In contrast, Anderson has been able to monitor dogs for over one year, without infection, while they were awake and active.

He says the goal of the study is to characterize the blood flow changes produced by high blood pressure in the portal vein, and ultimately to help improve surgical treatment of this condition.

The research is supported by grants from the National Heart, Lung and Blood Institute, and the Veterans Administration.

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Mailed Wednesday, September 19, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Superior athletic performance or habitual exercise does not guarantee protection against sudden death during or immediately after exercise, according to a study by researchers at Stanford University School of Medicine.

Regular exercise, such as running or jogging, is generally considered to be healthy for the heart and cardiovascular system. An estimated five to 25 million Americans jog regularly.

However, for some individuals, particularly those with heart disease, the increased workload which exercise puts on the heart can lead to serious problems, and even death.

The Stanford study analyzed the medical histories of 17 men and one woman, who died during or just after jogging or running, between 1973 and 1978.

All but four had been exercising regularly for at least a year, and three of the men had been running more than 100 miles a month. However, two had exercised less than one month when they died.

The study, published in the September 21, 1979 issue of the *Journal of the American Medical Association*, was conducted by researchers at the Stanford Heart Disease Prevention Program, including Paul D. Thompson, M.D., Michael P. Stern, M.D., Paul Williams, M.S., Kirk A. Duncan, M.D., William L. Haskell, Ph.D., and Peter D. Wood, D.Sc.

Thompson is now at Brown University Medical School in Providence, R.I.

The victims, most of them in California, were identified from the obituary accounts and by word of mouth.

Thirteen of the 18 individuals died of documented coronary artery disease. Of the remaining five, three died of heart-related dysfunctions, one died of heat stroke, and one of unknown causes.

In an interview, Haskell said that several factors may have contributed to the deaths of the individuals in the study:

• the majority had preexisting, and severe coronary artery disease, as determined by autopsy, and all of the individuals with heart disease were over 40. Three of the individuals had family histories of coronary artery disease appearing before age 50. Three were being treated for hypertension, and on the average they had a higher-than-expected blood pressure.

• six of the individuals had smoked cigarettes in the past, although all but two had quit the habit several years previously.

- more -

• six (33 percent) of the individuals experienced potential warning signs of heart trouble, but ignored them, and continued their usual level of exercise. Symptoms reported included stomach pains and unusual difficulty with breathing.

One man, who experienced difficulty breathing during a work-out, nevertheless "raced his wife over the final distance to their home, where he collapsed," stated the researchers.

The researchers emphasized that this study does not invalidate the contention that regular exercise, such as jogging, is a valuable health-promoting activity for the vast majority of Americans.

Unfortunately, they stated, "there is no highly sensitive or specific way to identify those at risk of exercise-related deaths." Further study is needed to determine who will benefit from a vigorous exercise program.

For example, most of the individuals in the study had been seeing their doctors regularly. Their cholesterol and triglyceride levels were normal or only slightly elevated.

Nine of the individuals had had exercise electrocardiograms (ECGs), a test of heart function, however, in six, the tests were considered normal.

"There is no evidence in our study that any currently available diagnostic procedure would have prevented these deaths," Haskell said.

"In the past, we considered the start of an exercise program as the high risk period for cardiovascular as well as orthopedic complications, and advised middle-aged men to start exercise programs gradually," the researchers stated.

"However, this study indicates that even long-time exercises are not totally immune to sudden cardiovascular complications."

In addition, they said, "physicians should be certain that their exercising patients are aware of symptoms (of heart problems) and the need for prompt medical attention when these symptoms occur."

And while improvements in diagnosis may identify those individuals at greatest risk for sudden death during exercise, "the ultimate prevention of most exercise-related deaths depends on the prevention of coronary arteriosclerosis," they stated.

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Mailed Tuesday, September 18, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

(Editors: A photograph of Bonesio is available if not included with the release)

STANFORD—

It seems nothing can stop Louis Bonesio.

At 45 the Gilroy, Calif., resident lives a life of what he calls "constructive leisure" by sailing, riding in hot air balloons, motorcycling and driving a high-powered sportscar.

This might not seem unusual, except that Bonesio is alive because the heart of another human beats in his chest.

Bonesio was 38 when his first heart attack hit. He believes the attack was partly due to the pressures of operating a wine business which, he said, is "at the mercy of the weather, and the whims of the public."

The attack kept him in Veteran's Administration Medical Center in Palo Alto for eight months. Since then he has become one of Stanford University Medical Center's 10 longest-living heart transplant patients.

"I thought the last person in the world to have a heart attack would be me, or so I'd always thought," Bonesio recalls. "I used to smoke, but I had to quit. And, when they told me I should have a transplant, I thought the whole idea was preposterous!

"I told the doctors that I didn't care to have the transplant, and that I didn't like the odds.

"But then I started running out of energy. I'd been in the hospital for more than eight months and I couldn't see my kids very often. They were only eight and four at the time and it was hard for them to understand what was going on."

On May 11, 1974, Bonesio underwent the four-hour surgery that replaced his failing heart. He was Stanford's 71st heart transplant recipient (Stanford has now transplanted 175 patients since the first one on Jan. 6, 1968. Of these patients, 69 are currently alive).

"I was truly surprised when I woke up," he recalled. "But I told myself I would not give up."

And he didn't. Three months later Bonesio was out of the hospital, and started his life over again.

Since the transplant, Bonesio says, "emotions don't fire me up as much now. But that has its advantages too. Now I 'weigh' everything first. That fits my birthsign anyway--I'm a Libra."

The long hospital stay caused permanent atrophy to Bonesio's leg muscles, and if he tries to run his legs bruise badly.

"I used to run track in school," he reflected. "I wanted to play tennis and racquetball. There's no way I can do that now, but what the hell? I'll make that sacrifice."

- more -

The medications Bonesio takes to combat rejection of the transplant--prednisone and imuran--caused some damage to his bones. His vertebrae have decreased in size and he subsequently shrank from five-foot-eleven to five-foot-nine.

"Now I feel like I'm standing in a hole when I'm with my old friends," he quipped.

The prednisone also caused bone degeneration and he was forced to have his hips replaced two years ago. A few months after that surgery Bonesio again returned to the hospital, this time with four broken ribs.

"I was motoring a bit too fast in a construction zone, turned a corner, lost control and hit a parked car," he recalled. "I totalled my Porsche. While I was in the hospital I got a herpes infection. I guess 1977 was not a good year," he laughed.

But Bonesio believes the key to survival lies in his attitude.

"Damn it, I'm not going to quit."

Bonesio tries to instill a similar attitude in others. He works with social workers in the heart transplant program, and talks to potential patients about all aspects of the experience. In addition, he also occasionally meets with Bill Van Buren, Stanford's longest-living heart transplant patient.

Bonesio said he has no problem at higher altitudes, and usually flies when he travels abroad.

"The only problem I have is at the airports. The authorities always want to know why I'm carrying around so much 'dope,' and the metal in my hips sets off the detectors."

Surprisingly, Bonesio doesn't get travel fatigue even though he still gets by with only three to four hours of sleep a night ("a lifelong habit," he says).

Active in community affairs, Bonesio serves on the board of directors of the Gilroy Chamber of Commerce and the Santa Clara County Chapter of the American Heart Association. He is also a member of Gilroy's Elks Lodge, and American Legion Post 669.

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Mailed Monday, September 17, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Dr A Dale Kaiser professor of biochemistry, has been appointed chairman of the department of biochemistry at Stanford University School of Medicine.

Kaiser succeeds Dr I. Robert Lehman, who resigned last month to resume full-time teaching and research.

The appointment, effective September 1, was announced recently by Dr. Lawrence G . Crowley, Acting Dean of the Medical School.

Kaiser, who has been a member of the department since 1959, "is one of the world's outstanding scientists," said Dr. Arthur Kornberg, Nobel laureate and professor of biochemistry.

His pioneering work with the bacteriophage lambda, a virus which invades bacteria, led to better understanding of how viruses infect cells, and how their genes are inserted into those of the host.

In 1970, Kaiser received the U.S. Steel Foundation Award in Molecular Biology by the National Academy of Sciences (NAS) in recognition of his work.

Kaiser is now studying the control of development in the social bacterium, *Myxococcus xanthus.*

In addition to his research achievements, "he is a very devoted and excellent teacher," Kornberg said. "He is sought out for advice and guidance by graduate students at all levels of training."

A native of Ohio, Kaiser, 51, received his Bachelor of Science degree from Purdue University in 1950, and his doctoral degree in biology at California Institute of Technology in 1955.

He was a fellow of the American Cancer Society at the Pasteur Institute in Paris, France from 1954 to 1956, and taught in the department of microbiology at Washington University School of Medicine in St. Louis before coming to Stanford in 1959.

Kaiser is a member of several societies, including the NAS, and the American Academy of Arts and Sciences. He has authored over 70 publications, and is on the editorial board of the *Annual Review of Genetics.*

His administrative responsibilities have included membership on the University Committee on Research, and on the University and Medical School Senates.

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Mailed Friday, September 14, 1979

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

EDITORS: Details follow asterisks.

FOR IMMEDIATE RELEASE

STANFORD --

Stanford University faces fines totalling $3,585 for alleged violations of health and safety regulations, state officials told the University informally Thursday, Sept. 13.

The University may appeal after official notification is received later this month. In June, Stanford University Hospital was cited for violations carrying a total fine of $1,800.

Repeated violations in the future could carry much greater fines.

The proposed fines against the University include:

* $1,000 for having containers of chemical carcinogens (cancer causing agents) stored outside a regulated area in chemistry, physics, and the Medical School;

* $1,000 for leaving a small vinyl chloride container unused in a chemistry lab;

* Two $500 fines for failing to report the location of two of the carcinogens and vinyl chloride to government officials;

* $235 for failing to post proper notices and follow other regulations for carcinogens kept in locked cabinets, drawers and shelves at the Medical School and in chemistry;

* $140 for failing to properly secure containers of concentrated acids and bases in a physics laboratory;

* $140 for failing to promptly clean up a barium oxide spill in physics; and

* $70 for seven instances of unchained gas cylinders in Plant Services, physics and chemistry.

Jack Sidlow, University manager of health and safety, said many of the violations already have been corrected. Others can be done soon. Most have 30 to 60 day abatement periods.

None involved any allegations of injury to individuals.

* * *

Lawrence S. Wong and John McGuire, state industrial hygenists, found 18 technical violations during 10 visits to campus over the last five or six months.

They indicated Stanford was "pretty much the same" as other universities, although "for the size of the staff, you've done a pretty good job." Health and safety officers often have a tough time "getting through" to researchers on the importance of safety procedures, they noted, UC-Berkeley was similarly cited in June.

(more)

The officials comments and informal discussion among University administrators afterwords pointed up the need for Stanford to establish at least one central storage facility for chemical carcinogens. This requires negative air pressure (to prevent release of carcinogens), careful posting of procedures, and training of users according to federal and state rules.

Fourteen chemicals are covered by these rules:

1. 2-Acetylaminofluorence
2. 4-Aminodiphenyl
3. Benzidine (and its salts)
4. 3,3'-Dichlorobenzidine (and its salts)
5. 4-Dimethylaminoazobenzene
6. alpha-Naphthylamine
7. beta-Naphthylamine
8. 4-Nitrobiphenyl
9. N-Nitrosodimethylamine
10. beta-Propiolactone
11. bis-Chloromethyl ether
12. Methyl Chloromethyl ether
13. 4,4'-Methylene (bis) 2-chloroanilinc
14. Ethyleneimine

The University of Colorado already has four high containment facilities for these carcinogens, Sidlow noted. SRI International handles these materials well, Wong and McGuire indicated.

Several of the violations cited at Stanford involved materials which were seldom used, Sidlow said. "For safety's sake:

* "It's important for all laboratories to let the Health and Safety Office know the location and amounts of carcinogenic chemicals used in research.

* "When these materials are rarely used, they should be disposed of promptly and properly.

* "When noncarcenogenic alternatives are available, these should be used.

* "Even small amounts, improperly stored or accounted for, can result in substantial penalties. Fines can be doubled if similar violations are found anywhere on campus within three years."

Special care also is indicated for such substances as asbestos, acrylonitriles, and arsenic compounds, Sidlow added. The number of hazardous materials probably will grow with time.

Although state and federal rules were designed to cover large quantity users, such as industry, they offer no special consideration to research or teaching institutions.

The review of Stanford compliance with CAL/OSHA (California Occupational Health and Safety Administration) rules is believed to have been triggered by employee concern over spray painting of acoustical ceilings containing small amounts of asbestos at Escondido Village.

(more)

The University was not cited for any violation there. Air samples taken at the site showed extremely low levels of asbestos fiber. The painting was designed to permanently seal the asbestos.

An information memo from the state will indicate the need to clean up asbestos particles promtly, Wong and McGuire said.

This memo also will cover acrylonitrile regulations, which lapsed briefly during the compliance study at Stanford but have been in effect since mid-June.

In 1977, the University organized a biohazards task force. In a report last year, it called for creation of a new Administrative Panel on Chemical Biohazards, said the list of regulated chemical carcinogens should be circulated to principal investigators, and noted that carcinogens should be stored in specifically approved locations.

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EDITORS: Sidlow may be contacted at 497-3201; Wong and McGuire at (415) 540-2673.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Constance Hellyer 415: 497-7603 or
Spyros Andreopoulos 415: 497-6911

STANFORD—

An endowed professorship has been established in the Stanford University School of Medicine by a gift from Dr. and Mrs. George H. Becker of San Francisco.

The new chair will provide support for faculty members whose work relates to "the alleviation and prevention of disease," according to acting dean Lawrence G. Crowley, M.D., who made the announcement yesterday for the Board of Trustees.

The chair will be named in honor of Dr. Becker's parents, George E. and Lucy H. Becker. The first holder of the professorship has not yet been named.

In making the gift, Dr. Becker, who practiced internal medicine in San Francisco for many years, said, "My parents and my profession have been very good to me. I would like to show my appreciation in a lasting way."

Dr. Becker is a 1921 graduate of the Stanford University School of Medicine, a diplomate of the American Board of Preventive Medicine and Public Health, and a fellow of the Royal Society of Health in Great Britain.

He has served as director of the Bureau of Communicable Diseases of the San Francisco Department of Public Health, vice-president of the Independent Order of Foresters with responsibility for their tuberculosis hospital and aged residents' home, and a member of the Irwin Memorial Blood Bank Commission.

Dr. Becker's many civic activities include leadership in the Tuberculosis Society, Community Chest, American Legion, United Service Organizations (USO), and the San Francisco Young Men's Christian Association (as president during World War II).

Dr. Becker is also one of the founders of the United California Bank.

Born in San Francisco, Dr. Becker graduated from Lowell High School and received his A.B. in science from the University of California in Berkeley.

He and his wife, the former Miriam Casperson of San Francisco, were married in 1924. They have travelled widely and share many philanthropic interests.

Dr. Becker's father, for whom the professorship is named, emigrated from Germany in the 1880s. He became associated with, and later managed, a San Francisco drayage firm.

His wife, the former Lucy Hanson, who is also named in the title of the chair, was born in San Francisco of Scottish parents. She served as a worthy matron of the Yerba Buena chapter of the Daughters of the Eastern Star.

Dr. Becker remembers his mother Lucy as "a truly remarkable woman. She possessed the rare realization that youth is endowed with a 'Holy Curiosity,' as Einstein put it, and mine was never suppressed."

—30—

Mailed Wednesday, September 12, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD --

Although director Dr. Kathryn Beadle is on a 10-month leave, Stanford's Speech and Language Clinic is continuing its many diversified programs.

Donna Dagenais is serving as acting director of the clinic, which deals with speech problems in children and adults. Tutoring for children in small groups is also provided.

A special program for stroke victims has also been offered at the clinic.

The clinic's tutoring program differs from usual clinic therapy. The focus is on specific learning problems children bring home from school, such as homework or concepts they cannot understand. Many of the children have underlying developmental speech and language disorders.

Beadle is serving as associate professor at Los Angeles State University during her leave from Stanford.

Mailed Tuesday, Sept. 25, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

"Stanford Medical School—The San Francisco Years," will be the featured presentation at a meeting of the Stanford Historical Society on Sunday, November 4 at 3:30 p.m. in Fairchild Auditorium.

Dr. Alvin Cox, emeritus professor of pathology in the department of dermatology, will present the talk which is open to the Stanford community and the public.

Stanford's School of Medicine originally was a private school in San Francisco known as Cooper College.

In 1908 the properties of Cooper Medical College were transferred to Stanford. All of Stanford's medical and clinical training took place in the San Francisco facilities until 1959, when the School of Medicine moved to new facilities on the university campus.

This is the 20th anniversary of the medical school's move.

Dr. Cox came to Stanford as a freshman in 1923 and has been associated continuously with the university for 56 years. He has been a faculty member for 46 years and was chairman of the department of pathology for 23 years.

He has done pioneering work in the field of environmental carcinogens and is still active in teaching and research at Stanford.

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Mailed Wednesday, October 31, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, 497-6911
FOR IMMEDIATE RELEASE
STANFORD—

The closing of approved radioactive waste disposal sites could affect about 300 research projects at Stanford within a few months, John A. Holmes, the University's senior health physicist, said Wednesday, Oct. 24.

The shutdown will have no immediate effect, since the University sent a shipment to Washington state which was buried there before that site was closed.

Holmes already has asked campus users of radioactive materials to reduce use as much as possible intil the situation is clarified.

The University has three or four shipments a year totaling about 170 55-gallon drums each, Holmes said.

"We're extremely cautious and always use proper disposal techniques."

Prof. Philip C. Hanawalt, biological sciences and chairman of the University's radiological hazards panel, stressed that the hazards from radioactive materials used in university research are miniscule compared to hazards generated by industry.

Stanford recently hosted the annual conference of California campus radiation safety officers. In a letter to Governor Dixie Lee Ray of Washington, the 18 participants urged action to reopen the site.

The letter said:

"Because we have responsibility for radioactive waste disposal from university research programs, we are facing a dilemma as to how such research can continue.

"We may well have to curtail vital medical and biological research on major campuses throughout the state.

"We ask that you not impose unduly restrictive regulations on our ultra low-level wastes which present minimal hazards, in contrast to the much higher activities and concentrations of low level waste from industry.

Similar letters were written by John Hickman, radiation safety officer at UC-Davis, to the governors of Nevada and S. Carolina which is now the only open site.

Among projects that could be affected are research efforts at Stanford Medical Center, Palo Alto Veterans Medical Center, Children's Hospital at Stanford, Carnegie Institute, and Hopkins Marine Station.

Projects include most basic chemical and biochemical research, including recombinant DNA, and cancer therapy temporary implants which use radioactive iridium with a half-life of only 60 days.

In the basic research projects, two commonly used radioactive tracers are Carbon 14 and Tritium. Both are low risk radioisotopes, but have long half-lives, requiring safe storage until they decay.

Radioisotopes used in diagnosis and treatment by nuclear medicine have very short half-lives and could be stored on the campus disposal facility until rendered harmless.

Holmes said Stanford has always taken a very conservative approach and has shipped its radioactive wastes in special containers prescribed by the U.S. Department of Transportation following all burial requirements.

Stanford, he added, could get by for a couple of months storing the wastes in its own facility, and doing everything possible to reduce use.

"But California needs state action to have available a properly operated burial site for radioactive wastes generated by vital biomedical research programs," he added.

10-25-79 —30—

EDITORS: Holmes' office phone is 497-3201.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Wanted: pleasant, caring people willing to spend several hours a week helping hospital patients. The pay? None. The rewards? Numerous.

This is not your typical "help wanted" advertisement, but then the Stanford Medical Center Auxiliary is not your typical organization either.

The auxiliary, which provides a myriad of patient-related services for Stanford Medical Center, is seeking additional men and women volunteers for its ranks that have been taxed recently by the uncertain economic climate.

The volunteer organization, which currently has about 350 active members, is hoping to recruit adults (and teenagers for its junior auxiliary) from the peninsula, explained auxiliary president Ann Markevitch.

"In a time when many people are seeking paid work due to economic necessity, they may forget that they can still give a few hours each week on a volunteer basis," Markevitch noted. "Unlike many activities, it (the auxiliary) brings a lot of satisfaction and friendship as well."

The auxiliary is celebrating its 50th anniversary this year, and in that time its members have logged some 1.4 million hours of service. Although the auxiliary was originally formed at the old Palo Alto Hospital, it became the Stanford Medical Center Auxiliary when the present university medical center site opened in 1959.

"Our auxiliary provides us with an invaluable service," commented hospital administrator Gary Mecklenburg.

"Its many services are all designed to assist us in the care of our patients, to make their stay in the hospital a more comfortable one. Auxiliary members provide that very important 'human touch' in the care our patients receive.

"In an era of heavy emphasis on cost containment, the auxiliary maintains 'extra services' that might be given up in a tight budget."

Mecklenburg noted that the auxiliary annually donates thousands of dollars worth of equipment for nursing units and departments in the hospital and medical center. In addition, it has provided nearly $155,000 in short-term loans to young interns and residents since 1962.

The auxiliary also provides two annual scholarships, one for an outstanding junior volunteer, and the other to Stanford Medical School, which in recent years has been awarded to a second year student in the master's program of the Division of Physical Therapy.

Auxiliary members work in the volunteer organization's 14 different services in the main medical center and at Hoover Pavilion, which is also a part of Stanford Hospital located near the Stanford Shopping Center.

Peninsula residents interested in joining the Stanford Medical Center Auxiliary may call (415) 497-6636 weekdays. Orientation meetings for prospective members are held the first Saturday and third Wednesday of each month.

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Mailed Wednesday, Oct. 24, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

EDITORS: ADVANCE FOR PM RELEASE ON WEDNESDAY, OCTOBER 24, 1979

STANFORD—A study by researchers at Stanford University School of Medicine and the American Dental Association has found important health problems among dentists and their assistants, associated with the use of anesthetic gases.

The problems include increased rates of liver, kidney, and neurologic disease, increased numbers of miscarriages among wives of male dentists and among female assistants exposed to trace concentrations of the gases, and a greater incidence of birth defects in the children of exposed female assistants, compared to those not exposed.

The implications of these findings are of concern to the health of approximately 100,000 dental personnel who are exposed to anesthetic gases in the U.S., said Dr. Ellis Cohen, professor of anesthesia at Stanford. However the results observed could be influenced, as in any epidemiologic survey of this type, by unrecognized reporting biases within the study respondents.

The findings were reported October 24 at the annual meeting of the American Society of Anesthesiologists in San Francisco, and presented simultaneously in Dallas at the annual American Dental Association (ADA) meeting by William Greenfield, DDS, chairman of an Ad Hoc ADA Committee on trace anesthetic gases.

The study, which is supported by grants from the National Institute for Occupational Safety and Health (NIOSH), began in June, 1978, and is scheduled for completion next year.

Questionnaires were sent to 64,000 dentists and dental assistants. Respondents were asked to estimate their occupational exposure to anesthetic gases, such as nitrous oxide and halothane, and to complete a brief personal health history for the 10 year period, 1968-78.

Over 22,000 dental assistants and 21,000 dentists responded to the survey, and 23,000 pregnancies which occurred during the sample period were reported.

Among the dentists who responded, 42 percent said they used anesthetic gases regularly in their practices. Approximately one-third of that group were "heavy users," using the agents more than nine hours per week.

The study found:

• among heavily anesthetic-exposed dentists, an increase in liver disease from 1.9 to 3.2 cases per 100, an increase in kidney disease from 2.4 to 2.9 cases per 100, and an increase from 0.35 to 1.35 cases per 100 in non-specific neurological disease (numbness, tingling, and weakness) relative to the group reporting no exposure to the anesthetic gases.

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• among heavily exposed female dental assistants, an increase in liver disease from 1.0 to 1.6 cases per 100, an increase in kidney disease from 2.4 to 4.1 cases per 100, and an increase in non-specific neurological disease from 0.45 to 1.98 cases per 100 relative to the non-exposed group of assistants.

• the rate of spontaneous miscarriage was increased from 6.7 per 100 in the control group to 11.0 per 100 among wives of heavy anesthetic-exposed dentists, and from 7.6 cases per 100 in the non-exposed to 17.5 cases per 100 in heavily exposed female dental assistants.

• birth defects increased from 3.6 to 5.9 per 100 among children of exposed female assistants, however, no increase in birth defects was reported in children of exposed male dentists.

• cancer incidence was unchanged among male dentists, but the rate among exposed female assistants appeared somewhat higher than among those unexposed.

A study of individual anesthetic gases used in dental offices revealed that nitrous oxide was the sole agent reported by 81 percent of those dentists using anesthetic gases.

Nitrous oxide, commonly known as "laughing gas," has always been considered to be inert and nontoxic. However, this study indicated that "significant health problems appear to be associated with the use of nitrous oxide alone," Cohen said.

It is presumed that patients themselves are not at risk because they are exposed only briefly to the anesthetic agents. The present study was designed to investigate dental personnel who are chronically exposed to trace concentrations of anesthetics.

Because dentists work close to the patient's open mouth, and tend to use larger volumes of the gases to maintain effective anesthesia, they may receive two to three times the dose of anesthetic gases as operating room personnel, said Cohen. Fortunately, control measures are available which assist substantially in reducing dental anesthetic exposure to acceptable levels.

Stanford and the ADA began the research at the request of the National Institute for Occupational Safety and Health after a similar study by the American Society of Anesthesiologists in 1974 revealed increased rates of liver disease, kidney disease, miscarriage and birth defects among male and female hospital operating room personnel, and increased rates of cancer among female personnel exposed to trace amounts of anesthetic gases. Subsequently, the ADA, working together with the ASA, alerted its membership to a similar potential problem in dental personnel.

In addition to Cohen and Greenfield, the research was conducted by Dr. Byron Brown and Ms. Marion Wu, of the Division of Biostatistics at Stanford Medical School, Drs. Charles Whitcher and Jay Brodsky, of the Stanford Anesthesia Department, Dr. Helen Gift, director of Economic Research of the American Dental Association, Dr. Thomas Jones, of the Department of Oral and Maxillofacial Surgery, University of Alabama, and Dr. Edward Driscoll, consultant for the National Institute for Dental Research.

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Mailed Tuesday, October 23, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia (415) 497-6911

Editors: Photographs of the speakers are available if not included with the release.

STANFORD—

Health hazards associated with sports will be explored by six Stanford University physicians in the autumn Progress in Medicine Lectures sponsored by Stanford School of Medicine.

"Sports Medicine" will be the subject of the three successive Tuesday lectures beginning Oct. 30. Each talk is open to the public and will begin at 7:30 p.m. in Kresge Auditorium at Stanford Law School on campus.

Drs. William Haskell and Peter D. Wood will discuss "At the Starting Line," a review of the physiology, body conditioning and nutrition for sports participants, in the first lecture Oct. 30.

Haskell is associate clinical professor of medicine in the Stanford Heart Disease Prevention Program, while Wood is adjunct professor of medicine, and deputy director of heart disease prevention.

"From the Heights to the Depths," a look at the special joys and dangers of skin diving, climbing, skiing, and scuba diving will be discussed by Drs. Herbert N. Hultgren and Alfred Spivack on Nov. 6.

Hultgren is professor of medicine and chief of cardiology services at Veterans Administration Medical Center in Palo Alto, while Spivack is clinical professor of medicine.

Drs. K. Gordon Campbell and Michael Dillingham will discuss "On the Playing Fields," a review of contact sports, racquet games and running, on Nov. 13.

Campbell is clinical associate professor of surgery and an orthopedic surgeon in the Department of Sports Medicine at Palo Alto Medical Clinic. He is also the team physician to the San Francisco Giants.

Dillingham is director of the Sports Medicine Clinic, Division of Orthopedics.

The Progress in Medicine Lectures are presented as a community service by the dean and faculty of Stanford Medical School, and by the Medical Center Council.

Although admission is free, seating is limited and will be on a first come basis.

Mailed Monday, Oct. 22, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Stanford medical students performed far better in Part I of the National Board Examinations in 1979 compared with last year, the office of student affairs of the Stanford University School of Medicine said Monday, October 22.

Information distributed to faculty and students by Dr. John Steward, associate dean for student affairs, shows that only 15 percent of the 87 students taking the examination in 1979 failed all or part of it compared to 37 percent last year and 27 percent in 1977.

The percent of medical students failing the entire exam in 1979 was as low as any year among the past nine years, Steward reported.

For the six years prior to 1977 the average percent of students failing all or part of the exam was 15 percent.

Part I of the examination, administered in July and September by the National Board of Medical Examiners, tests knowledge in the basic sciences, and usually is taken after two years in medical school.

Part II of the exam tests knowledge in the clinical sciences. The performance of Stanford students in that portion of the examination has been quite constant over the years. Passing both parts is a requirement for a medical degree at Stanford.

The medical students' falling scores in the basic science examination had caused concern among the faculty last year, even though the reasons for the decline were unclear, according to Steward.

"It is more clear now," he said, "that it is probably related to attitudinal factors. Students did not take the tests as seriously as had previous classes. Studies done last year could not associate the falling performance in 1977 and 1978 with any changes considered by the admissions committee in the selection of students."

Nevertheless, the faculty senate of the School, responsible for the curriculum, took steps last summer to strengthen the system of evaluating student performance.

The measures range from improved counseling of students with marginal performance, better procedures to inform students of their progress, to dropping under certain conditions the failing students from the M.D. program.

Stanford medical graduates have, however, competed extremely well for desired internships, Steward noted.

In 1979 more than 70 percent of the M.D. recipients were successful in obtaining one of their first three choices of internship appointments.

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Mailed Monday, October 22, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Dr. Otto A. Mortensen, visiting professor emeritus of anatomy at Stanford University School of Medicine, died Thursday, October 18, at Stanford hospital after suffering a heart attack at his home in Menlo Park.

He was 77.

A native of South Milwaukee, Wisconsin, Dr. Mortensen received his M.D. in 1929 from the University of Wisconsin Medical School in Madison.

He joined the Department of Anatomy at the University of Wisconsin in 1930 as an instructor, advancing to full professor in 1946, and chairman of the Department in 1950.

Dr. Mortensen also served as associate dean of the University of Wisconsin Medical School from 1952 to 1967, and continued to teach until he retired in 1972. He came to Stanford that year.

In addition to his teaching activities, Dr. Mortensen served on the National Board of Medical Examiners, Anatomy Section, from 1958 to 1962, and as vice-president of the American Association of Anatomists from 1960 to 1962.

He received the distinguished service award from the Wisconsin Medical Society in 1967, and is listed in *Who's Who in America.*

Dr. Mortensen is survived by his wife, Lila, and three children, Mrs. Margaret Wolberg of Madison, Wisconsin, Dr. Charles O. Mortensen of Muncie, Indiana, and Peter A. Mortensen of Hilton Head, South Carolina.

Memorial services will be held at the Stanford University Memorial Church on Saturday, October 27 at 4:30 p.m. Memorial contributions may be given to the Otto A. Mortensen Memorial Lectureship in Anatomy, at the University of Wisconsin Medical School, or to the Stanford University Medical Student Scholarship Fund.

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Mailed Friday, October 19, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

EDITORS: Photographs of Thomas and Arnold are available if not included with the release.

STANFORD—

Donald R. Thomas has been appointed director of personnel, and William W. Arnold a new assistant administrator, both at Stanford University Hospital.

Both appointments are effective immediately, according to hospital administrator Gary Mecklenburg.

Until recently Thomas served as director of personnel management and employee relations at the University of Pennsylvania Hospital in Philadelphia.

At Stanford Hospital he is responsible for employment, compensation and benefits, employee relations, education and development, employee health, and daily activities of the personnel department.

Arnold was assistant administrator of Santa Barbara Cottage Hospital, where he had responsibilities for a number of administrative programs.

Prior to that he was an administrative resident at the same hospital.

A graduate of Menlo College, Arnold also received a B.A. from the University of Washington in Seattle, and a master's of public health from UCLA.

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Mailed Monday, October 15, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911
or Vicki Applegate 415: 327-4800

City Desks: The following story is released jointly by the Children's Hospital at Stanford, and the Stanford University School of Medicine.

STANFORD--

The Children's Hospital at Stanford, and the department of pediatrics of the Stanford University School of Medicine will consolidate their outpatient pediatric services in a single program known as Stanford-Children's Ambulatory Care Center.

The center, which will be located at Children's Hospital on Willow Road across from the Stanford University Medical Center, will encompass all of the outpatient pediatric programs previously divided between the two independent institutions.

The move involving the relocation of the general pediatric clinic and 16 pediatric specialty clinics from Stanford to Children's Hospital is expected to take place in November.

Children's Hospital and Stanford, however, will continue their special inpatient treatment programs, and children seen at the ambulatory care center who require hospitalization will be admitted to each hospital according to need.

The center will be directed by Dr. Ruth T. Gross, McCormick professor of pediatrics and head of ambulatory pediatrics at the medical school.

The agreement to create a full-fledged ambulatory care center in a single location was announced Monday, (October 8) by Harold R. Walt, chairman of the Children's Hospital board of directors, and Dr. Lawrence G. Crowley, acting vice president for medical affairs and dean of the medical school.

The agreement which took more than a year of negotiations contains provisions to strengthen the joint missions of the two institutions without detracting from their separate identities.

"The medical staff and administrations of Stanford and Children's Hospital desire to provide the best medical care for children," said Walt and Crowley in a joint statement.

"This requires using our facilities, staffs, and equipment to fullest advantage. We believe the development of an integrated Stanford-Children's Ambulatory Care Center is a significant step in this direction," the statement said

John R. Williams, acting executive director of Children's Hospital, noted that the new clinic structure represents a consolidation of programs, and not a merger of institutions. The basic affiliation agreement, linking Children's Hospital and Stanford through a teaching program, remains unchanged.

In the new setting, Children's Hospital will provide space, nursing and support staff and ancillary services, and Stanford will provide medical staff and the postgraduate educational program, he said.

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Dr. Irving Schulman, Kendrick professor and chairman of the Department of Pediatrics, said the move will strengthen the scope and intensity of the long association between the medical school and Children's Hospital.

"The goal," he said, "is to create a strong single children's medical center program with two institutions owned and managed by separate governing bodies but sharing common professional goals."

He described the goals as follows:

- to provide exemplary medical care for children.
- to serve as a regional referral center.
- to provide excellent teaching and training for students, residents, fellows, physicians, and allied health professionals.
- to advance knowledge of diseases of children through research.
- to eliminate unnecessary duplication of facilities and services.

Children's Hospital, an independent nonprofit institution, and Stanford University School of Medicine have maintained close ties for years, according to Walt. In the early seventies, through joint planning, several patient care and research programs directed by Stanford faculty were located there as part of the patient care, education, and research programs of the school.

These included treatment programs for cancer, allergy and immunology, orthopedics and rehabilitation, and child psychiatry.

Pediatric outpatient programs now scheduled to move from Stanford to Children's Hospital in November include the general pediatric clinic and clinics for adolescent medicine, cardiology, endocrinology and metabolism, gastroenterology, genetics, hematology, nephrology, neurology, and surgery.

Dr. Gross, who also heads a general pediatrics training program under the auspices of the Robert Wood Johnson Foundation, said:

"Stanford and Children's Hospital are interested in developing an expanded ambulatory care program in the interests of pediatric care and teaching and training.

"It is only appropriate that we do it in a facility which is adequate to meet the program needs."

Gross said that today's pediatricians are increasingly occupied with a variety of chronic illnesses, handicapping conditions, and disorders of behavior and learning.

"The care of children with these conditions requires the skills of the general pediatrician trained in the ambulatory setting," she said. "Until now the training in general pediatrics has been primarily hospital based."

As a result, Gross said, young pediatricians in training have had less opportunity to become familiar with many of the clinical problems they will deal with in pediatric practice.

"We are taking a much broader view of the health needs of children," Gross said, "by giving greater emphasis on emotional and developmental needs, learning disorders, adolescent medicine, and the impact of chronic disease on children and their families."

Presently, physicians and the administrative staffs of the two institutions are taking steps to keep all patients informed of the move and make the transition as smooth as possible.

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Mailed Monday, October 8, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

In honor of the International Year of the Child, an open house for the public will be held in the Pediatrics Department at Stanford University Hospital Sunday, Oct. 21, from 1:30 to 3 p.m.

A series of events are scheduled that afternoon by the pediatrics staff to demonstrate child and health care teaching at Stanford.

These include a pediatric orientation, parent-staff discussion on hospitalization, special "play sessions" for children, and health care exhibits.

The event, which will be held in the pediatric clinic area (third floor of the hospital), will also provide an opportunity for the public to meet with health care consultants.

Judy Lanigan, assistant director of Nursing Service at Stanford Hospital, is coordinating the open house, along with Pat Moylan, Betty Lovelace and Judy Cramer.

In addition, Eleanor Hedenkamp and Pat Schnider are planning to develop a series of displays for the hospital with the U.N. International Year of the Child theme.

Reservations by Oct. 17 are encouraged by calling Linda Wong at (415) 497-7540 or 497-5096.

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Mailed Monday, October 8, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

Editors: Photographs are available if not included with the release

STANFORD—

Stanford University Hospital's West Nursery has been re-opened after undergoing a complete renovation. At the same time, remodeling has begun on the hospital's Neonatal Intensive Care Unit (East Nursery).

The renovation projects, which are costing about $1.6 million, are designed to improve infant patient care. Upgrading of the units will also help the hospital meet tightened state and federal licensing and accreditation requirements.

The remodeled West Nursery, which is primarily for infants in normal health, can house 23 bassinets.

The unit now features additional space between bassinets, well-lit rooms and modern pediatric monitoring equipment, explained Gary Rotzin, associate director of facilities at the hospital and primary project coordinator for the West Nursery renovations.

"We are very pleased with it," he noted, "as are the pediatric nurses on the unit. This represents a major improvement in the care of infants at Stanford."

Drawings for the Neonatal ICU were approved recently by the Offices of Development and Licensing of the State of California. The project, which began earlier this month, should take approximately 10 months, Rotzin predicted.

The Neonatal ICU has been chronically short of space, and the nursing staff threatened to resign en masse about a year ago unless the renovations were made. The situation was complicated when plans for the project were unexpectedly delayed.

In addition to Rotzin, other hospital staffers involved in the West Nursery project were health services planner Betty Rose and Gordon MacLachlan, project coordinator.

STANFORD—"What Can We Do With Pain?," a public seminar on resources available for dealing with pain will be held Tuesday evening, Oct. 16, in Fairchild Auditorium at Stanford University Medical School.

Community clergy, social workers, medical students, members of hospital auxiliaries and allied health professionals are invited to attend the session, which will be held from 5 to 9:30 p.m.

Among the participants will be Stanford University Hospital chaplain Rev. Ernie Young and Dr. Lorne Eltherington, associate professor of clinical anesthesia.

A fee will be charged, which includes a box supper. For further information call the hospital chaplain's office at (415) 497 5101.

Mailed Thursday, Oct. 4, 1979

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

A team of investigators at Stanford University is looking for 400 women volunteers between the ages of 35 and 65 for a study on the changes women experience related to menopause.

Women may qualify if they have noticed changes in their menstrual periods which might indicate menopause is approaching.

These would include recent changes in cycle length or a cessation of menstrual periods, provided the last one occurred within the last two years.

Dr. Winnifred Cutler, postdoctoral fellow in charge of recruitment of participants for the study, says it is one phase of a larger investigation on certain aspects of aging in men and women.

Dr. Julian Davidson heads the aging studies which are being conducted in the department of physiology and are funded by the National Institutes of Health.

"Although menopausal women are subject to biochemical changes at least as great as those of puberty, few large scale studies in this area have been made," notes Cutler.

"This is an opportunity for volunteers to contribute to knowledge on an issue of great importance to women," she adds.

Cutler explains that menopause difficulties represent a relatively recent problem and are apparently unique to humans.

"In the 17th century, less than 28 percent of the female population lived to experience it, and only about five percent reached age 75.

"Today in developed countries, 96 percent of women experience menopause and 50 percent reach age 75."

Some common symptoms of menopausal distress include insomnia, depression, hot flushes and muscle and joint pain, as well as sexual difficulties, Cutler says.

"We hope to learn what changes women experience and to be able to identify those changes that are a consequence of normal aging of the ovary.

"Understanding this relationship is the first step toward the development of an effective treatment of menopausal symptoms," she adds.

Two types of participation are available. In the first, 400 women will be asked to fill out a variety of questionnaires, anonymously and confidentially, during two private interview sessions, each lasting less than an hour.

The interviews will be scheduled several weeks apart and may be conducted in the participant's home or at the Stanford physiology department, according to the participant's choice.

Cutler also needs 20 research assistants to work with her in conducting the interviews The research assistants should commit three hours per week for 12 weeks

The schedule is flexible and can be arranged to suit the needs of the research assistant, she says.

Anyone interested in volunteering should phone the department of physiology at (415) 497-2432 and leave her name and telephone number so that Cutler may return her call.

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Mailed Wednesday, October 3, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Alcoholism among teen-agers represents a serious, and growing problem which demands the intervention of pediatricians as well as parents.

According to Dr. Stephanie Brown, associate director of the Alcohol Clinic at Stanford University Medical Center, between 30 and 50 percent of teen-agers are confirmed moderate drinkers by the time they reach adulthood.

Among adolescents, the onset of alcoholism is extremely rapid. Some young people have become alcoholics within six months of taking their first drink, Brown said.

"And if untreated, the teen-age alcoholic is bound to continue into the adult alcoholic," with corresponding social and physical problems, she said.

Brown spoke to community and Medical School faculty physicians at the Pediatric Department's grand rounds Friday, September 28.

She said one possible reason for the increasing rate of teen-age alcoholism is the fact that many teen-agers have switched from drugs, which are illegal and relatively difficult to obtain, to alcohol, which is more socially and legally acceptable, and which also provides a "high."

"The teen-age drinker may be the inner-city, street-wise kid," Brown said. "Here, drinking often is a part of a network of misbehavior," including delinquency and crime.

But he or she also may be a middle or upper class youth, who exhibits conventional behavior, and is seen by others as a high achiever.

"These teens usually drink in order to cope with the pressures of living," she said. As it is true of most adolescents, they may feel insecure, but they believe that drink will give them what they lack. "Their self-esteem is regulated through the use of alcohol," she said.

Unfortunately, Brown said, even if a drinking problem is spotted in these young people, usually no intervention is attempted, because "they are doing so well."

After all, drinking is the norm for adults. And if adolescents are to continue to see themselves as normal, they must begin to drink.

"This would be less of a problem if we had standards for learning drinking behavior," she said. "But we don't. In fact, drinking among teens is illegal. We have a double standard that actually may contribute to the problem."

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Because teen-agers learn that they must hide alcohol and drink it quickly, lest they get caught, they unwittingly copy the secretive drinking patterns typical of adult alcoholics.

Family problems also contribute to teen-age drinking. The child of an alcoholic is much more likely to repeat the pattern, Brown said.

For some children, alcohol becomes an object replacement for a rejecting or unavailable parent. "These children symbolically ingest that individual when they drink," she said, "and it becomes as difficult to separate them from alcohol as it is to break a close human bond."

Physicians face a tremendous challenge in treating teen-agers with drinking problems. "Often the young person refuses treatment, and denies vehemently that he or she even has a problem with alcohol," Brown said.

Physicians can overcome this denial by beginning with a discussion of the problem areas in their patient's life—difficulties in forming friendships, poor performance in school, or troubles with the police—and relating these problems to drinking.

In addition, it may be necessary to include the family in therapy, particularly if family members have contributed to the teen-ager's drinking problem.

But most important, physicians must accept no excuses from the patient with a drinking problem. "The teen must be treated as a potentially responsible adult who is on the path to self-destruction," Brown said.

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Mailed Tuesday, October 2, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD—

Couples in which one partner has diagnosed high blood pressure due to personal or social stress are being sought for a research study at Stanford University Medical School.

According to Dr. Craig Ewart, a psychologist and research associate in Stanford's Behavioral Medicine Laboratory, couples volunteering for the one week study will be interviewed, asked to complete a confidential questionnaire and have their blood pressure monitored during the sessions.

Those volunteers showing "significant changes" upon completion of the week-long testing will be asked to participate in followup training program lasting three additional weeks, Ewart noted.

"We want to show them how the social environment affects their blood pressure, and teach them to cope more effectively with this stress.

"Research shows that social stress may be involved in about 30 percent of today's hypertensives," Ewart explained. "This stress may be caused by a work situation, overbearing and abusive people, distressful marriage--a myriad of things.

"What we want to do is to map the problem of personal stress and its effects," he concluded

Ewart said those volunteering should be able to bring their spouse or mate with them for the sessions. The studies are conducted at no cost.

Those interested should contact Ewart or Dr. C. Barr Taylor at the Stanford Behavioral Medicine Lab, Room TD 205, Stanford Medical Center, Stanford, Calif. 94305. Telephone (415) 497-5065.

Mailed October 2, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Sleepless nights, declining sexual activity, and loss of memory are not inevitable consequences of aging, according to three Stanford University psychiatrists.

Often, these problems stem from physical disease, or even fulfill social expectations about aging, and therefore can be prevented.

The psychiatrists, Drs. William C. Dement, Herant A. Katchadourian, and Jerome A. Yesavage, spoke Thursday night, November 29 to a full house at the Medical School's Fairchild Auditorium. The program was sponsored by the Friends of Psychiatry and Behavioral Sciences.

About 40 percent of people over age 65 complain about their sleep, said Dement, who directs the Stanford University Sleep Disorders Clinic and Research Center.

Does this reflect that older people are less able to sleep well, or that they simply need less sleep?

"Normal sleep which is deep allows us to be zestful and alert during the day," Dement said. If the need for sleep decreased with age, one would expect daytime alertness to remain the same.

If, on the other hand, the ability to sleep declined, it would be reflected in deterioration of daytime alertness, concentration, and even memory, he said.

This is what is found in many older patients, he added.

Dr. Mary Carskadon, a staff member of the Sleep Research Center, studied the sleep of 24 elderly people who were healthy and had no complaints about their sleep.

Surprisingly, 12 of them exhibited sleep apnea, the cessation of breathing during sleep. This disorder, estimated to afflict between 50,000 and 100,000 Americans of all ages, is characterized by excessive snoring and daytime sleepiness, and can lead to heart disease, stroke, or even death.

Dement said that poor sleep is not a consequence of aging per se, but can be accounted for by disease. "If we can eliminate the disease (in this case by drugs to stimulate breathing during sleep), we conceivably might extend the lifespans of these people," he said.

Similarly, memory loss can be linked to diseases such as atherosclerosis and high blood pressure, said Yesavage, who directs the psychiatric intensive care unit at the Palo Alto Veterans Administration Medical Center.

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In addition, scientists believe that a slow down in the metabolism of brain cells may result in memory loss. Yesavage currently is testing an experimental drug, Hydergine, which stimulates brain metabolism, as a means of improving memory.

Psychological treatments also are important in improving memory, Yesavage said. "Memory can be compared to a muscle. It has to be exercised, otherwise we will forget how to remember things," he said.

Like sleep and memory, sexual activity need not decline as one grows older, said Katchadourian, who teaches "Human Sexuality," the most popular undergraduate course at Stanford in terms of enrollment.

Certain biological changes, and an increase in frequency of disease among older persons, can slow sexual responses, but "nothing fundamentally changes in the older individual," he said.

However, psychological problems, such as depression, and even social expectations can hinder sexual activity. "Women particularly are vulnerable to these ideas," Katchadourian said.

While the pairing of an older man with a young woman is considered acceptable, even enviable, the pairing of an older woman with a young man is not, he said.

What can one do? "The best way to preserve sexual vigor is sex itself," Katchadourian said. Physical changes that occur with menopause are less drastic in those women who remain sexually active.

"It's like saving money," he said. "You've got to start early in life."

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Mailed Friday, November 30, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Stanford University School of Medicine and the American Red Cross are working to iron out differences stemming from Stanford's decision to develop its own blood bank, Dr. Lawrence G. Crowley, acting vice president and dean, said Wednesday, November 21.

He issued the statement in response to an article in today's edition of the *Stanford Daily* reporting a rift in Stanford-Red Cross relationships.

The article quoted Dr. Donald Avoy, medical director of San Jose Red Cross, that his organization would file suit for breach of contract unless a new agreement to supply the university and recruit donors in the area was reached soon.

According to Robert Rosenzweig, vice president for public affairs, the policy of the university is to allow blood donor recruitment on campus for all blood banks, as long as they coordinate their drives with the University's blood donor drive coordinator.

The purpose of this policy is to establish not only better communication between local blood banks and the Stanford community, but to assure that the University's own blood bank and its needs are met, he added.

A year ago the University announced its intention to develop its own blood bank located near the Stanford University Medical Center.

The move, the University said, was necessary because of the patient needs of the Stanford University Hospital and academic program needs of the Medical School.

Prior to that Stanford's blood needs were served by a combined effort with the Central Regional Red Cross Blood Services, and located on 3330 Hillview Avenue in the Stanford industrial park.

The present contract with Red Cross expires December 31.

Crowley explained that the Hospital and Medical School have had long-established programs in transplantation, treatment of leukemia, and disorders of the immune system in which the faculty has pioneered new treatments.

"It was determined," Crowley said, "that Stanford, operating its own blood bank and developing certain blood products essential for patient care and academic research in the area of immunogenetics and immunohematology, was essential."

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He noted the University trustees have approved the academic program for the blood bank recently, and have allocated $1.6 million to finance the remodeling of the Redwood Building, 800 Welch Road, which the University has leased for the relocation.

The relocation includes a marked upgrading of research laboratory space, and a greater effort on the part of personnel in the recruitment of donors and processing of blood.

In addition, Crowley said, the closeness of the blood bank to the hospital should also improve patient care by reducing delivery time of specialized blood products.

Initially, Crowley explained, this move was undertaken with the cooperation of the Red Cross which later raised objections to a number of items. These ranged from recruitment of donors to Stanford's working with the Peninsula Blood Bank which supplies part of Stanford Hospital's needs.

At the heart of the dispute, Crowley said, is the philosophy of two different systems of blood banking.

These two systems are of equal quality, but differ in a fundamental way. Peninsula Blood Bank and its affiliates in the American Association of Blood Banks have traditionally argued for the use of a non-replacement or penalty fee as a way of recruiting donors. The Red Cross believes that giving blood is a community responsibility.

"The problem, however, facing Stanford is that it is located in the border zone, right on the edge of the two blood banking philosophies."

Many citizens, he said, who donate blood have their preferences too. There are those, particularly many employees of companies in the Stanford industrial park, who will not donate blood to the Red Cross because it will not give credits.

And there are those who feel, like the Red Cross, that giving blood is everybody's responsibility and should be done without credit.

"If some people won't give blood without credits, it's their business," Crowley said. "And as long as this system is legal Stanford has no right to eliminate a large group of donors who prefer other blood banking systems."

"Our position is to proceed with the development of a Stanford Blood Bank while continuing our discussions to develop a working arrangement for the participation of Red Cross in our program, Crowley said.

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Mailed Wednesday, November 21, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Problems of aging, including sleep disorders, sexuality, and memory loss, will be the subjects of a free public program at Stanford University School of Medicine Thursday evening, November 29.

The program will be held at 8:00 p.m. in the Medical School's Fairchild Auditorium. It is being sponsored by the Friends of Psychiatry and Behavioral Sciences, a public information and fund raising organization associated with the Medical School.

Speakers include Drs. William C. Dement, director of the Stanford University Sleep Disorders Clinic and Research Center, Herant A. Katchadourian, author of the book *Human Sexuality: Sense and Nonsense,* and Jerome A. Yesavage, a geriatric psychiatrist conducting research on memory loss.

Dement, professor of psychiatry, is an internationally-known authority on sleep disorders, and currently is serving as president of the American Association of Sleep Disorders Centers.

Research at the Stanford center includes studies of the effectiveness of sleeping pills, sleep apnea, or cessation of breathing during sleep, and the use of chronotherapy (manipulations of the natural day-night rhythms of the body) to treat insomnia.

Dement is author of the book *Some Must Watch While Some Must Sleep.*

Katchadourian is professor of psychiatry, and Stanford University vice-provost and dean of undergraduate studies.

He originated and teaches "Human Sexuality," the most popular undergraduate course at the University in terms of enrollment.

Recently, he has focused on problems of sexuality during middle and older age.

Yesavage is assistant profesor of psychiatry at Stanford, and director of the psychiatric intensive care unit at the Palo Alto Veterans Administration Medical Center.

Currently, he and his colleagues at the VA are testing pharmacological and psychological treatments of dementia, a syndrome characterized by loss of memory, in the elderly.

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Mailed Wednesday, November 21, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

City Desks: The following story on how Stanford University Hospital is coping with costs is included as a sidebar to Dr. Philip Lee's commentary on costs mailed simultaneously.

STANFORD—

How is Stanford University Hospital attempting to deal with rising costs?

According to Dr. James B.D. Mark, professor of surgery and chairman of a new medical staff committee on voluntary cost containment, the answer is to educate the physician.

"Doctors have a tremendous amount of leverage on the total cost of doing medical business," Mark said.

The committee's first project is a pocket-sized guide listing hospital charges for services that are ordered by physicians.

Called the "Physician Pocket Guide to Hospital Costs," it includes the current prices for various laboratory tests, x rays, electrocardiograms, medications, antibiotic therapy, operating room time, and room rates.

"The idea," Mark said, "is to make physicians aware of costs, so that they can assess benefits in relation to costs."

The committee also is considering other ways of informing physicians about costs, such as sending copies of the hospital bills of a certain percentage of patients to their attending physicians.

In the Stanford University School of Medicine Drs. Peter Rudd and Keith Marton, both assistant professors of medicine, are bringing cost considerations into the early training of physicians.

They have put together a packet of cost information and articles being used in the course "Introduction to Clinical Methods," taught to preclinical students. Versions of this packet will be developed later for clinical students and interns and residents.

Although doctor fees make up only 21 percent of the total personal health care expenditures, recent studies show that doctors control as much as 91 percent of the expenditures for hospital services because of their role as prime decision makers.

And as Mark put it, "increasing expenditures do not necessarily increase quality of care."

The hospital's pocket guide to costs has been well received by the medical staff as judged by the number of requests for copies, officials reported.

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Mailed Monday, November 19, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Common laboratory tests and x rays contribute more to high medical care costs than brain scanners and coronary bypass surgery, a University of California professor said Friday, November 16.

Along with inflation and changes in the complexity of care, it is probably the "nickle and dime" technologies rather than the "big ticket" items that are driving costs up rapidly, especially in hospitals, Dr. Philip Lee said.

Brain scanners have drawn particular attention because they are expensive and highly visible, but most of the costs are elsewhere, he said.

Lee is director of the UC Health Policy Center in San Francisco. He spoke in Palo Alto at the Big Game Medical Alumni Reunion of the Stanford University School of Medicine.

He stressed that fee-for-service, the most common method of paying physicians, encourages them to use medical technologies.

In the past 30 years, he said, the average number of laboratory tests on a patient with a perforated appendix rose from 5.3 to 31. For maternity care, the number of tests rose from 4.8 to 13.5. And the average number of electrocardiograms per patient rose from 5.4 in 1964 to 9 in 1971.

Citing various studies, Lee estimated that the cost for outpatient laboratory tests and x rays reached about $6.7 billion in 1975. A newer study places the price tag for radiologic procedures alone to more than $7 billion in 1978.

"The use of laboratory tests and radiologic procedures is intimately tied to physician behavior and method of payment," he said. "In my judgment it's closely linked to the present policies of insurance companies and Medicare and Medicaid."

About 130 million people in the United States are covered by health insurance policies paying doctors fee-for-service, or the so-called "usual, customary and reasonable charge system."

" This system essentially allows physicians to set their own level of reimbursement," Lee said.

When the government imposes controls on fee schedules to curtail prices, doctors offset their losses of income by increasing the number of their services, he said.

The medical profession, Lee said, is challenged more than ever to examine its own role and consider alternatives to the present "cherished fee-for-service system."

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If the profession fails to initiate changes, federal controls will be inevitable, he said.

Lee said doctor fees make up only 21 percent of the total personal health care expenditures. But the physicians's role as the primary decision-maker regarding utilization of health services has been grossly underestimated.

Doctors control as much as 91 percent of the expenditures for hospital services, and 76 percent of expenditures for the physician services," he said.

Lee said that when treatments change because of new drugs or techniques the costs rise more rapidly than if the treatments had remained unchanged. Increases in costs are correlated with a dramatic rise in the number of laboratory procedures, x rays, and use of prescription drugs.

"The problem, however, is not simply one of overutilization," Lee said. A Harvard study found that excessive use of radiologic procedures embodies excessive radiation per film, excessive films per examination, and excessive examinations per patient.

The latter was found related to a number of factors, Lee noted. They include a lack of knowledge by doctors of the capacities and limitations of x rays, undue dependence on them rather than clinical followup, patient demand, hospital policies, defensive medicine, and reimbursement method.

Lee said prescription drug use also increased dramatically in the past 30 years. The average number of prescriptions dispensed by pharmacies and physicians rose from 2.4 per person per year to 6.9 in 1976. The total number of prescriptions increased from 303 million in 1950 to 1.5 billion today.

"The benefits in some cases have been spectacular," Lee said. "In other cases the seriousness of adverse drug reactions, improper use or irrational prescribing have marred the benefits."

"One question that must be asked with respect to the use of technology--radiologic tests, prescription drugs, medical devices, surgical procedures--is whether or not the technology is used rationally or appropriately," he said.

Another aspect is to consider both the costs and benefits of medical services in the decision to produce them, Lee added.

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Mailed Monday, November 19, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Dr. Donald Laub, chief of the division of plastic and reconstructive surgery at Stanford University School of Medicine, has resigned his faculty positions to join the Palo Alto Medical Clinic.

Laub's resignation, both as chief of the division and as associate professor of surgery, becomes effective January 1, 1980.

Laub will join the department of plastic surgery at the Palo Alto Medical Clinic. He will remain on the medical staff of Stanford University Hospital, and will continue to teach resident physicians as a member of the Medical School's clinical faculty.

"We are sorry to see Dr. Laub leave the faculty," said Dr. John A. Collins, chairman of the department of surgery at Stanford. "He is an excellent teacher who has done a fine job in creating a first-class training program in plastic and reconstructive surgery."

Laub, 44, has been a member of the Stanford faculty for 13 years, and has been chief of the division of plastic and reconstructive surgery since 1967.

He is well known as the founder and president of Interplast, Inc., a private organization of physicians who provide free medical care to people in Latin America, and the South Pacific.

In addition, Laub has directed the Gender Dysphoria Program at Stanford for the past several years. The program provided psychological counseling, and hormonal and surgical treatment of the condition commonly known as transsexuality.

Laub said his care of patients with gender dysphoria will continue, as will his involvement in Interplast.

A 1960 graduate of Marquette University Medical School in Milwaukee, Wisconsin, Laub received residency training at the Yale New Haven Medical Center and at Stanford.

He is active in several professional societies, and recently was elected president of the Educational Foundation of the American Society of Plastic and Reconstructive Surgeons. Among his awards is the Physician's Recognition Award by the American Medical Association.

In addition to his clinical and teaching activities, Laub has authored over 50 scientific publications.

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Mailed Monday, November 19, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Recent advances in the study of biological structures will be the focus of an international conference held at Stanford University School of Medicine November 19 and 20.

The conference, sponsored by the Stanford Magnetic Resonance Laboratory, will be held in the Medical School's Fairchild Auditorium and is open to the public.

The emphasis of the conference will be on the recent discoveries of molecular motions in macromolecules (large molecules like proteins and DNA), and in cell membranes, says Oleg Jardetzky, professor of pharmacology at Stanford and director of the Magnetic Resonance Laboratory.

Some of the new approaches that will be presented at the conference are described below:

Calvin Quate, professor and chairman of applied physics at Stanford, will discuss the acoustic microscope, a device he developed which enables scientists to see tiny objects by the use of sound waves.

Jardetzky and Michael Hogan, postdoctoral fellow in the Magnetic Resonance Laboratory, will discuss the use of nuclear magnetic resonance (NMR) to "map out" internal motions in proteins and DNA. NMR is a powerful method for the study of molecular properties.

The Stanford group has demonstrated that molecular motions in DNA are stopped by the binding of drugs.

The use of NMR to study the mechanisms of enzyme inhibition by drugs will be discussed by G. C. K. Roberts, senior member of the National Institute for Medical Research in London.

Patrick Cozzone, professor of biochemistry at the University of Marseille, and Steven Boxer, assistant professor of chemistry at Stanford, will discuss a new NMR technique using the laser to map out surfaces of macromolecules.

Harden McConnell, professor of chemistry at Stanford, will discuss laser imaging of motions in cell membranes; in particular, the study of interactions of synthetic cell membranes with the immune system.

The Magnetic Resonance Laboratory has sponsored the conference for the past five years. The Laboratory was established in 1972 under grants from the National Institutes of Health and the National Science Foundation. It serves as a national center for the study of molecular structure.

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Mailed Thursday, November 15, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

Engineers in Stanford Medical Center's Department of Facilities will vote Friday, Nov. 30, to decide whether to retain their unaffiliated labor organization, join an engineering local, or to have no union.

Approximately 90 engineers are eligible to cast ballots in the election, which will be supervised by representatives of the National Labor Relations Board (NLRB).

Polling stations will be set up at the main medical center and at Hoover Pavilion, which is also a part of Stanford University Hospital. Balloting Nov. 30 will be from 7 to 9 a.m. and 3 to 5 p.m.

The engineers currently have their own unaffiliated labor organization known as SUMCEDA, which is an acronym for Stanford University Medical Center Engineering Department Association.

The engineers will decide whether to retain SUMCEDA, to join Local 39 of the Operating Engineers, AFL-CIO, or to have no union at all.

According to Ross Campbell, associate counsel at Stanford Medical Center, a runoff election would be held at a later date in the event none of the three ballot choices receives 50 percent of the vote.

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Mailed Thursday, Nov. 15, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

"Four Hundred Years of Wound Healing" will be the subject of the third annual Charles and Gertie Thuss Lecture held at the Stanford University School of Medicine on Thursday, November 15.

Dr. Fernando Ortiz-Monasterio, professor of plastic and reconstructive surgery at the National University of Mexico, will deliver the lecture at 4:00 p.m. in Room M106.

Members of the medical community and the public are invited to attend. The lecture is sponsored by the Medical School's division of plastic and reconstructive surgery.

Dr. Ortiz-Monasterio is well known for his methods of correcting cleft lip nasal deformities and other craniofacial anomalies. He served as chairman of the Department of Surgery at the Hospital General de Mexico, and currently is that institution's chief of plastic surgery.

A graduate of the University of Mexico School of Medicine (1945), Ortiz-Monasterio has authored numerous publications, and is active in many professional organizations including the American Society of Plastic Surgeons.

The lectureship was established in 1977 by Dr. Charles J. Thuss, Jr., who is associated with South Texas Pathology Associates in San Antonio, Texas, and Mrs. Thuss, a member of the Stanford class of 1966.

It honors his late parents, Dr. Charles J. Thuss, Sr., and Gertrude Noble Thuss, a former registered nurse. Dr. Thuss practiced plastic surgery at Kaiser Hospital in Santa Clara, and was clinical associate professor of surgery at Stanford Hospital.

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Mailed Wednesday, November 14, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

New technology, and better understanding of biomechanics and physiology have improved the diagnosis and treatment of sports-related injuries.

These advances have benefitted not only the professional athlete, but the recreational jogger as well, according to two sports medicine specialists at Stanford University Medical School.

Drs. K. Gordon Campbell, clinical associate professor of surgery, and Michael F. Dillingham, director of the Sports Medicine Clinic in the Medical School's division of orthopedics, described the types of injuries commonly suffered "on the playing fields," Tuesday evening, November 13, at the Law School's Kresge Auditorium.

Their talk was the third in a series of three lectures on sports medicine sponsored by the Medical School and the Medical Center Council.

According to Dillingham, one of the real advances in orthopedic diagnosis was the development of the orthoscope. This device is a tiny "telescope" which enables doctors to look directly inside joints for injuries.

"The orthoscope has taken the guess work out of diagnosis," Dillingham said. It is particularly useful in diagnosing injuries in children.

It is commonly believed that children are so flexible they can't hurt themselves, and that their "growing pains" are no cause for concern.

On the contrary, Dillingham said, injury to growing bones and tissues can occur, and can lead to improper growth rates and deformity. In addition, "children do not rehabilitate well against pain," he said. "If their knees hurt, they simply will not exercise, and their joints will become stiff."

The orthoscope can accurately determine if the injuries require surgical correction, he said.

Other diagnostic tools include bone scanning, CT (computerized tomographic) scanning, and gait analysis. The bone scan involves injection of radioactive isotopes into the body, which accumulate in areas of increased metabolism, indicating injury. The bone scan can detect injuries which are invisible in X rays.

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Gait analysis involves the use of lights or electrodes to study the range of motion of injured limbs, and to determine neurological handicaps.

Campbell, who also is the team physician of the San Francisco Giants, said that new treatments are used in professional athletes to speed recovery of their injuries.

Athletes with tendonitis, or inflamed tendons, for example, may be given whirpool treatments, ultrasound, heat, and electrogalvanic stimulation several times a day "to shock the tissues and help turn off inflammation."

However, most people don't need special treatments even if they could afford them, Campbell said.

For sprains, use common sense, he said. Rest the injured joint, elevate it, and place a pack of ice on it to reduce swelling.

In addition, simple "preventive maintenance" can reduce the likelihood of injuries occurring in the first place.

For runners, this means exercise and stretching before heading out to the track, wearing the right kinds of shoes, and running on soft surfaces whenever possible.

Many people suffer chronic muscle fatigue, sprains, and even fractures when they run because their arches may be too flat or too elevated, or their knees and ankles may be "out of alignment."

Orthotics often can help these people, Dillingham said. Orthotics is the use of wedges or other supports to place joints in a neutral position and remove the stress from other parts of the body. "The idea is not to correct the adult part, but to accommodate what Mother Nature has given it," he said.

Occasionally, exercise and orthotics cannot relieve the problems, and surgical correction may be necessary.

Most important to athletes, professional or otherwise, Campbell said, is that they do not disregard warning signs of injury. A simple wrist sprain may actually be a broken wrist bone. If unattended, it could lead to arthritis. "Listen to what your body says," he added.

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Mailed Wednesday, November 14, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Heredity, weight gain, obesity, and lack of physical activity significantly increase the risk of developing high blood pressure according to Stanford University epidemiologist Dr. Ralph S. Paffenbarger.

In a study of nearly 15,000 Harvard University alumni aged 35 to 74, Paffenbarger and his colleagues Alvin L. Wing, Robert T. Hyde, and Dexter L. Jung, have correlated incidence of high blood pressure with each of these factors.

They found that men who did not participate in vigorous exercise such as swimming, running or tennis, were at 35 percent higher risk of developing high blood pressure than those who did, and the protection of vigorous sports was particularly notable among overweight men.

The researchers also discovered that men who were 20 percent heavier than their ideal weight (according to height) were at 78 percent greater risk of getting high blood pressure than leaner men.

Alumni who had gained 25 pounds or more since entering college were at 60 percent greater risk than those who gained less weight, the researchers found.

In addtion, men whose parents had high blood pressure showed 83 percent higher risk of getting the disease than men whose parents had no such medical problem, the study showed.

Paffenbarger says that these results are important because high blood pressure is itself a strong indication of heart attack risk.

Family tendency seems the most clinically significant risk characteristic, says Paffenbarger, but lack of participation in vigorous sports represents a strong overall risk in the population because so few individuals engage in vigorous exercise.

Parental history of high blood pressure is the only risk factor that could not be reduced through the individual's own efforts, Paffenbarger noted.

Information was obtained through mailed questionnaires filled out in 1962, 1966 and 1972. During the six to ten year period of study, 681 of the participants developed high blood pressure.

The researchers compared information on those who developed the condition with those who did not in order to calculate the relative risk contributed by each factor.

Paffenbarger presented the study results at a meeting of the Americn Heart Association in Anaheim Tuesday, November 13.

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Mailed Tuesday, November 13, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

A memorial service will be held Friday (Nov. 16) in Connecticut for a Stanford Medical Center registered nurse who died along with four others while on a volunteer medical flight in Mexico.

Jo Hebard and her four companions were part of the Flying Doctors medical team of Northern California. All died instantly when their Cessna 210 crashed into trees in the rural Mexican town of Movas last Friday.

Hebard, whose father George W. Hebard is a practicing physician in New Canaan, Conn., had worked the past four years as a nurse practitioner in the DES (subspecialty) Clinic in Gynecology-Obstetrics at Stanford.

The DES Clinic examines women whose mothers took the synthetic estrogen compound diethylstilbestrol during pregnancy. DES exposure has been associated with a rare form of vaginal cancer and, more commonly, with non-malignant changes in reproductive organs.

The group of five, which included two dentists, was making a regularly scheduled medical mission to remote areas of Mexico. Six other airplanes carrying other members of the Flying Doctors were also in Mexico last week as part of their monthly medical mission.

Hebard's memorial service Friday will be in the New Canaan Presbyterian Church. Details are not yet complete, but internment will also be in New Canaan.

In lieu of flowers the family requests contributions be sent to Skidmore Nursing School in Saratoga Springs, N.Y. 12866.

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Mailed Tuesday, Nov. 13, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415 497-6911

STANFORD—

Stanford University has been awarded a $193,000 grant by the National Center for Health Services Research to analyze new technology used in the treatment of rheumatic diseases such as arthritis.

The study will follow the medical histories of 2,000 patients with arthritis at several institutions in the U.S. and Canada, using the American Rheumatism Association Medical Information System (ARAMIS), a national data bank based at Stanford Medical School.

"We hope to bridge the gap between the laboratory and the community," says study director Dr. James Fries, associate professor of medicine at the Medical School.

Fries says that new technologies and treatments often do not work as well in the community as they did under laboratory conditions.

"This may be due to the fact that patients are selected for initial clinical trials because they are not likely to have complications, or suffer side-effects from the treatments," he says. "This practice makes trials more ethical, but less representative of the world outside the teaching hospital."

Fries says the study will determine the benefits of new drugs and diagnostic tests in community settings. The researchers also will test reliability of laboratory tests performed at different institutions, and will track down possible side-effects of new drugs, by surveying the patient population.

In addition to Stanford, study participants include University of California at San Francisco, the University of Cincinnati, the University of Saskatchewan, the University of Pittsburgh, and the Phoenix Arthritis Center.

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Mailed Tuesday, November 13, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

The role and responsibility of physicians in determining the cost of medical care will be the topic of the featured address by Dr. Philip Lee at the Big Game Medical Alumni Meeting at Stanford University School of Medicine on Friday, November 16.

Lee is professor of social medicine and director of the Health Policy Program at the University of California in San Francisco. He will present his remarks following a lunchtime reception for alumni, associates, faculty and spouses at the Holiday Inn in Palo Alto.

During the morning clinical symposium in Fairchild Auditorium on campus, three speakers from Stanford medical school will discuss recent advances in diagnosis and treatment of heart conditions.

Dr. Michael Goris, assistant professor of radiology, will talk about four promising diagnostic procedures now available using radionuclide imaging of the heart.

Ultrasonic sector scanning of the heart, a new method of defining heart anatomy and identifying certain heart defects and diseases, will be discussed by Dr. Richard Popp, associate professor of medicine.

Dr. Bruce Reitz, assistant professor of cardiovascular surgery, will describe methods for surgically correcting certain complex abnormalities of the heart in infants.

A ceremonial planting of a plane tree on Alumni Green will kick off the daylong program of activities.

The tree is a descendant of the plane tree under which Hippocrates taught medicine on the Island of Kos in the fifth century, B.C., and was recently given to the medical school by the people of Greece. The tree will be presented by Dr. John Sarracino, associate chief of pediatrics at East Valley Medical Clinic in San Jose.

The Big Game Medical Alumni Meeting is an annual event presented by the Stanford Medical Alumni Association and the medical school's Office of Postgraduate Medical Education.

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Mailed Monday, November 12, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

A new program to train future doctors in the care of old people and diseases of aging will be launched by the department of family, community and preventive medicine of the Stanford University School of Medicine.

Funded by a $300,000 grant from the National Institute of Aging for the next three years, the program will stress the team approach to geriatrics, and will cover in depth issues in the training of physicians.

The program will be directed by Dr. Moira Fordyce, clinical associate professor. She will also coordinate development of the geriatrics curriculum.

An increasing proportion of the population is elderly, and all medical students will treat old patients sometime later in their careers, says Fordyce.

The goal of the new curriculum, she adds, is to provide students with wide knowledge of both normal and abnormal aging processes and the physical, psychological, social, economic and epidemiological aspects to growing old.

"We will stress the team approach to geriatrics, which involves physicians in specialized areas of medicine and family practice as well as nurses, social workers, physicians' assistants, physical therapists and other health professionals," notes Fordyce.

Students often become frightened of elderly patients through lack of exposure in medical school and through exposure to the chronically sick old in unfavorable settings, observes Fordyce.

In addition, students may become intimidated because the elderly have numerous problems ranging from medical to social, economic and emotional ones, she adds.

"What we would like to stress to students is that they need not solve all problems of the elderly single-handedly. A team can be made available who can help with many of these troubles. Merely because doctors often identify these problems does not mean they have to solve them all," Fordyce explains.

"We also plan to emphasize preventive medicine and the community resources available for keeping the elderly healthy and at home," she adds.

Prior to her arrival at Stanford, Fordyce was director of geriatrics at Texas Tech University School of Medicine.

She received her medical training at Glasgow University School of Medicine and worked with Sir William Ferguson Anderson for a year in acute and chronic geriatrics.

In Scotland, geriatrics has been taught as a required course in medical schools for many years, she says, and the team approach to problems of the elderly in the hospital and in the community is practiced everywhere in medicine in Britain.

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Mailed Monday, November 12, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—The third and final autumn Progress in Medicine Lecture on Sports Medicine presented by Stanford Medical School will be given Tuesday, Nov. 13, at Stanford University's Kresge Auditorium starting at 7:30 p.m. The lecture is free and open to the public.

Drs. K. Gordon Campbell and Michael Dillingham will discuss "On the Playing Field," a review of contact sports, racquet games and running.

Campbell is clinical associate professor of surgery at Stanford and an orthopedic surgeon in the Department of Sports Medicine at Palo Alto Medical Clinic. He is also team physician to the San Francisco Giants professional baseball club.

A native of San Francisco, Campbell earned his A.B. degree (1951) and his M.D. (1955) from Stanford. Prior to joining Palo Alto Medical Clinic he was a general surgery resident at New York-Cornell Medical Center.

Dillingham is director of the Sports Medicine Clinic of the Division of Orthopedics. He has been a resident in Orthopedic Surgery at Stanford and a fellow in the Spinal Cord Injury Unit at Santa Clara Valley Medical Center in San Jose, which is affiliated with Stanford.

Dillingham received both his A.B. degree (1966) and his M.D. (1971) from Stanford, and served his internship at Stanford.

The Progress in Medicine Lectures are presented as a community service by the dean and faculty of Stanford Medical School and by the Stanford Medical Center Council.

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Mailed Friday, Nov. 9, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—A promising new technique for "dissecting the immune system" is being applied to improve diagnosis and treatment of a wide variety of diseases, from leukemia to Legionnaire's disease.

The technique uses highly specific antibodies, microscopic molecules which often form the body's first line of defense against germs and other foreign invaders.

Called monoclonal antibodies, because they are made by cells descended from a single cell (clones), these molecules have provided scientists with a powerful tool, a pure chemical reagent which can be applied to basic research in cellular biology as well as clinical medicine.

"Monoclonal antibodies provide a marvelous set of tools for fundamental research," said Dr. Leonard Herzenberg, professor of genetics at Stanford University Medical School.

"But they also will allow the therapy for cancers to be tailor-made."

Herzenberg discussed the use and applications of monoclonal antibodies November 8, at a meeting of the Council for the Advancement of Science Writing in Palo Alto, CA.

Currently, 50 percent of childhood leukemias can be cured, Herzenberg said. But "why can't we cure the rest?"

It's because there are different types of leukemia, just as there are different types of white blood cells, from which the tumors are derived, and "we can't tell them apart at the moment," he said.

However, with the use of monoclonal antibodies, different cell types can be identified, and treated accordingly. When physicians are able to tailor make therapy to the individual patients and their cancers, "we have a real chance of beating all of childhood leukemia," Herzenberg said.

Similarly, monoclonal antibodies can be used to screen for external agents, like the bacterium that causes Legionnaire's disease.

"This was an unknown disease until a few years ago," Herzenberg said. "We still don't know where these bacteria are hiding, but they are hiding in the environment around us, probably in the soil."

Now, a specific antibody has been identified which reacts with the bacterium. It can be used to diagnose Legionnaire's disease in patients, and even to screen soil or the water in air conditioning systems for the bacterium, he said.

Other potential applications of monoclonal antibodies include:

- furthering understanding of disease such as arthritis, multiple sclerosis, and disbetes,
- speeding prenatal diagnosis of genetic disorders, and
- aiding tissue typing for organ transplants.

Monoclonal antibodies were first produced in 1975 by Dr. Cesar Milstein, of the Medical Research Council in Cambridge, England, and Dr. Georges Kohler, now in Basel, Switzerland.

The researchers were trying to produce new antibody molecules, by fusing mouse spleen cells with mouse myeloma (bone marrow cancer) cells, and growing them in culture.

What they got was a hybrid cell, called hybridoma, which has some of the features of the spleen cell (producing antibodies), and some of the features of the tumor cell (rapid and continuous growth).

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A spleen cell producing a pure antibody is thus "immortalized," Herzenberg said. It will continue to produce a specific antibody, and only that antibody, for years.

Herzenberg studied with Milstein in 1976, and that year brought the technique to Stanford. He and his colleagues have been able to speed production of antibody-producing clones with the fluorescence-activated cell sorter, a space-age research tool they developed in 1971.

First, rats are given injections of mouse cells. The rat spleen cells then produce a battery of antibodies against different mouse cell markers, called antigens, which they recognize as foreign.

The spleen cells are harvested, and fused with myeloma cells. Later, the fused cells are mixed with tiny, fluorescent plastic beads, coated with a certain mouse cell marker.

Those cells which produce antibody against this marker bind the beads.

The solution of cells is passed in a stream through the cell sorter. A laser beam directed at the stream lights up cells carrying the fluorescent tag. This sets off high voltage pulses which kick the fluorescent cells out of the stream and into rows of culture plates.

In this way, the researchers can quickly isolate hybrid cells producing antibody against a single, preselected cell marker.

"This is a big time saver," Herzenberg said. Other techniques required that the specific antibody-producing cells, often at concentrations of one cell per 10,000, be purified laboriously by growing all the cells in culture. "With the cell sorter, we can pull out 100 of the cells we want in two minutes," he said.

"this technique is superb. We are making rapid progress."

One of Herzenberg's current projects is in the field of prenatal diagnosis. Using monoclonal antibodies produced by researchers at Harvard and Oxford Universities, he and his colleagues have been able to detect fetal cells in the mother's blood as early as 15 weeks after conception. They are now trying to produce monoclonal antibodies against specific fetal cell markers, in order to isolate the cells more easily from the maternal serum.

If they can isolate the cells, grow them, and study their chromosomes, they will have a simple, safe and inexpensive test for detecting genetic defects, which can be performed at an earlier time in gestation than is now possible.

Herzenberg said that monoclonal antibodies may one day be regarded as a commercial product, "a standardized, reproducible, pure chemical reagent, which can be passed between labs and hospitals."

For example, genetic counseling centers in hospitals could obtain monoclonal antibodies to speed prenatal diagnosis of genetic disorders. Organ banks could use them to improve tissue typing of organs and body parts for transplantation. And epidemiologists could apply it to the study of disease among populations, and the evolution of new strains of viruses.

All these applications would be facilitated by industrial production and distribution of monoclonal antibodies, Herzenberg said.

Herzenberg has passed on some of his cell lines to other noncommercial investigators through the Jonas Salk Institute in San Diego. At the same time, Stanford University is exploring the issuing of licenses to companies interested in producing and selling antibodies from Stanford clones.

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Mailed Friday, November 9, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Advances in research on schistosomiasis have recently been made at Stanford University, shedding light on a disease that afflicts about one in 15 people worldwide.

With no known means of prophylaxis and no ideal drug to combat the parasitic disease, it is spreading rapidly, particularly in developing countries, according to Dr. Paul Basch, associate professor at Stanford University School of Medicine.

Basch, one of a small number of researchers in the United States to study the parasitic worm that causes the disease, is developing successful techniques for growing the worm by itself in the laboratory.

Until now, the only practical method of growing the organism has been in animals, where the worms can't be seen or studied directly. For this reason, little is known about their nutrition, or how they mature, find a mate, and produce eggs. Such knowledge would help to interrupt its life cycle and gain some control of the disease, Basch says.

Schistosomiasis is one of six major tropical diseases targeted for research by the World Health Organization. Despite their impact on a global scale, with high death rates, illness and economic loss, relatively scant research on tropical diseases is carried out in this country, notes Basch.

Improved sanitation in developing countries is the key to interrupting the spread of schistosomiasis, but economic conditions perpetuate the disease, Basch explains.

If the worm can be intensively studied in the laboratory, other methods may be discovered for gaining control over its spread, he contends.

The parasite requires two hosts—man (or less frequently, another mammal) and certain fresh water snails.

People acquire the infection from water contaminated with infective larvae released from snails. These microscopic larvae penetrate unbroken skin and eventually grow to mature, mate and produce eggs in the person's blood.

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By means of irritating secretions, many eggs erode through blood vessels and the intestinal wall and pass out of the body in the feces. Organisms hatching from these eggs can enter snails, where they multiply to produce thousands of the infective larvae that may reinfect humans, repeating the life cycle.

The severe illness caused by the worms is due to the many eggs that enter the liver, becoming physically trapped there instead of passing out of the body, Basch says.

These eggs irritate surrounding tissue which forms a fibrous capsule in response to the foreign body. Large portions of the liver may become fibrous, imparing its function, he explains, and creating the characteristic "big belly."

Blood circulation is also obstructed and veins may rupture, leading to severe or fatal bleeding, Basch adds.

Population growth, crowded conditions and unsanitary waste disposal all contribute to the spread, he notes. Irrigation projects and hydroelectric dams are also providing wider habitats for snails.

Methods of snail control such as poisoning, release of predators, and filling in swamps and ditches, have achieved only marginal effects, Basch adds.

The People's Republic of China has for years had a program of control involving elimination of snails, case treatment and improved sanitation. Other countries, including Brazil and many parts of Africa are also struggling to combat this disease.

Basch's work is supported by the tropical disease program of the World Health Organization and by a grant from the Edna McConnell Clark Foundation of New York.

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Mailed Wednesday, November 7, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—Medicare has announced that it will pay for some of the costs associated with heart transplantation at Stanford University Medical Center, at least until it makes a formal decision on covering the procedure.

The announcement was made Friday, November 2, in the form of a telegram to the Oakland, California office of Blue Cross, authorizing it to begin paying Medicare claims presented by Stanford for heart transplantation services.

Blue Cross acts as the intermediary for Medicare in California.

In the telegram, Leonard D. Schaeffer, head of the Health Care Financing Administration (Health, Education and Welfare Department) stated that the Public Health Service will make a formal opinion on the medical necessity of cardiac transplantation by January 1, 1980, and that the government will make the final decision on coverage "as soon thereafter as possible."

"We are gratified by the thoughtful action of the government in providing Medicare coverage to those patients who are in need of transplantation during this period of review," said Dr. Edward Stinson, head of the transplant team at Stanford.

"The life expectancy of patients accepted as potential transplant recipients is less than six months, and it is simply not possible for the hospital to help all of them without insurance coverage.

"We are hopeful that the final decision will be in favor of covering the procedure," said Stinson.

Heart transplantation at Stanford can cost over $100,000 for some patients.

In the past, the costs have been met through private resources, insurance coverage, and portions of a government grant provided to Stanford.

The costs of heart transplantation never have been covered officially by Medicare. However, it has paid for selected aspects of the care of 37 patients out of a total of 103 transplanted at Stanford from December 1973 to May 1979.

The 37 patients qualified for Medicare coverage because they were totally and permanently disabled by their heart disease.

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However, in May 1979, Medicare notified Stanford that it would no longer pay for heart transplants while it determined whether to cover the procedure.

As a result, other sources of support, including the government grant, were committed more quickly than usual, and it became more difficult for Stanford to evaluate as many patients for possible transplantation as it has in the past.

On September 17, Dr. Norman Shumway and members of the heart transplant team at Stanford sent a letter to the Health Care Financing Administration (HCFA), urging the government to officially approve coverage of the procedure.

Included with the letter were several papers and other data on the Stanford program.

According to Schaeffer, this data has been reviewed by the National Heart, Lung and Blood Institute (part of the National Institutes of Health), which found:

• while patients selected for transplantation at Stanford have an average life expectancy of less than six months if untreated, their five-year survival rate after cardiac transplantation is 50 percent.

• Dr. Shumway carefully screens all patients for cardiac transplantation to insure optimum chances for survival.

• the provider, Stanford Medical Center, is properly equipped and staffed to perform cardiac transplantation in a safe and effective manner.

"On the basis of these preliminary findings," Schaeffer stated in the telegram to Blue Cross, "HCFA has tentatively concluded that the transplant procedures performed at the Stanford Medical Center meet the criteria for medical necessity."

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Mailed Tuesday, November 6, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

The first successful recording of electrical signals from inside human epileptic nerve cells was reported today by Dr. David A. Prince, chairman of the Department of Neurology at Stanford University and his associate Dr. Robert Wong, at the ninth annual meeting of the Society for Neuroscience in Atlanta, Georgia.

Their experiments were done using new techniques for keeping brain slices alive in an artifical laboratory environment.

Using glass probes, called microelectrodes, whose tips measure less than 1/25000 inch in diameter, the Stanford team recorded signals from normal nerve cells and those from small pieces of brain removed by neurosurgeons as part of the treatment for patients with epilepsy.

According to Prince, there are marked similarities between the electrical discharges in some nerve cells from epileptic brain slices and those known to occur in various animal models of epilepsy.

Nerve cells involved in epilepsy tend to fire bursts of repetitive impulses and this behavior is part of the excessive discharge pattern that may lead to seizures.

These results are important, Prince noted, because they point out that abnormalities of human epileptic neurons may be mimicked closely by those in animals, where more detailed studies can be done.

Prince and Wong also have shown for the first time that nerve cells in slices of epileptic brain tend to retain their abnormal behavior in an artificial environment.

"This will allow more detailed studies of the causes and potential treatments for epileptic discharges and will hopefully improve our understanding of human epilepsy," Prince said.

Epilepsy is one of the most common maladies a neurologist treats, affecting between two and four million Americans, Prince noted.

Prince's work is supported by the National Institutes of Health.

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Mailed Tuesday, November 6, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

The vital and often complex role of operating room nurses will be highlighted on National Operating Room Nurses Day Wednesday, Nov. 14, at Stanford University Hospital.

A continual slide show and a medical-staff reception are part of the Stanford event, which is also being celebrated nationally following the signing of a proclamation by President Carter.

"There really is a big mystery about what we do," commented Gwenn Williams, director of Stanford Hospital's Operating Rooms. "We want to show the public who we are and what we do, and particularly to demonstrate the total nurse role concept we call 'perioperative nursing.' "

Williams says perioperative nursing is a "holistic approach to health care. It takes into account all the needs of our patients, and attempts to meet these needs through their entire hospital experience, including the preoperative and postoperative period."

There is a national trend toward this type of nursing care among operating room nurses, Williams noted.

The slide presentation is open to the public. It will be shown all day Nov. 14 in the hospital's first floor main lobby area.

(Editors: Williams and other Operating Room Personnel are available for interviews. Call Williams at 415: 497-5620).

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Mailed Monday, Nov. 5, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

The special joys and health hazards connected with popular outdoor recreational sports, such as skin diving, climbing, skiing and scuba diving, will be examined in the next Progress in Medicine Lecture presented by Stanford Medical School on Tuesday, Nov. 6.

Speakers at the public lecture are Drs. Herbert N. Hultgren and Alfred P. Spivack. The talk begins at 7:30 p.m. in Kresge Auditorium at the university's law school.

Chief of the cardiology service at Veterans Administration Medical Center in Palo Alto, Hultgren is also professor of medicine at Stanford.

He has spent most of his professional career at Stanford, and is a Stanford graduate as well. He earned his M.D. from Stanford Medical School in 1943.

During 1955-67 Hultgren was chief of the Division of Cardology at the medical school. He is an avid mountaineer, skiier and tennis player.

Spivack is clinical professor of medicine and a consultant in electrocardiography at Stanford Hospital.

He is a former director of the hospital's Coronary Care Unit, and the hypertension clinic in the medical school.

A graduate of Temple University, Spivack received his M.D. in 1954 from Jefferson Medical College in Philadelphia, Pa. He was involved in research for the U.S. Navy Radiological Defense Laboratory prior to his appointment as a cardiology fellow at Stanford in 1959.

He is past president of the Santa Clara County Heart Association, and is a current member of the Undersea Medical Society, American College of Sports Medicine, a fellow in the American College of Physicians and a fellow in the American College of Cardiology.

The Progress in Medicine Lectures are presented as a community service by the dean and faculty of Stanford Medical School, and by the Medical Center Council.

The third and final lecture in the autumn sports medicine series will be given Tuesday, Nov. 13, by Drs. K. Gordon Campbell and Michael Dillingham. Their talk is entitled "On the Playing Fields," which will be a review of contact sports, racquet games and running.

11/2/79 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

More than 100 science reporters and editors from newspapers and magazines in the United States and Canada will attend the week-long "New Horizons in Science 17th Annual Briefing" at Stanford University November 4 through 9.

Organized by the Council for the Advancement of Science Writing (CASW), the program will feature scientists reporting on the latest developments in their fields, from genetic predisposition to disease, to the awesome tangles unraveled by neuroscientists about the brain, to discoveries in high energy physics.

Other reports will cover energy risks, jumping genes, fancies of human evolution, weather prediction, quarks and the big bang, deep ocean hot springs, the social significance of dress, new dimensions and old illusions about psychic phenomena, gravity wave astronomy, and new archeological discoveries about the land of the Jews.

The sessions will be held in Rickey's Hyatt House Hotel in Palo Alto, and at Stanford Linear Accelerator Center.

A banquet, November 7 in the Stanford Faculty Club will feature the presentation of the National Association of Science Writers "Science-in-Society Journalism Awards."

The CASW is an independent, non-profit organization of science journalists. Through seminars and other educational programs, CASW has worked in the past seventeen years to improve the reporting of science in the daily press.

The program this year is supported by the National Science Foundation, Stanford University, and Stanford University Medical Center.

Speakers in this year's sessions are from the Atomic Energy Control Board of Canada; the California Institute of Technology, Pasadena; the University of California, Berkeley and Irvine; University of Chicago; IBM Thomas J. Watson Research Center, New York; Princeton University; University of Illinois, Urbana-Champaign; Scripps Institute of Oceanography, San Diego; Stanford Linear Accelerator Center, Stanford University, and School of Medicine.

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Mailed Friday, November 2, 1979

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Physicians at Stanford University Medical Center today determined that Fred Kelley, the 39-year-old former fireman from Framingham, Massachusetts, does not meet the criteria for receiving a heart transplant.

While Kelley's heart condition renders him functionally disabled to continue working as a fireman, the Stanford doctors said it is not severe enough to warrant taking the risks associated with transplantation at this time.

However, they added, this does not rule Kelley out as a possible candidate in the future.

Kelley came to the Medical Center Monday, October 29 to begin tests to determine if he should receive a heart transplant.

He had been referred to Stanford by doctors in Massachusetts after he had suffered two heart attacks.

Cardiac transplantation as performed at Stanford is quite successful—70 percent of patients are still living one year after surgery, and nearly 50 percent are alive after five years. However, complications of the procedure include rejection of the transplanted heart by the body, and increased susceptibility to infection. In fact, infection is a major cause of death among transplant recipients.

Kelley was released from the hospital today, and will return home under the care of his doctor. However, if his condition worsens, he will be reevaluated at Stanford for possible transplantation, stated the Stanford physicians.

Mr. Kelley expressed his appreciation to the city of Framingham, whose board voted October 10 to increase the city's tax rate to provide the funds necessary for the evaluation. The $60,000 raised by the city will be held in escrow to be used in the future for reevaluation, Kelley said.

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Mailed Thursday, November 1, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Intracranial bleeding, a major cause of illness and death among premature infants, now can be diagnosed earlier and more accurately with a technique developed by Stanford University radiologists.

The physicians use ultrasound, a technique which bounces sound waves off internal body structures and constructs pictures of the echoes, to detect bleeding before clinical symptoms, such as seizures or cessation of breathing, occur.

Early detection of bleeding enables the physicians to monitor the infants for signs of increasing fluid in the brain, which often follows bleeding, and to treat the hydrocephalus, or swelling, before it causes damage.

The technique could help the estimated 40 to 70 percent of infants born prematurely and weighing under 1500 grams (3.3 pounds) in whom hemorrhaging (bleeding) occurs. Currently, about half of these infants die from the bleeding.

Dr. David London, resident physician in radiology at Stanford University School of Medicine, recently reported on the technique at a meeting of the Radiological Society of North America, in Atlanta.

London conducted the research under the guidance of Drs. Dieter Enzmann and Barbara Carroll, both assistant professors in the division of diagnostic radiology. The research was supported by the Department of Radiology.

The device adapted for premature infants originally was developed for use in the eye by Dr. Alan Susal, clinical assistant professor of ophthalmology, and engineers at the Stanford Integrated Circuits Laboratory.

The device directs a narrow ultrasound beam between the soft bones of the infants' skulls, toward the fluid-filled ventricles of the brain where the bleeding usually occurs.

Ultrasound can outline areas of bleeding as accurately as the conventional brain CT (computer tomographic) scan, said Enzmann in an interview.

However, ultrasound scanning can be done at the infant's incubator in the intensive care nursery more quickly than brain scanning, and can avoid the need to transport the critically ill infant to the brain scanning room.

In addition, ultrasound scanning avoids the risks of ionizing radiation. "There are no known harmful effects of ultrasound at the energy levels we use," Enzmann said.

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Finally, ultrasound scanning is cheaper than CT scanning because the equipment is only about one-tenth the cost of CT scanners. Brain scanning, however, provides other, valuable information, particularly in ruling out the presence of other diseases, he said.

Enzmann said the exact cause of intracranial bleeding in the premature infants is not known. It occurs in a part of the brain which has disappeared in the normal term infant, indicating that the underdeveloped brain part is susceptible to hemorrhage under conditions of premature birth.

Statistics on the frequency of bleeding among premature infants are variable, Enzmann added, because only recently have physicians been able to detect the condition accurately with CT and ultrasound scanning.

In addition, as more infants survive other problems of prematurity, such as respiratory distress syndrome, "the next major hurdle they are likely to face is hemorrhaging," he said.

There is not much that can be done to treat intracranial bleeding in these tiny infants until it is known exactly when and under what conditions it occurs, Enzmann said.

However, once bleeding is detected, the infants can be monitored carefully by ultrasound for signs of brain ventricle swelling. This can be treated by lumbar puncture, to remove some of the fluid from the lower spinal cord and relieve pressure on the brain.

"Ideally, we'd like to scan every premature newborn infant in the intensive care nursery for signs of bleeding," he said.

In the future, the researchers plan a study to pinpoint when the hemorrhaging occcurs in these infants, and follow the sequence of events that leads to brain swelling.

In addition, they will monitor subsequent neurological and intellectual development in children who suffered intracranial bleeding, in conjunction with the Stanford Premature Research Center.

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Mailed Wednesday, December 19, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

SCIENCE WRITERS: Release date for this story has been set to coincide with publication of the research report in *Proceedings of the National Academy of Sciences.* A press conference has been scheduled with Dr. Avram Goldstein Thursday, December 20 at 2 p.m. at the Addiction Research Foundation, 701 Welch Road, Palo Alto, Building B, 3rd floor. Please notify the News Bureau if you plan to attend. Texts of the scientific paper and photos are available on request.

ADVANCE FOR RELEASE IN AM PAPERS, FRIDAY, DECEMBER 21, 1979

PALO ALTO—

Scientists at the Addiction Research Foundation have discovered a new brain chemical, 200 times more potent than morphine, and 50 times more powerful than a previously identified chemical, beta-endorphin.

The substance is called dynorphin, from the Greek word for power (dynamis) and the word endorphin, meaning natural morphine. Dynorphin is a member of a family of brain peptides or small proteins scientists believe play a role in relieving pain and regulating behavior.

The discovery of the substance is significant because it is a step forward in understanding brain chemistry, and in particular, how Mother Nature regulates pain.

In addition, the high potency of dynorphin indicates that it binds with high specificity to its receptor, a special molecule that fits it like a lock fits a key.

Drugs or chemicals must interact with receptors in cell membranes in order to exert their effects.

It is not yet known where dynorphin acts in the brain, or what function it serves. But it may lead scientists to the discovery of a receptor, or lock, for some highly specific function, such as pain relief, and thus enable them to construct more selective and more powerful drugs which fulfill the function.

A report on the research was published Thursday, December 20 in the current issue of the *Proceedings of the National Academy of Sciences.* It was authored by Avram Goldstein, Shinro Tachibana, and Louise I. Lowney of the Addiction Research Foundation, and by Michael Hunkapiller and Leroy Hood, of the California Institute of Technology.

The Addiction Research Foundation is a nonprofit institution attempting to develop basic information and improve methods of treatment for addictive diseases.

Dr. Goldstein, director of the Addiction Research Foundation, is also professor of pharmacology at Stanford. Dr. Tachibana is a visiting scientist on leave from Eisai Ltd., a Japanese pharmaceutical firm. Mrs. Lowney is a senior research assistant at the Addiction Research Foundation.

Dr. Hood is a professor of biology at Caltech and Dr. Hunkapiller is his associate. The Caltech team have developed improved techniques for sequencing peptides and proteins in tiny amounts, thus identifying individual amino acid residues that make up the peptide chain.

The work was made possible by grants from the National Institute on Drug Abuse and the National Institutes of Health, Department of HEW.

The dynorphin story actually began in 1971, with the discovery of specialized receptors for opiates, like morphine, in nerve cells by Goldstein and his colleagues. The existence of these receptors suggested that the body may produce chemicals to fit them.

This theory was borne out four years later, when the Addiction Research Foundation group discovered morphine-like peptides in animal pituitary glands. Other substances, the enkephalins, were found in brain by researchers in Scotland and Sweden.

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These "peptides" are produced in a variety of animals, from earthworms to humans. They are located in various parts of the nervous system, in the pituitary gland at the base of the brain, in the intestine, and in other tissues. Their location in the pituitary, the master gland in the hormone system, suggests that they may regulate hormone secretion or act as hormones themselves.

Immunological methods for detecting the substances were used to "map out" their distribution in the brain. They were found in highest concentrations in those areas associated with pain pathways, and the regulation of emotional activities.

One of these peptides, beta-endorphin, has been tested in humans for its ability to relieve pain, to treat drug addiction, and to reduce symptoms of severe mental illness, but the results are far from conclusive.

At the time of the endorphin discovery, the group at Addiction Research Foundation also found another peptide, which clearly was not related to beta-endorphin. It had a lower molecular weight, was more basic, and had a more persistent effect, as measured by its ability to inhibit electrically-stimulated twitching in isolated guinea pig intestinal muscle.

This muscle is used to test activity of morphine-like compounds because it contains a receptor of the same type that seems to mediate, or unlock, analgesia.

However, the researchers could isolate only small quantities of the substance, too small for the usual tests needed to determine its structure. Conventional sequencing requires milligrams of peptide, much more than had been obtained. So Goldstein turned to the Caltech group.

By increasing the sensitivity of the technique and damping out "background noise," Dr. Hood and his associates have been able to sequence much smaller quantities of peptides and proteins. The procedure employs a step-by-step removal and analysis of the amino acid residues.

The Caltech researchers were able to identify the first 13 residues of dynorphin, using only two micrograms of material. "Theirs is a tremendously improved technique for sequencing tiny amounts of material," Goldstein said. "It is a tour de force".

The first five residues of the identified fragment contained leucine enkephalin, one of the substances discovered in 1975. However, dynorphin is about 700 times more potent than the enkephalin. The researchers believed that the increase in potency was due to the extra residues they had identified.

To test their hypothesis, they synthesized the 13 residue peptide. It proved to be just as potent as the whole natural dynorphin molecule in the biological assay with guinea pig muscle. Less than one billionth of an ounce could completely stop the movements of the small bit of muscle tissue. In addition, naloxone, a drug which selectively blocks the action of morphine-like substances, also blocked dynorhin.

"Now we must answer these questions," Goldstein said. "What does dynorphin do? Where is it found in the brain? Under what conditions is it released? Is an abnormality of dynorphin function implicated in any disease conditions in humans?"

To "map out" the distribution of dynorphin in the brain, Goldstein and his colleagues are developing a radioimmunoassay, using antibodies made against the dynorphin molecule.

This technique also will enable the scientists to test human plasma and cerebrospinal fluid for the substance.

The most exciting aspect of dynorphin, Goldstein said, is that it indicates a level of specificity in these morphine-like peptides not previously recognized.

Ideally, Goldstein said, scientists would like to find a drug that is a strong pain killer, but has no effect on consciousness, and is not addicting.

Dynorpin may lead scientists to a specific receptor, or lock. If dynorphin is found to be a potent analgesic, and if the receptor can be identified, "it could be a big step forward in developing drugs to relieve pain without side effects," he said.

Goldstein also pointed out other areas in which the morphine-like peptides may be involved, such as mood disturbances, blood pressure collapse in shock, temperature regulation, and regulation of the sex hormones. "Dynorphin might turn out to be most selective in one of these functions rather than in pain relief," he said. "Only time and more research will give us the answers."

Mailed Thursday, December 20, 1979 —30— 400

QUESTIONS AND ANSWERS

gleaned from an interview with Dr. Goldstein by the Stanford University Medical Center News Bureau

Q) *What are the possible roles of dynorphin?*

A) Dynorphin is extremely potent in inhibiting electrically stimulated twitching in isolated guinea pig intestinal muscle, indicating that it binds specifically to receptors involved in analgesia. However, it is not as potent when tested in the mouse vas deferens, which contains a different type of receptor.

When dynorphin was injected into the brains of rats, catalepsy, a loss of voluntary motion observed with morphine, occurred. This indicates that dynorphin also causes changes in behavior.

Q) *How does dynorphin relate to other endorphins?*

A) Dynorphin is structurally unrelated to beta-endorphin but it does have some similar effects.

It contains leucine enkephalin, and may be a precursor molecule to that substance. It is possible that enzymatic breakdown may be Nature's way of "turning off" the action of dynorphin into less active enkephalin. To determine this, we will be trying to see if dynorphin is present in the same nerve cells as the enkephalin.

Q) *Have all the endorphins been discovered?*

A) By no means. There probably is a wide variety of these natural morphine-like compounds, which interact with a variety of opiate receptors. This complex means of interaction is evident in other systems, such as the neurotransmitters, chemical messengers which carry electrical impulses from one nerve cell to another.

Q) *How does this discovery relate to addiction research?*

A) It's too early to tell. One of the theories about addiction to opiate narcotics is that there is interference with the natural morphine-like peptides. The brain may get used to the heroin or morphine, and therefore stop producing endorphins. No such dramatic disturbance has been found, so far, for enkephalins or beta-endorphin. We will certainly want to see what happens to natural dynorphin in animals and humans during narcotic addiction.

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Q) *What impact do you think this discovery will have on understanding pain, and human disease like schizophrenia, in which a role of endorphins has been suggested?*

A) Again, we can only speculate. In pain relief by acupuncture, for example, some endorphin seems to be released, but so far it is not known which one is involved. Possibly it will prove to be dynorphin. Likewise, in schizophrenia, there are suggestive indications that there may be excessive production and release of some endorphin. However, my laboratory recently published an analysis of beta-endorphin in blood of nearly one hundred schizophrenic patients. There were no exceptional elevations in the levels. Again, maybe beta-endorphin is not the peptide that is disturbed in schizophrenia. We will be making similar measurements of dynorphin levels, to see if this new peptide may be implicated.

Q) *Is basic research in neurobiology, of the kind you are doing, really a worthwhile investment for society?*

A) I can't answer that in an objective way, of course, but there are some things worth pointing out. New discovery only comes from basic research. The greatest advances that affect people's health result from new understanding, which leads to new methods of preventing or curing illness--methods that couldn't have been developed before the new information existed. Neuropeptides obviously have a profound influence on human behavior and mental health. Every abnormality of brain function and behavior must reflect some underlying change in brain chemistry. No scientist can predict which discovery of a new brain chemical will open the door to understanding and cure of a particular mental illness, or provide new relief of pain.

Basic research really is the goose that lays the golden eggs. Just as every modern industry invests a significant part of its income in R and D, so must society invest a significant part of its gross national product in basic biomedical research, in order to guarantee—sooner or later—returns in the form of better health for the people. Our own work has been supported generously by the National Institute on Drug Abuse, a government agency. It is important to maintain adequate federal support for all biomedical research and training.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD—

David I. Sakai has been appointed director of finance at Stanford University Hospital, effective Feb. 3, 1980.

Sakai's appointment was announced by Dr. Peter Levin, associate vice-president and executive director of the hospital.

Levin said the finance director "has wide responsibilities for the managing and planning of the financial operations of the hospital."

Since 1976 Sakai has been chief financial officer of the 500-bed St. Mary's Hospital and Medical Center in San Francisco.

At St. Mary's he has supervised a staff of 95 personnel in accounting, billing, data processing, admitting, clerical and telephone services.

A certified public accountant (CPA), Sakai spearheaded a large reduction in accounts receivable levels at St. Mary's, and supervised reimbursements from Medicare and Medi-Cal.

During 1969-76 Sakai was controller of the medical division of a major hotel-motel chain. The division consisted of six general acute hospitals and six extended care facilities.

He developed standard financial reporting requirements for the division, as well as accounting policies and procedures. Furthermore, he implemented a management information system to supplement monthly financial statements.

Sakai is also a former senior accountant with Arthur Andersen and Co., independent public accountants in San Francisco.

A U.S. Navy veteran, Sakai received his B.S. degree and his M.B.A. from the University of California in Berkeley. He is a member of the American Institute of Certified Public Accountants, the California CPA Society and the Hospital Financial Management Association.

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Mailed Wednesday, Dec. 19, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Noted Stanford cancer researcher, Dr. Henry S. Kaplan, will describe advances in cancer research as part of a two-hour television special, "A Shining Season," to be shown on CBS on Wednesday, December 26.

The program is a dramatization of the life of a young track star, John Baker, who died of cancer in 1970 at the age of 26.

During breaks in the drama, current cancer research will be highlighted and Kaplan will be featured in his laboratory at Stanford Medical School and in interviews filmed in New York City.

The cancer special is sponsored by General Motors on behalf of the General Motors Cancer Research Foundation, established in 1978 to honor prominent individual research achievements in the diagnosis, prevention and causes of cancer.

Last spring, Kaplan, Maureen Lyles D'Ambrogio Professor in radiology, was awarded the Foundation's first Charles F. Kettering Prize for his research on Hodgkin's disease, a cancer of the lymph glands.

"A Shining Season" will be broadcast in the Bay Area on channel 5, KPIX, from 9 to 11 p.m..

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Mailed Wednesday, December 19, 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

Science and medical writers: This story is released jointly with the University of California Medical Center, San Francisco. Embargo time is set by the *New England Journal of Medicine.*

ADVANCE FOR AM PAPERS (PST), THURSDAY, DECEMBER 20, 1979

STANFORD—

Between 27 and 32 percent of hospital deaths related to certain high-risk nonemergency operations could be prevented if these procedures were confined to regional centers, a study by California researchers has disclosed.

The mortality of open-heart surgery, vascular surgery, transurethral resection of the prostate, and coronary bypass is lower in hospitals doing 200 or more of these operations a year, the researchers reported in *The New England Journal of Medicine* Thursday, December 20.

Similarly, the mortality rate of total hip replacement is lower in hospitals doing 50 to 100 or more operations a year.

For simple procedures such as gallbladder removal and vagotomy (surgery to control stomach acid in ulcer patients), the researchers found no relation between the number of operations performed and death rates.

Dr. Harold S. Luft of the University of California in San Francisco, and Drs. John P. Bunker and Alain C. Enthoven of Stanford University said their findings suggest the need for increased regionalization of certain procedures.

The authors said they undertook their study because of the widespread belief that, other things being equal, the quality of medical care improves with the experience of those providing it.

Their purpose was to obtain baseline data as to what surgical loads are required for specific procedures in order to obtain these results.

They said the "experience" hypothesis, if confirmed by others, could have profound implications for the organization of medical care.

"Optimal quality as well as cost savings could potentially be realized through regionalization, they added.

Funded by a grant from the Henry J. Kaiser Family Foundation, the two-year study examined the relationship between surgical load and mortality for 12 operations from 1,500 hospitals and more than 840,000 patients for 1974 and 1975.

The operations ranged in complexity from open heart surgery to gallbladder removal.

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The data for the study were provided by the Commission on Professional Hospital Activities (CPHA) of Ann Arbor, Michigan. In 1974-75, CPHA hospitals represented 29 percent of all U.S. nonfederal, short-term hospitals and accounted for 40 percent of the discharged patients.

Hospitals were categorized by the number of operations performed each year (from one to more than 200) for each surgical procedure, and data were adjusted for patient age, sex and diagnosis.

The study revealed that if all open-heart surgery, vessel surgery, coronary artery bypass grafts, and prostate surgery were performed with the results found in hospitals doing 200 procedures or more annually, the death rate could have been cut 27 percent.

Similarly, if all total hip replacements were performed with the results found in hospitals doing 50 or more procedures a year, the death rate could be reduced 32 percent.

While the study does conclude that a high volume of operations and low mortality go together, it poses another question, the researchers said. Does it explain the cause?

Some hospitals may be well known for having more skillful surgeons and operating room personnel, they noted, and as a result, may attract a larger share of patients suffering from a particular condition.

The study found that for some procedures, such as open-heart surgery and coronary bypass grafts, there was a substantial concentration of patients in hospitals with low death rates.

The researchers conclude that there is a case for regionalization of certain operations, and suggest that the first step should be implementation of a comprehensive regional surgical outcome system to confirm the results of their study and cover operations that were not included in their investigation.

Operations confirmed as having important volume effects should be considered for regionalization, the authors said.

They noted that the guiding principle should be that the greater the risk of low volume surgery, the greater the distance the patient should travel to a health facility with high volumes and good results.

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END ADVANCE FOR AM RELEASE THURSDAY, DECEMBER 20, 1979.

Mailed Monday, December 17, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Dana Redington, a graduate student at University of California at Davis, recently monitored his heart rate and physical activity during the oral examination for his doctorate.

His heart rate, which normally is 72 beats per minute, jumped to 90 beats per minute before the exam, and peaked at 150 when the first question was asked by his examiners.

His heart rate did not return to normal until hours later, when he went to sleep that night.

Redington's experiment was part of a program conducted by researchers at the Stanford Sleep Disorders Clinic and Research Center. Redington is a psychophysiologist at the center. The experiment demonstrates the impact which a stressful situation can have on the body.

Redington was able to record this experience with a small, light-weight package he wore on his belt. Electrode leads from the package recorded his heart rate and physical activity for play back on a computer program later.

The device represents a new technology in solid state electronics, which enables physicians to monitor the vital signs of their patients over long periods of time, and under a variety of conditions outside the hospital.

At the Sleep Disorders Center, for example, the devices are being used to diagnose disorders of the sleep-wake cycle, such as chronic jet lag and shift work problems.

"It is no longer sufficient to look at a single point in time to make a diagnosis," said Dr. Laughton Miles, clinical assistant professor of psychiatry, at a recent seminar in the Sleep Disorders Center.

"Physiological changes related to illness or health must be examined throughout the 24-hour period and in patients' own environments," he said.

In addition to providing a more natural basis for diagnosis, ambulatory monitoring avoids the costs of hospitalization and elaborate clinic testing, Miles said.

Equipment used by the Sleep Disorders Center was developed by Vitalog, Inc., a Palo Alto firm. The research is supported by the Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine, and by the Institute for Medical Research in San Jose.

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The use of microelectronics in the Sleep Disorders Center developed out of the need to improve diagnosis of often baffling sleep disorders related to a disruption of the normal sleep-wake cycle.

Many patients can't get to sleep at night, then find it difficult to stay awake during the day. This problem may be unrelieved or even made worse by the use of sleeping pills, and can be very disruptive to patients' social and working lives.

Before the advent of microelectronics, abnormal sleep-wake cycles could be diagnosed only by having patients keep sleep diaries, or by monitoring them in the laboratory.

Now acccurate monitoring can be done by machine outside the lab, at much less expense.

With microelectronics has emerged a new field called chronotherapy, the treatment of disturbed sleep-wake cycles.

Developed by researchers at Stanford and at the Sleep-Wake Disorders Unit in New York's Montefiore Hospital, the treatment involves putting patients to bed three hours later every day over a period of five days. This effectively "rewinds" their biological clocks, until the time they go to sleep coincides with their desired bedtime.

The studies are preliminary, cautions Charles Czeisler, Ph.D., a medical student at Stanford who helped design the treatment. However, "for people who have this disorder, chronotherapy can be an important alternative to drugs," he says.

Miles demonstrated the capacity of the ambulatory monitoring devices last summer during a two week train trip across seven time zones in Russia aboard the Trans-Siberian Express. The monitor provided an automatic computer record of shifts in his sleep-wake cycle and body temperature during the trip.

Miles said the devices might have application in determining the alertness of industrial workers and airline pilots, and thus avoiding accidents which occur from human error. They may also help researchers analyze the effectiveness of stress reduction and exercise programs in rehabilitating victims of heart attacks.

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Mailed Monday, December, 17, 1979

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Constance Hellyer (415) 497-7603

STANFORD—

Dr. Edward B. Stinson, a leader in Stanford University's heart transplant program, has been named The Thelma and Henry Doelger Professor of Cardiovascular Surgery.

The Stanford University Board of Trustees established the chair and named Dr. Stinson its first holder Tuesday, December 11.

The chair was endowed by a gift from Mrs. Thelma Doelger of Daly City. Her late husband Henry, a pioneering real estate developer and founder of Doelger Enterprises, built the Westlake district in Daly City and a major portion of San Francisco's Sunset district.

Dr. Stinson, 41 has been a close associate of Dr. Norman E. Shumway, chairman of the Department of Cardiovascular Surgery, since 1969, the year Dr. Shumway performed the first adult human heart transplant in this hemisphere.

"I am enormously pleased," Dr. Shumway said, "to have an endowed professorship in the department to which we could appoint Ed as recognition of his contributions to the department and society."

Dr. Stinson now directs the Stanford heart transplantation program, which is the most successful in the world and the most active in the United States.

Among his contributions was the development, in 1973, of a refined technique for obtaining small samples of heart tissue from patients. These samples, Dr. Stinson explains, are "valuable in diagnosing acute rejection episodes" so that corrective treatment can be provided.

Because of such improvements in the clinical management of Stanford heart transplant patients, nearly 70 percent—all suffering from end-stage heart disease—now survive at least a year. A total of 71 transplant patients are currently alive, two in their ninth year since receiving new hearts at Stanford.

In addition to his work on transplantation, Dr. Stinson heads one of Stanford's two cardiovascular services and is involved in a long-term evaluation of the results of heart valve replacement.

He is also the principal investigator in a national study on unstable angina pectoris (chest pain originating in the heart).

Dr. Stinson and his wife, Donna, are residents of Los Altos. They have two sons: Bret, who attends Los Altos High School, and Colin, a student at Pinewood School.

In addition to Mrs. Doelger's gift of this new professorship, Stanford's heart program is a substantial beneficiary of a charitable trust established by Mr. Doelger's will.

Mailed Wednesday, December 12, 1979 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

EDITORS: Details follow asterisks.

STANFORD—

Monitoring fetal growth, treatment of brain tumors with heat, and cell membrane function are among the research topics of ten young Stanford Medical School scientists selected to receive funds from the Andrew W. Mellon Foundation of New York.

The three-year $400,000 grant to Stanford University School of Medicine will "assist in providing teaching and research opportunities for outstanding young faculty investigators," according to the Foundation.

Stanford is one of 15 private medical schools to receive funds from the Mellon Foundation. The grant is a renewal of the Foundation's 1973 and 1976 programs of similar assistance to these institutions.

Ten young Stanford faculty members in basic and clinical sciences have been selected fellows for 1979-1980 by acting dean and vice-president for medical affairs, Dr. Lawrence G. Crowley.

The recipients are Helen M. Blau, Ph.D. (pharmacology); Richard H. Britt, M.D., Ph.D. (surgery); Dieter R. Enzmann, M.D. (radiology); Richard D. Mamelok, M.D. (medicine); W. Desmond McCallum, M.D. (gynecology and obstetrics); James E. Rothman, Ph.D. (biochemistry); Peter B. Sargent, Ph.D. (structural biology); Carla Jo Shatz, Ph.D. (neurobiology); David K. Stevenson, M.D. (pediatrics); and Bruce G. Wallace, Ph.D. (neurobiology).

* * *

Blau is studying genetic regulation of muscle cell differentiation and development to learn what conrols the transition of an unspecialized cell into a highly specialized muscle cell.

Neural coding in the auditory system is one subject of Britt's research. In addition, he is testing the use of hyperthermia as a new type of treatment for malignant brain tumors. This technique would deliver heat selectively to the tumor without affecting surrounding tissues.

Computerized tomography scanning (a new method of imaging using x-rays and computers) is being tested by Enzmann for distinguishing the stages in brain abscess development, with the goal of making early diagnosis more reliable.

Drug transport systems in kidney cell membranes are being examined by Mamelok, to obtain more information on drug therapy in patients with kidney failure. He also hopes to learn more about avoiding damage to the kidneys when administering potentially toxic drugs.

McCallum is developing a method of accurately estimating fetal volume from ultrasonic images so that fetal growth can be monitored.

Rothman is studying how cell membranes are formed and how different enzymes are directed to specific membranes during cellular growth and division.

Sargent studies the formation of synapses, the areas where nerve cells come into close proximity and influence each other across gaps of just one millionth of an inch.

How cells in the retina of the eye make connections with cells in the brain during development is the subject of Shatz's research. The entire visual system is dependent on information received from the initial nerve connections.

Stevenson is working on techniques for measuring certain types of gases in babies' breath. These measurements can be used by doctors to detect some ailments before they become severe, in time for effective treatment to be started.

Wallace is trying to determine how developing nerve cells accumulate neurotransmitters, the chemical messengers that transport electrical signals accross gaps, or synapses, between the cells.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Stanford University psychiatrists are studying a natural brain chemical that could provide clues to the development of autism.

They are seeking 200 autistic and severely retarded children to participate in the study.

Autism is an illness that occurs early in infancy and is marked by bizarre flapping and twirling behaviors, emotional withdrawal, and severe language disability. The disorder strikes four to five children per 10,000 yet it continues to baffle scientists.

The brain chemical believed to play a role in autism is serotonin, a substance that carries electrical impulses from one nerve cell to another.

Drs. Roland Ciaranello, assistant professor of psychiatry, and Steve Stahl, resident physician in child psychiatry, are studying a finding that one third of autistic children have abnormally high levels of serotonin in their blood.

Elevated serotonin levels have also been found in 50 percent of severely mentally retarded children whose condition results from unknown causes.

No one understands the significance of elevated serotonin levels, Ciaranello says. "We need to know what causes the elevation, if other family members also have high levels, and, ultimately, what role, if any, it plays in autism."

Participation of children in the study will require the taking of small blood and urine samples, and family histories.

Parents who would like their children to participate in the study should call the Laboratory of Developmental Neurochemistry at (415) 497-6049.

Further details about the study are described below.

Until the mid-1960s, autism was regarded primarily as a psychological illness caused by cold, unloving parents, Ciaranello says.

Now the disorder is viewed as a neurological disease. "It is clear these children have a profound inability to process incoming signals, "he says. In addition, as many as one third of them develop seizures during adolescence.

Today there are sophisticated programs designed to correct the language and educational disability which characterizes autism. Yet, Ciaranello says, this treatment is difficult, and progress is often poor.

"The fate of many autistic children still is institutionalization," he says.

Ciaranello and Stahl hope their study will improve understanding of autism, perhaps as a genetic disorder.

High serotonin levels may provide a means of diagnosing the disorder at birth. Alternatively, the study could lead to discovery of a "critical period" during development, after which brain damage and the resulting clincal signs known as autism occur.

"If we could find out which children are at risk for autism, and reach them before the critical period, perhaps we could prevent the brain damage," Ciaranello says.

However, he cautions that the study is preliminary, and that successful treatment is probably years away.

The study is supported by funds from the Department of Psychiatry and Behavorial Sciences.

Mailed Thursday, December 6, 1979. —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Tuition at Stanford University School of Medicine will increase 12.3% for present students and 20% for new students next fall if the University's Board of Trustees approves an administration recommendation next week.

This means tuition per academic quarter for current students will be $2,289 and for new students will be $2,446.

The tuition proposal was discussed by the administration at a meeting with medical student leaders Monday, December 3.

Medical students now pay $2,038 per academic quarter. That rate currently places Stanford at the median of $6,440 per year for private U.S. medical schools, said David S. P. Hopkins, assistant dean for administration.

Tuition rates at a few private medical schools presently run as high as $13,500 per year, he said.

In accord with a faculty committee recommendation, the administration has proposed that tuition be charged M.D. students for 13 quarters, regardless of the number of quarters registered. For quarters past the thirteenth students will need pay only a special student registration fee which is now $145.

Present students, Hopkins said, will continue to have the option of graduating in 11 or 12 quarters if requirements are met without having to pay the extra quarters of tuition.

John P. Steward, associate dean for student affairs, explained the change is intended to help reverse the trend of increasing number of students who spend four years or less in medical school to save money.

"The new policy will encourage medical students to participate more fully in the Stanford program and elective scholarly activities," he said.

Administration blamed inflation and current economic trends for the proposed increases.

Steward said presently the Medical School's resources appear sufficient to maintain the present commitment of the School to providing financial aid for needy students.

"We will remain committed to meeting the demonstrated need of every M.D. student with loans or a combination of loans and grants-in-aid," he said.

Two-thirds of Stanford medical students are receiving loans and other student aid to help finance their medical education.

Mailed Monday, December 3, 1979

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD—

Dr. Daniel Nebert, chief of the developmental pharmacology branch of child health and human development at the National Institutes of Health, will present the Pfizer Lectureship on Thursday, Dec. 6, at Stanford University School of Medicine.

The public lecture begins at 4:15 p.m. in Room R-358.

In his studies in rats, Nebert and his researchers have shown that genetic differences in the pathways of drug metabolism may influence the incidence of carcinogenesis (cancer) and teratogenesis (malformation). They have identified an organism in this species which seems to be associated with predictable development of neoplasms.

In his lecture, Nebert will discuss how the activity of drug metabolizing enzymes, which lead to cancerous compounds, is regulated by a genetically inherited receptor in cells.

The Pfizer Lectures are sponsored by the Division of Clinical Pharmacology and the Department of Pharmacology at Stanford Medical School. They are funded by Pfizer Pharmaceuticals, Pfizer Inc. of New York City.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Stanford University medical students plan to pursue full time academic careers in basic or clinical sciences at more than twice the rate for medical students nationwide, according to a survey conducted by the American Association of Medical Colleges (AAMC).

Forty seven percent of the survey respondents from Stanford Medical School's graduating class of 1979 would like to become faculty members at an academic institution as opposed to twenty percent of such medical students who responded to the questionnaire nationwide.

The survey also revealed that Stanford medical students:

- engaged in research during their medical school years at twice the national rate, and
- used freedom within the academic curriculum for educational purposes (overseas study, clerkships, research) at twice the national rate.

Forty two percent of Stanford medical students who responded had participated in a research project compared with 24 percent nationally, and 30 percent were authors of a research paper as opposed to 15 percent nationally.

Amid growing national concern over future opportunities for medical researchers, assessing changes in student attitudes was one purpose of the survey, according to Dr. Elizabeth Short, assistant dean for student affairs in Stanford's School of Medicine.

One unexpected result was that uncertain availability of research funds is not significantly deterring Stanford medical students from pursuing research careers, Short said.

"Stanford students seem to aspire to research careers for idealistic reasons," she said. "The challenge of the search for new knowledge was a strong motivation for incorporating research into career plans.

"However, uncertain availability of research training and research funds, and the financial disadvantages of a research career were negligible influences on the students' career choices," she added.

Although none of the medical students responding from Stanford (or nationwide) anticipated a career exclusively devoted to research, 67 percent of the Stanford group expected to be involved in research in the future.

Twenty two percent of these students expected to devote as much as several years full time or at least 25 percent of a continuous career to research, in contrast to nine percent of students nationwide.

Other factors strongly influencing Stanford students' penchant for research revealed by the questionnaire were their research experiences during medical school and the opportunity of working in an academic community.

In the two years the AAMC has conducted the survey, Stanford's flexible curriculum, pass/fail grading system, preclinical program, and faculty, were consistently reported as major strengths by the graduating students.

Clinical teaching and the small patient population were considered weaknesses by responding students.

And while the postgraduate financial outlook does not concern them, problems with high tuition and financial aid during medical school are increasingly worrying Stanford medical students, according to the survey.

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Mailed Wednesday, January 30, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

A new suite for the study of hyperthermia in treating cancer was dedicated Monday, January 28, in the division of radiation therapy at Stanford University School of Medicine.

Hyperthermia refers to the heating of tissue. Stanford researchers under the direction of Drs. George M. Hahn and Jane B. Marmor have found that heating by ultrasound effectively shrinks some solid tumors in patients, particularly surface tumors in the head and neck region.

Construction of the hyperthermia suite was made possible by a gift from Virginia and Dean Morrison of Piedmont, California. Mr. Morrison, a 1930 graduate of Stanford University, is chairman of Morrison Homes of Pleasant Hill. The Morrisons also support an endowed chair in their name at Stanford in population studies.

"We are very grateful to the Morrisons for their gift," said Dr. Malcolm Bagshaw, chairman of the Department of Radiology and director of the suite. "The new suite will make it possible for the Department to treat more patients and expand clinical research on this promising new technique."

Current projects include development of ultrasound transducer arrays, which will allow treatment of larger and some deeper tumors, and combination of hyperthermia with both radiation and chemotherapy.

Scientists have known since the 1890s that heat can shrink tumors. However, systematic study of the technique was not possible until the 1970s, when developments in ultrasound and microwave technology improved the dependability of heat sources.

Parallel developments in microelectronics enabled physicians to monitor directly the temperature changes which occurred in tissue upon heating.

In 1970, Hahn began studying the effects of heat on cells, using ultrasound equipment developed with the help of Douglas Pounds, a thermal physicist.

Later, the studies were applied to animals, and in 1976, Hahn and Marmor found that ultrasound heating caused shrinkage in 50 percent of surface tumors in dogs, cats and mice.

Last year they reported shrinkage in nearly 70 percent of superficial head and neck tumors, and in 50 percent of a variety of surface tumors in 30 patients treated with hyperthermia.

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Mailed Monday, January 28, 1980

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD—

During the past six years, Stanford failed to meet its own affirmative action goals for hiring Medical School faculty, a federal report charges.

Other schools within the University met faculty hiring goals, but failed to meet their targets for retention and promotion of female and minority faculty, according to an amended 30-day "show cause" notice from the San Jose regional Office of Federal Contract Compliance Programs.

Based on a three-month review by two compliance officers on campus, the University was cited for 15 deficiencies. Stanford Affirmative Action Officer Santiago Rodriguez called the list "significant and substantive, although not unexpected."

The University has cooperated closely with the compliance review. Rodriguez expressed confidence that satisfactory remedies can be developed for the deficiencies cited.

The transfer of affirmative action compliance provisions from the Department of Health Education and Welfare to OFCCP has resulted in a general tightening of standards, including more dramatic charges and antagonistic responses from other major universities.

At the November meeting of the Faculty Senate, Provost Donald Kennedy disclosed he was forming three task forces to identify women faculty of "unarguable quality" and bring them to the attention of deans and departments with vacancies.

Kennedy told the Senate that chicano faculty are "very significantly below any reasonable definition of critical mass" and said the University had suffered "attrition from the early 1970s" in black faculty. "We need to do more, especially in attracting and retaining junior faculty," he said.

Corrective actions demanded by OFCCP include:

* Developing staff affirmative action goals and timetables within each vice-presidential area, with objectives for hiring and promotions to be met in no more than five years.

* Revising internal reporting systems to measure the effectiveness of the total affirmative action program, including data on all applicants, new hires, promotions, terminations, transfers, layoffs, and recalls.

* Including performance on equal employment opportunity in the performance reviews of supervisors, managers, department chairpersons, and deans; and

* Revising job groups for faculty and other academic staff "to include faculty positions from departments having similar academic disciplines and common administrative control (under a single dean)." Within these related areas, separate job groups should be developed for 1) tenured faculty; 2) nontenured faculty, 3) lecturers, and 4) research associates.

University officials have been asked to meet later this month with OFCCP officials to develop a written conciliation agreement, indicating how the deficiencies can be met. Stanford may seek an extension in the 30-day limit which ends in mid-February.

From 1974-75 through 1979-80, Stanford "failed to meet its hiring goals for minorities and female faculty members without sufficient justification" in two areas, the report declared.

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In medicine basic sciences, the University's affirmative action plan projected 45 appointments, including one black, during this six-year period. There were actually 21 appointments, none of which was black.

In 1974 there were no blacks in the job group among 60 faculty. There still are no blacks among 46 faculty this year.

In medicine clinical sciences, the 1974 plan projected 137 faculty appointments, including two blacks and five Asians, over six years. Of the 172 faculty actually appointed, three were Asian and none black. Out of the 224 faculty in this job group in 1974 two (.9%) were black. Now there are none. Asians increased from five (2.2%) to seven (2.3%) over the same six-year period.

"Although Stanford's hiring goals were attained in every other goal area, minorities and females did not experience any increase in their utilization and in some cases experienced a decrease in representation, despite the existence of an affirmative action program and substantial opportunities to effect affirmative action," the report observed.

In other words, hiring gains were offset by subsequent losses over the six year period. In the total selection process for Stanford faculty:

* There were approximately 94 direct appointments to tenure during the six-year goal period, of which only four (or 4.2%) were women, two (or 2.1%) were black, one (or 1.1%) hispanic, and four (or 4.2%) were Asian.

* There were 163 faculty members promited to tenure, of which only 16 (or 9.8%) were women, four (or 2.5%) were black, four (or 2.5%) were hispanic, and five (or 3.1%) were Asian.

Where previous goals were not met, Stanford must establish "make up goals" to remedy its past failures in addition to future requirements, the federal report indicated.

On the staff side, the OFCCP points out the need for developing more accurate job groups. "Management and supervisory job(s). . .should be grouped by their level of responsibility—for example, first, mid- and top-level management." The present groups combine professional lawyers with legal assistants, administrative assistant IIIs have been classified as "executives, administrative and managerial, yet clearly do not meet the criteria. . .for this category," the report noted.

Rodriguez indicated that OFCCP has offered technical assistance in helping the University make these changes. He said the likely result is an increase in the total number of job groups used in affirmative action reporting. These now total about 40.

1/22/80 —30— 12

EDITORS: Rodriguez office phone is (415) 497-3483; OFCCP phone is (408) 275-7384. Contacts there are Emily Duncan, Angel Luevano or Mr. Oroz.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bob Tapia (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Does your blood pressure rise during periods of stress at home or on the job, or do you experience unpleasant side effects while taking medication for high blood pressure?

If your answer to either of these questions is "yes" you are invited to participate in blood pressure management training being offered by Stanford University Medical School.

The blood pressure training, which is free of charge, is designed for a "significant group" of patients who do not respond well to standard medical treatment, according to Dr. Craig K. Ewart.

The training is part of a research project being directed by Ewart and Dr. C. Barr Taylor.

In recent years researchers at Stanford and elsewhere have begun to use techniques such as relaxation, meditation and reflective stress analysis to lower blood pressure. Ewart and Taylor and trying to determine if these methods can help those who do not respond to drug therapies.

A novel feature of the project, Ewart noted, is inclusion of of the patient's spouse or intimate friend in the training.

If the training is to be effective, he explained, the patient must use stress control methods regularly in his or her normal environment.

"It is a lot easier to apply these skills in everyday situations if you have a partner who can help," he commented. "an understanding wife or husband can do a lot to help you reduce the amount of stress in your life."

The eight weeks of training is provided on an individual couple basis, and consists of weekly, hour-long sessions, tailored to the individual needs of each couple.

Sessions will be held in the Stress Relief Clinic.

Persons wishing to participate in the program, or those who need additional information may call the Stanford Health Behavior Program at 327-2873 weekdays between 8 a.m. and 5 p.m.

Mailed Monday, Jan. 21, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

(ADVANCE) FOR AM PAPERS THURSDAY, JANUARY 24, 1980

Science Desks: A press conference to present the report of the Joint Commission on Prescription Use will be held at 2 p.m. Wednesday, January 23, in 4232 Dirksen Office Bldg., Washington, D.C. Commission contact numbers are Kenneth Melmon, M.D., chairman, (415) 497-5454 or Marcus M. Reidenberg, M.D., vice chairman, (212) 472-6030.

WASHINGTON, D.C.—

A comprehensive monitoring system for evaluating the actual risks and benefits of marketed prescription drugs was recommended Thursday, January 24 by the Joint Commission on Prescription Use.

In a 153-page report reflecting three years of research, the commission called both for intensified efforts on the part of the U.S. Food and Drug Administration (FDA), and for the creation of a private,, nonprofit national Center for Drug Surveillance to engage in activities not covered by existing programs.

"A better coordinated and more comprehensive system of postmarketing drug surveillance should be established in the United States," the commission said.

Monitoring, the commission added, is needed because desirable or necessary information about prescription drugs is unavailable from premarketing studies. The limited number of patients participating in such studies restricts what can be revealed about drug effects.

The commission was formed three years ago at the request of Senator Edward M. Kennedy, chairman of the Senate Subcommittee on Health. The commission was asked to determine if there was a need for such monitoring system and, if so, how it should be structured most efficiently.

Noting that a stepped up surveillance program for marketed drugs should be a high FDA priority, the commission said a Center for Drug Surveillance was needed to complement and augment the responsibilities of the FDA and other research endeavors both public and private.

With initial recommended funding of $10 million a year, the commission said the center would work to educate all members of society who use and distribute pharmaceutical products, develop new programs and methods for postmarketing surveillance, train scientists and foster cooperation.

The report was made public by Dr. Kenneth L. Melmon, professor and chairman of the department of medicine at Stanford University, who chaired the 18-member commission.

Senator Kennedy, Dr. Theodore Cooper, then HEW assistant secretary for health, and Dr. David Hamburg, president of the Institute of Medicine-National Academy of Sciences, selected the commission's membership representing medicine, pharmacy, the pharmaceutical industry, hospital administration, and consumer and public interests.

For the past three years, the commission reviewed the need for surveillance of marketed drugs, and the development of a system that could be used to detect, quantitate and describe the anticipated and unanticipated effects of drugs used in medical practice.

The commission noted there are presently about 54,000 drug products on the market, representing 1,900 active ingredients, with 1,024 new chemicals introduced since 1940.

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These drugs are studied both in the laboratory and in animals for pharmacological and toxic effects prior to approval for studies in humans. The drugs undergo a three-phase testing before being released for marketing.

The studies, usually conducted in 500 to 3,000 volunteers, are designed to determine a drug's dose range and tolerance in humans, efficacy for one or more clinical conditions, and adverse effects. Controlled and uncontrolled clinical studies are used to demonstrate efficacy and to provide the primary information on safety.

If these trials confirm the drug's efficacy for the intended conditions with acceptable toxicity, the drug is approved.

Once marketed, despite restrictions implied in the official label, a drug can be used in any dosage for any indication considered medically appropriate. FDA regulation continues only to assure that the procedures and safeguards for manufacturing established during approval are maintained.

The commission said surveillance of marketed drugs includes many separate programs at the present time. They include voluntary reporting to FDA, to drug companies, and to the professions through medical and scientific journals, research programs based in universities, ad hoc studies, and research sometimes required of pharmaceutical companies by the FDA as a condition for marketing.

"These programs are functioning well, but they should be integrated," the commission said.

Hints of drug effects that will bear on medical and regulatory decisions may be detectable long before effects are clearly recognized and even longer before the information is used clinically, the commission pointed out.

It is the role of surveillance to detect systematically these hints, test whether they are pointing to real effects, and facilitate the use of this clinical information.

Thus, the beneficial or harmful (expected and unexpected) effects of prescription drugs as they are used in medical practice can be monitored and determined, the commission added.

With current methods, the commission noted, the system could be used to study expected or unexpected toxicity and unintended efficacy, successfully detecting events that occur with a frequency of at least one event per 1,000 exposures.

The commission said multiple types of reports will be necessary, tailored to the differing needs of recipients, to disseminate the drug information.

"The information gained is useful only when it is reported to those who can use it," the commission said.

The problem of monitoring marketed drugs is a worldwide concern, the commission said. Considerable strides have been made both in the U.S. and elsewhere to make such monitoring more systematic. The United Kingdom and other countries have either proposed or begun to implement innovative new methods for drug monitoring.

END ADVANCE RELEASE FOR AM PAPERS THURSDAY, JANUARY 24, 1980

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Mailed Tuesday, January 22, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia 415: 497-6911

STANFORD—

James H. Dewson III has been appointed director of the Division of Laboratory Animal Medicine at Stanford University School of Medicine.

His appointment was announced jointly by Dr. Lawrence G. Crowley, acting vice president for medical affairs and dean of the medical school, and by Gerald J. Lieberman, vice provost and dean of research at Stanford.

Dewson has served as acting director since last March. He succeeds Dr. Orland A. Soave, who retired earlier this year.

The Division of Laboratory Animal Medicine supports medical and scientific research at Stanford. The division operates about 30,000 square feet of animal space in nine different locations on campus.

An administrative panel appointed by the university president serves in an advisory and general policy-making capacity for the division. The panel helps insure that the university meets its ethical and legal responsibilities in the care and humane treatment of its animals.

Dewson is associate professor of hearing and speech sciences in the Department of Surgery, and previously was chairman of the administrative panel.

Dewson's research with monkeys led to the discovery in 1976 that these primates possess a type of brain which had earlier been associated with man's specific intellectual capacities.

A graduate of the University of Arizona, Dewson received his Ph.D. from Stanford Medical School in 1961. Except for three years (1967-69) when he taught and conducted research at Oxford, Dewson's professional career has been at Stanford when he began as a postdoctoral fellow in the Department of Psychiatry in 1961.

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Mailed Wednesday, January 16, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Patient occupancy at Stanford University Hospital is the highest it has been in three years, according to Hospital administrator Gary Mecklenburg.

For the past four months, September through December, there have been 20 to 30 more patients in the Hospital every day than the level anticipated in the budget (about 450 patients per day).

Mecklenburg said the higher occupancy has caused difficulties for the admitting, nursing and Emergency Department staffs.

In the last two weeks for example, several emergency patients had to wait in the Emergency Department overnight for a bed to become available.

Some of the high risk newborns and pregnant women normally transported to Stanford's intensive care nursery and delivery rooms have been taken to other hospitals in the region. And shortages of beds in the intensive care units (ICUs) have meant that some elective surgeries have been postponed.

The high census is not limited to Stanford, Mecklenburg said, but seems to be a regional phenomenon. Maternity cases at El Camino Hospital in Mountain View increased 11 percent in the period July, 1979 to January, 1980, compared with the same period last year, and overall occupancy this month has been high, according to assistant administrator Harvey Hansen. This resulted in the closing of the El Camino's emergency room for two days in the last two weeks, and the transfer of several patients to Stanford.

Sequoia Hospital in Redwood City has had an occupancy rate of up to 300 patients per day since New Year's, 50 more patients per day than normal. In addition, San Jose Hospital, Santa Clara Valley Medical Center in San Jose, and the Palo Alto Veterans Administration Medical Center have been more full than usual.

The increased patient occupancy throughout the area has increased competition for the nurses needed to staff extra beds at Stanford, Mecklenburg said.

In September, 1979, there were 56 vacancies for nursing positions at Stanford, 11 of those in the operating rooms. The gap has closed somewhat as the result of vigorous recruiting by the Personnel Department and Nursing Service, but there still were 43 vacancies as of January 1, six of them in the operating room.

Some beds remain unused because of a lack of nurses needed to staff them.

To adjust to the continued high occupancy, the Hospital has instituted a variety of measures.

On January 14, a 14-bed unit at the Hoover Pavilion was reopened, and an additional 10 beds at Hoover will become available later this week.

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The medical staff has approved new policies which call for admitting the sickest patients first, and allowing postponement of elective procedures.

Administrators are considering opening the temporary use of ICU beds as a pre-operative unit. Such a unit would not require as many nurses as an ICU does, and would get more patients into the Hospital more quickly, Mecklenburg said.

In the short run, the Palo Alto VA Medical Center may accept several specialty patients from Stanford, under an existing agreement.

And the Personnel Department and Nursing Service are undertaking several measures designed to increase the number of nursing recruits. These include providing rental apartments on a short term basis for nurses who come from outside the Bay area, changing the salary program to account for job experience, and improving the compensation package for relief nurses.

Apartments were made available in January, and the other changes will take place next month, according to Don Thomas, personnel director. Thomas encouraged all Hospital and medical staff to participate in the recruitment efforts.

Although several hospitals in the area periodically close their emergency rooms during periods of high occupancy, Mecklenburg said that Stanford will keep its Emergency Department open in any way possible.

"We are in a geographical location in which we have no other hospitals nearby for backup," he said, "and we would rather that patients receive care here than spend valuable treatment time riding in an ambulance to another hospital."

Mecklenburg said several factors may have contributed to the high occupancy at Stanford.

First, an increase in the numbers of hospitalized patients traditionally occurs in the period immediately following the holidays.

Secondly, greater numbers of referrals to Stanford occur when other hospitals have heavy patient populations. Stanford also offers new services which are attracting more patients. For example, 68 patients were transported to Stanford last year under the newly-established adult emergency medical transport service.

Finally, population growth in Santa Clara County may be contributing to high patient occupancy in area hospitals, Mecklenburg said.

Mecklenburg said the high occupancy probably would last through March.

"The cooperation of all Hospital employees, nurses and medical staff has been tremendous," he said, "particularly under such difficult circumstances."

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Mailed Wednesday, January 16, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Is the lower rate of heart disease among runners due to a "genetic protection" against the disease, rather than to the exercise itself?

A Stanford University professor refuted this suggestion, in a letter published in the current issue of the *New England Journal of Medicine.*

In the letter, Dr. Ralph S. Paffenbarger, Jr., professor of epidemiology at Stanford University School of Medicine, cited a study of 16,936 Harvard University male alumni to show that parental histories of heart disease did not differ significantly between those who participated in vigorous sports and those who were less active.

A previous study had suggested that the incidence of heart disease among parents of long distance runners is less than that of non-runners, making the runners a self-selected group which is genetically protected against the disease.

On the contrary, Paffenbarger wrote, the Harvard study "tends to refute suggestions that selection establishes exercise habits, determined by inherited or other familial characteristics, which in turn influences heart attack risk."

He stated it was likely that "sons of physically active parents would carry on their family life-style by being physically active themselves," but this does not refute the hypothesis that exercise contributed to their lower heart attack risk.

In fact, "exercise would tend to reduce the influence of adverse hereditary and familial circumstances," he added.

Paffenbarger analyzed five different risk factors for heart attack in the men, who graduated from Harvard between 1916 and 1954: cigarette smoking, obesity, high blood pressure, physical inactivity, and familial tendencies (both genetic and environmental).

The relative risk of heart attacks among those who expended less than 2000 kilocalories per week in exercise was 49 percent higher than their more active counterparts.

Thirty three percent of that risk may be attributable to a sedentary life-style alone, he wrote.

Hypertensive alumni had 134 percent greater risk of heart attack than those with normal blood pressure. Cigarette smokers had a 30 percent greater risk than non-smokers, obese men had a 32 percent greater risk than their leaner counterparts, and men who reported a family history of heart disease had a 28 percent greater risk than those who denied such a history.

"Thus, each of these five characteristics makes an independent and significant contribution to heart attack risk," Paffenbarger wrote .

In an interview, Paffenbarger said that the debate over the benefits of exercise will continue until its relation to heart disease is determined, and until the disease itself is better understood.

But although it is not established conclusively that exercise can lengthen life, "there is no doubt that it improves the quality of life," he said. "That is surely one of the chief dividends of good health."

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Mailed Friday January 11, 1980

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

EDITORS: *Photos available on request if not included.*

STANFORD—

Two Stanford University professors have been named recipients of the prestigious National Medal of Science, to be presented by President Carter early this year at a White House ceremony.

Dr. Donald E. Knuth, Fletcher Jones Professor of computer sciences, and Dr. Arthur Kornberg, Emma Pfeiffer Merner Professor of biochemistry, are among 20 recipients of the award, the nation's highest honor for distinguished achievement in science, mathematics and engineering.

Knuth and Kornberg bring to 12 the number of medal recipients from Stanford since the award was established by Congress in 1959 to honor persons "deserving of special recognition by reason of their outstanding contribution to knowledge in the physical, biological, mathematical or engineering sciences."

Previous Stanford winners are Profs. Paul J. Cohen, George B. Dantzig, Carl Djerassi, Paul Flory, the late Rudolf Kompfner, Wolfgang Panofsky, Linus Pauling, Henry Taube, Frederick E. Terman, and Cornelius van Niel.

Knuth is widely recognized for his research in the analysis of algorithms, the basic procedures by which computations are performed. He is also a recognized authority in the early history of programming languages and computing machines.

In addition, Knuth is the author of a series of books widely acclaimed in the field, *The Art of Computer Programming.* The series is an attempt to compile and organize the entire body of scientific material on programming of digital computers, and has contributed significantly to the establishment of computer science as a scholarly discipline.

Born in 1938 in Milwaukee, Knuth received a B.S. degree from Case Institute of Technology in 1960, and a Ph.D. from California Institute of Technology in 1963. In 1968, he joined the Stanford faculty.

A member of the National Academy of Sciences and the American Academy of Arts and Sciences, Knuth is also the recipient of several awards, including the 1971 Grace Murray Hopper Award and the 1974 Alan Turing Award, both from the Association for Computing Machinery, and the 1975 Lester R. Ford Award from the Mathematical Association of America.

A noted biochemist, Kornberg has made major contributions towards understanding replication of DNA, the primary genetic material of living things. His current research focuses on the nature of the replication process, including the mechanisms by which the long DNA chains begin replication, and the complex nature of the proteins required for initiation of DNA synthesis.

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Kornberg pioneered the synthesis of DNA in the laboratory, a feat for which he shared a Nobel Prize in 1959, and he has also worked out the synthetic pathways of nucleotides, the chemical precursor units of DNA.

Throughout the years, Kornberg has been a strong advocate of basic research in science, through public testimony, in speeches and in articles.

A native of New York, born in 1918, Kornberg received a B.S. degree from the City College of New York in 1937, and an M.D. degree from the University of Rochester in 1941.

In 1959, he joined the Stanford faculty as chairman of the department of biochemistry, a position he held for 10 years.

In addition to the Nobel Prize, Kornberg has received numerous awards and honors, including the 1968 Borden Award from the American Association of Medical Colleges, the 1968 Scientific Achievement Award of the American Medical Association, and nearly a dozen honorary degrees.

His publications number in the hundreds, and he is a member of the National Academy of Sciences, a foreign member of Britain's Royal Society, a member of the American Philosophical Society, and is a past president of the American Society of Biological Chemists.

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Mailed Wednesday, January 2, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

A new book about DNA, the basic matter of life that determines how cells should function and reproduce, has been authored by Dr. Arthur Kornberg, a Stanford University Nobel Laureate and one of the leaders in the field.

Titled *DNA Replication* (W.H. Freeman and Company, San Francisco, 724 pages, $32.50), the book contains over 300 color illustrations and is written at such a level that it will be useful to DNA researchers as well as to persons interested in supplementing their biochemical knowledge of the subject.

The new book builds on Kornberg's earlier work, *DNA Synthesis* published in 1974. That book covered the biochemical rather than the physiological aspects of DNA synthesis.

"I did not anticipate how little I would retain (of the early book), and how much would have to be added," Kornberg writes in the introduction.

He adds recent advances have produced a qualitative change and justified a larger scope.

The new book, according to Kornberg, embraces biochemical, genetic and physiological aspects, and also the numerous DNA transactions that determine the structure and function of the genetic material.

The first part deals with the explosive advances in genetic chemistry in terms of the structure of the genetic substance DNA. It is followed by presentations of the greatly expanded field of DNA enzymology, one aspect of which is the DNA repair system when mutations are introduced by agents ranging from chemicals to x rays.

This work, derived from bacterial studies, has preoccupied part of the Kornberg laboratory for the past 14 years. Biochemical and genetic studies with these mutants have provided new insights into how DNA is constantly evolving.

For an understanding of replication mechanisms, Kornberg gives an account of present knowledge. This is based on the use of small, well-characterized DNA viruses as tools to study DNA replication events. The structure of these viruses, their mechanisms of infection and replication, and genetic studies are presented.

The synthesis of genes and chromosomes and the newest developments in recombinant DNA research are discussed at the end of the book.

In recent years, writes Kornberg, refinements in analytic methods have uncovered unanticipated subtleties in the organization, replication, and expression of DNA.

The revised concepts have "made the present era one of continuing dreams and promise," he adds.

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Mailed Wednesday, January 2, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD—

Are you afraid of spiders, but don't want to be)

If so, here's an opportunity for you to receive treatment for this condition, which is known as arachnephobia.

The Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine is seeking volunteers willing to participate in this free treatment program.

Department researchers are administering the program in an effort to learn more about this problem and how to treat it.

If you're interested in participating, or if you need additional information, call (415) 327-2873.

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Mailed Friday, Feb. 29, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

Editors: Photo available on request if not included.

STANFORD—

A special flashlight to help individuals with severe night blindness has been designed by a Stanford University professor.

The new light is the least expensive and most readily available device to help thousands of individuals who have difficulty moving in the dark because of night blindness and tunnel vision caused by certain eye diseases, according to Dr. Michael Marmor, assistant professor of surgery (ophthalmology) at Stanford.

Marmor is also chief of the ophthalmology section at the Palo Alto Veterans Administration Medical Center (VAMC).

The flashlight, named the Wide Angle Mobility Light (WAML), has a high intensity bulb and broad beam (measuring 20 degrees vertically and 30 degrees horizontally) which combine to overcome the problems facing many patients with retinitis pigmentosa, Marmor said.

"Retinitis pigmentosa involves progressive loss of visual cells in the eye, particularly in the periphery of the retina, causing tunnel vision.

"Since the peripheral areas of the retina are also most sensitive to light, night vision is impaired," he added.

A conventional flashlight does not help because it casts a narrow beam that individuals with tunnel vision cannot easily locate in their field of view.

But the broad intense beam of the new flashlight "is easy for people with tunnel vision to follow," he explained.

The Wide Angle Mobility Light is manufactured and sold by a scuba diving equipment firm, Farallon Industries (Department E) of Belmont, California, and is a modified version of a diving light.

For $84, the five-pound light comes equipped with a special wide beam, high intensity bulb, rechargeable battery (each charge provides one continuous hour of light) and shoulder and waist straps which allow the light to be carried with the hands free.

"This permits the individual not only to move around, but to do chores if desired," explained Marmor.

"The waist strap is also useful because a light should be carried low to the ground so that irregularities in the surface will be shown in sharpest relief," he added.

Marmor noted that patients with night blindness and restricted peripheral vision who have tried out the light have been able to walk almost as freely at night as during the day.

"Although it's still more expensive than I would like, it should be affordable to the average patient and is considerably less expensive than other devices available," he said.

The Wide Angle Mobility Light was introduced last October, and Marmor hopes to get the word out to individulas who could be helped, notably those with retinitis pigmentosa or severe glaucoma.

He also encourages those who buy the light to return the enclosed questionnaire so that the design can be further improved, based on users' suggestions.

Marmor designed the WAML in collaboration with Mr. Ralph Shamlian, an expert on small lamps and batteries, and president of Tekna, a Menlo Park firm. Mr. Carroll Ault, a social worker in the Western Regional Blind Rehabilitation Center at the VAMC, helped in evaluation of early models of the light.

Mailed Monday, February 25, 1980 —30—

Editors: Farallon Industries, currently in Belmont, CA, will be moving to San Leandro, CA in mid-March, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Memorial services will be held on Wednesday, February 27 at Stanford University for Dr. Abraham White, consulting professor in the department of biochemistry, who died on February 14 in Santa Barbara at the age of 72.

Services will begin at 4:30 p.m. in Fairchild Auditorium in the Medical Center.

Principal scientist in the Institute of Biological Science of Syntex Research and former chairman of the department of biochemistry and associate dean of the Albert Einstein College of Medicine of Yeshiva University, Dr. White had also played an active role in the department of biochemistry's teaching programs at Stanford Medical School since 1972.

He died in Santa Barbara just before he was to deliver a lecture at the University of California campus.

An internationally known biochemist, Dr. White also was instrumental in establishing the Albert Einstein College of Medicine at Yeshiva University.

Prior to joining the faculty at Yeshiva, Dr. White had been vice president and director of research in the United States for Syntex during the early years of the company, from 1951 until 1953.

He rejoined Syntex in 1972.

Considered a world authority on the biochemical study of hormones, Dr. White most recently had been a leader in research on hormones of the thymus gland.

He was also coauthor of a widely used biochemistry textbook, *Principles of Biochemistry*, now in its sixth edition.

During his scientific career, Dr. White received numerous honors including the Eli Lilly award in biological chemistry for isolating a pituitary hormone in crystalline form, the distinguished alumni award from the Universities of Denver and Michigan, an honorary degree from Yeshiva University and election to membership in the National Academy of Sciences.

In addition to attending memorial services, friends and colleagues who wish to pay respects to the memory of Dr. White, may do so through contributions in Dr. White's name to the Albert Einstein College of Medicine of Yeshiva University, 1300 Morris Park Avenue, Bronx, New York 10461.

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Mailed Friday, February 22, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

The third and final winter Progress in Medicine Lecture on Plastic and Reconstructive Surgery will be held Tuesday, February 26 in Fairchild Auditorium, beginning at 7:30 p.m..

Drs. Donald R. Laub and Lars M. Vistnes will discuss "Aesthetic surgery to redesign the face, breast and other features."

The lecture is free and open to the public.

Laub, of the Palo Alto Medical Clinic, was formerly associate professor of surgery at Stanford and was chief of Stanford's division of plastic and reconstructive surgery from 1967 until he resigned this year.

He is the founder and president of Interplast, Inc., an organization of physicians who provide free medical care to people in Latin America and in the South Pacific.

Laub also directed the Gender Dysphoria Program at Stanford, providing psychological counseling, and hormonal and surgical treatment of transsexuality.

He will talk about body image and the reconstructive surgical procedures applied to redesign various body features.

Vistnes, associate professor of surgery at Stanford and chief of surgery at the Palo Alto Veterans Administration Medical Center, will talk about aesthetic surgery of the face, including ears, nose, eyelids, and face and neck lifts.

A specialist in wound healing, he currently is studying how tissue responds to silicone, a material widely used in plastic surgery. He also is investigating tissue responses to pressure, particularly in relation to the formation and prevention of pressure sores in paraplegic patients.

Vistnes has also done pioneering work on reconstructive techniques for eye sockets of individuals who have lost an eye. Known as orbital reconstruction, this surgery enables such people to wear a prosthetic eye.

The Progress in Medicine Lectures are presented as a community service by the dean and faculty of Stanford's School of Medicine and by members of the Medical Center Council.

Mailed Thursday, February 21, 1980 —30— 327

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD—

The seventh annual Katharine D. McCormick Distinguished Lecture at Stanford University School of Medicine will be presented by Dr. Rose O. Payne, professor of medicine, on Monday, March 3.

Her public lecture, which is entitled "Footprints on the Lymphocyte Surface—HLA," will begin at 5 p.m. in Fairchild Auditorium at the Medical School.

Her address will be the first to be delivered by a Stanford scientist since the lecture series began in 1974.

Payne is regarded as a pioneer in the study of the HLA system. In fact, her investigation of febrile transfusion reactions led directly to discovery of the HLA system.

She has had a central role in tissue typing for histocompatability studies and has made major contributions to understanding of the relationship of these cell surface markers to disease states.

She received her B.S., M.S. and Ph.D from the University of Washington, and joined Stanford Medical School in 1951. In 1964 she was presented the John Elliott Memorial Award of the American Association of Blood Banks for her research in leukocyte immunology.

Payne was one of the founders of the Professional Women of Stanford Medical School, a group that was organized as a direct result of the McCormick bequest.

The McCormick Lectureship honors Katharine Dexter McCormick, whose gift to Stanford Medical School was with the expressed hope was that it be used "for the encouragement and asssistance of women in pursuing the study of medicine, in teaching medicine and in engaging in medical research."

The annual lecture attracts outstanding women physicians and scientists to lecture at Stanford. Among the well known women scientists who have presented McCormick Lectures are Drs. Rosalyn Yalow and Rita Levi-Montalcini.

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Mailed Wednesday, February 27, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

Editors: Photos of the catheter technique available if not included with story.

STANFORD—

A major unit for the study and treatment of abnormal heart rhythms (arrhythmias) was established recently at Stanford University School of Medicine.

One of only a handful in the United States, the unit employs sophisticated new techniques for characterizing and treating this major health problem.

An arrhythmia is an interference with the normal electrical conduction of the heart. If untreated, it can lead to heart failure and sudden death.

Currently, 20 new inpatients are treated in the unit each month, and between one third and one half of all patients on the Stanford cardiology service at any one time have arrhythmias, according to Dr. Jay Mason, the cardiologist who directs the unit.

"We hope to become the major referral center in the Western United States for this kind of heart condition," says Dr. Edward Stinson, Doelger Professor of Cardiovascular Surgery and a member of the unit.

Other members include Dr. Roger Winkle, co-director, and Dr. Jerry Griffin, a pacemaker specialist in the cardiology division. Others associated with the unit include Robert E. Kates, Ph.D., director of the Stanford Drug Assay Laboratory, Dr. Donald C. Harrison, head of the cardiology division, and Dr. E.W. Hancock, professor of cardiology.

Arrhythmias most often are caused by heart disease, and occur frequently in patients who have suffered previous heart attacks.

The border between dead heart muscle which was killed during the attack and healthy tissue seems to "short circuit" the normal conduction of electrical signals through the heart, Mason says, causing rapid beating of the lower heart chambers, the ventricles.

Unless this rapid beating is in some way corrected, it may compromise the ability of the heart to pump blood and lead to heart failure or death.

Until recently, arrhythmias were treated primarily by implanting pacemakers in the heart, or by administering one of a battery of antiarrhythmic drugs.

Unfortunately, physicians had to rely on trial and error to determine which drugs were effective. If a given drug did not work another would be tried, but in the meantime the patients were exposed to potentially life-threatening arrhythmias.

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Now, Mason and his colleagues have devised a way of determining with greater certainty whether a drug is effective or not, before the patient leaves the hospital.

The technique involves placing a catheter, or thin tube, into the heart of the patient in the catheterization laboratory. Fast beating of the heart is begun, then stopped, by an electrode at the tip of the catheter.

Next, an antiarrhythmic drug is given to the patient intravenously, and the physicians try to re-initiate the abnormal rhythm. "If we can't," Mason says, "we know the drug will work."

This expectation has been borne out in a study of 58 patients conducted by Mason and his colleagues during the past four years, and reported at a recent meeting of the American Heart Association.

The physicians identified effective drugs in 39 of the patients during laboratory analysis, and prescribed the drugs for the patients when they left the hospital. Effective medications could not be found for the remaining 19 patients, and they were treated on a trial and error basis.

Eighteen months after the laboratory analysis, 82 percent of the patients in the first group were free of arrhythmias, and 73 percent remained free for 50 months.

In comparison, only 22 percent of the second group had not suffered a recurrence of arrhythmias 18 months following the analysis, and 12 months later, that figure had dropped to 11 percent.

Although catheterization involves some risks, the procedure has been conducted with zero mortality, Mason says.

"We believe our method is safer than conventional, trial and error drug testing," he said. "Patients are exposed to arrhythmias anyway until a drug is found that works."

Among other studies conducted at the arrhythmia unit but not yet published is a method for pinpointing the source of a severe or recurrent arrhythmia using electrophysiological techniques, and removing it surgically.

The unit also is conducting basic and clinical research in a variety of areas, such as studying the mechanisms of arrhythmias, testing antiarrhythmic drugs, and developing new types of pacemakers.

One project has resulted in the development of a computerized pacemaker, programmed to identify and to terminate rapid arrhythmias when they occur with electrical pacing stimuli. The device so far has been permanently implanted in four patients, Mason says.

With the help of Dr. James Knutti and his colleagues at the Stanford Center for Integrated Electronics in Medicine, the physicians are studying the transmission of electrical heart signals by radio waves to a receiver outside the body, a process known as biotelemetry.

Basic research is an important part of the arrhythmia unit's work, says Mason, for "the better we understand how arrhythmias occur, the better we can treat or even prevent them."

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Mailed Tuesday, February 26, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

Editors: Details follow asterisks

STANFORD—

Treatment of severe eye diseases and damage caused by acid burns and foreign objects in the eyes are under investigation at Stanford University Medical Center with funds from Research to Prevent Blindness, Inc. (RPB).

RPB, the nation's leading voluntary organization in support of eye research, has provided the Stanford division of ophthalmology with $50,000 in grants over the past 11 years, the organization announced.

Dr. Jules Stein, chairman, said that Stanford is among more than 50 medical institutions receiving annual RPB grant support for the study of eye diseases.

"Scientists at these laboratories are demonstrating the huge potential of research in vision and the critical need for public support of this still under-funded science," he added.

Dr. A. Ralph Rosenthal, head of Stanford's division of ophthalmology, explained that the funds will be used to supplement research in three major projects.

* * * * *

Cytomegalovirus retinitis is a virus infection that frequently appears in patients receiving immunosuppressive (anti-rejection) drugs for organ transplantation, and in patients undergoing chemotherapy for cancer, whose immune system is weakened.

The infection occurs in the retina and may cause blindness, Rosenthal noted.

Dr. Peter Egbert, assistant professor of surgery (ophthamology), has been studying the natural course of the disease, and the ability of doctors to manipulate the condition by altering levels of immunosuppressive therapy.

In addition, in collaboration with Dr. Thomas Merigan, professor of infectious diseases, and Dr. James Gallagher, postdoctoral fellow, he is testing intravenous adenine arabinoside (araA) as a treatment for the disease.

Egbert also is developing photocoagulation techniques that may be used to "wall off" patches of the infection, to keep it from spreading if immunosuppressive therapy must be increased.

Siderosis, an occupational hazard involving iron particles from a foreign body retained in the eye, can cause extensive damage to eye tissues.

Research associate Dr. Sonja Declercq is examining some of the destructive tissue changes caused by the iron, which may be similar to changes occurring in certain retinal degenerative diseases, such as retinitis pigmentosa.

Dr. James McCulley, assistant professor of surgery (ophthamology), is investigating hydrofluoric acid burns in the eye. This chemical, widely used in glass etching and in the electronics industry, causes severe burns of the cornea.

McCulley is examining how the chemical causes cornea damage. It is thought that the fluoride ion may bind other ions in the tissue, depleting those necessary for proper function.

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Mailed Wednesday, February 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A one day conference on dual career couples in medicine will be held at Stanford University School of Medicine on Sunday, March 9.

Sponsored by the Medical Center's Committee on the Well-Being of Medical Students and House Staff, the workshop will explore issues related to the strains and key decisions that influence dual career couples, with special emphasis on couples where one or both partners are physicians.

The keynote address, by Frank A. Johnson, M.D. and Colleen L. Johnson, Ph.D., both of the University of California in San Francisco, is entitled "Adaptive Strategies to Conflict and Competition in Two-Career Marriages."

Following the address, there will be panel discussions on the subjects of "Early Marriage-Early Career," "Impact of Children on Dual Career Couples," and "Established Marriage-Established Career."

The workshop will be held in Fairchild Auditorium at the Medical Center, from 9 a.m. to 5 p.m..

Pre-registration by March 4 is requested, and the fee for students, residents and Fellows is $8 per individual or $15 for couples. For all others, the fee is $10 for individuals or $18 for couples. Lunch is included and childcare facilities will be available.

For more information, or to pre-register, phone 497-6954.

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Mailed Wednesday, February 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Advances in microsurgery, the use of silicone implants, and an altered form of the body's structural protein, collagen, have led to dramatic improvements in plastic and reconstructive surgery.

In the past 15 years, for example, microsurgical techniques have permitted restoration of form and function of body parts ravaged by cancer, according to Dr. Vincent R. Hentz, assistant professor in the division of plastic and reconstructive surgery at Stanford University School of Medicine.

Surgical treatment of cancer can leave grotesque holes in the nose, chest, neck, or side of the face, Hentz said. And while the patient may be "cured" of cancer, "a cure under these circumstances is meaningless," he said.

The "plastic surgical approach" permits immediate reconstruction of the damaged parts, by transfer of tissues and even bones from other areas of the body, and has thereby allowed "even more radical surgery to treat cancer," Hentz said.

Hentz spoke at the second in a series of three Progress in Medicine lectures on plastic and reconstructive surgery Tuesday night, February 19, at the Medical School's Fairchild Auditorium.

Also speaking at the lecture was Dr. Ernest N. Kaplan, associate professor of surgery and chief of the plastic surgery service at Children's Hospital at Stanford.

The lectures, which are open to the public, are sponsored by the School of Medicine.

Tissue transfer is one new technique that has developed with the advent of microsurgery, Hentz said.

Microsurgery refers to the use of the operating microscope and tiny surgical instruments to repair small blood vessels, nerves and tendons.

Blood vessels less than one millimeter in diameter can be sewn together with sutures the size of the thinnest human hair using these techniques, he said.

The most dramatic example of microsurgery is reattachment of severed limbs, including fingers, hands and feet.

Microsurgery also has been employed to correct birth defects, such as absent or webbed fingers. According to Hentz, one out of six infants is born with deformities of the hands or arms.

Surgery can be performed early in life to remove useless parts, such as extra fingers, and to separate fused fingers.

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In addition, a finger or even a toe can be moved to replace an absent thumb and permit the child to grasp objects.

Other examples of plastic and microsurgical techniques include the repair of cleft lips and palates, and reconstruction of missing external ears.

The use of artificial parts has become widespread, particularly in the replacement of diseased hip joints. In addition, silicone, or plastic parts are being used to replace smaller joints such as the knuckles which have been rendered useless by arthritis.

These silicone "hinges" are fitted during surgery into the ends of the bones of the fingers and hand, and can result in a "remarkable improvement in both form and function of the hand," Hentz said.

Recently, a new substance has been developed which is aiding plastic surgeons in repairing so-called "contour defects," depressions in the flesh which result from diseases such as acne.

The substance is collagen, the structural protein of the body, which has been removed from the skin of cattle and chemically and enzymatically treated so that it will not excite immunological rejection when placed in the human body.

This pure collagen is injected as a gel-like liquid under the depressed areas of the skin, where it binds to the natural tissue and eventually forms new skin.

According to Kaplan, several injections of the substance may be required to fill in the depression. The treatment has lasted as long as eight years in the clinical trials performed at Stanford.

The technique for producing pure collagen was developed by four physicians, including Drs. John Daniels and Terry Knapp of Stanford University Medical School. The substance currently is being produced by the Collagen Corporation, a Palo Alto-based firm founded by the researchers, and is being tested by physicians throughout the U.S.

In addition, Kaplan and Hentz and surgery intern Dr. Joseph Rosen have been testing thin layers of collagen as a means of repairing severed nerves in animals.

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Mailed Wednesday, February 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

A leader in innovative approaches to the diagnosis of tumors, Dr. Sidney Wallace of Houston will deliver the first Etta Kalin Moskowitz Memorial Lecture on Thursday, February 28 at Stanford University School of Medicine.

The talk, entitled "Interventional Radiology in Oncology: Transcatheter Infusion and Occlusion Therapy," will be held at 5 p.m. in room M114 at the Medical Center.

Wallace is professor of radiology and chief of diagnostic radiology at the M.D. Anderson Hospital and Tumor Institute in Houston, one of the leading cancer treatment centers in the United States.

In addition to his formal lecture, which is open to the public, Wallace will present seminars on "Percutaneous needle biopsy and drainage procedures," "Liver masses: CT, ultrasound, and angiographic diagnosis," and "Head and neck tumors: the role of CT and conventional tomography."

The seminars will take place at noon on February 28 and 29 in room S092 in the Medical Center.

A gift from the late Etta Kalin Moskowitz, the purpose of the lectureship is to "provide support for teaching, training and research into the newest developments, techniques, information and advances in diagnostic radiology as it is specifically related to cancer in human beings."

A native of New York City, Mrs. Moskowitz traveled to the West in the early 1930's with her husband, Dr. Simon L. Moskowitz, who established a general medical practice in Brigham City, Utah, in 1935.

A leader in her community's civic and educational organizations throughout her life, she was particularly interested in health affairs and was active in her county and state medical auxiliary, organized the county mental health agency, and was a founding member of her county Red Cross and American Cancer Society programs.

In the early 1960's, following a successful battle against breast cancer, Mrs. Moskowitz focused her interests to fund raising and public education in cancer treatment and research.

Searching for a way to help others with cancer when she was stricken for the second time with cancer, Mrs. Moskowitz established the lectureship shortly before her death in 1978.

It is the first endowed lectureship in the department of radiology.

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Mailed Tuesday, February 19, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

The second winter Progress in Medicine Lecture on Plastic and Reconstructive Surgery will be held Tuesday, February 19 in Fairchild Auditorium, beginning at 7:30 p.m..

Drs. Vincent Hentz and Ernest Kaplan will discuss "Mending Defects and Injuries: how reconstructive surgeons repair birth deformities and the aftereffects of cancer and trauma."

The lecture is free and open to the public.

Hentz, assistant professor of surgery at Stanford Medical School, is also chief of plastic surgery at the Palo Alto Veterans Administration Medical Center.

A specialist in reconstructive surgery of the upper limbs, Hentz also conducts research on the mechanisms of nerve regeneration and repair.

A graduate of Davidson College in North Carolina, he received his M.D. from the University of Florida in 1968. He joined the staff at Stanford in 1975.

Kaplan is associate professor of surgery at Stanford Medical School and chief of the plastic surgery service at Children's Hospital at Stanford.

He has done research in the field of skin transplantation, and maintains a strong interest in emergency medicine.

Kaplan received both his B.A. and his M.D. from the University of California in Los Angeles.

The Progress in Medicine Lectures are presented as a community service by the dean and faculty of Stanford's School of Medicine and by members of the Medical Center Council.

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Mailed Thursday, February 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

EDITORS: Freeman may be contacted at (415) 497-0207 or 329-0777.
FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Reconstructing the larynx, or voice box, will be the topic of the fourth annual George S. Kiperash Lecture on Wednesday, February 20, at Stanford University School of Medicine.

The lecture will be delivered by Dr. George A. Sisson, professor and chairman of otolaryngology and maxillofacial surgery at Northwestern University Medical School in Chicago.

The public is invited to the lecture, sponsored by the division of otolaryngology, which begins at 8 p.m. at the Medical School's Fairchild Auditorium.

Sisson is a well known ear, nose and throat specialist who has pioneered techniques for reconstructing the larynx in patients who have had it removed because of cancer.

A graduate of Syracuse University in New York, where he received both his bachelor's degree (1942) and M.D. (1945), Sisson was clinical professor in otolaryngology at Syracuse before going to Northwestern in 1967.

The Kiperash Lecture was established to bring national and international figures to Stanford and to enhance continuing education and residency training.

It is named after George S. Kiperash, Jr., a former Stanford patient and native of San Jose.

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Mailed Thursday, February 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911 or Susan Carsen (415) 497-7605

STANFORD—

Nine junior faculty members at Stanford Medical School have been appointed Agnes Axtell Moule Fellows for the current academic year.

The appointments were announced by Dr. Lawrence G. Crowley, acting vice president for medical affairs and dean of the medical school.

As Moule Fellows, the nine faculty members will be involved in cancer research. They are Drs. Barbara Carroll, Peter Fessenden, Richard T. Hoppe, Alvaro Martinez and Norman Coleman, radiology; Robert Kessler, surgery; Roger A. Warnke and Jerome S. Burke, pathology; and Branimir I. Sikic, medicine.

The fellowships, which are administered by the Moule Medical Research Foundation, provide support for research and laboratory expenses, some salary support and for travel to scientific meetings.

The Moule Fellowships were established by Manley A. Moule as a memorial to his mother who died of cancer in Palo Alto in 1939.

Moule, a 1917 graduate of Stanford, was involved in real estate with the W. Ross Campbell Co. in Los Angeles. He died in 1974.

Mrs. Moule continues to live in the home Moule built in San Marino 50 years ago.

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Mailed Tuesday, February 12, 1980

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

A refresher course for nurses is being offered at Stanford University Hospital beginning March 5, 1980.

The eight week course entitled "Nursing Update," will be taught Wednesdays from 3:30 to 5 p.m., by Ruth McCracken, R.N., nurse instructor at the College of San Mateo School of Nursing.

Students completing the course will receive 18 hours of continuing education credit.

The course is designed for nurses who are returning to practice after an absence of one or two years.

It covers areas such as the grieving process, pain as a protective response, and how the nurse can help patients return to their normal levels of functioning after an illness.

Registration fees for the course are $33 for hospital employees, and $50 for non-employees. Deadline for registration is Wednesday, February 20, and the class size is limited to 15 students.

Nurses interested in registering for the course, or finding out about other courses should contact Linda Judd in Stanford's Nursing Service office, at (415) 497-5834.

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Mailed Tuesday, February 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Constance Hellyer 415: 497-7603

STANFORD—

Dr. Thomas C. Merigan has been named George E. and Lucy Becker Professor in Medicine at the Stanford Univeristy School of Medicine.

The endowed chair was recently established by a gift from Dr. and Mrs. George H. Becker of San Francisco, according to Dr. Lawrence G. Crowley, acting vice-president for medical affairs and dean of the School.

The professorship is named in honor of Dr. Becker's late parents, also of San Francisco.

The choice of Dr. Merigan as first holder of the chair is in accord with Dr. and Mrs. Becker's wish that their gift further "the alleviation and prevention of disease."

Dr. Merigan is a leading investigator on the clinical uses and fundamental properties of interferon, a natural body virus-fighting protein.

Studies by Dr. Merigan and his colleagues indicate that interferon is effective against viruses causing shingles, chicken pox, chronic hepatitis B infections, and the common cold.

The substance is also being tested against advanced cancer in a national study supported by the American Cancer Society. Dr. Merigan is co-chairman of that study.

Dr. Merigan was born in 1934 in San Francisco and earned his bachelor's and medical degrees at the University of California.

A member of the Stanford medical faculty since 1963, he is a professor of medicine, head of the Division of Infectious Diseases, and director of the Diagnostic Virology Laboratory at Stanford Hospital.

Dr. Merigan was honored in 1972 with a John Simon Guggenheim Fellowship and in 1973 with the Borden Award for Outstanding Research.

He and his wife Joan, a pediatrician, and son Tom, a student at Woodside Priory, live in Portola Valley.

Dr. Becker, a 1921 graduate of the Stanford University School of Medicine, practiced internal medicine in San Francisco for many years.

He is a diplomate of the American Board of Preventive Medicine and Public Health and a fellow of the Royal Society of Health in Great Britain.

He has served as director of the Bureau of Communicable Diseases of the San Francisco Department of Public Health, vice-president of the Independent Order of Foresters with responsibility for their tuberculosis hospital and aged residents' home, and a member of the Irwin Memorial Blood Bank Commission.

Dr. Becker's many civic activities include leadership in the Tuberculosis Society, Community Chest, American Legion, United Service Organizations (USO), and the San Francisco Young Men's Christian Association (as president during World War II).

He and his wife, the former Miriam Casperson, have been married over fifty years.

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Mailed Tuesday, February 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Scientists at Stanford University School of Medicine and SRI International have developed a new drug which enhances the effects of radiation in treating cancer without the serious complications of previous drugs.

The drug, which is called a radiosensitizer, recently was approved for toxicity testing in large animals by the new Drug Development Committee of the National Cancer Institute (NCI).

If the tests are successful, clinical trials in patients could begin within a year, said Dr. J. Martin Brown, associate professor of radiology at the Medical School.

Brown and Dr. William Lee of SRI International in Menlo Park, California, led the team of biologists and chemists which developed the drug. Their work was presented at a recent scientific meeting on radiosensitizers and radioprotectors at Key Biscayne, Florida.

Radiosensitizers refer to certain agents which prevent the ability of cells to repair early damage caused by radiation. The block of repairs leads to death of the cells.

Oxygen is one known radiosensitizer. About 25 years ago, scientists discovered that while normal cells, with normal amounts of oxygen, are killed by radiation, some cancer cells which are hypoxic (lacking in oxygen), survive.

To overcome this problem, clinicians have performed radiation therapy in hyperbaric chambers, attempting to increase the oxygen levels in the resistant cancer cells, and thus improve the effectiveness of radiation.

In addition, techniques using heavy particle radiation (for example, neutron or pi-meson radiation) were developed. Heavy particles can increase the damage done to cancer cells, and the presence or lack of oxygen makes little difference in their effect. However, both heavy particle radiation and hyperbaric techniques are expensive and so far have had only limited success.

Then six years ago, scientists discovered a compound, named misonidazole, which sensitized tumor cells to radiation, without affecting the response of normal cells surrounding the tumor.

"It worked beautifully in animals," Brown said, and clinical trials have begun in Canada, Great Britain, and the U.S..

However, a problem with misonidazole is that it is toxic to nervous tissue in high doses, and therefore is given to patients at only one tenth the strength necessary for a maximum radiosensitizing effect.

In studies supported by the NCI, Brown and Lee found that they could markedly reduce the drug's toxic side effects by modifying it so that it was almost insoluble in fat. The drug was now unable to cross the blood-brain barrier, the fatty wall which separates blood from nervous tissue.

In cell culture studies, and in tests of tumors in mice and spontaneous cancers in dogs, the researchers found that this new drug was as effective as misonidazole in sensitizing cancer cells to radiation killing, but five to 10 times less toxic to nervous tissue.

Now the researchers plan to study the ability of the drug to enhance the effectiveness of chemotherapy, and to act as a cancer-killing agent by itself.

There is evidence that hypoxic cancer cells also may be resistant to chemotherapy, Brown said, and can be sensitized to some anti-cancer drugs in the same way that they are sensitized to radiation.

If this can be proved, then radiosensitizers have the potential for being an even more important development in anti-cancer therapy, he said.

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Mailed Tuesday, February 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Stanford University Hospital is offering a $1,000 reward for information leading to the return of the four circuit boards stolen from the radiology department's brain scanner last week.

On February 9, sometime between midnight and 5 a.m., according to Palo Alto police, thieves removed two central processing unit circuit boards and two memory circuit boards from the computer portion of the hospital's EMI brain scanner.

The theft disrupted patient care for nearly 12 hours until temporary replacement parts were obtained from General Electric and installed in the machine.

The stolen circuit boards are not usable except in computers linked to similar scanners, hospital administrators said, and all other agencies and hospitals with similar equipment have been alerted to the theft.

Furthermore, the circuit boards would be difficult to sell outright and are of little value broken into smaller component parts, they added.

Anyone with information about the stolen items is urged to call the hospital at 497-5737.

The reward will be paid upon recovery of the missing items, hospital administrators said.

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Mailed Monday, February 11, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

CITY DESKS:

You are advised that a new state law, the California Medical Information Confidentiality Act (SB 480) regulating disclosure of medical information became effective Jan. 1, 1980.

The law affects the procedures hospital news services or public relations people must use to release general information about patients to the news media.

This note summarizes the new requirements as they affect the news media so that you will understand why it might take us a bit longer to give you information about a patient, or why we may not be able to give you anything at all.

Section 56.18 of Senate Bill 480 says a hospital may release, at its discretion, information about a patient's name, address, age, sex, reason for admission, general nature of injuries, and general condition, *unless requested not to do so by the patient, next of kin, or the provider of health care.*

We must also tell each patient in no less than eight point type and in a sheet separate from other hospital forms that he or she has the right to request that no information be released, including the fact of hospitalization itself. (That includes public record cases, public officials, everybody).

This means that while we may still release information about patients, we must make sure a specific patient has not requested that the information remain confidential.

In some cases this checking may take us a few minutes longer than usual. We hope this will not create a problem because we will do everything we can to provide the information you need from us in a timely fashion within the confines of the law.

At the same time, you should not be surprised if we are unable to give you the information you need.

The law stipulates clearly if we give you unauthorized information, we will have committed a misdemeanor. The patient whose name appeared in your paper may sue the hosptial for civil damages of up to $3,000, and attorneys fees of up to $1,000 and costs.

So you can see why both you and I better move to Siberia.

Spyros Andreopoulos

P.S. Copy of the law available on request.

2-11-80

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

The EMI brain scanner in the radiology department at Stanford University Medical Center is back to normal operation following a $17,000 theft of four circuit boards from its computer Wednesday morning (February 6).

"Fortunately, the disruption in patient care was minimal," said Norman Briggs, administrator in the division of diagnostic radiology.

Although scheduled brain scans for inpatients could not be performed, a General Electric whole body scanner was available in the hospital for emergency use, he said.

Late Wednesday afternoon, about 12 hours after the circuits were first reported missing, replacement parts were obtained from General Electric, enabling normal patient care to be resumed.

General Electric provided the parts from a used EMI scanner stored in a Mountain View warehouse, Briggs said.

New EMI circuit boards are expected to arrive by air today (Thursday) from the east coast manufacturer, he added.

The theft occurred sometime between midnight and 5 a.m. Wednesday morning, according to officer Alan Garcia of the Palo Alto police department.

The matter is under investigation and the police are working on a number of leads involving a possible suspect, he added.

Two central processing unit circuit boards and two memory circuit boards of the computer were taken, Briggs said.

These components form the core of the computer's logic system, he added. The computer processes the scanner's x rays to provide a useful diagnostic image of the brain for physicians.

"It is a highly useful diagnostic tool for many different conditions, including monitoring progress of patients following brain surgery and assessing possible brain damage following injury or stroke," Briggs explained.

Normally, the scanner operates 24 hours per day, seven days a week, and 10 patients or more each day are scheduled for diagnosis.

Following the theft, rescheduling was required for about 10 patients, Briggs said.

The stolen circuit boards are about 20 inches long, 12 inches wide and three-quarters of an inch thick, according to Briggs.

The thief's motive is not known.

Stanford is self insured for thefts up to $25,000, said Robert Beth, director of risk management for the university.

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Mailed Thursday, February 7, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

The high price of silver may force radiologists to move from film to electronics, according to a Stanford University radiologist.

"With the impact of integrated circuit technology and digital electronics, it is becoming feasible to store images electronically rather than on film," said Dr. William Brody, associate professor of radiology and electrical engineering.

The cost of X-ray film at Stanford University School of Medicine has increased 65 percent in the last year, said Norman Briggs, administrator of the diagnostic radiology division, and "we're expecting another 40 percent increase next month alone."

Most of the price hike results from the increase in silver values, which leaped from about six dollars an ounce last January, to $49 per ounce last month. It is now about $36 per ounce.

Briggs said the department of radiology had been spending about $300,000 a year for film and processing costs. This year, that figure is likely to exceed $450,000, he said.

Fortunately, the department has an active silver reclamation program, which enables it to recover between 10 and 20 percent of the costs of film.

Silver washed off the film during processing is collected and sent to a silver refining company in Oakland, which reimburses the department according to the current market price.

In addition, old X-ray films are sold by weight to the firm, or the silver is removed by the department (a process called purging) after the films are no longer needed for patient records, usually after seven years.

"About a year ago, we purged four years' worth of old films, and recovered $55,000," Briggs said. "Now I wish we'd waited another year to do it!"

Because of the reclamation project, and an existing inventory of film purchased when the price was lower, the radiology department has no plans to charge higher fees to patients for X rays, at least in the immediate future, according to department administrator Richard Placone.

"But we may be forced to do so as time goes on," he said.

Other clinics have had similar experiences. Both the Palo Alto and Menlo Medical Clinics recently increased patient fees, partly in response to the increase in X-ray film costs. Higher film costs have also contributed to increased charges in dental offices.

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One solution to the high cost of film would be to reduce the amount of silver it contains. Film companies are actively pursuing this possibility, but so far they have not been able to take all the silver out of film, without losing image quality or increasing exposure time.

Another solution may be to dispense with film altogether. This idea is supported by Dr. William Brody.

Brody is studying the use of digital radiographs to view blood vessels. "Electronics can provide a higher fidelity image of blood vessels than film," he said.

In addition, the new technique is less invasive. To see blood vessels in a conventional X ray, an opaque dye must be injected directly into them from a catheter, or small tube. In comparison, the increased sensitivity of digital radiographs enables physicians to introduce the dye by simple intravenous injection.

Currently, Brody is conducting his studies with a modified CT (computerized tomographic) scanner, a machine which can cost $750,000.

However, there is no reason why the same studies cannot be done on less expensive equipment, specifically designed for electronic radiography, he said.

Although radiographs taken electronically may not be any cheaper than those taken on film, Brody said that storage and retrieval of electronic images could involve considerable savings.

Today, Stanford radiologists store thousands of films in warehouses, and the films must be mailed when medical records are transferred to other physicians. Many films are lost.

With electronics, on the other hand, thousands of images can be stored on a single disc that may cost from six to 40 dollars, and which lasts a lifetime.

In addition, doctors may one day be able to transmit the images to each other over the telephone, or by satellite, Brody said.

Brody predicts the widespread use of electronic radiography in the next five to 20 years. One of the biggest obstacles, however, will be the resistance to change on the part of radiologists.

"Film has served radiologists very well," he said, and it may take economics to get them to look at another system.

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Mailed Tuesday, February 5, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

The mission of the Stanford University School of Medicine is to train as many physicians as possible for leadership in scientific medicine, and for careers in research and teaching in all branches of medicine, according to a statement approved by the School's Faculty Senate.

The School provides an educational environment that encourages "intellectual diversity" and offers stimulation and opportunity for self-motivated students interested in developing a "scholarly, investigative approach" to medicine, said the Senate.

This includes studies on the social aspects of disease, health care, and public health policy, as well as bench research and clinical investigation.

Accordingly, the School should select students "who will most benefit from this environment."

In addition, the Senate said, the School has a strong commitment to identify, recruit, and educate women and minority students, recognizing that both groups are underrepresented in the medical profession.

"This underrepresentation is particularly glaring in research and teaching," said Dr. Avram Goldstein, chairman of the Faculty Senate, "and it is precisely here that Stanford can make a special contribution."

Stanford ranked fourth in minority admissions in a survey of medical schools conducted last year by the American Association of Medical Colleges (AAMC), with minority students making up 19.5 percent of total enrollment.

This year that figure climbed to 22 percent.

The Faculty Senate is responsible for admissions, curriculum, and evaluation of candidates for the MD degree.

"Since we are a school of medicine and our graduates will have M.D. degrees, we certainly have the responsibility to ensure that all our graduates are capable of practicing at the forefront—in the leadership—of scientific medicine," said Goldstein at a recent Senate meeting.

"But we don't think that is enough.

"Our principal mission should be to train physicians who will be actively involved in research and teaching in all branches of medicine," he said.

"We believe this principal and rather special mission of this medical school has to be stated explicitly.

"Now we can ask, How can we encourage applications from students interested in teaching, research, and the pursuit of academic medicine?"

The Faculty Senate became concerned about the curriculum in 1978, and two committees were appointed to review it. One committee, headed by Dr. Robert Chase, professor of surgery, called for steps to reaffirm Stanford's original goals, namely—the encouragement of student individuality, the fostering of a graduate approach to medical education, encouragement of interests in academic careers in medicine, and the School's obligation to enlarge the field of knowledge.

A second committee, chaired by Dr. Ruth T. Gross, professor of pediatrics, dealt with problems of student evaluation and recommended the adoption of more rigorous performance standards.

As a result, the Senate now is studying ways of improving the curriculum through the existing committee on courses and curriculum and an ad hoc committee on curriculum evaluation, Goldstein said.

A recommendation by the chairmen of the basic science departments, that students be required to demonstrate competence in each department prior to graduation, is being considered, he said, and "we may end up with even more rigorous requirements" as the curriculum is developed.

Mailed Tuesday, February 5, 1980 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder 415: 497-6911

STANFORD—

Chronic undernourishment and anemia persist among the thousands of Cambodian refugees in Thailand, but emergency food and medical supplies have improved their situation considerably, according to a Stanford physician who recently visited the refugee camps.

Four months ago, many of the refugees, who streamed across the border into Thailand in the wake of a Vietnamese invasion last year, showed signs of severe malnutrition, said Dr. Dennis Davidson, clinical professor of medicine at Stanford University School of Medicine.

In particular, many children died, and those who survived are small for their age, he said.

Today, however, few deaths occur in the camps because of starvation. The major killers now are malaria and pneumonia.

Davidson estimated that 95 percent of the food and medical supplies which come to Thailand from countries around the world reach the refugees directly.

Yet, despite improved conditions, the need for supplies continues, he said.

Approximately 120,000 people live in two main refugee camps, one located 40 miles from Cambodia, and the other five miles from the border.

In addition, there are an estimated 300,000 to 400,000 refugees camped along the border. Davidson said the medical teams make periodic runs to distribute food and medicine, but there is no consistent way of ensuring the people are getting what they need.

In the two main camps, conditions remain primitive, Davidson said. Families live in cramped, one-room huts made of bamboo or tin with earthen floors.

About 1500 people are seen by medical personnel at the out-patient clinics each day. Seriously ill patients are admitted to one of eight 50-bed hospital wards housed in tents.

There are about 200 medical personnel in each of the camps, but their resources are quite limited. "As I was leaving, one camp was just getting an X-ray machine," Davidson said. "We had to go back to hands-on diagnosis, to feeling comfortable with knowing that you can't be sure what is wrong before you begin treatment.

"There is a danger of being immobilized by this uncertainty," he added. "If you wait too long before beginning treatment, your patient won't survive."

Davidson spent three weeks in the camps in December, working as a relief physician with a Dutch medical team in the outpatient clinics. He went to Thailand on his own, using his own money to pay for the trip, but said it is easier to join the relief effort as a member of a sponsored medical team.

Davidson, who works with the Stanford Heart Disease Prevention and Rehabilitation Programs, is not a newcomer to this kind of experience. While still in medical school, he worked in clinics in Madagascar for a month. In 1975, while in the Navy, he was in charge of the medical aspects of the Southeast Asian refugee camps at Camp Pendleton in California.

He said his experiences help him keep the sophisticated technology of medicine in the U.S. in perspective. "The majority of the world's population has very primitive medical care by our standards," he said.

Davidson said he was most impressed by the wide variety of nationalities represented in the relief efforts in Thailand. In a day when international tensions were high, "it was nice to see the United Nations banner flying over the camps," he said.

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Davidson can be reached at (415) 497-6461

Mailed Wednesday, February 6, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

EDITORS: Photos of speakers available if not included with story.

STANFORD—

The many aesthetic benefits and medical applications of plastic and reconstructive surgery will be discussed by five prominent physicians in the winter Progress in Medicine Lecture series sponsored by Stanford University School of Medicine.

Scheduled for three successive Tuesday evenings in February, the series, entitled "Face and Form," will be held in Fairchild Auditorium at the medical center. All lectures are open to the public and will begin at 7:30 p.m..

February 12—Art and Science: an overview of the development of plastic surgery, with Dr. Robert A. Chase, Emile Holman Professor of Surgery, in Stanford's division of plastic and reconstructive surgery.

February 19—Mending Defects and Injuries: how reconstructive surgeons repair birth deformities and the aftereffects of cancer and trauma, with Dr. Vincent Hentz, assistant professor of surgery, and Dr. Ernest Kaplan, associate professor of surgery, both of Stanford's division of plastic and reconstructive surgery.

February 26—Mirror, Mirror: aesthetic surgery to redesign the face, breast, and other features, with Dr. Donald R. Laub of the Palo Alto Medical Clinic (formerly associate professor and chief, division of plastic and reconstructive surgery), and Dr. Lars M. Vistnes, associate professor of surgery and chief of the surgical service at the Palo Alto Veterans Administration Medical Center.

The Progress in Medicine Lectures are presented as a community service by the dean and faculty of Stanford's School of Medicine and by members of the Medical Center Council.

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Mailed Tuesday, February 5, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

In a carefully planned but risky airborne transport operation lasting over 14 hours and covering more than 6,000 miles, an intensive care nurse and doctor from Stanford University Hospital successfully escorted a critically ill Englishman home to a London hospital last week.

With a series of traumas in his recent medical history, including a stroke, severe pneumonia, cardiac arrhythmia and a heart attack, Harry Humphreys was a very sick man, requiring the most comprehensive intensive care Stanford Hospital could provide, according to his intensive care unit physician, Dr. Thomas Feeley.

"Taking Mr. Humphreys back home to England was the one thing he needed beyond the best medical care we were able to provide," Feeley said, explaining the plight of the 70 year old Humphreys, who had been in the hospital for more than three months.

Dr. Alvin Hackel, associate professor of clinical anesthesia and pediatrics at Stanford, and director of the Stanford Critical Care Transport Service, supervised the transport arrangements.

(The Stanford Critical Care Transport Service transfers critically ill patients in referring community hospitals to and from Stanford while providing ongoing intensive care. It is run in tandem with the Northern California Infant Medical Dispatch Center, which locates intensive care nursery beds for critically ill babies, and assists in arranging transport of the babies from any of 120 participating community hospitals to 20 intensive care and intermediate intensive care nurseries in northern California.)

"A patient as sick as Mr. Humphreys is an unusual case for such a long transport, but under the appropriate circumstances we are prepared to carry out this kind of service," Hackel said.

"The care Mr. Humphreys received on the flight was equivalent to the level of care he was getting here in the hospital," he explained.

Humphreys entered Stanford Hospital over three months ago, following a stroke he suffered while on vacation visiting friends in the Bay Area with his wife, Alice.

According to Feeley, when the idea of going home to England was first suggested to Humphreys by several nurses taking care of him, he eagerly embraced the idea.

His wife, who was with him constantly during his hospitalization, recalled that "he was a changed man."

Although Humphreys suffered a dangerous cardiac arrhythmia the morning before the scheduled transport, his wife and daughter felt the risk of transport was still worth getting him home, Feeley recalled.

"In fact, the added risks probably helped ensure that we were prepared for any complication," Feeley said.

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Feeley and intensive care nurse Sherry Moore spent nearly 24 hours tending Humphreys, in the ambulance from Stanford Hospital to the San Francisco Airport where they boarded a Pan American airways 747; on board the plane for almost 14 hours until arrival at London's Heathrow airport; and on the British National Health Service ambulance which finally brought Humphreys to his destination, St. Thomas' Hospital in London.

"The entire operation went incredibly smoothly," Feeley said, recalling the planning that went into the effort.

The airplane was specially prepared, with a group of seats removed from the center section so that Humphreys' stretcher could be accommodated, and so that the necessary cardiac monitor, defibrillator, oxygen tanks, and other equipment could be stored.

A special electrical inverter was also installed in the plane, to provide the necessary power for the equipment.

Feeley had consulted with doctors at St. Thomas' Hospital, as well as with the ambulance crew, paramedics, and airport and airline personnel at Heathrow, so that all were ready and waiting for Humphreys' arrival.

Only one problem arose when they discovered that the hospital ward where Humphreys was expected did not have appropriate intensive care facilities, said Feeley.

However, temporary arrangements were made for his overnight monitoring and care, and the following day Humphreys made one final move to St. Thomas' intensive care ward in central London.

Several days after his return to England, Humphreys was sitting up in bed for three hours at a time, longer than had been possible in many weeks, Feeley reported recently from his office at Stanford, after talking with Humphreys' daughter, Yvonne, on the phone.

"His chances now for returning to a good life at home are high," commented Feeley.

In addition to Feeley and Moore, many individuals helped coordinate the transport, according to Hackel, including an anonymous donor who paid for the airline fares; Tricia Robertson of the Dispatch Center; Reverend Ernie Young, Chaplain at Stanford Hospital; Jean Harman of European World Travel; Frank Quigley of Pan American Airlines; and Dr. Jan Ehrenwerth, associate director of the transport service.

Although such medical air transports are not routine in the United States, they are quite common in Europe, Hackel noted. One transport insurance plan in France has over ten million subscribers, he added.

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Mailed Tuesday, February 5, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD—

"This will open up a whole new world for the deaf and the speech impaired," commented Shari Creley as she prepared the portable machine for a transmission.

The "machine" is a specially-designed device that resembles an adding machine (is about the same size as a portable typewriter, and weighs about five pounds) that allows deaf people to transmit and receive typed messages.

Stanford University Hospital currently has two of the machines (trademark name is "Portaprinter"), and eventually will have three, estimated Creley, who is an administrative assistant in the hospital's Department of Facilities and a member of the advisory committee on the disabled for the medical center.

Hospitals are now required to have the machines for emergency communications for the deaf, and in addition to Stanford a machine is in use at Santa Clara Valley Medical Center in San Jose. (Santa Clara Valley is affiliated with Stanford Medical School).

The machines hook up to any telephone, Creley explained, and for in-house hospital patients a "signalman" relay can be rigged so that a bedside lamp will flicker when an incoming transmission is about to begin.

"One of the great things, though, is that deaf people can call us with this device if they need emergency medical attention," Creley added, "this is a big step for them."

Stanford has notified a variety of state and national agencies that it now has the machines available for its deaf patients.

Eventually, she said, the machines will probably be maintained in Department of Emergency Services, Stanford Medical Center Communications and the hospital's ENT Clinic.

Officials estimate that over 800 deaf people already have the special machines in their homes in Santa Clara County.

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Mailed Monday, Feb. 4, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bob Tapia (415) 497-6911

STANFORD—

Dr. Ira H. Pastan will present the seventh annual Windsor C. Cutting Lecture Thursday, Feb. 7, at Stanford University School of Medicine.

The lecture is open to the public and begins at 4:15 p.m. in the medical school's Fairchild Auditorium.

Pastan is chief of the Laboratory of Molecular Biology at the National Cancer Institute in Bethesda, Md. His talk is entitled "Watching Hormones Act by Video Intensification Microscopy."

He was awarded the Van Meter Prize of the Amrican Thyroid Association in 1971, and he has used new methods to study the mechanism by which polypeptide hormones like insulin move to the interior of cells.

When insulin or other peptide hormones are made to fluoresce he has been able to follow their movement using an image-intensifier television camera.

Pastan's work is considered another step towards understanding how these hormones influence the function of the cells and thus exert their important physiological effect to combat diseases such as diabetes.

Pastan received his M.D. from Tufts University and worked in the field of endorcine biochemistry at the National Institute for Arthritis and Metabolic Diseases before joining the staff of the National Cancer Institute.

The Windsor Cutting Lectureship was established in 1973 by the faculty of the Department of Pharmacology at Stanford Medical School, and is supported by private contributions.

It honors the late profession and former department chairman by featuring speakers prominent in the pharmacology field.

Cutting, who died in 1972, also served as dean of the medical school during 1953-57, and as dean of the University of Hawaii Medical School during 1963-71.

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Mailed Monday, Feb. 4, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Several Stanford University physicians have resigned from the department of surgery at Santa Clara Valley Medical Center in San Jose.

The resignations resulted from a dispute with Santa Clara County, which administers the Medical Center, over salaries and the manner in which fees generated by the department are used, according to Dr. John Collins, professor and chairman of surgery at Stanford Medical School.

Currently, the County is negotiating with the surgeons, who want more of the fees made available for education and teaching purposes, said Collins.

All of the resignations are not necessarily final, he added.

At the same time, the Medical School has formed a committee headed by Acting Dean Dr. Lawrence Crowley, to look into the long-range aspects of the Stanford-Valley relationship.

"The purpose of the committee is to see if a more stable and mutually beneficial relationship can be constructed," Collins said.

Valley Medical Center has had a long-standing affiliation agreement with Stanford Medical School.

Under the agreement, Stanford provides staff for various services at Valley including surgery, medicine, pediatrics, and gynecology and obstetrics, as part of the teaching program of house staff and medical students.

However, problems have resulted from the uncertain future of Valley Medical Center, and from ambiguities in the status of Stanford faculty physicians who are assigned there, Collins said.

"It is probably an appropriate time to redefine the Stanford-Valley relationship," he said. The County faces a significant decision about renovating the Medical Center, Collins explained, and there are concerns about what will happen if the proposed Jarvis II initiative passes.

Collins said he was optimistic that the County and the Stanford surgeons would arrive at a mutually satisfactory solution through the negotiations.

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Mailed Friday, February 1, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

A technique for treating cancers of the lymphoid system shows promise in preventing rejection of transplanted organs and in relieving pain and inflammation of rheumatoid arthritis, according to a Stanford University immunologist.

"We find that we can use this technique as a method of 'immunological engineering,' " said Dr. Samuel Strober, associate professor of medicine and chief of the division of immunology at Stanford University School of Medicine.

The technique, called total lymphoid irradiation (TLI), refers to high dose radiation of the lymphoid tissue of the body—lymph nodes of the neck, chest and abdomen, thymus gland, and spleen. Other radiosensitive areas, including the head, lungs and limbs, are protected from radiation.

Already TLI has been used by the renal transplant team at the University of Minnesota with a "striking improvement" in the survival of kidneys transplanted into high risk patients who already had rejected a prior kidney, Strober said.

In addition, Strober and his colleagues have treated five patients who were disabled by rheumatoid arthritis and who did not respond to any other conventional treatment, with 2,000 rads of radiation each to the chest and abdominal lymphoid regions.

All patients have responded, he said. One woman who previously was wheelchair-bound and in almost constant pain is now essentially pain free, ambulatory, and able to perform her household chores.

Strober reported the technique Friday, March 28, during the scientific symposium at Stanford Medical School honoring the 20th anniversary of the School's move to the Stanford campus.

TLI is a technique developed over 15 years ago by Dr. Henry S. Kaplan, Maureen Lyles D'Ambrogio Professor of Radiology at Stanford, to treat Hodgkin's disease and other cancers of the lymphoid tissues.

The treatment has helped to improve the cure rate of early stage Hodgkin's disease from only 30 percent in the 1960s, to 86 percent today.

TLI causes a profound and prolonged drop in the lymphocytes, white blood cells responsible for the body's immune responses, including the defense against infection. Yet, less than one percent of the Hodgkin's patients treated with TLI contract severe bacteriological infections requiring hospitalization.

In addition, none of the several hundred patients treated with high dose radiation in this manner over the past 10 years has developed leukemia, Strober said.

In studying these patients, Strober said he and Kaplan "were impressed by the very significant immune deficits in these patients," which were similar to those of patients who received immunosuppressive drugs, including corticosteroids, to prevent rejection of transplanted hearts.

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Yet, unlike the cancer patients, the heart transplant patients were exquisitely susceptible to infection. In fact, raging, uncontrollable infection is the major cause of death among heart transplant recipients today.

This suggested that TLI could improve the success rate of organ transplantation.

First in mice, then in rats, Strober and his colleagues found that TLI permitted them to transplant bone marrow, skin, and even hearts from unrelated donors without rejection, even when the animals had received no other form of immunosuppression.

The skin and heart grafts were taken from the same donor as the bone marrow, suggesting that the donated lymphoid tissue in the marrow had paralyzed the host's immune system and that the host accepted what otherwise would have been considered foreign skin and heart tissue.

In addition, the animals did not exhibit what is called the "graft versus host" reaction, in which the donor white blood cells attack the host.

TLI apparently had induced "mutual tolerance" of donor to host and host to donor, Strober said.

To explain this phenomenon, Strober's colleague Dr. Donna King found that TLI resulted in the development of a certain population of lymphocytes, called suppressor cells, which prevent immunological attack of either donor or host cells against each other.

This could also explain how TLI improves rheumatoid arthritis, by correcting a deficit of suppressor cells which is thought to underlie certain "auto-immune" diseases. The reduced level of suppressor cells allows other types of lymphocytes to attack the body causing inflammation, pain and eventual destruction of tissues.

Another of Strober's colleagues, Dr. Brian Kotzin, confirmed this effect of TLI in mice with an auto-immune disease, before beginning tests in humans with disabling rheumatoid arthritis.

One of the most gratifying aspects of the treatment, Strober said, is that it enabled patients to discontinue their chronic use of high levels of potentially addicting pain killers such as codeine, to reduce or eliminate the corticosteroids they were taking, and to rely solely on minimal doses of aspirin as their only maintenance drug.

In addition to the arthritis studies, Strober's group, in association with the Stanford cardiac transplant team, is now testing the effect of TLI on heart transplants in dogs and monkeys.

The researchers also plan to test TLI in low risk patients who are receiving a first kidney transplant, with the kidney transplant team at the University of California at San Francisco, "in an attempt to completely eliminate corticosteroids from their immunosuppressive regimen."

Strober said the application of TLI is very broad. In addition to organ transplantation and treatment of auto-immune diseases, the technique may be important in bone marrow transplantation.

Currently, bone marrow transplants for treatment of aplastic anemia or leukemia can be taken only from matched donors such as a twin brother or sister, or else the graft will be rejected.

TLI might enable successful bone marrow transplantation even from unmatched donors, Strober said.

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Mailed Monday, March 31, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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CITY DESKS: Stanford University School of Medicine celebrates the 20th Anniversary of its move from San Francisco to Palo Alto, with a two-day scientific symposium March 27 and 28 in Fairchild Auditorium. The symposium highlights the School's scientific contributions in the fields of genetics, molecular biology, and clinical medicine. This background story of the history of the move and the School's accomplishments supplements an earlier story about the symposium.

STANFORD—

"Medicine for a new age."

With these words Dr. Frank Stanton, the president of CBS, dedicated the new Stanford University Medical Center on the Stanford campus September 18, 1959.

His speech was fitting, because more than just the buildings were new. The School had a new curriculum, strengthened faculty, and revitalized spirit.

"It was the beginning of the most significant venture to humanity at Stanford since the founding of the University itself," said then Stanford University President J.E. Wallace Sterling.

The School of Medicine had been located in San Francisco, where all clinical and some basic science teaching took place for 50 years. Recognizing that medical education is a responsibility of the University, Stanford during Sterling's presidency undertook the planning for the School's move to the campus.

"The opening of the Center, with its school and laboratories, and new Hospital and Clinics, occurred at a time of great ferment and growth in biomedical research," recalls Dr. Lawrence G. Crowley, acting vice president for medical affairs and dean.

"A national commitment had been made to accelerate biomedical research. Stanford joined in that commitment."

From the start, adds Crowley, the School decided that future doctors could best be trained in an atmosphere of research, and that such an environment would attract the most capable faculty to teach them.

Dr. Robert H. Alway, former dean who presided over the move of the School, had declared at the time, "Only through exposure to teachers who manifest the scientific approach can we minimize the human tendency to take the easy way, embracing empiricism and dogma."

There should be no basic difference between the scientist and the practicing doctor, Alway added. "Both share the same attitude that they are trained to observe, to reflect, to draw tentative conclusions."

"It is in this spirit that teaching, research, and patient care have evolved here," says Crowley. "Research, both basic and clinical have flourished. The School has made impressive contributions."

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In 1959, unlike most medical schools who taught their students on indigent patients in county hospitals, Stanford was faced with the necessity of operating its teaching programs in a hospital whose patients, because of the socioeconomic characteristics of Palo Alto and Santa Clara County, would be private in the traditional sense.

"There were many," recalls Crowley, "who believed that the School could not carry out a satisfactory program under such circumstances, and who predicted disastrous consequences for Stanford's program in medicine."

The events of the past 20 years speak for themselves, he points out. The School has attracted a superb group of academically-oriented physicians. The ability of the group has been demonstrated by the development of many outstanding clinical programs. The faculty medical practice increased from 13,000 patient visits per year in 1959 to over 130,000 patient visits in 1979.

The faculty is also responsible for nearly half of the 24,000 admissions to Stanford University Hospital. The Hospital also serves as a community hospital for some 400 practicing physicians, many of whom teach as members of the voluntary clinical faculty.

The quality of the teaching programs, instituted and operated with private patients, is attested to at least in part by these criteria, according to Crowley:

- The outstanding quality of Stanford students, and the excellent record of Stanford graduates in obtaining the most competitive internships in the nation's leading hospitals.
- The attraction of the internship and residency programs offered on the several Stanford clinical services for the top graduates of leading institutions from all parts of the country.
- The leadership of Stanford in innovations from both basic and clinical research, and the number of its graduates (more than 20 percent) who choose to enter careers in research and academic medicine.
- The active participation of many community physicians in teaching as members of the voluntary faculty.

Among Stanford's research achievements during the two decades, Crowley listed:

- DNA, the primary genetic material of living things, was brought to clear understanding.
- The techniques of transplanting genes from one species to another were developed, paving the way for studies of the organization of complex animal chromosomes in ways not possible previously.
- The same techniques have ushered a new era of genetic engineering, enabling construction of "bacterial factories" that will synthesize a variety of biologically produced substances such as hormones.

- more -

- The first fully successful complete replacement of the heart in animals was achieved in 1960. It provided the model in which the surgical techniques could be standardized, and diagnosis and treatment of rejection developed. Now the survival of heart transplant patients is equal or superior to that of recipients of kidney transplants.
- The first linear accelerator for cancer treatment in the Western hemisphere was built, leading to modern radiation therapies for Hodgkin's disease and other forms of cancer.
- A technique to isolate the clotting factor lacking in the blood of hemophiliacs was developed, leading to a treatment now used throughout the world for control of the disease.
- A little known protein molecule called the human leukocyte antigen (HLA) has been studied, leading to an understanding of why certain genes that protect man from germs also leave him susceptible to diseases such as rheumatoid arthritis.
- Another finding that the brain has its own opiate receptors, and that it produces its own opiates now provide a major challenge to learn what role they play in brain function and behavioral disturbances.

Many other "space-age" tools for diagnosis and research were developed and are in use in medical institutions. The most dramatic of these is the fluorescence-activated cell sorter. This tool is capable of identifying and isolating closely related types of animal cells at rates of up to 5,000 cells per second—a boon to research in cell biology, diagnosis and treatment of genetic defects, and disorders of the immune system.

It is estimated that many of the inventions at the University have come from the School of Medicine or from joint collaboration with the School of Engineering and other University departments.

Looking back to the time when Dr. Stanton delivered his speech, "Medicine for a New Age," one could not have anticipated the developments of the past 20 years, Crowley says. "The School has thrived and prospered from the close association with the many disciplines of the University, and has contributed significantly to the health and the intellectual life of the University, and the local and national community."

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Mailed Tuesday, March 25, 1980

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

CITY DESKS: This year marks the 20th anniversary of the move of the Stanford University School of Medicine from San Francisco to the main campus in Palo Alto. The event will be celebrated Thursday and Friday (March 27, 28) with a scientific symposium in Fairchild Auditorium. This historical background and facts and figures supplement stories sent out earlier.

STANFORD—

This year marks the twentieth anniversary of the dedication of the Stanford University Medical Center on the campus of Stanford University.

Designed by architect Edward Durell Stone, the inter-connected building complex provided a new home for the School and its Hospital and clinics.

Construction began in 1957 with the excavation for the Palo Alto-Stanford Hospital. The first Hospital patients were admitted in August 1959, and medical school classes began the following month.

The Hospital has a unique relationship with the City of Palo Alto in that it serves as the community hospital of more than 400 community physicians and their patients. Many of these physicians also teach as members of the voluntary faculty.

The School of Medicine was originally Cooper Medical College, which was incorporated in 1882 as a successor to earlier schools established in San Francisco by the University of the Pacific.

The Cooper properties were transferred to Stanford University ownership in 1908, and all clinical and some basic science teaching took place in San Francisco for 50 years.

In 1953, recognizing that medical education is a responsibility of the University, Stanford undertook the planning for the move of the School to the main campus, culminating in the dedication of the Medical Center in 1959.

Facts for 1979 about the Stanford University Medical Center follow:

Stanford University Hospital	
Admissions: 23,028 Days of care:	165,330
Emergency Department census:	28,219
Personnel, including part-time:	3,870
Interns and residents:	396
Budget:	$91 million
Outpatient visits:	130,218
Stanford University School of Medicine	
M.D. candidates, all classes:	380
Advance degree candidates (non-M.D.)	166
Postdoctoral scholars:	331
Total faculty:	458
Volunteer clinical faculty:	1,355
Budget (including $34 million in sponsored research):	$80 million
Affiliated institutions:	
Children's Hospital at Stanford	
Santa Clara Valley Medical Center	
Veterans Administration Medical Center, Palo Alto	

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Mailed Tuesday, March 25, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—Dr. Lawrence G. Crowley, acting vice-president and dean of the Stanford University School of Medicine for the past 15 months, has asked to be relieved of his present administrative responsibilities effective August 31, 1980.

In a letter to Stanford University President Richard W. Lyman, Crowley said that although progress had been made in the solution of many of the problems that he inherited at the end of 1978, many short- and long-range issues and problems face the Medical Center in the immediate months ahead.

"I believe the latter must be properly and resolutely addressed by someone in a confirmed leadership role rather than by an individual in a continuing acting capacity," Crowley wrote.

Crowley said he is willing to remain as a vice-presidential candidate and will continue to function vigorously in an acting capacity in the immediate months ahead.

"After September 1, 1980, I would like to return to my normal academic duties," he added.

The University is conducting a nationwide search for a vice-president for medical affairs to head the multimillion-dollar Medical Center. Its previous vice-president and dean, Dr. Clayton Rich, resigned in 1978.

Speaking for Lyman, who is out of town, Donald Kennedy, Stanford vice-president and provost said:

"Dr. Crowley has given us very dedicated and effective service as vice-president in the past 15 months. Anyone who has served in an acting capacity in a large organization recognizes it is difficult to do so for so prolonged a period."

Crowley undertook a two-year effort to close large projected deficits with the result that the School ended in the black in 1979, and with future projected deficits in a controllable range.

He settled an outstanding issue over reimbursement with the state's Medi-Cal program, formed a liaison committee of faculty and community physicians to develop recommendations for solving town-gown relationships, launched a planning process to correct building deficiencies in the Hospital, and a long-range study to determine future academic and building priorities for the Medical School.

In addition, he helped develop closer ties with Children's Hospital at Stanford. This allowed for the move of the entire department of pediatrics outpatient clinics to Children's Hospital, a major step toward creating a true children's medical center located at Stanford.

"Acting leadership may have been satisfactory in the past," wrote Crowley, "but because of intense national interest in health manpower education and biomedical research, as well as the major concern about the cost of health-care delivery, academic medical centers are functioning under intense scrutiny in a very dynamic, fast-moving public arena.

"Sound, stable leadership is essential, with ability to act promptly and decisively in order to provide an opportunity for the Center to survive and continue as a leading university medical center."

Except for a period in which he served as dean of the University of Wisconsin Medical School in Madison, Crowley, 60, has been associated with Stanford since 1964 as a professor of surgery, associate dean, and deputy dean. He was chief of surgery at the Palo Alto Veterans Administration Hospital, and was instrumental in developing an effective clinical teaching service.

He holds the M.D. from Yale. Prior to coming to Stanford he was a member of the faculty at Yale and the University of Southern California and was in private practice in Los Angeles.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

A term professorship in spinal cord injury medicine is being funded at Stanford University School of Medicine, by a $260,000 five-year grant by the Paralyzed Veterans of America (PVA).

Mr. Joseph Romagnano, national president of PVA, presented the grant to Stanford University President Richard W. Lyman and Dr. Lawrence G. Crowley, acting dean of the Medical School, during a luncheon March 20 at the Stanford Faculty Club.

"We are very grateful to the Paralyzed Veterans of America for their generous support of this program," said Crowley.

Crowley said the money will be used to support the teaching, research, and clinical activities of the chair holder, who has not yet been named.

According to Edward Jasper, executive director of the Bay area and Western chapter of the PVA, Stanford is the first U.S. medical school to have a chair in spinal cord injury medicine.

"We hope to obtain full endowment for the professorship in the future," he added.

The chair adds to already existing programs in spinal cord injury medicine and axonal disease research directed by Stanford faculty members and based at the Palo Alto Veterans Administration Medical Center.

In addition to supporting research, Romagnano said the purpose of the PVA grant is to encourage the recognition and certification of spinal cord injury medicine as a specialty by the American Medical Association.

"There are too few doctors adequately trained in the problems of patients with spinal cord injuries," he said. Getting more doctors involved in the field has been a goal of the PVA for the past 28 years.

The PVA was established in 1946, and was chartered by Congress in 1971.

The organization has donated over one million dollars to spinal cord injury research, and currently is supporting legislation in Congress which would increase funding of the spinal cord injury program of the National Institutes of Health to $16 million a year, Romagnano said.

"A lot has been done in maintenance, in keeping us alive," he said. "But until recently, support of research on nerve regeneration, for example, was quite limited."

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Mailed Thursday, March 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

In a successful cost containment effort, Stanford University Hospital saved almost half a million dollars in medical supplies between July, 1978 and November, 1979.

The savings were achieved through the efforts of a Product Evaluation Committee, established to help standardize patient care supplies and equipment used in the Hospital, according to John Rettig, director of the Hospital's materials management program.

"Standardizing to a single product brings a direct cost benefit since the manufacturer's price often depends on the quantities of the product sold," said Rettig.

By standardizing 14 different patient care supplies, $461,000 was saved, he said.

There is also a direct enhancement of patient care from standardizing supplies, Rettig added.

"The same product is available throughout the Hospital, and staff are familiar with the items and how to use them. There are no unexpected surprises waiting on the shelf," he noted.

The money saved will enable the Hospital to keep prices lower for these items, according to assistant administrator, William Arnold.

Some products involved in the recent savings include intravenous solution, electrodes, needles and syringes, endotrachial tubes and shoe covers used by operating room staff.

The Committee screens products according to specifications provided by each Hospital department using the item.

Samples are tested and evaluated by the departments, and the manufacturer who presents a satisfactory product and the most economical bid is selected, Rettig said.

"A good contract is highly desirable, and should include a low price and a protective inflation clause covering several years," he added.

The Product Evaluation Committee coordinates the selection process and has representatives from the medical staff, nursing staff, infection control, clinical laboratories, operating rooms, clinical engineering, clinics, and other Hospital departments.

Rettig expects further substantial savings from the Committee's continuing activities.

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Mailed Wednesday, March 19, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

City Desks: Because of the limited seating capacity of Fairchild Auditorium, the Stanford Medical School 20th Anniversary scientific symposium can be attended by invitation only. However, members of the press wishing to cover the meeting are welcome. Invitations and advance programs have been mailed to science writers.

STANFORD—

A scientific symposium, celebrating the 20th Anniversary of the move of Stanford University School of Medicine from San Francisco to Palo Alto, will be held March 27 and 28 in Fairchild Auditorium.

It was September 1959 when the new Stanford Univeristy Medical Center complex, consisting of a hospital, clinics, and Medical School classrooms and laboratories, was dedicated on campus.

At the time Stanford University president J. E. Wallace Sterling called the move "the beginning of the most significant venture in service to humanity since the dedication of the University itself . . ."

The symposium, organized by the faculty under the chairmanship of Nobel Laureate Arthur Kornberg, takes place as the School enters a new decade. The presentations try to recognize the scientific contributions of the faculty during the last 20 years, according to Dr. Lawrence G. Crowley, acting vice president for medical affairs and dean of the School of Medicine.

Because of limited seating capacity in Fairchild Auditorium, the symposium is open to invited guests, and to members of the campus community.

The morning session Thursday, March 27, from 9 a.m. to 12:15 p.m. will be on the topic of "Genes and Chromosomes" with David Baltimore, American Cancer Society professor of microbiology at the Massachusetts Institute of Technology, as guest commentator.

The talks include: "DNA Replication" by Arthur Kornberg; "A Molecular View of Chromosomes" by David S. Hogness; "Transplanting and Manipulating Genes in Bacteria" by Stanley Cohen; and "Transplanting Genes into Mammalian Cells" by Paul Berg.

The afternoon session from 2 to 5 p.m. will cover advances in "Neuroscience" with Nobel Laureate F. H. C. Crick, of the Salk Institute, as guest commentator.

The talks include: "Neurophysiology and Pathology of Sleep" by William C. Dement; "Generation of the Visual Signal in the Vertebrate Eye" by Denis A. Baylor; "Nerve Growth Factor" by Eric M. Shooter; and "Endorphins: Natural Opiates of the Brain" by Avram Goldstein.

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The morning session Friday, March 28 from 9 a.m. to 12:15 p.m. will be on "Immunology and Genetics" with Walter Bodmer, director of the Imperial Cancer Research Fund, London, England, as guest commentator.

The presentations include: "Genetics and Culture" by Luigi Cavalli-Sforza; "Monoclonal Antibodies and the Fluorescence-Activated Cell Sorter" by Leonard A. Herzenberg; "Genes, Antibodies and Disease: The Hidden Cost of Survival of the Fittest" by Hugh O. McDevitt; and "Dynamics of Antibodies and Other Receptor Proteins" by Lubert Stryer.

The afternoon program, from 2 to 5 p.m., will feature "Conquest of Disease at the Clinical Level" with Joshua Lederberg, Nobel Laureate, and now president of Rockefeller University, as guest commentator.

The presentations are "Hodgkin's Disease: Hope Replaces Doom" by Henry S. Kaplan; "Antivirals as Therapeutic Agents" by Thomas C. Merigan; "Transplantation of the Heart" by Norman E. Shumway; and "Total Lymphoid Irradiation in Organ Transplantation" by Samuel Strober.

The Stanford University School of Medicine, said Crowley, moved to the main Stanford campus at a time of great ferment and growth in biomedical research.

"In the short span of twenty years the Medical School with a small faculty and student body, has made singular contributions to the advancement of medicine and biology, with revolutionary findings leading to a new understanding of disease, and ways of coping with it," he said.

The Stanford Medical School was originally a private school, Cooper Medical College, which had been incorporated in 1882, the successor of earlier schools established in San Francisco by Dr. Samuel Elias Cooper and Dr. Levi Cooper Lane as part of the University of the Pacific.

In 1908 Cooper Medical College became the Stanford University School of Medicine and thrived in San Francisco as a school with a rich clinical tradition.

In 1953, deciding that medical education is a central responsibility of the University, Stanford, under the presidency of Dr. Sterling, began plans to relocate the School from San Francisco to the main campus, culminating in the dedication of the Medical Center in 1959.

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Mailed Monday, March 17, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911 or Corinna Kaarlela, UCSF News Service (415) 666-2557

EDITORS: This announcement is being released simultaneously by Stanford University and the University of California, San Francisco.

STANFORD—

An unusual program that trains young physicians in non-biological disciplines related to medicine and health affairs recently received funding for a three-year period at Stanford University Medical School and the Univeristy of California - San Francisco School of Medicine.

A joint training program with faculty from the two schools and from UC Berkeley, the Clinical Scholars Program is funded by the Robert Wood Johnson Foundation of Princeton, New Jersey.

The Foundation recently approved a $925,288 grant for three years to continue the program, now in its sixth year. There are currently nine scholars, four at Stanford and five at UC.

The program allows physicians who are committed to clinical medicine the opportunity for broader training in such fields as health care delivery, clinical decision-making, medical practice and public policy in health, according to the Foundation.

During the two-year program, scholars work together in a series of seminars and individually on special projects with faculty advisors.

The faculty members contribute expertise in fields such as epidemiology, biostatistics, medical information sciences, economics, sociology, anthropology, law and ethics, and the management sciences of accounting, systems analysis, operations research, and cost-benefit analysis.

According to Dr. Halsted Holman, professor of medicine and director of the Stanford portion of the program, most of the physicians are interested primarily in the areas of organization of health care, medical sociology and economics, and medical education.

"Introducing non-biological disciplines into medical thinking and practice will not by itself resolve the problems in health care . . . nonetheless these disciplines can yield understandings and methods which can greatly enrich and facilitate the search for better solutions," Holman said.

Factors affecting patients' return to work following major cardiac illness and cardiac surgery is the topic of one Stanford scholar's research.

Another Stanford scholar is trying to develop practical methods of assisting physicians with ethical decisions in medical practice.

Presently, seven Clinical Scholars training programs are funded by the Foundation.

Twenty-eight physicians have completed training in the Stanford-UC joint program.

Former scholars are involved in academic medicine, government, and in the practice of medicine, according to the Foundation.

They are developing and managing health care institutions and delivery systems, working in a variety of public and private institutions, and a number are contributing to the formulation, conduct and evaluation of health-related public policy.

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Mailed Monday, March 17, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

Editors: Photo of Preston available if not included with release

STANFORD—

John Preston, a counselor at Stanford University's Help Center and an education training assistant and social worker at the Rehabilitation Engineering Center at Children's Hospital, considers himself a lucky man in many ways.

"There are few people who have the opportunity to use all the skills they have learned in school in a satisfying career, but I happen to be one of them," he says with an immensely appealing smile.

Preston uses his counseling skills at the Help Center and his business administration background and marketing skills in evaluating controls and devices for disabled children at Children's Hospital.

But he brings much more than school learning to both jobs—he shares openly and warmly his personal experiences as a disabled person.

Seventeen years ago when he was 16 years old, Preston was in an automobile accident from which he emerged physically disabled and confined to a wheelchair.

"Learning to adjust to my new disability and being a disabled black person led to a lot of unusual problems," he observes mildly.

"I learned a lot about myself all at once. Previously, I had negative feelings and ideas about disabled people because I didn't see them in the community, working at jobs, being independent, happy or coping.

"Then, all of a sudden, I saw myself that way—I had no role models at all.

"The loss of identity following disability and then regaining it, was the hardest part."

Preston, a striking, elegantly dressed man, talks slowly and thoughtfully about his experience at the Help Center, where he counsels faculty and staff on personal and work-related problems.

When he began at the Help Center last September, he was apprehensive about his ability to cope with crisis intervention on a steady basis.

But he feels he has adjusted well.

"I think this stems from my experience as a disabled person. When I first became disabled, I was not sure how or even *if* I would be able to accomplish things that previously had been simple, like crossing the street.

"Everything was suddenly a challenge, often an obstacle to be overcome.

"Part of my adjustment meant becoming less frightened of experiencing things, since I had to throw myself into uncertain situations if I wanted to achieve anything.

"We all have to come to terms with our own limitations, not just those of us who are physically disabled. I see many people who are continually disappointed by the expectations they hold for themselves. Resolving this issue through a gradual growth of self-confidence may help immensely.

"For instance, when I counsel disabled people, one of the first things we must deal with is their self image and their motivation to take risks. Every time they successfully cope, the added strength they achieve is amazing.

"This is true for able-bodied people as well, and it's very rewarding to watch the strong person emerging.

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"Being able to help 'normal' people has, in turn, enabled me to grow and realize my own abilities."

Preston is extremely enthusiastic about the success the Help Center has achieved at Stanford.

"When you have problems with work, it can affect your entire lifestyle—where you live, how well you live, where your kids go to school, what you do in your leisure time.

"It's a real plus for a large institution to acknowledge this with a service like the Help Center and to try to deal with the whole person, not just the 'employee'."

At the Rehabilitation Engineering Center at Children's Hospital at Stanford, Preston works with disabled children and their families, evaluating control devices from a psychosocial standpoint, to make sure they actually work effectively for the individual.

He is also devising and assessing more effective methods for disseminating information on available controls to those who could benefit.

When he turns to the subject of social prejudices against the disabled, Preston recounts some disturbing experiences, without bitterness, but revealing a sure determination to achieve his goals.

For example, he recalls an incident from last summer, when he planned to take the state exam for licensing clinical social workers.

"I drove all the way to Sacramento only to discover the exam was being held in a building with a huge staircase and no other way in, and no one to help. I had to drive back home, without even getting inside the building.

"I wrote a letter to state officials, requesting my test fee back, my gasoline costs, and an accessible location in which to take the exam.

"I received no response for weeks, and with much frustration, contacted a local television station, where a reporter decided to look into the issue.

"Just then, the state called and gave me less than a week's notice that I should take the exam in San Francisco on the following Saturday. I had no study materials with me—they were in storage since I had just moved—but I had no choice but to go take the exam, prepared or not."

Preston feels his personal disappointment resulted in a more important victory—the state will not schedule the exam in an inaccessible location again, he says.

But Preston is clearly a man who most enjoys dealing with other people on a personal level, and does so in an open and easygoing manner.

Often, when engaged, he begins to speak rapidly, presenting an experience or a remark of extreme insight that encapsulates one of life's truths simply, movingly, and in a heartfelt way.

"About one year ago, I had an experience that was rare and wonderful," he recalls.

"There was a high school counselor who helped me tremendously shortly after my accident. When I felt I could never return to school, she convinced me that I could. When I graduated, she helped me find a college that would accomodate disabled people, a difficult task back in 1967. (Preston attended the University of Illinois.)

"Last year, on the occasion of her retirement, I was invited to go back to the midwest to give a speech in her honor, one of the most wonderful experiences I have had.

"It was almost as though, in some small way, I could publicly acknowledge and in part pay her back, for all that she had done for me. It is extremely rare for one to have that kind of opportunity."

You can't help feeling, once you've talked with John Preston, that he is a person to whom others must feel a similar debt.

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Mailed Tuesday, March 18, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Multiple sclerosis—the causes, worldwide distribution and general nature of the disease—will be discussed on March 20 by Dr. John F. Kurtzke, the 1980 George A. Zimmermann Lecturer at Stanford University School of Medicine.

The lecture, entitled "Multiple Sclerosis: An Epidemiological Attack," will begin at 5 p.m. in room M106 at the Medical Center. It is open to the medical community and to the public.

Kurtzke, a noted epidemiologist, is professor of neurology and community medicine at Georgetown University School of Medicine, and chief of the neurology service at the Veterans Administration Medical Center in Washington, D.C..

He will be the fourth annual Zimmermann visiting professor in the department of neurology.

Kurtzke received his M.D. from Cornell University Medical College in 1952, and has been a member of the Georgetown University faculty since 1963.

The Zimmermann Lectureship was established in 1977 in the neurology department, as part of a $500,000 gift of the late George A. Zimmermann for multiple sclerosis research and treatment at Stanford.

A prominent San Francisco businessman, Zimmermann died in 1974. He bequeathed virtually all of his estate to various charities and for medical research.

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Mailed Monday, March 17, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. Jerry R. Mitchell, of the Institute for Lipid Research, Baylor College of Medicine, in Houston, Texas, will deliver the William N. Creasy Memorial Lecture at Stanford University School of Medicine on Thursday, March 20.

The lecture, on the ability of the liver to eliminate toxic substances, is open to the public, and will begin at 4:15 p.m. at the Pharmacology Department Library, Room R-358, in the Medical School.

Mitchell is professor of internal medicine and chemical toxicology and chief of the section on hypertension-clinical pharmacology at Baylor. His research interests include clinical pharmacology and toxicology, cardiovascular pharmacology, drug metabolism, and biochemical and chemical reaction methods.

In addition to the lecture, Mitchell will spend the week of March 16 at Stanford teaching medical students, housestaff and postdoctoral fellows, under a William N. Creasy Visiting Professorship in Clinical Pharmacology.

The Professorship is one of 10 awarded this year by the Burroughs Wellcome Fund in honor of the late William N. Creasy, former president and chairman of the Fund.

The Burroughs Wellcome Fund is a nonprofit, private foundation located in Research Triangle Park, North Carolina, and supported by the pharmaceutical firm, Burroughs Wellcome Co.

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Mailed Thursday, March 13, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Recent proposals by several experts calling for separate standards in screening black and white children for anemia are based on inadequate evidence and it would be a mistake if they were adopted, according to a Stanford University professor.

Some recent studies have concluded that there is a genetic basis for the observed difference in average red blood cell counts (hematocrits) between black and white children.

But these studies are based on inadequate evidence and do not take into account economic factors that are linked with environmental and nutritional causes of anemia, according to Dr. Diana Dutton, assistant professor of family, community and preventive medicine.

"If lower standards for blacks were adopted, some black children who are now eligible for food supplementation and medical care would be ineligible simply because illness had been redefined," Dutton said.

The observed difference of two to three percent in average hematocrit levels of black and white children has been attributed to a combination of environmental, nutritional and genetic factors, Dutton said in an article published recently in the *Journal of the National Medical Association.*

But several researchers have proposed that the difference is genetic. The key issue, according to Dutton, is whether socioeconomic disparities between the racial groups have been adequately taken into account.

Poor nutrition and other conditions of poverty are known to cause anemia, she noted.

One of the proponents of separate standards is Dr. George Owen of the School of Public Health at the University of Michigan in Ann Arbor.

Some proponents of separate standards in anemia screening argue that advantages would include "a reduction in the proportion of black infants and children considered to be anemic and at nutritional risk and who therefore necessarily require special food supplementation or medical intervention."

This might mean that treatment currently going to black children would be given instead to white and other children thought to be in greater need, Dutton pointed out.

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Proponents of separate standards also argue that there would be a reduction in the "considerable financial burden placed on either the government or the individual," and fewer black children would suffer the "psychologic stress associated with having a 'disease'."

"These are certainly advantages, if some black children are presently being inappropriately defined as anemic," Dutton observed.

"Yet the evidence for this is uncertain, and the risks of untreated anemia are serious, including abnormal mental function and development, behavioral problems, physical growth retardation, and susceptibility to infection. At present, many black children, even those with the most serious hemoglobin deficiencies, go without needed nutritional or medical therapy," she said.

Dutton contends that on the basis of current evidence, economic factors cannot be eliminated as a possible cause of the reported racial differences in hematocrits.

"To control for economic factors, previous studies have compared specified economic subgroups, but the subgroups have been fairly broad and are likely to contain substantial economic disparities between the races," she said.

"It is therefore impossible to determine from existing data how much of the racial differential reported is genetic and how much is poverty-related."

From a study of children in Washington, D.C., Dutton found that some of the specific risk factors for anemia associated with poverty include larger family sizes, less educated household heads, more crowded housing conditions, less frequent children's health checkups, and less access to private health care sources.

"The role of genetic factors could best be examined in a prospective comparison of racial groups carefully matched on economic, cultural and dietary factors, with close dietary and medical supervision," she suggested.

"Without this kind of evidence, policy recommendations are premature."

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Mailed Wednesday, March 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

A Stanford-Palo Alto physicians' liaison committee has tentatively agreed on a plan to provide future limited access of community physicians to Stanford University Hospital's special facilities and laboratories.

The committee has been meeting for more than a year to resolve differences between the community physicians and the University.

A central issue has been the question of access of community doctors to hospital-based services now restricted to full-time faculty. These services include anesthesia, neurology, pathology, and the radiology service with its diagnostic, nuclear medicine and radiotherapy divisions, as well as all other specialized laboratories, including cardiology.

Under the proposed plan community physicians would have controlled access to the hospital-based services excluding pathology, but including electrocardiography.

As current community doctors holding privileges in the designated services leave or retire, they will be replaced by community doctors who hold clinical faculty appointments in the Medical School.

"The replacing doctor would acquire privileges identical to those of the departing doctor," according to the plan. "Replacements would be made either on a head count or full-time equivalent basis, as specified in advance for each affected service."

The liaison committee is co-chaired by Dr. Walter Arons, a community physician, and Dr. Lawrence G. Crowley, acting vice president for medical affairs and dean of the School of Medicine.

Arons and Crowley said a progress report containing points on which there is substantial agreement and others that require further work was mailed to the medical staff of the Hospital Tuesday, March 11.

One key area remaining unresolved is final agreement on the formula which would be used as a basis for replacement of community physicians in the hospital-based services.

Eventually any committee recommendations will be submitted to the Board of Hospital Directors for consideration.

The report said that both Stanford and the community physicians on the committee agree that Stanford University Hospital is a university hospital with a unique historical association to Palo Alto and the community physicians. They also agree that the Hospital has a dual mission of furnishing quality medical care to the community and of serving to further the educational and research missions of the School of Medicine.

This educational mission is carried out by the full-time, part-time, and voluntary clinical faculty, the latter composed primarily of community physicians.

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The report stated:

"We have come to recognize that the criteria and procedures that govern the appointment of physicians to the clinical faculty are central to all other questions of access to and privileges within the Hospital, as well as to the quality of the teaching program."

Accordingly, said the report, a committee appointed recently by the acting vice president for medical affairs and dean will formulate criteria and procedures for appointment of replacement physicians to the clinical faculty. The committee is composed of regular and clinical faculty.

In addition, the tentative agreement includes that:

- Replacement physicians would be expected to take active part in teaching, including the appropriate voluntary participation of their patients in educational and clinical research activities.
- A small number of courtesy staff appointments in several hospital-based services would continue to be filled as specified by the contract between the University and the City of Palo Alto.
- Service Access Committees would be formed to review applications for staff privileges in the hospital-based services. The committees would consist of regular faculty, clinical faculty and the chief of each service. The procedure would include a process of evaluating appeals.

The committee agreed that how doctors are compensated for their work should not be a criterion for appointment in the hospital-based services.

"The University members of the committee strongly prefer that new appointees to the hospital-based services should become part-time paid faculty members," the report said.

"Although the community members do not accept this as a necessary condition for replacement, the entire committee agrees that such arrangements, if reached by mutual agreement, are not objectionable in principle.

"Each service should be encouraged to work toward the alternative that best fits its needs and mission."

Tentative agreement also includes the need for each clinical service of the Hospital to form steering committees of full-time and community doctors to review topics of mutual concern.

"We endorse the intention of the School to appoint voluntary clinical faculty to relevant academic departments and School-wide committees, and to explore other appropriate ways of better integrating voluntary clinical faculty into the academic life of the Medical School," the report said.

Other areas remaining to be resolved is the request of specific physicians for certain privileges in hospital-based services, and the possible expansion of the number of community doctors in services in which they now have privileges, or in services where no such staff privileges exist.

Community physicians on the committee are Walter Arons, Walter Bortz, David P. Cooney, Robert W. Jamplis, George P. Janetos and Burt McDowell.

Stanford members are Malcolm Bagshaw, John Collins, Lawrence G. Crowley, Conrad F. Gullixson, Philip G. Larson, Peter Levin, Kenneth L. Melmon, Mrs. Linda Meier, Robert Rosenzweig and James Silverman.

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Mailed Wednesday, March 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Editors: This is the first in a two part series on the "science of birth," new techniques which are revolutionizing the diagnosis and treatment of illness in the fetus before delivery. Photos available if not included with story.

THE SCIENCE OF BIRTH—PART I

STANFORD—

Medicine is moving beyond the boundaries of birth. New genetic counseling techniques, the use of ultrasound, and special drug treatments have enabled doctors to diagnose and treat illnesses in the fetus before delivery.

The rationale for this new "science of birth" (properly called perinatal medicine) is to decrease the risks of illness or death to both mother and fetus during pregnancy.

"The risks of dying once one is born are never as great as during birth—until one is 85 years old," says Dr. W. LeRoy Heinrichs, chairman of the department of gynecology and obstetrics at Stanford University School of Medicine.

These risks can result from diseases carried by the mother, such as diabetes or high blood pressure, genetic defects carried by the fetus, and even social and economic factors, especially poor nutrition and health care during pregnancy.

"The focus of modern obstetrics (at Stanford as elsewhere)," Heinrichs says, "is to determine health, or disease, while the fetus is still in the womb, and treat it accordingly before it is jettisoned into life, independent from the mother."

Currently, there are several methods of determining ill health in the developing fetus. If there is the possibility of genetic abnormalities, based on family history or age of the mother, an amniocentesis can be performed.

This procedure, done at about the 15th week of pregnancy, involves removal of a sample of the amniotic fluid which surrounds the fetus, by a needle inserted through the mother's abdomen. Cells shed by the fetus into the fluid are grown in culture for two to three weeks, and examined in the laboratory.

Over 50 chromosomal and inherited biochemical abnormalities can be detected in this way. The most common test performed at Stanford's Genetic Counseling Clinic is chromosomal analysis of fetal cells for Down's syndrome (mongolism), a genetic disease characterized by 47 instead of 46 chromosomes, and serious mental retardation.

The frequency of this condition increases with the age of the woman at conception, and amniocentesis is encouraged especially for women over 35 who are pregnant for the first time.

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Early screening allows couples the choice of continuing or terminating the pregnancy, if a genetic defect is found. "We meet with every couple referred to Stanford to discuss the risks for a baby with Down's syndrome or other genetic disorders," says Dr. Howard Cann, director of the Genetic Counseling Clinic. "We provide as much information as possible, but the decision, to terminate or continue the pregnancy, rests with the couple."

Recently, researchers in the departments of genetics and pediatrics reported a new technique which may improve prenatal screening and provide an alternative to amniocentesis.

Using a device developed by Dr. Leonard Herzenberg, professor of genetics, the researchers have been able to detect the presence of fetal cells in the mother's blood stream as early as 15 weeks into pregnancy.

The device, called a fluorescence activated cell sorter, separates fetal cells from the maternal blood on the basis of a fluorescent label they absorb in the study.

Cann, who conducted the research with Herzenberg and their colleagues, cautions that the technique is "strictly experimental. We still are not sure we can grow cells in culture once we separate them," he says. "Practical application is at least five years off."

The incidence of chromosomal abnormalities picked up by screening at Stanford is between one and two percent; out of 358 recent amniocentesis procedures performed in a one year period, five abnormal fetuses were found.

Nevertheless, Cann says, thousands of birth defects in children throughout the U.S. are not detected until birth. Many women who need amniocentesis don't have it done, and even if every woman with the appropriate indication was screened, "there are many birth defects which are not associated with any known biochemical or chromosomal abnormality, and for which we cannot test," he says.

Tracking the fetus with sonar

Alternative methods of screening, notably ultrasound scanning, may improve that record. Originally developed by the armed forces as a means of detecting sea-going vessels, sonar, or ultrasound, has added another dimension to prenatal monitoring.

The ultrasound scanner works by bouncing a beam of sound waves off internal structures, such as the fetus and uterus, and constructing a picture of the echoes.

"Obstetricians would like to know three things about the fetus at each prenatal visit," says Dr. Desmond McCallum, assistant professor of gynecology and obstetrics. "How old is the baby? Is it the appropriate size for its gestational age? And how well is it?"

According to McCallum, ultrasound scanning is the most accurate way to determine fetal age early in pregnancy. As early as seven weeks after conception, the scanner can pick up a heart beat. Two weeks later, fetal movements can be seen.

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Until about 14 weeks, fetal size can be estimated by measuring the length of the fetus from the crown of its head to its rump. After 14 weeks, measurements of the cranial diameter are used to estimate age. Serial measurements of head and body size can monitor growth.

In addition, ultrasound can pick up abnormalities in the placenta, and in the quality of amniotic fluid, which may indicate problems with the pregnancy. According to Dr. Barbara Carroll, assistant professor of radiology, birth defects of the central nervous system, such as spinal bifida, also can be detected with ultrasound scans.

With Drs. Dieter Enzmann and David London, Carroll is using ultrasound to detect intracranial bleeding in premature infants just after birth. This condition strikes an estimated 40 to 70 percent of these tiny babies, and can lead to brain damage.

One of the most important uses of ultrasound is in determining the presence of twins, McCallum says. The death rate among twins is at least five times that of single fetuses, he says. If twins are detected early, however, "we can prescribe less extensive physical exercise and a special iron-rich diet, and, if indicated, monitor fetal well-being throughout pregnancy."

Another form of ultrasound, Doppler, may prove useful in determining overall fetal well-being. The technique bounces sound waves of a certain frequency off red blood cells moving through blood vessels, and measures the change in frequency of the echoes. Currently, this technique, as well as the electrocardiogram, is used to measure variations in the rate of the fetal heart beat. A healthy fetus is expected to have a wide variability in its heart rate, while one which is suffering from a chronic oxygen shortage would have little variability.

McCallum is using Doppler ultrasound to study the characteristics of blood flow velocity in the umbilical vessels, as another measure of fetal well-being.

Fetal therapy

Perhaps the most dramatic advance in maternal-fetal medicine is "fetal therapy," treating the fetus before birth. Blood transfusions for fetuses which suffer from anemia have been performed for several years. But recently, physicians have been able to treat other conditions, including complications of premature delivery, in the womb.

"Prematurity is the leading cause of death among newborn infants in the world," says Dr. Kent Ueland, professor of gynecology and obstetrics. A main complication of prematurity is respiratory distress syndrome, a condition in which babies cannot breathe normally.

These babies are born with immature lungs; some die, and others must be helped to breathe in the intensive care unit for days or weeks, until their lungs catch up to the rest of their bodies.

To minimize the risks of prematurity, doctors at Stanford interrupt premature labor with drugs, such as ritodrine, and give other drugs, notably steroids, to stimulate lung maturity, before delivery occurs. The babies are born, still premature, but with robust lungs.

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Heinrichs recently reported that treatment of the mother with steroids for one to two days before premature delivery significantly decreases the incidence and severity of respiratory distress among their infants. The research was conducted with medical student Porter Storey, now a research fellow at Vanderbilt University.

Despite advances in screening and treating illnesses in the fetus, high rates of disease and death among mothers and infants persist, particularly in the lower socioecomonic areas, and among certain age and racial groups.

The California Department of Health Services recently reported that babies born to women under 15 are two to four times more likely to have neurological abnormalities than those born to women aged 20 to 25. Yet 45 percent of these mothers fail to receive prenatal care in the first trimester of pregnancy.

In addition, the infant death rate may vary by a factor of six between two different socioeconomic groups in adjoining communities, depending on the availability of health care.

Clearly, the advances of technology are not reaching these women. What is needed is a comprehensive program of perinatal education. Such a program, called the Santa Clara Perinatal Project, was established in 1979 at the Santa Clara Valley Medical Center in San Jose, under a $219,000 grant by the State of California.

The goals of the Project are to provide intensive education for high risk mothers, outreach programs for community health care providers, and a regional perinatal center for critically ill mothers and babies.

According to project director Dr. Paul Hensleigh, about 200 women selected at random from the south and central regions of San Jose will be evaluated carefully during the course of their pregnancies this year. All the women are at high risk for complications, whether from medical diseases or socioeconomic problems.

But physical disorders are often not the only problems facing high risk women. "For many women, pregnancy is a life crisis, which compounds problems they may be having at home or at work," says health educator Paula Dase.

"And if the crisis is further complicated by a high risk medical condition such as diabetes, it can make for a potentially volatile situation," she says.

"The Perinatal Project is attempting to meet those needs in pregnancy through education, counseling, and support in a more humanistic approach to health care."

Project team members help patients participate in their own medical care. For example, nurse practitioner Nancy Adams teaches diabetic patients to monitor their blood sugar levels at home. "We've found that when the blood sugars are kept in the normal range during pregnancy, the outcome for infants of diabetic mothers improves dramatically," Hensleigh says.

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Mailed Thursday, March 6, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Editors: This is the second in a two part series on the "science of birth." This article covers advances in treating infertility.

THE SCIENCE OF BIRTH—PART II

STANFORD—

Infertility, the inability to have children, now can be treated successfully in a majority of cases, thanks to advances in medical and surgical treatments.

These treatments include the manipulation of natural hormones responsible for ovulation (production of eggs), microsurgery to repair damaged or diseased reproductive organs in both males and females, as well as the sophisticated technique for fertilizing the egg outside the womb which gained world wide attention with the birth of the first "test tube baby" in 1978.

An estimated one couple in every six have trouble conceiving. In the U.S., 10 million people at any one time are unable to have children.

According to Dr. Emmet Lamb, director of the Infertility Clinic at Stanford University School of Medicine, infertility may result from a variety of reasons, including low sperm count, irregular or absent ovulation, obstruction of the fallopian tubes, which carry the eggs from the ovaries to the uterus, or damage to the uterus' inner lining, the endometrium.

Because many factors may be involved in infertility, diagnosis of the problem can resemble a detective's search for clues. At Stanford, for example, doctors first examine the medical histories of both partners for past diseases or injuries which could impede conception.

Irregular cycles can be detected by having the woman keep temperature charts (a shift to a higher temperature during a cycle indicates ovulation), and problems with sperm in the male can be uncovered in a simple analysis of semen.

Other, more sophisticated tools are used to diagnose problems in the woman's reproductive organs, including techniques for taking X-ray films of or looking directly into the uterus.

In vitro fertilization, fertilization outside the womb, is not performed at Stanford, and besides, most problems can be corrected with more conventional techniques, says Lamb.

For example, problems with ovulation can be treated by giving drugs to correct an imbalance among the complex interaction of hormones which regulate egg production. At least 50 percent of women treated for ovulation problems at Stanford are later able to conceive, Lamb says.

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Microsurgery is employed to treat infertility which results from blocked fallopian tubes. Surgeons may use electrocautery with a fine needle to remove patches of scar tissue which obstruct the tubes.

If the ends of the tubes are closed by disease, they can be opened surgically.

Even previous sterilization procedures can be reversed by microsurgery. For example, pregnancy is achieved in approximately 70 percent of women whose tubes had previously been cut and "tied," simply by reopening the tubes and sewing the ends back together, says Dr. David Adamson, fellow in reproductive endocrinology and infertility at Stanford.

However, if the tubes were closed by cauterization, or burning, the success rate in reversing sterilization drops markedly, he says.

Similarly, 40 to 50 percent of couples in whom the man has had a vasectomy are able to conceive following a reversal operation, according to Dr. Robert Kessler, assistant professor of surgery.

Kessler says that both men and women increasingly are requesting reversal surgery. Between 50 and 75 reversals of vasectomies are performed at Stanford each year, and similar numbers of women come to the Infertility Clinic requesting reversal of tubal sterilization.

Most commonly, he says, people seek the operations because they have remarried and desire children by their new spouses.

Infertility is usually thought of as a female problem, yet in half the cases it is caused by a male factor, says Kessler.

Male infertility can result from disease, hormone problems, birth defects, and from varicose veins of the testes.

Varicose veins lead to a pooling of blood and an increase in temperature, thereby damaging the cells which produce sperm. The condition is treated surgically by removing the varicose veins, and allowing other, normal veins to take up the circulation of blood.

In addition to surgery, drugs such as caffeine can be given to improve mobility of sluggish sperm, or other agents, to decrease the viscosity of the semen.

About half the couples in which a male problem is identified will conceive after treatment. In the remaining 50 percent, artificial insemination or adoption may be recommended. Artificial insemination is achieved by injection of healthy sperm from a donor into the uterus during ovulation.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Patients at Stanford University Hospital now have their own television channel.

Beginning the first week in March, Channel 3 on the Hospital's TV sets will broadcast four hours of health education programming during the afternoons, Sundays through Thursdays.

The channel is free, and patients do not have to rent the television sets to turn it on.

"Channel 3 will be an important addition to the Hospital's patient education and orientation efforts," said Gary Mecklenburg, Hospital administrator.

"We encourage doctors and nurses to use the channel to supplement their own patient education programs."

Currently, patient education is provided daily to both inpatients and outpatients at the Hospital by doctors, nurses and other health professionals.

Programming of the new channel was developed by the Hospital's Allied Health Council, under the direction of council member Karen Richards, R.N.

Technical assistance is being provided by the Medical Center Instructional Media Department.

Programs include "what to expect from surgery," sports medicine, over-the-counter drugs, "how to stop smoking," and an examination of what makes up hospital bills.

Music and inspirational features also are broadcast.

Television guides detailing programs and schedules will be provided in patient rooms. In addition, patients will be asked to evaluate the new channel and suggest changes in the programs during a six month pilot period.

According to a statement by the Allied Health Council, the goal of the new channel, as of any patient education, "is to help individual patients acquire new knowledge, attitudes, and behavior that will promote their ability to care for themselves more adequately.

"Patients should have an opportunity to know the status of their health, the nature of their problems, what community health resources are available to them and their families, and what they can do to prevent future recurrence of illness.

"Patient education can be a positive force in the recovery from illness and in the alleviation of fear," reads the statement.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

Editors: Photos of talking wheelchair available if not included with story

STANFORD—

Researchers at Children's Hospital at Stanford have developed a "talking wheelchair" which gives speech to people unable to communicate because of cerebral palsy, strokes, and other disabilities.

The device, called a "versatile, portable speech prosthesis," consists of a computerized word processor combined with a speech synthesizer.

Users construct sentences on a video screen attached to the wheelchair using a keyboard, joystick, or even a single switch, and then direct the microprocessor to "speak" from a box containing the synthesizer.

The system is powered by a standard 24 volt wheelchair battery.

So far, six individuals with various degrees of speech disability have used the device on a trial basis with relative success.

One woman, who is unable to speak because of a movement disorder, recently used the device to "read" stories to her five-year-old son for the first time, said Carol A. Simpson, Ph.D., a psycholinguist who designed the language generation program.

"Needless to say, she was very excited," Simpson added.

Simpson and her colleagues at Psycho-Linguistic Research Associates in Menlo Park, California, developed the device with Maurice LeBlanc, chief of rehabilitation engineering at Children's Hospital, and Charles D. Lingel, an electronic engineer.

The project was supported by a grant from the National Aeronautics and Space Administration (NASA) Ames Research Center in Mountain View, California.

The device was demonstrated to speech therapists, physicians and educators March 1, at the Southern California Communication Aids Fair in Los Angeles. According to Simpson, several companies have expressed interest in marketing the device.

An estimated one and a half million people in the U.S. cannot speak understandably and can potentially benefit from communication aids such as the talking wheelchair, Simpson said.

The talking wheelchair project evolved from NASA-Ames research on synthesized speech displays for use in the cockpits of commercial aircraft.

Funding and technical assistance for the project was coordinated by the Stanford University Biomedical Applications Team, a program established by NASA in 1966 to transfer aerospace technology to the solution of biomedical problems.

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The goal of the project, said LeBlanc, was to design a "smart" speech prosthesis which allowed people to say anything they wanted in as short a time as possible, no matter how limited their physical dexterity.

The computer program consists of several commands controlling selection of phrases, words, and individual letters, which enable users to construct messages on a video screen. Another command activates the "talk" function.

The words are organized into different "pages" in the computer program, such as a question page, a page of useful phrases, and a dictionary of 925 commonly used words.

Depending on the severity of their physical disabilities, users may punch characters into a keyboard, move a joystick, or simply click a switch at appropriate intervals to construct the messages they wish to speak.

In addition, they can store completed sentences in the system indefinitely, for use at a later time.

Thus, they can build up a "library" of spoken messages so that they can go shopping, order a meal at a restaurant, or even read class assignments in school, Simpson said.

Experienced users of the keyboard model can construct sentences as fast as 30 words per minute.

Currently the voice is produced by a Votrax phoneme speech synthesizer, which has a male voice with a slight mechanical ring. The pitch, rate and volume of the speech may be adjusted to suit the user.

Researchers are attempting to make the voice sound more natural by adding components to its wave form, Simpson said, but it will be some time before a female voice is commercially available.

"Unlike the male voice, we don't have sufficient acoustic data on how the female voice is produced," she said.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

Editors: Photos of Baylor available if not included with story

STANFORD—

Dr. Denis Baylor, professor of neurobiology at Stanford University School of Medicine, has been awarded the Rank Prize in Opto-electronics for his research on the visual system.

The prize, 21,000 British pounds or about $50,000, was presented to Baylor Tuesday, March 4 at the Royal Society in London. It will be shared with Baylor's colleagues, Drs. Trevor Lamb and King-Wai Yau, research associates at Cambridge University.

The prize recognizes "the development of a new technique for recording the electrical currents generated by single photoreceptors in the vertebrate eye."

Photoreceptors, commonly known as rods and cones, are the cells in the retina which convert light into electrical signals. In the brain, these signals produce the sensation of vision.

In 1977, Baylor, and Lamb and Yau, then postdoctoral fellows in his laboratory, developed a technique for sucking a single rod cell into a tiny electrode, and measuring the change in electrical current flowing across its surface when the cell is exposed to light.

The technique may help scientists understand how the visual system works.

Baylor, 40, is internationally known for his pioneering work in the neurobiology of light reception by the vertebrate eye.

He is a 1961 graduate of Knox College in Galesburg, Illinois, and received his M.D. from Yale University School of Medicine in 1965.

He served as research associate at the National Institute of Neurological Diseases and Stroke and at Cambridge University, and was associate professor of physiology at University of Colorado Medical School before coming to Stanford in 1974.

An editor of the *Journal of Physiology,* Baylor has published over 50 articles in scientific journals. He received the Sinsheimer Foundation Award for Medical Research in 1975.

The Rank Prize in Opto-electronics is awarded by the Trustees of the Rank Prize Funds, and is one of two prizes established in 1972 by the late Lord Rank. The other award is given in the field of animal and human nutrition and crop husbandry.

The awards are made to individuals for notable achievements and also to encourage research and sponsor scientific symposia.

In addition to Baylor, this year's Rank Prize in Opto-electronics was awarded to five British researchers for their work on the liquid crystal.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. William Fowkes, head of the division of family medicine at Stanford University School of Medicine, has been appointed regional director of the Area Health Education Center (AHEC) for San Mateo and Santa Clara Counties.

Virginia Fowkes, who directs the Primary Care Associate Program at Stanford, is associate regional director.

AHEC is a national program supported by the federal government for the purpose of disseminating medical center resources and knowledge to underserved communities through health manpower education projects.

Stanford is participating in the California AHEC, which is directed by Dr. Malcolm Watts, of the University of California at San Francisco.

The regional AHEC office will open at 703 Welch Rd. in July, and an advisory committee representing the Medical School, San Jose State School of Nursing, and the allied health training programs at Foothill College has been appointed to plan and review AHEC projects.

The committee will work with the local Health Systems Agencies to plan projects such as continuing education for physicians.

Dr. Fowkes said it is hoped that these projects will become self-sufficient through state or local funding, and will continue even after the AHEC program has been completed.

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STANFORD—

A new affiliation agreement to train physicians in family medicine has been made between Stanford University School of Medicine and San Jose Health Center.

The agreement was announced recently by Medical School Acting Dean Lawrence G. Crowley and Health Center President John C. Aird.

It coordinates the resources of the Health Center's already-existing family practice residency program and Stanford's Department of Family, Community and Preventive Medicine.

Stanford and the Health Center also cooperate in the training of child psychiatry residents, physical therapy students, and physicians assistants.

"This new agreement broadens the clinical experiences of Stanford's residents, by exposing them to a different patient population than they would encounter in the mid-Peninsula," said Dr. William Fowkes, who directs both the residency program and the division of family medicine at the Medical School.

"At the same time, it enables the residents at the Health Center to participate in rotations at Stanford, use the library and other facilities, and engage in research activities.

"Both groups can only benefit from such cooperation," he added.

According to the agreement, San Jose Health Center will provide at least one clerkship and regular elective rotations for Stanford medical students and residents in the family practice program.

In return, the University will allow family practice residents to participate in rotations at Stanford Hospital, and to use the medical library and related facilities.

The director and faculty members of the family practice residency program will be appointed by the Health Center, and if acceptable, will be appointed to the clinical faculty of the Medical School. Stanford faculty will assist in training family practice residents.

Family practice faculty members will have access to the Medical School's divisions of biostatistics and health services research for consultation and research purposes.

The agreement is effective for one year beginning March 1, 1980, and will be extended thereafter on a year-to-year basis.

An affiliation liaison committee representing the administrations of both institutions will provide on-going review and approval of the program.

Mailed Wednesday, April 30, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

The second spring Progress in Medicine lecture, part of Stanford University Medical Center's twentieth anniversary celebration, will be held Tuesday, May 6 at 7:30 p.m. in Fairchild Auditorium.

Drs. George Harell and Richard Popp will discuss new ways to diagnose disease, and patient care in the 1980's.

The lecture is free and open to the public.

Harell is associate professor of radiology in the division of diagnostic radiology. An expert on computed tomography (CT), he will explain how CT scanning differs from conventional x rays and will discuss current uses and future applications of whole body CT.

Harell received his M.D. in 1963 from Columbia University College of Physicians and Surgeons. He joined the staff at Stanford Medical School in 1972.

Popp, associate professor of medicine in the division of cardiology, is a specialist in the field of echocardiography, the use of ultrasound in diagnosis of heart disease. He will discuss the technique's many applications in cardiac and cardiovascular medicine.

Popp received his B.A. from Johns Hopkins University in 1960, and his M.D. from the Johns Hopkins University School of Medicine in 1964. He joined the staff at Stanford Medical School in 1971.

The Progress in Medicine lectures are presented as a community service by the dean and faculty of the School of Medicine, the Stanford University Hospital, and members of the Medical Center Council.

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Mailed Wednesday, April 30, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415)6911

STANFORD—

The fifteenth annual John Kent Lewis Memorial Lecture will be presented by internationally known cardiologist Dr. Desmond Julian, on May 12 at the Medical School.

The lecture, entitled "Trials and Tribulations in Ischemic Heart Disease," will begin at 4:30 p.m. in Fairchild Auditorium. Physicians and other health professionals in the community are invited to attend.

Julian, professor of cardiology from the University of Newcastle Upon Tyne in England, is also medical director of the Regional Cardiac Centre at Newcastle, the cardiac research and clinical headquarters for northern England.

He originally developed the idea of coronary care, and established one of the first coronary care units in Edinburgh, Scotland.

He has made important contributions to the field of cardiac arrhythmias in patients who have suffered heart attacks, and he is a pioneer in the use of drug treatment in patients following acute heart attack.

The John Kent Lewis Lecture, first presented in 1964, honors the memory of Dr. John Kent Lewis, who received his undergraduate and medical degrees from Stanford in 1918 and 1922. Former chief of the Stanford Medical Service at San Francisco General Hospital, Lewis was a noted pioneer in heart research. He died in 1961.

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Mailed Monday May 5, 1980

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415)497-6911

STANFORD—

A one-day workshop for health professionals, on effective weight control counseling will be held at the Medical Center on May 30.

Co-sponsored by the Stanford Counseling Institute and Stanford Hospital's Nursing Educational Services, the workshop will present the latest research results and practical treatment strategies for nurses, dieticians, counselors, and other health professionals who work with patients on weight control.

The workshop will begin at 8:30 a.m. in the Hoover Cottage Lounge at Hoover Pavilion.

Topics to be covered include behavioral analysis methods for identifying negative eating and exercise patterns, self-instruction training and self-motivation, overcoming client resistance to change and practical procedures for conducting weight control groups.

The workshop will be led by two experienced weight control therapists—Gary Dexter, on the staff at the Stanford Counseling Institute, and Joel Killen, a staff member at the Stanford Heart Disease Prevention Program.

An advance registration fee of $40 is required. Early registration is recommended as enrollment is limited.

The workshop can also be presented to staff members at hospitals, professional organizations, and other groups on an individualized "in house" basis.

For more information or to request a registration form, contact Joel Killen or Gary Dexter at the Health Behavior Research Group at 7-3897.

Continuing education credit is available for nurses.

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Mailed Wednesday April 30, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

A team of Stanford University researchers has reported the first long-term survival in monkeys receiving combined heart and lung transplants.

Five in a series of 10 rhesus monkeys that received the transplants are still living up to 312 days after surgery with apparently normal heart and lung function, said Dr. Bruce Reitz, assistant professor of cardiovascular surgery at Stanford University School of Medicine.

If additional animal studies are successful, trials in patients could begin within two years, he said.

Reitz reported on the technique April 28, at the meeting of the American Association for Thoracic Surgery in San Francisco.

He conducted the research with Drs. Nelson Burton, Charles Bieber, Stuart Jamieson, John Pennock, Edward Stinson, and Norman Shumway, of the Medical School's Department of Cardiovascular Surgery.

Reitz said that heart-lung transplants could help patients who have suffered lung damage as a result of heart disease, and those who have bilateral or diffuse lung disease due to a variety of causes.

Transplanting the heart with the lungs is preferable to replacing both diseased lungs alone, Reitz said, because it is surgically easier to remove the heart and lungs as a single package.

In addition, it is almost impossible to biopsy lung tissue as a means of monitoring rejection of the transplanted organ. However, biopsy of heart tissue is done routinely in heart transplant patients, and could provide an indicator of rejection in the combined transplant, he said.

Patients with lung cancer would not be good candidates for heart-lung transplantation, Reitz said, because the disease often occurs in only one lung, and can be treated by surgical removal of the cancerous tissue.

In addition, the immune suppressive drugs used to prevent rejection of transplanted organs may accelerate the spread of cancer to other parts of the body, particularly if some cancer cells remained even after surgery.

The record of lung transplantation in humans to date has been poor, Reitz said. In 38 reported attempts, only two patients have lived longer than three months following surgery, and none survived for longer than 10 months.

Reitz cited three known cases of combined heart-lung transplants in humans performed between 1968 and 1971. All three patients died within 23 days, from pneumonia and failure of the severed windpipe to heal.

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Similar results were obtained previously in animal studies, he said.

The Stanford study differed from previous studies in that a new drug to prevent rejection of the transplanted organs, Cyclosporin-A, was substituted for traditionally-used corticosteroids.

Cyclosporin-A is a fungal derivative which seems to act specifically to block the immune cells responsible for rejecting transplanted tissue without affecting other immune cells that fight bacterial infection, Reitz said.

Infection is a serious problem in the use of corticosteroids, because they indiscriminately destroy all types of immune cells.

Cyclosporin-A also avoids the other complications of corticosteroids, which include delayed wound healing, weight gain, muscle weakness, and progressive bone deterioration, he said.

The Cyclosporin-A used in the study was provided by Sandoz, Ltd., of Basel, Switzerland.

In the study, Reitz and his colleagues performed transplants in 10 monkeys using cardiopulmonary bypass, the technique of circulating blood by machine used during open-heart surgery in humans.

Some of the monkeys received hearts and lungs from unrelated monkeys, and were given Cyclosporin-A to prevent rejection. Others had their organs removed and then reimplanted, and did not receive the drug.

Three of seven monkeys that had received unrelated hearts and lungs survived longer than 140 days after surgery. Two are still living six and seven months after surgery, and are being treated continuously with Cyclosporin-A.

The three animals that had their organs removed and reimplanted are living 60, 199, 312 days after surgery.

None of the monkeys on Cyclosporin-A contracted infections or had problems with healing of their windpipes.

"Success in these experiments is most likely due to the use of Cyclosporin-A," Reitz said.

However, one long-term survivor treated with the drug died after 144 days from a lymphoma, or cancer of the lymphoid tissues, which may have resulted from the immune suppression caused by the drug.

Kidney and heart transplant patients are known to be at higher risk of developing cancer, Reitz said, and in recent clinical trials of Cyclosporin-A in kidney transplant patients conducted at Cambridge University, England, "three recipients developed lymphomas within the first year of treatment."

Despite the risk of cancer, Reitz said the benefits of Cyclosporin-A make it a logical choice for clinical trials of heart and lung transplants.

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Mailed Monday, April 28, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. Richard D. Mamelok, assistant professor of medicine at Stanford University School of Medicine, has won a faculty development award in clinical pharmacology from the Pharmaceutical Manufacturers Association (PMA) Foundation.

The award provides $30,000 to support Mamelok's research and teaching activities for two years beginning July 1, 1980.

Mamelok, 32, is a graduate of Columbia University, and received his M.D. at Dartmouth Medical School in 1973.

He served as a research fellow in clinical pharmacology at the University of California Medical Center in San Francisco before joining the division of clinical pharmacology at Stanford in 1979.

His research focuses on understanding how certain drugs are transported across kidney cell membranes. The research may lead to improvements in the drug treatment of patients who have kidney failure.

Mamelok also is responsible for teaching medical students and fellows in clinical pharmacology.

A member of the American Association for the Advancement of Science, Mamelok also is a 1979-80 fellow of the Andrew W. Mellon Foundation of New York.

The PMA Foundation faculty development program has aided 51 junior faculty members since it was established in 1967.

It is part of a larger effort by the Foundation to support pharmaceutical and therapeutic advancement through awards to university research and training programs.

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Mailed Wednesday, April 23, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: Photos of speakers available if not included with story.

STANFORD—

Medical teaching, patient care and research in the decade of the '80's will highlight the spring Progress in Medicine lecture series in April and May at Stanford University Medical Center.

The series is one of several events celebrating the twentieth anniversary of the move of Stanford Medical School from San Francisco to the university campus.

All lectures are open to the public and will be held on Tuesday evenings at 7:30 p.m. in Fairchild Auditorium at the Medical Center.

April 29—*TEACHING: Medical education today*, with Dr. Lawrence G. Crowley, acting vice president and dean of the Medical School, and Dr. John P. Steward, associate dean for student affairs and adjunct professor of medical microbiology.

May 6—*PATIENT CARE: New ways to diagnose disease*, with Dr. George S. Harell, associate professor of radiology, and Dr. Richard L. Popp, associate professor of medicine in the division of cardiology.

May 13—*RESEARCH: The hidden cost of survival of the fittest*, with Dr. Andrei Calin, assistant professor of medicine, and director of the rheumatology section at the Palo Alto Veterans Administration Medical Center, and Dr. Hugh O. McDevitt, professor of medicine in the division of immunology and professor of medical microbiology.

May 20—*RESEARCH: How genes are reproduced and repaired*, with Dr. Errol Friedberg, associate professor of pathology, and Dr. David Korn, professor and chairman of the department of pathology.

The Progress in Medicine lectures are presented as a community service by the dean and faculty of the School of Medicine, the Stanford University Hospital, and by members of the Medical Center Council.

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Mailed Monday, April 21, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

A comprehensive health education program, on ways to reduce the risks of heart disease, will be launched this week by the Stanford Heart Disease Prevention Program in two central California communities.

The program is based on Stanford's "Three Communities Study," which showed that community-based health education relying heavily on the mass media can have a significant impact on helping people to change their lifestyle and improve their health status.

The Medical School and Communications Department at Stanford are coordinating the new education program for three main purposes:

—to demonstrate for the first time that community-wide education programs can reduce heart disease risk, thereby leading to diminished heart attack, stroke and death rates in entire communities,

—to show how health education for young people can prevent the adoption of harmful health practices,

—to show how communities throughout the U.S. can be organized to carry out effective and affordable education programs.

The program kicks off in Salinas and Monterey on Friday, April 18, with the broadcasting of a "heart health test" on Salinas station KSBW-TV (Channel 8) and in Spanish on KRAY Radio (104 FM) beginning at 8 p.m.

Viewers will be able to test their knowledge about many health issues and will learn how changes in food habits, stress, smoking and exercise can reduce their risk of heart attack and stroke.

The health test was produced by Janet Alexander, director of community education for the Heart Disease Prevention Program, in association with Veriation Films of Palo Alto, California.

The program, which runs for five years, also includes newspaper columns, radio and television spots, books on heart disease risks, education for health professionals, new school programs, and classes led by community groups.

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During and following the educational program, randomly selected individuals will be surveyed at yearly intervals for heart disease and stroke risk factors, and data will be collected on the incidence of heart disease and disease-related deaths in Salinas and Monterey as well as three other California cities.

The eight-year study is directed by Dr. John W. Farquhar, professor of medicine at the Medical School and head of the Stanford Heart Disease Prevention Program, and is supported for the first five years by a $6.2 million grant by the National Heart, Lung and Blood Institute.

Dr. Nathan Maccoby, director of the Institute for Communications Research, and Dr. Peter Wood, adjunct professor of medicine at Stanford are co-principal investigators.

The Medical School team includes Drs. Stewart Agras, Byron W. Brown, Jr., Stephen Fortmann, William Haskell, Stephen Hulley, Ralph Paffenbarger, and Barr Taylor.

The communications team includes Alexander, Dr. Douglas Solomon, Prudence Breitrose, Elizabeth Adler, Dr. Edwenna Werner, and Dr. Elizabeth Blackmer.

Although deaths from heart disease and stroke have declined over the last 10 years in the U.S., the disease still kills approximately 170,000 people under age 65 each year.

About 90 percent of these premature heart attacks and strokes can be prevented, says Farquhar.

"We hope to create a climate of opinion that encourages people to think positively about their health, and to provide step-by-step advice that will help them gradually make specific changes in food and lifestyle," he says.

"We will try to help people add to their feeling of well-being and zest for living, while at the same time they reduce their risk of heart disease and stroke."

By enlisting the participation of community groups, Farquhar says he anticipates the educational programs will continue long after Stanford's role in the study has been completed.

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Mailed Wednesday, April 16, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

Dr. Stanley Falkow, a noted scientist in the field of recombinant DNA research and infectious diseases, has been named professor and chairman of the Department of Medical Microbiology at the Stanford University School of Medicine.

The appointment is effective September 1, 1980. Falkow is presently a professor of microbiology and medicine at the University of Washington in Seattle.

Falkow is widely recognized for his work on the application of modern concepts and technologies of molecular biology to problems of infectious diseases.

"We are indeed fortunate to attract to Stanford an individual of Dr. Falkow's caliber," said Acting Vice President and Dean Lawrence G. Crowley. "His appointment promises to bring exciting and effective leadership to the academic programs of the department and the School."

The Department of Medical Microbiology has been without a permanent executive since Dr. Sidney Raffel retired in 1976 after 23 years as chairman. At that time Dr. Bruce Stocker, professor of medical microbiology, agreed to serve in an acting capacity until a successor was named.

Falkow's research deals with the way plasmids, circular DNA molecules that reproduce themselves inside bacterial cells, render bacteria resistant to antibiotics, and the way they contribute to the ability of bacteria to produce infectious disease.

He is regarded as an innovative teacher who has trained outstanding young fellows in basic and clinically applied research in the area of human infectious diseases.

The 45-year-old scientist was born in Albany, New York, and was educated in Rhode Island and Maine schools. In 1960 he received the Ph.D. in biology from Brown University.

Before moving to his present post in Seattle, Falkow was a professor of microbiology at Georgetown University Medical School in Washington, D.C..

He is the author of more than 106 published papers in his field, and has served on the editorial boards of *Bacteriology,* and *Infection and Immunity.* He is currently on the board of the *Journal of Infectious Diseases.*

From 1975 to 1978 he served on the advisory committee on recombinant DNA research of the National Institutes of Health, and he is a consultant to the Food and Drug Administration's committee on antibiotics in animal feeds.

In May this year Falkow will present a Kinyoun Lecture at NIH. This lectureship is awarded to eminent scientists who are internationally known in research areas supported by the National Institute of Allergy and Infectious Diseases.

Falkow is married and has two children.

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Mailed Tuesday, April 15, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

The United States government is not doing enough to prevent nuclear reactor accidents like the one which occurred last year at Three Mile Island, according to a University of California scientist.

"I'm convinced that a great deal more can be done than has been done to prevent accidents," said Joel Primack, Ph.D., associate professor of physics at the University of California at Santa Cruz, and consultant to the Nuclear Regulatory Commission's special inquiry group on Three Mile Island.

In addition, civil defense and emergency health planners are seriously unprepared for an accident in which large numbers of people are exposed to radiation, he said.

Primack spoke at a symposium on the medicine of acute radiation exposure at Stanford Medical School's Fairchild Auditorium on Saturday, April 12.

The symposium, for doctors and other emergency health professionals, was sponsored by the Stanford Medical Students Association and the Department of Family, Community and Preventive Medicine.

Primack said that the prevailing attitude among builders, operators and regulators of nuclear reactors is that a "melt-down," or overheating of fuel which can lead to release of radioactivity into the environment, is "an incredible accident—they don't have to plan for it."

Yet, the reactor at Three Mile Island was only 30 to 60 minutes from a major meltdown according to the Rogovin Study, the Nuclear Regulatory Commission's report, he said.

Primack criticized the NRC for not investing money in improving reactor safety.

The Commission spends $100 million a year "basically trying to convince us that reactors are safe," he said, yet spends "virtually nothing on improving reactor safety."

For example, it is possible to develop a filter system that could remove 95 percent of the radioactivity released in an accident before it reaches the atmosphere.

However, "the NRC has consistently refused to spend any money developing such a system," he said.

Primack recommended there be some "independent assessment" of reactor operation.

"The NRC is not adequately prepared to play that role. It was days before they understood what was going on at Three Mile Island, and even then they seriously misdiagnosed" the situation, he said.

"The hydrogen bubble scare was largely based on the technological incompetence of the NRC staff."

A second major problem is the inadequacy of civil defense and emergency medical procedures.

Roland Finston, Ph.D., director of Health Physics at Stanford University, said that potentially lethal exposure to radioactivity released in a reactor accident and deposited on the ground can be reduced by three fourths if people in the immediate vicinity (within five to 10 miles of the reactor) are evacuated within six hours.

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Yet, there have been no serious preparations for an evacuation of that magnitude, Primack said. (Approximately 29,000 people live within five miles of the Three Mile Island reactor.)

If an evacuation cannot be undertaken, for example because a snow storm prevents people from moving in and out of an area, "one should be prepared to shut reactors down" as a precautionary measure, Primack said.

One of the most serious health risks from a reactor accident is exposure to radioactive iodine, he said.

The thyroid gland avidly absorbs iodine, and any radioactivity it carries can cause the development of thyroid nodules and even cancer.

Fetal and child thyroid glands are particularly sensitive to radiation because of their smaller size.

Even at a distance of 200 miles from an accident, the thyroid glands of children would receive 500 rems of radiation, enough to cause nodules in 10 to 60 percent of the cases, Primack said.

Fortunately, 90 percent of the absorption of radioactive iodine can be prevented by giving potassium iodide (KI) either before exposure or as quickly thereafter as possible, Primack said.

Potassium iodide is a well understood drug with few side effects, which simply blocks absorption of other radioactive forms of iodine.

Yet, even though the Food and Drug Administration requested in December, 1978 that drug manufacturers submit applications to produce the drug for this purpose, "as far as I know, there still have not been any applications," Primack said.

"Nobody requires potassium iodide to be stockpiled," he added.

Following the accident at Three Mile Island, the Air Force dispatched planes to collect the drug from manufacturers. "One week later, they had 200,000 doses of KI," which were not used and "probably will be dumped."

"That's absurd," Primack said. "Potassium iodide should be stockpiled and distributed widely to people in the vicinity of a nuclear reactor who would not have the chance to get it from some central distribution point."

Finally, "we should be prepared to decontaminate land and water," he said.

Many reactors are located on rivers, placing a substantial fraction of the fresh water of the US in danger of being polluted in the case of a "melt-through," in which the molten fuel melts through the floor of the containment vessel.

"The amount of radioactive strontium, for example, that could be released from the melt, through even one half mile of ground to the local river, would be enough to pollute the entire annual run-off of the Ohio or Missouri Rivers for five years," Primack said.

This could be prevented by drilling wells right around the reactor to suck out the radioactive leakage, he said.

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Mailed Monday, April 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Stanford University School of Medicine is among 13 private medical schools that will receive grants from the Henry J. Kaiser Family Foundation to help alleviate some of the financial problems facing medical students.

Dr. Robert J. Glaser, president of the Palo Alto-based charitable foundation, said each of the 13 schools will receive an immediate grant of $100,000. A second grant of $50,000, payable, after January 1981, will be provided to those schools that match the second component on a two-to-one basis.

The foundation funding to the 13 schools totals $1.3 million.

"We hope the matching grant will provide the incentive for vigorous fund raising efforts," explained Dr. Glaser, "since foundation resources alone cannot make a significant impact on the indebtedness of students needing aid."

"The challenge grants may enable the schools to increase the awareness of their alumni, other individuals, and corporations about the financial problems facing today's students," he added.

Tuition costs in the 13 schools range from a low of $5,250 to a high of $8,152 per academic year (three quarters), according to the foundation.

(Stanford Medical School's tuition for the same period for new students will be $7,338 in 1980-81. Three-fourths of Stanford medical students borrow funds to meet part of the cost of medical education. Of the graduating M.D. students in 1979, 69 percent had a mean debt of $16,800, according to the Financial Aid Office. Total support of $2.6 million for medical students in 1978-79 at Stanford was composed of about 41 percent loans and 32 percent scholarships. The remainder came from income contributed by students, their spouses and parents.)

Dr. Glaser said the 13 schools are ideal candidates for this effort because eight years ago they formed a consortium whose officers meet regularly to share information on common problems, especially financial assistance for students.

"Because the consortium schools are privately funded and now share a considerable amount of data, they are in a position to test the hypothesis that aggressive fund raising on their part can increase private giving of scholarships," Dr. Glaser said.

"Historically," he noted, "medical alumni contributions have been small relative to their substantial earnings, and medical schools are eager to offer incentives to increase giving by their graduates."

Besides Stanford, medical schools which will receive the grants include Case Western Reserve, University of Chicago, Duke, Harvard, Johns Hopkins, Columbia, University of Pennsylvania, University of Pittsburgh, University of Rochester, Washington University, and Yale.

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Mailed April 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Chinese medicine is a balance of two worlds, each in stark contrast to the other.

In the field of infectious diseases, for example, Chinese physicians are gearing up to produce interferon using sophisticated recombinant DNA techniques, while at the same time they are trying to teach people to improve sanitation by keeping their pigs out of their houses.

Improving health care on both fronts is very difficult under the current economic conditions found in this country of 800 million people, according to Dr. Thomas Merigan, professor of medicine and head of the division of infectious diseases at Stanford University School of Medicine.

"There simply are a lot of other things besides improving health care that need to be done," he said.

Merigan recently returned from a month-long tour of several infectious disease research centers and hospitals in the People's Republic of China, as a guest of the Chinese Academy of Medical Sciences.

His observations of the trip were published in a recent issue of the *Journal of Infectious Diseases.*

One example of the problems facing the Chinese in controlling infections is the high rate of polio. According to the World Health Organization, 10,000 cases of paralytic polio were reported by the Chinese last year, two fifths of the world total. In comparison, the U.S., with a population of 240 million, only has about five cases a year.

Another problem is hepatitis. Five to 10 percent of the Chinese people suffer from chronic hepatitis B virus infections, Merigan said, compared with "very much less than one percent" in the U.S.

The high incidence may reflect genetic or cultural differences in susceptibility between the two peoples, as high hepatitis rates occur in other countries, including Japan. However, differences in sanitation and medical techniques could also be to blame, he said.

Not surprisingly, the high rate of hepatitis in China makes it easier for physicians to do long-term studies of patients with the disease. In Canton, researchers at the Chung Shan Medical College have noted an association between hepatitis and liver cell cancer.

Patients with such tumors have an eight times greater likelihood of carrying hepatitis B markers in their blood, as well as giving a history of hepatitis, compared with appropriate controls. In addition, studies of tumor biopsies have uncovered cirrhosis and inflammation characteristic of hepatitis.

At the Institute of Oncology in Peking, Drs. T.F. Sung and Y.H. Chang have found increased levels of alpha-feto protein in patients with liver cell tumors. This protein, which may be produced by the cancer cells, may provide a means of early detection of the disease. Again, Merigan said the great numbers of people with chronic hepatitis make possible this unique large scale study.

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Similarly, the high incidence of nasopharyngeal (nose and throat) cancer in southern China has made it possible for scientists to study the role of Epstein-Barr virus (EBV), which in Africa also has been associated with Burkitt's lymphoma.

Using sophisticated immunological techniques Dr. Y. Zeng and his colleagues at Peking's Institute of Virology have found that as many as 15 percent of individuals over 30 who carry antibodies against certain EBV markers, but who otherwise are without symptoms of malignancy, eventually will develop this cancer.

The Chinese would like to use interferon, the natural anti-viral agent, as well as other anti-virals to try to treat and prevent these cancers, Merigan said. Interferon currently is being tested in the U.S. as a treatment for a variety of cancers.

However, the Chinese program is a long way off, he said, due to a limited supply of the material, which currently is isolated from human white blood cells.

Workers at the Institutes of Genetics and Virology are attempting to develop recombinant DNA techniques for production of interferon by bacteria, a goal also of Western scientists, Merigan said, but as yet have not published many papers on this technology.

Another major thrust of researchers is the study of traditional Chinese medicine, Merigan said. For example, physicians are using modern medical lasers directed at traditional acupuncture sites to treat ailments such as liver disease.

The role of acupuncture, in Western medicine at least, remains unclear. Nevertheless, Chinese researchers have found that acupuncture with the laser seems to be as effective as the technique performed with needles, and the laser beam has the advantage that it cannot be contaminated and thus cannot spread infections, he said.

At the Institute of Virology, Dr. Y.T. How is studying the intriguing finding that an extract of a traditional herbal root can improve the action of interferon in treating recurrent respiratory infections.

This finding, and others like it, may benefit Western medicine, Merigan said, particularly if the active components of the traditional herbs can be purified.

Merigan said that many of the difficulties in improving medical care in China resulted from a period in the late 1960s and early 1970s of "isolationism and anti-intellectualism," during the so-called "Cultural Revolution."

Today, however, "one perceives the re-emergence of a growing group of very intellectually competent, vigorous and enthusiastic individuals who are deeply committed to the development of high quality medical and biologic research," he said.

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Mailed Monday, April 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

CITY DESKS: This story is a follow-up to a bulletin transmitted to AP and UPI early this morning.

STANFORD—

An elderly woman patient died and three security people were slightly injured Wednesday night, April 9, when a fire broke out in the patient's room in the Hoover Pavilion of Stanford University Hospital.

Edna Hansen, 76, of 180 Hamilton Ave., died from apparent smoke inhalation and burns suffered in a smoldering fire which began about 10:00 p.m., and which was confined mostly to the upper portion of the mattress of her bed on the third floor of the Hospital annex.

Hospital safety and security supervisor Jerry Murphy and guards Tracy Fry and Jeff Schlesinger were treated in the Emergency Department for smoke inhalation suffered when they tried to put out the fire, and were released early Thursday morning.

According to Palo Alto fire inspector Bob Cleveland, Mrs. Hansen had apparently been smoking in bed.

The body has been taken to Santa Clara Valley Medical Center for autopsy, because it is a coroner's case.

Dr. Bruce Halperin, resident physician on duty, said he attempted to rescue the woman, but the smoke from the burning mattress was so thick he could not enter the room.

He immediately ordered the evacuation of all patients on the ward to the first and second floors, where they will remain until the area is cleaned up, probably early next week.

None of the other patients suffered any complications or came in contact with the smoke, he said.

Despite the fact that some patients were on oxygen therapy and were receiving intravenous medications, Halperin said the entire floor was evacuated within three to four minutes.

"The nursing staff were tremendous," he said. "Their efforts were truly heroic."

Eight units of the Palo Alto Fire Department responded to the alarm, and doused the burning mattress within minutes upon arriving.

Damage to the room was limited to the mattress, curtains, and the wall, which was blackened by the smoke.

The unit on the second floor below the burned room was evacuated briefly by the fire department as a precautionary measure.

According to her physician, Dr. Walter Bortz, Mrs. Hansen was being treated for emphysema and organic brain syndrome, which is associated with mental confusion.

Mrs. Hansen was restrained in bed by a vest worn around the torso. Her arms and legs were not restrained and she could reach the call button which she used frequently during her hospitalization. Hospital officials said it is common nursing practice to use soft restraints in order to prevent certain patients from falling out of bed and injuring themselves.

Dr. Bortz said Mrs. Hansen did not have his permission to smoke. The nursing staff apparently did not know she had cigarettes in her room.

Hospital policy requires that patients who are confined to bed and who wish to smoke must have the permission of the responsible physician, and a responsible adult must be in attendance.

Mrs. Hansen is survived by a niece, Mrs. Dampier, of Los Altos, CA.

Funeral arrangements are pending.

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Mailed Thursday, April 10, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Relax—and help medical research by volunteering for a study on relaxation as a treatment for high blood pressure, being conducted in the department of psychiatry at Stanford University Medical Center.

Each individual in the study will receive three half-hour sessions of relaxation training during the course of one morning, and the last session may be taped for continued use at home, according to Dr. Michael Horne, coordinator for the project.

The relaxation training techniques are presently used in the psychiatry department's stress reduction clinic, he said.

People with high blood pressure who wish to volunteer should call Dr. Horne at (415) 497-6341.

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Mailed Wednesday, April 9, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

A $97 million program to correct deficiencies and modernize the Stanford University Hospital and Clinics over the next six years has been proposed by Medical Center administrators.

The plan, still in the preliminary stages, was circulated to the University Board of Trustees, medical committees, and discussed with student leaders Friday, April 4.

The 110-page document, "Facilities Plan and Capital Funding Forecast 1979 to 1985, Stanford University Hospital and Clinics," is part of a long-range planning study launched by Acting Vice President and Dean Lawrence G. Crowley to describe future resources and capital needs of the Medical Center.

Similar planning has been under way at the University to deal with the problem of obsolescence of academic buildings.

The Hospital plan was developed by a team headed by Hospital Executive Director Peter Levin.

Following approval by the Board of Hospital Directors, the proposal will go to the Trustees for action at a future meeting, Levin said.

Still, a plan of this magnitude will require approvals (a certificate of need) from local and state health planners, and city and county agencies. The process is expected to take several months.

Modernization of the Hospital is crucial, the report contends, because clinical and research activities are constrained by "serious functional deficiencies." These compromise the efficiency of the Hospital and its ability to provide high quality care.

A chief problem cited by the report is inadequate space. This results in a lack of compliance with hospital codes designed to safeguard the well-being of patients and staff. Among the deficient units are coronary care, intensive care, pediatrics, radiology, medical records, central sterile supply, cafeteria, and materials storage.

The report adds, "Many other aspects of the Hospital operation are in violation of existing codes and potentially citable."

Two years ago the Joint Commission on Accreditation of Hospitals, the California Medical Association, and the California State Department of Health accredited the Hospital for the normal two years as a result of a major commitment to implement corrective action.

But Levin stressed, "The plan goes beyond the mere correction of deficiencies. It is designed to make the Hospital more functional in terms of its mission as a teaching institution, a base for research, a regional center for specialty care, and a comprehensive community hospital."

The report stresses the important role played by both faculty and community physicians at the Hospital:

"Each group accounts for approximately one-half the annual patient days and each group cares for patients from all of Stanford's many market areas. Both groups serve the local community, draw referrals from outlying areas, and serve secondary and tertiary care patients."

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The Hospital modernization proposal recommends a two-stage approach which is interdependent and must proceed almost simultaneously.

The first stage will be an estimated $22.6 million program to complete the unfinished portion in the Hospital's new addition opened in 1976. It includes construction of a low-cost building near the Hospital to house support activities now located in the main center, and calls for remodeling the vacated space for patient care and academic needs.

This stage will correct some code deficiencies and provide needed space for cardiology, radiology, transfusion service, pharmacy, facilities department, medical records, materials storage and cafeteria.

The second stage, an estimated $70 million program, calls for construction of a new four-story wing to the north of the Hospital. This would provide 12 new operating rooms, renovation of 14 existing ones, 43 intensive care beds, 44 pediatric beds, and 56 medical and surgical beds to ease overcrowding of present wards.

At the same time all code deficienceis will be corrected.

Levin stressed the plan will not add to the Hospital's present capacity of 668 beds. "But it would create more usable beds in the main center," he said.

Financing of the Hospital proposal is under study, the report indicates. Potential funding options include a combination of long-term loans, Hospital reserves, and gifts.

If the program is approved, construction will begin in 1983 and completed in 1986.

In addition, the Hospital plan provides for renovation of the Boswell Building which houses the outpatient Clinics. In the Clinics faculty physicians treat their patients and teach medical students. Remodeling of the space is estimated at $4.5 million to be financed by a $3 million gift from the Boswell Foundation of Los Angeles, and Clinic funds.

"The clinics were never designed to meet the needs of modern medical practice," the report states. "They have inadequate waiting areas, undersized examining rooms, and major impediments to the attraction of patients and the integration of patient care and teaching activities."

The report concludes these capital outlays are necessary because of the explosive advances in medical science, the growth of clinical programs, and because the Hospital and Clinics were constructed inadequately from the start.

As an example, the report states, Stanford has slightly more than half the square footage per bed than the national average for teaching hospitals, and its operating rooms are inadequate.

"Patient care demand for greater operating room capacity is expected to increase over the next decade," the report predicts. The Hospital faces serious problems in this area with patient waiting lists, and surgeons having to operate during late hours.

"If Stanford takes no action in response to those serious problems," the report continues, "the quality of the Hospital as a teaching and community facility will decline, together with the ability to serve as a recognized base for educational and research programs.

"Failure to address cited code deficiencies could lead to decertification of beds and withdrawal of hospital accreditation which, in turn, would affect the status of Medical School programs."

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Mailed Monday, April 7, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

City Desks: Because of the limited seating capacity of Fairchild Auditorium, the symposium on radiation exposure can be attended only by those who have registered in advance. However, members of the press wishing to cover the meeting are welcome. Advance programs are available. In addition, a press conference has been scheduled with some of the speakers Saturday, April 12 at 9:00 a.m. at Fairchild Auditorium, located just south of the Medical School. Please notify the News Bureau if you plan to attend.

STANFORD—

A symposium on the medicine of acute radiation exposure will be held Saturday, April 12 in Fairchild Auditorium of Stanford University School of Medicine.

The one-day meeting, for physicians, medical students, and other emergency health professionals, will discuss the medical implications of a nuclear reactor accident like the one which occurred at Three Mile Island.

"Based on the Three Mile Island experience, it is generally agreed that emergency planning for an accident involving a large release of radioactivity is woefully inadequate," says Roland A. Finston, Ph.D., director of Stanford University's Health Physics Department and a symposium participant.

"This meeting is designed to help physicians in Northern California who are located near nuclear power plants to understand the medical problems associated with an accident, and to make emergency plans more realistically."

The symposium, called the Irene Lenon Memorial Lecture on Environment and Health, is sponsored by the Stanford Medical Students Association and the Department of Family, Community and Preventive Medicine.

Because of limited seating capacity in Fairchild Auditorium, the symposium is open only to people who have registered in advance. Registration of those not associated with Stanford Medical Center involves a $50 fee.

The first talk of the symposium will be given by Joel Primack, Ph.D., consultant to the Nuclear Regulatory Commission's special inquiry group on Three Mile Island, and associate professor of physics at the University of California at Santa Cruz.

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Primack will discuss what happens during a meltdown accident in a nuclear power plant—the mechanics of the accident, the type of radiation released, and how the radiation is distributed.

In the afternoon, Jacob Fabricant, M.D., Ph.D., director of the public health and safety task force of the President's Commission on Three Mile Island, and professor of radiology at the University of California at San Francisco, will discuss diagnosis and treatment of acute radiation syndrome in the exposed individual.

Other talks by Stanford University experts include the dosimetry, or means of measuring external and internal radiation, by Dr. Finston, the biology of radiation injury by J. Martin Brown, Ph.D., associate professor of radiology, and the pathology of acute radiation exposure by Luis F. Fajardo, M.D., associate professor of pathology.

People interested in attending the symposium should register with the Office of Postgraduate Medical Education, phone number (415) 497-5594, by April 8.

The Irene Lenon Memorial Lecture on Environment and Health is named in honor of the late Dr. Irene Lenon, a 1972 graduate of Stanford Medical School who left an endowment to the Department of Family, Community and Preventive Medicine to support medical and environmental health education.

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Mailed Wednesday, April 2, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. Merton Bernfield, professor of pediatrics at Stanford University School of Medicine, has been named a Macy Faculty Scholar for 1980 to 1981 by the Josiah Macy, Jr. Foundation.

The award provides support for several months of research and study in the field of perinatal biology at Yale University School of Medicine.

Bernfield plans to work at Yale with Dr. Joseph Warshaw, head of the division of perinatal medicine, beginning in August, 1980.

A graduate of the University of Illinois at Chicago, where he received his M.D. in 1961, Bernfield served as a research investigator of the National Institute of Child Health and Development before coming to Stanford in 1967.

He directed the Medical Scientist Training Program at the Medical School from 1974 to 1977, and currently directs the Fellowship Program in Molecular Pathology of Cell Membranes.

In addition to his position in the Medical School, Bernfield is Josephine Knotts Knowles Professor and Chairman of the Program in Human Biology, in School of Humanities and Sciences.

The Macy Faculty Scholar Award Program was established in 1972 to encourage medical and public health school faculty members to study in a "fresh environment."

To date, the Foundation has made 205 awards to faculty members from 67 institutions, and provided over $4.1 million in support of the program.

Recent faculty scholars from Stanford include Dr. Stanley Cohen, professor of medicine and chairman of the Department of Genetics, Dr. Eric Shooter, chairman of the Department of Neurobiology, and Dr. Irving Weissman, associate professor of pathology.

The Josiah Macy, Jr. Foundation was created by an endowment from Mrs. Kate Macy Ladd in 1930 for the advancement of medicine in the U.S.

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Mailed Wednesday, April 2, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: Embargo time is set by the *New England Journal of Medicine.*

ADVANCE FOR AM PAPERS (PST), THURSDAY, APRIL 3, 1980

STANFORD—

Toxoplasmosis, a congenital infection that has the potential of causing mental retardation, blindness and epilepsy in thousands of babies each year, can now be detected in infants, thanks to a new test developed by researchers working at Stanford University, the Palo Alto Medical Research Foundation and in Paris, France.

The new test is valuable because many infected infants appear normal at birth but most will develop severe complications later in life unless given early treatment, according to Dr. Jack Remington, professor of infectious diseases at Stanford University and coauthor of a paper describing the test, reported in the April 3 issue of the *New England Journal of Medicine.*

Remington's collaborators in the research were Stanford postdoctoral scholar Dr. Christopher B. Wilson and Drs. Jacques Couvreur and Georges Desmonts of the Institut de Puericulture in Paris.

With the new diagnostic test, drug treatment can be started in early infancy, significantly reducing chances of later serious complications, Remington explained.

The new test, called lymphocyte transformation, takes advantage of the fact that even unborn infants have an active immune system, he noted.

Lymphocyte cells in the infant's blood become sensitized to chemical markers called antigens, from the *Toxoplasma* organism.

When the sensitized lymphocytes come in contact with the antigen, they divide rapidly to bolster the body's immune attack. This rapid division can be detected by simple laboratory techniques in blood samples taken from the infant, Remington explained.

A positive result "can be regarded as strong evidence of congenital *Toxoplasma* infection both in symptomatic and asymptomatic children three months of age or older," the researchers wrote.

Previous tests were neither sufficiently reliable nor speedy in diagnosing toxoplasmosis in infants younger than one year of age, according to Remington, who is head of the division of allergy, immunology and infectious diseases at the Palo Alto Medical Research Foundation.

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The infection is caused by a parasite, *Toxoplasma gondii*, that chronically infects almost 50 percent of the U.S. population and is usually harmless and unnoticed in adults.

About 25 percent of women in the child-bearing age group in the U.S. harbor the organism in their bodies. In them, the infection poses no threat to the fetus.

But when acquired during pregnancy, 45 percent of the time the parasite passes to the fetus where it may cause significant damage to vital organ systems, the doctors said.

In one study conducted by Remington, Wilson and colleagues, 92 percent of the infected infants under investigation later developed complications, including retardation, seizure disorders, and eye disease or blindness in one or both eyes.

The common house cat frequently spreads the infection.

The primary ways pregnant women become infected are by eating raw or undercooked meat, and by contact with stray cats, infected house cats or material likely to be contaminated by cat feces.

Simple precautions for pregnant women to follow could also go a long way towards control of the disease, the researchers stressed.

These precautions include avoiding raw and rare meat by smoke-curing or cooking above 66 degrees centigrade, washing hands after handling raw meat, avoiding contact with stray cats, letting someone else change the cat litter, and avoiding work in the soil or gardening without gloves.

Approximately 3,300 infants born each year in the United States are congenitally infected with *Toxoplasma*, and cost analysis estimates suggest that society pays up to $221 million for care of individuals born each year who develop complications, Remington said.

Although the lymphocyte tramsformation test has been used to diagnose certain diseases in adults, this is the first demonstration of its effectiveness in detecting congenital disease in infants, the researchers said.

The research was carried out under grants from the National Institutes of Health.

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END ADVANCE FOR AM RELEASE THURSDAY, APRIL 3, 1980

Mailed Tuesday, April 1, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

"Twenty years ago we regarded DNA as a rigid, rod-like molecule," said Nobel Laureate Arthur Kornberg. "We thought of DNA as being simply a construction manual responsible for the cell structure and the enzymes that made the cell work.

"Another function of DNA was to be replicated so that a daughter cell would have the same construction manual with which to assure the life-style that its parent had."

Today this image of DNA has changed.

"We know now that DNA is a molecule with considerable flexibility and plasticity," he said. "Its dynamic behavior involves many functions."

"Anything that you can imagine about DNA can be used somewhere in some way," commented Dr. David Baltimore, a professor of microbiology at the Massachusetts Institute of Technology.

Baltimore was summing up a review of 20 years of work in DNA research which had been detailed at a two-day symposium March 27 and 28 by Stanford University Medical School scientists who have been leaders in the field: Dr. Kornberg, Dr. Paul Berg, Dr. David Hogness, Dr. Robert Lehman, and Dr. Stanley Cohen.

Lehman said that after 20 years a great deal is now known about the repair of DNA. "A very important generalization is that there is no single mechanism for the repair of DNA in any given cell," he said. "There are many mechanisms for the repair of damage caused by environmental insults such as ultraviolet radiation, gamma and x rays, and chemicals."

In retrospect this should have been fully anticipated, Lehman noted. "The preservation of the genetic material is so crucial to the life of the cell that it is reasonable for cells to have evolved a fail-safe mechanism—back up systems to take over when others fail."

DNA stands for deoxyribonucleic acid. It is the stuff of which genes and chromosomes are composed as the bearers of heredity in all living things.

The term "genetic recombination" discussed at the symposium refers to the process by which genes are reassorted and new linkage relationships are established between them.

"Recombination permits an organism to try out a number of arrangements of its genes in search of those which give optimal selective advantage," Lehman explained. "It is therefore a major driving force in evolution."

While scientists have learned a great deal about the repair mechanisms of DNA, knowledge about the molecular aspects of recombination still lags behind, he said.

In the past two decades, Stanford has been one of the nation's leading DNA research centers, so much so that Baltimore told the symposium participants, "You can imagine that all molecular biology comes from Stanford. I guess I am here to say that the rest of the world still exists."

Kornberg and the other scientists used slides to illustrate the elegant maneuvers and chemical steps used in their work. They showed how DNA can be spliced, cloned, and separated in specific parts or glued together.

He recalled that for years after James Watson and Francis Crick discovered the double helix in 1953, the processes of DNA replication remained a mystery.

To illustrate his point, Kornberg showed a colleague's humorous cartoon picturing the DNA molecule obscured by a fig leaf.

"I confess this slide did have a psychological impact on me," he said.

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In 1967, Kornberg's group was confronted with the task of whether an important enzyme DNA polymerase could copy a strand of DNA without error, making a gene or a collection of genes—a chromosome.

"We were pleased to report," Kornberg said, "what the news people rather prematurely called the creation of life.

"In fact, not only was there local excitement, but President Johnson called to congratulate us. At the time we did not fully appreciate that it was a more complex process."

After more than 10 years of painstaking research a lot has been accomplished. "We have removed the fig leaf and we are looking at the machinery of replication," Kornberg said. "We still don't know, however, where the process starts. We would like to know more about the origin of the cycle of replication."

In recent weeks, he added, work at his laboratory had produced evidence that the "locomotive" that drives replication moves in a certain direction on the DNA strand. This is a step toward understanding the "gearing up" process.

Hogness, a professor of biochemistry who is studying the genes of the fruit fly, described molecular cloning techniques which have yielded many surprises concerning the organization, structure and expression of genes.

He said, "The research has the potential of answering the most fundamental and appealing questions of biology. This is how the genes direct development."

Other presentations during the two-day meeting included reports on the isolation of new types of highly specific antibodies, research on the roles of immune mechanisms and disease, the architecture of antibody molecules, the relations between heredity and culture, and advances in the neurosciences.

Progress in clinical medicine included reports b Dr. Henry S. Kaplan, professor of radiology, who described how the once-fatal cancer called Hodgkin's disease can now be often cured, and by heart transplant pioneer Dr. Norman E. Shumway who said the success rate of heart transplants is now as good as those of kidney transplants.

In addition, techniques of Total Lymphoid Irradiation (TLI), developed by Kaplan, are now used to alter the immune system of man and animals allowing for the acceptance of organ transplants, and the treatment of patients with autoimmune diseases such as rheumatoid arthritis.

The sessions concluded with remarks by Nobel Laureate Joshua Lederberg, president of Rockefeller University.

Lederberg called Stanford's clinical achievements "the ultimate payoff in an exciting game, the pursuit of science."

People in biochemistry, physiology, internal medicine, and other fields, all are looking for answers to the same things from a slighly different perspective, he said.

"All of the major problems in human health are wrapped up in the DNA," Lederberg commented. "They include developmental defects, genetic defects, psychiatric diseases, some elements of heart disease—you name it."

Baltimore predicted that it will be possible to understand cancer, genetic diseases, and probably aging. "But what we do with that knowledge will depend on the health of the scientific enterprise," he said.

"We need institutions dedicated to the acquisition of knowledge and to the training of people who keep up with the changing technologies as well as the theoretical basis that allows for progress into new areas," he added.

The symposium marked the two decades that have elapsed since the Medical Center, once located in San Francisco, moved out of its former headquarters on Clay Street, and was relocated to the main Stanford campus.

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Mailed Tuesday, April 1, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

ADVANCE FOR P.M. RELEASE SATURDAY, MAY 31.

STANFORD—

Success in developing an "artificial ear" for the totally deaf now hinges primarily on "cracking the code" of electrical pulses on the auditory nerve by which the ear conveys speech information to the brain, according to a Stanford University scientist.

"We have come a long way now on developing the technology necessary for the small, low power, long-lived electronics required for the artificial ear. I am convinced we can solve the remaining technological problems within the next two years," said Professor Robert White, Director of the Institute for Electronics in Medicine at Stanford.

"The hardest part now is determining just how to pattern the electrical pulses on the nerve so that the brain will interpret them as speech and extract the speech information," he said.

White spoke on the development of an artificial ear device by Stanford scientists at the fourth annual conference for alumni of the School of Engineering on Saturday, May 31 at the University's Terman Engineering Center.

The device, one of several being developed throughout the world, is designed to bypass defects or injuries in the inner ear which have resulted in total deafness, White said.

"We are in effect attempting to trick the brain into thinking the ear is working when actually it is not," he said.

The device consists of an external box which converts sound into electrical signals and transmits them across the skin into the mastoid cavity above the ear. There, a surgically-implanted receiver and neuro-stimulator the size of a quarter sends electrical impulses down a series of electrodes to the auditory nerve.

It has been known for 200 years that stimulation of the auditory nerve will produce the perception of sound, White said, but only with the recent explosion in integrated circuit technology did it become feasible to exploit this phenomenon to try to "cure" deafness.

White's co-investigator is Dr. F. Blair Simmons, a professor of surgery (otolaryngology) at the Medical School who is one of the pioneers in the artificial ear field, he said.

Simmons performed one of the first multi-wire implantations in a patient in 1965. "His publication on this work is one of the landmarks of the field," White said.

However, inadequate technological backup limited progress on the project at that time.

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White joined Simmons in 1972, the year the project received its first grant from the National Institute of Neurological Diseases and Stroke.

In the intervening years, the two scientists and their colleagues developed a four channel (electrode) device, which Simmons implanted in two deaf subjects in 1977.

Although the current model does not provide enough information to give the subjects unaided speech perception, it does give significant speech cues, and has improved their ability to read lips, White said.

In addition, the device provides "auditory clues" which enable them to recognize that the phone is ringing, or that someone is knocking on the door.

Similar devices are being implanted in patients at other centers, White said, and at least one company is gearing up to produce a fairly simple single channel system within a year, under the rationale that such devices provide useful, if limited, auditory input to people who previously lived in total silence.

The Stanford group, however, is not satisfied with that. "Essentially all our work has been directed toward giving full unaided speech comprehension," he said.

Currently, the Stanford group is working on an eight channel device which will provide a precisely timed sequence of electrical signals at different points on the auditory nerve.

Hopefully, the electrodes will play the right "keys" in the brain in the right sequence so that subjects will be able to discriminate speech, White said.

Major difficulties have included developing low power custom integrated circuits, a hermetically sealed "can" which will protect the device from a hostile and corrosive environment inside the body, and electrode arrays which can bring signals to precise locations on the auditory nerve without damaging it.

These components are now in the testing stage, and the completed device "may be ready for implanting in subjects this Fall," White said.

White can be reached at (415) 497-4431

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Mailed Friday, May 30, 1980

END ADVANCE RELEASE

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911
CITY DESK: Story transmitted on Business Wire May 29, 1980

STANFORD—

The director of Stanford University's Heart Disease Prevention Program Thursday criticized a panel of the National Academy of Sciences (NAS) and its recommendations on diet and health as "unnecessarily conservative."

"Although I agree with many of the panel's views," said Dr. John W. Farquhar, "I must disagree with the notion that diet guidelines should be applied only to people at high risk."

Farquhar, a professor of medicine and a member of the Institute of Medicine of the NAS, said that having only some groups following dietary guidelines would be a losing battle.

He said some people believe that all you have to do to solve a medical problem is to identify the people at risk and give them advice.

"From the standpoint of effectiveness of public health this does not work," Farquhar said. "We do not have enough doctors to identify all of those at high risk and change must involve all family members in order to work."

Farquhar made his comments after news reports of the Food and Nutrition Board were published yesterday.

The panel, which develops the Recommended Dietary Allowances of vitamins and nutrients used by the government and food industry, questioned the validity of guidelines for low-cholesterol, low-saturated fat diets to prevent heart attacks.

The panel said it has not been scientifically proven that lowering the levels of blood cholesterol through diet will consistently reduce new coronary artery disease, although there may be a benefit for high-risk people.

But Farquhar took issue with the statement saying that it would be perceived as a switch in diet advice for Americans.

And he added, "I am worried about some 15,000 people around the country who have volunteered to participate in studies designed to clear up the relationship of fat diet and heart disease. Their nutritionists and the scientists who take care of them will have a lot of explaining to do."

Farquhar, who serves on the Nutrition Committee of the American Heart Association, said that available data strongly support the need for lowering fat intake in diet as a reasonable national goal.

"Although as scientists we would like to know a lot more about heart disease," he said, "most groups agree it is not necessary to have all the pieces of the puzzle before one could devise coherent action."

He said most public health educators are in agreement that to be effective you have to apply diet guidelines to an entire population—not a single group. This means guidelines will help some people more than others.

"The panel obviously wants to stand out as an exception," Farquhar said, "but this should allow for their recommendations to come under scrutiny and to accept the contrary opinions of other people who have worked in this field."

Farquhar said diet guidelines now advocated by the American Heart Association and federal agencies were developed as a result of three types of evidence.

One of these is observational epidemiology. "As you look about the world you find that cultures eating a lot of animal fat have higher cholesterol levels and incidence of heart disease than cultures that do not," he explained. "That in itself does not prove cause and effect, but just as the evidence with cigarettes and cancer, it makes us think.

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"The second line of evidence comes from experiments in which certain human populations are made to lower their cholesterol and you find that the rate of heart disease has been reduced.

"The third type of evidence comes from animal studies showing that when you reduce cholesterol, the rate of narrowing of the coronary arteries also drops."

Farquhar noted that there has been a 22 percent reduction in heart attack mortality in the United States, Canada, and Australia since 1967.

In all three countries there has been a reduction in all three risk factors—high blood pressure, cigarette smoking, and the levels of blood cholesterol.

It is possible that other factors such as better coronary care units, use of antiarrhythmic drugs, and coronary bypass surgery are responsible for the lower death rates, Farquhar said.

"But most scientists feel that these things alone cannot account for all of the decline."

He said overall the evidence makes a strong case for diet.

More recently, Farquhar said, new evidence has come to light, although still inconclusive, that high fat animal diets may play a role in breast and colon cancer.

"People who are conservative on the diet issue and heart disease prevention are going to have to reckon with all that evidence later on," he said.

The country as a whole might need 10 years or more to get accustomed to the importance of low-fat, low-cholesterol diet, he added. "So I think the panel's report may cause temporary confusion, but will also lead to a useful debate on this important topic."

Farquhar, author of a book, *The American Way of Life Need Not Be Hazardous to Your Health,* has directed the federally funded three communities study in Northern California for the past eight years.

The study, using mass media, has shown statistically that when people are given proper information about themselves they can make sound judgments in order to improve their health.

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Dr. Farquhar may be contacted at 497-6051 (office) or 327-1177 (home).

Mailed Thursday May 29, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Neighbors on Roxanne Drive in San Jose are giving "a gift from the heart" in a unique memorial tribute to a friend who recently died.

"The family expressed the wish that blood donations be made to the Stanford University Blood Bank in memory of Jack Merriam," said Mrs. Becky Bright of Roxanne Drive, a close neighbor of the bereaved family.

Mrs. Bright contacted the Stanford University Blood Bank, which will set up a mobile blood donation unit on June 8 at the Image Center, 1610 Blossom Hill Road, Suite 5, San Jose, between noon and 5 p.m..

"The blood drive is our way of getting together to show the Merriam family our sympathy and to show how much we care," Mrs. Bright said.

This will not only replace the 20 pints of blood used during his care at Stanford University Hospital, but will also help other heart patients presently at Stanford, she added.

"The concept of a memorial drive is a unique and generous one that we are pleased to participate in," said Rhoda Burns of the Stanford University Blood Bank.

Those interested in donating may make appointments by calling Mrs. Bright at (408) 267-4101. For information on eligibility to be a blood donor, call the Stanford University Blood Bank at (415) 497-7831.

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Mailed Wednesday, May 28, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Relatives of cancer victims at Stanford University Hospital now receive a short course in home nursing so that they can care for the individual after leaving the hospital.

The six-hour course is offered by the Palo Alto Chapter of the American Red Cross, and family referrals to participate are coordinated by Isabel Walker, social worker, and Barbara Reville, R.N., of the Stanford Oncology Day Care Center.

"We are starting to open a new way of training families or friends to become the support system for the cancer patient at home," Mrs. Walker explained.

Stanford's Oncology Day Care Center provides chemotherapy to patients with cancer on an outpatient basis. When complications arise a patient is hospitalized for a short time and then is able to return home. As Stanford has no hospice program, Mrs. Walker feels this new endeavor is an attempt to "extend services to the home using existing community resources."

"Relatives often feel helpless when things seem to be out of theri hands," Mrs. Walker said. "They need information and reassurance."

An example of how the program works is Mrs. Joan McVicker of Fremont, Calif. Her 18-year-old, Lori, has a form of cancer called lymphoblastic lymphoma and was treated at Stanford.

Just before Lori went home, Mrs. McVicker took the Red Cross course, and she became her daughter's nurse.

"I felt so confident, I thought I can now cope with anything," Mrs. McVicker said.

She was trained to give Lori her medications, to take her temperature and blood pressure, to give her bed baths, to monitor her nutrition and to do all the things a home nurse would do.

"Lori had problems swallowing her medications," Mrs. McVicker said. "Everytime I gave her a pill she would choke."

The Red Cross taught her how to take two spoons, crush the pill between them, and cover it with apple sauce, she said.

"The pills now slide down easily and I am no longer scared."

Cancer patients today spend various phases of their illness at home, explained Mrs. Walker. They need a comfortable environment, medication to alleviate pain, sometimes exercise, good nutrition to sustain their weakened bodies, and most of all—tender loving care.

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"Only the family can give these," she said. "But not all families are equipped to cope with the emotional and physical needs of the cancer patient."

That is where the Red Cross is a big help. And now, with the increasingly high cost of health care in hospitals, home health care is viewed as an attractive alternative.

But even more important is that we can reduce the feeling of helplessness," Mrs. Walker said. "Cancer is a family affair. People cannot have cancer and be left alone."

The idea for the program came from Mrs. Walker's experience as a public health nurse, and as an instructor for the American Red Cross in the 1950s. The Red Cross has been the pioneer in programs of home nursing since World War I.

Mrs. Walker and Ms. Reville surveyed relatives of cancer patients in the Oncology Day Care Center. They found interest in home care was high and they contacted the Red Cross.

The home nursing course is taught each month by a volunteer R.N., Verla McMorran, at the Palo Alto Red Cross Chapter. Instruction starts with a film, and includes such topics as body mechanics, oral hygiene, nutrition, and how to give a bed bath, medications, keep records, and when to call a doctor.

In addition, Mrs. Walker includes a section on the psychosocial aspects of living with cancer.

The course is free of charge, except for the textbook, *Family Health and Home Nursing*, available from the Red Cross for $3.95.

The program is evaluated regularly to find out if it meets the needs of patients at home. Evaluations include both group sessions and written forms. From this feedback, improvements are planned for future courses.

"We learn that families are using what they have been taught and feeling good about it," said Ms. Reville.

But the course, according to the families, has auxiliary benefits too.

"When I took it, I felt I was the only person facing a loved one with cancer," said Mrs. McVicker. "A lot of other people were there for the same reason. We had a special bond, and I felt much better."

The next course will be given June 7 from 9 a.m. to 3 p.m. at the Red Cross, 400 Mitchell Lane, Palo Alto. Persons interested in signing up should contact the Red Cross at (415) 322-2143, or the Oncology Day Care Center at Stanford at (415) 497-7621.

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Mailed Wednesday, May 28, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

CITY DESKS: The press is welcome to attend the sessions, but the meeting is limited to Stanford medical alumni only.

STANFORD—

Scientific and clinical accomplishments of Stanford Medical School graduates will be the theme of the 1980 alumni-faculty reunion Saturday, May 31 in the School's Fairchild Auditorium.

Dr. Donald Kennedy, Stanford's vice president and provost, and former commissioner of the Food and Drug Administration, will give the keynote address at a noon luncheon—"Regulation and Health: Two Decades of Change."

This year's reunion is held in connection with the 20th anniversary of the School's move from San Francisco to Palo Alto. A clinical symposium in the morning will be given by members of the classes of 1959 through 1964.

The symposium, which begins at 9 a.m., will be an updating of progress in frontier areas of medicine and biology.

Stanford's medical school has long been known for its emphasis on training physicians who plan to pursue careers in research and teaching as well as clinical medicine.

Thus, the alumni symposium focuses on the work of Stanford graduates who were taught in the School's world famed departments during the past two decades. An earlier symposium held this year dealt with the work of Stanford faculty in fundamental and applied research.

The talks from 9 to 10 a.m. include: "Computers and Clinical Judgment" by Marsden Scott Blois of the University of California, San Francisco; "Some Genes Come in Big Doses" by Laurence H. Kedes of Stanford; and "Pathogenesis and Treatment of Diabetic Retinopathy" by Hunter L. Little, a practicing eye specialist and Stanford clinical professor.

The presentations from 10:55 to 12 noon include "Brain-Evoked Potentials and Their Use in Evaluating Patients with Head Injury" by Maurice Rappaport of the Langley Porter Neuropsychiatric Institute in San Francisco; and "Use of Electron Microscopy in the Rapid Diagnosis of Viral Infections" by Nelson A. Wivel of the National Institutes of Health, Bethesda, Maryland.

Dr. Alvin Cox, professor of dermatology emeritus, will discuss the historical ties of the School to its predecessor in San Francisco at a special session at 3 p.m..

Reunion dinners for various classes will be held in the evening.

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Mailed Wednesday, May 21, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

EDITORS: Photos of Liza Taft available if not included with story.

STANFORD—

The old-fashioned house call lives on at Stanford University Hospital under a new name—home care.

Like many other hospitals throughout the U.S., Stanford is placing a greater emphasis on providing care at home, rather than in a specialized health facility, according to Liza Taft, R.N., director of the hospital's discharge planning program.

The purpose of home care is to preserve as much patient independence as possible, she said, but in many cases it has the added advantage of cutting the patient's medical bills.

At Stanford, home care is organized by a team of health professionals who begin planning for the patient's discharge almost as soon as he or she is admitted.

"Discharge planning" may involve prescribing physical therapy, so patients can recover needed body strength, teaching them how to take their own medications, or lining up a variety of support services outside the hospital, such as Meals on Wheels, part-time household help, and visiting nurses and physical therapists.

Some of these services are organized under the auspices of hospitals or county health centers. Others are independent. Many of the services are reimbursable under Medicare, MediCal or other insurance programs, but even when they are not, they can be less expensive than hospital care.

For example, Taft said that a home care visit may cost $45 and nursing care may run $10 to 15 an hour, compared with an average hospital charge of $200 daily.

Sometimes just providing information may mean the difference between resuming life at home after a period in the hospital, or institutionalization.

Taft recalled the case of a 74-year-old woman who lived in a mobile home with her elderly husband. While in the hospital, her doctor told her that he felt she could no longer care for her husband, who suffered from heart disease and diabetes, and recommended that they both move to a nursing home.

"She called me to talk about it," Taft said, "and I suggested she look into a variety of services that would allow her to remain at home.

"I don't know what would have happened if I hadn't talked with her," she added.

Although the discharge planners deal increasingly with older patients, referrals are also required for mothers and young patients.

For example, "we've helped design a rehabilitation program for a 10-year-old quadriplegic, and we've helped arrange home nursing care for the sick newborn of a single mother who has two other children under three years old," Taft said.

"These cases are not that much different from that of the 74-year-old," she added. "The idea is to keep the family intact."

One of the most dramatic examples of home care is the hyperalimentation training program.

Hyperalimentation refers to the tube feeding of people who because of disease or injury cannot absorb food normally. A carefully balanced and highly concentrated mixture of salts, sugars and proteins is fed by catheter directly into the heart, where it is quickly diluted and distributed throughout the body.

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Ten years ago, this treatment had to be administered by physicians in the hospital. Today, patients at Stanford hospital are taught to feed themselves, then sent home.

Jerry Nessel is one of five patients who have been trained in home hyperalimentation sinced the program began one and a half years ago.

A victim of cancer of the colon, which prevents him from eating solid food, Nessel had been in the hospital for three months when he began his training.

Under the direction of physicians, a team of nurses and pharmacists taught him how to keep the end of the catheter which is exposed to the air sterile and free of infection. They taught him how to prevent blood clots from forming inside the catheter with the use of heparin, a blood thinner. And they showed him how to mix the solutions and connect them to a machine which pumps them into his body.

Now at home, Nessel is very grateful to "be in my own surroundings, in touch with friends.

"The cooperation of my physicians, nurses and pharmacists at Stanford was exemplary," he said. "They pulled me through. They put me on my feet again and sent me home."

Pharmacist Tim Cheung, who is primarily responsible for the home hyperalimentation teaching program at Stanford, said that in addition to giving patients back their independence, the program saves money. It costs about $150 a day to rent the equipment and buy ready-mixed solution at home, compared with $300 a day to receive the same treatment in the hospital. And if patients mix their own solutions, the cost drops to $60 to $70 daily.

Planning for the patient's discharge requires the team effort of physical and occupational therapists, social workers, pharmacists, nurses, doctors, and dieticians. For difficult cases, these health professionals find it is useful to structure their efforts as a team in weekly meetings.

A coordinated rehabilitation program, directed by Gladys Kurzuk, R.N., is available to all stroke patients in the hospital.

On the hospital's orthopedia unit, this "co-care" program has been adapted for the rehabilitation of patients who have sustained major trauma and whose care requires the involvement of several team members.

Each Tuesday morning, the rehabilitation team meets to discuss patient problems and establish a consistent and comprehensive patient care plan. The patient and his or her family are encouraged to participate by using a bedside calendar and with the assistance of the patient's primary nurse. In addition, patient and family are asked to attend the rehabilitation program meetings whenever possible.

"In the past, we all went about our duties without knowing what the others were doing for the patients," said clinical nursing coordinator June Ogilvie, R.N., who organized the program.

The meetings enable all of the team members to work cooperatively and efficiently toward a designated release date. "This can't help but improve the independence of patients, if only by increasing their involvement in their own rehabilitation," she said.

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Mailed Wednesday, May 21, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

EDITORS: Photo of Brown available if not included with story.

STANFORD—

Dr. J. Martin Brown, associate professor of radiology at Stanford University School of Medicine, has won the 1980 Radiation Research Society Research Award.

The award, which is given annually by the Society for "outstanding contributions in radiation research," consists of a citation and $1,000.

Brown will receive the award at the Society's annual meeting in New Orleans on June 2.

A native of England, Brown received his D. Phil. in radiation biology at Oxfold University in 1968, then came to Stanford as a post-doctoral fellow and joined the faculty in 1971.

He is well known for his work on radiosensitizers, certain agents which can preferentially enhance the effects of radiation on cancers compared to normal tissues, and for his evaluation of the possible carcinogenic hazards of radiation.

Brown is a member of numerous scientific committees, including the National Academy of Sciences' Advisory Committee on the Biological Effects of Ionizing Radiation, and has authored over 60 scientific papers.

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Mailed Wednesday May 21, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Individuals who suddenly have their oxygen supply cut back (from respiratory failure or certain other conditions) may become sick or die, but patients with chronic diseases that lower their oxygen intake can adapt and survive, according to a Stanford University professor of medicine and physiology.

The harmful, often fatal, effects of oxygen depletion in the body, and the cellular adaptations that may permit living things to overcome and survive these conditions were described Tuesday, May 20 by Dr. Eugene Robin, the 1980 Amberson Lecturer at the annual meeting of the American Thoracic Society in Washington, D.C..

Robin noted that the condition of low oxygen supply in the body, called hypoxic dysoxia, is one which has not been carefully explored and studied until recently.

Understanding adaptation to lowered oxygen supply could help in developing new ways to treat patients with acute oxygen depletion, Robin suggested.

Much of the damage caused by oxygen depletion in humans and other animals is due to the disruption of normal biochemical reactions that take place inside living cells, Robin said.

These biochemical reactions involve energy production that "is used to move our muscles, permit our heart to beat, our glands to secrete, and our brain to think creative and productive thoughts," he explained.

Some animals display a remarkable ability to lower their energy requirements when low levels of oxygen are present in their bodies.

The freshwater turtle is one example, said Robin, with its "ability to dive for hours to days despite a fall in lung, blood and tissue oxygen to values of zero."

An adaptation enabling turtles "to reduce cell energy requirements by about 75 percent during the dive helps them accomplish this remarkable feat," he said.

Lower nervous system, cardiac and skeletal muscle activity go along with the reduced energy needs, he added.

Robin and his colleagues have observed similar reductions in energy requirements during prolonged diving in seals, and the mammalian fetus is thought to have a similar ability to lower its energy needs.

More work is needed to discover how animals accomplish this reduction of their energy needs.

However, new techniques for measuring biochemical reactions inside cells will become feasible in the next several years, Robin said, and these may be useful in the study and treatment of patients with hypoxic dysoxia.

Robin is professor of medicine and physiology at Stanford.

The Amberson Lecture was established in honor of J. Burns Amberson, a leader in the field of respiratory diseases. Lecturers are selected from those who have provided outstanding scientific contributions in the field of respiratory medicine.

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Mailed Tuesday, May 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

"Strategies for change—group therapy and hypnosis" will be the topic of a free public lecture at Stanford University School of Medicine on Thursday, May 29.

The lecture, sponsored by the Friends of Psychiatry and Behavioral Sciences, will be held at the Medical School's Sherman Fairchild Auditorium beginning at 8 p.m.

Speakers include Drs. Irvin D. Yalom, professor, and David Spiegel, assistant professor in the Department of Psychiatry. Department chairman Dr. Thomas A. Gonda will serve as moderator.

Yalom is a prominent researcher in the field of group psychotherapy. His book *The Theory and Practice of Group Psychotherapy* is considered a classic text in the field.

He also is noted for his studies on the relationship of hormones to behavior and the counseling of dying patients.

Spiegel, who directs the social psychiatry and community services at the Palo Alto Veterans Administration Medical Center, is well known for his work in hypnosis. He is co-author of the book *Trance and Treatment: Clinical Uses of Hypnosis.*

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FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

How genes are reproduced and repaired will be the topic of the last spring Progress in Medicine lecture on May 20 at 7:30 p.m. in Fairchild Auditorium at Stanford University Medical Center.

Dr. Errol Freidberg, associate professor of pathology, will describe the techniques cells have developed for repairing damage to DNA, the hereditary material of living things. He will also discuss the relationship between DNA repair and malignant cell growth.

Dr. David Korn, professor and chairman of the department of pathology, will describe how DNA is replicated inside cells, and he will discuss the enzymes involved in the replication process.

The Progress in Medicine lectures are presented as a community service by the dean and faculty of the School of Medicine, the Stanford University Hospital, and members of the Medical Center Council.

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Mailed Wednesday, May 14, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Eugene D. Robin, professor of medicine and physiology at Stanford University School of Medicine, has been selected as the 1980 Amberson Lecturer at the annual meeting of the American Thoracic Society in Washington, D.C. on Tuesday, May 20.

Robin will discuss his recent research on the harmful and fatal effects of oxygen depletion in the body, and the cellular adaptations that may permit living things to overcome and survive these conditions.

Robin, who has been professor at Stanford since 1970, previously was professor of medicine at the University of Pittsburgh School of Medicine.

He is the author of more than 200 scientific publications and has served as a consultant in respiratory medicine. He is also a past president of the American Thoracic Society.

The Amberson Lecture was established in honor of J. Burns Amberson, a leader in the field of respiratory diseases. Lecturers are selected from those who have provided outstanding scientific contributions in the field.

The American Thoracic Society is the largest organization of pulmonary physicians in the U.S..

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Mailed Monday, May 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

An "information day" on critical care nursing will be held at Stanford University Medical Center on Wednesday, May 21.

The program, sponsored by the Department of Nursing Service, is for nurses who want to learn more about nursing specialties at Stanford, including care of heart transplant patients, advanced life support and emergency care, and transport of critically ill infants and adults and high risk mothers.

Tours will be conducted on all intensive care units, and poster exhibits in Fairchild Auditorium will describe aspects of various technologies, patient education and nurse orientation.

The day-long program begins at 8:30 a.m. in the auditorium, located just south of the Medical Center.

Speakers include Dr. Myer Rosenthal, medical director of the intensive care units, Dr. Kent Ueland, chief of maternal and fetal medicine, Dr. Norman Shumway, chief of cardiovascular surgery, Dr. Jay Mason, assistant professor of medicine, and Ann Baldwin, Ph.D., R.N., a nurse consultant specializing in ways to manage job stress.

Lunches will be provided.

Nurses interested in attending the program are urged to contact the Department of Nursing, at (415) 497-5181. Space is limited.

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Mailed Tuesday, May 13, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

"Runners make good lovers."

This is the opinion of Dr. Peter D. Wood, a lean, balding professor at Stanford University School of Medicine, and one of the finest senior distance runners in the country.

Wood postulates the "sexual athlete," capable of virtuoso performance, is pictured as a fit, slim, vibrant individual, not as obese, wheezing, or out of breath.

"Since sex may, rather narrowly, be regarded as a pleasant athletic diversion, then a pair of physically fit players is most likely to put on a good performance," he says.

"Good sexual performance calls for good physiological equipment and psychological attitude. Running seems to offer both attributes to both sexes.

"Running has features that make it an erotic activity. The customary clothing is revealing, but not unduly so. The movement involved is intriguing."

Wood adds, "I suspect countless men have enjoyed running behind a shapely woman. Voyeurism, you could say, I suppose. But this is a pleasure denied to sedentary man."

A certain amount of female bottom slapping has been observed on the part of some mature male runners, at least in uninhibited California, he reports.

Wood expresses his thoughts in a new book, *Run to Health* (351 pages, Charter Books, New York, 1980, paper $2.50).

The book, drawn from his experiences as a runner and as deputy director of Stanford's Heart Disease Prevention Program, is a whimsical guide to everything you wanted to know about running but were afraid to ask. His topics on the heart, cholesterol, weight, smoking, and running risks are drawn from his scientific work at Stanford.

But Wood makes it clear that his comments on the sexual aspects of running are more philosophical than scientific. "After all nobody has written a Kinsey Report on runners, though the readership is there."

On the more serious side, Wood's book provides valuable health advice for the novice runner if he or she wants to survive and to make it safely to the bedroom. Among his recommendations:

•The runner is usually most comfortable running when he has eaten lightly or not at all, in the previous three to five hours.

•Water is the only dietary component that may become in critically short supply during even quite long runs. It should be replaced during and after runs, particularly in hot or warm weather.

•Diluted glucose-containing drinks may be helpful in the later stages of longer runs.

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Wood comments the most healthy diet for runner and nonrunner alike is the well-known formula: low in saturated fat, cholesterol and salt, and moderately high in starches. Yet there is evidence that "carbohydrate loading" does increase the glycogen content of leg muscles, and this technique may improve running performance over distances of 15 miles or more.

"The dedicated runner," Wood observes, "although much leaner than average, eats more of all foods than the sedentary individual, to balance his high energy expenditure. Runners do eat more but weigh less.

"The runner does not require supplementary vitamins and minerals, with the possible exception of iron in women.

"Vegetarian diets have excellent health features and are compatible with good running performance if carefully selected.

"Constipation is seldom a problem in the regular runner, especially when combined with a diet containing adequate fiber."

Wood explains the runner's blood is different from the blood of relatively inactive people and is perhaps his most valuable possession. The runner's oxygen-carrying red blood cells are renewed more frequently and are often present in lower concentration in the blood than that of sedentary persons.

"Although the runner's total cholesterol level is not much different from average," he explains, "we know now that runners display a remarkably healthy-pattern of plasma lipoproteins, the minute fat and cholesterol-containing particles involved in the integrity, or downfall of our arteries."

Of women runners, he says, "They not only enjoy running but are now performing very well, especially over the longer distances.

"Running offers many benefits to women of all ages—weight control, a good figure, freedom from smoking, great cardiovascular fitness and improved rapport with the family."

There is rapidly mounting evidence, Wood concludes, that running can confer much sought-after health benefits. Running is preventive medicine!

"Running entails some risks," he says, "but overall the runner has many characteristics of the fit, healthy human being, the darling of the life insurance companies."

"And runners are also nice people," he smiles. "This has always been axiomatic in my household."

Wood first felt the urge to run in London in 1935, when a race for six year olds was held on the occasion of the Silver Jubilee of King George V and Queen Mary.

"In those days it was important for every British boy to have a sport," he recalls. "Running wasn't as popular as it is now, but I managed to survive every urge to quit."

Ironically, Wood's research is now concerned with the influence of exercise on cholesterol levels and HDL, the newly discovered blood component that seems to protect against heart disease.

He wrote *Run to Health*, he says, to stress the positive effects of exercise, and to clarify the confusion surrounding the benefits and difficulties one encounters in becoming a runner.

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Mailed Monday, May 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Patricia Taylor, R.N., assistant director of the Emergency Department, has been named the 1980 Thomas A. Gonda Employee of the Year at Stanford University Hospital.

A member of the Emergency Department staff for the past 17 years, Taylor's "dedication to the institution is known to everyone who has come into contact with her," said Dr. Michael Eliastam, director of Emergency Services.

She has been a leader in training and recruiting critical care nurses for the department, in reorganizing the department facilities and services "while remaining a skilled bedside nurse who delivers the highest quality patient care and maintains our goal of the patient first," Eliastam added.

Taylor was presented with the award by Hospital Administrator Gary Mecklenburg during the Hospital's 22nd annual awards banquet at Rickey's Hyatt House May 9.

Four other Hospital employees were presented with special service awards for outstanding performance, initiative, creativity and leadership in their jobs.

They are Joyce Lawson, chief radiation technologist, on the staff for 24 years; Jessie Butler, laboratory assistant in the clinical labs, a 30-year employee; John Silva, courier driver for the past 10 years between the Main Center of the Hospital and Hoover Pavilion; and Marianne Rosson in accounts receivable, who has been with the Medical Center for 15 years.

Nurse Marguerite Brickner, R.N. was given special acknowledgement as the Hospital's longest-term employee, with 35 years on the staff.

Altogether, 267 employees were awarded pins for 10 to 35 years of employment, representing a total of more than 4,000 years of service to the Hospital and Clinics.

A large turnout of employees and their guests joined the banquet festivities, which included remarks from Dr. Lawrence G. Crowley, acting dean of the Medical School and vice president for medical affairs.

Taylor is the fifth recipient of the Hospital's Employee of the Year award. Established in 1975, the Gonda award honors Dr. Thomas A Gonda, former director of Stanford Hospital and currently chairman of the Department of Psychiatry and Behavioral Sciences in the School of Medicine.

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Mailed Monday, May 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

ADVANCE FOR P.M. RELEASE SATURDAY, MAY 10, 1980

STANFORD—

Stanford University physicians have reported "significant improvement" in the surgical treatment of abnormal heart rhythms (arrhythmias) with the use of a new technique.

The technique, called activation sequence mapping, relies on placement of electrodes inside the patient's heart to pinpoint the source of the arrhythmia.

Surgery, to interrupt the abnormal rhythms, can then be performed more accurately.

The work was reported Saturday, May 10 by Dr. Edward Stinson, Doelger Professor of Cardiovascular Surgery, and Dr. Jay Mason, director of the Stanford Cardiac Arrhythmia Study Unit, at a three-day international symposium on cardiac arrhythmias sponsored by the Medical School's division of cardiology.

The techniques for mapping and surgically treating arrhythmias were pioneered at Duke University about a decade ago, Stinson said. However, they are just beginning to be used widely.

Stanford's program began only within the last six months, but preliminary results, in a series of 20 patients with heart disease, are encouraging, he said.

Mason compared results in 32 patients with severe arrhythmias not treatable by conventional means, who underwent surgery without prior mapping, to 20 patients who had surgery with mapping.

Complete success was achieved in 85 percent of the mapped group, while only 19 percent of the unmapped group were completely free of arrhythmias after surgery.

One patient in the mapped group and nine in the unmapped group died from their arrhythmias.

Arrhythmias most often are caused by heart disease, and occur frequently in patients who have suffered previous heart attacks.

The border between dead heart tissue which was killed during the attack and healthy tissue seems to "short circuit" the normal conduction of electrical signals through the heart, causing rapid beating of the lower heart chambers, the ventricles.

Unless this rapid beating is in some way corrected, it may compromise the ability of the heart to pump blood and lead to heart failure or death.

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Until recently, arrhythmias were treated primarily by implanting pacemakers in the heart, or by administering one of a battery of antiarrhythmic drugs.

However, these treatments are not effective for some patients, particularly those whose arrhythmias result from heart muscle disorders or birth defects.

One such defect, the Wolf-Parkinson-White syndrome, is characterized solely by the presence of an abnormal electrical circuit. This circuit allows the passage of extra electrical impulses which overstimulate the ventricles and cause rapid beating.

The "trick" in treating these disorders, Stinson said, is to identify where they begin. "Since we can't see them, we must detect them electrically," he said.

This is done by determining the sequence by which different parts of the heart are activated, or stimulated to beat, and zeroing in on the part that beats first.

First, the patient is brought to the catheterization laboratory, where several catheters, or small tubes with electrodes on the ends, are introduced into the heart. One catheter initiates a rapid ventricular beat, while the others "map" the activation sequence.

Next, the patient is moved to the operating room, where the chest is opened, and the circulation and breathing is taken over by machine. The empty heart is opened and the arrhythmia reinitiated.

With an electrode strapped to his finger like a ring, the surgeon performs more detailed mapping of the inside of the heart.

Once the source of the arryhthmia has been pinpointed, the surgeon cuts it away from the heart's electrical circuitry, thereby "curing" the patient.

The Stanford researchers said they would continue their studies of the mapping and surgical techniques to determine which patients benefit most from the procedure.

END ADVANCE FOR P.M. RELEASE SATURDAY, MAY 10, 1980

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Mailed Friday, May 9, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

"The incidence of sudden cardiac deaths should greatly decrease in the coming decade," a Stanford University heart specialist predicted Thursday, May 8.

"This is because doctors are making progress in being able to identify people with life-threatening arrhythmias and to treat them," said Dr. Donald C. Harrison, professor and head of the cardiology division in the School of Medicine.

Speaking at a three-day international symposium reviewing past progress in the field, Harrison added:

"If we can identify the upper 10 percent of patients who are at high risk of dying from their arrhythmias, we will have accomplished a major feat.

"This is the major challenge for medicine in the eighties."

Arrhythmias involve interference with the normal electrical conduction of the heart. They are most often caused by heart disease, and occur frequently in patients who have suffered previous heart attacks.

If left untreated, arrhythmias can lead to heart failure and sudden death.

Harrison said of the more than 1,200,000 patients who suffer acute heart attacks each year in the United States, about 120,000 fall in the high-risk category and require special treatment.

Until recently, arrhythmias were treated primarily by implanting pacemakers in the heart, or by administering one of a battery of antiarrhythmic drugs.

But doctors had to rely on trial and error to determine which drugs were effective.

If one drug did not work another would be tried, but in the meantime the patients were exposed to potentially life-threatening arrhythmias.

"Now, after a decade of progress, the mechanisms of arrhythmias and the cellular basis for them have been more clearly delineated," Harrison declared.

"In the decade of the seventies we have seen the introduction of many new antiarrhythmic drugs, and ways of determining with great certainty whether a drug is effective or not, before the patient leaves the hospital."

In addition, he said, techniques have been developed both in the catheterization laboratory and the operating room, for mapping precisely these arrhythmias in man.

He said arrhythmias which are not amenable to drug treatment could be controlled in the future with these techniques.

He said these involve methods for pinpointing the source of severe or recurring arrhythmias, and then intervening surgically to interrupt them.

"These new techniques are only beginning to gain acceptance by the medical community," he said.

Harrison said a lot of effort is now being put into research to determine which patients with arrhythmias belong to low or high risk groups.

"As our ability to identify the high-risk patient improves, we can begin to cope with the problem of sudden death in an effective way," he said.

The symposium is being held on the Stanford campus, and attended by several hundred heart specialists from the United States and abroad.

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Mailed Friday, May 9, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: Photo of Lovelace available if not included with story.

STANFORD—

Her job is unusual—she tries to make the Hospital look exciting to children.

She is Betty Lovelace, the person most children meet when they enter Stanford Hospital, and a special friend to children while they're here.

As director of pediatric play therapy, Lovelace is concerned with children's constant need for diversion and stimulation through play during their hospital stay.

But she also coordinates entertaining and imaginative pre-hospital orientation and pre-operative teaching programs for young patients.

Every Sunday afternoon, through a carefully organized slide show, Lovelace introduces Stanford Hospital to young patients scheduled for admission. Slides take the children from the admission desk all the way to the trip back home, while Lovelace narrates the story with scripts appropriate for each age group.

"We try to give a feeling for the sights and sounds of the Hospital, and introduce the different people children are likely to meet," she explains. Lovelace takes care to update the slides regularly so that children recognize staff members when they actually meet.

The slides show the strange world of hospital corridors and nursing stations, hospital beds and controls, bedpans, gurneys, and all the paraphernalia required for basic tests and procedures.

"We try to anticipate and respond to the basic fears kids have like 'who takes care of me?' and 'where will I sleep?' or 'can I play?'."

Lovelace also points out aspects of hospitalization where children can exercise choice and control. These include simple things such as meals, when kids choose their own menu, or occasions such as parties, play activities and games.

"But we don't want kids to think they are coming to summer camp," she warns.

"I watch the children carefully while showing the slides, trying to stop and explain if I see a worried face," Lovelace says.

Families are encouraged to attend together and learn from the orientation. "Sometimes, family members unconsciously transmit their own fears to children," she observes.

But orientation doesn't end once the patient has been admitted, Lovelace adds. On arrival, children receive cartoon booklets. "We provide colorful little stars they can stick inside as visible rewards for mastering difficult tasks or getting through painful experiences," she says.

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There is also space for autographs from new friends such as doctors, nurses and other patients.

Children are encouraged to practice their own experiences with stuffed animals. They particularly enjoy giving the animals shots or applying bandages, Lovelace says.

Handcrafted puppets and real-life dolls serve as models for demonstrating unfamiliar items including cast material, tubing, anesthesia masks and syringes.

Lovelace uses a miniature hospital for pre-surgery orientation, tracing the entire sequence of events beginning with pre-operative preparation. She describes the operating room suite, anesthetic "sleep," the recovery area, and "waking up."

The child's orientation to surgery is most successful when it is a coordinated effort of the entire pediatric team, including social workers, nurses, anesthesiologist, surgeons and play therapist, she adds.

Since children's needs differ, Lovelace has designed the programs to be flexible and individualized. One of her major interests concerns the special problems deaf and blind children face. She is adapting new approaches to help such youngsters prepare for and cope with hospitalization.

Tactile materials or aromatic substances typical of the hospital can be effective in orienting blind children, she explains.

"Recognizing the child's needs to exercise some control over the events of the day of surgery, the OR nurse may offer the sighted child a choice of color of surgery cap (instead of the the standard green). The blind child may be offered different scents on the anesthesia mask, such as oil of peppermint or cloves," she says.

Lovelace is often called upon to present her show at local schools as on ongoing health education tool for children, and she has published an article in the *Journal of the Association of Operating Room Nurses* on her work with deaf and blind pediatric patients, as well as articles in other professional journals.

Recently, the California Medical Association acknowledged the trauma children may experience on first visit to a hospital.

"The more the child understands about what's going to happen at the hospital, the less likely he will fear the visit," the CMA says. "If properly prepared, the child may even see an impending hospital stay as an 'adventure'. However, parents should not mask the more painful aspects of the experience, and risk losing the child's trust," the CMA advises.

The most convincing proof of success for Lovelace was the time one of her young patients confessed, "it's not that bad things don't happen here, but at least there are no bad surprises."

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Mailed Thursday, May 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

The Stanford Medical Student Scholars Program has received a pledge of $25,000 annually for a period of two years from the Stanford Medical Alumni Association to support medical students in basic and clinical research projects.

"We feel this program provides an excellent scholarly experience, and financial support of the program is one of the best ways our Association has found to help medical students," said Dr. Don Goffinet, secretary-treasurer of the Association and associate professor of radiology at Stanford.

The Scholars Program, renamed the Stanford Alumni Medical Student Scholars Program following the recent gift, was established one year ago to help medical students find opportunities for creative research in clinical medicine, biomedical science or health care delivery, according to Dr. Doug Brutlag, assistant professor of biochemistry and chairman of the Scholars Program Committee.

"We're extremely grateful for the support and generosity expressed in the Alumni Association's gift," said Brutlag, "particularly since we currently have more applicants than we are able to fund."

Some medical students have been discouraged from pursuing research opportunities due to the difficulties of finding faculty sponsors, financial support and space in research groups, according to Dr. Duncan Govan, professor of surgery and chairman of the Committee on Courses and Curriculum which designed the program.

The Chase Committee in the Medical Faculty Senate has recommended that opportunities for faculty-supervised research be made available to every interested medical student, Brutlag said.

The Scholars Program provides students with academic credit for up to two quarters, 18 units of tuition remission (it costs the program $1600 per quarter per student) and a list of 112 faculty members willing to sponsor students' projects.

"We are pleased with the response from the faculty," said Brutlag. "This represents more than one fourth of the Medical School faculty, and we hope to steadily increase the number of sponsors," he added.

The Program has 16 students currently enrolled. Projects range from Edward Baer's work on purifying and characterizing the endogenous opiate, dynorphin (in Dr. Avram Goldstein's lab) to a joint project by Ami Laws and Susan Jacobson, evaluating the costs of intensive care and post-intensive care quality of life, under supervision of Dr. Myer Rosenthal, director of the Hospital's intensive care units.

Positive responses from students who have participated in the program indicate that they value highly the freedom to explore different areas of basic and clinical sciences before making career decisions, Brutlag said.

In order to receive academic credit, students are required to submit a written proposal and must later present a thesis and oral defense before the advisor and two additional faculty members.

Two alumni members will soon be appointed to the Scholars Committee, Brutlag noted, and the liaison between students and alumni may open up additional research opportunities off campus.

Through the Scholars Training Program, the Medical Scientist Training Program and the Cancer Biology Research Program, approximately half of all Stanford medical students are involved in research sometime during their medical school careers, he added.

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Mailed Thursday, May 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Seventy-six percent of medical students graduating from Stanford University School of Medicine this year have been matched to one of their top three choices for internship.

Fifty-four percent received their first choice and sixty-five percent will be interning in a university hopsital, according to Dr. Kenneth Vosti, associate dean for student affairs.

The match rate is the highest in the past ten years, he said.

It is the fourth year in a row that at least seventy percent of the graduates have been matched to one of their top three internship choices, he added.

Also following a pattern set in previous years, most graduates will continue their medical training in internal medicine. Pediatrics, surgery, family practice, psychiatry, radiology and pathology internships follow in popularity.

Stanford Hospital will receive the largest number of graduates, (23 out of 65) with the rest distributed among hospitals nationwide, Vosti said.

Stanford medical students' continuing high match rate is a reflection of their strong clinical performance and a counseling program that helps them apply for programs most appropriate to their level of experience and career goals, he added.

To qualify for internship programs, medical students must satisfy graduation requirements of the Medical School. These include passing parts I and II of the National Board Examinations and certain course requirements, Vosti explained.

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Mailed Thursday, May 8, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD--

Five young volunteers at Stanford University Medical Center were awarded memorial scholarships for outstanding service by the Medical Center Auxiliary at the annual junior volunteer awards and recognition dinner held Wednesday evening, May 7.

The five junior auxiliary members, all young mid-Peninsula women, are Sheela Dave of Palo Alto, Krystyna Kaczmarek of Menlo Park, Kathleen Rice of Palo Alto, Jennifer Smart and Sheri Sobrato, both of Atherton.

Dawn McClelland, Auxiliary president, presented the scholarship awards, valued at $300 each. This is the second year the Auxiliary has sponsored the awards, which are funded by memorial donations, according to Joan Naber, junior volunteer chairwoman.

Kathleen Rice volunteered 220 hours in pediatrics, and has also been a member of the Northern Peninsula Council of Junior Volunteers for two years. She will attend Univ. of California-Berkeley next fall where she will major in petroleum and chemical engineering.

Sheela Dave has worked for 230 hours in the escort and emergency services. She is a member of the Palo Alto Medical Explorers, "S" Club and California Scholarship Federation Club at Palo Alto High School, and a member of the Junior Council of Peninsula Volunteers. Sheela plans to attend U.C. Davis next year, majoring in the biological sciences.

Jennifer Smart has volunteered 235 hours in the emergency room and on patient services, and this summer she will be employed in the Admitting Department at SUH. Next fall, Jennifer will enter Smith College to major in international relations.

Sheri Sobrato has worked 269 hours in the pediatrics service. She has been chairwoman of the Junior Volunteers in Pediatrics, and she served as the President of the Northern California Council of Junior Volunteers during the past year. Sheri has also been a volunteer for the Community Association for the Retarded and recently joined their staff. She will attend Stanford in the fall, majoring in developmental psychology with emphasis on the retarded and abnormal child.

Krystyna Kaczmarek has given 411 hours in admissions and emergency. She now works in the Hospital's Department of Dietetics while attending San Francisco State. She is a chemistry major and plans to go into nursing or medicine.

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Mailed Thursday, May 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Health professionals at several institutions across the country will soon take part in a Stanford University study developing and testing new methods for teaching cost-effective clinical decision-making.

The study is the first test in medical education of tutored videotape instruction (TVI), a new teaching technique developed at Stanford University.

The project is funded by a grant of $59,897 from the National Fund for Medical Education, with sponsorship from the Schering-Plough Foundation.

TVI may be valuable in medical education because it can make information available to a large number of individuals in a format that has proven teaching effectiveness, according to Dr. Harold Sox, Jr., assistant professor of medicine and chief of the division of general internal medicine at Stanford's School of Medicine.

One of the principal activities of physicians is trying to identify the causes of patients' problems with enough certainty to start specific treatment. However, most clinical diagnostic methods are imperfect, and clinicians must often take action without being perfectly certain. One goal of the project's teaching materials will be to help students deal effectively with diagnostic uncertainty, Sox said.

The health industry costs U.S. consumers about $200 bilion each year, and that figure is increasing more rapidly than general inflation, Sox explained, with diagnostic tests contributing up to 25 percent of patients' bills.

"By helping students learn how to predict when tests will be useful to them, we hope that the use of tests can be reduced without adversely affecting patients' welfare," he noted.

Another aspect to making clinical decisions is evaluating patients' attitudes toward the alternative choices, Sox said. "This is a difficult area in which to use hard and fast rules, and it has become an active field of research," he said.

Drs. Keith Marton and Edward Shortliffe of the division of general internal medicine will also collaborate on the project, scheduled to begin this summer, Sox said.

Tutored videotape instruction was developed by Dr. James Gibbons and colleagues in the School of Engineering at Stanford University, Sox noted.

Students are shown a videotape of a regular classroom session, with a tutor present. The tutor or the students may interrupt the tape at any time for discussion or clarification.

Equal performance ratings from students in taped classes and those students receiving TVI indicate that the technique is extremely effective, Sox said.

Michael Higgins, a decision analyst will assist in developing the classroom material for the TVI segments. Each tape will focus on a particular diagnostic problem, Sox explained.

The Stanford researchers are collaborating with colleagues at the Public Health Service Hospital in Seattle, the Brooke Army Medical Center in Texas, and the Dartmouth Medical School.

Those participating in tests of TVI will include medical students, graduate physicians and house staff, physicians' assistants and nurse practitioners.

The National Fund for Medical Education is a public foundation that was chartered by Congress in 1954 to mobilize voluntary support for medical education. It has awarded over $50 million to medical schools, societies and consortia since its founding. The primary mission of the Fund is to promote the best possible health care for the American public by supporting improvements in medical education.

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Mailed Wednesday, May 7, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

How we may inherit susceptibility to certain diseases will be the topic of the third spring Progress in Medicine lecture on May 13 at 7:30 p.m. in Fairchild Auditorium at Stanford University Medical Center.

Two experts will discuss "the hidden cost of survival of the fittest," or how the body's resistance to some diseases may be linked with susceptibility to others.

The lecture is free and open to the public.

The speakers will be Dr. Andrei Calin, assistant professor of medicine at Stanford and director of the rheumatology section at the Palo Alto Veterans Administration Medical Center, and Dr. Hugh O. McDevitt, professor of medicine in immunology and professor of medical microbiology at Stanford.

The Progress in Medicine lectures are presented as a community service by the dean and faculty of the School of Medicine, the Stanford University Hospital, and by members of the Medical Center Council.

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Mailed Wednesday, May 7, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

The Supreme Court's *Stanford Daily* decision has paved the way for "abusive invasions by law enforcement officials into the security and privacy of physician's offices," according to the American Medical Association and the American Psychiatric Association.

The statement was made to the U.S. Senate Judiciary Committee in reference to the decision that upheld the right of police to search the files of the Stanford student newspaper for photographs of a sit-in at Stanford University Hospital in which a crime had occurred.

The representative for both the AMA and APA, Dr. Nancy Roeske of Indianapolis, told the committee that the decision "substantially limits whatever degree of privacy was thought to have existed for innocent citizens."

Roeske said the search procedure by police, as contrasted to the subpoena request for information, "is particularly pernicious since it does not allow the physician to challenge the disclosure of his records on grounds that they're both privileged and confidential."

She further stated that the Supreme Court finding is contrary to established APA and AMA policy on the nature of patient-physician relationship and the ethics of practice.

Stanford officials had no comment about the AMA/APA position, but they said they have general concerns about the question of protecting the confidential nature of doctor-patient relationships.

They recalled a case in 1973 in which two investigators from the Santa Clara County District Attorney's Office, using a search warrant to gain entry, attempted to search the medical record files of the Stanford University psychiatric clinic, seeking evidence in the prosecution of an alleged sex offense case.

Medical School officials at the time surrendered the youth's file while telling the investigators they could not go through the psychiatric files because of the confidentiality of the names of other patients.

The investigators complied and did not conduct a full search.

The AMA and APA support legislation by Senators Birch Bayh (D-Ind.) and Max Baucus (D-Mont.) protecting innocent third-party records held in privileged relationships or those protected by First Amendment rights from illegal search and seizure.

The statement outlining the AMA and APA positions on this issue is scheduled to appear in the May 9 issue of the *Journal of the American Medical Association.*

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Mailed Wednesday, May 7, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

STANFORD—

A Stanford University official Tuesday said there is no impasse in the talks between Stanford and community physicians, and expressed confidence the two groups have clearly laid the basis for future agreement.

Robert Rosenzweig, vice president for public affairs, made the statement in a letter to Palo Alto Mayor Alan Henderson. Both the mayor and community physicians recently wrote letters expressing doubts in the outcome of the current discussions.

The talks center on whether community doctors should be given access to certain hospital services now restricted to full time faculty.

"My own view is that there has been a good deal more progress on that matter than either the Council's letter or the recent letter from the Community Physicians for Patient Care suggest," Rosenzweig declared.

A joint Stanford-Palo Alto physicians' liaison committee last month proposed a plan to give community doctors controlled access to the Hospital's special facilities and laboratories. As community doctors with staff privileges in the designated services leave or retire, they would be replaced by community doctors who hold clinical faculty appointments in the Medical School.

Rosenzweig said the proposal "clearly contains a mutually acceptable approach to the questions of future access.

"It is easy to deprecate the progress that has been made because there is still a good deal of heat associated with the details of implementing the approach. But the basis for the agreement is there and that is the most important fact of all."

Henderson informed Stanford officials two weeks ago that the city council was dissatisfied with the progress of the discussions.

The mayor said the council had asked the city attorney to meet with Stanford officials to determine if the University was complying with the provisions of the city contract.

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The contract in question was signed in 1968 as part of an agreement under which Palo Alto sold its interest in the Hospital to the University. In exchange Stanford guaranteed priority in a large block of beds to patients from the community and assured local physicians of staff rights.

However, future appointments in certain hospital services were to be restricted to full time faculty. These services include anesthesia, cardiology, neurology, pathology, radiology as well as other specialized laboratories.

In 1978 the board of hospital directors reaffirmed this policy. Private physicians formed the Community Physicians for Patient Care to fight the decision. In response the Stanford-Palo Alto physicians' liaison committee was formed to grapple with the problem.

Indicating that discussions between the respective attorneys over the contract issue have begun, Rosenzweig added, "I am confident they will serve to reassure citizens and council members that Stanford has been faithful in meeting the obligations it undertook in 1968."

Rosenzweig said the resolution of the hospital-based services issue seems to be reasonably simple compared to the really important and difficult questions facing the Medical Center in the future.

"Those problems will arise from the conflict between a fixed set of obligations for community care and rapidly changing conditions affecting medical education," he said.

He included biomedical research, technology, the delivery and payment of medical services, and the problems of the University of which the Hospital and Medical Center are part.

"These are formidable issues," he said, "and the way they work themselves out will affect the quality of medical care available in this area and the conditions of medical practice.

"Until now no one has been much disposed of to look far enough ahead to begin to grapple with the future. For different reasons the University, the local medical profession and political leaders have been absorbed in much shorter range preoccupations.

"If we continue to act as though the conditions of the past decade will obtain in the future, I am afraid we will have trouble—University and community alike—that will dwarf our present difficulties. I hope very much that we will not lose the chance to discuss these longer range issues."

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Mailed Tuesday, May 6, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Gary Mecklenburg, administrator of Stanford University Hospital and Clinics, will leave his post September 1 to become president and chief executive officer of St. Joseph's Hospital in Milwaukee, Wisconsin.

Mecklenburg, 34, will also become a member of the board of directors of St. Joseph's Hospital, a 570-bed community and teaching hospital affiliated with the Medical College of Wisconsin and Marquette University.

Stanford Hospital Executive Director Dr. Peter J. Levin expressed his regrets at Mecklenburg's departure, citing his "strong administrative leadership which has made the Hospital much more responsive tp patients' needs."

Among Mecklenburg's accomplishments, Levin pointed to improvements in the Hospital's budgeting process, employee relations, and operating procedures.

"Gary's leadership in control of expenditures resulted in the slowing down of the rate of increase at a time of unprecedented national inflation," Levin said.

The annual rate of increase has been cut from an average of 19.1 percent during trhe years 1973 to 1977, to less than nine percent in the past three years, "significant savings" beyond the national average, he said.

Mecklenburg was appointed administrator of Stanford University Hospital and Clinics in 1977. Prior to that he was deputy director. He has also been a lecturer at Stanford in the department of family, community and preventive medicine since 1978.

Before coming to Stanford Hospital in 1977, Mecklenburg was associated with the University of Wisconsin Hospitals in Madison from 1970 to 1977 as assistant superintendent and later associate superintendent.

He received his B.A. degree in anthropology from Northwestern University in 1968 and his M.B.A. degree in hospital administration from the University of Chicago in 1970.

Mecklenburg received the Harold M. Coon, M.D. Award of Merit of the Wisconsin Hospital Association in 1974, naming him Wisconsin's Young Administrator of the Year.

He is a member of the American College of Hospital Administrators, a member of the executive committee of the Hospital Conference of Santa Clara County, and a member of the Board of Directors of Northern California Central Services, Inc.

Mailed Wednesday, June 25, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. Louis Krasno plans to retire from the practice of medicine this year, so he can concentrate on another career—playing the gypsy violin.

Krasno, a clinical assistant professor at Stanford University School of Medicine, is leader of the Gypsy Trio, which performs for benefits and social functions on the Peninsula.

Over the past 17 years, the Trio has played before such notables as the late President Dwight D. Eisenhower, former President Gerald Ford, the late Maurice Chevalier, Victor Borge and Helen Hayes.

Dressed in colorful vests and sashes tied about the waist, the three musicians played recently at the Lytton Gardens retirement home in Palo Alto.

Their music is moody, yet stirring. It suggests an earlier, more romantic age, which celebrated life with gusto.

"We're trying to preserve this type of music—gypsy music—that has all but disappeared in this country," says Krasno.

Krasno was born and grew up in the Austin area of Chicago, and learned to play the violin when he was only five years old.

His mother and father, emigrants from Hungary and Romania respectively, taught him to play by ear, "like the gypsies," he says.

He earned a Ph.D. in physiology and his M.D. from Northwestern University in 1944, and afterwards set up practice in Evanston, Illinois, specializing in cardiology. Later he served as a medical officer in the Navy, and as a consulting cardiologist for United Airlines, a position which he still holds.

In 1957, he moved to the Bay Area. He has been a member of the clinical faculty at Stanford for the past 15 years, helping train medical students and residents, and doing research in the area of heart disease prevention.

But he has never lost his love of music, and today feels even more strongly about the need to keep the musical legacy of the gypsy culture alive.

"In New York City 20 or 30 years ago, there were dozens of gypsy cafes where we'd play all night," he recalls. "They are all closed down now.

"You can still find gypsy musicians in Europe, but in the U.S. they are virtually extinct. For some reason, the musician is no longer a part of gypsy society here."

Krasno's partners in the trio are Carlos Velez, of SRI, International, who plays the guitar, and Albert Norris, who is in the oil exploration business and plays bass. Both formerly were professional musicians schooled in jazz.

"When I was looking for partners for a trio in the early 1960s, I found that jazz musicians were far more flexible than classical musicians," Krasno says.

"Jazz relies on improvisation which is essential to gypsy music."

Today, the Trio performs in retirement homes, before audiences who "can't get out to hear this kind of music," Krasno says.

"We're trying to excite interest in gypsy music," he added. We've made some recordings, so even if no one follows in our footsteps, at least we will leave the music behind us."

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Mailed Wednesday, June 25, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

A three-part curriculum in basic medical science, clinical medicine and investigative medicine has been approved in principle by the faculty senate of the Stanford University School of Medicine.

The action should serve to notify prospective students, faculty and other interested parties "that Stanford expects its graduates as well as its faculty to play a major role in the advancement of medical knowledge, and that it expects to be a leader in the development of academic physicians," according to a statement by the committee of five, the executive board of the senate.

The curriculum already requires that students demonstrate competence in the basic sciences and clinical medicine before graduation.

The addition of the third requirement, investigative medicine, "embodies what is special about the School and its avowed mission to train all our students for leadership in the practice of scientific medicine," said Dr. Avram Goldstein, senate chairman and professor of pharmacology.

The committee of five is expected to appoint an ad hoc committee on investigative medicine in the next few weeks, to study the feasibility of the plan, and determine specific proposals and a time-table for phasing them in.

According to the statement by the committee of five, "Stanford Medical School currently has an elective curriculum, wherein medical students have a great deal of flexibility in deciding how they shall achieve the requisite knowledge to develop competence in the basic and clinical medical sciences.

"The task before the ad hoc committee on investigative medicine is to develop curricular and research opportunities under a third part of the medical curriculum without compromising either the basic elements of the present curriculum or the dictum to produce outstanding clinicians and practitioners of scientific medicine."

Basic elements of the Medical School curriculum are electivity of course work, pass-fail grading, and program flexibility.

Senate member Dr. Irving Weissman said that under the proposal, investigative medicine would be taught in a "two-arm" approach—through course work on research methodology, experimental design and interpretation, and through a "hands on" science project.

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Investigative projects would not be limited to bench research, but could include clinical studies, research on epidemiology, health policy, or preventive, community and public health. The projects could be based entirely on library research, or could involve research in various University departments outside the Medical School.

Through the three-part curriculum, "graduates of this medical school would have the option of pursuing either clinical or academic medicine through postgraduate training," said Weissman, an associate professor of pathology.

The curriculum evaluation committee of the faculty senate, chaired by Professor Byron W. Brown, of the Department of Family, Community and Preventive Medicine, estimated that the proposed program might cost $250,000 a year, "and will rise with other costs."

The committee said it would be possible to "raise this amount of money for this educational experiment, a unique program of training in investigative medicine."

A major impetus for approval of the three-part curriculum is the need to train more minority students for careers in academic medicine.

Citing the School's dismal record in attracting qualified minority faculty, Goldstein said Stanford has an obligation to try to identify and attract the kind of minority students who are committed to academic careers in order to help alleviate the shortage of minority faculty members in medical schools.

Goldstein said that minority faculty development is an area in which Stanford with its unique resources can make its greatest contribution.

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Mailed June 24, 1980

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

VACANCY ANNOUNCEMENT

POSITION: SCIENTIFIC WRITER III

DEPARTMENT: MEDICAL CENTER NEWS BUREAU

DURATION: Permanent, Full Time

SALARY: $1485-1919 per month, depending on experience

DUTIES:

The News Bureau of the Stanford University Medical Center is seeking an experienced science writer to report and write articles covering a wide range of the clinical and basic medical sciences, and the programs of a University Hospital, including short news items as well as longer features.

This individual will also have the following duties:

— Write and edit a monthly publication for the hospital medical staff.

— Work as the associate editor of the *Stanford M.D.* magazine, contributing original articles, preparing the general and science news section, class notes, and working with designer on layout and production aspects.

— Act as liaison to news media seeking information about Medical Center activities and respond to inquiries from reporters and editors.

— Contribute news stories to Campus Report/Medical Center Memo supplement on a weekly basis.

— Serve on editorial committees.

QUALIFICATIONS:

A minimum of 3 years of writing and editing experience is required, with general knowledge of medical sciences and biology. Candidates with a combination of journalistic experience and with a portfolio demonstrating clearly they can write for both scientific and lay audiences will be given preference. Similarly, journalistic experience and prior work with an academic medical center information office will be given consideration. Creative ability, interviewing skills, and a general understanding of medical and scientific terms with attention to detail and accuracy are important. Some experience in working with designers on layout and production is also required.

APPLICATION PROCESS:

Qualified candidates should submit a detailed resume, including salary requirements, and provide representative samples of published material by July 15, 1980 to:

Linda Stabler
Personnel Department-VAC
Serra and Galvez Streets
Stanford University
Stanford, California 94305

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

During the summer months when students and faculty are away and many hospital employees are on vacation, the Stanford University Blood Bank (SUBB) must turn to the community to meet its blood needs.

This summer SUBB will be setting up mobiles at many businesses in the area, including Macy's, The Emporium, Lockheed and Hewlett-Packard.

Summer is traditionally a slow time for blood banks around the country and this is also true at SUBB since students and faculty at Stanford are such generous donors.

In the past nine months, students alone donated 2500 productive units of blood, which is roughly 20 percent of the total blood given since SUBB began in March of 1978. A productive unit is one that can be transfused.

"Students have less ambivalence about this kind of giving," says Ellen Fox, hospital coordinator for SUBB. "It appeals to them." Flexible schedules and active recruiting at campus dorms also help, she said.

Although most community hospitals need only 5000-6000 units of blood a year, Stanford uses 30,000 units a year to meet the needs of the cardiovascular unit, leukemia and other blood diseases, premature nursery and patients at Children's Hospital at Stanford.

A single blood donation can help as many as four patients since blood can be separated into component parts such as platelets, red cells and plasma.

Anyone age 18 to 65 can donate blood as often as five times a year. A child of 17, however, can give blood with parental permission and those 65 years and older can do so with a physician's approval.

SUBB offers a credit policy for each pint of blood donated. Credits are cumulative and may be assigned at any time to any patient at Stanford University Hospital or to an immediate family member. A credit erases the replacement fee that some blood carries for a period of one year following each donation.

These credits also can be used for immediate family members in other hospitals throughout the country, according to guidelines set up by the SUBB.

Giving blood takes only five to seven minutes, although donors should allow at least 45 minutes for the donating process, which includes registration, a brief medical history and a 15-minute rest period afterwards.

"In no way does giving blood impede a person's normal functions," says Mary Ward, campus coordinator for SUBB and a regular donor. "We tell them (donors) not to do any strenous activity. . . otherwise there are no restrictions."

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Mailed Tuesday, June 24, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

A life support training center for local citizens and health care professionals has just been opened by Stanford University Hospital.

Dedication ceremonies for the center, which will offer both basic cardiopulmonary resuscitation (CPR) and advanced cardiac life support (ACLS) techniques, were held on June 19.

The new facility which is located next to the Hospital's Emergency Department, cost $20,000 to construct and was funded largely through donations from local service clubs and businesses.

Todd Kiskaddon, a certified paramedic in Santa Clara County, who is trained in both CPR and ACLS, has been hired by the Hospital as the center's coordinator.

On the peninsula, the American Red Cross and the American Heart Association have a long history of providing life support training techniques. The Hospital will make the center and its equipment available to these organizations to expand their activities.

In addition, members of local service clubs will be trained as instructors and they, in turn, will be able to train their own people at the center.

"Our goal," says Dr. Michael Eliastam, emergency services director, "is to saturate the area with people trained in CPR."

CPR training teaches the ability to provide life-sustaining care until an ambulance arrives on the scene, or a victim can be transported by some other means to an emergency department.

ACLS training, however, goes beyond the capabilities of lay persons and involves the use of drugs, intravenous lines, electrocardiogram and breathing assistance machines, as well as defibrillators.

Certification in ACLS will be required of all physician and nursing personnel in the Hospital's emergency department.

Both programs will be offered at the center on an informal as well as a formal basis. Self-teaching modules and individual performance testing will be available and the center will be open in the evening as well as during the day.

"Because a lot of physicians don't deal with emergency situations very often," says Eliastam, "this will give them the benefit of honing their skills on their own time. . . without close scrutiny."

Operation of the center will cost the Hospital $50,000 a year. This figure includes the coordinator's salary, secretarial support and funds for an equipment technician.

Donors to the construction and equipment of the facility include Raychem Corp., Menlo Park; the Rotary Clubs of Palo Alto and Menlo Park; the Kiwanis Clubs of Palo Alto and Menlo Park; Palo Alto Host Lions and South Palo Alto Lions; Aldo J. Test, an attorney.

Along with Eliastam, Dr. Kent J. Garman, associate professor of clinical anesthesia, and Barbara Behrens, clinical nurse coordinator in emergency, have been the most active proponents of the center.

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Mailed Tuesday, June 24, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

The organization representing most of the registered nurses at Stanford University Hospital today gave notice of its intention to strike if a new collective bargaining agreement is not reached by midnight, July 4, 1980.

The Committee for the Recognition of Nursing Achievements (CRONA), which represents over 1,000 of the Hospital's non-supervisory staff registered nurses, has been negotiating with the Hospital on the terms of a new agreement since May 20.

The current agreement will expire June 30. Under the National Labor Relations Act, CRONA is required to give 10-day notice of its intention to strike.

Joanna Nelson, R.N., chief negotiator for CRONA, said, "We have one goal in mind—reaching an agreement."

Even in the event of a strike, "We will make sure patient care is not compromised." That includes providing coverage of critical care and other areas from which patients cannot be moved to other hospitals, she said.

Hospital administrators are meeting this week to make contingency plans for the possible strike.

The plans may include closing selected units, limiting admissions to nonelective and emergency cases, and making provisions for transfering patients to other hospitals, according to a schedule which depends on the progress of the negotiations, said Hospital Administrator Gary Mecklenburg.

Priscilla Wheeler, chief negotiator for the Hospital from the University Counsel's Office, said, "The Hospital desires to reach a mutually acceptable agreement as soon as possible."

She said the negotiators are working to resolve "a number of outstanding issues," but neither side would give details today.

Wheeler added that a federal mediator may join the negotiations, but so far the Hospital has not been contacted by the Federal Mediation and Conciliation Services, which provides mediators to help resolve labor disputes once a strike notice has been filed.

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Mailed Tuesday, June 24, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Stanford University School of Medicine will maintain a "full program" of residency training in surgery at Santa Clara Valley Medical Center next year, despite the resignation of five of its faculty members.

According to Dr. Lawrence G. Crowley, acting dean of the Medical School, three of the five positions have been filled, and active recruitment is underway to fill the remaining two.

Dr. David Burton, associate professor of clinical surgery, has been appointed chief of orthopedic surgery at Valley.

Dr. Dennis Becker, chief resident in neurosurgery, has been named chief of neurosurgery at Valley, and a clinical assistant professor of surgery at the Medical School.

A third vacancy, in orthopedic surgery, will be filled by four physicians from the San Jose Orthopedic Medical Group, who probably will rotate as clinical faculty on a monthly basis, according to Burton.

They are Drs. Mark Golod, John Stahler, John Dedinsky, and Paul Swartz.

The new appointments become effective the same day as do the resignations, July 1.

Valley Medical Center has had a long-standing affiliation agreement with Stanford.

According to the agreement, the Medical School provides staff for various services at Valley, including surgery, medicine, gynecology and obstetrics, dermatology, psychiatry and neurology as part of the teaching program of house staff and medical students.

However, the programs in orthopedic surgery and neurosurgery were cast in doubt last February, when five Stanford faculty members with appointments in the department of surgery at Valley submitted resignations.

They included all three orthopedic surgeons, Drs. Clyde Alan Farris, Steven S. Fountain and John Harding, and the only neurosurgeon, Dr. Richard D. Hamilton.

In addition, Dr. A. Crane Charters, chairman of the surgery department, resigned.

According to Robert Sillen, executive director of Valley Medical Center, the surgeons resigned for a "full spectrum of reasons," some of them personal. For some of the doctors, an important reason was failure of Stanford and the County to reach an agreement on a practice plan proposed by the medical staff last September.

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The plan would have converted the present system of paying faculty strict, full-time salaries, to an incentive situation, under which faculty members would keep some of the professional fees they earned to support their salaries, as well as their individual teaching and research activities, Sillen explained.

"In my opinion, the practice plan concept is in the best long-term interest of the medical staff and Valley," he said.

However, "it is not at all clear" what such a plan would have done to the relationships between the County, Stanford, and the physicians themselves.

"One issue for Stanford is, how does the University retain enough control over the academic process, including faculty appointments and salary levels, when it is run by a private group?" Sillen said. "That is a valid concern."

In addition to the resignations, some officials at Stanford had become concerned about the future of Valley. Extensive renovation of the physical facilities are required, yet the potential passage of Proposition 9 raised the specter of reduced funds to state-aided institutions like Valley.

Accordingly, groups were formed both at Valley and at Stanford to review the affiliation agreement and discuss the long-term goals and needs of both institutions.

"Now that Proposition 9 has been defeated, we can begin more definite long-range planning to strengthen and reaffirm the relationship between the Medical School and Valley Medical Center," said Crowley.

"Stanford has little to worry about as far as the future viability of Valley is concerned," Sillen added. "Valley has a bright future. We're going to be here a long time."

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Mailed Friday, June 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Five members of the Stanford University School of Medicine faculty have been promoted to tenured positions, effective September 1, 1980, the Dean's office has announced.

They are Drs. Douglas L. Brutlag, Allen D. Cooper, Leslie J. Dorfman, Michael F. Marmor, and I. Ross McDougall.

Brutlag, associate professor of biochemistry, is noted for his studies of the molecular structure of chromosomes, and has succeeded in making chromosomes from their component parts, DNA and proteins.

The work is providing a better understanding of the structure of chromosomes and of the way new ones are put together when cells divide.

Brutlag, 34, earned his bachelor's degree at the California Institute of Technology in 1968, and his Ph.D. at Stanford in 1972. He served as a research scientist with the Commonwealth Scientific and Industrial Research Organization before joining the Stanford faculty in 1974.

He is founder and first chairman of the Stanford Medical Student Scholars Program, and recently was awarded a Camille and Henry Dreyfuss Teacher-Scholar Grant.

Cooper, associate professor of medicine, is well known for his research on the factors that regulate the body's synthesis of cholesterol.

A native of New York City, Cooper received his M.D. from the State University of New York in 1967.

He served as resident and research fellow at University of California Medical School in San Francisco, and as staff gastroenterologist at the Wilford Hall United States Air Force Medical Center in San Antonio, Texas before coming to Stanford in 1974.

His honors include invitations to participate in the Deuel and Gordon Research Conferences, a National Institutes of Health research career development award, and membership to the American Society for Clinical Investigation.

Cooper also plays an active role in teaching and clinical care, serving as coordinator of the gastroenterology section of the physiology course, director of the Clinical Gastroenterology Laboratory, and as chairman of the Department of Medicine's committee on quality assurance.

Dorfman, associate professor of neurology, is known as an innovator in the assessment of nerve disorders.

He introduced a new method for indirectly measuring the velocities at which electrical impulses are conducted along the spinal cord, and demonstrated that this velocity is slowed in the elderly and in patients with multiple sclerosis. The measurement is particularly useful in detecting small spinal cord lesions.

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In addition, Dorfman has developed a method of determining the speed with which different sizes of nerve fibers conduct impulses. This technique may aid doctors in identifying the effects of different forms of peripheral nerve damage, that which occurs in nerves outside the brain and spinal cord.

A native of Montreal, Canada, Dorfman received his M.D. at Albert Einstein College of Medicine in New York in 1968.

He served as resident and as acting instructor in neurology at Stanford before being appointed assistant professor in 1974.

He founded and directs the Evoked Potentials Laboratory, and also directs the Electromyography Laboratory. Electromyography refers to recordings of the electrical potential of nerve and muscle, an essential technique in diagnosing neurological disorders.

Marmor, associate professor of surgery (ophthalmology), is considered one of the few leaders in the field of electroretinography.

Electroretinography is the measurement of changes in electrical potential in the retina after stimulation by light, and is used to evaluate visual function.

In addition Marmor is well known for his studies of retinitis pigmentosa, one of the most common dystrophic diseases of the retina, and of the adhesive forces which hold the retina in place. The latter study may lead to better treatment of detached retinas, a common cause of visual impairment and blindness.

Marmor received his M.D. at Harvard Medical School in 1966. He served as assistant professor of ophthalmology and director of the Clinical Electrophysiology Unit at the University of California Medical School in San Francisco before coming to Stanford in 1974.

In addition to his research, Marmor directs the Stanford Clinical Electrophysiology Unit, and teaches in undergraduate courses in electrical engineering and human biology, as well as in medical school classes and postgraduate medical education programs.He also serves as chife of the Ophthalmology Section at the Palo Alto Veterans Administration Medical Center.

McDougall, associate professor of radiology and medicine, has been studying the use of radioactive substances in improving diagnosis and treatment of a variety of diseases.

For example, he developed a sensitive and highly specific method for detecting abscesses throughout the body, by white blood cell scanning. A major interest has been the use of radioisotopes in the diagnosis and treatment of thyroid disease.

In addition, he has been studying vesicles, tiny cells which can be made in the laboratory from fatty materials. Vesicles have proved useful in understanding the mechanisms of disorders such as Graves ophthalmopathy, and they may also be used in the future to carry drugs to specific areas of the body.

A native of Scotland, McDougall received his medical degree in 1967, and his Ph.D. in 1973 from the University of Glasgow.

He served as lecturer in medicine at the University Department of Medicine, Glasgow Royal Infirmary, before coming to Stanford in 1976.

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Mailed Monday June 16, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Early detection of diabetes, rigorous control of blood sugar, and continuous surveillance of fetal well-being are essential for reducing death and disease among infants born to diabetic mothers, according to a University of Pennsylvania fetal medicine specialist.

"The majority of women have had little nutritional education when they become pregnant," and diabetes may go undetected until their first check-up, said Dr. Steven G. Gabbe, director of the fetal medicine division at the University of Pennsylvania in Philadelphia.

While this may not be a problem for most mothers and babies, chronic, uncontrolled diabetes during the first trimester of pregnancy increases the risk of life-threatening birth defects two to three fold, he said.

Death from birth defects of the heart, skeleton, central nervous system and kidneys today kills more babies of diabetic mothers than any other cause.

The overall perinatal death rate associated with diabetes has been cut from about 30 percent in the 1940s to only five or six percent today, mostly due to advances in fetal monitoring and increased use of cesarean section delivery, Gabbe said.

However, complications of excessive birth weight, low blood sugar, and prematurity continue to plague the babies, and indicate a need for improved understanding and control of the disease.

Gabbe spoke on the problems of diabetes in pregnancy on Monday, June 16, during a three day conference on the nutritional care of high-risk mothers and infants at Stanford University School of Medicine.

The conference, for nutritionists, nurses and physicians involved in obstetrics and neonatology, is being held in the Medical School's Fairchild Auditorium, and is sponsored by the Department of Pediatrics under a grant by the Department of Health, Education and Welfare.

Gabbe recommended that "every pregnant patient should be screened for diabetes," at least by measuring her blood sugar one hour after she has been given a 50 gram dose of glucose (sugar).

If diabetes is detected, and if insulin is required, nutritional therapy should also be instituted, he said.

"Diet rarely gets attention," Gabbe said, yet it is important to balance the daily dosage of insulin with the diet as well as physical activity and stress in order to prevent large shifts in blood sugar levels during the 24 hour period.

In addition, the patient should be taught home glucose monitoring—how to test her blood for higher than normal blood sugar levels throughout the day.

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Home monitoring "keeps the patient out of the hospital and gives her much more control over her diabetes," Gabbe said.

The nutritional needs of premature infants were explored during Monday morning's session by Dr. Norman Kretchmer, director of the National Institute of Child Health and Human Development in Bethesda, MD.

Kretchmer said in 1960 not a single baby in New York born between 750 and 1,000 grams survived. According to statistics from Stanford's nurseries, today the survival rate among such babies is 80 to 90 percent.

"The reason we have been able to deal with these immature infants is that we have learned how to feed them," Kretchmer said.

"The premature infant is an organism that has not been 'baked' in the oven long enough," he said. "Therefore, it has no ability to utilize the protein in the diet in terms of making amino acids essential for development."

The biomedical capabilities of the premature infant are indeed limited, he added. "The less fat they are the more difficulty they have in adjusting to temperature. This problem has led to the development of isolettes to care for them."

Kretchmer said advances of the last 20 years are changing "our concepts of pregnancy, and prematurity in terms of daily nutritional requirements.

"Preemies require much more protein than any adult can tolerate," he said.

In fact, the amount of daily intake of protein required by premature infants is equivalent to an adult eating three pounds of meat per day.

Kretchmer concluded that the U.S. is entering into an era of "nutritional individuality" in which mothers, babies and other adults can be accommodated in terms of their individual nutritional requirements.

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Mailed Monday, June 16, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A $4 million project for renovation of the outpatient clinics in the Medical Center's Boswell building was approved by the University Board of Trustees Friday, June 13.

The renovation project, funded in part by a $3 million gift from the James G. Boswell Foundation, will be the first significant upgrading of the clinic facilities since their construction in 1959, according to David Mendelow, associate dean and administrator of the clinics.

The Boswell Foundation, located in Los Angeles, supports hospitals and other health care facilities and community organizations in California and Arizona.

The clinic remodeling project will complement a proposed $97 million program to correct deficiencies and modernize the Hospital over the next six years.

Both the Hospital and outpatient clinics are housed in the large Medical Center complex built in 1959 and designed by architect Edward Durrell Stone. The clinics are located in the Boswell building which comprises one wing of the complex.

In the clinics, faculty physicians treat their patients and teach medical students. The clinics receive more than 130,000 patient visits annually.

However, "the clinics were never designed to meet the needs of modern medical practice," a recent planning report noted. "They have inadequate waiting areas, undersized examining rooms, and major impediments to the attraction of patients and the integration of patient care and teaching activities."

Planned improvements include increasing the size of examining rooms; increasing conference teaching space; streamlining corridor and hallway patterns; consolidation of special procedure rooms; construction of more private interior waiting areas; and general brightening and refurbishing to improve the clinics' appearance and comfort.

"The completed facility will be more conducive to teaching," noted Mendelow. "It will also be more pleasant for patients, allow for more privacy, decongest traffic in the hallways, and permit greater efficiency through grouping of similar activities."

The architectural firm of Almeter and Finley in Palo Alto has been selected to do the design.

Once design plans are submitted, final approval for construction to begin will be sought from the University trustees in early 1981, Mendelow said.

A completion date has not been forecast, he noted, but during renovation, the clinics will remain open to patients.

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Mailed Monday June 16, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Stanford University School of Medicine presented 140 degrees during its annual commencement exercises Sunday, June 15.

The ceremonies also honored seven Medical School faculty members for outstanding achievements in teaching.

Medical degrees were presented to 78 men and women. The Medical School also awarded 25 Ph.D.'s, 30 master's degrees (including 27 in physical therapy), and seven bachelor's degrees in medical microbiology and basic medical sciences.

The diplomas were presented during ceremonies in Stanford Medical School's Grant Courtyard following the University's 89th annual commencement at Frost Memorial Amphitheater.

Dr. Norman Blank, professor of radiology, was selected by the medical graduates to receive the Arthur L. Bloomfield Award for excellence in the teaching of clinical medicine.

Blank was also voted the Henry J. Kaiser Award for excellence in clinical teaching, the fifth time he has received the award in the 18 years he has been a member of the Medical School faculty.

The other Kaiser Award for excellence in clinical teaching was given to Dr. Thomas Raffin, acting assistant professor of medicine.

Drs. Thomas Mathers and Peter Sargent, assistant professors of structural biology, were voted Kaiser Awards for excellence in preclinical teaching.

The Henry J. Kaiser Family Foundation Award for outstanding and innovative contributions to medical education was shared by Drs. Robert Chase, Emile Holman Professor of Surgery, and Duncan Govan, professor of surgery.

Both had received the award previously; Chase in 1978 and Govan in 1977.

Sarah Semans, associate professor emeritus of physical therapy, received the annual Lucille Daniels Recognition Award for outstanding contributions to physical therapy.

Semans, who retired from full-time teaching in 1969, has remained active in the Division of Physical Therapy, and in clnical activities.

The Medical School commencement address was delivered by Dr. Robert J. Glaser, former dean of the Medical School from 1965 to 1970, who currently is president of the Henry J. Kaiser Family Foundation.

Diplomas were presented by Dr. Lawrence G. Crowley, acting vice-president and dean of the Medical School. He was assisted by Govan and Terry Sanford, lecturer in physical therapy.

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Mailed Monday June 16, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Three eminent professors in the Stanford University School of Medicine have been named to endowed chairs by the University Board of Trustees.

They are Dr. I. Robert Lehman, the William M. Hume Professor in the School of Medicine; Dr. Hugh O. McDevitt, the Joseph D. Grant Professor in the School of Medicine; and Dr. Philip Sunshine, the Harold K. Faber Professor in Pediatrics.

Lehman, a biochemist, has made important discoveries that help explain how the genetic substance, deoxyribonucleic acid (DNA), is replicated during cell division, how it is repaired following damage by radiation and toxic chemicals, and how it recombines during the exchange of hereditary materials between cells.

Recombination permits an organism to try out a number of arrangements of its genes in search of those that give it optimal selective advantage. It is regarded as a major driving force in evolution.

The Hume chair was established in honor of the late William Mansur Hume of Woodside and San Francisco. A native of Indiana, Mr. Hume was the founder of Basic Vegetable Products, Inc.. He had served as president, chairman and director of the San Francisco-based firm until his retirement in 1974.

In his will, Mr. Hume left Stanford School of Medicine approximately $5.6 million to be used for "basic research in medicine." A portion of the funds was set aside to establish the chair whose holder must meet that requirement.

McDevitt, holder of the Grant chair, is engaged in research on the genetic control of the immune system. His discoveries include a little known protein molecule called the human leukocyte antigen (HLA) which helps explain why some people may be susceptible to disorders ranging from arthritis to certain forms of cancer.

The Grant chair was established in 1969 to honor Joseph D. Grant, a leading California industrialist, financier and merchant and a member of the University Board of Trustees for 51 years. The first chair holder was Nobel Laureate Joshua Lederberg who left Stanford two years ago to become president of Rockefeller University.

Sunshine, the Faber Professor, is a specialist in neonatal medicine and pediatric gastroenterology. His research has been concerned with the study of the physiologic and biomedical handicaps of the prematurely born infant. Sunshine has been largely responsible for the establishment of the nationally recognized Clinical Research Center for Premature Infants at Stanford.

The Faber chair, whose first holder was Dr. Norman Kretchmer, former chairman of pediatrics and now director of the National Institute of Child Health and Development in Bethesda, Maryland, honors the late Dr. Harold K. Faber, an internationally known Stanford professor and founder of Children's Hospital at Stanford.

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Mailed Monday, June 16, 1980

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

EDITORS: There will be a brief photo opportunity with Kennedy and others at 5 p.m. or later today, following adjournment of the Board of Trustees meeting at Stauffer Auditorium. This is adjacent to Hoover Tower, between the Lou Henry Hoover Building and the Herbert Hoover Federal Memorial. Please note the trustee meeting may go as late as 6:30 p.m. because of its lengthy agenda. Kennedy plans a press conference at 9 a.m. Tuesday, June 17, at the President's Office Building on Inner Quad. He will be engaged in commencement activities and previously planned travel off campus until then.

FOR IMMEDIATE RELEASE

STANFORD—

Stanford Provost Donald Kennedy, commissioner of the Food and Drug Administration during 1977-79, will become eighth president of the University Aug. 1.

A Stanford faculty member since 1960, Kennedy will succeed Richard W. Lyman, who will become president of the Rockefeller Foundation on the same date.

Kennedy's selection was announced Friday, June 13, by Dr. Peter Bing, of Los Angeles, president of the Board of Trustees, following a thorough national search. Kennedy was the unanimous first choice of trustees, faculty, students, and alumni who participated in the search.

Lyman said: "Having known Donald Kennedy virtually since his arrival at Stanford 20 years ago, I am most enthusiastic that the trustees have asked him to be the University's next president.

"He brings to the office many strong qualities: flair, imagination, a quick and agile mind, and a great capacity to bring out the best in other people. We couldn't be in better hands."

Kennedy said that "under Presidents Wally Sterling and Dick Lyman, Stanford has moved into a preeminent position among America's private universities. It is a privilege as well as a challenge to succeed to this tradition."

Kennedy, 48, has long been highly regarded as a teacher, scholar, and administrator. During the past decade, he has been considered for the presidency at Harvard, Chicago, Cornell, and Yale.

As Stanford's top academic officer, Kennedy will be concerned with more than 11,700 students, about 7,000 faculty and staff, and a consolidated budget of $487 million annually.

A biologist, Kennedy is a member of the National Academy of Science and the National Institute of Medicine. He is a fellow of the American Academy of Arts and Sciences and of the American Association for the Advancement of Science.

Born Aug. 18, 1931, in New York City, Kennedy holds three degrees from Harvard—A.B., 1952; A.M. 1954; and Ph.D., 1956, all in biology. A former ski racer and coach at Harvard, he weighs 165 and stands six feet, one inch—"high enough to hit the volleyball down, but not inside the spike line," he once observed.

While at the FDA, he and his wife, Jeanne, now community relations director at Stanford Hospital, were named honorary national cochairmen of the Committee for the Stanford Griffins, a new mascot proposed by Stanford athletes.

The Kennedys celebrated their 27th wedding anniversary Wednesday, June 11. They have two daughters, Page, a Hampshire College graduate now in South America and Julia, a Stanford sophomore.

Kennedy is the first athletic coach to become head of Stanford since Sterling in 1949 and the first biologist since David Starr Jordan, the University's first president, in 1891.

Besides volleyball, his recreational interests include skiing, trout fishing, and running.

* * *

In the mid-1960s, he was named to the first Committee on Undergraduate Education at Stanford by President Sterling, now the University's chancellor. Kennedy received Stanford's top honor for undergraduate education, the Dinkelspiel award, in 1976.

Graduating seniors have asked him to speak at class day three times, a record exceeded by no other faculty member. In 1977, he cited students as a "corrupting" influence in shifting his interest from hard science toward public policy.

"You seduced me into that dreadful scientific error: the substitution of important, unanswerable questions for unimportant, answerable ones," he noted.

In 1969, near the peak of student unrest, he told graduating seniors: "The problems of population growth, of environmental deterioration, of technological overkill are complex. Hearts and bodies are no good against them; only minds are."

After plunging into the political cauldron of saccharin, ice cream, and other food and drug controversies, he told students: "even though one must put up with a good deal of ritual abuse in the regulation business, there is some solace in the fact that in significant part it is ritual abuse. . . . When, in

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the same week, *Business Week* called me arrogant and *Time* called me clubfooted, a friend at the Institute of Medicine said that being Lord Byron isn't all that bad."

After he left the FDA, *The Washington Post* said Kennedy "brought exceptionally articulate and well reasoned argument to. . .often emotional debate." *A New York Times* editorial called him "an exceptionally articulate as well as competent scientist. . . .

"Morale has been raised and the FDA's reputation is decidely one of independence. One measure of the respect that Mr. Kennedy won is that spokesmen for both consumer and industry groups, who seldom agree on anything, rate him equally high."

Kennedy headed the Department of Biological Sciences at Stanford from 1965 to 1972, and later directed the highly respected human biology program. In 1974, he was the first recipient of the Benjamin Scott Crocker professorship in human biology.

Elected to the Advisory Board by his faculty colleagues in 1967, he served as its chairman during 1971-72, presiding at its hearing for former Prof. H. Bruce Franklin.

In less than a year as provost, he moved to improve faculty and staff salaries, created task forces to attract top women professors to the faculty, and took direct personal charge of faculty affirmative action programs.

Last fall, he told the Palo Alto City Council "How well I do will have to be judged by the quality of Stanford faculty in the year 2000. The assistant professors we're trying to appoint and house now will be at or near the peak of their scholarly productivity then."

Knowledge "never gets easier; it only gets harder," Kennedy commented, and it may tend to become progressively more expensive.

"It has to keep getting a little more expensive because it builds on previous knowledge.

"The book of knowledge only grows. You discover that you have new obligations to find out things because you have discovered new tools." Computer science does not displace classics or comparative literature; it becomes an aid to scholars in these disciplines.

In talks with the Faculty Senate last fall, Kennedy said his long term goals as provost included maintaining a balanced budget and attracting "the best student body and faculty in the world" here during the next decade.

The fact that higher education and Stanford face "a tight time" economically should not be "an invitation to a sense of academic helplessness," he added. Kennedy has continued earlier initiatives in forming a new program in public policy.

In 1975, Kennedy headed an ad hoc task force study of extradepartmental programs at Stanford, resolving long standing disputes about how these could best fit the institution's framework. He subsequently served on an Associated Students task force on tenure and teaching quality, whose recommendation for universal course evaluation now has quietly taken effect with faculty approval.

Regarded as a master teacher by several of his colleagues, Kennedy initiated a departmental practice in biology of hiring only one assistant professor for each tenured opening. This meant a greater teaching load for senior faculty, but focused considerable attention on young scholars.

As provost, Kennedy has expressed great concern at possible cutbacks in federal support for graduate students, criticized curtailment of programs benefitting minority graduate and professional students, and noted the rapid obsolescence of many key facilities used in federally sponsored research.

Stanford now ranks third nationally (behind Johns Hopkins and MIT) in dollar volume of federally sponsored research, excluding the Stanford Linear Accelerator Center. The strength of its faculty is reflected in 102 members of the American Academy of Arts and Sciences, 64 in the National Academy of Sciences, 31 in the National Academy of Engineering, 10 in the National Academy of Education, 11 winners of the National Medal of Science, eight Nobel Laureates, and four Pulitzer Prize winners.

New research programs advanced by the faculty include a Center for Integrated Systems, designed to continue U.S. leadership in electronics and related fields; a cardiovascular research center; and the proposed single pass collider project at SLAC, which would achieve collisions at 100 billion electron volts.

Stanford now ranks second only to Harvard in private gift support, receiving a total of $64 million last year, and in its ability to attract those students it admits as freshmen. Stanford's Graduate School of Business and School of Education have consistently ranked first nationally in recent years. The Schools of Engineering, Law, and Medicine usually have ranked among the top three.

Undergraduate enrollment of minority students is at an all-time high. Countering a national trend, first year enrollment of minorities in graduate and professional programs ended a four-year decline last fall.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Stanford University heart transplant surgeons yesterday expressed cautious support of the federal government's plan to undertake a major study of heart transplantation in the U.S.

The study was announced by Secretary of Health and Human Services Patricia Harris during a press conference June 12 in Washington, D.C.

Purpose of the study is to determine whether heart transplantation can be considered a "medically reasonable and necessary" procedure, and thus should be covered by Medicare.

Until the study begins, all temporary coverage of heart transplantation by Medicare will be withdrawn, Harris said.

Stanford surgeons Drs. Norman Shumway and Edward Stinson said they were not sure what the impact of the withdrawal of Medicare funding would have on the program at Stanford.

Medicare has covered the transplant costs of some Stanford patients on a temporary basis since November, 1979.

However, "we hope the hiatus in funding is as short as possible," said Stinson, head of the transplant team.

Since May, 1979, the Health Care Financing Administration (HCFA), which administers Medicare, in conjunction with the Public Health Service, has been evaluating the Stanford program, to determine whether heart transplantation as performed at Stanford should be covered by Medicare.

However, Harris said, "Although the PHS is continuing its analysis...there are too many unanswered questions to justify a final decision on general Medicare coverage.

"These include the patient selection process, the long-term social, economic and ethical consequences of the procedure, and the potential for national expansion of the heart transplantation procedure."

Harris said that the HCFA will "immediately initiate a broad study of medical, social, economic and ethical consequences of heart transplantation" in conjunction with the National Center for Health Care Technology of the PHS.

According to press reports, she said the study probably would begin in September, 1980, and most likely would involve Stanford.

In addition, Harris said the HCFA will develop by September "a generic definition of (what constitutes) reasonable and necessary medical services."

Finally, she said, HCFA has notified Blue Cross/Blue Shield of California, the Medicare intermediary for Stanford, that "we are withdrawing the tentative authorization granted last November.

"However, those Medicare beneficiaries who received heart transplants and continue in treatment, and those eligible persons already accepted for transplant at Stanford and Arizona will be reimbursed by Medicare for appropriate costs."

(Last month, a Social Security administrative-law judge ordered Medicare to pay for one patient's transplant costs at the University of Arizona in Tucson.)

The Stanford surgeons said the number of patients considered for transplantation at Stanford who are covered by Medicare varies from year to year.

However, patients' private insurance and Medicare are not the only sources of financial support. Stanford surgeons have never charged professional fees for their service, and in addition, portions of a yearly research grant from the National Institutes of Health may be used to defray the costs of transplantation in some patients.

Cost of a transplant, including hospitalization can run from $40,000 to well over $100,000.

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Mailed Friday, June 13, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

An unprotected child involved in a car accident at just 30 miles per hour suffers the same damage as if he were hurled from the roof of a three-story building.

Such a gruesome scenario, experts believe, is avoidable if parents are educated in the proper use of car seats for children from infancy until they are about four years old.

In fact, says Dr. James Flippen, an associate professor of pediatrics at Stanford University Hospital, the use of car restraints can reduce the number of fatalities among children by as much as 80 percent and decrease injuries by 50-60 percent.

Current statistics, he says, show that 4,000 children die annually on the nation's highway and 200,000 more sustain severe injuries. According to the National Safety Council, this means that automobile accidents have replaced communicable diseases as the No. 1 killer of children over the age of one.

More importantly, adds Dr. Flippen, car accidents are the No. 1 "preventable killer" of children.

Dr. Flippen recently held an in-staff meeting at the hospital on infant auto safety with a representative from the state Department of Transportation. Since October, the state has been operating a "safety-in-transit" program on passenger safety for children.

Federally-funded, the program's main thrust is establishing good safety habits among the parents of newborn children.

"Statistically," says Dr. Flippen, "we find we get the best results involving parents in the neonatal period. . . because they are most susceptible to the needs of their child at the time of birth.

"If proper carriers are used initially, parents tend to continue the habit later on."

To educate parents, the state program suggests infant car seats be made available to new mothers at cost before they leave the hospital; consumer guides, describing acceptable car seats, be distributed; and hospitals display infant child seats in auxiliary gift shops or in maternity wards.

Also, a film, entitled, "The Perfect Gift" can be shown. It underscores the importance of using a car seat the moment an infant is taken home.

Although mothers often feel they can adequately shield their babies by cradling them in their arms, the film show that in an accident, the baby can be crushed by its mother's body or become a human missile, hurtling head first into the dash or windshield.

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Mailed Thursday June 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Stanford University Hospital has been granted an exception to the 1979-80 limits on reimbursement by the federal government for hospital services provided to medicare patients.

The exception will avoid an estimated loss of $2 million in the hospital's annual income, according to Hospital Executive Director Dr. Peter J. Levin.

(The estimated loss was based on the reduction in reimbursement to Stanford, from $191 to $169 per Medicare patient per day.)

Although the hospital has been paid at the lower rate since last September, Levin said the difference will be made up through higher reimbursements through the remainder of the fiscal year.

The exception was announced recently by the Health Care Financing Administration (HCFA) of the Department of Health and Human Services, which administers the Medicare program.

In a letter to the Blue Cross of Northern California, the region's Medicare intermediary, HCFA official Michael W. Maher stated that the exception takes into account the relatively short average period of hospitalization in California compared with other states, and the higher costs of "more intensive. . . services" provided at Stanford.

"We are very pleased that the HCFA granted an exception," said Levin.

"We were able to prove that nursing services provided at Stanford are more extensive than those provided to Medicare patients in most other hospitals," he said.

Levin added that the exception represents a year of effort by University officials.

In addition, Levin also lauded California Congressman Pete McCloskey and other members of the State's congressional delegation for supporting a change in the regulations.

Currently, the HCFA is considering comments from the nation's hospitals on a proposal to revise last year's regulations, to take into account more fully the costs associated with training physicians.

Although the proposed regulations are greatly improved, Levin said they would still cost the Hospital an estimated $1.4 million in annual revenue.

Stanford has prepared comments on the proposal, but may have to request a further exception next year if the regulations are put into effect in their present form, he said.

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Mailed Thursday June 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911
CITY DESKS: Photos available on request if not included.

STANFORD—

It has been nearly two years since Tom Streithorst had a heart transplant at Stanford University Hospital, but aside from living in the Bay Area, he has made no real concessions in his strenuous lifestyle.

As of January this year he went back to work full-time as an NBC correspondent; he writes occasionally for several magazines; he reads voraciously; and he is currently in the process of overhauling a 24-foot sloop for a sailing trip to Mazatlan, Mexico, and perhaps eventually, around the world.

He also plans to write a book of memoirs on his career, which will include a segment on his operation and his journey back from what he describes as the "edge of death". A two-part film on his ordeal has been aired by NBC and is considered the first visual documentation of the entire procedure through the post-operative period.

Of course, there are the little things he has had to give up since the operation, like pizza and other junk foods, but as he says, "I'm essentially the same person. . .only more intensely so."

If there is any doubt, one need only visit Streithorst in his hospital room at Stanford, where he recently underwent treatment for an infection. Restless after eight days in bed, he granted an interview, while readying himself to go out on an assignment of his own.

Dressed in corduroy jeans, a light blue button-down shirt and tie loafers, he looked casually elegant. And despite the fact that he claims to be battling a weight problem—("My wife says she married Jack Palance and ended up with Orson Welles")—he is more stocky, than fat.

Only the purplish bruises on his legs and the IV (intravenous) machine, which pumps heavy doses of medicine into his body, attest to the occasional physical discomforts a new heart has caused.

"Prednisone and Imuran", says Streithorst, "are the two (drugs) that keep you alive, but they are also the ones that make your bones fragile and your skin bruise easily.

"If you kiss me, I bleed."

Like all heart transplant recipients, Streithorst must juggle a battery of drugs the rest of his life, because the body never stops rejecting the foreign heart tissue. Ironically, the same drugs which have brought this problem under control, leave patients susceptible to life-threatening diseases because they suppress the body's natural immunity.

Infections are not only common, they are now the leading cause of death among transplant recipients—a statistic which Streithorst treats with proper respect.

"I tend to come in here if something doesn't seem quite right," he says. "Having a weakened immunity systems means anything can go wrong very rapidly."

The precaution of living close to Stanford, he feels, has increased his odds for survival by at least 40 percent.The availability of quick, effective medical attention also has given him a psychological edge, although he is far too busy to brood about death.

"I'm not afraid of dying," he says. "I am afraid of sickness, of limitations. You have to take risks to be. . .to feel alive."

As a foreign correspondent for NBC for 15 years, Streithorst took many risks on the job, including three tours as a war correspondent in Vietnam. He also witnessed many times what he describes as quick, relatively painless, death. It is his repugnance to the other kind of death—slow and degenerative—that ultimately led him to Stanford University Hospital for help.

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To date, some 189 heart transplants have been performed at the hospital—more than anywhere else in the world. Each year, at least 400 patients are referred for transplantation, but only 60 are asked by the transplant team, to come out for further evaluation. Of these, 40 are eventually selected for treatment, but one-third of this number die before treatment can take place.

Without transplantation, all those chosen for the operation would die within a few months. With the operation, there is currently a 70 percent chance of survival the first year, and a 50 percent survival rate of five years.

Streithorst met the medical, as well as the more subtle, criteria of the transplant team with flying colors.

Not only was he considered a good candidate for survival, Dr. Norman E. Shumway, chairman of cardiovascular surgery, called him an "obvious winner"—someone who clearly wanted to do more with his life.

"I was the kind of guy who woke up after the operation and said, 'Oh my God, I'm alive,' now I have to get cracking and do all the things I want to do."

This meant, once Streithorst decided he wanted to return to work, he didn't wait around for NBC to ask him. Nor was he put off by a 1976 study in the *Journal of the American Medical Association* that indicated that some heart transplant patients had encountered hiring discrimination.

Instead, he proposed that NBC rehire him on a six-month trial basis, then if both parties were mutually satisfied, a standard three-year contract could be signed.

"I told them they had been very generous, which they had," he says, "and that they owed me nothing more. . .except the opportunity after 15 years to see if I could still do it."

Although the trial period ends on July 7 this year, NBC has already offered Streithorst a new contract. So it seems clear that he still can do it.

He is no longer a foreign correspondent since it would take him too far away from the hospital, but as a domestic correspondent, he likes to specialize in "eyebrow raisers". These are the kind of stories that combine significance and originality, he says.

It may well be that raising eyebrows is just part of his self-described "audacious" style.

From his hospital bed, he asks a startled nurse to unhook the IV so he can go get a sandwich. "Let your people go," he pleads.

When she won't, he simply walks out of the room with a big smile, wheeling the machine behind him.

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Mailed Wednesday June 11, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911

CITY DESK: Conference is by invitation only, but reporters are welcome.

STANFORD—

A three-day conference on "Nutritional Care of High-Risk Obstetrical Patients and High-Risk Infants" will be sponsored by Stanford University School of Medicine, department of pediatrics, on June 16 through 18 in the School's Fairchild Auditorium.

The purpose of the conference is to increase the knowledge and awareness of health care personnel in meeting the nutritional needs of both high-risk pregnant mothers and those of the immature and ill newborn infant.

An overview of these problems, entitled, "Nutritional Needs of the Pregnant Mother and Her Fetus" will be given by Dr. Norman Kretchmer, director, National Institute of Child Health and Human Development in Bethesda, Maryland. Formerly chairman of Stanford's department of pediatrics, Dr. Kretchmer established one of the first premature infants research centers in the country.

Dr. Philip Sunshine, professor of pediatrics and director of nurseries at Stanford, will be the program moderator.

Other topics covered in the three-day conference will include: "Human Milk Banking," "Diabetes in Pregnancy,""Immunological and Environmental Factors in Human Milk," "Toxemia of Pregnancy—A Nutritional Disorder" and "Physiology of Lactation."

The conference is funded by a grant from the Department of Health, Education and Welfare.

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Mailed Wednesday June 11, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

Stanford University is sending six medical students and 33 others interested in health care careers to England this summer to study the National Health Service there.

During the eight-week program, the students will reside in Cliveden House 40 miles from London and commute to their medical assignments in the community. Cliveden is leased by the university from the National Trust of England as an overseas campus.

"One of the most important aspects of this program ," says Dr. Count D. Gibson, Jr., the academic coordinator who will accompany the students abroad on June 18, " is that the students will see the National Health Service is not just for poor people.

"Where Cliveden is. . . is hardly a disadvantaged area!"

Dr. Gibson is chairman of the Department of Family, Community and Preventive Medicine. In 1975, he accompanied the first group of medical students from Stanford abroad on an experimental program.

While the program was successful, he says, it proved unwieldy because too many students were involved. So this time, only half the original number are going.

However, the selection process, says Gibson, was "agonizing."

"In the end, we chose the most mature and the most experienced."

Altogether, there were 131 applicants for the program, but only 39 slots. Those selected had to be at least college juniors and have work experience in a health care setting.

Once chosen, all those, except medical students, were required to take a course in the spring on the health care systems of Britain and the U.S., which Gibson teaches. Also, whenever possible, students were exposed to the American counterpart of the institutions they will be studying abroad.

"What's the purpose of all this," asks Gibson rhetorically. " All of these young people are committed to health care careers in the U.S. We hope this exposure will give them a clearer look at our own strengths and weaknesses."

Once abroad, the students will have a two-week orientation period before being sent out into the community to study the various components of the English health care system.

Some of these components include special hospitals where the mentally ill and chronically disabled are treated; acute general hospitals where the medical specialists practice; and district community physicians, responsible for health promotion and disease prevention.

Student assignments will actually be determined by St. Thomas Hospital Medical School in London, which collaborates with Stanford on the program.

Except for transportation costs, says Gibson, the cost of studying at Cliveden will be identical to the cost of room and board in one of Stanford's own dorms.

For their work, the students will receive 15 units of credit from Gibson's department.

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Mailed Tuesday June 10, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

The Division of Ophthalmology at Stanford University School of Medicine has received a grant of $12,500 by the Northern California Society for the Prevention of Blindness for purchase of a new camera used in the diagnosis and treatment of retinal disease.

The grant was made at the request of the I CARE Auxiliary of the Society, which directs a glaucoma screening program in various senior centers and retirement homes throughout the Peninsula.

The new equipment, called a Pomerantzeff equator plus camera, enables doctors for the first time to take a wide angle photograph of the entire retina at the back of the eye. Previously they had to piece together several shots to form a composite view of the retina.

"The new camera will enable us to improve diagnosis of a variety of retinal disorders, including tumors, retinal infections and diabetic retinopathy, a complication of diabetes that can lead to blindness," said Dr. A. Ralph Rosenthal, head of the ophthalmology division.

"We are also very grateful to the I CARE Auxiliary for their generous support of the summer student research fellowship in ophthalmology," he said.

Begun last year, the fellowship provides $1,500 each summer for five years to support research by a medical or premedical student in glaucoma or ocular complications of diabetes.

In addition, ophthamology residents participate in the Auxiliary's glaucoma screening program, and perform the examinations on a rotation basis during the academic year, Rosenthal said.

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Mailed Thursday June 5, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. Herbert L. Abrams, chairman of the department of radiology at Harvard Medical School, has been appointed visiting professor of radiology at the Stanford University School of Medicine for the academic year 1980-1981.

Abrams served as head of the division of diagnostic roentgenology at Stanford from 1961 to 1967, before assuming the post at Harvard.

A well known diagnostic radiologist and specialist in coronary angiography, Abrams recently published a study of the dramatic rise in the use and cost of radiologic procedures in the U.S.

The increase is related to a variety of factors, he reported, including undue dependence on radiologic rather than clinical follow-up, defensive medicine, and reimbursement policy.

Abrams received his M.D. from the State University of New York-Downstate Medical Center in 1946, and completed residencies in medicine at Montefiore Hospital and in radiology at Stanford University Hospital before joining the Stanford faculty as an instructor in radiology in 1951.

He served as acting executive of the Radiology Department in 1961, and was promoted to professor the following year.

The author of 150 scientific articles, Abrams is on the editorial boards of several medical journals, and has participated in numerous professional societies and organizations, including the American Association for the Advancement of Science, the American Heart Association, and the Institute of Medicine of the National Academy of Science.

In addition to his academic duties as Philip H. Cook Professor and Chairman of Radiology at Harvard, Abrams is radiologist-in-chief at Peter Brent Brigham Hospital and at the Sidney Farber Cancer Institute in Boston.

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STANFORD—

Dr. Julian Davidson has been promoted to professor of physiology at Stanford University School of Medicine.

The author of over 100 scientific publications and two books, Davidson is well known for his studies of the relationship between hormones, the brain and sexual behavior.

Recently he has turned his attention to the study of hormonal and behavioral factors in aging of humans.

A native of Ireland, Davidson received his Ph.D. in physiology at the University of California (Berkeley-San Francisco) in 1959. He was a postdoctoral fellow of the National Institutes of Health (NIH), and did research at Hebrew University in Jerusalem, Israel before joining the Stanford faculty in 1969.

He is a member of several professional organizations, including the Endocrine and Reproductive Biology Study Sections of the NIH. He received a Guggenheim Fellowship in 1970, and a special NIH fellowship to study at Oxford University, England, in 1970-1971.

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Mailed Tuesday, June 3, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

EDITORS: Photo of Mrs. Stiebel available if not included with story

STANFORD—

Alice Stiebel has made a unique gift to her parents, the gift of blood.

Recently, Mrs. Stiebel of 840 Talisman Drive, Palo Alto, learned that Stanford University Blood Bank gives credit each time blood is donated.

The Blood Bank does not charge a "replacement fee," but will pay for any such fees charged by other blood banks used by patients and their families and friends under its credit system.

Mrs. Stiebel plans to assign the credits she earns for giving blood at Stanford to her parents, Mr. and Mrs. Henry Bauling, also of Palo Alto.

Although they are now healthy, active people in their 70s, "this is a gift in reserve should they ever need it," she said.

The pint she gave for her parents was the first one Mrs. Stiebel had ever donated.

"I had a natural reluctance to part with my blood," she said, "but my aversion was overcome by my desire to help my parents in the future.

"I never had the motivation to give before," she added.

Mrs. Stiebel said she hadn't yet told her parents about the gift. "I'm not doing it for their reaction. I'm doing it for me, as a way I can take care of them."

Ellen Fox, blood donor recruiter at the Blood Bank, said that Mrs. Stiebel's gift is one of many regular donations that help maintain an adequate blood supply for the Stanford Hospital.

Currently, the Hospital uses 100 pints of blood every day.

Further information regarding blood credit policies can be obtained by calling the Stanford University Blood Bank, 497-7831.

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Mailed Wednesday, June 4, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

EDITORS: Photo of volunteer available if not included with story

STANFORD—

Ten Stanford undergraduates are participating in a unique program this spring as volunteers in the cardiovascular intensive care unit (ICU) at the University Hospital.

The program is designed to help nurses care for critically ill patients with heart disease, while giving the students some "hands on" experience in clinical medicine, according to program director Dr. William New.

New, an assistant professor of anesthesia at the Medical School, conceived the program as a means of helping the undergraduate students he advises decide whether or not to pursue a career in medicine.

Many students are interested in medicine, he noted, but are nervous about taking the premedical curriculum without some sort of "reality testing."

"You can't learn anything about medicine in the undergraduate biology courses," said Eugene Toy, a sophomore electrical engineering major who has been volunteering on the ICU for the past six weeks. "This experience has really convinced me that I want to become a doctor."

Toy plans a combined career in medicine and electrical engineering. Other student volunteers are majoring in chemical engineering, biology, and human biology, although only three of the 10 have New as their advisor.

In the ICU, students can observe the care of patients just back from open heart surgery, and perform some nursing assistant tasks, such as helping nurses turn patients in bed or attending patients as they walk around the unit.

They do not perform direct patient care which requires professional training, and are under constant supervision by the nurses or nursing assistant.

In addition, all of the students joined the Hospital Auxiliary, which provides insurance coverage to volunteers who work with patients.

"They are probably the most knowledge-thirsty volunteers the Hospital's ever had," said program director New.

"It is shocking at first to see really sick patients," said Taylor Chung, a junior who enlisted other students in the program and organized their schedules so there is volunteer coverage five evenings a week.

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"Some of us had butterflies in our stomachs," he said, especially when confronted with patients just back from open heart surgery who have the zipper-like scar from neck to abdomen and drainage tubes in their chests.

But the queasiness disappeared as they became involved with the nursing and medical staff.

"They take a big load off my shoulders," said John Marcello, the unit's only nursing assistant in the evenings. "I work with 25 nurses in what can be a very demanding job."

"The students have been really willing to learn and to help out," adds Libby Travers, R.N. "They're the kind of people you want to see as doctors."

New says he has received no negative repercussions from the program. The doctors and nurses like to have the students around, and, of course, the patients get more attention than they would otherwise.

However, it is unclear how much legal liability the volunteers carry, said Kathy Rawlins, R.N., if, for example, they help walk a patient and the patient falls.

That question should be resolved when the program is evaluated this summer, she added.

Although the ICU will lose its student volunteers when the school year ends in June, New said he hoped it would be established on a more permanent basis in the Fall.

There certainly is no lack of interest, he added. "I must have 20 students who want into it, far more than I advise."

New said that student volunteers seeking experience in medicine could help nurses in other areas of the hospital, such as the intensive care nursery and operating rooms.

"Here is a tremendous reservoir of interest and abilities," he said. "The real problem is finding some place to capture that energy and use it."

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Mailed Monday, June 2, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Negotiations for a new contract between Stanford University Hospital and CRONA (the Committee for Recognition of Nursing Achievements) began Tuesday, May 20.

CRONA is the professional organization which represents over 1,000 of the Hospital's non-supervisory staff registered nurses.

The current agreement will expire on June 30.

"We hope to reach an agreement before the deadline," said Joanna Nelson, R.N., chief negotiator for CRONA.

Other members of the CRONA team are registered nurses Hedy Dumpel, Patricia Tharp, Mary Durando, Melba Simpson, and Alice Serbein.

The Hospital is represented by Priscilla Wheeler, chief negotiator from the University Counsel's Office; Don Thomas, director of Personnel Services; Carol Ann Bergman, manager of labor relations; Nancy Madsen, R.N., associate director of Nursing Service; and Joyce Miller, R.N., and Jeanne DeJoseph, C.N.M., assistant directors of Nursing Service.

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Mailed Monday, June 2, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulous (415) 497-6911

STANFORD—

Crowded rooms, the rattle of carts, noisy visitors and the midnight pill or shot.

Patients are still listing traditional grievances among the chief irritants of hospitalization, according to a survey at the Stanford University Hospital.

But, on the plus side, physicians and nurses continue to rate surprisingly high with the patients they take care of, despite much recent criticism of the health care establishment, according to the survey.

The highly positive attitude toward the quality of medical and nursing care was one of the chief findings of the patient and community attitudes survey program instituted by the hospital.

Until the poll was initiated by the 668-bed university hospital, administrators, doctors and nurses could only guess at how patients really felt about the care they were getting, food, their hospital environment, their room or ward, financial matters and other aspects of being sick and under treatment in a large health care and research institution.

The survey questionaires and polling techniques which included not only patients and the community at large, but the hospital's entire medical staff were put together by Decision Research Institute.

According to Hospital Executive Director Dr. Peter Levin, the survey was commissioned in order to evaluate how the community, patients, and the medical staff perceived the effectiveness of the hospital's operation.

"It is an opening step in our efforts to improve services to patients and the community," Levin said.

One survey—May 1979—of 3,700 former patients, with results based on 959 usable questionaires shows that patients were generally more satisfied with the quality of their care and with the attitudes of their doctors and nurses than was thought to be the case.

For example, when asked to rate nursing care as "poor," "fair," "good," "very good," or "excellent," 75% of the responding patients evaluated nursing as "very good to excellent," with 13% "good" and 5% only "fair."

When the patients were asked if nursing procedures were explained before being carried out, if lights or call bells were answered promptly, and if requests were promptly filled, about 4 in 10 responded that this was always the case, while an additional 30% noted frequent occurence.

"Physician care was generally highly rated," the survey report noted. Better than 8 in 10 (86%) of the patients considered the treatment and attitude of their personal physician to be "very good to excellent."

Interns and residents received only slightly lower marks, with 78% of the patients evaluating them as "very good to excellent."

This finding of high acceptance of interns and residents by the patients is significant, Levin said, since Stanford University Hospital is a teaching institution with many of them on the floors each day to gain clinical experience.

Stanford serves both as a community and a teaching hospital, with community and faculty physicians on the staff. The differing objectives of the two groups have often led to town-gown friction. Predictably, the views of the two groups differed in some respects.

Seventy percent of the faculty physicians said their patients regarded the hospital as "above average to superior" versus 44% of the community doctors who shared this opinion. Community physician ratings were clustered more at the lower end (24% "average," 14% "below average," and 3% "inferior."

Community physicians (25%) said town-gown conflicts were a major problem, and 11% of both community and faculty doctors were critical of past administrative leadership.

However, both community and faculty physicians (53%) agreed that the quality of medical care is high. It is for the most part, the support services, such as medical records (file room and transcription), administration, cafeteria, emergency department, and operating room facilities among others, that were considered average.

Stanford's reputation, quality of medical care and medical staff, and advanced technology are viewed by physicians, patients, and the community as the hospital's strongest points.

Community, former patients, and physicians cited impersonal care in some cases as the most common weak point.

Costs also came under criticism. Four in 10 (43%) of the patients found the cost of their care to be higher than they had expected, and 23% said the costs were excessive for the quality of services provided.

Levin sees use of the information gathered not only for making immediate changes as necessary, but also for long range planning, to incorporate the patient's and the physician's viewpoint as the hospital changes and develops.

Already, he points out, the need for better relationships with the hospital's many constituencies led to the appointment of a community relations director, followed by development of a patient relations program as a next step. There have been changes in the food service management, and in the organization of the admitting department.

And a new publication was started to improve communication with physicians.

"The physical facilities of the hospital give rise to much dissatisfaction on the part of physicians and patients," Levin said.

"One major action in this area has been the development of a multi-million-dollar modernization plan to correct deficiencies, and add space and operating rooms. Also renovation of patient rooms is being considered, including provision for more private rooms which, according to the survey, patients want.

The survey included 807 physicians on the staff who were mailed questionaires in February 1979. The response rate was 65.9%. Face-to-face interviews with a random sample of 136 physicians on the staff were also conducted.

In addition, 800 residents from the hospital's primary and secondary service areas (San Mateo to San Jose) were contacted in telephone interviews.

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Mailed Thursday, July 31, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Stanford University Hospital has received two-year accreditation from the Joint Commission on Accreditation of Hospitals (JCAH) and California Medical Association (CMA) consolidated survey, according to Dr. Peter Levin, Hospital executive director.

Two years is the maximum period of accreditation granted by JCAH.

The survey team visited the Hospital March 17-19, inspecting many aspects of patient care, documentation of medical care, physical plant and facilities, safety and space, management and administrative operations, medical staff organization and nursing service, and laboratory procedures.

"We are very pleased," Levin said. "What was obvious from the survey is that the Hospital is operating at a high level of practice, and the quality of our operations came through."

The JCAH report to the Hospital listed a number of recommendations on areas to be improved prior to the next survey. Many of the technical recommendations are already being put into effect, Levin noted.

One recommendation suggests that the two separate radiology departments be combined to avoid duplication of services. Presently one department serves community physicians and another serves university faculty.

This recommendation is under consideration, Levin said.

California State Health Department representatives also participated in the survey for licensing purposes.

The purpose of the survey is to help hospitals maintain highest quality health care, according to the JCAH.

The JCAH is a private, nonprofit organization governed by the American College of Surgeons, the American College of Physicians, the American Dental Association, the American Hospital Association, and the American Medical Association.

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Mailed Tuesday, July 29, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Researchers at Stanford University School of Medicine have succeeded for the first time in growing human hybridomas, artificially created cells that produce pure or "monoclonal" antibodies.

Antibodies are highly specific molecules that often form the body's first line of defense against viruses, bacteria, and other foreign invaders.

Hybridoma technology at present produces mouse antibodies. These, according to researchers, are not the first choice for diagnosis and treatment because of the body's natural reaction against foreign proteins.

Therefore, the development of pure antibodies from human cells is considered to have far-reaching implications both as a powerful tool for studying human disease, and as a method for rapid diagnosis of virus and bacterial infections, and detection of cancer.

A long-range goal of researchers in the field is to use monoclonal antibodies for therapy as vaccine replacements and in the treatment of diseases ranging from hepatitis to cancer.

The method for making human monoclonal antibodies was developed by Dr. Lennart Olsson, a Danish Medical Research Council Fellow now at Stanford, and Dr. Henry S. Kaplan, D'Ambrogio Professor of Radiology and director of the Cancer Biology Laboratory.

Kaplan reported on the research last week at the International Congress of Immunology in Paris, France.

"In principle, this method should permit generation of human monoclonal antibodies against a broad spectrum of predefined antigens," Kaplan said of the work which was sponsored by grants from the National Cancer Institute.

Antigens are protein-linked substances that stimulate the body to produce antibodies as diseases do.

Olsson and Kaplan produced the human antibody molecules using a human myeloma cell line (bone marrow cancer cells) developed by Dr. Kenneth Nilsson of the Wallenberg Laboratory at the University of Uppsala, Sweden.

The key to their success, however, is that they primed the human cells chemically to select a mutant cell line that propagates in the test tube more readily.

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Next the researchers fused the mutant cells with the uninvolved spleen cells of patients with Hodgkin's disease who had undergone splenectomies (removal of the spleens) at Stanford University Hospital.

At least two weeks prior to surgery, such patients are routinely submitted to immunologic tests, and they are sensitized with a chemical 2-dinitrochlorobenzene (DNCB).

As a consequence their spleen cells produce antibody to DNCB. The hybridoma or hydrid cell so formed by the fusion process has some of the features of the spleen cells (producing antibody to DNCB) and some of the features of the primed myeloma cells (rapid and continuous growth).

Kaplan cautioned, however, against premature optimism about the technique.

"The only antigen used in the present study was DNCB," he said. "The ultimate importance of this method will depend on the spectrum of antigens against which human monoclonal antibodies can be produced."

Experience with mouse hybridoma techniques have indicated the antibody spectrum to be considerable, Kaplan said, but this technique is also facilitated by optimal immunization procedures and unlimited supply of mouse spleen cells.

More work is necessary to determine if human monoclonal antibodies to a broad spectrum of antigens can be produced in the test tube, he added.

Mouse monoclonal antibodies were first produced in 1975 by Dr. Cesar Milstein of the Medical Research Council in Cambridge, England, and his former colleague, Dr. Georges Kohler, now in Basel, Switzerland.

Their invention has led to development of an important biotechnology industry. Mouse monoclonal antibodies are sold for research only, including certain limited clinical trials.

According to Niels J. Reimers, director of the Office of Technology Licensing at Stanford, steps are being taken to make the human mutant cell line developed by Olsson and Kaplan available to other researchers through the Salk Institute in La Jolla.

In addition, Stanford will make arrangements to make the cell line available to commercial companies interested in the process.

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Mailed Monday, July 28, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Stanford University Hospital's Disaster Preparedness Committee wants all Hospital employees to "think disaster" Tuesday, July 29.

At 10 a.m., a disaster drill announcement will be broadcast over the telepage system, all departments will activate their disaster plans, and a carefully orchestrated drill will test the Hospital's response to a make-believe calamity.

The disaster scenario involves the crash of a 727 commercial airliner in the Palo Alto baylands, shortly after takeoff from the San Jose Airport. When the pilot attempts a water landing, the fuselage breaks open, and many people are injured. In addition, a fire in the forward compartment of the plane causes several burn casualties.

This type of scenario provides "patients" with multiple injuries, according to Associate Administrator Don Utt. About 30 moulaged volunteers (with makeup applied to simulate real injuries) will move through the patient care system. Volunteers are from the Palo Alto Boy Scouts, the San Mateo County Explorer Scouts and the Stanford Medical Center Auxiliary.

Paramedics from Palo Alto will assist in transportation, along with the St. Clair Ambulance Service. Two Coast Guard helicopters will also participate in the drill, to exercise procedures for transfer of patients to the Hospital from the helipad on Welch Road.

One major goal of the drill is to orient new house staff physicians to the Hospital disaster plan, according to Dr. Jan Ehrenwerth, of the Disaster Preparedness Committee, who is coordinating the drill.

But the Committee also hopes to stimulate broader interest in disaster preparation.

The probability of a major Bay Area temblor has been set at 50 percent during the next ten years by several earthquake prediction specialists.

Because of the catastrophic effect this could have on the community, the Committee has set another drill next February to specifically test the Hospital's ability to respond to a major earthquake.

In addition to exercising the Hospital's internal response, the February drill will evaluate evacuation readiness and procedures for moving patients to University and community resources such as Cowell Student Health Center, the Surgicenter, and a 200-bed packaged field hospital owned by Santa Clara County and stored at the University.

The Hospital conducts at least two disaster drills annually.

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Mailed Thursday, July 24, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Irene Liong (415 497-6911

STANFORD—

Dr. Frederick A. Fuhrman, professor of physiology at Stanford University School of Medicine will become professor emeritus, effective Janaury 1, 1981.

Fuhrman, who has been on the medical school faculty since 1941, studied in his early work the effects of temperature on biological processes.

For the last 15 years he has worked with biologically active natural products from animals, emphasizing marine forms. Early in this research with Dr. Harry Mosher of the Department of Chemistry, he discovered that the California newt contains tetrodotoxin, an extremely toxic substance previously known only in the Japanese pufferfish.

Tetrodotoxin, a non-protein toxin is easier to handle than a protein toxin. It is widely used in research and can be modified to treat diseases, he said. This toxin is 60 times more powerful than strychnine or curare, and even a tiny amount can kill a man.

Tetrodotoxin is rivaled in toxicity only by kokoi venom found in certain south american frogs, saxitotoxin found in certain clams and mussels, and palytoxin from a marine invertebrate animal.

According to Fuhrman, "just because a compound is toxic, one need not assume that it is not useful. Different dosage levels and modification of the molecule can often make a very useful drug from the original poison."

Fuhrman is currently studying shell-less marine snails related to the common garden slug. He and his wife Geraldine, a research associate, are trying to isolate pure chemical compounds in these and related animals to find their effects.

One compound which has been isolated from the marine snail is called doridosine. A new hypotensive drug, doridosine reduces the blood pressure and heart rate. So far it has only been tested on guinea pigs and mice, with the animals recovering completely after being injected with the compound.

Fuhrman, who believes that "the interaction between biology and medicine is important," was associated with Hopkins Marine Station at Pacific Grove, California for seven years. During his stay he continued his research with marine animals.

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As director of the Max C. Fleishmann laboratories at Stanford for 10 years, Fuhrman said the role of the labs were to "provide facilities and materials to students for study and individual research." The concept was to provide an area where students could take a group of classes from chemistry to cell biology without leaving the labs.

Under these conditions the professors would go to the students so that the students could study more effectively. Today, because of a lack of student interest, the labs are operating on a smaller scale.

Born in Coquille, Oregon, Fuhrman received the B.S. and M.S. from Oregon State University in 1937 and 1939, and the Ph.D from Stanford in 1943.

His many honors include a Guggenheim Fellowship, during which he worked in Copenhagen, a senior postdoctoral fellowship from the National Science Foundation and a fellowship from the Commonwealth Fund.

He is a member of the American Physiological Society, Society of General Physiologists, Society for Pharmacology and Experimental Therapeutics, and is a fellow of the American Association for the Advancement of Science.

A prolific author, Fuhrman has contributed articles to the *American Journal of Physiology, Science*, the *Journal of Pharmacology and Experimental Therapeutics* and the *Journal of General Physiology*.He has also written for the *Encyclopedia Britannica* and *Scientific American*.

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Mailed Thursday, July 24, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

A two-day conference on the use of computers and applications of "artificial intelligence" in medicine will be held August 17 through 18 at the Stanford University School of Medicine.

Co-sponsored by the Division of Research Resources of the National Institutes of Health, the conference will begin at 8:15 a.m. in Fairchild Auditorium.

Among topics will be an overview of the uses of artificial intelligence in diagnosis and treatment, and SUMEX-AIM, the nationwide, federally-sponsored computer network now providing much of the impetus for this work.

SUMEX-AIM stands for Stanford University Medical Experimental Computer-Artificial Intelligence in Medicine. It was co-founded by Dr. Joshua Lederberg, now president of Rockefeller University in New York, and Professor Edward Feigenbaum, chairman of Computer Science at Stanford.

Artificial intelligence refers to the emerging capabilities of computers to reason symbolically with the use of specialized knowledge.

Many of the computer programs that now use artificial intelligence for biomedical research and decision making have evolved within the SUMEX-AIM computing system, according to Edward H. Shortliffe, program chairman.

He said the conference is aimed at physicians to familiarize them with applications of artificial intelligence techniques, and the future promise of this field in medicine and biomedical research.

Twenty years ago, explorations in artificial intelligence were limited to mathematical exercises and games of chess.

In the mid-1960's, researchers began to apply the computer's "brain" to solving tough problems in chemistry and biology.

The advantage of a large, time-shared system like SUMEX is that it permits rapid interactions and cooperation between many research groups in fields ranging from organic chemistry to medical diagnosis.

One example of artificial intelligence research which will be reported at the meeting is INTERNIST. Developed by Dr. Jack Myers and computer scientist Harry Pople of the University of Pittsburgh, it is a program that mimics the reasoning used by physicians to diagnose disease.

When perfected, this system will be able to assist physicians seeking advice on difficult medical problems as well as paramedics serving in remote or underserved areas.

Another example is MYCIN, the work of Dr. Shortliffe and Dr. Bruce Buchanan. In collaboration with Drs. Stanley Cohen and Stanton Axline, they have developed a program to help physicians diagnose infectious disease and prescribe treatment.

A third application of artificial intelligence research will be discussed by Dr. James Fries of Stanford's Department of Medicine and Dr. Robert Blum of Clinical pharmacology. It is the use of computerized data banks to study chronic diseases such as cancer, heart disease and stroke, the various treatments, laboratory tests, and the complex relationships among them.

Other talks will focus on "human engineering" issues on how computers can be made more attractive and accessible to physicians.

The computers in medicine program is held in conjunction with the First Annual National Conference on Artificial Intelligence which will be held on the Stanford campus August 18 through 21 immediately following the medical meeting.

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Mailed Wednesday, July 23, 1980

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT:

Spyros Andreopoulos, Computers in medicine conference, Stanford, (415) 497-6911

Joel Shurkin, National Conference on Artificial Intelligence, (415) 497-2558

James Augustine, National Institutes of Health, Division of Research Resources, (301) 496-5545

TO: SCIENCE WRITERS AND CITY DESKS

Stanford University will play host to two major conferences on Artificial Intelligence in August.

The first of these is a two-day meeting on the use of computers and applications of artificial intelligence in medicine scheduled at the Stanford University School of Medicine August 17 through 18.

The meeting, co-sponsored by the Division of Research Resources of the National Institutes of Health, will provide state-of-the art reports on the uses of artificial intelligence in medicine, and the role of SUMEX-AIM (Stanford University Medical Experimental Computer-Artificial Intelligence in Medicine). This nationwide federally funded facility is providing much of the impetus for this work.

The second meeting is the first annual National Conference on Artificial Intelligence (AAAI) August 18 through 21. AAAI is a new scientific society composed of experts in the field.

Topics will range from robotics to communicating with computers through natural language.

A trade fair demonstrating the latest "hardware" and "software" available will be held in conjunction with the conference (see accompanying stories).

You are cordially invited to attend the meetings. If you plan to come, please fill out the form below and the program, including the NIH publication, "Seeds of Artifical Intelligence," published by the Division of Research Resources will be sent to you. Return to:

NEWS BUREAU, STANFORD UNIVERSITY MEDICAL CENTER
Room TC 135
Stanford, CA 94305

_____ I plan to attend Computers in Medicine Conference August 17 and 18.

_____ I plan to attend First Annual National Conference on Artificial Intelligence, August 18-21.

_____ Send me a copy of "Seeds of Artificial Intelligence," and program.

Name_____ Telephone_____

Address _____

Organization _____

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Roberta Joyce Navickis has been appointed science writer in the Stanford University Medical Center News Bureau. Her appointment is effective Aug. 4.

She will succeed Bill Snyder who is leaving Stanford to become reporter for the *Nashville* (Tenn.) *Banner.*

Navickis, 33, is a graduate of the University of Illinois, with a Ph.D. in reproductive endocrinology. For the past two years she has been a postdoctoral research fellow in the Department of Reproductive Medicine, University of California-San Diego.

Combining a background in science and journalism, Navickis has worked for *Science News* in Washington; the *San Francisco Chronicle* as an intern of the Council for the Advancement of Science Writing, and has published articles geared for the layman in many other newspapers and magazines.

In 1976 she was a mass media intern of the American Association for the Advancement of Science in Washington.

Navickis has conducted research in hormones and cancer, ovarian endocrinology, interactions of hormones and vitamins, and calcium transport.

And she has taught courses in cell biology and genetics.

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Mailed Friday July 18, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Thomas Raffin has been appointed assistant chief of medicine for clinical programs, a new post in the department of medicine at Stanford University School of Medicine.

The new position was created "to coordinate the department's increased commitment to clinical medicine and teaching," said Dr. Kenneth Melmon, in announcing Raffin's appointment.

"The quality of research, teaching and patient care in the department of medicine has always been outstanding," Raffin noted. "This new position will ensure that clinical programs remain innovative and strong."

Among Raffin's responsibilities will be close involvement with the department of medicine's house staff training program, assisting in the department's medical student education activities, and planning and coordinating new clinical programs in the department of medicine, Melmon said.

For example, the department is creating closer ties with physicians in the community through more effective consultation and referral service, Raffin said.

Another aspect of the strengthening relationship between Medical School faculty and community physicians is the department's steering committee, composed of both faculty and community physicians. The steering committee will assist in giving direction to the assistant chief of medicine, Raffin noted.

Raffin, assistant professor of medicine in the division of respiratory medicine, is also associate director of the intensive care units and medical director of the Hospital's department of respiratory therapy. He graduated from Stanford Medical School and did his house staff training at the Peter Bent Brigham Hospital in Boston. He joined the faculty following a three year fellowship in respiratory medicine at Stanford.

He is the 1980 recipient of the Henry J. Kaiser Foundation award for excellence in clinical teaching, presented by the graduatng class of medical students.

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Mailed Monday, July 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Stanford University researchers have converted a technique for studying chemical compounds into a precise "meter" of the metabolic status, or healthiness, of organs such as the kidney and brain.

For the first time, mild, reversible physiological changes have been measured in animals without invading the tissues, by nuclear magnetic resonance (NMR), a spectroscopic method used in chemistry to identify compounds and study molecular structure, said Dr. Oleg Jardetzky, director of the Stanford Magnetic Resonance Laboratory.

Aided by grants by the National Institutes of Health—Division of Research Resources and by the National Science Foundation, the experiments so far have been confined to animals, but "there is no question in my mind that the technique is feasible in humans," he said.

NMR could be used to study conditions in which brain damage is suspected, as in cases of near drowning or asphyxiation during delivery, he said. In addition, the technique could be used to determine the healthiness of donated organs, such as kidneys or hearts, before they are transplanted.

"Here is a chemical handle to assess the metabolic competence of an organ, or an animal, or a patient," said Jardetzky, also a professor of pharmacology at Stanford Medical School.

Other methods for monitoring metabolism rely on blood tests, which cannot tell what is happening inside the cells of certain organs, or other tests which damage the measured tissue.

Jardetzky reported on the Stanford experiments Monday, July 14, at a symposium on noninvasive monitoring methods at the 28th International Congress of Physiology in Budapest, Hungary.

The work was conducted by Jardetzky and his colleagues, David Wemmer and Norma Wade-Jardetzky, in collaboration with Dr. Eugene Robin and Dr. Michael Weiner of the Department of Medicine at Stanford.

NMR spectroscopy measures radiation absorbed by the nuclei, or central cores, of various atoms when the elements are placed in a magnetic field. Chemical compounds can be identified by the pattern of lines of their absorption spectra.

The technique has been used by chemists since the 1950s. However, "you can observe nuclear resonance in cells, organs, tissues, animals, and even humans, just as you can in chemical compounds," said Jardetzky, who first used NMR to take physiological measurements of sodium levels in blood in 1956.

Similarly, he added, by taking a reading of the phosphate content of tissues with NMR, scientists can assess their metabolic competence.

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This was first done in 1974 by Professor G.K. Radda and his colleagues at Oxford University.

Phosphate, when bound to other molecules is the way the body stores energy in chemical form. Phosphate bound to one type of molecule, adenosine, is an immediately accessible form of energy, "the checking account of the body's energy," Jardetzky said. When phosphate is bound to other molecules, it forms an energy reservoir, or "savings account."

Metabolism actually can be defined in banking terms, as the balance between storing and using energy to perform the various tasks necessary for life.

Jardetzky and Dr. Michael Weiner, now at the University of California School of Medicine in San Francisco, and their colleagues, demonstrated that this energy balance can be measured accurately in a single organ, the kidney, in rats by taking NMR readings of the organ's phosphate content.

In an experiment with freshwater turtles, conducted with Dr. Eugene Robin, acting chairman of physiology at Stanford, the scientists followed changes in brain metabolism as the animals dived, and became deprived of oxygen.

The second experiment has particular application to patients, such as near drowning victims, who may have suffered brain damage due to oxygen deprivation.

Currently, physicians are limited in making a diagnosis of brain damage to performing blood chemistry tests and observing the patient.

"If a patient's blood is depleted of oxygen, you know something is wrong," Jardetzky said. "But you don't really have any direct access at all to what is happening chemically inside the brain."

NMR spectroscopy provides a totally noninvasive method of diagnosing and monitoring not only oxygen depletion but other metabolic disorders as well, he said.

Jardetzky said although it is possible to do NMR spectroscopy in patients, "it is not feasible with the present equipment."

The advent of clinical studies will depend on approval by human subject committees, as well as provision of funding to build the necessary equipment, he said.

However, "I would not be surprised if in the next 20 or 30 years we had the instruments capable of creating a metabolic picture of the body," he added, similar to the way radiography forms pictures of the skeleton, and computerized tomographic (CT) scanners create images of the body's soft tissues.

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Mailed Monday, July 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911

Editors: Photos of Mrs. Cybulski available if not included with story.

STANFORD—

The day she was discharged from Stanford University Hospital the sign in the window finally came down.

It read, "Please bring me a pizza."

Its light-hearted appeal contrasted sharply with the serious medical problems that kept Carol Cybulski bedridden for more than a year in one of the longest stays in the hospital's history.

But the sign became a symbol of hope for family and friends who waited out her slow and painful recovery.

The 32-year-old Paso Robles woman, who was admitted to Stanford May 3, 1979 and not released until June 23 this year, had developed severe abdominal complications following a hysterectomy in a community hospital.

There were so many tears in her intestinal wall that 20 operations were needed to repair the damage. She was unable to eat anything until two weeks before her discharge and the pain from all the surgery was so enormous, she became temporarily addicted to narcotics.

And last December, she developed blood poisoning and for four months lay in intensive care, near death.

That she didn't die is due, in part, to an immeasurable quality that each patient has—the will to live. But what can be measured and played an indisputable role in her recovery was the support of her family and the medical personnel who took care of her.

"They're an extremely close family," says Claire Mailhot, clinical nursing coordinator on West 2B where Mrs. Cybulski lived most of the past year.

"Their support and the constant care of the nurses on our staff definitely helped pull her through all if this."

On the day of her release, Mrs. Cybulski lay quietly on her bed and joked about all the offers of pizza she has had. Even now, she couldn't eat one, since she is still on a soft food diet.

And sometime next year, according to Mailhot, she will have to come back to the hospital for the final repair work on her intestinal wall.

But none of this seemed to matter.

Surrounded by her family and the nursing staff, who streamed in and out her room with warm wishes, she looked happy and relieved to be getting out.

Her parents, Gene and Helen Gibbs were there, as they has been every day of her illness. So was her husband, Mike who called every day and commuted 180 miles from Paso Robles on the weekends with the couple's children, Michael, 8 and Stephanie, 14.

The enormous strain the family has been under is apparent in Gibbs' rather terse description of his grandson:

"He's eight going on 25. . . If they had let him, he would have helped with the surgery."

Yet the mood of the day was perhaps captured best by the words on a cake the nursing staff had made for Mrs. Cybulski's farewell luncheon.

In bright green lettering, it read, "We've come a long way, Baby."

And indeed, they had.

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Mailed Wednesday July 9, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos or Bill Snyder, (415) 497-6911

STANFORD—

Registered nurses at Stanford University Hospital, represented by the Committee for the Recognition of Nursing Achievements (CRONA), have ratified a new 20-month contract with the Hospital, it was announced Tuesday, July 8.

Principal provisions of the contract include a 12% wage increase, retroactive to June 22, a 3% increase on March 1, 1981, and a 9% increase on July 1, 1981.

Additional provisions of the new contract include an increase in the night shift differential from 12 to 14%, and improvements in educational and retirement benefits.

According to Priscilla Wheeler, chief negotiator for the Hospital, the contract was shortened from the previous length of 24 months to 20 months, to improve the Hospital's ability to compete in recruiting nurses with other area hospitals, whose contracts have had expiration dates earlier than Stanford's.

Dr. Peter Levin, executive director of the Hospital, said the negotiations, which began May 20, were conducted "with a mutual sense of cooperation."

Negotiating teams reached tentative terms late Sunday evening, July 6, after a day-long meeting called by Ruth Carpenter, a federal mediator.

Nurses ratified the contract by a two to one margin during an election held Monday and Tuesday. CRONA represents more than 1,000 of the Hospital's non-supervisory staff nurses.

Earlier, the nurses had rejected by a narrow margin a tentative agreement worked out by the Hospital and CRONA with the assistance of the federal mediator.

Originally, CRONA, whose contract expired June 30, had notified the Hospital of its intention to strike July 4 if an agreement was not reached by that time. However, the deadline was later extended to July 8, then rescinded, and a new notice of intent to strike July 14 was given.

Meanwhile, the Hospital took steps to reduce its census in anticipation of a possible strike, from 576 patients on June 26 to under 250 as of July 5. The number was expected to drop to 100 if a strike could not be averted.

Over the Fourth of July weekend and through Tuesday, emergencies and elective patients were admitted only if they could be out of the Hospital before the strike deadline.

Not surprisingly, "the Hospital has a backlog of admissions," said Hospital Administrator Gary Mecklenburg today. However, "we will be working closely with the medical staff in order to admit their patients as soon as possible."

Members of the CRONA negotiating team included Joanna Nelson, R.N., chief negotiator, and registered nurses Hedy Dumpel, Patricia Tharp, Mary Durando, Melba Simpson, and Alice Serbein.

The Hospital was represented by Priscilla Wheeler, chief negotiator from the University Counsel's Office; Don Thomas, director of Personnel Services; Carol Ann Bergman, manager of labor relations; Nancy Madsen, R.N., associate director of Nursing Service; and Joyce Miller, R.N., and Jeanne DeJoseph, C.N.M., assistant directors of Nursing Service.

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Mailed Wednesday, July 9, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Stanford University School of Medicine and the Speech and Language Clinic will part ways August 31 after 20 years of operating a state-wide program for patients with communications disorders.

The clinic, however, will be reorganized as a private professional corporation and will continue independently to serve the patients of Stanford, the Palo Alto Medical Clinic, Children's Hospital at Stanford and a number of extended care facilities in northern California.

The new clinic will be directed by Dr. Kathryn R. Beadle and Donna Dagenais who have developed the program in its present form over the past 10 years.

The clinic, now situated at 600 Willow Road, will move to a new Palo Alto location to be announced later, said Dr. Beadle. It will also have a new name, "Speech and Language Clinic of the Midpeninsula."

The reason for the split was given in identical statements by Dr. Beadle and Dr. John A. Collins, professor and chairman of the Department of Surgery, to whom the clinic has been administratively responsible.

"It is simply a matter of economics," they both agreed.

In 1970 rising costs forced the Medical School to abandon its academic program of training specialists in speech and language disorders. The speech clinic, however, was retained to serve hospital and community needs. It was hoped it could become self-supporting.

While the clinic today is one of the busiest at Stanford, it cannot compete effectively as part of the academic medical center with its associated costs.

"The clinic would be more flexible and efficient if it were separated from the School," Collins said.

He stressed, however, that the clinic's relationship with the School of Medicine would continue as a major referral source for this type of service.

Dr. Beadle added the services which the clinic offers are desperately needed and are a part of total patient care. She plans to further increase the responsiveness to community needs.

The clinic sees patients from infancy to old age. Among them are stroke patients, victims of head and neck cancer, people with voice and fluency disorders, children with birth defects and others with a variety of developmental speech and language disorders. During recent years educational testing and some tutorial help has been offered for learning-disabled students.

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Stanford opened a Speech Clinic on the campus as part of the Department of Speech and Drama in 1932.Shortly thereafter, the first courses in speech correction were taught and programs in audiology and the speech sciences were added.

The activities gradually expanded into a Division of Speech Pathology and Audiology as part of the School of Medicine when the latter was moved from San Francisco to the main campus in 1959.In the late sixties the division was abolished and the programs were split—hearing sciences under the Division of Otolaryngology, and Speech and Language under the Department of Surgery.

"Even though the clinic will be independent, the strong affiliations we hope to develop will enable us to provide an excellent caliber of diagnostic and treatment programs in all age groups,"said Dr. Beadle.

She will retain her clinical faculty appointment in the Medical School.In this position she will participate in teaching physicians, nurses and staff in the hospital. Continuing education programs for speech pathologists, paraprofessional groups and patient families will also be offered at the new clinic, she said.

While the program signals the end of an era at Stanford, Dr. Beadle said she is confident the new Speech and Language Clinic of the Midpeninsula will continue to provide even better services to a far greater number of patients.

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Mailed Wednesday, July 9, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Dr. Henry S. Kaplan of Stanford University School of Medicine has been awarded the Meyer and Anna Prentis Award for outstanding contributions to cancer research by the Michigan Cancer Foundation (MCF).

Dr. Kaplan, D'Ambrogio Professor of Radiology and director of the Stanford Cancer Biology Research Laboratory, received a medal and $1,000 on June 12, during an international carcinogenesis workshop in Detroit.

The workshop, on environmental agents which may cause cancer, was sponsored by the MCF and the National Cancer Institute.

Dr. Kaplan received the award in recognition of his pioneering work on the treatment of Hodgkin's disease and other cancers, and for his "important discoveries in the fields of leukemia and lymphoma research," and "equally significant contributions to experimental radiobiology."

The Prentis Award is given periodically in honor of the late Meyer L. Prentis, former treasurer of General Motors Corporation, and his wife, Anna.

The Michigan Cancer Foundation supports research on the causes and treatment of cancer, and provides a variety of medical services in the Detroit area, including cancer screening and detection, and health education.

In addition to the Prentis Award, Dr. Kaplan recently served as the William Kerr Memorial Lecturer of the Gold-Headed Cane Honor Society of the University of California Medical School in San Francisco, and as the Frederick Stohlman, Jr., Memorial Lecturer during a symposium on "Modern Trends in Leukemia" at Wilsede, Germany.

He was the invited guest lecturer at a symposium on cancer research sponsored by the Australian Academy of Sciences in Canberra, Australia, on May 2, and was a visiting professor in the department of radiation oncology at Johns Hopkins Medical School in Baltimore in April.

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Mailed Tuesday, July 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911 or
Elaine Levy (415) 567-6600, ext. 2218

EDITORS: The following story is released jointly by Mt. Zion Hospital and Medical Center and Stanford University School of Medicine.

STANFORD—

A unique fellowship, which enables Israeli physicians to study in the U.S., has been established at Stanford University School of Medicine and Mt. Zion Hospital and Medical Center in San Francisco.

The fellowship is in hematopathology, the study of cancers of the lymphatic system, including the bone marrow.

It was conceived by Dr. Ronald Dorfman, professor of pathology and co-director of the Surgical Pathology Department at Stanford, during a trip last year to Israel.

During the trip, "I clearly recognized many of the obstacles facing the medical schools in Israel, in their endeavors to attract medical students into the field of pathology, and in the establishment of residency training programs," he said.

"I returned to the United States determined to help."

Dorfman contacted Dr. Ernest Rosenbaum, associate chief of medicine at Mt. Zion, and the two men organized a group of 15 physicians at Mt. Zion, Stanford, and at four medical centers in Israel to sponsor the fellowship.

First recipient of the fellowship is Dr. Eli Okon, who met Dorfman during his trip to Israel.

Okon is a senior lecturer in pathology at The Hebrew University—Hadassah Medical School in Jerusalem. He has done research at the Weizmann Institute of Science and was a fellow at St. Bartholomew's Hospital in London.

He was invited to come to Stanford last year by Dorfman, but limited finances prevented him from accepting until the fellowship was offered this spring.

Okon's fellowship is partially sponsored by donations given in memory of Sanford Haber, a former patient of Rosenbaum who "had a deep interest in Israel," Rosenbaum said.

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In addition, Okon is relying on study benefit funding by Hadassah Medical School to support his three month stay in the U.S.

Okon said the fellowship money will help him cover part of his expenses and has enabled him to bring his wife and three children with him.

At Stanford, Okon will work primarily with Dorfman and his colleagues in the Surgical Pathology Department, reviewing over 100 pathology consultations per month, participating in interdepartmental conferences on the treatment of lymphomas (lymphoid tumors), and learning new techniques in immunopathology, the use of cell surface markers on biopsy materials to help make a diagnosis of cancer.

In addition, Okon will spend two weeks working in the clinical and tissue pathology labs at Mt. Zion under Drs. Frank Elevitch and Harvey Klein, and will have the opportunity to study the Hospital's applied computer technology.

He also will present a lecture on his own research in the field of neurohormones.

Dorfman said, "Following the remarkable efforts of Dr. Rosenbaum and his associates, I hope that sufficient funds may become available to allow us to establish this fellowship on a yearly basis."

With this in mind, he has asked several Israeli pathologists to form a committee to aid in the selection of a fellow each year.

In addition, the American Physicians Fellowship, Inc., for Medicine in Israel, has agreed to contribute toward the fellowship, he said.

The fellowship is sponsored at Stanford by Drs. Dorfman, Jerome Burke and Roger Warnke in the Department of Pathology, Department Chairman David Korn, Henry Kaplan, D'Ambrogio Professor of Radiology, and Dr. Stanley Schrier, head of the division of hematology.

Sponsors at Mt. Zion include Drs. Rosenbaum, Klein, Elevitch, Ben Coloff, Lawrence Feigenbaum, Alan Glassberg, and Bernard Kaufman, Jr.

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Mailed Monday, July 7, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos 415: 497-6911

Statement by Priscilla Wheeler for CRONA/Stanford University Hospital

(Wheeler is chief negotiator for the Hospital)

STANFORD—

Negotiating teams representing the Committee for the Recognition of Nursing Achievements (CRONA) and Stanford University Hospital announced July 6, 1980 that a tentative agreement for a new contract has been achieved.

The CRONA negotiating team has indicated that it will unanimously recommend the proposed agreement to the CRONA membership.

Details of the agreement are to be reported by CRONA to its membership with a ratification vote scheduled to be taken from Monday, July 7 at 3 p.m. until 6 p.m. Tuesday, July 8.

The agreement was hammered out by the two teams before Ruth Carpenter, mediator for the Federal Mediation and Conciliation Service in San Francisco.

Strike deadline for July 14 still remains in effect pending ratification of the agreement.

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Mailed Monday, July 7, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Dr. Lucien J. Rubinstein and his wife, Dr. Mary M. Herman will leave Stanford next year to join the faculty of the University of Virginia School of Medicine in Charlottesville.

Their appointments to the faculty will be effective in Spring, 1981, according to a University of Virginia announcement.

Dr. Rubinstein has been a professor of pathology at Stanford University School of Medicine since 1964. Dr. Herman has been on the Stanford faculty since 1966 and is an associate professor of pathology.

"They have outstanding international reputations as neuroscientists," said Dr. Norman J. Knorr, dean of the University of Virginia School of Medicine. "We look forward to their developing our neuropathology division and to the contributions they will make to our overall neuroscience research program."

Dr. Rubinstein has directed the neuropathology training program at Stanford and coordinated the neurobiology program at the Palo Alto Veterans Administration Medical Center between 1970 and 1974. He is an international authority on pathology and biology of nervous system tumors.

Dr. Herman's research has been primarily in neurooncology and neurodevelopment, and metabolic and age-related disorders of the central nervous system. In 1974 she won the Weil Award, given by the American Association of Neuropathologists, for the best paper in experimental neuropathology.

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Mailed Monday, July 7, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bill Snyder (415) 497-6911

STANFORD—

Registered nurses at Stanford University Hospital have failed to ratify a new collective bargaining agreement.

The nurses, represented by the Committee for the Recognition of Nursing Achievements (CRONA) Thursday, July 3 began voting on whether to go out on strike, at 12:01 a.m. Tuesday, July 8.

The voting, which currently is taking place in the Medical School's Fairchild Auditorium, will continue until 6 p.m. Friday, July 4, "to make sure that everyone gets out to vote," said CRONA chief negotiator Joanna Nelson, R.N.

Over 700 nurses voted yesterday on the Hospital's proposed agreement, but failed "by a simple majority" to ratify it, Nelson said.

CRONA represents over 1,000 of the Hospital's nonsupervisory staff registered nurses.

Details of the vote and the tentative agreement have not been disclosed.

According to Priscilla Wheeler, chief negotiator for the Hospital, negotiations between Stanford and CRONA resulted in a tentative agreement on a new contract on July 1, in the presence of a federal mediator.

CRONA gave the Hospital a three-day extension of its original strike notice, which had set the strike deadline for midnight July 4, pending ratification of the agreement.

"My understanding is that the agreement fell short of ratification by a narrow margin," she said.

"The Hospital hopes that the CRONA membership will reevaluate its decision on the agreement."

Wheeler said reevaluation could include taking another vote on ratification.

She continued, "Because of uncertainties over the actual strike deadline provided by CRONA, the Hospital is exploring its legal rights to receive appropriate notice, under the health care amendments of the National Labor Relations Act."

Wheeler did not elaborate on what possible actions the Hospital may take.

"At this point, the Hospital's primary concern is to continue to provide for the welfare of its patients," she added.

According to Hospital Administrator Gary Mecklenburg, the Hospital will continue to curtail non-emergency admissions and elective surgery for patients who cannot be out of the Hospital by July 8.

Earlier, the nurses stated to the Hospital that they intend to provide coverage of critical care and other areas from which patients cannot be moved to other hospitals.

In addition, all admissions are now screened by the Emergency Department, and only critically ill patients who cannot be transferred to neighboring hospitals are being admitted.

Mecklenburg said that in the event of a strike the Hospital will reduce the number of patients from the average 500 to only 100.

Patients will receive instructions from their physicians of any changes in plans for their care. These may include transfer within the Hospital, or in some cases, transfers to neighboring hospitals.

In 1974 CRONA nurses walked off the job for 11 days. During that period supervisory RNs working with CRONA nurses under an agreement with administration, staffed the renal, coronary and intensive care units as well as the emergency and premature infants research center.

In 1978 last minute negotiations prevented a walk out scheduled for June 30 after a strike notice had been filed 10 days earlier.

Mailed Thursday, July 3, 1980 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Even if a heart attack has been ruled out as the cause of your chest pain, it doesn't mean that you're free of risk.

A new Stanford study shows that patients hospitalized with chest pains and sent home after a heart attack has been ruled out, are more prone to having a serious or fatal heart attack than previously realized.

The study was conducted on 211 patients with chest pains admitted to the coronary care unit at Stanford University Hospital for evaluation of suspected heart attack, and carried out by Dr. John Schroeder, associate professor of medicine in the division of cardiology at Stanford University School of Medicine, and his associates Irene Lamb, R.N. and Marie Hu, M.A..

The researchers found that patients in whom a heart attack was ruled out were as likely to experience serious cardiovascular complications or death in the two years following hospitalization as were the patients in whom a heart attack was confirmed, according to a report in the July 3 issue of the *New England Journal of Medicine.*

According to Schroeder, the study identifies for the first time a group of high-risk cardiac patients who had not been previously recognized, and who need medical attention similar to that given patients who have had heart attacks.

"Normally, when we confirm that a patient has experienced a heart attack, there is a well defined course of treatment, and the patient receives careful monitoring and follow-up," Schroeder said.

"But when a patient comes in with chest pain and a heart attack is ruled out by the standard blood tests and electrocardiogram, the patient, family and doctor are all relieved, and the patient may go home and soon resume an active life without further follow-up.

"What we have found is that this is probably not appropriate, and these patients actually require similar surveillance and assessment as those who have had a heart attack," Schroeder explained.

Out of 211 admissions to the coronary care unit, 16 patients were found to have chest pains caused by conditions unrelated to heart disease. Among the remaining patients, 84 were found to have had a heart attack and six died in the hospital.

A heart attack was ruled out as the cause of chest pain in 89 patients.

The researchers followed the two groups of patients for 27 months following their discharge from the hospital. They found that the incidence of cardiovascular events (heart attack or death) was nearly identical in the two groups.

In those who had suffered a heart attack, 7.7 percent had another heart attack or died within six months of leaving the hospital, and 22 percent had a heart attack or died within 27 months of discharge.

But for those in whom a heart attack was ruled out as the cause of chest pains, 8.0 percent had a heart attack or died within six months, and 21.6 percent had a heart attack or died within the 27 month follow-up period.

The research was carried out with a grant from the National Institutes of Health.

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Mailed Thursday, July 3, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Registered nurses at Stanford University Hospital, represented by the Committee for the Recognition of Nursing Achievments (CRONA), have reached tentative agreement on a two-year contract with the Hospital, it was disclosed Tuesday, July 1.

The Hospital and CRONA jointly announced the tentative settlement, following seven weeks of negotiations.

Details of the agreement were not announced. CRONA gave the Hospital a three-day extension of the strike notice, pending ratification of the new contract by its membership Wednesday. CRONA represents more than 1,000 of the Hospital's non-supervisory staff nurses.

CRONA nurses last week gave the Hospital the required 10-day notice of their intention to strike unless an agreement could be reached by midnight July 4.

The current contract of CRONA expired Monday night.

The Hospital during the weekend took steps to curtail non-emergency admissions and elective surgery for patients who could not be out of the Hospital by July 4.

Hospital Administrator Gary Mecklenberg said today the Hospital will resume normal activities and admission with an affirmative vote on the new contract by the CRONA membership.

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Mailed Tuesday, July 1, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Stanford University Hospital daily room rates will increase an average $32 in the fiscal year beginning September 1.

Medical, surgical and gynecology room rates will increase an average 15.5 percent from those set one year ago. These are the services that most hospitalized patients use.

The new rates, according to Executive Director Dr. Peter Levin, reflect the continuing impact of severe inflationary pressure on Hospital operating costs and salaries, a 50 percent increase in the cost of utilities, and a continuation of reduction in reimbursement from the government for care to Medicare and MediCal patients.

This year's increase is higher than last year's 11.6 percent, Levin noted. However, the Hospital's room rate increases for the past two years were below the rate of inflation for the same period, he added.

"This year's higher increase also indicates that the successful cost containment efforts of the past few years have limited the areas available for further reductions," Levin observed.

The new room rates were approved by the University after the Hospital's Board of Directors reviewed the annual budget on August 5, recommending rates for the new fiscal year.

The new rates will be $207 per day for ward accommodations, $223 for a semi-private room and $249 for a private room, an average increase of $32 from last year.

Medical, surgical and gynecology patients utilizing services of house staff physicians will pay $16 more than the above rates. The patient's attending physician determines whether such services are utilized.

Rates will increase an average 16 percent in some specialized units, including the intensive care and coronary care units, and the premature nursery.

Rates will increase 15.8 percent for obstetrics patients, 16.2 percent in the well-baby nurseries, 16.3 percent for psychiatry patients, and 16.0 percent for pediatrics patients.

Rates for x-ray, laboratory and other ancillary services will rise an average 16 percent.

The new room rates compare favorably with those charged by other similar highly specialized teaching facilities, Levin pointed out.

Patient revenues make up 99 percent of the Hospital's funds, according to Levin. The Hospital has neither tax support nor endowment income.

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Mailed Thursday, August 28, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
EDITORS: Photo available on request if not included.
STANFORD—

Researchers in the department of pediatrics at Stanford University School of Medicine have discovered that it may be possible to decrease the severity of jaundice in certain infants by closely monitoring the diabetic woman during pregnancy.

Using techniques called "trace gas analysis," the researchers found an association between the amount of jaundice pigment produced in an infant of a diabetic mother and the degree of control of the mother's diabetes during pregnancy.

Dr. David Stevenson, assistant professor of pediatrics, explained that the new techniques enable them to measure infants' production of jaundice pigment by monitoring concentrations of expired gases in the breath of newborn babies.

Jaundice is a yellowing of the skin and other tissues, caused by deposits of bile pigment called bilirubin. If left untreated, it can cause other complications in the infants' health.

Stevenson and his colleagues, Clinton Ostrander, a researcher and development engineer, and Dr. John Johnson, now at the University of New Mexico, have been investigating the question of why jaundice occurs more often in prematurely born infants, infants of diabetic mothers, and in other infants with certain types of anemia, Stevenson explained.

Their findings have been published in papers in *The Journal of Pediatrics* and *Pediatrics* during the last year.

By measuring carbon monoxide (a byproduct of bilirubin production) in infants' breath, the researchers found that the infants have an unusually high production rate of bilirubin, a fact not previously known.

If the blood sugar of a diabetic mother is not carefully controlled during pregnancy, an increased amount of sugar passes to her fetus. The sugar stimulates increased production of insulin by the fetus' pancreas, causing the fetus to grow abnormally large.

"This abnormal large growth is also correlated with increase bilirubin production," Stevenson noted.

Another trace gas measured in the breath of infants is hydrogen, which is used by doctors to assess how well babies absorb their feedings, he added. Hydrogen is produced by bacteria in the intestines from carbohydrates which the baby has not absorbed.

"Feeding can be a major problem with prematurely born infants who often do not absorb milk sugars well," Stevenson said. A complicated and sometimes fatal disease called necrotizing enterocolitis is associated with poor food absorption, he added.

"Now, we may be able to determine which babies are at high risk for necrotizing enterocolitis, or to detect the condition before it becomes too serious," Stevenson said.

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Mailed Monday, August 25, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos or Bobbi Navickis (415) 497-6911

STANFORD—

They are theorists and dreamers who call themselves "knowledge engineers."

Linked by a sophisticated federally funded computer network across the country, these experts for the past 10 years have been laying the groundwork for tomorrow's thinking machines and how they might be adapted in medicine.

Their target: defining the laws of expertise so that they can be programmed into the computer.

How these experts work, their accomplishments, and future goals were the topic of a symposium on artificial intelligence recently held at the Stanford University School of Medicine.

"Artificial Intelligence is absolutely inevitable," declared Dr. Edward Feigenbaum as he discussed the emerging capabilities of computers to "think" with the use of specialized knowledge.

Such specialized knowledge is not contained in textbooks, he said. It is basically judgmental knowledge based on the rules of experience from working in a particular field.

He said it is the job of knowledge engineers to work with the experts to elicit this information, and to make it explicit so that it can be critiqued and a consensus reached.

Ultimately, according to Feigenbaum, an understanding of the nature of intelligence—whether expressed by man or machine—will lead to the design of computer-based tools that will aid doctors in becoming more effective thinkers and clinicians.

A key to this research is the SUMEX-AIM network directed by Feigenbaum. It stands for Stanford University Medical Experimental Computer-Artificial Intelligence in Medicine and is funded by the Division of Research Resources of the National Institutes of Health. It is within this computing resource that most programs using artifical intelligence have been developed.

But according to Feigenbaum, SUMEX-AIM system is more than that.

"It is the first electronically based scientific community," he said. "Nothing like it exists anywhere else."

The computers that drive the SUMEX-AIM system are much more powerful, providing sophisticated computation and memory capability for anyone who uses it. And it allows scientists to communicate rapidly with colleagues and to test their theories.

"When I am on sabbatical leave in Paris," said Feigenbaum, "I'll be able to communicate with my colleagues at Stanford on a daily basis."

There are scientists in more than 20 institutions in the United States and abroad using the system to tackle problems. One group is developing medical consultation systems. Another is investigating the use of artificial intelligence techniques in procedures of genetic engineering. Still another is tackling the more abstract issues of medical and scientific reasoning and theory formation.

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But even with this concerted effort underway, the science of artifical intelligence in medicine is still very experimental, according to Harry Pople of the University of Pittsburgh. The consensus at the meeting was that at present no one program was ready for use by practicing physicians and that just when they will be ready is hard to predict.

Dr. Edward Shortliffe of Stanford said the programs were too large for most computers and too slow for most physicians, and that many fundamental questions about artificial intelligence still need to be answered.

Donald A. Lindberg of the University of Missouri added that we must yet program in "a sense of humility"—when the program doesn't know the answer, it must learn to say so.

Another problem with the existing programs is that each is limited in scope to a few diseases or disorders. (INTERNIST, a program being designed to serve as a consultant for doctors of internal medicine, is the exception with almost 500 diseases in its knowledge bank.)

But the scientists hope to eventually distill the essence of expertise so that the same programs can be used for consultations on other diseases.

Even if the programs are perfected the knowledge engineers realize that the programs must be attractive and believable to physicians. Therefore, a substantial part of their research is focused on making the programs palatable to the physician. Having it explain its actions and respond to questions rather than just spewing out an answer are two of the human qualities that the scientists are trying to engineer into the program.

"Artifical Intelligence will make for good medicine," Lindberg said. Doctors won't be replaced by computers, he continued, only helped.

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Mailed Tuesday, August 19, 1980

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Dr. Lawrence G. Crowley has been appointed vice president for medical affairs at Stanford University, effective immediately.

The appointment, culminating a nationwide search by a faculty committee was announced Tuesday, Aug. 19, by President Donald Kennedy.

Crowley served as acting vice president and dean at the Medical Center for the past 20 months.

"Stanford is fortunate that Larry Crowley has agreed to continue his thoughtful, effective leadership of the Medical Center," Kennedy said.

"I look forward to continuing the strong working relationship that has already grown between us."

Kennedy added that even under the handicap of acting status, Crowley "has been able to work effectively with the faculty, both developing concensus about the Center's future and in making progress toward it."

He said these qualities of conscientious consultation and strong administration are exactly what is needed to help the Medical School's faculty fulfill its own extraordinary promise and to guarantee another period of progress in research, medical education, and patient care.

"The extensive search for leadership that was in the process during this entire period enabled us to conclude with confidence that the best person for the job was the one who was already doing it so well."

Crowley's appointment marks the first time that the posts of vice president for medical affairs and dean of the School of Medicine will be separate.

His predecessor Dr. Clayton Rich who resigned in 1978 held both positions.

Crowley, who will remain acting dean, said he would begin a search for a dean promptly.

He said he regards his appointment as a great challenge and opportunity and looks forward to working with the faculty and university administration in the next four years.

"The Medical School must preserve its strong research program thrust, and the Hospital should continue its provision of a strongly supportive environment for clinical research," he said.

Crowley who is 61 was born in Newark, New Jersey. He is a graduate of Yale University (1941), and of the Yale University School of Medicine (1944).

He was a professor of surgery at Stanford from 1964 to 1974. He became dean of the University of Wisconsin in Madison that year, but he returned to Stanford in 1977 as professor and deputy dean.

Prior to coming to Stanford, he had served on the faculties of Yale and the Universty of Southern California.

He also served as chief of surgery in Stanford's affiliated Palo Alto Veterans Medical Center, and was responsible for the publication of the Comprehensive Stanford Medical School long range academic plan when he served as associate dean in 1972-74.

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Mailed Tuesday, August 19, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911
CITY DESKS: The patient has requested no interviews at this point.
STANFORD—

While working in an Alaskan crab packing plant, Alfredo Domingo caught his shoulder-length hair in one of the machines, ripping the scalp off his head.

The accident occurred on August 4 and the 21-year-old Domingo was rushed to a nearby Anchorage hospital, then flown overnight to Stanford University Hospital for surgery, arriving early the next morning. With him on that flight—packed in a bucket of ice—was his scalp.

It was Domingo's fellow workers at the plant who apparently thought to keep the scalp cool. And because of that prompt action, the scalp tissues stayed alive, enabling Stanford surgeons to reattach the scalp more than 24 hours later.

"What is unusual," says Dr. Vincent Hentz, assistant professor of surgery at Stanford Medical School and chief of plastic surgery at the Palo Alto Veterans Administration Medical Center, "is the great delay between when the scalp was torn off and putting it back on successfully.

"Fingers have been put back on days later because the tissues, if cooled, don't require much of a blood supply. But I don't believe such a delay in reattaching a scalp has been reported."

By using microsurgery, which involves working under magnification with extremely small tools and sutures one-fifth the thickness of a human hair, Hentz and a team of four plastic surgery residents worked nearly 11 hours to save the Stockton youth's scalp.

The vessels were torn and stretched so badly, says Hentz, that the arteries and veins attached to the scalp could not be directly sutured to the arteries and veins in the patient's head and face.

So the surgical team took veins from Domingo's foot to bridge the gap between the damaged vessels and those in his head and face, much the way a pipefitter would fit a pipe.

During the operation, which began at 8 A.M. and ended around 6 that evening, Domingo received 9 or 10 units of blood, which is almost enough to replace the body's entire blood supply.

Had his scalp died, says Hentz, he would have had to undergo a number of reconstructive operations, since the accident left 60% of his skull exposed and bare bone won't accept skin grafts.

And although it is possible the scalp still could die, it has been almost two weeks since the operation and Hentz is confident the patient is well on the way to recovery.

"It's conceivable," he says, "that he could go back to work in four weeks."

Hentz estimates the overall cost of Domingo's hospital stay at between $10,000 and $15,000, which should be picked up under his insurance policy with the company. If reattachment had failed, says Hentz, medical costs could have been as high as $50,000.

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Mailed Monday, August 18, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks 415-497-6911

CITY DESKS: Photos available upon request if not included.

STANFORD—

On a recent Tuesday, JoAnn Hattner made the rounds of the obstetrics and gynecology clinic at Stanford University Hospital as she always does. A less stalwart soul might have found the first encounter discouraging enough to quit for the day.

"I'm not hungry," the woman told Hattner, angered by all the questions. "I just don't like any of them foods...so how do you expect me to eat them?"

In her fourth month of pregnancy, the woman was considered high risk because of known alcohol abuse. It was Hattner's task to determine why she had lost two pounds in the last month and how to improve her diet enough to ensure a healthy weight gain - and more importantly - a healthy baby.

Nutritionists like Hattner are pretty much in agreement that the ideal weight gain for a pregnant woman of normal weight is 24 pounds during a 40-week gestation period.

But this was one battle in the field of preventive nutrition that Hattner seemed likely to lose. Whatever she suggested met with resistance.

In Hattner's work, however, this is the extreme case - not the norm. For the rare patient whose attitude prevents meaningful counseling, there are dozens who respond positively to nutritional advice.

A registered dietician, Hattner serves as a consultant on nutrition to three medical specialties - obstetrics, neonatology and pediatrics. Her services are contracted out through the Department of Dietetics to the Hospital and the Children's Hospital at Stanford.

Over the past nine years at Stanford, she has carved out a specialty in the area of preventive nutrition for pregnant women and infants through childhood. When preventive measures fail prenatally, she provides therapeutic nutrition.

She readily admits that she prefers this to working with sick adults whose bad eating habits often contribute to their illness.

"I don't think I have the tolerance for adults who continue to abuse themselves nutritionally," she says. "It's possible to influence a child's nutrition through the mother... and for me, at least, this is far more rewarding.

"I strongly believe that nutrition - prenatally, in infancy and childhood may well be the key that affects the quality of health for an individual."

In recent years, Hattner has received considerable attention in the press, partly because she is such an articulate spokeswoman and partly because of a renewed interest in nutritional issues.

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She has often been quoted as saying the best time to reach a pregnant woman is before conception. And this is still one of her strongest convictions.

"We really should be preparing women better for pregnancy, she says, "and before they get pregnant is the best time for a woman to come to an ideal weight and establish good nutritional habits."

In July Hattner addressed educators, nurses, and other health professionals at a conference in Las Vegas on prevention of developmental disabilities. It is her hope that the meeting will result in more nutrition programs for high school girls.

Her own interest in nutrition apparently goes back to her childhood, which was spent largely on hospital grounds. Her father, now retired, was a psychiatrist and administrator for the Veterans Administration and he encouraged her to go into the profession of dietetics.

Historically, according to Hattner, nutrition grew out of home ecnomics, a field traditionally dominated by women. And even today, she says there are far more women in nutrition than men.

Hattner received her B.S. degree from the University of Idaho in 1963, then went to the University of California Medical Center in San Francisco for a fifth year internship in dietetics.

Shortly after graduation, she came to work at Stanford. She took time out in 1967 to earn a masters degree in public health at Berkeley, then worked in public health and clinical research before returning to Stanford.

Although much of nutrition is common sense, she says, clinical studies are difficult to run because of the legal and ethical complications involved.

"You can't take two pregnant mothers and feed one alcohol just to study the effects," she says. "So the work is done strictly by observation and pregnancy outcome...meaning, of course, the infant."

One of the studies Hattner is currently involved in concerns the feeding regimens of the premature infant.

The study, which ends next year, is funded under a three-year federal grant and is being carried out by the Department of Pediatrics. Some of its findings were reported recently at the department's conference on nutritional care of the high-risk pregnant mother and that of the immature or ill infant.

"One of my roles," says Hattner, "is anthropoemetric measures. What this means is I'm essentially looking at body composition as a means of assessing growth."

Body composition is determined by measuring an infant's arm circumference and, through the use of calipers measuring skin folds of subcutaneous fat. Although length, height and weight are also taken into account, body composition is an important component in evaluating infant growth.

Hattner says this method was also used in another study, looking at infants of mothers with diabetes and gestational diabetes. That study, which combined the work of neonatology, hematology and nutrition, found that babies of diabetic mothers do have increased fat.

Research apparently takes up roughly 20 percent of Hattner's time. On Wednesdays through Fridays, she sees patients at the Hospital or at Children's Hospital. Many of them are high-risk.

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No matter what the nutritional problem, Hattner works closely with physicians in designing a therapeutic regimen for each patient. She also works, in many cases, with a social worker to determine environmental factors that might affect diet.

In the genetic metabolics clinic at Children's, Hattner deals with infants up through childhood who have an inborn error in their metabolism, such as PKU (phenylketonuria). Through special formulas, which restrict the amino acid that causes brain damage, treatment of PKU over the past 15 years has met with increasing success.

"The new challenge in the area of preventive nutrition," says Hattner, "is to find ways of treating young women who have PKU."

Other clinics where Hattner takes her nutritional expertise include gastroenterology and endocrinology. Because many of the babies and children she sees are failing to thrive, she must deal not only with their problems, but with the emotional strain on the parents.

"There is a tremendous amount of guilt involved," she says, "because the thinking is, 'surely, a mother should be able to nourish her own child'."

At the hospital, Hattner's chief responsibility is the implementation of a quality assurance program for patients. The program, she says, came about as a result of her three-year chairmanship of quality assurance for the California Dietetics Association, which has 4000 members.

"I think we're the forerunners in California to define certain nutritional guidelines," she says. These guidelines include assessing a patient's needs according to the length of stay and priority from a medical standpoint.

A patient, who has had open heart surgery, for instance, will have a greater need for nutritional therapy than one who is in the hospital for minor surgery.

"The hope," says Hattner, "is every patient who comes into the hospital will be nutritionally assessed.

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Mailed Monday, August 11, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911

CITY EDITORS: This is the first of a two-part series.

STANFORD—

In the past month Stanford University Hospital has hired some 50 registered nurses to ease its current nursing shortage, although many of those hired are recent nursing school graduates who must be trained first before they can work on the floor.

"When you talk about shortages," says Nancy Madsen, associate director of nursing services,"you have to look at functional nurses...those who are working right now and have enough training to work in an acute care setting such as this one."

Although not nearly as severe as the national problem, the Hospital's present vacancy rate is high enough to cause concern—at least until October when the new hires have completed their orientation and staffing is back to normal.

Madsen says the Hospital is attempting to close out 20 patient beds in the Main Center during this interim period.

At the moment, the most acute staffing shortages exist in Stanford's five medical units and one pediatric unit.According to Madsen, there are 40 full-time equivalent vacant out of 152 full-time positions in this unit. These numbers, however, are deceptive since nearly three-fourths of the Hospital's RN staff work less than 100 percent, which means it usually takes two nurses to fill one post

"Nurses today," says Madsen, "are becoming as specialized as physicians , so the immediate problem can't be solved by simply shifting nurses around. We have to look at units with similar care needs."

Nationally, hospital administrators now face a nursing shortage of 100,000 and an alarming drop-out or burn-out of 30 to 40%. In addition, an estimated 40% of the nation's 1.4 million registered nurses now work four days a week or less.

As a result, recruitment efforts have expanded dramatically in recent years. At Stanford, hospital administrators feel their task should be easier now that CRONA (Committee for the Recognition of Nursing Achievements) has ratified a new 20-month contract, making Stanford's salaries more competitive with other Bay Area hospitals.

"The new contract has lareay helped with our recruitment efforts," says Katie Bray, coordinator of nurse recruitment and retention at the Hospital.

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"Having a competitive salary is very important if you don't want nurses bouncing around from hospital to hospital for a nickel an hour increase."

In the past, Stanford fell behind in salary negotiations because of earlier contract expiration dates elsewhere. The new contract, which Bray describes as" one of the finest packages on the West Coast", will bring the Hospital more in line with other facilities , although there still will be a three-month time lag.

Ratified by CRONA members on July 8, the new contract went into effect, July 1 , and expires in February of 1982. CRONA is the professional organization that represents the Hospital's 1000 non-supervisory registered nurses.

The contract calls for an immediate 12% salary hike this year, a 3% increase on March 1, 1981 and a 9% increase on July 1, 1981. It also provides for an increase in the night shift differential from 12 to 14 % and improvements in educational and retirement benefits.

For experienced nurses in the top classification, the salaries are apparently the highest in the Bay Area.

Since last year, according to Bray, Stanford has cut its vacancy rate for nurses in half through the active recruitment efforts of Administration, Personnel and nurses and doctors.

"I think this is a very unusual effort," she says."There are many hospitals where nursing doesn't know what personnel is doing and vice versa.

"The profession has become highly pressured, highly technical," says Bray, who was recently elected president of the San Francisco Bay Area Association of Nurse Recruiters. "It has the same kind of curve as medicine in general.

"And in a hospital like Stanford where you find very complex research going on in cancer and heart problems, the knowledge of the person who takes care of the patient must also increase."

The resulting stress, adds Bray, means more and more nurses have cut back on their hours or quit the profession altogether.

The nursing profession has also lost numbers in the last decade because of new professional opportunities that have opened up for women. Many women, who once went to nursing school, now go on to medical school instead.

This national shift in emphasis was reflected on Stanford's own grounds five years ago when the decision was made to shut down its nursing school because of competition with the Medical School over available funds.

"That decision hurt us in two ways,"says Duane Walker, director of nursing services. "It took away a natural pool of trained nurses and it discouraged nurses who wanted to go on for bachelors or masters degrees from doing so. When they found it was not available here, they went elsewhere."

Walker says one of the highlights, or "most glamourous changes" in the new contract are the educational benefits. Nurses who want to go back to school can now receive up to $1000 in reimbursement costs.

"I'm not aware of many hospitals who are doing that," he says, adding that prior benefits only provided small stipends for workshop or seminar costs and tuition reimbursement.

By September,1982, according to Walker, working nurses at Stanford will be able to study under a satellite program set up by San Jose State on Hospital grounds. The program, he says, has already received federal funding.

Walker sees this venture as a recruitment attraction. Other measures the Hospital has undertaken to attract nurses includes the provision of temporary housing for out-of-state nurses. Nurses now can lease an apartment for up to three months before having to find housing of their own.

"Before the Hospital decided to do this," says Walker, "we actually found three nurses living in the back of a Volkswagon van, trying to save up enough money for a deposit on a place of their own."

Like Bray, Walker emphasizes the joint efforty of Hospital personnel in recruiting new nurses. Stanford advertises in national journals, holds open houses and sends recruiters to nursing job fairs around the country. "We're getting our own staff to be ambassadors," he says. "And right now we are looking at the system with an eye to providing monetary incentives for bringing in new nurses."

Equally important, however, is the retention of the nurses already working at Stanford.

Throughout negotiations, CRONA members voiced the need to address the problems caused by nursing shortages. The main concern is added stress in a job already filled with stress.

"I hope the new contrract will have a positive effect on these problems," says Joanna Nelson, R.N., president of CRONA. "Women are beginning yto look ahead a bit more. . .to built-in incentives for them to stay in the nursing profession."

As for the current contract, Nelson calls it "very competitive right now." Whether it remains so, she says, depends on what other Bay area hospitals do when their contracts are negotriated.

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Mailed Wednesday, August 6, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks 415-497-6911

STANFORD—

CITY EDITORS: This is the second of two parts.

In the intensive care unit a young woman lies curled up in pain, her only movement an involuntary twitching. Unit nurses take turns monitoring "drips" or solutions round-the-clock as they have for nearly three months, although there is still no sign of improvement in the patient's condition.

Laurie Gunderson glances quickly at the woman, then shakes her head. As the clinical nurse coordinator for the Hospital's 25-bed cardiovascular ICU, she has seen many critically ill patients who linger on indefinitely with no improvement.

"The nature of this unit," she says, " is mostly life and death situations that are stressful. But this kind of patient—who after months of care shows no improvement—is perhaps the most stressful."

The issue of nursing stress has only recently gained momentum as hospital administrators across the country face a nursing shortage of 100,000 and an alarming 30 to 40% drop-out or burn-out rate of those in the profession. In addition, an estimated 40% of the nation's 1.4 million registered nurses now work four days a week or less.

At Stanford, the statistics are perhaps less dramatic, but the problems are not. An acute care institution, which serves as a teaching hospital and a community referral center, Stanford nurses apparently experience greater stress than the average nursing population.

Although research on work-related stress of nurses is still in its infancy, a recent study of 1800 ICU nurses by the University of California's School of Nursing, San Francisco (UCSF), concluded that this was particularly true for Stanford ICU nurses because of the Hospital's international reputation in heart transplant work and "other complex and specialized surgical and medical interventions."

Stanford was chosen as the demonstration site in the local area because it has three ICU units—cardiovascular, surgical and medical—and employs the largest number of ICU nurses in the Bay Area.

ICU nurses were extracted from the general nursing population because of considerably higher turnover rates. An estimated 51% of the nation' hospitals currently show severe shortages in their intensive care units.

But whether or not ICU nursing is actually more stressful than other types of nursing is a subject of controversy. And to date, there have been no studies comparing nursing stress.

"Each unit has its own type of stress," contends Joanna Nelson, an R.N. and president of CRONA (Committee for the Recognition of Nursing Achievements), the union which represents the Hospital's 1000 non-supervisory nurses. "ICU nurses say they have higher stress. . . those of us on the floor say that's highly debatable."

Nelson apparently found her own work at Hoover Pavilion so stressful that she cut back to four days a week.

"My patients were so ill," she says, " that I began to have bad dreams and I couldn't sleep at night. Many nurses handle stress the way I did by cutting back to a shorter work week."

In Stanford's nursing population, nearly three-fourths of the RNs work less than 100 percent, which means it usually takes two nurses to fill one full-time vacancy. Administrators have stepped up recruitment tactics dramatically in recent years, although staff shortages are a chronic concern. Fewer nurses obviously means more stress for those left on the floor.

"If there aren't enough nurses," says Tricia Dotti, a staff nurse on East 1A, "you can't give the kind of care you want to give and this is very frustrating."

A general medical unit with 34 beds, East 1A, has had unusually high staff shortages in recent weeks. According to Anna Olson, the clinical nurse coordinator for the unit, East 1A is budgeted for 22 full-time nursing positions, but only 14 of these are filled right now. And since all but two nurses on the unit are part-time, this means it is operating with 16 fewer nurses than usual. - more -

2-2-2 Olson sees the major factor in today's nursing market as the shift of nurses away from hospital work to registries, or private companies.

"This allows a nurse," she says, " to choose not only where, but when she'll work and for more pay."

Other sources of stress on East 1A are typical in other units as well. Nancy Madsen, associate director of nursing services, describes one such problem as the "pure crunch of physicians."

On Olson's floor there are four medical teams—three teaching teams and one community team—and each of these teams has six to eight physicians. Not only does this result in an inevitable overlap of medical opinion, but there is a space squeeze as well.

"You have to be an excellent communicator just to know who to talk to around here," says Myrna MacAllister, the unit's assistant clinical coordinator. That problem is apparently compounded when nurses have to deal with overworked physicians who have been up all night.

"Their pressure definitely filters down to us," says MacAllister.

In the University of California study, staff shortages and "personality conflicts" with staff, physicians, administrators and residents were identified as the leading stress factors for Stanford's ICU nurses.

North ICU, where Gunderson works, is currently operating with 19-20 nurses per shift, although normally there are at least 23 on a shift. Unlike a general nursing unit, however, where nurses must take on an additional patient load, ICU nurses always provide one on one care.

"An RN has to be in every room because of the acuity of our patients," says Gunderson. "This means when there's a shortage, we can't stretch our staff. If there aren't enough nurses, we have to close down patient beds."

To meet current shortages, Gunderson says, non-ICU nurses are being trained for the first time with the help of Hospital inservice instructors. That training will include a high degree of technical expertise since ICU nurses must operate a staggering number of machines.

Although this is challenging, says Gunderson, it is one of the reasons she feels ICU nursing is more stressful than working on the general floor.

Elle Hedenkemp, an ICU nurse for the past six years, agrees that ICU nursing is more stressful—at least in some ways.

"There are more dramatic situations here. . . with families totally out of control," she says, "but those of us who choose this kind of work are a funny breed who thrive on the challenge.

"I found it very frustrating out on the floor because it's harder to have an in-depth relationship with a patient. Here there is a lot more feedback from patients and their families and that is very gratifying."

Whatever the stress source, Anne Baldwin's job is to identify it, then find ways of alleviating the stress before "burn out" occurs. Baldwin was hired by the Hospital four months ago as its first nurse coordinator of a nursing consultation program.

The supervisory position, according to Duane Walker, director of nursing services, was created as a result of the UCSF findings.

"We were definitely responding to this study," he says.

Baldwin describes the purpose of her job as providing consultation to any nursing unit that would like help with work stress. Her background includes 12 years of nursing experience and a doctorate from the University of Michigan in educational psychology.

"My belief is all nursing jobs are too stressful," she says. "In fact, they are so stressful that they are incompatible with adult living and personal and professional growth."

One of the biggest psychological issues in nursing today, says Baldwin, is the loss of patients. Often times they—not the doctor—are the instrument of pain.

"To last very long in this profession," contends Baldwin, "nurses must learn to grieve, then go and form other attachments."

Baldwin's advise to the individual nurse suffering from stress is to "talk it out, think it out, exercise it out."

As for the Hospital's role, she says, it must provide good listening channels, regular support groups and educational programs for nurses on the nature of stress.

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Mailed Wednesday, August 6, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A record 26 percent of this year's incoming class at Stanford University School of Medicine is composed of minority students, and 36 percent of all entering students are women.

Among 86 matriculants there are 13 chicanos, six blacks, two native Americans and one Puerto Rican. Thirty one incoming students are women.

According to Director of Admissions Dr. Laurence Kedes, Stanford Medical School has the highest minority enrollment figures and has recently ranked second in enrollment of women among 13 private medical schools that form a medical school consortium. (The consortium schools form a cooperative group, sharing information in areas of common interest. Members include Case Western Reserve, University of Chicago, Cornell, Duke, Harvard, Johns Hopkins, Columbia, University of Pennsylvania, University of Pittsburgh, University of Rochester, Washington University and Yale.)

Last year, a study of minority admissions published in the *New Physician* magazine ranked Stanford fourth in performance among 121 medical schools in the area of minority admissions. (The study excluded medical schools that are predominantly black.)

Stanford Medical School has been particularly successful in attracting highly qualified chicanos, noted Dr. John Steward, associate dean of student affairs. "Being on the West Coast, we feel a strong obligation to chicano applicants, and we find many choose Stanford because of the proximity to major centers of chicano populations," Steward said.

Kedes noted there is concern that numbers of black students applying to medical schools have leveled off after a sharp rise that began in the early 1970's. Competition among medical schools in recruiting qualified black applicants has accordingly increased, he added.

"The competition for black medical students is stiff," he said. "Every one of the black applicants we accepted this year had also been accepted by several other top medical schools."

As a result, although Stanford Medical School offered places in its first year class to 23 blacks, only six actually matriculated, he observed.

"Black students may prefer medical schools in urban centers with higher black populations," Steward suggested as one explanation for Stanford's high turn-down rate from blacks this year.

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In contrast, 13 out of 19 Chicanos accepted this year are attending Stanford, two out of three accepted Native Americans are enrolling, and the single Puerto Rican accepted has decided to attend Stanford, Kedes added.

About 50 percent of the incoming students intend to pursue careers in academic medicine involving research in basic or clinical sciences, Kedes said, while 35 percent of the students plan to practice medicine outside an academic affiliation. The remainder (15 percent) is undecided on career goals.

The Medical School faculty senate recently approved, in principle, a three-part curriculum encompassing basic medical science, clinical medicine and investigative medicine. The addition of the third component, investigative medicine, "embodies what is special about the School and its avowed mission to train all our students for leadership in the practice of scientific medicine," said Dr. Avram Goldstein, senate chairman and professor of pharmacology.

Goldstein noted that Stanford feels an obligation to identify and attract minority students who are committed to academic careers in order to help alleviate the shortage of minority faculty members in medical schools.

In addressing the incoming class September 22, during orientation week, Goldstein said, "Women and minorities are, as you know, very much underrepresented in the medical profession. This imbalance is far worse in academic medicine. If you see so few role models among the professors at this (or any other) medical school, that very fact is indicative of the need.

"Careers in academic medicine are enormously rewarding, and they are very much open to you. Maybe an academic career is right for you, and you haven't yet considered it one of your options. Find out more. The faculty will be ready and eager to help you."

Goldstein continued, "This faculty admires, appreciates, and rewards the inquiring minds among you. This faculty is here because Stanford is one of the world's great centers for research in medicine and biomedical science. Through research and around research we have created an environment here in which you can learn. And we are stimulated by the challenge of inspiring bright young minds to follow our path and to surpass what we have accomplished.

"This devotion to research is part and parcel of our concern for patients . . . and beyond the welfare of our own patients, in a wider context, medical research is the sure hope of the future, for the prevention, cure, and alleviation of disease, and eventually for an improved quality of life for the entire human race."

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Mailed Monday, September 29, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Paul Berg, Ph.D., of Stanford University School of Medicine, will be awarded $15,000 for his contributions to science, the Canadian-based Gairdner Foundation announced Monday in Toronto.

Berg, Willson professor of biochemistry, will be one of six scientists from Canada, the United States, and Israel, receiving individual awards.

He will receive the award "in recognition of his contributions to our understanding of the mechanisms of protein synthesis and of the interplay of viral and cellular genes in regulating growth and division," the foundation said.

Berg has devised new and physical approaches to analyzing the structure of simple viral chromosomes, making possible a molecular approach to the study of their genetics.

In addition he and his colleagues have been active in the development of recombinant DNA techniques to introduce new genetic information into mammalian cells with virus DNA vectors.

These experiments are designed to explore the chemistry and biology of mammalian and human chromosomes and hopefully to provide the basic knowledge for the prevention, management and cure of hereditary diseases.

The awards will be presented October 16 and 17 at the 1980 Gairdner Foundation Lectures at the University of Toronto.

This year's winners were selected from more than 117 nominees by the foundation's medical advisory board, chaired by Dr. C. H. Hollenberg, foundation president and chairman of the University of Toronto's department of medicine.

The other winners are Irving B. Fritz, University of Toronto; H. Gobind Khorana, Massachusetts Institute of Technology; Efraim Racker, Cornell University; Jesse Roth, National Institutes of Health; and Michael Sela, Weismannn Institute of Science, Israel.

The Gairdner Foundation was formed in 1957 by the late James A. Gairdner and his family in Toronto to recognize outstanding contributions to medicine.

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Mailed Monday, September 29, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Dr. Avram Goldstein, professor of pharmacology in the Stanford University School of Medicine, has been re-elected for a second term as chairman of the School's faculty senate.

Also re-elected is Dr. Frances K. Conley, assistant professor of neurosurgery.

Three new members were elected to serve on the committee of five of the senate for 1980-81. They are Drs. Roy H. Maffly, professor of medicine; Lars M. Vistnes, associate professor of surgery; and Irving L. Weissman, associate professor of pathology.

Weissman, former chairman of the senate, had served as an ex-officio member of the committee last year.

Goldstein's re-election was interpreted as a vote of confidence to the movement of change that he and other faculty members were responsible for instigating in the Medical School.

During the past year the senate approved in principle a three-part curriculum in basic medical science, clinical medicine and investigative medicine. The action was taken to serve notice for prospective students, faculty, and other interested individuals that Stanford's curriculum has a two-fold purpose:

That purpose is "to develop in all students the capacity for leadership in the clinical practice of scientific medicine, and to provide opportunities for as many students as possible to prepare themselves for careers in research and teaching in the various branches of basic, clinical, and social medicine."

The committee of five is the executive board of the faculty senate. The senate represents the School's faculty, defines admission and graduation requirements as well as curriculum and academic policy.

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Mailed Friday, September 26, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

Two Stories: Spyros Andreopoulos Bobbi Navickis, second (415)497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Dr. Norman E. Shumway, Stanford University's heart transplant pioneer, Thursday (Sept. 25) became a Fellow of the Royal College of Surgeons in Manchester, England.

The 56-year-old Shumway is the first contemporary Stanford surgeon to be so honored by the prestigious College.

In England Shumway also gave the Moynihan Lecture, honoring the late Lord Berkeley Moynihan, a famed surgeon and the College's first president.

Shumway discussed the clinical status of heat transplants. One-year survival rates for transplant patients have climbed from 22 percent in the first year to a peak of 70 percent in 1980, he said. About half of those who receive a donor heart today can expect an additional five years of life.

His research team has transplanted 213 hearts into 195 patients in the past 12 years. Of these 77 are living—one patient for more than 10 years. (The discrepancy in figures is due to the fact that some patients had more than one transplantation).

"This improvement in survival," said Shumway, "comes not as a result of some fantastic breakthrough, such as specific induced tolerance (though such an event is probably inevitable), but rather from judicious adaptation to patients of techniques developed in the experimental laboratory."

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FOR IMMEDIATE RELEASE

STANFORD—

Fifteen junior faculty members at Stanford Medical School who are cancer researchers have been appointed Agnes Axtell Moule Fellows for the current academic year.

The appointments were announced by Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean at the medical school.

The fellows are Drs. Barbara Carroll, C. Norman Coleman, Peter Fessenden, Richard T. Hoppe, Alvaro Martinez, and Anthony E. Howes of the Department of Radiology; Drs. Jerome S. Burke and Roger A. Warnke of the Department of Pharmacology; Dr. Laurence J. Korn of the Department of Genetics; Dr. Branimir Sikic of the Department of Medicine; Dr. Ann M. Arvin of the Department of Pediatrics; Dr. Peter Parham of the Department of Structural Biology; and Dr. Robert Kessler of the Department of Surgery.

The fellowships are administered by the Moule Medical Research Foundation, which was established by Manley A. Moule as a memorial to his mother who died of cancer in Palo Alto in 1939. The fellowships provide, in addition to some salary support, $1,000 for laboratory or teaching expenses and $500 for travel to scientific meetings.

Moule, a 1917 graduate of Stanford, was associated with the W. Ross Campbell Co., a real estate firm in Los Angeles. Mrs. Laleah Moule continues to live in the home Moule built in San Marino, CA, 50 years ago.

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Mailed Friday, September 26, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

Note to Editors: Details follow astericks.

STANFORD—

Four junior faculty members at Stanford Medical School have been appointed William H. Hume Faculty Scholars for the 1980-81 academic year.

They are Dr. Eric. I Knudsen of the Department of Neurobiology, Dr. Bruce R. Ransom of the Department of Neurology, Dr. Stephen J. Shochat of the Department of Surgery and Dr. Douglas C. Wallace of the Department of Genetics.

The fellowships provide, in addition to some salary support, $1,000 for laboratory or teaching expenses and $500 for travel to scientific meetings. They are funded from the $5.6 million gift left to Stanford School of Medicine by the late William Mansur Hume of Woodside and San Francisco.

A native of Indiana, Mr. Hume was the founder of Basic Vegetable Products, Inc. He served as president, chairman and director of the San Francisco based firm.

As stipulated in Mr. Hume's will, all the fellows are engaged in basic biomedical research.

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Knudsen is studying how sound is pinpointed. Using the owl, an animal particularly good at locating sound, he is observing its behavior when sound is beamed its way. He is also monitoring the biomedical changes taking place in the nerve cells in the various brain pathways involved in hearing.

Dr. Shochat is monitoring the immune system in children with solid tumors. He is also studying the effects of anesthesia on the immune system.

How their environment influences the functioning of the two major types of cells in the brain, neurons and glial cells, is the research interest of Ransom. He is exploring how the ion, potassium, affects their membrane potential and if neurotransmitters, chemical agents used by nerve cells to communicate with one another, can act on the glial cells.

Wallace is studying the genetics of the DNA in the cell's powerhouse, the mitochondrion. Only a small amount of DNA, the cell's hereditary material, is found in mitochondria; the majority is found in the cell nucleus. Wallace has identified genetic markers in the mitochondria of human blood cells through which he learned that mitochondrial DNA comes solely from the mother. The DNA found in the nucleus is half from the father and half from the mother.

The appointments were announced by Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean of the medical school.

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Mailed Friday, September 26, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

If deaf patients want to say, "Help me!" in sign language, chances are they won't be heard. Most doctors and health professionals aren't trained in sign language.

While an interpreter is often the answer, a doctor's familiarity with sign language can avoid misunderstanding and frustration, and can be critical—especially in emergencies.

Responding to this need and to state and federal requirements for the disabled, Stanford University Hospital is training both Hospital and University employees in American Sign Language (ASL), the native language of most deaf adults in the U.S. today.

In the past the need for interpreters at the Hospital was met by an occasional staffer who knew the language, students recruited by the Social Services Department, or deaf patients who brought their own interpreters.

The ASL course is sponsored by the Hospital's Human Resources Development Department. "One of the goals," says Nina Gelfant, the instructor, "is to provide the Hospital with skilled signers on the staff."

As a result of last year's classes, she says, several staff members now use ASL well in their areas of specialization.

Gelfant hopes to improve the program by inviting more deaf people to participate in class sessions. "Human contact is essential," she says. "ASL cannot be learned alone at home or from a book."

And she hopes to continue the course beyond the initial term, because she feels that 10 weeks is not enough time to attain proficiency in signing—only enough for a good start.

Even if physicians know just a touch of ASL, Gelfant says, the psychological boost they'll give their patients can help in the total healing process.

Unfortunately, last year the course failed to attract physicians. One reason, says Donald Thomas, director of Hospital Personnel, is that physicians are hard-pressed to find the time. To fit individual schedules, a program using videotape cassettes is under consideration.

It is important to understand, says Gelfant, that ASL is not a strict visual representation of English, as is "Signing Exact English," a new sign system being used in some schools.

"This is a moving, growing, expressive language with its own grammar and usage," she says of ASL. "And it's a physical language.

"To communicate effectively with most deaf Americans, one must learn ASL."

Although not deaf herself, Gelfant emphasizes that there is a cultural perspective to learn along with the language, since ASL does not contain many of our common idioms. For example, she says, Stevie Wonder's popular lyric, "You are the Apple of my Eye," would be a mystery in ASL.

Also, says Gelfant, the deaf may not understand how different aspects of their lives, such as marital relationships, relate to questions of health. Therefore, physicians may need to explain more thoroughly why such questions are asked.

Gelfant is the interpreter coordinator of the Deaf Counseling Referral and Advocacy Agency in San Jose. She teaches in the interpreter training program at Ohlone College and in the Linguistics Department at Stanford.

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Mailed Friday, September 26, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

Old people go crazy for three reasons, according to Dr. Alex Comfort, noted English researcher on aging and author of many books, including the best-seller, "The Joy of Sex". They've been crazy their whole lives. They get ill and go crazy. Or we, as a society, drive them crazy.

It is the later reason, the "sociogenics" of aging that Comfort singles out as the most heinous culprit of all in society's demoralization of the elderly. Myths about little old ladies in tennis shoes or old gents who are "bonkers", says Comfort, are far more damaging than the physical realities of aging.

"We now know that intelligence does not decline with age, nor does learning," he says. "Even sexuality holds up better than the capacity to ride a bike or play a round of golf.

"In fact, most old people are nothing like decrepit. They are vigorous people who would rather be blown up by a volcano than die of old age."

Dr. Comfort was at Stanford University Medical Center recently at the invitation of Dr. Moira Fordyce and the Department of Family, Community and Preventive Medicine. Under Fordyce's direction, a geriatric curriculum for the Medical School is being developed.

Comfort's topic was "Real and Imaginery Aging", a subject he has spent the better part of his 60 years studying in man and in animals. Educated at Trinity College, Cambridge and The London Hospital, Comfort was the first recipient of the London Doctor of Science degree in gerontology and the author of the standard textbook on gerontology, "Aging, The Biology of Senescence."

In 1974, he moved from England to California, where he has been a Fellow of the Institute of Higher Studies in Santa Barbara. He holds clinical appointments at both Stanford and U.C.L.A. and teaches Grand Rounds at Brentwood Veterans Administration Hospital in Los Angeles.

Comfort returned to teaching geriatric medicine full time because of its virtual absence in American medical schools and his belief that the provision of proper geriatric services is something that can and should be done right now.

Doctors may someday tinker with the lifespan of man, he says, but ultimately even if we live "as long as Moses", we're all going to get old.

Although the U.S. is apparently ahead of Comfort's native England in gerontology, or the study of the biology of aging, the English are more advanced in geriatric medicine—the delivery of health care services to those now old.

"You wouldn't find an old lady in a wheel chair with her bladder up to her chin and no one there to help her," says Comfort. "The main problem in the U.S. is definitely a lack of integrated services."

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One of the aims of geriatric medicine, he notes, is to tailor-make programs to fit local needs.

Obviously in Canada where the winters are prohibitive, institutional care of the elderly makes more sense than home care, he says.

But in Florida, the climate might dictate a different choice.

"Geriatric services should be geared to the residents in the area," he says, "and they should be a part of the planning. Old people are the most aware of where existing services aren't working."

Comfort's interest in the elderly goes back to a scene in a London hospital during World War II.

"I saw an old man dying on one of the acute care wards," he recalls. "There were ants walking in and out of his nose and I thought to myself, we ought to be able to handle old people better than this.

"It was quite clear that geriatric medicine was one area we didn't know much about."

Another strong influence in his life was his father, who died in 1977 at the age of 94.

"He had exactly two weeks of old age," says Comfort. "I hope to be as active in my nineties as he was. He was simply not infirm."

Aside from attitudes, another major problem still confronting old people, says Comfort, is "gross overprescription" of drugs, particularly diuretics.

"There was this feisty old gent in his eighties," he says, "who suddenly began acting strangely. The geriatrician found no infection, no electrolyte imbalance and the man told him he was taking no medication.

"But when they held him upside down, the pills just tumbled out.

"I always tell doctors just starting their practice that they should get a huge plastic bag and tell their patients to put all medication in it."

Although Comfort believes the teaching of geriatric medicine should be done by specialists, the actual practice should come from a family practitioner.

"Just as there is a tendency to shunt old people out of the mainstream of society," he says, "there is a tendency to shunt geriatric medicine out of the mainstream of medicine into a geriatric ghetto."

As for himself, Comfort has found his life's work immensely rewarding.

"We are talking about the restoration and maintenance of the quality of life," he says.

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Mailed Friday, September 19, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bobbi Navickis, (415) 497-6911 or Max Lewis, (415) 858-3941

City Desks: On Monday, September 22, the Palo Alto Veterans Administration Medical Center and Stanford University will dedicate a new Rehabilitative Engineering and Development Center whose work is described in the accompanying story. The dedication ceremony at Bldg. 51, 3801 Miranda Avenue, Palo Alto, will begin at 2:30 p.m. followed by an open house, and project demonstrations.

STANFORD—

"Robaids" may be how you spell relief to a disabled person.

The development of small and powerful microcomputers has paved the way for construction of robotic aids or robaids to help the paralyzed and those with limited muscular control regain some independence. Help is also coming for the mute, the blind and the deaf from computers that listen and speak.

Work on such devices is proceeding apace at the new $1 million Rehabilitative Engineering and Development Center at the Palo Alto Veteran's Administration Medical Center.

The center, established in 1978, will dedicate its new quarters on Monday, September 22. Various devices, such as "smart" robotic arms and "smart" wheelchairs, will be demonstrated at an open house at 2:30 p.m.

The center, a cooperative effort of the VA Medical Center and Stanford University schools of Engineering and Medicine, is expected to bring the most advanced technology to the aid of individuals with physical disabilities.

A most futuristic device under development is the "smart" robotic arm with its to be "even smarter" two-fingered hand. Using this device, quadraplegics will be able, with a spoken command or a turn of the head, to instruct the arm to fetch or move things.

Larry Leifer, an associate professor of mechanical engineering and the director of the center, and Inder Perkash, an associate professor of surgery, are modifying a robotic arm developed for industrial use by the Unimation Company. The arm, which is not attached to the person, but rather mounted on a wheelchair or an independent mobile platform, has 11 computers in it.

"We're trying to develop smart robotic arms that can be programmed by the patient to perform any manual task,"Leifer said. "This single, high technology device promises to give the severely disabled person control of all the other gadgets in our society. We want to replace devices that do only one thing with a device that can be programmed by the patient to do many."

At present, the hand can go up and down, sideways, back and forth and turn. Its movement can be directed by voice commands such as "move left," "flex elbow," and "close hand."

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Leifer and Perkash are trying to make the arm a little more human-like by programming it to respond verbally to the user's commands. An order may be met by among others, the obedient reply of "I understand the command and am proceeding," or the complaint "My batteries are getting low." A key concern of Leifer and Perkash is to develop a device the physically disabled will want to use, one they feel comfortable using. They will be consulting with potential users all during the arm's development.

A more versatile hand is also being developed for the arm. The hand will be able to pinpoint an object and then grasp, or avoid it without precise human control. This is an all-important consideration in diseases such as cerebral palsy in which movements may be jerky.

"It will be a case of the hand controlling the arm," Leifer said. The hand will 'sense' objects and in turn direct the arm's movement. The present two-fingered prototype contains a microcomputer controller and eleven light sensors.

With its slanting fingertips and bending joints, the hand could be used to bring food to the user's mouth, allowing the disabled a modicum of independence.

For those with speech problems as well as paralysis a head control device for piloting the robotic arm is being developed.

A clinical prototype should be ready next summer, Leifer said. A prototype for use in the home may be available as early as 1983, he added.

"Without paying us anything for our labor, right now it costs about $65,000 to make the arm and hand," Leifer said. "But by 1985, they could cost $20,000 or less. It depends upon how many are being made. If very few are made, they will be custom and therefore expensive."

"On a total 1.5 million dollar annual budget for the center, we could not produce the units commercially," Leifer said. "Our aim is to develop them and then bring them to a commercial interest's attention."

A spinoff from the smart arm research has been the development of the "smart" wheelchair. Through use of ultrasound sensors and a microcomputer, a wheelchair can follow a wall at a constant distance and can avoid running into things. It can also follow someone down a hall and stop if he stops. Another 3-wheelchair being developed for indoor use will be able to make tight turns and even rotations, Leifer said.

"Microcomputers are allowing us to achieve a great deal of fine control of motion, and are key to improving the aids for the disabled," Leifer said.

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Advance copy transmitted on Business Wire.

Mailed Friday, September 19, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A $15,000 gift from the Lions Club International Foundation to the division of urology at Stanford University School of Medicine will help support studies in early detection of prostate cancer, the third leading cancer in men, accounting for 17 percent of all male cancers.

Dr. Thomas Stamey, urology division chief and professor at Stanford, was recently presented the gift by a group of Lions Club officials.

"There are 55,000 cases of prostate cancer each year in the U.S., and about 22,000 deaths," noted Stamey. "The Lions Club gift will supplement ongoing studies aimed at developing a chemical test based on examination of the semen, which contains prostatic fluid. This would allow early detection of prostate cancer without relying on annual rectal examinations," he explained.

Currently, prostate cancer can be detected by rectal exam, but it is detected at a curable stage in only about 10 percent of cases, Stamey noted.

A better technique for early detection is sorely needed, he added, and could possibly help the estimated 4.9 percent of white males and 5.8 percent of non-white males who eventually develop cancer of the prostate.

Harry Aslan, a past president of the International Association of Lions Clubs, presented the gift to Stamey on behalf of the group.

"We strongly believe in serving the needs of people," Aslan said. "Supporting medical research provides a special opportunity to help many people."

Other Lions officials involved in the presentation included Joseph DiDuca of Los Gatos, international director of the International Association of Lions Clubs, Philip Ritzau of Milbrae, a past president of the International Association, William Tonelli of Burlingame, district governor of District 4-C4 of the Lions, and Donald Stanaway of Burlingame, a past district governor of 4-C4.

The Lions Club International Foundation is the philanthropic arm of the International Association of Lions Clubs representing 33,000 clubs worldwide, according to Aslan.

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Mailed Wednesday, September 17, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Stanford Medical School's Department of Psychiatry and Behavioral Sciences formed its first division, the Division of Child Psychiatry and Child Development, on September 1.

The division has been created to better coordinate the clinical child psychiatry program developed over the past three years at Children's Hospital with the basic research program in child psychiatry, according to Dr. Thomas F. Anders, head of the new division.

"Too many child psychiatrists lack an academic base," he said. "We aim to integrate the academic and clinical aspects of child psychiatry and in doing so hope to train child psychiatrists who will serve in leadership roles in public and academic institutions."

"We've made it possible for a group with common interests to work in common surroundings," Dr. Thomas A. Gonda, chairman of the department, said. "The number of faculty members conducting research in child psychiatry and development has now reached a critical mass that warrants the division's formation."

Seven faculty members are in the division at present and within a year two more faculty positions will be created. In addition six physician specialists, a clinical psychologist and a social worker are part of the division.

In addition to Anders, the other faculty members are Drs. Roland Ciaranello, Anneliese Korner, P. Herbert Leiderman, Seymour Levine, Alvin A. Rosenfeld, and Alberta E. Siegel.

The research interests of the faculty are diverse. Anders investigates sleep problems in children. Leiderman studies cross-cultural approaches to child and family practices. Levine does basic research on animal behavior.

In the child psychiatry program, developed in affiliation with Stanford, clinicians treat the gamut of behavioral and emotional disorders, from bed wetting to schizophrenia. They also must work with normal children adjusting to chronic illness.

Familiarity with the frontiers of knowledge in central nervous development, child psychiatry and animal behavior and an appreciation of the cross-cultural approaches to child rearing will sharpen their clinical skills, Anders said.

In turn, the basic researchers will gain by exposure to the clinical problems in the field, he said. "New research problems may come to their attention."

Commenting on the growing field of child psychiatry and development, Gonda said: "It has become increasingly apparent that understanding how children develop is very important in understanding the behavior of adults."

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Mailed Tuesday, September 16

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Once when Dr. Alfred P. Spivack was scuba diving in Honduras, he saw a man, planning to dive, whose physical condition was so poor that sport diving should have been labeled "hazardous to his health".

"He was extremely fat and he smoked constantly, puffing up the steps," says Spivack, a clinical professor of medicine at Stanford Medical School and an avid sport diver. "When he took off his shirt, there was a big red scar on his chest, which obviously meant he'd had open heart surgery. And here he was considering going scuba diving for the first time.

"I finally told the instructor that I didn't want to be on the same boat with the man because he was not taking responsibility for his own safety... and I didn't feel he should be allowed to dive."

The story, according to Spivack, illustrates the kind of person who gives a potentially beautiful sport a bad name. Any person interested in scuba diving, says Spivack, should have a complete physical check-up beforehand and also get proper training in a sport that is definitely not for everyone.

Spivack, his wife and two children are all certified by the National Association of Underwater Instructors. And in his opinion, this kind of instruction, which includes 30 hours of classtime and a weekend of supervised diving, is the bare minimum needed. Otherwise divers run the risk of panic because of an inability to handle unfamiliar situations, and in many cases, serious injury.

"The worst thing," he says, "are some of these quickie resort courses. People are usually there for a week, so they get a fast training course of a day or two... and then they're off!"

In the U.S. today, there are an estimated two to three million scuba divers and their numbers are growing. As the sport's popularity continues to grow, Spivack says, physicians have to become aware of the medical problems involved and who should be diving and who shouldn't.

At the moment, however, diving medicine is a very complex and little known field. One reason for this, notes Spivack, is many doctors find the field unattractive because of the medical and legal hassles involved. Not only is the accident rate potentially high in scuba diving, the liability factors are often difficult to determine.

But the knowledge of diving medicine is becoming more widespread as commercial diving, in particular, sparks more research in the field, and as physicians like Spivack attempt to bring more information to their communities about the medical aspects of man underwater.

Spivack is a member of the Undersea Medical Society, which cosponsored a recent training course in undersea medicine in the Florida Keys. The society's express purpose is to spread the knowledge of diving medicine.

One of the most common misconceptions about the sport, says Spivack, is that shallow diving is safe. Without an understanding of diving physiology, however, even this kind of diving can be dangerous.

"You can get into trouble with gas expansion in the lungs in 14 feet of water," says Spivack. "You are dealing with a non-compressible person (largely because of water content and bone) breathing the compressible medium of air or gases."

One of the most dangerous times apparently is when a diver returns to the surface.

On the descent, the gases a diver breathes become more compressed the deeper he goes because water pressure is increasing. (With every 33 feet, the diver is under another atmosphere of pressure, or 14.7 pounds per square inch.) The increased pressure causes the air molecules to occupy less space, much the way a balloon responds when it is squeezed. Under increased pressure, the gases also become more soluble, or dissolvable in the bloodstream and body tissues.

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If a diver comes up at a measured rate, the molecules of oxygen, nitrogen and other gases have a chance to re-expand slowly and the excess gas leaves the body. But if a diver comes up too quickly, the gases expand too rapidly and form bubbles. This can happen even in a shallow dive.

These bubbles of gas, says Spivack, can be liberated anywhere in the bloodstream and the body tissues. The more serious types of decompression sickness, or the "bends" as it is more commonly known, can involve the brain and spinal cord, or other vital organs such as the heart and lungs and often result in death.

By obeying bottom time, however, Spivack says a diver can resurface without running this risk. Bottom time, according to no-decompression dive tables, indicates how long a diver can safely stay at a given depth, including the ascent time which should be no faster than 1 foot per second.

For example, a diver going to 60 feet may stay down for 60 minutes, but a minimum of one full minute is needed to reach the surface safely. A diver going to 150 feet, however, can stay down only 5 minutes and requires at least two and a half minutes in resurfacing time.

Most sport divers, says Spivack, should not go below 100 feet because it is too dangerous and because the best diving—with the most vivid colors—is between 30 and 60 feet.

Whenever he goes diving, Spivack always goes with a "buddy" since there is always the potential that something can go wrong. On one underwater venture, Spivack got a very painful ear block in his middle ear, which made him dizzy, and posed the possibility of its bursting.

"Because I knew what to do," he says, "I didn't panic. But every diver—no matter how good he is—needs help at one time or another."

Proper equipment is another factor in diving safety. According to Spivack, there is considerable variation in the quality of equipment and potential divers should investigate the differences thoroughly. But there are also practical considerations that come with experience.

"Beginners tend to get big masks that are flashy," he says, "but you have to remember that when you get water in the mask, you have to tilt the head up and exhale to blow the water out. Bigger masks require more blowing... so a low volume mask is preferable."

Of all the places he's explored underwater, Spivack likes the Red Sea best. Diving there, he says, was like being on an ocean safari.

"You see enormous schools of jack fish, sea turtles and sharks that are six feet and larger," he says. "The marine life is so plentiful that the sharks aren't interested in a large fish in a wet suit—at least not now.

"I am concerned, though, that as the Red Sea gets fished out, there will be more shark attacks on humans. But, in general, sharks are not as much of a problem for scuba divers as they are made out to be."

As long as divers remember they are "visitors in another world" and approach that world with caution and respect, says Spivack, the beauty and excitement of scuba diving is an unparalleled experience.

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Mailed Thursday, September 11, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

DNA, the basic hereditary material of living things, is doing the twist.

"Its bending and twisting motions occur at the mind-boggling rate of roughly a billion every second," said Dr. Oleg Jardetzky who reported the finding in the current issue of *Biochemistry*.

He and a colleague, Dr. Michael E. Hogan, said their observations counter the traditional notion that DNA (deoxyribonucleic acid) is a rigid double-helical staircase.

DNA is "more like a staircase made of rope, than it is one of iron and concrete," said Jardetzky who directs Stanford University's Magnetic Resonance Laboratory.

The new finding was obtained by the use of nuclear magnetic resonance (NMR) spectroscopy, a technique employed by chemists for the past 30 years to identify compounds and study molecular structure.

The understanding of internal motions inside DNA is important, according to Jardetzky, because it explains how the molecule interacts with the proteins and enzymes which read the genetic code.

"Scientists had thought the DNA helix to be a rigid structure which could interact with proteins much like a key fits into a lock," he said.

"If in a particular region of the DNA helix the structure of protein meshed properly with the structure of DNA, that region could be recognized as having the proper genetic information."

Now, according to Jardetzky, it is clear the reading of DNA proteins is more complicated than the "lock and key" model.

"The ability of a protein to read information from DNA must be sensitive not only to the average structure of the helix but also to the rate and size of the wobbling which occurs in different regions," he explained.

The practical implications of the finding are wide ranging, he said.

Recombinant DNA or genetic engineering uses special enzymes as tools for cutting and splicing DNA. However, scientists don't really know how that cutting or splicing occurs.

"Advances made in the understanding of enzyme-DNA interactions at a basic level will provide the kind of information necessary for the rational design of gene splicing technology," he said.

In addition, they are important to understanding the effects of mutagens and cancer causing agents since mutations involve the disruption of the mechanism by which enzymes and other proteins read the genetic code.

The research, supported by the Division of Research Resources of the National Institutes of Health, the National Science Foundation, and the Damon Runyon-Walter Winchell Cancer Fund, were based on advances in NMR technology, Jardetzky said.

Rates of internal motions were calculated from the NMR data by a theory written in 1978 by Jardetzky and research associate Roy King.

Nuclear magnetic resonance goes back to 1945, when Dr. Felix Bloch of Stanford and Dr. E. M. Purcell of Harvard independently observed that atomic nuclei, the central cores of atoms, absorb certain frequencies of radiowaves when placed in a magnetic field.

NMR gives off a characteristic absorption spectrum, enabling scientists to identify chemicals by the types and numbers of atoms they contain.

It also provides information about the bonds holding atoms together, thus permitting the study of the shape and motions of even the most complex molecule over time.

Jardetzky's group is one of several in the United States studying molecular interactions through use of NMR.

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Mailed Tuesday, September 9, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Getting reliable information on the effects of medical care requires more than just token support by the federal government.

This is the opinion of Dr. John Bunker, director of health services research at Stanford University School of Medicine.

In separate articles in the *New England Journal of Medicine* and on the opinion pages of the *New York Times*, Bunker has decried the low priority that health policy research has in Congress.

President Carter has recommended a $78 million budget for the National Centers for Health Statistics, Health Services Research, and Health Care Technology. The House Appropriations Committee has already slashed $4.25 million from this amount and the Senate may well vote further cuts.

"In the global sweep of the problems our society faces, this may not seem important," Bunker wrote. "But it is."

He said Americans spent $212.2 billion on health care last year—an average of $943 per person. The care the public receives for this amount ranges from life-saving measures to benefits too small or hard to measure.

"The experimental evidence on which to judge the effectiveness of most such care is, unfortunately, poor," Bunker said.

"Nevertheless, physicians must make decisions. By nature optimistic, they tend to believe in the effectiveness of the treatments they use.

"Poor data and professional enthusiasm encourage the over-utilization of diagnostic tests, drugs, operations and hospitals."

Congress apparently thinks that individual health agencies such as the National Institutes of Health, the Food and Drug Administration, the Center for Disease Control and others already do this work.

While these agencies attempt to evaluate their programs, the yardsticks by which they measure success or failure are not sufficient to formulate important policy decisions.

There is a reason in having strong, independent organizations to evaluate health services, Bunker said. That is to avoid the conflict of interest when federal agencies are responsible for evaluating their own performance.

The National Center for Health Statistics provides data on virtually every aspect of health, including birth and death, infant mortality, prevalence of disease and disability. The National Center for Health Services Research is responsible for studies in the organization, financing, and utilization of medical care. The National Center for Health Care Technology evaluates the effectiveness and economic impact of health care technologies.

Bunker said the argument that cuts are necessary because the economy is hurting on all fronts might have a little appeal if the level of funding for these centers had been reasonable in the past.

"When one considers that the essential services of the centers have been chronically undersupported, it makes no sense at all," Bunker said.

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Mailed Tuesday, September 9, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Fifty million people in the U.S. complain of sleep disturbances, yet physicians cannot answer their most basic questions about how much sleep is necessary for good health.

This is just one indication of the fledgling status of the study of sleep disorders as a scientific and medical discipline, according to Dr. William Dement, professor of psychiatry and director of the Sleep Disorders Center at Stanford University School of Medicine.

And although some sleep disorders kill people, most medical schools offer no regular training in sleep disorder diagnosis and treatment, he adds.

These and a myriad other problems and misconceptions about sleep disorders and their treatment are being attacked in a major program, "Project Sleep," initiated by the U.S. Public Health Service and announced last December by Surgeon General Dr. Julius Richmond.

Dement was recently elected chairman of the project's Joint Coordinating Council, a group of professional organizations and consumer groups planning and carrying out the project's educational programs.

"Sleep disorder medicine is in the process of being born as a clinical field," says Dement. "A major task we face is establishing guidelines for diagnosis and treatment in a brand new field of medicine.

"But before we can promote guidelines for practice, we need to establish a consensus among the most experienced practitioners in the field," he adds. "This is a first order of business for the Council.

"While most medical specialties have emerged over many years, we are trying to collapse a century of clinical evolution into a period of a few months," he explains.

There is an urgency to educating physicians and patients about sleep disorders, Dement contends, so that the millions who now suffer from conditions like insomnia, sleep apnea and narcolepsy, will be able to benefit from the most current knowledge and therapeutic techniques and drugs available.

Project Sleep came about, in part, in response to concerns about widespread use of pills and tranquilizers for insomnia, Dement explains. A 1979 National Academy of Sciences study report Dement helped prepare, "Sleeping Pills, Insomnia and Medical Practice," pointed out some of the major concerns.

"While no one has ever clearly established the efficacy of sleeping medications, 25 million prescriptions for these medications are being written every year in the U.S.," he says.

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And there are documented adverse effects from these drugs, including the dangers of serious or fatal overdose, and impaired alertness and coordination, he adds.

Another major goal of the Project Sleep Joint Coordinating Council, Dement explains, is to identify gaps in medical knowledge of sleep disorders and insomnia and to promote further research in these areas.

For instance, he explains that although millions of adults use sleeping pills continuously, almost no research on the medications' long-term effects has been conducted.

Among the public and private groups involved in the Joint Coordinating Council are the American Medical Association, the American Academy of Family Physicians, the Association of Sleep Disorders Centers, the American Psychiatric Association, Consumers Union, Ralph Nader's Health Research Group, and the Pharmaceutical Manufacturers Foundation.

Since the study and treatment of sleep disorders is emerging as a field of clinical medicine, guidelines and standards for practice are particularly important, Dement explains.

For instance, in 1976, the Association of Sleep Disorders Centers was formed to adopt and promote patient care standards that would "ensure highest quality evaluation and treatment" at the growing numbers of sleep disorders centers around the country. Dement is currently president of the Association, which represents 12 fully accredited centers.

Despite the rapid growth in numbers of specialized sleep disorders centers, both physicians and the public need more education about sleep and its problems and treatment, Dement emphasizes, citing a vivid example.

"People over 60 represent about 15 percent of the population in this country, yet they represent about 25-30 percent of the sleeping pill users.

"Preliminary evidence shows about half of all elderly people have breathing problems during sleep. For these people, sleeping pills would not be medications of choice, and might even be dangerous, since they are respiratory depressants and could worsen those breathing difficulties that already exist," he explains.

Through Project Sleep's Joint Coordinating Council, Dement hopes to increase public and professional awareness of problems such as these.

"Sleep disorders have never been considered mainstream medicine, and research in the field has suffered as a result," he explains. "We hope to overcome the temporal disadvantages the field has faced, and establish sleep research as a true discipline with a formal program of training in medical schools.

"In essence, the study of sleep and its disorders is an area as large as the biomedical sciences currently dealing with the waking state and the waking patient."

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Mailed Tuesday, September 2, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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CITY DESKS: Macy is willing to be interviewed, if there is an interest.

STANFORD—

Gilbert Macy has been in and out of hospitals so many times in the past 14 years that he and his wife, Estelle, joke about writing their own Michelin guide on hospital care.

"We'd give them three sutures... instead of knives and forks for ratings," says Macy with a laugh.

Macy, a Commissioner of Human Rights in Rockland, N.Y. for nearly 15 years, was hospitalized again in April this year for a heart transplant operation at Stanford University Hospital in Palo Alto, California. Prior to this, the 51-year-old Macy had had such severe heart problems that by his own count, he'd been in and out of hospitals 34 times since 1966.

But his unusual ability to laugh at the whole ordeal is typical of what Dr. Norman Shumway, chairman of cardiovascular surgery, describes as the "heroics" of the heart transplant patient.

"Heart transplants are not for everyone," Shumway has stressed on many occasions. "The patient has to have some kind of unique zest for living—not so much a fear of dying, but in fact, a love for staying alive."

By the time he got to Stanford, Macy's zest for living already had been tested. He had survived six heart attacks and open heart surgery in 1972.

Like all heart transplant recipients, however, a new heart was his last hope. Near death, Macy knew, "time was of the essence."

Although most recipients must wait an average of two months for a donor, Macy was lucky. On April 23, 1980—eighteen days after his arrival at Stanford—he got a new heart.

His donor, a 20-year-old man, died in a motorcycle accident.

"I cannot speak highly enough about Stanford's operative and post-operative care," says Macy of his experience. "Everyone has been wonderful, friendly and concerned."

With the operation, Macy became one of Stanford's 193 transplant recipients and a member of what he calls the "most exclusive club in the world"—the survivors' club. At the moment, Macy is one of 75 living heart transplant patients.

Each year, at least 400 patients are referred to Stanford for transplantation, but only 60 are asked by the transplant team to come out for further evaluation. Of these, 40 are eventually selected for treatment, but one-third of this number die before treatment can take place.

Since the first transplant in 1968 by Dr. Christiaan Barnard in Capetown, South Africa, the length of survival for transplant recipients has increased dramatically from a matter of weeks, to one year for 70% of all recipients and five years for roughly half of them.

To stay alive, however, Shumway's "heroics" come into play. Transplant recipients must take a battery of drugs the rest of their lives, because the body never stops rejecting the foreign heart tissues. Ironically, the same drugs which have brought rejection under control leave patients susceptible to life-threatening diseases because they suppress the body's natural immunity.

Infections are not only common, they are now the leading cause of death among transplant recipients.

Since his operation, Macy admits to some anxiety over infection and also the possibility of a heart attack with his new heart.

"The heart becomes denervated from the brain in heart transplant patients," he says, "which means the normal impulses that go from the brain to the heart aren't there, and I could have a heart attack and not be aware of it... because there would be no pain."

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Although there are other symptoms such as headaches, chills and a slight drop in body temperature, adds Macy, he feels more comfortable being near Stanford's cardiovascular team—at least for the moment. Technically, the risk of an undetected heart attack is slight, since an EKG (electrocardiogram) would pick up any changes in the new heart.

"I don't have any specific plans right now," says Macy, "but I'll probably do some consulting work. I can do that just as easily here, as in New York."

For many heart transplant patients, one of the greatest traumas is accepting the new heart as their own. But Macy apparently had little problem with this, compared to the ordeal of the post-operative period, which he will be in for another three months.

"The fact that you have a healthier heart is a given," he says. "The difficult thing for me has been building my body back up to a semblance of my old self.

"I played tennis semi-professionally years before I got sick. In fact, I was in pretty good shape until two years ago. That was when my doctors in Nyack, N.Y. told me, 'Don't ask us to give you a diagnosis, there is none!' "

Macy believes it will probably be another six months before he feels reasonably fit. By then, he hopes to lose the "four chins" the large doses of prednisone have caused.

"My toes are the only thing still proportionate to the rest of my body," he jokes.

Prednisone and Imuran are considered the two most indispensable drugs for heart transplant patients, but they are also the ones with the most severe side effects, such as bone fragility, bruising, and weight gain.

During the postoperative period, doctors try to reduce the amount of these drugs as much as possible without triggering the body's rejection of the new heart.

Of the last few years, Estelle Macy says, "We've run the gamut of every emotion from horror to joy."

But the Macys seem to have done so with the courage and humor.

My wife gave me a sign that reads, 'I'm unconditionally guaranteed to have defects', and that's true," says Macy, "but I'm also a survivor by nature."

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Mailed Tuesday, September 2, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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CITY DESKS: PHOTO AVAILABLE ON REQUEST IF NOT INCLUDED WITH STORY.

STANFORD—

Job sharing may be a good way to bypass the seven year itch.

At least that's the experience of Joan Miller and Pat Gamberg, heart transplant nurses at Stanford University Medical Center, who are celebrating their seventh anniversary this year as job partners without a hint of the famous affliction.

Sharing one full-time position in the department of cardiovascular surgery, both women work three days a week, overlapping once weekly to handle a busy clinic schedule.

So serious are the two women about cooperative job sharing that when their EKG technician called in sick one Thanksgiving holiday, each came in to cover for exactly half the day.

Miller and Gamberg recounted the incident with amusement recently in the closet-sized office they share with two large desks, many volumes of statistics, and one cardiovascular surgeon. They explained that job sharing allows each partner to pursue her career while retaining enough freedom to spend time on family, home and other interests.

Job sharing, on the increase nationwide, nevertheless remains an unusual phenomenon. An article in the November 1978 *Stanford University Manager*, a publication of the personnel department, reported that only four non-academic University positions had been identified as being shared.

In a relatively new game Miller and Gamberg are old hands—they have been job sharing since 1973.

"And we plan to continue until they throw us out," laughed Miller, who originally held the position alone, full-time from 1970 until 1973.

Their enthusiasm for the unorthodox alliance is shared by others in the department—most importantly, by their boss.

"It's an outstanding arrangement," reported Dr. Edward Stinson, who is professor of cardiovascular surgery and principal investigator of the heart transplant program.

"Job sharing is still a new and growing phenomenon. People decide to share jobs for many reasons," explained Susie Ruggels of New Ways to Work, a nonprofit organization based in San Francisco that actively promotes the concept of job-sharing and other work/time options nationwide.

"One of the major reasons people try job sharing is to gain more time to engage in other interests or responsibilities such as child-rearing, caring for elderly parents, or continued education," Ruggels said.

In 1973, expecting her first child, Miller was looking for someone to cover during the three month period she expected to be absent.

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Gamberg, then a nurse in the clinical research unit at Stanford Hospital, was exploring the possibility of half-time work, in order to gain time to spend with her two children at home.

Friends since 1964 when they were nurses in the same unit, Miller and Gamberg presented their job sharing proposal to Stinson, and embarked on the experimental arrangement with his cautious backing.

Now, Miller and Gamberg hold primary responsibility for maintaining complete medical information on all heart transplant patients from Stanford. Although not involved in the immediate post-operative care of patients in the Hospital, they are the primary medical contacts for heart transplant patients once they leave.

Together, they assist the physician in the transplant outpatient clinic, handle many routine and emergency phone calls from patients, and arrange for Hospital re-admissions and procedures whenever necessary.

They also lecture frequently on various aspects of the transplant program, and help in preparation of articles on the transplant program for publication in professional medical journals.

Although they share most duties, Miller and Gamberg have found that they complement each other in some areas, with one preferring a particular task over the other.

One of the most demanding aspects of the job is collection, filing and retrieval of data on all aspects of the heart transplant program, according to Gamberg.

"From the time a patient is accepted as a candidate for transplantation, all information is processed through our office," she explained. "Joan is expert at computing some of the statistics relating to transplant rejections in our patients, and this is an area that I prefer to leave to her."

"On the other hand, Pat is good at dealing with people, so she handles most of our employee relations and supervisory tasks," continued Miller.

"We have known each other for so long that each of us feels secure in knowing how the other will behave or react in any situation," Miller added. "The two greatest problems in this type of sharing would be competition and having other people try to play us against each other—we have avoided both pitfalls so far."

Does the team recommend job sharing for others?

"Yes; particularly if it's a mutual decision between two people who know and trust each other," Gamberg responded.

"But only if they're both extremely tolerant and extremely good," Miller laughed.

And a sense of humor probably helps most of all, they agreed.

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Mailed Wednesday, October 29, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

A new way of measuring a deformity of the chest wall that affects one out of two hundred children, is helping physicians at Stanford University School of Medicine learn more about surgical therapy to correct the condition.

The abnormality, known as "sunken" chest, is a major cosmetic problem for those afflicted, according to Dr. Stephen Shochat, chief of pediatric surgery. But the condition may also cause complications of the cardiovascular system that can become serious health concerns, he noted.

Surgery is sometimes performed to correct the cosmetic problem, Shochat noted. But the lack of a simple objective method for measuring the severity of the deformity has made it difficult to determine whether or not surgery helps significantly.

Shochat and his colleagues have adapted a technique developed by Japanese scientists, called moire phototopography, to measure precisely the body contours of children with sunken chests.

Moire patterns occur when two geometrical screens are superimposed. In moire phototopography, light is aimed through a screen to produce a design that is projected onto the body, Shochat explained.

The design is molded by the body contours of the patient, producing lines similar to the contour lines on a topographical map.

Using the lines as a guide, the depth of the deformity can be measured with high accuracy, Shochat said.

These body contour lines are recorded on film which can be analyzed simply and inexpensively, he explained. The technique is simple to perform, there is minimal inconvenience to the patient, and even infants can be studied, he added.

With the new measurement technique, children can be followed for evidence of early and progressive recurrence following surgery without the need for repeated x-rays, Shochat explained.

In addition, moire phototopography will enable physicians to correllate more objectively the severity of the deformity with the presence of serious complications, he noted.

Shochat reported on the use of moire photogopography in measuring sunken chest at a meeting of the American Academy of Pediatrics in Detroit on Tuesday, October 28. His colleagues in the study are Drs. John Csongradi, Gary Hartman and Lawrence Rinsky.

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L100

Mailed Wednesday, October 29, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

"The next decade for the Stanford University Medical Center will be one of maturation and consolidation of gains, according to Dr. Lawrence G. Crowley, vice president for medical affairs.

"And while the rapid growth of the late sixties and early seventies is not on our agenda, real forward motion is," he said.

"We cannot be complacent about our stature or rest on past laurels. We must not stagnate. The people, programs, and state of biomedical science here are much too dynamic to settle for the status quo."

Crowley, who recently assumed the top administrative post at the Center, spoke on future goals of the center and its relationships to the community at a staff meeting held earlier this week at Fairchild Auditorium.

Crowley said the Medical Center, which includes a university hospital, a medical school and clinics, has been helped by the crises of the late seventies "because they forced us to re-examine our values and the way this Center functions."

"In a sense, we've come of age. We've just turned 21," he said of the Medical Center which last year celebrated its twentieth year in Palo Alto.

"Like the life of an individual at one extreme and civilizations at another, an institution must not only employ its natural talents productively, but be able to adapt to changing circumstances," he said.

Crowley reported that the past 20 months were devoted to a serious re-evaluation of the Center and the relationships of its three functional units.

"This re-evaluation has been largely accomplished," he said. "The School, Hospital and the Clinics where the faculty members practice, now have identifiable and rational governance and financial systems.

"Each unit is responsible for its own program and budget within the overall umbrella of the Medical Center and the University. All these programs ended the fiscal year in a relatively strong financial position."

Crowley spoke about the physical facilities of the hospital which have been deficient in several ways—overall space, functional design, and maintenance. This has been a serious concern during the past decade and their correction is the goal of the Hospital's recently approved modernization plan.

When completed, Crowley said, "the modernization will provide almost 43 percent increase in Hospital space, including some academic space when certain Hospital functions are relocated."

He said the neonatal intensive care unit, now under construction, will be completed late winter or early spring. The modernization of the Boswell Building, which houses the University outpatient clinics, scheduled to begin in 1981, will help the faculty "provide the most modern ambulatory care in an attractive and efficient setting."

Concerning the Hospital, Crowley said these characteristics and qualities will be desirable in the 1980s.

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"We have a dual role as a University hospital and regional referral center and a community hospital with special responsibilities to local citizens," he said.

"I firmly believe that only in a hospital that provides the highest quality of care will there be true quality in medical education, professional training, and clinical research.

"We must vigorously and continuously emphasize quality care for all our patients. This means more than simply the best technical care by physicians, nurses, and technologists. It means thoughtful, humanistic, indeed loving care from the moment the patient enters until the patient no longer requires hospitalization."

Crowley said that although community physicians and faculty may have different goals, their objectives are not necessarily divergent or contradictory.

"We are all united in the goal of providing the best possible care for our patients while we educate tomorrow's health professionals and improve medical procedures," he said. "The commitment is shared by all of us in a university community and underlines our responsibility to the society that has invested so much in institutions like Stanford."

Crowley said for almost two years representatives of full-time faculty and community physicians have been discussing ways of improving town-gown relationships and work more effectively toward common goals.

"Now I believe we have established the framework of a fair and practical working relationship with the community physicians," he said. "Recommendations are in the final stages of development. We will present them soon to the Hospital Board of Directors, the University and others. I anticipate we will implement these recommendations promptly in order to get on with the business at hand."

Crowley said he will make consented efforts to strengthen the Center's relationships with its major affiliated institutions—the Palo Alto Veterans Medical Center, Santa Clara Valley Medical Center, and Children's Hospital at Stanford.

"I believe the increased opportunity to offer specialized care and training at those hospitals maybe a useful way to perform our distinctive role effectively," he said.

Crowley spoke of the need for effective management.

"I predict there will be no relaxation of federal, state and community demands for levelling the steep rise in health costs," he said. "We must learn to live with these realities to provide a quality product at a reasonable cost.

"Part of the process will involve the development of approaches that will permit us to adapt to changes in the national care structure instead of reacting, as we have in the past, to these changes by crisis management."

Crowley said a university, by its very nature, is an open place.

"That openness to inquiry, to criticism, to review, to understanding of another viewpoint is a sourse of great strength. We share our results. We try to communicate freely and openly with our students, our patients, and the community."

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Mailed Friday, October 24, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

City desks: Copies of the Report available on request if not included with story.

STANFORD—

Medical care, particularly in a teaching hospital like Stanford's, is a complicated business.

The complexity of providing care to 23,000 patients year round is the subject of Stanford University Hospital's 1979 annual report just published and available to the public from the hospital's Community Relations Office.

The report covers many key areas monitored by the Hospital's Quality Assurance Program, an effort which evolved from the need for a more systematic way of identifying and correcting problems, and to meet the requirements of the Joint Commission on Accreditation of Hospitals.

Infection control, maintaining radiological safety, and the protection of human volunteers in research projects are discussed.

"Our intent is not punitive," says Judy Bruzus, Quality Assurance Program director. "We are not so much interested in identifying the individuals responsible for problems, as in finding out where the system tends to break down, and in relaying our findings to the people who are best able to take action."

An example of how this system works was a recent Code 66 described in the report. Code 66 in hospital parlance is a red alert. A patient on the north wing's first floor nursing unit had suffered cardiac arrest.

Immediately, a team of physicians, nurses, respiratory therapists, and other support personnel rushed to the scene.

The crash cart carrying vital drugs, respiratory bags, monitors, and defibrillators was wheeled to the patient's bedside. One of the doctors took charge, while they all worked together to get the patient's heart beating again.

Meanwhile, in the background, a respiratory therapist stood with a clipboard taking notes. She noted there was some confusion at first about who would take charge.

During previous cardiopulmonary resuscitations (CPRs), she had noticed other problems, such as a crash cart's extension cord, which was too short to reach the electrical outlet, or a resuscitation bag that mulfunctioned during use. Each factor had added valuable time to the resuscitation procedures.

The therapist with the clipboard was participating in a patient care audit of CPR as performed in the Hospital. Her observations were presented to a CPR committee representing other therapists, physicians, nurses, pharmacists and Hospital engineers.

The committee recommended steps to eliminate the confusion and crowding during resuscitations, and directed the responsible departments to correct the inefficient equipment on crash carts.

A later audit showed improvements in most of these areas, according to the annual report.

Besides the departmental activities, says the report, several committees of the medical staff meet regularly to review specific aspects of medical practice, including the disciplining of physicians who fail to meet required standards.

"The business of these committees is not always as dramatic as the CPR audit, but it is nevertheless a very important means of protecting patients," the report says.

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For example, "because mistakes in matching or delivering blood for transfusions can be fatal, the blood ordering or delivering system is carefully scrutinized by a blood tranfusion committee. Similarly, incomplete or unavailable medical records can delay treatment and endanger patients during emergencies.

"Thus, a medical records committee is assigned the job of ensuring that records are complete and easily retrievable."

Another busy committee is the Panel on the Use of Medical Subjects in Research. It meets each month and reviews 60 to 70 research proposals in nearly every field of medicine. The panel includes 10 physicians, a professor of ethics and philosophy, a lawyer, a registered nurse, a pharmacist, community members, and students.

"Not many are rejected outright," says panel chairman Dr. Philip Berger, professor of psychiatry and behavioral sciences, "but many go through a long process of modification to increase the benefit and decrease the risk to the patient."

This, according to the report, means that in reviewing proposals panel members must make sure that volunteers are prevented from unnecessary risks and that the researcher has obtained informed consent.

Informed consent means that the volunteers understand that they have the right to know why the experiment is being conducted, what benefits as well as risks are involved, and that they may withdraw from the study at any time without prejudicing their medical care, the report says.

Financial data and other details of the Hospital's operation are also provided in the report. For a copy, call 497-7167.

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Mailed Tuesday, October 21, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Dwain N. Fullerton, associate vice president for medical development at Stanford University Medical Center, has resigned to accept a position as vice president for institute relations at the California Institute of Technology.

His appointment effective November 1 was announced Monday, October 20, by the Pasadena-based institute.

In his resignation letter to Dr. Lawrence G. Crowley, vice president for medical affairs, Fullerton wrote:

"It is with mixed emotions that I must inform you of my acceptance of the position. . . I am sorry to be leaving the School at a time when, under your leadership, the future looks so bright."

Crowley said, "Dwain has put in many years of devoted and effective service to the University and more recently to the School. We are sorry to see him go. We congratulate him and wish him well in his new position of challenge and opportunity."

A Stanford alumnus and long-time Palo Alto resident, Fullerton had headed the University's corporate relations program for 10 years before being named associate vice president at the Medical Center in 1979.

Prior to joining the University's Office of the General Secretary, he worked with the Graduate School of Business as associate director of the International Center for Advancement of Management Education, and as associate dean of a business school in Lima, Peru, modeled after the GSB.

His first fund-raising experience was in Stanford's annual fund, starting in 1960.

Fullerton earned the A.B. from Stanford in 1958 and the M.A. in 1960. In addition, he attended the National University of Chile as a Fullbright scholar.

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Mailed Monday, October 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

The existential approach to psychotherapy has long been viewed as a "homeless waif...not permitted into the better academic neighborhoods," says Dr. Irvin D. Yalom.

And yet most clinicians operate implicitly within this framework, he says, whether or not they are aware of it.

"In his bones," says Yalom, "the clinician appreciates a patient's (existential) concerns and responds accordingly."

These vital concerns that are shared by a patient and his therapist, according to Yalom, are not accounted for in traditional psychological theories. But they should be in the center of the therapeutic arena.

Yalom is a professor of psychiatry at Stanford University School of Medicine and the recipient of two national awards for his contributions in the fields of clinical psychiatry and research.

In his recently published book *Existential Psychotherapy* (Basic Books, New York, $18.50), Yalom says that the existential approach differs from other theories in its radically different view of the "specific forces, motives and fears that interact in the individual."

Unlike the Freudian approach, for instance, which posits that the child is governed by innate instinctual forces at conflict with a world that prevents their satisfaction, existential therapy holds that the individual is at conflict with the givens of existence, or the human condition.

Yalom identifies the four ultimate concerns of the individual as death, freedom, existential isolation and meaninglessness. Although someone else might have chosen different concepts, he says, these represent the existential experiences of Everyman, including the therapist.

"There are a number of loose approaches vaguely referred to as existential," he says. "What I've tried to do is make a synthesis of them to show there is a coherent structure to this approach."

Like all clinical approaches, however, Yalom emphasizes that the existential approach is not for all patients, or all therapists. But it is, in his opinion, a valuable, effective psychotherapeutic tool, "as rational, as coherent and as systematic as any other."

As defined in the book, death is the most obvious, most easily apprehended ultimate concern of the individual. Conflict arises between the awareness of death's inevitability and the wish to continue to be.

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"The death of another," says Yalom, "is one way we are brought into confrontation with our own death. It is part of the grieving process...though often we may not realize it."

Known for his pioneering work in group counseling for dying patients, Yalom says that experience helped him treat patients, who aren't physically ill, face the concept of death.

"Properly confronted," he says, "an awareness of death has the power to enlarge us...to live fuller lives. It is an old lesson people have written about for centuries."

Yalom brings to his work a great interest in the humanities and literature, which is reflected throughout the book. He spent more than three years writing and researching it, and readily acknowledges his debt to the community of scholars at Stanford.

A graduate of Boston University Medical School, Yalom has been at Stanford since 1963.

In 1974, he received the Edward Strecker Award for psychiatric care and treatment in the U.S. and in 1979, he was awarded by the American Psychiatric Association, the Foundation's Fund Prize in Psychiatry.

Other books he has authored include *The Theory and Practice of Group Psychotherapy* (Basic Books, New York, 1975), considered a classic text in the field; *Encounter Groups: First Facts* (Basic Books, 1972); and *Every Day Gets a Little Closer* (Basic Books, 1974), an examination of the patient-psychiatrist relationship written with a former patient with the pen name of Ginny Elkins.

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Mailed Monday, October 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

In the bewidering maze of contradictions and myths that surround loneliness, a twin tower of truth emerges: nobody really understands its dimensions, and professionals have been frequently unsuccessful in combating it.

Now, however, two Stanford University psychiatrists have launched a study of loneliness. They are looking for volunteers to join them in their efforts to learn as much as possible about loneliness and new ways of helping them cope with it.

The psychiatrists are Dr. Irvin Yalom, a professor and author of the recent book *Existential Psychotherapy*, and Dr. Molyn Leszcz, a postdoctoral fellow in psychiatry.

"We are exploring loneliness especially in people who have been thrust abruptly into it," said Yalom. "And a couple of populations that fall in this category are persons who are bereaved, separated or divorced."

Of special interest, he added, are people who have been recently separated after a long term relationship and who have no children or other close relatives with whom they can share their concerns of feeling lonely.

In terms of format, the program will take an educational approach, Yalom explained. There will be classes, depending on the number of volunteers, which will be held weekly at Stanford.

The first class will be Wednesdays from 11:30 to 1 P.M. Classes will be limited to eight people and will be free of charge. The work is funded by a private research grant.

"Loneliness is poorly understood from the professional standpoint," Yalom said.

He and Dr. Leszcz will be looking at a couple of important dimensions.

"One dimension has to do with a person's social skills—ways of interacting with others," Yalom said.

Certain individuals, he explained, have never learned to be alone. These are people who have gone to high school and college, then into marriage without the experiences of real life.

"When they are suddenly thrust into this situation," he said, "they become distrustful of others, desperate or engage in frenetic activity to escape their loneliness."

Yalom said the second dimension under study will be whether loneliness can serve as a learning, growth-oriented activity. By maximizing a patient's physical, social and emotional strengths, one might be able to reverse the effects of loneliness.

Individuals interested in taking part in the classes should contact Ms. B. Mitchell, telephone 497-6352, for details.

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Mailed Monday, October 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Numerous books have been written both on diseases and on their treatment, but nary a one—until now— has tackled prognosis.

Dr. James F. Fries of Stanford University School of Medicine and Dr. George M.Ehrlich of Hahnemann Medical College in Philadelphia, after collecting and evaluating data for three years, sending 4,000 letters and working with 400 contributors and consultants, have produced *Prognosis: Contemporary Outcomes of Disease* (Charles Press Publishers, Bowie, Md.,1981, $34.95.)

The conventional wisdom has been that prognosis is much more an art than a science, only slowly acquired by the clinician over the years; medical texts routinely ignore the subject, Fries said in a recent interview.

Without taking the art out of prognosis, his book attempts to put some hard numbers in.

"We like to think of clinical judgement as more compassionate than a calculation," he said, "but at the same time we like to base our judgements on the most precise information available. The articles in this volume attempt to strike a compromise between the extremes."

The book is a practical, working guide to 131 medical and surgical conditions. Each condition is discussed in a concise article, with graphs and recent references. When hard data are not to be had, best guesses are given.

"Prognosis, whether qualitative or quantitative, is an indispensible link between diagnosis and the treatment decision," he said. "Few patients follow the 'average' course, and the good physician must learn how to individualize the decision. Genetic, demographic, social and psychosocial variables may determine the course a disease may take and how effective a treatment will be in any one patient."

The art in medicine comes in distinguishing the individual patient from the average patient, Fries said.

"Prognosis is part and parcel of this distinction, a broadly conceived prognosis, not just one equated with life expectancy."

Fries and Ehrlich identify death, disability, discomfort, drug (therapeutic) toxicity, and dollar cost as dimensions of prognosis, ones that must be considered when tradeoffs between treatments are made.

"In addition, it's imperative to weigh these dimensions over the time course of a disease," he stressed. "A further complicating factor is that a prognosis may or may not be heavily dependent upon a specific therapy. If it is, the prognosis with and without treatment needs to be deliberated upon."

All in all, formulating an accurate prognosis is not an easy task. Fries said this is the probable reason why no one has heretofore undertaken the challenge of systematizing the prognosis of a large number of diverse diseases.

In this book, a constellation of conditions is considered: infectious, malignant, hematologic, respiratory, cardiovascular, gastrointestinal, genitourinary, gynecologic, arthritic and connective tissue, endocrine and metabolic, neurologic, and psychiatric diseases, and diseases of the skin, eyes, ears, nose and throat.

Fries, author of several other books, including the best-selling health guide "Take Care of Yourself," is an associate professor of medicine at Stanford University School of Medicine. Ehrlich is professor of medicine and director of the division of rheumatology at Hahnemann Medical College and Hospital in Philadelphia.

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Mailed Oct. 20, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

A symposium for persons with Parkinson's disease and their families and friends will be held at Stanford University Medical School on Sunday, October 19 at 2 P.M. in Fairchild Auditorium.

Sponsored by the United Parkinson Foundation, the meeting, one of a series throughout the country, will consist of short talks by a panel of clinical neurologists, followed by a period during which the public can ask the physicians questions.

Dr. Robert W.P. Cutler, Stanford professor of neurology, will be the chairman of the meeting. Guest speakers will be Dr. Donald B. Calne of the National Institutes of Health, Bethesda, Md.; Dr. Harold L. Klawans of Rush Medical College in Chicago; Dr. George W. Paulson of Ohio State University, Columbus; and Dr. R. Lorne Ryan of Palo Alto.

The speakers will address topics ranging from present and future treatments of the symptoms of Parkinson's disease to the many medical and social problems faced by patients and their families.

The disease, a chronic, progressive, degenerative disorder of the central nervous system, affects approximately 750,000 patients in North American, the vast majority of them over age 45.

Health care professionals are also invited to attend the symposium.

The meeting is free and no reservation is needed; also printed materials about the disease will be available at no charge.

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Mailed Wednesday, October 15, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

EDITORS: ADVANCE FOR P.M. RELEASE, THURSDAY, OCTOBER 16.

STANFORD—

Heavy exposure to "laughing gas" (nitrous oxide) is no laughing matter, according to results of a recent study by researchers at Stanford University School of Medicine.

The study showed that dentists who regularly use nitrous oxide in their dental practices report certain symptoms of neurological disease at four times the rate of dentists who do not use this inhalation anesthetic.

These symptoms include numbness, tingling and/or muscle weakness.

The dentists' assistants who are also heavily exposed to nitrous oxide have a three-fold higher incidence of these non-specific neurological symptoms than their unexposed counterparts, according to the Stanford researchers.

Results of the present study were announced Thursday October 16 at the annual meeting of the American Society of Anesthesiologists in St. Louis.

The neurologic findings came from questionnaires mailed to 30,000 dentists and an equal number of dental assistants as part of a national Dental Health Survey conducted by Stanford researchers with the cooperation of the American Dental Association and the National Institute of Occupational Safety and Health.

The questionnaires asked dentists and dental assistants to estimate their occupational exposure to nitrous oxide and other anesthetic gases and to complete a brief personal health history for the ten year period, 1968-1978.

According to Dr. Jay Brodsky, assistant professor of anesthesia, although a direct cause and effect relationship cannot be proven from the data in this study alone, the evidence suggests that neurological disease from exposure to nitrous oxide may represent an important occupational hazard for dental professionals.

Dental patients would not be at risk, Brodsky added, because their exposure to the gas is brief and infrequent.

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"Many medical and dental professionals have mistakenly considered nitrous oxide a non-dangerous drug," Brodsky noted.

"This study draws attention to the potential hazard of prolonged exposure to laughing gas," he explained.

The tingling, numbness and muscle weakness may represent a neurological disease similar to pernicious anemia, possibly involving an interaction between the nitrous oxide and body stores of vitamin B12.

With continued heavy exposure the symptoms may progress into more severe problems such as general weakness, gait disturbances and loss of bladder and bowel control, Brodsky warned.

Among the dentists who use gaseous anesthetics, over 80 percent use nitrous oxide exclusively while 20 percent use a combination of nitrous oxide and halogenated gases such as halothane, Brodsky reported.

His colleagues in the study are Dr. Ellis Cohen, professor of anesthesia, Dr. Byron Brown, professor of family, community and preventive medicine, Dr. Charles Whitcher, professor of clinical anesthesia, and Marion Wu, research associate in family, community and preventive medicine.

Brodsky noted that other significant health problems are also associated with the use of anesthetic gases, including increased rates of liver and kidney disease, and increased numbers of miscarriages among wives of male dentists and female assistants exposed to trace concentrations of the gases. There is also a greater incidence of birth defects in children of exposed female assistants, compared to those not exposed.

These results were reported last year.

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END ADVANCE FOR P.M. RELEASE, THURSDAY OCTOBER 16, 1980.

Mailed Wednesday, October 15, 1980.

News release file

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

An infection that has the potential of causing mental retardation, blindness and epilepsy in thousands of babies each year could be significantly reduced if pregnant women followed simple preventive measures, doctors were better informed about the infection, and screening programs were available, according to a Stanford University professor.

The disease, called toxoplasmosis, is caused by the parasite *Toxoplasma gondii*, a ubiquitous organism chronically infecting almost 50 percent of the population in the U.S., according to Dr. Jack S. Remington and his colleague Dr. Christopher B. Wilson.

Remington is professor of medicine at Stanford and director of Allergy, Immunology and Infectious Diseases at the Palo Alto Medical Research Foundation. Wilson, a former postdoctoral scholar at the Foundation, is now at the University of Washington in Seattle.

Toxoplasmosis is usually so mild that most individuals do not know they have acquired the infection and they suffer no harmful effects.

About 25 percent of women in the child-bearing age group in the U.S. harbor the organism in their bodies. In them, the infection poses no threat to the unborn child.

But when acquired during pregnancy, 45 percent of the time the parasite passes to the unborn child where it may cause significant damage to vital organ systems, the doctors note.

Although most of these infected infants appear normal at birth, many develop severe symptoms later in life, including mental retardation and blindness.

In an article in the October 15 issue of the *American Journal of Obstetrics and Gynecology*, the Stanford researchers outline basic information both doctors and pregnant women should know, and they propose establishment of regional screening programs, on a trial basis, for early detection of the infection during pregnancy.

Since 90 percent of the women who get the infection show few outward signs and feel no symptoms, the only effective diagnosis is by blood test before and during pregnancy.

Women testing positive for antibodies prior to pregnancy (those with chronic infection) need no follow up since transmission of a mother's chronic infection to her unborn child has not been demonstrated.

But Wilson and Remington suggest that for those women testing negative, follow-up testing during pregnancy would be valuable in detecting recently acquired infections.

The calculated cost of a screening program in the U.S., based on inexpensive and reliable blood tests already available, would amount to approximately $110 million per year, less than half the calculated cost of care required if the infected babies were born, the researchers claim.

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The estimated 3,300 infants born infected each year in the U.S. alone bring the total financial cost to society to $221 million, according to the researchers' cost analysis.

And the emotional burden is incalculable, they add.

Simple precautions for pregnant women to follow could also go a long way towards control of the disease, the researchers stress.

"It is the responsibility of all physicians caring for pregnant women and women attempting to conceive, to inform them appropriately about specific hygienic measures for prevention of congenital toxoplasmosis," the researchers state.

The common house cat frequently spreads the infection, and pregnant women may become infected by contact with excrement from stray cats, infected house cats or by contact with other material likely to be contaminated by cat feces. Eating raw or undercooked meat is another way the infection is easily spread.

The toxoplasma organism has three forms: an infectious one that triggers the acute infection, a chronic cyst form living dormant in animal tissues (including most meats), and an oocyst form found only in cats and shed in cat feces.

Infected house cats may shed millions of oocysts every day for as long as two weeks. The oocysts are spread by flies and cockroaches and thrive in moist soil for months.

Simple precautions include avoiding raw and rare meat by smoke-curing or cooking above 66° C., washing hands after handling raw meat and vegetables, avoiding contact with stray cats, letting someone else change the cat litter, and avoiding work in the soil or gardening without gloves.

If a pregnant woman becomes infected, she and her doctor should discuss possible actions, say the researchers, including drug therapy, therapeutic abortion, or taking the risk of infection in the fetus.

This risk is highest when the mother contracts the infection late in pregnancy. Although transmission of the infection is less likely early in pregnancy, those babies affected are more severely damaged.

The state of Oregon has mandatory screening to detect maternally acquired toxoplasmosis, testing 110,000 women per year at $1 per pregnancy, the authors report.

Wide scale screening already occurs throughout the U.S. for diseases less commonly transmitted to the fetus and newborn, such as rubella and syphilis, they observe.

And regional screening programs to detect inborn errors of metabolism have reduced the cost of diagnosis of these disorders by 90 percent or more.

"Carefully planned screening and treatment, along with prevention techniques and information, could significantly reduce the expense and the suffering currently caused by this disease," the authors conclude.

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L100

Mailed October 15, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415)497-6911

STANFORD—

Dr. Inder Perkash, associate professor of surgery at Stanford University School of Medicine, has been named to a chair in Spinal Cord Injury established for a five-year term by the Paralyzed Veterans of America (PVA).

Perkash, chief of the Spinal Cord Injury Center at the Palo Alto Veterans Medical Center, is the first faculty member of a U.S. medical school to have a chair in spinal cord injury funded by the PVA.

The chair, supported by a $260,000 grant, was announced earlier this year by Joseph Romagnano, national president of PVA, and Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean of the School of Medicine.

The chair adds to already existing programs of training and research in spinal cord injury medicine directed by Stanford faculty members and based at the Palo Alto Veterans Administration Medical Center, Crowley said.

Edward Jasper, executive director of the Bay area and Western chapter of PVA said he hopes that full endowment for the chair can be obtained in the future.

Perkash; educated in India, England and Stanford, has received recognition for his research and teaching on spinal cord injury. As a result the Palo Alto Veterans Hospital has been recently designated as a regional teaching center and singled out for expansion from its currently capacity of 30 beds to a total of 60 beds.

In his research, Perkash studied the mechanisms of bladder contraction and sphincter relaxation which are involved in spontaneous emptying of the bladder. He was responsible for one of the most important advances in their care—the emptying of the bladder without catheterization.

He also studied neurophysiological disturbances related to the bladder which cause reflex elevations of blood pressure. He developed surgical procedures which will interrupt these reflexes and relieve spinal cord patients of distressing symptoms.

Perkash, working with Stanford engineers at the VA's new Rehabilitative Engineering and Development Center opened recently, is helping in the modification and development of robotic arms and other devices to help the paralyzed and those with limited muscular control regain some independence.

The PVA was established in 1946, and was chartered by Congress in 1971. The organization has donated more than one million dollars to spinal cord injury research, and is currently supporting legislation in Congress to increase funding of the spinal cord injury program of the National Institutes of Health.

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Mailed Wednesday, October 15,1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

A $114.8 million plan to modernize Stanford University Hospital was approved Tuesday, Oct. 14, by the general members of the Hospital Corporation.

The approval empowers the Hospital board and administration to proceed with development of architectural design to be completed by November 1981.

Hospital officials expect actual construction to begin late in 1982, but precise dates will depend on timing of approvals from local and state health planners, and city and county agencies, they said.

In pointing out the need for modernizing the Hospital, Stanford University President Donald Kennedy said, "Even the best medical science enterprises, let alone clinical research, require a first-rate environment for clinical application in order to flourish.

"A critical handicap to the improvement of this environment is the quality of Stanford's present facilities. That is why we must make a substantial investment in bringing them up to standard."

According to a planning study by Vice President for Medical Affairs Lawrence G. Crowley and Hospital Executive Director Peter Levin, one example among the numerous hospital deficiencies is the amount of support space for a hospital of this size.

"Stanford has slightly more than half the square footage of support space per bed than the national average for teaching hospitals," they wrote in a 110-page report outlining the Hospital's options. In addition, its operating rooms are inadequate.

"Patient care demand already exceeds operating room capacity, and some growth is expected over the next decade," they predicted. "The Hospital faces serious problems in this area with patient waiting lists, and surgeons having to operate during evenings and weekends."

The modernization plan will use a two-stage approach, with construction proceeding sequentially.

The first stage calls for completion of the unfinished portion of the Hospital's north wing opened in 1976, construction of a low-cost building nearby to house support activities, and remodeling of present facilities.

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This stage will provide needed space for Cardiology, Radiology, Transfusion Service, Pharmacy, Facilities Department, Medical Records, Materials Storage, and Cafeteria.

The second stage calls for construction of a new four-story wing to the north of the Hospital. This would provide 12 new operating rooms, renovation of 14 existing ones, 43 intensive care beds, 44 pediatric beds, and 56 medical and surgical beds to ease overcrowding in present areas. Included in the program are plans to bring Hoover Pavilion in compliance with seismic standards.

The project will not add to the Hospital's licensed present bed capacity of 663 beds. It would provide for more efficient utilization of existing beds, Levin emphasized.

The project is expected to be financed by a combination of private borrowing, Hospital reserves, and gifts.

According to Levin, the Hospital has been authorized to seek funding through revenue bonds issued by the California Health Facilities Authority for up to $79.4 million.

The Hospital is a separate, Stanford-owned subsidiary corporation in which the University trustees are also the general members, with full authority and assets. (See related story).

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Mailed Tuesday, October 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos, (415) 497-6911 Joel Shurkin, (415) 497-2558

STANFORD—

"Stunned is about the best word I can describe it."

These were the words of Paul Berg to the question of how he felt when he learned he had won the 1980 Nobel Prize in chemistry.

But the first word that he and two others had won the $212,000 prize did not come from the Nobel Foundation. It was from a colleague whose son had heard the news on the radio early Tuesday morning.

At first when the telephone rang Berg thought it was bad news, he told a packed press conference at Stanford University School of Medicine. "A telephone call at 5:55 a.m. normally brings bad news, not good ones," he said.

"In this particular case it was delightful news," Berg said. "Nevertheless the news was shattering to me, my wife and my son and our dog, since a number of photographers showed up shortly after and camped on our doorstep waiting for me to come out."

The 54-year old Willson Professor of Biochemistry was given one-half of the prize "for his fundamental studies of the biochemistry of nucleic acids, with particular regard to recombinant DNA," the Nobel foundation said Tuesday.

The other half of the prize, the Foundation said, will be jointly shared by Walter Gilbert, professor at Harvard University, and Frederick Sanger, director of research at MRC Laboratory of Molecular Biology at the University of Cambridge, England.

Their contributions concerned the determination of base sequences in nucleic acids, the Foundation said.

"The biochemistry of nucleic acids is about as broad a term as one can possibly imagine," Berg said. "It covers frankly most of the activities that go on in this department (biochemistry).

"Principally, the work that we have done is trying to understand how genes are organized in our chromosomes and how they function both in health and disease and normal development.,"

Berg said the breakthrough that came about five or six years ago was the ability to isolate specific genes or segments of DNA and to be able to study them in molecular detail.

"Our own work has been principally using isolated genes and learning how to reintroduce them into animal cells in order to learn something about them and their function," he said.

"The research we are doing," Berg said, "I hope will lead to a more profound and complete understanding of the molecular details of gene function."

This is very important, he explained, inasmuch as one can argue that most of human characteristics—behavior potential, longevity, susceptibility to disease—all are in large part conditioned by the genes.

"That kind of understanding will have enormous impact on our understanding and appreciation of these areas," Berg said.

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In response to a question, he said that one of the practical benefits that have come out of this type of genetic research is the ability of scientists to isolate specific genes capable of directing production of very specific types of molecules that have therapeutic value.

Many of these practical advances have been highlighted in the press in recent years and include the introduction of genes into bacteria for the production of human insulin, human growth hormone, and human interferon, he said.

"I think we can expect that there will be many such enormous benefits to society," Berg said.

But Berg stressed that in his view, "The most important practical benefit will be the knowledge generated by the use of these techniques in understanding both the structure, organization and function of human and other animal genes."

He said that as knowledge about the work of normal and defective genes is gained, "We think more seriously about how to ameliorate genetically-based diseases."

He was, however, critical of scientists recently exploring such type of gene therapy. "I think attempts to apply it to humans today are premature. We don't know nearly enough to be able to do it with any assurance of success," he said.

Asked by a reporter if he had expected to win the Nobel prize, Berg quipped, "I don't think you can be a scientist and not know that there is a Nobel Prize.

"I never thought much about it," he added. "You just put the thought aside and forget it because it's not the motivation for the kind of work we do."

He said he was more concerned and interested in the recognition of people who worked with him in the past 12 years—students, postdoctoral fellows and colleagues who actually share in this award.

"It's their ideas, efforts, their devotion and commitment and the fun we had working together that made it all worthwhile," Berg said.

Berg and his wife Mildred, and 22-year-old son, John, have been invited to the Nobel Week ceremonies in Stocholm December 6 through 14.

The prize-awarding ceremony will be December 10.

News of the prize brought elated reaction from many parts of the Stanford campus.

"That's terrific. . . amazing and wonderful," said Stanford University President Donald Kennedy.

"It is a moment of great excitement and pleasure," said Vice President for Medical Affairs Lawrence G. Crowley.

Berg is now the ninth Nobel Prize winner at Stanford. The others are: Kenneth J. Arrow, economics (1972); Felix Bloch, physics (1952); Paul J. Flory, (1974); chemistry; Robert Hofstadter, physics (1961); Arthur Kornberg, physiology or medicine (1959); Linus Pauling, chemistry (1964) peace (1962); Burton Richter, physics (1976); William B. Shockley, physics (1956). Affiliated with Hoover Institution: Milton Friedman (1976) economics; Frederich Hayek (1974) economics; Alexander Sholzhenitsyn (1970) literature.

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Mailed Tuesday, October 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Sweeping changes in the governance structure of Stanford University Hospital were adopted Tuesday, Oct. 14, by the general members of the Hospital Corporation.

"The changes define more clearly the relationship of the Hospital to the Universty," said Dr. Lawrence G. Crowley, vice president for medical affairs who under the new rules becomes also president of the Hospital.

Crowley said the Hospital, a separate, University-owned subsidiary corporation, in which the University trustees are also the general members of the Hospital Corporation, will have full authority and assets, and distinct boundaries for responsibility and accountability.

"We are taking great care, as we design the new governance structure for the Stanford Hospital," said Stanford University President Donald Kennedy last week in explaining the action to the Academic Council.

Kennedy added the goal is to maximize the Hospital's independence "because the patient care enterprise is rather special and has a political future of its own."

The Board of Hospital Directors' previous authority and responsiblity was generally limited to medical staff matters, and to advising the University president on planning, budgets, rates, and Hospital needs.

Under the amended governing bylaws, these changes will go into effect January 1981:

- The Board of Hospital Directors will have full authority and responsibility over the operations and management of the Hospital.
- The vice president for medical affairs will also hold the position of president of the Hospital, responsible to the board for overall administration.
- The Hospital board's membership will be increased from 9 to 15, and 12 of the directors will be elected by the general members of the Hospital Corporation.
- The Hospital board will include two general members, seven other citizens who are not employees of Stanford or the Hospital, of whom three must be Palo Alto residents and a practicing community physician.

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® In addition, the presidents of the University and Hospital, the Hospital executive director, the University's vice president for Business and Finance, the dean of the School of Medicine, and the chairman of the Faculty Practice Plan will be elected to serve on the board. The president of the University will generally be elected as chairperson of the Hospital board.

The changes mark the first time since the inception of the Hospital that practicing physicians—both community and faculty—will serve on the board.

Stanford has a 40-year contract with the City of Palo Alto for operation of the Hospital, including priorities for bed access to community physicians and Palo Alto residents.

"None of the provisions of this contract are affected by the new bylaws," Crowley explained.

Nor are the bylaws of the medical staff affected by the changes. The medical staff is self-governing with respect to the professional work performed in the Hospital.

"The change," said Crowley, "clarifies the relationship between the Hospital and medical school which must function as separate, distinct but collaborating entities.

"The Hospital must make certain that it is and remains a University hospital offering the best possible patient care to the community, in addition to its special functions of fostering education and research."

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Mailed Tuesday,October 14, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter 415: 497-6911

STANFORD—

Dr. Lars Vistnes has been appointed chief of the division of plastic and reconstructive surgery at Stanford University School of Medicine.

The appointment, effective September 30, was announced by Dr. John Collins, chairman of the department of surgery.

"We look forward to a new era in the program, which is already an excellent one," Collins said.

Vistnes, associate professor of surgery, is internationally known for his work in periorbital surgery, which involves reconstruction of the area around the eye socket.

He succeeds Dr. Donald Laub, who resigned his faculty positions at Stanford Medical School January 1, 1980.

In order to devote full time to the new position, Vistnes stepped down from two posts at the Palo Alto Veterans Administration Medical Center, where he had been chief of the plastic and reconstructive surgery section since 1971, and chief of surgery since 1975.

A native of Norway, Vistnes, 53, received his undergraduate and medical education in Canada. He spent his residencies in surgery and plastic surgery in San Francisco hospitals, and was a lecturer in surgery at the University of Manitoba before coming to Stanford in 1971.

In addition to his contributions to periorbital surgery, Vistnes also initiated the use of water bed treatment for spinal cord injury patients, now a standard treatment in many hospitals. He demonstrated that the water bed provides the most effective method for relief of pressure which leads to bed sores and skin damage.

—30— L100

Mailed Monday, October 13, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Dr. Avram Goldstein, director of the Addiction Research Foundation in Palo Alto and professor of pharmacology at Stanford University, will receive the Franklin Medal for outstanding scientific achievements, the Franklin Institute announced Friday in Philadelphia.

Goldstein will be one of 11 world-renowed scientists and educators who will be honored by the Institute at its 1980 Medal Day Ceremonies October 15 in the Benjamin Franklin National Memorial.

Goldstein, who founded the nonprofit Addiction Research Foundation in 1973 to improve understanding and treatment of addictive diseases, will receive the medal for his pioneering work in small proteins called brain peptides, the Institute said.

The award citation also credits Goldstein for his research which defined the criteria for the establishment and identification of the presence of opiate receptors in the brain and his continued important contributions in the endophins.

In 1979, Goldstein discovered and isolated dynorphin, a natural brain chemical 200 times more powerful than morphine.

Such brain peptides have been shown to affect sleep, memory, blood pressure, and responses to stress and pain.

The Franklin Institute was founded in 1824 as a nonprofit organization to promote science and technology, and its awards are designed to encourage exploration in these fields.

Past receipients include Niels Bohr, Albert Einstein, Enrico Fermi, Glenn Seaborg, Marshall W. Nirenberg, and Hannes Alfven.

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Mailed Friday, October 10, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

A two-day conference on the regulation of the practice of medicine will be held October 16 through 17 at Stanford University. The conference will be in the Forum Room of the Meyer Undergraduate Library.

The second in a series of three to be held in California, the conference was initiated by the Board of Medical Quality Assurance (BMQA) in Sacramento as part of its effort to examine issues arising from consumerism and the movement of permitting paraprofessionals into the practice of medicine.

The Stanford meeting, co-sponsored by the Department of Surgery of the School of Medicine, will focus on the patient's role in health care.

Speakers at the meeting are Mark Kleiman, executive director of the Consumer Coalition for Health in Washington, D.C.; Robert M. Veatch, Ph.D., professor of medical ethics at the Kennedy Institute of Ethics, Georgetown University; and David Sobel, M.D., acting chief of Preventive Medicine at the Kaiser Permanente Medical Center in San Jose.

Kleiman's topic will be "Health Care, the Consumer's Viewpoint," at 8 P.M., October 16.

Veatch will discuss "The Emerging Role of the Patient," at 9 A.M., October 17, and Sobel will speak on "Self-Care: the Patient as a Practitioner," at 1:30 P.M.

"The ultimate goal in examining these issues is to assist the BMQA in arriving at a more comprehensive definition of what constitutes the practice of medicine in California," said Dr. Harry A. Oberhelman, a BMQA member and professor of surgery.

In recent years a growing number of paraprofessionals—nurse midwives, physician's assistants, nurse practitioners, nutritionists, optometrists, podiatrists and others have been expanding their clinical domains, and are striving for varying degrees of independence from the physician.

The guidelines of what constitutes medical practice now written into law need to be re-examined in order to aid the BMQA in its role as a regulator of health care, said Sandra Bauer, a staffer with the Sacramento-based Public Affairs Research Group which has organized the conferences.

The first conference, held in Los Angeles last month, focused on the medical profession and society.

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Mailed Wednesday, October 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

The vista from a mountain top is not the only thing that is breathtaking. Although beauty is abundant, oxygen is in short supply.

In the autumn of 1981, sixteen scientists and mountain climbers will trek up the ultimate challenge in mountaineering, Mount Everest, to study how man adapts to this oxygen shortage.

Among them will be Dr. Frank H. Sarnquist, 38, assistant professor of anesthesia at Stanford University School of Medicine and clinical chief of the department of anesthesia at the Palo Alto Veterans Administration Medical Center. He's been climbing mountains for almost 20 years.

This is the first expedition to Everest devoted primarily to medical research. Dr. John West, a physiologist at the University of California, San Diego, will lead the $500,000 expedition.

Why Mount Everest? Sarnquist explains that on Mount Everest man is near the limits of his endurance. In the ethereal heights near the summit, the barometric pressure is so low that the number of oxygen molecules in a foot of cubic air becomes periously few. In fact at the 29,028-foot summit, theoretically the air should be so rarefied that man could no longer extract enough oxygen to climb.

But he does. In 1978, although dazed and desperately short of breath, Reinhold Messner and Peter Habeler of Germany became the first humans to reach the summit without using oxygen during the ascent.

Sarnquist said the expedition will measure for the first time the barometric pressure at the summit. He suspects that it is slightly higher than the theoretical value and that's why man can make it to the top, although only barely so.

But the expedition's major interest lies in the physiological adaptions the body makes when faced with oxygen debt. The scientists will test how well their bodies and those of the mountaineers are holding up as they struggle toward the peak.

Three camps will be established: a base camp at 17,600 feet, a laboratory camp at 20,000 feet and a camp at 26,200 feet from which an assault on the summit will be made. The expedition will climb the south ridge of Everest.

At each of these camps, as well as the summit, various types of tests will be done. At the laboratory camp, the climbers will work out on a bicycle exerciser which will measure how well they're working. Chemical changes will also be measured in the blood.

Climbers going to the summit will carry small electrical instruments to monitor oxygen consumption and heart activity. "We're hoping a few of the climbers will make it," he said. They will be using oxygen intermittently.

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Sarnquist is interested in one of the body's relatively long-term adaptions to oxygen shortage: the increase in the number of the red blood cells, which carry oxygen to the tissues, and their oxygen-carrying protein, hemoglobin. It may take as long as six to eight weeks after moving to a higher elevation before the body has fully compensated for the low oxygen by increasing the red blood cells.

He suspects that some people may develop too much of a good thing. Too many red blood cells cause the blood to become thick, sticky and resemble sludge. The climber becomes sluggish and slow-witted. Also the tiny blood vessels in the arms and legs and other exposed places become clogged, increasing the chance of frost bit.

This syndrome is seen in some individuals who live at high altitudes. Sarnquist has just returned from three weeks in Cerro de Pasco on the central highlands of Peru. Certain of the older people living in this Peruvian town, 14,200 feet high in the Andes, develop a "sludgy sort of blood" because they have almost twice as many red blood cells as normal.

Sarnquist, working with a group of scientists from the Center For Disease Control in Atlanta and the National Institutes of Health, removed some of the red blood cells by bleeding the patients. They put back the blood after removing the cells from it and then tested the patients on a bicycle exerciser.

Results from the Peruvian trip have not been analyzed yet, but Sarnquist said the Peruvians reported feeling better.

On the Mount Everest trip, Sarnquist will repeat this test at the 20,000 camp on any of the climbers who develop high red blood cell levels. A prefab hut heated to 72 degrees will be set up for the experiments.

He explained that there may be some down to earth benefits from this expedition. "People living and working at high altitudes and people at sea level with lung and heart problems face a similar problem: a shortage of oxygen. When people are sick you have to treat them the best way you know how. You can't do experiments using them."

"On the Everest trip, we'll be able to observe how a healthy body adjusts to an oxygen shortage. From what we learn on this trip we may better understand what is happening in the sick person at lower altitudes.

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Mailed Tuesday, October 7, 1980

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

EDITORS: Text available on request.

STANFORD—

Stanford administrators soon will seek trustee approval of a major modernization program for Stanford Hospital, President Donald Kennedy told the Academic Council Friday, Oct. 3.

During the past two years, the Medical Center has made "dramatic and encouraging progress with its most serious problems," Kennedy said.

Besides balanced budgets, the gains include appointment of Lawrence Crowley as vice-president; progress toward agreements with community physicians; and restructuring of the Hospital Board of Directors.

Kennedy put no price tag on the prospective hospital modernization program. But last April Medical Center administrators circulated a 110-page document indicating $97 million would be needed over the next six years. A team headed by Hospital Executive Director Peter Levin developed the plan, which was discussed last month by the University Board of Trustees.

The Medical Center has operated in the black financially for two years in a row and "the forecast for next year and beyond is bright," Kennedy said.

Following "determined discussions and negotiations with community physicians" over access to hospital services and clinical faculty membership, he added, "I confidently expect we will have agreement by the end of fall. . . .

"It is now quite generally understood that we need each other, respect each other, and can live together productively."

In its relations with the rest of the University, the Medical Center "is not now, has never been, and is not prospectively a financial liability to Stanford," he added. "It has brought us remarkable and diverse intellectual richness and significant prestige while bearing its own weight."

While "no one can make iron clad promises" about the future, Kennedy told the faculty, "we are taking great care, as we design the new governance structure for Stanford Hospital and as we evolve new budget and accounting procedures, to maximize independence and so minimize potential liability for the rest of the University, if only because the patient care enterprise is rather special and has a political future of its own that will be difficult to control."

A "first-rate teaching hospital, with some policy control from the teaching institution" appears to be "an essential component of medical education," he observed.

Having a "full service" Medical School and Hospital right on campus has made possible the development of a truly extraordinary enterprise in biomedical research, with important ties to other schools and departments," he said.

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Among Stanford's 66 members of the National Academy of Sciences, 30 percent are in the biomedical sciences.

A few universities have tried to build biomedical research enterprises around two-year preclinical programs, but "none of these has achieved real excellence on the research side and they have had rather unhappy management histories as well," he observed.

Warnings publicized nearly two years ago that the Medical Center faced a possible cumulative shortfall of $7 million by 1982 have not materialized, Kennedy noted.

"The decline in hospital census was reversed last year, with an increase in admissions and total patient days, and also net income.

"Last year the Hospital was able to add the reserves necessary to finance its own capital improvement. A new faculty practice program was developed and agreed upon, and is providing significant new income to School programs. There is no shortfall."

Despite its relatively small size and highly publicized financial problems two years ago, Kennedy said, the Medical School is "regularly ranked among the top four or five in the U.S. It attracts superb students and possesses a unique and respected orientation toward research and academic medicine."

But he added: "Even the best basic medical science enterprises, let alone clinical research, cannot operate in a vacuum: they require a first-rate environment for clinical application in order to flourish.

"That environment is not composed only of clinical faculty. It depends strongly on Stanford's capacity to attract the best interns, residents and fellows—categories of postdoctoral trainees who do not appear on the University's degree roster, but are critically important in determining the institution's quality and reputation.

"All these relationships point to the need for a first-rate patient care capacity at Stanford. A critical handicap to the improvement of this environment is the quality of Stanford's present hospital facilities. That is why we must make an investment in bringing them up to standard."

He praised the Medical School faculty for its "significant, thoughtful effort. . .to define its ambitions for the school and to evaluate and improve its curriculum." Together with the improved performance of students on national board examinations, this "leaves one confident about the health of teaching" in the School, Kennedy said.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Nine out of ten chidren today with the malignant cancer known as Hodgkin's disease will be long-term survivors, according to a Stanford University professor.

A multidisciplinary approach involving careful "staging" (determining the extent of the disease at time of diagnosis) and modern treatment methods have contributed substantially to boosting the cure rate, said Dr. Sarah Donaldson, associate professor of radiology at Stanford University School of Medicine.

Donaldson's remarks were based on a study following 171 children with Hodgkins disease treated at Stanford University Medical Center between the years 1962 and 1980. She spoke at the third annual Bristol Myers Symposium on Cancer Research held at Stanford November 20-21.

The symposium, sponsored by the Bristol Myers company and attended by physicians and cancer researchers from around the world, dealt with advances in the understanding and treatment of malignant lymphomas, cancers of the lymphatic system.

Hodgkins disease is a type of cancer that strikes the lymphatic system, usually appearing in people between the ages of 20 and 40, Donaldson noted. About 8,000 cases overall are reported in the U.S. annually.

The disease frequently shows up as a lymph node enlargement in the neck, chest or abdomen but it can involve other tissues and organs as well.

It is one of the most curable cancers, through treatment programs involving radiation therapy and drug therapy, or chemotherapy. Much of the pioneering development of these treatment techniques was done at Stanford by Drs. Henry S. Kaplan and Saul Rosenberg, the co-chairmen of the symposium. Treatment programs may consist of radiation therapy alone, chemotherapy alone or a combination of both. Many sessions of the symposium dealt with the continuing research currently under way to determine precisely the relative risks and benefits of the various treatment modes.

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"Although it was once thought that children with Hodgkin's disease fared less well than adults, the current results indicate that the course of illness and response to treatment in children does not differ from that in adults," Donaldson said.

"As cure is now a reality in patients with Hodgkin's disease, we must look to the quality of survival and carefully analyze the effects of our therapies which now yield such gratifying results," Donaldson told the audience of several hundred physicians.

Complications of treatment in children may include impairment of bone growth and development, some loss of fertility, increased susceptibility to infection, and development of a new malignant tumor.

The latter problem is the most serious, Donaldson observed. In the 171 children followed in the Stanford study, four developed second malignant tumors during treatment, she noted.

"The successful programs of yesterday and today are unfolding new questions for tomorrow. These remain questions regarding the quality of survival and the price of success. These questions are perhaps the most difficult to solve," Donaldson concluded.

Bristol Myers provides unrestricted cancer research support at five university medical centers in the U.S. and two in Europe. The grants are being applied to basic research and clinical therapy programs and constitute the largest unrestricted contribution made by a corporation in support of cancer research. The institutions involved rotate sponsoring annual symposia on aspects of cancer research.

—30— L100

Mailed Wednesday, November 26, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

The medical conquests of today are revealing unanticipated dilemmas as survival rates increase for patients once thought incurable. These are the so-called diseases of medical progress.

A group of cancer specialists meeting at Stanford University School of Medicine November 20-21 heard how, in a small percentage of patients aided by dramatic medical therapies such as heart transplantation and cancer treatment, new malignant cancers may develop.

The symposium, sponsored by the Bristol Myers company, focused on advances in understanding and treating lymphomas, cancers of the lymphatic system.

Hodgkin's disease, one type of lymphoma, is among the most curable cancers, with a five-year survival rate of about 90 percent among patients receiving modern radiation therapy and chemotherapy treatments, explained Dr. Norman Coleman, assistant professor of radiology and medicine at Stanford.

However, in about three percent of a group of 1,096 adult Hodgkin's disease patients treated at Stanford since 1968, a new cancer of the blood (leukemia) developed after completion of treatment for Hodgkin's disease, Coleman said.

"It is extremely unlikely that the leukemia develops as part of the natural course of Hodgkin's disease unmasked by improved survival, but rather leukemia is probably induced by treatment," Coleman noted.

The incidence of leukemia differed among several groups of patients on different treatment programs, Coleman said, with no leukemia reported only in the group receiving radiation therapy alone, without chemotherapy.

In contrast, about five percent of the patients given combined radiation therapy and chemotherapy or chemotherapy alone developed leukemia, he said.

These results suggest that chemotherapy for Hodgkin's disease should be used cautiously, Coleman remarked.

However, he noted that the survival rate of patients given both chemotherapy and radiation therapy is at least as good as those receiving radiation therapy alone, despite the excess leukemia in the combined treatment group.

Therefore, the risk of adverse side effects must be carefully weighed against the potential benefits of combined therapy, Coleman noted.

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Heart transplant recipients form another group of patients who develop malignant cancer at a higher than normal rate. Among 199 patients given new hearts at Stanford University since 1968, eleven have developed lymphomas, cancers of the lymphatic system, an incidence of about five percent, reported Dr. Charles Bieber, senior research associate in the Department of Cardiovascular Surgery at Stanford Medical School.

The reasons for this phenomenon are not well understood, noted Dr. Roger Warnke, assistant professor of pathology at Stanford, but it may be related, in part, to the anti-rejection medications patients must take to suppress the body's natural tendency to reject foreign heart tissue.

So far, in six of the afflicted heart transplant patients the lymphoma was discovered in time for radiation treatment to be initiated, and four patients have been treated successfully, Bieber said.

"If these lymphomas prove to be treatable, the cancers may be managed effectively," he said.

The problem of rejection of new organs in transplant patients has stimulated researchers to look for better anti-rejection techniques than those now available, Bieber explained.

Recently, researchers at Sandoz, a drug company in Switzerland, found a new drug called cyclosporin-A that has proved effective in combatting rejection in both monkeys and humans with transplants. Of 50 reported human kidney transplant patients around the world who have received the drug so far, four have developed lymphoma, Bieber said.

He noted that this is a somewhat higher incidence of lymphoma than has been observed in the heart transplant patients on conventional steroid therapy to control rejection, but much lower than the incidence of lymphoma observed in heart transplant monkeys treated with cyclosporin-A.

This possible serious side effect of cyclosporin-A will have to be monitored extremely closely when the drug begins to be used next year in transplant patients at Stanford, Bieber remarked.

The advantages of the drug will probably outweigh the risks, he predicted, but further studies are needed.

Current steroid anti-rejection therapy also has many adverse side effects, including decreased bone strength that increases susceptibility to breakage, increased susceptibility to infections, and some neurological problems.

"Development of lymphoma is a small but recognized risk for transplant patients. But as cancer research continues, this problem too will be more effectively treated," Bieber concluded.

Bristol Myers provides unrestricted cancer research support at five university medical centers in the U.S. and two in Europe. The grants are being applied to basic research and clinical therapy programs and constitute the largest unrestricted contribution made by a corporation in support of cancer research. The insitutions involved rotate sponsoring annual symposia on aspects of cancer research.

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Mailed Tuesday, November 25, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

The mutual effects of exercise and oral contraceptive use on blood cholesterol levels are under investigation at the Stanford Heart Disease Prevention Program.

Researchers are seeking women volunteers between the ages of 21 and 35 in the following categories:

- using oral contraceptives and physically active;
- using oral contraceptives, with a sedentary occupation and no regular physical exercise;
- not using oral contraceptives, with a sedentary occupation and no regular physical exercise.

Volunteers will make three visits over the period of a month to the Heart Disease Prevention Program facilities at 730 Welch Road. The staff will draw small blood samples, conduct a bicycle fitness test, and determine body density by underwater weighing.

Participants will receive detailed information on their blood cholesterol levels, percentage of body fat, and their maximum oxygen transport capability (a measure of physical fitness).

Those interested in volunteering should call Jim Phelps at (415) 497-6254 for more information.

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Mailed Wednesday, November 19, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

John B. Ford, 31, has been appointed director of medical development at Stanford University.

He will have overall fund raising responsibility for the Medical Center—the School of Medicine, Hospital, and Clinics, according to Lawrence G. Crowley, vice president for medical affairs, and Joel Smith, vice president for development.

Ford succeeds Dwain Fullerton who resigned recently to become vice president for institutional relations at the California Institute of Technology in Pasadena.

An associate director of development since 1977, Ford has directed the major gifts program for the Medical Center.

"John has performed outstandingly in his three years at Stanford, and before coming here, gained valuable experience at Caltech and the University of Chicago," Crowley said. "We are pleased to recognize his very considerable capabilities by this appointment."

Ford, who received his undergraduate education at Stanford, attended the University of Southern California masters program in history and public administration.

He was director of annual giving at the University of Chicago from 1975 to 1977, and prior to that had served as assistant director of special projects at Caltech.

Ford with his wife, Cynthia, and three children, lives in Los Altos.

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Mailed Thursday, November 13, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
EDITORS: Advance for release November 21, 1980.

STANFORD—

A new prescription drug called zomepirac sodium has proved more effective than intramuscular doses of morphine in treatment of pain following surgery, a Stanford University researcher reports.

Unlike morphine, which has little effect when taken orally, zomepirac sodium can be taken in pill form, explains Dr. William Forrest, associate professor of anesthesia, in the November 21 issue of the *Journal of the American Medical Association.*

The drug has received considerable attention because other studies indicate that it is not addictive and that it has impressive pain-killing potency compared to standard oral pain relief medications such as aspirin and codeine.

These results are very promising, says Forrest, because there has never before been a non-narcotic oral drug to rival intramuscular narcotic agents and surpass the oral standards like aspirin in relieving pain.

Many new drugs have side effects that limit their usefulness, Forrest notes. However, in his study involving 104 patients who had recently undergone abdominal, bone or joint surgery, side effects observed with zomepirac sodium (such as nausea, dizziness, headache, sweating and visual problems) were no greater than with morphine.

The patients studied had severe or moderate pain following surgery, and they were given a single treatment of either zomepirac in pill form or morphine in an injection, to relieve pain. In addition to measuring the extent of pain relief, the time that elapsed before the patients asked for remedication was measured.

Two different dose levels of zomepirac (100 milligrams and 200 milligrams) were administered along with two dose levels of morphine (four milligrams and eight milligrams). Five to ten milligrams of morphine is commonly prescribed for postoperative pain, Forrest explains.

"Both dose levels of zomepirac provided greater alleviation of pain than either of the morphine treatments," he observes.

In addition, at least 61 percent of the patients in each of the zomepirac treatment groups went six hours without asking for more medication. In contrast, 11 percent of the patients receiving the low dose of morphine and 16 percent receiving the higher dose completed a six hour period without asking for more medication.

Although the drug's mechanism of action is not known, Forrest says it is thought to block pain impulses mediated by chemicals called prostaglandins. This puts it in a class with many mild analgesics such as aspirin, he notes.

The drug, developed by McNeil Pharmaceutical in Pennsylvania, was recently approved by the Food and Drug Administration for relief of mild to moderately severe pain.

The company reports that more than 200 physician investigators and 4,000 patients have participated in studies of its effectiveness in treating a broad range of acute and chronic pain conditions.

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Mailed Wednesday, November 19, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

EDITORS: Photo available if not included with story.

STANFORD—

Sean Mooney, the Medical Center's new energy conservation manager, envisions the day when people will look at Stanford and say, "That medical center is not only one of the best in medicine, but it's also one of the best in energy conservation."

That's what he's after.

Mooney comes to Stanford with a good feel for hospitals—as opposed to industrial or purely educational settings—and for the special needs of patients, physicians and researchers. He asserts that the Medical Center's Resource Conservation Committee did much excellent groundwork from 1977 to 1979.

A certified California energy auditor with a degree in physical organic chemistry and mathematics from Pennsylvania State University, Mooney has had extensive experience as chief engineer for a Health Maintenance Organization in Oakland, and as assistant chief engineer at the University of Miami School of Medicine. Before coming to Stanford he was design engineer and campus energy manager at San Jose State University.

Continually escalating costs of energy and technology result in an increasingly large chunk of the Medical Center's budget being spent on energy, says Mooney. This means there is less left for other functions. Anticipated utilities expenditures at the Medical Center for fiscal year 1980-81 are $4.3 million.

According to Mooney, specific plans to conserve at the Medical Center include: lighting level reduction and lighting efficiency upgrades wherever possible; power factor correction to make electricity usage more efficient and save on public utilities; condensate heat recovery, to reduce steam consumption in the main complex; reconfiguration of chilled water pump controls; resetting a number of non-critical hot water temperature controls (in public restrooms, for example); modifications of a large number of fume hoods in laboratories, so they won't exhaust as much conditioned air to the outside; and a study of the new Phase One building's heating, air conditioning and ventilations systems, with possibilities for increased energy efficiency.

The program also includes analysing ways to determine areas of highest energy consumption in the Hospital, which are not always obvious.

Faced with special problems of its own, such as many shift workers during a 24-hour day, the Medical Center's strategy is, to some extent, independent from the University's. Nonetheless, in an effort to establish a unified energy policy throughout Stanford, associate director of Utilities Warren Weeks and Mooney are trying to adapt the main campus program to the Medical Center's goals.

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Energy program manager on main campus, Lynda Weisberg, and assistant energy program manager Nancy Teater are in contact with Weeks and Mooney. Teater and Mooney are working closely to increase public awareness of energy conservation, which is the most critical aspect of their effort. As Mooney points out, the "nuts and bolts" don't mean anything unless people participate in implementation.

As he sees it, one of Mooney's most essential functions here is to convince employees that their ideas are important and their actions count. "People waste energy and people can save it," he says. With the disappearance of daily gas lines as reminders, Mooney sees a need for revival of the realization that energy problems aren't going away.

Campus-wide efforts, launched even before the 1973 oil embargo, have continued steadily since that two-year crisis, during which the University made appropriate sacrifices in energy usage.

Since then there have been several major technical, management and public awareness efforts, as Stanford's Energy Program Office seeks out old and new areas of waste and sets priorities for action. One example is the central steam plant, which supplies steam and chilled water to much of the campus, including the Medical Center. More than $2 million was recently spent to make it more energy-efficient.

One program now in progress on main campus involves "building energy managers," employees selected in each department to serve as overseers of energy efficiency in their respective buildings. Mooney coordinates a similar program at the Medical Center, where building energy managers are distributed according to distinct area needs, and act as important sources of information for all employees.

One additional function of the Medical Center's energy managers program will be to provide employees with information on how to conserve energy, and thus money, in their homes. Posted on bulletin boards will be tips, many from Pacific Gas and Electric itself, on cutting down home utility bills.

Mooney hopes to predict and prevent waste, rather than to try to cure it in retrospect, which is much more difficult and costly. He will work on a program of engineering and energy review, in order to determine the most economical and energy-efficient ways to run all projects.

Mooney also plans to conduct audits in the Hospital; a lighting audit will probably be the first. He intends to meter all the steam, chilled water and electricity used by the Medical Center.

By looking at how much it actually costs to operate buildings, and revealing these findings to employees, he hopes to raise the incentive to conserve.

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Mailed Wednesday, November 12, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR FURTHER INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
FOR IMMEDIATE RELEASE
STANFORD --

Matti Myllyniemi, 18, the first Swedish patient to receive a heart transplant at Stanford, died at 6:45 a.m. November 12 at Stanford University Hospital.

Doctors listed the cause of death as multiple organ failure.

Myllyniemi was flown to Stanford from Sweden in critical condition on October 1. He was evaluated as a heart transplant candidate after his Swedish doctors determined that he had end-stage cardiac disease. The Swedish government paid for his transport and medical expenses at Stanford.

Myllyniemi received a new heart October 16. He remained in serious condition in an intensive care unit of Stanford Hospital until his death.

Myllyniemi's mother, who joined him at Stanford soon after his arrival in October, was at his bedside all night before he died.

His case attracted wide attention in Sweden where heart transplants are illegal because death is defined by the cessation of heartbeat rather than cessation of brain activity, as in California.

Myllyniemi was the 197th patient to receive a new heart at Stanford, which has the most active heart transplant program in the world.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

(ADVANCE) FOR RELEASE SUNDAY, NOVEMBER 16, 1980

STANFORD—

Dr. Donald C. Harrison of Stanford University School of Medicine is the 1980 president-elect of the American Heart Association, it was announced Sunday, November 16, in Miami Beach, Florida, at the Association's annual meeting.

Harrison is the William G. Irwin Professor of Cardiology. He is noted for his studies with anti-arrhythmic drugs, the application of computer technology in cardiology, and development of heart-monitoring devices that may help prevent sudden death. He has published more than 450 papers in these areas.

In addition to his clinical and teaching activities at Stanford, Harrison is serving as a member of several national advisory boards and committees and as a vice president of the Interamerican Society of Cardiology.

He has also previously served as a member of the National Heart, Lung and Blood Institute's advisory committee on coronary artery disease, the Medical Research Service Merit Review Board of the Veterans Administration Hospitals, and as a trustee and vice president of the American College of Cardiology.

Harrison has provided 15 years of volunteer service in American Heart Association programs on county, state and national levels, the announcement said.

He is also a member of the Santa Clara County Heart Association board of directors.

A 1958 graduate of the Medical College of Alabama, Harrison took additional training at the Peter Bent Brigham Hospital in Boston, and did research at Harvard Medical School and at the National Heart and Lung Institute, Bethesda, Maryland. He came to Stanford in 1964, and was made chief of cardiology in 1967 at the age of 32, making him one of the youngest men ever to become head of a major cardiology unit.

Harrison lives in Los Altos, California, with his wife Laura and their three children.

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Mailed Tuesday, November 11, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

Operating rooms at Stanford University Hospital are too small, too few in number, and competition for their use is so fierce that many operations go late into the night or are held over until the next day or the weekend.

"You have to try and work in the operating rooms to really understand the situation," says Dr. John Collins, chief of surgery and chairman of the operating room committee that assigns block time for 10 different surgical specialties and four anesthesia groups.

"It's awful."

The problem is an extremely sensitive one, since faculty and community surgeons, as well as Hospital administrators, agree its solution hinges on completion of the $114.8 million Modernization Plan. And completion is at least six years away.

But in order to finance the plan, ultimately the Hospital will need both the community's understanding of the problem and its support.

The Hospital plan was developed by a team headed by Hospital Executive Director, Peter Levin. It states that patient care demand already exceeds operating room capacity and predicts some growth over the coming decade. And it warns:

"If Stanford takes no action in response to this problem, the quality of the Hospital as a teaching and community facility will decline, together with the ability to serve as a recognized base for educational and research programs."

Just last month, the general members of the Hospital corporation, which is composed of University trustees, acted on that warning. It approved the $114.8 million plan and empowered the Hospital board and administration to begin an architectural search. Designs and certified cost estimates, necessary for the Hospital to get a certificate of need, are expected to be completed by November, 1981.

Once the Hospital has the certificate of need in hand, says Levin, the next step is to approach the California Health Care Financing Authority and ask them to consider a request for a tax-free bond issue.

Actual construction is expected to begin in late 1982, although precise dates depend on timing of approvals from local and state health planners and city and county agencies.

Each month of delay, says Levin, costs the Hospital $1 million in cost escalation.

Under the two-stage plan, the Hospital would get 12 new operating rooms and nine to 11 existing rooms would be totally renovated, giving the Hospital a total of 21 to 23 operating rooms by 1986.

At the moment, the Hospital has only 16 operating rooms, two of which are in Hoover Pavilion and are used for minor surgical procedures. Technically, the remaining 14 operating rooms in the Main Center are all multi-purpose rooms, but at least three are unusually small and one has an immovable table with an X-ray column that limits the kind of surgery that can be done.

The resulting room crunch leaves surgeons scrambling around for operating room time, and when emergencies occur, putting elective patients on hold. It also, says Collins, exacerbates relations between faculty and community surgeons and even causes stress within the different specialities.

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"When you have such an increase in demand and pressure to get into operating rooms," he says, "people resort to all sorts of maneuvers to get into them."

Inevitably, the squeeze in the operating rooms spills over into the activities of the Medical School as well.

"We end up operating much later than in most teaching hospitals," says Collins. "As a result, educational activities for house staff and Medical School students get stuffed into the weekends."

Because Stanford is an acute care institution, most of the patients who come through its doors are far sicker than those seen in other institutions. The Hospital also has an international reputation in heart transplant work and other complex and specialized surgical and medical interventions.

Both of these factors contribute to the severity of the current problem, since the average time of each operation is far greater than in most hospitals.

"This doesn't mean our surgeons are slower," says Collins. "It's just that the procedures we do here are more complicated." Often, a surgeon will underestimate his operating time, he adds, because when there aren't enough operating rooms for their patients "people are always looking for angles so that they can get whatever time might open up."

On an average day, operations are performed on 55 patients at Stanford, according to Gwen Williams, director of the operating rooms and ambulatory surgery unit.

"Most of our surgical services are overutilized right now," she says. "We don't have a lot of extra time to give them. We try to utilize the existing operating rooms as efficiently as possible by minimizing the down-time between patients (the time between operations), and offering increased staffing later in the evening.

Operating rooms at the Hospital are staffed on a 24-hour basis, with all 16 rooms available during the peak hours of 7 a.m. to 3 p.m. daily. On a yearly basis the operating room committee, which is a subcommittee of the Medical Board, assigns block time for each specialty based on use during the previous year.

When a specialty runs out of block time, or does not have priority time on a given day, says Williams, cases are put on an add list, and they are given time once priorities are out of the way.

"Emergencies take precedence over scheduled procedures," she adds.

The operating rooms at Stanford are shared by faculty surgeons, community surgeons, including the Palo Alto Clinic, the Menlo Clinic, and four surgeons from a community cardiovascular group. Roughly 60 percent of operating time goes to Stanford doctors, with the remaining 40 percent divided among the others.

But scheduling becomes even more complicated because there are four anesthesia groups, one for each surgical team.

Says Williams, "Stanford faculty anesthesiologists generally do not provide anesthesia services to community surgeons, and community anesthesiologists do not provide services to Stanford faculty.

"A lot of times this causes confusion because we can't get the proper mix of individuals."

Feeling on this issue is deeply engrained in traditional town-gown concerns.

Community surgeon, Dr. William Fielder, who is deputy chief of surgery, argues that community anesthetists were here long before the Stanford group and should be allowed to continue competing.

But he also believes the teaching commitment of the Stanford anesthetists often creates delay for other surgical groups.

Additional operating rooms, contends Fielder, will resolve this problem, along with the more pressing space concern.

Surgical delays and rescheduling operations obviously cost money. Operating rooms are important income producers for hospitals. In 1980-81, according to the Financial Department, gross revenue for operating rooms was $15.7 million or roughly 11 percent of total patient revenues at this time.

More importantly, however, more operating rooms are necessary if Stanford is to stay in the forefront of medicine. Plans to develop certain clinical services in which Stanford has been in the lead have been impossible to implement because of bed limitations and lack of operating room facilities. These include such programs as renal transplantation, orthopedic surgery, bone-marrow transplants, and microsurgery.

In the meantime, while awaiting implementation of the Modernization Plan, community surgeons at Stanford have received some relief from the Palo Alto Surgicenter—at least for minor surgery. Since it opened its doors in 1976, says Dr. Robert W. Jamplis, executive director of the Palo Alto Clinic, there have been 10,000 cases and no deaths.

"It's been an absolute boon," says Jamplis.

"By taking uncomplicated cases away from Stanford," agrees Executive Director Peter Levin, "the Surgicenter has been a big help to us."

In November, Stanford plans to open an ambulatory surgical treatment unit for minor surgery patients, which will handle ten percent of the Hospital's surgery cases. Although these cases will still be performed in the operating room suite, patients will be prepared for surgery in the new unit.

Its creation will do more to open up patient beds in the Hospital than ease the operating room crunch. Nonetheless, it is a small step towards solution of a problem generally considered the number one priority of the Hospital in the coming years.

"More operating rooms will mean less hassles for doctors and better services for patients," says Dr. Jamplis. "There is no town-gown problem with surgeons on this. It is a common concern for all of us."

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Mailed November 10, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

CITY DESKS: Story is embargoed for PM papers, Monday, November 10, to coincide with report presentation at the annual meeting of the American Association of Blood Banks, held at Sheraton Hotel, in Washington, D.C.

(ADVANCE) FOR PM PAPERS MONDAY, NOVEMBER 10, 1980

STANFORD—

Infections from cytomegalovirus (CMV), a leading cause of death among premature infants treated in hospital intensive care nurseries, can be avoided by careful blood donor screening, a Stanford University School of Medicine study has found.

The three-year study was conducted to evaluate in detail the hazards of CMV infection after birth, and to determine if infection associated with transfusion could be prevented by using blood donors screened to be free of CMV.

The study found that transfusion associated CMV infections in intensive care nurseries can be reduced to zero. It also demonstrated the gravity of the problem—an overall mortality in selected subgroups of CMV-infected infants of 40 percent compared to a mortality of 6.6 percent in the same intensive care unit from other causes.

The findings are significant because CMV infections are estimated to afflict about 13,500 or 7.5 percent of the 210,000 infants born each year prematurely in the United States. This viral infection can cause pneumonia, hepatitis, hemolytic anemia and other complications. And it possibly contributes to developmental retardation and hearing loss.

The study was carried out in the departments of Pediatrics and Pathology by Anne S. Yeager, F. Carl Grumet, Elizabeth B. Hafleigh, Ann M. Arvin, John S. Bradley, and Charles Prober.

Their findings were presented Monday, November 10, at the annual meeting of the American Association of Blood Banks in Washington, D.C. A detailed report will appear later this month in the *Journal of Pediatrics*.

CMV is a common herpes-related virus transmitted from the mother to the infant during passage through the birth canal, Dr. Grumet, director of the Stanford University Blood Center, said in an interview. "But another source of infection, which is less appreciated, is blood transfusion."

In preemies transfusions are frequently required to treat shock or to replace blood lost for tests to monitor delicate bodily functions and maintain metabolic balance. But even the most minute blood samples drawn from these preemies must be replaced.

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The study, utilized a sensitive antibody test developed and refined by Dr. Yeager and suited for rapid large scale donor screening, Dr. Grumet explained.

A total of 164 transfused preemies in the study received blood from 643 donors. Of the 74 infants exposed to CMV-positive blood donors, 10 or 13.5 percent were infected with CMV. Of 90 babies exposed only to CMV-negative donors, none acquired infection, according to the study.

The researchers found that prolonged hospitalization increases the risk of CMV infection since the preemies are likely to receive more blood transfusions. Conversely, CMV infections frequently result in prolonged hospitalization. Additional risk factors were the volume of blood given and the number of donors per infant.

"The cutoff point in terms of blood volume necessary to cause infection seems to be about 50 cc," Dr. Grumet said. "No infant receiving less than 50 cc of red cells became infected.

"Presumably a baby has to receive a certain dose of live virus before it gets infected," he explained.

In the study, conducted at Stanford University Hospital between 1977 and 1980, the preemies were divided into two groups. One group of infants received routine blood products from donors not tested until after transfusion. This group therefore received blood from both CMV positive and negative donors—a condition simulating normal hospital transfusion practices. The other group received blood only from donors specially pretested and shown to be CMV negative.

Because the study established, that in susceptible infants, transfusion acquired infections occurred only in recipients of positive and not in recipients of negative blood, only CMV negative blood is now used at Stanford for premature infants, Dr. Grumet said.

Donors of plasma were also screened for CMV infection, but no infections attributable to plasma transfusions were identified, the study found.

An additional benefit was also noted, the researchers reported. The use of CMV negative donors reduced exposure to the virus by staff coming into contact with infected infants.

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Mailed Friday, November 7, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD--

A mutant cancer cell line, developed by Stanford University scientists and used for producing human monoclonal (pure) antibodies, will be made available for research purposes to scientists around the world, the University announced Friday, November 7.

Announcements that the myeloma cell line, developed by Drs. Henry S. Kaplan and Lennart Olsson, will be made available to other scientists appeared in the journals *Nature* and *Science* this week.

"The mutant myeloma line, SKO-007, useful for making human hybridomas. . . is available to a) academic scientists under prior agreement to restrict further distribution, and b) to industry under a non-exclusive license agreement," the announcement said.

Cells for distribution to scientists will be ready to be shipped in about three weeks," said Dr. Henry S. Kaplan.

He explained that cells need to be grown to the requisite culture volume, then frozen for shipment after rigid quality control tests are completed. These steps have been under way for several weeks, he said.

Under a policy adopted by the University last week, scientists may obtain the cells by paying nominal handling costs and signing a statement that the cells will be used solely for research purposes.

"The cell line is provided as a service to the research community," said Stanford Vice President for Public Affairs Robert Rosenzweig.

Kaplan and Olsson reported the development of human monoclonal antibodies from artificially created cells, called hybridomas, in the September issue of the *Proceedings of the National Academy of Sciences.*

Until their efforts, hybridoma technology had produced only mouse antibodies which are not considered the first choice for diagnosis and treatment because of the body's natural reaction againsts foreign proteins.

Therefore, the development of pure antibodies from human cells has created great scientific interest. The pure antibodies are expected to be used as a powerful tool for studying human disease, and as a method for diagnosis of virus and bacterial infections, and detection of cancer.

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Mailed Friday, November 7, 1980

EDITORS: Individuals interested in obtaining the cell line should contact the Stanford Technology Licensing Office (415) 497-3567

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

TO SCIENCE WRITERS AND CITY DESKS:

A two-day scientific symposium featuring some of the world's foremost experts in the field of diagnosis and treatment of malignant lymphomas will be held at Stanford University School of Medicine November 20 through 21.

The symposium, "Advances in Malignant Lymphomas," is the third in a series sponsored by Bristol-Myers Company.

The sessions will be conducted from 8 a.m. to 5:50 p.m. in the Sherman Fairchild Auditorium of the Stanford University Medical Center.

The symposium will explore the causes, immunology, pathology and treatment of malignant lymphomas.

It will be chaired by Dr. Henry S. Kaplan, D'Ambrogio Professor of Radiology and director of Stanford's Cancer Biology Research Laboratory; and Dr. Saul A. Rosenberg, professor of medicine and radiology.

Specific sessions will examine the current evidence of the role viruses may play in animal and human cancers, treatment complications, abnormalities of the immune system in cancer patients, pediatric leukemia, and research involving treatment of leukemia with artificially created mouse antibodies.

More than 400 participants, including cancer experts from the United States, Canada, Finland, France, Great Britain, Israel, Italy, and Sweden will attend.

Bristol-Myers provides unrestricted cancer research support at five university medical centers in the United States and two in Europe. The U.S. institutions include Baylor College of Medicine, the University of Chicago, the Johns Hopkins University School of Medicine, and Yale University School of Medicine.

The grants are being applied to basic research and clinical therapy programs and constitute the largest unrestricted contribution made by a corporation in support of cancer research. The institutions involved rotate sponsoring annual symposia on aspects of cancer research.

Reporters are cordially invited to attend the sessions. If you plan to come, please fill out the form below and return to the News Bureau. The program of the conference will also be sent to you, if not included with this announcement.

NEWS BUREAU, STANFORD UNIVERSITY MEDICAL CENTER
Room TC 135
Stanford, CA 94305

_____ I plan to attend the Annual Bristol-Myers Symposium on Cancer Research, "Advances in Malignant Lymphomas, November 20, 21.

_____ Send me a copy of the program.

Name_____ Telephone_____

Address _____

Publication _____

Mailed Thursday, November 6, 1980

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

A student entering Stanford Medical School this fall will have to spend at least $55,000 in the next four years, according to the Office of Financial Aid. And, of course, this is a conservative estimate. Inflation is still zooming. Tuition alone, fueled by inflation and increasing operating costs, rose 53% at Stanford between 1975 and 1979. The annual tuition for new students in 1980 has reached the formidable figure of $7,338, and will almost certainly keep rising.

At the other end of medical school, graduation, students are leaving with increasing debts. In the six years between the years 1973 and 1979, the average has more than doubled. In 1973, 76 students (the 85% of the class receiving financial aid from the School) had an average debt of $8,000; by 1979, the mean debt had risen to $16,800, 69% of the class needing aid. Even that figure may be deceptively low because it does not take into account accruing interest.

The problem—the ever-increasing cost of medical education—is not Stanford's alone. It's plaguing both public and private schools. Large numbers of entering medical students may accrue debts of $50,000 or more, according to a recent estimate of the Senate Committee on Labor and Human Resources.

Moreover, the escalating costs have been coupled to declining resources of student assistance, making the prognosis even poorer.

After the chorus clammering for "Meritocracy" in the 60s and 70s, the tune of the 80s may be the old refrain, "Medicine, none but the rich."

How true does the new tune ring? Apparently it has struck a responsive chord in the Congress. "Many low and middle income Americans cannot from existing sources meet the price of education in the health professions" is the opinion submitted in September by Senator Edward M. Kennedy (D-Mass.) of the Committee on Labor and Human Resources.

The private sector is also starting to harken.

In April, 1980, the Henry J. Kaiser Family Foundation of Palo Alto made an outright grant of $100,000 for medical student grants-in-aid to Stanford and to each of 12 other private medical schools. The 13 medical schools (Stanford, Case Western Reserve, University of Chicago, Duke, Harvard, John Hopkins, Columbia, University of Pennsylvania, University of Pittsburgh, University of Rochester, Washington University and Yale) formed a consortium about a decade ago to share information on common problems. The Foundaton also promised a second grant of $50,000 to those schools who could match it on a two-to-one basis, a so-called challenge grant.

Will the increasing cost of a medical school education indeed deter financially disadvantaged students, and increasingly the children of middle and even upper-middle class, from seeking admission to medical school? And if so, what impact will this have on the caliber of medical students?

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Bernard W. Nelson, executive vice-president of the Kaiser Family Foundation, described the Foundation's conception of the problem this way:

"The Kaiser Family Foundation is very concerned about the cost of medical education, especially at the private institutions. Schools in the medical consortium, such as Stanford and Harvard, have traditionally played leadership roles in medical education over the years. The idea (of these grants) is to help schools increase their financial resources so that they will not be compromised.

"The challenge grant is aimed to increase grants for medical students. With the current emphasis on loans, students are now graduating with debts that are in some cases unmanageable. We want to increase the grant money available.

"Obviously, there are some students who will be able to pay, no matter what the price. But if institutions are forced to alter admission practices because of financial considerations, they will be weakened. One of the strengths of these institutions is their ability to attract first class students. We don't want financial considerations to change this."

The nation's unabating double digit inflation may make the causes of the rising costs fairly self-evident, but the reasons for the dwindling resources may not be so apparent. Therein hangs a tale.

A major role in this story is played by the Federal government, and a major theme is how the government changed its mind as to what its role should be.

The story begins in 1963. But first something must be said about the present. Medical students finance their education through grants, loans, work, and contributions from parents. Grants and loans have provided the lion's share of the costs for medical students of meager or modest means. At Stanford in the 1979-80 year, 41% of the calculated total financial need of the medical students was met through loans, 30% through grants. (Parental contributions theoretically accounted for another 7%; the rest was left up to the students.)

Understanding how the nature and amount of the federal loans and grants have changed over the years is important in understanding today's situation.

Before 1963, aid to medical students was mainly a family affair. But in response to perceived critical health manpower shortages in the nation, Congress in 1963 enacted legislation that provided direct federal support for health professions education. For nearly two decades prior to this, federal funding for health education was only a by-product of its commitment to biomedical research.

With enactment of new legislation in 1971, the attitude of Congress to the whole health manpower issue began to change. As the seventies progressed, the need to increase the aggregate supply of health professionals no longer was perceived to be the critical issue; rather it became where the physicians were settling—large cities—and what type of medicine they were practicing—lucrative specialties. Rural and inner-city areas were being neglected, as was primary care medicine.

The new perception that there really was no longer a terrible doctor shortage, coupled with the observation that doctors have an enviably high average income, resulted in a change of attitude toward student assistance programs.

Taxpayers became increasingly unwilling to subsidize medical students or schools, feeling that students should be able to borrow against their high future earnings.

The watershed year proved to be 1976. Students were told they would have to bear a greater part of the responsibility. Under the new law student assistance programs emphasized loans without interest subsidy, and the few grants left, except for those who were "exceptionally needy," required repayment in service.

The student loan program was reauthorized but on a more restricted basis. The interest rate of one newly-authorized loan program, the Health Education Assistance Loan Program (HEAL), could rise to 12%. Other government-insured, 7% interest-rate loans, available to medical students through the Higher Education Act of 1965, became less attractive to banks in days of double-digit interest rates.

Another federal health manpower bill is in the works this year. Versions passed the House and the Senate in September; attempts to reach a compromise bill will begin in November. Among the many differences between the House and the Senate versions are the student assistance provisions. While the House bill essentially continues, with modifications, the student aid programs of the 1976 law, the Senate bill proposes an almost entirely new portfolio of programs.

The Senate, realizing that it is not now just the very low income students who cannot afford a medical education, designed its bill to meet the needs of students from the entire range of economic circumstances—and to ensure that students bear total responsibility for payment of their education either through loan repayment or service payback. If the Senate version predominates, even some loans will have service paybacks.

Will debts become unmanageable? The Senate committee hypothesized this scenario in its report. If a student borrowed $8,000 a year (not an unlikely sum in the near future), the person would be $32,000 in debt at graduation. If this were a HEAL loan, at current interest rates the student would have to repay a total of $148,000 or $822 per month for 15 years, starting three years after graduation.

Because of such depressing calculations, the HEAL program has been used relatively little by medical students to date. But how long lower interest-rate loans will be available to finance the bulk of their education is not known. (Most students at Stanford now use a potpourri of loans, with varying interest rates.)

Private medical schools face a particularly acute problem because their tuition on average is three and a half times higher than that of public schools, pushing up the total cost considerably. Stanford's tuition is about average for private medical schools.

How well will the private schools compete with the public schools for the top students, if money becomes a major consideration?

"Facing an option to attend a private or a public medical school, what should be important to the student is not what it actually costs to go to medical school, but rather how much debt he will have to assume," Dr. John Steward, associate dean for student affairs at Stanford, said.

So far the debts of Stanford's grads have been comparable with many public and private medical schools. The mean indebtedness of Stanford's 1979 graduates was as low as or lower than that of the graduates of most of California's state medical schools and of the 12 other schools in the consortium, according to Dr. Laurence Kedes, director of the medical school admissions.

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Stanford has accomplished this through a complex assortment of federal, state and private loans, grants, and endowments. "This is a precarious juggling act," Steward said. "We're never sure how much money will be available to us in the near future. We try to be frugal and retain some reserve for emergencies."

Up to the mid-seventies students at Stanford were told that if they matriculated, they could expect funds to be available to finish. Not so anymore.

Now, in the front of the financial aid handbook given to students is the qualifier: "We believe at this time that funds available to the School will be sufficient to meet the valid needs of our medical students during the coming year, provided that they are willing to work during the summer, to borrow, to live within what we consider to be a frugal but reasonable budget, and to obtain the calculated parental contribution.

"We cannot assure students that all of their need will be met in future years."

Stanford has yet to fail to fill any student's needs. But in 1979, half of the applicants who were accepted to the medical school but chose not to come cited financial considerations as their major reason, according to Kedes.

Stanford is looking to the private sector for help, trying to establish more predictable and steady sources of financial aid.

The alumni have helped in the past—both as individuals and through their organization. In 1975 the Medical Alumni Association activated an endowment fund established earlier for grant use and established a loan fund.

The hope at Stanford is that they will help even more in the future.

"The opportunity for talented individuals of all socio-economic and ethnic backgrounds to become physicians must be preserved," Steward said. "To do this both stable and sufficient financial aid resources are essential.

"We can no longer rely on the Federal government to bear the cost of medical education, nor should we. Those of us who have had the benefits of a medical education should assist those following in our footsteps. The Kaiser Family Foundation has given us the challenge; I hope we meet it."

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Mailed Wednesday, November 5, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Because health of mind and body are often closely linked, Stanford University Medical Center is opening a new unit where patients will receive both comprehensive medical and psychiatric treatment.

Named the Comprehensive Medicine Unit, the 13-bed ward is located at the Hoover Pavilion of Stanford University Hospital, and is a joint effort of the departments of medicine and psychiatry at Stanford University School of Medicine.

According to Dr. Lorrin Koran, associate professor of clinical psychiatry and medical director of the unit, it will be one of a small number of such facilities in the country.

The unit, scheduled to open November 10, aims to help several kinds of patients—those whose medical illnesses lead to or are complicated by psychological problems, patients whose medical illnesses could be helped by behavioral techniques such as biofeedback, and psychiatric patients who are also suffering from medical disorders.

For instance, Koran explains that patients with heart disease often experience severe depression; people with chronic lung disease may be plagued by anxiety; cancer patients often experience disabling chronic pain; certain drugs administered for medical problems occasionally cause psychological symptoms; drug and alcohol abuse can bring on severe physical and mental illness; and psychiatric disorders can be complicated by medical conditions.

"It is not enough to provide either medical or psychiatric care to patients like these," he says. "But with a coordinated treatment program, we hope to improve patients' coping skills and maximize their recovery."

In addition to standard medical care, patients will receive psychiatric treatments in the new program including individual and group psychotherapy for both patients and family members, medications, and behavioral therapies such as biofeedback and relaxation training.

"For example," says Koran, "we might provide a therapy group where diabetic patients can discuss different methods of coping with the illness and related problems. We will provide them with information about their disease, review coping strategies and help each patient decide what works best. Complementary groups for the patients' family members may be helpful as well.

"We may ask patients with chronic pain to keep diaries to help them detect patterns in their behavior or activities that tend to affect the pain".

"About 20 percent of all patients on medical wards suffer from clinical depression," Koran notes. "What we learn in the new unit may help us introduce psychiatric interventions more widely to improve patient care."

In addition to psychiatrists and physicians specializing in several medical specialties, nurses who specialize in medical and psychosocial nursing, psychologists, social workers, and occupational and physical therapists all will contribute to patient care.

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Mailed Wednesday, November 5, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: The following story is released jointly by the University of California, San Francisco and Stanford University School of Medicine. All press inquiries and press arrangements will be handled by Physicians for Social Responsibility; contacts are Mary Lord and Lois Wise at (415) 845-8395.

STANFORD—

A two-day symposium on the medical consequences of nuclear weapons and nuclear war will be held Monday and Tuesday, November 17 and 18 at the Herbst Theater, War Memorial Veterans Building at the Civic Center in San Francisco.

Sponsored by the University of California, San Francisco, Stanford University School of Medicine, and the University of California, Berkeley, School of Public Health, the symposium will include discussions of the medical effects of nuclear weapons production; psychological effects of the nuclear arms race; physical characteristics of a nuclear explosion; medical and surgical problems among survivors of a nuclear war; long term effects of nuclear explosions; and political and economic aspects of the nuclear arms race.

The symposium is organized by the the Bay Area Chapter of Physicians for Social Responsibility and the Council for a Livable World Education Fund.

A renowned faculty includes members from a broad range of medical, public health and scientific disciplines. Among the faculty members are Howard H. Hiatt, M.D., dean of the Harvard School of Public Health; Herbert Scoville, Jr., former deputy director for research of the C.I.A. and president of the Arms Control Association; Dr. Sidney Drell, professor of theoretical physics and deputy director of the Stanford Linear Accelerator Center; Stuart Finch, M.D., professor of medicine at Rutgers Medical School and former director of research, Radiation Effects Research Foundation, Hiroshima; and Gene R. LaRoque, retired Rear Admiral in the United States Navy, and director of the Center for Defense Information.

Continuing medical education credit is available for physicians who attend the symposium; a registration fee of $75 will be charged. For non-physicians who attend the symposium, there is a fee of $15, and students pay $5 to attend. Registration begins at 8 a.m. in the lobby of the Herbst Theater. The program begins at 8:50 a.m..

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Mailed Wednesday, November 5, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Certified nurse-midwives will probably be delivering babies at Stanford University Hospital before the end of the year, according to Dr. William J. Aronson, chairman of the Hospital's perinatal care committee.

A proposal, drafted by Dr. W. LeRoy Heinrichs, chairman of the Department of Gynecology and Obstetrics (Gyn-Ob), to grant qualified certified nurse-midwives (C.N.M.s) staff privileges for a one-year trial period was recently approved by the Medical and the Hospital boards of Stanford.

Applications from C.N.M.s will soon be accepted and reviewed by the credentials committees of the Gyn-Ob Service and the Hospital.

The certified nurse-midwives will only handle "normal" pregnancies and deliveries, those considered low-risk. A faculty obstetrician will be called in if any problems occur during the pregnancy or the birth.

"Members of the Department have strongly supported the plan," Aronson said. This is another sign of the growing acceptance of certified nurse-midwives, a relatively recent trend.

Not until 1971, when a joint statement was issued by the American College of Obstetricians and Gynecologists, the Nurses Association of the American College of Obstetricians and Gynecologists, and the American College of Nurse-Midwives, did C.N.M.s gain the official approval of the medical profession. C.N.M.s could not legally practice in California until 1974.

Midwifery got a bad press at the turn of the century. Lay midwives were delivering babies in the home in less than sterile conditions, with resultant high rates of infant and mother death. Meanwhile, anesthesia, forceps and hygenic delivery rooms were becoming the norm for doctors, and hospitals became the safer place to have a baby. Many states outlawed midwives.

Today certified nurse-midwifery is legal in every state except Kansas, and certified nurse-midwives are trained professionals. They graduate from one of the 25 nationally-approved educational programs in midwifery (three are in California) and are solely responsible only for women having normal, low-risk pregnancies. High-risk pregnancies are attended to primarily by obstetricians, although nurse-midwives may work along with the doctor.

They are registered nurses, who have either obtained a midwifery certificate along with a master's degree, or have taken a basic midwifery course, which lasts from nine to twelve months.

By the time training is finished, a C.N.M. will have performed a minimum of 20 deliveries and newborn examinations and conducted at least 20 first visits of pregnant women.

There are now 2,100 C.N.M.s in the United States, 1,700 of whom are members of the American College of Nurse-Midwives.

Jackie Dorman, 30, and Nancy Smee, 31, are two C.N.M.s planning to apply for practice privileges at Stanford. They run the Nurse-Midwives Associates in Palo Alto, which they opened last year; they deliver between three and five babies a month.

"We offer personalized care," said Smee in a recent interview. "The initial visit is two hours long, and the succeeding visits are a minimum of a half an hour. We stay with the woman all during labor, giving her support. Within 24 hours after delivery, we make a home visit to see how everyone's doing."

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"We are very accessible," said Dorman, who is pregnant and plans to have Smee deliver the baby. "We really get to know the women. We try to help them experience pregnancy and birth in a very positive way."

"These women are primed for learning—about themselves, about the body, about their partners. We don't just say, 'Do you have any questions?', we try to anticipate questions. We provide information about the common changes during pregnancy," she added.

Smee and Dorman require their patients to take childbirth classes.

If a woman develops complications during the pregnancy, Smee and Dorman refer her to an obstetrician. But they always follow the course of the pregnancy and are with the woman during labor.

"Some women prefer to go through pregnancy under the supervision of a C.N.M.," Aronson said. "Stanford is trying to be responsive to consumer requests by adding this additional dimension to the wide range of services already offered by the obstetrical unit."

Smee said that many of their patients are graduate students or nurses at Stanford.

"They are by and large well-educated and consciously seeking out alternative choices to the traditional method," she said.

Aronson said by granting certified nurse-midwives staff privileges, Stanford would be providing women who do desire an alternative choice with a safe place to have a child.

"Although certified nurse-midwives seldom deliver in the home, lay midwives usually do. Home delivery is hazardous," he said. "By allowing C.N.M.s to practice in the Hospital, we may encourage women who want a midwife to choose the safer course with a C.N.M. rather than a lay midwife."

The most recent survey of the American College of Nurse-Midwives found that 97 percent of C.N.M.s practice on hospitals or in alternative birth settings, with only 3 percent attending home deliveries.

The number of hospitals in the Bay Area where C.N.M.s can practice is limited. Only Mills Hospital in San Mateo, the Santa Clara Valley Medical Center in San Jose, San Francisco General, Mt. Zion, St. Luke's, and Moffit hospitals in San Francisco, and Merrit and Highlands hospitals in Oakland have granted C.N.M.s staff privileges.

But more and more hospitals are granting privileges, especially in rural areas like the San Joaquin Valley, according to Smee.

Aronson said that the C.N.M.s would also be a teaching asset, providing more opportunities for medical students to observe normal births.

Certified nurse-midwifery is starting to look like an idea whose time has come.

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Mailed Wednesday, November 5, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

A pregnancy risk prevention program is taking shape at Stanford University Medical Center, modeled after the successful Heart Disease Prevention Program.

Funded by a $30,000 planning grant from the Henry J. Kaiser Family Foundation of Menlo Park, the program will study whether through the mass media pregnant women can be taught measures that will reduce risk to their babies.

Despite advances in screening and treatment of illness in fetuses, high rates of disease and death among mothers and infants persist, especially in the lower socioeconomic areas, and among certain age and racial groups, according to the program's leader Dr. Paul Hensleigh of the department of gynecology and obstetrics.

"We can reduce the risks that result in infant deaths by educating communities about the dangers in pregnancy that can be lessened by the mother's knowledge and use of health care," he said.

The greatest cause of infant death is prematurity, he explained. It is reflected in low birth weight and associated with a number of factors, some of which can be prevented if the pregnant woman is aware of them and takes precautions.

"The mass media are potentially an effective way to make her aware," Hensleigh said.

A community-based, mass media, educational campaign has proved to be successful in the eight-year-old Stanford Heart Disease Prevention Program. In that program, communities exposed to such a campaign have been found to have reduced risks of cardiovascular disease compared with similar communities that received no media campaign.

The program will be aimed at informing the entire community, Hensleigh said. "We will want to increase the perception of pregnancy risks in the community's whole social network. This will increase the chance that pregnant women will get our message and act on it.

"During this phase of the program we're brainstorming to be sure that we've identified risk factors in pregnancy that can be changed through use of the mass media. We don't want to target factors that can't be changed or ones that even if changed won't make any difference."

A series of advisory sessions have led to the identification of the following aspects of or actions in pregnancy whose risk could be reduced by a change in the pregnant woman's attitudes or behavior, or both.

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— pregnancy at a very young or old age;

— too late or too little prenatal care;

— inadequate nutrition in the preconceptional and gestational periods;

— use of cigarettes, drugs or alcohol during pregnancy; and

— unawareness of available beneficial interventions for women with a history of perinatal mortality or premature delivery.

Various groups of physicians, communication researchers, health workers, anthropologists and social scientists will during the planning phase delineate the attitudes, motivations and behaviors of pregnant women toward which the campaign should be directed. They will also decide on the media methods to be used, which could be "everything from billboards to television," according to Hensleigh.

The communities to be tested will also be chosen during the planning phase. Hensleigh says they will have about 70,000 people, and will most probably be within 100 miles of Stanford. In communities smaller than 70,000, the number of births would be too few to test whether the media campaign was working.

"The study won't be in the major metropolitan areas," he said.

The number of communities to be involved in the study has not been determined yet, but the communities tested will be matched with control communities, which are similar in their birth rates, populations and infant mortality rates, but are far enough away that the media campaign won't spill over into them.

Once the planning period is finished next April, the program will apply to a number of granting agencies to raise the estimated $3.5 million cost of the project. The project director is Dr. W. LeRoy Heinrichs, chairman of the department of gynecology and obstetrics.

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Mailed Wednesday, November 5, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

A search committee to seek qualified applicants for the deanship of the Stanford University School of Medicine was appointed Tuesday, November 4, by Dr. Lawrence G. Crowley, vice president for medical affairs.

The committee will be chaired by Dr. Jack Barchas, professor of psychiatry and behavioral sciences, Crowley said.

The committee will conduct a search both within and outside the Medical School and the University for qualified candidates, and will make its formal recommendations to the vice president no later than May 15.

In the search the committee is expected to consult with the faculty of the School, the administrative leadership of the School and Stanford University Hospital, the leadership of the student body and the alumni as well as appropriate individuals in other academic institutions.

"The position of dean is an extremely important leadership position for the School, Medical Center, and University," Crowley said. "The dean will be the chief academic officer of the School with responsibility for the academic programs. He will also serve as associate vice president of the Medical Center."

Until recently the posts of vice president and dean were held by the same individual. With Crowley's appointment to the post of vice president last summer, the positions were split as part of a major reorganization of the Medical Center.

The reorganization recognizes the increasing complexity and responsibilities of the two positions, and the need to be able to address the priorities of the Hospital and the School of Medicine on an even-keel basis.

Besides Barchas, members of the search committee are Frances K. Conley, assistant professor of surgery; Victor R. Fuchs, professor of economics and family, community and preventive medicine; Avram Goldstein, professor of pharmacology; I. Robert Lehman, professor of biochemistry; Hugh O. McDevitt, professor of medicine (immunology); Bruce R. Parker, associate professor of clinical radiology; Saul A. Rosenberg, professor of medicine (oncology); Irving Schulman, professor and chairman, Pediatrics; Alfred Spivack, clinical professor of medicine; James A. Spudich, professor and chairman, Structural Biology; Edward Stinson, associate professor of cardiovascular surgery; and Stephen G. Waxman, professor of neurology.

Crowley will serve as ex-officio member of the committee, and one student will be appointed shortly.

Staff support for the committee will be provided by Ms. Michael Cowan, special assistant to the vice president.

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Mailed Tuesday, November 4, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

TWO STORIES

STANFORD—

Stress—how it affects your health and ways to keep it under control—will be the topic of a panel discussion at Stanford University School of Medicine at 8 p.m. Thursday November 13.

Three Stanford psychiatrists with expertise in various aspects of stress and its health effects will participate in the free program in Fairchild Auditorium, sponsored by the Friends of Psychiatry and Behavioral Sciences.

Dr. Roland Ciaranello, assistant professor of psychiatry and behavioral sciences, will discuss the biological aspects of stress, and what happens to the body when an individual is stressed. Ciaranello is also director of the laboratory of developmental neurochemistry at Stanford, and chairman of a National Academy of Sciences panel on the biologic substrates of stress.

Dr. Stewart Agras, professor of psychiatry and behavioral sciences, will discuss the uses of behavior modification treatments for stress reduction and management. Agras is also director of the laboratory for the study of behavioral medicine at Stanford.

The moderator will be Dr. Thomas Gonda, professor and chairman of the department of psychiatry and behavioral sciences.

The program is open to the public.

—30— L100

STANFORD—

Three Stanford University School of Medicine faculty members are among the 42 newly-elected members of the Institute of Medicine, based in Washington, D.C..

They are Jack D. Barchas, M.D., Nancy Friend Pritzker Professor of Psychiatry and Behavioral Sciences; Thomas C. Merigan, M.D., George E. and Lucy Becker Professor of Medicine, and chief of the division of infectious diseases; and Edward Rubenstein, M.D., associate dean of postgraduate medical education, and professor of clinical medicine.

Chartered in 1970 by the National Academcy of Sciences to enlist distinguished members of medical and other professions, the Institute conducts a broad range of health policy studies through the work of its committed members.

—30— L100

Mailed Monday, November 3, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

EDITORS: Details follow asterisks.

STANFORD—

Six assistant professors at Stanford are recent grantees of the Biomedical Research Support Grant awards, sponsored by the National Institutes of Health.

They are: Joseph Eliason, M.D. (surgery, ophthalmology); Vincent Hentz, M.D. (surgery, plastic and reconstructive surgery); Peter Parham, Ph.D. (structural biology); Thomas Raffin, M.D. (medicine, respiratory medicine); Branimir Ivan Sikic, M.D. (medicine, oncology and clinical pharmacology); and Robert Wall, M.D. (medicine, hematology).

A Stanford faculty committee headed by Dr. Eric Shooter, professor and chairman of the Department of Neurobiology, selects the award recipients each year.

The purpose of the grant is to assist scientists in funding basic and clinical investigations, especially in the areas of biomedical and behavioral research.

* * * * *

Eliason's research is aimed at studying the mechanism by which blood vessels grow into the cornea of the eye in response to certain diseases and injuries. A variety of diseases cause scarring and the growth of these blood vessels, which in turn result in blindness. By observing what gives rise to this growth, researchers hope to find ways of controlling it.

Hentz is developing a method to study the recovery of sensibility after nerve injury. Hoping to establish non-invasive ways to study methods of nerve repair, he anticipates that his research will lead both to better ways of assessing results of surgery and more objective measures of recovery.

Hentz is examining methods to improve hand and finger movements following tendon lacerations. He hopes to develop a new suture technique which, while allowing simpler tendon repair, will reduce the resulting scars which tend to impair function and cause stiffness.

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High concentrations of oxygen can be toxic to organisms and tissue. A number of illnesses are caused by highly reactive chemicals related to oxygen, called "oxygen free radicals," which destroy tissue. Raffin is investigating the basic mechanisms of oxygen toxicity. He is also studying the ways in which different drugs may be used to reduce or prevent injury to biological systems by oxygen free radicals.

Wall is developing monoclonal antibodies to raise against isolated human blood vessel wall cells. His research is an effort to better understand the cellular basis for atherosclerosis—commonly known as hardening of the arteries, a major cause of heart attacks and strokes.

Parham is studying the structure of HLA antigens, a set of proteins on the outside of human cells which plays a role in the recognition of foreign substances and viruses infecting the cells. He and his fellow researchers hope to address the question of whether there are functional connections between HLA antigens and certain structures found inside the cell membrane. In order to ascertain this, monoclonal antibody probes will be used against both the HLA antigens and proteins of which the inner structure is composed.

Sikic is interested in why some cancer cells are resistant to certain anti-cancer drugs, and how other cancer cells may develop resistance to drug treatments. Such studies may enable physicians to predict which drugs would be useful in an individual patient, and may lead to strategies for improved chemotherapy treatments.

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Mailed Monday, December 29, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

The field of adolescent medicine is now entering its own adolescence, having been an active subdivision of pediatrics for nearly 12 years.

Since it is a relatively new field, however, little is known yet about the physical and behavioral development of normal teenagers as well as those with serious medical problems.

"In general, adolescents have been outside the mainstream of medical care," says Dr. Iris Litt, associate professor of pediatrics at Stanford University School of Medicine and director of the adolescent medicine clinic at Stanford-Children's Ambulatory Care Center.

"One reason (for this) I think is we all share in the mythology that adolescence is the healthiest time of life...There is no pressure to bring kids into the doctor after the age of 10."

Several factors, however, are beginning to change this attitude, and adolescent medicine, according to Litt, who is one of its pioneers, is finally coming into its own.

Technological advances in medical care, she says, are forcing pediatricians to look at the problems of the chronically-ill children who now survive into adolescence. But economics, adds Litt, is also playing a part, as pediatricians, faced with a falling birth rate, must look beyond traditional baby care to stay financially sound.

Litt's personal interest in adolescents goes back to the early sixties when she taught junior high briefly between college at Cornell University and her entrance into medical school at the State University of New York.

"I found I really enjoy working with adolescents," she says simply.

Throughout her professional career, Litt has written extensively on medical concerns of the adolescent, such as drug abuse, venereal disease and health care needs in general. Before coming to Stanford in 1976, she was an associate professor of pediatrics at Albert Einstein College of Medicine in the Bronx.

She also worked as an assistant director of adolescent medicine at Montefiore Hospital and Medical Center in New York and was the medical director of that institution's Juvenile Detention Center.

Most of the adolescents who come through the doors of the Stanford-Children's clinic are there for complicated diagnostic treatments, requiring an intra-disciplinary approach.

But much of the clinical research being done, including Litt's own, also involves the so-called normal teenager. In questionnaires routinely distributed to patients, says Litt, the overriding concern of this group is their physical development.

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"The boys think they're too short and worry that their penises are too small," she says. "Girls are concerned that their breasts aren't large enough or that they're too tall. These are the kinds of things adolescents really worry about.

"What we try to do is address these kinds of issues...and reassure them that what they are experiencing is normal."

One-third of all pubescent males, says Litt, experience breast development, which they find frightening, but which is perfectly normal because of increased hormonal activity at this time.

"What you find," she says, "is many teenage males are experiencing this, worrying about it, but not saying anything."

Having worked with troubled and street-wise adolescents in New York, Litt found herself deeply interested in another adolescent problem—compliance, or willingness, to take prescribed medications. The issue is an important one in adolescent medicine, since the commonly held impression that this age group will be non-compliant, has often resulted in a different standard of care for them.

"Repeatedly what I saw with these teenagers," says Litt, "is that drug abusers were totally indiscriminate in what they put in their bodies.

"At the same time, I was answering consults from subspecialists about why adolescents were not taking their prescribed medications. It was an interesting paradox."

In a recent study, Litt, with Walter R. Cuskey, Ph.D., a consulting associate professor of sociology in pediatrics at Stanford's School of Medicine, looked at compliance, with special emphasis on adolescent compliance with contraceptives.

The two researchers wanted to know whether or not patient compliance with medical regimens is predictable, specifically with regard to contraceptive use.

"It is evident," says Litt, "that providing contraceptives is not enough to prevent the high rate of teenage pregnancy in this country."

Results of the study, published earlier this year in the *Journal of Pediatrics,* showed that only 45 percent of the adolescent females involved were in fact taking their prescribed birth control pills.

"Those who came to us on their own for contraceptive advice," says Litt, "did much better with compliance than those who came in with some other problem, were found to be sexually active, and then received contraceptives."

The study also showed that this group took responsibility for making its own medical appointments and for paying medical bills—suggesting, as Litt and Cuskey point out, "that encouraging autonomy in relationship to the medical visit may help to improve adolescent compliance."

At the clinic, compliance has also been studied in rheumatoid arthritis patients to determine whether adolescents take their mediation more frequently or less frequently than younger children.

"By measuring salicylate levels," says Litt, "we found that there was no difference. With each group there was non-compliance. But when the question was broken down further, we found that the earlier the teenager developed arthritis, the less compliant he or she is as an adolescent."

A similar study, which Litt is conducting with Ira Friedman, M.D., a former fellow in adolescent medicine, is currently underway, involving 50 epileptic patients from around the Bay Area. One of the questions being asked, she says, is whether a rebellious attitude towards one's parents also extends to doctors, and if so, its effects on compliance with medication.

Researchers will also be examining the role of sexual development and how it comes into play. Previous work in this area revealed that teenagers who made their own appointments had better self-images and were more comfortable with their bodies than those who allowed their parents to take the initiative in making appointments.

Still another subject of long-standing interest to Litt is the area of gynecological problems in teenage women. As in compliance, however, available data is fairly scarce, even though, as Litt notes, girls with cramps account for the highest rate of absenteeism in school on a short-term basis.

Specifically, Litt has been looking at the effects of using a mild prostaglandin inhibitor for three days in a row before menstruation as a menstrual cramp therapy. Her findings will be published shortly with Jerry Klein, another former fellow in adolescent medicine.

In the meantime, she says, research on the developmental factors in cramps is an on-going concern. Prostaglandin levels and ovulation are being studied from the first menstruation on, in conjunction with Patrick Lavin, M.D., adolescent medicine fellow.

"If we can predict who will get cramps," says Litt, "ultimately, we may be able to prevent them."

The adolescent medicine clinic is one of 27 specialty clinics at Stanford-Children's Ambulatory Care Center. The outpatient services of the two institutions were consolidated in January of this year, although inpatient care is still handled by each hospital according to need.

Dr. Litt is acting director of the center, while Dr. Ruth T. Gross, McCormick professor of pediatrics and head of ambulatory pediatrics at the Medical School, is on sabbatical leave.

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Mailed Monday, December 29, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Kathleen Roberts has been appointed controller of Stanford University School of Medicine.

The appointment became effective December 1.

Roberts succeeds Robert Butler who is retiring from the controller position, according to David Mendelow, associate dean for administration.

As controller, Roberts is responsible for preparation of budgets and forecasts, management of Medical School funds, and for analysis of financial policies, federal regulations, market pressures and other matters that impinge on Medical School finances.

The first woman to hold the controller's position, Roberts was promoted from her previous job as financial planning analyst at the School.

A native of Canada, Roberts received a masters degree in management from Northwestern University in 1978, and has experience in financial and budget matters in both health care and academic settings.

Prior to her arrival at Stanford, Roberts worked in fiscal management and quality control for Baxter Travenol Laboratories, Inc. in Deerfield, Illinois.

She has also worked for an academic department at Northwestern University, and she carried out a variety of administrative and financial duties as an administrative resident at Northwestern Memorial Hospital in Chicago.

—30— L101

Mailed Wednesday, December 17, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

Bedsores, a common affliction of the elderly or long-term patient, have no common treatment. Remedies range from old-fashioned sugar solutions to the use of heat lamps and Maalox.

Now, however, three nurses in the Hoover Pavilion of Stanford University Hospital have launched a one-year study of these patient pressure points, known as decubitus ulcers, in an effort to standardize care.

The three, all R.N.s, are Alba Palmieri, Linda Simpson and Gladys Kurzuk. They are trying to measure scientifically whether ulcers heal faster in a moist or dry environment. At the same time, patient comfort and nursing time involved in treatment are being evaluated.

Ultimately, the study will involve a total of 50 patients at Hoover, who will be treated with either Op-site or a combination of heat and Maalox.

Op-site, which has the texture of skin and is made from polyurethane, acts as a vaporous seal, permitting water and air to pass through, but keeping out bacteria. Thus the ulcer is protected in a moist environment.

Heat lamps and the application of Maalox, on the other hand, promote healing by keeping the ulcer dry.

"We wanted to do a comparative study rather than just look at one treatment," says Palmieri, "because we felt this would be more effective."

So far, according to Palmieri, approximately 30 patients have been treated under the study, now in its seventh month and funded under a small grant from the Acme Corporation, which makes Op-site.

Although preliminary findings do in fact favor the Op-site treatment, says Palmieri, more definitive results will not be ready until the first of the year.

One of the questions being asked, she adds, is whether or not Op-site is a cost-effective treatment.

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"Obviously, if a treatment works well," says Palmieri, "it is worth the money to the patient. But this is one of the things we still have to determine."

Each patient who is treated under the study, says Palmieri, has given his or her consent. Physician consent is also obtained before proceeding with treatment.

Once treatment is begun, extensive files are kept, which contain not only personal data on such issues as patient comfort, but the length of treatment and the nursing time involved.

The files also contain both written and pictorial descriptions of each ulcer. At the moment, says Palmieri, nurses at Hoover take pictures of patient ulcers every three days until treatment is discontinued or the ulcers heal. In addition, they measure ulcer size at regular intervals with a centimeter tape.

In several cases, the nurses have been able to use both treatments on the same patient, applying Op-site to one bedsore, Maalox to another, thus eliminating variables such as patient health in assessing treatment.

(Actual application of Op-site, however, is done only by the three principal investigators, notes Palmieri, since it must be applied in a special way.)

Prior to implementing the study, decubitus ulcer patients at Stanford had been identified by several Hospital departments, including Concurrent Review and Discharge Planning, as a significant nursing concern.

Palmieri, Simpson and Kurzuk had arrived at the same conclusion on their own. And all three were interested in expanding their nursing roles into research.

At the time a proposal was drawn up, Kurzuk was working with stroke patients who were afflicted with bedsores, and Palmieri and Simpson, as clinical nurse coordinators, were considering a standardized care program for ulcer patients on their units.

Now, of course, they are hoping the results of their study will lead to a standardized care program throughout the Hospital, as well as have some national impact through publication in leading nursing journals.

As for staff reaction to the project, Palmieri says, they've been both cooperative and enthusiastic.

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Mailed Monday, December 15, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

On a moonless night an owl can swoop down unerringly upon a mouse scurrying across a dark field. The hapless mouse finds itself in the owl's talons because it has made sounds and the owl has no equal in hearing. One estimate is that an owl because of its keen hexring can catch an insect in no more light than a candle would produce at 1,170 feet.

A Stanford University Medical School researcher is investigating just how the owl pinpoints sound so precisely and thus targets its victims so accurately. Dr Eric I. Knudsen, an assistant professor in the Department of Neurobiology, explains that more is to be learned than just how owls listen. The hearing of owls and humans is alike in several important ways, he says, and by discovering how hearing in owls develops and adapts, a better understanding of human hearing may be achieved.

The decor in the complex of rooms that is Knudsen's office and lab is decidely owl. A parliament of owls under the room number welcomes one at the door. Inside, owls looking as if E.F. Hutton were speaking, peer out of the pictures on the wall, and an assistant wears an owl-embroidered lab coat. Perched on a cage in one of the rooms sits a beautiful, brown and white owl with a heart-shaped face.

"Owls hunt at night and therefore need to localize sound very accurately," says Knudsen, who studies barn owls, which belying their name can also be found living in the campus palm trees.

The broad, earnest-looking faces and the silk-soft feathers of barn owls are really adaptations to facilitate hearing, he explains. The outsize head with its broad, flat face surrounded by a ruff of feathers is a very efficient sound collector. Stiffer feathers ring the ear openings, deflecting sound into the ears.

Also, the design of the body feathers permits the owl not only to descend silently upon its prey, but also eliminates the rustling of the wings that would distract it in its tracking of the mouse.

Another less obvious adaptation, Knudsen says, is that the barn owl's right ear is cocked upward and the left ear pointed downward. This assymetry allows owls to localize sounds from above and below, he explains. A noise coming from below will be louder in the down-directed left ear, one from above will be louder in the right ear. In the up-down direction an owl's hearing is therefore superior to a human's.

But in other important respects, the two are quite similar. In distinguishing whether the sound is coming from either the left or the right, owls and humans are a good match, far better than say monkeys or cats.

Also, owls and humans hear in approximately the same frequency range. Whereas dogs and cats can hear very high pitched sounds, up to 50,000 cycles per second, humans can only hear up to 18,000 cycles per second, owls up to 12,000 cycles per second.

Another similarity is that while most mammals have movable ears (a jack rabbit is a prime example), both owls and human have fixed ears.

Knudsen wants to know how the brain's network of nerves specialized for hearing registers where a sound is coming from. One of the ways to do this is by studying the owl's behavior as it grows. Knudsen is investigating whether the owl is born with the ability to localize sound or whether it learns through trial and error.

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Two things are important in pinpointing sound: the loudness or intensity of the sound, and its time or phase difference in reaching the two ears. A big bang off to the left will be heard louder and earlier in the left ear than in the right. Both ears will send messages to higher brain centers, where the messages will be compared and a decision made as to the origin of the sound.

As the bird grows, Knudsen says, the sound collector that is his face becomes larger, and progressively more efficient. The distance between the ears becomes greater, and thus it takes longer for a sound to reach the second ear. A bird can become more discriminating. Knudsen is asking whether the owl takes all of this expanding awareness into account as he is growing.

Knudsen is also investigating whether an owl can adapt when the signals reaching its brain no longer accurately reflect reality. He puts an earplug into one of the owl's ears to soften the sound in that ear. If the owl is judging by past experience, it will think the sound is farther to the opposite side than is really the case.

Knudsen reports that the owl does make the mistake and preliminary evidence suggests that eventually it will make the connection and begin to accurately pinpoint its target again.

Knudsen is also interested in how hearing and sight hook up in the brain to produce an integrated message. He is tracking the nerve cells used in hearing to various brain centers and determining how they are interacting with the nerve cells specialized for sight.

Knudsen conducts his hearing experiments in a light-tight room walled with buff-colored pads.

During the tests, infrared light is shone into the darkened room to follow the owl's actions. Neither humans nor owls can detect infrared light and so to the owl the place is pitch black. But the light can be detected with instruments.

The owl perches on a platform, a mirror strapped to its head. Knudsen beams in a sound at some measured place. He then monitors how well the owl has localized it by watching a calibrated screen for a beam of infrared light reflected by the mirror on the owl's head.

Knudsen keeps his 15 owls, with names like Leu, Too Tall, Karim, and Amanda, in an aviary so they can exercise.

For those steeped in nursery rhymes, that the owl has superb hearing may not come as a total surprise. They may remember

Here was an old owl liv'd in an oak
The more he heard, the less he spoke
The less he spoke, the more he heard
O, if men were all like that wise bird.

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Mailed Thursday, December 11, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Stanford University officials unveiled plans at a campus dinner December 9 for a $14 million cardiovascular research building that will integrate heart research activities at Stanford University.

Fundraising for the building has passed the halfway mark with $9 million already received through private gifts.

A grant of $4 million received in 1979 from the Max C. Fleischmann Foundation of Nevada enabled the University to begin planning for the building, to be located adjacent to Stanford University Hospital.

An additional $5 million in cash gifts and pledges has since been received, including a major gift from an individual after whom the building will be named when construction begins in mid-1981, according to University President Donald Kennedy.

The new heart research center represents the first major building project for the Medical Center as it starts its third decade on the Stanford campus, said Dr. Lawrence Crowley, vice president for medical affairs.

The 31,000 net square foot building will house the academic and research programs of the department of cardiovascular surgery and the division of cardiology headed by, respectively, Dr. Norman Shumway, Frances and Charles Field professor of cardiovascular surgery, and Dr. Donald Harrison, William G. Irwin professor of medicine.

"The Harrison and Shumway teams have established international reputations for excellence in teaching and research relating to cardiovascular disease," Kennedy noted. "Despite extraordinary space handicaps, they have worked successfully to revolutionize the treatment of heart disease," he added.

The Stanford groups have pioneered research and treatment in several areas of cardiovascular disease, including clinical programs in heart transplantation for end-stage heart disease patients, and treatment of cardiac arrhythmia, an abnormal heartbeat that frequently causes sudden death.

The new facility will help integrate ongoing research in these areas and will permit a more comprehensive attack on outstanding problems of cardiovascular disease, Crowley said.

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"Heart disease is still the leading cause of death in the U.S. and in most developed countries," Harrison told the group of about 150 guests at the dinner. "We have made great progress against heart disease but it remains a major cause of premature death.

"We need to understand the basic physiology and basic cellular processes that lead to heart disease, and to do this requires collaboration among many scientific disciplines."

Stanford is uniquely equipped to carry out a comprehensive program of this kind, Harrison said. Collaborative research with other departments in the Medical Center, with faculty from various departments in the University, and close contacts with many of the technological industries in the area have contributed to much of the progress that has already been made against cardiovascular disease, he noted.

New laboratory space in the building will accommodate cardiovascular specialists in radiology, pediatrics, anesthesia, pharmacology, immunology and pathology, Harrison said.

In addition, faculty from University departments such as physics, biology, computer science and engineering will have space for collaborative research.

Among the major research projects currently under way in Harrison's division are studies on cardiac pharmacology, or how drugs affect the heart, particularly cardiac arrhythmias; applications of computer systems and other advanced technology to early diagnosis of heart disease and monitoring the course and extent of disease in patients; and studies on the prevention and treatment of coronary artery disease.

"It is of utmost importance that successful and precise laboratory investigations precede any clinical adaptation of new and innovative techniques of surgical treatment," Shumway said.

In addition to continuing research that has steadily improved clinical results in cardiac transplantation and has made Stanford's heart transplant program the most active and successful in the world (70 percent of the heart transplant patients now live at least one year and 50 percent live five years), Shumway's department is actively pursuing other studies in cardiac replacement, including combined heart and lung transplantation, and development of a partial mechanical replacement for a diseased heart.

The architect for the building is the firm of Hellmuth, Obata and Kassabaum, based in St. Louis, Missouri and in San Francisco.

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Preliminary plans for the building, which will be directly northeast of the Hospital, include a lower level animal facility, ground floor research laboratory space, and an upper level comprising faculty and staff office areas, and library and conference space.

A new training program for postdoctoral fellows will also be located in the building, allowing cardiovascular specialists to pursue training and research opportunities in a wide variety of disciplines.

Kennedy acknowledged the University's appreciation for several major gifts from individuals and foundations which have been received to support construction of the building.

The Max C. Fleischmann Foundation of Reno has supported numerous projects at Stanford Medical Center, including several research laboratories. Until its dissolution earlier this year, the Foundation maintained an interest in a broad spectrum of fields, both medical and non-medical. Mr. Francis Breen, a trustee of the Foundation and a Stanford Law School alumnus, noted that in supporting construction of the cardiovascular building, the Foundation hopes in the future to help many patients who suffer from heart disease.

Mrs. Louis Kovitz of Los Altos, the widow of the late Dr. Kovitz, and her daughter, Susi Kovitz Kohan are among the early supporters of the building project. Prior to Dr. Kovitz' death from cardiac disease in 1979, the Kovitz' also established a Visiting Lectureship at the School of Medicine to bring distinguished physicians from around the world to Stanford. Dr. Kovitz, a native of Baltimore, received his M.D. degree from Washington University in 1929. He became a specialist in industrial medicine and surgery and was the first medical director of Lockheed Missile and Space Corporation.

Mr. and Mrs. Mervin Morris of Atherton have had a longstanding interest in activities at the Medical Center, particularly in the area of cardiac research. Mr. Morris was founder and chairman of the board of Mervyn's retail stores, from the company's establishment in 1949 until his retirement in 1980. The Mervyn's chain includes 50 stores and 12,000 employees.

Mr. and Mrs. Peyton Hawes of Portland Oregon are also longtime supporters of Stanford. Mrs. Hawes is a Stanford graduate and several of the Hawes' daughters have also attended Stanford. Mr. Hawes is an executive officer of Payless Drug Stores Northwest, Inc..

Mr. and Mrs. Gordon Ness of Atherton also have pledged support for the building. Mr. Ness, chief executive officer and chairman of the board of the Stanford Scientific Corporation, attended Stanford and is interested in the applications of technology to the study of cardiovascular disease.

The Ralph J. Weiler Foundation of Los Angeles has also provided a gift to support the cardiovascular building. Mr. Weiler, who died in 1974, was a Stanford graduate from the class of 1922.

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Mailed Wednesday, December 10, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Faculty members of the department of pharmacology at Stanford University Medical Center Monday expressed opposition to the proposed aerial spraying of the pesticide Malathion over 120 square miles of Santa Clara County.

In a letter sent to the mayors of the 14 affected Santa Clara County cities and Congressman Peter N. McCloskey, they said they had "serious reservations" about the plan, proposed last week by federal and state officials, to combat the Mediterranean fruit fly by spraying the county six times using low-flying airplanes.

Malathion kills by inhibiting an essential enzyme in the nervous system of all animals, not just the fruit fly, the scientists said.

"It will, for instance, also kill bees, any possible natural predators of the fruit fly, and predators currently being used in ongoing pest control programs," they wrote.

"The effects on the natural ecological balance cannot be predicted."

Moreover, although once it enters the blood stream of humans and other mammals, Malathion is rapidly rendered harmless--at least in its ability to inhibit the essential nervous system enzyme, it may not be free of adverse effects, they said.

"In particular, irritations could result from Malathion droplets landing on the skin and eyes. Inhaled droplets might cause complications before being detoxified.

"Lastly, we do not have enough information on possible carcinogenic (causing cancer)or teratogenic (causing birth defects) effects of Malathion, but we feel that caution is warranted in the use of a chemical as reactive as Malathion," they wrote.

They concluded that "the fact that human health may be jeopardized and beneficial insects will be harmed is reason enough for considering other strategies for combating the fruit fly."

The letter was signed by Helen M. Blau, Ph.D., Avram Goldstein, M.D., Dora B. Goldstein, M.D., Sumner M. Kalman, M.D., Tag E. Mansour, Ph.D., Gordon Ringold, Ph.D., Howard Schulman, Ph.D., and James P. Whitlock, Jr., M.D.

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Mailed Tuesday, December 9, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

When Jimmy Carter visited Portola Valley last summer, Stanford student Buzz Price was told he'd be responsible for coordinating a transport should anything happen to the President or members of his family.

Price was the dispatcher on duty that day at the state-funded Northern California Perinatal Dispatch Center, which operates in tandem with Stanford's Department of Critical Care Transport.

For students, the Center is a quiet place to work.

Except when the phone rings.

That's when the drama begins. The dispatcher, who's a student if it happens to be evening, night or weekend, must coordinate all necessary communications relating to medical and transport arrangements. Perhaps a critically ill newborn needs a bed in an intensive care nursery immediately, and several in the area are full at once. Or a high-risk maternity patient requires prompt hospital attention.

A referral—the acceptance of a patient into a specified facility—should usually be accomplished in less than 20 minutes, says Alvin Hackel, M.D., associate professor of clinical anesthesiology and clinical pediatrics, and director of both the Dispatch Center and the Medical Center's department.

The dispatcher must be prepared for anything. He or she must know where to refer calls, have information handy on airplane and ambulance companies, be competent to deal with all kinds of questions and details, and above all be able to think clearly under stress in emergencies.

"Everything must be mobilized," says Hackel of activities at the Center, which in order to expedite referrals from community hospitals to regional centers on an emergency basis, keeps track of bed availability throughout Northern California.

Utilizing radio communications, dispatchers provide necessary links between hospitals and the often-used "transport team." The team consists of specially trained doctors, nurses and respiratory therapists from the admitting hospital's I.C.U.

Currently the office employs seven student dispatchers, two of whom go to Stanford. They are Price and Heidi Hedlund. Stanford students generally get "first shots" at the odd-hour jobs, says Hackel, and it doesn't matter what their fields of study are. Whether pre-medical or romance languages, "They just have to be committed to this," he says.

Price agrees. An undergraduate in industrial engineering, he didn't really know what the job would entail when he first applied, over a year ago. "I just needed the money," he recalls. At the job interview, however, he became very enthusiastic, and today he says, "It's gratifying to do a job that's important."

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Dispatchers are trained on the job, through the use of tapes and one-on-one teaching by administrative assistant Tricia Robertson and Price, who's been there longer than the other students. During the training period, says Price, the new dispatchers are drilled on protocols for all types of transports. They receive instructions on the equipment and descriptions of their duties, and they are timed through simulated transport arrangements. Dispatchers are required to consult with their supervisors until they complete training, which can last over a month.

The students each work 20 hours a week on eight-hour shifts. On weekdays they work from 4:30 p.m. to midnight or from midnight to 8 a.m. On weekends they also work the 8-to-4 daytime shift. Who gets which shift? "We were all hired for our vast flexibility," says Price. Robertson points out that there is time for studying on the job too, since the workload is erratic. So far Hackel is quite pleased with the performance of students as dispatchers, who he finds have many of the skills required to do the job.

In a 12-month period from September 1, 1979, through August 31, 1980, the Stanford transport team conducted 527 transports of newborns, pediatric, adult and obstetric patients. During that same period of time, the Dispatch Center handled a total of 3,664 referrals, consults, transport arrangements and air-to-ground communications.

Hackel anticipates an increase of at least ten percent in the total number of transports performed in the coming year. This estimate is based on the projected opening of the new intensive care nursery, the gathering momentum of the educational Perinatal Outreach Program, and increased use of the transport program in returning patients to community hospitals for continued care.

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Mailed Monday, December 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A new class of drugs known as "calcium antagonists" shows promise in dramatically improving treatment for many patients with cardiovascular disease, according to a Stanford University cardiologist.

More than half of a group of patients with documented severe and frequent chest pain (variant angina pectoris) experienced complete freedom from pain while receiving one of these drugs, diltiazem, according to results of the Stanford study published in the December issue of the *American Journal of Cardiology*.

"Diltiazem appears to be a highly effective drug for controlling the pain caused by coronoary artery spasm," reported Dr. John Schroeder, associate professor in cardiology at Stanford University School of Medicine. These are the first published results from a randomized, controlled, double-blind study testing a calcium antagonist drug, Schroeder claimed.

His colleagues in the study were Dr. Steven Rosenthal, Dr. Robert Ginsburg, Dr. Donald Baim, and Irene Lamb, R.N..

Only recently recognized as an important cause of severe chest pain and sometimes even fatal heart attack, a coronary artery spasm is a temporary constriction in one of the major blood vessels serving the heart, Schroeder explained.

Like the more widely known problem of atherosclerosis (a buildup of cholesterol inside the artery) which has, until now, received most of the blame as a cause for angina and heart attack, a coronary artery spasm impedes the flow of blood to the heart muscle. The spasm may occur during activity or at rest, in a cholesterol-blocked artery or in a clear one, Schroeder noted.

Coronary artery spasm may significantly contribute to the pain of angina pectoris in as many as one third of the estimated one million new patients per year in the U.S. who develop angina pectoris, he added.

"Calcium antagonist drugs such as diltizaem are thought to block the inward movement of calcium into muscle cells of the coronary arteries," Schroeder explained.

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On slowing the calcium movement, the muscle cells contract less readily and the spasm problem diminishes in many patients, he said.

None of the calcium antagonist drugs has received approval from the Food and Drug Administration yet, Schroeder noted, because clinical tests of the drugs are not completed. However, no side effects were observed from the drug given to participants in the Stanford study, Schroeder said.

Although there are drugs already available, such as nitroglycerine, which can relieve pain caused by coronary artery spasm, it is preferable to prevent the spasm from occurring, said Schroeder, thereby reducing the danger of heart damage or heart attack.

"It is important to have techniques for determining which angina patients have a coronary artery spasm problem," Schroeder noted. "Now we have a way of preventing pain and possible damage from spasm instead of treating the pain after it has begun."

The patient's electrocardiogram, a routine measurement of the heart's beating pattern, displays a characteristic shift when a coronary artery spasm occurs, Schroeder noted.

But since the shift is only seen in patients with an ongoing spasm, the diagnosis is difficult in certain patients such as those who experience angina infrequently or only at night.

In the Coronary Artery Spasm Clinic at Stanford Medical Center, Schroeder and his colleague, Dr. Robert Ginsburg, have devised a method for confirming the occurrence of spasm in these patients.

The patients are taught how to transmit their electrocardiograms over the telephone with special equipment, as soon as they feel the pain begin. The electrocardiogram can then be analyzed at the clinic for the telltale traces of spasm.

Calcium antagonist drugs other than diltiazem are also being tested at the Stanford Spasm Clinic in patients whose chest pain is resistant to usual treatment, Ginsburg said. These drugs include nifedipine, perhexilene and verapamil.

About 15 patients are seen each week in the Clinic, he noted, and the number is rising as the significance of coronary artery spasm in heart disease becomes more widely recognized.

Schroeder's study was supported in part by Marion Laboratories, the drug firm that is seeking Food and Drug Administration approval to market diltiazem in the U.S..

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Mailed Monday, December 8, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911
EDITORS: Photo available if not included with story.
STANFORD—

A step down can be a step forward for someone like Dr. Helen Blood.

Blood plans at the end of this year to relinquish the chair of the Division of Physical Therapy, a post she has held for ten years, in order to shift her main focus from administrative responsibilities to teaching and research endeavors.

"It is my own personal choice that I want to get on with new activities at this time," says Blood. She intends as one of her new projects to work with elderly persons in their societal environments, distinguishing major physical factors that downplay their meaningfulness in the community.

Blood has been associated with Stanford for many years, in capacities diversified enough to afford her a multiple perspective on the Physical Therapy program.

Starting as a student in Stanford's post-baccalaureate Physical Therapy program, she received her Certificate of professional qualification in 1947. Ten years later she returned as a teaching fellow and master's degree candidate, and completed her M.A. in 1959. In 1961 she joined the faculty, having been enticed back to Stanford by the appealing prospect of establishing a professional relationship with professors she had valued as a student.

"This is an exciting campus," says Blood, reflecting on her years at Stanford. "I like the character of this school—I mean the University as a whole, as well as the Physical Therapy program." In fact, the Division has participated in several inter-departmental activities throughout the University, and plans to increase such involvement in the future.

This concept of wholeness has always been important to Blood, whether in regard to educational pursuits, professional alliances or patient care. Her extensive list of publications, her organizational involvements (of which her contributions as a member of the American Physical Therapy Association have been most significant) and her many research projects exemplify Blood's commitment and concern for what she calls the "totality of the patient's life," which includes physical condition along with psychological, social and economic problems. Stanford, says Blood, has been one of the leading schools in emphasizing this concept, while she personally has been a major contributor in the field because of her pioneering efforts to combine these components.

One of Blood's first faculty responsibilities at Stanford, in 1964, was to initiate a three-year home program in San Jose, affiliated with the Visiting Nurses Association, in which students participated in the home care of physically disabled people.

From 1971 to 1978 Blood was involved in Stanford's Family Focus Project. A transitional care unit was set up, allowing family members to spend the final three days of hospitalization with the patient, while they learned techniques of patient care.

Again stressing social and psychological factors, Blood contends that if one spouse, for example, has always been the dominant decision-maker, it is inappropriate for health professionals to arbitrarily decide, "You're no longer going to participate in decision-making because you've had a stroke." Instead, possible role modifications should be explored, she says.

Another important project carried out by the Division from 1974 to 1976 was a cancer rehabilitation program designed to examine the psycho-social barriers which inhibit optimum patient care, and to challenge the common assumption that cancer is strictly a dead-end, terminal experience. The primary purpose of the program was to get regional schools in the western part of the United States attuned to including more psycho-social considerations in their curricula, applicable to cancer and, ultimately, all other kinds of patients.

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Thus important work lives on, even when the research grant money runs dry. "When grants are finished we take the important concepts that have evolved and integrate them within our curriculum," says Blood. "So projects are on-going in a sense, by virtue of impacting both the educational system and the administrative facilities in which we work."

The Division of Physical Therapy is currently involved, under Blood's direction, in a five-year training program for cross-cultural screening of children.

Affiliated with the Well Baby Clinics of the Santa Clara County and San Francisco County Health Departments, the program's purpose is to analyze cultural characteristics which impact health care and early developmental processes, including sitting, crawling, walking and talking.

In some cultures children are placed on the floor, explains Blood, while in others they are not. In some clothing is free and easy; in others children are "bundled and snuggled and tightened up so that they have limited freedom."

The group studies pre-schoolers from birth to five years old. "We're trying to understand both physical and developmental—but primarily developmental—disabilities," says Blood.

Blood's obviously diversified interests stem back to her undergraduate days when, at the University of Utah, she majored in physical education, with a combined minor in anatomy and English. Now a Doctor of Education, with a 1976 degree from the University of Southern California, she tries to attract students with varied backgrounds to Stanford's Physical Therapy program.

Students with bachelor's degrees in many different areas enter the program, from the physical sciences and from other majors such as psychology, sociology and French. This mix provides diversity and challenge both, says Blood. And as a result, graduates from the program provide a mix of professionals in the field and show great variety in the places they choose to work, she adds.

"Certainly, to be associated with a program of Stanford's caliber can be nothing but exciting," says Blood. She will continue teaching professional orientation and sharing the advanced study in administration and community health.

Blood's own decision to become a physical therapist was made after she earned her B.S. in 1942, and found herself disenchanted with secondary school education. Having been always interested in the medical profession, she chose physical therapy as an alternative, when economic factors prevented her entry into medical school.

Does she have any regrets?

"The greatest excitement for me is the interdisciplinary relationships with all kinds of health professionals," she says. "If I had had the economic means to do so, would I still have liked to be a physician? The answer is yes. But I have not regretted the fact that I am a physical therapist, because I've been involved in the profession during a very fascinating period of growth and development."

In fact, Blood's recent doctoral dissertation, though it focuses on physical therapists, is meant for application to all health professionals. Entitled "The Role of Institutions of Higher Education in the Continuing Education of Physical Therapists in California," it asserts that the importance of higher education in initial professional preparation should extend beyond that period, and play a continuing role in maintaining professional competence. Blood developed a model curriculum which could be instituted to accomplish these goals, using California schools as a data base for her research.

In line with Stanford's philosophy, the American Physical Therapy Association (APTA) has recently recommended that entry into the profession be at the master's level by 1990. Since the program here already incorporates this notion, the only change being considered is the possible reinstitution of a former program to accommodate post-professional graduate study. "At the present time we do not allow people with physical therapy degrees to enter our program," says Blood.

In her pursuit of ever broader horizons, Blood has traveled to many parts of the world. On an eight-month sabbatical leave in 1977-78, she served as a visiting professor at the Cumberland College of Health Sciences in New South Wales, Australia, and as a consultant in Australia, Japan and New Zealand.

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Have her experiences in these countries affected her work at Stanford? "Obviously, I've incorporated much of the information into my advanced study area," Blood responds.

But she cautions against comparing foreign educational systems with our own. "Education-wise we are at a different stage and in a different channel of development from the other countries. So I brought back less to incorporate within our curriculum than I did to incorporate within our administration and community health area," says Blood.

Blood's many high achievements are reflected in a impressive list of special honors.

Among these are the two highest national awards ever given to professionals in her field: the Mary McMillan Lectureship Award, which Blood won in 1979, and the Lucy Blair Service Award for outstanding professional service, which she won in 1975. At Stanford Blood received the second Lucille Daniels Recognition Award in 1978, voted upon by students in the Physical Therapy master's degree program.

Blood delivered her Mary McMillan lecture, entitled "Account Ability," at a national APTA conference in Atlanta, Georgia. A play on the title's two words, the thrust of the lecture was the necessity of perpetuating modern-day professional accountability, while guarding against the sacrifice of innovation and creativity.

In it Blood stated, "The focus of the health care industry, the patient or client, has been lost in our emphasis on the mechanisms used for serving or caring for the person."

Helen Blood has been legally blind since 1974, with only peripheral vision remaining. She is independently ambulatory, however, and uses magnifying glasses for close work.

Undaunted by her disability, Blood recently spent ten days vacationing in New England with a friend, enjoying the exquisite fall colors. She especially appreciated the White Mountains of New Hampshire.

"It's gotten in *my* way," says Blood of her blindness, "but it doesn't seem to have interfered with the performance of my job; we've made the necessary adaptations, which have allowed me to continue to function as director."

Not sensitive about the issue of her restricted vision, Blood enjoys the company of people and continues to attend "a good many socials."

It's plain to see why she's invited.

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Mailed Monday, December 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Dr. Thomas A. Stamey, professor of surgery and head of the Division of Urology at Stanford University School of Medicine, is the author of a new book, *Pathogenesis and Treatment of Urinary Tract Infections.*

The 612-page volume has been published by the Williams and Wilkins Company of Baltimore/London. Designed for students and clinicians, the book meticulously describes modern techniques developed at Stanford, and utilized in the investigation, diagnosis, and treatment of urinary tract infections.

Included is practical, detailed information such as how to determine whether the kidneys are involved in the infection, how to sterilize urine and how to prevent recurrent infections.

Various approaches are described, from surgical treatment of the infected site to the use of medications to prevent reinfections. There is also an analysis of the proper selection and effectiveness of a wide range of antibiotics.

During the past 19 years at Stanford, Stamey followed up patients with recurrent urinary tract infections by culturing the bacterial colonization sites between episodes of recurring infections. Men and women of all ages, as well as infants and children, were included so the studies would have a wide application.

These studies have led to a better understanding of the natural history and causation of urinary tract infections.

Numerous examples of surgical cures are included in his book with bacteriological follow ups for more than 10 years. Examples of bacterial persistance are given to serve as a guide in treating individual patients, and there is a major case study of chronic bacterial pyelonephritis.

"It is now possible," states Stamey, "to take any patient with recurrent urinary tract infections and successfully solve the problem."

Surveys have suggested that several million women in the United States alone—some seven percent of all women over 50, approximately one percent of school girls, and about four percent of young women—are victims of such infections. Many more experience urinary infections at some period of their lives.

A general practitioner can expect to see 59 cases of urinary infection per year for every 1,000 patients who visit him.

As for urologists, probably more than 50 percent of the office practice involves the diagnosis and treatment of urinary tract infection.

"Sexual intercourse is undoubtedly the major cause of a precipitous rise in urinary tract infections between the ages of 18 and 24 in recent years," Stamey says.

Urinary infections in males, only one-tenth as common as in females, occur mostly at the two extremes of life.

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Mailed Monday, December 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

"How long wilt thou sleep, O sluggard? When will thou arise out of thy sleep?"

The Bible's Book of Proverbs offered no answer to its questions, but now a Stanford researcher and his colleagues reply that how long someone sleeps depends on the phase of his body clock at bedtime.

How long a person had been awake before he went to sleep, provided he had been awake at least 14 hours, doesn't seem to matter,they say.

Charles A. Czeisler of Stanford's Sleep Disorders Research Center, Elliot D. Weitzman, Janet C. Zimmerman, and Richard S. Knauer of Montefiore Hospital and Medical Center in New York, and Martin C. Moore-Ede of Harvard report their findings in the December 12 issue of *Science* magazine.

Contrary to popular wisdom, body temperature is not always 98.6 degrees. It varies each day in cyclic fashion, in the average person dipping to as low as 97 degrees and peaking at more than 99 degrees.

Scientists are learning that such so-called circadian (from the Latin for "about a day") rhythms are part and parcel of most body processes. The body clock, located somewhere in the brain, controls and coordinates all the various cycles.

The alternation of sleep with wakefulness is an obvious one of the body's cycles. But blood pressure, heart beat and levels of certain hormones have their ups and downs each day, too.

Using the very stable body temperature cycle to track the internal clocks of their test subjects, Czeisler and his colleagues found that the rhythms of body temperature and sleep-wakefulness are coupled to one another.

When their research subjects, who were normal sleepers, chose to go to bed at a time when their body temperatures were near their lowest points, they slept an average of 7.8 hours. When they chose to retire at their warmest, they slept almost twice as long, an average of 14.4 hours.

"The most important factor in determining the length and internal structure of sleep is when we go to sleep, not how long we have been awake beforehand," Czeisler says. "It's not enough to allot eight hours for sleep if those eight hours are at the wrong phase of the body temperature cycle.

"This finding calls for a re-examination of the way scheduling for night duty and shift work is done.

"The shift worker who gets off at 6 a.m. and decides to do a few things before he goes to bed at 11 a.m. may find he can't sleep well. Other than the obvious disturbances caused by screaming children and barking dogs, much more fundamental biological processes are involved. He is trying to sleep at the wrong phase of his circadian timing system."

Czeisler says a very disrupting cycle is the slow rotation shift system--days for a week, evenings for a week, followed by the graveyard shift for a week.

"Constant quantum leaps in schedules like this never allows the internal clock to catch up, since it can only be reset by a small amount each day."

The array of body rhythms is usually orchestrated to act in harmony, kept in tune by the earth's 24-hour light-dark cycle and social cues. If these prompts are not there, or if they are erratically shifted, however, cycles begin running at their own beat, and sometimes fall out of unison.

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"People just don't realize how important regularity in their sleeping habits is," he says. "Hamsters and blowflys whose schedule is shifted by six hours every week in experiments have a 25 percent shorter life span."

In his experiments, Czeisler removed the usual time cues and let the body find its natural rhythm, which for the rock-stable body temperature is about 25 hours.

Each experimental subject lived for up to six months in a specially-fashioned, windowless apartment, and were not allowed access to current newspapers, radio, TV or anything else that might divulge the time of day. Bright-eyed attendants, on random shifts, ministered to a subject's needs 24 hours a day (breakfast would be provided at 11 p.m. if so requested) and so the subject had no idea what the real time was.

Most of the time, subjects, although they predictably developed "free-running," non-24 hour sleep-wake, body temperature and hormonal rhythms, kept their cycles in sync. Routinely, their body temperature began slipping before sleep, was lowest as they fell asleep, and crept back up as they slept.

Sometimes, however, cycles fell out of unison. While the body temperature rhythm stayed near normal, the length of the sleep-wake cycle was anywhere from 30 to 50 hours long. Also, how long a subject slept on any one "night" seemed erratic and unpredictable at first glance.

On closer examination, however, a very regular pattern emerged. When bedtimes occurred at the temperature trough, sleep episodes were normal. The subject always awoke when his temperature was in the process of going back up, usually six to eight hours after bedtime.

However, when a subject went to bed at or after his temperature peak, he slept inordinantly long (one person once slept 20 hours straight.) Apparently, an out-of-sync subject only woke up after his body temperature had slipped to its low and had begun to rise again.

Czeisler noticed also that subjects most often chose to go to bed just after their temperature trough, and that the type of sleep in which dreams are made, rapid-eye movement or REM sleep, would occur earlier and in greater amounts if the person slept at his temperature low rather than his high.

A person out in the world and active can't just take his temperature one day and figure out the phasing of his body clock, says Czeisler. Too many outside factors come into play, such as how much he is exercising, which causes body temperature to rise, and when he is sleeping, during which it falls.

Already Czeisler, however, working with Dr. William Dement at Stanford's Sleep Disorders Research Center, and other researchers at other centers have used what's been learned to treat people who have problems with their sleep schedule.

"These results allow us to begin applying the principles of circadian physiology to sleep processes in man," Czeisler says. "Understanding how these internal clocks work will enable us to develop rational shift-work schedules and methods to minimize jet lag."

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Mailed Monday, December 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

Stanford University Hospital has opened a new Ambulatory Surgery and Treatment Unit on the ground floor of the Hospital.

Although an anticipated 10 percent of the Hospital's minor surgery patients will be readied for surgery here, actual operations will still be performed in the Hospital's operating room suite.

It is open from 6 A.M. to 7 P.M. Monday through Friday.

The unit is divided into two functional areas, a pre-admit or waiting room for patients and a pre-medicated section with five beds for those patients who require some quiet time before or after surgery.

According to Gwen Williams, director of the Hospital's operating rooms and outpatient processing, the unit is geared towards the "well patient who needs minor surgery."

"It is very traumatic for people having minor surgery to be with those having major surgery," she says. "We've tried to physically isolate them from those things traditionally associated with sickness, such as stretchers."

In the new unit, patients can listen to music, browse through magazines or share time with family members prior to surgery. Eventually, says Williams, the unit will be a "one-stop place" where everything from laboratory work to financial clearance will be handled.

Prior to the unit's creation, outpatients were taken care of in the Emergency Room, along with the critically ill. But the trend, says Williams, is to see more patients on an ambulatory basis away from this traumatizing environment.

"The focus in the past," she says, "has been on critical patients. The unit is a way of offering a better physical environment for the outpatient."

Its creation should also cut back on a patient's medical expenses and open up more beds in the Hospital for acutely ill patients.

In the future if there is a demand, says Williams, the number of beds in the unit may be expanded to nine and the unit may operate on Saturdays as well.

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Mailed Monday, December 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

Isabel Hanson's rheumatoid arthritis was so severe two years ago that she could barely eat, poking the food through stiff and inflamed jaws. A walk down the block was an excruciating ordeal. And one of her hands was so crippled, the fingers literally drifted to one side in what she describes as a waterfall effect.

"I'd been to zillions of doctors," she says, "and they all told me virtually the same thing. It's a progressive disease over which there is little control. You'll just have to live with it."

A semi-professional musician, Hanson found the loss of her ability to play the piano intolerable. In one of several suicide attempts, she sat outside her Berkeley home in a hot tub during an electrical storm, hoping to die.

But somehow, she says, she could never really go through with it; the anger inside was too great. And upon her parents' insistance, she decided to see just one more doctor. On Nov. 30, 1978, Hanson came to the Immunology Clinic at Stanford University Medical Center to see Dr. Halsted R. Holman, a Guggenheim professor of immunology.

"I was ready for something new and awful," she admits, "when Holman came in, looked at me, then looked at my records. Suddenly, he just threw the folder down and started yelling, 'Damn it. This disease has been allowed to get out of hand. This is ruining your life. You're a pianist and you can't play...you can barely walk.'

"I had no energy anymore and here was this doctor expressing the rage that I felt. What's more, he was telling me I could get better."

Hanson, who thought she would never walk again, was put on a vigorous exercise program and started on penicillamine, a copper-based drug with a chelation effect (a type of bonding of elements in the blood). Although the drug can cause kidney damage and has other dangerous side effects, she was told if she could tolerate it, the rheumatoid arthritis might go into remission.

Little by little it did.

In fact, today, Hanson can walk up to three miles, swims regularly and just recently began to pick out a few tunes on one of her two Steinway pianos. She has also written a book about her experience called "Outwitting Arthritis", released earlier this month by Creative Arts Book Company in Berkeley.

Of course, to write the book, Hanson needed help with her severely deformed hand. Although ultimately, she had an operation to correct the ulnar drift elsewhere, her initial treatment was received at Stanford's Hand Clinic. A splint, providing joint protection, enabled her to start typing her work roughly a year ago.

"I choose the 'ing' form in the title," she says, "because you can never outwit arthritis once and for all. It is an on-going process. Part of the therapy is not to give in."

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The book contains 33 cases in which people talk about their experiences with arthritis. Its inspiration, according to the author, came in early 1979 when she was feeling so emotionally isolated that she started a support group of her own.

"Well people just don't know what it's like," says Hanson. "It was wonderful to be around other people who were hobbling around the livingroom the way I was... and to talk to people who were interested in what was working for arthritics and what wasn't."

Hanson discovered in her interviews that while some arthritics found gold shots and steroids effective treatments, others were helped by unconventional methods such as acupunture, special diets and bio-feedback techniques.

"I'm very much a creature of Western medicine," says Hanson, "but what I'm trying to say in the book is these alternative methods should not be dismissed. Doctors acknowledge there is such a thing as psycho-somatic illness, what about a psychological approach to wellness?

Hanson's personal battle with arthritis began in 1974 when she was 45 and the youngest of her children was only 8. The family had been snow skiing one weekend and Hanson thought a pebble had lodged in her shoe. Although she kept shaking the shoe, the sensation remained.

"It was the first awareness of pain I've ever had," she says. "I'd always been a super healthy person before all this happened."

Eventually, other joints in her body began to be affectd and Hanson admits, she began to get scared. In between those early consultations with doctors, she herself tried acupunture, then later a special diet that had little effect on the arthritis, but made her anemic.

By the time she reached Stanford, the most demoralizing event of each day was waking up to a new pain in still another part of her body.

At Stanford, however, she says she received not only the emotional validation she needed to go on, but also the drug that finally worked.

Because of her success in containing the disease, Hanson often speaks on arthritis in the Bay Area whenever she can. She also plans to begin a small problem solving group for rheumatoid arthritics.

"I want to provide a place where they can talk about such things as their sex lives," she says, "or how to disguise your arthritis at work when you're constantly dropping the coffee pot."

She hopes to begin the sessions with two therapists from the University of California in January of 1981.

Meanwhile, Hanson is busy doing the promotional work for her newly-published book.

In a personal copy to Dr. Holman, she wrote the following inscription: "See what happens when you give a patient hope!"

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Mailed Monday, December 8, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Dr. Robert G. Petersdorf, professor of medicine at Harvard Medical School and president of the Affiliated Hospitals Center in Boston, will be a visiting professor at Stanford University Medical Center from December 8 to December 12.

Dr. Petersdorf's visit, co-sponsored by the Louis and Dorothy Kovitz Visiting Professorship and the Stanford Community of Internists, has been tailored for the community physician, as well as for housestaff, students and academic faculty.

His professorhip will be highlighted by two lectures.

Dr. Petersdorf will deliver the 10th Louis and Dorothy Kovitz Visiting Professorship lecture as grand rounds in the Fairchild Auditorium at 8:30 A.M. on Thursday, December 11. The talk is entitled "Some Clinical and Experimental Aspects of Bacterial Endocarditis."

His second formal presentation, "Fever of Unknown Origin," will be given at 8 A.M., Friday, December 12, at grand rounds in the cafeteria conference room of the Santa Clara Valley Medical Center.

Besides these lectures, Dr. Petersdorf's week-long visit will include off-campus meetings with community physicians, informal meals with house officers, reports and rounds at Stanford Hospital, Hoover Pavilion, the Veterans Administration Hospital, Santa Clara Valley Medical Center and El Camino Hospital.

Community physicians and Stanford medical staff are encouraged to take full advantage of the numerous opportunities to meet with Dr. Petersdorf, said Dr. Kenneth Melmon, professor and chairman of the Department of Medicine. A detailed schedule can be obtained from the Department of Medicine, S102d, 497-5454.

The Kovitz Visiting Professorship was established in 1969 by Dr. Louis and Dorothy Kovitz of Los Altos to bring outstanding lecturers in medical and surgical fields to the Medical Center. Dr. Kovitz died in 1979.

The Stanford Community of Internists is a recently formed group of community and Stanford faculty associated with the Department of Medicine, which sponsors educational events.

Dr. Petersdorf is well known for his role as a spokesman of academic medicine and as a leader in academic clinical medicine.

Receiving his M.D. degree cum laude from Yale in 1952, he held faculty positions at Yale and Johns Hopkins University before going to the University of Washington School of Medicine in 1960. From 1964 to 1979, he became a professor of medicine in the Harvard Medical School.

He is fellow in the American Academy of Arts and Sciences and a member of the National Academy of Sciences and its Institute of Medicine. He has been very active in the Association of American Medical Colleges, most recently being chairman of the Assembly. He has also served as chairman of the American Board of Internal Medicine and of the National Board of Medical Examiners.

He is on the editorial board of a number of journals and has almost 300 publications.

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Mailed Wednesday, December 3, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

A broad patent covering the novel gene splicing and cloning method developed by scientists at Stanford University School of Medicine and the University of California in San Francisco has been issued by the U.S. Patent Office in Washington.

The patent, the first of its kind to be granted in the U.S. in this field, covers the technique only, according to Niels Reimers, director of Stanford's Office of Technology Licensing.

The second part of the patent application filed in 1974 covers products resulting from the use of the technique. It is now pending, but Reimers expects it to be issued within a year as a result of the U.S. Supreme Court's decision last Spring allowing the patenting of biological organisms produced by gene splicing.

The inventors of the gene cloning technique are Dr. Stanley N. Cohen of Stanford and Dr. Herbert W. Boyer of the University of California in San Francisco.

In a paper published by Cohen and Boyer in the *Proceedings of the National Academy of Sciences* in 1973, and co-authored by Annie C. Y. Chang and Robert B. Helling, the first construction in the laboratory of biologically functional DNA molecules that combined genes from different sources was reported.

The scientists constructed these molecules by splicing together segments of two independent genetic elements within the cells of the bacterium *E. coli*, called plasmids, and then inserting the newly constructed DNA molecules into *E. coli* cells, where the recombinant DNA replicated and changed the heredity of the bacterium.

Subsequently, Chang and Cohen introduced genes from the unrelated bacterial species, *Staphylococcus aureus*, into *E. coli* where these genes also expressed biological properties they had displayed in the original host. Shortly afterward, the Cohen-Boyer team showed for the first time that even genes from animal cells could be propagated in bacteria using the DNA cloning methods they had developed.

The propagation in bacteria of genes derived from organisms ordinarily unable to exchange genes with *E. coli* represented a breach in the barriers that normally separate biological species, giving rise to the field of research known as recombinant DNA.

Within months, experiments involving the cloning of bacterial and animal cell DNA from various sources were being carried out in a number of laboratories. These procedures have enabled studies of the organization of complex chromosomes in ways not possible previously.

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They have also made possible the introduction of genes into bacterial cells, enabling construction of bacterial "factories" that can synthesize a variety of biologically produced substances such as insulin, interferon, and growth hormone.

In the past decade, gene cloning has become increasingly sophisticated and the promise of the technique has given rise to a multimillion-dollar gene cloning industry.

Reimers said the method patent just issued by the U.S. Patent Office together with the recent U.S. Supreme Court decision paves the way for the product patent now pending.

"Product claims (for pharmaceuticals and other substances produced by the technique) are generally more significant in patent terms," Reimers said.

"If products made by such technique are not covered, an industry could use the process in another country, then sell the product in the U.S. market without infringing the method patent."

When the product patent now sought by Stanford and UC is issued, licenses will be granted for both patents to industry on a non-exclusive basis for reasonable royalties, Reimers said.

He noted under such licensing agreements, the companies will be required to follow the physical and biological containment procedures of the National Institutes of Health guidelines for recombinant DNA research. Such guidelines are now mandatory for universities and industries which receive federal funds. The rest of the industry follows the guidelines on a voluntary basis, he said.

Patents, under Stanford's patent agreement with the NIH not only encourage investment by companies to make certain that the fruits of research reach the public, but they provide additional income for the university to support research and educational purposes.

In the case of the recombinant DNA method and product patents, both Cohen and Boyer have waved their right to personal royalties.

Reimers cautioned against undue speculation that such patents will result in millions of dollars for Stanford and UC.

"It should be observed," he said, "that at present there is no gene splicing product in the marketplace. Any product developed in the future will have to be tested for efficacy before it is initiated into the Food and Drug Administration process. And a product of a new technology might require a longer period for approval."

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Mailed Wednesday, December 3, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Elliott Levinthal, adjunct professor of genetics at the Stanford University School of Medicine, has been appointed director of the Defense Sciences Office of the Defense Advanced Research Projects Agency in Arlington Virginia.

He will be responsible for research and development activities in the agency's cybernetics technology, materials sciences and nuclear monitoring areas, said Robert R. Fossum, agency director.

Levinthal directed the Medical School's instrumentation research laboratory since 1962. He served as principal investigator on the Viking 1975 lander imaging science team, co-investigator of the Mariner Mars 1971 photo interpretation team, and as a member of numerous committees of the National Aeronautics and Space Administration.

He also served as an associate dean for research in the School of Medicine from 1970 to 1975.

A graduate of the Massachusetts Institute of Technology, and Stanford University, he was formerly president of Levinthal Electronics Products, Inc. when he came to Stanford to direct the instrumentation research laboratory in the Department of Genetics. The laboratory, supported by NASA, was established to design devices which could study chemical events on other planets, including the possibility of forms of life.

Eventually techniques developed for space exploration were applied in the fields of biology and medicine.

More recently Levinthal was associated with the SUMEX-AIM project (Stanford University Medical Experimental Computer-Artificial Intelligence in Medicine).

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Mailed Tuesday, December 2, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Studying growth disorders in children and using microcomputers to monitor the application of anesthesia and the vital signs of critical care patients are among the research interests of the 10 Stanford Medical School scientists selected to receive funds from the Andrew W. Mellon Foundation of New York.

The junior faculty members in basic and clinical sciences have been selected for the 1980-1981 academic year by Dr. Lawrence G. Crowley, vice-president for medical affairs, and acting dean of the medical school in accordance with the three-year $400,000 grant awarded to Stanford University School of Medicine in 1979.

The grant, the third of its kind received from the Mellon Foundation, is meant to "assist in providing teaching and research opportunities for outstanding young faculty investigators." Stanford is one of 15 private medical schools to receive funds from the Foundation.

The recipients are Richard H. Britt, M.D. (Surgery); Dieter Enzmann, M.D. (Radiology); Ronald G. Rosenfeld, M.D. (Pediatrics); James Rothman, Ph.D. (Biochemistry); Peter Rudd, M.D. (Medicine); Peter B. Sargent, Ph.D. (Structural Biology); Howard Schulman, Ph.D. (Pharmacology); Carla J. Shatz, Ph.D. (Neurobiology); Lawrence Steinman, M.D. (Neurology); and Mark Yelderman, M.D. (Anesthesia).

Britt is investigating whether heat, produced by microwaves or ultrasound, can be focused on brain tumors to destroy them. He is also exploring how the structures of certain nerve cells involved in hearing are related to their functions.

Enzmann is exploring whether computer tomography scanning (a new method of imaging using X-rays and computers) can be used to distinguish the stages in brain abscess development. His goal is to make early diagnosis more reliable.

Growth disorders in children is the prime concern of Rosenfeld. He is tracking the levels of two hormones, growth hormone and somatomedin, in the blood of children with growth disorders. In addition, he obtains cells from such children and studies how hormones affect their growth in controlled conditions in the laboratory.

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Each cell in plants and animals has a number of different kinds of membranes, one type surrounding the cell, other types essential parts of cell organelles. Rothman is trying to discover how a cell correctly directs the different sets of proteins, key components of membranes, to the various types of membranes.

Rudd has a multitude of interests. He is trying to establish optimal guidelines for screening hypertension, to devise regimens that will convince patients to more faithfully take their medicine, and to develop effective ways to educate physicians about new cost-effective diagnosis tests.

Sargent studies the formation of synapses, spaces between nerve cells just one millionth of an inch wide. Chemicals released by one nerve cell travel across a synapse to activate or inhibit an electrical impulse in another nerve cell.

Schulman is studying protein phosphorylation enzymes that are calcium-dependent in nerve cells of the rat brain. He is trying to understand how these nerve cells function because they use as their neurotransmitter the chemical histamine, a possible cause of depression.

How cells in the retina of the eye make connections with cells in the brain during development is the subject of Shatz's research. The entire visual system is dependent on information received from the initial nerve connections.

Steinman is studying what happens when the body's defense system, the immune system, mistakenly attacks and destroys myelin, an essential covering of many nerve cells. Antibodies directed against a protein in myelin may be the cause of diseases such as multiple sclerosis and Guillain-Barre's disease.

Yelderman is using microcomputers to monitor the application of anesthesia and the vital signs of critical care patients. This is a less invasive technique than traditional methods.

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Mailed Tuesday, December 2, 1980

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: The following release announces a symposium on nutritional aspects of aging that may be of interest to medical writers, food editors or feature writers. Members of the press are invited to attend, and speakers will be available for interviews on the day of the symposium.

STANFORD—

A symposium on nutritional aspects of aging in America will be held Thursday, December 4 at Tresidder Union on the campus of Stanford University.

Sponsored by the division of gerontology at Stanford University School of Medicine, the symposium will present up-to-date information about nutrition as it relates to human aging.

At the morning session, speakers will discuss the nutritional status of the elderly in America, the changes in nutrient requirements which accompany aging, diets for the elderly, and problems of the aging skeleton.

Workshops are scheduled for the afternoon dealing with special eating problems of the elderly and evaluating nutritional needs of the elderly.

Speakers include Dr. Robert Marcus, assistant professor in gerontology at Stanford, Dr. Barbara Posner, assistant professor in nutrition from Boston University, Dr. Vernon Young, professor of nutritional biochemistry from the Massachusetts Institute of Technology, and Dr. Mary Bess Kohrs, associate professor in nutrition and medical dietetics from the University of Illinois.

The symposium is designed primarily for health professionals who care for the elderly, including nurses, physicians, dietitians and others. Continuing medical education credit is available, and a nominal tuition will be charged.

The Palo Alto Medical Research Foundation, Peninsula Nurses Extended Care Group, and the Mead Johnson Nutritional Division are also providing support to the program.

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Mailed Monday, December 1, 1980.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

When Stephen LaBerge has a dream he doesn't like, he simply changes its content, much the way a movie director might change a scene in a movie.

Through a phenomenon called lucid dreaming, LaBerge, because he's aware he is dreaming, can orchestrate the dream's events—discarding unpleasant characters, rescripting dialogue, even supplying a happy ending.

"Normally, we are not able to exercise choice in our dreams," he says, "because we don't know that we can have control. But in dreams not to our liking, we don't have to fight or flee things that frighten us...even if this is how we usually handle them.

"There are other options—like deciding to step outside our dreams and watch."

LaBerge, who earned his doctorate in psychophysiology at Stanford last June, has been studying lucid dreaming at the Sleep Research Center for the past three years with his colleagues, William C. Dement, Lynn Nagel and Vincent Zarcone.

Reports of lucid dreaming, or dreaming while being fully aware that you are dreaming, are not all that unusual and have been known of since at least the time of Aristotle. And yet, says LaBerge, there has been a theoretical bias against accepting them for what they are.

"The assumption is that the nature of dreams is irrational," he says, "and therefore what these people are experiencing must be day-dreams. We have found it (lucid dreaming) does in fact take place during sleep."

At the sleep lab, subjects who reported having lucid dreams were asked through a prearranged signal to indicate when during sleep they were aware of dreaming. Polygraphs, measuring brain waves, eye movements and muscle tension in the chin as well as the wrists, were used to determine at which stage of sleep this occurred.

What was found, says LaBerge, is that lucid dreams occur almost exclusively during REM (rapid eye movement) sleep, sometimes called active sleep, or paradoxical sleep, because the brain is still as active as when the person is awake.

And yet, adds LaBerge, if the criterion of being awake is whether a person perceives the external world, then the subjects were not, in fact, awake.

Although at this point there are few dreamers who can induce lucid dreams "at will," LaBerge himself has devised a method, which has enabled him to have as many as 26 lucid dreams in one month.

In the January issue of *Psychology Today,* he explains that there are two presleep psychological factors needed for MILD—mnemonic induction of lucid dreams. The first and most obvious, he says, is motivation, while the second is the presleep intention to remember to be lucid during the next dream.

MILD employs both visual and verbal memory techniques to reinforce the ability to perform future actions. This is done, according to LaBerge, by forming mental associations between what one wants to remember to do and the future circumstances in which one intends to act.

When LaBerge wants to have a lucid dream, he says to himself before going to sleep, "Next time I dream, I want to remember I'm dreaming." Then he visualizes himself lying asleep in bed dreaming, and at the same time he sees himself as being in a dream and realizing that he's dreaming.

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Although the events in our dreams are illusory, says LaBerge, our feelings of anxiety and fear are real and must be dealt with, even if we are aware we are dreaming.

"Were it not so," he writes in the *Psychology Today* article, "lucid dreams would have no useful connection in our waking lives."

With a recurring nightmare, for instance, LaBerge says, a person must relive the nightmare in a waking state, conceive of a positive outcome and the next time the nightmare occurs, remember to recognize it as a dream.

"Often if the dream is figured out symbolically in a waking state," he contends, "the nightmare won't come back since the situation we are trying to resolve has been resolved."

By inducing lucid dreams himself over the past year, LaBerge says, he has experienced a significant decrease in the number of anxiety dreams he has had.

Lucid dreaming, by its very definition, means being lucid or in full possession of one's faculties, even though asleep. LaBerge describes the phenomenon more poetically, "The lucid dreamer does not wish to leave the dream world by awakening, but to awaken within the dream."

In so doing, LaBerge believes, the lucid dreamer may ultimately provide first-hand data from within the dream world itself. Even more significant, perhaps, lucid dreaming may open up other spheres of being or consciousness, suggesting, as LaBerge writes, "what it would be like to discover that we are not yet fully awake."

LaBerge often teaches courses in lucid dreaming when he's not at the sleep center. At the moment, he is teaching a course at the San Andreas Health Council.

He is also exploring with his colleagues the healing potential of lucid dreaming under a grant from the Holmes Center in Los Angeles.

A graduate of the University of Arizona with a bachelor of science degree in mathematics, LaBerge was a Woodrow Wilson fellow at Stanford in the late sixties, studying towards a doctoral degree in chemical physics. Although he completed the course work and passed the qualifying exams, he decided at that time to take a leave of absence. He later returned to Stanford, obtaining a degree through the Graduate Special Program.

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Mailed Tuesday, January 27, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

A consumer choice health plan, a system of universal health insurance based on fair economic competition in the private sector, has a good chance of being adopted under the Reagan administration, according to Prof. Alain C. Enthoven of the Stanford University Graduate School of Business.

"The Reagan administration," he writes in the Jan. 8 issue of *The New England Journal of Medicine,* "will be under severe pressure to slow the growth of health-care spending at least in the public sector in the coming months."

These costs were about $56 billion in 1975 and $100 billion in 1980, chiefly to pay for the Medicare and Medicaid programs, and not counting the large and rapidly growing tax subsidies to private health insurance.

Noting that only about two thirds of this rise in costs was due to inflation, a health policy group formed to advise President Reagan has recommended giving first priority to a "competition strategy" of health care financing, according to Enthoven. This includes support of "a compromise version of the various pro-competitive bills that can be broadly supported."

Presently five pro-competition bills for reform of the nation's health care system, some based on Enthoven's ideas, are pending before the U.S. Congress.

Enthoven's proposals, described in detail in his recent book, *Health Plan* (195 pp. Addison-Wesley, 1980. $12.95), envision a consumer-choice health plan (CCHP) based on four principles not generally applied today.

These principles, according to Enthoven, are consumer choice, a fixed-dollar subsidy toward the premium of a qualified health-care plan using the same rules for all competitors, and organization of physicians into competing economic units.

More simply stated, CCHP will stress fair competition in the private sector through health maintenance organizations and other alliances in which competition influences cost controls. And it would retain Medicare as an option.

"Most of the criticisms of the consumer-choice plan so far have come from the left, from people who believe that health care should not be in the marketplace," Enthoven says. "Now consumer-choice will come under scrutiny from the conservatives who may want to see more freedom for the market to work."

He notes that until now the health care sector has been regulated to boot, but these controls have failed to contain costs. By elimination of regulation, however, Enthoven does not mean turning medical care into a total free-market process. Few products are bought and sold with no restrictions whatsoever.

What he means by "competition" is the introduction of certain mechanisms into the system to encourage people and institutions to behave differently from the way they have traditionally behaved.

But the "competition strategy," Enthoven says, is viewed to create problems for some. Among them are the teaching hospitals that see themselves threatened.

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He says a recent article by Dr. Eli Ginzberg of the Association of American Medical Colleges, is an example of such negative thinking, spelling out doom for teaching hospitals if "a consumer choice" approach is adopted as a national policy. The reason for the concern is that teaching hospitals, whose job is to train physicians, have higher costs and could not compete with community hospitals.

"In principle," Enthoven argues, "these problems ought to be resolvable through the identification of the incremental costs of teaching and research and through direct public subsidies to support these activities at the level considered appropriate by society."

"The hidden subsidies through Medicare and Medicaid that now support teaching and research," Enthoven adds, "are major contributors to misallocation of resources.

"Dr. Ginzberg and the Association of American Medical Colleges would do well to recognize that the financial pressures on the government are becoming severe. The proponents of the competition strategy did not invent the need for control of health-care costs. It is there.

"The wise course of action for the Association of American Medical Colleges would be to develop its own constructive proposals for cutting the cost of health care in the least damaging way.

"If it does not, costs will be cut in some other way that is not to its liking."

Enthoven believes the prospects of the competition strategy that he advocates are enhanced by a continuing growth of alternative delivery systems, despite resistance by providers and barriers in tax and Social Security laws. HMO membership increased from about 5.8 million in 1975 to 8.8 million in 1979.

If the Reagan administration chooses to implement the competition strategy, what will be the likely steps? Enthoven predicts the first priority will be to work with members of Congress in the coming months to develop a compromise version of the legislation now pending. "This strategy would open up a large part of the market for employees' health insurance to economic competition on a fair basis," he explains.

A second step, according to Enthoven, would be a phased Medicare reform, giving beneficiaries the opportunity to receive more benefits at a lower cost by joining an efficient organized plan.

"Such a change would eliminate vast amounts of unproductive claims-processing paperwork," he says.

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Mailed Monday, January 26, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

David S. P. Hopkins has been named director of the Office of Analysis and Planning and executive assistant to the vice president for medical affairs at the Stanford University Medical Center.

The appointment of the 37-year-old administrator, effective immediately, was announced Tuesday by Dr. Lawrence G. Crowley, vice president for medical affairs. Hopkins has served as an assistant dean for administration in the School of Medicine since 1978.

In his new position, according to Crowley, Hopkins will be responsible for all analysis and planning activities within the Office of the Vice President including the development of a long range plan for the Center.

Hopkins will coordinate planning activities of the School of Medicine, the Faculty Practice Program and the Hospital.

"A major goal," said Crowley, "will be to assure that planning carried out at the major components of the Medical Center—the Hospital, Medical School, and Clinics—is feasible and compatible with Center-wide goals."

In addition Hopkins will serve as an executive assistant to the vice president for medical affairs, facilitating communications between the VP's office, the three major units of the Center, the University and affiliated hospitals.

Hopkins, a Harvard graduate, holds degrees in statistics and the Ph.D. in operations research from Stanford. He held posts as systems analyst with IBM, the University of California, and was IBM postdoctoral research fellow in the Department of Operations Research at Stanford in 1970-71.

In 1971 he joined the University's Academic Planning Office as staff associate and later became senior staff associate. He is co-author with William F. Massy of a forthcoming book on *Planning Models for Colleges and Universities* to be published by the Stanford University Press.

He is a member of a number of volunteer organizations including the board of directors of the Alan Guttmacher Institute, a research and policy development arm of Planned Parenthood.

In the past three years, Hopkins has been responsible for developing many of the new systems introduced in planning and budgeting in the Medical School. He also contributed to the analysis of the financial feasibility of the Hospital's modernization plan.

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Mailed Tuesday, January 20, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Dr. Richard L. Popp, a noted cardiologist specializing in ultrasound and other techniques for measuring changes in the structures and chambers of the heart, has been named associate chairman of the Department of Medicine at the Stanford University School of Medicne.

Popp, 41, an associate professor of medicine since 1975, is the second faculty member to be named associate chairman of a major department in the School, Vice President for Medical Affairs Lawrence G. Crowley said Tuesday.

"Dr. Popp's appointment reflects the diversity and the heterogeneous responsibilities of the department," said Dr. Kenneth L. Melmon, chairman of the Department of Medicine.

Medicine is the School's largest department, representing 12 academic divisions ranging from cardiology to respiratory medicine.

"It is clear that a single chairman cannot respond in a timely fashion to the various academic and clinical groups that depend on the readiness of the Department's administration," said Melmon.

In his new position, Popp will assist Melmon in day-to-day administration, meeting with faculty, students, community physicians and personnel, and will represent the department on key Medical School committees as needed.

Melmon, in addition to his own research commitments, will assume greater role in the external affairs of the Department, particularly the development of funding sources to support research and clinical programs, development of young investigators, and addition of new programs and laboratory space.

Popp is a graduate of Johns Hopkins (B.A. 1960, M.D., 1964). He was one of the first investigators to recognize the significance of measuring quantitative changes in the structures of the heart. Using ultrasonic waves and a mathematical formula he developed, Popp has been able to measure the internal dimensions of the heart at various phases of contraction.

He has also succeeded in calculating ventricular volumes, stroke volumes and total cardiac output for the heart in normal patients and in patients with heart disease. He has also used the technique to study heart tumors, and effects of drugs and exercise on heart disease.

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Mailed Tuesday, January 20, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

Once a woman has lost a breast to cancer, her sense of sexual disability is affected by her husband's perception as much as her own, says Reggie Kriss, a licensed marriage and family counselor on the staff at Stanford University Medical Center.

And yet, one of the major clinical findings during the past year of working with women who have undergone mastectomies, says Kriss, is that too often there is a breakdown in communication, with both partners denying their real feelings.

"We are finding that women are hesitant to talk to their spouses about how they feel," says Kriss, "because they are afraid the mastectomy is turning their partners off sexually. And in fact, this is what is happening."

But at least, adds Kriss, the women she has worked with are venting their feelings, whereas too often their spouses are not.

"I feel the husband sometimes suffers more than the wife," says Kriss, "because he has no one to talk to about how he feels. He may want to be honest with her, but he certainly isn't going to tell her he isn't aroused anymore."

Since the fall of 1979, Kriss has been working with small cohorts or groups of 10 women at a time in a therapy class called "Self-Image and Sexuality: Post-Mastectomy." So far, some 40 women have gone through the one-year program, which consists of 90-minute sessions every week for six months; then monthly sessions for another six months.

At the moment, Kriss is seeking volunteers for two groups beginning in February, which have an optional feature of a couples session. This option, however, comes much later in the program, once the women have become more comfortable with their own feelings.

"The basis of many relationships," say Kriss, "is homeostasis, or keeping things as they are. But the very phenomenon of mastectomy has changed the relationship, even if both partners are burying their feelings.

"It's all very complex, but how is he going to love her body again if she can't."

For the woman, a fear of being sexually unattractive is a "very key point," says Kriss—one that is complicated by the fact that her outward appearance may belie the apprehension within.

"Ideally, a woman may feel that inner beauty is the most important thing," she says, "and yet, when she looks at herself in the mirror, she sees only ugliness. What we try to do is get her to acknowledge the loss of a certain kind of beauty, rather than pretend that the loss doesn't exist."

Kriss considers herself an expert on denial, having denied her own feelings about her first mastectomy for nearly 14 years. Not even her children were aware she had lost a breast until nine years ago when Kriss underwent a second mastectomy and decided, as she puts it, "to come out of the closet." -more-

2-2-2 "I was young and attractive when I had my first mastectomy," says Kriss. "The thought that if people knew they might pity me, was unbearable. Besides, I looked perfectly normal on the outside and no one needed to know how awful I felt about myself under the clothes."

It is this "invisibility" of the mastectomy, according to Kriss, which enables women to hide their fears about their damaged sexuality. But once the initial relief of being alive has passed, she says, the post-mastectomy woman also must learn to cope with an altered self-image.

The function of group therapy, she stresses, is to allow the women to let their feelings out, much the way a Greek chorus tells you what's happening in a play, all the while lamenting the tragedy.

"You have to do a lot of grieving and mourning when you've lost a part of your body," says Kriss. "For a woman,losing a breast is like a man losing his penis. Breasts are a man's first turn on and they are the first expression of a young girl's sexuality—the expression of the so-called female form.

"If sadness and anxiety are not dealt with, obviously sexual arousal is affected."

In developing a program for post-mastectomy women, Kriss and Dr. Helena Kraemer, associate professor of psychiatry at Stanford, spent several months preparing a questionnaire, weeding out those questions they felt might be confusing or unreliable. Ultimately, they intend to use the questionnaire to measure the effectiveness of therapy in rebuilding self-esteem.

An essential part of the existing program, says Kriss, is putting the women back in touch with their own bodies. In one exercise, the women are asked to shower with a fragrant soap, then to rub their bodies with oils or lotions to heighten their sensuality. Later, they are asked to express how they feel.

The program is also a forum for opening up new ideas sexually. The women are encouraged, says Kriss, to be more aggressive or more imaginative in love-making.

Because she herself has come through the experience, the women in the group relate more openly, admits Kriss.

"I always ask my groups whether it helps that I've had one mastectomy. . .or two?, she says. "It always brings a laugh."

Aside from her personal experience, Kriss has led groups of breast cancer patients in the past with Drs. Irvin Yalom and David Spiegel in the Department of Psychiatry. Last year she completed training in the sex and disability unit at the University of California School of Medicine at San Francisco.

A chapter she has written entitled "Sexuality and Physical Disability: Personal Perspectives" is currently in press in an edited edition of a book *Sexuality and Disability* (edited by David Bullard and Susan Knight). The book is being published by Mosby and Co., St. Louis, Mo.

Eventually, Kriss would like to take the women who have worked in her groups and use them as a resource for the "fresh mastectomy" patient in the hospital, both before and after surgery.

"I think this could be a whole new career opportunity for women who have had mastectomies," says Kriss. "Research is helping us find out there are a lot of severe problems that are not being dealt with."

For women interested in the February counseling sessions, Kriss can be reached at (415) 857-0857.

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Mailed Monday, January 19, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Stephen G. Waxman has been named associate chairman of the department of neurology at Stanford University School of Medicine.

The appointment, effective January 12, was announced by Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean of the Medical School.

The associate chairmanship is a new designation and the department of neurology is the first in the Medical School to have such a position.

Waxman, who has been professor of neurology at Stanford since 1978, is also chief of the neurological unit at the Palo Alto Veterans Administration Medical Center (PAVAMC).

According to neurology department chairman Dr. David Prince, Waxman's appointment will strengthen representation of VAMC neurology faculty, students and researchers in the affairs of the department.

"The neurology department has extensive teaching, research and clinical programs at the Palo Alto VAMC which interlock closely with programs based at Stanford Medical Center," Prince explained.

"Dr. Waxman's contributions during the past two years have been very significant in maintaining the high quality of these programs," he added.

Waxman is a leading researcher in the biology of nerve fibers (axons), and an authority on diseases of axons, including multiple sclerosis.

At the age of 35, Waxman is the author of approximatlely 100 scientific papers and abstracts and currently, he directs a major program on nerve disease carried out jointly by Stanford and the VAMC.

A 1967 graduate of Harvard University, Waxman received his Ph.D. in 1970 and his M.D. in 1972, both from Albert Einstein College of Medicine in New York.

Prior to his arrival at Stanford, Waxman was associate professor of neurology at Harvard and visiting associate professor of neurology at the Massachusetts Institute of Technology.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

In a departure from traditional therapy, the Stanford Alcohol Clinic has expanded its scope to include not only alcoholics, but family members who have been scarred by the problem as well.

Most programs, says the clinic's associate director, Dr. Stephanie Brown, will only offer help to family members if they are with the alcoholic.

But at Stanford, even the most distant relative or "a significant other" can receive individual counseling.

The most widely-publicized example, perhaps, is the program for adult children of alcoholics. Many of these patients were so-called model children, who suddenly found their lives falling apart in their 20s or 30s, or sometimes even later in life.

"The general history of these grown-up children we are now seeing is very similar," says Brown. "There is a real syndrome of over-achievement. Often they were the perfect children...yet as adults they are driven and their achievements too often seem hollow."

They also suffer, adds Brown, from an inability to trust their own feelings and perceptions, and a fear of not being in control. These defense mechanisms, developed at an early age to cope with the pain and chaos of an alcoholic household, often backfire when the child turns adult.

In the past, therapists have focussed their attention on the more obviously troubled offspring of the alcoholic, the ones who turn to drugs or alcohol themselves early on. But increasingly, says Brown, professionals now realize that the seemingly well-adjusted child runs an equal risk of alcoholism later in life.

(An estimated 50 to 60 percent of all alcoholics have at least one alcoholic parent.)

At Stanford, there are presently three therapy groups for adult children of alcoholics. Brown, who pioneered the sessions, describes them as a "hybrid of the best psychiatric therapy models and the best of existing alcohol programs."

A clinical psychologist specializing in alcoholism, Brown is mainly interested in the problem of alcoholism as a continuum, or the reasons behind its perpetuation from one generation to another.

"The fact is when you remove the alcohol," she says, "there are a lot of underlying problems. It's important to have treatment available for extra help."

In her work, Brown combines a deeply personal concern with professional expertise. A clinical study of recovering alcoholics, she says, led to a new therapy model, which is being developed at the clinic.

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"What we are trying to do," she explains, "is design a treatment according to the different stages of alcoholism. One of the biggest problems, however, is that regardless of treatment, the perception of alcoholism tends to be oversimplified."

While the end-stages of alcoholism still carry a stigma, says Brown, anything short of flagrant abuse is not recognized as a problem, since alcohol use is an accepted part of our culture.

"There is no other problem or substance like alcohol. . .so overloaded with other meanings," she says. "It is part of the economics, even the religion in our society.

"Alcohol is everywhere in the most fundamental way."

And yet, adds Brown, there is a cultural importance attached to the ability to control one's self, compounding the problem.

"My personal opinion," she says, "is the reason so much importance is put on control is that everyone would like to think controlled drinking is possible. But I don't see it. The only real treatment is abstinence."

At the clinic, according to Brown, most of the people who come for help have their lives intact, but realize alcohol is no longer working for them and they are worried. This is the first step, Brown believes, in dealing with an addiction.

"Once you have determined that you have lost control," she says, "then you can seek outside help for yourself."

The staff of the Alcohol Clinic is small, with Brown the only full-time staffer. In addition, there is a psychologist, a psychiatrist and an education coordinator, all of whom work part-time.

Funding for the program comes from the Thomas and Katherine Pike Foundation as well as the Mary Pike Foundation. In addition, a new grant from the National Institute of Alcohol and Alcohol Abuse (NIAAA) will provide training for medical students and psychiatry residents in the field of alcoholism.

Brown is extremely enthusiastic about the new program, which she will be teaching.

"Nobody has any easy solutions," stresses Brown, "but through continued clinical research, we are constantly learning new ways to approach the problem."

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Mailed Monday, January 19, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

EDITORS: Photos available if not included with story.

STANFORD—

The thumb-walk, the elbow chop and the heel-toe dance are just a few exercises designed to help people with arthritis. In fact, though many don't realize it, there are numerous things they can do to help themselves.

A series of free classes in arthritis self-management, co-sponsored by Stanford and the Mid-Peninsula Health Service, aims to drive the point home. The only prerequisites for attending the course are that one be at least 18 and have arthritis.

Part of a patient education research project, headed by research associate Kate Lorig and conducted by the Stanford Arthritis Center, the course has run successfully for two years through series which last six weeks apiece. Dr. Halsted Holman, head of the Arthritis Center, is principal investigator for the project.

Meeting for two hours each week, participants in the class attempt to learn what arthritis actually is. They practice exercises and relaxation techniques, discuss nutrition, medications and patient-physician communication, and generally work on problem-solving for both the physical and emotional aspects of arthritis. They complete questionnaires at several intervals during the course, and are continually compared to a control group of future participants.

Each class is taught by two community leaders who have been trained by Lorig. Currently there are about 60 leaders, ranging in age from 21 to 81, from all walks of life. Many have arthritis themselves or in their families, some are retired health professionals, and others are simply people interested in gerontology.

Ruth Pape, 71, is a former participant and present leader of the course. A retired social worker for Contra Costa County, her background includes assisting physicians with emergency care and teaching Red Cross first aid in Berkeley, Oakland and Contra Costa County. So involvement in health care services is not foreign territory for her.

The research project intends, through the course, to determine whether community health education is effective in terms of quality of life and/or is cost-effective.

As a result of taking the course, do people with arthritis experience less pain and depression? Do they also visit doctors less frequently and take fewer medications, thereby reducing their medical expenditures? And in turn, would such a reduction justify the cost of the course?

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In general, says Pape, participants have less pain than usual while they attend the class. Moreover, if they do feel pain they also feel free to express it, and many knowing ears are eager to listen.

Pape has found the course terrific, though not a cure-all.

"During the class periods I exercise much more and am more aware of diet," she says, admitting that she tends to "slip up" outside of class. Pape is not sure how other paricipants fare once completing the course and on their own. As a leader, she would like to know just how effective the classes are.

Based on initial findings, with 1,200 having completed the course so far, Lorig concludes with some confidence, "People are doing the things we're teaching them and increasing their knowledge." The determination of cost-effectiveness has not yet been established, she says. But the researchers have found that participants experience decreased pain and are more active than before they took the course.

Lorig and Dr. James Fries, assistant director of the Arthritis Center, recently co-authored the *Arthritis Helpbook*, published by Addison-Wesley. It is a self-help book, says Lorig, a "cookbook of all the things people can do for their arthritis." The book is available at the Medical Center bookstore, in local bookstores, and through the Mid-Peninsula Health Service.

Fifteen arthritis self-management classes of about 15 members each are scheduled to begin during the first two weeks of February, at various locations throughout the Bay Area. Participants in the new series will be encouraged to invite "significant others"—spouses, siblings or anyone else who can provide moral support—to attend as well. All classes will be given through De Anza Community College, and credit is available if desired.

To obtain the required application form for the course, or to find out more about teacher training, call 497-7935.

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Mailed Thursday, January 8, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Spyros Andreopoulos Lisa Ames, second (415) 497-6911

STANFORD—

A $10,000 unrestricted grant for research in blindness has been awarded to Dr. Peter Egbert of the Stanford University School of Medicine.

Dr. Egbert is an assistant professor and acting head of the Division of Ophthalmology in the Department of Surgery. His research interests include eye tumors and eye diseases in immunosuppressed patients, particularly cytomegalovirus infections.

Research to Prevent Blindness, Inc., based in New York, is a voluntary organization supporting eye research. Stanford's Ophthalmology Division has received $60,000 in annual grants from the organization since 1970.

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STANFORD—

Stanford University Medical School has recently received a donation of $12,122.27 from the Esther Sparks Cross fund of the California Community Foundation, a publicly supported perpetual trust whose purpose is to solicit and allocate funds for worthy community causes.

To be used for the education of promising and financially pressed medical students engaged in cancer research, the fund was first established at Stanford in 1967.

Founded in 1915, the California Community Foundation is one of the largest community foundations in North America, with active capital funds totaling over $25 million. Its Board of Governors is composed of seven community leaders who are familiar with public needs.

Stanford medical students currently receiving assistance from the fund are: John Ruark, John Oakley, Louie Naumovski, Tien Pham, Dale Kooistra and Doris Burton.

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Mailed Wednesday, January 7, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Does your blood pressure rise during periods of stress at home or on the job? Do you experience unpleasant side effects while taking medication for high blood pressure?

If the answer to either of these questions is "yes", you are invited to participate in blood pressure management training being offered by Stanford University Medical School.

The blood pressure training, which is free of charge, is designed for patients who do not respond well to standard medical treatment, according to Dr. Craig K. Ewart.

The training is part of a research project being directed by Ewart and Dr. C. Barr Taylor.

In recent years researchers at Stanford and elsewhere have begun to use techniques such as relaxation, meditation and stress reduction training to lower blood pressure. Ewart and Taylor are trying to determine if these methods can help those who do not rebpond to drug therapies.

A novel feature of the project, Ewart noted, is inclusion of the patient's spouse or intimate friend in the training.

If the training is to be effective, he explained, the patient must use stress control methods regularly in his or her normal environment.

"It is a lot easier to apply these skills in everyday situations if you have a partner who can help," he commented. "An understanding wife or husband can do a lot to help you reduce the amount of stress in your life."

The six weeks of training is provided to each couple separately, and consists of weekly, hour-long sessions, tailored to the individual needs of each couple.

Sessions will be held in the Stress Relief Clinic.

Persons wishing to participate in the program or needing additional information should call the Stanford Health Behavior Program at 497-5867 weekdays between 9a.m. and 5p.m.

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Mailed Monday, January 5, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Bengt Samuelsson, a 1977 winner of the Lasker Award, will deliver the 1981 Lane Lectures on January 13, 15 and 16 at Stanford University School of Medicine.

Samuelsson, dean of the medical faculty at the Karolinska Institutet in Stockholm, Sweden, is a leading researcher in the field of prostaglandin biochemistry.

Prostaglandins are substances found in the tissues of most mammals and in some of the lower vertebrates and invertebrates. Although all of the functions of prostaglandins have not yet been determined, they are thought to play an important role in a large number of hormonal and neurological activities.

This year's Lane Lectures, the 37th series since the lectureship was initiated in 1896, will be held at 5 p.m. in Fairchild Auditorium at the Medical School. The lectures are open to the public.

Samuelsson's first lecture, on Tuesday, January 13, is entitled "The biochemistry of prostaglandins and thromboxanes." On January 15, he will discuss "Leukotrienes: a new group of biologically active compounds," and on January 16, "Biological roles of prostaglandins, thromboxanes and leukotrienes."

A native of Sweden, Samuelsson received the D. Med. Sci. degree in biochemistry in 1960 from the Karolinska Institutet and the M.D. degree in 1961 from the same institution.

He was assistant professor of medical chemistry at the Karolinska Institutet from 1961 through 1966, professor of medical chemistry at Stockholm's Royal Veterinary College from 1967 to 1972, and returned to the Karolinska Institutet in 1973 as professor of medical and physiological chemistry and chairman of the department of chemistry. In 1978, Samuelsson became dean of the medical faculty at the Instituet.

In addition to the presitigious Lasker Award, Samuelsson has received numerous other awards and honors for his work on prostaglandins. These include the Anders Jahres Award from Oslo University (1970), the Louisa Gross Horwitz Award from Columbia University (1975), the Intrascience Medal (1976), and the Ciba Geigy Drew Award in Biomedical Research (1980).

The Lane Lectures were established in 1896 by Dr. Levi Cooper Lane, one of the founders of Stanford University School of Medicine. (The School was known as Cooper Medical College until 1909 when it became Stanford Medical School. The School moved from San Francisco to the Stanford campus in 1959.)

The Lane Lectures have been given by scientists from around the world who are particularly noted for outstanding achievement and research in medicine. Previous lecturers have included Sir Bernard Katz of University College in London, Dr. George Wald of Harvard University and the late Theodosius Dobzhansky of the Rockefeller Institute.

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Mailed Monday January 5, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Anne S. Yeager, associate professor of pediatrics, has been promoted to a tenured position at Stanford University School of Medicine effective January 1, the Dean's office has announced.

Yeager, a specialist in infectious diseases, is noted for her studies of pediatric viral illnesses, particularly infections in the newborn.

In 1976, Yeager and her colleagues reported that immunizing children younger than 13 months of age against measles was significantly less effective than immunizing children 13 months of age or older. The researchers discovered that antibodies from the mother still present in the younger children's bloodstreams interfered with the vaccine's ability to confer immunity.

As a result of Yeager's findings, the recommended age for measles immunization was raised from 12 to 15 months in the U.S. and around the world.

Yeager is studying other viral illnesses, inluding cytomegalovirus (CMV) infection, a leading cause of death among premature infants treated in hospital intensive care nurseries. She and her colleagues recently reported that CMV infections, frequently acquired in premature infants through blood transfusions, can be eliminated by careful screening for blood donors who are free of CMV.

Yeager is also investigating the transmission of herpes simplex, a common venereal disease, from mothers to their unborn infants. Neonatal herpes simplex is fatal in over half the infants infected and can also cause severe brain damage in infants who survive. Yeager's work has helped determine the proper medical management for mothers and infants with the disease.

A native of Baltimore, Yeager received her B.A. degree from Cornell University in 1961 and her M.D. degree from Cornell University Medical College in 1965.

She carried out her internship and residency in pediatrics at the affiliated hospitals of the University of Washington in Seattle, and subsequently became a fellow in pediatric infectious disease at the University of Colorado Medical Center in Denver.

Prior to coming to Stanford as assistant professor of pediatrics in 1974, Yeager was assistant professor at the University of Colorado Medical Center and assistant director of the department of pediatrics at the Denver General Hospital.

She has been associate professor of pediatrics at Stanford since 1977, and is currently head of the division of pediatric infectious diseases at Stanford Medical School.

—30— L101

Mailed Monday, January 5, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: Advance for release A.M. Tuesday, January 5, 1981.

EDITORS: Details follow asterisks. The following release coincides with publication of the December issue of the *Proceedings of the National Academcy of Sciences.* Photos available on request of Dr. Kornberg and his colleagues and of DNA replication proceeding bidirectionally from the replication origin on a plasmid.

STANFORD—

Biochemists at Stanford University School of Medicine have succeeded for the first time in creating a test tube system with all the ingredients necessary to initiate a round of synthesis of the DNA of a bacterial chromosome.

The work is considered important because it is a first step towards discovering how cells control the frequency of DNA replication initiation, a significant event in controlling the overall rate of cell division and growth, the researchers said.

Since the structure of DNA was discovered nearly 30 years ago scientists have unraveled many mysteries of how the molecule replicates to produce identical copies of itself for the next generation of cells. But one crucial problem has remained obscure: how does a cycle of DNA synthesis begin?

Through their new enzyme system, finally the resolution and analysis of factors that control initiation of a chromosome cycle should become accessible, the researchers predicted.

The feat was accomplished in the laboratory of biochemistry professor Dr. Arthur Kornberg, a Nobel laureate who in 1959 created synthetic DNA for the first time, and in 1967 reported the first successful test tube synthesis of DNA that was demonstrated to be biologically active.

Kornberg called the latest achievement "a milestone" in his laboratory's continuing efforts to understand the complex biochemical basis of DNA replication.

His colleagues on the project are Robert S. Fuller, a Ph.D. candidate in biochemistry and Jon M. Kaguni, a biochemistry postdoctoral fellow. A report of their work was published in the December issue of the *Proceedings of the National Academy of Sciences.*

The beginning of DNA synthesis is a key process in the life of a cell, Kornberg explained, because the point at which chromosome replication gets started is the point of commitment, determining whether or not a cell will double its DNA and therefore, whether or not it will reproduce.

Finding how cells control their growth rate could solve some long-outstanding and fundamental questions, such as how cells become transformed, or cancerous. (Rapid, continuous and uncontrolled growth is a hallmark of cancer.)

Understanding the control of DNA replication initation could also explain why embryonic cells synthesize DNA continually and adult cells remain relatively quiescent, Kornberg said.

But at this stage in the research, it's far too early to speculate about what will be found, Kornberg stressed. "If you ask what we can say about major questions of control of growth and cancer at this time, the answer is very little," he said.

"Not only are we not working with animal cells where these questions have been posed, but comparable questions with regard to simpler bacterial cells have not been broached. We don't anticipate any answers until we know a lot more about the details of the system," Kornberg added.

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 Kornberg and his colleagues carried out their work with bacterial plasmids—small circular pieces of DNA independent of the main bacterial chromosome—that were genetically engineered to include the segment of the main chromosome at which DNA synthesis always begins, the so-called origin.

The researchers grew colonies of *Escherichia coli* cells that harbored the origin-containing plasmid, called pSY317. Then they broke open, or lysed, the cells and collected the resulting fluid that was brimming with cell components. But in this rich cell soup, they found that no DNA synthesis was initiated.

"It may not seem reasonable to think that if you start with something inactive, you can then obtain a fraction from it that is active," said Kornberg, "but that's what was done."

By adding just the right amount of ammonium sulfate, a salt that precipitates proteins, the researchers came up with an active fraction.

The amount of salt added is crucial, explained Kornberg—if just a little more is added, an inactive fraction is obtained. By adding the salt, which precipitates certain proteins and other cell components, ingredients necessary for DNA initiation were concentrated or something was excluded that had inhibited initation in the total extract, Kornberg suggested.

The quest to find an active fraction of the bacterial soup in which DNA synthesis could be initiated was an arduous one. "We sought this system for many years," recalled Kornberg, "without success. Many other laboratories around the world were also working very hard on this problem. However, when we found it, the reaction turned out to be much more clear and powerful than we anticipated.

"Initiation of DNA synthesis is actually a rare event—it happens only once in the lifetime of the cell. We are astonished and pleased by the high level of synthesis we have found."

The first attempts to find a system for studying how DNA synthesis begins were carried out using purified proteins known to be involved in the replication of viral DNA, and involved looking for additional factors that would stimulate replication. Only after these attempts proved fruitless did Kornberg's group attempt to extract active fractions from solutions of disrupted bacteria.

Kornberg cites graduate student Fuller's talent and perseverance as "important ingredients" in the lab's latest accomplishment, one that had proved so elusive over many years of hard work.

"Why it took so long to find this DNA synthesis initation system will be answered, in part, by finding out precisely what's in the system that is exacting and irreplaceable," Kornberg said.

"As we sort out the components of this machine, we will learn which elements were absent or defective in previous preparations as compared to the present one. Probably most of our previous failures came about because we were missing several substances in optimal levels. Now we will analyze very precisley, quantitatively, what substances are required.

"The basic processes of synthesizing DNA chains, transcription of this genetic material into the RNA language, and translation of the genetic code into protein are essentially identical in bacteria, plants, animals and humans," Kornberg said.

"For that reason, we have confidence and optimism that understanding these basic processes in bacteria, where research can be done more precisely and easily, will give reliable insights into how these processes occur in higher levels of organisms.

"That there is a universal use of basic biochemical patterns throughout nature warrants our confidence that regulation of these processes, when understood in one system, will become far easier to understand in all systems.

"It is my conviction that the most important elements in understanding the process of chromosome replication initiation will come through knowing its biochemistry," Kornberg added.

The research was supported in part by grants from the National Institutes of Health and the National Science Foundation and by fellowships from the American Cancer Society and the Damon Runyon—Walter Winchell Cancer Fund.

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Placing the *E. coli* origin on a plasmid (using recombinant DNA techniques) contributed significantly to the recent success, explained Kornberg. The origin-containing plasmid used in these experiments was first constructed in Japan by biochemist Dr. Seiichi Yasuda, who later worked in Kornberg's laboratory during the years of 1978-79.

Inserting the origin sequence in a plasmid was really a strategy to enrich for the origin region, which is otherwise a relatively short portion of the *E. coli* genome, occurring just once per chromosome molecule.

It's probably impossible, said Kornberg, using even the most sophisticated techniques, to extract the entire *E. coli* chromosome intact from an *E. coli* cell; it's an intricately coiled string of approximately four million nucleotide base pairs. But a plasmid is a more manageable molecule a few thousand nucleotides long (approximately one-thousandth the size of a chromosome) and it will remain intact when the bacterial cell is broken open.

If the origin were not embedded in a plasmid, trying to locate the sequence, which is only 245 base pairs long (or 1/16,000 the length of the chromosome) would be like trying to find the "needle" in a "haystack" of fragmented pieces from the cell, Kornberg mused. "By placing the origin on the much shorter plasmid, we enriched for it approximately 400-fold," he remarked. "What's more," he continued, "because a plasmid can replicate independently in the bacterial cell, we can obtain as many as 100 copies of the origin, instead of just one, from each bacterial cell."

The new system behaves much like the DNA replication initiating machinery inside an *E. coli* cell. This gives the researchers confidence that their test tube system is physiologically genuine, that it represents the intiation process as it is actually carried out in living cells. For instance, it is knocked out by the same poisons that are capable of blocking initiation in living bacterial cells, and its activity requires the presence of certain genes and enzymes already known to be required for initiation.

Another expectation of a genuine DNA synthesis initiation system is that it would start replication going in both directions from the point of origin—this is known to be the case in *E. coli*, Kornberg said. By examining with the electron microscope origin-containing plasmids from the test-tube system, the researchers confirmed that replication did proceed bidirectionally. This was an added proof that the system was physiologically relevant, they reported.

The eventual aim of this research, Kornberg said, is to characterize the genes and the proteins involved in carrying out and controlling initiation of DNA synthesis. Most likely, several proteins are required, and in fact, some of these are already known. Others await discovery.

And although the 245-nucleotide base pair origin sequence enables replication to begin on the plasmid, "adjacent sequences may be important for more complex behavior expected of the *E. coli* chromosome," Kornberg and his colleagues suggested. Just how the adjacent sequences play such a modulating role will be a focus of study using the new system, they said.

"Ultimately, the exploitation of this system should allow a direct biochemical approach to the regulation of replication," the researchers said. "The availability of an authentic system for the replication of the *E. coli* chromosomal origin should allow the isolation of those factors as well as the understanding of those processes which control the frequency of origin-initiation and couple the rate of chromosomal duplication to that of the cell as a whole."

Mailed January 4, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

An attractive, slightly overweight teenage girl decides to go on a diet. A familiar scenario so far.

Upon reaching a normal weight, however, she still considers herself fat. She continues denying herself food, to the point of losing up to 30 or 40 percent of her body weight. And yet she can't stop *not* eating.

Food has become the Enemy, her diet an obsession, and the girl a victim of anorexia nervosa.

A psychological disorder which sometimes, though rarely, results in death, anorexia's incidence appears to be on the rise. "Given the tremendous preoccupation with fitness and weight, one would expect it to be," says Dr. W. Stewart Agras, professor of psychiatry at Stanford Medical Center, who answers three or four concerned letters a day from all over the country.

The classic case of anorexia nervosa follows several general patterns, says Agras, though there are exceptions. The typical anorexic tends to have been a high achiever in school—often a perfectionist. Most frequently affected by the disorder are adolescent girls from well-to-do, well-educated families, and the reasons for this are still unknown.

"One could theorize," says Agras, "that weight and appearance are more critical variables in the socialization of young women." Also, studies have shown people (especially women) in upper socio-economic groups to be, in general, thinner than those of other groups.

Many anorexics are sports enthusiasts, though no particular aspirations (such as dancing, acting or modeling) have been definitively linked with development of the disorder. Often, however, being slightly too heavy for the sport she enjoys, the teenager receives pressure to lose weight—pressure from her family, peers, teachers and/or coaches.

The normal conflicts of adolescence also conspire to head certain teenagers towards anorexia, says Agras. Some anorexics fear adulthood responsibilities, and want desperately to control at least one area of their lives. Some are subconsciously rebelling against their parents.

Certainly, says Agras, her family always suffers along with the anorexic. "Besides wasting away, the anorexic disrupts a central family function—mealtimes!"

Parents tend to feel guilty, especially after a series of medical consultations has excluded other possible disorders. Still, says Agras, they often resist treatment of any condition termed a "psychological disorder."

Why would a young woman virtually starve herself? No one knows for sure, though there are several theories about. These cover possible biological, cultural and psychological causes.

Anorexia is a rare disorder, affecting probably no more than one in 10,000, for which some believe certain people are biologically predisposed. But though certain hypothalamic and endocrine abnormalities do occur, the question of whether these are causes or effects of starvation has not been answered. According to Agras, most abnormalities disappear when normal weight is achieved, though conclusive data is still lacking.

"All we can say," he explains, "is that anorexics show all the characteristics of being starved." They always stop menstruating, he adds, often quite early in the disorder. "Other than that, there are no clear biological markers."

Nor are there any clear psychological markers to determine why a particular person is affected, believes Agras, although some disagree with him.

One theory holds, for example, that anorexics are trying to escape from social and sexual pressures of the female role. By thinning down, they may no longer feel threatened by these.

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Other theories point to disturbed and disordered family lives, or maintain that anorexics are manifesting a particular type of neurosis.

While Agras concedes that these all may play a role in the development of the disorder, he emphasizes, "The amount of socialization experience they've lost is probably the major barrier to their future success, and the question is whether they really *can* catch up." He adds, "We don't yet know how to help people regain those lost years."

For the anorexic, weight and body image become overriding concerns. And her body image is often distorted: even when emaciated, she identifies areas of fat. She refuses to resume normal eating, fearing she'd lose control and become very fat.

"Of course that *is* a risk," says Agras. "About ten percent of anorexics do in fact gain large amounts of weight upon recovery."

To lose weight, says Agras, anorexics do anything they can think of. In addition to abstaining from food, they commonly resort to laxatives, amphetamines and excessive exercise.

(In fact, says Agras, some anorexics are first detected when brought in for treatment of injuries—sustained during sports their weak bodies can no longer manage.)

Many anorexics, ironically, enjoy gourmet cooking for others. This is remarkable, says Agras, since they are always hungry themselves. Most reach a stage where they will eat normally—or even binge—but force themselves to vomit afterwards. This syndrome is almost inevitable after a year or two, he says.

Though not affecting one's innate ability, anorexia does reduce scholastic performance. "There's an enormous amount of energy and time that goes into not eating," explains Agras.

"The real problem is the tremendously abnormal social and work lives anorexics lead. Basically they lead lives of chronic invalidism."

Very few anorexics actually die, however, since their weights stabilize after dropping to a certain level. Agras estimates that less than five percent die of starvation and/or medical complications. In fact, many manage barely to survive, even if left untreated.

But if she *is* treated, what's the best method of treatment? The question has sparked much controversy, mainly over behavioral versus psychotherapeutic approaches.

The Eating Disorders Clinic at Stanford is one of several programs across the country which uses behavior modification techniques, says Agras, adding that the clinic deals with obesity and overeating as well as anorexia nervosa.

Psychiatrists Joellen Werne and Barr Taylor currently run the Stanford program, which Agras oversees.

"Here, as at most major medical centers, we see the cases which have failed treatment elsewhere," says Agras. The first priority, he says, is for the patient to gain weight. Until that happens, he explains, it's impossible to begin dealing with psychological problems.

But even before she's admitted, the patient must participate in evaluation sessions with family members and agree to an individually designed, written contract. The contract makes certain privileges contingent upon her gaining small amounts of weight, regularly and steadily during her hospital stay. These privileges may include the opportunity to participate in group meetings on the ward, in physical therapy programs, to watch television, read, and so on.

Obviously, in order for this to work, the patient must recognize her problem and desire help. "I really don't think one can help people who don't want treatment," says Agras, excepting, of course, emergency cases for which medical treatment is vital.

According to Agras, there are three to five anorexic patients staying in the Hospital's two psychiatric wards, at any given time. Since it's a rare disorder, he says, only a few centers of treatment exist nation-wide.

Stanford's inhospital program, which takes an average of ten to twelve weeks, focuses on motivating the patients to eat. "It's very hard work to put on weight," says Agras, explaining that patients must consume up to 4000 or 5000 calories a day before they even begin.

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Patients learn to count mouthfuls of food, instead of calories. That's one way they can monitor food intake and gain confidence in their control of the situation. Having them plot graphs of daily weight changes also helps, says Agras, in the system of informational feedback—a clear variable in the program's success.

Reinforcement—through earned privileges and the encouragement of highly skilled nurses, dieticians and therapists—has also proved effective, says Agras. The staff members, he adds, understand and care for the uniqueness of each individual patient. Their concern is to "provide guidelines and gently set limits without becoming like police of an arbitrary or punitive system."

Another technique used is to serve large rather than small meals, based on the finding that anorexic patients generally eat a certain proportion of whatever amount is served.

Once a patient is approaching normal weight, says Agras, she is asked to lose two or three pounds and then regain them. Again, this is to convince her that she *is* in control—a very important step towards recovery.

Also, once on her way up the scale, the patient participates in family, group, and often individual therapy. Besides helping the patient learn to cope, Agras explains, it's necessary to help her family come to terms with a daughter returning to a normal role in the home.

Upon leaving the Hospital, says Agras, patients are encouraged to continue with therapy on an outpatient basis, either at Stanford or with a local therapist.

Long-term results have shown that about 85 percent of the patients do regain necessary pounds. A little over a third of the patients, however, lose weight again, and often return to the inhospital program. Anorexics go through different phases, explains Agras, during which they feel capable or incapable of making progress.

Agras believes inpatient behavior modification is the best current treatment for anorexia nervosa. It's the only method which has been researched so far, he says, with controlled and consistent evidence that it works. Its success is probably due, he feels, to the precise specification of treatment procedures, which facilitates the establishment of new therapeutic programs.

No one has yet experimentally compared behavior modification and outpatient psychotherapeutic approaches to treatment, says Agras. He does not think psychotherapy is as profitable, since it can take months—or even years.

Also, says Agras, weight is not usually the primary concern of a psychotherapist, though there are exceptions. Differing priorities in treatment, he says, form one basis of the controversies which arise.

Is anorexia nervosa a curable disorder? Agras says that some anorexics do recover totally, and for them food is no longer a problem.

But these are in the minority. Most, even after recovery, will always be sensitive to the issue of weight. They may return to normal activities, says Agras, but most former anorexics will always be a bit underweight and have a tendency to relapse during periods of great stress.

Much data and controlled research in the areas of cause, treatment and re-socialization of anorexics is still lacking, says Agras, and sorely needed. He hopes that all concerned fields, including sociology and psychology, will explore the unchartered territory still necessary to our further understanding of this complex and mysterious disorder.

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Mailed Thursday, February 26, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911
Editors: Pictures available on request if not included. Dr. Linus Pauling's birthday is on February 28.

STANFORD—

Linus Pauling is not a man given to chitchat; he wants to get on with his business, which is "science and the nature of the world."

So as he approached his 80th birthday this week, leaning back in his chair, tugging his black beret down over his nimbus of gray hair, he said a tad wistfully,

"It's interfering a little with my work."

Getting older is not what's interfering, its's all those people interupting him to ask about it, he explains.

When not being the object of an interview, Pauling the two-time Nobel laureate and controversial grand old man of science, was busy directing the Linus Pauling Research Institute of Science and Medicine, writing research papers, lecturing on basic science to a group of clinicians at Stanford and going to parties in his honor.

"I'm busier than ever," Pauling, who from afar looks like a large leprechaun, reports. "Partially because I get hundreds of letters about vitamin C. I try to answer personally all the letters addressed to me. Many are from people with cancer or from their relatives. It's important that they are answered."

He says there are also four or five books he'd like to write.

"The National Science Foundation is hoping I'll write a book on chemical bonds formed by atoms of the transition metals because my ideas here are different from other people's," Pauling, the physical chemist, says.

"And I think more powerful, too," Pauling, the winner of a Nobel Prize for his work on chemical bonds, adds.

"I'd also like to write a book on the molecular basis of life. Back in 1940, I had already developed ideas about this.

"Dr (Ewan) Cameron and I are thinking of writing another book on vitamin C and cancer (the first was published in 1979). I'm also thinking of writing a book on vitamin C and heart disease. Since vitamin C builds up the body, makes people healthier, it can protect us to some extent from all sorts of diseases."

His autobiography?

"I'm always being asked if I won't write my autobiography," says Pauling, who peppers his lectures with enough tantalizing anecdotes to confirm it would be fascinating. "But I have so many other things to do. Hashing over old stuff doesn't interest me as much as making discoveries."

At 80, Pauling transcends the usual description of an active octogenarian as spry. While lecturing, he paces back and forth, clasping his hands behind his back, periodically springing them forward to paint imaginary pictures in the air. In greeting, he thrusts out his hand jauntily. While speaking, he laughs easily, his grin spreading up his pink cheeks to his ears. Always, his mind seems to be racing, thinking, checking that every thought is catalogued and in order.

He seems most tireless in his espousal of the attributes of vitamin C, a subject that has enthralled him since 1966. His advocacy has brought loud howls from some in the medical establishment.

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Pauling is undaunted by the criticism. He's been the target of barbs many times before, he says, "even my theory of resonance." Resonance, a phenomenon having to do with the simultaneous alternatives of how atoms of a compound are bound, is the work of which he says he is most proud. It is a star in his work on the nature of chemical bonds (forces that hold molecules together), which earned him the 1954 Nobel Prize in Chemistry.

In the USSR, his theory came under attack in 1951 because officials thought it conflicted with dialectical materialism principles. But even in the free world, he says, a number of chemists decried it. His theory proved to be right on the mark.

But the attacks on his scientific theories were nothing compared with the attacks on his political stands.

His outspoken anti-war and anti-nuclear testing speeches in the 50s rang out loudly in a country under the hush of McCarthyism.

He was denied a passport in 1951. He was threatened with imprisonment for refusing to cooperate with congressional investigators. He was at least once denied government support on political grounds.

In the very year he won his Nobel Peace Prize, 1962, he and his wife, whom he credits with raising his political and social consciousness, picketed the White House prior to a dinner for Nobel scientists to demand an end to nuclear testing. He protested the Vietnam War before it was politically popular to do so.

Today, he voices alarm about the build up of the defense budget.

"It's real insanity, it seems to me, not to recognize that the existence of nuclear weapons forces the United States and the Soviet Union and the People's Republic of China to get along with one another by peaceful means, to not get involved in war."

One thing not controversial is that Pauling has been a force for over half a century—in the opinion of one writer, with enough "energy, inventiveness, showmanship and genius for a consortium."

His contributions to science are dazzling. He started probing the structure of simple inorganic molecules in the 20s, by the mid-30s he was tackling the molecular structure of the complex molecules of living tissues.

He was among the first to apply the principles of quantum mechanics to the structures of molecules. He introduced into chemistry the concepts of hybrid orbitals (in which electron orbits are moved from their original positions by mutual repulsion), directed valence, electronegativity, and resonance hybrids.

Working with hemoglobin, the major protein of red blood cells, he developed a theory of native, denatured and coagulated proteins. In the 40s Pauling discovered the molecular reason why red blood cells sickle in sickle cell anemia.

In 1940, working with biologist Max Delbruck, he conceived a concept of molecular complementarity in antibody-antigen reactions. He also recognized the importance of hydrogen bonds in macromolecular structures.

He discovered that proteins could be shaped like spiral staircases called alpha helixes. Incidentally and ironically by virtue of his current advocacy of vitamin C, he made this major discovery when he was in bed, felled by the flu. Bored with reading mystery novels, he started folding paper models and discerned the right structure.

He also developed a molecular model for anesthesia, a theory of the atomic nucleus and a theory of memory.

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Now his major interest lies with vitamin C and its affects on health, but Pauling's interests have never been narrow. Last year he published two to three papers each on chemical bonding and on nuclear structure.

His success as a scientist is attributed to his capacity for quick insight into new problems, his ability to recognize interrelationships.

"I have a good memory," he says, "especially for things I'm interested in. And of course, I've been interested in science and the nature of the world. So I have built up and continue to build up a great background of knowledge, largely factual, but also theoretical. When something comes along, I hear something, or read something, that doesn't fit into this picture I have of the world, I start wondering about it, worrying about it, trying to decide whether I need to change the picture, or whether this new report is wrong."

Pauling started building his base of knowledge at Oregon State Agricultural College (now Oregon State University), from which he was graduated in 1922. After earning his Ph.D. from California Institute of Technology in 1925, Pauling went to Europe for two years on a fellowship to work with a number of the physics greats, such as Neils Bohr, Erwin Schrodinger, and William Henry Bragg. By 1927, he was back at Cal Tech, a full professor by 1931. In 1963 he left Cal Tech, and after stops at the University of California at Santa Barbara and at San Diego, he came to Stanford in 1969. In 1973, he started his own institute in Menlo Park (last December it moved to Palo Alto). He is an emeritus professor of Cal Tech and of Stanford.

With his quick mind and his panoply of facts, Pauling has instilled fear in many a scientist that Pauling would beat him to the solution. In *The Double Helix,* James Watson recounts how he and Francis Crick feared that Pauling would figure out the structure of DNA before they did.

For all his showmanship and panache, Pauling confesses to being a shy child.

"In grammar school, I wouldn't represent our school in a spelling contest because I felt so shy. I made an excuse why I couldn't go."

"Only in college did I develop self-confidence and that was because of my scholastic success. I was beginning to be outspoken about my ideas about chemistry. I overcame my reticence. I may have become even sort of brash for a while."

Some would say that Pauling is still being rather brash about his ideas on vitamin C. But Pauling is a total convert. Tucked in a pocket of his blue cardigan sweater pocket are vitamin C pills; he takes 10 grams a day, more when he's sick.

He argues that man is one of the few animals that can't manufacture large quantities of the vitamin. Most animals make very large amounts each day; goats, for instance, make 13 grams a day. And for optimal health, man needs large quantities, he says.

Pauling says that although everything vitamin C does is not yet known, he believes the main way it protects the body from disease is by building up the body's immune, or defense, system.

The jury may still be out on the merits of vitamin C, but the judgment is in on Pauling.

"He has been a pioneer—indeed an activist—not only in the forefront of science, but also in the cause of peace, of health and the alleviation of human suffering," said Nobel laureate Paul J. Flory recently at a Stanford dinner honoring Pauling. "We may not always agree with the causes he espouses, but his dauntless courage, forthrightness and dedication elicits our highest admiration. In this, as in science, he has set an example all of us admire and should emulate in undertaking actions and responsibilities expressing our own convictions."

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Mailed Thursday, February 26, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames (415) 497-6911

STANFORD—

Leah Kaplan, a clinical social worker who has worked at the Cowell Student Health Center since 1964, was recently elected chairwoman of the Board of Stanford's Help Center. She succeeds Bruce Hinchliffe, chairman of the Board from June, 1977 till January, 1981.

Harold K. Boyd, director of the Stanford Medical Fund and associate dean of Student Affairs on campus, was elected vice-chairman.

Kaplan, who currently spends two afternoons a week in the Ombudsman's Office, served as Stanford's assistant dean of Student Affairs from 1974 till 1979. She has supervised M.S. candidates in Counseling and Guidance as well as social workers at the Cowell Center.

Besides working at Stanford, Kaplan, who is married with two children, has served in clinics of San Francisco, San Mateo, Maryland and Connecticut. She has supervised social work students at the University of Calfornia School of Social Welfare. She served on the Board of Directors of the American Civil Liberties Union from 1960 to 1962.

Kaplan has been president of the Stanford Faculty Club since 1980, the same year she won the Lloyd W. Dinkelspiel Award.

She received her B.A. at the University of Minnesota in 1943, and did graduate work at Yale University. She earned her master's degree at Smith College in 1946.

Boyd is a graduate of St. Augustine College, Atlanta University. He received his M.A. in United States history at North Carolina Central University, in 1966.

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STANFORD—

Sally R. Agle has been appointed Stanford University Medical Center's deputy director of medical development, a newly created position, announced director of medical development John Ford.

Her appointment effective March 1, Agle will work closely with the director on all aspects of fund raising for the Medical Center.

An associate director of development for the University since 1977, Agle has directed the major gifts program for the East Bay and Monterey regions and coordinated donor relations activities for the entire program.

Previously, Agle worked in Stanford's Office of the General Secretary and in the Hoover Institution. She has also taught at the Instituto Panameno-Norteamericano in Panama.

Born in the Panama Canal Zone, Agle received her undergraduate education at Goucher College in Baltimore, Maryland.

Agle lives in Menlo Park with her husband.

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Mailed Wednesday, February 25, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Three of six fellowships in the neurosciences, awarded for the first time this year by the Esther and Joseph Klingenstein Fund, Inc. of New York, went to young investigators who have been or are closely associated with the department of neurology of the Stanford University School of Medicine.

The awardees, each of whom will receive $99,000 over the next three years, are Dr. Arnold Kriegstein who will join Stanford as assistant professor of neurology in July; and Drs. Jeffery Noebels and Robert Wong, former trainees of Dr. David Prince in the epilepsy research program of the department of neurology.

"We are delighted because three of these awards have gone to outstanding young investigators associated in some way with Stanford Medical School," said Prince, professor and chairman of the department of neurology.

The Klingenstein Fund established the fellowships this year to support investigators working on problems relevant to epilepsy.

"It is an important source of support," said Prince, "which will facilitate training research efforts in a critical clinical area."

In recent years, he noted, federal funding for biomedical research in epilepsy and other neurological disorders has become significantly reduced.

Kriegstein, who received an M.D. and Ph.D. from New York University, worked there on problems of development of the nervous system in a marine animal. He received subsequent training in neurology at Children's Hospital and the Peter Bent Brigham Hospital in Boston.

He will study the development of nerve cells in immature mammalian cerebral cortex and epileptic discharges in the developing brain during his Klingenstein fellowship at Stanford, according to Prince.

Dr. Wong is currently an assistant professor of physiology at Louisiana State University in New Orleans. Dr. Noebels, who received the Ph.D. in neuroscience at Stanford, was subsequently awarded a William Lenox Fellowship by the American Epilepsy Society. He is now completing his medical training at Yale.

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Mailed Wednesday, February 25, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: Photo available on request if not included.

STANFORD—

When Romulo Romero examines patients at the Gardner Community Health Center in San Jose he brings to the job his skills as a well trained health practitioner and the personal involvement of a longtime community resident.

Romero, a 1979 graduate of the Stanford-Foothill Primary Care Associate Program, is a physician's assistant at the Health Center, which is located in a Spanish-speaking neighborhood of east San Jose.

"One evening a young man came into the clinic, but would not talk to the nurse," Romero recalls. "It was clear that he felt a language barrier and he distrusted physicians. He finally agreed to talk with me, at first very reluctantly, but opened up and talked more freely once he knew I could understand. I found that he was having sexual problems and some psychological difficulties.

"I feel a special responsibility, as a minority health practitioner, to understand this kind of distrust and to help overcome the barriers," Romero explains.

As a physician's assistant (PA), Romero is not unique—the number of non-physician health care pracititioners (such as PA's and nurse practitioners) is steadily increasing in California and nationwide—but as a minority PA working in a medically underserved community, he is helping fill a vast gap in the health care system, according to Virginia Fowkes, director of the Primary Care Associate Program.

Before entering the Program, Romero volunteered in several community health centers in East San Jose, a neighborhood with which he feels close ties. "I became aware of how there was only one hospital for the burgeoning east side, which is primarily a low-income, high-minority area, while there were many hospitals on the west side," he explains. "Getting more health services to minority areas then became my primary concern."

The Primary Care Associate Program, which was established in 1973, is a two-year training course that Stanford runs jointly with a consortium of community colleges around the state, including Foothill College in Los Altos, Hartnell Community College in Salinas, Modesto Junior College, Bakersfield Community College, and College of the Redwoods in Eureka.

The first year is spent in pre-clinical classroom work at one of these colleges. Clinical work carried out during the second year of the Program is coordinated through Stanford University Medical Center and consists of didactic and clinical teaching at Stanford as well as preceptorship training with a physician in the community.

The Community Outreach Project was initiated last year by the Primary Care Associate Program to recruit minority applicants.

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2-2-2 Compensating for the uneven distribution of physicians and other health care professionals is one of the driving forces behind the Project, according to Ron Garcia, Project director. Even though there has been much discussion about a possible surplus of physicians by 1990, there is little evidence to indicate that those physicians will migrate to the underserved areas or alleviate the health care needs of traditionally underserved populations, he says. And the Graduate Medical Education National Advisory Committee (GMENAC), the same group that predicted the physician surplus, has also predicted that by 1990 the number of PA's needed will increase from the present level of 11,000 to 26,000.

"We look for people, who already are committed to health care professions," explains Garcia. But, unlike Romero, many potential applicants only think of the traditional roles in medicine, such as doctor and nurse, neither of which may suit their needs, Garcia adds.

"Often, we have to make people aware of the many opportunities available to midlevel practitioners," he notes. "Although PA's don't practice independently from a physician, they can handle many medical tasks, such as physical exams, taking medical histories, assessment and management of common acute and chronic medical conditions, treatment of wounds, and health education and counseling.

"In many instances, PA's augment a physician's practice because of clinical or cultural experiences acquired prior to the PA program," Garcia says. "Minority PA's may enable a physician to greatly expand his practice. For example, a Spanish-speaking PA may attract an entirely different population of patients," Garcia says.

George Villanueva, minority recruitment officer for the Community Outreach Project, explains that Romero was an ideal applicant. "We are trying to identify candidates in areas of the state that are medically underserved. These areas frequently contain low-income, high-minority populations. We select applicants from these areas who are committed to returning there when they graduate and go into practice."

To date, 85 percent of the program's minority PA graduates are working in state-designated health manpower shortage areas, Garcia points out.

To help train and encourage students in the Outreach PA program, graduate PA's and physicians who work in minority communities come in frequently to talk about the special health care problems found in medically underserved minority populations.

Romero, who is a part-time clinical instructor in the Program, explains why he takes time from an already hectic schedule to remain involved with PA students. "If I am going to fulfill my goal of improving the quality of health care within medically underserved communities, then I have to help find and train others with a similar social commitment," he says.

The Primary Care Associate program welcomes applicants. To obtain application forms or for further information regarding a career as a physician assistant, contact the Primary Care Associate Program at 703 Welch Road, Suite F-1, Palo Alto, California 94304. Applications for the class beginning September 1981 must be received by March 15.

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

VACANCY ANNOUNCEMENT

POSITION: SCIENTIFIC WRITER III

DEPARTMENT: MEDICAL CENTER NEWS BUREAU

DURATION: Permanent, Full Time

SALARY: $1632-2077 per month, depending on experience

We are looking for a writer/editor to prepare, edit, and coordinate production of a weekly news supplement on the activities of a large academic medical center complex and its personnel. The supplement is part of *Campus Report*, a weekly newspaper published for faculty and staff of Stanford University.

We will give preference to someone with previous writing and editorial experience in a medical or health-related academic institution.

While the primary responsibility of this job is the newspaper supplement, additional duties will include a variety of reportorial assignments concerning the Stanford Medical Center, its patient care, teaching and research activities, and its personnel; and lending of editorial skills in preparing informational booklets for prospective students and the public.

Qualifications include college degree in journalism or equivalent, three to five years reportorial experience, knowledge of headline writing, and layout and design. Ability to initiate ideas and to produce accurate copy, to work under deadline pressure; understanding of medical terminology and the workings of a hospital and medical center, and willingness to learn operation of word processor.

APPLICATION PROCESS:

Qualified candidates should submit a detailed resume, including salary requirements, and provide representative samples of published material by March 12, 1981 to:

Don Slaughter
Personnel Department-VAC
Serra and Galvez Streets
Stanford University
Stanford, California 94305

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Branimir I. Sikic has been selected to receive a $60,000 two-year Faculty Development Award by the Pharmaceutical Manufacturers Association Foundation (PMAF) of Washington, D.C..

The Awards are given annually to outstanding clinical pharmacologists who are beginning to develop research programs in the field, according to Thomas Hanrahan, president of the Foundation.

Sikic, 33, is an assistant professor of medicine in oncology and clinical pharmacology. He is studying how human tumor cells become resistant to anticancer drugs such as bleomycin, adriamycin and vinblastine.

"A major defense of tumor cells against these drugs appears to be to exclude them from entering and accumulating within cells," he explains. "The cell membrane may be particularly important since some resistant strains of cells are capable of efficiently pumping out these toxic agents."

Using specimens of cancers that have been removed from patients at surgery, Sikic is testing the tumor cells for sensitivity or resistance to drugs in the laboratory. The resistant tumors are then compared to sensitive tumors with respect to their ability to take up drugs, to metabolically inactivate drugs, and to actively extrude them after entry into the cell.

Sikic is also developing resistant strains from sensitive cells by exposing them to the various drugs and selecting for cells which can survive these treatments. The acquired resistance can then be directly compared to the originally sensitive cell population, he explains.

"A novel aspect of this work is the emphasis on studying cells from spontaneous human tumors," Sikic says. "Previous knowledge in this area was derived from animal tumors and cultured cell lines which may have little relevance to the resistance mechanisms of human tumors in clinical practice."

Sikic received the B.S. degree in 1968 from Georgetown University and the M.D. in 1972 from the University of Chicago Pritzker School of Medicine. Prior to joining the faculty at Stanford Medical School in 1979, he was a medical oncology clinical fellow at Georgetown University Hospital in Washington, D.C..

The PMAF Faculty Development Award program was started in 1966 with the ultimate aim of stimulating teaching, research and training in clinical pharmacology, according to the PMAF. Sikic is one of five Award recipients announced this year by the Foundation.

Previous Stanford faculty clinical pharmacologists who have received the award are Dr. Terence Blaschke, now associate professor of medicine, and Dr. Richard Mamelok, assistant professor of medicine.

—30— L105

Mailed Thursday, February 19, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Ronald A. Castellino has been appointed associate chairman of the department of radiology and director of the division of diagnostic radiology at Stanford University School of Medicine by Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean.

Castellino succeeds in both positions Dr. William Northway who has stepped down to devote more time to teaching and research activities.

An associate professor of radiology since 1974, Castellino has been on the faculty at Stanford Medical School since 1968.

In 1970, Castellino became the chief of diagnostic oncologic radiology, a new section which he organized within the radiology department and the first such subspecialty section at a major medical center. For the past two years, he has directed the computerized tomography (CT) body scanning program at Stanford.

Castellino's research has led to improved techniques for evaluating patients with cancer. His research has focused on developing accurate methods for assessing spread of cancer to lymph nodes throughout the body, using radiographic techniques of lymphography and CT body scanning.

Born in New York City, Castellino grew up in Brazil. He received his M.D. in 1962 from Creighton University School of Medicine in Nebraska. He spent two years as a Peace Corps physician in Brazil from 1963 to 1965, and completed his residency in diagnostic radiology at Stanford in 1968 prior to joining the faculty.

In 1974 Castellino was awarded a Guggenheim fellowship and in 1977 he was a member of the U.S. Cancer Delegation to the People's Republic of China. Since 1973 he has been a member of the executive board of the International Society of Lymphology and an associate editor of the journal *Lymphology*. He is the author of more than 100 scientific papers.

—30— L105

Mailed Thursday, February 19, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos or Laura Hofstadter (415) 497-6911

STANFORD—

Tom Streithorst, an NBC News correspondent who received a heart transplant two years ago, died Thursday morning (Feb. 19) at Stanford University Hospital.

He suffered a cardiac arrest and physicians were unable to resuscitate him, said Dr. John S. Schroeder, associate professor of cardiology.

Streithorst had been admitted to the Hospital Tuesday night after complaining of feeling feverish, according to Schroeder. He had no signs of rejection.

In addition, according to a recent medical check up, his heart function was normal, Schroeder said.

Streithorst, who lived in San Mateo, had gone scuba diving on the north coast during the weekend, Schroeder said.

The exact cause of death has not been determined pending an autopsy.

The 49-year-old correspondent had gone to work full time for NBC since January 1980 and was based in San Francisco. He had chosen to live close to Stanford where he received a new heart in August 1978, because, as he put it, it increased his odds for survival.

"But I am not afraid of death," he told an interviewer earlier this year. "I'm afraid of sickness, of limitations. You have to take risks to be alive."

William J. Small, President of NBC News, issued this statement:

"Tom Streithorst was a great correspondent, a man of tremendous courage and never failing humor.

"His distinguished career for NBC included some of the most dangerous assignments possible in Vietnam, the Middle East and Latin America.

"He always reported with clarity and insight and never complained about danger. His personal courage in the matter of the heart transplant was admired by all who knew him.

"And his eagerness to return to reporting was no surprise to those of us who were his friends. He will be missed."

Streithorst was with NBC for more than 15 years as a foreign correspondent in Latin America, the Middle East and Vietnam. In 1978, he was told that his heart had given out, and a heart transplant was his one chance for survival. He was accepted in the Stanford Medical Center heart transplantation program, and agreed to let his friends and colleagues at NBC cover his story no matter what the outcome.

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He received his new heart at the age of 47, and his story was telecast on NBC's Prime Time Saturday in August 1979, after a yearlong recuperation. (The story of Streithorst's heart transplant was updated and repeated on NBC in May 1980.)

Streithorst returned to active duty with NBC on January 7, 1980, working out of the San Francisco bureau as a domestic correspondent.

A native of New York, Streithorst was born June 4, 1931 and was a 1953 graduate of Princeton University. He received an M.A. in international relations from Johns Hopkins in 1954.

From 1954 to 1956 he taught history at the University of Beirut in Lebanon. He became the Beirut reporter for *Time* magazine from 1956 to 1958.'

Streithorst joined NBC in 1958 as a Middle Eastern correspondent. He covered the landing of the U.S. Marines in Lebanon under the "Eisenhower Doctrine." He left NBC in 1960 to become a correspondent for *Newsweek* in the Middle East.

Streithorst later went to Brussels, where he covered the Common Market for *Newsweek* and the *Washington Post.*

In 1964, Streithorst returned to NBC as a Latin American correspondent. He was first assigned to Rio de Janeiro (1964-1967), then to Mexico City (1969-1972) and later to Buenos Aires (1972-1975). He traveled extensively throughout Latin America.

In 1973, Streithorst received the Maria Moors Cabot Prize awarded by Columbia University for "distinguished journalistic contributions to the advancement of inter-American understanding."

His Latin American assignment was interrupted three times for duty as a correspondent in Vietnam, in 1968, 1971 and 1972. While in Vietnam during 1968, he was forced to return home for a delicate heart operation.

While in Morocco, in November 1975, he collapsed and was sent back to the U.S. for his second open heart surgery. Placed on permanent disability in 1977, Streithorst moved to New Orleans where his condition worsened and he was told that his only chance for survival was a heart transplant.

Streithorst was married to Alicia Lopez, an architect and a citizen of Argentina. He had three children, Thomas, Catherine and John Michael.

Funeral arrangements are pending.

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Mailed Thursday, February 19, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Dr. Roger Warnke, assistant professor of pathology at Stanford University Medical Center, has won the first Benjamin Castleman Award of the Massachusetts General Hospital, announced Ronald F. Dorfman, professor of pathology.

The award was designed to honor an outstanding paper in the field of human pathology, published in English in 1980. The candidates, nominated by members of the International Academy of Pathology, were pathologists or pathologists-in-training who had not yet reached age 40. Papers were to be based on human material, with an emphasis on morphological or anatomical approaches.

Warnke's winning paper, "Immunologic Phenotype in 30 Patients with Diffuse Large Cell Lymphoma," was published as a lead article in the *New England Journal of Medicine* (vol. 303: 293, 1980). A collaborative effort by the departments of pathology and oncology, it was co-authored by Stanford Drs. and technologists R. Miller, T. Grogan, M. Pederson, J. Dilley and R. Levy.

Dr. Sanford I. Roth, secretary of the award committee, informed Dorfman that Warnke's paper had won.

The award, consisting of $1000 and a plaque, will be presented to Warnke at the annual meeting of the United States-Canadian Division of the International Academy of Pathology, March 2, at the Palmer House in Chicago.

Warnke received his M.D. at the Washington University Medical School, St. Louis, Missouri, in 1971. He was appointed to a pathology internship at Stanford in July, 1971, and completed his residency—including a postdoctoral fellowship in surgical pathology—in June, 1974.

Warnke was appointed an assistant professor of pathology in July, 1976.

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Mailed Wednesday, February 18, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

(ADVANCE) FOR P.M. RELEASE THURSDAY, FEBRUARY 12, 1981

STANFORD—

A Stanford University Nobel Laureate Thursday called on fellow academic scientists to resist pressures of "secrecy and gimmickry" sometimes imposed by emerging biotechnology companies.

He also challenged companies now working with university scientists to learn to communicate in a free and open academic manner in order to attract the best scientists and to insure the success of their efforts.

"The explosive developments in genetic engineering have generated confrontations between academia and industry," said Dr. Arthur Kornberg. "Unlike the postwar electronics revolution which originated mostly in industry, the earliest industrial applications of genetic chemistry and immunobiology have come exclusively from academic laboratories.

"Understandably, the scientists that provided the ideas, techniques, and practitioners of genetic chemistry are reluctant to be excluded from its financial rewards by enterpreneurs and venture capitalists."

Kornberg made his remarks in a speech prepared for delivery February 12, at the dedication of the David L. Lawrence Convention Center in Pittsburgh,Pennsylvania.

There are obvious problems, he said, if universities as nonprofit institutions become enterpreneurial and employ their faculties for both academic and commercial performance.

And there are dangers too "if genetic engineering companies appropriate a generation of senior scientists as consultants and junior scientists as employees and seal them off from free exchange of new knowledge."

But the Nobel Laureate noted, "There is no putting this genie in the bottle. For many years we promised applications in genetic chemistry and immunobiology.

"Now when they are within reach we must not circumscribe or blunt them. Solution of difficult social problems that accompany these applications cannot come from summit conferences, nor should we depend on lawyers and government agents.

"I am hopeful that scientists who have been and will remain the major resources of these commercial efforts will have the character and wisdom to preserve academic standards and combat pressures for secrecy and gimmickry.'

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Despite these problems the commercial success of molecular and cellular biology has done two positive things, Kornberg said, "It has created many attractive jobs in an area where opportunities had become scarce.

"Commercial success has also secured a respectability for basic biologic science among our fellow citizens and their governmental representatives, a stature that dominance of the Nobel Prize awards never could achieve."

He added, "What each of us does face and must grapple with is how to shape our scientific lives and cope with a sudden and increasing public awareness and concern with what we do."

Scientists as well as laymen are commonly confused by the distinction between science and technology, Kornberg noted.

He defined science as the acquisition of basic knowledge, and technology as the application of this knowledge to solve a practical problem.

"We recognize that science and technology are interdependent and on occasion inseparable," he said.

"Advances in science depend on technology and have on occasion given science novel directions."

But scientists must always remember that technology is based on a foundation of science, he said. This scientific base is often obscured and ignored when refinements in technology, heaped upon one another,make it seem that the marketed product is more important than the knowledge that fathered it.

Kornberg said: "I believe the responsibility of the scientist is to do the most creative and dedicated research within his or her power, and to report the results honestly, promptly and unstintingly.

"The scientist should also, as a conscientious citizen in a democratic society, participate in the discussions and actions of scientific and social communities.

"It is not the responsibility of the scientist to choose research of clear social or economic value, nor to affect the transfer of research findings to technology.

"The few scientists among us who have the talent to do applied research that bridges the gap between science and technology deserve our applause. But this is a rare talent, as uncommon among great scientists as in the rest."

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Mailed Wednesday, February 11, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

A cluster of changes in a person's life, for better or worse, can make that person more prone to sickness, accidents and even criminality, believes Dr. Gurdon S. Pulford, a pediatrician at the Palo Alto Medical Foundation for Health Care, Research and Education, and clinical professor at Stanford.

He is conducting a study in adolescents to see if the frequency and seriousness of illnesses are correlated with the number and types of changes that have recently occurred in an adolescent's life.

"Change itself is important as a cause of disease," Pulford says. "And good events, such as becoming head of the football team, may be as stressful as bad ones."

Stress resulting from too many and too big changes can be a major factor in causing disease, he says. Stress can upset the hormonal balance and alter the workings of the immune system, making someone more susceptible to disease, he explains.

"This contribution is found in all disease, major as well as minor, physical as well as mental, acute as well as chronic, autoimmune as well as neoplastic.

"Life changes for adolescents reach a peak when they are 18, a time when many develop mononucleosis as freshmen in college. This is a disease caused by a virus they may have been harboring for a long time, but which never caused any symptoms before," he says.

He cites an interesting study into the still unknown causes of juvenile rheumatoid arthritis (JRA). Investigators noticed that children with JRA were more than two and one-half times more likely to have parents who were divorced, separated or dead than were comparable children without the disease. And in over half the cases, the divorce, separation, death or adoption occurred near the time the disease appeared.

Even the blame for the number and severity of injuries that high school football players incur can apparently be pinned on, to a degree, too many changes in the player's family life. Pulford tells of another study in which more than 40 percent of the players who had had a death of a parent or sibling, separation or divorce of parents, or more than one of these troubles, were subsequently injured during play. If these events had occurred as recently as the previous year, the risk of sustaining a major injury was up four-fold.

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"Disease may be considered not just the flu," Pulford says. "It's also an unwanted pregnancy, an accident, a theft. Criminality is a social disease."

During the last year, Pulford has asked adolescents coming into the Palo Alto Medical Clinic (now the Palo Alto Medical Foundation for Health Care, Research and Education) if they would fill out a "life event scale," which has been developed by R. Dean Coddington of the Louisiana State University Medical Center.

The scale is composed of 50 of the good and bad turns in life: the death of a parent, getting your first driver's license, loss of a job by your father or mother, being told you are very attractive by a friend, appearance in juvenile court, getting a summer job, and so on.

The 12- to 20-year-olds were asked how many times in the last year each of the scale's events occurred. The more momentous events on the scale are weighted more heavily. Scores have been compiled for each of the adolescents for categories of changes that are considered desirable, undesirable, personal, environmental, and familial, and then a grand total was computed.

About 1000 adolescents are participating in the study, Pulford says.

During the next year, Pulford will score the number of times and the type of illnesses for which the participants return to the clinic. His hypothesis is the more life event changes in the last year, the greater the number of visits for more serious diseases.

If the life event scale does turn out to be an accurate predictor, Pulford says eventually a doctor may be able to say to his patient: "Hey, you've got 400 points this year, be careful."

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Mailed Wednesday, February 11, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Susan Jenks (415) 497-6911

STANFORD—

Barbara Nichols, the president of the American Nurses Association, will be the first speaker in a distinguished lecture series for nursing, sponsored by the Department of Nursing Services.

Nichols, who is the first black president of the 180,000 member association, will speak on the general topic, "Emerging: Visions of the Future" at a dinner honoring staff IV nurses, Feb. 25, at Rickey's Hyatt House, Palo Alto. The dinner is scheduled to begin at 7:30 P.M.

She will also be at Stanford Hospital all day, Feb. 24, for consultations with administrative groups in the morning, and for open forums with staff in the afternoon.

In addition to her responsibilities as ANA president, Nichols is also director of hospitalwide inservice education at St. Mary's Hospital Medical Center in Madison, Wisconsin. She holds a masters of science degree in behavioral disabilities from the University of Wisconsin, a bachelor of science degree in nursing from Case Western Reserve University and a diploma from the school of nursing at Massachusetts Memorial Hospital.

In 1979, she was awarded an honorary doctor of science degree from the University of Wisconsin-Milwaukee in recognition of her work in health education.

Nichols is currently serving her second consecutive term as ANA president, having been reelected in June of 1980 for another two years.

The next lecturer in the distinguished lecture series will be announced shortly. The Department of Nursing Services plans to hold these lectures every three months during the coming year.

All of the speakers will be national figures, who are leaders in the nursing profession.

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Mailed Wednesday, February 11, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

New members and officers of the Stanford University Hospital Board of Directors were announced at the Board's first 1981 meeting Tuesday, February 10. It was also the first meeting of the Board since the Hospital's governing bylaws were amended, expanding both the membership and the authority of the Board of Directors.

The changed bylaws, which went into effect January 1, 1981, were adopted in October, 1980 by the general members of the Hospital Corporation. (The Hospital is a separate, University-owned subsidiary corporation in which the University trustees are also the general members of the Hospital corporation.)

The new Hospital Board of Directors members are Walter L. Arons, M.D., William E. Ayer, Ph.D., Peter S. Bing, M.D., John A. Collins, M.D., Donald Kennedy, Ph.D., Peter J. Levin, Sc.D., William F. Massy, Ph.D., Geraldine F. Steinberg, and David Jordan Stone.

Previous Board members who will continue to serve are Conrad F. Gullixson, Linda Randall Meier, Dean O. Morton, Frank H. Roberts, and Lawrence G. Crowley, M.D..

A final appointment to the Board will be the new dean of the Medical School when that individual is named.

The officers elected for the next two years are Kennedy, chairman; Roberts, vice chairman; and Morton, secretary-treasurer.

Arons is a physician in private practice in Palo Alto, specializing in endocrinology and internal medicine.

Ayer, a trustee of Stanford University, is the founder and past president of the Palo Alto firm of Applied Technology, Inc., now a division of Itek Corporation. He is also a member of the boards of directors of several local and national corporations.

Bing is president of the University Board of Trustees. He has been a member of the Board of Trustees since 1970, and also serves as director of various charitable organizations..

Collins is the Walter Clifford and Elsa Rooney Chidester professor, and chairman of the department of surgery at Stanford Medical School. He is also chairman of the Faculty Practice Plan.

Crowley is vice president for medical affairs, acting dean of the Medical School, and also president of the Hospital corporation. He has been on the Hospital Board of Directors since 1979.

Gullixson, a Palo Alto attorney, was a member of the Hospital Board of Directors from 1962 to 1968, and from 1970 to the present. He served as president of the Hospital Board of Directors from November 1977 to January 1981.

Kennedy is president of Stanford University, and was previously vice president and provost of the University from July 1979 to August 1980.

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Levin is associate vice president for medical affairs and executive director of Stanford University Hospital and Clinics.

Massy is University vice president for business and finance, and professor of business administration.

Meier has been a member of the Hospital Board of Directors since 1978. She is an active volunteer and is on the boards of directors of several local organizations.

Morton, a member of the Hospital Board since 1978, is an executive vice president of Hewlett-Packard Company.

Roberts is a senior partner with the law firm of Pillsbury, Madison and Sutro in San Francisco, and he is general counsel of Standard Oil Company of California. He has been a member of the Hospital Board of Directors since 1970 and was president of the Board from 1971 to 1977.

Steinberg is principal of Enshallah Developments, a corporation engaged in social planning and housing developments. She served as Santa Clara County supervisor from 1977 to 1980.

Stone is an independent oil operator and has been a member of the Faculty Advisory Board, Charles R. Blyth Fund, of Stanford University since 1979.

The newly-amended bylaws, which define more clearly the relationship of the Hospital to the University, give the Hospital Board full authority and assets and distinct boundaries for responsibility and accountability.

The Board's previous authority and responsibility was limited to medical staff matters and to advising the University president on planning, budgets, rates and Hospital needs.

The new Board members reflect the change in composition of the Board specified in the amended bylaws. These changes increase the membership from nine to 15 and specify that 12 of the directors are elected by the general members of the Hospital corporation. Also, the Board must include two general members of the Hospital corporation and seven other citizens who are not employees of Stanford or the Hospital, of whom three must be Palo Alto residents and a practicing community physician.

In addition, the president of the University, the president of the Hospital (the vice president for medical affairs of the University), the Hospital executive director, the University's vice president for business and finance, the dean of the School of Medicine, and the chairman of the Faculty Practice Plan must be among those elected to serve on the Board. The president of the University will generally be elected as chairperson of the Hospital Board.

The changes mark the first time since the inception of the Hospital that practicing physicians—both community and faculty—will serve on the Board.

The Board meets once every two months, while committees of the Board meet on a monthly basis. These include an audit committee, a finance committee, a planning and development committee, and a joint conference committee of the Hospital Board and the medical staff.

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Mailed Wednesday, February 11, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

One unique feature of the Palo Alto Veterans Administration renal dialysis unit is its emphasis on care of the geriatric patient. This is because the unit's patient population is, on the average, ten years older than that of other dialysis units.

The unit meshes well with other programs acknowledging "the graying of America" at the Palo Alto V.A. Hospital, one of seven in the country selected by the Veterans Administration to develop a geriatric research and education center. "Studies show that by 1990, two-thirds of all vets will be over 65," says Dr. Robert Swenson, chief of the Artificial Kidney Center at the V.A.

First opened in 1974, the dialysis unit, which contains 12 beds, treats about 75 patients each year, with an average age of 55. At the moment, the oldest is 87 and the youngest 21. With sufficient facilities to accommodate all patients who come for care, says Swenson, the unit turns no one away. The only reason to *not* proceed with dialysis treatment, he adds, would be unwillingness on the part of the patient.

Another characteristic which distinguishes the Palo Alto unit from all others in Northern California, is that half its patients learn to dialyze at home.

"We do encourage but don't insist that patients dialyze at home," says Swenson. "If they know what's happening, they will understand the limitations of the machinery, the limitations of the therapy, and also the virtues and benefits."

One major virtue of dialyzing at home is that costs are kept down—somewhat. Developed as a lifesaver in the mid 1960's, dialysis—which removes small molecules from the blood by simple diffusion—now costs at least $25,000 a year. Patients can save whoever's paying $10,000, by dialyzing at home with the help of a relative instead of a hospital's trained personnel.

At present, 75,000 patients in the U.S. are undergoing dialysis, to the tune of $1.3 billion a year. Under the End Stage Renal Disease Program of 1972, Medicare covers 80 percent of the cost. As the cost of dialysis rises linearly in the U.S., the taxpayers' burden will grow steadily harder to bear, already a cause for concern to many government administrators. For patients who are veterans, however, the V.A. pays the total cost.

Kidney transplants are also expensive, costing about $25,000 each. "We consider kidney transplantation and hemodialysis to be equally efficacious," says Swenson. "But we insist that our transplantation candidates be comfortable with dialysis before the operation, in case the kidney is rejected. With cadaver kidneys, only 50 percent take," he explains.

Diseases which generally result in the need for dialysis are glomerular nephritis in the young, and polycystic kidney disease, kidney disease secondary to hypertension, and atherosclerosis in older people.

Patients initially dialyze twice a week, later increasing to three times as their disease progresses. The process generally takes about three and a half hours each time. (The larger and heavier the person, the longer it takes him to dialyze.)

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A person on dialysis is chronically anemic, his red blood cells at a low ebb. His diseased kidney has stopped making the hormone erythropoetin, which stimulates the bone marrow's production of the cells, and the dialysis machine cannot replace the hormone's action.

As a result, intensity of activity is limited for the patient: he probably couldn't climb a mountain because of low red blood cell level, says Swenson, though some hemodialysis patients do participate in jogging programs.

Uncontrolled hypertension can also limit the patient's physical activity. And for older patients, says Swenson, there are accompanying problems such as atherosclerosis and diseases of old age to contend with.

Diet restrictions are relatively minor, says Swenson, but dialysis patients must limit their fluid and potassium intake, and avoid binge-eating.

Since no portable dialysis units now exist, there are also certain travel restrictions. But patients are free to visit other dialysis centers, located across the country. "We try to break through the patient's idea that he's frozen in this place," says Swenson, adding that the ultimate dependency on machine, doctor and mate often leads to psychological frustrations for the dialysis patient.

The V.A. Medical Center has pioneered the use of high efficiency dialyzers which cut down on the time of dialysis, and computers to monitor chemicals in the blood, making sure the dialysis is sufficient. The V.A. has trained 15 to 20 of all practicing nephrologists in Northern California.

Regularly exchanging patients, staff and faculty with Stanford's dialysis unit, the V.A. unit is a training ground for dialysis technicians (every unit in Northern California has a technician trained at the V.A.), and a clinical testing ground for newer forms of therapy.

One of these, called "continuous ambulatory peritoneal dialysis," involves placing liquid in the peritoneal cavity and allowing diffusion to occur continuously. While it requires neither machine nor helper, this process causes possible infections and is not very efficient, says Swenson, who is pessimistic about its long-term effects.

But research goes on, in a never-ending effort to combat kidney disease.

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Mailed Wednesday, February 11, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: ADVANCE FOR RELEASE THURSDAY, FEBRUARY 12, 1981.

STANFORD—

Salads and raw vegetables are dangerous foods for certain hospitalized cancer patients to eat, according to a report in the February 12 issue of the *New England Journal of Medicine.*

Many bacteria lurk on fresh salad vegetables, even after washing, and these are known to include types of bacteria that frequently cause life-threatening illness and death in certain types of cancer patients, says the report by Dr. Jack S. Remington, professor of medicine at Stanford University School of Medicine and Dr. Stephen Schimpff, professor of medicine at the University of Maryland School of Medicine.

The problem is most serious for those cancer patients receiving radiation or drug treatment that helps control the cancer but at the same time drastically reduces their white blood cell count. Since the white blood cells are a vital component in the body's defense against bacteria, these patients become extremely vulnerable to bacterial infections while receiving cancer therapy, the doctors explain.

The patient's weakened defenses are unable to prevent food-borne bacteria from invading, and once they colonize the digestive tract, the bacteria may proliferate and spread, causing serious or fatal infection throughout the body.

Most physicians are very fastidious about keeping susceptible hospitalized cancer patients away from sources of airborne bacteria, Remington and Schimpff note, with the use of isolation rooms and through administration of antibiotic drugs.

But ironically, these antibiotics may actually foster, rather than hamper, infections from some of the bacteria commonly found on fresh produce.

Harmless bacteria normally live in peoples' intestines, the doctors explain, and these "friendly" denizens actually do their human hosts a favor by producing noxious substances that discourage virulent bacteria from surviving in the gut.

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However, antibiotics kill a large number of the "friendly" bacteria, thereby permitting antibiotic-resistant strains of the harmful ones to take hold.

About 50 percent of hospitalized cancer patients die from an infection rather than from their cancer, Remington notes.

And "nearly 50 percent of infections in cancer patients have been shown to be caused by hospital-acquired organisms which have colonized the patients' digestive tract," state Remington and Schimpff.

"There appears to be insufficient appreciation of the potential role of food as a major origin of these organisms," state the two researchers, both experts in the area of infectious diseases in cancer patients.

Remington is chief of the division of allergy, immunology and infectious diseases at the Palo Alto Medical Research Foundation, and Schimpff is head of the section of infection research at the Baltimore Cancer Research Program (National Cancer Institute), University of Maryland.

Several independent studies have found that salad ingredients, more than any other foods tested in hospital kitchens, harbor harmful bacteria, the doctors note.

"Physicians must recognize this problem now and deal with it . . . by eliminating salads from the diets of certain high risk patients," they declare.

"The hesitation to limit or prohibit feeding salads to patients stems, in some instances, from lack of prospective controlled studies which doctors feel should be performed before such a practice can be recommended or accepted," the two physicians note.

"But shall we really feed harmful bacteria to these high-risk patients to answer such a question, as is being done now with salads?

"We doubt that prospective, randomized trials are indicated to prove that food, especially salads, serve as a major source of new pathogenic bacteria," they conclude.

—30— L100

Mailed Tuesday, February 10, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Stanford University is applying to the National Cancer Institute (NCI) for grant assistance to help in construction of a two-story 25,000 square-foot radiobiology research building to be located on Governor's Avenue west of the Medical Center.

Total cost of the new building is estimated at $8.8 million. Federal assistance sought is $2.7 million, while $6.1 million must be found from private gifts.

The application was approved by the University's Board of Trustees on Monday, February 9.

The new facility would be the second building in the Governor's Avenue complex, an eight-acre site set aside by the University in 1973 for a cluster of research buildings. (The Louis B. Mayer Cancer Biology Research Laboratory, the first research facility to be constructed on the site, was dedicated in 1975.)

The new facility will accommodate a variety of research programs all directly related to cancer, according to Dr. Robert Kallmam, director of the radiobiology research division.

They include basic studies on radiation and drug effects in tumors, combined radiotherapy and chemotherapy techniques in cancer treatment, development of radiosensitizers (chemicals that enhance the effects of radiation in cancer treatment), studies of cellular capabilities in repairing damaged genetic material (DNA), and research on hyperthermia (the use of heat in treating certain types of tumors).

In addition to laboratory and office space, the new building also will house a major specific-pathogen-free mouse facility and a special biohazard virus laboratory constructed according to stringent federal safety standards.

The new construction should help alleviate the problems of severely limited and fragmented space the radiobiology program has faced in recent years, Kallman noted.

The present target date for beginning construction is early 1984, with occupancy targeted for late summer of 1985, Kallman said.

Communications with appropriate agencies are under way, and the University has prepared an environmental assessment statement.

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Mailed Tuesday, February 10, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Dr. Maria I. New, chairwoman of the Department of Pediatrics at Cornell University Medical College in New York City and Pediatrician-in-Chief at the New York Hospital, will deliver the eighth annual Katharine D. McCormick Distinguished Lecture on Thursday, February 12.

Her lecture, "An Update of Congenital Adrenal Hyperplasia," will begin at 5 P.M. in Fairchild Auditorium at the Medical School.

Congenital adrenal hyperplasia, a group of inherited diseases, results when any one of a number of enzymes needed to make the adrenal steroid hormones is defective. Because of such a deficiency, the adrenal secretes sex steroid hormones instead of its usual complement of corticosteroids, causing the genitals of both boy and girl infants to develop abnormally.

Studying for over a decade how the adrenal gland functions in both normal and diseased states, Dr. New is an accomplished laboratory researcher and pediatrics clinical investigator.

She has brought about a new understanding of the adrenogenital syndrome. This group of disorders results from excessive or abnormal patterns of secretion of the adrenal steroid hormones, possibly as a result of an adrenal tumor. In the clinic the syndrome most often is seen in women who develop characteristics typical of the normal male, such as a tendency to baldness, a receeding hairline, and growth of a beard.

She also discovered, in pioneering studies, a new metabolic defect responsible for hypertension in children and was instrumental in alerting pediatricians to the problem. She has been active in educating physicians and the general public about new findings in diabetes, metabolic disorders and kidney disease.

The McCormick Lectureship honors Katharine Dexter McCormick, who donated $5 million to Stanford Medical School in 1969 with the expressed wish that it be used "for the encouragement and assistance of women pursuing the study of medicine, in teaching medicine and in engaging in medical research."

Katharine McCormick was a co-founder of the League of Women Voters and a vigorous champion of women's rights.

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Mailed Thursday, February 5, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Stanford University Hospital is working on a possible solution to a knotty problem concerning patients who are Jehovah's Witnesses.

The problem is how to avoid giving Jehovah's Witnesses unwanted blood transfusions, and at the same time prevent malpractice suits that may result when doctors comply with the wishes of such patients.

Stanford Hospital has an average of three to four Jehovah's Witnesses as patients each year.

One man working on a constructive answer to the problem is San Jose attorney William Hardy, representative of the Watchtower Bible and Tract Society (the Witnesses' legal organization).

Working with Carole Price, assistant director of the Hospital, Hardy has proposed what might be a mutually beneficial solution to an often complex situation.

Hardy explains that Jehovah's Witnesses' refusal to receive transfusions is based on religious beliefs, with scriptural roots. Alternatives to transfusions are acceptable to the Witnesses, but they do not always work.

And the Witnesses feel compelled to live by their principles, says Hardy. "Jehovah's Witnesses believe that God will reward them for being steadfast in their beliefs."

His proposal has the purposes, says Hardy, of building better relationships among hospitals, doctors and Jehovah's Witnesses, and of avoiding court battles which are productive to no one.

In return for *not* performing unwanted transfusions, hospitalized Witnesses and/or their relatives would sign a release to relieve the Hospital of legal responsibility. This would enable adults, explains Hardy, to exercise their right to refuse any medical procedure.

Already provided to many doctors, lawyers and hospitals is a booklet explaining the Witnesses' beliefs. Individuals submit documents to their personal physicians and carry statements in their wallets—signed in the presence of two witnesses—to the effect that they do not wish to receive blood transfusions.

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2-2-2 In addition to the release forms, says Hardy, the Society would provide counselors whom the Hospital could call on in emergencies. The counselors would be instrumental in protecting physicians, by "hearing and seeing what the patient wants," says Hardy.

Hardy recognizes that in cases dealing with children, parents' decisions can be superceded by court rulings, but he hopes that physicians would at least honor families' wishes by avoiding transfusions if at all possible.

Having handled court cases on this conflict for over 20 years, Hardy feels that the ready supply of available blood often makes doctors too hasty in performing transfusions. "During surgery, a good, skilled physician can often prevent the loss of blood in many ways," he says.

The plan Hardy advocates is an attempt to iron out problems on both sides, he says, and to encourage treatment of the *whole* patient—including emotions and religious beliefs.

Hardy says that many well-known hospitals on the east coast have already agreed to the program. He approached Stanford—along with a few other hospitals in the area—because of the cooperative attitude he's found here in the past. Hardy hopes that if Stanford adopts the proposal, other hospitals may follow the lead.

Price has already broached the subject informally with a few physicians, she says, who have indicated an interest in further information. She intends to distribute written material to staff physicians and to actively solicit their views.

Price has identified certain difficult issues in the plan, which require further discussion. For example, what if the patient is unconscious, and his wallet-sized card was signed over two years ago—should it still be valid? There might also be difficulties in cases where the spouse of the patient is not a Jehovah's Witness.

Moreover, the range of possibilities is such that general rules are hard to make, says Price. She emphasizes that what's really important is to fully apprise patients of the risks of the procedure if blood and blood products are not going to be used, in order that they can make well-informed decisions.

One of the benefits Price sees in Hardy's proposal is the fact that physicians would be educated in advance about the Witnesses' beliefs, and vice versa.

Certainly, an advantage of the program, Price adds, would be to identify for the Witnesses those physicians who are willing to cooperate with their wishes.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD

Dr. William C. Dement, professor of psychiatry and behavioral sciences and director of the Sleep Disorders Center at Stanford University School of Medicine, has received the 1981 Intra-Science Research Foundation Medalist Award for his research in the areas of sleep and sleep disorders.

Dement accepted the award jointly with Dr. Michel Jouvet of the Universite Claude-Bernard (Lyon, France) during the Intra-Science Research Foundation's 14th annual symposium, held February 3-6 in Santa Monica, California.

Dement is widely recognized as an authority in the areas of basic and clinical sleep research. In addition to his contributions to the understanding of sleep apnea, narcolepsy and insomnia, he has been an outspoken proponent of increased scientific research on sleep and its disorders, and he has promoted recognition of sleep disorders as a field of clinical medicine.

Dement is the founder and first president of the Association of Sleep Disorders Centers, editor-in-chief of the journal *Sleep*, and he is chairman of the Joint Coordinating Council of Project Sleep, the U.S. Public Health Service's program on insomnia and sleep disorders.

The Intra-Science Research Foundation of Los Angeles is a nonprofit organization that supports education and research in the health sciences. Each year the Foundation sponsors a symposium in a selected area of biomedical research, and honors outstanding researchers in the field with the Foundation's Medalist Award. Dement's award represents the first such honor to be given to a sleep researcher.

A previous Stanford University Intra-Science Medalist Award winner is Dr. Carl Djerassi, professor of chemistry, who received the award in 1969.

The Foundation's 1981 symposium, "New Perspectives in Sleep Research," is being held February 3-6 at the Miramar Sheraton Hotel in Santa Monica.

Sessions include such topics as the pharmacology of sleep control, sleep in old age, dream psychophysiology, and biological rhythms.

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Mailed Tuesday, February 3, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos or Bobbi Navickis (415) 497-6911

STANFORD—

It's often painful for a child, or even an adult, to be physically different. Tall or short, fat or skinny, people will have some derisive remark to make.

Like other physical aspects, height is primarily a product of heredity. If you are short, your ancestors were probably short too. Occasionally a chronic disease can be responsible for decreased growth. Or sometimes people are small because they lack growth hormone.

There are about 1.8 million very short children in the U.S. below the third percentile in predicted height. About one percent, or 18,000, of these children are deficient in growth hormone.

Doctors can supply that growth hormone to children who are deficient to help them reach normal height. But how many of these children are treatable by the hormone or how it works are still matters of scientific debate.

For example, researchers at Emory University in Atlanta recently found that even children with seemingly normal levels of growth hormone yet nevertheless short (perhaps 40 percent of the short children) could also be made to grow when given growth hormone.

The problem with determining precisely which children growth hormone can help has been its short supply. The hormone has been extracted from the pituitaries of human donor-cadavers. Its supply has been strictly regulated and available from the National Pituitary Agency (NPA).

Its supply has been so scarce that growth hormone was only given until a patient reached a height of five feet. That was all the NPA would provide.

Growth hormone acts primarily on bone, cartilage and muscle although it also affects other organs such as the kidneys, liver, and intestines. To treat one child for one year, 50 pituitaries from cadavers are needed, with an average treatment lasting 5 to 10 years.

That is why the manufacture of large amounts of working growth hormone made by genetically-engineered bacteria has been greeted with great excitement by the medical community. For the first time all the potential benefits of treatment as well as other uses will be studied in detail.

The South San Francisco firm Genentech, Inc., one of the leaders in the biotechnology industry, has manufactured the hormone, and the first in a series of clinical tests to determine its effectiveness and safety have begun in the division of pediatric endocrinology of the Stanford University School of Medicine.

Drs. Raymond L. Hintz, Ronald Rosenfeld, Daryl M. Wilson and Ann Bennett are conducting the three-week trial in 10 adult, normal volunteers to meet the U.S. Food and Drug Administration's first requirement in any clinical test—that the drug be shown to be safe.

If no complications are detected in this trial, the FDA is expected to okay tests at Stanford and 11 other medical centers in the U.S. to determine whether children with insufficient growth hormone of their own will grow when injected with the laboratory-produced hormone.

The trial with children could begin within a month of the completion of the adult test, according to Hintz.

Of the 10 volunteers in the adult study, five will receive daily injections for a week of natural growth hormone, while the other five will be injected with Genentech's engineered growth hormone. After a one-week rest, the two groups of volunteers will exchange treatments.

Volunteers will receive physical exams, including tests to check the functioning of their hearts and livers, as well as tests to see if the engineered hormone can produce metabolic effects identical to those that result from natural growth hormone.

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Although adults can't grow anymore because their long bones have become totally calcified, they do respond to growth hormone with changes in the blood levels of glucose, insulin, and of the hormone somatomedin, a substance which mediates some of the many actions of growth hormone, according to the researchers.

If FDA approval is granted, the tests in at least 20 children deficient in growth hormone will last a year. This will be the first treatment of growth hormone, natural or manufactured, for these children.

In California, the centers involved in this facet of the study will be Stanford, the University of California at San Francisco, and the University of California at Los Angeles.

Abroad, studies have already been approved by the United Kindgom Department of Health for a clinical trial at the Great Ormond Street Hospital of Sick Children in London. A year-long test of Genentech's growth hormone will begin in February. Ten of the children will be receiving their first treatment of any type of hormone. The other 10 have already been receiving growth hormone extracted from human cadaver pituitaries.

If the trials proceed as scheduled, what can be expected? The scientists are cautious in making premature claims. But this much is known from past experience in treating children with natural growth hormone.

Growth hormone will not make every short person tall. At the present state of knowledge, there is no hormone which is going to make someone bigger than his own genes dictate.

Patients must be carefully selected. A child who comes to the clinic must be determined to be free from other disease. Only after ruling out disease and heredity, treatment with growth hormone can begin.

Growth usually follows after treatment, but not everyone responds. Some children begin to grow after the dosage is increased, while about 10 percent develop antibodies and no longer react to treatment.

Treatment must begin early. A child is more receptive to the hormone at a young age. The chances of response begin to diminish after age 10.

There are some complications. Once a child has started growth hormone therapy, two psychological problems may be encountered, according to the pediatricians. First is the so-called King Kong complex in which the child who has always been small begins to grow and becomes very aggressive.

The second involves the child's inability to change his body image—he sees himself as a small, sweet child. When he becomes the same size as his friends, he loses his uniqueness.

Parents most often suffer from inflated expectations and hope the first injection of the hormone will make their child normal size. Although there is an initial growth spurt, it usually takes months to approach normal, and it can take years if therapy is started late.

While treatment results with the manufactured growth hormone will not be known for some time, researchers are already thinking of other clinical applications. At a recvnt FDA symposium these were suggested: Treatment of short stature accompanying Turner's syndrome, a disorder of sexual development affecting 1 in 2,500 females born in the United States; treatment of the arthritic and short stature effects of juvenile rheumatoid arthritis; enhanced healing of wounds, cartilage damage and fractures; and treatment of burns, stress ulcers, and osteoporosis.

And this is only the beginning.

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Mailed Monday, February 2, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Notes to editors: Following is background material for heart-lung transplant.

The 1972 discovery of the drug cyclosporin A set the stage for this new attempt to successfully replace at the same time both heart and lungs. Cyclosporin A circumvents two previously formidable obstacles in heart-lung transplants: the slow and imperfect healing of the windpipe and life-threatening infections.

Dr. Bruce A. Reitz, assistant professor of cardiovascular surgery at Stanford Medical School and head of the transplant team, estimates that the Stanford team may do three to four of these operations each year, considerably fewer than the 20 heart transplants it did last year. Not only do fewer people need a combined heart-lung transplant, but suitable donors are also harder to find, Reitz says.

As is true with heart transplant candidates, only persons judged to be dying and unable to be helped by any less drastic treatment will be considered for the operation.

For some patients with heart disease, replacing only the heart is not good enough. Their lungs have been irreparably damaged due to the high blood pressure resulting from a poorly-pumping heart. Patients with damaged lungs, resulting from either a failing heart or widespread disease in the lungs themselves, are a poor risk for a heart transplant. The damaged lungs resist the "new" heart's efforts to pump blood into them, straining the heart. The only recourse is to replace both the heart and the lungs.

Likewise, some patients who initially have just lung disease, such as pulmonary hypertension, or pulmonary or cystic fibrosis, end up with a damaged heart that needs to be replaced as well.

Although the success rate for heart transplants has improved in recent years (70 percent of the transplant patients now survive the first year), the replacement of lungs has met with failure. According to Reitz, in the 38 attempts up to 1977, only two patients lived longer than three months after surgery, and none survived longer than ten months.

The three previous combined heart-lung transplants, performed between 1968 and 1971, fared even worse: the patients survived only 14 hours, and 8 and 23 days.

One of the reasons success is yet to come in transplanting lungs is that the windpipe, or trachael tube, fails to heal completely, resulting in infection, air leakage or bleeding. The windpipe is slow and difficult to mend for a number of reasons, a major one being its scanty blood supply, which hinders healing.

Corticosteroids, until now the standard drugs given to prevent the body from rejecting the "foreign" lungs and an essential ingredient in the high success rate of heart transplants in recent years, slow down and antagonize the healing process even more. Cyclosporin A is such a find because it enables the surgeons to replace or decrease the dose of coricosteroids, and doesn't itself interfere with the windpipe's healing.

Cyclosporin A, a metabolite of the fungus Trichoderma polysporum, is composed of 11 amino acids hooked together to form a ring. It was discovered by Sandoz Pharmaceuticals of Basel, Switzerland. Sandoz has made the drug available for clinical trials to transplant surgeons in Britain, France, Canada and the United States during the last three years, and it has been used in kidney, liver, pancreas and heart transplants.

Exactly how cyclosporin A works is unknown, but it appears to inhibit the action of those cells of the body's defense system responsible for rejecting foreign tissue, the so-called T cells.

Reitz and Drs. Nelson A. Burton and John L. Pennock lay the groundwork for the operation working with monkeys. In tests during the past several years, they reinvestigated the possibility of heart-lung transplants with their new drug in hand. Results were encouraging. Three of seven monkeys receiving "new" hearts and lungs and being treated with cyclosporin A survived more than 140 days after surgery. Two are still living, 14 and 15 months after the operation.

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Reitz says a major problem will be finding suitable donors. Donors will have to have both normal heart and lungs, and must be compatible with the blood type of the recipient.

Reitz anticipates that some donor lungs will be disqualified because they are infected.

Infection is the bugbear of transplant patients. The drug therapy, which suppresses the body's immune system, thus preventing rejection of the transplanted organ, also permits infections to gain a toehold. Infection has caused a third of all deaths in heart transplant patients, and the most common site has been the cells of the lungs. Another critical advantage of cyclosporin A is that it doesn't interfere with the immune system responsible for battling bacteria, while it inhibits those responsible for rejecting transplanted organs.

The choice of donors will be limited to those near Stanford Medical Center, because a method hasn't been worked out by which a heart and lung combination can be transported for any distance outside the donor's body, Reitz says. Since 1977 the number of potential donors for heart transplants has been greatly increased by a method to protect the heart in sterile bags and place it on ice after removing it from the donor and flushing it with a cold salt solution. Cooled hearts have been flown to Stanford in a chartered jet from up to 450 miles away.

Although, conceptually, replacing both the heart and the lungs (essentially the entire contents of the thoracic cavity) seems a mighty job, its actual execution is elegant, involving relatively few cuts and reconnections, once the overlying membranes are cut away.

Four surgeons work an average of four hours. Tubes are inserted into a major artery and two major veins just before they enter the heart so that the patient can be put on a heart-lung machine that will keep the blood flowing to all the other parts of the body. After the blood has been successfully detoured through the heart-lung machine with the help of clamps downstream on the artery and vein, the heart and lungs are removed with only three cuts; the ascending aorta (the major artery), right upper chamber of the heart and the windpipe, or trachae, are severed. The new heart and lungs are then put in, the three areas reconnected, and the blood diverted back through the new heart.

If the operation seems relatively simple, the balancing act performed after the operation does not. The body's immune system must be suppressed enough that it cannot mount an offensive against the new thoracic tenants, but yet not so suppressed that it cannot fight off the least infection.

The new organs must be monitored regularly to see if they are under seige, and if they are, the dose of immunosuppressive drugs increased to avert a rejection.

A technique was developed several years ago to sample directly a small piece of the heart for early signs of rejection that can't be detected by more conventional methods. A thin, flexible wire with a clipper at the end is inserted in the patient's jugular vein and threaded down into the transplanted heart to obtain a small sample of tissue. This ability to directly assess the heart transplant accounts for a goodly part of the increased success rate in recent years.

This technique has not proved useful for lung transplants, Reitz says, and so it is hard to detect the first signs of rejection when only lungs are transplanted. In the combined heart and lung transplants, evidence of rejection of the heart means also rejection of the lungs, and therapy can be begun before the situation is out of control.

Although cyclosporin A is the best drug yet found for heart-lung transplants, it is not without its undesirable side effects. Most serious is the potential development of malignant lymphoma, a form of cancer that has been previously associated with immunosuppression. Three kidney transplant patients in recent clinical trials of cyclosporin A conducted at Cambridge University in England developed lymphomas in the first year. The research team in England has since lowered its dosage of cyclosporin and no new lymphomas have been detected.

Other side effects of the drug include mild cases of hair growth on the face and limbs, tremors, and toxicity to the kidney.

Cyclosporin A is still an experimental drug on which all the evidence is not in. Yet no drug now available to a transplant patient, who must take drugs the rest of his life, are without undesirable side effects. Cyclosporin A may give a patient with failing heart and lungs, who otherwise faces a sure and near death, the possibility of a successful transplant, Reitz says.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

City Desks: This is the last of two articles concerning the biotechnology industry and its growing relationships to academe.

FOR IMMEDIATE RELEASE

STANFORD—

Five years ago genetic engineering research faced an uncertain future because some people feared it would create microbial monsters that might escape the laboratories and decimate the population.

The genetic engineering problem today is no longer some unimaginable disease threatening to kill people off.

The problem now is its commercial success, and the accompanying stresses and strains it has imposed on the universities that gave birth to the new technology.

"The vascillations and soul-searchings at Harvard and Stanford have had wide press coverage in recent months," observes Arthur Kornberg, a Nobel Prize winning biochemist and one of the patriarchs of the DNA field.

"But there is no putting this genie in the bottle. For years we promised applications of genetic chemistry and immunobiology. Now when they are within reach we must not circumscribe them or blunt them.

"What each of us does face and must grapple with is how to shape our scientific lives and cope with the sudden and increasing public awareness and concern with what we do."

The relationships of Stanford University biomedical scientists to the biotechnology companies now emerging in the San Francisco Bay Area are a topic of study by a committee appointed recently by Vice President for Medical Affairs and Dean of the School of Medicine Lawrence G. Crowley.

Headed by Eric M. Shooter, chairman of the Department of Neurobiology, the committee has been directed to examine these relationships in the light of the University's consulting policy, and to determine their potential impact on the School's academic programs.

Consulting has been encouraged at Stanford and other institutions not only because it results in a two-way transfer of knowledge between scientists and industry, but it is also an indirect form of subsidy to the university, particularly since many professors' market value on the outside is often greater than what academe can afford to pay them.

Under this policy, a professor may consult up to 52 days per year, which most agree is generous. The consulting policy recognizes that when faculty members hold officerships and consultantships with private firms there may be conflicts of interest.

Stanford has not found it necessary to develop rules of conduct regarding conflicts of interest, except for government-sponsored research which mentions that potential or actual conflicts of interest should be disclosed. An example would be when a professor undertakes a government-sponsored project while working on similar research with a private firm.

Disclosure, however, of such matters is now voluntary and some believe it may not be adequate under the pressures in which some faculty working with industry may find themselves.

"I rather doubt," says Crowley, "that with the profit motive so strong and the stakes so high that we can leave everything up to the individual—that everyone in the School will have the character and wisdom needed to preserve academic standards and to combat pressures.

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"If we don't have wise policies, the motivation for a considerable amount of research in academia could be shifted significantly away from the search for new discoveries towards applications and commercial success.

"And this movement could sweep our graduate students and postdoctoral fellows as well."

Henry S. Kaplan, an astute and tough-minded professor of radiology who pioneered new cancer treatments, thinks the root problem is that some professors are given equity in the new biotechnology companies.

"This is a new ingredient in the picture," Kaplan says, "and it's not trivial.

"There might be subtle pressures on such faculty members with respect to secrecy in their research which under normal circumstances would have been treated as open.

"We may have situations in which faculty within the same or different departments ceased to communicate effectively with each other because now their proprietary interests relate to different companies.

"One could imagine perhaps graduate students or post-doctoral fellows who do research for professors with company connections, finding themselves under pressure to do work of direct benefit to the professor's company."

Kaplan says the normal consulting arrangements sanctioned by the University had some tradition about them.

"They were not very much abused," he says. "The new situations now offer the possibility for abuses that could be quite serious."

Not everyone, however, is in agreement with Kaplan's view.

Hugh McDevitt, a professor of medical microbiology and medicine, asks, "What's so different about a chemist who consults for Monsanto and gets paid a yearly consulting fee? Does this bend his loyalties any more than the guy who gets paid in stock?"

Kaplan's counter argument is that company stock may involve large amounts of money.

"If this money is going to the individual rather than his research program" Kaplan says, "it will certainly change the scientist's public image.

"Professors would be viewed as businessmen."

Kaplan adds the alternative of royalty income turned over to the research fund under the University's patent policy would be viewed differently.

"The public wouldn't object to industry's paying royalties to universities for faculty inventions if the income was used to support research and education."

Stanley N. Cohen, professor and chairman of the Department of Genetics, as well as other faculty members interviewed for this report view the conflict issue less alarmingly.

"I agree," says Cohen, "that the university has the obligation to set guidelines on these matters, and it has. But the real issue is whether or not affiliations of faculty with industry influence academic missions and directions.

"This will have to depend on the basic outlook of the faculty member, his integrity, feelings about academic values, his reason for being at the university.

"In theory these outside influences can happen subtly. There is no way they can be fully monitored. This is true not only when we consult for industry but also for the government.

"The important thing is disclosure. We must be fully open about our relationships and be very careful keeping the lines clean between our university activities and outside consulting."

Thomas C. Merigan, professor of medicine, feels that faculty members should not make industry commitments that might compromise their fields. -more-

"I've got to be able to speak out accurately and freely," he says. "I must relate to my students unhindered by consulting connections, and pick research projects in areas that seem challenging and important.

"We mustn't get hooked on consulting in a way that we lose sight of our mission, which is to teach and advance knowledge."

Another scientist who asked not be identified raises a different point. He says he finds it interesting that similar questions have not been raised about profits made by faculty from writing textbooks, which can yield hundreds of thousands of dollars to the author.

"Faculty members do much of their book-writing on University time, often using its facilities," the scientist observes. "Their Stanford affiliation is used in promoting their books, and they may require or recommend use of their books by the students they teach.

"Moreover, their books often lead to substantial fees from medical-legal, and industrial consultations."

The scientist adds, "The potential for true conflict of interest in this area seems much greater than in the case of limited consultations outside the University.

"Yet, few eyebrows are raised about the outside income to the textbook writer, even when the profits come from work that does not involve significant scholarship."

Kaplan thinks the University should be entitled to a portion of such outside income.

"I would like to see a policy evolve that would cover all outside income across the board—book royalties, honoraria, consulting fees," he suggests.

"The percentage contributed to the University need not be so large as to stiffle this type of initiative."

Noting that the School of Medicine already has such a policy—"a percentage of the faculty's clinical earnings is returned to the School"—Kaplan adds, "It would be fair treatment to apply it across the board."

If issues of money, secrecy and potential conflicts, are hotly debated, another concern is also surfacing.

"We have to worry," says Nobel Laureate Paul Berg, "about the distortions that the development of molecular biology in the private sector may inject into the traditional systems of scientific inquiry."

Although Berg welcomes industry's interest—"I think it is a plus"—however, he points out that many of the new companies are now competing for the talents of bright young scientists with the universities.

"The attractions offered by industry are formidable," he says. "The universities cannot compete on financial and even on other grounds.

"It raises a concern in my mind that we may lose a better part of a generation of molecular biologists, cell biologists, and geneticists who will not work at universities. Who will then achieve the breakthroughs of tomorrow?"

Some of these issues will undoubtedly be examined by the Shooter committee when it begins to meet in the coming weeks. But there is one other area which will have to be addressed by the University as a whole. This is the issue of whether Stanford should take an equity position with respect to products of faculty research.

Stanford University President Donald Kennedy has not ruled out the possibility of the University and its professors participating in commercial ventures, but for the moment he has put such a consideration in abeyance "because of the potential conflicts of interest it might generate."

"The University, I think, has an entirely legitimate interest in returning some reasonable portion of this new value that it is creating to nourish its academic needs," he says.

"But the University has to be reasonable in its demands and has to keep certain principles in mind.

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4-4-4 "It should be fair and equitable with the faculty, and it should desire to increase the rate of diffusion of potentially valuable new technology into human services.

"The University cannot in its own strategies, whatever these may be, put the return of value ahead of the obligation to act in the public interest."

Given these limits, Kennedy adds, and assuming the University can stay clear of conflicts of interest, it should pursue opportunities to return value.

"At the moment I am inclined to believe that the mechanism that is keeping us off the slippery slopes is our patent licensing policy," he says.

But patents on faculty inventions have problems too. They trouble Berg who thinks patents distort research.

"How much can the logical outcome of a research project be influenced," he asks, "if there is a chance of obtaining a patentable result versus one which may be scientifically important but with no market value?"

The problem applies equally to faculty and students.

"If there is a chance to make money," Berg says, "and the University encourages work that is patentable, the research emphasis will undoubtedly bend in that direction."

Another dimension of the patent question is secrecy, according to Berg. "People may not be so willing to discuss germs of ideas if they're potentially patentable. The overall result will be to reduce scientific exchange. Certainly it won't increase it.

He favors creating a national foundation to deal with all university patents.

"Conflict would be eliminated," he argues. "Some of the royalties would flow back to the universities to support research and other needs and some would be used to support research training nationwide," he says. "It would be a logical thing."

In the current debate it is easier to affirm the growing pains of the new biotechnology than to prescribe for them. Neither academe or industry, which must depend heavily on academic science, have any precedent or models to follow. As Kornberg puts it, "Unlike the postwar electronics revolution which originated mostly in industry, the earliest industrial applications of genetic engineering and immunobiology came exclusively from academic laboratories."

Moreover, the growing industry-university interactions are complicated by the fact few businessmen understand academe and few of the biomedical scientists understand the business world. Recently, for example, a businessman on a local television show complained how hard it was to manage professors.

He said, "They will discover something in the lab that will raise six new questions while the company is interested in just one thing."

The businessman added, "It's hard sometimes to keep them in line."

Kornberg, who referred to such pressures earlier, said he hopes the scientists who have been and will remain the major source of these commercial efforts will have the character and wisdom to resist them. He believes companies can be successful fostering and working in an academic environment. "In so doing," he says, "they will attract the best scientists and thereby have the most important ingredient for success."

It should be stressed the interactions between industry and academe did not begin with genetic engineering and immunobiology. They have existed at Stanford for many years, developing gradually but on a similar if not larger scale.

Business, chemistry, engineering, physics, earth sciences and so on have had long-standing ties with the private sector. This two-part examination of such links found no faculty members who feel these links have harmed the academic enterprise. In fact, in most cases they have greatly enhanced it.

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Editors: This is the first of two articles on industry-academia relationships and the business of science funding.

STANFORD—

Quietly, yet steadily in the past few months, an enclave of small biotechnology companies has been settling on the Midpeninsula near Stanford University. They are in the race to exploit commercially two fields that barely existed five years ago, genetic engineering and hybridomas.

Even though the University is not involved in these ventures, the firms are settling here because they depend on molecular and cell biologists, geneticists, immunologists, and computer scientists to work for them as employees or consultants.

Stanford and its School of Medicine have the talent the companies want. The basic genetic engineering or DNA cloning technique was developed by scientists at Stanford and the University of California in San Francisco. The two institutions hold the patents for the process. Stanford scientists also have contributed key refinements in hybridoma technology and related instrumentation, bringing its application closer to reality.

DNA cloning is a technique that permits the tailoring and transplantation of genes from one species to another. The technique permits the introduction of genes into easy-to-grow bacterial cells, enabling construction of "bacterial factories" that can synthesize a variety of biologically produced substances. The process, using spliced or recombinant DNA, has been called the ultimate technology, and its benefits are now emerging in medicine, with the testing of gene spliced insulin, human growth hormone, and interferons.

Hybridoma technology, invented in England at about the same time as recombinant DNA, makes possible artificially created cells that produce pure or "monoclonal" antibodies. Such highly specialized antibodies,instead of the usual mixture produced by the body's immune system, not only provides a powerful tool for research but can be expected to provide quicker detection of viruses, bacteria, and cancer cells. The long-range promise of monoclonal antibodies is that they might prove useful in therapy, or as vaccine replacements.

The prospect of big payoffs from research originated by academic scientists has attracted active commercial interest. The university scientists too are aware of the growing importance of these technologies to the world economy. In principle, they note, bacteria could be engineered to produce almost anything created naturally by plant and animal cells. This could have a significant impact on a host of industries, from energy and chemicals to agriculture.

"This drives many companies to get in the act right now to develop the research capability and the people needed to make these applications possible," says Stanford Nobel Laureate Paul Berg.

"Understandably," adds his colleague, Nobel Laureate Arthur Kornberg, "the scientists who provided the ideas, techniques, and practitioners of genetic chemistry are reluctant to be excluded from its financial rewards by enterpreneurs and venture capitalists."

Deserving though the scientists may be, their new role in business ventures raises real concerns. Among them are whether they should share information with their colleagues, how much money they deserve for their discoveries, how the university should share in their gains, and how to resolve possible conflicts between teaching, research, and consulting activities.

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2-2-2 Last week the Stanford Committee on Research held its first open hearing on the matter. This week Dr. Lawrence G. Crowley, vice president for medical affairs and medical school dean, appointed a committee headed by neuroscientist Eric Shooter to examine faculty outside activities in light of the University's consulting policy.

In a memo, Crowley noted that outside opportunities for some scientists have become exceptionally attractive and the rewards relatively great.

"These conditions," Crowley added, "have created unusual pressures and problems, including potential conflicts of interest for our faculty and the potential for distortion of our educational activities.

"The full consequences are difficult to foresee, but we should attempt to evaluate them carefully."

Stanford University President Donald Kennedy, a biologist himself, also sent a letter urging faculty to use "caution and deliberation" in responding to the flurry of overtures from genetic engineering firms.

In an interview, Kennedy said he is concerned about three issues: the public credibility of the scientific enterprise, the health of basic research, and the preservation of the university as an environment in which first quality research and related teaching can go on.

"I think the very new environment in which we find ourselves offers opportunities, but also real problems in all three of these areas," he said.

Kennedy said he fears an increasing proportion of the research efforts of "our best scientists may come to take place in off campus environments where they will be less accessible to students and colleagues who choose not to work for industry."

"And this," Kennedy stated, "will result in a diffusion away from the kind of intellectual center the university represents."

Kennedy also sees real problems of openness and scientific exchange. The evidence is unmistakable, he thinks, that the informal exchange between individuals and the general feeling of collegiality are rapidly disappearing.

"We all recognize cases in which scientists were competitive and close-mouthed with one another," he said, "but to add the problems caused by good old venal human nature to those created by a powerful profit motive is to invite the exacerbation of the situation."

Kennedy's final point is the credibility of science.

"I see evidence from talking to all kinds of people outside the University that the escalation of value undergone by some of the gene-splicing venture companies, and the large paper profits made by some scientists, are inviting suspicion," he said.

"When a professor says in an interview that his discovery will possibly lead to a cure for a disease, people will ask, 'I wonder what company he is tied up with?' "

And that Kennedy finds troublesome, particularly if some of the new business ventures associated with the names of prominent university scientists fail.

"I worry," he said, "that people are going to remember the claims—maybe even have the company's prospectus on file—and wonder if the scientists who seemed to offer so much in the way of hope were in fact participants in a kind of deception."

Pointing to recent critical newspaper articles on the gene-splicing industry, Kennedy added, "Suspicions are already beginning to grow."

Like Kennedy, Kornberg welcomes industry's interest in genetic chemistry applications, but he deplores the business practices of some companies. He urges his colleagues to "have the character and wisdom to preserve academic standards and combat pressures for secrecy and gimmickry."

"There are dangers," Kornberg says, "if genetic engineering companies appropriate a generation of senior scientists as consultants and junior scientists as employees and seal them off from free exchange of new knowledge."

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But there are motivations beyond just sharing in potentially lucrative ventures that lure academic scientists to industry. One is a genuine desire on the part of the scientists to see their work applied for the public benefit.

"If in fact we do believe there are practical benefits from molecular biology," says Berg, "then we should all applaud that there is a private industry eager and willing to move in the field of application.

"After all these years of doing this research, and insisting on how important it is and what it would mean to mankind, it is somewhat hypocritical to be negative when the possibilities to apply this information are presented."

Another reason why some scientists now look for closer industry ties is survival. Universities, having to compete in a market dominated by wage and salary rates, face a difficult, if not uncertain economic future. Traditional sources of support are falling off or not keeping up with inflation. And President Reagan's policies are expected to limit severely the funds available for higher education and research.

These problems drive many academic scientists to look in the private industry sector for support.

"I am in a stage of my research when there is an obvious practical application," says Hugh McDevitt, an eminent Stanford immunogeneticist. "Presently the federal government is unable to respond with new funds to support these new developments.

"Industry, on the other hand, is prepared to do so and more rapidly than the government through its normal funding mechanisms."

McDevitt also stresses that academic scientists throughout the country are forming similar alliances with industry to advance genetic engineering and hybridoma research.

"We have to do the same in order to remain at the forefront of our fields," he says.

Leonard Herzenberg, a genetics professor adds another reason. "Producing monoclonal antibodies on a mass scale is beyond the capabilities of individual scientists and university laboratories. Private industry can do this effectively and has performed an excellent service to the research community."

Interferon expert Thomas C. Merigan says that before gene-spliced interferon was produced, there was not enough of it to go around so that it could be tested.

"We are now in a position, without of course knowing what the result will be, to carry out the definitive interferon tests," he says.

The connection between industry and faculty at Stanford is not new or without precedent. It was a Stanford engineering professor, Frederick E. Terman, who three decades ago persuaded Stanford to open an industrial park, leasing the land to businesses.

This development sealed the marriage of academic science and commerce in Palo Alto. The age of electronics had arrived, and high-technology companies saw the advantage of being next door to an acclaimed university that welcomed them by sharing personnnel and ideas. The San Francisco Peninsula became the most fertile area in the world for the development of electronics and acquired the name "Silicon Valley."

They say if Terman provided the spark for Silicon Valley, then the Stanford genetic chemistry pioneers will be the key to the "Recombinant DNA Valley," the cluster of companies now sprinting into the biotechnology age. With this will come new jobs for young scientists and technicians, a more efficient technology transfer of the fruits of university research, and needed funding for the University.

Consider, for example, the new companies or subsidiaries launched in the Palo Alto area recently:

- **Cetus Immune Corporation (CIC).** A subsidiary of the Berkeley-based recombinant DNA firm, CIC, with Stanford professor Hugh McDevitt, will place its emphasis on human hybridoma monoclonal antibody technology, the firm explains. "The long-term diagnostic opportunities will also be addressed."

McDevitt, its principal scientist, has been joined by several other Stanford faculty members—Edgar G. Engleman, F. Carl Grumet, Thomas C. Merigan, and William S. Robinson, all members of the Cetus 28-member Scientific Advisory Board.

• **Cetus Palo Alto Corporation (CPA)** is the firm's second subsidiary with Stanley N. Cohen, a Stanford geneticist and clinical pharmacologist, as the principal advisor. Work at CPA involves the development of new methods for making antibiotics, research in brain chemicals called neuropeptides, and novel diagnostic tests for viral, bacterial, and protozoic infections.

Cohen, who co-invented the molecular cloning techniques with the University of California's Hebert Boyer, founder of Genentech, has been joined by three other Stanford professors on the Cetus Scientific Advisory Board—Stanley Falkow, William S. Robinson, and Jack Remington. Genetics research associate Annie C.Y. Chang, is also associated with the subsidiary.

• **Becton Dickinson Corporation** is an established company based in New Jersey. Its Mountain View laboratory is expanding its activities to exploit potential applications of monoclonal antibodies to medicine. A new facility for that purpose is under construction at the firm's Mountain View site. A major supplier of health care products—syringes, needles and a variety of diagnostics, Becton Dickinson has successfully produced and marketed worldwide the fluorescence activated cell sorter.

Developed in 1971 by scientists in the genetics department, this space-age tool, which separates cells on the basis of their fluorescent label, is an important adjunct to the emerging monoclonal antibody technology.

Leonard Herzenberg, professor of genetics who pioneered the biological applications of this device, has consulted for the firm for the past 10 years.

• **IntelliGenetics,** a new firm was founded by three Stanford faculty members to provide computer software to the molecular genetics industry, and to provide consultations regarding computer applications.

The three scientists are Douglas Brutlag and Lawrence Kedes in the School of Medicine, and Edward Feigenbaum in Computer Science. Another computer scientist, Peter Friedland, is also associated with the group. The four have been at work for more than four years researching applications of artificial intelligence to molecular genetics.

The DNA cloning industry, experts believe, will need sophisticated computers to control many of the delicate processes of bacterial growth fluctuations and other variables involved in gene-splicing applications, and to monitor each stage independently. If nothing else, a professor commented, IntelliGenetics should make a fascinating marriage between the two supertechnologies of tomorrow.

• **DNAX Ltd., and DNAX Research Institute of Molecular and Cellular Biology** are the latest addition to the enclave of biotechnology companies being established in Palo Alto., The brainchild of Alejandro Zaffaroni, a successful biochemist-businessman and president of ALZA Corporation, DNAX and its research institute have been formed to "exploit three advanced technologies—genetic engineering, immunobiology, and drug delivery systems—to make new products," the firm states.

Products will include high potency, specialized antibodies for diagnosis and treatment of disease and for use in industrial processes.

In addition, DNAX will direct efforts in developing organisms for large-scale production of pure, high potency biological macromolecules to be used as hormones, vaccines, interferons, growth factors and diagnostic reagents.

The ALZA drug delivery technology will be used to target the delivery of these agents to specific sites and to regulate their administration so as to minimize toxic effects.

The DNAX six-member scientific advisory board includes Stanford's Charles Yanofsky and Nobel Laureates Paul Berg and Arthur Kornberg. Three others serve on the firm's immunology panel, Roger Kornberg, Samuel Strober, and Irving L. Weissman.

Kornberg says he is enthusiastic about DNAX because of the commitment of its corporate managers to provide an academic atmosphere, and to promote exchange of information through prompt publication, open seminars, and fellowships.

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Another aspect Kornberg likes is the company's commitment to return, if successful, a substantial amount of money to support research in academic institutions. "I believe such a commitment is unique among genetic engineering companies," he says.

Kornberg, like other Stanford colleagues, is concerned that the role of scientific advisors in DNAX be presented accurately and not subjected to rumor or speculation. He adds, "The work we do in our academic laboratories will not be done with any special advantage to DNAX."

In the past 30 years many forms of academia-industry interaction have evolved at Stanford. One of these is the Industrial Affiliates Program. It is an attempt to provide a link between faculty and company scientists and engineers, and to provide a way for companies to learn about university research in progress.

Affiliates programs involved more than 18 departments from Aeronautics to Thermosciences. Companies pay fees for participation in the educational seminars and other activities, and often these lead to consulting ties.

In Biochemistry alone the program brings more than $150,000 a year for use in academic activities. This arrangement seems to have worked well without the potential conflicts that have been feared in some ventures.

A more intensive Affiliates program is the recent consulting arrangement between the Syntex Corporation in Palo Alto and the Department of Medicine.

Under the agreement, Syntex has made a substantial gift to an Institute of Biological Investigation formed by the department's 80-member faculty. While Syntex is given no access to Stanford technology the agreement requires institute members to consult for Syntex as needed for up to eight days a year. If at the end of the consultation, Syntex wishes to develop a long-term relationship on a project, it can do so by a separate contract arrangement.

Such projects, however, must have the approval of the institute's scientific board and must meet the same rigorous standards as grant proposals to the federal government.

The gift monies to the institute will be used to support young faculty which the deparmtent needs.

"Most consulting," comments Kenneth Melmon, chairman of the Department of Medicine, "is now done on an ad hoc basis benefitting only the faculty member and is of little value to academe and often to the companies when it involves complex questions.

"The consultation is often shallow. The company requesting help on a complex problem does not always get the best advice, and the consultant almost never gets any feedback. Bad consulting leads to poor relationships.

"What we have done with Syntex is a relationship that builds on academic values. We have a desire to provide responsible advice and to use it as a basis for a long-term productive relationship.

"If we give Syntex and others some answers, we are likely to solidify industry support. In the past we could not get such support on other than a charitable basis."

Although this report has concentrated on the School of Medicine and the evolving relationships of its faculty and the biotechnology industry, it would not be complete if it did not touch upon the role of the Office of Technology Licensing (OTL).

Patent licensing remains an important source of funding for university research and for supporting the ever-increasing costs of education at Stanford. Since its inception in 1970, the OTL has negotiated nearly 74 agreements for development and marketing inventions for the faculty—many of them emanating from the Medical School. Total license royalties since that time have exceeded $2.7 million, and last year's royalties reached $655,000.

What of the future? It is clear, as one scientist puts it, "that the development of genetic engineering in this area is an inevitable as Hewlett-Packard." But because this industry was developed entirely by academic scientists, and because of the scale of their involvement in the field of application, it has raised many agonizing questions and led to a serious re-examination of all industry ties with the university and its faculty.

"The fact these issues are being debated openly and in an uninhibited way," the same scientist adds, "is an optimistic sign of the health and vigor of the academic enterprise.

Everybody wants to make the links between academic research and industry as open and cooperative as possible, and with all the safeguards needed for a vigorous and independent science."

Next: Gène-splicing and the Medical School—some special problems.

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STANFORD—

An ad hoc committee to review outside consulting activities of the full-time faculty of the Stanford University School of Medicine has been appointed by Dr. Lawrence G. Crowley, vice president for medical affairs and dean.

Headed by Dr. Eric M. Shooter, chairman and professor of the Department of Neurobiology, the committee will examine faculty outside activities in light of the University's consulting policy.

If conflicts exist, the idea is to recommend changes or additional guidelines.

Crowley said scientific advances emanating from research in genetic engineering and hybridomas have opened opportunities for scientists responsible for these developments to participate as consultants or in other roles.

Noting private industry's interest in the commercial possibilities of these developments, Crowley added, "These conditions have created unusual pressures and problems, i cluding potential conflicts of interest for our faculty and potential for distortion of our educational activities.

"The full consequences are difficult to foresee," Crowley said, "but we should attempt to evaluate them carefully."

Crowley said such evaluations are in progress in many universities around the country.

"The president, provost and all the vice presidents are concerned about this issue at Stanford," he said. And the Research Committee of the University had been asked to review the matter."

In addition to Shooter, committee members include Paul Berg, biochemistry; Hugh McDevitt, medical microbiology; Stanley N. Cohen, genetics; Kenneth Melmon, medicine; John Collins, surgery; William Northway, Jr., radiology; and John L. Wilson, associate dean for faculty affairs.

In addition, Carl Hitchner, managing attorney for medical affairs, and David Mendelow, associate dean for administration in the School of Medicine, will serve as resource persons.

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STANFORD UNIVERSITY MEDICAL CENTER
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TWO STORIES

STANFORD—

Dr. Ora M. Rosen will present the eighth annual Windsor C. Cutting Lecture Thursday April 9 at Stanford University School of Medicine.

The lecture, open to the public, commences at 4:15 in the Medical School's Fairchild Auditorium.

Rosen, chairman of the Department of Molecular Pharmacology at the Albert Einstein College of Medicine, Yeshiva University, will deliver a talk entitled "Mechanisms of Hormone Action during Differentiation of a Cultured Adipocyte Cell Line."

Educated at Barnard College and at Columbia University College of Physicians and Surgeons (M.D., 1960), Rosen's background is in molecular biology, endocrinology and pharmacology. In addition to being chairman of her department, she is also director of scientific affairs of the Diabetes Research and Training Center of Albert Einstein College.

Rosen's main research interest concerns the molecular events involved in hormone action. Recently she isolated an enzyme influenced by the hormones insulin and epinephrine and important in regulating activity of other proteins involved in heart and muscle cell metabolism.

Rosen's research has added to knowledge of how cells regulate energy production in health and disease, and her work in diabetes and other metabolic diseases may lead to selection of better chemical agents for therapy of these diseases.

The Windsor Cutting Lectureship was established in 1973 by the faculty of the Department of Pharmacology, in memory of Dr. Cutting, former professor and chairman of the department. Dr. Cutting, who died in 1972, also served as dean of the Medical School from 1953 through 1957 and as dean of the University of Hawaii Medical School from 1963 through 1971.

—30— L101

STANFORD—

Dr. Henry S. Kaplan, Maureen Lyles D'Ambrogio Professor of Medicine, has been elected a foreign associate in the Academy of Sciences of the Institute of France.

Kaplan, director of the Stanford Cancer Biology Research Laboratory, is internationally known for his pioneering work in radiation therapy for Hodgkin's disease and other forms of cancer.

—30— L101

Mailed Monday, March 30, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Dr. Tag E. Mansour, the Donald E. Baxter Professor of Pharmacology at Stanford University School of Medicine, has been awarded a Macy Faculty Scholarship for 1981-82 from the Josiah Macy, Jr. Foundation of New York.

The award provides support for Mansour to spend six months pursuing scholarly research at three institutions in England and Egypt beginning in October.

Mansour, who is chairman of the Pharmacology Department at Stanford University School of Medicine, plans to pursue new strategies in the development of drugs to curb parasitic helminth (worm) infections. Current drug therapies against the various helminth diseases, which are a significant health problem throughout most of the developing and undeveloped areas of the world, are inadequate because they harm the human host as they eradicate the worms, explains Mansour.

The advances of biology and medicine in the Western world have been only frugally applied to this area of research, Mansour laments, since the diseases are not a major problem in Western countries. Nevertheless, the need for such research, in terms of human suffering, is undeniable: an estimated 180 million people have the infection schistosomiasis, caused by the blood fluke *Schistosoma*; 650 million are infected with *Ascaris*; 450 million afflicted with *Ancylostoma*; 250 million with *Filaria*; and 20 million with *Onchocerca*, Mansour reports.

One promising avenue of research Mansour has followed for several years involves searching for biochemical and molecular characteristics in worms unique and distinct from those in their hosts. Finding such unique traits gives researchers specific targets for drug therapy, he explains.

By way of example Mansour cites the parasitic worm's mobility which is crucial to its survival in the host intestinal or circulatory system. "The chemical serotonin seems to play a role in the control of movement," he says. "If we can block the serotonin action selectively, we would have a successful chemotherapeutic agent," he suggests.

As a Macy scholar, Mansour will spend five months in England at the London School of Hygiene and Tropical Medicine where he will deliver the Heath Clarke Lectures in November, and at the National Institute for Medical Research at Mill Hill. He will also spend a month at the Naval Research Institute in Cairo, Egypt.

A member of the Stanford faculty since 1961, Mansour is a native of Egypt. He received his bachelors degree from the University of Cairo and his Ph.D. in pharmacology from Birmingham University Medical School in England.

He serves on several national and international health advisory committees and is the author or co-author of nearly 100 scientific publications.

The Macy Faculty Scholar Award Program was established in 1972 to encourage medical and public health school faculty members to study in a "fresh environment." Mansour is one of 26 recipients this year, selected from 144 applicants nationwide. During the Program's eight years, the Foundation has supported 231 faculty members from 70 institutions in the United States and Canada to the tune of $4.7 million. There have been nine Stanford University faculty recipients.

The Josiah Macy, Jr. Foundation was created by an endowment from Mrs. Kate Macy Ladd in 1930 for the advancement of medicine in the United States.

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L101

Mailed Wednesday, March 25, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

A scientist at Stanford University Medical Center who has made some startling discoveries about the energy-generating structures in cells is also acquiring new information about certain rare genetic diseases.

Dr. Douglas Wallace, assistant professor of genetics at Stanford, has been probing the genes of the small cellular energy-producing organelles called mitochondria. These particles have long fascinated biologists. Thought to have evolved within cells from bacteria-like invaders eons in the past, they intrigue scientists concerned with symbiotic (mutually beneficial) relationships. They also intrigue geneticists because, in mammalian cells, they comprise the only sites outside the cell nucleus to harbor self-replicating DNA. The notion that as many as several hundred of the "semi-autonomous" mitochondria may reside inside each cell has led at least one biologist, Lewis Thomas, to wryly question who is actually running the show.

Underscoring more soberly the significance of the mitochondrial presence in mammalian cells, Wallace is now uncovering evidence that mitochondria and mitochondrial DNA may play an important role in certain genetic diseases in man.

Wallace and his colleagues, Dr. R. Giles, Dr. H. Blanc, Dr. H. Cann and J. Case, recently reported a key finding. While studying the inheritance pattern of human mitochondrial DNA, they found that the mitochondrial DNA follows a maternal lineage. It is the mother's set of mitochondrial genes that is passed to her children, never the father's. "This maternal inheritance pattern is unique," explains Wallace, and unlike all other genes, which may come from both mother and father. "It was a most surprising and intriguing observation," he reports.

The researchers discovered maternal inheritance by examining mitochondrial DNA from blood platelets and skin of individuals from several families. Using "restriction enzymes," (proteins that cut the circles of mitochondrial DNA at specific points determined by the sequence of nucleotides), they found that the pattern of mitochondrial DNA fragments from the children was always the same as their mother's and never like their fathers'.

This observation, together with the knowledge that there are a number of genetic diseases that follow a maternal inheritance pattern and that affect those body tissues with high energy demand (the nerves and muscles), led Wallace to wonder whether mitochondrial DNA can undergo changes, or mutations, that cause disease.

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Leber's hereditary optic atrophy is one of the better known of the maternally inherited diseases. Other possible candidates for mitochondrial DNA coded diseases are certain of the mitochondrial muscle disorders, which are characterized by mitochondrial alterations in some muscle tissue cells. Mitochondria in these cells often have an abnormal shape and physiology.

"Our goal is to determine if these diseases are in fact due to mutations in the mitochondrial DNA. Then we will be a lot closer to understanding their biological basis," states Wallace. "Knowledge of the maternal inheritance pattern of such diseases would be invaluable in counseling the families," he adds.

Leber's syndrome is a fairly rare condition, but nevertheless it is among the more common inherited diseases, Wallace observes. Usually, it's first noticed in adolescence as a "hole" in the vision caused by atrophy of the optic nerve, and it may wax and wane, often ending in blindness.

In the numerous human pedigrees from families whose members have Leber's atrophy, it has been observed that the syndrome is consistently inherited through the mother, never the father. In order to investigate the possibility that Leber's optic atrophy may be controlled by a gene on mitochondrial DNA, Wallace is currently seeking Leber's atrophy patients to participate in some clinical tests.

Wallace plans to take blood samples from the volunteers in order to search for unusual patterns in the mitochondrial DNA and to examine their inheritance. He also hopes to study the patients' cells for evidence of mitochondrial abnormalities. "We hope these studies will confirm that Leber's syndrome is due to a defect in mitochondrial DNA," he says.

But showing convincingly that a mitochondrial-related disease is caused by mitochondrial DNA changes is no simple task. It's complicated by the fact that the small circular molecules of mitochondrial DNA do not contain enough information to code for more than approximately 20 polypeptide chains (the structural components of proteins). Mitochondria are made from hundreds of proteins. This means that nuclear DNA also plays a major role in orchestrating mitochondrial protein formation.

Pedigrees from some families with mitochondrial muscle disorders follow the maternal inheritance pattern expected if a mitochondrial DNA gene coded for the defect. Other pedigrees of mitochondrial muscle disorders show the standard "Mendelian" pattern of inheritance, and these would presumably reflect a defective mitochondrial polypeptide controlled by nuclear DNA, Wallace notes.

But the mitochondrial muscle disorders are rarer than Leber's disease and the pedigrees are few and far between. This makes the maternal inheritance pattern observed much less certain, cautions Wallace. "We need to examine many more pedigrees to state with any authority whether or not certain types of muscle disease are maternally inherited, and therefore candidates for mitochondrial DNA coded diseases," he says.

One further test of the nuclear or mitochondrial origin of an inherited characteristic involves a special technique Wallace devised for human cells in culture. He removes the nucleus and its enclosed DNA from the cell he suspects of having a mitochondrial DNA coded alteration. This leaves behind the cell's cytoplasm where the only remaining genetic material is mitochondrial DNA. The "enucleated" cell is then fused with a normal cell—the result Wallace calls a "cybrid."

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If the cybrid expresses the mitochondrial alteration of the original enucleated cell, it provides proof that the mutation was carried on DNA from the cytoplasm, Wallace explains. Eventually, with this method, he and his colleagues hope to confirm the mitochondrial origin of these diseases and learn more about the proteins controlled by genes in mitochondrial DNA.

Although the questions about mitochondrial DNA coded diseases are compelling, equally intriguing are some of the basic biological puzzles, Wallace admits. How and why mitochondrial DNA is maternally inherited are still matters for speculation, he comments. Perhaps the huge egg cell, with its many mitochondria merely overwhelms the small sperm's contribution, he suggests. Or the sperm's mitochondria may just be destroyed. The fact that maternal inheritance of mitochondrial DNA is found in many other plants and animals hints at an evolutionary advantage to the scheme, Wallace says.

"This is how basic biology fuses with clinical medicine," Wallace adds. "Most of our effort must go toward understanding the human mitochondrion as a biological phenomenon before the clinical answers will come."

Wallace's work is supported by the National Institutes of Health, the March of Dimes Birth Defects Foundation and the National Science Foundation.

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L101

Mailed Wednesday, March 25, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Coronary artery bypass surgery is now so safe that death or sickness resulting from the operation is infrequent enough to be considered nearly a random event, according to D. Craig Miller, a cardiovascular surgeon at Stanford Medical Center.

Speaking at the American College of Cardiology's recent San Francisco meeting, he said that the surgery, with its attendant medical care, has become so refined that it's almost impossible to identify someone for whom the surgery is a high risk.

In fact, he adds, the operation is becoming safer and safer, despite the fact that the patients are becoming, in general, sicker and older.

Miller's calculation of the safety of the operation is based on his analysis of nearly 2000 Stanford heart-surgery patients. He compared 1000 patients who were operated on between 1971 and 1975 with 973 operated on between 1977 and 1979 in Stanford's department of cardiovascular surgery. He did the study with Drs. Norman E. Shumway, Edward B. Stinson, and Philip E. Oyer.

They found that the chance of suffering a heart attack within a short time after the operation fell from 8.7 percent in the earlier group to 4.6 percent in the latter; the chance of dying was only half as great, declined from 2.4 percent to 1.2 percent. By 1979, the chance of dying was down to 0.68 percent.

Miller's conclusions are at odds with the consensus reached last December by a conference held at the National Heart, Lung, and Blood Institute. It concluded that the risk of death from the surgery was between 1 and 4 percent in the best of circumstances, and between 10 and 15 percent in the worst, that being when a patient has congestive heart failure and his heart is not pumping blood efficiently.

The conference's estimates, based on large randomized and non-randomized studies done throughout the 70s at a number of institutions, are probably not valid in 1901, Miller says. The risk of dying from the operation has been reduced during the decade and is really ow much lower; at Stanford in 1979, it was only two-thirds of one percent, he says.

True, he says, the risk, to some extent, is related to in which hospital the surgery is done. (A recent study found that the death rates for bypass surgery in 15 of the most prestigious cardiac surgery hospitals in the United States ranged from 0.3 to 6.4 percent.) But, that Stanford has such an enviable record shows the know-how is now had to make the operation safer at other hospitals also, he says.

Controversy is not new to coronary artery bypass surgery. Since it became common approximately 12 years ago, the operation has had to withstand the skepticism that it was worth neither the risk nor the money, that perhaps medication, in many cases, could do as well. It has survived to become one of the most popular surgeries--in the United States last year, 110,000 operations were performed at an average cost of $15,000 each.

The most common reason the operation is done is to alleviate angina pectoris, or chest pains, at can't be controlled with medication. The pains result from some parts of the heart not receiving enough blood because the arteries feeding the heart, the coronary arteries, have become partially or totally blocked.

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In the operation surgeons replace those of the four coronary arteries that have become clogged. They usually graft veins taken from the upper leg in place of the blocked arteries, enabling blood to flow freely through the heart again.

The more recent group in Miller's study included older patients and more females, who are at higher risk than males. (Eighty-three percent of those in the study were male, a reflection of the much greater incidence in heart disease in males than females.) Also, compared with the patients in the first half of the 70s, more of these later patients had high blood pressure, diabetes, elevated blood lipid levels, congestive heart failure, diseased arteries leading to brain, and severe chest pains called unstable angina.

They also had, on average, a greater number of heart arteries diseased, 3.3, compared with 2.7 in the earlier group, and required, on average, a greater number of grafts (2.95, up from 2.4.) and had suffered more heart muscle damage due to previous heart attacks.

However, even though, in general, sicker and older, and therefore seemingly at a greater risk, the latter group fared much better.

Miller attributes the improvement to a number of causes. With experience have come better expertise on the part of the anesthesiologists, the surgeons, and the nurses, who care for the patients before and after the operation. He says more precise ways to diagnose the patient's problems before the operation have been developed, and drugs that can better stabilize the heart before and after the operation have been identified. Also, there are better ways to protect the heart from damage during the operation.

In fact, the operation has become so refined that in the 1977-1979 group, the only identifiable factor that increased the risk of a patient's dying was an emergency operation on an unstable heart. However, in the 1971-1975 group of patients, anyone who had required an emergency operation, had a diseased left main artery, had high blood pressure, or had congestive heart failure, faced a greater chance of dying.

In the 1977-1979 group, only females and a few of those patients who required coronary endarterectomy (a procedure used to unclog those arteries which are totally blocked) could be tagged as likely to have a heart attack either during or within a short time after the operation. In the earlier group, age, an acute heart attack before the operation, disease in the left main heart artery, and the method used to protect the heart from damage during the surgery surfaced as risk factors.

Miller says that because many of Stanford's patients are referred to Stanford from elsewhere, one thing for which he could not completely test may increase the risks. He could only determine how well the left ventricle, the heart's main pumping chamber, was working in 32 percent of the patients. This factor has proven to be a risk in earlier studies done elsewhere, implying that severe muscle damage from many previous heart attacks put a patient at greater risk.

The decision as to whether or not an operation is worth the risk should be based on what's true now, Miller concludes, not what was true in the earlier phases of the development of coronary artery bypass surgery.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A Tuesday noon lecture series on "Women and Health," sponsored by Stanford Medical School's division of family medicine, will begin March 31. All lectures, open to the public without charge, will take place in room M106 in the School of Medicine.

The presentations, many of which may include films, exercises, or other types of audience participation, will include:

- **March 31—Women as Mothers**—with Julie Olsen Edwards, a National Endowment for the Humanities Scholar and author of *Motherhood in the 80's*
- **April 7—Menstruation: Theory and Practice**—with Emily Culpepper, a feminist freethinker
- **April 14—Health and Obesity: Risk or Riddles**—with Stacey Fitzsimmons, chronic disease epidemiologist
- **April 21—Prescriptions for Women**—with Judy Martin, M.D., from Stanford's division of family medicine
- **April 28—Minority Women and Health**—with Esperanza Walters, R.N., M.P.H., director of the South Bay Area Health Education Council
- **May 5—The face in the Mirror is Mine**—with Ginny Connell, a marriage and family counselor; co-founder and administrator of "The Alive Place" in Sherman Oaks
- **May 12—Women and Work: A 24-hour Job**—with Julie Olsen Edwards, co-director of the Cabrillo College department of early childhood and family life education
- **May 19—Movement for Health**—with Jean Couch, M.S., co-author of *The Runner's World Yoga Book* and a yoga instructor on KQED television
- **May 26—Networking**—with Jeanne Flyntz DeJoseph, C.N.M., Ph.D., assistant director of nursing services at Stanford Hospital; and with Marita Grudzen, health care consultant.

The division of family medicine is part of the department of family, community and preventive medicine at Stanford. The noon lecture series may be taken for academic credit by medical students. For more information, call 497-7874.

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Mailed Thursday, March 19, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames (415) 497-6911

STANFORD—

A workshop for women—though men are invited too—entitled "Designing your Medical Career," will be offered on Saturday, April 4, by the Katharine McCormick Society, the Stanford Medical Students' Association, and the American Medical Women's Association Professional Resources Research Center.

The conference, to be held at CERAS, Stanford University, from 8 to 5, will provide an opportunity for women in medicine to think about and discuss their career plans. It is open to interested medical students, graduate students, postdoctoral scholars, housestaff and others. The major focus will be on academic medicine, with discussion of the steps necessary to make it a feasible career option.

Speakers will include such prominent members of the medical community as Lawrence Crowley, M.D., Sarah Donaldson, M.D., and Frances Conley, M.D. Medical student Laura Esserman will introduce the program.

Topics will include historical perspectives on women in medicine; academic medicine versus private practice; alternative work strategies such as split residencies and job-sharing; how to promote institutional acceptance of part-time academic positions; handling positions of power and responsibility; handling stress and femininity in the workplace; resume building and organizing time; and options for Ph.D.'s.

One purpose of the meeting is to help organize Stanford women into a cohesive and active group, and to recruit women to organize the next workshop—tentatively planned for next fall.

The cost of the workshop is $5.00, including lunch. Advance registration is required, and the deadline is March 25.

For further information, contact Dr. Joan Kendig, Department of Anesthesia, at (415) 497-6455.

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STANFORD—

Pianomime, a Stanford based non-professional mime troupe, will offer a benefit performance of "Bagatelles" on March 29, at 3, in Stanford University's Little Theater.

Proceeds from the event will go to the Pediatrics Department of the Medical Center.

Directed by Stella Bensadon, a Bay Area teacher, director and performer of mime, "Bagatelles" originated as a workshop for her mime students. It is a full-length performance of mime comedy and drama, using piano accompaniment.

Besides Bensadon, members of the troupe are: David Gollub (pianist), Barbara Milligan, Larry Russick, Gigi Weix and Kazuko Yamamoto.

Bensadon's international background in mime includes studies in Israel with Yoram Boker, and in Paris with Etienne Decroux, the teacher of Marcel Marceau. She has also studied with Ella Jaroszewics, star of the Tomashevsky Mime Theater.

In 1974 Bensadon led a Stanford troupe called "The Company."

Tickets of the upcoming performance may be purchased at the door. The price will be $3.00 for adults, and $2.00 for children.

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Mailed Wednesday, March 18, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

As recently as two or three years ago, Peggy Richardson's presence in an intensive care unit startled many of the nursing staff.

"They would say to me, what are you doing here," she recalls. "The patient isn't eating!"

That attitude—that the critically ill patient is beyond help nutritionally—is changing, however, says Richardson, as more efficient methods of feeding these patients have been devised and the need has become more clearly established.

Richardson, a registered dietician at Stanford University Hospital, credits a 1974 article in *Nutrition Today* with exposing the severity of the problem. In that article, entitled, "The Skeleton in the Hospital Closet," the author argued that patients, especially the critically ill, were often neglected nutritionally because a typical intravenous feeding was too low in caloric value to do any good. As a result, many patients were suffering from malnutrition, although they were not diagnosed as such.

"This was really the beginning of a change in attitude within dietetics and the field of medicine," says Richardson. "More emphasis was put on nutrition after this article came out. . .especially the nutritional status of critical care patients."

According to Richardson, as recognition of the need grew, so did the ability to meet it. Specifically, something called total parenteral nutrition (TPN) was developed in the mid-seventies.

In TPN, higher doses of dextrose and amino acids can be given to a patient through the use of the body's major veins, the jugular and the superior vena cava. Previously, intravenous feedings were carried out in peripheral veins, which could not tolerate the higher caloric density needed to provide sufficient nutrition.

At the same time, the development of a fat-solution in Europe, which could be given simultaneously, says Richardson, enabled patients to receive total nutrition—protein, fats and carbohydrates—for the first time.

"TPN really opened up a whole new ballgame," says Richardson. "Patients could be adequately nourished who might otherwise suffer from malnutrition."

At Stanford, Richardson spends roughly half of her time working with these potentially malnourished patients in the medical surgical and cardiovascular ICUs; the other half of her work day she spends with cardiovascular patients who have undergone fairly routine procedures and need nutritional counseling rather than therapy.

The prevailing philosophy among dieticians, says Richardson, is "if the gut works, use it." The nasal-gastric route is preferable, she says, because studies have shown nutrients received by the patient in this manner are better utilized in the body than through intravenous feedings.

IV feedings are also enormously expensive. As Richardson observes, "TPN is an expensive way to get your steak and potatos."

Typically, the cost of one IV bottle, which provides roughly half of the average 2500 calories needed per day, is $70. Richardson estimates that at any given time there are between 15 and 20 patients in the Hospital who are on TPN.

After sustaining a major injury, whether from trauma or from the bodily stress of surgery, says Richardson, a patient's nutritional needs jump dramatically. Enormous amounts of calories are expended in order to heal the body tisues, rebuild muscles and regain normal respiratory functions.

Since nutrition is not the first focus of interest following a severe injury, says Richardson, a patient may already be suffering from a calorie deficit by the time his or her condition stabilizes.

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2-2-2 "In a truly critical case," she says, "we begin immediately with TPN, but the general rule is if a patient is unable to consume food orally one week to 10 days after injury,they should be put on parenteral nutrition."

Although complete nutritional assessments are not done as frequently as Richardson would like, they are done on a limited basis, with a physician's order. The purpose is to provide a baseline for measuring a patient's progress.

One of the best and most immediate indicators for determining protein breakdown, says Richardson, is a nitrogen balance test, which can be done quickly by measuring the urea nitrogen excreted, with the amount of protein being taken in.

"Ideally," says Richardson, "we want a critical care patient to be anabolic which means taking in more nitrogen than excreted and building tissue."

In a nutritional assessment sheet, which Richardson devised, other ways of determining a patient's nutritional status include measuring skin folds of subcutaneous fat to determine energy stores, and establishing a patient's immunity status.

All the while, the underlying question during treatment remains, "Is this doing the patient any good?"

We are constantly assessing whether the patient is improving," says Richardson. "If nothing is happening, then we can change the composition of the IV solution."

Usually when patients are on TPN, eliciting cooperation from them is a moot point, since they are too sick to care. But once TPN is stopped and the patient is started on nasal-gastric feeding, cooperation becomes essential.

Individual tolerance levels are also taken into account. One of Richarson's patients, who was badly injured in a car accident, is currently receiving nasal-gastrically 5000 calories a day.

"There is no way a little old lady could tolerate this level," says Richardson, "but younger people don't have the metabolic problems an older person might have."

"The high dextrose levels of TPN will ultimately create delayed gastric emptying, and while it (TPN) doesn't affect the appetite per se, a patient feels full on smaller amounts of food.

"When you start on nasal feeding, sometimes you get stomach distention and the patient simply doesn't feel like eating or they don't like the foods that are best for them."

Allergies and glucose intolerance can also complicate a patient's ability to begin eating normally again. So soft foods and liquid substitutes are often used as oral feedings are gradually increased.

Although there are frustrating times when a patient's recalcitrance prevents recovery, says Richardson, there are compensating moments of success as well.

"It's very gratifying when you do succeed," she says.

For the past three years, Richardson has served on Stanford's Total Parenteral Nutrition Committee, which is headed by Robert Sladen, assistant professor of anesthesia. The committee acts as an advisory group, reviewing TPN procedures currently in use and developing protocols for the Hospital's program

Represented on the committee are physicians, surgeons, pharmacists, nurses and dieticians.

And just recently, according to Richardson, a nurse who specializes in TPN was hired by the Hospital to coordinate the activities of the committee.

"This is a major step forward," says Richardson, who eventually hopes to see patients assessed nutritionally before, as well as after, surgery.

"Studies have been done," she says, "that have shown patients who go into surgery malnourished, are apt to do less well than those who are properly nourished. Ideally, it would be nice to be able to assess these patients in the future. For one thing, it would be more cost-effective because their recovery would be faster and they would get out of the Hospital that much sooner."

Richardson, who came to Stanford in 1972, received her B.S. degree from Cornell University in 1965. Her experience also includes a one-year internship at St. Mary's Hospital in Rochester, Minn. and work in a research unit at Yale University Hospital in New Haven, Conn.

Her interest in the field of nutrition apparently came about naturally.

"There's a very simple reason," she confides with a laugh, " I love food."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Stanley Falkow, chairman of the Department of Medical Microbiology at Stanford University Medical Center, and Dr. Susumu Mitsuhashi of Japan have been awarded the Paul Ehrlich-Ludwig Darmstaedter Prize, the highest German honor for scientific work in the field of medicine.

They received their award in the Church of Paul in Frankfurt on March 14, the birthday of Paul Ehrlich, a Nobel laureate of 1908 and pioneer in immunology and bacteriology. They will share the 80,000 German marks (approximately $40,000) prize money.

Both scientists have investigated why medicines that kill bacteria can suddenly become ineffective. They discovered that small, circular DNA molecules, called plasmids, found in the bacteria, are responsible.

Mishuhashi found that these plasmids contain genes that code for resistance to antibiotics, and that these plasmids can be passed between bacteria, with a resultant rapid spread of antibiotic resistance among the bacteria.

Falkow showed that the plasmid exchange takes place not only between related bacteria, but between unrelated bacteria as well. He found that a pathogenic bacterium that antibiotics can kill suddenly becomes resistant to the antibiotics when the bacterium acquires from a harmless bacterium a plasmid carrying an antibiotic-resistance gene.

The bacterium that causes meningitis in children is usually killed by penicillin. But in the last few years, it has become resistant to the antibiotic. Falkow found that this resistance could be traced to the meningitis-causing bacterium's acquiring a plasmid from a harmless bacterium normally found in the intestine. Since the human intestine has a resident population of bacteria, Falkow's finding says that we are always in danger of carrying around this source of drug resistance with us.

Falkow received his Ph.D. degree from Brown University in 1961. After serving as assistant chief of the Department of Bacterial Immunology at Walter Reed Army Institute of Research for three years, he joined the Department of Microbiology at Georgetown University Medical School in Washington, D.C. in 1966. In 1972, he became a professor in the Department of Microbiology and Immunology of the University of Washington Medical School in Seattle, where he has remained until he came to Stanford this year.

Falkow has written more than 100 scientific articles and chapters, has written the single most complete text on plasmids and is on the editorial boards of *Infection and Immunity* and *The Journal of Infectious Diseases.*

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Mailed Wednesday, March 18, 1981

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

Editor's Note: Photo available on request if not included.

STANFORD—

X-ray pictures in the future may uncover the 30 percent of lung tumors now missed, tell if the coronary arteries in the heart are clogging up, and detect lipid build-up in the carotid artery that could lead to a stroke. They may also be able to replace some exploratory surgeries and diagnostic catherizations.

Medical researchers at Stanford and elsewhere are developing ways to select what will be in an X-ray picture, and the pictures are beginning to tell more by containing less. The researchers are capitalizing on principles of physics, are utilizing advanced electronic equipment, and are fashioning sophisticated computer programs to subtract out the incidental anatomy. They're being rewarded with a sharp picture of the structure under scrutiny.

In a standard X-ray picture, a lung tumor lurking behind a rib gets missed, a gall bladder, tucked under a lobe of the liver and obscured by bowel gas, carries its load of stones uncaught. The problem is that the conventional X-ray picture is cluttered with too much of the anatomy, and what's really of interest sometimes gets eclipsed.

So out go the old films, which can't be selective enough in what they record, and in come the microcomputers, video displays and tricks of physics. The result is pictures of bodiless bones, stark blood vessels and revealed gall bladders.

Drs. William Brody, director of Stanford's Advanced Imaging Techniques Laboratory, and Albert Macovski, professor of electrical engineering and of radiology, are developing such an X-ray machine.

This machine, built by General Electric, is like no other existing at present. It employs "dual energy imaging," or less concisely said, two beams of X-rays, one of high and one of low energy, to form the image.

This new method is more sensitive than the old. It allows doctors to gather the same amount of information using a lower dose of X-rays or concentration of iodine, or both, than the old conventional film does. (Iodine is used as a label to locate the structure of interest.) For a comparable dose of X-rays or iodine, the dual energy imaging method tells more than the standard method.

Macovski says this work could bring great improvement in the diagnosis of two types of diseases: those at present that can't be reliably diagnosed with X-rays, such as bone and lung tumors, and those that can only be detected with very invasive techniques, such as exploratory surgery or the insertion of catheters into blood vessels.

Symptomatic patients and surgery candidates will not be the only ones to benefit, he says. The system could be used to screen persons without symptoms, but at high risk, yet not enough risk to try a risky diagnostic procedure. It could also be used to follow a patient's progress after surgery.

Brody is striving to refine the technique to where the coronary arteries will be able to be visualized, something which is impossible today and which obviously would be a quantum leap in the detection of heart disease.

Dual energy imaging exploits a phenomenon of physics: When X-ray beams pass through a material, they lose some of their energy to that material. Just how much energy is lost and in what form depends upon the nature of the material; it is different for the iodine tag and for the body's soft tissues and for its bones.

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As the patient, lying on a table, is slowly transported through the dual-energy imaging machine, razor-thin X-ray pictures are taken of the part of the body being examined. The information from each slice is fed into a computer automatically, where the difference between how the high and the low energy beams have fared is rapidly calculated. The differences between the change in each beam is used to create the final picture.

As the beams pass through the body's soft tissues, the loss of energy by either beam is slight, so the shadows from all the soft tissue regions are nearly cancelled in the computer image. In the iodine-tagged tissue, however, because of the nature of iodine, one beam loses much more energy than the other, and the difference calculated by the computer is large.

The computer can go through all these calculations quite rapidly and within three to four seconds piece together the information from the various slices to form a sharp picture of the iodine-tagged tissue.

Dr. Brody has been using the machine on patients with vascular problems for over a year on an experimental basis. Patients with chest lesions are also now being scanned, he says.

An alternative method being developed by several researchers around the country to improve the quality of X-ray pictures is digital fluoroscopy.

Brody and Macovski are acquiring such a machine soon.

The digital refers to the use of computers to analyze the data emerging from the fluoroscope. In the procedure, a "before" picture of an area of patient is taken. Then a chemical, which has been engineered to lodge in the structure of interest, is given to the patient, followed by an "after" picture. The computer is instructed to find the difference between the two pictures, which should be only the administered chemical, outlining the desired structure.

One problem with fluoroscopy, Macovski says, is that if the patient moves, the picture is garbled, a difficulty not encountered with the dual-energy imaging method.

It is also less flexible than the dual-energy imaging machine, he says, but it should be cheaper.

Digital fluoroscopy will be useful for diagnosing, among other things, whether the carotid arteries have built up lipid plaques, which could possibly break loose and cause strokes. This is because the chemical can quickly reach the right area once it has been injected into a vein, and so the patient's moving is ot a great problem.

Digital fluoroscopy is nearing commercial availability, Brody says. But the dual-energy imaging machine is still a few years down the road, he says.

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Mailed Wednesday, March 18, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Stanford President Donald Kennedy announced at a medical staff meeting Tuesday evening that the main problems that have divided community and faculty physicians at Stanford Univerasity Hospital have been solved.

"Not every single issue has been resolved, some are inherently 'rolling'," he said. "But the issues that can be resolved have been."

A formal report and recommendations of the Palo Alto Community Physicians and Stanford Medical School Liason Committee, which worked for more than two years to resolve the conflicts, will probably be made to the Hospital Board of Directors at its April 15 meeting, he said.

Differences between community and faculty physicians reached a crisis point on Aug. 1,1978, when the Hospital Board of Directors issued a memorandum saying that community physicians' access to some specialized hospital-based services should be limited in the future. That policy, while not changing the admitting privileges of community physicians, would have restricted future community specialists from certain laboratory privileges.

Individual affiliation agreements have now been submitted by the Hospital for several community physicians whose access to particular services has of special concern to community physician groups, Kennedy said.

Also, criteria for appointment, reappointment and promotion of the voluntary clinical faculty has been drafted and agreed upon, he reported. A formal appeal mechanism of negative decisions on reappointments and promotions, and a review of departmental decisions on initial appointments by a dean will also be instituted for the volunteer clinical faculty, he said.

In addition, a special class, clinical associates, has been created for any qualified voluntary clinical physician for whom there is no space in the appropriate department or service at the time of his appointment.

These voluntary clinical faculty guidelines were drafted by a committee consisting of equal numbers of fulltime and clinical voluntary faculty members, led by Dr. John Wilson.

The main liason committee, with Drs. Walter Arons and Lawrence G. Crowley as co-chairman, has in addition developed application and appeal procedures and criteria for the replacement of existing community physicians in the Hospital services and laboratories, Kennedy said.

Problems not completely solved in the present report will have to be considered by the liason committee and the Hospital Board at intervals, Kennedy said. Reviews of the access arrangements for existing or new Hospital services or laboratories will need to be carried out a regular basis by the Hospital Board, he said.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

One hospital offers its nurses a free trip to Hawaii after a year on the job. Another offers a $1000 reward. In still another, nurses receive 40 hours' pay for working a 24-hour weekend.

These "gimmicks"—as Duane Walker, R.N., M.S., Stanford's director of Nursing Services, calls them—reflect the extreme competition in nurse recruitment that's taken place among hospitals, nationwide, over the last few years.

Out of 1.4 million nurses in the U.S. today, says Walker, only about 700,000 are working, leaving at least 100,000 nursing vacancies throughout the country.

Stanford, too—with 48 current full-time vacancies—is involved in the massive effort to recruit and, more importantly says Walker, retain nurses.

But it's a costly venture. Dan Heath, assistant director of Finance for the Medical Center, explains that the development of special programs over recent years has led to increased expenditures.

For the year 1980-81, according to Heath, costs over and above intended spending for orientation and recruitment amount to about $800,000.

It does, however, seem to be paying off. While the average rate of nurse turnover nationwide is currently 68 percent, at Stanford it's now only 25 percent, says Walker, compared to 35 percent when he arrived here three years ago.

And, he otes, Stanford's one-year retention rate for the 106 new nursing graduates hired this past year is 90 percent. This contrasts dramatically with the national one-year dropout rate of 85 percent for new grads.

An example of Stanford's innovative approach is the offer of a new 12-hour shift for the medical intensive care units (I.C.U.'s). Nurses will work 7 A.M. to 7 P.M.—or vice versa—for just three days a week. Implemented this month, the system's results will be carefully evaluated in the near future.

Upon announcement of the system, says Walker, 26 vacant positions were filled within two weeks. And there is already a waiting list to work on the unit, preference being given to current staff nurses.

Stanford now has three full-time nurse recruiters, led by coordinator Katie Bray. One project they're involved with is a series of "job faires," designed to sell the Hospital to potential nurse recruits.

There are two types of faires, says Walker, both advertised through the media. One is a department's open house, for which displays are presented and tours conducted. So far, these have been held for the operating rooms, critical care I.C.U.'s, medical nursing and pediatrics nursing units.

The other type is long-distant, held in various cities across the country. Private companies sponsor the faires in large hotels, and up to 200 hospitals pay for use of individual booths. Stanford sends staff nurses and clinical nursing coordinators—as well as recruiters—to run booths at these events.

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"Happy nurses are the best recruiters," says Walker. That's why the Hospital has devised a special incentive for its staff: all non-exempt Hospital employees who successfully recruit nurses receive a cash bonus. The award is $250 after six months' retention, and another $250 after twelve.

And increasing incentives for nurses themselves to choose Stanford is naturally a priority concern.

Nurses' salaries—also hiked up in the present market, where demand exceeds supply—are competitive here with other hospitals in the area, says Walker, adding that the Bay Area offers some of the highest salaries in the country.

The housing shortage in this area of the state can be fearsome, says Walker. For this reason, Stanford now provides temporary housing for newly-arrived nurses, allowing them at least three months to find their own homes.

Refresher courses are offered to nurses returning after several years away from work, those who require up-dated information on medications and procedures.

And for new graduates—not hired by Stanford until recently—a special orientation program has been designed. Each graduate couples up with an experienced nurse, receiving an evaluation from her at the end of two months.

Nurses have a tough job, says Walker, often working nights, weekends and holidays. Yet their personal lives are very important to them, he contends. Most enjoy recreation, while many are concerned with children at home.

Eighty percent of Stanford's nurses work fewer than 40 hours a week. Flexible working hours are negotiated individually for those with outside commitments, says Walker.

Of nurses who leave the Hospital due to stress or "burn-out," he notes, many later join private companies—where they may be paid more.

In fact, one reason for the national nursing shortage, says Walker, is that increasing numbers of women—the main source of nurses, traditionally—are now seeking careers in numerous other fields, open to them today as never before.

Nursing administrators at Stanford have conducted two job satisfaction surveys in the last three years, says Walker, to take the pulse of nurses' feelings about their work.

Through questionnaires, they were asked what pleased them most at Stanford, what didn't please them, and what was important to them on the job.

Results were shared with the staff, who were then asked for further recommendations. These were of two categories, explains Walker: those which could take place at the nursing unit level, and those which would require his (administrative) involvement.

It was discovered through one of the surveys, says Walker, that communication was not all it could be between the nursing administration and staff.

To rectify this and build morale, a nursing services newsletter was started, along with weekly announcement sheets and monthly staff meetings. For Valentine's Day, 1981, a special "thank you" flyer was distributed to nurses, with warm comments from both the administrative btaff and several patients themselves.

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Also, a distinguished lecture series for nursing was set up by the Department of Nursing Services. Barbara Nichols, president of the American Nurses Association, was the series' first speaker, on February 25.

For the year 1980-81, says Heath, the original budget for ursing recruitment at the Medical Center was $220,000, plus orientation costs. But additional expenses were incurred for most of the innovations mentioned above.

In fact, says Heath, $460,000 is being spent, in all, for nurse recruitment. Orientation costs, he says, are $330,000 over what was expected. And additional compensation costs amount to $215,000.

Who foots the bill? The patients do, says Heath, as costs are passed along, with an ever-rising price tag on hospital care.

Future possibilities for nurse recruitment and retention, according to Walker, include expanding the Office of Nursing Research—which now has a staff of three, led by Dr. Lois Welches—into a regional center for nursing research. Funding is being sought through a grant from the federal government.

The center would focus on identifying and solving problems of nursing practice. Already, an educational program including workshops and seminars is underway, with the purpose of teaching nurses basic research skills. A survey designed to determine how many nurses would attend such classes, says Walker, demonstrated an overwhelmingly positive response.

Also under consideration is the feasibility of developing an on-site day care service for Medical Center employees. Carol Ann Bergman of Personnel has been coordinating a task force to explore this issue, with representatives from Nursing as well as other departments.

Another plan, says Walker, is to set up a satellite baccalaureate nursing program in conjunction with San Jose State University, at no cost to Stanford. (Stanford disspelled its own nurses training program several years ago, due to competition over funds in the Medical School.)

And U.C. San Francisco, says Walker, may develop a satellite master's program here. Tuition costs to nurses, he points out, would be much lower under these programs than if Stanford were to reinstate its own.

Plans are also underway for a cardiovascular institute to open in January, 1982. This would entail a six-month training program in cardiovascular nursing for all interested nurses—some of whom might be attracted to work at Stanford, hopes Walker. The costs of the institute have not yet been determined, he explains, but tuition fees would necessarily be charged.

"The Medical Center as a whole is known for teaching, research and patient care," says Walker. "And nurses should be involved in these different areas too, not just the latter."

"Professional excellence by excellent professionals" is the motto supporting Stanford's national reputation as a center of excellence for nursing practice, says Walker.

"We hope nurses will be attracted here by that, rather than by the idea of being near to San Francisco or the Golden Gate Bridge," he notes.

Friends of Nursing is a new community group forming to meet with Walker in an advisory capacity. Its purpose will be to solicit financial support for nursing activities and to increase public awareness.

In order to better market the Hospital—locally and nationally—as a desirable place to work, the group will help keep a close watch on both the images and realities of nursing at Stanford.

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Mailed Thursday, March 12, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Pictures at an Exhibition, by the composer Moussorgsky, is a challenge to the best pianists of the world, says Luther Cobb, M.D.

"I certainly never thought *I* could play it," says Cobb, a surgery resident in the lab of assistant professor Ronald Merrell. But he did—at his first recital since high school, given recently at Stanford.

As an undergraduate at Michigan State, explains Cobb, he started working on the piece under the guidance of a graduate student in the Music Department.

"I even auditioned in the Department for a duo major, with chemistry. But they decided my commitment was not strong enough, and they were right." In order to excel as a musician, he explains, one's commitment must be total.

But Cobb continued anyway on his own, keeping a piano in his dorm room until he graduated in 1974.

As a first-year medical student at Stanford, Cobb had no piano. He finally bought a piano but missed a teacher's guidance.

"If you're just playing for yourself, fooling around, you don't do as well," he explains.

While an intern in surgery here, Cobb resumed piano lessons. His instructor ever since has been Adolph Baller, a professor in Stanford's Music Department. According to Cobb, it was largely Baller's encouragement that led to his recent recital.

"Polishing a piece for performance is the best growth hormone for a musician," says Cobb, in the true words of a physician musician.

When he's not playing music, Cobb is concerned with research for improving treatment of diabetes and other diseases of the pancreas. Working with dogs as subjects, he and his colleagues are attempting to isolate islets (small glands) from the pancreas. They hope to be able to transplant the islets, instead of the whole pancreas. Pancreas transplantation itself, notes Cobb, is still in the experimental stages.

Born in Arkansas, Cobb discovered a love for the piano when he was five or six years old. He was one of six brothers, all of whom learned to play on an old piano given them by an aunt.

"My older brother was taking lessons from a piano teacher who lived next door. He would practice, and then I would take a seat and play his lesson."

Essentially, Cobb taught himself to read music and play, even before starting lessons. He grew up performing in several neighborhood recitals a year, organized by his teacher.

Today, Cobb participates in a musical group of physicians led by Rodney Anderson, M.D., a urologist at the Santa Clara Valley Medical Center. "There are lots of musical people around here," says Cobb, whose favorite composer is Chopin.

Preferring classical music in general, he nevertheless enjoys such moderns as Gerschwin and Scott Joplin. As for jazz, Cobb likes to listen. "It's a totally different skill to play it," he says.

There was a good turnout for his recent recital, says Cobb, especially from the Medical Center community. He hopes, since the initial try was a success, to perform more in the future.

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Mailed Thursday, March 12, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames (415) 497-6911

STANFORD—

The fifth annual George A. Zimmermann lecture will be given at Stanford University Medical Center on March 19, by W. Ian McDonald, Ph.D., F.R.C.P.

McDonald, who is professor of clinical neurology at the Institute of Neurology, Queen Square, London, will discuss "Three problems of Multiple Sclerosis," at 5, in room M-106. The lecture is free and open to the public.

McDonald is an honorary consultant physician to the National Hospitals, Queen Square and Maida Vale, and to the Moorfields Eye Hospital of London.

Established by the Department of Neurology in 1977, this annual lectureship is part of a gift from the late George A. Zimmermann, a longtime San Francisco businessman, for multiple sclerosis research and treatment at Stanford.

Previous speakers included Barry G.W. Arnason (1977), Richard T. Johnson (1978), Guy M. McKhann (1979), and John R. Kurtzke (1980).

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STANFORD—

The 1981 Achievement Rewards for College Scientists (ARCS) Scholars from Stanford University School of Medicine are Gary S. Richardson and Martin E. Kernberg. Both students received ARCS scholarships at a luncheon given in San Francisco, on March 5.

Affiliated with the Sleep Disorders Center, under the direction of Dr. William C. Dement, Richardson has been involved with sleep research at Montefiore Hospital in New York City and at Stanford since 1975.

Kernberg, who works at the Palo Alto Medical Research Foundation, is involved in cardiovascular research. At Stanford, he has worked with Drs. Edwin Alderman, Neil Ingels and Margaret Billingham.

The ARCS Foundation is a non-profit organization, founded in 1958 and based in Los Angeles. Its purpose is to provide funds for outstanding students of exceptional achievement and promise, involved in doctoral programs in physical science, life science or engineering.

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Mailed Tuesday, March 10, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Dr. Hugh O. McDevitt, the Joseph D. Grant Professor in the School of Medicine, has been awarded the 1981 Passano Foundation Award in recognition of his research on "the relationship between the immune system, histocompatability antigens and human disease."

He will receive the award along with an honorarium of $25,000 in Baltimore, on March 31.

McDevitt, 50, has been a pioneer in uncovering the relationship between the genetic control of the body's immune response and the body's susceptibility or resistance to various diseases.

He discovered that genes in the mouse called immune response genes, which control the mouse's ability to respond to infection, are clustered together on one chromosome, and that they are closely linked to genes responsible for recognizing histocompatability antigens and thus destroying transplanted tissue grafts. Analogous immune response genes are present in man also and appear to be associated with susceptibility or resistance to diseases such as ragweed hayfever, several autoimmune diseases and arthritis, multiple sclerosis, psoriasis, and cancers such as acute lymphocytic leukemia in children and Hodgkin's disease.

McDevitt received a bachelor's degree with honors from Stanford in 1952 and an M.D. degree from Harvard Medical School in 1955. Before coming to Stanford in 1966, he taught bacteriology and immunology at Harvard.

Among his other honors are election to the National Academy of Sciences and the 1977 Borden Award for outstanding research from the Association of American Medical Colleges.

Beginning in 1945, the Passano Foundation, a Baltimore-based nonprofit corporation existing solely to encourage medical research, has each year presented an award to a person or persons who have made an outstanding contribution to the advancement of medical science and whose work was done in the United States. The Directors give prime consideration to work that has immediate clinical value, or that shows promise of practical application in the near future.

Founded by the late Edward Boteler Passano, then Chairman of the Board of the medical and scientific publisher The William and Wilkins Co., the Foundation has honored 43 scientists. Of these, nine have subsequently won a Nobel Prize for their work.

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Mailed Tuesday, March 10, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

The brain is the body's grand communicator; its stock in trade is sending and receiving messages. Billions and billions of nerve cells are abuzz with signals, communicating with one another and with other parts of the body.

Two Stanford University School of Medicine researchers have found that in the brain's highest centers there may be more than one way to get the message across. The way they've discovered is speedier than the most common way of sending and receiving messages in the brain, and so it may be important in epilepsy, a disorder characterized by large numbers of nerve cells firing at the same time.

Michael J. Gutnick and David A. Prince of the department of neurology report in a recent issue of *Science* magazine that electrical connections apparently exist between the nerve cells in the cerebral cortex, an area of the brain important for learning, memory, perception, and consciousness.

The most common way for cells to propagate their messages in the cerebral cortex is through the use of charged chemicals called neurotransmitters. A nerve can be thought of as a one-way live wire: if a cell is turned on at its one end, an electrical signal rushes to the other, causing little packets of neurotransmitters to be dumped out. The neurotransmitters zip to other cells, giving them the signal to either turn on or turn off.

What Prince and Gutnick found is that while the signal is rushing down the nerve cells, if parts of other nerve cells are joined in just the right way, through so called "gap junctions," then the signal can jump from one cell to another, much like a spark jumps between two live wires.

This is important because messages can spread much faster if they're going through the electrical connection route than if they're travelling part way through neurotransmitters. If the message can travel so fast, then many cells can be turned on to fire at the same time. Since many nerve cells firing at the same time is a distinguishing mark in epilepsy, Prince hypothesizes that such electrical couplings may play an important role in the disorder.

Prince and Gutnick did not discover this type of nerve conduction; it's been known for some time. Until now, however, electrical couplings have only been reported in the "more primitive" or lower parts of the mammalian brain, not in the higher brain centers. The conventional wisdom has been that electrical coupling of cells is a property of primitive nervous systems, such as those of the electric eel, Prince says.

Prince speculates that these electrical couplings may be more important than previously thought, however, in normal as well as in abnormal brain function. He and Gutnick found that the cells that were electrically coupled were sometimes in columns. It's been known for some time that columns of cells in the higher brain regions act as units in receiving, processing and sending information. Prince says electrical couplings may make it possible for these cells to act as a unit by spreading the message so quickly among them.

Prince plans next to investigate whether electrical coupling between nerve cells plays an important role in the development of epilepsy after brain injury. He will continue using animals for his studies; this initial work was done in guinea pig brains. But, he hopes that such experiments on electrical coupling will eventually lead to a better understanding of the development of epilepsy in the human brain.

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Mailed Tuesday, March 10, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos, Bobbi Navickis or Laura Hofstadter (415) 497-6911

CITY EDITORS: A press conference with Drs. Reitz and Shumway is scheduled for noon, Monday, March 9 in room W001 at Stanford University Hospital, 300 Pasteur Drive in Palo Alto.

STANFORD—

The first combined heart and lung transplant in humans in almost 10 years, the fourth one ever done, was performed at Stanford University Medical Center on March 9 by a team of surgeons led by Dr. Bruce A. Reitz and Dr. Norman E. Shumway.

The patient, Mary D. Gohlke, of Mesa, Arizona, is reported in stable but critical condition in the Hospital's intensive care unit following the four-hour operation. She received the heart and lungs of an anonymous donor whose body was flown from southern California.

"So far the patient looks very good," said Reitz. "The heart is functioning normally and she is breathing with the help of a respirator."

He added that the critical period will come in 24 hours when an attempt will be made to wean the patient from the respirator.

The operation began at 12:30 a.m. and was completed at 4:30 a.m.. In addition to Reitz and Shumway, other physician members of the team included Drs. John Pennock, Edward Stinson and John Wallwork. Nurses involved in the transplant included Aggie Boyles, Peggy Hartin, Jackye McGraw, Grace Neal, Margaret Paskert, Jan Vorwerk, and Sue Young.

Gohlke, 45, is advertising director with the Mesa Tribune (a Cox chain newspaper) of Mesa, Arizona. She is the only woman executive on the advertising side on any Cox newspaper, and she rose to her position in three years.

Her husband, Karl, is an engineer and they have two sons, Lucas, 14, and Christopher, 17.

Gohlke has been suffering from pulmonary hypertension. After she became ill with a cold in November, 1979, she thought she was coming down with her usual bronchitis, but it was diagnosed as pneumonia. In February 1980, her conditon was diagnosed as primary pulmonary hypertension and by March of that year, she was only able to work four hours a day.

She was forced to take disability leave from her position, but hopes to return to work after recovering from the operation.

Gohlke came to the Stanford area with her mother, Bea Martin, several weeks ago in order to be close to the Hospital.

On her decision to have the operation, Gohlke recently commented, "we would still be in the trees eating bananas if we didn't try things. We've got to try, not just sit on our hands. If I die, I want to leave my family, my sons the thought that at least Mom tried."

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Her mother said, "she's gutsy, she's always been gutsy."

The 1972 discovery of the drug cyclosporin A set the stage for this new attempt to successfully replace at the same time both heart and lungs. Cyclosporin A circumvents two previously formidable obstacles in heart-lung transplants: the slow and imperfect healing of the windpipe and life-threatening infections.

Dr. Bruce A. Reitz, assistant professor of cardiovascular surgery at Stanford Medical School and head of the transplant team, estimates that the Stanford team may do three to four of these operations each year, considerably fewer than the 20 heart transplants it did last year. Not only do fewer people need a combined heart-lung transplant, but suitable donors are also harder to find, Reitz says.

As is true with heart transplant candidates, only persons judged to be dying and unable to be helped by any less drastic treatment will be considered for the operation.

For some patients with heart disease, replacing only the heart is not good enough. Their lungs have been irreparably damaged due to the high blood pressure resulting from a poorly-pumping heart. Patients with damaged lungs, resulting from either a failing heart or widespread disease in the lungs themselves, are a poor risk for a heart transplant. The damaged lungs resist the "new" heart's efforts to pump blood into them, straining the heart. The only recourse is to replace both the heart and the lungs.

Likewise, some patients who initially have just lung disease, such as pulmonary hypertension, or pulmonary or cystic fibrosis, end up with a damaged heart that needs to be replaced as well.

Although the success rate for heart transplants has improved in recent years (70 percent of the transplant patients now survive the first year), the replacement of lungs has met with failure. According to Reitz, in the 38 attempts up to 1977, only two patients lived longer than three months after surgery, and none survived longer than ten months.

The three previous combined heart-lung transplants, performed between 1968 and 1971, fared even worse: the patients survived only 14 hours, and 8 and 23 days.

One of the reasons success is yet to come in transplanting lungs is that the windpipe, or trachael tube, fails to heal completely, resulting in infection, air leakage or bleeding. The windpipe is slow and difficult to mend for a number of reasons, a major one being its scanty blood supply, which hinders healing.

Corticosteroids, until now the standard drugs given to prevent the body from rejecting the "foreign" lungs and an essential ingredient in the high success rate of heart transplants in recent years, slow down and antagonize the healing process even more. Cyclosporin A is such a find because it enables the surgeons to replace or decrease the dose of coricosteroids, and doesn't itself interfere with the windpipe's healing.

Cyclosporin A, a metabolite of the fungus Trichoderma polysporum, is composed of 11 amino acids hooked together to form a ring. It was discovered by Sandoz Pharmaceuticals of Basel, Switzerland. Sandoz has made the drug available for clinical trials to transplant surgeons in Britain, France, Canada and the United States during the last three years, and it has been used in kidney, liver, pancreas and heart transplants.

Exactly how cyclosporin A works is unknown, but it appears to inhibit the action of those cells of the body's defense system responsible for rejecting foreign tissue, the so-called T cells.

Reitz and Drs. Nelson A. Burton and John L. Pennock lay the groundwork for the operation working with monkeys. In tests during the past several years, they reinvestigated the possibility of heart-lung transplants with their new drug in hand. Results were encouraging. Three of seven monkeys receiving "new" hearts and lungs and being treated with cyclosporin A survived more than 140 days after surgery. Two are still living, 14 and 15 months after the operation.

Reitz says a major problem will be finding suitable donors. Donors will have to have both normal heart and lungs, and must be compatible with the blood type of the recipient.

Reitz anticipates that some donor lungs will be disqualified because they are infected.

Infection is the bugbear of transplant patients. The drug therapy, which suppresses the body's immune system, thus preventing rejection of the transplanted organ, also permits infections to gain a toehold. Infection has caused a third of all deaths in heart transplant patients, and the most common site has been the cells of the lungs. Another critical advantage of cyclosporin A is that it doesn't interfere with the immune system responsible for battling bacteria, while it inhibits those responsible for rejecting transplanted organs.

The choice of donors will be limited to those near Stanford Medical Center, because a method hasn't been worked out by which a heart and lung combination can be transported for any distance outside the donor's body, Reitz says. Since 1977 the number of potential donors for heart transplants has been greatly increased by a method to protect the heart in sterile bags and place it on ice after removing it from the donor and flushing it with a cold salt solution. Cooled hearts have been flown to Stanford in a chartered jet from up to 450 miles away.

Although, conceptually, replacing both the heart and the lungs (essentially the entire contents of the thoracic cavity) seems a mighty job, its actual execution is elegant, involving relatively few cuts and reconnections, once the overlying membranes are cut away.

Four surgeons work an average of four hours. Tubes are inserted into a major artery and two major veins just before they enter the heart so that the patient can be put on a heart-lung machine that will keep the blood flowing to all the other parts of the body. After the blood has been successfully detoured through the heart-lung machine with the help of clamps downstream on the artery and vein, the heart and lungs are removed with only three cuts; the ascending aorta (the major artery), right upper chamber of the heart and the windpipe, or trachae, are severed. The new heart and lungs are then put in, the three areas reconnected, and the blood diverted back through the new heart.

If the operation seems relatively simple, the balancing act performed after the operation does not. The body's immune system must be suppressed enough that it cannot mount an offensive against the new thoracic tenants, but yet not so suppressed that it cannot fight off the least infection.

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The new organs must be monitored regularly to see if they are under seige, and if they are, the dose of immunosuppressive drugs increased to avert a rejection.

A technique was developed several years ago to sample directly a small piece of the heart for early signs of rejection that can't be detected by more conventional methods. A thin, flexible wire with a clipper at the end is inserted in the patient's jugular vein and threaded down into the transplanted heart to obtain a small sample of tissue. This ability to directly assess the heart transplant accounts for a goodly part of the increased success rate in recent years.

This technique has not proved useful for lung transplants, Reitz says, and so it is hard to detect the first signs of rejection when only lungs are transplanted. In the combined heart and lung transplants, evidence of rejection of the heart means also rejection of the lungs, and therapy can be begun before the situation is out of control.

Although cyclosporin A is the best drug yet found for heart-lung transplants, it is not without its undesirable side effects. Most serious is the potential development of malignant lymphoma, a form of cancer that has been previously associated with immunosuppression. Three kidney transplant patients in recent clinical trials of cyclosporin A conducted at Cambridge University in England developed lymphomas in the first year. The research team in England has since lowered its dosage of cyclosporin and no new lymphomas have been detected.

Other side effects of the drug include mild cases of hair growth on the face and limbs, tremors, and toxicity to the kidney.

Cyclosporin A is still an experimental drug on which all the evidence is not in. Yet no drug now available to a transplant patient, who must take drugs the rest of his life, are without undesirable side effects. Cyclosporin A may give a patient with failing heart and lungs, who otherwise faces a sure and near death, the possibility of a successful transplant, Reitz says.

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Revised Monday, March 9, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A Stanford University student was raped in a Stanford Medical School laboratory during the first week of February around midnight.

Marvin Herrington, director of the Stanford Public Safety Department, is releasing a description of the rapist in order to alert the community to be aware of any suspicious persons.

The rapist is described as a white male in his early to mid 20's, of medium height and build, with dark brown collar length hair. At the time the attack took place, he was wearing a green hospital scrub suit and a T-shirt.

According to Herrington, the rapist approached by entering the laboratory where the student was studying, turning off the light, and then assaulted the victim, who subsequently required medical treatment.

The rape victim, who does not want to press charges and wishes to remain anonymous, did not report the rape to the Stanford Public Safety Department until February 24, according to Herrington.

Herrington stresses that anyone in the Medical Center who notices a suspicious person meeting this description should contact the Hospital's Department of Safety and Security immediately at extension 7-7222, or they may contact the nearest police department, either Stanford's Public Safety Department or the Palo Alto Police Department. Both departments are investigating the case, although the incident occurred in the Medical Center, which is under Palo Alto police jurisdiction.

There are as yet no suspects.

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Mailed Thursday, March 5, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Michael Cowan has been appointed director of Public Events at Stanford University Medical Center, and executive officer of the Medical Alumni Association, announced Lawrence G. Crowley, vice president for Medical Affairs.

Cowan, who succeeds Barbara Norton in these areas of responsibility, will be involved in vigorous program development for both. Public Events programs will include tours, a Progress in Medicine lecture series and a speakers' bureau.

"By next winter," says Cowan, "the program will be ready to reach actively into the community, rather than just respond to outside requests as they come in."

This month, the office is settling at 800 Welch Road.

Cowan has been assistant to the vice president for Medical Affairs and dean of the School of Medicine since April, 1978.

Prior to that, she served as financial aid administrator of the Medical School, and as a financial assistant in the University's Student Accounting Office.

She has been a consultant to the Department of Health, Education and Welfare, and to the Calfornia Student Aid Commission.

Cowan received her B.A. in rhetoric at U.C. Berkeley and did graduate work in speech at U.C.L.A. She also attended the Calfornia Graduate Institute of Psychoanalytic Psychology.

Cowan lives in Menlo Park with her son.

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Mailed Wednesday, March 4, 1981

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A new but as yet little known applied science called genetic toxicology may soon become as widespread as general toxicology within the chemical and drug industries, predicts a Stanford University Medical School professor.

Toxicology testing of new substances to determine their harmful effects on the body is one of business's responses to the public demand for more assurance of safety concerning new products. Genetic toxicology goes beyond general toxicology to study the specific effects of chemicals on the genetic material (DNA), explains Dr. Errol Friedberg, associate professor of pathology.

DNA can be damaged by a wide variety of chemicals and by certain wavelengths of radiation—if not repaired, the damage may lead to permanent mutations, or to diseases, including cancer.

In fact, it is believed that one significant cause of cancer may be abnormal repair or lack of repair of damaged DNA, according to Friedberg.

Many industries are already setting up laboratories for genetic toxicology programs, hiring scientists whose specific job will be to determine the degree to which products under consideration for manufacture and marketing cause damage to DNA.

"It's an entirely new application of the techniques of DNA repair research," says Friedberg.

In theory, he adds, exquisitely sensitive tests could be developed to monitor DNA damage within the cells of individuals exposed to high risk chemicals or radiation.

In part, to meet the demands of this new technology, Friedberg and his colleague, Dr. Philip Hanawalt, professor of biology, have compiled a book that provides "cookbook" detail about current laboratory procedures in DNA repair research. The book, *Laboratory Procedures for Research in DNA Repair* has just been published by Marcel Dekker, Inc..

In the preface to the book, Friedberg and Hanawalt state that "after almost half a century of active research, the terms DNA damage and DNA repair have come to have much broader significance than might have been anticipated.

"It is now abundantly clear that the plethora of chemical agents that 'contaminate' our environment constitute a major (if not the major) source of biologically significant damage to the genetic material in living cells."

The vital information contained within the DNA of the human body would be reduced to gobbledegook if it were not for the sophisticated cellular repair systems that Friedberg and Hanawalt have been studying for many years.

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In order to understand how DNA damage and repair occur, it's helpful to imagine the structure of the DNA molecule, Friedberg suggests.

DNA consists of extremely long chains of small molecules called nucleotides which are strung together in a precise sequence in which is encoded all the vital information for the cell's growth and survival, he explains. Triplets of bases form the "words" of the DNA language, and an alteration in one base can completely alter the sense of the "word".

Damage to DNA can take the form of a deleted base or stretch of bases, chemical alteration of bases, abnormal binding together of adjacent bases, or one or more breaks in the long DNA strand.

Various enzymes within cells recognize these specific types of damage and repair the mistakes, restoring the cell's original complement of genetic information, Friedberg explains. For instance, there is a specific enzyme that recognizes and repairs two adjacent pyrimidine bases that have bonded to form a nonfunctional pair, or "dimer". If left unrepaired, such dimers disrupt the normal uncoding system that processes the information contained in DNA

Normally, DNA repair enzymes maintain genetic order within our cells. But what happens if a component of the repair system itself is defective? Serious disease may be the result, says Friedberg.

For instance, he is studying an uncommon disease called xeroderma pigmentosum—patients with this hereditary condition have a 100 percent probability of developing skin cancers, a type of malignancy associated with ultraviolet radiation from the sun and other sources.

Individuals with the disease have a defect in the enzyme that repairs DNA damage caused by ultraviolet radiation.

Another of the 15 or more diseases now suspected to be caused by defective DNA repair systems is ataxia telangiectasia, which is associated with a high incidence of cancer of the lymphatic system, Friedberg notes. Radiotherapy or x-rays cause many such patients to become seriously ill, because of a defect in the repair of x-ray damage to DNA.

Despite increasing evidence that environmental chemicals are a major source of damage to DNA, the relationship between environmental "contamination" and human cancer is still very controversial, says Friedberg.

But it is important to closely monitor new chemicals to establish their genetic toxicity, particularly to ensure safe exposure levels for industrial workers who experience prolonged contact with the materials, he maintains.

Mailed Tuesday, March 3, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames (415) 497-6911

STANFORD—

Dr. Ferid Murad, professor of medicine and pharmacology, and director of the Clinical Research Center at the University of Virginia Medical School, will present the Pfizer Lecture on Friday, March 13, at Stanford University School of Medicine.

The public lecture begins at 3:15 in room R-358.

Murad's main research areas are cell biology and molecular pharmacology. He has been a leader in trying to understand how the compounds cyclic GMP and AMP regulate a whole series of cellular functions.

He is especially interested in discovering where the enzyme guanylate cyclase—which produces these compounds—is located in the cell, and what regulates its activity.

In his lecture, entitled "Guanylate Cyclase: Purification, Characterization and Preparation of Monoclonal Antibodies," Murad will discuss his use of monoclonal antibodies in characterizing the enzyme.

The Pfizer Lectures are sponsored by the Division of Clinical Pharmacology and the Department of Pharmacology at Stanford Medical School. They are funded by Pfizer Pharmaceuticals, Pfizer Inc. of New York City.

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STANFORD—

Did you know that Stanford University Hospital's pharmacy fills an average of 1,283 prescriptions a day?

Or that the Auxiliary's contributions to the Hospital since 1959 include more than 1,450,000 service hours and $659,000?

Or that in 1979-80, the School of Medicine received gifts of $16,426,000?

These are just a few of the many facts spelled out in the Stanford University Medical Center *Facts* booklet of 1981. Take this one: tuition per quarter, for the School of Medicine, was $50 in 1920; in 1981 it's $2,780.

For copies of *Facts*, write to: Publications, Office of Medical Development, 780 Welch Road, Suite 106, Palo Alto, California 94304; or call (415) 497-5036.

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Mailed Tuesday, March 3, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

The Stanford University School of Medicine which, according to earlier forecasts would have faced a budget deficit of up to $2 million in fiscal 1980, has ended the year in the black, Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean, told the School's Faculty Senate last week.

"We assess the financial health of the Medical School to be sound," Crowley said, adding that he expects balanced budgets for the next two years if present assumptions for inflation, salary increases, energy costs and other factors hold true.

Crowley said the anticipated deficits forecast in 1978 and 1979 were avoided by holding down the expenses in the School's operating budget, postponing capital improvements, new income and improvements in research support.

However, the present optimistic outlook does not mean there are no problems, he said. "While we have attempted to address our capital needs in a rational manner, there is still a gap between those projects we would like to do and those which we can afford.

"Utility costs are escalating at an alarming rate. It still remains difficult to accurately predict faculty activity in the clinical and research areas. The School is highly dependent on indirect cost recovery from sponsored research, and faculty practice income for both operating and capital needs.

"Thus, we must constantly monitor our income and expenses to maintain our present good health."

Clouding the fiscal horizon further, Crowley added, is the uncertainty of future research funding under the new administration in Washington and policies which have yet to be developed.

"Prudence dictates, therefore, that we be conservative, and attempt to consolidate our position based on the fact that Stanford has done well in a declining research market due to the quality of its faculty and, hence, strong competitive position," he said.

The financial long-range forecast report prepared by David Mendelow, associate dean of the School of Medicine, was developed this year on a mathematically structured computer simulation model. The purpose is to set formal constraints on the next year's budget development and to establish financial direction for a number of years ahead.

"We approach this year's forecast with increased maturity, sophistication, and understanding of our financial environment," Mendelow wrote.

The School's current operating budget, excluding sponsored research, is $20.8 million. Academic department expenses comprise 56 percent of the total expense. Faculty and other teaching salaries are 31 percent of the total and 55 percent of the academic departmental expenses. Utilities are the second largest item, 13 percent. Administration, and operations and maintenance are each 12 percent. Academic support, including library expenses, are 7 percent of the total.

These assumptions were used in preparing the long-range forecast, according to Mendelow:

- inflation is projected at 10.5 percent for fiscal 1980 and 1981, decreasing to 10 percent in each of the next two years.

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• faculty salaries are expected to rise 2.5 percent above inflation in 1981, and one percent above inflation in the next two years. Staff salaries are also expected to increase "to correct current seriously non-competitive situations."

• energy costs, based on calculations of Medical School uses of energy, are expected to rise 17.5 percent, 11.6 percent, and 23.5 percent in the next three years.

The financial forecast, in addition, assumes a modest faculty growth in selected basic science and clinical departments reflecting programmatic needs, and modest increases in sponsored research, and in clinic visits.

The class size, according to the report, will remain the same. Tuition increases, forecast by University budget assumptions, will be at 3.1 percent above inflation for fiscal 1981, and two percent in subsequent years. Federal capitation grants, originally provided to encourage schools to train more physicians, will be phased out in 1981.

The combined effects of unrestricted income loss and essential new programs have resulted in an increase in the budget of academic support services, Mendelow said.

He noted, for example, that restricted funds for library acquisitions are not keeping pace with rising costs. Hence, more and more of the library's acquisitions must be covered by the School's operating budget.

A new element added this year to the School's long-range forecast concerns capital improvements. "Our outlook has broadened," he said, "for we recognize that capital investment is an integral part of any long-range financial plan."

Postponement of much needed capital improvements has resulted in plant and program deterioration in so many areas, and this must be corrected. Mendelow said a number of major capital initiatives are contemplated in the future.

"The source of funds include major gifts, federal grants, and School reserves," he said. "However, it is clear to us that a major gap exists in our ability to meet our major project needs."

He said that while the School has increased its reserves to the extent that it is able and is now studying how much, if any, can be used for capital improvements, a comprehensive plan will have to evolve on how these projects should be funded.

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Mailed Tuesday, March 3, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

The Stanford Alcohol Clinic will sponsor a series of four public lectures in March and April designed to increase understanding of problems and issues surrounding alcohol use and abuse.

The meetings will take place on four successive Monday evenings starting March 16 at 8 p.m.. They will be held in Room M112 of the Stanford Medical School, located on the inner courtyard at the south corner of the Medical School.

The programs will address concerns of individuals and families and will cover treatment possibilities and results of recent research on alcoholism.

According to Dr. Emily Garfield, educational coordinator for the Alcohol Clinic, this series was arranged in response to public interest on the part of those concerned about alcohol—their own drinking, someone else's, or issues in sobriety.

Dr. Stephanie Brown, clinical psychologist and director of the Clinic, will open the series March 16 with a talk entitled "What is Too Much Alcohol?". Brown is recognized for her innovative work on the causes and treatment of alcoholism, and on children of alcoholics.

Subsequent programs, all to be held at 8 p.m. and conducted by members of the Alcohol Clinic staff, include:

March 23—"Alcohol and the Family," with Dr. Susan Beletsis, clinical psychologist and therapist;

March 30—"Children of Alcoholics," by Dr. Tim Cermak, psychiatrist;

April 6—"Alcohol as it affects Adolescents, the Elderly, and Other Groups," with Dr. Emily Garfield, Clinic educational coordinator.

For further information call 497-6376.

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Mailed Monday, March 2, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

"Her prognosis seems better now than at any time in the past three weeks."

These were the words of Dr. Bruce Reitz, speaking of the recovery progress of 45-year-old Mary D. Gohlke of Mesa, Arizona.

Mrs. Gohlke, advertising director with the *Mesa Tribune*, received a combined heart-lung transplant at Stanford University Hospital March 9. It was the first such transplant in humans in almost 10 years, and the fourth one ever done, according to Reitz and Dr. Norman Shumway who performed the four-hour operation.

The operation was the culmination of more than two years of experimental work in primates, conducted by Reitz and his associates in the Stanford cardiovascular laboratory.

In his first major statement since the operation, made in response to numerous press queries, Reitz emphasized that Mrs. Gohlke still faces a long road to recovery. "And unforeseen problems could arise."

But he added, "The mild rejection of her new heart and lungs that beset her at 10 days after surgery has now been completely reversed, and by every indication, her windpipe is healing adequately."

The healing of the windpipe has been a particularly troublesome problem in past heart-lung transplants, Reitz explained.

"We are especially encouraged that it has thus far posed no problem for Mrs. Gohlke."

Reitz said that now the major potential risk that could hamper Mrs. Gohlke's recovery is infection.

"She has suffered no infections to date," he said.

This is an encouraging sign, according to Reitz, but she will be watched closely for signs of infection in the next few months.

Reitz did not rule out further rejection episodes which are not unexpected in transplant patients. "If another episode should occur, we expect that we will be able to catch it early on and control it," he said.

According to Reitz, the smooth healing of the windpipe and the absence of infections thus far is due to the specific action of the drug Cyclosporin A as compared with other immunosuppressants previously available.

"Mrs. Gohlke," said Reitz, "now faces the challenge of rebuilding her strength and stamina. In the last few days she has shown steady improvement."

He explained that Mrs. Gohlke has begun physical therapy, such as lifting very light weights, and is even being taken outdoors for a change of scenery.

Although she is still very tired, she is beginning to regain her pre-operation sense of humor. "How are the monkeys?" she asked Reitz recently, referring to the animals used to make this experimental work possible.

Reitz said Mrs. Gohlke is expected to remain in the hospital at least another month and a half. "We hope she will be able to move from the intensive care ward to a general one in perhaps two to three weeks.

"Throughout, Mrs. Gohlke has shown great spirit and determination and she appreciates the encouragement she has received from many people," Reitz said.

He also stressed the experimental nature of the operation. "We are learning, and happily, all the lessons thus far have been good."

4-1-81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

CITY EDITORS: A press conference with Willie and members of the Pediatrics staff is scheduled for 9:30 A.M., Friday, April 3, in the Pediatrics playroom at Stanford University Hospital, 300 Pasteur Drive in Palo Alto. STANFORD—

Eleven-year-old William Ramirez may get to go home soon.

When that happens, he'll be the first ventilator-dependent, quadraplegic child, receiving financial support from state agencies, ever to go home from a hospital in the tri-county region of Alameda, Santa Clara and San Mateo.

"We've been hoping to set a precedent with Willie," says clinical social worker in Pediatrics Maria Nasjleti who, along with many other dedicated staff members, has been planning Willie's return home for many months.

In the past, social agencies such as MediCal and the California Children's Service have provided financial support for children like Willie while hospitalized, but not at home. Willie's parents, both of whom work full time, moved with their four children to the U.S. from Mexico four years ago. They cannot afford, on their very limited income, the medical equipment and renovations that would be required to bring their son home.

Willie was initially hospitalized at Stanford University Hospital on December 15, 1979, after being hit by an automobile driven by an uninsured motorist in his hometown of Hayward, California. He was paralyzed from the neck down.

In May, 1980, Willie was transferred to the Santa Clara Valley Medical Center for rehabilitation services. While there he learned to type on an electric typewriter with a mouth stick, paint and talk again. He returned to Stanford last August.

After a very complex struggle requiring the participation of Hospital staff members with varying skills and responsibilities, the state has agreed to pay for Willie's medical equipment at home, transportation for medical check-ups, and all medical supplies including medications. It will also pay nurses' fees for trial home visits, prescribed by Dr. James Loomis, Willie's attending pediatrician. (The three visits he has had so far, reports Nasjleti, went exceedingly well.)

Staff involved in the group effort include physical therapists, occupational therapists, respiratory therapists, recreation therapists, neurosurgeons, pediatricians, psychiatrists, Willie's primary nurses, the clinical nursing coordinators (C.N.C.'s) and the pediatric resident staff.

"But with all of our work," says Dorothy Holmes, assistant C.N.C., "we couldn't have gotten anywhere without Willie's outstanding adjustment and spirit, unusual for a child his age. And his mother is a pretty amazing woman, too," she adds.

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"The state's willingness to set this precedent," says Nasjleti, "demonstrates that in the future it will be possible for other children like Willie to go home instead of having to be institutionalized." Without the assistance that's been granted, she explains, Willie would need to live in an institution for the remainder of his childhood years. And, she adds, there appear to be very few community resources designed for handicapped children, the services that *do* exist accommodating only those 16 or over.

"I think this is because kids require more than adults do, in terms of supervision of daily activities," says Holmes. But, she adds, as more and more severely injured children are surviving now, provisions need to be made for training families and setting up households.

But Willie does have a special card which enables him to ride the Sam Trans Redi-Wheels buses, specifically built for handicapped and disabled persons.

And he's been attending the Loma Vista school in Palo Alto regularly, while the Hospital is still his home. "Establishing a school program for a needy child is difficult," says Nasjleti, "and the district has done a wonderful job." Willie, she adds, is the first child on a respirator to be admitted into the Palo Alto school district.

"A charmer" is one way to describe Willie, says Nasjleti. His engaging personality and sense of humor may be part of the reason, she suggests, that he has enlisted the interest and support of so many staff members at Stanford.

"They have just hung in there for so long and shown such patience," says Nasjleti, explaining that Stanford, a center for acute care rather than rehabilitation, is not usually equipped to deal with such a long-term project.

"It would have been much easier to send Willie somewhere else once he was stable," she continues. "This has been a real humanitarian effort."

Says Holmes, "The only reason Willie has had to stay at Stanford for a year and a half is that there's no other institution in California that could take him. The rehabilitation facilities are just filled to the brim."

An exceptionally bright and talented child, Willie has been extraordinarily brave since his precipitous accident, often boosting the morale of those who care for him. "He has not shown bitterness about his accident," says Nasjleti, "though of course he has his moments." His attitude has been one of hope, courage and determination."

Holmes explains that Willie has adjusted well to his lifelong impairment, and is able to do a lot more now than he could at first. His phrenic nerve pacers allow him to be off the ventilator for five to six hours, on good days. "He's gotten more used to his situation, but he had to put lots of hard work into it," she says.

Speaking both English and Spanish, Willie has made a variety of friends during the course of his stay here. He and an accomplice recently wrote a three-page plan for taking over the Hospital!

But Willie's real claim to fame lies in his mastery of a particular computerized game. The company that produces it (and donates new materials to Stanford's playroom every year) recently asked if the Ramirez' would consent to Willie doing commercials! Sure enough, they have agreed.

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Willie's parents made a commitment early on to do whatever is necessary for Willie to return home. Though they speak only Spanish and therefore require interpretors, they have been taught intensively by Stanford personnel to care for their son at home.

"I think it's his family's faith that's the bulk of their strength," says bilingual Nasjleti, adding that Willie's return home will mean a tremendous change in lifestyle for the entire family. The transition, she says, will be wrought with many social, psychological and emotional hurdles.

The only thing keeping Willie in the Hospital now, says Nasjleti, is the lack of a suitable house for his family. The Ramirez' present home is not large enough to accommodate all the modifications necessary for Willie's care. Among other items, electrical work would need to be done, a furnace installed, and several access ramps built.

Luckily, the Ramirez family has been approved to participate in a federally funded rent subsidy program, administered by the city of Hayward. They are searching for a new home, with the help of the Hayward Community Housing Advisory Service.

Willie has two older brothers and an eight-year-old sister. Because of certain program requirements, the house they find must have four bedrooms.

Meanwhile, says Nasjleti, the telephone company has devised a special, inexpensive speaker system for handicapped people. Willie will have one in his new home.

And both Pacific Gas and Electric and the Hayward fire department have agreed to provide "life-line services" to the family. This means that in case of emergency or machine malfunction, help will arrive at the Ramirez house momentarily.

Willie will probably attend the Sunset School for Orthopedically Handicapped Children in Hayward.

If he didn't go home to his real family, says Holmes, Willie might have to be placed in a foster home. The hope now is that things will work out for the Ramirez', once they find an appropriate house.

"Those of us who have worked with Willie look forward to the wonderful day when he can go home," says Nasjleti. "Still, after all this time, it will be sad in a way." It's apparent, though, that none of the parties intend to lose contact.

Any groups or individuals wishing to make donations for Willie's care should contact Alice Morrow, R.N., clinical nursing coordinator in the Pediatrics unit at Stanford University Hospital, 300 Pasteur Drive, Department of Nursing Services, Stanford, California 94305. Morrow's phone number is (415) 497-5351.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames (415) 497-6911

STANFORD—

A new group program called "Social Skills for Singles" will soon be offered by the Department of Psychiatry's Stress Reduction Clinic at Stanford. The series is similar to one conducted in 1980.

Designed for single adults who experience some discomfort with social interactions, the group will meet at the Clinic on Mondays at 6 p.m., for eight weeks, beginning May 11.

The major focus of the group will be to teach communication skills for initiating conversations, maintaining them, and requesting future meetings. These skills will be described, demonstrated, discussed and practiced. In addition, concerns during social interactions, as well as places and ways to meet people will be discussed.

Group leaders will be Barbara Newman, a licensed marriage, family, and child counselor, and Carl Viesti, Jr., a licensed psychologist.

Interested people will be interviewed, beginning April 20, to determine whether the group will benefit them. There is a small fee per session for those who enroll.

For further information or to schedule an interview, call Newman or Viesti at 497-6341.

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STANFORD—

The next proud owner of a king-sized, handmade, Stanford album quilt will be selected on May 8, at the annual spring benefit of the Stanford Medical Faculty Women's Association.

Each year the Association, founded in 1961, raffles off the quilt (first prize), along with several other special items and gift certificates for hotels and restaurants. Funds raised go towards the Medical Student Scholarship Fund, started in 1967 by the Association under the presidency of Gladys Kirkman. Mrs. Kirkman has been leader of the quilting project, which attracts many participants, ever since.

Raffle tickets will be sold at Stanford University Hospital, April 20 through 24; at the Palo Alto Clinic April 27 through 29; at White Plaza April 30 through May 1; and again at the Hospital May 4 through 8. The quilt will be displayed at each sales location. Tickets cost $1.00 each, $5.00 for six, or $10.00 for twelve.

4-7-81 —30— 213

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Nisu mi sve koze na broju.

Do you know what that means? If so, you may consider volunteering as an interpreter at Stanford University Hospital.

The Hospital needs people who are fluent in different languages to act as interpreters for patients from many nations all over the world.

Although three professional Spanish interpreters, as well as many bi- and multi-lingual Hospital employees, provide translation services, they cannot provide all the assistance needed in a variety of languages, explains Jeanne Kennedy, director of Community Relations.

Kennedy is developing a "translator bank" of interested community members who would like to lend their linguistic expertise every so often. The number of times each individual would be called upon is probably small, she says, perhaps only once a year. But the effect on the patient's welfare would be enormous, she adds.

If you are interested, contact Kennedy at the Office of Community Relations, room P3018, Stanford University Hospital, or phone 497-7167.

Incidentally, the phrase in Serbo-Croatian means, literally, "I cannot account for all my goats," but any native speaker would understand it to mean "I don't feel myself today."

—30— L101

Mailed Wednesday, April 8, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

If your mate helps you lose weight, you'll likely soon become slimmer and healthier, according to a new Stanford University study—even if your relationship is unhealthy.

Couples working together to help one overweight partner reduce achieved substantial weight losses with minimal assistance through a simple home study weight loss program, according to Stanford researchers. And, unexpectedly, the couples with the least successful relationships lost more weight working as partners than their more blissfully paired counterparts, the researchers report.

These are some of the surprising results from a year-long study of 23 couples enrolled in a home study weight loss program carried out through the Heart Disease Prevention Program at Stanford University School of Medicine.

The overall average weight lost by participants in the program was 23 ½ pounds, a heftier reduction than that obtained through many conventional weight loss behavioral techniques, reports William Threlfall, a doctoral student in counseling psychology and a member of the research team. Threlfall's colleagues on the project are Dr. Randy Black, formerly a postdoctoral scholar at Stanford University School of Medicine and now on the faculty at University of Nebraska Medical Center, and Judy K. Black.

The researchers note that there was no significant performance difference for males and females, although the program was by no means successful for everyone. One participant actually gained eight-and-a-half pounds although three-fourths of the participants lost at least 17½ pounds of their excess body weight, and one-third of the participants lost at least 33 pounds. "Altogether we were very pleased with the weight losses and long-term maintenance," say Black and Threlfall.

But "counterintuitively", they add, the unhappy couples managed a significantly greater weight loss—an average reduction of 32 pounds for the reducing member—when compared to the happier pairs, whose reducing members lost an average 19 pounds during the year.

The researchers explain that prior to the study they expected that people who could work together well would show greater losses. The researchers speculate that one of several possible factors contributing to the unexpected finding may be that motivation to improve personal appearance was higher among individuals struggling in, or considering leaving, an unsuccessful relationship.

(Happiness and unhappiness were determined by scores on several standard psychological tests, the researchers note.)

On the average, participants lost more than 38 percent of the total amount necessary for them to reach their ideal weight (calculated by a stringent formula often used in weight loss research). However, weight loss is not the only useful measure when evaluating obesity, the researchers observe. More impressive were participants' achievements in lowering their body fat content: on average, they lost more than 45 percent of the total amount necessary to reach an optimal level of body fat, and 17 percent of the participants actually achieved their ideal level of body fat, the research team reports. (The ideal for men is 14 percent body fat, and for women 24 percent.)

Two other observations intrigued the research team.

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"Many of the overweight helping partners lost weight too, amounting to an average loss of nearly ten pounds," they note. In addition, many of those who successfully shed pounds also freed themselves of a high-blood pressure problem, a substantial health benefit believed to be associated with weight loss. "Of the 14 subjects who were initially hypertensive, only three remained so by the end of the year," the researchers explain.

The home reducing program was divided into three phases. During the first phase, which lasted 13 weeks on the average, couples engaged in some simple record-keeping concerning calories and body weight. The only contact the couples maintained with the research team amounted to mailing these records to a counselor on a weekly basis. The greatest reduction occurred during this treatment phase: subjects lost an average 14½ pounds and continued losing for an average of 13 weeks. "Three subjects required no further intervention to reach ideal body fat," the researchers report.

"We were surprised to see such substantial and extended weight loss during this time with so little involvement on our part," they note.

In fact, the experimenters had designed the study to evaluate problem-solving strategies for people who were unable to lose weight.

When the participants' weight loss leveled off, they entered the second phase of the study, which focused on problem-solving strategies designed to help the couples overcome weight loss obstacles. The couples were taught specific skills for encouraging further reduction and they maintained close mail and telephone contact with counselors. During this ten-week period, the participants lost on the average another six pounds, the researchers report.

The third component of the study examined the couples' weight loss progress over a six month period using the learned problem-solving skills with minimal supervision—an average of one-and-a-half pounds were shed by the reducers.

Finally, at a follow-up check three months after completion of the study, the participants had regained an average of only one-and-a-quarter pounds.

Based on these finding, the researchers suggest that people bring into a weight loss program substantial personal resources for achieving weight loss. "Still, the first pounds are often easiest for dieters to lose," they point out, and this may account for some of the initial loss figures.

But overall, "the minimal intervention strategy appears to be a powerful procedure and for some is the only method necessary to reach an ideal level of body fat," the researchers suggest. And the notion that people are able to accomplish substantial weight loss on their own, at home, using simple techniques, may give them lasting confidence to continue losing and to maintain the loss once achieved, the researchers conclude.

Most of these findings were presented at a recent meeting of the Association for the Advancement of Behavior Therapy.

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L101

Mailed Wednesday, April 8, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

"Here I am in this beautiful, golden California. Everyone's happy. I should be happy, but I hate it."

So recently lamented a soured-on-sabbatical wife of an academic at Stanford's Help Center.

"I don't have a job. I don't have any friends. And everyone seems so busy."

A sabbatical has the mystique of being a time of casting off the weight and responsibility of teaching and committee meetings, a time of unfettered thought, a time of adventure and of travel to new lands.

But sabbaticals are not always sunny, and the stresses and strains encountered are sending a notable number of people to Stanford University's Help Center for counseling.

The Help Center was started three years ago to provide a problem-solving, short term counseling service for the University, Medical Center and SLAC communities.

"I have had several people tell me," says Linn Hayes, clinical social worker at the Help Center, "'I went on sabbatical once. It was awful; I'll never do it again.'"

"And so they've ruled out what can be a marvelous experience because it was so horrendous the first time," she says.

Before families embark on a sabbatical, they should sit down together and dispel the fantasies and discuss the realities, say Hayes and Sharon Levin, also a Help Center clinical social worker.

"As much as possible every member of the family should be involved in the planning. Obviously, someone has to make the final choice of where to go, but everyone should have some imput," Hayes says.

"If there is no choice in the place, then there should be a choice in whether or not to go.

"Repeatedly, we've heard complaints from the family members who only reluctantly went along, without thinking out what they were going to do. They get to Oshkosh, Egypt or Boston and there is instant cultural shock. Often, without friends or plans, they just become immobilized."

"The academic going on sabbatical should think through what his or her professional goals are, and if they are realistic," Levin says. "Can three books and five articles be written, and a Nobel Prize-winning piece of research be done in one year or six months?"

Sabbatical and Sabbath are both derived from the ancient Hebrew word for rest, but the modern-day reading seems to be restless, a time of frenetic activity.

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"Many people charge into a sabbatical thinking they're going to set the world on fire," says Hayes. "Then, they get there and the department isn't all it was said to be, or the equipment isn't as good as what they've left behind, or the intellectual chats they've imagined before going just don't materialize."

Most people don't give themselves permission to express any ambivalence about the sabbatical, Levin says.

"I'm here, I must be having a good time." people sternly tell themselves, and quietly reprimand themselves, "I better be having a good time."

"It's a year in one's life," Levin says. "It's not a honeymoon. In a normal year, there are ups and downs. Why shouldn't this be true in a sabbatical, when there are even more adaptations than normal to make?"

Those that do remain true to the etymological meaning of the word "sabbatical" and do regroup and rethink during the year may also encounter a crisis, Hayes says.

"I've had people come back and say, 'Things that bothered me about my job and my teaching position here really crystalized while I was away, and I now realize that I'm quite unhappy.'"

If going there and settling in is a wearing experience, coming home can be just as wrenching, Levin says.

"The family has to leave its new friends, and come home to friends that may have changed in the last year."

There's also the problem of how a family handles being in close quarters and forced shared activities for perhaps the first time.

If the challenge of being emotionally elastic doesn't faze the family, the more mundane matter of finances may, Hayes says.

"It just costs more to go on sabbatical these days. Anywhere. Many people used to go to Europe, but an apartment in Paris for a family costs $2000 a month now. There may not be enough money left over to steal away on those little trips the family had planned, or for those activities counted on to entertain and occupy the family during the time away."

Because of the chilling costs involved, a six-month sabbatical is becoming the only choice for many, Hayes says.

All this is not to discourage people from taking sabbaticals, but to tell them that ups and downs are a natural part of the sabbatical leave, Levin says.

4-15-81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

"An experimental operation" is how doctors describe the recent heart-lung transplant performed at Stanford University Medical Center. However, someone had to decide that it was appropriate to do the experiment.

That someone was Stanford's Medical Committee for the Protection of Human Subjects in Research, and the heart-lung surgery is just one of hundreds of research activities which it has reviewed in the past year.

The committee is the medical sub-panel of Stanford's "institutional review board," a requirement of the Department of Health and Human Services (HHS) for all institutions receiving federal funds for sponsored research involving the use of human subjects.

Its purpose, says chairman Philip A. Berger, M.D., associate professor of psychiatry, is three-fold: to protect the human subject; to facilitate research and make sure potential new treatments are not delayed unnecessarily; and to meet HHS regulations. The committee's overriding principle, says Berger, is that in order for a proposed investigation to be approved, it must present greater potential benefits than risks.

"Not many projects are rejected outright, but many go through a long process of modification by the committee," he notes.

More than half of the 60 to 70 proposals reviewed each month are directly affected by committee action—even if it's just a request for additional information. "It's an unusual proposal that doesn't need *some* modification," says Berger, explaining that this might be in scientific design, subject selection, maintaining confidentiality, or other areas.

"One joy of being on the committee," says Berger, "is getting to know many potential new treatments first. It's very exciting, what goes on here at Stanford. We see proposals of people who have won Nobel prizes for their discoveries."

The studies reviewed by the committee are primarily biomedical, usually involving the administration of drugs, chemical agents or blood products, or the study of samples of bodily fluids or tissues. Many also involve surgery.

There is a procedure for screening out proposals that don't need review, based on certain HHS-specified criteria. But, says Berger, who's been a member for five years and chairman for two, when in doubt the committee reviews. "We err on the conservative side."

According to HHS regulations, the composition of an institutional review board must reflect the diversity of attitudes and expertise inherent in any health-related or academic environment. The medical committee at Stanford includes physicians of various specializations, a nurse, an administrator, a lawyer, a pharmacist, an undergraduate student, a medical student, and a community member not otherwise affiliated with the institution. Appointed by the President of the University, all members receive an orientation packet and presentation when they join the committee.

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Each proposal is sent to a majority of the 15 committee members for individual review, every month. They prepare questions and comments for the investigator, who in turn must respond to their queries. The questioning must be anonymous to be effective, so correspondence is routed through Martha Weitzenberg, administrative coordinator since 1973 (the first year the group became organized).

Meeting the first Tuesday of every month, committee members discuss and vote on the proposals they've reviewed. (Often, an outside expert in the field at question is recruited for consultation.) Majority rule decides.

"But a majority of members usually doesn't vote for a proposal if one member has a serious reservation or objection," says Berger. "By the time it is approved," he continues, "most committee members agree."

When a proposal is rejected, there is an appeal procedure which a researcher may follow. Basically, he may appear before the committee to present his case in person, after which the group re-evaluates its decision.

Every proposal must be reviewed at least once a year, after initial approval. Some are reviewed more often, at the discretion of the committee. For the heart-lung surgery, a stipulation was made that ~~before and~~ after each transplant the committee must receive a report on the particulars of the case. The committee does not want to deny this potentially life-saving procedure to anyone who has no other hope. But if in their review of the cases, the members feel that the risks of the operation are outweighing the benefits, they can withdraw approval at any time.

Berger reminds us that there are two types of benefits to human subjects. A large number of projects, including experimental treatments and diagnostic procedures, are expected to be of direct benefit to the subjects involved. Others, through the information they help gather, are expected to be of benefit to society's future patients. And subjects must be informed as to which kind of benefit is hoped for.

They must also be informed of the risks. Some projects are relatively risk-free, such as taking blood samples to study kidney function. Others, however, especially the testing of new and toxic cancer-fighting drugs, do involve potential risks.

The consent form, a very important part of the research procedure, is also of great concern to the review committee. It is the mechanism by which the committee (under HHS guidelines) ensures that no pertinent information is withheld from research volunteers.

Consent forms must include the purpose of the research, the procedures involved, the risks, the benefits, alternative treatments, a statement that subjects are free to withdraw from the research without prejudicing their medical care, and an invitation to ask questions. It specifies that treatment is available in case of harmful effects, and offers the review committee's phone number as a route for feedback.

When subjects are under legal age or suffer from mental disorders, consent is obtained from family members or other legal guardians. Still, says Berger, the general rule is not to force treatment against a subject's will.

It's important that consent forms be both complete and understandable, explains Berger, and this is where the committee often intervenes. In fact, a change in the consent form is the most frequent modification required, and the committee suggests to most investigators that they provide oral explanations to their subjects as well.

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A prerequisite for project approval is effective communication with subjects. "Some researchers are great," says Berger, "and some are terrible." The committee works very hard with the latter type, to make them more sensitive to subjects' needs. As to be expected, says Berger, the committee is viewed both negatively and positively by investigators.

"I think that the committee is absolutely essential," says Berger, "but that there *are* certain requirements on it that do at times get in the way." For example, a proposal must be submitted to study human tissue that would otherwise be discarded during surgery. Because Stanford is doing more research in recent years, the activitiy of the committee has naturally increased, and such trivial reviews as this are viewed as more cumbersome than ever.

Berger is hopeful, however, that with a new set of regulations to become effective July 27, 1981, greater efficiency will be possible.

Amendments to the existing regulations will essentially exempt from regulatory coverage broad areas of research which present little or no risk of harm. These include educational, behavioral and much social science research—areas generally covered by the behavioral sub-panel of the review committee at Stanford. Also exempt will be research involving the collection or study of existing data, documents, records, pathological specimens or diagnostic specimens, when publicly available or recorded so as not to identify the subjects.

Another new provision will be for "expedited review" of certain minimal-risk proposals, whereby approval may be granted by the chairperson alone, or by a designated committee member. The HHS has a detailed list of research categories which are eligible for expedited review.

After passage of the National Research Act in 1974, institutional review boards were informally required to review all research involving human subjects, conducted by institutions receiving funds from HHS under the Public Health Service Act, regardless of where funding for a particular project was obtained.

Effective in July, the regulations will be applicable only to research conducted or funded directly by HHS. Still, committee review and/or other mechanisms for protecting all human subjects is strongly recommended, and recipients of federal funds for covered research must provide HHS with a statement of the institution's methods for protecting the rights and welfare of all subjects, regardless of source of funding.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911
Editors: Photos available if not included.

STANFORD—

On April 21, three days after the seventy-fifth anniversary of the Great San Francisco Quake of 1906, the University will pretend 'the big one' has come, and at 10 a.m. begin its first earthquake drill.

The imaginary earthquake (a 7.5-magnitude quake on the San Andreas, with the epicenter at Crystal Springs in San Mateo county; the 1906 quake was an 8.3) has been supposed to look for any slip ups in the University's plan to handle this major, unpredictable, but almost inevitable, disaster.

Seventy-five years ago this Saturday, the earth under Stanford shook mightily for about a minute in the early morning. The tower and flying buttresses of Memorial Church toppled; the nearly finished library and gymnasium, Memorial Arch, and brick additions to the museum collapsed.

Two persons were killed: a student in the path of an Encina Hall chimney that crashed through four stories to the basement, and a fireman crushed under the falling great stone smokestack of the powerhouse.

Predictions are that the earth in Northern California will most probably quake violently again relatively soon, and the University, flanked by two great faults, the San Andreas and the Hayward—being only five miles from the San Andreas— has been developing a plan to handle the aftermath of a great quake.

The drill has been organized by the Earthquake Preparedness Committee, which was formed last year at Stanford President Donald Kennedy's request, and is being coordinated with Stanford University Hospital's semi-annual disaster exercise.

This is a test to see if the University knows how to respond to a once-in-a-hundred-years earthquake, says Police Chief Marv Herrington, who is head of the Department of Public Safety and has been working on the earthquake preparedness plan for the last 18 months. Anything less serious and not so widespread could be handled using the routine disaster plans, Herrington says.

The overpasses of the freeways, as well as the bridges to the Peninsula, are expected to collapse in a quake of this magnitude, leaving the campus isolated for 24 to 72 hours. Helicopters to airlift those most seriously injured would probably be the only outside aid available.

With this in mind, the megaearthquake plan is geared to self-sufficiency and a cutting of losses, and to a fast and efficient sizing up of what the damage is and of what needs to be done.

At 10 a.m. on April 21, the emergency operations group, assembled at the police station, will get the word that the earthquake has happened. In the imaginary wrecked world, anywhere from 60 to 100 persons will lie dead; 500 to 1000 injured. Fifteen percent of the campus buildings will have been damaged beyond use, at a cost of approximately $120 million.

Because it would be too disruptive to involve the whole campus in the drill, "disaster" will visibly strike only the student residence, Roble Hall, and the Terman Engineering Building.

Fire alarms will signal that Terman is to be evacuated, and a team will be sent in to search for any laggers.

At Roble Hall, a band of broken and battered students, complete with moulages (graphic makeup molds intended to make the exercise more convincing) will await aid. Diane Conklin, who is recruiting the student volunteers, says she expects that as many as 200 students, felled by the gamut of possible injuries will be scattered thoughout and around Roble Hall—in the showers, the laundry rooms, the rooms, the lounges, on the lawn.

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Meanwhile, directed by the ranking police officer on duty, the various members of the operations group will gather the news filtering in from police armed with walkie-talkies out in the field. The operation's group mission is to determine as soon as possible what resources are left intact, who is injured, which places are dangerous, and to get that information out to the policymakers and those that could provide help.

The command post at the police center will alert the Hospital of the disaster, and triage teams, consisting of a doctor, a nurse, and a person outfitted with a walkie-talkie, will be dispatched posthaste to reconnoiter the situation. The teams will radio back to the Hospital what help is needed and where.

In a great earthquake, roads will most likely be impassible and the usual fleet of ambulances and emergency vehicles may not be available, says Dr. Jan Ehrenwerth, chairman of the disaster committee of the Hospital. So whatever transportation is available will be commandeered, he says.

In the president's office will gather a group intent on drawing up sensible short- and long-term plans of action for the University. The president, the provost, vice-presidents of business and finance, of development and of public affairs, the Dean of Students, legal counsel, and representatives of SLAC and the medical center will confer on the information flooding in—a fairly, but not totally, complete picture of what has happened.

They will be called upon to make decisions as to what should or could be done in the pressing short-term—can supplies be brought in from outside the University? Which buildings are safe and available?—and in the licking-the-wounds long-term—When can the University be reopened? With whom will we replace the disabled or dead faculty and staff?

At the same time, the injured students will be being dispatched to either the Medical Center, Cowell Student Health Center or Children's Hospital at Stanford, which are assumed to be damaged but usable.

The majority of those injured, including those most seriously hurt, will be taken to the Medical Center, where the doctors and nurses partaking in the drill will have either reported to the operating rooms or to the triage area in the first floor lobby near the emergency room.

In short order, they will find the operating and emergency rooms overflowing with the wounded, and no empty beds to be had in any of the units.

For the many wounded streaming in, they will have to scramble to set up a mock operating room and cots away from those utilities usually thought of as necessities, such as water, electricity and oxygen—a scenario most probable in a real disaster.

At the various disaster and decision-making areas on campus and at the Hospital, observers will carefully note what happens, Herrington says, and their reports, along with the accounts of the principals involved, will be scrutinized over the next two to three months. The experience gained in the drill will be used to refine both the University's and the Hospital's plans.

When the big one finally comes, Stanford hopes to be prepared to soften the shock.

4-15-81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Editors: Pictures available if not enclosed.

STANFORD—

The earthquake drill is no idle exercise. There is a 50-50 chance northern California will experience a major earthquake—magnitude 7 or higher on the Richter scale—within the next decade, predict Profs. James Gere and Haresh Shah, codirectors of the John H. Blume Earthquake Engineering Center at Stanford, and Prof. Richard H. Jahns, former dean of the School of Earth Sciences.

And if the great quake doesn't come in the next decade, there is a 75 percent chance that one will occur in the decade after that, says Gere.

Even if the next big quake is not as powerful as the 1906 quake (which was a magnitude of 8.25 on the Richter scale), the damage and death toll is likely to be much higher just because ten times the number of people live in the San Francisco Bay area now.

When a great quake does come, the probability is that you'll be hit by a falling bookcase, rather than a flying buttress.

"We think the possibility is remote that any campus buildings will collapse," says Gere. "but even if the building meets code, the possibility cannot be ruled out.

"On campus, the greatest danger will be from falling ceilings and fixtures and broken glass, overturned file cabinets, and the like.

"In 1978, an earthquake shook the UC Santa Barbara campus on a Sunday afternoon. In example after example, bookcases and file cabinets were found toppled right where people would have been working if it had been a weekday."

It wouldn't take much effort or expense to secure bookcases, heavy furniture, or equipment likely to topple, says Gere, and it would reduce injuries and minimize property damage.

"People should take responsibility for their own safety if they are working or living in an earthquake region." says Gere.

To help them do that, Gere and Shah have prepared a pamphlet, *Earthquakes—How to Protect Your Life and Property.* It details how to prepare for, and what to do during and after the next earthquake.

In preparation for the quake, besides securing the heavy furniture, the water heater and the gas furnace, they recommend that your home be stocked with emergency provisions of food and water, a bedside flashlight, a battery-operated radio, and fire extinguishers. It's unwise to have your bed near a large glass window, they say. And you should know the fundamentals of first aid and the telephone numbers for emergency services.

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During the quake, they advise, above all, to remain calm. Then, if you are indoors, to quickly scurry under a desk, table or workbench, or if no cubbyhole is near at hand, to stand in an interior doorway or in the corner of a room. The idea is to get clear of the path of falling debris, the greatest danger. Running outside is not wise.

But if you are outdoors, head for an open space, away from buildings and power lines, they counsel. If you are in a moving automobile, calmly stop the car away from tall buildings, overpasses and bridges, and stay in it until the shaking stops.

After the quake, the number one thing to do, Gere and Shaw say, is to remain calm (or supposedly to get calm, if you did not prove to be unflappable during the quake.) Then try to help anyone who is hurt or anywhere it is needed.

Caution becomes the order of the day, they say, because buildings could still collapse and explosions could still happen from gas leaks. The danger of substantial aftershocks is always there too.

Gere and Shah's pamphlet was distributed to University employees last fall. Recently, the University's Department of Public Safety has written a brochure, *Earthquake—A Guide for Stanford University Residences,* which includes a campus map that indicates places where students should gather following an earthquake.

Besides the earthquake drill and attempts to educate people on what to do before, during and after an earthquake, the University is heeding its own experts' warnings that a major earthquake may be too soon here. Last year, it purchased a $60 million earthquake insurance policy to cover the loss of buildings and their contents. With a $3 million deductible, the policy's annual premium is approximately $480,000.

In 1979 three Stanford engineering students estimated that damage resulting from a major earthquake to buildings alone, to say nothing of their contents, would cost the University a minimum of $36 million, a maximum of $72 million. If the estimates are in the right range, the policy is well worth the cost.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Delightful, delicious and deadly is how one doctor describes the wild mushroooms growing in abundance this damp spring.

A recent case of mushroom poisoning at Stanford University Hospital should serve as a warning to those venturing in pursuit of the fungal delicacies in verdant springtime fields, says a clinical associate professor of medicine at Stanford University School of Medicine.

Mushrooms now surfacing in damp soil may look beautiful, says Dr. Lawrence Paaso, a gastroenterologist at the Palo Alto Medical Foundation, but they are extremely dangerous. "If you eat more than two of the most poisonous varieties, your probability of dying is 60 to 70 percent," he says.

The young man recently poisoned has a good chance of pulling through, although he was at one point listed in serious but guarded condition, "a classical case of mushroom poisoning," says Paaso. He may have sampled the most deadly type of mushroom, *Amanita phalloides*, commonly known as "death cap" or "destroying angel," Paaso notes. It grows widely throughout the San Francisco peninsula during fall, winter and spring months.

Victims of mushroom poisoning most likely will feel fine for a few hours and then, six to 12 hours after ingestion, they will suffer from weakness, nausea, and extreme vomiting and diarrhea. Later they may show signs of liver, kidney and central nervous system damage, sometimes with life threatening results.

Treatment consists of close observation and supportive care measures, particularly for the liver and kidney, says Paaso. Unfortunately, "there is no magic antidote available," he adds.

For this reason Paaso urges extreme caution when it comes to harvesting wild mushrooms. Mycologists and other experts at mushroom identification have been known to make mistakes, he cautions, and amateurs expose themselves to great risk when plucking and sauteeing the wild fungi. Harmless varieties of mushrooms often can be distinguished from the more dangerous ones only with great difficulty.

The safest way to savor the flavor of mushrooms is to purchase cultivated varieties from a grocery store, Paaso suggests.

—30— L105

Mailed Wenesday, April 15, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Nancy Madsen, R.N., associate director for nursing services at Stanford University Hospital, has been appointed assistant Hospital director by Dr. Peter Levin, executive director.

Madsen, who has been the nursing department associate director since joining the Hospital staff in 1978, has held responsibility for the assistant nursing directors and for the day-to-day operations in nursing units throughout the Hospital. Her promotion reflects the increased involvement Madsen has taken in administrative management of the nursing department and her greater role in the management team of the Hospital, according to Levin.

In addition to taking a larger role in overall Hospital management tasks, Madsen has assumed responsibility for nursing recruitment. She has also initiated and carried out several innovative programs within the department.

One such project involves a new classification system of patient acuity that will enhance the department's ability to predict Hospital nurse staffing needs at any given moment. Three times a day, Madsen explains, nurses on each unit evaluate patient conditions in order to determine precisely the unit's staffing needs for the following shift. This system shows promise in improving department productivity, she says. A computerized system currently being installed to automatically process the patient condition information into staffing volume will make the procedure yet more efficient, she adds.

Along with Duane Walker, director of Nursing Services, Madsen has carried out a nursing job satisfaction survey, only the second of its kind within the department. "We are putting into effect some changes that will improve problems identified through the survey," she notes.

Madsen also serves as a preceptor in the department's administrative residency program for graduate nursing administration students from the University of California.

Madsen will continue to report to Duane Walker, R.N., director of Nursing Services and Hospital associate administrator.

Madsen holds an M.S. in nursing from the University of Utah. She came to Stanford in 1978 from Utah, where she held a joint appointment as an instructor in the College of Nursing and as assistant director of nursing service at the University of Utah Health Science Center.

Madsen is a member of numerous nursing professional associations and has been active in nursing research and in consultation to many state and national nursing organizations.

—30— L105

Mailed Thursday, April 16, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Deborah Barker has been teased a lot lately. Her friends think she's about to drop everything here, and move on to the big-time in Hollywood.

But Barker says it's not likely. A services representative in Stanford's Hematology clinic since last December, she feels her recent filmed performance on a Perry Como television special was "just one of those things that happen."

Not to everyone. But half-Japanese Barker has a special talent. She plays the koto, a six-foot long, Japanese string instrument, made of native Japanese wood, with 13 strings held up by movable bridges. "It's sort of like a harp," she says.

Barker was spotted by a talent agent during a recent performance in San Francisco, and was asked to film a recital in the Japanese Tea Garden of Golden Gate Park.

The show on which she will appear, to be aired May 10, is Perry Como's Spring in San Francisco Mothers' Day special. And Barker's recital is one of many segments for the program. "I also filled in as the assistant in a magic act," she notes.

It was Barker's first time on television, and it was "kind of fun," she says. "But the make-up artists really went overboard. It's not going to look like me at all!"

Born and raised in nearby Atherton, Barker recently spent a year in Japan, studying the koto, the language, and other aspects of the country's culture and art—the tea ceremony and Japanese pottery, for example.

Although the koto is more popular in Japan than elsewhere, she says, even there it is much less common than such western instruments as the violin, the guitar and the piano.

Barker has played the koto for 14 years, and she's still taking (as well as giving) lessons. Her Japanese mother used to play the instrument. "And I guess it was her dream that her daughters would also play the koto."

So last year, while they were in Japan, both Barker and her younger sister earned the highest degree for koto. "It's sort of like a Ph.D. in koto," she explains.

Barker also holds a B.S. in physiological psychology from U.C. Davis.

She currently belongs to a group of about 60 koto players, which gives regular performances throughout the year. Besides giving its own annual New Year's recital, the group performs at the Cherry Blossom Festival held twice a year in San Francisco's Japanese Trade Center.

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STANFORD UNIVERSITY MEDICAL CENTER
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EDITORS: The following release announces the Eighth Annual Spina Bifida Association Conference to be held at Fairchild Auditorium, Stanford University School of Medicine and at the San Jose Hyatt House, May 13-15. The conference is in two parts—one for medical professionals, the other for children and adults with spina bifida, their family members, and the general public. Reporters are cordially invited to attend the medical update session, the workshops or the social events. This marks the first time this major spina bifida meeting will be held on the west coast. Media inquiries and arrangements should be coordinated through Gretchen Hecht at the Children's Hospital at Stanford, phone 327-4800, extension 345.

STANFORD—

Spina bifida: it's the second most common neuromuscular birth defect, seven times more frequent than muscular dystrophy and five times more frequent than multiple sclerosis. Yet, most people know little about spina bifida because, until recently, many children born with the defect died soon after birth. At a national conference May 13-15 at Stanford University and at the San Jose Hyatt House, medical professionals, people with spina bifida, their parents and other family members, will gather to discuss recent advances in medical care and in social awareness that have dramatically increased life expectancy and quality of life for spina bifida persons.

The eighth annual conference in a series presented by the Spina Bifida Association of America, it is the first time the meeting is located on the west coast. The theme of the conference is "independence for all," and medical professionals, parents and persons with spina bifida will participate in a joint mission to learn more about spina bifida and to inform the community on how it can help people with spina bifida become more independent.

There are different types of spina bifida with varying degrees of severity. Some are asymptomatic but most individuals develop multiple handicaps. People with spina bifida need medical care from many different specialists for the various complications which accompany the condition. Pediatricians, neurologists, neurosurgeons, urologists, orthopedists, nurses, social workers, physical therapists and orthotists (rehabilitation engineers who custom-design braces and other aids to enhance the patient's mobility and functioning) are all likely to participate in a spina bifida person's care.

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Experts and representatives of these disciplines will present a daylong "medical update" session on Wednesday, May 13 at Fairchild Auditorium at Stanford University School of Medicine. They will discuss the medical and surgical advances that have significantly reduced the high mortality rate that existed just a few decades ago among people with spina bifida. Also on the program are speakers who will address the areas of social and rehabilitation services—and advances in these realms, such as the trend towards improving life for physically handicapped individuals (better facilities, transportation, more aggressive hiring) and how spina bifida children are being mainstreamed into regular schools.

Exhibits and workshop sessions at the San Jose Hyatt House on Thursday and Friday, May 14 and 15, will approach a spectrum of practical living problems that people with spina bifida and their families are likely to face; education for the handicapped, disability and sexual image, legal rights for the disabled, bowel and bladder management, job training, car/van conversion, mobility and orthotic devices, travel and sports.

A number of social and fun events have been planned for the many spina bifida families expected to attend; a barbeque and game room are among the highlights and Marine World and Great America tours are also being offered.

Spina bifida is a defect of neural tube development that begins at one month of age in the unborn child. During normal development, the neural tube is an open structure; gradually it closes—with fusion usually complete by one month into pregnancy—and out of the closed tube emerge the central nervous system components, brain, spinal cord and nerves. Defective fusion of the neural tube along the spine is spina bifida, which actually means "open spine;" the condition afflicts one out of approximately every 600 babies born in the United States.

The higher the lesion on the spinal cord, the greater the resultant muscular paralysis and sensory loss; many remain completely paralyzed from the waist down, and almost all have bowel and bladder incontinence. About 60 percent of spina bifida patients have an associated problem, hydrocephalus, an accumulation of cerebrospinal fluid in the ventricles of the brain. (This condition can be alleviated by threading an artificial tube under the skin, leading from the brain into the abdominal cavity where the fluid may be reabsorbed.)

The conference is hosted by the Spina Bifida Association at Stanford and is co-sponsored by the Spina Bifida Center of the Department of Pediatrics at Stanford Medical School. Continuing medical education credit is available for physicians and other medical professionals who attend.

For further information or to register, call (408) 578-7375.

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L105

Mailed Wednesday, April 22, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Two Stanford psychiatry professors will discuss changing family roles and children and television during a panel discussion on Social Influences in Childhood at 8 p.m., Thursday May 7 in Fairchild Auditorium, Stanford University School of Medicine.

The lectures, open to the public without charge, are sponsored by the Friends of Psychiatry and Behavioral Sciences.

Dr. P. Herbert Leiderman will initiate the program with a presentation on changing family roles. Leiderman has been studying early child care for over a decade. Based on studies conducted in a Kikuyu community outside Nairobi, Kenya, Leiderman has found that, particularly in lower economic groups, multiple caretaking by brothers, sisters, other relatives and friends as well as by the mother, enhanced childrens' learning abilities.

Dr. Alberta Siegel will address the influence of television on children. Siegel has conducted research on the topic of mass media violence and its effects on children for over 20 years and has written numerous articles on this and related subjects. She was also a member of the U.S. Surgeon General's Scientific Advisory Committee on Television and Social Behavior from 1969 to 1971.

Moderator for the program will be Dr. Thomas Anders, head of the division of child psychiatry and child development at Stanford Medical School. Dr. Thomas Gonda, chairman of the Department of Psychiatry and Behavioral Sciences, will present the speakers.

For further information call the Friends of Psychiatry at (415) 497-6376.

—30— L104

Mailed Wednesday, April 22, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Registered nurses from Stanford University Hospital will express their opposition to lowering the passing scores on California nursing Board examinations Friday April 24 at a public meeting of the California State Board of Registered Nursing (BRN).

The hearings will take place in San Francisco at 9 a.m. in the auditorium of the State building at 450 Golden Gate Avenue.

According to Claire Mailhot, R.N., chairperson of the legislative committee in Stanford Hospital's Nursing Department, the BRN is being pressured to reduce examination standards for nurses seeking registration in California in response to a suit filed against the BRN by the Foreign Nurse Defense Fund Group

The suit claims that current exams administered by the BRN are biased and that the passing standards discriminate against foreign and other minority nurses seeking licensure in California, Mailhot says.

Present standards call for scores of at least 350 out of 700 on each of several exams covering a broad range of topics, including pediatrics, obstetrics, psychiatry, medicine and surgery, Mailhot explains. As a result of the suit, the BRN is considering developing new examinations and lowering the passing scores by 100 points or more to a range of 200 to 250, she adds.

"As nurses, our concern is that if nursing examination standards are dropped in California, the quality of nursing care will decline, " Mailhot says.

In addition, if the California BRN decides to redesign the Board exams, as has been proposed in response to the suit, says Mailhot, they will no longer be recognized by other states. This could affect nationwide nurse recruitment efforts carried out by some California hospitals, according to Nancy Madsen, R.N., associate director of Nursing Services at Stanford Hospital.

"We do a lot of nurse recruitment from outside the state," Madsen explains. "If nurses who are already registered in other states have to take an entirely new set of board exams in order to practice as R.N.'s in California, it will make recruitment much more difficult," Madsen says.

It's a reciprocal problem, Madsen adds, since nurses who have been registered in California will not automatically be able to transfer their licensure to other states, as they have in the past.

The BRN is also considering extending interim permits granted to unregistered nurses who have not yet passed the Board exams, Mailhot says.

According to Joanna Nelson, R.N., president of the Committee for Recognition of Nursing Achievements (CRONA), the bargaining unit for staff nurses at Stanford Hospital, this action would allow people who have failed the Board exams to practice as nurses for as long as two years without passing.

Nelson adds that the California Nursing Association (CNA) is opposed to the BRN actions, and the CNA has called a press conference for Friday morning to coincide with the BRN public meeting.

"We have struggled for many years to develop some autonomy for nurses and to gain respect for the nursing profession," says Mailhot. "We are no longer handmaidens—nurses today are required to have a knowledge base that permits us to actively participate and intervene effectively in patient care decisions."

A nationwide nursing shortage has left many hospitals searching for qualified nursing help. But Mailhot contends that lowering professional standards to allow more to enter the nursing ranks is not a promising solution.

"Anyone who thinks this will solve the nursing shortage problem is wrong," she says. "If the quality of nursing is dropped, we'll be pushed back 50 years and many nurses themselves will drop out of the profession," Mailhot predicts.

The Board of Registerd Nursing is a politically appointed body that oversees nursing in the state of California.

Mailed Thursday April 23, 1981.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Stanford University Hospital is taking the temperature of its food!

Every day, at both the main center and Hoover Pavilion, the Department of Dietetics monitors the temperature of patient meals.

And three or four times each month, it conducts a "tray assessment," designed to help evaluate the food's quality, quantity and appearance.

The procedure is quite clever. First, a schedule must be arranged—with a selection of Hospital unit, date, meal and time of day. Then, on the specified day, an order is put in for an unoccupied room, by a fictitious name.

Those conducting the assessment wait eagerly in the room for tray delivery. Once it's there, they begin to fill out a special form, covering such items as food appearance ("appetizing," "color-coordinated," "crisp,"...), food texture, neatness of tray, taste and aroma, and portion sizes. They note the time of departure from the kitchen and arrival in the patient room.

"This helps us pinpoint problems sometimes," says Jane Woeckener, R.D., M.S., assistant director of Dietetics/Nutritional Services. She explains that although transit time does vary among units (depending on how far they are from the kitchen), the trip should never take more than 10 minutes.

According to Woeckener, tray assessments—in operation for two years at Stanford—can involve as many as five participants at a time.

"We have representatives from food production, the trayline, clinical dietetics, and more. Different people are involved all the time, both managers and employees, supplying us with feedback from many perspectives. And we assess all meals—breakfast, lunch and dinner—on many different units."

Food temperature, taken both on the trayline in the kitchen and at mealtime in the patient's room, constitutes an important feature of the assessment. Temperature standards, which of course vary among items, reflect ideal heat at serving time.

And the temperature of food containers is taken too, to determine how well dishes have held heat. "All hot menu items are served in insulated and covered dishware," says Woeckener.

To complete the assessment, all participants sign the form, indicating a consensus of opinion. The menu is attached to the form, which is later discussed at both supervisors' and managers' meetings in the Department of Dietetics. Any recommendations for change are implemented as soon as possible.

"The tray assessment system has proven very effective," says Woeckener. Both food and trays have been made more attractive, with everything now at an acceptable height for eating in bed (some items used to be placed too high).

And the hope, of course, is that food quality, above all, has improved. Noted one patient recently on a Community Relations questionnaire, "Nutritious, tasty food with variety." Surely though, comments like "rubbery vegetables" also appear, serving to keep those tray assessors in full swing and on their toes!

4-27-81 —30— 215

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

A world-renowned diagnostic radiologist, Dr. Herbert L. Abrams, of Harvard University will deliver the second annual Etta Kalin Moskowitz Memorial Lecture on Thursday, May 7 at Stanford University School of Medicine.

Abrams, the Philip H. Cook Professor and chairman of radiology at Harvard, will discuss "New Imaging Technologies in Oncology: Problems in the Evaluation Process" at 5 p.m. in room M114 of the Medical Center. The lecture is open to the public.

He will also speak on Friday, May 8 at noon in room S092 of the Medical Center on "The Prognostic and Pathologic Implications of Coronary Arteriography."

Abrams, whose special interest is in cardiovascular radiology, is spending this academic year at Stanford on sabbatical, as a visiting professor of radiology and also as a fellow at Stanford's Center for Advanced Study in the Behavioral Sciences.

He was head of Stanford's division of diagnostic roentgenology from 1961 to 1967, before going to Harvard.

Abrams received his M.D. from the State University of New York-Downstate Medical Center in 1946. After residencies in medicine at New York's Montefiore Hospital and in radiology at Stanford University Hospital, he joined the Stanford faculty in 1951 as an instructor in radiology. He became a full professor in 1962. He has published more than 150 scientific articles.

The Moskowitz Memorial Lecture, the first endowed lectureship in the department of radiology, was established through a gift of the Late Etta Kalin Moskowitz. She was particularly interested in advancing those aspects of diagnostic radiology dealing with cancer.

A native of New York City, Mrs. Moskowitz traveled to the West in the early '30's with her husband, Dr. Simon L. Moskowitz, who set up a general medical practice in Brigham City, Utah, in 1935.

A leader in her community's civic and educational organizations, she was particularly interested in health affairs and was active in her county's and state's medical auxiliaries. Mrs. Moskowitz organized her county's mental health agency and was a founding member of her county's Red Cross and American Cancer Society programs.

In the early '60's, following a successful battle against breast cancer, Mrs. Moskowitz focused her interests on fund raising and public education in cancer treatment and research. She established the lectureship shortly before her death in 1978.

4-29-81 —30— 215

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

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4-29-81 —30— 215

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

The Hospital's renovated neonatal intensive care unit will be dedicated on Friday, May 1 at a morning symposium.

The three lectures will be given in room M016 in the Medical School from 8 to 10 a.m. Everyone is welcome.

Dr. Robert Alway, retired medical director of the Hospital and former dean of the Medical School, will speak on "Foresight and Hindsight."

"Dedication of A New Neonatal Intensive Care Unit" will be the subject of the talk by Dr. Norman Kretchmer, director of the National Institute of Child Health and Human Development.

Finally, Dr. John Johnson, associate professor of pediatrics at the University of New Mexico and former director of the nurseries at Stanford, will lecture on "Bilirubin Metabolism."

After more than four years of planning and one and a half years of construction, babies were moved in the expanded and renovated unit on April 14.

4-30-81 —30— 215

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911
Photos available if not included.

NOTE TO EDITORS: The bright-hued, neonatal intensive care unit of Stanford University Hospital, renovated at a cost of more than a million dollars, was formally dedicated on May 1. After more than four years of planning and one and a half years of construction, the unit, which was pinched for space, is now spacious and airy.

Orange and yellow cats and dogs populate the curtains, and the walls-of-drawers are lollipop-colored orange, yellow or blue. The space for each of the unit's 25 beds has been enlarged from 25 to 100 square feet and a number of new facilities have been added: a conference room for physicians and nursing staff, a treatment room, a parents' room in which a baby can be breast-fed, a house staff sleeping room, and a clean and dirty utility room.

More than 800 critically-ill infants are admitted annually to the unit from throughout the Western states. They range from the three-months premature babies, who have a multitude of problems, to the full-term babies suffering from pneumonia or genetic diseases.

The unit outgrew its old surroundings because of the immense influx of high technology into newborn intensive care during the last ten years. Babies no longer just need incubators, but also banks of green screens with blipping lights to monitor their vital functions.

"There has been a technological revolution in medicine, and a tremendous application of technology has come in the area of newborn intensive care," says Dr. David Stevenson, associate director of the unit.

With the advent of the technology has come the ability to save babies once thought hopeless. Following are two stories, one about the problems facing the premature infants, the other about the challenges facing their families.

Treating Premature Infants: How Far Have We Come

A pint-sized stuffed koala bear hugs the transparent tubes threading through the hole in the plexiglas side of Jason's enclosed bed. Jason almost looks transparent too, his pellucid skin with its texture of fine vellum maps his small veins and arteries.

Tiny, soft chicks and orange bugs with black tossles for eyes also share Jason's bed, but Jason's eyes are closed, and you suspect he doesn't notice.

Jason, who was born two months ago weighing only one pound and nine and a half ounces, sucks at the tube which snakes to his mouth bringing oxygen for his little lungs.

Jason is lucky; if he had been born five years ago, chances are he would have died.

But today, approximately 75 per cent of the babies born weighing only between 750 and 1000 grams (1.6 to 2.2 pounds) who are in Stanford University Hospital's intensive care nursery will live, says Dr. David Stevenson, associate director of the unit.

"There has been a technological revolution in medicine, and a tremendous application of technology has come in the area of newborn intensive care," he says.

"We're now treating twenty-five or thirty of those babies a year, and every year the number is increasing. Ten years ago we would only save one or two a year.

"And information gathered over the last 20 years—even before we've had the kind of survival rate achieved over the past three years— leads us to believe that most of the babies in this very low birth-weight group go on to be normal.

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"That's what makes what we are doing worthwhile. If we were producing a large number of incapacitated people, it wouldn't make much sense to be doing this kind of work."

On Jason's chest are taped wires which wend their way to electronic monitors surrounding his bed. They continually check his heart rate, breathing pattern and blood pressure; other wires make sure he maintains the right temperature. His blood gases are monitored continuously to check that he's not getting too much oxygen, which could blind him.

Even with the new technology, a too-soon baby has a long uphill fight, and often has a galaxy of problems to overcome.

A beeping starts on the other side of the large room, which is the central part of Stanford University Hospital's expanded and renovated new-baby intensive care unit. A nurse rushes over to the baby in trouble and gently prods his foot. He begins breathing again, and the beeper stops.

The momentary stopping of breathing by a preemie is not a rare occurence. Probably 30 per cent of the preemies will suffer from apnea, or intermittent cessation of breathing, at some time during their stay in the intensive care unit, says Dr. Ronald Ariagno, associate director of the unit.

Dr. Anneliese Korner, an adjunct professor at Stanford, found that infants placed on oscillating water beds had significantly fewer apneas than did infants in standard incubators, presumably because of the movement. One type of waterbed used allows the baby to experience the rocking produced by his own movements; another provides in addition to the baby's own waves, gentle, irregular oscillations in the rhythm of the mother's respirations.

The lungs develop more slowly than any of the body's other systems, only maturing shortly before the usual time of birth: 38 to 42 weeks after conception. Babies born before their time arrive in the world lacking an essential lung chemical, called surfactant (a surface-active agent), that is necessary to keep the small sacs in the lungs from collapsing every time the babies exhale.

Those babies without surfactant develop respiratory distress syndrome (RDS), a disease that killed most of them only ten or fifteen years ago. But ventilators in the last decade or so have now been refined to deliver air to the fragile, developing lungs in a more gentle manner, and doctors have learned through experience when and how they should help the baby breathe.

"When I came to Stanford in 1959," says Dr. Philip Sunshine, director of the unit, "We didn't even understand how we should wean the baby off the respirator once we put him on it. We've come a long way in helping babies with lung problems."

Besides refining the technology, doctors discovered that if a woman's premature labor can be stopped for a few days and she is given a steroid hormone, such as betamethasone, her baby will have developed some lung surfactant by the time of birth, says Stevenson. But, he adds, the drugs used to stop premature labor and mature lung function are still considered to be investigational, and their use entails some risks.

Interestingly, giving the steroid beta-methasone 24 to 48 hours before premature delivery decreases RDS in female, but not male, infants. Stevenson says the reasons for the difference are not clear, but adds,

"In general, pemature baby girls do much better than premature baby boys. Overall, if you are going to be premature, you'd prefer to be a little girl."

Babies who have been born after developing as few as 26 weeks are now being saved, Stevenson says. But the technology being used to help these three-month early babies breathe won't be able to help those any less mature, he says.

The lungs of babies younger than 26-weeks gestation are so undeveloped that even if oxygen is pushed down into them, blood vessels have not yet grown close enough to the small air sacs for the oxygen to be picked up and carried to where it is needed in the brain, heart and other organs.

Poorly-functioning lungs are often the most immediate threat to the premature or sick baby. Pneumonia, and air-block syndromes can also strike.

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3-3-3 Although the cause is still uncertain, sudden infant death syndrome (SIDS), sometimes called "crib death," may also be a result of breathing difficulties. An apparently well infant in his first year of life will unexpectantly and unexplainably die.

Dr. Ariagno, working with members of Stanford's Sleep Disorders Center, has been trying to better understand the causes of apnea, and how it is related to sudden infant death syndrome.

"One idea is that the difficulty an apnea baby might have is some trouble with awakening," Ariagno says.

Apnea occurs most often during sleep.

The baby may not be able to wake up when he meets a challenge that his sluggish, sleeping body cannot adequately respond to, he says.

"There is insufficient data to say that this inability to change from a sleep to a waking state is truly important, but some preliminary data suggest that this is an important area of adaptation that doesn't function well in babies that have apnea."

Sudden infant death syndrome strikes one to three babies out of every thousand born, Ariagno says. In some reports, babies who are graduates of intensive care units seem to be at a highter risk: as many as 44 out of every thousand will develop SIDS after they've gone home apparently well, he says. But this has not proved to be the case at Stanford, he says.

Ariagno and his colleagues are trying to identify those things that make an infant prone to apnea, such as what it is about brain injury that predisposes a baby to stop breathing.

Babies are rarely dying from lung disease any more, Stevenson says, at least in those cases where ventilators can help.

"Now, we are confronted with babies with many other problems, especially metabolic and nutritional ones," he says. "And the only way out of their tenuous situation is to grow."

But feeding can be a major problem with prematurely born infants, who do not absorb milk sugars well. Dr. Sunshine has found that preemies don't have enough of an intestinal enzyme needed to break down the sugar in milk, lactose, and so don't digest milk well.

Lacking the strength to suck at breast or bottle, and having immature swallowing mechanisms that may cause choking, gagging or breathing of liquids, they sometimes must be fed through a tube threaded down into the stomach, or through their veins.

A primary interest of Stanford's unit has been its reseach into the nutritional problems faced by the premature infant.

"We're aiming at getting sick preemies to become normal people," says Stevenson. "And our biggest concerns are with metabolic stability and improved nutrition."

"Only at 34 or 35 weeks of gestation is the intestinal tract ready for extrauterine life," Dr. Sunshine says. "Before that there are lots of problems."

Dr. Sunshine and Dr. John Kerner, an assisstant professor of pediatrics, have been developing ways to make sure that the baby who must be fed intravenously gets adequate nutrition, but at the same time isn't overloaded with sugars and amino acids, which could lead to liver damage.

Preemie's intestines have slow motility and distend quickly, Sunshine says, because they have trouble absorbing many substances. The infant's intestinal lining can suddenly slough off for some unknown reason, leaving the bowel open to invasion by the baby's own bacteria. Milk provides a good growth medium for the bacteria; the bowel stops functioning and the baby's life is in danger.

Only with time does the proper panoply of intestinal enzymes develop, he says. Sunshine discovered one such enzyme lack that leads to dangerously high levels of ammonia in the preemie's blood.

Another problem facing premature infants is jaundice, which if it becomes severe enough will leave the jaundiced infant severely brain damaged. The yellowed skin of the infant is mirroring the buildup throughout the body of a bile pigment called bilirubin.

Preemies, infants of diabetic mothers and those with certain anemias most often require treatment for their jaundice.

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4-4-4 Some jaundiced babies need exchange transfusions to remove the bilirubin. But most are just put under white lights, with little black patches protecting their eyes. It's been discovered that the blue portion of the rainbow that is light can best break down bilirubin.

Another problem premature babies often face is being born with a hole between the right and left sides of their hearts, which doesn't close as it should. This hole, a shunt used to bypass the undeveloped and non-functioning lungs (in the uterus, oxygen comes from the placenta, not from the lungs), is present in all babies, and closes shortly after birth in normal-term babies.

When it doesn't close, the baby may become blue because no blood is going through his underdeveloped lungs, which are putting up resistence to blood flow. When the lungs improve, then all the blood may flood into them, and congestive heart failure results.

If the doctors can't close the hole with drugs, then these tiny, bread-loaf size babies must have heart surgery.

The problems with barely-breathing lungs and poorly-pumping hearts lead to another major problem: bleeding in the brain.

"Somewhere between 40 and 50 per cent of babies born less than 34 weeks of gestation have intracranial hemorrhage of one degree or another," says Stevenson. "We really don't know what causes it."

The bleeds can range in severity from a localized, tiny bleed into the fluid-filled ventricles of the brain to a more massive bleed that seeps from the ventricles to the brain matter itself and may cause permanent damage.

"Over the last five to ten years, we've developed the technology to see how often it is happening," Stevenson says. "The encouraging thing we've found is that a number of babies who have had intracranial hemorrhages seem perfectly normal during the examination, and are probably going to be normal."

Drs. Barry R. Tharp, associate professor of neurology, and Thomas P. Clancy, clinical associate professor, have been using ultrasound and CAT scanners to determine which babies have intracranial bleeds. They have also been mapping the brain wave or EEG patterns of the preemies, and correlating this with the brain's maturation.

Another problem in the long list facing a preemie is poor regulation of the body temperature, resulting from an undeveloped nervous system, little fat and thus little insulation and fuel, and a poor response to cold stress, says Dr. Ariagno.

A small baby has a greater chance of survival if he is able to maintain a certain temperature, because his oxygen needs are lowest at that temperature, and his ill-equipped lungs aren't taxed. So, a preemie's first home is either in an incubator or under a radiant warmer, bathed in warming lights.

Finally, there is the ever-present danger of infection in the small, weak baby who is ill equipped to fight it. And all the tubes going into a premature baby to bring him food or medicine or to hunt for things that may be going wrong increase the probability that he will contract a bacterial or viral infection.

But in spite of the plethora of problems, babies like Jason are making it, and his orange bugs and green turtles may not have to go unnoticed for long.

"There is immense potential to develop outside of the uterus—in spite of some life-threatening stresses," says Dr. Ariagno. "Surprisingly enough, there are even some advantages. For instance, if the lungs of the infant are damaged, they have the capacity to recover to a great extent. They not only get bigger, they still can develop more."

What can be done with the new technology is dazzling, but not without problems. Doctors intervening to solve one problem can cause others unintentionally, and so must be ever-vigilant that while they're giving a helping hand to one system, they're not retarding the development or harming another.

But steadily, they're learning about these very young babies and their special problems.

"Our reseach is designed to put us out of business," says Stevenson.

Down the row from Jason is another baby who is going to go home very soon. She was born six months ago weighing a tad over two pounds. She smiles; she's a survivor. The odds are with Jason, too.

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Challenges Facing Families of Premature Infants

Kristen and Karen Regelein, who are identical twins, will be three this June.

They kiss, and hold hands, and occasionally thwack each other, just like other little three-year old girls. But they're special.

Kristen and Karen were born three months early.

"When they were born, they weighed 2 lbs., 4 oz., but within a few hours, they had dropped down to a pound and a half," says their mother, Mrs. Marsha Regelein.

"Kristen was given a 50-50 chance at birth. Karen had such severe lung problems they told us she would not make it through the night. But she did.

"Then we just did it day by day. They told us so many times that she may die, I couldn't count them for you. We went up there a lot of times to say goodbye to her, but she was just too tough."

Marsha Regelein and her husband, James, are tough, too. Well-informed and articulate, she talks of the trying last three years with surprising calm.

"Kristen had bouts with apnea (intermittent cessation of breathing), and almost died a couple of times. And she was the healthier one; she came home after three and a half months, weighing less than five pounds.

"Karen stayed in the hospital six and a half months. She had much more severe lung disease, so when she did come home, she still required oxygen. There were all kinds of equipment and apparatus. We had to go down her nose and mouth with a suction machine to pull the mucus out about 20 times a day.

"Round-the-clock nursing was required the first year. The second year, we cut it down to two shifts a day; just last month we sent our last nurse away. We have not had our house to ourselves that entire time.

Caring for their little girls, the Regeleins have grown closer to each other, but that doesn't happen to all families. Often the strains put on a family by the financial burdens and the emotional drain of being at death's door repeatedly can destroy it.

"We have to deal with many complicated family problems," says Dr. David Stevenson, associate director of Stanford's neonatal intensive care unit.

The unit has its own full-time social workers, Charlene Canger and Jeannie Kelly.

The Regeleins', in the midst of their own struggle, have taken the time to counsel other families of premature, sick babies born at Stanford.

"Most families don't do very well. I don't blame them," says Mrs. Regelein. "It's an absolutely overwhelming thing to have even one baby, much less two, that you're told may not live."

Even the Regeleins, who repeatedly say how thankful they are, are not planning to have anymore children. Kristen and Karen are their first.

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"We hadn't planned on having lots of children, but if we had, we probably would have changed our minds," says Mrs. Regelein. "They couldn't really guarantee me that these things wouldn't happen again, and I wouldn't put me, much less any baby, through that kind of trauma again.

"Kristen and Karen came out really well. They are fairly healthy, they're bright and personable. We are very lucky. I wouldn't want to press our luck."

If the toll on the families is too readily apparent, no one knows yet all the psychological effect on the fetus growing in a world of non-stop light and noise instead of in his mother's womb.

Also, the all-important parent-infant bond does not get a chance to form normally.

"We encourage parents to come into the nursery as soon as they can, and as often as they want," says Stevenson. "We try to foster the development of an intimate relationship between the parents and the baby."

But the sight of sick, fragile babies that at any time may die proves to be too much for some parents, who were expecting the nice, healthy Pampers baby.

If the baby does make it, there is still the grating worry of whether he'll have any handicaps.

"We just found out that Kristen has a fairly severe hearing loss that we had not known about." says Mrs. Regelein. "That would be devastating to another family, and for us, it's not pleasant. But in the list of all the things, we could have come out with, it's minor. She's bright, she's well and very sturdy.

"Karen, as sick as she was, has no retinal damage, no brain damage, no motor skill damage. Her lungs are in superb condition compared with even a year ago.

"For the first time since they've been born, I feel we know all the things that is wrong with them. We know all the things we have to do to fix it.

"Some of it is not real good news, but there are not a lot of question marks left anymore. And that's a real good feeling.

"There aren't many data to show you about what is going to happen to your baby. There aren't many people you can talk with because there are not that many people walking around with babies like ours."

"There is no question about it," says Dr. Stevenson. "We need to think of all these problems arising in newborn intensive care from an interdisciplinary point of view. Not only doctors, but clergyman, psychologists, even anthropologists are needed to help young families confronted with economic and psychological problems."

Mrs. Regelein says the girls helped her to be strong.

"I saw them doing better, because we were being strong. They really are a reflecion of your strength."

5/1/81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis or Spyros Andreopoulos (415) 497-6911

STANFORD—

The second combined heart-lung operation at Stanford University Medical Center was performed on a 30-year-old Binghampton, N.Y., man on May 1.

Charles Walker, who was born with a congenital heart defect and whose lungs had become damaged because of his poorly-pumping heart, had become seriously ill more than two and a half years ago. A team of four surgeons, led by Dr. Bruce A. Reitz and Dr. Norman E. Shumway, completed the four and a half-hour operation at 6 a.m.

Walker is now in the Hospital's intensive care unit in critical but stable condition. He will remain on a respirator for 24 to 48 hours before the attempt is made to let his new lungs begin breathing for him.

His new heart and lungs came from an anonymous donor.

"So far, we are satisfied that strategies developed with animals in our laboratory have proven successful in patients," said Dr. Reitz.

But, he cautioned, it is too early to judge the overall success of heart-lung transplants until more operations are done.

Walker has been waiting for a donor since April 3. He and his mother, Mrs. June Spangenberg, have been living in the Stanford area while waiting for the donor.

Mr. Walker is the middle son of five. He grew up in Newark Valley, New York, and now lives in Binghampton with his dog, Teddy.

Mrs. Mary D. Gohlke, of Mesa, Arizona, who received a heart-lung transplant on March 9, is in satisfactory condition 54 days after her operation. She is still in the intensive care unit, and slowly regaining her strength and stamina. She is on a physical therapy regimen.

This is only the fifth heart-lung transplant ever performed in the world. The other three were done between 1968 and 1971, but because of complications, none of the recipients lived longer than 23 days.

The 1972 discovery of the drug cyclosporin A has set the stage for the most recent attempts to replace at the same time both heart and lungs. Cyclosporin A circumvents two previously formidable obstacles in heart-lung transplants: the slow and imperfect healing of the windpipe and life-threatening infections.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Medical students at Stanford University will join their colleagues nationwide in a National Day of Concern for Health on Friday May 8, 1981, declared by the board of trustees of the American Medical Student Association (AMSA).

The day is intended as a constructive protest to the Reagan Administration's proposed budget cuts in health related programs, according to Arturo Molina, president of the Stanford Medical Student Association.

Stanford medical students will assemble in the courtyard of the Medical School at noon and will then march across campus to White Plaza, culminating with a rally in front of the Old Union until 1 p.m..

Rally speakers will include Dr. John Steward, associate dean for Medical School student affairs; Count Gibson, professor and chairman of the Department of Family, Community and Preventive Medicine; Andre Burnett, guest professor at Stanford and expert on issues of minority higher education; and Silvia Corral, senior medical student.

Across the country, students will acknowledge the Day of Concern in many different ways, Molina says. In Washington, D.C., medical students have planned a march and rally, and seminars will be held at Yale, he notes.

Stanford medical students have also organized a postcard-writing campaign to key legislators. Information and postcards will be available at the rally, Molina says. The medical students hope to attract students, staff and faculty from around the campus to the march and rally, and they are seeking active participation of several other campus groups including the Stanford Premedical Society and the Stanford Progressive Alliance.

The Reagan Administration's proposed cuts "will affect mostly those citizens living at or below poverty levels," contends Molina. "Such actions will further diminish the already impoverished status of many underserved populations in this country," he adds.

According to the AMSA, three areas of potential budget cuts cause greatest concern:

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- reductions in direct service programs,
- consolidation of current programs into block grants to individual states,
- elimination of reasonable loan programs to health professions students.

An AMSA statement asserts that a 25 percent reduction has been proposed in approximately 40 health and social service programs including community health centers, maternal and child health programs and migrant programs. Also on the list of proposed cuts, according to the AMSA, is Medicaid funding, by means of an interim cap on federal participation. The proposed cuts in 1981, they say, will amount to $353 million and in 1982 to $1.2 billion.

Related to health care funding reductions are massive cuts anticipated in environmental protection, occupational safety and health, family planning and mental health, and food stamps, the AMSA statement adds.

Health student loan programs are slated for drastic cuts, with a ceiling to be placed on the number of federally employed National Health Service Corps physicians.

"The elimination of reasonable loan programs to health professions students is likely to enhance the entrance barriers for low and middle income students as well as racial and ethnic minority students," the AMSA says. "This will ensure that in the long run, fewer communities will be provided health care practitioners and facilities through the NHSC," the AMSA statement continues.

"The proposed consolidation of current categorical programs into block grants to individual states will shift the responsibility for administration and provision of services from the federal to state governments, a change which many states are neither prepared nor committed to implement," the AMSA explains.

The National Day of Concern is endorsed by several other national medical student organizations, including La Raza Medical Student Association and the National Medical Student Association.

Further information can be obtained from students involved in planning Stanford's Day of Concern, including Arturo Molina, Pamela Steele, Silvia Corral and Michael Gurule. They can be reached at the Medical School's office of student affairs at 497-6951.

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L104

Mailed Tuesday, May 5, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

Editors Note: Mrs. Gohlke and her family have requested that neither pictures be taken nor interviews be given at this time. Condition reports will be provided by the News Bureau as requested. If the Gohlke family should change its mind, we will inform you.

STANFORD—

Mrs. Mary D. Gohlke, the 45-year-old Mesa, Arizona, woman who received a heart-lung transplant at Stanford University Hospital on March 9, was transferred from the hospital's intensive care unit to a general ward this afternoon (Wednesday, May 6). She remains in satisfactory condition.

Dr. Bruce A. Reitz, the cardiovascular surgeon who is in charge of the heart-lung transplant program, says that, although it is impossible to predict exactly, Mrs. Gohlke may be released from the hospital in three weeks.

Mrs. Gohlke, advertising director of the *Mesa (Arizona) Tribune,* received the first heart-lung transplant in humans in almost ten years, and the fourth one ever done in the world. She has survived longer after the operation than any of the other recipients, the longest of whom survived 23 days.

On May 1, a 30-year-old Binghamton, N.Y., man became the second person to receive a heart-lung transplant at Stanford. Charles Walker, who was born with a heart defect, is still in critical condition, but his recovery has been smooth so far.

Mrs. Gohlke, who had pulmonary hypertension, has spent the 59 days since her operation in the intensive care unit slowly regaining her strength and stamina.

Ten days after the surgery, she was beset by a mild rejection of the new heart and lungs, but that was completely controlled within a week, and her recovery has been steady, although slow, since.

The 1972 discovery of the drug cyclosporin A has set the stage for the most recent attempts to replace at the same time both heart and lungs. Cyclosporin A reduces the possibilty of two previously formidable problems in heart-lung transplants: the slow and imperfect healing of the windpipe and life-threatening infections.

Mrs. Gohlke's operation was the culmination of more than two years of experimental work in primates, conducted by Reitz and his associates in the Stanford cardiovascular laboratory.

The operation is still an experimental one, and only time and experience will tell whether it will be possible to do it routinely. The Stanford team may do three to four of these operations a year, Reitz estimates.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Stanford police have completed an investigation into the citizens arrest and alleged injury of a psychiatric outpatient by security personnel at Stanford University Medical Center, a spokesman announced Tuesday.

Stanford Police Chief Marvin Herrington said he has turned over investigative material to the Santa Clara County District Attorney's Office.

The action stems from an April 27 incident in which the patient struggled with Medical Center security personnel.

The 32-year-old Palo Alto man was treated and released from the Stanford University Hospital emergency room suffering from a broken or dislocated finger, three broken teeth and bruises around the eye.

The patient was issued a citation by university police officers for investigation of fighting in a public place and assault and battery.

Herrington said he was informed by the District Attorney's office that all allegations against the patient were dropped.

"We were asked to conduct a followup investigation by the District Attorney to determine whether charges should be brought on either side. We conducted the investigation and turned over all the materials," Herrington said.

The chief said he offered no opinion on whether further action should be pursued.

Stanford University Police serve as Santa Clara County Sheriff's Deputies and have no administrative connection to the hospital security force.

Richard Pettingill, assistant administrator, said the hospital was conducting its own internal investigation into the incident.

Herrington said a receptionist in the Department of Psychiatry Outpatient Clinic called Medical Center security officers after a patient, who had just completed a visit with his doctor, demanded loudly to return to the inner office.

Three security officers arrived and they were later joined by a supervisor who asked the man to leave.

The patient conceded he struck the security man, whom he said had kicked a backpack he had brought to the office, Herrington said. The security man said he had picked up the patient's backpack to help him leave the office.

According to statements, the patient and security man, who was not injured, exchanged further blows.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

On the surface, the picture looks bright for women entering medicine. The number of women physicians in the U.S. has risen steadily in the past decade, and 25 percent of today's beginning medical students are women.

But, upon closer scrutiny of the facts, one discovers different trends. In a recent interview, Laura Esserman, a third-year medical student at Stanford, and Dr. Joan Kendig, Associate Professor of Biology in Anesthesia, discussed special problems they see for women in medicine.

Presently, said Esserman, less than 10 percent of American medical school faculty at all ranks are women (lower than the percentage for 1965-66). There is not one full dean who's a woman in any medical school in the country.

At Stanford Medical School, the number of women faculty members has in fact remained at approximately 10 percent since 1971. And of these, most are assistant or associate professors. "This past year, *no* women faculty at the School were promoted."

As Esserman sees it, part of the problem lies in the fact that women, traditionally, have not opted for careers in academic medicine, as physician researchers; rather, they have chosen private practice—for reasons not altogether apparent.

"We feel," she said, "that perhaps the existing structure has made it difficult or impossible for many women to choose academia."

Kendig explained that most women are about 30 years old when they complete their residencies. This is also the time they may want to start families, and that's where complications set in.

It is critical *not* to take time off if one wants to pursue an academic career. Explained Esserman, "Once you've gotten out of the mainstream it's very difficult to work your way back into the tenure track." So for many women, it comes down to choosing between family and work.

"I don't think very many men would accept a career on such an either-or basis," commented Kendig.

Another obstacle to academia women have faced, said Kendig, is that less often than men are they encouraged to think seriously about paths for career advancement. "The important question is, what do they have to do now so that they have the option of moving into job "X" five years down the line, and conversely, what's going to shut them out from that option?"

Students should consider all the specifics, said Kendig, and make sure they have clear, convincing documentation in their dossiers. "If you look around at many women, they have just sort of fallen into their careers."

One reason for this, suggested Esserman, is that women have not had the advantage of being part of the "old boy network" so common to professional circles of men.

"I think what you plan to do in your career is often based on a role model." And except for the basic sciences, she said, almost all clinical medicine is taught by male faculty. "So, maybe subconsciously, you don't really think that's an option open to you."

Therefore, said Kendig, it's important to watch how the University is doing, "not only in getting women into beginning ranks, but in promoting them in comparison with men.

"One problem, of course, is that we're getting women in just when opportunities for everyone are being very tightly restricted. It's a tough time."

And many appointments, said Esserman, are very political decisions. "A lot depends on whom you know." Often, women doctors simply don't have the luxury of extra time to stay and talk with colleagues at the end of the day. They have to go home to their families.

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Said Kendig, "If you're asked by a search committee to come up with a name for chairman of the department, you think of good old Joe Blow, who's been around, who's here all the time, and quite obviously a big part of his department. You don't think of Jane Smith, who vanishes at the end of the day and whom you only see professionally."

The few women physicians who do enter academia, said Kendig, are often so swamped with committee duties that they have little time to spend with individual students. "We get asked to serve on every committee, many times because we're women."

And this becomes a dilemma. "We're torn," said Kendig. "Many of these committees are very important, and one really feels a duty to serve.

"On the other hand, women and also minority faculty at this university may impede their own careers by being too generous. Because committee time is not rewarded the way research output is, and there are only so many hours in a day."

It was the glaring paucity of female role models on the Stanford medical faculty which prompted Esserman and another medical student, Barbara Paul, to organize a recent conference for women, entitled, "Designing your Medical Career."

The program was sponsored by the Katharine McCormick Society, an organization of Stanford women faculty and medical students, as well as the American Medical Women's Association and the American Medical Association. It provided an opportunity for women in medicine to think about and discuss their career plans.

Later, reflecting on the all-day program, Esserman commented, "The conference wasn't on how to make it in a man's world, it was how to make it as a woman, in a predominantly male organization."

One proposal for change, she said, is in the area of work options. If women—and men—had more flexibility in arranging their schedules, happier and more effective professionalism could result.

Job sharing and shared residencies are two ways to go, said Esserman, for women who want to keep abreast of their fields while raising families. Most successful residency-sharing programs, she explained, work on a rotating basis, with the two physicians alternating one month or two, on and off the job. Job sharing requires either both partners on duty at the same time, or working alternate days. And of course, said Esserman, for such arrangements to succeed, the two partners must be compatible.

Job sharing may benefit the institution too, said Esserman. "If one person is out sick the other can cover. And usually, both end up putting in more than their official half-time." Besides, she added, if physicians are not encouraged to consider raising a child important, or are not given the opportunity to try it, that is counterproductive to the medical field.

But work options, stressed Esserman, are not just for raising families. A shared residency, she said, seems a natural for anyone deeply involved in research. "Otherwise, unless you take time off during your residency, you're essentially quitting in your research area."

Agreed Kendig, "This is something that all physicians aiming for an academic career face, just how to fit their research time in with their clinical training time. It's a very difficult tightrope act."

Presently, she noted, several women in Pediatrics share residencies. And two physician specialists share one full-time position in the Pediatrics Ambulatory Care Center. In the Department of Psychiatry, both men and women have in the past taken extended residencies in order to have time for other activities.

Commented a sharing resident in Pediatrics, "One disadvantage I've found is that you can feel a bit rusty after being away a couple of months, and there's a certain anxiety associated with re-acclimating. But overall, it's working out well. It's really what you make out of it."

Many obstacles to job advancement, believe Esserman, are related to the frequent misconception that anyone involved in job sharing is only half committed. "Changing this attitude, I think, is just a matter of getting more good people to do it, and also a matter of time."

Dr. Lawrence G. Crowley, Vice President for Medical Affairs and Acting Dean of the Medical School, was the only male panelist at the conference. "He was extremely supportive," said Esserman.

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Addressing certain administrative problems he sees with shared residencies and job sharing, Crowley nonetheless said he'd be more than happy to look at proposals, and possibly to establish more secure work option programs.

He spoke, however, of natural resistance from members of the establishment, the perceptions of reverse discrimination when most sharers are women, and the difficulties in procuring funds from granting agencies.

"In general," he said, "Stanford is committed to seek new knowledge and experiment with change. Creativity is welcome. Restraint is pragmatic."

Certain departments, he said, would not lend themselves readily to shared residencies. And it's difficult to make an effective evaluation when comparing a part-timer with others who move at a faster pace.

Crowley pointed out that an academic career in medicine entails both teaching and research. And while it may be relatively easy to share a teaching load, conducting research on such a basis—without duplication of effort—is trickier. (Many participants at the conference, however, felt that research is ideally suited for a collaborative effort by two people in a job sharing position.) A long-term trade-off for the individual, of course, is decreased income.

Crowley did, though, have several suggestions of ways to work towards the kinds of change discussed at the conference. He recommended the development of small, well-planned pilot projects with built-in criteria and methods for evaluation. Special term support, he said, should be sought for such projects. Concerning problems of delayed tenure for job sharers, he said, the entire tenure system as it stands is currently under review.

Meanwhile, said Esserman, the past shows us that the growing number of female medical students should not be interpreted as promise of greater prominence among women faculty members in the next decade or two.

Women began to enter the field of medicine in numbers, she said, in the late 19th and early 20th centuries. In the beginning, it seems, there was quite a bit of solidarity among them. "But later generations began to worry more about individual professional identity, and many group goals were no longer shared. Women neglected to preserve themselves as part of the medical establishment."

And now, said Esserman, "No one will roll the stones out of our way." Young women, she pointed out, must know how the medical power structure works in order to get a hand in it.

Both Kendig and Esserman stressed the importance of child care and other household support as prerequisites for women's advancement in medicine. Said Esserman, "We must not be afraid to hire people to do the things we don't have time for."

On-site day-care, said both women, would be a very worthwhile project. "But," recalled Kendig, "we tried a number of years ago to get a child care center started here, and got absolutely nowhere."

In fact, a task force was recently formed at the Medical Center to consider the feasibility of various child care services as part of a long-range human resources plan. However, because of tight budgetary conditions, the task force is presently concentrating its efforts on evaluating other methods of assisting employees with child care, such as providing information on existing facilities. According to Carol Ann Bergman of Personnel, the committee will continue to evaluate on-site feasibility for the future.

Kendig has suggested to Crowley and the Office of Student Affairs that the conference on women in medicine ought to be made an institutional responsibility in the future. "Our students obviously need it. We had a fantastic turnout and a very enthusiastic response."

Based on the success of the conference, Esserman concluded that counseling and forums for discussion are very important for both men and women in medical school.

"I don't think people really sit down much to discuss what's stressful. If they did, they'd feel much freer and make more effective physicians." In fact, she noted, women actually tend to have the edge over men in discussing the daily anxieties they face. "So this could be the beginning of something really important for us all."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Like a scene from years past on the Stanford University campus, about 200 medical students and a sprinkling of faculty members held a noon march and rally at White Plaza on Friday, May 8, in protest of the Reagan Administration's budget cuts in health related programs.

Carrying signs that read "we need M.D.'s, not M.X.'s," and "a healthy economy needs a healthy society," the marchers drew many stares and occasional applause as they traversed the campus enthusiastically chanting "health care is a right; no more budget cuts."

The rally was one of many sanctioned at medical schools nationwide by the American Medical Students Association (AMSA), according to Arturo Molina, president of the Stanford Medical Student Association and one of the organizers of the protest.

Major cuts in direct service health care programs and elimination of low-interest loan programs to health professions students were the focus of "The National Day of Concern," said Molina.

According to an AMSA statement, the administration will put a brake on Medicaid spending by means of an interim cap on federal participation, with cuts in 1981 equalling $353 million and in 1982, $1.2 billion.

Also, the AMSA says that reductions in health student loans, loan rates at only three percent above the Treasury rate, and a federal ceiling on the number of National Health Service Corps scholarships are likely to enhance entrance barriers to the health professions for low and middle income students and racial and ethnic minority students.

Through a statement read by Molina, Dr. Lawrence G. Crowley, the Medical School's vice-president for medical affairs, and Dr. John P. Steward, associate dean for students, said: "sudden and substantive cuts in federal support will unquestionably jeopardize programs that have demonstrated merit . . . of extreme importance is that we maintain access to the healing professions for individuals from disadvantaged backgrounds. Unfortunately, many of the proposed legislative changes could result in fewer physicians coming from disadvantaged backgrounds."

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"A blitz has come over us in the past three or four months," said Dr. Count Gibson, professor and chairman of the Department of Family, Community and Preventive Medicine, addressing the crowd which swelled to about 300 as lunchtime browsers from the nearby Spring Faire paused to listen to the speeches and fill out protest postcards to mail to legislators.

"We have been caught off guard but we have to let our congressmen and state legislators know that these cuts will cause our neighborhood health centers to starve and close. Once they are closed, how will they re-open? We have to save these institutions in order to save lives."

The Administration plans to consolidate about 40 health and social service categorical grant programs (including migrant programs, community health centers, and maternal and child health programs) into block grants to the states with cuts for 1982 totalling 25 percent in current dollars, according to the AMSA.

"We must begin to write to our state legislators now," said Silvia Corral, a senior medical student who addressed the rally. "As medical students, we're not used to being active in politics. Some of my colleagues say that medicine shouldn't be political. But we have to protest now," she continued. "The Reagan Administration is hitting us like a fly ball."

"It's a time of crisis," said Andre Burnett, a guest professor at Stanford and an expert on issues of minority higher education. "When you can't be assured of health care tomorrow, when you can't be assured of educational opportunities tomorrow, it's a crisis."

Related to health care funding reductions are massive cuts anticipated in environmental protection, occupational safety and health, family planning and mental health, and food stamps, the AMSA adds.

All of the speakers exhorted march participants to write to their legislators, and many students were busily filling out postcards as the rally concluded.

"This is going on at medical schools across the country," commented Molina. "I think it's a very substantial turnout," he added. "It looks like about half the medical student body to me."

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Mailed Friday, May 8, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind, 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Jessica Raphael spends each Wednesday afternoon in the same pediatric ward where as a child she mounted a successful battle against scoliosis.

The Gunn High School senior may or may not be typical of the 55 junior volunteers at Stanford University Hospital, but Tuesday night (May 11) she was among five of the Candystripers honored for dedicated service.

Receiving scholarships for service in excess of 200 hours were, besides Raphael, Jamie Flaxman, Alice Mansell and Victoria Anderson of Castilleja School; and Susan Benham of Palo Alto High School. All of the winners are seniors.

Mansell accumulated the most hours—295—and has worked in both patient services and the emergency room.

Both Anderson and Raphael say they plan careers in nursing, and for the latter the choice isn't really a decision.

"I can't really see myself working any place else other than in a hospital," she explained.

While in sixth grade, Raphael completed the first of several hospitalizations for scoliosis, a lateral curvature of the spine.

"I had some really good experiences with the people here then, and I decided I wanted to come back here to work," she said.

"Some of the most rewarding times now are times spent with the kids who have the same thing I had. It kind of helps to talk with someone who has been through it," she adds.

Of course most of the children, aged six months to 18 have other diseases, and Raphael says she especially enjoys working with the youngsters who speak only Spanish."

"Many of these kids don't have anyone who can talk with them, so it's really great to see them smile and respond when they are able to be with someone who speaks their language."

Raphael studied Spanish in school and participated in a summer exchange program in Oaxaca, Mexico. And smiling she says that much of her Spanish practice these days result from conversations with her boyfriend, Javier Gil, and his Spanish-speaking family.

Colette Case, a recreation specialist in the pediatric ward, praises the work of Raphael and her colleagues.

"There just wouldn't be as much one-on-one contact with the patients without the volunteers," says Case.

Candystripers such as Raphael play games or talk with the patients.

Case says that often activities are selected to enhance whatever difficulties the patients might be having. For example, the volunteer might be encouraged to guide a child recovering from a stroke to try fingerpainting to help regain dexterity.

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(Mailed May 12)

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

"Cardiovascular Nursing in the 80's: New Frontiers" will be the topic of a national clinical nursing seminar, co-sponsored by Nursing'81 (a nursing journal published monthly) and Stanford University on September 9 and 10, 1981.

To be held in San Francisco at the Saint Francis Hotel, the seminar will focus on guiding the professional nurse from current principles related to care of cardiovascular patients to potentially advanced principles and skills of the future.

An optional third day, September 11 (limited to 200 participants from the first two days), will include a visit to Stanford University Hospital where workshop sessions will take place.

Topics to be covered at the seminar include: cardiac rehabilitation and patient education; cardiac surgery and transplantation: Where We've Been and Where We're Going; the child with heart disease; nursing management of the cardiac transplant recipient; and others.

Speakers will include Norman E. Shumway, M.D., Ph.D., professor and chairman of Stanford's Department of Cardiovascular Surgery; Jay Mason, M.D., assistant professor in the Division of Cardiology; and Linus Pauling, Ph.D., Nobel laureate from the Department of Chemistry.

Members of Stanford's Nursing staff participating on the faculty will be: Carol Ashton, Elaine Baylis, Janice Bridgham, Joan Caldwell, Paula Caltagerone, Marty Douglas, Kathleen Grady, Eleanore Hedenkamp, Joan Mersch, Joyce Miller, Mary Jo Schuermann-Oeder, Margaret Pfister, Julie A. Shinn, Katherine M. Vivenzo and Lois Welches.

Fees for those who register before July 1 are $150 for the two-day seminar, and $35 for the optional third day (to be filled on a first-come, first-served basis). Registration after July 1 will be subject to a 10 percent surcharge.

Fees include all materials distributed at workshop sessions, plus coffee and luncheons. The third-day fee includes motorbus roundtrip transportation between the Saint Francis Hotel and Stanford University, continental breakfast and luncheon.

All interested nurses can register by contacting Mr. John E. Kelly, Nursing'81, 132 Welsh Road, Horsham, PA 19044, (215) 657-4600.

5/12/81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Note to editors: Picture available, if not included.

STANFORD—

Dr. Dora Goldstein, professor of pharmacology at Stanford University Medical Center, has been awarded the second annual Award for Scientific Excellence by the Research Society on Alcoholism in recognition of a decade of "outstanding contributions" toward the understanding of the biology of alcohol tolerance and dependence.

She received a $1000 award and a plaque.

Dr. Goldstein, the immediate past president of the Society, has delved into those chronic components of alcoholism that are due to the drug itself, and not those owing to the psychological problems of the drinker.

She's explored the hand-in-glove relationship of alcohol dependence and tolerance, testing the premise that these are adaptive phenomena. Physical dependence and tolerance to the drug occur because the human or animal adapts to the alcohol's presence and functions fairly well in spite of its being there.

The body actually changes some of its inner workings to accommodate the alcohol and becomes tolerant of the drink. But while the body now can tolerate the alcohol, it also needs the drug around to provide the conditions in which it is geared to operate, Goldstein says. And therein lies the rub.

Dr. Goldstein, in order to get a handle on a syndrome with many components, developed a simple system to produce rapid alcohol dependence in mice.

Sorting out the many components of alcoholism in man is a next to impossible job, says Goldstein.

"Alcohol addiction in man develops over a period of years, and is often accompanied by malnutrition and disease," Goldstein says. "It is difficult to study alcohol dependence when other diseases are present."

So scientists look to animals for clues about the physical parts of alcoholism. Mice are choice research subjects because they become alcohol-dependent in just two to four days.

Dr. Goldstein figured out that mice could be kept in a drunken state if vapor of alcohol was wafted into their air-tight plastic cages. After a few days in such alcohol-laden air, the mice are made to go cold turkey and their withdrawal symptoms are closely measured and recorded.

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Certain strains of mice develop convulsions when the alcohol disappears. (That only select strains convulse implies there is a genetic factor in alcohol dependence.)

Dr. Goldstein and her colleagues found that the intensity of these convulsions was related to the amount of alcohol the mice had had over time.

After Dr. Goldstein demonstrated that dependence on alcohol is, at least in part, physical, she turned her attention to the changes that occur in the cell membranes of alcoholic mice.

Alcohol, which is a small molecule, appears to work by slipping into cell membranes and altering how they operate, says Dr. Goldstein.

Working with her associate, Dr. Jane Chin, she discovered that alcohol at first makes cell membranes more fluid. But as the mice develop tolerance, their membranes are no longer readily deformed by alcohol. Instead, they stiffen up, and in alcohol's presence behave rather normally. The two researchers found this to be true in both brain and red blood cells.

Drs. Goldstein and Chin think that this imperturbability of the membranes may be due to the increased amounts of cholesterol that they have found in the alcohol-accustomed membranes. Working with artificial membranes in a test tube, they've discovered that the more cholesterol these membranes contain, the greater is their resistance to the membrane-moving effects of alcohol.

Dr. Goldstein is now investigating what happens to the cholesterol-cargoed, adapted membranes when the alcohol goes away. She is also exploring if the alcohol itself assists cholesterol's collecting in the cell membranes.

Dr. Goldstein's hope is that by better understanding the physical changes wrought by alcohol, one moves closer to minimizing the all-too-apparent damage done by the drug.

"Addiction is becoming a lot less mysterious than it used to be," says Goldstein. "Although we still don't understand the psychological components very well, we're getting to understand the biochemical and pharmacological components really nicely."

The Research Society on Alcoholism, a component group of the National Council on Alcoholism, has about 300 active members. Its aim is to increase support for alcohol reseach and to enhance communication among alcoholism researchers, says Goldstein.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Charting blood flow in the heart and great vessels of the body and mapping the connections the visual system makes in the brain as it develops are among the research interests of the seven Stanford junior faculty members recently selected for biomedical research awards.

Diana Guthaner, M.D., of the division of diagnostic radiology; Lorin K. Johnson, Ph.D., of the department of pathology; Laurence J. Korn, Ph.D., of the department of genetics; Mervyn Maze, M.B., Ch.B., and Susan Rice, Ph.D., both of the department of anesthesia; Ron G. Rosenfeld, M.D., of the department of pediatrics; and Carla J. Shatz, Ph.D., of the department of neurobiology have received start-up money from a National Institutes of Health grant awarded to the School of Medicine.

Each year, funds are distributed to junior faculty members to assist them in establishing research programs. Dr. Eric Shooter, chairman of the department of neurobiology, is the head of the faculty committee that selects the recipients.

Dr. Guthaner wants to characterize the blood flow in the heart, the body's great vessels, and coronary artery bypass grafts using computed tomography, a CAT scanner. Her aim is to find out in a non-invasive way whether a person is developing problems that could lead to a heart attack.

Dr. Johnson is trying to better understand the relationship between atherosclerosis, or hardening of the arteries, and blood cells called platelets. He is culturing in the lab two types of blood vessel cells: the endothelial cells that line the arteries and the underlying smooth muscle cells. He is watching how the platelets affect the cell types, and if medication can effectively combat the proliferative effect platelets have on the smooth muscle cells.

Dr. Korn is exploring what regulates the expression of genes in higher animals during their development. He is using the South African clawed toad as a model, and is probing whether proteins or other factors determine whether or not, in the course of development from the egg to a toad, the ribosomal RNA is made.

How the hormone epinephrine, used, among other things, as a vasoconstrictor and heart stimulant, and the common anesthetic halothane act together to cause irregular beating of the heart is what Dr. Maze is trying to discover. Although either substance alone can cause irregular beating, or arrhythmias, together they can create a life- threatening situation.

Dr. Rice is investigating how a drug for tuberculosis speeds up the metabolism of a fluoride anesthetic. Too rapid breakdown of the anesthetic releases an excess of fluoride into the body, resulting in transient damage to the kidney.

Growth disorders in children is the primary concern of Dr. Rosenfeld. He grows cells from children with growth disorders in controlled conditions in the laboratory, and tests how hormones, such as somatomedin, affect them.

Dr. Shatz is mapping the connections the visual system in the cat makes as it develops. During the prenatal period, the visual systems of cats and humans make similar connections, and so she hopes to get clues about humans from studying cats.

5-19-81 —30— 219

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Note to editors: pictures available, if not included

STANFORD—

The time has come for biomedical researchers and government-granting agencies to realize that high-powered, high-cost instruments—increasingly key tools in the biomedical sciences—are most efficiently used through shared-facilities, says Oleg Jardetzky, director of the Stanford Magnetic Resonance Laboratory.

Jardetzky is the first president of the Association for Advanced Technology in Biomedical Research, a group composed of directors of public-supported laboratories that are national or regional centers for research. The group recently formed to promote the use of sophisticated technology in biological and medical research and in medical practice, and to get the message out that sharing means saving.

Dr. Carl Djerassi, Stanford professor of chemistry, and Dr. Edward H. Shortliffe, Stanford assistant professor of medicine are members of the Association's steering committee.

Jardetzky says that costs of technologies such as nuclear magnetic resonance, synchrotrons, million-volt electron microscopes, and computers programmed for graphics or artificial intelligence, run in the six figures. They're just too expensive to be given to the individual investigator; the answer lies in regional or national facilities, he says.

"Biomedical researchers must start sharing these costly resources, as the physicists and earth scientists have done for a long time," he says.

The quality, quantity and development of scientific instruments available for research in the United States have been declining during the last decade. The drop can be pinned on inflation and the shrinking research dollar, coupled with a doubling in replacement costs of equipment, which is increasingly more powerful and sophisticated and, thus, in greater demand, he says.

Super high-technology in biomedical reseach has come into its own during the past decade, providing ways to tackle problems previously unanswerable.

"Scientists in their own labs armed with test tubes and centrifuges are obviously making tremendously valuable contributions," Jardetzky says. "Yet, there are aspects of biomedicine that we'll never understand without high technology. For instance, we'll never know how molecules function until we know how they move, and for that we need a synchrotron, or nuclear magnetic or electron spin resonance."

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Although there are some shared facilities around, they are still relatively few, he says. Approximately 60 such facilities will be members of the new Association, says Jardetzky.

Those existing are the work of the 20-year-old Biotechnology Resources Program of the Division of Research Resources of the National Institutes of Health (NIH) and of the instrumentation program at the National Science Foundation.

The NIH program has been at a constant level of funding since 1967, says Jardetzky, which translates to a considerable cut in funding given that the inflation in instrument costs often exceeded 100 percent during this period. And recently, Congress proposed cutting its funds much more severely than most other NIH programs, he says.

"The program all along has been on a back burner," says Jardetzky. "Some facilities are now being phased out altogether. The government must become aware that certain types of work will not be done unless there is a sharing by individual investigators."

The shared facilities that do exist are scattered over the nation, but Stanford with its five has by far the most. The largest number found at any other university is two.

Stanford's national facilities are: the Stanford Magnetic Resonance Laboratory (SMRL), headed by Jardetzky; Stanford University Medical Experimental Computer for Artificial Intelligence in Medicine (SUMEX-AIM), headed by Drs. Edward Feigenbaum and Shortliffe; Stanford Synchrotron Research Laboratory (SSRL), headed by Dr. Arthur I. Bienenstock; the Mass Spectroscopy Laboratory, headed by Dr. Carl Djerassi, and the Stanford Electronics Laboratory (SEL), headed by Dr. James D. Meindl.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Lane librarian Claire Still, the resident expert on the history of medicine, retired this month after almost twelve years at the Lane Medical Library. But you could scarely wink before she was exploring another page of history—a train trek across Canada.

Ms. Still, a small, slim woman, whose twinkling blue eyes behind her brown-framed glasses grow big when she talks of the trip, is a self-taught history of medicine buff.

She learned all she could at every chance she could, says Peter Stangl, the director of Lane, and her retirement is a great loss to the library. None of the other librarians has the specialized knowledge that Ms. Still has.

She says her interest in the history of medicine developed naturally. Before enrolling in Library School at the University of California, Berkeley, in 1969, she had been a medical social worker for 25 years, and among other things worked with the American Red Cross during World War II and travelled to various parts of the country during the polio epidemic of the '50's. She also has two brothers who are physicians.

Last September, after years of handling most of Lane's original cataloging of rare books and reference questions about history, she officially became the history librarian of Lane.

During this past academic year, she has undertaken several ambitious projects. Lane has some 6500 rare books, some dating to the early 15th century, according to Still. She has developed a computer listing of the subjects and chronology of Lane's pre-1850 books.

She also has organized and cataloged three major collections of papers: that of Dr. Russel Lee, the founder of the Palo Alto Clinic, Dr. Ray Lyman Wilbur, who was dean of the School of Medicine from 1913 to 1916 and became Stanford's third president in 1916, and Dr. William S. Hunter, a longtime physician at Kaiser.

In addition, she has helped Dr. Alan Koslow, a resident in surgery, catalog and photograph the considerable collection of medical instruments that Lane has acquired over the years.

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A particular interest of hers has been in the history of Bay Area women physicians. In 1976 she wrote an article for the Stanford M.D. on Alice Higgins, the first women graduate of the Medical College at the Pacific, predecessor of Cooper Medical College and of the Stanford University School of Medicine.

Last year she aided those editing *Victorian Women,* which was published by Stanford University Press.

Ms. Still's fascination with history does not stop at medical history. She is also a member of the Stanford Historical Society and historical societies of Menlo Park and Palo Alto. Her special interest is the oral histories of long-time area residents.

Ms. Still has also been active in the Association of American University Women, the Medical Library Association and the Northern California Medical Library Group.

She grew up and went to college in Lincoln, Nebraska. After receiving her bachelors degree from the University of Nebraska in Lincoln, she earned a masters in social work from Catholic University in Washington, D.C.

She has worked as a medical social worker at, among other places, Walter Reed and Georgetown University hospitals in Washington, D.C. and at Stanford University Hospital. She was also the social service director of a rehabilitation center in Omaha for over six years.

Since her switch into library science, she has worked at Lane.

When not travelling or chronicling the past, Ms. Still likes to play bridge and do needlepoint.

After her seven-week trip across Canada, Ms. Still plans to return to her Menlo Park home, and to keep on learning all she can about medical history, and other kinds too, for that matter.

5-19-81 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Keith Taylor, professor of medicine at Stanford Medical School, on July 1 will become Director General of Great Britain's Health Education Council, a semi-autonomous organization that advises the British government on priorities and programs in mass health education.

Taylor will take a leave of absence from Stanford at the end of the academic year in order to fill his new position.

A gastroenterologist and nutrition expert who holds the George Deforest Barnett Professorship in medicine at Stanford, Taylor will succeed Alastair Mackie in the post. The appointment was made by the Secretary of State for Health and Social Services of the British government.

The Council, with a yearly budget of five million pounds, carries out national, local and regional public information campaigns "to educate people to look after their own health," Taylor explains.

Much of the Council's information is conveyed directly through the mass media outlets of television, radio, newspapers, and magazines, explains Taylor. But schools, the National Health Service network and other organizations also cooperate in promoting health education information and materials, he says.

"One of my major efforts will be in the medical schools, to boost the health education training of doctors," notes Taylor, who will be the first medical professor to hold the Director General post since the 32-member Council was formed in 1968.

Specific areas he expects the Council to emphasize include smoking, alcohol consumption, and exercise. Target population groups are especially the very young (preschool and school children) and the late middle-aged (those around 60 years of age), particularly in the lower of the five social classes recognized in England, Taylor says.

In a sense, says Taylor, Britons have less incentive than Americans to stay healthy, since necessary health care services are guaranteed at no direct cost.

And since health services in Britain are uniformly provided to people of all ages and all social classes through the National Health Service, improving Britain's national health is largely a matter of better health education along with an increased appreciation of preventive measures that may forestall disease, Taylor believes.

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Health maintenance organizations, or HMO's, (subscription health care groups that have been growing in the U.S.) have not realized their potential in this area, he claims.

By lowering subscription rates for members who participate in health education programs, HMO's have an opportunity to offer persuasive financial rewards, not available in the British system, to promote better health habits.

Taylor, 56, was born in London and received his general and medical education at Oxford University. He has been on the Stanford faculty for the past 18 years and was chief of the medical service at the Palo Alto Veterans Admininstration Medical Center from 1968 to 1978.

Taylor has been a strong advocate of increased research in human nutrition throughout his career, and he maintains that nutrition research is one of the most neglected areas of modern science. Promotion of adequate nutritional standards, in the home as well as in institutions such as schools, is another area he expects the Council to focus on.

Taylor held a Guggenheim Fellowship in 1971 and traveled extensively in Australia, Southeast Asia and Europe, studying systems of medical education and programs in human nutrition. Among his published works are papers on the absorption and transport of vitamin B12, and the immunological aspects of imflammatory diseases of the gastrointestinal tract. He is a member of numerous professional societies in the United States and in Britain. He is also a fellow of the Royal College of Physicians.

Of his new position, he says "it represents part of my interest that I have not had a chance to apply in a practical way."

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Mailed Tuesday, May 19, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Some mammalian tumor cells are able to manipulate their immediate environment in such a way as to prevent the body from fighting off the tumor by immunological methods, according to a report in the May 22 issue of *Science* magazine by researchers at Stanford University, Brown University and the Beth Israel Hospital, Harvard University.

The key to this successfully evasive maneuver of tumor cells lies in their secretion of a membrane substance that promotes coagulation, or blood clotting, in the immediate vicinity of the tumor cell. This "mini blood clot" affords the tumor a dense, protective shield from the immune system's armory of disease-fighting proteins, the antibodies.

Dr. Steven Quay, the Stanford member of the research team that made this discovery, says these recent findings could provide an avenue for cancer therapy.

Quay says that for some time it's been appreciated that although people produce antibodies to growing tumors within them, the antibodies seem ineffective and unable to destroy the tumor cells. But researchers have not known why the normally powerful immune system has been stymied by tumor cells.

Only last year, two of Quay's colleagues from Beth Israel Hospital (Drs. Harold and Ann Dvorak), along with other researchers at Harvard, showed that tumor cells are able to change the environment right around them, the "microenvironment," in a way that incapacitates the immune system. They made the key observation that a barrier surrounds the tumor, forming what they called a "cocoon," isolating the tumor from the rest of the body. The barrier consists of fibrin, the primary material of which blood clots are made.

Quay and his colleagues now have shown that a substance found in the surface membrane of the tumor cell speeds the formation of these mini-blood clots and that this substance is biochemically different from the usual components of blood that activate and speed the clotting system (called procoagulants).

At least this is true in the two guinea pig tumor cell lines and the one human tumor cell line the researchers have so far investigated. Quay's partners in the research included the Dvoraks, and Drs. N. Orenstein, P. Hahn and A. Bitzer from Harvard, along with Dr. A. Carvalho from Brown University.

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The researchers think this new information opens up several novel possibilities for therapeutic tacks to combat cancer. Administration of a general anticoagulant drug would be dangerous, Quay points out, because in order to have a dose high enough to prevent clot formation in the region of the tumor, the patient would run the risk of hemorrhage throughout the body.

But an alluring possibility involves finding a way to manipulate the tumor's coagulation system to prevent the microclots from forming, he suggests. This would have the effect of enhancing the patient's immunity because the natural anti-tumor antibodies circulating in the patient's blood could then get at the tumor cells.

The tumor-specific procoagulation factors that Quay and his colleagues have discovered are not yet completely characterized. "Anything that increases the rate of coagulation is called a procoagulant factor," he observes. "Until we know more about it, we can't call it anything else," he says. But it's most likely one of two types of compounds. "We know it comes from the plasma membrane, which is made of proteins and lipids," he says.

A possible therapeutic strategy would be to inactivate the procoagulant substance, says Quay, by a neat double-cross using the immune system. Once the procoagulant substance is purified, it can serve as a mold for designing an antibody to bind it specifically. The specificity of the antibody would prevent it from binding the blood's usual clot-promoting substances and interfering with the normal coagulation process, while permitting it to incapacitate the tumor-produced clotting substance.

The localized clot-promoting ability that Quay and his colleagues have observed is not unique to cells from solid tumor masses, he adds. Preliminary results from new experiments indicate that cancer cells from patients with leukemia also have procoagulant activity. It could be a universal phenomenon, Quay suggests.

The National Institutes of Health were the major source of funding for this research and Quay received support from the Elsa U. Pardee Fund, a private organization (based in Midland, Michigan) that supports cancer research.

Mailed Tuesday, May 19, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

To increase community attention to both speech and hearing, the Stanford Audiology Clinic of the Division of Otolaryngology and the Mid Peninsula Speech and Language Clinic of Redwood City will co-sponsor a special program on Tuesday, May 26, at 7:30 p.m.

To be held in Faber Auditorium at the Children's Hospital at Stanford, the program is offered as a public service, free of charge. It is presented in recognition of May, designated "Better Speech and Hearing Month."

Key speakers will be Dr. Holly Hosford-Dunn, director of the Stanford Audiology Clinic, and Dr. Kathryn R. Beadle, executive director of the Mid Peninsula Speech and Language Clinic and a member of the clinical faculty at Stanford School of Medicine.

They will discuss "Speech and Hearing Disorders: Identification and Treatment," after which small group discussions led by Clinic staff members will address specific questions about hearing and communication disorders.

Stanford University School of Medicine and the Speech and Language Clinic parted ways officially August 31, 1980, after 20 years of operating a state-wide program for patients with communications disorders.

The Clinic was reorganized as a private professional corporation, and continues to serve the patients of Stanford, the Palo Alto Medical Clinic, Children's Hospital at Stanford and a number of extended care facilities in northern California.

The purpose of the separation was to make the Clinic more flexible and economically efficient. Since then, its relationship with the School of Medicine has nonetheless continued as a major referral source for this type of service.

5-20-81 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

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5-20-81 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: See related story on the high incidence of sleep-related breathing disturbances in the healthy elderly.

STANFORD—

The elderly, who comprise 15 percent of the population in this country, consume 40 percent of the sleeping pills, but surprisingly little is known about the short and long term health effects of these medications in older people.

Sleep researchers at Stanford University Medical Center are now seeking volunteers age 62 or older to participate in studies exploring the effects of sleeping pills on nocturnal physiology and their carryover daytime effects following nighttime ingestion.

The studies, which will take place beginning in July, are one component of a $3.5 million project on sleep disorders in the elderly funded by the National Institute on Aging and based at the Stanford Sleep Disorders Center.

Dr. William C. Dement, professor of Psychiatry and Behavioral Sciences and director of the Sleep Disorders Center at Stanford, is principal investigator on the project.

"It has been conclusively established that the disproportionate prescribing of sleeping medications to elderly people with insomnia lacks a clear scientific basis," says Dement.

"Nevertheless, given the prevalence and severity of insomnia complaints in the elderly, safe and effective relief is very important. We want to determine if any compounds can be used to treat sleep problems that will not have the adverse side effects we associate with most sleeping pills."

Most hypnotics, or sleeping pills commonly prescribed, are slow to be broken down and excreted by older people whose metabolism rates have slackened, explains Dement. For this reason, when taken night after night, the compounds and their breakdown products accumulate in the body, impairing daytime functioning, alertness and coordination, he says.

In fact, Dement believes that the daytime drowsiness people attribute to lack of a previous night's sleep, may actually be a delayed effect of the drug they took the night before to induce drowsiness.

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But daytime drowsiness is not the only side effect associated with most sleeping medications, he warns. New evidence indicates that these hypnotics, most of which are respiratory depressants, can worsen sleep-related breathing disturbances found in almost 40 percent of the elderly.

Dement and his colleagues plan to examine the effects of new short-acting hypnotics in elderly volunteers, as well as to monitor the effects of more conventional drugs.

Volunteers, who must be 62 or older, will be screened to make sure they are not suffering from any severe sleep disturbances. In the study, they will be required to spend five consecutive days and six nights at a student dormitory on the Stanford campus set aside for sleep experiments during part of the summer.

Volunteers will take one of a variety of sleeping medications. During the night, they will be attached to monitors that measure their sleep and waking patterns, their heart rate and breathing functions. In the day, their alertness will be measured and their performance of various tasks tested.

"This is a very exciting study because of the 24-hour monitoring plan," enthuses Dement. "Sleep has always been isolated from wakefulness, and the result is a century of meaningless data. We want to correlate problems of sleep at night with those of wakefulness during the day."

This is a pilot study planned with a relatively small number of volunteers, probably 15 to 20, Dement says. In future studies, the researchers may study large numbers of people using "ambulatory" monitors the volunteers can take home.

Data from these experiments could be very significant, Dement points out. "These data may guide the use of sleeping pills in this country," he says.

Those interested in volunteering should call (415) 325-4697 of 497-6601. All volunteers must be selected by July 5 with the study to begin July 13.

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Mailed Wednesday, May 20, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Photos available if not included)

STANFORD—

Dr. Allen B. Barbour has been appointed Associate University Ombudsman for the Medical Center, Stanford University President Donald Kennedy announced today, May 20.

Barbour, a clinical professor of medicine, will serve effective Sept. 1 under University Ombudsman John D. Goheen.

In the newly created position, Barbour will handle complaints and grievances for M.D candidates and all other students at the Medical School, and for residents and interns at the hospital.

"This is the first time that interns and residents have been provided with the service of an ombudsman at Stanford," said Dr. John P. Steward, associate dean for student affairs at the Medical School.

Previously, students at the Medical School were referred to the main campus for mediation service.

Faculty and staff of the Medical School will not be affected by the new arrangement and will continue to seek mediation assistance from Goheen's office, Steward said. Hospital employees, other than interns and residents, are unaffected by the restructuring, he said.

Since 1969, the ombudsman at Stanford has served as a mediator seeking to protect students, faculty and staff from injustices or abuses of discretion.

Goheen said Barbour will handle such issues as disputes by interns or residents about working hours, or complaints by medical students about the quality of a course.

The Committee on the Well-Being of Medical Students, composed of students, residents and faculty members, recommended last year that a second ombudsman with knowledge of the Medical Center was needed at Stanford.

Barbour was recommended for the appointment by a faculty-student-resident committee "and he was clearly our first choice," said Steward.

The committee acted under the direction of Lawrence G. Crowley, vice president and acting dean of the School of Medicine.

Barbour came to Stanford as an assistant professor of medicine in 1963 after 10 years in private practice in internal medicine at San Rafael. During that same decade he served on the faculty at the University of California, San Francisco, where he had graduated from medical school in 1943.

Barbour has served as chief of the Division of Ambulatory Medicine at Stanford Medical School. He organized the Stanford Diagnostic Clinic and has served as its chief since 1971.

In addition to his parttime duties as ombudsman, Barbour, who becomes a professor emeritus, said he hopes to pursue medical writing.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: See related story on volunteers needed for study of sleep and sleeping medications in the elderly.

STANFORD—

Two out of five people above age 62 may stop breathing many times while asleep at night without even being aware of the problem, according to Stanford University sleep researchers. But these breathing disturbances, or apnea episodes, may cause fitful sleep and contribute significantly to daytime sleepiness, the researchers add.

Nearly forty percent of healthy elderly adults taking part in a one-night sleep monitoring study experienced five or more sleep-related respiratory disturbances per hour of sleep, according to results published in the current issue of *The Journal of Gerontology* by Drs. Mary Carskadon and William Dement of the Stanford Medical Center Sleep Disorders Center.

However, the sleepers all awakened during the periods of stalled breathing and recommenced normal respiration. This leads Carskadon and Dement to suggest that widespread insomnia and fragmented sleep among the elderly may be a result of apnea-induced arousal, and the disruption of sleep may be an important factor in daytime sleepiness among the elderly.

In addition to the 37.5 percent with clearly documented apnea (five or more arousals per hour of sleep), another 17 percent had "borderline" apnea, between one and five breathing stoppages and consequent arousals per hour.

Dement stresses that the study participants were healthy elderly volunteers who presented no sleep problems and had no sleep complaints. The 40 volunteers, ranging in age from 62 to 86, both men and women, were recruited from senior centers, church groups and other non-clinical sources. Some had not a single respiratory disturbance during the nighttime study while one woman topped the 200 mark, with 216 episodes, averaging about 45 arousals per hour.

The prevalence of apnea is much higher among the elderly patients with sleep complaints who seek help at the Stanford sleep disorders clinic, Dement points out. He estimates that among the 15 million people over 62 in the U.S., perhaps almost half, or seven million, suffer from sleep apnea.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Dement is professor of Psychiatry and Behavioral Sciences and director of the Sleep Disorders Center at Stanford University Medical Center.

To Dement, this discovered high prevalence of apnea among normal elderly people adds urgency to questions about traditional insomnia therapy; sleeping pills.

Respiratory disturbances may be an added hazard for those taking sleeping pills, he says. Current evidence suggests the possibility of a potentially harmful interactive effect of sleep apnea and sleeping pills in the elderly, he notes, "which, surprisingly, has never been closely studied.

"Preliminary data have shown a worsening of sleep-related respiratory problems when sleeping pills are given," he adds. "And it is troubling," Dement continues, "that although the elderly comprise only 15 percent of this country's population they are prescribed about 40 percent of all sleeping medications.

"It seems likely that sleeping pills are actually contraindicated in the elderly since most of these medications are respiratory depressants, and may even induce sleep apnea," Dement says.

Although among females in the study there was an apparent peak of apnea among those in their seventies, among the men apnea was equally prevalent among individuals in their sixties, seventies and eighties, the researchers report.

Previous research has shown much lower incidences of apnea in middle-aged and young people, Dement says. One study of 20 people between 40 and 60 years of age found no individuals with five or more respiratory events per hour, he says, and "even in younger chronic insomniacs, the prevalence of sleep apnea syndromes probably does not exceed 10 percent."

Additional studies are needed, Dement urges. Until recently, respiratory measures had not been made in sleep studies of the elderly, he says. "Whether these events progress to total respiratory failure or are entirely benign is one question that must be addressed by future research," he adds.

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L106

Mailed Wednesday, May 20, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

The Infant Sleep Apnea Clinic at Stanford University Medical Center, the only one of its kind in California, is being consolidated with the Adult Sleep Disorders Clinic, the Department of Psychiatry has announced.

"While of significant importance as a medical facility and as a source of academic research information, operation of a separate Infant Sleep Disorders Clinic unfortunately is not economically feasible," said Karl Gray, business manager for the Department of Psychiatry.

The consolidation will produce a single sleep clinic, the Stanford Sleep Disorders Clinic, which will see adult patients, and pediatric patients in consultation with the Department of Pediatrics.

In the past, many patients have been seen for apnea, a prolonged pause in respiration that can be life-threatening if undetected, particularly in infants. It is thought to be a possible cause of sudden infant death syndrome (SIDS), in which seemingly healthy infants suddently die with no apparent cause. The incidence of SIDS in the U.S. is near two to three per thousand live births, and it is the biggest killer of infants between the ages of one month and one year.

Although apnea can occur as the result of a diagnosable medical problem, such as a neurological seizure or cardiovascular disorder, most often there is no identifiable underlying cause.

Frequently, parents of apnea infants discover the condition by finding the limp, blue and breathless baby in a crib. If found immediately, the infant can be resuscitated by artificial respiration, but time is of the essence. Without breathing, an infant usually cannot survive more than several minutes without irreversible damage or death.

The condition can severely disrupt a family's life, particularly after multiple near-misses or close calls with death. Anxious parents become afraid to leave the waking or sleeping child's side for an instant and may try to watch the child 24 hours per day.

For this reason, an effective aid has been a special respiration and cardiac monitor that parents attach to the infant when they are away from the baby's side during the day, or at nighttime.

A three-pound box linked to a belt that fits around the baby's abdomen and to electrodes that sense the baby's respiration and heart rate, the monitor can be set to sound an alarm when the interval between breaths or heartbeats increases beyond a specified length.

This means that when the infant ceases breathing, the monitor rings and the alerted parents can revive the child quickly.

Once an infant progresses without incident for several months, the monitor may be discontinued. So far, among infants on the monitor followed by Stanford, no fatalities have occurred.

About 100 apnea patients were evaluated at Stanford last year. Current patients and new ones will be referred to Pediatrics, and the Sleep Disorders Clinic will assist with evaluation of these patients when appropriate.

5-21-81 —30— L106

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Pictures of Caldicott available if not included)

STANFORD—

Dr. Helen Caldicott, president of Physicians for Social Responsibility (PSR), is scheduled to deliver the convocation address at Stanford University Medical School commencement exercises June 14.

Caldicott's lecture is entitled "The Medical Effects of Nuclear War." PSR is committed to study and combat the potential dangers of nuclear hostilities.

A Stanford/Midpeninsula Chapter of PSR was organized in April.

"The Medical consequences of nuclear war are so horrendous that the medical community could not adequately respond to even a limited nuclear exhange," said Barbara Paul, a spokeswoman for the local PSR group.

The organization believes that physicians as healers bear a particular responsibility to warn the public and work against the possibility of nuclear war.

Caldicott was selected in a vote of fourth year medical students.

A Boston pediatrician specializing in cystic fibrosis, Caldicott is a former Harvard Medical School faculty member who suspended her teaching and clinical activities to concentrate on anti-nuclear activities.

Caldicott studied medicine and completed her internship and residency in her native Australia. She headed the Cystic Fibrosis Clinic, Children's Hospital Medical Center in Adelaide, Australia in 1975-76.

At the ceremony, Kathy Kraus, Stanford Medical School registrar, said 83 M.D. degrees will be bestowed, including 10 diplomas earned by students who graduated in January. Last year 78 medical degrees were presented.

In addition, 27 A.M. degrees in physical therapy, 21 Ph.D., and six M.S. degress also will be given.

The Medical School ceremony is to be held at Grant Courtyard following Stanford's 90th annual commencement.

5-22-81 —30— 517

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: Photo of Levine available if not included with story.

STANFORD—

If you place a box containing a live boa constrictor into a cage of monkeys, the monkeys behave in a marked and predictable way; they become agitated and wary, avoiding the box. A solitary monkey shows the same avoidance behavior when exposed to the threatening snake, but there is an important physiological difference, recently discovered by Stanford University researchers. Despite the similarity in behavior, the solitary monkey undergoes a great degree of physiological stress on exposure to the snake while the monkeys that live in the group undergo little stress at all.

This finding of Psychiatry professor Seymour Levine and his colleagues is just one of many discoveries Levine's group has made using hormone measurements as a "barometer" of the psychological state of an animal.

"In using the snake as a stress provoker, our aim is to understand the hormone responses that accompany fear and agitation," Levine explains.

What makes his research on stress unique, Levine adds, is the use of physiological measures to assess stress rather than only behavioral signs.

"What we have shown in the snake study is that association in a social group can reduce the physiological response to a potentially threatening stimulus," explains Levine. "If we had observed only the animals' behavior without looking at their hormone levels, we would not have discovered this stress-buffering aspect of social groups," he says.

The core around which Levine's research centers is stress—fear, anxiety and other factors that cause it—and adaptation to stress, or coping. His thriving colony of squirrel monkeys on the Stanford campus has provided Levine and his colleagues an excellent primate laboratory: "There are certain things of interest that you can examine only in a highly social animal like the squirrel monkey," he explains.

The discrepancy between behavior of animals and their internal physiological state has long intrigued Levine.

"Think of how many times someone has asked you how you're feeling and you respond 'just fine,' when you're actually tired, depressed, angry or stressed," he suggests. "The person who asked you often doesn't have a clue to your internal turmoil because your behavior simply doesn't reflect any of that. We are using hormone analysis to probe that hidden, internal condition," Levine says.

For many years Levine has been studying the interactions among environmental, behavioral and social factors and hormone systems. "Many people feel you can divorce the biomedical questions from the social context. I feel that's an unenlightened attitude. You have to look at the whole animal functioning in a dynamic environment," he maintains.

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"In fact," comments Levine, "ours is one of a half dozen labs in the country looking at psychoendocrinology and the only major primate lab looking at behavioral and endocrine responses to social influences."

For a time Levine carried out his work with chimpanzees at the Stanford Outdoor Primate Facility on Jasper Ridge. But those large and slow-to-mature primates could provide very sparse data at best, he recalls. "They were extraordinarily expensive to maintain, difficult to handle for data collection, potentially dangerous, and the fact that we had only a relatively small number of chimps meant that our data were statistically limited," he explains.

Since the closure of that facility in 1978, Levine has focused his primate work on a 200-member squirrel monkey colony and 50 rhesus macaques.

Two major areas of interest to Levine are the emergence of mother/infant relationships (the process of attachment) and the many facets of stress-related behavior—for example, the response of infants to early stressful events such as separation from the mother; the relationship between biorhythms, including reproductive cycles, and stress; and adaptation to chronic stress, namely coping.

A recent finding from Levine's lab brings new insight into one of the most famous observations in psychology, an experiment conducted in the 1950's by Harry Harlow and colleagues at the University of Wisconsin.

Harlow and his associates demonstrated that infant monkeys have an inborn need to attach to a "caregiving" figure; this figure could even be an inanimate object, they found. Raising newborn monkeys with either a cloth surrogate "mother" or with a wire "mother" that had an attached feeding bottle, they observed that the baby monkey clung continuously to the cloth surrogate, leaving to feed on the wire surrogate only occasionally. In other words, the "contact comfort" the cloth surrogate provided was somehow more soothing to the infant than the oral gratification it learned to receive from the wire surrogate.

When Harlow removed the infant monkey from the cloth "mother," the agitated baby cried and searched for comfort, just as a young monkey does when removed from a live mother. Because of the similarity of the separation behaviors that Harlow observed, until recently psychologists assumed the attachment to an inanimate surrogate parent was as strong as that for an actual parent.

But through hormonal studies Levine and his colleagues recently showed that the infant separated from its actual mother has the telltale hormone perturbations signifying stress while the surrogate-raised infant experiences little physiological stress on separation. The attachment bond to a surrogate is simply not of the same quality as that to a real mother, the researchers conclude.

The hormones Levine and his group measure when studying stress response are produced by the adrenal glands. The adrenals, located above the kidneys, secrete hormones that help gear up many of the body's systems to deal with a stressful situation. This hormone production occurs in response to many environmental influences that are stressful, such as physical injury, pain, disease, and temperature extremes—and also in response to psychological factors such as anxiety, fear and novelty, Levine explains.

Levine's group is also examining the hormones associated with the range of sexual behaviors, and they are finding that psychological factors and social influences can profoundaly affect the reproductive system and mating behavior.

In one series of experiments they demonstrated that the combined influence of behavioral excitement and social factors was strong enough to override even the physiological biorhythm in seasonal breeders.

They conducted the experiments with squirrel monkeys, seasonal breeders that closely mingle sexually and mate only during several months of the year. At this time in the breeding cycle, males have high levels of the male hormone testesterone which plays a role in aggression and mating behavior.

The researchers grouped males together for a period, establishing a male dominance hierarchy. They then confined the males with females at a non-mating time in the breeding cycle. To their astonishment, within 24 hours of the colony formation, the males' testosterone levels rose to breeding-season norms and mating took place, culminating in fertile conception and pregnancy.

"This is a surprising result that shows us how a simple alteration in social environment can profoundly alter behavior previously thought to be tightly controlled by a basic hormone rhythm," explains Levine.

Levine's research group includes several graduate students, undergraduates, postdoctoral scholars and research associates. Their research is funded by two federal agencies, the National Institute of Mental Health and the National Institute for Children's Health and Human Development. Like many scholars engaged in social research, Levine is concerned about proposed severe federal cutbacks in funding. "It's distressing that such research may stop at a time when we are just coming up with new ideas and understanding of how the social environment can affect our internal systems—we're just learning about some of the environmental determinants of pathological conditions, the relations between stress and the emergence of illness, for instance."

"Stress has been called the 20th century scourge," says Levine. "But what is impressive is the animal's capacity to modulate and deal with stress—what we call coping," he adds.

Several years ago Levine studied coping strategy among human parachute jumpers. "When we examined the physiological response of novice parachute jumpers, every stress-response system fired," he recalls. "But by the fifth time they leapt from the plane," he notes, "there was a very dramatic drop in their physiological stress response.

"The jumper learned he could survive, the situation became predicatable to him, and he felt he had control. Even if control is only perceived rather than real, coping occurs," Levine observes.

The notions of predictability and control are central to coping, Levine and his group have learned. To examine these variables in more detail, they are now studying multiple short-term separations of infant monkeys and their mothers. They ask, if the infant learns it can predict reunion with mother, will its interim stress reaction diminish?

Dr. Christopher Coe, a long-time research associate of Levine's, describes a typical separation study. "To look at the effect of a familiar environment on a separated infant monkey, we remove the mother and leave the infant behind with other familiar adults who can care for it. Unlike an infant that is left entirely alone, the infant appears to be totally adjusted, accommodated, and able to cope with the separation. But when we measure its hormone levels, we find that the infant with familiar adults is not really coping at all—it's showing the typical signs of physiological stress."

In related studies, their research has focused on how other variables such as novelty and familiarity, affect the separation response. "We have tried to isolate the dimension of familiarity from the dimension of contact comfort," explains Coe. "We want to know to what degree is the physical contact with another monkey essential compared to just being in a familiar place, which, in a sense, makes the situation predictable."

Seeing the mother or other monkeys during a separation is not very helpful, Coe reports. In fact, if the mother and baby are separated and allowed to see one another, it's an extremely frustrating and negative situation. "We have found this is one of the most stressful types of separation. It's actually better to separate the infant totally, where it's out of sight and out of mind," Coe says.

In future studies, the researchers will add in the variable of unpredictability, by having separations of different lengths, for instance. "We want to see if they adapt as readily," Coe says.

One ultimate aim, says Levine, is to look at "the long-term consequences of traumatic or stressful experiences during infancy. And, of course, by looking at a primate like the squirrel monkey, which shows a strong attachment relationship, we hope to gain insight into these processes in humans," he adds.

The young monkeys go from mother-infant studies to puberty studies, and then long-term consequences, three years, five years away. Since the monkeys reach puberty at three, Levine's lab is just now entering the puberty phase of study. It's becoming a very exciting, important time in their research program, Coe and Levine agree.

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L104

Mailed Wednesday, May 27, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

EDITORS: Photo available if not included with story.

STANFORD—

Children entering the Hospital's inpatient Pediatrics unit these days are greeted with, "Let's try to find a choo-choo train," or "Let's count how many balloons there are."

That's how they're led to discover the artwork of Nancy Turver, a technician in Stanford's lab who has made the Peds walls come alive with brightly colored pictures, all tailored to a young child's taste for fun.

Besides the train and balloons, Turver has adorned the unit with an apple tree, a cat, a cricket, a yellow school bus, a toy soldier, a nineteen-foot rainbow, a sailboat, a snowflake, a pick-up truck, a spinning top, a Jack-in-the-Box, the sun, some birds, kites, stripes, snow geese and more.

Members of the Pediatrics staff, says Turver, have found the decorations a wonderful supplement to their patients' orientation. It makes the parents happier too, she says. "It sort of shows that somebody really cares about the kids."

Turver, who works 20 hours a week in the Hospital while aiming for a full-time career as an artist, first broached the idea with Jill Greenberg, regional operations manager for Pediatrics. Play therapist Betty Lovelace, clinical nursing coordinator Alice Morrow, Greenberg and others had been toying for some time with a plan to create a more child-like atmosphere for the unit. So Turver, after presenting her drawings, was welcomed aboard.

"At first it was sort of an experiment," she recalls. But the project blossomed as more and more children showed delight in their new surroundings.

Wallpaper, explains Turver, is often out of the question for hospital rooms because of the difficulty involved in cleaning. But her paints will present no such problem, remaining intact "for a long time."

Turver is now in the process of painting window scenes in some of the windowless patient rooms of the unit. And as a spin-off from the project, her wall graphics have been transposed into coloring books, now available at the Hospital's gift shop for $1.00 each.

Proceeds from the book, entitled *All Aboard for Good Health* (with the choo-choo featured on the cover), will be funneled back to the Pediatrics unit. The book will also be given to children hospitalized on the unit, says Greenberg.

6-25-81 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Several Peninsula women have called Stanford University Medical Center in recent weeks to inquire about telephone calls from a man allegedly conducting a survey for Stanford on birth control methods, toxic shock syndrome, and other subjects with sexual overtones.

A Medical Center News Bureau survey shows no study of this nature being conducted by Medical Center researchers; women should be aware that the male caller has no official connection with Stanford.

The phone imposter surfaced in recent months with "nuisance" calls to several women, many of them in the Pacifica area of San Mateo County. The women became suspicious when he asked numerous questions about their sexual patterns and practices.

Stanford Medical Center officials became aware of the problem when women called to verify authenticity of the survey.

According to the women, the caller identifies himself as a researcher with Stanford Medical Center and, occasionally, with Planned Parenthood.

Planned Parenthood officials contacted by Stanford similarly deny having any connection with the telephone survey. They stress that Planned Parenthood also has no research survey under way, and would not conduct a survey on birth control methods by telephone.

—30— L108

Mailed June 25, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911
EDITORS: Photos available if not included with story.
STANFORD—

In the hours following Mary Gohlke's March 9 heart-lung transplant, things were hectic for Stanford's cardiovascular intensive care unit.

One overriding qualification for an intensive care nurse, says Audrey Covner, R.N., Gohlke's first post-operative nurse, is, "You have to know when to sweat." This was especially true on that day.

Security guards surrounded the unit, reports Tina Freedman, R.N., another of the first nurses to care for Mrs. Gohlke during her eight weeks' stay in the unit. "It was kind of funny the way they wanted to see the nurses' I.D.'s the first day," she recalls.

But after the initial commotion subsided, those close to the case agree that little distinguished it—in terms of nursing care—from the 20 to 25 simultaneous cases they had to deal with in the north intensive care unit (NICU).

Besides transplants, the types of acute cases handled on the unit include coronary bypass surgery; heart valve replacements; repair of congenital heart defects; and aneurysms. (Other intensive care patients are cared for in the medical and surgical intensive care units.)

Since every part of the body can be affected by activity in the heart, cardiovascular intensive care nurses must have a wealth of physiological information.

"People are still amazed at how much nurses know," says Covner, who followed Gohlke on the night shift through her entire stay in the unit.

"We have to know what we're doing; we're the ones who are constantly with the patients."

Brenda Smith, R.N., acting clinical nursing coordinator of the unit, explains that each nurse is assigned to one patient's bedside for an eight-hour shift. Except for a half-hour lunch and two 15 minute breaks, she is present to observe fluctuations in the patient's condition, record and analyze data; and monitor stability.

However, like in any intensive care unit, NICU patients have a potential for sudden instability at all times. Therefore, says Kit Laird, R.N., another night shifter, "Our nurses can do anything a first-year intern could do in an emergency. We are trained to do whatever is necessary to save a patient's life, until the doctor arrives."

According to Laird, NICU nurses must be able to judge the appropriateness of specific heart rhythms for particular patients. They must be attuned to virtually all the bodily patterns of their patients, in order to manipulate both drugs and machinery for desired results—in blood pressure, for instance.

Since nurses are legally responsible for any drug they administer, they must constantly assess physicians' orders and doses given. This is especially crucial in an intensive care setting, where medications tend to be the most powerful.

In a sense it's like being a computer, says Patti Tharp, R.N., a day-shifter, the way an NICU nurse must correlate information and come up with an immediate plan of action during a crisis.

This type of activity, all agree, becomes routine—almost second nature to those with experience. Especially since cardiovascular nursing is a real specialty, adds Tharp, where similar cases are seen repeatedly.

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NICU nurses must, moreover, understand the *why* of what happens to their patients, all of whom just had open-heart surgery.

In a nutshell, the secret of the NICU nurse? "We are just assertive, intelligent women and men," says Tharp.

It seems inevitable that intensive care nursing entail stress as well as satisfaction. Why would a nurse choose such a high-power specialty?

Smith explains, "ICU nurses seem to like the high activity level. Similar to nurses in the Emergency Room, they like to get right in there, do something important, and see the results quickly. They're concerned with short-range goals, primarily."

British-bred Freedman corroborates the statement, confessing that she prefers the acute situations—the short-term crises—to the transplant cases, who commonly remain in the unit for a month, long after their crisis period has passed.

"It's more demanding to be an ICU nurse," she contends. "You have more responsibility, and there are many technical aspects to the work." ICU nurses, she says, always seemed to her more knowledgeable than other nurses. So having chosen the nursing profession, she decided to shoot for its stars.

Tharp, who worked closely with Charles Walker, Stanford's second heart-lung recipient, concurs.

"I like the high pace, the recognition from my colleagues, and the greater respect and trust I receive as an ICU nurse."

But while Tharp agrees that transplant cases are really a separate part of ICU nursing, she enjoys the educational role they demand of her. "Transplant patients are really shooting for quality versus quantity of life, and they know that," she says.

As for life expectancy, 63 percent of Stanford heart transplant patients now live one year after surgery; 40 percent live five years. The longest Stanford survivor was transplanted in January, 1970.

"We must teach the patients to live with this and become self-sufficient," continues Tharp. "We try to help them get back into the flow of life."

Adds Laird, who became fascinated with intensive care nursing while working her way through school as an ICU aide, "The idea for all of our patients is that they'll be going back to normal lives, and that we're only playing a small part. We must keep this in perspective ourselves, and help our patients to remember it, in order to keep them sighted on their goals."

Covner, impressed by Stanford's nursing staff when she first arrived a little more than a year ago, recalls, "I'll never forget when my first patient (cardiac) arrested on me. I pushed my emergency code button, and suddenly there were lots of people in the room to help. . . . It works here because of the team work."

When an emergency arises, she explains, the nurses cover for one another, often working overtime. If one patient requires two nurses, he gets them.

NICU nurses' schedules are set for a month at a time, says Smith. There are a total of about 130 full and part-time nurses currently working on the 25-bed NICU. Collectively they must cover days, evenings and nights—including weekends.

Generally, says Smith, a nurse has the same assignment for two days in a row. But if she elects, she may continue to follow a particular case. For transplants and other long-term patients, one nurse becomes the "primary," as Covner was for Mrs. Gohlke.

The primary nurse is responsible for coordinating her patient's care. Focusing exclusively on one case, she is in a position to lead the team of health care professionals involved. Besides physicians and associate nurses, this may include social workers, chaplains, nursing assistants, physical and occupational therapists, and dieticians.

Her role is important, for physicians and residents are often tied up in the Operating Room. NICU's sole supplier of patients. Six to eight patients arrive from the O.R. every day (except on weekends). While residents are officially on call at night, a nurse is often the one to make an urgent, life-saving decision.

For every two rooms in the four-year-old NICU (which was previously combined with the Hospital's other intensive care units), there is one "floating nurse"—someone assigned to go in and out, back and forth, all the time. So essentially, each room has about one-and-a-half nurses.

Patients are usually doubled up in a room, except for the transplant cases. These, explains Laird, must be isolated, since the drugs used to lower risk of rejection of foreign tissue (called immunosuppressants) also lower resistance to infection.

Even the nurses, she says, for at least a week or two after surgery, must wear gown, gloves, mask and booties. (They eventually cut down to a mask and booties.) And transplant patients' rooms include a special "anteroom" for putting on these costumes. One door leads to the outside and one to the patient; the two must not be opened at once.

Unlike many other hospital units, the NICU has no central monitoring equipment. Instead, there is monitoring machinery in every patient room. This, say the nurses, facilitates primary nursing care, and is not only safer but makes patients feel safer.

Patients do, however, become accustomed to having one person by their sides at all times, and many may have difficulty making the transition to a regular ward.

In order to ease the impact of transferring, NICU nurses train patients to know their own medications and warning signals. Says Freedman, "Transplant patients who are successful are extremely well-informed."

For transplants, a weaning procedure called "self-relief" may be used, whereby the patient is eventually allowed to be alone in his room for designated periods of time, always within reach of immediate help. Besides the patient's physical condition, the use of this option depends largely on his attitude and/or degree of fear. Charles Walker, reports Tharp, did quite well with his free time while on the unit.

The admiration is mutual. Commenting recently on his perception of the unit, Walker indicated that the NICU nurses could not have been more supportive of both him and his mother. They have given, he said, so much—including such tangibles as pots and pans for setting up house nearby, and their own home phone numbers for ready emotional stroking.

Explains Tharp, "Transplant patients and their families really need lots of psychological support. They have to deal with the fact that someone else's organs are in their body, and that this gives them a second chance to live."

On an emotional level, all the nurses agree that it's important with any transplant case to keep the issues of donor and recipient separate. This is for the good of both families, says Tharp, each of whom needs to resolve something different.

"Of course we couldn't do without the donors," says Laird. "There are patients who have been accepted as transplant recipients but who die before a donor becomes available."

And if a transplant does take place, she continues, there is often much sensitivity regarding the donor family—especially when the latter puts an emotional strain on the recipient, viewing his progress as its investment.

"Donors' families," says Laird, "should just know that they've given a very special gift—the gift of love, the gift of life—but there is no string on that gift.

"As a very articulate transplant recipient once said to me, 'You have to love the whole world better, not just the person who gave you your new heart, because that would cheapen the gift. It's bigger than that. Every day has to count and be special to you.' "

More than other patients on the unit, adds Tharp, transplant recipients develop close ties with their nurses. "They will talk with us about sexual activity, exercise, diet, whatever."

And if you follow a patient and get to know his family, says Covner, you're bound to feel some emotional tie. "Even an ice cube would melt a little."

This requires an important balance of any nurse. Explains Laird, "It's not sympathy, but empathy that we feel and they need. You know there will be an end point to the relationship: whether the patient dies, or gets better and moves on." There are nurses, though, who continue such friendships—some have even attended their former patients' funerals.

Since intensive care patients often have trouble doing ordinary, every-day things for themselves, says Smith, the nurse's job can at times be tedious. But even routine chores—such as combing or washing a patient's hair—are really quite important, says Covner, from the patient's point of view.

Moreover, whether anything dramatic occurs or not, adds Laird, "You know that you've mattered, when you've been at a patient's bedside for eight hours."

Agrees Freedman, "At that point you know what's going on with that patient better than anyone." She continues, "We would like more recognition for what we do."

Freedman's concern for the image of nursing is echoed by the others. The profession itself, they feel, has come a long way, but the public's conception of it has not.

Nurses, says Tharp, are still very much stereotyped as the "handmaidens of doctors." And they would like to emerge from the "bedpan era" in the public eye.

NICU nurses, says Covner, are a real liaison between patients and physicians. "The doctors depend on what we tell them. I really feel the doctors respect the nurses on our unit."

Any new nurse hired at Stanford must participate in an in-depth orientation, with classes given by the educational coordinators.

Then, says Smith, all nurses assigned to an intensive care unit must take a five-day critical care course, whether or not they have previous experience in an ICU. The course covers diseases, treatment and nursing care guidelines. "It really covers the gamut of what you usually see in an ICU."

In addition to this, many one, two or three-day workshops are offered on such topics as respiratory treatment, pediatrics, and advanced critical care. According to Smith, there's a wealth of choice as to what a nurse can do, and the specialties she may develop.

Only recently, she continues, has her unit begun to hire some new nursing graduates with no ICU experience. Those with experience, she says, are simply harder to find nowadays. Besides the nursing shortage being felt nationwide, Stanford faces the handicap of its overly expensive location.

"When we saw inflation go up," says Smith, "we saw applications go down. Many people prefer to stay put, rather than relocate and risk lots of money in the Bay Area."

But according to Smith and the other nurses interviewed, the new grads—by virtue of real hard work—have done quite well. Upon arrival at the unit, they are placed on "buddy time," whereby an experienced nurse helps them out and evaluates them periodically. Stresses Laird, "You're never left alone when you're first starting or learning."

A new hire always begins on the night shift. Eventually she participates in the unit's system of month-by-month rotation. Some lucky nurses with seniority privileges are assigned as permanent day-shifters.

And then there are those rare few who actually choose the night shift. Covner and Laird both did. Explains Covner, "A lot of my friends are not nurses. So this way I can sleep during the day, and do my socializing in the evenings before work."

A somewhat different evening event is the pre-operation course for patients and family members conducted by NICU nurses on a regular basis. The program includes a short slide show, a short run-down on what is likely to happen after surgery, and a question-and-answer period. Patients participate on the evening prior to their scheduled surgery.

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For child patients, the nurses make a special visit before surgery, carrying a toy doll equipped with all the body's organs. And when visiting pre-transplant patients, they bring a chart for illustration.

The idea, both pre- and post-operation, is to help the patients not to be frightened, and to reassure them whenever possible. Says Covner, "We're very honest with our patients. I think we're really patient advocates."

"The hardest thing for me," says Freedman, "when it looks hopeless for a patient, is dealing with the family—watching people watch their loved ones die.

"There are often things you can do," she continues, "to prolong life for the short-range: for one day, perhaps. But with all the anguish involved in this 'hanging on' period, you sometimes wonder if it's worth it."

Of course, nurses don't set the policy. Whatever the attending physician and the family decide, they must adjust to.

"And if they do decide to withdraw treatment at some point," says Tharp, "that's also very difficult for a nurse. Because you usually feel so much in control of things, technically. When activity is stopped you feel weird, like there's nothing else you can do."

It's important, she continues, for nurses to go through their own mourning process when a patient dies. "Everyone probably does this in her own way. I find I always think of the patients who have made it. Also," she adds, "supporting the family members is hard, but they can often support you back too."

Every procedure performed on the NICU is documented by what's known as a patient-care plan. Based on her first-hand experience with Mrs. Gohlke, Covner has written such a plan for heart-lung transplant patients, which is now in use on the unit. It was edited by Dr. Bruce Reitz, Gohlke's primary physician and head of the cardiovascular surgical team which performed the transplants.

"The plan will need revision as time goes by," explains Covner. "What may have worked with Mary, may not work for everyone."

Covner is now in the process of writing an article on the nursing care of heart-lung transplant patients, also to be edited by Reitz, which she hopes to have published.

She contends that other than certain new technical aspects, the experience was similar to following any other heart transplant patient.

Notes Smith, "We did not really treat Mary as a special patient. She was seen as one of our patients, all of whom receive the best nursing care possible. In that respect there was no difference."

Naturally, though, there was more a sense of the unpredictable with Mrs. Gohlke. "Nobody quite knew what to expect," says Freedman.

And the newness of the surgery did make the case stand apart. Mrs. Gohlke did, after all, have lungs as well as heart replaced. It was important, says Smith, for the nurses involved to have had extensive experience with many other kinds of cases, resources of knowledge to incorporate in handling this one.

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

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Note to Editors: Symposium programs and individual papers of interest available upon request.

STANFORD—

The progress made in understanding and treating that disabling, complex disease, psoriasis, will be the main focus at the Third International Symposium on Psoriasis, to be held at Stanford University Medical Center July 13 through the 17 in the Fairchild Auditorium.

Six to seven million Americans have psoriasis. The disease, which results in thick, red, silvery-scaled patches on the skin, has no cure, and its cause is unknown. In some cases, the disease cannot even be controlled. It strikes both sexes, all ages and almost all races, everywhere in the world.

Researchers throughout the world have been working to find the cause of psoriasis, whose hallmark is uncontrolled and accelerated growth of the skin cells. So many things could be responsible for the condition that the work requires the collaboration of scientists of many different disciplines—dermatologists, cell biologists, cancer specialists, immunologists, biochemists, geneticists, virologists, and pharmacologists.

Reflecting the wide range of disciplines involved, the program is very diverse, covering everthing from the basic pathogenetic aspects of psoriasis to appraisals of the various therapies for the disease.

Both genetic and environmental factors may contribute to psoriasis. In one-third of the families of psoriasis patients, other family members also develop the disease, suggesting a genetic predisposition. Various environmental factors, such as injury to the skin, infection, or drug eruption, provoke or aggravate the condition.

Doctors hope that with a better understanding of the disease will come the development of specific treatments for the different forms of psoriasis.

Today, no completely satisfactory method of treatment exists. But a variety of procedures—ultraviolet light, coal tar, steroids, vitamin A compounds (retinoids), and anti-cancer drugs (in the most severe cases)—can cause regression or modification of the scaly patches. Their actions will be extensively discussed.

The press is cordially invited to attend the symposium. If you plan to come, please fill out the form below and return to:

NEWS BUREAU, STANFORD UNIVERSITY MEDICAL CENTER
Room TC 135
Stanford, CA 94305

_____ I plan to attend the Third International Symposium on Psoriasis, July 13-17.

Name_____ Telephone_____

Address _____

Organization _____

6-17-81 —30— BJ3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

The Department of Anesthesia recently held its annual farewell dinner to honor departing housestaff, at the World Trade Club in San Francisco. Three special awards were presented at the event.

For exceptional skill and dedication to patient care, as well as clinical research resulting in publications and presentations at national meetings, Douglas Merrill, M.D., received the Robert D. Dripps Memorial Award. In July, Dr. Merrill will begin a two-year fellowship in neuroanesthesia research at the Mayo Clinic.

The Dripps Award is named for one of the distinguished pioneers in anesthesia, who was professor and chairman of the Department of Anesthesia at the University of Pennsylvania for 23 years. It was donated by the Janssen Pharmaceutical Company to honor the outstanding house officer in Anesthesia at Stanford for 1981.

The Faculty Teaching Award is given by the graduating housestaff to the faculty member who has made the most outstanding contribution to their education during the past year. The 1981 recipient was Donald Stanski, M.D., assistant professor of anesthesia and medicine (Clinical Pharmacology), who is nationally known for his studies of the pharmacokinetics and pharmacodynamics of thiopental and d-tubocurarine.

The Ellis N. Cohen Achievement Award, named for Stanford's distinguished emeritus professor of anesthesia, is to honor a faculty member whose accomplishments and contributions to the field during the past year best exemplify the highest standards of excellence. This year's recipient was Edgar Yhap, M.D., associate professor of clinical anesthesia and chief of the General Anesthesia Services at Stanford University Hospital.

Earlier this year, Dr. Yhap was awarded the Legion of Merit by the Surgeon General of the United States Army at Letterman General Hospital, to acknowledge his exceptional contributions to military medicine for 20 years.

Although at Stanford for only one year, Dr. Yhap has had a remarkable impact on the teaching, clinical care and administration of the anesthesia services at the Hospital, according to department chairman C. Philip Larson, Jr., M.D.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Just seconds before a giant jetliner is to touch down on the runway, the pilot suffers a massive heart attack.

The co-pilot is trained and poised to take over within seconds of such an emergency, but this time, the ground is less than a second away, and the plane dives fatally. The resulting crash kills 450 persons.

Although the scene is fictitious, it punctuates the unique concern over monitoring commercial pilot health. There are few, if any, comparable situations where a single individual holds the lives of so many persons directly in his or her hands.

Consequently the retirement age for pilots has been set at 60, lower than for most jobs.

But the need for a mandatory retirement age is under review by Congress and was studied recently in an Institute of Medicine study. Entitled "Airline Pilot Age, Health and Performance," the March 1981 report concluded that while physical and neurological functions do decline with age, "usually no single age merges as a point of sharp decline in function."

Dr. Donald Harrison, chief of cardiology at the Stanford University Medical Center and a member of the study committee, said in a recent interview that neither an early retirement age nor more frequent health exams are necessary to make flying even safer than it already is.

Rather, Harrison believes that less frequent—but more comprehensive—physical exams could become the core of improved health monitoring for the nation's airline pilots, whom he believes because of pressure might not fulfill the image of robust good health often associated with the profession.

What Harrison suggests is that when pilots reach about age 50, they should be categorized, based on medical history, past physical exams, and laboratory studies as either high or low health risks for coronary disease.

Risk factors such as cigarette smoking, high blood pressure or high cholestorol could place the pilot in the high risk category. Since these elements are at least partially controllable through healthful living, the pilot wishing to remain in the cockpit would be motivated to modify his lifestyle, Harrison believes.

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"Until age 50 there should be lots of education in these people about what cardiovascular risk factors mean.

"After age 50," Harrison continued, "those persons who fell in the higher ranges of risk factor profiling, would then be required to do some of the more technological testing exercies, such as stress ECG.

"What we're proposing is a cascade of tests.

'If a pilot fails one test, he would be given another test to check the validity, since the sensitivity and specificity of the tests are not always conclusive. Of course if he or she passed the first tests, the additional tests need not be ordered."

After about age 60, Harrison suggests that the burden of proof be shifted to the pilot, who would then be required to pass a battery of sophisticated tests as evidence that he or she was in fact fit enough to fly.

Although there is no evidence that 60 is a significant age for physical or neurological deterioration, Harrison believes that all pilots be required to stop flying commercially after age 70.

"At that point," he said, " In most there clearly is deterioration of physical, psychological and neurological function, and no one on the committee suggested that persons be allowed to pilot airliners after that age."

The study, prepared in response to a 1979 law calling for a study of the mandatory retirement law, was not intended as an indictment of flying safety.

"Flying is damn safe now. We just feel that everything possible should be done to make it safer," Harrison said.

"Since we have the means to technologically improve our testing, we ought to go all the way and make it safer," he added.

Since the current physical exams were established in the 1950s, new more sensitive and accurate tests have become available. An example is coronary angiography, a procedure which enables physicians to examine the interior of arteries by injecting dye and then x-raying the vessels.

State of the art tests can be expensive, and because dyes are injected into the blood vessels of the heart, they involve a risk. Therefore, Harrison believes they should only be given to high risk pilots, including all those older than about 60. He says that a coronary angiography should only be used after noninvasive tests such as treadmills or the clinical history, for example, suggest a cardiac or related condition.

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Currently the FAA requires physical exams yearly, but Harrison believes that a test every two years is sufficient for pilots without evidence of a health problem up to age 50. But he cautions that such biennial exams should be comprehensive and standardized.

As for younger pilots, Harrison notes that they are selected for their good health, and there is reason to believe that they are lower than average risk for disease.

But Harrison cautions that there is little evidence either way to suggest that older pilots are unusually good health risks.

"We believed as a committee that as they approached the 50s or so that there was certainly no evidence to point to them having low risks. If anything they were at least at the average risk.

"They are highly stressed. They're switching a lot of time zones. They are away from home a good deal. Their diet is not always very well regulated. A lot of them don't exercise very much.

"So even if they were selected as a low risk group, they frequently are now into a high risk profile."

"But the problem with all of this is that there has been no documentation," Harrison said.

The cardiologist noted that more studies about pilot health are needed, but these are difficult to obtain because of the reluctance of pilots to discuss health problems which could force them to lose their flight status.

An indication of the fear of reporting medical problems, Harrison believes, is reflected in the statistics involving heart attacks by pilots in flight.

Between 1961 and 1968, 11 pilots suffered heart attacks in-flights, although no fatalities resulted. In eight cases the pilot died. Harrison notes that this is far beyond the usual 20 percent fatality rate for heart attacks, indicating two possibilities:

Either the stress conditions during flight are so severe that otherwise routine heart attacks were intensified, or additional unreported heart attacks occurred in flight.

The study notes that the potential for heart attacks is greatest at times of stress, which in the cockpit are likeliest to occur during take-off, landing or during an emergency.

"If you have one message that comes through our whole report," Harrison said, "it's that we need to know more about the psychological, physiological, the stress responses, the cardiovascular and endocrine functions as it changes in pilots."

While medical experts, the government and pilots are working to evaluate the health of pilots, technological developments involving aircraft are working to make flying safer, perhaps even reducing the role of the pilot. Onboard computers, Harrison notes, are playing an increasingly larger role in the actual flying of airplanes.

STANFORD UNIVERSITY MEDICAL CENTER
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Note to Editors: The competitive version of the Para-Bike, one of its designers, Doug Schwandt; its record-setting rider, Asher Williams; and a primary sponsor, the Telephone Pioneers of America will be available to meet with the press on Thursday, June 18. They will be at the Rehabilitative Engineering Research and Development Center at the Palo Alto Veterans Administration Center, Bldg. 51, 3801 Miranda Avenue, Palo Alto, at 10:30 a.m. For further information on the press conference, contact Mr. Bob Brown, press relations manager at Pacific Telephone, (408) 491-6346.

Also, a videotape of the International Human-Powered Vehicle Association Championships is available from which tapes can be made. Doug Schwandt can be reached at (415)493-5000, ext. 4473.

STANFORD—

People clapped when Asher Williams pedaled by last month—even before he set a world's record.

Asher, whose legs were paralyzed in a diving accident last summer, was racing in the International Human-Powered Vehicle Association Championships.

Snuggled under a tear-shaped fairing to reduce the air drag, he hand pedaled himself to speeds of 25 miles per hour, just edging out Marshall Smith who reached 24 miles per hour.

Although racing foot-powered bikes reach speeds more than twice that great, this is the fastest ever clocked for a hand-powered bicycle. It is considerably faster than the speed of the common variety bicyclist.

Williams and Smith were pumping the competitive model of the Para-Bike, a first-of-its-kind bicycle for paraplegics that is being developed at the Rehabilitative Engineering Research and Development (RERanD) Center at the Palo Alto Veterans Administration Medical Center.

In addition to his speed record at the Pomona (CA) racetrack, Williams went a distance of 3.6 miles around the track, matching himself against more than 30 foot-powered bikes.

In this International Year of the Disabled Person, Williams and Smith were breaking away.

Smith is an administrator of the International Year for the province of British Columbia. The 54-year-old Canadian had biked all his life until an accident two years ago left his legs paralyzed. Williams, 21, was a West Point Cadet—running, swimming, lifting weights every day—when he dived into a too-shallow pond last July and damaged his spinal cord.

Both, as are many paraplegics, are still avidly interested in sports, wanting to take part in the many recreations available to the able-bodied, if possible. The Para-Bike gives them the chance to feel the exhilaration of biking again, as well as provides an excellent aerobic exercise.

Hand-pedaled tricycles, but not bicycles, have been around for years for persons without the use of their legs, says Doug Schwandt, rehabilitation engineer at the Center.

But trikes don't provide the same free, flying feeling bikes do, he says.

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Schwandt and Candy Mintz were challenged by the idea of designing such a bike a year and a half ago while working for masters degrees in Stanford University's Design Division, under the guidance of professors Larry Leifer and Philip Barkan. Under the sponsorship of the RERanD center, they worked closely with Leifer, director of the Center, and Peter Axelson, a Center biomedical engineer. Axelson, who is himself a parapiegic, had the idea of developing an alternative cycle for the disabled. He is a great proponent of the development of recreational equipment for the disabled; he designed the ARROYA, a downhill skiing sled for paraplegics.

They created a bike of a different order: the cyclist rides low and the pedals are high. The cyclist, equipped with specially padded skateboarding gloves and low to the ground sports-car style, suspends his legs in cushioned slings, which can be quickly released. Instead of handlebars, the rider uses a hand-cranked chain wheel and chain linked to the front wheel to both propel and steer himself.

To stop, the rider merely back pedals.

Because the rider is so low the ground, there is a feeling of speed on the Para-Bike, Schwandt says, and a sensation of floating.

For beginners, an extra option and precaution is a heavy-duty rollerskate wheel mounted on the frame on either side of the rider ready to touch down should he begin to fall.

When expertness is mastered—Schwandt says that just as in learning to ride a regular bike, one must learn to balance the Para-Bike—the rollerskate wheel, which tends to limit the turning radius, can be cast off.

The version that Williams and Smith rode last month in Pomona is the 2nd prototype. It was built by Peter Johnson of Palo Alto, who has designed, built and races his own "streamline" cycle. Fred Tatch of Eugene, Oregon, designed and built the fairing.

The designers decided to concentrate on making a racing bike because the demands of design made for a competitive model would likely result in faster development of a purely recreational one.

The Sierra Pacific, George S. Ladd and John I. Sabin chapters of the Telephone Pioneers of America, the service organization of the Bell Telephone Co., helped sponsor the competitive version of the Para-Bike. As one way to make the Para-Bike available to disabled persons as soon as possible, these Northern California chapters hope to interest other chapters in the U.S and Canada to help fund the construction of Para-Bikes to be used in their local areas.

Schwandt says that several persons have shown interest in producing the Para-Bike. He estimates that it will cost approximately $1000 to make.

Already on Schwandt's drawing board are plans for a tandem bike, for an able-bodied person and a paraplegic. He hopes to design it such that the disabled person could ride it alone, if he wanted.

Schwandt says he thinks that the racing version of the Para-Bike can reach speeds of 30 miles per hour. But once the fairing is removed, it becomes a more mild-mannered means of recreation. Schwandt and Williams can be glimpsed some days pedaling around in the bike lanes of Stanford and Palo Alto.

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STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

In the pitched battle to combat cancer, an old strategy—that of killing cancer cells with heat—is being dusted off and the tactics are being refined.

And while it appears that heat won't be the ultimate weapon, researchers have hopes that it will at least be a delaying tactic in situations where other methods have failed. Also, they've good evidence that this plan of attack—called hyperthermia—may make standard radiation and chemotherapy treatments more devastating to the tumor.

At Stanford and several other medical centers, researchers are beaming high-frequency sound waves (ultrasound) or microwaves at tumors in the hope that the great heat they generate will stop the tumors short and shrink them.

Other researchers are experimenting with radio-frequency waves. Some are heating the entire body—not just the tumor—with hot wax baths, hot water suits, or heat exchangers with dialysis-type shunts that raise the temperature of the entire body.

At Stanford, so far the focus has been on ultrasonic heat therapy. Dr. George Hahn, associate professor in the division of radiology, began testing the effect of heat on cancer cells in the laboratory in the early '70's.

Later, the treatment was tried on patients and found to cause some superficial tumors to dwindle, if only temporarily, says Dr. Jane Marmor, assistant professor of radiology. Tumors—heated to lethal temperatures of 110 degrees or more— shrunk in 43 percent of the 45 patients that she treated with ultrasound.

One of the limitations of the technique has been that only tumors no deeper than three cm—or just a little more than an inch—below the surface of the skin could be superheated because the ultrasound waves penetrated poorly.

Now, Douglas W. Pounds, a physicist in the department of radiology, has developed a machine that is able to reach some deep-seated tumors.

Marmor, Pounds, Hahn, Malcolm A. Bagshaw, chairman of the department of radiology, and Peter Fessencen, assisstant professor of radiology, began experimentally treating patients this year.

The device has several ultrasonic beams instead of one. At first, the beams are wide-spread and of low intensity, but later converge on target with considerable strength, thus sparing the normal tissues through which they must pass.

Previously inaccessible tumors in the stomach, pelvis and extremities can be treated, says Marmor. But she qualifies that not all tumor types will be suitable targets. Ultrasound won't be able to reach lung, brain, or abdominal tumors lying behind air-filled organs because air and bone reflect the ultrasound beams.

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Marmor says much has to be learned before hyperthermia becomes a medaled member of the armamentarium against cancer.

"My guess is that hyperthermia will prove helpful, but it won't, by itself, be a cure for cancer," she says. "I doubt it will replace the standard modalities, which are surgery, radiation and chemotherapy. Rather, I believe it will be a good adjunct therapy."

One of the obstacles to evaluating how effective hyperthermia can be, Marmor says, is that so little is known about its dosimetry—how much heat to apply, for how long and by which means. Neither is it known how many treatments are enough.

That's what she and her colleagues at Stanford are trying to determine. She stresses that such dosimetry studies must be carefully controlled before it can really be determined how effective hyperthermia is against cancer. Hyperthermia equipment is already on the market, but Marmor is skeptical of its effectiveness.

In research centers, hyperthermia is usually used as a last resort—when standard treatments have failed—because it is still experimental.

Marmor's patients had incurable, spreading cancer unable to be controlled with other treatments; some had received all the radiation they could tolerate.

Marmor predicts the hyperthermia treatments may be given in the future along with the radiation. She and Hahn found that in 7 of 15 patients with multiple, superficial tumors treated with either radiation or radiation plus ultrasound, those tumors receiving both radiation and ultrasound regressed more.

In experimental model systems, hyperthermia also increased the effect of cancer drugs, Marmor says and so may prove to be a valuable companion treatment to chemotherapy, too.

Just how hyperthermia works is not known. Some researches believe that tumors are particularly susceptible to heat because they have a scantly blood supply and can't efficiently export the excess heat. Others suspect that the DNA and protein repair mechanisms of tumor cells aren't up to par.

In the early '70's, Hahn found that nutritionally-deprived cells such as tumor cells are especially sensitive to heat. His later work suggests that heat deals a blow to the workings of the cell membrane.

The side effects of hyperthermia are relatively mild and short-term compared with those of surgery, radiation treatment, or chemotherapy. But, of course, these three are also more effective than the heat therapy. With ultrasound hyperthermia, Marmor says, patients sometimes feel pain and a few develop skin blisters in the treated area, especially if it is near bone.

It will be years before the jury comes in on just how effective and useful hyperthermia is, Marmor says, but from what's been seen so far, the trials should definitely go on.

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

Charles Walker walked out of Stanford University Hospital this morning (Tuesday, June 16), 48 days after he received a heart-lung transplant.

The 30-year-old, bearded Walker, who had been born with a heart defect, seemed all good cheer, joking and smiling.

Before the operation, walking was a chore for him; he was out of breath within minutes due to his damaged lungs. Although he still is not ready for a hearty hike, he can now stroll around the Hospital and out of it with ease.

The past two weekends Walker, who has recovered from his operation free of any major problems, ventured out into the world again, dining at local resturants, and trying out the sunbathing at the pool of the apartment his mother is renting.

Mr. Walker received the fifth heart-lung transplant in the world on May 1. His lungs had become damaged as a result of his congental heart defect. Although he has repeatedly been hospitalized since birth, his condition worsened almost three years ago, and he was forced to quit work. Eventually, he was told that his only hope was the experimental heart-lung transplant operation.

Mr. Walker will live in the Stanford area with his mother, June Spangenberg, for the next two or three months. Doctors will further adjust the doses of the medications he must take the rest of his life, and keep checking for any signs of rejection of his new heart and lungs.

Unless controlled by drugs, the body marshals its defense, or immune, system against the transplanted organs, which it registers as foreign agents. The greatest threat of rejection is in the first three months after the operation, but it it always there. Although it is not uncommon for transplant patients to have a bout with rejection, Walker has had no problems.

When he gets the okay from doctors, he plans to return to his home in Binghamton, N.Y., and his poodle Teddy, who has a passion for chocolate malt balls. Eventually, he plans to go back to work as a mortician.

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He has no definite plans for this summer, other than to keep exercising to build up his strength and stamina. The nurses of Stanford's intensive care unit, where Walker spent the first month after his operation, have planned a barbecue for him. And they also have talked of giving Walker and his mother a tour of San Francisco, cable cars and all, something neither has experienced.

Mr. Walker and Mrs. Mary D. Gohlke, 45, who received a heart-lung transplant at Stanford on March 9, and was released from the hospital on June 1, seem both headed for recovery.

Physicians are encouraged with what they've learned from Mr. Walker and Mrs. Gohlke. When the operation was attempted three times before in the late '60's and early '70's, seemingly insurmountable problems arose and the longest any patient survived after the operatation was 23 days. The project was abandoned.

The discovery of a drug, cyclosporin A, prompted doctors to try again. Cyclosporin A has indeed proved to be invaluable in helping the windpipe to heal properly and preventing life-threatening infections.

Although the news is nothing but good for Mrs. Gohlke and Mr. Walker so far, the operation is still experimental and it will be years before it could become routine.

Mr. Walker, who has bought his very first jogging suit—navy blue with white stripes—says that he's thankful--to the doctors and nurses at Stanford, to the donor's family, and to his mother and his own family and friends. He says he's received nothing but encouragement and help, and hope.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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(Photos available if not included)

STANFORD—

Stanford University Medical School bestowed 141 degrees under clear blue skies but gloomy predictions that the world is suffering from a terminal illness.

"It's a gloomy subject to talk about on an exciting day," said Dr. Helen Caldicott as she began the June 14 convocation address. The speaker is an Australian-trained Boston pediatrician, who heads Physicians for Social Responsibility (PSR).

Caldicott, who has suspended her clinical and teaching duties to devote fulltime to PSR, said that the effort needed to save the world from nuclear disaster will require the sort of total commitment doctors must have to save a terminally ill patient from death.

Physicians as healers have a particular responsibility to work against the probability of a nuclear holocaust.

"This is our issue," she told the audience, "because a nuclear war is (a) medical (issue). It's not economic and it's not political. If any of us are left alive, we're the ones who are going to have to cope with the circumstances emanating from it."

People tend to block from their minds the possibility of nuclear disaster, she said, through the process of "psychic numbing," which shields the mind from having to deal with what most people would regard as the unthinkable. This psychological block must be overcome before people can effectively deal with the problem, Caldicott added.

Although the risk of nuclear war, whether by design or accident, is great within the next few years, Caldicott said that the "Patient's condition (the planet) is guardedly optimistic.

"...But if we all work together as physicians, educating our patients throughout the world, we will save this planet."

Following the speech, the degrees were presented and the 83 new doctors, five more than last year, joined together in the Declaration of Geneva oath.

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The other degrees included 27 A.M.s in physical therapy, 22 Ph.D.s, four B.S. degrees in medical microbiology, and five M.S.s.

Seven faculty members were honored during the afternoon ceremony at Grant Courtyard following the college's 90th annual commencement.

Dr. John P. Steward, associate dean for student affairs, received the Kaiser Family Foundation Award for outstanding and innovative contributions to medicine.

In presenting the honor, the only award whose recipient is selected by faculty rather than students, Dean Lawrence G. Crowley praised Steward for his "global contributions to medical education," during not only his 17 years in the dean's office but also during nearly four decades at Stanford, starting as an undergraduate in 1944.

A student vote selected four recipients of the Kaiser Family Foundation Awards for excellence in teaching.

These included Norman Blank, professor of radiology, Keith I. Marton, assistant professor of general internal medicine; Lawrence H. Mathers, lecturer in structural biology; and Carlos A. Camargo, associate professor of clinical medicine in endocrinology.

All of the Kaiser teaching award winners have been selected for that honor by their students in previous years.

Receiving the Arthur L. Bloomfield Award for excellence in the teaching of clinical medicine was Thomas A. Raffin, assistant professor of clinical medicine and a winner last year of a Kaiser award.

Adjunct Professor Barbara Kent received the Lucille Daniels Recognition Award for outstanding contributions to physical therapy education at Stanford. She is a 20 year veteran here.

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6-16-81

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

In the early morning hours one night last autumn, Eugene Elliot was summoned to the hospital.

A man whose scalp down to his eyebrows had been ripped from his head was being flown to Stanford from Alaska, he was told.

Elliot, who is in his fourth year of a six year residency program in plastic and reconstructive surgery at Stanford University Medical Center, and three other residents were needed to assist Dr.Vincent Hentz in painstakingly reattaching the scalp and reconnecting its arteries and veins to the man's head.

More than 24 hours earlier, the 21-year-old Alaska crab packer had caught his shoulder-length hair in one of the packing machines, and his scalp had been wrenched from his skull. His fellow workers had the presence of mind to put the separated scalp on ice, keeping it from dying and enabling the Stanford doctors to later reattach it.

The operation, which lasted nearly 11 hours, was a success and the man is now sporting a new crop of hair, Elliot says. And even though a few weeks after the operation someone batted him in the head with a billy club, the scalp is alive and well, he says.

Although this is probably the most exciting and challenging operation he's been a part of—though, possibly not the most bizzare: he once was part of a team that reconstructed an ear that had been bitten off in a bar fight—Elliott says that creativity is always required in plastic and reconstructive surgery.

"Every problem is different," he says. "And the results usually give instant gratification—for both patient and doctor. You can see what's been accomplished."

"Nothing is more gratifying than fixing the cleft lip of a child," says David White, another fourth year resident. "And seeing the mother's face when her baby is given back to her."

There are 24 doctors in Stanford's plastic and reconstructive surgery residency program—four in each of the six years of the program. Not only is the program the largest in North America, it was also the first to integrate general with plastic surgery.

Traditionally, after medical school, aspiring plastic surgeons were trained for three to four years in general surgery, before specializing in plastic surgery for the last two or three years.

"A two year residency program after a general surgery residency is probably not adequate anymore," says White. "The field of plastic and reconstructive surgery has become too big to learn everything in just two years."

Although the common conception is that plastic surgery is the same as cosmetic surgery—the shaping of noses, the lifting of faces, the shoring up of sagging eye lids and abdomens, and the enlarging of breasts—cosmetic or aesthetic surgery is only a small part of plastic and reconstructive surgery.

Rather, plastic surgeons spend the majority of their time reshaping the damaged body and restoring its proper function. They reattach severed limbs, fingers and toes, fix cleft lips and palates, mend facial bone fractures, uncurl hands crippled by rheumatoid arthritis, reshape malformed sexual organs, and recover burn victims

"The plastic surgeon is an all-round surgeon," White says. "An integration of scientific understanding, technical skill, and creativity is required. Plastic and reconstructive surgery overlaps with so many areas—urology, opthamology, neurosurgery, chest surgery, and ear, nose and throat surgery—to name a few."

Since there is so much to learn, Stanford in the '60s instituted a residency program, which accepts doctors right out of medical school.

They still are trained in general surgery, but it is the type of general surgery judged to make them better plastic surgeons.

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"We don't do as many gall bladders," White says.

From the beginning the residents are in the operating room, either at Stanford Hospital, Kaiser Hospital in Santa Clara, the Santa Clara Valley Medical Center, or the Palo Alto Veterans Administration Medical Center. At first, they tackle only the minor operations, such as cutting out a lump or repairing a hernia, just observing the more difficult ones.

"We work as a team and the residents operate to their level of competence," White says.

But as their competence and measured judgement increases, so do their responsibilities. The residents must increasingly call upon their creative talents.

"We sketch ahead of time what we expect to do, but we must always be ready to change plans quickly," White says.

"We make three-dimensional models and draw sketches. To be a plastic surgeon, you must be able to work out and visualize problems in three dimensions—both what a patient will look like after the next operation and after three additional ones," Elliot adds.

Residents also are able to take part in the INTERPLAST program, a non-profit group of volunteer doctors that gives free medical attention to people in underprivileged countries who are in need of reconstructive surgery. The program was started in the mid-'60's by Dr. Donald Laub, former head of the plastic and reconstructive surgery division, because he realized the great need for reconstructive surgery in Latin American countries.

Elliot has been to Honduras twice with the program.

In their fifth year, residents, if they choose, can go to another institution to acquire more experience in a particular area of plastic and reconstructive surgery.

White, who plans to concentrate on hand surgery, is spending next year in Baltimore's Union Memorial Hospital because of the volume and kind of cases referred there.

Elliot, who wants to become a plastic surgeon with ties to academia, will spend his fifth year at a hand clinic in Louisville, KY.

By their sixth and final year, with five years of experience behind them, the trainees earn the title of chief resident, and almost their wings. They are now central members of the operating team, doing many kinds of surgery.

Plastic surgery is geared to preserving and restoring the function of the body's parts, but ten years of training—four in medical school, and six in the residency program—can't help but be a little wearing on the plastic surgeon.

"Yes, I'm running from very early in the morning to late at night," Elliot says.

Yet, he quickly adds, "But I love operating, it's fun, it's challenging, it's gratifying."

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

Stanford University Hospital daily room rates will increase an average of 10 percent beginning July 1.

The medical, surgical, and gynecology room rates will be $232 per day for ward accommodations, $247 for a semi-private room, and $287 for a private room. These are the services that most hospitalized patients use.

Medical, surgical, and gynecology patients utilizing services of housestaff physicians will pay $16 more per day than the above rates. The patient's attending physician determines whether such services are utilized.

The new rates, approved last week by the Board of Hospital Directors, represent a catch up with cost increases in providing patient care in both regular and special care units, according to Peter Levin, hospital executive director.

Levin noted that the hours of care per patient day are running almost seven percent higher than anticipated on routine care nursing units.

"The patient mix has shifted toward those patients who require a greater intensity of nursing care," he explained. "More care means more cost." Also, a severe nationwide shortage of registered nurses has driven up costs of recruitment and retention.

Levin indicated that increases reflect a move to align rates more closely to actual costs of providing different levels of nursing services. Rates for some specialized units such as intensive and coronary care will rise an average of 9.2 percent, obstetrics 9.7 percent, basic nursery 9.9 percent, and intensive care nursery 2.9 percent.

He said that increases in x-ray, laboratory and other ancillary services and further room rate adjustments will be forthcoming for fiscal 1981 beginning in September.

"The July increase reflects only unexpected costs in the current year," Levin noted. "Continuing inflationary pressures and reduced reimbursement from the government for care to Medicare and Medi-Cal patients will necessitate further increases for the coming year."

Patient revenues make up 99 percent of the Hospital's funds. The Hospital has neither tax support nor endowment income.

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STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

Stanford University medical researchers Monday, June 15, announced they are looking for volunteers to participate in a $2.6 million randomized federal study of two drugs that seem to cure hepatitis B, a liver disease that permanently afflicts more than 100 million people throughout the world.

Under a five-year contract from the National Institute of Allergy and Infectious Diseases, Dr. Thomas C. Merigan of the Division of Infectious Diseases and his colleagues will study interferon, an antiviral substance produced by the body, and another drug, adenine arabinoside monophosphate (Ara-AMP).

Merigan's research as well as other published studies show that the two drugs used in combination or alone have produced cures in a significant number of patients with hepatitis B.

In such patients, according to Merigan, there was either transient suppression or enduring eradication of Dane particles in their blood.

Dane particles, named for the British electron microscopist who first saw them, are the complete form of the hepatitis B virus and contain surface antigens and other markers of infection.

In the United States, approximately 10 percent of patients hospitalized with acute hepatitis B become chronically infected, and they continue to carry Dane particles.

According to Merigan, such patients are major potential transmitters of hepatitis B.

Presently, there is no effective treatment against hepatitis B. For this reason, Merigan explained, discovery of a cure would be significant for the tens of thousands of Americans who are hepatitis carriers. These include doctors, dentists, and nurses who can no longer work in their professions or jobs, as well as clinical laboratory personnel.

Merigan said Stanford has used the drugs in 44 patients over the past five years to gain trial experience and to determine the optimum dosage schedules for producing enduring hepatitis eradication.

"We are now ready to extend our initial observations, for only in a controlled trial can the real usefulness of such therapy be determined."

Merigan said the volunteers will be divided into three groups. One group will receive injections of Ara-AMP alternating with interferon, the other Ara-AMP alternating with a placebo. A third group of volunteers will receive a placebo alone.

Volunteers will be placed in the groups randomly, he said, and neither they nor their doctors will know which group the volunteers are in.

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"This is a standard scientific procedure which allows researchers to work out the effect of any treatment without being biased by prior expectations," Merigan said.

He stressed that even if a volunteer receives a placebo during the study, he will be no worse off than he is now.

"If the treatments prove effective," Merigan said, "patients who received the placebo will be treated at the end of the study."

The volunteers in the study will be hospitalized for a few days during early treatment at Stanford, and blood samples will be drawn. A liver biopsy will also be obtained prior to and after therapy, and one and two years later. Liver biopsy, using a hollow needle, is a commonly used technique for obtaining liver tissue to analyze under the microscope.

"The biopsy is important," Merigan said, "to determine the degree of hepatitis damage to the liver, and to evaluate the effectiveness of treatment on the virus in the liver."

The human leukocyte interferon will be supplied for the study by the antivirals substance program of the National Institute of Allergy and Infectious Diseases. NIAID obtains its interferon from the Red Cross Blood Transfusion Center in Helsinki, Finland.

The drug, Ara-AMP, will be supplied by Warner Lambert/Parke Davis and Company of Ann Arbor, Michigan, under an investigational drug permit issued by the Food and Drug Administration.

Merigan said creating public awareness of the need for volunteers with chronic hepatitis is an important first step in the research.

"We'll have to screen a lot of patients in order to get those who are interested and who have the right characteristics in terms of the nature of their hepatitis infection," he said.

Approximately 150 patients will be accepted. They will be mostly from the Bay Area, Merigan said. Patients living farther away will be considered only if they can come to Stanford for the required weekly studies.

Merigan's collaborators in the project are Drs. William S. Robinson, Peter B. Gregory, Coleman I. Smith, and Lynn W. Kitchen.

Patients willing to volunteer in the study should call (415) 497-5715.

STANFORD UNIVERSITY MEDICAL CENTER
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(Photos available if not included)

STANFORD—

Sometimes most of the kids around Stanford University Hospital's labor and delivery unit belonged to Barbara Petree.

"There were a lot of times," recalls Petree, "when I would come into work the evening shift with my four kids and Jan Choyce's three kids. I'd leave all seven in the waiting room, and Jan (another nurse in the unit) would take them all home and take care of them until I would get off."

Petree's story of juggling child care with a career may not be unusual in a modern hospital. But her professional performance is not typical, as evidenced by the handlettered sign Choyce and some of the 54 fellow nurses and assistants put up in the ward Petree heads as clinical nursing coordinator.

The poster identified Petree as the hospital's "employee of the year" an honor spawned by the nomination of her colleagues, subordinates and the doctors she works with.

There were 30 other nominees for the Thomas A. Gonda Employee of the Year award, but on May 29, Petree walked to the podium to receive the coveted plaque.

Petree may be humble, respectful and gracious, but she isn't coy—in a recent interview she explained why she might have been chosen.

"I'm people oriented. I care about the staff and this department. I'll try my best to change my people's schedules or arrange days off or whatever might be needed.

"If people are having problems at home, for example, many times they'll tell me what the problem is, and possibly I might be able to arrange their schedule for them so that they can do something a little easier or perhaps a little less stressful. People's needs are met.

"But that's been the philosophy even before me.

"Also, I'm confidential with information that people give me.

"And courtesy is one of my biggies. It comes naturally, but it's very important to me. There's very little courtesy in a hospital in general, but I think it's very important."

Professional excellence is clearly important, as evidenced by the statement of a Medical School faculty member who nominated Petree:

"It is through her concerted effort that a quality tertiary perinatal unit has been developed at Stanford Hospital."

And recently she was elected vice chairman of the California Section of the Nurses Association of the American College of Obstetricians and Gynecologists.

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During 25 years in the field, Petree has seen many changes in nursing:

"Nursing has changed tremendously. The focus has changed significantly so that it is patient directed."

In the past, she said, nurses would "go in and perform various procedures on patients.

"Then you would leave them.

"Now you spend more time with patients and the family. Of course we have a lot more ancillary personnel, which helps tremendously. Nurses don't spend as much time cleaning rooms and performing housekeeping tasks as in the past.

"The patients have demanded more personalized care. We've learned a lot more about the needs of the pregnant patient and family and some of the stresses involved."

"The patients are older and there are a lot more wanted babies these days. We're getting a lot more mothers in their mid-30s, and believe me these are very wanted babies."

The father's role has grown over the years, since both parents participate actively. "The parents are very well informed and this helps," she says.

Stanford in 1967 was a pioneer in having fathers in the delivery room.

"We still have a waiting room for fathers," Petree notes, "but it's hardly ever used. They're right in their with their wives."

Another change involves the rare but sad moments when the delivery is stillborn or deformed.

"We used to protect the mother by taking the baby out of the room, and now we don't do that—it's still her child, so we'll wrap the baby up, we'll take photographs of the baby if that's what they wish, we'll let them hold the baby if they need to go through all of the grieving process."

Petree said she was skeptical when the procedure for handling stillborns was established a few years ago.

"I could see the rationale behind it, but it seemed sort of cruel. And yet, the more you work with families who have had this problem, and the more you see how grateful they are that you let them deal with part of life, the more of a believer I become."

Technologically, mothers can be prepared for both happy and sad news through the use of equipment such as electronic fetal monitoring.

"There are very few surprises," Petree says.

During the years, the nurses, too have changed in that the latest crop "have not spent a lot of time with patients. They have been focused on a college campus and the time that they spend in the hospital is much less than we had.

"But on the other hand, they are extremely well educated, and that's what the nursing profession needs. They also do a great deal of thinking for themselves."

The older nurses, Petree says, must take responsibility for keeping up with their younger colleagues by learning modern science.

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"What we have had to do is keep up on the physiology. I took a physiology course a number of years ago, and the instructor asked us who had taken an earlier course without DNA and RNA. My hand went up."

Yet despite a possible science education handicap, Petree believes that the older nurses may be sharper in picking up clinical symptons.

"For example, if a patient in our department were dehydrated, we would know they were dehydrated because they weren't putting out urine, because their tongue was beginning to crack, or some of the other signs.

"Younger nurses could give us the physiological base for what is happening to their body. But you need both.

"We also serve as role models for the younger nurses, most of whom are students. The average length of service in this ward is 12 years, so we really don't get too many new nurses, and those who come to us usually already have obstetrical experience. So our contact is with student nurses.

"We teach that you have to fit in with the patient's world. If a patient is extremely nervous, then we have to be even calmer than usual."

The experience raising four children might be helpful at work, but Petree is cautious about drawing parallels between having your own kids and functioning effectively in a labor and delivery ward.

"I don't think that you have to have children to be a good nurse in this department," she said.

"But it can be nice if you do have something to relate to, because patients feel a little more comfortable. They always ask, 'how many children do you have?'"

In the early 1970s, Petree was asked whether she wanted to become a head nurse.

"At first I thought, 'no.' But then I began to think about it.

"I decided I wanted something more. I always enjoyed leadership positions. I felt I was ready for a larger role in nursing. With the head nurse position you still have an opportunity to care for patients, which is very satisfying for me."

While Petree has kept pace with modern developments in her work field, her marriage, she says, reflected current values from the start—from a time when equal roles in marriage were not always accepted.

"It's been an unusual marriage," says Petree. "My husband believed right from the early years that we should share some of the childrearing and some of the responsibilities. He had his own business (as a paperhanging contractor) so he was able to spend more time caring for the children."

The Petree family, she says, is unusual in other ways, and perhaps this includes group communication.

"When I thought about going back to school, we sat down as a family and discussed how chores could be divided up, and what they expected of me.

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"One thing they said they wanted of me was to be available Friday nights, because the two children played in the band and wanted me to come see them. I also told them what days I needed to study."

School for Petree meant management studies she found important for her role as clinical nursing coordinator.

That period of schooling was among the hardest of her life.

"I'm an evening person, so probably the early morning was the worst time for me, getting up at 5:30 and having to come in early to work, knowing that I would have to face school until 10:30 at night."

Although she thought about quitting several times, "I kept going. I guess it's a basic philosophy that I have—if you start something, you should finish it."

Finally, the effort was rewarded with a masters of arts in management from the University of Redlands, achieved with full cooperation from the family.

"At graduation time my youngest daughter said, 'Oh terrific, now you can take over the laundry again.'"

Petree, a third generation Bay Area resident, has been at Stanford Hospital and a Mountain View resident, since she and her husband, Warren, moved south from San Francisco 20 years ago.

"We had two small children, and we just didn't think the city was the best place to raise them."

Petree is satisfied the decision was wise.

"We are a little unusual, in that our kids still do things with us—camping, trips to the city, visiting relatives, whatever."

Her oldest daughter, Janis, 23, plans to follow into nursing and is currently working on a B.S. in that field at San Jose State.

Petree's oldest son, Joe, 22, is majoring in environmental management at Loyola Marymount University in Los Angeles, while her youngest son, Rick, 18, plans to attend Cal State Northridge. Sixteen-year-old Anne is in her junior year at St. Francis High School in Mountain View.

A key to bringing up the Petree kids, she says, has involved an attitude of never telling the children they *can't* do anything. Another clue may be reflected in Petree's own description of her kids now as teenagers:

"They are truly great people."

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

Sue Addicott and about 400 of her colleagues belong to the flip-flop world of the night people.

Most days at about 7:15 a.m., the Stanford University Hospital nursing assistant drives not to work but back home to Portola Valley. Sometimes, Addicott says, she casts a smile at some of the drivers whose cars are backed up in the opposite direction. They're heading down to urban areas and the hectic world of daytime jobs. For Addicott a "day" in the emergency room is over and it's time to relax.

"It's almost a sinful wicked feeling to crawl into bed as the sun rises," says Addicott, 46.

About 10 percent of the hospital's 4,000 employees, says personnel director Don Thomas, are needed between the wee hours of midnight and 8 a.m. to perform nearly all the tasks which are performed at any other hour.(The shift is called "mornings" to distinguish it from the "night shift, which for most workers runs from about 4 p.m. to midnight.)

While many of the morning people are helping to keep patients comfortable and alive, many other workers are needed for such tasks as housekeeping, recordkeeping, or getting breakfast ready for the day.

Some of the night people accept the wee hour shift because it is the only current opening available in their specialty. But many of the Stanford Hospital workers on duty after midnight have specifically requested that shift.

A 12 to 14 percent pay differential, promotion possibilities, an opportunity to spend more daylight hours with family, or the need to spend the day in school, on another job or outside playing in the sunshine are among reasons cited for selecting the reverse regimen.

But for at least a few, the routine has become the normal way of life. Marguerite Brickner has spent most of her 36 years at the hospital working nights, mostly in the sometimes hectic but usually upbeat world of the well-baby maternity ward.

"I guess I'm just a night person," explains Brickner, the hospital's longest-serving employee.. "I'm just not alert during the day."

But Brickner has another reason for her schedule, an explanation echoed by many of her colleagues.

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"There just isn't as much confusion around here," she says.

Addicott agrees:

"It's somewhat less of a Greyhound bus depot syndrome at night," says Addicott. When you're busy, you're very busy, but there is a clear idea of who is doing what . . . . Many of the people here are the same, and we do get used to working with each other."

Dick Tashiro, 29, who alternates as the lone pharmacist after midnight, says he enjoys the opportunity to work independently.

"I get to do things the way I think they should be done," he says.

Anna Gerac-Huwel, North ICU charge nurse and a 10-year Stanford Hospital veteran, thinks "you're not living with the hustle-bustle and bureaucracy of days....I think there is a feeling that we're all in this together."

For many of the night people, the work schedule just comes with the territory and is an issue perhaps unworthy of contemplation.

"If you're going to do floors, you sure can't do them in the daytime when you got a lot of people around," says Cleveland McDonald, a housekeeper who receives extra money for running a floor polisher, a task which surely can't be done when visitors, administrators, and the larger day staff are glutting the corridors.

For Frazier Tillmon, a job as night security guard at Hoover Pavilion is a second source of income. He works days as a school aide.

In the basement each weeknight at the communications hub is Beth Griffith, who has worked that shift on the switchboard for 29 years. Over the long span of years her reasons have changed from practicality to normality.

Back in the '50s, Griffith explains, working nights "was convenient. I was always home to feed my children breakfast and see them off to school. I was home just like a housewife would be.

"Now after half a lifetime, if I would have to work days, I probably would zombie my way through it."

More has changed for Griffith over the years than the expectation of several decades past that women stay home and be housewives. With her children grown and society changing, it is Griffith's husband who has breakfast waiting for her when she returns to their Menlo Park home after each shift.

Griffith is another wee hour worker who stresses the feeling of independence which comes from working all night.

"You really don't have that problem of having someone standing over your shoulder as long as you know what you're doing and are willing to do it."

The complement of morning people, says personnel director Thomas, is about 10 per cent of the total staff roster of about 4,000 persons. Most functions, including a small admissions staff and records staff are needed during the predawn hours.

While teaching and many clinical activities occur intermittently or are postponed until daytime, patient-related tasks occur at a brisk pace, says Esther Strathdee, one of several nurses who serves as clinical nursing coordinator on mornings.

"Some people have the idea that patients sleep at night. That's not really true in a hospital.

"There is a fair amount of comforting that needs to be done at night. The activity of the day is over. It's dark and some people just need to talk about the events of the day," Strathdee says.

"We actively need our most experienced nurses at night," she says, noting that backup advice and help from the most experienced doctors is often not instantly available.

It's not certain what effects the flip-flop schedule might produce on people's bodies, but all of the night people have developed patterns to manage their schedules. Some say they prefer to go to bed right after work, others choose to stay up all day and sleep right before the shift, while some take intermittent naps throughout their off hours.

An informal sampling of the night people at Stanford indicates that the vast majority sleep less than eight hours in each 24. Several longtime night people say they sleep less than four hours average each day.

Most say they are convinced they get less sleep than they did as day people. It's common for many of the night people, particularly those with outdoor interests or active social lives, to revert to night sleeping on vacations or weekends.

Many of the long time night people are anxious to tout the positive aspects of the alternative lifestyle.

"You know," says Joni Ratts, an emergency room nurse, "I just hate to get up on cold, gray mornings and go to work. This way I don't have to."

And for Anita Dunton, the morning shift admitting coordinator, the daylight means freedom to play golf.

For Judy Partridge, a refugee to California from the snows of Western Canada, working nights as a nurse leaves the day free for racquetball, jogging and poolside sunning.

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6/12/81

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

The Stanford University Hospital Board of Directors Wednesday June 10 selected the Seattle firm of Naramore, Bain, Brady and Johanson (NBBJ) as architect for the Hospital's $115 million modernization project.

Selection of the architectural firm is a major step in the planning to expand and renovate the Hospital's facilities that has been ongoing for three years, according to Elvia Garwood, recently named acting director of the project.

The NBBJ firm, which has specialized in health-care projects since its inception in 1943, in the past five years has designed health-care facilities with construction costs of $500 million, said Dr. Lawrence G. Crowley, vice president for medical affairs, in a report to the Hospital Board and in a letter mailed to all physicians on the Hospital's medical staff.

Among the firm's more recently completed projects, Crowley noted, are the University Hospital, University of Washington, Seattle, both the original building and additions; the Scripps Clinic and Research Foundation in La Jolla; and the St. Mary's Hospital addition in Rochester, Minnesota, including 43 operating rooms.

Crowley also outlined in his letter to Hospital medical staff further areas of progress on the modernization project, which will correct certain functional deficiencies in the Hospital as well as adding approximately 150,000 square feet of new area.

"Because no project has been built at Stanford that matches the size and cost of this one, we are conducting a national search for the person who will manage the total project," Crowley said. "In the interim, we have named Elvia Fernandez Garwood associate director and acting project director."

Garwood, who joined the University's planning office in 1976, has been associated with the Medical Center since 1979 and has had responsibility for the renovation of the Boswell Clinics in the Medical Center, a related project that is "moving ahead independently of the Hospital project," Crowley said.

Crowley also announced that Dr. Michael Eliastam, director of the Department of Emergency Services, has been appointed associate manager and physician representative on the project on a part-time basis. Eliastam will also serve as liaison with both faculty and community physicians during the program and construction phases, Crowley added.

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Crowley has also appointed an executive policy committee to advise him on setting major goals, strategies and policy concerning the modernization project. The committee members include, in addition to Crowley and Garwood, Carl Hitchner, Medical Center counsel; David Hopkins, director of the Medical Center's office of planning and analysis; Philip Rector, director of facilities for the Medical Center; Peter Levin, executive director of Stanford University Hospital (SUH); Mary Catherine Krawec, associate director/planning (SUH); David Sakai, director of finance (SUH); James Silverman, chief of staff (SUH); and Jason Mavis, director of facilities and services for the University.

Crowley stressed that because building costs are rising rapidly, "it is prudent to modernize now." The project involves finishing shell space on two floors in one of the Hospital wings, and construction of a new wing. There will be additions to the Department of Radiology, Cardiology/Radiology, operating rooms, a new pediatric unit, a new intensive care unit, new clinical laboratories, and a 56-bed medical/surgical unit. These modifications do not represent an increase in licensed beds, Garwood notes.

In addition, portions of the present building will be remodelled to provide expanded space for other clinical programs.

Initiation of construction is expected in 1982 with completion by 1985. A staged approach to construction should minimize the impact on Hospital operations, according to Garwood.

Crowley said he also soon plans to appoint an operational advisory group to work closely with the program and design team. Membership will include Hospital administrators and service chiefs, and medical staff members.

Before construction can proceed, Stanford must file a certificate of need with the Office of Statewide Health Planning and Development, Crowley noted. This application should be filed within a year, he said, after the necessary architectural planning and cost estimates have been completed.

Mailed June 11, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

EDITORS: Advance for A.M. release Thursday, June 11, 1981, to coincide with publication in the *New England Journal of Medicine.*

STANFORD—

The coming challenge to American physicians will be how to adapt to the cost-conscious 1980's, says economist Victor Fuchs of Stanford University and the National Bureau of Economic Research.

Fuchs describes three trends likely to affect medical practice adversely. They are a slower growing economy, a decrease in the rate at which the health sector increases its share of the gross national product, and the rapid growth in the number of doctors for at least another decade.

"These trends will not only have an impact on physicians in private practice, but they represent a major challenge to medical school faculties as well," he writes in the June 11 issue of *The New England Journal of Medicine.*

"Because the expansion of medical schools has been so rapid since 1950, and the slowing down will be so marked, the coming decade is likely to be particularly traumatic for academic physicians in patient care, research and teaching," he predicts.

Noting that patient care income now provides a significant portion of faculty salaries in medical schools, Fuchs says these revenues will be subject to the same competitive pressures that will face physicians in private practice.

In response to these competitive pressures, physicians will tend to hold down hospitalization of their patients, re-examine their approaches to diagnosis and treatment, and in general try to protect their own incomes.

"The solution of reducing hospital utilization in order to protect physician income will be especially controversial in universities that bear fiscal responsibility for the hospital as well as the medical school," Fuchs says.

The new, tight financial environment is also likely to result in some changes in emphasis for medical research.

"When the growth of health care expenditures seemed virtually unlimited," Fuchs says, "researchers were primarily interested in finding new drugs, new treatments, or new tests that made a positive contribution to health regardless of the benefit-cost ratio.

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"All that was needed was a demonstration that the innovation was better than existing alternatives."

Under the competitive, cost-conscious conditions that are likely to prevail in the 1980's, Fuchs predicts that researchers will be expected to answer questions such as "How much better is the innovation?" and "How do the expected benefits compare with those that could be obtained if the resources were used in some alternative way?"

Ultimately, the new modes of practice and the new demands on research will have an impact on the form and content of medical education.

He believes the training of interns and residents will increasingly incorporate questions such as "Why did you order this test?" as well as "Why didn't you?"

At the undergraduate level, medical training will probably be broadened to include elements of the behavioral, social, and decision sciences as well as the traditional biological sciences.

"Adaptation will be particularly difficult," he says, "because the development of new programs, new courses, and new techniques must occur in what will be virtually a no-growth situation."

While a slowing down of the growth of medical expenditures will be achieved primarily by organizational reforms, a decrease in hours worked by physicians may be another way.

"I believe such a decrease is already occurring to a greater extent than is revealed in most surveys of physicians," he says.

Fuchs explains that doctors will be taking longer vacations, more days off, and sabbaticals.

"To the extent that the average practicing physician will be working fewer hours per year in 1990 than in 1979, he or she will be hospitalizing fewer patients, writing fewer prescriptions, and in general generating lower expenditures," Fuchs writes.

He adds that most physicians in the United States have never known a time when the real resources at their disposal were not increasing at a rapid rate.

"Thus the coming challenge will require skillful administration and considerable understanding and cooperation between the 'gown' and 'town' medical communities," Fuchs notes.

In the past 30 years, according to Fuchs, doctors have been the beneficiaries of historical developments mostly beyond their control. In the decade ahead they are likely to be the victims.

"Their responsibility, as always, is to do the best they can under the given circumstances," he concludes.

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6-9-81

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FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

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Mailed June 11, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

Dr. Roy Cohn is the new president-elect of the Stanford Medical Alumni Association, and Dr. David Rytand is the new director of alumni relations of the Stanford University School of Medicine.

Elected at the Association's annual reunion Saturday, Cohn will serve as president in 1982-83, succeeding Dr. S. Gainer Pillsbury of Long Beach.

Rytand was appointed by Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean. He will succeed Dr. Gunther W. Nagel of San Francisco who served on the post since 1965. The part-time job of alumni relations director is to serve as liaison between the School and its alumni.

Cohn, who graduated from Stanford Medical School in 1933, has been a member of the Association's board of governors and member of the editorial committee of *Stanford M.D.*, the magazine of the Association. He is recognized as a respected clinician with an active surgical schedule and as a stimulating teacher of medical students and residents.

He has served on the faculty since 1938, and was the first holder of the Walter Clifford Chidester and Elsa Rooney Chidester Professorship in Surgery until he became emeritus professor in 1975.

Rytand, chief of cardiology at Santa Clara Valley Medical Center, was graduated from Stanford in 1933, and was the Arthur Bloomfield professor of medicine until he became emeritus professor in 1975. Rytand also is past president and treasurer of the Association.

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STANFORD UNIVERSITY MEDICAL CENTER
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(Editors: Photos available if not included).

STANFORD—

Mary Gohlke and Charles Walker, two ordinary people whose immediate goals range from returning to work to riding a bike to eating French food, told reporters Friday they were grateful to be alive.

Gohlke, a 45-year-old newspaper advertising executive; and Walker, a 30-year-old mortician whose illnesses have kept him out of the job market, faced news reporters here at Stanford University Medical Center, and described their zest for life and the unusual operation which has made continued living possible.

Walker said he is anxious to leave the hospital and return to work. But he is also anxious to try some simple pleasures his weak heart and lungs have denied him for the three decades of his life.

I want to "ride a bicycle for one....I've never ridden a bicycle. I just want to do the things normal people do at 30 years old.

Walker also says he wants to take his dog for a walk around the block, a seemingly simple and easy task, but one which his frail health has prevented him from accomplishing for two years.

Mrs. Gohlke is looking forward to returning to the hectic pace of work at the *Mesa Tribune*.

"I see no difficulty in returning to a normal kind of life.

"I may cut (back from) 12 hour days and go to 10," she quipped.

Among lighthearted goals, Mrs. Gohlke is hoping for a meal in a French restaurant. Released from the hospital on June 1, Mrs. Gohlke has already left her apartment for a luncheon out, but the French meal was yet to come.

With a desire to live, Mrs. Gohlke sought out the heart-lung procedure and didn't hesitate when the opportunity became reality in March.

"What choice did I have. It was taking a chance on that (operation) or dying. I had anywhere from six minutes to six months to live.

"I didn't feel like a hero or anything. As I have said before, we'd still be in the trees eating bananas if we didn't try anything.

"It was time to make a decision, and I chose to have it done."

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Although expressing extreme gratitude to the families who donated the heart and lung of their loved ones, Gohlke and Walker both firmly expressed the conviction that their bodies are now a functioning unit and their own.

"I just feel it was just fantastic," said the bearded Walker. "I can't be thankful enough to the family who has been so generous to donate the organs of this gentleman who was killed, and I just feel so much better since it was done that I can't be thankful enough for it.

"And I don't really think of them as someone else's organs now. They're mine, and they're doing a beautiful job for me."

For Mrs. Gohlke, the donated heart and lung is part of the continuation of life.

"It's like I used to tell the children when we talked about death. They asked questions. I think things just continuously go on.

"It's like the flowers become dormant in the fall and are there again in the spring, and I think the same kind of thing in regard to the donor organs. I've always thought as long as you remember someone's name, they're never truly dead.

"And I will always remember this donor."

Mrs. Gohlke says that generally she feels well, "and the only thing that I don't like is the shaking.

"And they tell me that will take about six months to subside. It's bothersome when you're eating, when you spill your food all over your clean clothes.

"But it's little enough payment for living."

Mrs. Gohlke is a bit hesitant to advise other persons who might undergo the experimental procedure, "but I think they need to approach it with hope, and faith in their doctors and courage and a belief that they're going to make it.

And she points to herself and Charles Walker as examples of how much hope the procedure can offer.

Mrs. Gohlke, of Mesa, Ariz., received her new heart and lungs March 9. Walker, of Binghamton, N.Y., was given his new heart and lungs on May 1. He was transferred from intensive care to a general medical ward on June 2. Currently, he is lifting light weights and continuing with an active physical therapy program.

Both Walker and Gohlke suffered from terminal heart and lung defects and were offered little likelihood of survival without the radical surgical procedure. Mrs. Gohlke had essential pulmonary hypertension, and Walker was born with a congenital heart defect and his lungs had become damaged because of his poorly-pumping heart..

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Dr. Bruce A. Reitz, the cardiovascular surgeon who is the head of the heart-lung transplant team, is encouraged by the progress so far of the two heart-lung recipients.

He expects gradual improvements in Mrs. Gohlke's and Mr. Walker's ability to do things, and sees no reason why they could not fully recover to lead normal lives.

Reitz shys away from saying that the heart-lung operation can be termed a success, as reported in several newspapers. He feels it is still too soon after the operation, and two patients are hardly enough to judge if the operation will prove helpful enough to one day become routine. Much has still to be learned, he says.

But the first two operations have taught him and his colleagues good things already.

"We've learned that the operation works," Reitz said.

"Both patients' windpipes healed without complications, and the lungs are functioning without being innervated."

In the majority of previous heart-lung and lung transplant attempts, the windpipe failed to heal properly, leading to infection, air leakage or bleeding. That problem apparently has been overcome by a recently discovered drug cyclosporin A, which doesn't interfere with the weeks-long mending process.

Cyclosporin A, which has been billed as essential to the operation, has proven to be an invaluable drug, Reitz says, but not a magical one.

"It is not specific, and it must be used in combination with other drugs," he says.

Still, all in all, cyclosporin is proving to be key in the operation. Reitz says that lung transplant operations, which had been discontinued several years ago because of the dismal survival rate, will probably begin again soon in New York because of the drug.

Reitz also credits much of the recovery of Mrs. Gohlke and Mr. Walker to the experience gained during Stanford's 13-year-old heart transplant program. Doctors, nurses and therapists are attuned to the problems and complications encountered by transplant patients.

Dr. Reitz says it will be many years before the operation may become routine. Stanford is the only center doing the operation, and to his knowledge, no place else is planning to perform the operation.

"We'd like to make the heart-lung a model for how new therapies should be evaluated and the findings made available to other groups.

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"We plan to continue our work in the laboratory with the monkeys, and to carefully select patients for the operation."

For now, Stanford only plans to do four of the operations a year.

"We want to learn as much as we can from each operation, so that the next patient can be benefited."

Dr. Reitz and the transplant team operate on two or three monkeys each month. Two of them, Gustav and Mom, have survived over a year and a half after the operation. The animal work layed essential groundwork for the first human operation.

Now, the researchers are continuing the experiments with the monkeys to work out optimal drug dosages and combinations, and to study the long-term problems encountered in heart-lung transplants.

No one has yet been selected to be the third heart-lung transplant recipient, but Reitz has received over 100 phone calls and letters from physicians and patients inquiring if they could qualify as a candidate.

The standards are now very stringent, and few people qualify. In the future as more knowledge and experience are gained, the standards will be relaxed and the number of operations done each year will be increased, he says.

Dr. Reitz says one of his most difficult tasks is in selecting the patients.

"It is so hard to know if someone is ill enough that he is in his last three to six months of life."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Women who have been successfully treated with drugs or radiation for the cancer known as Hodgkin's disease can become pregnant and give birth to normal children, according to results of a study by cancer researchers at Stanford University School of Medicine.

Twenty percent of the entire group of women surveyed following treatment successfully became pregnant, and no birth defects were found among the 24 infants born. Among 28 pregnancies, there were 21 normal live births, (including one set of twins), two premature infants and one low-birth weight infant. All of these children are developing normally, the researchers report. Five of the women who became pregnant elected to abort the pregnancy.

The study was carried out by questionnaires and interviews involving 103 women who received treatment between the ages of 13 and 40.

"It is the first major study of this kind," said Dr. Henry S. Kaplan, D'Ambrogio professor of radiology, one of the investigators. "The results are positive." Details of the study were published in the June 4 issue of the *New England Journal of Medicine* by Kaplan and Drs. Sandra Horning, Richard Hoppe and Saul Rosenberg of Stanford.

Although 20 of 26 women in the study who stated that they had tried to have children succeeded in becoming pregnant, "any conclusions drawn from our observations must be guarded," the researchers said. "Many sexually active women did not use birth control because they assumed that they were sterile."

In addition, "larger populations of patients with similar treatment characteristics and longer surveillance times are necessary to completely assess the effect of therapy on offspring."

Hodgkins disease is a cancer of the lymphatic system which can be treated with combinations of anticancer drugs, doses of radiation directed at the lymph organs throughout the body, or by a combination of both of these techniques.

Reproductive potential, as determined by menstrual activity and incidence of pregnancy, was more strikingly impaired among the women who received radiation therapy and drug therapy together in a treatment program than among those getting radiation therapy or chemotherapy alone, the researchers reported.

It has been known for some time that both radiation and drug therapy for cancer can affect reproductive potential, the researchers noted. But insufficient information has been available "to allow professionals to counsel young women regarding the effects of current treatment programs on ovarian function."

Most of the women, 69 percent, were reported to be menstruating following their cancer treatment while 31 percent of the women in the study failed to menstruate following therapy and may be sterile.

Age at treatment and the degree of exposure of the ovaries during treatment were the most important factors in predicting pregnancy, the researchers discovered. The older women were when they underwent therapy, the less likely they were afterwards to resume menstruation.

"Advances in the treatment of all stages of Hodgkin's disease have led to the expectation of long-term survival in more than 70 percent of patients," the doctors noted.

As a result, concerns about quality of life for survivors have assumed greater importance. "The probability of maintaining reproductive function, becoming pregnant, and delivering a normal child is important to young women anticipating successful therapy for Hodgkin's disease," they added.

—30— L107

Mailed business wire Thursday, June 4, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

A final report of recommendations to resolve conflicts over medical staff privileges in Stanford University Hospital was unanimously approved Wednesday, June 3, by a liaison committee of community and faculty physicians.

The report, transmitted to Stanford University Hospital Board Chairman Donald Kennedy, paves the way for development of a new Hospital Board policy concerning access of community physicians to hospital based services and laboratories.

This step, Kennedy said, will be undertaken by an ad hoc committee of the Hospital Board headed by Mrs. Linda Meier. The committee will prepare a newly drafted policy which is consistent with the contents of the report.

Members of the Meier committee are William E. Ayer, William F. Massy, Dean Morton, Frank Roberts and Kennedy, ex officio. The committee will present recommendations to the full board sometime this summer.

Dr. Lawrence G. Crowley, vice president for medical affairs and co-chairman of the Palo Alto Community Physicians-Stanford Medical School Liaison Committee, said he is very pleased that final agreement has been reached.

"It provides a fair and equitable approach to resolving the differences dividing the full-time faculty and the community physicians, and enhances the unique historical association of the Stanford University Medical Center and the City of Palo Alto," Crowley said.

He added that such differences are natural in a University teaching hospital in which full-time faculty responsible for clinical academic programs and community physicians striving to provide comprehensive care for their patients must co-exist.

Dr. Walter Arons, a community physician and committee co-chairman, said: "The agreement is a significant document that deals successfully with the questions raised by the August 1, 1978 memorandum."

"The issues were obviously difficult," he added referring to the two and a half years of negotiations. "But the fact we have an agreement is a measure of the desire of both sides to work out a solution."

The memorandum in question touched off a controversy because it excluded future access of community physicians to some specialized hospital-based services. A liaison committee was formed to grapple with the issues. Even though both sides had agreed early that community doctors should have

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limited access to specialized services, the main point of contention was centered on the rules for replacing those community physicians who retired.

The key elements of the liaison committee recommendations are:

- Community physicians should continue to have controlled access to the hospital-based services in which they now hold privileges.
- As present community doctors holding staff privileges in the designated services leave or retire, they will be replaced by community doctors who hold voluntary clinical faculty appointments and actively participate in the teaching and clinical research program of the Medical School. It was recommended that a review of the staffing of these labs and services by the Board would be required at least every five years.

Associated with the report are new guidelines regarding the appointment and promotion of clinical voluntary faculty. The policy guidelines are believed to be important because privileges in the hospital-based services have been generally limited to physicians holding faculty appointments.

Voluntary clinical faculty guidelines were developed by a committee consisting of equal numbers of full-time faculty and clinical voluntary faculty, headed by Dr. John L. Wilson, Associate Dean for Faculty Affairs.

The guidelines include criteria for appointment, reappointment and promotion of the voluntary clinical faculty, and formal appeal mechanisms for review of negative decisions.

A special class, clinical associates, has been proposed for qualified voluntary clinical faculty physicians for whom there are no openings in the appropriate department or service at the time of the appointment. The number of clinical associates will be limited to 30, and they will make their patients available for teaching if needed.

Because of the complex relationships of the community physicians to Stanford, Arons termed the document as "perhaps the most detailed clinical faculty document in the country."

"It provides community physicians on the clinical faculty a greater degree of protection from arbitrary decisions, and it is a democratic document," he said.

Arons said he was optimistic that the current agreement would provide a firm basis for discussions of future issues between the two groups as they arise.

The liaison committee, in addition to Arons and Crowley, has included Malcolm Bagshaw, John A. Collins, Conrad Gullixson, Robert Jamplis, George Janetos, C. Philip Larson, Peter J. Levin, Burt McDowell, Linda Meier, Kenneth L. Melmon, Robert M. Rosenzweig, and James F. Silverman.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Barbara Petree, a 20-year nursing veteran at Stanford University Hospital, was named the 1981 Thomas A. Gonda Employee of the year.

Petree, who serves as a clinical nursing coordinator assigned to labor and delivery, was presented the top employee award at a May 29 banquet ceremony by Dr. Thomas A. Gonda, the former director of Stanford Hospital and the man for whom the annual prize was set up to honor in 1975. Gonda currently serves as chairman of the Department of Psychiatry and Behaviorial Sciences in the School of Medicine.

The Gonda Award winner was selected by a committee from among 31 persons nominated by fellow employees.

"We felt not only that Barbara Petree had distinguished herself over a wide range of activities," said hospital personnel director Don Thomas, "but a wide range of people both in and out of the hospital recognized these accomplishments."

One nomination letter said, "It is through her (Petree's) concerted effort that a quality tertiary perinatal unit has been developed at Stanford Hospital."

Recently, Petree was elected vice chairman of the California Section of the Nurses Association of the American College of Obstetricians and Gynecologists.

Colleagues praised Petree, a Mountain View resident, for her excellent empathy with patients and families.

"I'm profoundly honored," said Petree during an emotional speech at the award's banquet.

In addition to the Gonda Award, five other Outstanding Employee awards were given to runners-up at the 23rd annual hospital awards banquet.

These certificate winners included Hedy Dumpel, a staff nurse; Betsy Buck, a secretary in the EEG lab; Willie Hall, a carpenter for the Facilities Division; June Ogilvie, the clinical nursing coordinator for West IIA; and Ida Huggins, a unit service assistant at the east nursery.

Also, 351 hospital employees received pins or other engraved items honoring five to 30 years service.

The lone 30-year honoree was Virginia Howe, who works in the preadmission area.

6/2/81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Note to Editors: An interview with Mrs. Gohlke and Mr. Walker will be available Friday, (June 5) P.M. The press conference is being held on a pool arrangement because of the inadvisability of having large numbers of persons around the patients who are on immunosuppressive drugs. Members of the press pool have already been selected; in an effort to be equitable, there is a representative from television, radio, newspaper and wire service. Detailed information as to where transcripts and videotapes of the interview can be obtained will be released on Thursday, June 4.

STANFORD—

Mary D. Gohlke left Stanford University Hospital yesterday (June 1), 85 days after she received a heart-lung transplant.

"I'm glad I went through with the operation," said Mrs. Gohlke. "I'd do it again. I've a ways to go before I get my strength back, but I'm working on that."

Mrs. Gohlke, 45, became the world's fourth heart-lung transplant recipient, the first one in ten years, on March 9. The longest any of the other recipients, who were transplanted between 1968 and 1971, lived after the operation was 23 days. But a recently-discovered drug, cyclosporin A, greatly increases the chances that transplant recipients will be able to recover fully and lead a normal life.

"I'm working to get back to my family, to my job," said Mrs. Gohlke, who before her illness was advertising executive of the *Mesa* (Arizona) *Tribune*.

She will live in the Stanford area for two to three more months so that doctors can further adjust the doses of the medications she must take the rest of her life and can keep a close watch for any signs of rejection of her new heart and lungs. After that she plans to return to her home in Mesa, Arizona.

A more immediate plan after her long hospital stay is to have lunch at a French restaurant soon

The news is also good for Charles Walker, 30, of Binghamtom, New York, who received a heart-lung transplant at Stanford on May 1. In satisfactory condition, he was transferred from the Hospital's intensive care unit today (Tuesday, June 2) to a private room on a general ward.

He's now riding an exercise bicycle a half mile a day, lifting light weights, taking walks, and treking up and down stairs in an attempt to build up his strength.

"I'm so thankful for the heart-lung program," he said. "It hasn't been easy, but I feel so hopeful. This is about the best I felt in my life. I've been off oxygen for days. I feel I've a whole new lease on life. The doctor told me I didn't just get a pair of lungs, I got a Rolls Royce of lungs."

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Both patients have been cheered by the good wishes they've received from all over the country.

Walker says since his operation he's received 800 to 900 cards wishing him well. One Syracuse, N.Y., woman, who signs her name only as "Phina", has sent him a card with a dollar enclosed for luck every day since his operation.

She also arranged for a shiny new ten-speed bicycle to be waiting for him when he goes home. Walker, who was born with a congenital heart defect, had expressed the hope that the operation would allow him to learn to ride a bike, something he's never been able to do because of his chronic illness.

Mrs. Gohlke, who had essential pulmonary hypertension and spent the first 59 days after her surgery in the intensive care unit, has been during the last month in a private room in a general ward. Ten days after the surgery, she was beset by a mild rejection of the new heart and lungs, but that was completely controlled within a week, and her recovery has been steady, although slow, since then.

Four heart biopsies have disclosed no rejection problems for Mr. Walker.

Mrs. Gohlke's and Mr. Walker's operations are the culmination of more than two years of experimental work on monkeys, conducted by Dr. Bruce A. Reitz, the cardiovascular surgeon in charge of the heart-lung transplant program, and his associates in the Stanford cardiovascular laboratory.

Reitz stresses that the operation is still experimental, and only time and experience will tell whether it will be done routinely. For now, the Stanford team plans to do four of these operations a year, Reitz says. He estimates that because of the very strict selection process, very few persons would qualify as candidates. In the future if results are good, the number of operations done each year will be increased, he says.

No one is now waiting for the third transplant.

Costs for the operation, with its attendant long hospitalization, are estimated to be between $75,000 and $100,000.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Sheldon King, director of the hospital and clinics at the University of California Medical Center in San Diego, has been named executive vice president of Stanford University Hospital effective November 1.

The new appointment was announced recently by Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean of the School of Medicine.

In addition, King will succeed Dr. Peter Levin as executive director of Stanford University Hospital and associate vice president for medical affairs. Levin, who has resigned, is continuing as a Hospital consultant. In thanking Levin for his direction of the Hospital since 1977, Crowley cited his administrative leadership which has made the Hospital much more responsive to patients' needs.

In announcing King's appointment, Crowley pointed to his "distinguished record as an outstanding hospital administrator. He is highly respected throughout the UC system and on the national scene," Crowley said, "with a strong track record of management in university-based hospitals."

King, 49, has been director of the UCSD Medical Center hospital and clinics since 1972.

He is a New York University graduate with a masters degree in hospital administration from Yale University.

At UC San Diego School of Medicine, King has also been an associate clinical professor in the department of community medicine since 1977 and has served as acting chief of the division of health care sciences.

Before becoming hospital director at UCSD in 1972, he was executive director of the Bronx Municipal Hospital Center in New York for four years. Prior to that, he held several positions at Mount Sinai Hospital in New York, including assistant director and director of planning.

He has written numerous articles dealing with health management issues and is on the editorial board of the *Journal of Medical Education*. He is also on the board of directors of the California Hospital Association.

—30— L109

Mailed July 31, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

Twenty-eight-year-old Karen Wilson Tuesday, July 28 became the third person to receive a combined heart-lung transplant at Stanford University Medical Center.

After the twelve-hour operation, she was taken to the Hospital's Intensive Care Unit. She is in critical condition, but her vital signs are stable. She is breathing with the aid of a respirator, and no attempt will be made to wean her from it until her condition is more stable.

The operation took longer than the usual four to five hours because of bleeding complications resulting from the scars and adhesions left by the two major heart surgeries she had previously undergone, and the unusual anatomy of her congenital heart defect.

The blonde, blue-eyed resident of Mill Valley, Calif., went into surgery about 7:30 a.m. to replace the heart and lungs that had been faulty since birth.

A team of three doctors, Drs. Bruce A. Reitz, Norman Shumway, and John Wallwork, performed the experimental operation.

Wilson had been awaiting the operation since July 2. Her two other major surgeries were done when she was 2½ and 23. Last January, she had a cardiac arrest, which greatly restricted what she could do, and it was estimated that she had only months to live.

"I've never had any second thoughts," she said in a recent interview. "This is my only chance. The hardest part was waiting for the decision that I would be a candidate."

Wilson was born with two things wrong with her heart: a condition called transposition of the great vessels of the heart and a hole between the two lower chambers of her heart.

Briefly, normally the main vessel leading to the lungs—the pulmonary artery—is attached to the lower right chamber of the heart, and the main vessel leading to the remainder of the body—the aorta—is attached to the lower left chamber of the heart. In Wilson's heart, the two arteries had switched places, were transposed: the pulmonary artery came from the left side, and the aorta was attached to the right.

Her lungs were irreversibly damaged because of the abnormal blood flow pattern resulting from her backwards-connected heart.

Growing up in Miami, Wilson was able to attend school but never to participate in any sports or gym. She moved with her mother to Marin county in 1972.

Her mother, Betty Brashear; stepfather, Turner Brashear; and sister, Mrs. Donna Cameron, were at the Hospital during the operation.

"I want the operation because I want to lead a normal life," she said. She looks forward to learning to play tennis and pursuing her interest in photography.

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The 5-foot-3, 110 pound woman said recently "I've lots of determination. I've wanted this for a long time."

Wilson says that 30-year-old Charles Walker, who received the second heart-lung transplant at Stanford on May 1, has been of immense help in reassuring her. She and Walker have become good friends, she said. He waited with her in the hours before the operation.

She read everything she could get her hands on about the first two Stanford transplants, and when she and her family was told that she was a candidate everyone cried except her.

"It's what I wanted," she said.

Stanford performed its first heart-lung transplant on March 9 on Mary Gohlke, 45, a Mesa, Ariz., advertising executive.

Both Gohlke and Walker are still recovering from their operations. Gohlke has had to be briefly rehospitalized three times for minor complications since her initial June 1 release. Walker has been free of complications.

Both are still living in the Stanford area for the time being, but may be able to return to their homes sometime in the autumn if no complications develop.

This is only the sixth time the operation has been done in the world. It was attempted three times between 1968 and 1971, but because of the complications, none of the recipients lived longer than 23 days. Mrs. Gohlke's operation was 141 days ago.

In those early attempts, the windpipe failed to heal properly, leading to infection, air leakage, or bleeding. That problem apparently has been overcome by a recently discovered drug, called cyclosporin A. which doesn't interfere with the weeks-long mending process.

Dr. Reitz says it will be many years before the still-experimental operation may become routine. Stanford is the only center doing the operation; it plans to do about four a year. To his knowledge, no place else is planning to perform the operation.

"We want to learn as much as we can from each operation, so that the next patient can be benefited to the fullest extent," he said.

He estimates that because of the very strict selection process, very few persons would qualify as candidates, but adds that in the future if the results are good, the number of operations done each year will be increased and a greater number of people may qualify.

7.29.81 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A cancer researcher and a cardiologist at Stanford University School of Medicine have been named the first two Brotman Foundation Scholars for medical research from a $25,000 gift to Stanford from the Brotman Foundation of California, located in Los Angeles.

The two scholarship recipients, Dr. Stuart Young and Dr. Jay Mason, both assistant professors, will carry out basic medical and clinical research programs as Brotman scholars.

Young is developing techniques for destroying cancerous tissue while leaving normal tissue unharmed. He is also developing improved methods for diagnosing tumors and monitoring their growth or shrinkage during therapy. He has had promising results working with contrast agents, substances that are tumor-specific and can outline a tumor for enhanced diagnostic imaging and more sharply targeted therapy. Young also hopes to develop a system for delivering tumor-killing drugs directly to cancerous tissue.

Mason is studying new ways of diagnosing and treating abnormal and potentially fatal heart rhythms. These methods include mapping the heart tissue in order to find and surgically remove the spot where the rhythm disturbance originates; inducing arrhythmia in patients in order to evaluate in a controlled setting the effects of various anti-arrhythmic drugs; and using programmable pacemakers that can be installed in a patient to sense abnormal rapid beating of the heart and, through electrical stimuli, rapidly halt the arrhythmia.

In naming Mason and Young as Brotman scholars, Dr. Lawrence G. Crowley, vice-president for medical affairs and acting dean of the School of Medicine, acknowledged the Brotman Foundation gift.

"In young faculty members such as Dr. Young and Dr. Mason, the Brotman Foundation is investing in future national leaders in medical research and education," he said. "Their research programs will certainly advance through the Foundation's generosity."

The Brotman Foundation was established in 1960 by Dr. David M. Brotman in memory of his mother and father. According to the Foundation, Dr. Brotman, who died in 1973, was one of the guiding forces in the advancement of proprietary hospitals in southern California. During his career, he was medical director and president of several hospitals in southern California and subsequently founded, and was president of a nationally known chain of hospitals.

An important goal of the Foundation is to serve the community by awarding grants to physicians who are engaged in medical research projects.

—30— L108

Mailed Wednesday, July 29, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

New forms of a familiar substance, vitamin A , can bring relief to those plaqued by psoriasis and acne, and hold promise as anti-cancer agents. Man-modified molecules of vitamin A are proving capable of controlling severe cases of psoriasis, an incurable disease that afflicts six to seven million Americans alone.

The retinoids (a catch-all name for vitamin A and its naturally-occurring and synthetic modified forms) are also clearing severe cases of acne, and studies in animals suggest they may eventually be a weapon against certain types of cancer.

This heartening news coming in from numerous studies throughout the world had the nearly 500 doctors and scientists gathered at Stanford last week for the Third International Psoriasis Symposium in a buoyant mood.

"This is one of the most exciting drugs in the history of dermatology," opined Dr. Eugene Farber, chairman of the department of dermatology of the Stanford University School of Medicine, and president of the International Psoriasis Research Foundation, a multidisciplinary, non-profit reseach center in Palo Alto. "It is a major breakthrough."

"The retinoids are like comets in a night sky," said Dr. Constantin Orfanos, chairman of the department of dermatology in the Free University of Berlin in West Germany.

In the early and mid-70's Orfanos did the first clinical studies with the particular retinoid that is proving to be most beneficial in the treatment of psoriasis, the so-called aromatic retinoid.

"This is the first time an oral medication has had such an influence in psoriasis," he said. "Until now the only drugs that have really proved useful by themselves were the cytotoxic (cell-killing) drugs used in cancer treatment. But these drugs kill all cells indiscriminately. The retinoids are more targeted for the skin."

An especially appealing aspect of the retinoid therapy is that the messy, staining, often irritating lotions and creams of the standard assault on psoriasis can be replaced in some instances by a pill in the morning and evening.

In the clinical studies already done, nearly 90 percent of those patients whose bodies were covered with psoriasis—the most troublesome kind—were helped by the treatment, according to Orfanos. In general, 61 percent of psoriasis patients have a good to excellent response to the aromatic retinoid treatment, he said. It is particularly effective in the pustular and erythrodermic types of psoriasis, he reported.

more

The scales usually start regressing about three weeks after therapy is begun, and within an additional six to eight weeks disappear.

Also, standard therapies seem to interact with the retinoids in such a way that healing occurs more rapidly and requires smaller doses of medication.

The aromatic retinoid will probably be in clinical use in Switzerland, England, France and Germany as early as this autumn. Estimates are that it may be two to three years before it reaches the market in the United States, however. The delay is due to the stringent rules of the Food and Drug Administration, groused some of those dazzled by the drug's benefits and eager to start its clinical use.

Stanford is part of a five-center clinical study now being conducted in the United States to meet the FDA's requirements.

Even the most ardent boosters of the new drugs, however, admit the retinoids carry a baggage of undesirable side effects, and until a more risk-free type is fashioned, they will only be used to treat the most severe cases of psoriasis or acne.

The most serious undesirable effects that could potentially develop are birth defects, and woman are advised to wait a year after they stop taking the drug before becoming pregnant, says Dr. Werner Bollag, head of the cancer research laboraties of Hoffmann-La Roche and Co. in Basle, Switzerland.

The aromatic retinoid also increases the level of serum lipids, putting patients with diseases such as diabetes at a greater risk than those without the disease. Other side effects include chapped lips, a drying out of the nose and mouth lining, and peeling of the palms and soles.

The hallmark of psoriasis, which results in thick, red silvery-scaled patches on the skin, is a six to seven times faster growth rate of the skin cells than is normal. Vitamin A has long been known to control the growth and differentiation of certain types of cells, such as those found on the skin, and so is a natural for treatment. But in the doses required for therapy it proved to be toxic—arthritis-like symptoms can develop, hair fall out, skin crack and peel, and the liver and spleen enlarge.

Bollag set out in the early 1970s tinkering with the vitamin A molecule, modifying it chemically, trying to eliminate the bad and enhance the good effects.

He synthesized more than 1500 different forms, and began the Herculean task of testing them in rats. One compound, a 13-cis retinoic acid, was found to be excellent for clearing up severe, inflamatory acne; the aromatic retinoic proved to better treatment for psoriasis. A workable compound for the treatment of cancer hasn't been identified yet.

In experiments with animals, retinoids effectively combatted lung, bladder, breast and colon cancers, but their inherent toxic effects caused by their buildup in the body overshadowed their cancer-combatting qualities.

So the search still goes on for a molecule that has been tailored to counter cancer but has been rid of the properties that lead to the undesirable effects, but scientists are hopeful.

7-29-81 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Harold L. Mindell, associate administrator for engineering at Yale-New Haven Hospital, has been named director of the Stanford University Hospital Modernization Project.

The appointment becomes effective October 1, 1981, said Dr. Lawrence G. Crowley, vice president for medical affairs and president of Stanford University Hospital.

In addition, Crowley announced that Elvia Garwood will become deputy director of the Modernization Project. Garwood has served as acting director since February 1981 and will continue in that role until Mindell arrives.

Mindell and Garwood will lead the Hospital's Modernization Project team, along with Dr. Michael Eliastam, who will provide liaison with faculty and community physicians, and Malinda Mitchell, R.N., who will represent the Department of Nursing Services, Crowley said.

Mindell, 55, will be responsible for overall management, design, and construction of the $115 million Hospital expansion and renovation plan, financially the largest single construction project ever undertaken by the University or the Hospital.

In appointing Mindell, an engineer, to the post, Crowley noted his extensive experience in managing other large construction projects in health care settings, most recently a $70 million replacement facility and major renovation project at Yale-New Haven Hospital in New Haven, Connecticut.

Mindell also was responsible for operations and maintenance at Yale-New Haven Hospital, supervised design and construction of the Hospital's other renovation projects and directed an energy management program.

Prior to his position at Yale-New Haven, Mindell was division manager for maintenance at the 750 bed Hadassah Hospital in Jerusalem, Israel from 1974 to 1978.

From 1951 to 1974 he was a partner in the consulting engineering firm of Dubin-Mindell-Bloome Associates, P.C. (located in New York and Hartford) where he was responsible for design of mechanical and electrical systems on construction projects totaling nearly $1 billion.

Mindell earned a B.S. degree in mechanical engineering from the University of Michigan in Ann Arbor in 1950.

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Garwood, before becoming acting director of the Modernization Project in February, was manager of major projects in the Medical Center Facilities Department and directed the renovation project for the Medical Center's Boswell clinics. From 1976 to 1979 she was a project manager in the University Facilities Office.

Garwood graduated from Cooper Union for the Advancement of Science and Art in New York City and she holds a master's degree in architecture from Yale University.

Initiation of construction on the modernization and expansion project is expected to take place sometime in 1982 with completion by 1987. The architectural firm handling the project is Naramore, Bain, Brady and Johanson of Seattle, which will establish a Palo Alto office for this project.

The project involves finishing shell space on two floors of the Hospital, new construction, and renovation of the Hospital areas vacated during departmental moves. Without increasing the number of licensed beds in the Hospital, there will be additions to the Departments of Radiology, Cardiology/Radiology, new and renovated operating rooms, a new pediatric unit, a new intensive care unit, new clinical laboratories and a 56 bed medical/surgical unit.

Some support areas will also be incorporated into the Modernization Project. These include consolidation of a materials management center, revising the main kitchen/cafeteria areas, expansion of the pharmacy, and extension of the loading dock and related support services.

Mailed Wednesday, July 29, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

The bookstore at Stanford University Medical School is scheduled to move to an expanded downtown Palo Alto location Aug. 3.

The move from a 475-square-foot store next to the student lounge at the school to the new location at 135 University Ave. at High Street will expand the floor space about five times and permit an increase of about 25 percent above the current inventory of about 3,500 titles, said Roy Hoyer, manager.

"A lot of medical schools complain about the size of their bookstore, but our situation was ridiculous," said Hoyer about the tiny bookstore which has been at the same location for about 20 years.

The move will leave the Medical Center without an on-premise bookstore, but Hoyer said he hopes increased stock, more space and longer business hours "will offset the inconvenience of the move."

The store will be open 9 a.m. to 6 p.m. Monday through Saturday, In addition, the facility will be open until 9 p.m. on Thursday.

Textbooks will be sold, and rebates previously offered to the Stanford community will be continued, Hoyer said.

Efforts were made to expand the present facility, but "despite much sympathy, neither the university nor the Medical Center has offered any hope for future accomodation of a larger store in the Medical Center," bookstore management said in a flier explaining the move.

David Mendelow, associate dean for administration at the space-scarce Medical School, said "no space contiguous to the bookstore was immediately available which could be developed economically."

The medical bookstore is a branch of Stanford Bookstore, a nonprofit corporation operated as a service to the university with a board of directors composed of faculty members and other persons in the Stanford community.

The new store will be called the Stanford Medical/Technical Division Bookstore, and will include a variety of books on a variety of scientific topics and an expanded display of medical instruments.

The store plans to mail books to customers or have books not in stock mailed directly to customers by publishers.

The tentative phone number is 327-3680. Campus interdepartment mail will reach the new facility via the main campus bookstore.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

A British nursing manager believes that competitive U.S. hospitals might successfully adopt some of the cooperative techniques of socialized medicine.

Comments on differences between U.S. and British health care came from Gill Greaves, the northwest Surrey divisional nursing officer, who recently completed a three-month study trip to Stanford University Hospital and other California health care facilities.

Greaves, who is in charge of both in- and out-patient nursing care for an eight-hospital division south of London, conceded she was sometimes a bit surprised by the differences between the competitive U.S. hospital system, and Britain, where since 1948, the government has paid for the bulk of medical care from taxes.

"The biggest difference between the two countries is that each hospital in America tends to function individually, whereas in socialized medicine, there's more of a cooperative approach."

Perhaps most striking, she said, was the commercial orientation encountered here.

"The competitive element is a good thing to have," she said. "But to me it's interesting to see to the extent to which that is carried, both within the institution and in competition with other hospitals. For instance the advertisements on the radio, actually marketing health—or ill health as it were.

"Whereas in Britain, the competition within the National Health Service (NHS) tends to be individual and internal and probably takes the form of competition to make waiting times less in one district than in another, or in the nursing service to reduce the turnover rate. Things of that nature."

But Greaves said the United States need not socialize its medical coverage to benefit from some of the administrative lessons she believes can be learned from the NHS.

For example, hospitals and health care districts in her country are managed by consensus, rather than as here with an administrator and assistants.

In each British hospital, the administration consists of a nurse manager, a finance officer, an administrator (in charge of the physical facilities), and three doctors who are voted into office by their medical colleagues for four year terms. The doctors include a consultant (specialist), a general practitioner and finally a community physician concerned with environmental medicine and school health.

On the divisional level where Greaves works, a similar team oversees a group of hospitals and outpatient health care in an area.

The managers meet formally to plan and review operations, and each member of the team has veto power in the decision making.

Greaves said that occasional disputes usually are resolved on the local level, since administrators are motivated to prove to their superiors that they can solve their own problems.

The consensus approach, Greaves believes, enables all management personnel to understand a wider range of problems and would be adaptable to the U.S. system of free enterprise health care.

"What I think it would mean is that there would be more discussion between departments and maybe more cooperation between administrators of different functions which could collectively benefit the hospital."

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At Stanford, Duane Walker, director of nursing, discussed consensus management with Greaves during her visit and has concluded from that and other research that "nursing needs to move more in that direction.

"Nursing would have a voice in planning and delivery, programs and finances, and the joint approach already is being studied in this country," Walker said.

Greaves believes that by including nursing in the top management team, her field is better represented in overall health planning. For example, one of the eight local hospitals in her district currently is scheduled to be remodeled, "and under our team approach the nurse manager is very much involved in actually planning and designing the new hospital."

Overall planning of comprehensive care is emphasized more in Britain, Greaves believes, than in the United States, where more emphasis is placed on development of acute care.

"The way we work is to take a given community of 200,000 to 300,000 population to look at the age-sex ratio and the morbidity of that population and from there determine the pattern of service which needs to be provided for that population.

"For example, if you're living on the south coast of England, you have a high population of elderly, which means that a lot of your resources must go toward the services for the elderly. And it probably means that some of the other services need not be developed to quite such an extent as in other areas where there may be more younger people.

"So on top of that there is close integration between community services and hospital services, including extensive home visitation services for patient and relative support, as well as outpatient clinics which are part of NHS.

Greaves sees that a trend in this country toward health maintenance organizations—prepaid plans such as Kaiser—is a recognition that health care must extend beyond the hospital.

Greaves is quick to deflect a stereotype that British government functions on a maximum of clerical procedure.

"I'm amazed at the amount of paperwork which is generated here and the kind of bureaucratic work here—much of it, of course related to patient billing—which we really don't have. .

"We don't have anything like JCAH (Joint Commission on Accredidations of Hospitals) or PSROs (Professional Standard Review Organizations) which in themselves generate an enormous amount of work" because they require visiting time by medical personnel and followup reports.

"That leaves people (in British health administration) to some extent freer to be innovative and creative, albeit within a given budget," Greaves said.

But she emphasized that some paperwork is at least a necessary evil, and "I do support the idea of patient care monitoring through quality assurance programs, and I think the NHS should develop more effective monitoring."

Despite some criticism, Greaves strongly praised the physical facilities she found here and said they generally appeared to be superior to those in Britain.

Also, Greaves said that at Stanford particularly—she also visited hospitals in Yuba City and Santa Barbara and around the Bay Area—"nursing research is extremely exciting....People are making a sophisticated effort to research what techniques and care is most effective for patient treatment. The proposed liaison between nurse researchers and clinical nursing coordinators as a team approach to research is impressive, she added.

Another feature of Stanford, is a mix of teaching and community physicians, which she felt enhanced both patient care and doctor training.

3-3-3 In addition, she noted that some high technology care, such as heart transplants and kidney dialysis, appeared to be more highly developed in this country, although she questioned whether this might be the best allocation of resources, which vary between the two nations.

"The U.S. spends 9 percent of its gross national product on health, while Britain spends 6.5 percent of its gross national product. So that in itself is a difference.

"But within that it depends on your philosophy of approach whether you're going to divide that up between all ages of the population on as equal a basis as possible, or whether you're going to in fact put more of your money into acute services and less into the long stay, in which case you have a less equal approach to care. I perceive that the emphasis is much more on acute care here and on more equal care in Britain."

Another difference, which Stanford's Walker noted, is that the British hospitals are smaller and tend to be more specialized. Consequently, it could be more difficult to treat multiple problems in a single facility.

For example, Greaves' division, consists of a district general hospital with 400 beds, a 50-bed acute hospital for surgery and minor casualties, three smaller community hospitals specializing in longer term care, an orthopedic hospital and two geriatric facilities.

On the larger district level, there is a maternity hospital, a 900-bed mental handicap hospital and several other specialized facilities.

Greaves contended that while the psychiatric hospital, for example, might not be set up to handle acute medical treatment, a mental patient suffering serious physical illness would be moved to the district hospital.

"You have to decide which is the more serious problem at the moment and direct your attention to that," she said.

Britain, Greaves noted, shares a common bond with the United States in a shortage of nurses. While little difficulty is encountered in recruiting nurses to the profession, many leave after a short period to come to the United States, for example, or shift to other less straining and perhaps more lucrative fields, she said.

"We need to determine how many we need to train in order to have enough nurses available to us."

Training of nurses, she added, is different between the two nations, offering a slightly different type of training in each country.

English nurses, Greaves believes, "have more clinical experience and exposure during their training than the American nurses do. But I think possibly U.S. nurses have a better theoretical base than ours....What I have seen here is that when the nurses come out of training, they need quite a lot of support and more training in order for them to be competent practitioners.

"Whereas, I think our nurses would have had about 50 percent of their time spent in clinical areas of training as part of the work force."

In Britain registered nurses attend school, usually operated on a district basis for three years, although some degree courses combined with other nursing certificates exist.

Most R.N. courses in the United States range from two to four years.

At Stanford, Walker contended that the greater clinical emphasis in England offers no advantage.

"Our nurses have the theoretical base, and it's been proven that they will learn much faster once they're at work," Walker added.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

The day of nurses catering to the demands of the doctor has ended in the United States, but elsewhere, nursing never had such a surbordinate role, contends an international nursing advisor.

"In many countries throughout the world, there are very few doctors, and nurses are the only professionals that cover the health needs of people on a national level," comments Dr. Hend Abdel-al, nurse advisor for the International Council of Nurses (ICN).

For Abdel-al, whose job is located in 58 countries around the world, the most important step lies in making governments realize that both doctors and nurses have different responsibilities and make separate contributions.

During a recent visit to Stanford University Hospital, Abdel-al summarized her views by saying nursing is a profession and not a discipline. And she feels that in many nations nurses need to be more involved at the government level of health care planning.

"Nurses make up a very large part of the health services personnel," she says, "And I think we as nurses should direct our energies at really seeing the application of our responsiblities within the health services delivery system at the national as well as local level."

Abdel-al says that within those countries where nurses are found at the government level of planning for health care and the distribution of nurses around the country, officials have found it very helpful and health services have improved.

"I think it's only logical that if you're responsible for the health service delivery that you have to be responsible for planning it and implementing it as well."

As a nurse advisor for the ICN, Abdel-al spends much of her time traveling to various countries visiting or establishing nurses' associations or representing the ICN at international meetings.

The ICN is an international federation of national nurses' associations, representing 89 countries, based in Geneva, Switzerland.

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Abdel-al's most recent visit was to the United States for the 17th Quadrennial Congress of the ICN held in Los Angeles in early July. Since then Abdel-al has traveled to the University of California at San Francisco and then Stanford University Hospital, observing various nursing research units.

Abdel-al's visit to Stanford on July 9 was spontaneous as it wasn't until the congress in Los Angeles that she became aware Stanford had a nursing research center, a relative rarity at hospitals.

Although Abdel-al's services and responsibilities for the ICN often vary, she currently is gathering information about the structures and locations of nursing research units all over the world.

Her main objective is to find out how research can help the development of nursing as a profession. This information will then be disseminated to the different national nurses associations within the ICN.

"I'm very glad that I came to Stanford because I find it fascinating and very important in supporting nurse's conceptions about what role research plays in our practice," she said.

"I think what I found most facinating is that staff nurses are the ones that somehow decide what are the problems and then get the help and the time for researching these problems."

Stanford's Director of Nursing Service Duane Walker felt that the visit was mutually beneficial as Abdel-al said she plans to use infomation gathered here in a paper she will present at the World Federation for Mental Health Congress in Manila next month.

"I think Stanford gained some real ground in being able to share with her what we're doing," said Walker. "The most revealing thing for me was realizing that our problems like the shortage of nurses and the image of nursing, whether it's a profession or discipline, are international problems and not just something we are struggling with in the United States."

As a Ph.D. graduate of the University of Edinburgh in Scotland, the Egyptian-born Abdel-al started her job at the ICN two years ago. Since then she has visited more than 23 countries through the French-speaking worlds of Europe and Africa and all of the Middle East.

Before coming to the ICN she was head of the psychiatric nursing department at Cairo University and was consultant to the Ministry of Health in Egypt.

From Stanford Abdel-al went to Seattle and then Manila for her meeting starting Aug 1.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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PALO ALTO CITY COUNCIL CONSIDERS HMP RESOLUTION

STANFORD—

The Palo Alto City Council Monday night (July 27) postponed until Aug. 9 a decision on whether to pass a resolution formally supporting the Stanford University Hospital Modernization Plan (HMP).

The resolution is not required for work to continue on the project, but hospital officials are seeking the action as a testimony of support from the council as the HMP faces review by state and county agencies.

"We are seeking the voice of a friend and neighbor who will vouch for us as we move through the governmental approval process in the weeks, months and years ahead," Lawrence G. Crowley, nford's vice president for Medical Affairs told the council Monday.

Crowley said SUH plans to seek similar resolutions from neighboring communities in the future.

Councilmember Emily Renzel, who was absent, had written her colleagues requesting a postponement until the council was able to seek assurances from Stanford on several issues, including the issue of access to hospital-based services by community physicians and financial issues relating to the hospital and HMP.

Councilmember Larry Klein, who in Renzel's absence sought the continuance Monday night, said "it was not appropriate" for the council to become involved in disucssions of Stanford finances. But he recommended—and the council subsequently adopted unanimously—his motion that a public hearing be held Aug. 3 to discuss the access question and other issues relating to the hospital's HMP request.

The hearing would be conducted by his council hospital subcommittee which will report back for full council action on the resolution Aug. 9.

Stanford asked the council to approve a resolution saying "the City of Palo Alto supports ernization of the Stanford University Hospital."

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The measure states that approval "does not constitute advance approval by the City of Palo Alto of any of the financial, environmental or physical aspects of the modernization project."

Full public hearings by the city would be held when the hospital seeks a favorable environmental impact report and building permits.

The $123.9 million HMP is intended to bring the hospital up to modern standards and fulfill the patient care and teaching needs of the community and medical center through the 1990s.

"Everything in the plan is necessary for the hospital's survival," Sheldon King, director of SUH told the council Monday.

Paul Cooney, a Palo Alto physician and clinical professor of medicine, told the council that the access question was like the "rock of Sisyphus," an obstacle which in recent years has caused discord between the hospital and some physicians and needs to be resolved.

But Cooney said he favored the HMP: "It's a given. There's no right-minded physician who wouldn't be" in favor.

Geraldine Steinberg, a lay member of the hospital board and former member of the Santa Clara County board of supervisors said "access and the need to modernize are two different issues."

Both she and Walter Arons, a Palo Alto physician who also serves on the hospital board, said that discussions between hospital and community physicians are making progress and should be conducted independently of the HMP question.

The question of access has not involved the admission of patients, since all qualified community physicians may admit their patients to SUH, and Palo Alto residents have priority for elective admissions.

At issue is the question of whether doctors who are not fulltime faculty members may have unrestricted or greater privileges to perform certain procedures in hospital or university operated labs or facilities, such as radiology.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Volunteers with high blood pressure are being sought by a Stanford University professor for an experiment to test the effects of what he described as "a rapidly acting drug."

Dr. Michael Horne of the department of psychiatry said subjects should be more than 18 years old without serious complications from their blood pressure conditions.

Testing is to last about two hours and volunteers will be taking the drug, which has no known side effects, orally, Horne said. Subjects may be taking other medication which will not be withdrawn during the test.

Horne said no compensation will be provided but volunteers will be given advice on various psychological techniques to control blood pressure if they desire.

For further information, call the Laboratory of Behavioral Medicine at Stanford University Medical Center, (415) 497-6911.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Paul Gullixson (415) 497-6911

STANFORD—

Dr. Avram Goldstein, professor of pharmacology at Stanford, has been selected as the recipient of the 1981 Torald Sollman Award.

The award is presented every three years by the American Society for Pharmacology and Experimental Therapeutics (ASPET) to the person who has made the most "unique and original" contributions to the advancement of research and education in the field of pharmacology.

Goldstein, a world authority on the use of methadone in drug addiction, is also widely recognized for his discovery and isolation of dynorphin, a natural brain chemical 200 times more powerful than morphine.

Goldstein will receive his award and give the traditional Sollman Oration in August at ASPET's Fall meeting at the University of Calgary in Alberta, Canada.

Sponsored by Wyeth Laboratories of Philadelphia, the award is named in honor of Dr. Torald Sollman for his pioneer work in the fields of pharmacological investigation and education.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Paul Gullixson (415) 497-6911

STANFORD—

Dr. Kendric C. Smith, professor of radiology has been elected vice-president of the American Institute of Biological Sciences (AIBS).

Effective Nov. 1, Smith will serve as vice president until 1982 when he will become president.

Established in 1947, the AIBS represents more than 8,000 individual members in more than 40 professional biological societies. The AIBS monitors federal activities important to the field of biology and provides advisory services to federal agencies. The Institute also is active in curriculum revision in high schools and colleges and publishes *BioScience* journal.

At Stanford since 1956, Smith is a leading expert in the field of photobiology which deals with the chemical and biological effects of light. For his expertise he was elected president of the American Society of Photobiology in 1972.

Smith also is a specialist on the effects of radiation on cells. In 1971 he was part of a team that discovered the mechanism by which cancer cells repair themselves after X-rays produce breaks in the DNA chain of cells.

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FOR INFORMATION CONTACT: Paul Gullixson (415) 497-6911

STANFORD—

Dr Gerald Reaven, professor of Medicine and head of Stanford's Division of Gerontology, has been selected to serve on two separate national advisory boards.

Reaven was one of 18 persons chosen by Health and Human Services Secretary Richard Schweiker to the newly formed National Diabetes Advisory Board of the National Institute of Health. The board includes 12 members chosen from the science profession or science related fields.

The Panel was formed by an act of Congress with the purpose of assisting national programs of research, health care, and education and control of diabetes mellitus.

"I think the board is a reflection of a growing perception by Congress and the Reagan Administration of the great importance of diabetes as a health care problem," said Reaven. "It's an exciting opportunity for the field."

Reaven was also recently reappointed to the Advisory Panel on Endocrinology for the United States Pharmacopoeial Convention (USP).

Serving until 1985, the panel members comprise one of 26 advisory boards which works in conjunction with USP and its drug-use information development programs.

Reaven, who first served on the board in 1976, was selected with nine other doctors by the advisory panel's chairman.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: Photos of instruments, Koslow and librarians available on request if not included)

STANFORD—

From a time when fainting was the only relief from the tortuous pain of a surgical saw tearing through bone and nerves comes a collection of implements detailing medical progress in recent centuries.

Several thousand pieces of medical memorabilia, recently unwrapped after two decades of obscurity in a basement, were catalogued recently at Stanford University Medical Center's Lane Library by a surgical resident with a yen for history and collectibles.

Many of the objects pay unwitting tribute to superstition.

The oldest instrument, dating back to about 1690, is a scarifier which was used to suck blood and serum from the ill. The rationale for the painful treatment now known to be useless was the ancient belief, spawned by the Greek philosopher Hippocrates, that the body was comprised of humors—bile, blood and phlegm—which needed to be drained when one became dominant.

The scarifier consists of one or more blades, about a quarter inch long, and a separate cup. After cuts were made, the cup was placed on the body heated, so that as it cooled it would draw out blood.

Later models were equipped with adjustable blades—a testament to technological skill but still fell short of today's medical knowledge.

Dating back more than 100 years are ornately carved scalpels and saws, usually with ebony or ivory handles. The intricate, artistic designs caused death for those persons whose skin was opened, since the nooks and crannies on the sculptured surfaces were marvelous spawning grounds for infection in a day before sterilization.

As recently as the turn of the current century, specially designed forceps were used to crush the heads of infants who were too large at their moment of birth to pass through their mother's pelvis. Such devices predated the now-routine Caesarean section, which allows the baby to be removed while sparing the mother and baby's life.

From dusty boxes stored in the basement for more than two decades, third year general surgery resident Alan R. Koslow identified, photographed and catalogued the collection he estimates to be valued at about $500,000.

The pieces had been wrapped in "1959 newspapers, which gives us a clue that they were wrapped up when the Medical Center moved down from San Francisco 22 year ago," Koslow said in a recent interview.

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Some of the more historicaly significant pieces, including an 1890 syringe kit belonging to Dr. Oliver Wendell Holmes, are on public view in a lone display case in the library. But most of the material remains locked up in a basement case awaiting available funds for permanent display facilities.

Peter Stangl, Lane Library director, said no arrangements have been finalized for public display of the collection, which he calls "significantly large.

"We are genuinely hoping to find some way to display these materials in a manner which will give them the respect they deserve. But even until then, the cataloguing efforts of Koslow enable our staff to preserve the valuable material we have or hope to receive in a safe and proper manner."

According to Koslow, "The important thing about the collection is the scope. It has an example of just about every major field, except for anesthesia."

Koslow is hesitant to rank the medical collection against other universities, but he estimates that it might be in the top 10 or so in the nation in terms of quality and quantity.

Most of the pieces arrived at Stanford haphazardly, often as bequests from widows or their attorneys, unsure what to do with a doctor's personal instruments.

But their fate until Koslow's arrival was uniform—obscurity.

"It was serendipity, really," said Stangl about how Koslow's talents were matched with the collection.

Claire Still, who retired recently as medical history librarian at Lane, chatted one day with Koslow and learned he had attended the University of Buffalo. She asked if he knew a young medical student who had catalogued a small implement collection there.

Koslow knew him well. It was he. And for the next few months, the surgical resident spent the miniscule hours of free time he was able to budget each week at identifying the wide array of often gruesome, sometimes beautiful, and occasionally puzzling tools.

Using a skill picked up on vacation trips, Koslow photographed—using a light box and the advice of Medical Center staff photographers—each item for additional cataloguing.

"I consider myself more of an historian than a collector in that I get as much joy from cataloguing and working with someone else's as I do from my own collection."

Koslow, an admittedly addicted collector, does maintain his own small medical artifacts collection and also, as a hobby, collects stamps—all with medical themes.

"Just about everything I do is medical," laughs Koslow.

The painstaking work for Koslow at Lane Library involved matching various implements with various catalogues, many of which were in the Lane collection.

"What you do is you look back a year at a time until the particular item isn't there anymore. Then you figure it was introduced the next year, and that's often how you date objects," he explained.

Storing data mentally is a crucial skill for the cataloguer.

"There was one particular scissors, I just couldn't identify," said Koslow. "I just kept it in the back of my mind until one day I ran across it in a catalogue."

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While the the collection as a whole, Koslow estimates, is worth about $500,000, individual implements are worth from about $5 to $300, while several large surgical kits range in value up to about $6,000.

"Those came from a day when the surgeon had to supply his own tools. The cases were ornate and the doctor carried it around from operation to operation. Before sterilization became a common practice in the last decades of the 19th century, the knives often were simply wiped off and put back in their crushed velvet container, where an often deadly array of germs waited on the metal to be inflicted into the next patient.

"We can learn a lot about medicine by looking at these knives," said Koslow. For example they would make double-sided knives, "so in an amputation they could go around first one side and then without turning the knife, they could reach around and get the other side.

"Speed was essential in the days before anesthesia, because of the humane need to finish as soon as possible to reduce the patient's suffering."

While many of the devices, including the scarifiers, are testaments to outdated and now rejected practices, the collection includes several precursors of hope.

Among these are two listerizers, looking a bit like kerosene lamps, which were used to vaporize carbolic acid as a disinfectant. Starting around 1870, these devices were the first major breathrough in surgical infection control and drastically reduced deaths.

From the 1840s comes a trephine set, used to drill holes in people's heads to release "evil humors" from the brain.

While the superstitious practice, which originated in prehistoric times, is of course extinct, the technique has been adapted to modern day surgery. Doctors occasionally cut a hole in the skull to release the pressure of blood or water on the brain.

As for Koslow, he is taking two years off after his third year of residency to pursue a two-year research project in Bethesda, Maryland under the auspices of the American Red Cross.

He is researching early signs in the development of hardening of the arteries, and he hopes after the project and two more years of residency to practice vascular surgery—and continue collecting.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Dr. Michael Eliastam, director of Stanford University Hospital's Department of Emergency Services, has been named to three new administrative posts in the Hospital and the Medical School by Dr. Lawrence G. Crowley, vice president for medical affairs.

Eliastam, 37, will continue as medical director of Emergency Services, while dividing the remainder of his time among the three functions, which include serving as faculty consultant to the Hospital Modernization Project; acting as deputy to Dr. James Silverman, Hospital chief of staff; and advising Vice President Crowley on legislative matters.

As associate director of the Stanford University Hospital Modernization Project, Eliastam will serve as the primary liaison between the Project staff and both faculty and community physicians.

In his role as deputy chief of staff for the Hospital and assistant dean for clinical affairs, Eliastam will be involved with patient care activities of medical staff and house staff physicians, and the interface between physicians and Hospital administration.

As special assistant in the vice president's office for legislative and related affairs, Eliastam will be concerned with state and federal changes in legislation likely to affect the practice of medicine.

A member of the Stanford Medical School faculty since 1974, Eliastam has just returned from a year-long leave of absence during which he was a visiting scholar at the National Center for Health Care Technology (NCHCT) in Rockville, Maryland. As special assistant to the director of the NCHCT (a division of the federal government's Department of Health and Human Services), Eliastam concentrated on medical technology assessment issues.

Eliastam's previous training and experience combine interests in medicine and public health policy.

He has been director of Emergency Services since 1974.

A native of South Africa, Eliastam received his M.D. degree from the University of Witwatersrand Medical School in Johannesburg in 1966. He completed his medical and surgical internship and residency training in Johannesburg and at Rush Presbyterian St. Luke's Medical Center in Chicago.

Eliastam earned masters' degrees in public administration and in public policy from Harvard University in 1972 and 1973. His research activities have been in the areas of paramedic care in the field, and the cost effectiveness of x-rays in the emergency setting.

—30— L108

Mailed July 22, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Henry S. Kaplan of Stanford University School of Medicine will be awarded a Gold Medal for distinguished achievements, at the American College of Radiology's (ACR) annual meeting in Las Vegas on September 23.

Kaplan, D'Ambrogio professor of radiology and director of the Stanford Cancer Biology Research Laboratory, in the 1950's conceived the use of high energy linear accelerators in radiation therapy for cancer patients, a technique that has since been used with highly successful results not only at Stanford Medical Center but in cancer centers and hospitals throughout the world.

Kaplan's pioneering work in radiation therapy techniques as well as in diagnosing stages of cancer for planning treatment strategies, has led to dramatic strides in treatment of patients with Hodgkin's disease and other cancers of the lymphatic system. As a result, today Hodgkin's disease is one of the must curable cancers.

The Gold Medal is awarded annually by the ACR, an association representing more than 17,000 physicians who specialize in radiology, to one or more radiologists who have made distinguished contributions in the field.

Receiving a Medal along with Kaplan this year will be Dr. Seymour Ochsner, of the Ochsner Clinic in New Orleans, Louisiana, the ACR said in announcing the upcoming honor.

Kaplan, who has been on the Stanford faculty since 1948, received his B.S. from the University of Chicago and his M.D. from Rush Medical College in Chicago.

An internationally respected authority on cancer and radiotherapy, Kaplan is the recipient of numerous other honors, both national and international.

—30—

L108

Mailed July 22, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: Photos of interns at work available on request)

STANFORD—

They are doctors, they are students, and each year around this time many of them are new. Their first assignment can be to save a life.

"They're somewhere between a student and a trained physician," says chief of staff Dr. James Silverman of the approximately 410 house officers contracted to Stanford University Hospital.

These interns and residents are here to learn, yet they are paid and are sometimes given the responsibility of life and death.

Faculty members and administrators often say the hospital could not be run without their help, and the logistics of their scheduling tend to support this.

Starting dates for the new crop of house staff are staggered over a 10-day period.

First come the surgery interns, June 21, followed three days later by pediatrics and a day later by medical interns. Then on July 1, the residents who have completed their service depart after giving the new doctors a five to ten day orientation.

"It is scheduled it this way to make it as minimally disruptive as possible," says Helen Rantz, who since 1967 has directed the House Staff office serving Stanford and the hospitals affiliated with its house staff program—Veteran's Administration, Santa Clara Valley Medical Center, Kaiser Hospital in Santa Clara and Children's Hospital at Stanford.

While each of the new interns, sometimes called a first-year resident, works under supervision of a resident, faculty member or community attending physician, the responsibility for split-second decision making on vital matters comes very quickly.

Bonnie Maldonado, a pediatrics intern assigned to Children's Hospital, said vital responsibility started her first night on call.

"A child was brought in with acute asthma. The resident was admitting a leukemia patient and would have come over had I needed him. But she was busy, so with the help of the nurses, I ordered medication" and took the child through to the admitting stage, said Maldonado. "He's okay, and he's going home soon."

John Cameron, who like Maldonado attended Stanford Medical School and moved straight into an internship here, works in East 1B where he cares for private medical patients.

"There is a lot of responsibility, especially on night duty, when you have to reach the attending physician on the phone. There's always help available, but there are a lot of decisions you have to make."

The work schedule for interns and residents is stiff with most of them drawing every third or fourth night on call. Some services are more hectic than others, and at particularly busy departments, such as medicine, the house stasff member might need to be up nearly the entire period of each on-call shift.

The hectic schedule is nothing new, says Rantz, who has been associated with doctors and housestaff most of her adult life. She was engaged to an intern who was later to become her husband, the late Dr. Lowell Rantz, former associate dean for clinical affairs at Stanford.

This year she processed 68 interns and 75 residents arriving at Stanford to further their education. While much of their schedule—including grueling hours and increased responsibility—are standard over the years, she has noticed that trends in recent years which have made coping as a house staff member somewhat different than in her husband's time around World War II.

"For one thing the housing situation, particularly here, is grave. We don't see as many married house staff any more. The cost of housing in this area makes it very difficult.

"So many of these people are doubling up or paying far more than their salaries would allow for housing."

—more—

2-2-2 The salaries or educational stipends which house staff receive seems generous by standards of several decades ago, when house staff pay may have been several hundred dollars a year. Rantz herself considers the pay, starting at $18,040 for Stanford Hospital interns, "rather generous, at least considering it was $8,000 ten years ago and $12,500 five years ago."

But she notes that many years ago, house staff members were provided with lodging and food in the hospital. They weren't forced to fend for themselves in a harsh economy.

Silverman agrees that housing is a serious problem and often increases the emotional toll felt by the spouses of housestaff members.

"What sometimes happens is that the resident won't find a place to live nearby. So he'll rent a tiny place a half hour or more from the hospital, and he'll leave his wife at home alone while he comes to work in the family's only car."

Subsidized or otherwise inexpensive housing near the hospital is seen as critical by Silverman if Stanford is to retain the highest quality house staff.

Already, notes Dr. Irving Schulman, chairman of the department of pediatrics, some house staff members are choosing to serve at other institutions where the cost of housing is less.

"We really have no way of telling how many people this affects. And I do think it's part of a national trend toward people staying closer to home where they're settled because the cost of relocating is so high.

"But when we've followed up in some cases, we have found highly qualified applicants who have told us they have selected other institutions in areas where the cost of living is lower."

Nevertheless, the competition for an internship or residency at Stanford remains stiff.

Schulman says he's pleased with the present crop. Over the years, he says, "the interns change as the student population in general changes.

"The ones in the '60s were different. They carried the same social concerns as the rest of the population their age with broad interests away from medicine."

Today's interns, he believes, generally direct their attention more exclusively toward medicine.

But house staff and doctors have other reasons for focusing exclusively on medicine. The grueling schedules, and Silverman says the often small circles which today's specialists in training spend their time sometimes produce an isolation which can interfere with their ability to function as total people.

"What you have, particularly in a university type setting, is radiologists who talk only to radiologists, orthopedists talking only to orthopedists," Silverman said.

More cross-pollination of disciplines and ideas, he said, would be desirable.

Yet the pressures of learning and dealing with patients remain, and Rantz says despite the changing trends, interns and residents over the years have remained a hard working group by need and dedication.

Most of the interns accept the grueling schedule, which often require 24-hour days throughout a five-year commitment.

But some of the newcomers are questioning the grind as it relates to patients.

"Last night I had one hours sleep, and there is no way I can be as alert for my patients today as I might otherwise," said Maldonado. "The schedule, not to mention the effect on me, must take its toll on patients, and that's not a good thing. Maybe that's part of the reason some physicians turn out cold. They just don't have enough time and energy always to deal with their patients as human beings.

Orientation is sometimes an awkward process, says Bill Benitz, senior resident in pediatrics.

"This year we've tried to have some orientation sessions. One of the things we've tried to generate is an attitude of teamwork. For example, we stressed the need to to treat nurses as colleagues and not just someone who is an employee. After all at the start of training the nurses really do know some more things than the intern."

Many, if not most, of the interns realize their rather raw status as doctors. Asked how she felt being called doctor, pathology intern Sara Michie replied humorously:

"Nobody around here calls you doctor when you're just starting out."

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers 497-2558 or Laura Hofstadter 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

The central campus area of Stanford probably will be sprayed with malathion droplets during the coming week, but no definite schedule has been set, Medfly Project officials reported Tuesday afternoon, July 21.

Aerial spraying in the so-called "San Mateo zone" north of Page Mill Rd. could start as early as Thursday morning. But no firm schedule has been set.

As of 9:30 a.m. Tuesday, the Stanford Hospital Department of Emergency Services reported no patients had been received with malathion-related health problems or complaints since the spray program started last week.

The Hospital's Nursing Department reported its staffing remains at an average level. While five or six pregnant women who asked for time off specifically mentioned they were leaving the area because of spraying, the total number of people asking for sick leave has not been above normal.

The Medical Center's special phone line (497-5000) with a taped message on health precautions, updated regularly as new information is obtained, has received more than 180 calls a day.

Once the spraying schedule is known, Prof. Robert Schimke, head of the Biological Sciences Department, says, "we're going to close the vents and hope for the best." Several projects inside the building could be affected by malathion.

At the Medical Center, all air intakes have filters sufficiently dense to screen out malathion droplets. As a prudent precaution to further minimize risk, the Medical Center is installing filters that will exclude particles larger than 0.3 microns in diameter in certain air intakes. Malathion droplets measure 800 microns across.

As an extra measure, the ventilation system will be turned off temporarily during spray periods, if they occur in the immediate area.

Crews organized by Grounds Manager Herb Fong have stripped primary medfly host plants of their fruit throughout the central campus area, including student housing.

More than 60 students volunteered to help strip fruit. This effort was coordinated by students Susan Shepherd and Barbara Hecht at Escondido Village.

University crews picked up bagged fruit voluntarily stripped in the faculty-staff housing area.

7/21/81 —30— 13

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Paul Gullixson (415) 497-6911

STANFORD—

Four members of the Salinas media were the guests of honor at a Stanford luncheon this week (July 13) where they received certificates for their participation in the Stanford Heart Disease Prevention Program (SHDPP).

The awards were in appreciation to the men for broadcasting Program information in Spanish to the Mexican-American Community in the Monterey-Salinas area.

"Unless you have a newspaper column or a news broadcast nothing can happen for a program like this," said SHDPP Chairman John Farquhar, who presented the certificates. " You build on that stong foundation."

Media leaders honored were Tony Trevino and Martin Kline both of radio station KCTY, Salinas; Armando Guzman of KSBW television channel 8, Salinas; and Oscar Parodi of Salinas' El Sol newspaper.

The-year-old program is a mass education and prevention plan against heart disease in the Monterey, Salinas, and Pacific Grove communities.

7-14-81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (Story written by Lisa Ames) (415) 497-6911

STANFORD—

There was a time when a housekeeper's training consisted of the simple command: "Get rid of the dirt!"

Not anymore. Nowadays, like everything else affected by modern technology, institutional housekeeping has become complicated business.

Especially in places like hospitals, explains Maria Sosa, daytime area coordinator of Housekeeping at Stanford University Hospital. Says Sosa, who supervises five supervisors, "You have to really teach your employees to be very careful—especially in critical care areas."

The National Executive Housekeepers Association, Inc. (NEHA) is one organization that helps spread information on recent advances in the field. NEHA provides housekeeping management staff with a 320-hour educational program of courses in sociology, psychology, economics, management, communications, safety practices, environmental controls and more.

Sosa and six fellow members of the Hospital's housekeeping staff recently completed the program, qualifying to apply for certification as members of the association.

Karl Hickethier, executive housekeeper of the Hospital, is himself a certified member (he and three others previously completed the program). Eligible employees wishing to participate, he explains, are awarded educational leave time to do so. They are paid regularly and reimbursed for tuition costs.

Hickethier recognized early the need to keep in step with ever-changing requirements of the job. It's been largely through his efforts, in fact, that Stanford staff are joining NEHA. Recalls Sosa, "Karl encouraged us to take this opportunity for our own good."

Housekeeping is like any other field, she says, in that higher positions demand increasingly higher standards and credentials.

Agrees Donald Utt, associate administrator of the Hospital, "This program qualifies the employees for promotion. And certification is really a recognition of their skills."

Several years ago, he says, the Hospital began to send housekeeping staff members out of town—to the mid-west or the east coast—in order to attend the program. Sosa and her colleagues completed their first 160 hours during an intensive month in Oklahoma four years back.

Luckily for westerners, though, since March of 1980 the program has been sponsored at U.C. Santa Cruz. The courses, three full days apiece, are given at the Veterans Administration Hospital in Palo Alto.

NEHA's members include housekeeping management staff from hospitals, nursing homes, hotels, motels, schools, industries, department stores, office buildings, recreation centers and parks. They concentrate on seeking housekeeping improvements that are both effective and economical.

And they look for new members. Sosa, now ready to apply for certification herself, intends to help in active recruitment efforts as soon as she's officially on board.

7/14/81 -30-

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Paul Gullixson (415) 497-6911

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7-14-81

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STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Stanford University Medical Center will reimburse Medicare approximately $1.5 million as a result of adjustments on the Medical Center's cost claims for services rendered by Stanford faculty physicians to Medicare patients for the years 1975 through 1977.

A report issued June 29 by the Department of Health and Human Services Audit Agency in San Francisco approves adjustments proposed by Stanford's Medicare intermediary, Blue Cross of Northern California, and clarifies principles to be used by Stanford in preparing annual cost claims for faculty physicians' indirect services to Medicare patients.

The principles are the same as those agreed upon in January 1979 by Stanford and the California Department of Health Services for services provided to Medi-Cal patients.

These reimbursement principles, applied retroactively, lower by about $1.5 million the cost claims Stanford submitted to Medicare for the three year period, 1975-1977, during which Medicare's total cost reimbursement to Stanford was approximately $58 million (an adjustment of about 2.6 percent.)

Stanford has been using these principles to prepare its cost claims since 1978 so no further adjustments for this issue are anticipated.

After concluding the agreement with Medi-Cal in January 1979, Stanford brought the Medi-Cal settlement to the attention of Medicare officials in March of that year, believing that the same agreed upon cost reimbursement principles would apply to the Medicare program as well.

Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean of the School of Medicine, said that Stanford is pleased that the reimbursement issue with Medicare now has also been resolved.

"The present agreement with federal officials is entirely consistent with the principles of reimbursement that were agreed upon back in 1979 with California's Department of Health Services for Medi-Cal," Crowley added.

Under Medicare law, teaching institutions may recover costs, on an annual basis, for indirect patient services provided by faculty physicians to Medicare patients. Such services include medical administration, medical direction, and supervision of the services rendered by interns and residents.

The principles settled in the Medicare agreement, as with Medi-Cal, cover these areas:

- faculty patient care efforts are determined by use of an effort report prepared by the individual faculty members;
- direct medical and surgical professional services to Medicare patients are reimbursed through payment of a professional fee;
- indirect faculty effort towards providing professional services to Medicare patients are paid for by Medicare to the institution through the hospital cost reimbursement system.

Crowley said that, following the Medi-Cal settlement, the Medical School anticipated a similar adjustment would be agreed upon with Medicare and the School established reserves to pay back the amount claimed by Medicare for the three year period.

7-13-81 —30— L108

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

This information is being provided as a community service by Stanford University Medical Center. It will be updated as further guidelines are received from state authorities. These recommendations are based on data from a report of the California Department of Health Services which states, "there is no significant health risk involved in the proposed aerial application of malathion."

During spraying:

— stay indoors, and close windows. Avoid pulling air into house through fans or air conditioner. This also applies to automobile travel.

For the duration of the Medfly project and after each spraying, the following is advised:

— Avoid contamination of your home by washing exposed areas of body, wiping feet or leaving shoes at the door.

— Infants and children should also be washed following exposure and according to usual cleanliness habits.

— Food exposed to spray should be washed before eating.

If a woman is known or suspected to be pregnant, (particularly in the first three months of pregnacy), since it is not known if long term risks exist, we recommend she follow the above advice and also stay indoors the day following spraying if possible.

The above recommendations are prudent guidelines based on available information. Past spraying experience with malathion suggests that health risks are small.

7-10-81 —30—

released 7-2-81 - evening - Bay City News
dropped after Pen. Times-Trib, S.J. Mercury

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: MIKE GOODKIND (415) 497-6911; OR HOME (415)367-7685

STANFORD-SEVEN MILD CASES OF HEPATITIS A WERE CONFIRMED BY LABORATORY TESTS THURSDAY AMONG THE 450 PERSONS ADVISED IN JUNE BY STANFORD UNIVERSITY MEDICAL CENTER TO SEEK GAMMA GLOBULIN TO PREVENT THE DISEASE.

IN ADDITION; KAREN AXNICK; INFECTION CONTROL SUPERVISOR AT STANFORD UNIVERSITY HOSPITAL; SAID BLOOD TESTS WERE PENDING ON FOUR OTHER PERSONS-ALSO EMPLOYEES OF THE MEDICAL CENTER-WHO WERE BELIEVED TO HAVE CONTRACTED THE DISEASE FROM AN AFFECTED FOODHANDLER.

AXNICK SAID ALL OF THE 11 STAFF MEMBERS HAD DEVELOPED ONLY MILD SYMPTOMS AND SEVERAL MIGHT NOT HAVE REPORTED THEIR SYMPTOMS HAD THEY NOT BEEN WARNED OF THE POSSIBLE RISK AFTER EATING CATERED FOOD.

THE SEVEN CONFIRMED CASES; SHE SAID; WERE ROUTINELY REPORTED TO THE SANTA CLARA COUNTY HEALTH DEPARTMENT.

NO HOSPITAL PATIENTS HAVE EXHIBITED SYMPTOMS OF THE DISEASE AND NONE OF THE INFECTED PERSONS WERE SERIOUSLY ILL OR NEEDED TO BE HOSPITALIZED; AXNICK SAID.

THE ADVICE TO SEEK GAMMA GLOBULIN SHOTS WAS ISSUED TO PERSONS WHO ATE CATERED MEDICAL CENTER MEALS BETWEEN MAY 16 AND JUNE 5 AFTER THE INFECTION WAS CONFIRMED IN THE CATERING UNIT FOODHANDLER ON JUNE 12.

THE EMPLOYEE; A BURLINGAME RESIDENT WHO WORKED AT THE CENTER FOR ABOUT FIVE MONTHS; PREPARED FOOD ONLY FOR CATERED LUNCHEONS AND NEVER HANDLED FOOD GOING TO PATIENTS OR PERSONS EATING IN THE HOSPITAL'S CAFETERIA; SAID JOHN VARNADO; DIRECTOR OF DIETETICS.

THE FOOD SERVICES EMPLOYEE STOPPED WORK JUNE 5 WHEN HE DEVELOPED THE FIRST SYMPTOMS; WHICH NORMALLY ARE FATIGUE; HEADACHES OR STOMACH UPSET.

AXNICK SAID FURTHER CASES AMONG THE GROUP EATING CATERED MEALS WERE POSSIBLE UP UNTIL ABOUT JULY 17; SINCE SYMPTOMS OF THE DISEASE NORMALLY DEVELOP WITHIN SIX WEEKS OF EXPOSURE.

HEPATITIS A IS A VIRUS INFECTING THE LIVER; WHICH INFREQUENTLY REQUIRES HOSPITALIZATION AND ALMOST NEVER PRODUCES LONGTERM DISABILITY. SYMPTOMS; SAID AXNICK; ARE MUCH LESS SEVERE THAN THE MORE VIRULENT HEPATITIS B.

NORMALLY; AXNICK SAID; CLOSE PHYSICAL CONTACT OR INGESTION OF FOOD HANDLED BY AN INFECTED PERSON IS REQUIRED TO TRANSMIT THE AILMENT.

AS A PRECAUTION; DR. THOMAS MERIGAN; HOSPITAL EPIDEMIOLOGIST; SAID THURSDAY AN INVESTIGATION WAS CONTINUING IN AN EFFORT TO LEARN IF THE RECENTLY INFECTED STAFF MEMBERS POSED A THREAT TO OTHERS; INCLUDING FAMILY MEMBERS; HOSPITAL EMPLOYEES AND PATIENTS.

''THE FOLLOWUP MEASURES WILL NOT HAVE TO BE NEARLY AS EXTENSIVE FOR THE RECENTLY INFECTED EMPLOYEES; SINCE THEIR ABILITY TO TRANSMIT THE DISEASE TO OTHERS IS SIGNFICANTLY LESS THAN THE DIETARY WORKER WHO PREPARES FOOD; A MAJOR TRANSMITTER OF THE AILMENT;'' MERIGAN SAID.

THE 11 PERSONS WITH RECENTLY CONFIRMED OR SUSPECTED CASES INCLUDE ADMINISTRATORS; DOCTORS; AND SECRETARIES.

-30-

7-2-81

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Gift income to Stanford University Medical School has reached record levels with three months remaining in the fiscal year, a fundraiser said Wednesday (July 1).

For the nine-month period ending May 31, gifts to the Medical School totaled $18.5 million, a 25 percent increase from the $13 million for the same period a year ago, said John Ford, director of medical development. The nine-month figure has already surpassed the previous record of $16.5 million for a 12 month fiscal year, set three years ago.

A total of 2,796 living individuals gave $6 million, Ford said.

"One major reason for this encouraging rise," said Ford, "is that we have two compelling projects which have attracted interest and support."

A cardiovascular research building generated gifts totaling $3.7 million, including $2.8 million from an anonymous donor. Last year, a gift of $4 million from the Max C. Fleischmann Foundation of Reno initiated the fund drive for the building.

The 30,000 square foot facility is expected to be completed in about two years. It will house the research and academic programs of cardiology, headed by Dr. Donald Harrison, and cardiovascular surgery, including Stanford's well-known transplantation program led by Dr. Norman Shumway.

About $2 million of the $14 million gift total still needs to be raised for the building, Ford said. All of the money for the center is expected to come from gifts.

The second project is the renovation of the Boswell Clinics, the primary outpatient treatment facility at the medical center. The James G. Boswell Foundation of Los Angeles gave $2 million for the project during the current fiscal year. The foundation gave an initial $1 million five years ago.

All except $600,000 of the $4.6 million needed for renovation is to come from gifts. The balance is slated to come from fees and other clinic income.

Renovation is scheduled to begin this summer and is expected to be completed in stages during the next few years, according to Mary Lou Kilcline, a Medical Center administrator.

Ford noted that many faculty members have been particularly active in support of fundraising during the year.

Shumway and Harrison, for example, participated in many events in support of the cardiovascular building, and faculty-initiated, industry-affiliated programs in the Department of Biochemistry and Medicine have generated unrestricted gift support for those departments.

"With the present budget climate in Washington," says Ford, "our faculty have shown great initiative in seeking private research funds to pick up any decrease in federal funding."

Business, industry, foundations and associations are a crucial source of funding for the Medical School and Stanford as a whole.

During the current fiscal year, in the business and industry category, 151 donors gave $1.8 million, 54 foundations offered $4.6 million and 47 associations gave $1.3 million.

Twenty bequests accounted for $5 million, and about 30 percent of the Medical School's living alumni gave $250.000. Ford said.

7-1-81

—30—

M18

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

EDITORS: Photos available upon request.

STANFORD—

Thirty-four new graduates of the Stanford-Foothill Primary Care Associate Program stepped forward last week to receive their certificates of clinical proficiency as physician's assistants and family nurse practitioners.

The ceremony, which was held in Grant Courtyard of the Medical School, marked the end of a vigorous two years of training for these young people, said Victoria Demartini, student affairs coordinator.

The program, she explained, is based on a dedication towards medically underserved populations, among whom many of the trainees have lived or worked. And most intend to return, carrying new skills and knowledge to places their services are most needed.

The physician's assistants are now ready to practice in conjunction with physicians. They have been trained to do physical exams, take medical histories, assess and manage common acute and chronic medical conditions, treat wounds, and provide health education and counseling.

An underlying purpose of the program was well articulated at the Friday ceremony by guest speaker John Vasconcellos, when he said, "There has been a shift in our society recently, to recognizing that there are many different levels of primary health care and various kinds of training appropriate for providing responsible and skillful health care services."

Vasconcellos is an eight-term assemblyman representing the twenty-third district in the California legislature. He was invited to speak at the graduation, said Demartini, because of his efforts to promote legislation in the health field.

Program director Virginia Fowkes, also speaking at the ceremony, commented to the audience of graduates and their families, "Since this is a relatively new form of health care delivery, the eyes of the nation are upon you as you make your way into communities, and into practice."

The Primary Care Associate Program, which graduated its first class in 1973, is a training course that Stanford runs jointly with a consortium of community colleges around the state, including Foothill College in Los Altos, Hartnell Community College in Salinas, Modesto Junior College, Bakersfield Community College, and College of the Redwoods in Eureka.

The program is currently government-funded, and tuition-free for legal residents of California.

Trainees spend their first year in pre-clinical classroom work at one of the participating colleges. During the second year they carry out clinical work, coordinated through Stanford University Medical Center and consisting of didactic and clinical teaching at Stanford as well as preceptorship training with a physician in the community.

—30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

A joint Stanford-federal program, which during the past decade tapped space agency expertise to produce several significant developments in medical care, is to be disbanded at the end of the year.

The demise of Stanford's Biomedical Applications Team (BATeam) may seriously cut off or eliminate the ability to transfer National Aeronautics and Space Administration knowledge to civilian medical applications, say several federal authorities and Stanford personnel.

"It's going to interfere with the transfer of a lot of technology that we have had access to and curtail monitoring of activities here that NASA has had available," said Dr. Donald C. Harrison, chief of the division of cardiology and executive director of the BATeam.

"This loss of funding is the culmination of what amounts to a fairly long decline in NASA's budgeting for us, and I think in NASA's longterm devotion to technology utilization," said Harry Miller, administrative manager for the Division of Cardiology, who helped set up the BATeam 10 years ago.

Since its inception, the BATeam has developed a talking wheelchair, a safe device to monitor brain pressure in head injury patients, and magnetic measurement devices which allow doctors to monitor complex cardiac defects without the danger of inserting chemicals or mechanical probes into the heart.

Stan Miller, technology utilization officer at NASA's Ames Research Center in Mountain View, said the teams nationwide were "being phased out as part of the continuing belt-tightening that NASA has had to face."

The Stanford BATeam, which worked closely with nearby Ames, was a year ago one of seven similar technology transfer groups. Since then, five of the teams were eliminated or, like Stanford, being phased out this year.

The Stanford group, said local BATeam director Gary Steinman, has received $50,000 in funding from NASA to allow the team's three full-time and five part-time employees to wrap up loose ends by Dec. 31.

The team was headed since its inception by Harrison, who along with Harry Miller founded the team as an offshoot of existing research in the Division of Cardiology. Both men continue to serve as part-time officers along with their cardiology duties. Steinman, biomedical engineer Luke Brennan and secretary Margo Ballamy are the full-time employees.

Another BATeam currently is operating at Research Triangle Institute (RTI) in North Carolina. The other remaining technology transfer team, concerned primarily with transportation applications, remains at SRI International in Menlo Park, Calif..

Ray Whitten, acting chief for terrestrial applications at NASA in Washington, said RTI's and SRI's groups were the two teams chosen to continue "because they are the two oldest. These teams have a broader perspective. And since we are phasing out, we thought these teams would be the best to do that," he said.

The Stanford team, said Harry Miller, has been funded during the past 10 years at up to $265,000 per year. Last year's funding was $200,000.

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Essentially, Whitten explained, the teams acted as brokers, identifying civilian problems and then seeking solutions within the vast bank of data NASA has collected over the years from its space program.

While many of the other teams contracted out the actual research, Steinman and Miller noted that Stanford was uniquely able to do its own research in a variety of clinical and laboratory settings within the university.

Harold Sandler, chief of the biomedical research division at Ames agreed that the loss of a research institution as a team sponsor was significiant.

"With the demise of active participation of medical groups, of which Stanford represents the best that NASA has at this time, the reliance for medically based transfers are going to fall on the industrial community, because as I understand it, we are going to function with RTI being the main interface between the medical community and NASA. The way in which they will work would be to try and be aware throughout the medical system and then broker ideas through industrial channels to the medical community, rather than trying to work with the medical community directly.

"...I believe that would constrict the potential of usable information to transfer to less than a quarter of what would be possible otherwise, since there is no company that is going to be willing to risk an investment until they have some preliminary evidence that something is worth investing in. And all the easy things have been pretty much covered."

Other medically oriented BATeams (as contrasted with the other technology transfer teams) had existed in the past decade in Houston, Denver and most recently, the University of Wisconsin.

Regarding the team approach in general, Whitten added:

"Since the early 1960s, "it's been pretty well proven that without a catalyst, without somebody moving between technology development and technology needs, the transfer didn't take place."

Stanford's Miller said, "Our mission for NASA as it's been stated in the last few years is to identify important medical problems that are amenable to technological solutions.

"Then we try to identify NASA technologies which might be uniquely applicable to solving the problems, adapting that technology and evaluating the resulting application to see if it can be commercialized," Miller said.

Commonly, said Miller, Stanford makes its technology available for nonexclusive production to commercial firms. In the case of the talking wheelchair, Children's Hospital at Stanford, which participated in the development, holds a royalty free license, which is to be issued to a Huntington Beach firm—Computers for the Physically Handicapped—for production.

The device, will enable wheelchair patients unable to speak, to write statements on a keyboard which will be vocalized by a speaker on the unit.

The device is programmed to translate written language into a variety of synthesized sounds and can be readily reprogrammed into languages other than English.

Whitten pointed to the talking wheelchair, or versatile portable speech prosthesis, as one of two of the outstanding technology transfer developments to emerge from the Stanford team.

The other, he noted, was the intracranial pressure (ICP) monitoring system for neurosurgery patients requiring continuous monitoring of pressure on the brain. A small transmitter is inserted in the skull between the scalp and the exterior of the brain sac.

The equipment overcomes several earlier problems with pressure monitoring devices in that it requires no awkward permanent transmission lines and does not require the brain sac to be punctured, which poses a risk of injury and infection.

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NASA's Sandler said the ICP device offers an outstanding opportunity for widespread use and could eventually be used extensively and routinely for such occurrences as motorcycle accidents.

The brain pressure measuring device was adapted from the technology used to measure wind pressure on airfoils in a wind tunnel. The transmitter was adapted from biotelemetry instruments used to measure the medical condition of astronauts in space.

"It required a lot of creative insight to come up with this new application from the two seemingly unrelated technolgies," Whitten said.

The device is to be manufactured by Pacesetter Systems Inc. of Sylmar, Calif., under a nonexclusive license. Stanford will make the technology available without royalty fees but with the understanding that other companies wishing to manufacture the device will be given the same rights.

Stanford has additional contracts with NASA which will not be affected by the BATeam breakup, and some ongoing projects, such as the talking wheelchair, are developed far enough that they will continue under other auspices.

But Miller said further development could be impeded by the cutback. NASA's Stan Miller said his agency would still make information available to civilians, but he added, "It will be more difficult to get these ideas pried out."

And NASA's Whitten said, "What we're going to try and do is continue the technology transfer. But it will be harder without the teams. The teams formed a very important brokerage role."

Nationally, he explained, the teams were budgeted for some $1.1 million per year with about 85 projects in various stages of development. The funding level, he said, enabled NASA to comply with the federal technology innovation act of 1980, which requires that .5 percent of research and development budgets of agencies such as NASA be used for technology transfer to civilians.

He said it is unclear whether his agency will be in compliance after cutbacks in the technology transfer program are completed next year.

8-24-81 —30— mg20

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

White inmates in a California youth prison behave with more hostility toward other ethnic groups than blacks or Mexican-Americans, two Stanford University psychiatrists have concluded.

Moreover, their study showed white inmate leaders tend to be more hostile toward other groups than their followers, while blacks and Mexican-American leaders were more tolerant of different races than other members of their ethnic group.

The study by Dr. Adolf Pfefferbaum and Dr. Norman I. Dishotsky was published in the August issue of the *American Journal of Psychiatry* and was based on field work at a California Youth Authority center.

Pfefferbaum said the study appears to be most significant because it calls into question a popular notion that individual personality is the sole determinant of prejudice.

"We didn't want to challenge the notion of personality as a factor in prejudice, but what we did find was that social factors—including relationships within a peer group and incarceration—were important in determining race relations," Pfefferbaum said.

Of 1,000 wards at the center, 350 were identified by ethnic group and categorized as leaders or followers. The study group included 151 whites, 104 blacks and 65 Mexican-Americans aged 16 to 21.

Each ward was rated by five supervisors, whom were asked the question, "How does the ward relate to his own and other ethnic groups?" The supervisors were told to categorize each youth's racial hostility on a five-point scale with one indicating cooperation, five indicating maximum hostility.

Among the whites, leaders averaged 3.0 in their attitude toward blacks, while their followers tended to be more tolerant toward blacks with an average score of 2.6.

In contrast, black leaders were more tolerant than their followers toward whites, scoring 1.9 for the leaders, 2.3 for the followers. Mexican-American leaders scored 2.0 toward blacks, significantly more tolerant than their followers who averaged 2.7.

The figures, said Pfefferbaum, tended to question another common notion: that prejudiced people are unselective in their hatred of other groups.

The study showed that while blacks and Mexican-Americans tended not to distinguish in their feelings of cooperation between each of the other two groups, whites were signifcantly more prejudiced toward blacks than toward Mexican-Americans.

White leaders scored 2.6 in their feelings for Mexican-Americans, contrasted with the more hostile 3.0 figure in their attitude toward blacks.

Pfefferbaum said that he became interested in the subject of ethnic prejudice among incarcerated youth during a visit several years ago to a facility where he observed some white wards with swastika tattoos and other over symbols of the Neo-Nazi movement.

"What we found," said Dishotsky, "is that their knowledge or understanding of German Naziism was minimal, highly distorted or nonexistent.

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"There is very little indication that there is much potential for a mass movement, but there certainly is a movement within the prison environment. What therefore happens is that people exposed to the prison environment are exposed to a much more racist feeling than the population at large."

Both researchers suggested that major shifts in the prison population during the past two decades—in which the proportion of blacks and Hispanics have grown—have led to the decline in power and status within the American prison system of whites.

This, the psychiatrists said, contributes to a white power backlash.

Pfefferbaum also speculated—but quickly added that his theory was untested—that white youths came from more varied backgrounds and had not been required to think of themselves as part of a a threatened group before entering prison.

On the other hand, Pfefferbaum said many of the blacks and Mexican-Americans may have come from minority communities where a strong sense of group identity and an ethic of mutual protection was strong.

Both psychiatrists suggested that the reasons behind the differing attitudes might be worthy of a future study. And they emphasized that a study was warranted to avoid the major pitfall of studying prejudice—making assumptions without adequate data.

"There isn't an awful lot of stuff written about racism that is data bound. One of the things that we did was collect information and work from that without making a lot of assumptions.

Dishotsky added:

"What we feel we have here is a methodology of measuring racial tensions. And we think that a quantitative method of measuring prejudice in the penal system might help predict where an outbreak of violence might occur in the future.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

The working nurse is target of a new educational program to begin this fall at Stanford University Hospital.

Specifically, the new program is designed for the working nurse without a bachelor's degree, who wishes to earn one while remaining on the job.

Stanford's Department of Nursing Services has joined forces with San Jose State University's Department of Nursing to provide this opportunity. Through their combined efforts, a program—to be housed at Stanford—has been set up as an outreach option of San Jose's already existing program in nurses' training.

Participants in the new program will use packets of self-instructional material to do much of the learning on their own. Classes will be scheduled as often or as rarely as the students and instructor deem appropriate. And the location for meeting will be equally flexible.

Open to all licensed R.N.'s in the community with a satisfactory academic record, the program will be taught by members of the regular faculty at San Jose. Resources and study space will be available at the Stanford Learning Center, almost ready in Suite 327, Nursing Education Services, at 701 Welch Road.

Why has Stanford become involved in this program? To provide nurses with the chance to pursue their training locally and conveniently, according to Julie Shinn of Nursing Education Services, as well as to help in the Hospital's nursing recruitment efforts. "For nurses considering Stanford," she explains, "it's an added advantage."

"What we're providing," explains Louise Trygstad, coordinator for community outreach at San Jose, "is an alternative pathway through the regular program at San Jose, where nursing students begin as freshmen and end up with a B.S. degree. This new program will have the very same outcome for students who are already R.N.'s."

Most prospective students, she says, will have two-year degrees from community or junior colleges. Those accepted into the program will pay a fixed amount per semester in fees, no matter how many courses they opt to take at any one time.

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"How long each student takes to finish the degree will be a totally individual matter," says Trygstad.

Another added attraction for R.N.'s, she continues, is that they may be exempted from taking many of the nursing courses required for other students. This, naturally, is because they have already studied the basics of nursing in order to be licensed by the state.

In order to receive credit for those courses, however, the nurses will still have to pass "challenge examinations," says Trygstad, after studying the course materials available among the program's resources. And all students will have to take the equivalent of San Jose's senior year in nursing, since that is the one leading to the degree after licensure. Senior year's focus, she says, is community health and research.

The program can accommodate as many as 25 students per semester in each center (San Jose is also setting one up at Hartnell in Salinas.) The first session at Stanford will begin in September.

Anyone wishing to apply in time for the next "challenge exams," scheduled to take place in December, should contact Trygstad by the end of September, at (408) 277-2084. But prospective students, she says, should first attend a group advisement session in order to find out more about the program.

The first such session coming up is slated for August 28, at 10 a.m., in room M110 of Stanford Medical School, when Trygstad will be on hand to answer further questions which anyone may have.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind, (415) 497-6911 or Maureen Roskoph, 497-7105

STANFORD—

A blood center tailored for the often-complex and specialized needs of Stanford University Hospital is scheduled to begin accepting public donors Aug. 25.

The Stanford University Blood Bank at 800 Welch Road is set up to handle about 65 donors daily, said donor recruiter Maureen Roskoph. Previously, the location housed only the bank's administrative offices, but the newly opened facilities contains not only donor facilities, including adjacent free parking, but also a processing lab.

"All of our blood stays in the community," Roskoph said, "and that means each donor is assured that he or she is helping a member of this immediate area."

Although Stanford Hospital conducts extensive research, Roskoph emphasized that all blood is used by patients, unless the donor is informed in advance that his blood is required for research.

The center is equipped with specialized equipment, including an irradiator, which is needed to prepare blood for heart transplant patients. Also in use is a central alarm monitor system, which lab supervisor Teri Lawrence said is unique among California blood banks.

Six temperature sensors in blood storage areas are connected to the machine. Whenever the temperature starts moving away from the optimum temperature for blood storage, an alarm is sounded.

The lab and storage facilities are new. Previously, Roskoph said, all lab work was performed in the hospital's transfusion service work area. The facility at 800 Welch Road previously housed only the blood bank's offices.

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The donor center is open 8:30 a.m. to 8 p.m. on Tuesdays; 8:30 to 6 p.m. on Wednesdays and Thursday; 8:30 to 3:30 p.m. on Fridays and 9 a.m. to noon on Saturdays.

The center is closed on Monday, when the crew will be accepting donations as they have in the past at Stanford University Hospital. Mobile crews will continue to visit various industrial and other locations in the community by invitation on weekdays, Roskoph said.

Appointments are preferred at the new center, which features three beds for regular donations, as well as a bed for pheresis donations, the selective drawing of particular blood components needed for a specific patient.

The Stanford blood bank is a member of the American Association of Blood Banks. Donors, who may give once every 56 days, are entitled through the association to receive one unit of blood without replacement fee for themselves or anyone they designate for a year for each unit they donate.

The replacement fee is a charge above the amount ordinarily paid by insurance companies as an inducement for people to give blood. The Stanford blood bank does not charge such a fee for its own blood, but does assess the fee for supplementary units purchased from other banks.

The Stanford University Blood Bank was established in 1979 after officials determined that the university needed to operate its own facility, because of unique medical and research needs, including the organ transplant program, treatment of leukemia, and disorders of the immune system.

A contract between the university and the American Red Cross to operate a blood bank in Stanford Industrial Park expired at the end of 1979.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Paul Gullixson (415) 497-6911

STANFORD—

Dr. Robert Hill, chief of medicine at Palo Alto Medical Clinic, was recently elected president of the Stanford University Hospital Medical Staff.

As president Hill will serve for two years and assist chief of staff Dr. James Silverman with such administrative tasks as committee appointments. In addition, he will represent the medical staff at Hospital staff meetings.

A clinic partner since 1958 and a member of the Hospital staff since 1956, Hill is presently on the board of directors of Community Physicians for Patient Care.

This organization of local private doctors was formed in 1978 in action against restrictions placed on them by Stanford Hospital.

Hill was chosen by the active medical staff members for his past membership on such panels as the By-Laws committee, the Joint-Conference committee and the Medical Records committee. He also is a seven-year member and past chairman of the Patient Care Evaluation Committee.

In addition Hill has served as chief of the former Palo Alto Medical Staff and twice as a member of the Stanford Medical Board.

He received his undergraduate degree at Drake University in Iowa and his M.D. at the Indiana School of Medicine in Indianapolis.

8-20-81 —30— MG20

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

EDITORS: Details follow asterisks.

FOR IMMEDIATE RELEASE

STANFORD—

A Stanford surgeon has cited a 1975 faculty study as evidence the University covered up possible fraud in medical research by a faculty colleague.

The University has denied the charge, which comes from Dr. Eugene Dong, a self-described "whistle blower" engaged in a complex, bitter and continuing legal controversy since 1979 with Dr. Zoltan Lucas and Stanford.

Both are tenured associate professors of surgery. None of the allegations involve patient care.

Responding to Dong's charges in a brief filed with the California appellate court, attorneys for the University quote the 1975 study as concluding that "the question of fabrication and fraud (by Lucas) is unresolved." The court has upheld the University's contention the report itself should remain private.

Documents recently filed with a petition for a rehearing on discovery issues in the two-year-old case indicate Dong has obtained a copy of the report, but not through University officials.

In an interview, Dr. George Feigen, who headed the 1975 study, said the committee found probable cause to further investigate Dong's allegation of fraud by Lucas but did not "sit in judgment" on the case.

Feigen said he was "upset" at the "inadequate" response to the committee's recommendation that hearings be held on Dong's charges.

While no hearings were held, "I don't think the University covered up fraud," he declared.

"The machinery kind of creaks and groans. It's unfortunate that this carried on so long, but I don't construe it as a coverup," Feigen said, particularly in view of subsequent disciplinary action by the University against Lucas.

Lucas was publicly reprimanded by Stanford President Richard W. Lyman in March 1979 and suspended without pay for 12 weeks for professional misconduct in his research. Lucas admitted that 18 citations of his scientific papers were in error between 1967 and 1977.

One of two research grants Lucas held from the National Institute of Health in 1979 expired last year. The other will end in December. Lucas has requested a leave effective Oct. 1.

* * *

In 1973, 1975, and 1977 Dong raised questions concerning Lucas' work.

Three different internal groups were established to investigate Dong's claims. Counterclaims by Lucas against Dong were reviewed by the Dean's Office and it was determined that no action against Dong was indicated.

The University has consistently sought to maintain the confidentiality of all these internal reviews, a position basically sustained by the state appellate court.

In his current suit against Lucas and Stanford, Dong alleges that the University kept him "in the dark" about the Feigen committee's findings and "lied" to him and the public about what these investigators thought of his allegations against Lucas.

To support his claim, Dong includes a copy of the committee's letter to former Surgery Department Chairman James Mark in October, 1975, recommending further investigation of the charges against Lucas.

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Besides Feigen, the committee included Prof. Leonard Herzenberg, a Stanford geneticist, and Associate Prof. Robert Mishell, a UC-Berkeley immunologist.

In a recent interview, Feigen said he telephoned former Medical Affairs Vice-President Clayton Rich "a couple of times and had a session with him" in person. But Rich indicated there was no appropriate mechanism for further action, according to Feigen.

(The Advisory Board, a group of seven tenured faculty elected by their colleagues, may hold hearings and make recommendations if the University president proposes disciplinary sanctions against tenured faculty members. No sanctions were proposed in 1975. Four years later, there was no appeal to the Advisory Board by Lucas on the sanctions imposed by Lyman.)

Early in 1976, in response to a request from Lucas, the Feigen committee considered additional information from Lucas, circulated to them by Feigen. "This didn't change anyone's mind" about their conclusions, Feigen recalled.

In 1977, further charges by Dong and inquiries from NIH concerning irregularities in Lucas' citations of scientific papers and information provided in his contract proposals triggered an extensive analysis of these documents.

In 10 instances, Lucas admitted papers he cited concerning his research already had been rejected for publication. In five instances, they never had been submitted. In three, the wrong journal was cited.

Dr. John Wilson, associate dean for faculty affairs at the Medical School, and Carol R. Price, associate legal counsel for the University, said there was "persuasive evidence" that five other citations by Lucas concerning his own work were in error.

In his public reprimand of Lucas, based on the Wilson-Price study, Lyman said "There has been no conclusion that your research results have been seriously affected."

But he added: "Because of the chronic nature of your professional misconduct and incompetence over a period of many years, the University must exercise some prospective controls to ensure your behavior in this respect is not continuing."

(In a campus radio interview soon after taking this disciplinary action, Lyman said: "The investigation has been protraacted on this case—too protracted in my view; it has gone on [for] years, and it didn't need to take that long. . . . Faculty are obviously reluctant to bear down on colleagues unless they're really convinced that it must be done.")

In his public reprimand, Lyman said the dean of medicine and head of surgery would conduct a formal review of Lucas' research after two years. This procedure is now in process, according to Wilson and Dr. John Collins, head of surgery, who expects the review will be completed this summer.

University records show Lucas was the principal investigator on two NIH projects in 1979. One ended last year, while the other is scheduled to expire at the end of 1981.

The first was a contract with the National Cancer Institute for direct assay of lymphokine. Initiated for one year in September, 1978, it was extended for a second 12-month period, expiring in September 1980. Total direct costs were $287,734.

The second was a three-year grant on factors negating response to mammary adenocarcinomas, starting in January 1979 and scheduled to end this year. Total direct and indirect costs for this grant amount to $219,256.

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Collins became the principal investigator on these projects during the 12 weeks Lucas was suspended. As head of the department, Collins also has certified the accuracy of scientific and technical information contained in each grant application, contract proposal, and progress report submitted to NIH by Lucas after his reinstatement in 1979.

In his petition for rehearing on the issue of discovery concerning Lucas and Stanford, Dong cites an internal NIH file memo dated May 27, 1977, and a *Stanford Daily* article published June 28, 1977, as evidence of the University's misleading the public about the Feigen committee findings.

The NIH memo, based on a phone conversation with Carl Hitchner of the Stanford Legal Office, said that Hitchner had verbally "reviewed the actions taken at Stanford which resulted in a committee report that concluded, in general, that Dr. Lucas was not guilty of any fabrications or fallacious research reporting but perhaps guilty of sloppy laboratory administration.

"He mentioned that the committee report initially had come up with some unanswered questions and (that) a later submission by Dr. Lucas answered most of these questions to the committee's satisfaction but still left the question of sloppy laboratory administration."

The *Daily* quoted University Legal Counsel John Schwartz as saying "neither (the 1973 or 1975) committee found any evidence of any deliberate scientific misrepresentation."

In a Jan. 29, 1979 letter to NIH, Schwartz said Hitchner recalled "a great effort on his part to be precise (in talking with NIH) with regard to just what the committee did and did not find. . . .

"Informal telephone conversations are not a particularly satisfactory means of communication when it involves drawing and appreciating the difference between a conclusion that something did not exist and a conclusion that there was not enough evidence to conclude that something did exist." Shortly thereafter, NIH was informed of Lyman's public sanctions against Lucas.

A brief submitted for the University to the California first district court of appeals by the University says: "The Feigen report concluded that 'the question of fabrication and fraud is unresolved.' The remarks attributed to the University in hearsay memoranda (from NIH) and newspaper clippings cited by Dr. Dong say essentially the same thing."

In a separate legal case, settled out of court in January, 1981, Dr. A. Baronio Martins, a former research associate of Lucas, charged Lucas had libeled him in grant applications to NIH and that Stanford had denied Martins had a three-year contract even though this was stated in the grant application.

In a deposition for the Martins suit, Kenneth D. Parker, criminologist and toxicologist, claimed some research by Lucas was "science fiction."

Parker said analysis of the inks used in Lucas' research notebooks suggested some entries had been fabricated or altered. In addition, five rats in one control group of Lucas' experiments "never existed," Parker claimed.

In material disclosed by the University in response to a court order, the Feigen report noted that "We purposely have not studied in depth the large amount of materials presented by Dr. Martins, feeling this dispute will be aired elsewhere and that the charges did not lend themselves to an appropriate examination by our committee."

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Daily room rates at Stanford University Hospital will go up an average of 12.2 percent, starting September 1.

The rate increase is included in the Hospital's proposed $146.6 million budget for fiscal 1981-82, which is being submitted for approval by the Board of Hospital Directors to the general members of the Hospital Corporation, the Stanford University Trustees.

The budget figure includes $7.1 million for needed equipment and capital improvements during the coming year.

Dr. Lawrence G. Crowley, president of the Hospital, said the increases are necessary because of higher wages and benefits for employees, increased care requirements of patients being admitted, inflation and higher costs for supplies and equipment, and significant reductions in reimbursement from the government programs of Medicare and Medi-Cal.

Hospitals in general are facing decreasing federal reimbursement as a result of payment limitations imposed by the new federal budget. Payments for some kinds of care given to Medicare and Medi-Cal patients increased only three to six percent over the current year. At Stanford Medicare and Medi-Cal patients account for about 49 percent of the Hospital's patient days.

The daily cost for medical, surgical, and gynecology services will be $257 for ward accommodations, $274 for a semi-private room, and $318 for a private room.

Medical, surgical, and gynecology patients utilizing services of resident physicians will pay $19 more per day than the above rates. The patient's attending physician determines whether such services are utilized.

Crowley noted that measured in terms of nursing hours per patient day, Stanford attracts an increasing number of patients with the most critical and complicated diseases.

"On the average they require both greater nursing skills and hours of care than patients admitted to nonteaching hospitals," he said.

Nursing hours per patient day are running about six percent higher than anticipated on routine care units. Normally such high intensity of care is found only in coronary and intensive care units.

However, for these routine cases the length of stay at Stanford is 11 percent shorter than most hospitals with 400 or more beds. The shorter stay is attributed to the results of intensive nursing services and higher mix of registered nurses.

Rates for some specialized units such as intensive care will go up 11 percent, obstetrics 10.9 percent and basic nursery 9.6 percent.

The Hospital increased its room rates an average of 10 percent in July to compensate for unexpected costs in the current year. At the time officials announced that further increases would be necessary for fiscal 1981-82.

Patient revenues make up 99 percent of the Hospital's funds. The Hospital has no tax support as do district hospitals or government-supported hospitals.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

The first Charles E. Culpeper Visiting Professor at Stanford University School of Medicine is Dr. Dean Warren of Emory University in Atlanta, a world renowned expert on the liver and biliary tract, the Dean's Office has announced.

Dr. Warren, the Whitehead Professor and chairman of the department of surgery at Emory University, will visit Stanford Medical School on August 28 and 29 as a visiting professor in the Department of Surgery.

Warren will deliver a talk on "Portal Hypertension" at the Department of Surgery grand rounds at 8 a.m. on August 29 in room M112 at the Medical School.

Warren, who received his M.D. degree in 1950 from Johns Hopkins School of Medicine, was dean of the school of medicine and vice president for medical affairs at the University of Miami prior to joining the faculty at Emory University.

This is the first year of a five-year rotating Culpeper Visiting Professorship at Stanford Medical School. Next year, the Professorship will be in the Department of Medicine, according to the Dean's Office.

The Charles E. Culpeper Foundation of New York supports primarily health, education, science and technology programs. The Foundation also offers grants to support arts and letters, youth activities, administration of justice, and native American affairs.

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Mailed August 18, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

A new policy governing the access of community physicians to Stanford University Hospital's specialized services and laboratories was approved Wednesday, August 12, by the Board of Hospital Directors.

Drafted by a committee of the Board, headed by Mrs. Linda Meier, the new policy is consistent with the recommendations of the Palo Alto Community Physicians-Stanford Medical School Liaison Committee announced in June.

After laboring for more than two years, the Liaison Committee had reached agreement on the principle of community physicians having controlled access to certain Hospital-based clinical services and laboratories and on the rules for replacing those community doctors who leave.

Under previous Board policy future access to such services was limited to Medical School faculty responsible for clinical academic programs.

The new Board policy provides for the granting of clinical privileges to the Hospital-based services and laboratories to the following medical staff members:

- full-time and part-time paid faculty of the Stanford University School of Medicine;
- community physicians who were members of the medical staff as of August 1, 1978, and who held clinical privileges in those services;
- community physicians on the voluntary clinical faculty who qualify as replacement physicians under the new guidelines;
- community physicians who qualify as courtesy physicians under the Palo Alto City-Stanford contract, which guarantees access of community doctors to Hospital beds;
- community physicians who affiliate with the School of Medicine to teach and do research under full-time faculty supervision.

The Board said:

"The adoption of these recommendations is consistent with the need to maintain excellence in patient care in the Hospital, the need to maintain strong teaching and clinical research programs within the Hospital-based services and laboratories, and the need to fulfill the Hospital's responsibility to the community."

The Board also adopted a resolution, appointing a committee to consider further community involvement in new Hospital-based services and laboratories that might become available in the future, as well as issues related to access and utilization of Hospital-based and admitting services.

The committee will be composed of three Board members, three community physicians, and three faculty physicians. The committee will also guide the board on the impact of new appointments on patient care, operating costs, the teaching and research missions of the Hospital, and its responsibility to the community.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Volunteers are needed to participate in a nutritional research project being conducted by Dr. Gerald Reaven and associates at the Clinical Research Center of Stanford University Hospital. The study is designed to investigate metabolic effects of two levels of dietary carbohydrate.

Recent recommendations of the American Diabetes Association and the American Heart Association suggest certain benefits from a low fat, high carbohydrate diet. But researchers at Stanford aren't sure.

"We feel," says Reaven, "there is enough information to suggest that those recommendations, taken without consideration of individuals' metabolisms, could be potentially harmful for certain people."

He also states that the *form* of the carbohydrate intake must be taken into account: for example, string beans are quite different from coffee cake.

In their study, researchers here will attempt to see what happens with two separate diets which vary as to proportions of fat and carbohydrate. In the past, says Reaven, such experiments conducted with formulas proved negative results for increased carbohydrate. Now he's interested in trying the study with real foods.

The subjects being sought—both male and female—should be 21 to 65 years old, and *not* currently in any medical or dietary therapy for diabetes or hyperlipidemia. They *should,* however, have a history of boarderline or mild diabetes; a family history of diabetes or coronary heart disease; a history of abnormality of blood lipids (cholesterol or triglyceride); or a family history of abnormality of blood lipids.

Accepted volunteers will be provided with free meals for 30 days, as well as a medical examination and dietary evaluation, a routine chest X ray, cardiogram, liver and kidney function tests, and evaluation of blood sugar and lipids. The project will not interfere with subjects' routine daily work schedules.

Those interested should call Ann Coulston, R.D., at 497-5430, from 9 a.m. to noon; or George Liu, M.D., at 497-6054, from 1 to 6 p.m.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Paul Gullixson (415) 497-6911

STANFORD—

Dr. Inder Perkash, associate professor of surgery, has received the 1981 Speedy Award from the Paralyzed Veterans of America.

The award is made to the person of all countries for the most outstanding contribution in the field of spinal cord injury.

Perkash was honored by PVA'S "highest form of acknowledgement" for his contributions to SCI medicine in the field of urology. In addition he was recognized for founding and directing the Spinal Cord Injury (SCI) Center at the Palo Alto Veterans Medical Center and his research there in urodynamics.

Perkash is also considered a leading international authority on surgical procedures and management of neurogenic bladder dysfunction.

Last October he became the first faculty member of a medical school to be appointed to the PVA Professorship of Spinal Cord Injury Medicine Chair.

Perkash received his award at the PVA Annual Convention Banquet in Denver July 24.

8-11-81 —30— 509

FOR INFORMATION CONTACT: Paul Gullixson (415) 497-6911

STANFORD—

Dr. Stanley N. Cohen, professor and chairman of Stanford's department of genetics, is the recipient of the Marvin J. Johnson award of the American Chemical Society (ACS).

The award recognizes Cohen's contributions to the advancement of microbial and biochemical technology, particularly in the development of recombinant DNA research.

Cohen's test-tube construction of biologically functional recombinant DNA molecules has been considered a milestone in genetic research.

His work in 1972 and 1973 sparked the recent rapid developments of genetic engineering including the production of such biologically active hormones as insulin, somatostatin, and the anti-viral drug interferon by bacterial "factories."

Cohen will deliver his award lecture entitled "Cloning and Expression of Genes in Heterospecific Hosts" on Aug. 26 in New York City at the ACS Microbial and Biochemical Technology Division's annual convention.

8-11-81 —30— 509

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Bobbi Navickis (415) 497-6911

STANFORD—

"I suspect there are minor risks from spraying (of malathion), but they're from helicopters' crashing into houses and from people's falling off ladders while stripping their apricot tree," concluded notable Berkeley biochemist Bruce Ames at a recent Department of Medicine's grand rounds.

Ames, *San Francisco Chronicle* science writer David Perlman, Stanford President Donald Kennedy and Department of Medicine chairman Kenneth Melmon comprised the panel of a rather unusual Thursday grand rounds, "The Community as Patient."

From his own singular perspective, each member dissected the data and the events that were seemingly leading the area's population to near panic.

The consensus seemed to be now that the confusion had started to settle that the original fears were mostly unfounded—the doses being dropped were too small and malathion seemed to be relatively harmless.

"I think part of the problem is that all risks are competing risks," said Ames, who has been a leader in developing sensitive tests for environmental carcinogens and mutagens.

"It is one thing to look at malathion all by itself and say, oh yes, the result of this test or that test is... But, in a way, that's not fair because nothing is risk free and the alternatives have risks.

"You always must think how it fits into a larger picture. If everyone leaves Palo Alto, then there is a risk that with a million people driving an average of 60 miles one of them will crash into a tree. Plus there is the consideration of all the carcinogenic automobile exhaust that's being put up into the air.

"Plus, if the medfly isn't stopped now, tomorrow worse pesticides will have to be used. Part of the problem in decision making is that people don't tend to say what the risks are if we don't do it.

"I really started thinking about this when I almost fell off my roof while I was cleaning my gutter. I started thinking about all those people climbing up on their roofs cleaning their solar collectors and the roofers installing the solar collectors. I looked up the statistics on roofers, and in fact, roofers fall off roofs fairly frequently. Yet everyone claims solar energy is absolutely safe."

Ames said that malathion is the safest organophosphate pesticide, and organophosphates are the safest kind of pesticide because they break down relatively rapidly in the environment. In addition, Ames said malathion is such a weak pesticide that it was almost abandoned in the early stages of development because the manufacturers thought it would prove almost useless.

It is the garden-variety pesticide, one that people use to spray their roses, one used to rid English school children of head lice. In fact, he said that if you spray your roses as directed on the bottle of malathion it is possible to buy at your local garden store, you'll get quite a bit higher dose than from the bait applications.

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 English school children are also dusted with much higher concentrations than is being sprayed, and although no thorough epidemiology study has been done, the studies that have been done reveal no serious side effects, he said.

The concerns about malathion centered on its possible long-term effects.

Ames recounted the various tests for carcinogenicity (ability to cause cancer), mutagenicity (ability to cause mutations) and teratogenicity (ability to cause birth defects)—the standard concerns about any chemical.

"It has a pretty clean bill of health as far as carcinogenicity tests go," he said.

Malathion was tested in enormous doses—much higher than most chemicals are scrutinized—in rats and mice, up to a few grams a day. Out of six separate tests, in only one strain of male mice at one dose was there a statistically significant increase in one kind of liver tumor. In reviewing the results, the National Cancer Institiute decided that this evidence was too tenuous to be damning, given the variability in controls, he said.

Ames did add the qualifier that rats and mice are imperfect models for people, and it can never be said for sure that if a chemical is noncarcinogenic in rats and mice, it's also noncancer-causing in people.

But he continued:

"Even if it were a carcinogen, there is probably little danger because the amount being dropped is so low."

The most relevant tests—those in rats—of malathion's ability to cause birth defects turned up no incriminating evidence, he said. One test that involved injecting malathion into a chick embryo resulted in some abnormalities, but it's not clear what that test means, he said.

Eight different tests done in bacteria and yeast probing for any ability of malathion to produce mutations in the genetic material proved negative, he said. Two other tests turned up barely positive.

"Overall, the toxicology has been negative, just those two little clouds," he said.

Ames said that no really convincing studies have been done on humans, even though it has been sprayed on a number of population centers. Some of the reason stems from the difficulty of designing defensible tests, he said.

"People exaggerate the power of epidemiology," he said. "The big thing is something called confounding variables."

People are exposed to so many different things, it's near impossible to pin the blame on a particular agent, he explained.

"Given the incredibly low doses of malathion being dropped, it's not justifiable that the definitive study to pick up something on malathion can be done in Santa Clara county," he said.

Science writer David Perlman, who attempted to provide the public with daily updates on malathion, said he was confronted with daily deadlines and gaps in the flood of information coming from various sources and an even more chronic problem:

"One problem the media copes with all the time, that the public has never been able to thrash out for itself, is the idea that somehow when you use the word risk you are saying danger," he said. "The public takes the word risk far beyond what is appropriate."

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Melmon said he first became aware of the seeming magnitude of the problem when he received a phone call for help from the California Highway Patrol on the Saturday night before spraying was due to begin. The Patrol feared that at a minimum 25 per cent of the population might flee the Santa Clara Valley because of the high anxiety over the possible toxic effects of the insecticide.

State and local governments soon asked for a measured, official response from Stanford about the risks, Melmon said.

Institutions like Stanford can't become experts and pronouncers on everything, and probably shouldn't, said Kennedy.

The real question becomes how do you know when it is terribly important to have a consensus view to present on behalf of the institution, as opposed to a set of more limited views on behalf of interested individuals, he said.

Perlman said it probably would be difficult to develop a consensus in such a fast-moving controversy as that over the Medfly because of the various strongly-worded faculty opinions.

He suggested that what probably should be aimed for is a rapid mobilization of the spectrum of opinion that exits, and then its presentation to the public through the intermediary of the press. He also proposed that the University line up people who could explain the relevant, sometimes cloudy data to the press.

Kennedy considered how physicians should respond when the inevitable questions from their patients come.

"No one is in the position to offer absolute assurances about malathion or about other chemicals. We must remember that there are not any real absolutes in this business," he said.

"And it is very near the heart of medical practice to be prudent in the face of uncertainty, even rather distant uncertainty. Yet, even in a public health situation like this one, the things that doctors tell their patients or the things that scientists caution are distant possibilities become frighteningly close.

"The obstetricians that recommend to pregnant women that they leave are doing at one level something very prudent, yet when that advice becomes widely reported it becomes a source of concern that can grow out of all proportions to the hazard."

Everyone seemed to agree on one thing. The Medfly had caught most people unawares.

"It seems to me there has been a lack of political leadership," said Ames, "On many of these questions, much depends on how serious the Medfly is. No substance is absolutely free, so how important is it to spray?

"I thought that it came out relatively late in the newspapers that Hawaii has had a lot of trouble, that the Medfly isn't some ordinary insect."

Melmon concluded that "what we have to do in the future is have more of an early response system in place for issues that we may inevitably have to answer as an institution."

8-6-81 --30-- bj3

STANFORD UNIVERSITY MEDICAL CENTER
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EDITORS: Details follow asterisks.

STANFORD—

The first encouraging results from clinical studies involving the use of monoclonal antibodies in the treatment of cancer patients have been reported by researchers at Stanford University School of Medicine.

The studies are still preliminary and limited to a few patients whose cancers were only temporarily or partially controlled. Nevertheless, the results have added cautious optimism to the field of applying immunologic methods to the treatment of cancer, the researchers said.

Two patients, one suffering from leukemia, cancerous proliferation of the white blood cells, and the other with lymphoma, cancer of the lymphatic system, were administered monoclonal antibodies produced in the test tube by mouse hybridoma cells.

The patients, both of whom had advanced disease and had failed to improve with conventional cancer treatments, drug therapy and radiation therapy, each showed some evidence of benefit from the antibody therapy, according to Dr. Richard Miller, Dr. Ronald Levy and their colleagues at Stanford.

This is the first time that clinical benefit from monoclonal antibodies has been documented. Lev said.

Reports on each patient's therapy have been published in the August 1 issue of *Lancet* and the July issue of *Blood*.

Levy is associate professor of medicine (oncology) at Stanford and Miller is a research associate in oncology. Their co-authors on the *Blood* article are Dr. James McKillop and David Maloney.

Following those promising trials, four more patients have been treated at Stanford with mouse monoclonal antibodies, with encouraging results, said Levy.

One important aspect of the recent studies, Levy stressed, was to establish whether or not it is safe to give mouse antibodies to humans. Since the mouse antibody is a foreign protein, researchers did not know if the patient's own immune system would tolerate the substance or whether it would give rise to serious allergic reactions.

However, in the published results, one patient showed no anti-mouse immune response, and the other had an insignificant response that disappeared within a few days. All six patients receiving therapy thus far tolerated the mouse antibody without difficulty, Levy said.

This finding opens the way for further development of mouse monoclonal antibodies as a new mode of cancer treatment which can be combined with traditional methods such as radiotherapy and chemotherapy, he pointed out.

The production of pure monoclonal antibodies is based on the 1975 discovery by George Kohler and Cesar Milstein in Cambridge, England, that mouse tumor cells can be fused with antibody-producing cells of the immune system, called lymphocytes, to create a new cell called a hybridoma.

Hybridomas inherit the quality of immortality from the cancer cell progenitor, and the ability to produce a specific antibody from the lymphocyte.

Methods are available to identify and select out from millions of hybridoma cells, the one that secretes the desired antibody. Its ability to continually multiply in the test tube allows researchers then to cultivate large quantitites of pure and specific antibody.

In three of the six patients, the antibody treatment produced significant improvement, particularly evident in those who had a form of lymphoma involving the skin, called mycosis fungoides. In one 67-year old male patient, healing and shrinkage of skin tumors was observed and some of his skin lesions completely cleared during the course of antibody therapy. Levy and Miller reported in the *Lancet* article.

However, monoclonal antibody therapy has not succeeded in completely curing any patients' cancer, Levy cautioned.

"For the present, antibody therapy is no substitute for more traditional and proven methods of cancer treatment such as radiotherapy and chemotherapy," he said. "However, we hope that antibodies will prove an additional modality of treatment that can be combined with current methods."

In the meantime, "a great deal more development and testing is required before antibody therapy may be generally available," Levy added. "The current results are encouraging enough to make further investigation worth while."

Levy's work is supported by the Howard Hughes Medical Institute and by grants from the National Institutes of Health and the American Cancer Society.

. . .

Antibodies are proteins produced by cells of the immune system called lymphocytes, in response to the perception by the body of foreign substances such as bacteria and viruses. Each lymphocyte produces just one highly specific type of antibody.

There are millions of different lymphocyte types that enable the body to contend continuously with the variety and heterogeneity of foreign agents it contacts. Antibodies help the body combat foreign agents by recognizing and binding specifically to the particular substances that identify the agents. These substances are called antigens. Other "effector" cells-from the immune system then eliminate the antibody-bound substances from the body.

In the case of monoclonal antibody therapy for leukemia and lymphoma. Levy and his colleagues use an antibody that recognizes antigen molecules which sit on the surface of normal lymphocytes but are found in much larger numbers on the surface of cancerous lymphocytes.

Once the antibody is administered. it attaches to the target cells and the body's own defenses remove and destroy the cancer cells.

Previously, researchers had presumed that only human monoclonal antibodies would prove tolerable for therapeutic purposes. However, because human cells are much harder to work with in the laboratory, it might be several years before useful human monoclonal antibodies are available for testing, Levy said.

Why the foreign mouse antibodies failed to trigger an immune response in humans is not certain, according to Levy. As the most likely explanation, he suggests that because the patients had already received drug treatment known to suppress the immune system, their tolerance of mouse antibodies might be a sign of overall immune system sluggishness. This hypothesis is being explored now in experiments with monkeys, Levy said.

3-3-3 Two problems with antibody therapy Levy and his colleagues recognized in treating their first patient; one concerns antigen molecules floating free in the blood that can bind to the administered antibody, in effect "sopping it up" before it can reach the antigens on the tumor cells.

The other problem, called antigenic modulation, involves the temporary disappearance of antigen from the tumor cell surfaces during a two to three day period following an antibody dose. Either the antigen-antibody complexes may fall off the tumor cells or they may be engulfed inside them, suggested Levy. In either case, the tumor cells lose the antibody signals that alert other cells in the immune system to destroy them.

However, since the antigens begin to reappear on the cancer cell surfaces several days after an antibody treatment, by carefully linking the antibody dosage schedule to the rhythm of antigen production in the tumor cells, this problem can be controlled, Levy said. (For instance, in one patient, antigen on the tumor cells diminished for three days following an antibody dose, reappearing on day number three or four. His antibody dosage schedule was therefore set at one dose every four days.)

Careful timing of antibody administration also minimizes the sopping up effect of free antigens circulating in the blood. The free antigen molecules seem to be shed into the bloodstream as tumor cells are destroyed, releasing them from the surface. Since the body clears the circulating antigens within about 24 hours, however, doses can be scheduled when free antigen is at a minimum. (The level of free antigen can be measured by a test known as a radioimmunoassay.)

Due to the sophisticated immunologic techniques required to prepare pure monoclonal antibodies and to monitor antigen modulation and free antigen levels, Levy emphasized that this type of work can only be performed at present in institutions with special expertise in immunology.

The patient described in the *Lancet* article had a "dramatic response but at no time was he free of all detectable disease," the doctors reported, describing his condition as "a stable, partial remission."

The patient's skin and peripheral blood disease remained stable and in remission after 10 weeks of antibody therapy, but the treatment was discontinued when the cancer started to grow back in lymph nodes. Further radiation therapy was not successful and the patient died four months after the initiation of antibody therapy from cancer in the lymph nodes, but "with skin and peripheral blood disease still in a partial remission," the doctors noted.

Monoclonal antibodies may also be useful in monitoring the course of disease during therapy or to detect recurrent cancers early, Levy said. "They can help physicians detect low levels of leukemia cell products in patients' blood or detect small numbers of leukemia cells themselves," he added.

Theoretically, it might be possible one day to precisely custom design antibodies for therapy and monitoring of each individual patient, Levy speculated.

Another possibility would be to hitch toxic chemicals to the antibodies which would then zero in on the cancer cells, targeting the chemical's destructive powers directly on the tumor, explained Levy, but so far he and his colleagues have only tested direct administration of antibody alone.

And, although Levy and his colleagues now are testing monoclonal antibodies only in certain leukemia and lymphoma patients, other investigators are using monoclonal antibodies effectively against some solid tumors in animals. Within a few years, such investigations could commence in humans, the researchers predicted.

In addition, monoclonal antibody therapy may prove useful in combatting other diseases caused by bacteria, viruses or parasites, and in therapy for some autoimmune diseases.

Mailed Monday, August 3, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Karen Wilson of Mill Valley, Calif., died Saturday (August 1) at Stanford University Hospital. Wilson, who was 28, had received a heart-lung transplant on Tuesday (July 28.)

She died at 8:30 a.m. as a result of kidney and liver failure that resulted from complications encountered in the transplant surgery.

She is survived by her mother, Mrs. Betty Brashear, stepfather, Mr. Turner Brashear, sister, Mrs. Donna Cameron, and her father, Sid Wilson of Henderson, N.C.

Ms. Wilson had been born with a congenital heart disease. Last January she had a cardiac arrest and her condition worsened considerably, and it was thought she had only a few months to live.

"I've never had any second thoughts," she said talking about the operation in a recent interview. "This is my only chance. I want the operation because I want to lead a normal life. I've lots of determination."

This was the third heart and lung transplant at Stanford. Mary Gohlke, 45, a Mesa, Ariz., newspaper advertising executive, received the first heart-lung transplant on March 9. Charles Walker, 30, of Binghamton, New York, received the second on May 1.

Both Gohlke and Walker are still recovering from their operations. Gohlke has had to be briefly rehospitalized three times for minor complications since her initial June 1 release. Walker has been free of complications.

Both are still living in the Stanford area for the time being, but may be able to return to their homes sometime this autumn if no complications develop.

8-1-81 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

A special program entitled "Depression: behavior and the brain" will be presented Thursday, Oct. 22, at 8 p.m, in the Sherman Fairchild Auditorium of Stanford University School of Medicine.

Sponsored by the Friends of Psychiatry and Behavioral Sciences at the Medical Center, the program will feature as speaker Dr. Philip A. Berger. The moderator will be Dr. Thomas A. Gonda, professor and chairman of the Department of Psychiatry and Behavioral Sciences.

Berger is presently associate professor of psychiatry and behavioral sciences. He also serves as director of the Stanford Mental Health Clinical Research Center, and director of the Schizophrenia Biologic Research Center. He first came to Stanford as a resident in psychiatry in 1970, and was an assistant professor from 1974 until 1980.

The lecture on depression is open to the public, admission is free of charge, and there are no reserved seats. However, in order to plan for adequate seating, the organizers would appreciate being notified of any individuals' or parties' intention to attend.

The Friends of Psychiatry and Behavioral Sciences is a public information and fund raising organization associated with the Medical School. It is located at 800 Welch Road, room 201.

For further information regarding the upcoming program, as well as other activities of the organization, call 497-6376.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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(EDITORS: This profile marks the stepping down from active clinical duties of Allen Barbour, professor of clinical medicine. His views on patient care represent four decades of medical concern in private as well as university practice).

STANFORD—

Dr. Allen Barbour's chart notes were different.

When he was a chief resident nearly three decades ago, a philosophy of medicine was already being reflected in his medical chart notations.

For Allen Barbour's chart notes weren't the typical one- or two-sentence scribblings.

Some patient entries, recalls an intern who served under Barbour back in 1952, would run five and six pages, intimately detailing a patient's life situation.

"You could argue that I'm full of baloney or that I'm too wordy," Barbour laughs. "Or you could argue," he adds more seriously, "that I'm trying to look at all aspects of an illness that another person might ignore."

Looking for illness—the total component of a patient's suffering—rather than just an isolated disease, has been Barbour's commitment since his student days.

Now he's 63 and has sought emeritus status as a professor of clinical medicine to write a book, **Human Dimensions in Medicine**, which he feels will synthesize his views about the human side of medicine. He also is serving as associate university ombudsman for the Medical Center.

But he continues to spread the gospel—although he wouldn't call it that—and gently or sometimes aggressively chide colleagues whom he believes can focus so closely on disease symptoms that they lose sight of the patient as a person.

Many of his Stanford Medical School colleagues and former students were to hear Barbour once again emphasize his views Oct. 29, when he holds Medical Grand Rounds.

Later his colleagues will honor him at an evening banquet. Announced will be an endowment providing an annual Allen Barbour award to the medical student who reflects those personal and scholarly traits of the prize's namesake.

An award perhaps is fitting for Barbour, who has won countless teaching honors from his students each year at Medical School graduation.

His instructional duties at Grand Rounds will reflect his philosophy and will also focus closely on a topic of practical significance. The title is *Psychogenic Chest Pain.*

"The cause of about 60 percent of all chest pains cannot be traced to a specific source or disease. While some of these may be caused by various physical strains, the vast majority appear to result from emotional components.

"If doctors don't consider those emotional components, they're not likely to get good results.

"The positive approach involves understanding the patient as a person. Then perhaps we might help the patient trace the cause of his chest pain to its emotional sources.

"I'd like for doctors to be able to say that a chest pain results from a certain human anguish, rather than simply saying that no known cause or disease is present."

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Barbour's medical history began at the University of California at San Francisco where he received his M.D. in 1943. It was during World War II then, and Barbour served in the Navy, including an internship at the U.S. Navy Hospital at Oakland.

After postgraduate training at Massachusetts General Hospital and in England, Barbour became chief resident at the University of California Hospital in San Francisco for a year in 1952.

Then Barbour went into private practice for the next 10 years.

"I enjoyed private practice; my brother was my partner. We got along very well.

"I can't say that I left it from any dissatisfaction. The only dissatisfaction was that I got to working too hard. I didn't know how to reduce my practice, or I wasn't able to I guess. I'd say yes to everybody."

During that decade, Barbour served as a voluntary faculty member at the University of California, and finally:

"It occurred to me that I was a scholar at heart. A closet scholar.

"I'm not exactly a publishing researcher by any means, but I like the scholarly environment, so I looked into a university appointment where I could blend my ideas about clinical medicine with the teaching of students and residents.

"And Stanford was interested, so here I am—a Cal man at Stanford.

"Besides," Barbour continued, "private practice is a little on the lonely side. You're making your own decisions. There's nobody to talk problems over with. You can't have dialogue regularly.

"And then you miss the kind of academic discussion, grand rounds, specialty conferences.

"It's quite different. The main source of scholarly input as a private practitioner is your own reading and consultations with other doctors, so you glean their specialty knowledge in the act of taking care of a patient. But it's easier in an academic environment."

And that's where Barbour has spent the last 18 years—teaching, seeing patients in clinics, and serving as a scholar vitally interested in the course of medical education.

How would Barbour, since 1974 a professor of clinical medicine, change the course of medical education?

"I think I would start by teaching students analysis of symptoms that would be straightforward and practical.

"You see, textbooks aren't organized by symptoms and illnesses. They're organized by diseases. So if you read a textbook on internal medicine, you may note in a chapter on hypothyrodism that fatigue is a symptom of that ailment.

"And then you read a chapter on disease of the adrenal cortex and find that people with Addison's disease have fatigue.

"But nowhere in the book does it tell you that 80 percent of all patients with fatigue have no disease at all. That's not known to most physicians.

"So they spend endless time and money on tests to wind up only with a diagnosis of fatigue of unknown etiology, which of course is an illness and not a disease.

"Medical students need to understand diseases, because that is important. I'm not in any way putting down the disease model in medicine. I'm just saying it needs to be fitted into a more comprehensive model."

The interest in the human side of medicine evolved naturally for Barbour, he believes.

"Once you get intrested in the human side of medicine, the technological side gets more and more uninteresting.

"For example, the first time you see a lobar pneumonia, it's very interesting. As a student, you've read about it, and now here's a real disease and real chance to help someone.

"But by the time you've made the same diagnosis a hundred times, you're pretty familiar with the diagnosis, how to treat it and all its complications.

"It ceases to be interesting.

"But the people that have the pneumonia are always interesting.

"I mean medicine is a marvelous way of having contact with a lot of people from all walks of life. There's hardly anything else which gives you that opportunity. You not only have contact, but intimate contact. You're engaged in their inner secrets and problems.

"So that no matter how uninteresting the common cold is, it's the person who has it that's interesting. So medicine becomes interesting."

Time pressure is a widely known feature of a physician's life, and Barbour concedes that doctors have to use their time judiciously. That's one reason, he feels, that support personnel and health educators should take over some of the functions modern doctors have been called on to perform.

"If a doctor spent two hours a day teaching all his patients how to eat better and exercise better, he would have to see six fewer patients who were sick and needed help.

". . . I think that a lot of work that doctors do should be taken over by other people. Obesity for example is not a good place for a doctor. He doesn't have that much time and energy to formulate diets and monitor patient's daily diet habits.

"I think Weight Watchers and places like that do a better job. They see the patient weekly, they charge less, and there is a combined group approach which can be supportive and helpful.

But on the other hand, Barbour believes that even when doctors can spend only a few minutes, that time can be marshaled to serving patient needs.

"It's very hard to learn about a patient or be supportive if you only have 10 minutes. But sometimes that really is all you have. Therefore, you've got to learn how to make that time count.

". . . I think there is a lot of time wasted on things which are not the most important. We go through a lot of motions. Even though there is no chest disease, we may sit the patient up every day, tap the chest, listen for rales, 'play doctor.'

"Well, you can generally tell whether you need to do that or not. If the vital signs are all normal on the nurse's notes, and there are no complaints, your time might be better spent talking to the patient aboiut his or her life situation.

"Take the case of a patient dying of cancer. You've got 10 minutes. You might spend a lot of time on biomedical details which are no longer significant.

"What the patient really needs at that point is for someone to spend the 10 minutes in a more intimate interpersonal relationship of doctor and patient as people."

Another example, cites Barbour, might be a patient with cirrhosis of the liver. Physicians hover over his bed debating endlessly which diuretic to use.

"But the basic problem is alcoholism, and no one is talking with the patient about the human situation which causes him to drink and what might be done about that.

"The patient will get out of the hospital and he'll be back two months later because he'll hit the first bar when he leaves."

Specialization, Barbour believes, is no excuse to avoid the human side of medicine.

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"I think that the development of psychiatry in the 19th century was a real detriment to medicine, because it separated in practice the psychosocial aspects of illness from the physical aspects of medicine. That, unfortunately, relieved the 'real' doctors—non-psychiatrists—to deal with the body, because the psychiatrist ought to be dealing with the other things."

Specialties, he says, need to draw from each other, but all must become involved in human care.

"The system is conducive to making technologists out of physicians. Those physicians who perform technological tasks may be particularly vulnerable to this problem.

"But there are notable exceptions. Take (Dr. Norman) Shumway (chief of the cardiovascular surgery program).

"He likes people. He's got a good sense of humor.

"He may only spend a minute or two with the patient, but there's some real contact there on his daily rounds.

"We need people like that who are superb surgeons, but that doesn't mean they can't be friendly at the bedside."

Of course during the past few years, much of Barbour's activities have involved working with medical students. Have they changed?

"There isn't much difference over the years, with the exception of the Vietnam War. Those students were different.

"The war was such a turbulent time that I have to say that there were a number of students in medical school who were there primarily for the purpose of getting out of the draft.

"Now they were smart. And it doesn't mean that they didn't become good doctors. But that wasn't their primary motivation.

"... Now the students are pretty much as they were before the war."

Of course individual students are different within each class regardless of era. Some students have an instinctive feel for the human dimension of medicine, Barbour believes, while some do not.

"This is a tricky thing. I don't understand what makes people care about patients. It has no connection with anything.

"Researchers sometimes are the best doctors at the bedside. Some people who say they are going into psychiatry or going into country practice may or may not really care about patients.

"On the other hand, some students who may want in part to get into medicine to make a lot of money, may become very fine physicians, very concerned about patients.

"Caring about patients is a very peculiar quality. I can't predict it ahead of time, but after 40 years of practicing medicine, I can tell within one or two times with a student at the bedside how he or she will become.

"It's the way they listen, the way they talk, and the way they accept the patient for where or what he is."

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

A patient waiting area intended to free Stanford University Hospital beds earlier in the day opened Monday (Sept. 21) in the PATS lobby of the Main Center.

Staffed by nurse Joann A. Miyao and transporter Harden Stamps Jr., the waiting area is designed for recently discharged patients who are not able to leave the Hospital by the 10 a.m. checkout time, said Sandra Perkins, director of patient admitting services.

"The unit has been established to facilitate an earlier admission process and at the same time achieve regionalization of patients, a goal long hoped for in this hospital," said Perkins.

"The hope is that by providing a holding area for ambulatory discharged patients who are waiting transportation home or discharge medications, the rooms that they vacate can be cleaned and made available for incoming patients," Perkins added.

Expediting the release of patients before 10 so that the patient's bed may be reassigned the same day is a long-term goal of Hospital administration, Perkins said.

The discharge unit consists of about a dozen waiting room chairs, television, games and magazines for the waiting patients. Requirements for admission to the unit will be ambulatory patients more than 15 years old with no more than an estimated three hour wait for a ride or their medications, Perkins said.

Excluded will be isolation patients, persons requiring major treatment during the wait, behavior disorders and certain other patients at risk.

The unit will be in operation from 10 a.m. to 3 p.m. Monday through Friday. Lunch will be provided to patients waiting through the noon hour, Perkins said.

Miyao said short-term parking for patient pickup is available in the doctor's parking lot adjacent to the unit.

The discharge unit was a joint effort between Nursing and Patient Admitting Services.

"Until patients physically leave the hospital they are still our responsibility," noted Perkins, explaining the need for the supervised waiting area for discharged patients.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames (415) 497-6911

STANFORD—

Eighty-six first-year medical students from all over the country plan to join the School of Medicine's student body for the current academic year, 1981-82.

An orientation program for the new students, of whom 38 percent are women and 26 percent represent minorities, was coordinated by the Office of Student Affairs, involving the participation of many second-year students. Taking place throughout this week, it is intended to welcome and inform the newcomers.

The program has included faculty and staff presentations, student panels, non-academic advising, recreational activities, tours of the Medical Center, and welcoming remarks by Drs. Lawrence G. Crowley, Donald Kennedy, and John Steward.

The Medical Students Association sponsored a "free day," Thursday, with an optional beach trip for new students.

Registration days are Sept. 28 and 29, and autumn quarter classes begin Sept. 30.

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STANFORD—

The School of Medicine's Faculty Senate held its annual election of officers for the Committee of Five, last Friday, Sept. 18.

Out of five nominees, Dr. Avram Goldstein was elected chairman for the third year in a row. Goldstein is a professor of pharmacology.

The other members elected to serve until Sept., 1982, were: Robert Cutler, professor of neurology and chairman of the Committee on Courses and Curriculum; Frances Conley, assistant professor of surgery; Lubert Stryer, professor of structural biology; and Robert Lehman, professor of biochemistry.

The Committee of Five is the ruling body of the Faculty Senate, which is a representative body of all the departments in the Medical School. The Committee sets agendas, appoints committee members, and makes the Senate's administrative decisions. Besides the chairman, it is to be composed of two faculty members from the basic sciences and two from the clinical sciences.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames (415) 497-6911

STANFORD—

Participants are needed for a study examining the effect of aging on the sexual response of men and women. This research is being conducted in the laboratory of Dr. Julian Davidson, professor of physiology.

Menopausal women who have not menstruated for the preceding year or longer, and men over the age of 50 are sought. The study involves blood sampling for the determination of hormone levels and the use of noninvasive psychophysiological measures. Remuneration is available.

Anyone interested in learning more about this work is invited to contact Dr. Marie Kwan or Martha Morrell in the Department of Physiology, at 497-2434.

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STANFORD—

Dr. David Glick, professor emeritus of pathology who was recalled to active duty in the Department of Radiology's Cancer Biology Research Laboratory, will receive a plaque and cash award Sept. 25, at the University of Minnesota, Minneapolis.

The honors coincide with Glick's presentation of the Gerald T. Evans Lecture, entitled "Development of Microanalytical Biochemistry—Some General Reflections," to be delivered that day. The lectureship is sponsored by the Department of Laboratory Medicine and Pathology at the University of Minnesota.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

In the event of a fire, an earthquake, or other emergency, many Stanford University Hospital personnel are now prepared to prevent injury to themselves and patients, thanks to a back care/patient evacuation training program (Back-Evac) initiated in 1978 and still going strong.

The objective of the program, organized by the Physical and Occupational Therapy Department, is to instruct all Hospital employees in back care, both on and off the job, and especially during situations which might involve patient evacuation.

The way both the basic and refresher courses work, says Joan Smithline-Zeiser, program coordinator and a physical therapist herself, is by instructing "trainers" from designated Hospital departments. The trainers are then responsible for providing training for all of the employees in their respective departments.

This season's courses, held in the last couple of months, were geared towards departments selected for participation because of their emphasis on patient orientation and care.

Next year, however, an effort will be made to involve every department throughout the Hospital, as the importance of the program has become exceedingly clear, says Smithline-Zeiser.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

The husband of an emergency patient shouts in anxiety at the unit clerk. A psychiatric patient, face contorted, wrings his hands and paces the floor. Hospital staff become agitated, sensing the potential for violent behavior.

To ensure calm and effective handling of situations like these by health professionals, the Facilities Protection Department was recently prompted to sponsor a workshop for 20 selected employees, on understanding, managing and controlling aggression in the health care setting. Participants in the program, held mid-September, were from NOB (inpatient psychiatric unit), Emergency Services, and the Facilities Protection Department staff.

The primary theme of the day was that specific verbal interventions—rather than aggressive reactions—are usually effective tools to help a person calm down and regain a sense of inner control. Said Allan G. Wickersty, Ph.D., the program leader, "When the aggressive patient or visitor is the *only* part of the scene that is out of control, then the crisis intervention team—led by security—has the best possible advantage."

Some of the verbal techniques he advocated for dealing with difficult situations include: deliberately ignoring inappropriate behavior, using humor to ease tension, explaining the rules, and expressing interest in the person's activities. Or sometimes, he said, just a firm "No!" does the trick.

Wickersty, a licensed psychologist and psychodramatist, first designed his training program in Washington, D.C., several years ago. Since then, he has conducted it with hospital Security and Emergency Department staffs across the country.

And he knows as well as anyone that talking isn't always enough to quiet an emotional explosion.

"For those crisis situations in which, by surprise or through escalation, an assault or violent behavior is already happening, or is unavoidable," he explained, "we teach skills in physical control techniques." However, he stressed, "Our goal and professional responsibility is to control aggression without injury of any kind."

Thus, the physical maneuvers taught in the course require body mechanics, leverage and control techniques that are non-offensive (not based on pain as the motivator)—and yet, powerfully effective. For example, simple techniques were demonstrated for dealing with hair and clothes pulls, bites, chokes, and wrist grips. Two and three-person restraints were also taught, requiring cooperation and teamwork, another skill emphasized in the workshop.

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Wickersty sees the role of the hospital security officer as "the professional accountable for maintaining security by working with all the other professionals in a team effort that capitalizes on their pooled abilities." He teaches that teamwork extends to all hospital staff: clerks, housekeepers, nurses and physicians.

"We try to get away from relying on security as a last resort," he said. "If you leave the dirty work up to any one person, anger develops."

Wickersty used role-playing to demonstrate his theories. He had staff members play disturbed patients or visitors, while others acted out the roles of admissions clerk, nurses and physicians. This exercise, he said, makes staff more sensitive and helps them think of new peaceful ways to deal with irate or disturbed people.

Finally, Wickersty did not leave Stanford until the course participants proved they could use his verbal and physical techniques—on him. He role-played the part of a violent visitor, and it was up to them to calm him down, safely but surely.

"It's a very rare occasion that a situation like this actually arises," said Greg Homer of the Emergency Department, "but the information being presented here will be helpful in case it does."

Hilary Ryniewicz, director of Safety/Security Services, was quite pleased with the workshop. "The feedback was very favorable," he said. "We will try to continue to offer this program in the future, possibly involving other departments as well."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Six tenured faculty appointments were approved Tuesday (Sept 15) by the Stanford University Board of Trustees.

Ferid Murad, who has been serving since July as chief of medicine at the Palo Alto Veterans Administration Medical Center, was named professor of medicine. He was recruited from the University of Virginia to Stanford, which operates patient care and teaching services at the VA Center.

Murad, 45, is renowned for his research into fundamental cell biology. His work has provided important clues to the origin of certain endocrine disorders and to the matabolism of tumors.

He serves on study sections of the National Institutes of Health, and as editor of the **Journal of Cyclic Nucleotide Research.**

A 1965 graduate of the Western Reserve University School of Medicine, Murad served as director of the Clinical Research Center at Virginia since 1971.

Also approved at the trustees September meeting were five Stanford University Medical School faculty members promoted effective Sept. 1 to the tenured rank of associate professor. These were F. Carl Grumet and Margaret E. Billingham, pathology; Frances K. Conley, surgery (neurosurgery); Bertil E. Glader, pediatrics; and Lawrence Meyer Simon, medicine (respiratory medicine).

Billingham, 51, a native of Tanga, Tanzania, has spearheaded developments in cardiac pathology, particularly in research involving Stanford's extensive cardiac transplant program.

She has provided a detailed system of measuring changes in the heart after transplantion which have helped doctors monitor patients.

Billingham came to Stanford as a pathology resident in 1966. She is a graduate of the Royal Free Hospital School of Medicine in London.

A Palo Alto native, Conley, 41, serves as chief of the neurosurgery section at the VA Center. She is a fellow of the American College of Surgeons and is pursuing important basic research in experimental tumor biology. She currently serves on the state Medical Quality Review Committee and is a graduate of Stanford Medical School.

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Glader, 42, received his M.D. from Northwestern University. He was appointed to the faculty of the department of pediatrics in 1977 as co-director of the division of pediatric hematology. A 1980 he became chief of medicine at Children's Hospital at Stanford.

A pediatric hematologist/oncologist, Dr. Glader has made significant contributions toward an understanding of red blood cell destruction, cell membrane injurey and altered cellular physiology and biochemistry associated with hemolytic anemias, a common chronic anemia in children which can lead to retarded growth and other ailments.

The overall thrust of Grumet's research has been histocompatibility, which is the capability of cells or tissues to remain functional when grafted to another organism. Serving as associate director of the University Blood Center Program and director of the transfusion service at Stanford University Hospital, Grumet has been active in work relating to practical aspects of blood banking and to prevention of transfusion-acquired virus infection.

The 43-year-old Grumet is a native of New York City. He received his M.D. from from the University of Pennsylvania.

Simon, a specialist in the field of respiratory medicine, is studying the changes that occur either when oxygen depletion occurs or when a patient, who is experiencing respiratory distress, receives a high concentration of oxygen which may result in toxic side effects.

A native of Port Chester, N.Y., Simon, 40, graduated from the New York University School of Medicine.

Since 1979, he has served as chief of the respiratory medicine section as well as medical director of the respiratory therapy department and pulmonary function laboratory at the VA Medical Center. He also serves as director of the medical fiberoptic bronchoscopy service at the VA.

In addition to the tenure confirmations, the trustees also approved associate professor appointments in the clinical line for Ronald L. Ariagno in pediatrics, and for Bruce Parker in radiology and pediatrics.

Also, Peter Fessenden, Ph.D., was named adjunct profesor for teaching and practice in radiation therapy in the department of radiology.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: At the blood bank, please call Dr. Ed Engelman, medical director, or administrator Roger Svoboda, (415) 497-7903)

STANFORD—

A rare blood plasma was being sought for a 5-year-old girl suffering from an unusual kidney ailment at Stanford University Hospital.

Dr. Bruce Tune, a nephrologist, said the child required six units of rare type AB plasma daily in order to prevent permanent damage to her kidneys.

"If we receive the blood its possible that this child will completely recover," said Tune. "Without the blood, its likely that the child will suffer irreversible kidney damage," he added.

Rhoda Burns, a spokeswoman for the Stanford University Blood Bank, said the supplies of the rare AB blood type, present in only 4 percent of the population, had been nearly depleted during the 10 days the child has been hospitalized for the ailment called hemolytic uremic syndrome.

Tune said the disease usually follows an episode of diarrhea and results in complete kidney failure. Sufferers are unable to urinate, hence they are not able to eliminate waste products from their system.

Usually, the malady can be corrected, Tune said, by proper diet and a small number of transfusions. But the girl, identified only as a San Jose-area resident, is suffering so acutely that longer hospitalization with extensive transfusions are needed, he said.

Precisely how the transfusions correct the ailment is unknown, Tune said. "Apparently it either adds something the kidneys need, or it eliminates some poison in the kidneys, or perhaps both.

"All we do know is that transfusions seem to be effective at solving the problem in extreme cases such as this."

The rare kidney ailment occurs about 20 to 40 times a year in California, Tune estimated. The girl's case, he added, was one of the most serious he has seen.

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While hospitalized, Tune said, the girl's body wastes are being eliminated through use of a kidney dialysis machine.

Burns said a nationwide search for AB plasma was underway, but doctors hoped that donors with AB blood would be willing to donate to the child locally at the Stanford Blood Bank, 800 Welch Road.

"If they live too far away, they should donate at a convenient blood bank and explain that it is for a child at Stanford," Burns said.

The spokeswoman said blood for the child would probably be needed for about six weeks for the child, "but since we've been using so much of this rare type, supplies around the country are being depleted. Therefore, we'll have a general need for AB even after the little girl recovers," she said.

Burns said the Stanford Blood Bank, which recently opened its donor facility, is equipped to make optimum use of the rare blood type through a procedure called manual pheresis.

Donors' blood will be drawn and the plasma will be extracted. The remaining blood components will be returned to the donor's blood stream.

This procedure, Burns said, enables donors to safely provide twice as much blood as they could if whole blood was drawn and retained. The pheresis procedure takes about one hour, she said.

Persons with AB blood are encouraged to call the Stanford University Blood Bank at (415) 497-7831 for an appointment.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(EDITORS: Photo available if not included)

STANFORD—

A filmless x-ray system intended to make certain diagnostic procedures safer while simultaneously making patient care more efficient was installed this week at the Stanford University Medical Center.

The new system, called digital fluoroscopy, employs a television camera which projects the image of the particular body part or tissue under study on a video screen. The picture is created from digital, or computer data, which allows the patient's picture to be stored on video or magnetic tape to be called up later by the doctor who can view it on a video screen.

"Within the next ten years, we expect systems employing video to totally revolutionize X-ray as we know it now," said Dr. Dieter Enzmann, head of the digital fluoroscopy program at Stanford.

The current system, manufactured by the General Electric Co., is expected to be in use treating patients by the end of October, Enzmann explained.

It was on display for approximately 400 persons attending the Sept. 14-15 Conference on Digital Radiography sponsored by the International Society for Optical Engineering, Stanford's Department of Radiology and the federal Bureau of Radiological Health.

Specifically, the device will be used initially for patients suffering from various blood vessel ailments.

Digital fluoroscopy enables good pictures of arteries to be recorded without the risk of inserting catheters (tubes) near the heart or brain. Such intrusions deep into the blood vessels to inject a dye could result in heart attacks or strokes.

In digital fluoroscopy, the dye, which is used to highlight the arteries, is injected into the veins in the arm, which is much less dangerous, simpler, and thus may be performed as an outpatient procedure, said Enzmann.

The individual picture produced of a blood vessel or soft tissue is not as detailed as the view produced from traditional catheterization.

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But, Enzmann pointed out, the diagnostic capability is approximately the same, since the video console permits an imaging technique called subtraction.

First a picture of the patient is taken without a dye.

Then the same view is taken with the dye. The two views are combined on the screen in such a way as to eliminate unwanted structures (body parts), allowing the physician to observe areas of interest.

Hospitals may add the video camera and display console to their existing X-ray suite for about $200,000. Thus, Enzmann said, it is economically feasible now for use in many hospitals.

In addition, it provides potential efficiency and cost saving advantages for the hospital, patient, and the nation.

One of the largest savings, Enzmann said, is that hospital beds will be freed, because patients need not be hospitalized overnight as is necessary with catheterization.

"Eventually expensive X-ray film will be eliminated, and patient X-rays will be stored in a variety of ways, including digital and video disc and magnetic tape. Ultimately this could save hospital storage space and would be cheaper than film, but technological developments still are necessary for this development to become feasible," he said.

Within the next decade, Enzmann predicted it will be practical to transport X-ray pictures via cable to various locations, allowing a consulting physician in a nearby hospital, for example, to quickly view a patient X-ray transmitted to his own video terminal.

Other pioneering techniques in X-ray will also become increasingly available in the coming years.

One such system is "dual energy imaging," which is being used experimentally at Stanford under the direction of Dr. William Brody. This technique involves two nearly simultaneous X-ray photos of the same area taken at differing energy levels. The computer then constructs a picture on the video screen of the artery or material of interest to the physician.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

A noted neuroscientist, Dr. Dominick P. Purpura, has been appointed dean and associate vice president for medical affairs at the Stanford University School of Medicine.

The appointment, culminating a nine-month search by a faculty committee, was announced today, Sept. 14, by Dr. Lawrence G. Crowley, vice president for medical affairs.

Purpura's appointment will be effective sometime after January, 1982, when he completes his present commitments, Crowley said.

He praised Purpura as a distinguished investigator, teacher and dynamic administrator, with a deep commitment to medical education and concern for medical school curricular issues.

The 54-year-old scholar is currently a professor and chairman of the Department of Neuroscience, and director of the Rose F. Kennedy Center for Research in Mental Retardation and Human Development at Albert Einstein College of Medicine, the Bronx, New York. The center is an important institute, with both basic and clinical functions involving a number of medical school departments.

At Stanford Purpura will be the holder of the Carl and Elizabeth Naumann endowed chair as well as a professor in the Departments of Neurobiology and Neurology. He will also serve on the Board of Hospital Directors of Stanford University Hospital.

"I look upon the deanship as the most challenging opportunity of my professional career," wrote Purpura in his acceptance letter to Crowley. "Clearly, facilitation of the growth of such a distinguished institution as the Stanford University School of Medicine must be viewed as one of the most important missions in academic medicine today . . .

"I am certain I can effectively lead the faculty in their further pursuit of excellence in teaching, research, and patient care."

A graduate of Columbia College (1949), and Harvard Medical School (1953), Purpura completed his internship and part of his residency training at Columbia-Presbyterian Hospital in New York. He joined the faculty of neurological surgery at Columbia's College of Physicians and Surgeons in 1956 as a research physician. In 1967 he became professor and chairman of the Department of Anatomy at Einstein, advancing to his present administrative and academic posts in 1972 and 1974, when he founded the Department of Neuroscience.

His career is replete with honors, including a number of teaching awards, and the Lucy Moses Prize in Basic Neurology as well as the William G. Lennox Award of the American Epilepsy Society. He is president-elect of the Society for Neuroscience, and editor-in-chief of *Brain Research,* a major primary journal in the field, which he will continue to edit.

Purpura's most recent research has dealt with the study of human cortical development using the data and techniques of basic neuroscience.

He has applied this knowledge and techniques to the study of abnormal nerve cell development related to mental retardation. He was among the first to observe that the brains of children, who are mentally retarded with no known cause such as chromosomal aberrations, had structural abnormalities in their nerve cells.

He concluded that these structural distortions on the surface of nerve cells were the reason for the lack of cognitive development, and later others have confirmed his findings.

"Dr. Purpura's observations have been a seminal contribution in the area of mental retardation," said Dr. David Prince, professor and chairman of the Department of Neurology.

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His work spans some 200 publications.

The new dean is no stranger to Stanford. He was visiting professor in Physiology in the early seventies. He taught basic neurology and neurophysiology. At the time there were discussions about the development of neurosciences program at Stanford in which he participated. The program became a reality in 1977 with the construction of the Sherman Fairchild Building.

Commenting on the search, Crowley said that a distinguished list of about 300 persons was considered.

"It was clear from the start that the faculty wanted a dean with an established academic and administrative record," he said. "Dr. Purpura emerged as the outstanding choice, and the consensus developed within the search committee and faculty and students was astounding."

The committee was headed by Dr. Jack Barchas, Pritzker Professor of Psychiatry and Behavioral Sciences.

Purpura comes to the Medical School at a time in which the posts of dean and vice president for medical affairs will be separate.

The posts were split in 1980 when Crowley was named vice president for medical affairs as part of a major reorganization of the Stanford University Medical Center and its units, the Hospital, Clinics, and the School of Medicine.

The reorganization, Crowley explained, recognizes the increasing complexities and responsibilities of the two positions and the need to be able to address the priorities of the Hospital and the School of Medicine on an even-keel basis.

Crowley's predecessor, Dr. Clayton Rich, held both positions when he resigned in 1979.

Among the dean's chief responsibilities will be the development and sustenance of the academic programs of the School in teaching, research, and patient care, including budget, allocation of academic space, and recruitment and nomination of academic chairmen and associate deans, Crowley said.

He will also be responsible for policies and procedures to insure the quality of academic programs, and the effective promotion of the Faculty Practice Program, and he will participate in a leadership role in the policy setting, planning and overall management of the Medical Center.

The dean also chairs the executive committee of the Medical School. Consisting of department chairmen and associate deans, the committee acts as the chief advisory body to the dean.

Purpura is married and has three sons and a daughter.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

"My most important concern is to find the way to becoming an effective dean, not necessarily loved, but effective, and to meet some of my own goals—making the School as good as it should be and perhaps even better."

Thus spoke Dr. Dominick P. Purpura, the newly appointed dean of the Stanford University School of Medicine, in a recent campus interview.

At 54, Purpura is of medium height, with brown hair, blue eyes, and a trim waist maintained by jogging 20-25 miles per week. His hair is thinning, and he wears glasses. He was full of thumping enthusiasm as he talked about the challenge of his new job.

"I've dealt with many deans in my 29 years of academic life," he readily admitted, "but I never felt they really understood the problems of basic scientists as I do.

"Everybody in academic medicine says this of deans. So the novel challenge that I face now is, Can I really do the job that I have always complained about?"

Purpura is convinced—and has said so on other occasions—that to be a satisfactory dean, one must do at least three things:

"First, he must be aware of not necessarily the consensus but the direction towards excellence that a faculty wants to take," he said.

"Faculties often do not know the way entirely, and the dean can facilitate that move."

He believes that because of his own experience as a scientist articulating those needs for years, perhaps he can now listen to the faculty a little better than a "professional" dean.

"Second, a dean must be aware that a School of Medicine is concerned with the teaching of medicine," Purpura said. "Too often some of the best medical school faculties have too remote a relationship with medical students and that leads to disillusionment for both students and faculty.

"I think it's important to put the medical student back at the central focus of concern in a medical school.

"Third, of course, apart from leading and guiding people towards their own ascertainment of excellence, is to recognize that a medical school, and Stanford in particular, is not on Neptune or Uranus.

"If the School were on an isolated planet or the Mojave Desert, there'd be no problem. It would be so contained that we'd develop in any way we saw fit. But the School is located in this community and it must develop its relationships in a proper and mutually beneficial way."

How was he considered for the Stanford deanship?

Purpura said he had lectured in the Physiology Department at Stanford in the early seventies.

"I concluded that the Medical School was a remarkable place and this was the one School that I would look into seriously, if I had the opportunity.

"But back at Albert Einstein School of Medicine I got busy with my own work. Eight years went by and I completely forgot about it. Then quite out of the blue last January I got calls from several people inquiring if I would be interested in being considered for the deanship.

"It didn't take me more than five seconds to respond that I was."

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His interest in Stanford was two-fold, Purpura explained. "I knew for many years that the Medical School is a center of excellence. I also knew that my own career was moving more and more in the direction of research development and administration, although I had continued my own investigations."

Since 1972, Purpura has directed the Rose F. Kennedy Center for Research in Mental Retardation and Human Development in the Bronx, New York. For the past seven years he has also served as professor and chairman of the Department of Neuroscience, which he founded, at Albert Einstein College of Medicine.

His research at Einstein has concerned human cortical development using the techniques of basic neuroscience.

"I see the basic data coming out of neuroscience research as the only hope in our being able to understand the pathophysiology of developmental failure," he said.

Purpura and his colleagues have applied this knowledge and techniques to the study of abnormal nerve cell development related to mental retardation.

Specifically, he was one of the first to demonstrate that there were disorders of dendrites and dendritic spine structure in the brains of children with profound mental retardation. Most communication between nerve cells occurs through structures called synapses onto dendrites, threadlike extensions on the surface of nerve cells.

Purpura determined that the brains of children who are mentally retarded with no known cause such as chromosomal abnormalities, had nerve cells virtually devoid of the typical patterns of spine synapses that normally develop before birth.

He began to suspect that this problem was the basis for the lack of cognitive development, and later these findings have been confirmed by others.

"I went into research in medical school because it was as joyful as a hobby," he said. "And I feel I have been successfully funded for 30 years to practice my hobby. What a privilege and responsibility!"

"That's what in fact a good deal of basic research is for the individual—an exploration of the joy of discovery and doing things. For awhile I may give up some of that joy, but I think it's a minimal sacrifice."

Purpura, however, plans to teach. His lectures have dealt with integrative processes in the mammalian brain, and he is well-known for his ability to communicate clearly and to present difficult data in a simple, easy-to-understand manner.

"I love teaching," he said. "Back at Einstein I gave about 70 percent of the neurobiology course myself. I intend to be able to give some lectures, if invited, in the Departments of Neurobiology, Neurology, and Psychiatry at Stanford."

Purpura glanced at his watch. "Time," he said, "to go to my next meeting."

He was all smiles as he said goodbye. But it was clear that even though he doesn't become officially dean till next year, his job had already begun.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Peter Wood isn't exactly sure what to say in a lecture entitled, *Dietary Intake of the Older Athlete.*

It's not that he doesn't know what older athletes eat. He's done studies, academic and personal, into what foods and diets seem to work best for active people.

He's got plenty to talk about, certainly.

"But I can't really think of any differences between the diet of a 65-year-old runner and a 20-year-old runner. The differences in a desirable diet are quite minimal," he states carefully. In fact, Wood, who has been running for 40 of his 52 years, says he can't think of a single thing older runners should eat differently from their more youthful compatriots, except that children and adolescents need extra calcium, other minerals and vitamins for growth.

Yet Wood, who estimates he's run about 100 marathons at times ranging down to a respect-demanding 2 hour and 45 minutes, will deliver his talk on diet for older athletes Sept. 25. It's the final morning of a two-day seminar entitled "Nutritional Determinants in Athletic Performance."

The symposium is being held at the Sheraton Palace Hotel in San Francisco and is jointly sponsored by the Stanford Heart Disase Prevention Program (SHDPP), the American College of Sports Medicine and the Shaklee Corp., a manufacturer of nutritional products and food supplements.

Coaches, trainers, teachers, physicians and scientists will exchange the latest research findings on the role of nutrition, fluid intake and body composition on athletic performance.

Wood, deputy director of SHDPP, firmly believes that diet should relate directly to exercise and not the age of the participant.

"If someone is running a marathon, he's going to need a lot of carbohydrates whether he's 20 or 80,"Wood emphasizes.

But he also cautions:

"Remember we're talking about athletes. You can't compare the diet of a 70-year-old runner with a totally sedentary 70-year-old."

Wood, who ran this year's Boston marathon in just over three hours, said he prepares for races using a modified form of a technique called carbohydrate loading.

About one week before a major race, Wood says he takes about a 25-mile run in the Palo Alto hills near his house.

"I become exhausted, and the glycogen (the form in which people store body sugar or energy) content of the muscle drops significantly. I then eat plenty of carbohydrates until the race.

"Being British (Wood has been in California about 20 years) I do enjoy sugar, but I wouldn't recommend that. Any starch will do.

"Just about the time the race starts, the glycogen is building to a peak. This gives a boost at the starting line, a sort of rebound effect."

Some athletes further deplete their glycogen level by restricting their carbohydrate intake for a few days after their exhausting pre-race workout. Then they eat extra carbohydrates for just a few days before the race.

"But I think that's a bit much, and just might possibly be harmful," Wood says.

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The runner and scientist—his specialty is lipid chemistry—cautions that techniques such as carbohydrate loading are fine for athletes when they solve certain endurance problems.

"But they certainly aren't the cure for everything. Carbohydrate loading isn't going to solve a mechanical defect such as helping someone's legs get longer or their lungs breathe easier from smoking, to cite a few obvious examples."

Athletes burn signficantly more calories than sedenatry persons, Wood explains, "so consequently a vigorous exercise program is sometimes the least painful way to diet."

As for general dietary guidelines, Wood recommends what most experts have been suggesting for at least a decade: less fat, salt and cholesterol; more fiber and carbohydrates.

"But if I only had 20 seconds to tell athletes what they should consume, I should say, 'before and during exercise in hot weather, drink plenty of water.'"

Meetings for the two-day symposium begin at 8:45 Sept. 24.

Topics include a presentation on the latest research into the role of carbohydrates and fats in running, what drinks will maximize athletic performance, the role of vitamins, and the consequence of rapid fluid and weight loss on health and fitness.

Co-chairmen are Dr. William Haskell of SHDPP and Dr. James Scala, Shaklee vice president of Science and Technology.

Sept. 14, 1981 —30— mg20

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

The role of diet in athletic performance is the subject of a symposium scheduled Thursday and Friday (Sept. 24-25) at the Sheraton Palace Hotel in San Francisco.

Coaches, trainers, teachers, physicians and scientists are to spend the two days exchanging the latest research findings on the role of nutrition, fluid intake and body composition on athletic performance.

Entitled, *Nutritional Determinants in Athletic Performance*, the symposium is sponsored by the Stanford Heart Disease Prevention Program (SHDPP), the American College of Sports Medicine and by Shaklee Corp., manufacturer of nutritional products and food supplements.

Special lectures include a special presentation on *Sports Anemia: Its Influence on Athletic Performance* by Russell Pate of the University of South Carolina, and *The Diabetic Patient and Athletic Peformance* by Arthur Leon of the University of Minnesota.

Also included will be presentations of general interest on the latest research on the role of carbohydrates and fats in running, what drinks will maximize athletic performance, the role of vitamins and minerals, and the consequences of rapid fluid and weight loss on health and fitness.

Lecturers include David Costill of Ball State University, Gail Butterfield of the University of California at Berkeley, Peter Wood of SHDPP and James Whittam of Shaklee.

For further information contact symposium co-chairman Dr. William Haskell of Stanford (415) 497-6254, or Whittam at Shaklee, (415) 887-5136.

Sept. 14, 1981 —30— mg21

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

The first use of synchrotron radiation to obtain X-ray pictures of blood vessels in animal hearts was reported by Stanford University scientists Monday, Sept. 14.

The novel application of synchrotron radiation to medicine, according to Dr. E. Barrie Hughes, "offers a new approach to arteriography of the coronary arteries by non-invasive means."

The new technique, developed by grants from the Henry J. Kaiser Family Foundation and the William Randolph Hearst Foundation, may turn out to be, the scientists believe, one of the most important advances in X-ray diagnosis since Wilhelm C. Roentgen, a German physicist, discovered the X-ray tube in 1895.

Hughes is project director and senior research associate at Stanford High Energy Physics Laboratory. He discussed the potential uses of synchrotron radiation in medicine at an International Conference on Digital Radiography at Stanford University Medical Center.

Synchrotron radiation, obtained by whirling electrons in a ring at nearly the speed of light, produces X-rays of enormous intensity that can be finely tuned. This form of radiation has been used for analytical research in surface physics, biochemistry, solid-state physics, and structural biology. But this is the first time, according to the scientists, that synchrotron radiation has been studied as a source for producing clear pictures of small and large blood vessels in the heart, brain and other parts of the body.

The technique so far, Hughes reported, has been studied in phantoms, objects that mimic body structures, and in excised calf and pig hearts injected with a contrast agent such as iodine.

In patients the procedure will involve two X-ray pictures following a simple injection in an arm vein. It would be done on outpatients and would provide an alternative to catheterization, an uncomfortable and expensive test associated with risks and requiring several days of hospitalization.

Another possible use of the technique would be in mass screening for coronary and cerebral artery disease much as the X-ray is now used to detect tuberculosis. The present methods of visualizing coronary and cerebral arteries are too costly in terms of risks and dollars. Their use is limited only to those patients suspected of having advanced disease, the scientists believe.

According to Hughes, attempts to develop non-invasive methods in angiography have suffered from the use of conventional X-ray sources which are too weak to provide a truly monochromatic or single-color X-ray needed for the procedure. The conventional Roentgen tube emits white light which also suffers from a scattering effect as it penetrates tissue structures.

"A synchrotron X-ray beam, on the other hand, is capable of providing an X-ray intensity entirely adequate to record projected images even after transmission through thick body sections," Hughes explained.

The Stanford investigators are performing their experiments at the Stanford Synchrotron Radiation Laboratory (SSRL) adjacent to an electron storage ring called SPEAR located at the Stanford Linear Accelerator Center. SPEAR, in combination with special magnets, called "wigglers," developed by SSRL scientists to maximize the production of synchrotron radiation, represents a totally new source X-rays with more than 100,000 times the intensity of the radiation emitted from the largest X-ray tube.

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According to Dr. Arthur I. Bienenstock, director of SSRL, "It is the development of wiggler magnets that has made the medical experiments possible."

Through a "window" in the storage ring, the scientists intercept the beam of X-rays with a pair of special crystals called monochromators, also built by SSRL scientists. The angle of the crystals can be adjusted to select a single-color X-ray frequency most sensitive to iodine.

Using miniature electronic detectors, the scientists take two X-ray pictures of the organ that has beeen injected with iodine. The pictures can be displayed on a television monitor or oscilloscope in graph form. The two pictures display all the blurry features normally presented by soft tissue and bones in conventional X-rays.

But when the two pictures are fed into a computer the scientists can suppress the information derived from tissues, and maximally enhance information related to the iodine.

The result, Hughes said, is images that can be recorded in sharp focus despite arterial motion. The intensity of the X-ray beam permits short time exposures well below that of a conventional X-ray, and the scattering effect is all but eliminated.

The next stage of their research, the scientists announced, will involve studies in animals and a small number of patients. This work, however, will probably not begin until next summer when a new X-ray beam line, wider than the present one in the storage ring, is constructed. This would include a patient examination area within the Stanford Synchrotron Radiation Laboratory.

In the future one of the major obstacles in the use of synchrotron radiation in medicine will be the high cost of constructing facilities. But Hughes said, "Rapidly developing technologies are making useful beams available at more existing centers and reducing the potential size and cost of future facilities designed expressly for medical work."

There are about six synchrotron storage rings currently available in the United States and operating in connection with large accelerators built for basic physics research.

The research team is composed of investigators from the departments of Physics and Electrical Engineering, and the Stanford University School of Medicine.

Principal investigators are Dr. Edward Rubenstein, professor of clinical medicine and Medical School associate dean for postgraduate education, and Nobel Laureate Robert Hofstadter, Max H. Stein professor of physics.

Other collaborators include Lorna E. Campbell, Randolph L. Kirk, Thadeus J. Krolicki, Jennifer P. Stone, Steven Wilson, Dr. Herbert D. Zeman and Professors William R. Brody, and Albert Macovski.

Dr. Albert C. Thompson of Lawrence Berkeley Laboratory designed the special detectors utilized in the project.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

A new artificial pancreas is being used at Stanford University Hospital in efforts to help insulin resistant diabetics.

Dr. Michael Greenfield, an endocrinologist, said blood sugar level has been successfully controlled so far in six diabetics who volunteered to participate in a pilot study.

The experiment was started about six months ago under a grant by the National Institute of Health and the Nora Eccles Treadwell Foundation. Dr. Gerald M. Reaven, professor of medicine, is the principal investigator.

The artificial pancreas is a mechanical device which permits the patient's insulin needs to be monitored on a minute-to-minute basis. The machine calculates and then administers the precise insulin dose needed at various times of the day to maintain proper blood sugar level.

About 10 million Americans suffer from diabetes, a disorder in which the body is unable to properly oxidize carbohydrates—specifically blood sugar—because either the pancreas fails to produce sufficient insulin or the body is incapable of utilizing its existing insulin supply. The amount of insulin needed at any given time is highly variable, and depends on such factors as food intake (which supplies glucose or sugar) and amount of exercise.

In the Stanford program, patients are hospitalized for about two weeks. Volunteers are connected to the mechanical pancreas, where for 24 hours blood in minute quantities is drawn from one arm and analyzed by the machine. The device, which costs $50,000, vaguely resembles in size and appearance a battery charger used by service stations.

"The blood is analyzed for glucose level every 10 seconds and the appropriate insulin dosage is thus computed. Then the machine injects insulin into the other arm at the precisly computed dosage," explained Robert Solomon, a research fellow.

Greenfield said the technique "is particularly significant for the millions of non-insulin-dependent diabetics who previously have been treated unsuccessfully with other drugs.

"There are people whose bodies produce an average or only slightly below average amount of insulin. What happens, though, is that for some reason their system is unable to use their own insulin to control the amount of blood sugar.

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2-2-2 "Physicians in the past sometimes gave them massive doses of insulin in order to try and control the diabetes. But that approach was not effective, because we didn't know how much the patient needed at a particular time of the day," Greenfield added.

During the past decade, these older diabetics have been treated with drugs intended to help their bodies utilize their own insulin. But Greenfield explained that these drugs, while often offering temporary relief, may not sometimes provide any longterm benefits.

(In contrast, diabetics whose bodies fail to produce sufficient insulin have been treated successfully for many years with insulin injections. Because their insulin needs are smaller and more predictable, doctors have found it easier to prescribe proper dosages for these patients, who usually are younger than the insulin-resistant diabetic.)

Solomon said that the amount of blood used during a two-week hospitalization would be about the same as a single blood bank donation.

About 21 artificial pancreas machines currently are being used nationally, but Greenfield said he believes Stanford is the only facility using the gear for treatment research into non-insulin dependent diabetes.

Greenfield and Solomon said the current volunteers all have shown significant improvement in their blood sugar as they are continued to be monitored by their private physicians and the Clinical Research Center at Stanford University Hospital.

Eventually, the researchers hope that a miniaturized version of the artificial pancreas might be developed, so that a patient's insulin dose might continue to be monitored and administered. But Greenfield said the predictions based on the two-week monitoring seem to work effectively for the group tested so far.

Solomon and Greenfield both said current research would have to be expanded if scientists are to learn why some people build up a resistance to insulin or if the resistance is the preexisting condition which hinders the body's ability to burn blood sugar or produce insulin efficiently.

Doctors, who hope to complete the study in about a year, are searching for additional volunteers.

Criteria include persons suffering from diabetes who are otherwise in reasonably good health. They should never have been treated with insulin before. The researchers would prefer persons who are not more than about 25 percent overweight.

The volunteers will be treated without charge, including free insulin supplies, Greenfield said.

Persons or referring physicians who wish to contact the program may call Greenfield or Solomon or Claude Lardinois at (415) 497-6973 or 497-6054.

Sept. 9, 1981

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
(If you wish to call the Stanford University Blood Bank directly, please call Deborah Spector at (415) 497- 6795)

STANFORD—

When you sign a contract to work with Deborah Spector at the Stanford University Blood Bank, one thing you don't get is money.

Spector, hired three months ago to set up a volunteer program for the blood bank, is looking for about 25 people who will perform a plethora of tasks without pay at the recently opened donor center.

But, said Spector, that doesn't mean she's looking for amateur or casual performances, and that's the reason for the contracts.

"We're trying to do everything as professional as possible, hence we developed the idea of contracts for our volunteers," she said.

"We'll spell out very specifically what we expect of our volunteer workers and what they might expect of us," she said.

One thing volunteers might hope for, of course, is a sense of satisfaction from helping people.

"And I think we're offering a real chance for our volunteers to feel part of a team—to feel as if they belong to a vital work environment. There are going to be very few distinctions between our paid and unpaid staff," Spector said.

But in addition to satisfaction, Spector said volunteers will be receiving some very practical benefits, particularly persons seeking to enter or reenter the job market.

"They'll be gaining work experience, and they'll also be getting a reference from us."

Students might also receive work-study credit if it can be arranged with their high school, college or technical school, she said.

Each volunteer will be asked to tour the facility at 800 Welch Road before deciding what task they will perform.

Needs include persons to assist with registration and scheduling of about 65 donors daily. Other persons are needed to drive blood donations to the Stanford Medical Center laboratory for processing, record keeping, helping donor nurses in a myriad of ways, or using telephones to recruit donors.

"One of the most important things we do around here is make donors feel comfortable," said Spector. "The main qualification," she said, "is a willingness to give of yourself, help others and be part of a team.

"But we certainly aren't going to rule out people with specific technical skills either, especially since the complex treatments, including organ transplants underway at Stanford University Hospital, require processing equipment and techniques not ordinarily found at many blood banks."

All of the blood is used at Stanford University Hospital, exclusively for patient care, unless the donor is informed in advance that his blood is needed for Medical Center research.

In order to keep the constantly needed supply of blood flowing, Spector said she is particularly anxious for volunteers of varied backgrounds.

"Our donors come from all walks of life. In order for them to feel as comfortable and at home as possible, it's vital that our volunteers also represent as wide a spectrum of our community as possible," she said.

Handicapped persons are particularly urged to apply.

"I think there are quite a few handicapped persons out there who are truly interested in doing volunteer work, but who feel reluctant because no one ever asks them.

"Well, we're asking," Spector said.

And lest anyone think that volunteering at the blood bank is purely for women, Spector adds:

"We've ordered quite a few uniforms for men."

To get a uniform—given to each volunteer—or to secure further information, call (415) 497-6795.

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Sept. 9, 1981

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Volunteers are needed to help determine how the human process of aging affects the way in which different drugs are metabolized by the liver.

A group of Stanford researchers headed by Dr. Terrence Blaschke, chief of the Division of Clinical Pharmacology, is conducting a study on how the liver breaks down different types of drugs and how this process changes with age.

The three drugs being tested are amobarbital, oxazepam, and isoniazid.

Volunteers in the study are administered small doses of each drug, each on a separate day. Blood and urine samples are collected throughout the week, which subjects spend in the Clinical Research Center.

"There are different pathways by which the liver eliminates these drugs," says Blaschke, "and we think that one of the pathways will change with age whereas the other two may not."

If this is true, he explains, it would affect dosage prescriptions of different drugs, depending on their pathways, for patients of varying ages.

The doses of drugs administered, explains Kathy Turner-Tamiyasu, the research nurse involved in the project, pose only minimal risks.

"The only really possible problem is an allergic reaction, which we can never predict." The other risks are described in detail on the consent form.

Volunteers must be healthy, white women, aged 40 to 80. They should be non-smokers who take no medications except birth control pills or Premarin. All subjects will be compensated.

The reason for using white women only, explains Blaschke, is to provide for homogeneity. "Also," he says, "we wanted to look at hormonal changes both pre- and post-menopause."

Anyone interested in volunteering or obtaining further information should contact Turner-Tamiyasu, at 497-5266.

9-9-81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(EDITORS: A longer, featurized article about the artificial pancreas research at Stanford University Medical Center is available if not included).

STANFORD—

A Stanford University Hospital program is searching for volunteers willing to undergo treatment in an experimental program studying adult onset diabetes.

Dr. Michael Greenfield, an endocrinologist, said the program involves the use of a mechanical monitor which during a two-week period develops a precision profile of certain diabetics' insulin needs.

Volunteers should be adult-onset (non-insulin-dependent) diabetics who never before have been treated with insulin. Greenfield said potential volunteers should be otherwise in good health and within about 25 percent of their ideal body weight.

Selected volunteers will be admitted to Stanford University Hospital for two weeks, where their blood will be analyzed on a minute-by-minute basis using the artificial pancreas. After their release, volunteers will be followed closely by the Stanford researchers and their own physicians.

All costs, including hospitalization, insulin and followup visits, will be provided free to volunteers under a National Institute of Health grant. Six volunteers, who have been involved in the program for up to six months, have found their diabetes successfully controlled, Greenfield said.

Volunteers or physicians wishing to refer patients may call Greenfield, Solomon or Claude Lardinois at (415) 497-6973 or 497-6054.

9-8-81 —30— mg20

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

An election is scheduled Sept. 18 to decide whether about 90 Stanford University Hospital employees want to be represented by Local Union No. 39, International Union of Operating Engineers, AFL-CIO.

Eligible to vote are the crafts and communications employees and biomedical technicians formerly represented after 1972 by an unaffiliated hospital employee organization, SUMCEDA, an acronym for Stanford University Medical Center Engineering Department Association.

The election will be held from 7 to 9 a.m. and 3 to 5 p.m. at locations to be determined at both the main Hospital and Hoover Pavilion.

In a Nov. 30, 1979 election SUMCEDA scored 39 votes, Local 39 got 36, and 5 workers voted for no union. In addition, four ballots were challenged and the election results were suspended.

After the election Local 39 filed objections and an unfair labor practice charge against the hospital. These actions resulted in more than one year of proceedings before the National Labor Relations Board. In early 1981 Local 39 dropped its charge and all objections.

While the results remained in limbo, SUMCEDA's leadership wrote asking to withdraw as the bargaining unit.

Norm Keltner, acting SUMCEDA president, said he wrote the letter because the workers were "dissatisfied with SUMCEDA's ability to bargain with management.

Keltner served as an official election observer for Local 39 in the 1979 election.

Following an investigation the NLRB ruled June 30 that SUMCEDA'S request to cease representing the workers was legitimate and represented the wishes of the membership. The NLRB then ordered a new election.

Don Thomas, hospital personnel director, in a Sept. 1 letter to the employees eligible to vote, sait the hospital administration felt it owuld be a mistake to bring Local 39 into the hospital. He added the hospital would provide the employees with accurate information on the issues involved before the election.

Dan Robinson, assistant director of personnel, said market adjustments have been made to the formerly SUMCEDA-represented employees' salaries on Aug. 30, 1980 and 1981, along with yearly wage adjustments for other hospital employees.

Sept. 8, 1981 —30— mg20

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

A prototype X-ray system which its developers believe could radically improve certain diagnostic procedures is expected to highlight an International Conference on Digital Radiography scheduled at Stanford University Medical Center Sept. 14-16.

The device, which is based on the technology used for the CAT scanner, is the substance of a system called dual energy digital radiography.

Dr. William Brody, director of Stanford's Advanced Imaging Techniques Laboratory and conference chairman, said the system employs two beams of X-ray. The simultaneous images are compared and analyzed by computer and then projected on a television screen.

Unlike traditional X-rays, which give a single picture forever frozen onto film, the use of a console and a TV screen permits physicians and/or technicians to adjust the picture so that particular organs, or even tissue, may be highlighted. This, said Brody, provides doctors with a heretofore unavailable diagnostic picture.

The images recorded by camera are fed into a computer, so that they may be converted into verbal data or numerical tabulations in addition to pictures on the video screen.

Tissue or blood vessels may be viewed without catheterization, an often risky procedure which can trigger stroke or other vascular injury.

Stanford researchers have been using the machine on patients with vascular problems on an experimental basis, but another system called digital fluoroscopy—which also uses video equipment to construct X-ray pictures—is to be set up while the conference is underway.

Digital fluoroscopy, unlike dual energy radiography, is commercially available, and can be placed in a large hospital setting quickly.

In fact, Brody said the system is expected to be used in patient treatment at Stanford by the end of September.

A major difference between digital fluoroscopy and X-ray is that the dual energy gear is capable of isolating the particular organ or tissue needed for study with one picture. With fluoroscopy, the patient must be photographed twice, creating the risk that the picture will not be a precise match and might be blurred.

The first picture is taken without a dye or contrast medium. The second picture is taken after a dye is injected, and results of the two pictures are compared. Even though with fluoroscopy a dye must be injected, no catheterization is needed, thus making it far less risky than traditional X-ray.

Techniques currently are not developed to the point where fluoroscopy can replace catheterization in all cases, since picture quality may not always be as desirable. However, Brody feels the procedure is clearly the direction in which X-ray is heading.

The conference at Stanford starts at 7:30 a.m. Monday, Sept. 14. Group meetings are to be held in Fairchild Auditorium at the Medical Center.

Brody said that sessions are intended for both medical personnel and scientists involved in the techniques of developing digital radiography and its application to patient diagnosis.

Sponsors include the Advanced Imaging Techniques Laboratory of the Department of Radiology, as well as the International Society for Optical Engineering and the Bureau of Radiological Health.

A one-day tutorial course, An Introduction to Digital Radiography, precedes the main conference on Sunday, Sept. 13.

9-8-81 —30— mg20

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (story by Paul Gullixson) (415) 497-6911

STANFORD—

Stanford University School of Medicine recently announced the selections of this year's Andrew W. Mellon fellows, Agnes Axtell Moule faculty scholars, and William H. Hume scholars.

The Mellon fellows were chosen in accordance with a three-year $400,000 grant awarded to the School of Medicine in 1979.

The medical scientists receiving funds from the Mellon Foundation in New York are Richard Britt, M.D. (surgery), Dieter Enzmann, M.D. (radiology), Brian Hoffman, M.D. (medicine), Robert Marcus, M.D. (medicine), Vera Morhenn, M.D. (dermatology), Ron Rosenfeld, M.D. (pediatrics), Peter Sargent, Ph.D. (structural biology), Gary Schoolnik, M.D. (medicine), Carla Shatz, Ph.D. (neurobiology), Howard Shulman, Ph.D. (pharmacology), Jeffrey Sklar, M.D. (pathology), and Lawrence Steinman, M.D. (neurology).

The Hume fellowships are funded by a $5.6 million gift left to Stanford by the late William Mansur Hume of Woodside. The 1981-82 Hume Faculty Scholars are Helen Blau, Ph.D. (pharmacology), Eric Knudsen, Ph.D. (neurobiology), Bruce Ransom, M.D. (neurology), Stephen Shochat, M.D. (surgery), and Douglas Wallace, Ph.D. (genetics).

As stipulated in Hume's will, all the fellows are engaged in basic biomedical research.

The Moule fellowships were set up through bequests made by the late Manley A. Moule in memory of his mother, who died of cancer in Palo Alto in 1939. Moule, a 1917 Stanford graduate, requested that the money go towards cancer research.

The Moule recipients are Ann Arvin, M.D. (pediatrics), Jerome Burke, M.D. (pathology), Barbara Carroll, M.D. (radiology), C. Norman Coleman, M.D. (radiology), Richard Hoppe, M.D. (radiology), Anthony Howes, M.D. (radiology), Robert Kessler, M.D. (surgery), Lawrence Korn, Ph.D. (pathology), Jane Marmor, M.D. (radiology), Peter Moskowitz, M.D. (radiology), Peter Parham, Ph.D. (structural biology), Gordon Ringold, Ph.D. (pharmacology), Branimir Sikic, M.D. (medicine), F. Graham Sommer, Ph.D. (radiology), and Roger Warnke, M.D. (pathology).

Both the Hume and Moule fellowships provide for some salary support, $1,000 for laboratory or teaching expenses and $500 for travel to scientific meetings.

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9-3-81

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

The Department of Dietetics has prepared a 45-minute nutrition workshop specifically designed for Stanford adult outpatients who are undergoing cancer treatment. The workshop was developed to help cancer patients obtain and maintain good nutritional status, explains Jane Woeckener, assistant director of Dietetics/Nutritional Services, because malnutrition can influence response to cancer treatment.

The workshop will be conducted by Kristine Birge, R.D., M.S., a clinic nutritionist. During the workshop, patients will participate in determining their individual ideal weights, protein needs, caloric requirements, nutrient needs, needs for vitamin supplementation, and plans for dietary improvement.

The total cost of the workshop for each participant is $10. A copy of the Department's new publication, "Nutrition for Cancer Patients undergoing Radiation and Chemotherapy," will be given to each participant.

The first workshop is scheduled for Sept. 17, from 9 to 10 a.m., in room E003. Subsequent workshops will be conducted weekly with the time and day varying each week to maximize patient participation. Workshop schedules are posted in the Oncology and Radiation patient waiting areas, or can be obtained by calling the Nutrition Clinic.

The Department of Dietetics' belief, says Woeckener, is that this will be a "successful, self-supporting workshop that can be of significant benefit to patients receiving outpatient cancer treatment."

Any questions about the program should be addressed to Kristine Birge, who can be reached at 497-5440.

9-3-81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (story by Paul Gullixson) (415) 497-6911

STANFORD—

Many activities which Stanford's Rosemary Watt and Suzanne Miller had anticipated during their recent nursing oncology tour of the Soviet Union should never have been planned.

They know that now but explain that much of the disappointment that surrrounded their attempt at a professional exchange with Russian nurses stemmed from their own naivete towards the "stigmas" attached to both cancer and the nursing profession within the USSR.

"Many times it was like beating a dead horse with the things we were trying to do," said Watt, an enterostomal clinical nurse specialist and co-leader of the nursing tour.

Prior to the 14-day trip, Watt and Miller had anticipated discussing cancer patient care with Soviet physicians and nurses. The tour, presented by the Professional Seminar Consultants, Inc., was designed as a continuing educational experience for the more than 80 nurses in the group congregated from around the nation. Watt and Miller were asked to present papers to the nurses, some of which were to be presented to Soviet nurses as well.

But not one socialist nurse attended any of the six lectures given in the five republic capitals they visited. The private discussions of cancer patient care never happened nor did the opportunity to observe nurses caring for or physicians treating cancer patients.

When asked why, Miller could only shrug. "We didn't ask a lot of questions about why we couldn't. We just made it known that we wished to meet with Russian nurses and talk with them."

"The status of nurses in Russia is such that this was not appropriate behavior," surmised Watt. "Presenting papers to nurses is just not done there."

Miller, a clinical oncology nurse educator here at the Medical Center, noted that nurses in the USSR don't make the type of nursing judgments common in America. Because of nurses' subordinate role there, Watt and Miller were given the chance to talk with only one nurse in the three cancer institutes and one hospital they visited.

The one discussion was held with a head nurse in the operating room where, as far as Watt and Miller could tell, she performed many of the same duties as surgical nurses do here. Nevertheless, the conversation was allowed only with a physician present, who, as the Americans recall, continually interrupted the nurse and answered questions for her.

(Though an interpreter accompanied them at all times they cautioned that there were problems with translation, as the interpreter was "not necessarily medically oriented.")

Many of the touring American nurses got a better understanding of the feeling for their profession from talking with one nurse of Russian descent who was along on the tour. She told her colleagues that while she was growing up, there came the dreaded day she had to tell her Russian-raised parents she wanted to be a nurse.

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"They responded as though she told them she was going to be a prostitute," said Watt.

"The role of nursing as we know it was just not a part of the culture in which we found ourselves," said Watt. " You had to face reality and deal with it as it is."

One word that creates even more negative feelings than nursing and is seldom allowed in Soviet households is "cancer."

"It's treated (in attitude) like leprosy," said Watt, adding that even those patients who have it rarely, if ever, hear the word mentioned.

"Cancer patients there don't get told their diagnosis," said Miller. "They may suspect but even those in the cancer institutes say to themselves, 'I'm here because my doctor works here and that's all. Everybody else here has cancer but I don't.' "

Watt and Miller believe that the evasion surrounding the illness is similar to the attitude towards the disease in the U.S. during the 1940's and 50's. But despite the design of the tour, they never did observe cancer patient care by nurses and received only brief, partial tours of the cancer institutes.

"The staff within the general, or emergency hospitals as they are called, were marvelous to us," said Watt. "They showed us patients and equipment and graciously answered our questions. It was just the cancer institutes that shut their doors."

As far as cancer treatment goes, Miller said that though she was told they did use chemotherapy, she never did observe it in use. During their tours of the institutes they only saw halls and the diagnostic areas.

"All of the presentations in the cancer hospitals were done in an auditorium with the physicians at podiums," said Miller.

She said one nurse was going to be given a tour of the pediatric ward by a physician in one of the cancer institutes when a senior doctor stepped in the way, saying it wasn't possible because the ward was under construction.

"It's in a way difficult to sift out what was real and what they wanted you to see," said Miller.

Despite the lack of extensive tours, at least one nurse got a first-hand account of general nursing care, as, while on the trip, she suffered an acute appendicitis attack.

The care administered following her appendix-removal surprised Watt and Miller. No intravenous feeding was given despite her nausea, and the nurses recall that her blood pressure was never taken.

"The only physical measurement that the nurses did was to take her temperature," remembers Watt.

The hospitalized nurse later reported that about the only responsibility she could observe nurses having on a regular basis was giving out medicine. Watt added, however, that she did hear they were also involved in ambulation, assisting bedridden patients to walk, and catheterization, inserting a catheter into the bladder.

They also noticed the medical staff there often reused non-disposable brown rubber IV tubing and IV bottles, a common practice here in the states during the second world war.

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"Generally speaking, even though some areas of care may be more sophisticated, my impression is that they're about thirty years behind," contended Watt.

The trip began in Moscow on July 14, and continued through the cities of Tbilisi, Erevan, Baku and Kiev, all capitals of their respective republics. Ninety-one people, including some family and friends, went on the tour. Three were from Stanford University Medical Center, while two others were from Children's Hospital at Stanford.

Not all of the trip was business, however, as nurses spent time shopping, sipping cognac and savoring borscht as well. In addition to visits to the Kremlin, Red Square and St. Basil's Cathedral, cultural activities ranged from attending a Moscow circus to swimming in the Caspian sea.

They enjoyed great freedom during their trip and while avoiding any political questions, resolved many of their own presumptions about Soviet life. As independent winemakers, Watt and Miller found a personnal interest in Soviet wines.

Miller said that on one guided tour they were shown a bell that was so big they couldn't lift it out of the pit it was formed in, and a cannon that was said to be so big that if it were ever fired it would blow itself up.

Miller said that their tour guide added, "We are like you in America, we like things bigger and better. We don't always make them better but we try to make them bigger."

Overall, Watt and Miller were excited about their experiences in the Communist country and were satisfied with their professional exchange with the medical staff. Watt felt that many of the setbacks in their plans were due to the size of the group they were traveling with. If just the two of them were to go back, she feels even the cancer hospitals would probably be more open to their questions and requests.

They also were pleased with the gift exchanges between the health care representatives of the two countries. Watt said they gave the physicians Russian-translated copies of the papers they presented during the trip and samples of American medical supplies. In return, the Soviet physicians presented them with pins and postcards of the area and, in one instance, a picturesque book, in Russian of course.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(EDITORS: Elvia Garwood, director of the Hospital Modernization Program, is available at (415) 497-7474).

STANFORD—

Preparation of detailed designs and licensing applications have been authorized for the largest construction project in the history of Stanford University—the Hospital Modernization Project (HMP).

The Board of Stanford University Hospital Directors resolved at an Oct. 23 meeting to authorize the Seattle-based architectural planning firm of Naramore, Bain, Brady and Johanson (NBBJ) to begin Nov. 1 drawing up detailed schematic plans for the project. NBBJ already has prepared a predesign summary outlining proposed changes and has opened a Palo Alto office for the project.

The board's action also authorizes the application of a Certificate of Need (C.O.N.) from the state of California by Feb. 1. The procedure is required of hospitals seeking to renovate or add to their facilities, and in essence ensures that a community need exists for the alteration or addition.

The HMP is estimated at about $70 million in construction costs. The total pricetag will depend on market conditions at the time money is borrowed. In Oct. 1980, the board authorized a total cost ceiling, including financing, of $114.8 million.

HMP Director Elvia Garwood explained that the project is intended to augment the level of medical services given without the need to seek an increase in the hospital's license for 663 beds.

"People come to Stanford University Hospital because of the unparalleled quality of our medical care," Garwood said. "When the modernization is completed, we're hoping they will come here because of the outstanding level of comfort and convenience we'll be offering as well."

The board's action this month maintains the staggered design and construction timetable on schedule.

The current first stage, which began with pre-design planning July 1, is to convert large segments of unimproved shell space into patient treatment and diagnostic facilities for radiology and cardiology, as well as expanded capacity for pharmacy, the transfusion service, dietary, surgical pathology, as well as various support functions, such as materials management (supply). This stage is expected to be completed by June 1984.

Additional stages, involving new construction and remodeling of current facilities, would be completed by March 1987.

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The package calls for construction of 44 acute pediatric medical-surgical and intensive care beds, about 100 medical-surgical beds and 66 intensive care beds. Some of the beds will replace those currently in use at the aging Hoover Pavilion annex (formerly Palo Alto Hospital), while other beds will be moved from existing units at the Main Center.

"We are hoping that 35 percent of all beds will be in single rooms," Garwood said, adding that currently two beds have been placed in some rooms intended for use as singles, and many rooms intended for four persons are housing five patients.

"Our goal is to create more space for individual patients, and since this is of course a major teaching hospital, additional room for bedside examinations will enhance the learning opportunities," Garwood said.

Much of the modernization will involve new construction rather than remodeling, Garwood said, because the costs of bringing some units up to the most modern standards would be higher than replacing them.

For example, the architects have estimated it would have cost about 10 percent more to remodel rather than replace the 14 operating rooms currently in use, Garwood said.

The new surgical suite will house 24 operating rooms. Besides cost, Garwood said that replacement was chosen in lieu of remodeling because insufficient space existed at the present site to expand. The old space will be converted into a respiratory, physical and occupational therapy facilies but will remain in use as operating rooms until the new suite is completed, Garwood said.

The plans call for more comfortable waiting room facilities, updated equipment and a floor plan which will allow more efficient movement of patients, personnel and equipment.

The HMP's new construction will occur to the east of the current building, and the main entrance would be moved into the new construction which will also contain the lobby, gift shop and admitting areas. The cafeteria is to be remodeled and additional food service areas will be provided.

Two alternative final designs are being considered, Garwood said, one offering a slightly more horizontal design which would allow a wider range of critical care functions to be placed contiguously on the same floor. The alternative design would be more compact and could offer greater overall functional efficiency, NBBJ indicated in its predesign summary report.

The new construction is expected to displace several hundred parking spaces. Garwood said temporary spaces would be provided until a comprehensive parking plan for the entire Medical Center is implemented.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: Photo available on request if not included.

STANFORD—

Dr. Stanley N. Cohen of Stanford University School of Medicine has been selected to receive the 1981 Wolf Prize in medicine for his role in discovering and developing recombinant DNA techniques.

Cohen, professor and chairman in Stanford's department of genetics, will share the $100,000 award from the Wolf Foundation of Israel with Dr. Barbara McClintock of the Carnegie Institution of Washington and the Cold Spring Harbor Laboratory.

Cohen was cited by the Foundation for being the first, with his colleagues, to construct a biologically functional hybrid plasmid in 1973, and in the following year to achieve actual expression of a foreign gene implanted in bacteria by recombinant DNA methods.

Through such advances, "Cohen has exercised a central and seminal role in discovering and developing recombinant DNA methodology," the Foundation noted, "and in demonstrating its usefulness for analysing complex genetic elements, and for obtaining expression of foreign genes in bacterial cells."

McClintock was cited for her contributions to the understanding of chromosome structure and function, including her identification and description of transposable genetic elements.

The Wolf Foundation has awarded prizes annually since 1978 "for outstanding contributions on behalf of mankind." The Wolf prizes are sometimes referred to as Israel's equivalent of Sweden's Nobel prizes.

This year's prize-awarding ceremony will take place at the Israeli Knesset in March 1982 when the president of Israel will distribute the awards. The presentation ceremony will coincide with the first anniversary of the death of the founders, Dr. and Mrs. Ricardo Wolf who died in February and March 1981, respectively.

The Wolf prizes, each worth $100,000 to be shared equally in the case of more than one recipient, are announced annually in five fields, including agriculture, mathematics, chemistry, physics and medicine.

Five prize committees consisting of several internationally prominent scientists in each field select the award recipients.

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The purpose of the Wolf Foundation, which began its activities in 1976, is "to promote science in all its fields and art in all its forms." With the consent of the Foundation's trustees, a sixth prize may be awarded for achievements in the sphere of art (music, painting, sculpture, or architecture).

Cohen began investigating gene structure and evolution in the early 1970's with studies of plasmids, circular bits of DNA that exist separately from the primary genetic apparatus of bacterial cells.

In 1972, he and his colleagues at Stanford found that they could change the genetic legacy of bacteria by introducing plasmids into the cells.

With Dr. Herbert Boyer at the University of California, San Francisco, Cohen's group showed that they could make and clone functional "hybrid" plasmids using bits of DNA pieced together from separate *E. coli* plasmids.

The following year Cohen and his colleague Annie Chang reported that genes from an unrelated bacterial species could be stitched into an *E. coli* plasmid and inserted in the *E. coli* cell where the genes propagated and expressed the biological functions they displayed in the original host.

The next step was to try the same thing using animal genes, and this was achieved in 1974 with the report by the scientists that animal genes, introduced by plasmids, were successfully propagated in bacteria. A powerful new technique for genetic transplantation was born.

In 1978, Cohen and his colleagues achieved the first biological expression of genes from mammals which had been transplanted into bacterial cells. This achievement, which has brought closer the ultimate knowledge of the structure and function of genes, also opened the prospects for genetic engineering and "bacterial factories," clones of bacteria that could produce a cheap and unlimited supply of essential antibiotics, vitamins and hormones.

A native of Perth Amboy, New Jersey, Cohen, 46, received his B.S. from Rutgers University in 1956 and his M.D. in 1960 from the University of Pennsylvania School of Medicine.

He came to Stanford in 1968 and currently holds joint appointments in medicine and genetics.

Cohen is a fellow of the American Academy of Arts and Sciences and a member of the National Academy of Sciences. He received the Burroughs-Wellcome Scholar Award in Clinical Pharmacology in 1970, the Josiah Macy Jr. Foundation Faculty Scholar Award in 1975, and was chosen a Guggenheim Foundation Fellow in 1975.

Cohen has also received the V.C. Mattia Lectureship Award in 1977, the Marvin Johnson Award from the American Chemical Society for 1980, and an Albert Lasker Basic Medical Research Award in 1980.

Mailed Wednesday, October 28, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Man and mouse have in common more than meets the eye.

Researchers at Stanford University School of Medicine now report that some pieces of the hereditary material, DNA, are nearly identical in mouse and man.

The common chemistry was recently found by scientists analyzing the submicroscopic, fine structure of pieces of DNA from the energy "factory" of the cell, the mitochondrion.

They have now published in the October (Part II) issue of the journal *Cell* the complete sequence of the circular DNA molecule (precisely 16,295 nucleotides long) from mouse cell mitochondria.

Until recently, DNA, a helical double-stranded molecule composed of thousands of nucleotides strung one after another like beads on a string, kept its fine structure a mystery. It seemed a formidable task, even impossible, to discover the identity and sequence of each nucleotide on a thousands-long chain.

But new analysis techniques have helped researchers to begin to determine the precise sequences of short DNA molecules from mammalian cells. Human mitochondrial DNA was completely sequenced earlier this year by a group of British scientists led by Frederick Sanger, whose development of the sequencing techniques earned him a Nobel Prize.

These are among the first DNA molecules in mammalian cells to be so precisely analyzed.

The importance of sequencing DNA molecules, according to Dr. David Clayton, associate professor of pathology and leader of the Stanford research group, is that it will help scientists learn how DNA, the cell's master molecule, directs protein synthesis, controls its own replication, and guides other cell activities.

"It's like having a book in a foreign language and suddenly being presented with a dictionary," Clayton said.

Among the discoveries Clayton's group has already made as a result of the sequencing feat is that the mouse mitochondrial DNA is nearly identical in overall sequence and in gene organization to human mitochondrial DNA, which is 16,569 nucleotides in length.

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The researchers also found that the genetic code in mouse mitochondrial DNA is slightly different from that found in most other DNA strands. (The genetic code is the code cells must decipher when using DNA to to make proteins—triplets of nucleotides specify the amino acids of which proteins are made.)

Because these changes in the standard genetic code have also been found in human and cow mitochondrial DNA, they may be a common feature of mitochondrial systems in mammals, Clayton suggests.

Clayton's colleagues on the sequencing project were Maureen Bibb, Richard Van Etten, Catharine Wright, and Mark Walberg.

Sequencing of the mitochondrial DNA has also permitted the researchers to complete a transcription "map" of the molecule—this means that they have identified portions of the DNA that code for proteins and other biologically important molecules. Sites on the DNA molecule that control the DNA's own replication process are also now located and under study, Clayton says.

One of the most useful aspects of knowing the entire sequence of this DNA molecule, says Clayton, is that researchers can now alter the molecule by site-specific mutagenesis in an effort to learn more about how DNA molecules work. "This is a powerful approach in which we make a change at a specific point on the genome, and try to put it back in the cell and study the results," Clayton explains. This type of detailed study of mouse mitochondrial DNA is likely to reveal some clues about how DNA molecules direct the scope of cell activities, Clayton says.

The research was supported by grants from the National Institutes of Health and from the American Cancer Society.

—30— L109

Mailed Monday, October 26, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

In keeping with a commitment of service to the community, Stanford has scheduled its first Medical Center career symposium for Saturday, Nov. 7, from 10 a.m. till 2 p.m., in the Fairchild Auditorium and Lobby.

Intended as an introduction to both Medical School and Hospital departments, the event will include tours of the Center, an 11 a.m. lecture by Stanford psychiatrist C. Barr Taylor on job stress, and an offering of informational brochures, maps, and selected publications.

Departmental representatives will be on hand to discuss the various types of positions in their areas, current openings, and the general functioning and focus of their departments.

The event is also intended to boost recruitment efforts for experienced clerical and administrative staff.

Gail Selke, employment coordinator in the Medical School's Human Resources Group, and Renee Wald, coordinator of employment/recruitment in the Hospital, are responsible for planning the program—which is the first in what may become a series of annual or semi-annual events.

Since each department has had to do its own recruitment, says Selke, hiring has been difficult—particularly in support positions where competition from industry is high.

"We hope to attract people with medical backgrounds, who understand the terminology, for example."

However, Selke emphasizes, the symposium is not expected to cause much hiring immediately, but rather to expose potential applicants to current and future job possibilities at the Medical Center.

Career Symposium I is free and open to the public. Refreshments will be served.

For further information about the activities planned, call Selke, at 497-6295, or Wald, at 497-6361.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Art galleries aren't the only place to exhibit one's paintings.

As members of the Palo Alto Art Club have discovered, hospital corridors do very nicely too.

As a result, in exchange for providing a showcase, Stanford University Hospital since 1966 has been treated to a wide assortment of oils and watercolors adorning its otherwise naked walls.

Frances Tuban, a 76-year-old life member of the Club, was one of the first to exhibit her work at Stanford. "Now I'm not so concerned with selling, but I still paint. You don't have to retire from art," she says with pride, having recently undergone open heart surgery.

And having been a patient herself at El Camino Hospital, Tuban knows what a difference pleasant surroundings can make. "I'd love to look at the pictures on the wall while I was in the hospital," she says. "Even when you're being pushed down to X-ray, it's nice to see artwork."

Adds Carolyn Hofstetter, a life member who teaches oil painting, "I don't think people realize how many hospital patients are ambulatory and can enjoy the paintings. They're not just for visitors and employees, but patients too."

The paintings are hung in groups for periods of three months at a time. While on exhibit, they are also on sale, with a list of prices retained by Hospital Administration. The proceeds from all sales are split: 70 percent goes to the artist, and 30 percent to the Club.

"This is a better deal for artists than in most galleries," says Hofstetter, with the Club since 1961, pointing out one advantage available to members.

Each painting is secured to the wall by a padlock, onto a security hook. Since neither the Art Club nor the Hospital has insurance coverage for the paintings, none over $300 as the selling price are displayed.

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The Art Club, whose headquarters are now located at 668 Ramona Street in Palo Alto (phone: 321-3891), was founded in 1921. Today's membership, totaling over 800, is drawn mainly from San Francisco to Monterey, and is open to amateur and professional artists and those wishing to help promote interest in the fine arts. A non-profit organization, the Palo Alto Art Club is the second largest art club in the nation.

A 60th anniversary celebration is currently underway at the Club, while its Spanish-style building downtown undergoes repainting and remodeling. This fall a major fund raising effort begins in order to support the renovation.

"Some of us are worried about the word 'club,' " says Hofstetter, "because it sounds like it's for members only. But it's really more of a school, entirely open to the public."

The Club offers a variety of classes, taught by a teaching staff of prominent artists, in all painting mediums, Chinese brush painting, drawing, life drawing, collage, portrait sketching and painting, stained glass, calligraphy, printmaking, etching, lithography, sculpture, and more. A scholarship fund helps needy children and senior citizens participate in the classes offered.

"There are evening classes too," says Hofstetter, explaining that members pay slightly lower class fees than others.

They also have the privilege of exhibiting in the Club's sales and rental gallery, and in outside shows at SUH, Hoover Pavilion, libraries, the Surgical Center of the Palo Alto Clinic, and other community service locations. Annual shopping center and art fair exhibits provide members with additional sales and exhibiting opportunities.

Says Hofstetter, "I think the Art Club does a lot for the community and can do more."

At Stanford, administrative services manager Marjorie Hildahl agrees. "We appreciate the Art Club's assistance in beautifying the Hospital's corridors," she says. "We look forward to continuing the good relationship we've always enjoyed."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames, Laura Hofstadter (415) 497-6911

STANFORD—

Dr. Saul A. Rosenberg, professor of medicine and radiology in Stanford's School of Medicine, is among the fifty new members recently elected to the Institute of Medicine for five-year terms beginning Jan. 1.

New members are elected by present active members from among candidates chosen for major contributions to health and medicine, or to such related fields as the social and behavioral sciences, law, administration, and engineering.

Rosenberg has been at Stanford since he first joined the faculty here in 1961. He has been chief of the Division of Oncology since 1965.

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STANFORD—

How do oral contraceptives and physical exercise interact to control blood cholesterol levels in women?

This question may soon be answered by research under way at the Stanford Heart Disease Prevention Program.

The researchers are seeking women volunteers between the ages of 21 and 35 in the following categories to participate in the study:

- using oral contraceptives and physically active;
- using oral contraceptives, with a sedentary occupation and no regular physical exercise;
- not using oral contraceptives, with a sedentary occupation and no regular physical exercise.

Volunteers will make one visit to the Heart Disease Prevention Program facilities at 730 Welch Road. The staff will draw small blood samples, conduct a bicycle fitness test, and determine body density by underwater weighing.

Participants will receive detailed information on their blood cholesterol levels, percentage of body fat, and their maximum oxygen transport capability (a measure of physical fitness).

Those interested in volunteering should call Dan Merians, at (415) 497-6254, for more information.

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10-22-81

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: ADVANCE FOR RELEASE AFTER 5:30 P.M. PDT FRIDAY OCTOBER 23 TO COINCIDE WITH PRESENTATION OF RESULTS AT THE INTERFERON CONGRESS IN SAN FRANCISCO.

STANFORD—

Interferon produced by recombinant DNA techniques seems to be passing its early safety tests, Stanford University researchers reported Friday October 23 in San Francisco.

This means that sufficient quantitities of the highly purified protein may soon be available for definitive clinical studies on the substance's anti-cancer and anti-viral potential.

Preliminary clinical trials at Stanford University Medical Center using interferon made by genetically engineered bacteria indicate that the gene-splicing product does not differ significantly in function from interferon derived naturally from human cells.

Because the bacteria-produced substance is 98 percent pure, doctors can now be sure that any effects observed are due to interferon itself and not from other components present in the cruder preparations previously available which were only about 2 percent interferon.

These early trials have also produced tentative but encouraging results about the biosynthetic protein's anti-tumor effects, Stanford doctors report.

Four of eight patients with advanced cancers of various types who received intramuscular injections of interferon over a period of 34 to 56 days demonstrated some evidence of tumor regression, according to Dr. Sandra Horning, clinical instructor at Stanford University School of Medicine.

However, Horning stressed the preliminary nature of the study, which was not the standard "randomized double-blind" experiment used to test drug effectiveness but was rather a "phase I" safety study designed to test only how well patients tolerated various doses of this new synthetic form of interferon.

"The fact that both preparations have similar effects in patients indicates to us that it is the interferon and not an impurity or other factor responsible for the effect we're looking at," Horning said.

Horning presented the results of the phase I study Friday October 23 at the second annual International Congress for Interferon Research in San Francisco. Her colleagues on the study were Drs. Jedd Levine, Richard Miller, Saul Rosenberg and Thomas Merigan of Stanford.

The recombinant DNA-produced interferon, made by inserting the interferon gene from human leukocytes (a type of white blood cell) into bacteria, is manufactured by the pharmaceutical firm Hoffmann-LaRoche, Inc..

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In addition to the eight patients administered the synthetic interferon at Stanford, eight patients at M.D. Anderson Hospital and Tumor Institute in Houston received the drug. These 16 patients were the first to receive bacterial produced interferon, Horning said.

The phase I study was designed to determine toxicity, pharmacokinetics and tolerable doses of the substance rather than its clinical effectiveness in fighting cancer, Horning explained. However, anti-tumor activity was observed in one patient with breast cancer, one patient with chronic myelogenous leukemia, and in two patients with nodular lymphoma.

The Stanford researchers now plan to begin additional clinical testing of the bacterially produced interferon to assess its effectiveness in treating cancer patients while continuing to monitor possible side effects. They are looking for cancer patients to participate as volunteers in the trial, particularly patients with nodular lymphoma. Interested individuals should contact Michelle Meyers at (415) 497-5877.

The major side effects experienced by patients receiving either genetically engineered or natural interferon are fever, fatigue, muscular pain and headache, Horning reported. All of these symptoms are reversible, she added.

Recently interferon has been acclaimed as a miracle drug that can cure every disease from the common cold to cancer. Such claims are wildly exaggerated, Horning said.

The importance of having a plentiful supply of pure interferon is that adequate clinical tests can now be carried out, she noted.

Not only is the bacteria-produced interferon expected to be more plentiful and purer than the cruder blood cell-derived substance—it will also be about ten times cheaper, a boon to researchers who would like large quantities of the material for testing.

Since interferon was first discovered, scientists have learned that there are at least 15 different forms of the protein made in the body by different cell types. In addition to leukocyte interferons, the body produces forms known as fibroblast interferon and immune interferon.

Interferon's natural function in the body is to participate in fighting viral infections and tumors. Interferon administered in fairly large doses has a general anti-growth effect on cells, Horning said.

Other institutions that will study the cancer fighting potential of the biosynthetic interferon in collaboration with Stanford are M.D. Anderson Tumor Institute and the University of Wisconsin.

—30— L109

Mailed Wednesday October 21, 1981.

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers

FOR IMMEDIATE RELEASE

STANFORD—

So far, bioengineering has been mostly "bio" and not much "engineering," says Prof. Channing Robertson, head of Stanford's Department of Chemical Engineering.

Working closely with Stanford administrators over the past two and a half years, Robertson has played a central role in trying to redress this balance, achieve technology transfer and secure more private funding for basic research by universities in this field.

His efforts, and those of many others, culminated in the recent formation of a new, non-profit Center for Biotechnology Research to fund basic academic research and a for-profit firm, Engenics, committed to developing large-scale chemical processing using biologic intermediaries.

Six companies have provided $7.5 million for four years of applied research and development by Engenics. They are: Bendix, General Foods, Koppers, Mead, MacLaren Power and Paper (a subsidiary of Noranda Mines) and Elf Technologies of Societe Nationale Elf Aquitaine.

They also have provided $2.4 million for the non-profit Center for Biotechnology Research, which will fund basic research at Stanford, Berkeley, and other academic institutions.

Governed by three independent trustees, the Center holds a 30 percent share of Engenics. If Engenics proves a commercially important biotechnical enterprise, this share will increase in value, providing universities more private support for fundamental research.

The Center's initial grants include approximately $1 million each to Stanford and Berkeley for four years. Robertson and Dr. Abdul Matin of the Stanford Department of Medical Microbiology will be coprincipal investigators at the University, while Prof. Harvey Blanch of the UC-Berkeley Department of Chemical Engineering serves in a similar capacity there.

Efforts already have started to assemble a 25-member research team, including about two research technicians, two post doctoral fellows, three Ph.D. candidates, and three or more undergraduates at each institution. Trans-Bay meetings are planned monthly.

Stanford President Donald Kennedy says that "while there is no commitment by the Center to support research at Stanford beyond the present contract, I believe this novel approach to the funding of research and technology can set a new pattern of long-term support for university research which can contribute significantly to meeting future needs.

"I am particularly grateful for the far-sightedness of the six companies for developing this new and imaginative approach."

Robertson expects that the non-profit Center will fund at least one proposal from another academic institution this year. Center trustees, who will make decisions about research funding after peer review of proposals, are James E. Gaither, chairman, a partner in the San Francisco law firm of Cooley, Godward, Castro, Huddleson and Tatum; Paul M. Cook, president and chief executive officer of the Raychem Corporation; and Charles J. Hitch, former president of the University of California and former economist and assistant secretary and controller of the U.S. Department of Defense.

The non-profit Center will receive royalty-bearing licenses from the universities under all patents resulting from research it sponsors in accord with the standard policies of each university. In addition, the Center expects to receive licenses from Stanford under some of the basic patents covering biotechnology and genetic engineering on the same terms as others.

Engenics' basic purpose differs significantly from that of many other highly publicized firms. It seeks to develop reliable, cost effective biotechnological processes, rather than genetically altered microorganisms with the capability of synthesizing specific products.

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 The company will be based in the Bay Area, though no site has yet been chosen. "Within the next 10 years, biotechnical processes will be developed and refined to the point where living cells will produce, from inexpensive raw materials, a broad spectrum of chemical products in the areas of pharmaceuticals, food stuffs, agricultural chemicals, industrial chemical intermediates, and gaseous and liquid fuels," a prospectus notes.

Engenics will establish a laboratory to develop specific processes to the point where useful products can be commercially manufactured and separated in continuously operating systems.

Robertson and Blanch will be consultants to the new company and are among its founders. The 30 percent of Engenics stock held by the non-profit Center covers most of the usual "founder's share" of stock in a new company.

Other founders of the company are William Eberle, corporate director, former Stanford trustee, and former special representative of President Ford for trade negotiations; Maurice Lazarus, chairman of the finance committee of Federated Department Stores, a Harvard overseer, and a director of Massachusetts General Hospital; and Franklin Lindsay, former president and chairman of Itek Corporation.

Lindsay serves as Engenics board chairman, with Blanch, Eberle, and Lazarus as directors. Other directors include one executive from each of the six firms providing the initial capital and the chief executive officer of Engenics. The companies retain a 30 percent share of the firm, with the rest held in reserve as incentives for the new firm's personnel, who are in the process of being selected.

Robertson sees genetic engineering as a major design tool in the development of reactor systems of the future, based on renewable bioresources rather than on fossil fuel hydrocarbons.

His interest stems from work done with Prof. Alan S. Michaels and Larry Waterland, a Ph.D. candidate in chemical engineering, in 1973.

"The aim of our project was to immobilize an enzyme, much as we immobilize other catalytic materials. Enzymes are nature's catalyst," Robertson says.

To immobilize enzymes, the Stanford group used synthetic hollow fiber "bioreactors."

"Essentially, these were analogs of conventional, tubular catalytic wall reactors commonly used in the chemical process industry," Robertson explains. "To picture what these are like, just imagine a tube. The enzyme, which is a protein, is placed in the wall of the tube. Under magnification, the wall looks like a household sponge; it's extremely porous and full of holes. The enzyme fits into these holes and remains there.

"Material to be converted into a product is passed through the interior of the tube, diffusing out into the sponge-like wall. This brings it in contact with the enzyme, which converts it into the product.

"The enzyme is fixed and immobilized in space. The reactant is brought to it and the product is continuously removed. Our view at that time was that we had demonstrated a new and generic approach to enzyme immobilization and biological reactor design."

Soon afterwards, while on a sabbatical in Switzerland, Robertson reflected on this work and its possible application in genetic engineering. One of the key problems, as he saw it, was taking the fruits of genetic engineering and microbiology and getting them into large scale production, particularly where the resulting products—unlike drugs—did not have a very high added value.

"For that to happen, ways would have to be devised to take microorganisms or cells which may or may not have had genetic alteration and place them in an environment—in a reactor—where they could perform their functions for extended periods of time.

"The translation of a cell or microorganism from the bottom of the molecular biologist's test tube into a fully operational bioreactor could be a step as major as the actual genetic engineering itself.

"What occurred to me is that a cell is nothing more than a vast collection of enzymes, or chemical catalysts. From an engineer's viewpoint, one should be able to immobilize them much as we had done with individual enzymes in the early 1970's. -more-

 "With genetic engineering available to us, it would be possible to tailor the cellular biochemistry in such a way that we could circumvent some of the idiosyncracies of nature and produce catalytic systems which would be optimal for a given process.

"One other rather interesting aspect of cells and most microorganisms is that they operate at room temperature and room pressure. Therefore, in principle, we have an enormously reduced energy load relative to common chemical processing (catalysis) which is most often done at elevated temperatures—many hundreds of degrees Centigrade—and usually under extreme pressure conditions.

"Since practically every chemical that one can imagine, or at least every precursor chemical, can in fact be produced by a cell—whether it is an animal cell, a plant cell, or a bacterial cell—you have before you all of nature to select from.

"At that point, one can ask the genetic engineer to fine tune that cell. Then if we, as engineers, provide the hardware to put that cell into place so that it may perform its biochemical functions in the most optimal manner, out of this would emerge an entirely new chemical processing industry.

"In the next decade or two, this could have a major impact on the fossil-based hydrocarbon chemistry now in place. It would offer the possibility of *in situ* catalysis regeneration, because cells grow and divide. Platinum doesn't. Cells renew themselves."

One area in which practical applications could emerge is foods. "One can produce a variety of amino acids—food supplements, vitamins, food texturizers, proteins, flavors, fragrances, colors—all of which would be natural products," Robertson notes.

In his own laboratory, William Smith, a Ph.D. graduate student, was working on aspartic acid, one half of a coupled molecule known as aspartame, recently approved by the Food and Drug Administration as a sweetening agent.

"When we began 12 months ago, we selected aspartic acid simply because it was there," Robertson says. "Quickly, but quite by chance, a great deal of interest was expressed in our work."

The applications of scaled up genetic engineering processes will most likely first occur with the production of pharmaceuticals, he noted. But the same may prove true in time with fuels and forest products.

"My view is that the hydrocarbon feed stocks that we use now—coal, oil, and gas—will be slowly replaced—or at least supplemented—by biomass feed stocks," Robertson says. "Forest products and agricultural materials will play a major role in supplying biomass material to chemical plants of the future. These raw materials, essentially glucose or sugar, will be converted into other chemicals, some of which might be fuel precursors or fuels themselves.

"Biological sensors may be used for instrumentation. Biologically based processes may be used to concentrate metals, to remove waste from waters, or for countless other tasks."

The impact could be just as broad as the development of microprocessors in electronics, Robertson believes.

In electronics, rapid advances in hardware were not proliferated in a host of public uses until software programmers realized the potential of small chips. "What's happened in genetic engineering is just the reverse," he notes.

"The software programmers came first. They've been able to go in and alter the genetic code and rewrite the programs, but they have no hardware to put them into."

When he returned from his sabbatical, Robertson went back to his lab, joined forces with Profs. Michaels and Stanley N. Cohen at the Medical School, "and took what we knew how to do best—which was put enzymes into hollow fibers—and instead put in whole cells."

Working closely with Michaels, Cohen, Smith and two other Ph.D. students, Douglas Inloes and Shari Libiki, "we found we could achieve cellular densities which were absolutely astounding—tens of thousands of times higher than any conventional fermentation process available," Robertson says. -more-

"Now we're spending a great deal of time trying to understand the behavior of cells which are essentially packed in such a way as to mimic our (human) bodies, in the way capiliaries perfuse our tissues."

Robertson gave a talk describing his work to a University seminar at Stanford in 1978. Lindsay, a participant, was fascinated. Board chairman of Itek and a long-time friend of Stanford, he later came to Robertson's office to see if there were appropriate ways in which the transfer of technology from campus to the public could be accelerated, with major benefits being returned to the University.

"I feel very, very strongly that any of the work that I do could not have happened had I not been at Stanford," Robertson says. "It's that environment that permits my colleagues and me to unleash our creative spirits and put them to work. And for that, Stanford should be a beneficiary of whatever it is that I do."

Eberle, then a Stanford trustee, and Lazarus of Harvard were among those joining in a long series of discussions. At one point, more than two years ago, an industrially sponsored consortium to support basic research in several fields at the University was considered. But it failed to materialize.

After the name Engenics was coined, an effort was made to organize an off-campus firm with no University ties with a combination of venture capital and corporate support, with Michaels as president. This, too, fell through. Michaels decided he would no longer play any major role in subsequent organizational efforts. But the company name was retained, leading to some confusion in subsequent press reports.

Blanch and Robertson turned back to their respective universities. After Lindsay and others helped draft the basic framework, Robertson contacted Gerald Lieberman, Stanford's vice provost and dean of graduate studies and research, who kept President Kennedy posted.

"We wanted to do everything in a way that was open, where the University could question, challenge, or make suggestions," Robertson says. "If at any point my involvement compromised their view of me as a member of the academic community, I asked them to let me know, so things could either be changed or brought to an end.

"I didn't want to put anyone in an awkward light."

He praised the administration for a "very supportive" attitude. Several offices—legal, sponsored projects, technology licensing"—commented on various proposals. The final version took shape in late February and early March this year.

"The hard decision was that I would not have anything major to do with Engenics. People asked me if I was going to be president. My students thought I was going to be president; some of the faculty thought I was going to leave. Others thought I was on the board of directors. But I'm none of those.

"Having put the agreements for the company and the Center into place, I can sit and watch them grow, and see the results of fundamental research put to work. As an engineer, it's satisfying to see that happen.

"What we have right now is an embryo of what could potentially be a major component of all the funding that's available for biotechnology.

"There are hundreds of similar type companies that could conceivably participate in similar sorts of arrangements in other universities.

"Each of us has funding from other sources besides the Center for Biotechnology Research. For instance, I have funding from Monsanto in my laboratory in the same area. Funds from the Center now allow us to expand an activity that's already in place, for which we are very grateful.

"As with any form of sponsored research, any other corporation or any other government agency may participate in the funding of research in either Blanch's laboratory or my laboratory.

What if another company, not among the sponsors of Engenics and the Center, wants to find out more about this research?

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"They'll have the same access, coming and talking with me, listening to seminars, as they normally would under any other circumstances," Robertson replies.

Then what's the advantage to the sponsoring companies?

"They obtain a 'window' on the new technology; that's the primary advantage," he continues. "They hold equity in Engenics. In the end, what Engenics does probably will bear little relationship to what I, as a single investigator, do in my laboratory.

"In principle, it could, but if Engenics sits and waits for me to discover something, the chances it will be successful are highly unlikely.

"My feeling is that the work we do is of such a basic and fundamental nature that its expression—what will be done with it in an applied sense—is as big a jump as the jump we took to create that basic science in the first place.

What's the difference to society?

"My view is that the more people who are thinking about the applications of this research, and the more groups that are working on it, the greater the chances are that the public ultimately will benefit," Roberston says.

"There's practically no way to know in advance precisely how or where the breakthroughs will come.

"That's why it's important to keep communications open across many different channels—in the lab, out to industry, and among academics who share our research interests."

Does the source of support make any difference in your daily research activity?

"No. I'm not compartmentalizing my lab, my students, my research or my thoughts. When that becomes the dominant concern, the research is in serious jeopardy."

What about other ways of commercializing the results of basic research?

"It's still relatively easy for professors to move off campus and take a major stake in private firms designed to develop their laboratory discoveries. I could have done so with Engenics," Robertson notes.

"But that can blur the distinctions between basic science and its applications. Moreover, it does not relieve the growing financial pressure on university research.

"It's vital to find ways of increasing the funding of basic science nationally, especially when large cutbacks appear likely for NSF, NIH, and other federal sources.

"The consequences of such reductions could be especially serious for graduate students and young professors who have not had time to establish their reputation.

"To the extent that the Center for Biotechnology Research and other efforts to increase private funding are successful, the impact of federal cuts may be diminished somewhat.

"The point is to strike out and try something new, and see if it works. And if it does, it will get modified, changed, and improved.

"The real measure of what we do, and whether or not it's acceptable in terms of University and academic standards, is peer review and whether or not it can be published.

"We're not barred in any way from publishing our work. The standards by which our work is measured are the same as they've always been, and we intend to meet those standards."

In the last national evaluation by department heads, Stanford's work in chemical engineering was ranked the best in the U.S.

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EDITORS: Robertson's office phone is (415) 497-4906.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: ADVANCE FOR RELEASE NO EARLIER THAN 6:30 P.M. EDT WEDNESDAY OCTOBER 21 TO COINCIDE WITH NEWS EMBARGO SET BY THE *NEW ENGLAND JOURNAL OF MEDICINE.*

STANFORD—

Rheumatoid arthritis patients who were formerly wheelchair-bound have become active and obtained relief from pain following treatment with a type of radiation therapy developed by Stanford University doctors.

Nine of eleven patients with intractable rheumatoid arthritis who were treated with total lymphoid irradiation (TLI) regained considerable function as symptoms of morning stiffness, joint tenderness and joint swelling substantially diminished, according to a report by Stanford researchers in the October 22 issue of the *New England Journal of Medicine.*

Maximum improvement occurred six months following the six-week treatment period, said Dr. Samuel Strober, associate professor of medicine and chief of immunology at Stanford University School of Medicine. And these benefits have continued for up to 18 months with few side effects following the radiation dose, he added.

However, this is a pilot study and additional clinical testing of TLI for advanced rheumatoid arthritis is needed before its usefulness is proved, Strober cautioned.

His associates in the study were Stanford researchers Dr.Brian Kotzin (now at the University of Colorado Health Sciences Center), Dr. Edgar Engleman, Dr. Andrei Calin, Dr. Richard Hoppe, Geoffrey Kansas, Candace Terrell, and Dr. Henry S. Kaplan.

Their work was supported in part by grants from the National Institutes of Health and the Howard Hughes Medical Institute.

In the nine patients showing marked improvement, TLI brought about an 82 percent reduction in morning stiffness, 74 percent reduction in joint tenderness and 70 percent decrease in joint swelling, Strober and his colleagues reported.

The significance of these results, he said, is that an advanced arthritis patient's lifestyle could be transformed from that of a wheelchair-bound person to one in which the patient could resume many normal daily activities with a maintenance drug regimen of only aspirin.

Furthermore, the doses of TLI administered (a total of 2,000 rads) are low enough that temporary side effects such as nausea, loss of appetite and fatigue, are limited while long-term hazards, such as development of cancer, are remote, Strober said.

Because of its relatively benign side effects, if proven effective in further testing TLI treatment would be preferable to the powerful cytotoxic (cell-killing) drugs rheumatoid arthritis patients are currently given when they have failed to improve with milder agents (such as anti-inflammatory drugs, gold compounds and penicillamine).

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TLI is a form of treatment in which radiation from a linear accelerator is targeted on lymph nodes throughout the body.

It was developed over two decades ago by Dr. Henry S. Kaplan, D'Ambrogio professor of radiology at Stanford, and it has for years been the treatment of choice for many patients with Hodgkin's disease, a cancer of the lymphatic system, Strober explained.

During the radiation treatment, non-lymphoid tissues in the body are shielded by lead barriers and the radiation is focused on lymph nodes of the neck, chest and abdomen, thymus gland, and spleen.

TLI has helped improve the cure rate of early stage Hodgkin's disease from only 30 percent in the 1960's to 86 percent today.

TLI causes a profound and prolonged drop in the lymphocytes, white blood cells responsible for the body's immune responses, including the defenese against infection. Yet, less than one percent of the Hodgkin's patients treated with TLI contract severe bacteriological infections requiring hospitalization.

In addition, none of the several hundred patients treated with high dose radiation in this manner over the past 10 years has developed leukemia, Strober said.

Afflicting nearly two million people in the United States, rheumatoid arthritis is a disabling disease in which the body's immune system is thought to attack its own tissues causing severe pain and inflammation in joints and muscles.

It is one of several "autoimmune" diseases and doctors suspect it may be caused by an abnormality of one type of white blood cell (a "suppressor" lymphocyte) which normally keeps the immune system in a delicate balance.

Suppressor cells are like the brakes of the immune system; without their inhibiting action a "runaway" effect can take place in which the defense system's destructive cells attack everything nearby.

TLI, which causes a long-lasting drop in the overall number of lymphocytes, actually increases the relative proportion of suppressor cells, Strober and his colleagues discovered. This may account for its ability to counteract rheumatoid arthritis, Strober suggested.

"This form of radiotherapy deserves further study," concluded Strober and his colleagues, who have already initiated a larger controlled clinical study of TLI in rheumatoid arthritis patients.

—30— L109

END OF ADVANCE FOR RELEASE 6:30 P.M., EDT WEDNESDAY, OCTOBER 21.

Mailed Tuesday, October 20, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

A radiation treatment commonly administered to patients with cancer of the lymphatic system is now showing promise of controlling tissue rejection in kidney transplant patients.

The technique is total lymphoid irradiation (TLI), a form of radiation treatment selectively administered to the lymphoid tissues which control the body's immune system.

In early clinical testing, it has been effective enough that three kidney transplant patients receiving the treatment are overcoming the body's tendency to reject the foreign organ with dramatic reductions in the usual doses of anti-rejection steroid medications.

Dr. Samuel Strober, associate professor of medicine and chief of immunology at Stanford University School of Medicine, presented these preliminary but encouraging results at a public scientific symposium held Saturday October 17 at the Medical School's Fairchild Auditorium. The symposium, "Perspectives on Blood Related Science in the 1980's: New Dimensions in Medical Care," is one of several events celebrating the formal opening of Stanford Medical School's new Blood Center. The speakers discussed a variety of blood-related medical discoveries that are beginning to have a broad impact on patient care.

Strober, who is collaborating with members of the renal transplantation teams at the University of California, San Francisco and at Pacific Medical Center, said TLI needs considerably more clinical testing before its usefulness at preventing rejection in transplant patients is proved.

Alternatives to conventional immunosuppressive drugs (such as steroids and azathioprine) are needed, Strober explained, because of these agents' undesirable side effects, among the most serious of which are suppression of all parts of the patient's immune system which leaves him highly susceptible to infection, and an increased risk of certain types of cancer after several years of therapy.

TLI is not new. It was developed over two decades ago by Dr. Henry S. Kaplan, Stanford professor of radiology, and it is "the treatment of choice" for many patients with Hodgkin's disease, a cancer of the lymphatic system, Strober explained.

During the radiation treatment, which is usually done on an outpatient basis, non-lymphoid tissues in the body are shielded by carefully placed lead barriers and the radiation is focused only on the cancerous cells in the lymph nodes.

The potential application of TLI to controlling rejection in transplant patients came about after Strober, Kaplan and colleagues noticed that Hodgkin's patients treated with TLI have a highly suppressed immune system (similar to that of patients receiving steroid medications to prevent rejection).

The TLI temporarily reduced to a very low level the number of lymphocytes in the Hodgkin's patient's body. It also brought about a more permanent alteration in the balance of different classes of lymphocytes. Lymphocytes are white blood cells that participate in the immune reaction that protects the body from bacteria and other infectious and toxic agents.

Yet, unlike patients on steroids who are highly susceptible to infection, Hodgkin's patients who have been treated with TLI have a very low incidence of infection.

Further study revealed that whereas steroids and azathioprine are nonselective in suppressing the immune system, TLI actually changes the balance among various components of the immune system, enhancing the population of "suppressor" lymphocyte cells.

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Suppressor cells are like the brakes of the immune system. They slow an all-out attack on foreign agents and thus, in transplant patients, inhibit the body's efforts to reject the foreign tissue.

One of the kidney transplant patients who received TLI for six weeks prior to the transplant has now survived nine months, Strober said, and has received no steroid medications since 55 days following his operation, a 95 percent reduction in the usual post-transplant steroid dose.

In another symposium presentation, Dr. Thomas Merigan, professor of medicine and chief of infectious diseases at Stanford, described the potential clinical uses for interferon, a natural protein obtained from white blood cells.

Merigan reported that early studies of interferon manufactured through gene-splicing techniques indicate that the biosynthetic substance is very similar to teh naturally derived product.

This means that sufficient quantities of the highly purified protein may soon be available for definitive clinical studies on the substance's anti-cancer and anti-viral potential.

Dr. Bruce Reitz, assistant professor of cardiovascular surgery, outlined the clinical experience in the new heart/lung transplantation program at Stanford Medical Center. The program relies heavily on expertise provided by the Stanford Blood Center in matching donor and recipient, screening blood for the highly immunosuppressed transplant recipients, and in providing specialized blood components.

Other symposium speakers included Dr. Edgar Engleman, assistant professor of pathology and medical director of the Blood Center, who discussed "Monoclonal antibodies: new weapons in the diagnosis and treatment of human diseases;" Dr. Rose O. Payne, professor of medicine emeritus and director of the tissue typing laboratory at Stanford University Hospital, who talked about "HLA and clinical applications;" and Dr. F. Carl Grumet, associate professor of pathology and director of the transfusion service at Stanford University Hospital, whose talk covered "Cytomegalovirus infection in transfusion recipients: avoidance by blood screening."

Dr. David Korn, professor and chairman, department of pathology, who moderated the program, noted that all of the blood-related research topics presented by the speakers would most likely have "an impact in patient care in less than 10 years."

Korn added that nearly all blood-related research programs can be carried out with the very small samples that are drawn separately to be used for screening blood from volunteers before their blood is given to patients. Therefore "most blood goes toward patient care," he said, adding that "one unit goes a long way."

In welcoming symposium participants, Dr. Lawrence G. Crowley, vice president for medical affairs, said that the purpose of creating the Stanford University Medical School Blood Center was "to bring together in one place and as close to the Medical Center as possible a critical mass of physical resources as well as intellectual and other human resources, that will allow for provision of high quality patient care services, and at the same time to provide a stimulating environment for exciting research and teaching in blood-related sciences."

The symposium was the second in a week-long series of events to celebrate the formal opening of the Blood Center which is located at 800 Welch Road in Palo Alto, adjacent to the Medical Center.

On Tuesday October 20 Buddy Hatton will host a live KSFO broadcast from the new Center. On Wednesday October 21, the Center will be open with special refreshments for blood donors courtesy of Swensons, McDonalds and Haagen Dazs. On Thursday October 22 special guests at the Blood Center will be members of the Stanford Football Team, Stanford Band and the Stanford Dollies.

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L109

Mailed Monday, October 19, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

"The Science of Birth" will be the focus of this fall's Progress in Medicine lectures series, a community outreach program sponsored by the Stanford University Medical Center.

In an effort to foster public understanding, Stanford faculty physicians will discuss both the evolving new science of birth and the focus of modern obstetrics: to determine health and disease while the fetus is still in the womb and treat accordingly before birth.

The autumn quarter will open Oct. 28 with an introductory presentation by Dr. W. LeRoy Heinrichs, professor and chairman of the Department of Gynecology and Obstetrics. Also speaking will be Dr. Kent Ueland, professor of gynecology and obstetrics and chief of the section of maternal/fetal medicine, and Dr. David Stevenson, assistant professor of pediatrics and associate director of the Nurseries.

They will discuss "The Regionalization of Perinatal Services," an education and outreach program designed to improve the outcome of high risk pregnancies throughout the Central Coast Region of California through newly established applications of maternal/fetal medicine.

On Nov. 4, Dr. Paul A. Hensleigh, associate professor of gynecology and obstetrics, will talk about "Being Born Healthy," and the risks and benefits of predicting birth defects.

Dr. P. Herbert Leiderman, professor of psychiatry, will discuss "Mother to Infant Social Bonding," Nov. 11. His focus will be the effects of early contact on maternal attitudes and behavior.

The Progress in Medicine lectures were initiated at Stanford in 1966 by Dr. Joshua Lederberg, then professor and chairman of the Department of Genetics, to provide an opportunity for leaders in academic medicine to share their insights and perspectives with the community.

Lederberg had observed: "The community has little opportunity to be informed of the exciting developments in medicine. Public understanding of these developments is of the utmost importance to social decisions."

This year the series will focus on a single theme—the development of the child—for the entire season, of which the Science of Birth is only Part 1. The winter and spring quarter programs will be announced later on.

All autum quarter presentations will take place in the Medical Center's Sherman Fairchild Auditorium, at 7:30 p.m. Admission is free, and seating is limited. There are no reserved seats, and no tickets will be issued. Early arrival is recommended to permit the best choice of parking and seats.

For further information and registration forms, call the Medical Center's Office of Public Events, at 497-6389.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Stressing a dual role of patient care and scientific innovation, Stanford University President Donald Kennedy formally opened the new Blood Center in ceremonies Friday (Oct. 16).

"By being a center for new developments in this area—a capacity we make possible through this new addition (of a Blood Center)—we can also contribute to the care of generations to follow, in this community and in others," Kennedy said in remarks prepared for delivery to a group attending the afternoon ceremonies.

A major feature of the opening program is a scientific symposium open to the public scheduled Saturday (Oct. 17) from 9 a.m. to noon in Fairchild Auditorium.

The new facility includes a donor center and processing facilities. Donor recruiter Maureen Roskoph said all of the blood is used for patients in the community, unless the donor is informed in advance that his blood is needed for research.

Specialized equipment, including an irradiator, is available to prepare blood for heart transplant patients, as well as for all hospital emergency and general medical needs.

In addition to Kennedy, welcoming remarks at the opening were to be given by Palo Alto Mayor Alan Henderson; Lawrence G. Crowley, Stanford's vice president for medical affairs; R. Hewlett Lee, chief of surgery at Palo Alto Medical Foundation, and Melvin C. Britton, 1980-81 president of the Santa Clara County Medical Society.

The scientific symposium, entitled *Perspectives on Blood Related Science in the 1980s: New Dimensions in Medical Care*, was to feature six Stanford scientists.

Pioneer transplant surgeon Dr. Bruce A. Reitz was to discuss *Heart and Lung Transplantation: A Review*. Dr. Thomas C. Merigan, professor of medicine was to lecture on *Interferon: A Useful Product of White Blood Cells*, while Dr. Edgar G. Engleman, assistant professor of pathology and medicine, as well as director of the blood center, chose the topic: *Monoclonal Antibodies: New Weapons in the Diagnosis and Treatment of Human Diseases*.

Other speakers are F. Carl Grumet, associate professor of pathology and director of the hospital transfusion service, who was to discuss the screening out of infections in transfusions. Rose O. Payne, professor of medicine emeritus and director of the tissue typing laboratory was slated to speak on *HLA and Clinical Applications*, and Samuel Strober, associate professor of medicine and chief of the division of immunology, was to talk about lymphoid irradiation.

Special events, including a live radio broadcast on Tuesday (Oct. 20), refreshments on Wednesday, and a visit by members of the Stanford football team, band and Dollies on Thursday, are also planned as part of the opening celebration.

The donor center is open Tuesdays from 8:30 a.m. to 8 p.m., Wednesdays and Thursdays from 8:30 to 3 and Saturday from 9 to noon. Officials said appointments are preferred and may be made by phone (415) 497-7831.

Oct. 16, 1981

—30—

mg205

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

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Oct. 16, 1981

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mg205

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

The Board of Directors of.Stanford University Hospital has approved a Committee on the Well-Being of Medical Personnel to focus on mental illness, or the abuse of alcohol or other drugs by medical personnel.

The committee was set up Sept. 9 by the hospital's medical board, comprised of university faculty doctors and community physicians.

Members have not yet been selected for the new group, which is to develop rules to guide department heads to respond to specific incidents.

The committee also is to compile a list of organizations and individuals who can provide professional assistance to the impaired medical person, including physicans, nurses and other allied health professionals.

Sponsoring and publicizing educational programs and serving as a statistical resource for such information as incidence discovery, therapy and followup of cases are other duties.

The board is to consist of five doctors, as well as representatives from nursing services, hospital administration and the university counsel's office.

In an unrelated development, the general members of the hospital corporation formally approved the 1981-82 operating budget of $139.5 million and the capital budget of $7.1 million at their meeting Tuesday (Oct. 13).

Newly elected to a three-year term on the hospital board was Nancy B. Munger, Los Angeles, representing the Stanford University board of trustees. Reelected to three-year terms were Frank H. Roberts and Conrad F. Gullixson, both of Palo Alto; and Peter S. Bing of Beverly Hills.

Also named to the board were Dominick Purpura, the newly appointed dean of the Medical School, and Kenneth Melmon, chairman of the department of medicine, representing the faculty practice plan.

Oct. 16, 1981 —30— mg20

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

"Kiss me, I don't smoke," says the frog on the American Cancer Society's button, handed out to Hospital employees last Wednesday, Oct. 7, along with balloons, posters and t-shirts, in the corridor outside the main cafeteria.

The cancer display-booth was included in "Pathways to Health," one day out of a week-long faire planned and sponsored by members of the Hospital's Environmental Health and Safety Committee.

Besides the above-mentioned paraphernalia and many brochures, the Cancer Society provided employees with an audio-visual lesson on monthly breast self-examination and photos of actual human lungs in three different states: normal, cancerous, and emphysematous.

The American Red Cross also had a booth, complete with blood pressure screening by Palo Alto area volunteer nurses. Included in their display were handouts on several courses and information on donating blood.

On hand too was the Diabetes Society of Santa Clara Valley, with cookbooks for diabetic children, wallet cards, and a list of various community services. Sign-up cards were available for newly-diagnosed diabetics, who can be matched up with trained diabetic volunteers for emotional support.

A nutrition display by Stanford's Department of Dietetics included a test-yourself quiz, dietary counseling, and flyers which reminded people to avoid too much sodium, fat, saturated fat, cholesterol and sugar, to read food labels carefully, to choose snacks wisely, to watch calorie intake, to eat foods with adequate starch and fiber, and to include foods from the basic four food groups (meat, milk, fruit/vegetable, and bread/cereal) in their daily diets.

The Health Improvement Division of Stanford's Heart Disease Prevention Program also participated in the day's events, announcing its first official series of health courses to be offered quarterly for Stanford employees—on exercise, weight management, and Q.U.I.T. smoking.

Two Stanford graduates calling themselves "Fitness Unlimited" demonstrated aerobic dancing in the afternoon. And films shown covered features of CPR and the Heimlich maneuver (used to stop choking).

Dr. Kenneth Dole, representing the American Cancer Society, discussed detection, treatment and prevention of cancer, and outlined various warning signals and safeguards.

Other events of the week were "Attack the Back" day, with a focus on body mechanics; "Environmental Safety is more than you may think," including inservice sessions on chemical, gas, and radiation safety, as well as hepatitis control; and "Bad Wires cause more than shocks," a presentation on fire and electrical safety—including members of the Palo Alto Fire Department, equipment sold to employees at low rates, and a layout of the Hospital's fire safety evacuation plans.

For the latter two programs, the Hospital met the requirements of the Joint Commission on Accreditation of Hospitals, and the California Office of Occupational Safety and Health Administration.

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Tuesday's event, called "Are you ready for the Big One?" included a demonstration by SPECS (Southern Peninsula Emergency Communication System), a group of amateur ham radio operators who explained their role in the event of an earthquake. By way of illustration, they actually set up equipment to communicate with other cities.

"One of these days we're really going to get an earthquake—we know that," said Walter Read, emergency coordinator of the 25-year-old, 130-member organization. He explained that since phone lines can become unusable right away in an emergency, "we know we'll be a big help to the authorities."

Several operators are assigned to each of various agencies in the area, including hospitals, colleges, police departments, and the Red Cross. In the case of an emergency, they are able to set up communication between these agencies immediately.

"We don't originate any messages, we're just the back-up," said Read. The operators report to whoever is in charge at the scene, be it a doctor, nurse, or police chief. Their connection with Stanford University Hospital is the Emergency Staff Room, and Read demonstrated a ham radio-to-telephone conversation with the Department as part of his presentation.

"We're busy all the time," he said, explaining that the operators routinely handle urgent personal messages, providing an alternative to the phone system. Local amateurs living all across the nation are coordinated in their efforts by the National Traffic System.

"It never fails, and it's free," said one member proudly. A better sales pitch would be hard to find.

Also included in Tuesday's presentation were graphs illustrating the California faults, films provided by the Stanford University Earthquake Hotline, informational brochures, and a talk by Stanford seismologist James M. Gere.

All in all, the week's events went smoothly, with substantial employee turnout for the faire.

"We hope to make the health and safety faire an annual event for employees," said Ruben Perez, assistant director of Hospital Safety and chairman of this year's planning committee.

"Many individuals here at the Hospital deserve a lot of credit for making the program a success," he added.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Doctors may have to find new ways to organize their practices to keep pace with the public's and science's newfound awareness of preventive health, says the head and founder of the research-oriented Stanford Heart Disease Prevention Program (SHDPP).

The organization seeks to develop scientific evidence showing the effectiveness of various public health programs.

"We've been in an era when the country was waking up to the importance of prevention and to the importance of health promotion, health improvement, and health maintainance," said Dr. John W. Farquhar as he reflected on the SHDPP's first decade.

"We've worried about the fact that the medical profession still hasn't really awakened to the fact that the concepts of health and prevention are changing.

"On one level doctors' future economic livelihood is threatened unless they wake up. On another level, they've abdicated an important responsibility," Farquhar said.

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Such techniques are especially conducive for weight loss, smoking cessation or similar health improvement programs, said Farquhar, a professor of medicine.

"Disease is far away from irradication, quite obviously. No matter what we do to encourage and improve personal health, there will be a need for more and more doctors. The physicians need not worry about losing patients because there are no more diseases left to treat.

"But they could run out of patients because they've gone to other health professionals since physicians haven't responded to meet their needs," Farquhar said.

He added that adapting to new forms of treatment won't necessarily be adverse to income, since a team of physicians and other health professionals can produce highly effective, hence lucrative practices.

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In essence, a lot of modern medical care should be education, not treatment, he added.

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Mass media, booklets and direct mail and posters were among tools used to persuade residents to stop smoking, make dietary changes or lose weight.

"I think the two most important things," recalls Farquhar, "is that the ability of the average person to change his nutritional habits exceeded our fondest hopes and seemed to be a lot easier to achieve than we had thought.

"Maybe the most remarkable was the degree of change we achieved in smoking cessation in a group of people who were given what would have been thought to have been a rather small amount of attention.

"We got a 50 percent reduction that lasted for three years. That is on a par with the best which has ever been achieved."

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The participants had about 12 hours of classroom work in addition to the media attention and surveys the entire community received.

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"We have great hopes that we will develop methods for smoking prevention and for exercises, nutrition and weight control in young people that will get them started right in life and will help them work as educators within their own families.

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STANFORD—

The fourth heart-lung transplant at Stanford University Medical Center in 1981 was performed early Sunday (Oct. 11)in a 5-1/2-hour operation.

Dr. Bruce A. Reitz, assistant professor of cardiovascular surgery, said the patient, identified as Barry Davis, 40, came through the operation with no immediate complications.

He was returned to surgery several hours later to correct internal bleeding.

A day after surgery, the patient was reported in critical but stable condition, and his prognosis appeared hopeful. Doctors said his bleeding was subsiding and appeared not be a serious problem.

Transplant patients are routinely reported as critical after the surgery, Reitz noted.

"We are learning more about the procedure each time this operation is performed. The patient has a long road to recovery but the intial signs appear encouraging," said Reitz, who heads the heart-lung transplant team.

Davis, of Redwood City, Calif., was suffering from a congenital ventricular septal defect. He had a hole between his heart chambers, a condition which is correctable by surgery in youngsters now but not when Davis was a child.

In recent years, his poorly pumping heart caused damage to his lungs, necessitating replacement of both major organs.

He lived a fairly active life until about two years ago, when he was forced to quit his job in hotel management because of his deteriorating condition. Like his three predecessors, Davis was selected for the pioneering procedure after doctors determined he would almost certainly die within six months.

Davis' condition, said Reitz, is similar to the second heart-lung transplant patient, Charles Walker, 31, who returned home to New York State on Sept. 6, 129 days after his operation.

The first heart-lung transplant at Stanford was performed March 9 on Mary Gohlke, 45, who recovered sufficiently to return to her Mesa, Ariz., home Sept. 1.

The third transplant was performed July 28 on Karen Wilson, 28, of Mill Valley, Calif. She died three days later from complications encountered when scar tissue from previous open heart surgery resulted in excessive bleeding.

Three earlier heart-lung transplants were performed between 1968 and 1971 in South Africa, Texas and Minnesota. The longest survivor lived only 23 days.

The procedure was revived at Stanford this year after pioneering experiments on monkeys disclosed that a new drug, Cyclosporin A, circumvented two previously formidable obstacles: the slow and imperfect healing of the windpipe, and life-threatening infections. Precisely how the drug works is not fully understood. But it inhibits the body from rejecting the new heart without eliminating the body's ability to heal or fight off infection.

10/12/81

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

EDITORS: Photo available upon request if not included with story.

STANFORD—

Little did Joe Bennett suspect, as a child singing in the church choir in Colt, Arkansas, that he'd one day compose and record his own songs.

Even farther from his mind was the notion that the content of these songs would be based on his experiences in a hospital.

But so it happened. Bennett, who works in Stanford University Hospital's Clinical Engineering Department, says he found himself hospitalized on and off for five years, starting in 1967, at the Veterans Administration Hospital in Palo Alto.

"I remember when I awoke after being unconscious for six days, and a wonderful nurse was holding my hand. The nursing care I received during that traumatic period in my life was, overall, excellent."

Out of that experience was born a song he just recently recorded, entitled, "Angel of I.C.U." A sample of the lyrics go: "My Doc's golden touch, and her tender loving care/I got well darn fast, and got out of there."

"Angel" was Bennett's second piece, composed in 1972 following a Latin tune called "My Darling Rosita." Since then he has written many others, and performed at several SUH Christmas shows.

"I grew up near the home of country music superstar Charlie Rich (the 'silver fox')," says Bennett, "and his parents were friends of the family. They were my Sunday school teachers and led the choir I sang in. But I never did anything with my music until a few years ago."

After his hospitalization, Bennett started voice, piano and organ lessons, not to mention songwriting. When he joined the staff of SUH in 1973 as a patient television repairman, his songs were already expressing his concern for people and health.

"This is where it all started for me," says Bennett. "All of my music relates to patient care, which means a lot to me."

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A prime example, Bennett's recent "C.P.R. Superstar" aims to teach as well as entertain. "I took the C.P.R. (cardiopulmonary resuscitation) course here at the Hospital," he explains. "Several people commented that it would be good to have a song to help keep the rhythm."

His song was inspired by that comment. In it he says: "This routine is good to learn./Be prepared when it comes your turn./You'll save a life and be a star/Because you knew your C.P.R."

Bennett stresses, however, that the song alone is no substitute for the C.P.R. course—which is necessary, he says, to really learn the techniques. "I just hope people will pick up this jingle, to help them with the beat." It's meant to supplement class instruction.

With the help of his new wife Edith—who is also his business manager and moral supporter—Bennett has recorded "Angel" and "C.P.R." on a 45 rpm disk. For "Angel," he had back-up from musician friends on the piano, drums, base guitar and rhythm guitar.

Bennett's record is available now in the Hospital's gift shop.

Bennett belongs to the South Bay Songwriters Association (Palo Alto) and the Songwriters Resources and Services (Hollywood). He has named his product RAN Records, using the initials of his new baby granddaughter.

"And 'E and J' Productions," he smiles, "stand for Edith and Joe."

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FOR INFORMATION CONTACT: **Mike Goodkind (415) 497-6911**

STANFORD—

Tenth anniversary ceremonies are scheduled Wednesday (Oct. 7) for the Stanford Heart Disease Prevention Program.

Intended to honor employees of the innovative program, ceremonies will be highlighted by a 4:30 p.m. address on health education by Stanford President Donald Kennedy at Braun Auditorium in the Seeley G. Mudd Chemistry Building.

The SHDPP was founded as an interdisciplinary public health approach to the prevention and control of heart disease by Dr. John W. Farquhar, professor of medicine.

A key element of the research program has been a series of community studies seeking to learn the effectiveness of various educational methods—including a media campaign—in changing people's health habits.

Looking backward, Farquhar noted that the first three-community study in Watsonville, Gilroy and Tracy, Calif., provided strong support for the effectiveness of using health education to get people to take responsibiity to reduce the risk of heart disease by taking such action as quitting smoking or reducing cholesterol intake.

"We've been in an era when the country was waking up to the importance of prevention, health promotion and improvement, and holistic health.

"And we've seen it get commercialized, distorted.

"What we've been trying to do is give it a good scientific basis," said Farquhar.

Currently the team is conduucting through 1986 a five-city project which will attempt to set up permanent health education programs which can serve as models for other communities. The two cities in which programs are being set up are Salinas and Monterey, while three other similar communities are being used as comparisons.

Among other projects undertaken during the project's first 10 years is a Stanford Lipid Research Clinic, one of only fifteen such facilities worldwide. The clinic's current activity has been a coronary prevention program involving about 3,800 men with high blood cholesterol. This program, started in 1975, is scheduled to run another two years.

Several smaller studies are underway, including a nutritional assessment, sponsored by the Food and Drug Administration, which is comparing different methods of measuring food intake and eating habits.

Other endeavors include research into exercise physiology and investigations into self-directed health behavior changes, including a smoking prevention project to be used in schools.

Oct. 6, 1981 —30— mg21

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

EDITORS, PLEASE NOTE: This feature story is being sent to you to coincide with the announcement of a benefit planned for Oct. 13, at 8 p.m., in the Fairchild Auditorium of Stanford University Medical Center. The event will support the Assistance League's HOME Advancement Fund, started in order to continue and expand its services. The benefit, open to the public, will include a champagne reception and lecture by Brian Sinclair, the real person behind the character named "Tristan" in James Herriot's book, *All Creatures Great and Small.* Tickets are available, at a tax-deductible price of $7.50 each, at the Tresidder Union on campus, the Peninsula Box Office, and the Assistance League's Chapter House, 169 State Street, Los Altos.

STANFORD—

There's no place like home, as the saying goes.

But having a place to hang their hats near the Hospital can be a life-saver for long-term outpatients who live far from Stanford.

Like James Sellick, a former New York policeman who recently spent a month here for specialized cancer treatment, many out-of-towners find the cost of rental housing or motel accommodations in this area prohibitive, considering the various other expenses they accrue in association with extended medical care.

"And it's very hard to even *find* housing near Stanford," says Sellick, reiterating a common concern which often turns into a pressing need for patients.

It was in recognition of this need that, almost four years ago, the Assistance League of Santa Clara County created a committee called "HOME," short for "Housing of Medical Emergencies." Under the HOME program, subsidized housing was made available to a few Stanford outpatients and their families, according to finanical and medical need.

According to Kay Clair, chairwoman of the committee, "We hated to see people living in waiting rooms while worrying about their desperately ill relatives."

The League started out contracting for two one-bedroom apartments in the Oak Creek apartment complex across Willow Road from the Hospital. Since then, two additional units have been added to the group. "And we have served nearly 60 families," she says.

Each apartment houses two people: the patient and a relative. And the charge is only $10 a day, including utilities, for up to nine weeks. Presently, heart transplant recipients and cancer outpatients occupy the units.

"HOME has never had a waiting list of fewer than eight patients," says Clair, explaining that all screening and living arrangements are made by clinical social workers at the Hospital.

In addition to its other activities as one chapter of a national nonprofit volunteer service organization, the Assistance League runs an on-going fund raising program in the form of a costume rental shop—the largest on the Peninsula—housed at its Chapter House in Los Altos. "Most of our costumes are made by members," says Clair, "and Halloween is our busiest time of year."

Funds raised at the shop support HOME as well as other projects geared towards blind children and senior citizens.

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Obviously, there is hope that someday, HOME will be able to accommodate more patients who need its services. "I would probably not have been able to come to Stanford," says Sellick, "without the availabilty of nearby, low-cost housing. It was essential for my treatment."

He adds, "It took away a lot of the anxiety and unnecessary discomfort, and having my family with me made the treatment less stressful. There really isn't any way I can express my gratitude."

Sellick did not even rent a car while he was here. He walked to and from the Hospital eight to ten times a week for his therapy.

"The Oak Creek units are so handy for the patients," says Clair. "Their proximity to the Hospital, public transportation, and shopping make them very convenient."

Clair feels that one reason Oak Creek Apartments was more receptive to the League's cause than other complexes they approached was "because their manager had died of cancer and they saw the many months of treatment required."

Says Jean Miller of Anchorage, Alaska, who lived in one of the units with her 18-year-old son while he underwent treatment, "The people in the buildings were so nice. Even the neighbors seemed to know what the program was about, and made us feel very comfortable there."

The HOME apartments come fully furnished, and are equipped with self-cleaning ovens, garbage disposals, dishwashers, and a central laundry room.

"You wouldn't want for anything," attests Betty Wise of Porterville, who stayed in one of the apartments during most of September.

The HOME committee consists of nine members who "fix up" the apartments between occupants, and purchase any necessary supplies. "Most of the time," says Clair, "the apartments are left just as they were found, so there's no great labor involved in getting them ready for the next patients."

All furnishings, says Clair, excepting beds, linens, and kitchen supplies, were donated by League members and friends. "Everyone rallied together when we got the apartments."

She adds, "No family is untouched by cancer, so if you can help a little bit, why not?"

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STANFORD—

Young children with physical problems occurring at birth may have a greater risk of suffering long term social problems than other children, a Stanford University psychiatrist believes.

Dr Herbert Leiderman, professor of psychiatry, said such difficulties occurring at birth as congenital heart disease, club palate, club foot and even premature birth in otherwise normal infants, can sometimes lead to a child's difficulty with his peers.

A preliminary study, now in the final of three years, suggests that both family and peer experiences before age two may contribute to later social difficulties in this group of children.

While conclusions are still uncertain, Leiderman speculates that overconcern from parents and lack of contact with peers might in some cases be an experience which contributes to the social disability.

Leiderman and his colleagues at the Boys Town Center at Stanford received a three-year grant from the March of Dimes Foundation, supplemented by funds from the Boys Town Center to study the social development of physically handicapped infants and youngsters. Plans currently are being made for a more definitive study of the how physically handicapped children develop socially.

The goal said Leiderman, is to develop assessment procedures for potentially high-risk children and to find appropriate ways to prevent social problems from developing in children under about three years of age.

In the preliminary study, Leiderman and his colleagues observed various groups of children—some handicapped and some not—to determine how they interacted with one another. Recorded were such characteristics as how many times the child initiated play, or how many times he or she joined in play activities voluntarily.

Oct. 5, 1981 --30— mg21

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

EDITORS: Photo of Garwood available upon request.

STANFORD—

Harold L. Mindell, who was appointed director of the Stanford University Hospital Modernization Project (HMP) effective Oct. 1, has resigned the position due to personal reasons, announced Dr. Lawrence G. Crowley, vice president for medical affairs and president of the Hospital.

Mindell, associate administrator for engineering at Yale-New Haven Hospital, had planned to join the Stanford staff full-time on Nov. 1. He was to be responsible for overall management, design, and construction of the $115 million Hospital expansion and renovation plan, financially the largest single construction project ever undertaken by the University or the Hospital.

Elvia Garwood, deputy director of the project, has been appointed to replace Mindell as director effective immediately, Crowley announced. Garwood had served as acting director of the project since last February.

"In this role she has very effectively launched, guided and kept this project on schedule to date," said Crowley. "She has demonstrated excellent skills in the architectural selection process and the programming and pre-design phase."

Before becoming acting director of the HMP in February, Garwood was manager of major projects in the Medical Center Facilities Department. From 1976 to 1979 she was a project manager in the University Facilities Office.

In addition to the HMP, Garwood has contributed to other major Medical Center projects such as the completion of the third floor of Fairchild, early planning of the Boswell Clinic renovation, and the Stanford University Blood Center.

Garwood graduated from Cooper Union for the Advancement of Science and Art in New York City, and she holds a master's degree in architecture from Yale University.

Oct. 5, 1981 —30— 202

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Perspectives on Blood Related Science in the 1980s: New Diminsions in Medical Care., is the topic of an Oct. 17 public scientific symposium dedicating the new Stanford University Blood Center.

The symposium is among five days of special events sponsored by the specialized donor facility serving Stanford University Medical Center..

Among the six speakers is Dr. Bruce A. Reitz, whose topic, *Heart and Lung Transplantation: A Review*, reflects his experience in the pioneering surgical technique. He is an assistant professor of cardiovascular surgery and spearheaded the research leading to the first successful heart-lung transplant operation earlier this year.

Dr. Thomas C. Merigan, professor of medicine, will talk on *Interferon: A Useful Product of White Blood Cells.*

Monoclonal Antibodies: New Weapons in the Diagnosis and Treatment of Human Diseases, is the topic of Dr. Edgar G. Engleman, assistant professor of pathology and medicine, as well as director of the blood center.

The symposium from 9 a.m. to noon will be held in Fairchild Auditorium at the Medical Center. Other events, starting with a ribbon cutting ceremony and champagne reception at 4:30 p.m. Friday, will be held at the donor center at 800 Welch Road.

Among speakers at the opening event will be Stanford President Donald Kennedy, Palo Alto Mayor Alan Henderson, Dr. Lawrence G. Crowley, Stanford's vice president for medical affairs; R. Hewlett Lee, chief of surgery at Palo Alto Medical Foundation; and Melvin C. Britton, 1980-81 president of the Santa Clara County Medical Society.

On Tuesday (Oct. 20), Buddy Hatton of KSFO radio will host a live broadcast from the center. The next day, special refereshments for donors will be provided, and on Thursday, members of the Stanford football team, band and Dollies will be special guests of the center.

The new center, which can handle up to 65 donors daily, is equipped with specialized equipment, including an irradiator, which is needed to prepare blood for heart transplant patients.
All of the blood, said donor recruiter Maureen Roskoph, stays in the community, and all blood is used by patients unless a donor is informed in advance that his blood is needed for research.

The donor center, which began accepting public donors Aug. 25, is open Tuesdays from 8:30 a.m. to 8 p.m., Wenesday and Thursdays from 8:30 to 6, Friday from 8:30 to 3 and Saturday from 9 to noon.

Roskoph said appointments are preferred and may be made by phone, (415) 497-7831.

She added that donors receive credit for themselves or someone they designate each time they give a unit of blood.

Oct. 5, 1981 -30— mg21

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—Barry Davis, 40, was released from Stanford University Hospital Wednesday (Nov. 25), 46 days after becoming the institution's fourth heart-lung transplant recipient.

Dr. Bruce A. Reitz, assistant professor of cardiovascular surgery, said Davis, of Redwood City, Calif., will be returning to Stanford for twice weekly clinic visits and continue at home with a physical therapy program, including bicycling and weightlifting.

"We're very pleased with the way the program is going," said Reitz, who performed the Oct. 11 transplant. "The results have encouraged us to go forward and continue to screen for persons who might be suitable for the procedure."

Reitz said Davis' prospects for returning to normal activity, including a career, were good.

Davis suffered since birth from a ventricular septal defect, a hole between the two primary chambers of the heart.

He had suffered symptoms since he was 15 years old and was forced to quit his job in hotel management about two years ago because of physical deterioration.

His lungs ultimately were damaged beyond repair, because his defective heart caused an overload of blood into the lungs.

Davis was selected for the heart-lung transplant procedure after doctors determined that he could not survive more than a few months without it.

Davis' stay in the hospital was one day shorter than Charles Walker, 31, who was released 47 days after his May 1 operation. He returned Sept. 6 to his Binghamton, N.Y. home, where he is reported healthy and active in sports. Mary Gohlke, 46, received her organs March 9 and spent 85 days in the hospital. She is reported progressing and is back at her Mesa, Ariz. home with her family.

The third recipient, Karen Wilson, 28, of Mill Valley, Calif., died of complications four days after her July 28 operation.

Heart-lung transplants were first performed in South Africa, Texas and Minnesota between 1968 and 1971, but none of three patients lived longer than 23 days, because the new foreign organs were rejected by the recipients' bodies.

The procedure was revived this year at Stanford when pioneering experiments on monkeys disclosed that a new drug, Cyclosporin A, helped circumvent two previously insurmountable obstacles: the slow and imperfect healing of the windpipe and life threatening infections.

Nov. 25, 1981 —30— mg205

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

You can't live forever, but you can virtually choose how fast you will grow old.

This new view of the future, contradicting sharply the widely held picture of an ever older, ever more feeble population consuming the lion's share of the health care dollar, is the subject of a new book by Drs. James F. Fries and Lawrence M. Crapo of the Stanford University School of Medicine.

The book, *Vitality and Aging* (W. H. Freeman and Company, San Francisco, 172 pages, $15.95 cloth, $7.95 paper), its authors believe has an important bearing on future medical care planning because of the predictions it allows about the numbers and type of future patients.

These predictions suggest that the number of very old persons will not increase, that invalidism and chronic disease will occupy a smaller portion of the typical lifespan, and that the need for medical care in later life will decrease.

In the authors' view, most attempts to define the aging process and forecast health trends have ignored the interaction between two important sets of observations.

The first set consists of statistics showing that humans are mortal and that the natural human life span is fixed at about 85 years, a fact that has remained unchanged in the past 100,000 years. The second set of observations shows that chronic illness, such as arthritis and heart disease, can be postponed and that many of the functional deficits of old age can be modified, at least for a time.

Fries and Crapo estimate that under ideal conditions, 95 percent of Americans would die natural deaths between the ages of 77 and 93. And even though death from disease can never be totally eliminated, they feel the job of modern medicine to eliminate premature death is largely accomplished.

"Unfortunately," Fries and Crapo note, "these simple facts have not often been directly faced, and research in human aging has frequently been a quest for the secrets of longevity and even immortality.

"Predictions that we soon will live to be 200 years old because of Vitamin C or E, Gerovital or some other magical elixir have obscured a more reasonable quest, for increased vitality in old age."

In addition, the myths of Methuselah, of Shangri-la and the Fountain of Youth "remain as false and diverting as they have always been," the authors believe.

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"As illness is cured or prevented," Fries says, "we live more often into old age, to almost the very end of our natural life span.

"Most people in approaching old age fear three problems—loss of ability to get around easily, of intellect and memory, and development of lingering disease.

"They think of old age as dependence on others, increasing loneliness and isolation."

And here is where the news gets better, according to Fries and Crapo.

Social and physical scientists have now begun to study the differences between individuals. Why do some people age more rapidly in particular ways than others? Can one identify the good factors in the "slow agers" and apply them to others for the purpose of improving the quality of life in those later years?

This is already happening, Fries and Crapo believe. Such factors can be identified, and they appear to be modifiable by manipulating lifestyle.

The downturn, for example, in heart disease deaths in recent years is the first evidence that this can be done, they say.

The authors give examples of how runners can improve steadily even as the capacity of their hearts and lungs diminishes with age. This is because the functional capacity of vital organs is never used to capacity to sustain human life.

"If we wish to improve a skill or function we must practice," says Fries.

The idea is not limited to physical skills. Studies show that training and use can improve intelligence test scores even in persons over 70, and that the loss of short-term memory associated with aging can be improved by practice.

But the study of the modifiable aspects of aging has just begun, Fries and Crapo believe, and represents a new clinical frontier.

"As we move from our present preoccupations with disease and longevity, these crucial studies represent an approach to the maintenance of full and vigorous life," Fries says.

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If you are interested in the book, you may contact the physicians directly: Dr. James Fries, (415) 497-6003 or Dr. Lawrence M. Crapo, (415) 858-3933.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

An innovative clinic, called the Stanford Medical Group, has been formed to strengthen Stanford Department of Medicine's commitment to patient care.

Headed by Dr. Michael B. Jacobs, clinical associate professor of medicine, and Dr. Armand P. Gelpi, clinical professor of medicine, the new clinic will have the primary duty of seeing patients much as doctors in private practice do.

In the past three decades, according to Gelpi, academic medical centers have tended to restrict their activities to mostly teaching and research, with a shift of emphasis away from patient care.

"The program is trying to bring this emphasis back on a small scale," he said. "I think it's a valid goal from the educational standpoint to have a clinic that serves as a model for the transition between academic medicine and the realities of clinical practice."

Presently, very sick patients are either admitted directly to the Stanford University Hospital or are seen in the General Medical Clinic, an operation that emphasizes the teaching as it does patient care, and in which doctors in training participate under faculty supervision.

The Stanford Medical Group, however, will be different.

"The first person the patient sees will be a Stanford faculty member," Jacobs explained. "The faculty member becomes a personal physician that in many ways parallels a private practice."

Students and resident physicians will still be incorporated in the new clinic, but only as "observers." said Gelpi.

The services will include night time and weekend coverage provided by 12 rotating associates, also full-time faculty members of the Department of Medicine. Hospital care would be included if the patient requires it.

"Every large academic medical center needs physicians to provide comprehensive diagnostic workups for patients, to decide which specialists they should be sent to, and be responsible for the continuity of care," Jacobs said. "We think we can fulfill that role."

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Besides its direct patient care role, the group will offer a 24-hour consultation service to all clinical departments of the Medical School and to Northern California physicians, Jacobs said.

The new clinic also incorporates Stanford's successful executive health program started a year ago. The program is offered to company executives for the purpose of identifying current or potential health problems.

This preventive medicine effort draws on the techniques developed by Stanford's unique Heart Disease Prevention Program, and on Dr. Gelpi's own extensive experience in occupational health and preventive medicine, Jacobs said.

Gelpi had served for more than 12 years as chief of internal medicine for the Arabian American Oil Company in Saudi Arabia. From 1970 until recently he was a staff physician at Cowell Student Health Center at Stanford, and was associated with the Palo Alto Medical Clinic.

A goal of the new clinic, Gelpi said, is to engage patients clearly as partners in their medical management rather than as passive participants.

"I am a strong advocate of self-education and of physicians taking an advocate role with their patients," Gelpi said.

"The patient with the best information is going to make life easier for his doctor and help himself in the long run."

The new clinic includes nurse Marjorie Dunn, and services coordinator Sandy Musashi. The clinic is located within the Boswell Clinic Building in the Stanford University Medical Center.

Like all clinics which belong to the Faculty Practice Plan, the new group will be self-supporting from patient fees. The physicians are salaried.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

A group of Medical School faculty members has joined with colleagues from other Stanford University departments to focus the nine separate research programs they represent on issues of national health policy and service.

John Bunker, professor of family, community and preventive medicine and director of the division of health services research, recently was elected chairman of the seven-member governing council of the new Consortium for Health Research and Policy.

"The consortium includes faculty members who are at the forefront of research and analysis in disease prevention, health economics, legislative reform, technology assessment, the organization and delivery of health care, and physician and patient—or provider and consumer—behavior," Bunker said..

The concept of group health planning gained a physical boost in October, when the Board of Trustees approved a remodeling project which will move many of the members into a single office complex.

Specifically, the Board of Trustees approved $1.5 million to $2 million to renovate about 30,000 square feet of space for offices in the campus building formerly housing the Medical Microbiology Deprtment, which recently moved to new quarters in the Fairchild Building.

The complete list of tenants has not been established, but among those expected to move into the consortium-sponsored office space within 18 months are health communication functions of the Stanford Heart Disease Prevention Program (SHDPP), about half the department of medicine's division of immunology, and much of the family, community and preventive medicine department, including the division of health services research, which Bunker heads.

"The research of the new consortium will emphasize the role of the consumer, or patient. This is particularly appropriate as the problems of medicine shift from those of acute disease to those of chronic disease," Bunker contended.

"Since chronic illness rarely can be cured, and since increased effort at prevention is in order, clearly the patient must play a centeral role in the preventive program," Bunker added.

"We are taking a close look at how we may improve the quality of life, rather than simply attempting to prolong its duration.

"And we are also by necessity taking a hard look at cost analysis and system design.

"Research in these areas require, in addition to medicine, a variety of social science skills, including economics, sociology, psychology and communications. Hence there is the need for an interdisciplinary research center."

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Most of the consortium's members already are actively involved in health planning, and some of the components individually have made widely recognized contributions to health planning.

The SHDPP, headed by consortium member John W. Farquhar, professor of medicine, has been involved in multidisciplinary research into ways of preventing heart disease through community education. Another SHDPP principal, Nathan Maccoby, professor emeritus of communication, is a founding member of the consortium and is reflective of the social science input the consortium is seeking.

Victor R. Fuchs, a professor of both economics and of family, community and preventive medicine, has combined his interest in the two disciplines by serving as a senior research associate for the National Bureau of Economic Research.

Another national leader in the consortium is Alain C. Enthoven, Marriner S. Eccles Professor of Public and Private Management, graduate school of business. author of a book, **Health Plan**, Enthoven is an advocate of the "consumer choice plan," in which competition, instead of regulation, influences costs in medical care.

Bunker said the group is expanding regularly and currently includes about 20 members. The group is open to all faculty members concerned with health planning research who wish to actively support the consortium.

Included among the 13 founding members are Byron William Brown Jr., professor of biostatistics and director of the division of epidemiology; Diana B Dutton, assistant professor of health services research; David M. Eddy, formerly professor of engineering economic systems, now occupying a similar position at Duke University.

James F. Fries, associate professor of medicine and director of the American Rheumatism Association Medical Information System; Count D. Gibson Jr., chairman of the family, community and preventive medicine department, Halsted R. Holman, Berthold and Belle N. Guggenheim professor of medicine, co-director of the Robert Wood Johnson Clinical Scholar Program at the University of California and Stanford; W. Richard Scott, prefessor of sociology and director of the Multidisciplinary Research Training Program on Organizations and Mental Health; and Harold Sox, head of the division of general internal medicine.

The existing programs include SHDPP, the Stanford Arthritis Center (including the American Rheumatism Association Medical Information System), the Midpeninsula Health Service, the division of health services research, and the department of family, community and preventive medicine.

Also the health management program at the Graduate School of business, the multidisciplinary research training program on organizations and mental health; the ambulatory care research program of the divison of general internal medicine, and the national bureau of economic research.

Members of the governing council, in addition to Bunker, are Brown, Fuchs, Holman, Maccoby, Scott and Sox.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
(Editors: Photos available if not included)

STANFORD—

Stuart Rosse was getting a bit burned out in his job as a pastry chef just about the time his wife, Kathy Kraus, was ready to leave work temporarily to have the couple's baby.

So Rosse suggested—a bit timidly, he admits—that maybe he could take over her duties as registrar of the Stanford University Medical School while she stayed home for a few months.

And so he did.

Every weekday since he started Sept. 1, Rosse, 25, puts on a clean shirt and shaves and reports to the desk in the private office that once was his wife's exclusive domain. The grooming regimen, the couple agrees, has been one of the most difficult transitions for the former student and chef in adapting to a new work arrangement which has been judged successful by both Medical School officials and the couple.

Julian, born Oct. 13, also seemed happy as he slept contentedly during one of his mom's frequent visits to see how Rosse was doing on his new job.

"This is definitely an extension of our life at home," said Kraus. Now the couple is in the process of converting it to a permanent job sharing arrangement, "which will give Stuart more time at home to spend with Julian," the 27-year-old Kraus said.

"I was surprised but delighted when I heard of the setup," said Dr. John Steward, associate dean for student affairs and the Kraus-Rosse couple's boss.

Another backer of both the maternity relief and prospective job sharing arrangements is Rosemary Hornby, manager of the Human Resources Group for the Medical School.

"We have tried to encourage job sharing for several years. It can be very useful in terms of sometimes getting two kinds of expertise economically under the auspices of a single job.

"For example, a few years ago we were able to hire an engineer and an architect, both halftime, to supervise the installation of some equipment. We got two kinds of needed job skills which we almost certainly wouldn't have been able to find in a single individual.

"One reason job sharing might not have been done in the past is that conceptually we're not really into it yet. Employers just don't even think about the concept when they post a job.

"And it takes more time by the hiring person to set it up. You've got to have a very close match, since the two people have to work closely together."

Kraus and Rosse, who met while both were Stanford undergraduates and later married 4-1/2 years ago, believe that a close relationship at home has helped Rosse do the job better.

The work includes maintaining records for the 397 medical students, compiling statistical information about the student body, and helping the medical students with problems involving their records.

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"Anyone doing this job, regardless of how much prior experience he or she has, will have a lot of questions about how various procedures are performed," Kraus explained. "These are questions which can only be answered by someone who has actually done this job.

"So, Stuart and I have a real advantage, because he can ask me questions at the dinner table or whenever they come up. If the Medical School had hired an outsider, that person obviously would not have had the access to talk with me about problems which inevitably come up."

The job "can become an overwhelming source of conversation," said Kraus. "A lot of people simply could not do the arrangement.

". . . I was a little worried at first," Kraus continued. If there had been any disagreements about how to do the job, it would put me in a very difficult position."

"I think when Kathy gets back to work," Rosse interjected, "I'm going to have to be a little more careful about keeping the desk straightened up and that sort of thing. At work, anyway, Kathy tends to be a bit more organized. That's one of the compromises we'll have to work out."

Rosse first suggested the maternity leave relief arrangement while the couple was visiting her parents in Oak Ridge, Tenn. in July.

"I was a little bit afraid of suggesting it at first," said Rosse, "at least partly because I wasn't sure I had the proper qualifications. But eventually I got over that and while we were walking down the street, I popped the question about the job."

Rosse majored in Germanic literature and thought at Stanford and comes from what he calls "an intellectually oriented background." The registrar's job calls for a college degree and some relevant administrative background.

"I never had any doubts that Stuart could learn to do the work," said Kraus, a music major who transferred to the position March 16 from another administrative slot in the main campus registrar's office. "But I was a bit concerned about whether he could adapt to the routine of an office job.

"Stuart never had a job where he had to dress a certain way," she said.

"I really wondered," Rosse added, "whether I could get used to shaving every day."

"And still," she said, "there are days where he'll say, 'I wonder if I really need to shave.' I won't say anything. And very soon, he'll say, 'well I guess I better,' and that's the end of that.

". . . For a while he had a lot of trouble answering the phone in a businesslike way. He'd always say 'hello' or something casual like that. He's also not the world's greatest typist, but fortunately, that's not a crucial part of this position."

The transition from pastrymaking to the office required some compromises.

"In this kind of work, it's a bit difficult to assess the rewards," Rosse said.

"Pastry baking is a sensual kind of thing. When you finish the day you see the eclair or pie. Here it's a matter of saying, 'today I moved 247 pieces of paper.'

"Yet, now I don't have to feel exhausted after a day of lifting 100 pound sacks of flour, and this enables me to be rested and function during those early morning feedings of Julian.

"And I'm still doing some parttime baking, and this is really satisfying because I can choose only the most interesting projects. I get to do what I want."

Tentative plans call for Kraus to return to work parttime about Jan. 1.

Rosse would shift to half time, "which will give me more time to spend with Julian and do some more gourmet pastry projects parttime."

Nov. 18, 1981

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mg205

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Carl Hitchner, managing attorney for medical affairs, is leaving Stanford University effective Dec. 15 to become a partner in the Los Angeles-based law firm of Weissburg and Aronson, the university announced today.

"Carl Hitchner's expertise and understanding of the law profession, particularly as it relates to medicine and health planning issues, has been an invaluable asset to Stanford and the medical community generally," said Lawrence G. Crowley, M.D., Stanford's vice president for medical affairs.

"We wish him well and appreciate that his unique talents have created a solid foundation for the conduct of the Medical Center during some crucial years of planning and development," Crowley added.

No replacement was announced immediately.

Hitchner joined the university's legal office in Oct. 1973 after completing law school at the University of Notre Dame, South Bend, Ind. He had served two years starting in 1968 as a certified public accountant in the university finance office. He came to Stanford from the CPA firm of Peak, Marwick and Co.

In his most recent position, Hitchner was responsible for the legal affairs of the Medical Center, including Stanford University Hospital.

Hitchner said he will open a San Francisco office for Weissburg and Aronson in early January in the financial district. The firm, which currently has offices in Washington as well as Los Angeles, specializes in representing hospitals, nursing homes and other care facilities.

He is a Westlake resident.

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STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
(415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers
FOR IMMEDIATE RELEASE
STANFORD—

Stanford's unprecedented effort to license the entire genetic engineering industry for use of its basic scientific techniques is off to a strong start, according to Andrew Barnes, coordinator on this license for the University's Office of Technology Licensing.

Seven companies already have signed up, and at least 20 more have made a commitment to do so within a month, including U.S., Japanese, and European firms. "Our latest estimate is that 50 will be signed by Dec. 15," Barnes said Monday, Nov. 16. "New ones are calling in daily. We're concerned about an overload the last few days before the deadline."

Firms which already have signed include Green Cross of Japan, Schering A.G. of West Berlin, Smith-Kline, Eli Lilly, Schering-Plough, International Minerals and Chemicals, and Advanced Genetic Sciences, a venture firm planning applications in agriculture.

Barnes said representatives of 60 companies showed a "very lively interest" in licensing when he visited Japan, as did 14 European firms during a trip to the Continent.

"The license agreement itself has been very well received, with many compliments on its construction and administration," Barnes said. First-year revenues, initially forecast at $200,000 to $300,000, may approach the $1 million mark, he estimated.

That total would be reached if 50 firms paid a $10,000 sign up fee plus an additional $10,000 annually. Those signing by Dec. 15 may credit five times these basic fees against future royalties on resulting products. This credit is limited to 50 percent of the earned royalties annually.

Thus, for example, a company which signed up and then took three years to develop a commercial product would have a credit of $200,000 to apply against the first $400,000 in royalties.

While there's been "some grumbling" that the patent is too broad, and occasional rumors of a legal challenge, the overwhelming response to date has been positive, Barnes said.

"Many small companies have delayed making a decision, indicating they want to analyze the licensing agreement. But now, as the deadline nears, we're getting bombarded with calls.

"The program is going well. Things are happening quickly now that several firms have signed up."

The licensing program is based on a broad patent covering the basic gene splicing and cloning methods invented by Dr. Stanley N. Cohen of Stanford and Dr. Herbert W. Boyer of the University of California at San Francisco. Both inventors waived their rights to personal royalties.

When the licensing effort was announced Aug. 3, Stanford President Donald Kennedy noted it was designed to "assist the process of technology transfer by making sure lots of players get into the game. This increases the probability of valuable new applications for human science."

Niels Reimers, director of the Office of Technology Licensing and past president of the National Licensing Executives Society, believes "there's no precedent for this sort of program, seeking to license all companies who are using what is essentially the basic tool needed in genetic engineering. These companies are in widely ranging markets such as pharmaceutical, chemical, agricultural, and energy."

The earned royalty rate is one percent of net sales of end products ranging up to $5 million in value, three quarters of one percent on sales between $5 and $10 million, and one half of one percent on sales above $10 million annually. Separate royalty schedules apply to bulk products, basic genetic products, and process improvement products. Use of recombinant DNA methods in noncommercial basic research will not require a license.

Fifteen percent of the royalty income will go directly to Stanford for the costs of administering the license. After payment of direct expenses, the remaining funds will be divided evenly between Stanford and the University of California.

11/17/81 —30— 2T

EDITORS: Barnes and Reimers may be contacted at (415) 497-0651.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Two young faculty members in the Stanford University School of Medicine have been selected to receive research fellowships from the John A. Hartford Foundation of New York City.

Dr. Gary Schoolnik, assistant professor of medicine and medical microbiology, and Dr. Jeffrey Sklar, assistant professor of pathology, are two of the twelve 1981 awardees, selected from a group of 86 highly qualified applicants.

His funding to begin Sept. 1, 1982, Schoolnik will examine the molecular basis for the capacity of gonococci, the bacterium responsible for gonorrhea, to cause disease. In particular, he will study the mechanism by which gonococci colonize human mucous membranes.

Schoolnik is chief of the Infectious Diseases Division of the Veterans Administration Medical Center in Palo Alto.

Sklar's research concerns the molecular genetics of a chromosomal change seen in malignant white blood cells of many patients suffering from a common form of adult leukemia.

Through his study, to receive Hartford support starting July 1, 1982, Sklar hopes to answer a number of questions about the nature of this chromosomal change—not the least of which is whether it is a cause, and not just an effect, of this form of cancer.

Inaugurated in 1979, the John A. and George L. Hartford Fellowship Program is designed to add to the supply of medical researchers by supporting the work of promising young physicians who wish to pursue biomedical studies. Each award provides annual salary support for the Fellow, and an overhead allowance to the sponsoring institution. It is for up to $113,400 for three years.

"These types of grants are very important," says Sklar, "because in many ways the beginning of a research career is the most important period, and with funding being tight the situation is even more tenuous. If young investigators don't get funding, then ten or twenty years from now there won't be anyone doing research."

The Hartford Foundation is a private philanthropy established in 1929 by John A. Hartford. Its assets today amount to $135 million.

11-16-81 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

When cancer patient Imogene Seaberg of Cupertino heard she had to come to Stanford every day for six weeks to receive radiation therapy, she didn't know how she would do it.

"It's bad enough to find out you have cancer," she says, "without having to worry about your transportation to and from treatment."

But Seaberg, whose husband takes the car to work, had to worry. "Even if I had had access to a car, I sometimes didn't feel up to driving."

Seaberg's dilemma is common to many outpatients who require long-term treatment. For them, getting to and from Stanford or other area health facilities can pose a major problem.

Recognizing the special needs of these patients, the American Cancer Society (ACS) and the Palo Alto area Red Cross operate programs to transport patients to and from medical appointments.

The oldest of the two, ACS's "Freewheelers" was started 18 years ago. It has been facing such a demand that it needs more volunteer drivers. The drivers must be willing to use their own cars and fuel to provide the service.

According to Bob Hammer, chairman of the Santa Clara ACS transportation committee, there are now about 45 drivers in his group, some more active than others.

To meet demand, Hammer and others have tried picking up as many as three patients at a time. But, he explains, this is not always feasible when different locations and appointment times are involved. Moreover, it's often necessary for drivers to stay with the patient during an appointment, not only to avoid getting lost, but for moral support.

Drivers, says Hammer, can provide an important third party where cancer is concerned. "Patients are often reluctant to burden their families too much. With an objective outsider, they feel they can really unload."

Isabel Walker, oncology social worker at Stanford, agrees. A Freewheeler is a "friendly taxi driver," she says.

Hammer, a retired electronics technician from south San Jose, began as a Freewheeler over two years ago for personal reasons. "My wife died of lung cancer. Then I had a heart attack and had to retire.

"I wanted to help people who have cancer as well as those who don't," he explains. Today, Hammer is the health fair coordinator for the Santa Clara County unit of the ACS. Besides freewheeling, he works in the unit's gift shop and lectures on the warning signals of lung cancer and colon-rectal cancer.

Hammer says, "I'm happy knowing I'm doing something that's helping somebody—and that's helping me. It's selfish in a way."

The drivers, he says, come from all walks of life. "Many are housewives, some are retired, and many are working people who drive on their day off."

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They're allowed to deduct nine cents per mile from their income tax (for gas), but other than that they're on their own financially.

The patients served by the program must be ambulatory, says Hammer, because drivers are not equipped to handle accidents of non-ambulatory people. "There are other transportation services coordinated by the counties for those individuals." (An example would be the "Handi-Wheels.")

Most patients served by the Freewheelers are elderly, says Hammer, and most are widows. "The men seem less willing than their female counterparts to admit they need help," he observes, "at least until it's absolutely necessary."

To avoid a waiting list for the transportation service, a budget has been set aside in the Santa Clara chapter to hire a cab when no driver is available. "But this is a test," explains Hammer. "If it works, we will try to secure ACS funds to continue it."

The Red Cross motor service differs from the Cancer Society program in that the organization itself supplies the vehicles (three station wagons), and pays for gas and maintenance.

According to Margie Hornbeck, Red Cross director of transportation, patients served must have residence in Palo Alto, Mountain View, Los Altos, Stanford, Moffet Field, or Los Altos Hills. "But of course there are people from all over the world being treated at Stanford. If they have housing in the area during their stay, that is counted as residence."

Hornbeck, a driver herself for 10 years, says the program became active about four years ago. "We're one of the few Red Cross chapters in the area that has this kind of program, because it's a heavy and expensive priority."

There is no charge for the service—which is reserved for patients who vitally need it—and no age limit (except that children under 12 must be accompanied by an adult). At the moment, there are seven Red Cross volunteer drivers, and, says Hornbeck, "We can always use more."

Like the Freewheelers, the Red Cross prefers ambulatory passengers. Patients must at least be able to get in and out of the vehicle themselves, with help if necessary.

Anyone interested in either volunteering or finding out more about the Red Cross service should call Hornbeck at 322-2143.

The contact for the Cancer Society's Freewheelers program in Santa Clara County is Janet Perry, at 287-5973. In Alameda County, the person to call is Norma Linder, at 357-1961.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR RELEASE AFTER 1 p.m., Sunday, Nov. 15 to coincide with Harrison's installation.

(EDITORS: A more complete release on the American Heart Association Assembly and Harrison's installation has been issued by AHA from Dallas)

STANFORD—

Donald C. Harrison, William G. Irwin Professor of Cardiology at Stanford University Medical Center, was installed Sunday (Nov. 15) in ceremonies in Dallas as president of the American Heart Association.

The installation was part of the AHA's annual assembly, which includes scientific sessions as well as business meetings.

Harrison, chief of cardiology at Stanford University Hospital, served in various AHA posts since 1965, and last year was on the national executive committee as president-elect of the national voluntary health agency.

The AHA, headquartered nationally in Dallas, has 14 medical and scientific councils, and a nationwide network of 55 affiliates. The association claims 40,000 physican and 80,000 other members who jointly develop policies and programs for almost 2 million volunteers working on the community level.

Harrison, a 1958 graduate of the University of Alabama School of Medicine, trained at Peter Bent Brigham Hospital, Boston and in research at Harvard Medical School.

He was named chief resident in medicine at Stanford in 1963, and has served here since in a variety of posts. His research interests include cardiac pharmacology, with primary emphasis on antiarrhythmic drugs and adrenergic blocking agents. He also is acutely interested in the development of computer techniques for data analyses.

Harrison lives in Los Altos with his wife, Laura, and the couple's three children.

Nov. 12, 1981 —30— mg205

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: ADVANCE FOR P.M. RELEASE MONDAY NOVEMBER 16.

STANFORD—

A new highly accurate scanning technique developed by Stanford University researchers may help prevent needless limb amputation and death in certain patients who become infected following cardiovascular surgery.

The technique, called white cell scanning, shows promise in solving one of the most vexing problems cardiovascular surgeons face: the early diagnosis of infections in patients who have received artificial heart valves or artificial arterial grafts, according to Dr. D. Craig Miller, assistant professor of cardiovascular surgery at Stanford.

Patients who receive aortic bypass grafts have a fairly low likelihood of developing a graft infection, ranging between one and six percent, says Miller. However, the serious or fatal consequences for those who do become infected is "devastatingly high," he says.

Unless the infection is diagnosed and treated early, patients with grafts in the aorto-femoral region (where the aorta branches into major arteries of the legs) have a mortality rate of 50 to 75 percent and amputation is required in 20 to 30 percent of patients, Miller explains.

"But a graft infection doesn't have to be life-threatening if we can recognize it early," he emphasizes.

The new technique, which involves nuclear scanning, not only affords early diagnosis which will allow early treatment—it also is highly reliable (89 percent accurate in early clinical tests) and is non-invasive (doesn't require exploratory surgery or catheterization).

Miller reported on clinical tests of the technique in nine patients who had aortic grafts in the abdominal or chest regions, Monday November 16 at scientific sessions of the American Heart Association meeting in Dallas. His colleagues in the research were Peter McKeown, Stuart Jamieson, R. Scott Mitchell, Corneluis Olcott, John Mehigan, Bruce Reitz, and I. Ross McDougall.

McDougall, a nuclear medicine specialist and associate professor of radiology at Stanford, helped develop the white cell scan technique. The procedure involves taking a sample of the patient's blood, isolating the white cells, tagging them with small doses (about one millicurie) of a radioactive element called Indium-111, replacing the cells in the patient's blood and then performing a nuclear scan to locate areas where the white cells cluster.

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White cells participate in the body's defense against infection, clustering at infected spots in the body. Such a cluster of radioactively labeled white cells (a "hot spot") thus pinpoints sites of infection during the nuclear scan; if a hot spot is detected at the site of a graft, then treatment can be started as soon as possible, Miller explains.

(The indium tagging does not diminish the normal activities of the white blood cells, Miller notes.)

"The ability of white cell scanning to help physicians make this diagnosis precisely early in the course of graft infection should result in earlier treatment and improved survival rates," Miller says.

The treatment for graft infection requires major surgery in which the infected parts are removed, the surrounding areas cleaned and new grafts implanted outside the infected area, says Miller. Because the treatment involves major surgery itself, many physicians are reluctant to treat patients until the diagnosis is absolutely certain. But the lack of early and reliable diagnostic tests has meant that treatment comes tragically late, Miller says.

Other techniques that have been used in the past to detect graft infection are ultrasound and computerized tomographic scanning. But neither technique has the specificity and accuracy that the indium white cell scanning procedure has demonstrated so far, Miller says.

Miller adds that the new technique requires further clinical testing and because it is so new, it is not yet widely available.

Arterial bypass graft and artificial heart valve surgery are fairly common cardiovascular surgical procedures, notes Miller. About 900 patients undergo such operations each year at Stanford Hospital alone, he says.

Severe atherosclerosis—a fatty accumulation that blocks blood flow through the arteries—is one condition where arterial bypass grafting is indicated. Another condition that can be treated with this type of surgery is an aortic aneurysm, in which the blood vessel wall becomes so thin that it balloons out and may burst. In this case, the aneurysm is removed and the artifical dacron graft replaces it.

The indium white cell scanning technique has also been applied by McDougall and his colleagues in detecting other types of infections, including abdominal, chest, brain and bone infections. In addition, the method has been used to label leukemic blood cells in patients in order to study the cell distribution in the body and to monitor patients' response to treatments.

Mailed Thursday, November 12, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: ADVANCE FOR RELEASE NO EARLIER THAN A.M. SUNDAY, NOVEMBER 8 TO COINCIDE WITH PRESENTATION OF RESULTS AT THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES.

STANFORD—

Results from a large study of hepatitis B patients at Stanford University show for the first time that although most patients with the infection completely recover with no lasting effects, a small number of afflicted patients are at high risk for fatal complications.

The most significant finding was that an examination of liver tissue and blood tests can identify those patients at high risk, and preliminary evidence suggests that antiviral therapy may improve their liver disease, according to Dr. Coleman Smith of Stanford's division of infectious diseases.

In a survey of 370 patients with chronic hepatitis B who were followed for five years, the Stanford researchers found that a certain group of patients (less than three percent) with extensive liver damage ran a 45 percent risk of death from liver failure and related complications.

Smith, a research associate, presented the results of the long term study Saturday November 7 at the annual meeting in Chicago of the American Association for the Study of Liver Diseases. His colleagues on the study are Drs. Peter Gregory, William Robinson and Thomas Merigan of Stanford.

Hepatitis B, a liver disease that afflicts more than 100 million people worldwide, is caused by a virus against which there is now no definitive treatment although a promising drug therapy is currently undergoing clinical testing at Stanford.

Ninety percent of those who contract the infection recover with no permanent damage. However, approximately 10 percent of patients hospitalized with acute hepatitis B infections become chronically infected. These patients range from having mild to serious illness, but it is impossible to predict where on the severity spectrum any patient will fall, according to Smith.

What the researchers did was classify chronic hepatitis B patients into three groups according to how much damage was apparent in biopsies of liver tissue examined under the microscope. They then followed the patients for as long as eight years to determine the survival rate of patients in each group.

They found that 70 percent of those with the chronic form of the disease had relatively minor liver damage even though particles of the virus were present in their tissue. Among these patients survival chances were high, nearly 100 percent at the end of a five-year period, Smith reported.

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For those patients whose liver biopsies showed a medium range of cell destruction, the survival rate dropped, with 90 percent surviving the five-year period.

The highest risk group consisted of patients whose samples showed signs of extreme cell damage, or liver cirrhosis. Among this group, approximately 50 percent were alive at the end of the five-year follow-up.

Smith stressed that the number of patients in the high risk category is a very small percentage of patients with hepatitis B. The encouraging news is that they can be identified and be given medical attention as new hepatitis B treatments become available.

Smith suggested that patients who know they have the chronic form of hepatitis B should not be alarmed but might consult a physician for appropriate medical care.

Patients with the chronic form of hepatitis B are also potential transmitters of the infection. Even for those who are not among the higher risk group and therefore less in need of treatment, a cure that could limit the potential for transmission of the infection would be desirable, Smith noted.

The B form of hepatitis is transmitted through intimate contact—such as sexual relations or handling of blood. Doctors, dentists, nurses and clinical laboratory personnel, as well as male homosexuals, are among the groups with a higher than normal incidence of chronic hepatitis B.

In early clinical testing of two anti-viral drugs at Stanford, a combination of interferon and adenine arabinoside monophosphate (Ara-AMP) has shown promise as a hepatitis B cure.

Under the direction of Dr. Thomas Merigan, a $2.6 million randomized clinical study of the two drugs is being organized at Stanford with a five-year contract from the National Institute of Allergy and Infectious Diseases.

The study is intended to elaborate on earlier published Stanford studies which show that the two drugs used in combination or alone have produced cures in a significant number of hepatitis B patients.

Volunteer patients with chronic hepatitis B are still being accepted for the study.

Volunteers, who should be from the Bay Area or willing to come to Stanford for weekly studies, will be hospitalized for a few days and blood samples will be drawn. A liver biopsy will also be obtained prior to and after therapy, and one and two years later.

People willing to volunteer in the study should call (415) 497-6231.

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END OF ADVANCE FOR RELEASE A.M. SUNDAY, NOVEMBER 8.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: (Stanford) Spyros Andreopoulos (415) 497-6911 or
(Children's Hospital) Vicki Applegate (415) 327-4800 Ext. 363

City Desk: Story is released jointly with Children's Hospital at Stanford.

STANFORD–

Stanford University Hospital and Children's Hospital at Stanford have agreed to continue intensive planning for a unified children's medical center at the present Stanford University Hospital site.

A resolution calling for study of "a joint venture to build, own, and operate a children's hospital" has been approved by the Board of Directors of Stanford University Hospital and by the Board of Directors of Children's Hospital at Stanford.

The two boards have also taken these actions:

• authorized the firm of Naramore, Bain, Brady and Johanson of Seattle, architects for Stanford University Hospital's modernization program, to develop a schematic design of a consolidated children's hospital.

• agreed to form a joint planning committee to develop proposals on the organization and governance of the new hospital, conduct a detailed financial feasibility study, and develop fund raising plans.

According to the resolution, the committee must make its recommendations to the two boards as soon as possible, but no later than June 1, 1982. If the recommendation is to proceed with consolidation, there should be a joint venture agreement for both Boards' consideration.

The proposed new building, to be an addition to the present Stanford University Hospital modernization program, would retain the name "Children's Hospital at Stanford." The boards of the two institutions would share financial responsibility for its operation, but each parent institution would control its own endowment and other financial assets.

A unified children's medical center would consolidate the 60 beds of Children's Hospital at Stanford, the 44 acute pediatric medical, surgical and intensive care beds of Stanford University Hospital, and the combined clinical, teaching, and research programs of both institutions in a single setting of patient care.

Presently, several teaching and clinical research programs of Stanford Medical School departments—Pediatrics, Surgery, Psychiatry, and Radiology—are carried out at Children's Hospital, supplementing the core programs at Stanford University Medical Center.

Both hospitals share a common medical staff whose members are on the Stanford medical faculty.

More than 2,500 patients are transferred each year from Children's to receive specialized services available only at Stanford University Hospital.

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The hospitals are a mile apart and separated by a major thoroughfare. This requires constant transportation of sick children, less than optimal overall service, and duplication of effort and facilities, the two hospital boards have concluded.

A study entitled "Final Report—Planning for Children's Services" by a task force representing the two institutions also agreed that "the health care services offered to children could be provided optimally only through unification at a single physical location".

In a joint statement, Kenneth H. Sayre, chairman of the board of Children's Hospital at Stanford, and Dr. Lawrence G. Crowley, president of Stanford University Hospital, said:

"The purpose of the proposed consolidation is to provide the best possible overall comprehensive medical care for children and to improve the complementary activities of pediatric teaching and clinical research."

Children's Hospital at Stanford, a nonprofit institution, and Stanford University School of Medicine have maintained close ties since the former was established on the campus in the 1920's. In recent years, Children's has been formally a teaching hospital of the School of Medicine, but it is independently governed and separately funded.

The potential development of a single children's medical center has been discussed in the past. Rising costs, concerns over duplication of services as well as trends in pediatric care, which result in attracting to Stanford the more difficult-to-treat cases, have played a major role in the current proposals for unification, officials explained.

Another impetus for re-examining this option was the present $115 million modernization program contemplated by Stanford University Hospital, which includes inpatient pediatric facilities.

"A rare opportunity," Crowley termed it, "to review the future of pediatric care in the community and region."

Both sides emphasized there are many details to be worked out, including future use of the existing site of Children's Hospital at Stanford. The consolidation concept requires approval by the Children's Hospital Board, and by the general members of the Stanford University Hospital Corporation. It must be financially feasible. And the two boards must reach agreement on the organizational structure.

Finally, the project must pass the review process by local and state agencies.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(EDITORS: The following release is embargoed until 9 a.m. EST Jan. 4, when James F. Fries is scheduled to deliver his paper at the American Association for the Advancement of Science meeting in Washington)

STANFORD—

Medical science may never be able to lengthen the average human lifespan beyond about 85 years, but people may expect increasing vigor and good health right up to the end, two Stanford University scientists have concluded.

In fact, the two researchers believe "the medical and social task of eliminating premature death is largely accomplished."

The implications of the research are important for society, say Drs. James F. Fries and Lawrence M. Crapo, because it destroys the myth of an ever older population increasingly in need of geriatric care and expensive facilities. As diseases are eliminated, people should live healthy lives until inevitably they are overtaken by death from old age.

Longterm care facilities need to concentrate on encouraging autonomy rather than on expanding medical care, which won't be needed by a healthier older population, the doctors explained.

Results of Fries and Crapo's research have been published in a book, **Vitality and Aging** (W.H. Freeman and Co., San Francisco, 172 pages, $15.95 cloth, $7.95 paper). Their conclusions were presented Jan. 4 in a paper, *Physiologic Aging and the Compression of Morbidity*, at the American Association for the Advancement of Science Meeting in Washington, D.C.

Central to the authors' conclusions are the dual findings that disease can be eliminated but that the human lifespan is fixed.

What the authors have done is compare how elimination of disease, particularly during the current century, has failed to alter the statistical truth that virtually everyone will die before the age of 97 unless illness or accident kills them first.

As evidence, they show that the oldest documented human being in the world lived 115 years, and claims of superlongevity among certain remote mountain peoples "have now been convincingly shown to represent systematic age exaggeration." Statistical analyses indicate that man reached the current fixed lifespan about 100,000 years ago.

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Human organs deteriorate at a slow but constant rate from about age 30, and eventually they fail lethally in all of us at about the same age.

The present lifespan did not develop arbitrarily, Fries and Crapo contend, and is related in part to natural selection and the need for persons to remain productive until their offspring no longer need their protection.

But while organs deteriorate, it is still possible to increase physical efficiency throughout one's lifetime. For example, it is possible that a serious runner free of disease can increase his or her performance throughout most of life, since the organs are seldom used to their biological capacity, even by athletes.

Under ideal conditions, the median natural human lifespan is set at a maximum of 85 years, and 99 percent of Americans would die of old age between about 73 and 97, the researchers said.

Fries and Crapo do not rule out the possibility that the human lifespan could ultimately be lengthened, and point to such new techniques as recombinant DNA as potential solutions.

But, they contend, "the solutions to (lengthening the lifespan)...must involve a quantum jump in scientific knowledge....We suspect that superlongevity and immortality are at least as difficult to achieve as travel through time."

The authors show how the conquest over disease has narrowed the gap between the theoretical and actual lifespan of persons to the point now where white females in 1980 die an average of only seven years short of the theoretical limit. Of those seven years, four are accounted for by violent death.

At least one major killer of 1900, smallpox, has been completely eliminated, while tuberculosis—the no. 1 killer in 1900—has shown a decline of 99.5 percent.

Fries, an associate professor of medicine, directs the Stanford arthritis clinic and is author of the bestselling book, **Take Care of Yourself**. Crapo, an assistant professor of medicine at Stanford, is clinical director of the Geriatric Research Center at the Palo Alto Veterans Administration Medical Center.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

A tougher smoking policy was adopted and a controversial wartime preparedness plan was discussed by the Stanford University Hospital board of directors Dec. 10.

The board, asking for further study, postponed action until Feb. 10 on the Pentagon's civilian/military preparedness plan. The institution's medical board one day earlier had recommended to the hospital board that no contract be signed with the Department of Defense.

But the medical board suggested that the hospital should inform the government on a continuing basis about the number of beds which might be available for wartime emergency patients. The medical board represents the medical staff, composed of community and faculty physicians.

SUH, along with other U.S. medical institutions, has been asked to contract for beds and care in advance of a potential limited nuclear war overseas.

The standard agreements under the Civilian-Military Contingency Hospital Systems proposal also call for participating hospitals to report detailed personnel information, including data which the government could use to mobilize health care professionals.

The SUH medical board had objected to reporting personnel information.

Analysts have noted that civilian participation would be vital to provide care for U.S. casualties following a limited nuclear war outside the country, such as in Western Europe.

Nationally the plan has been backed by the American Medical Association. And some hospital administrators have suggested that advance agreement with the military would ensure that hospitals would continue to run their own facilities. The lack of such agreeement, some administrators contend, could trigger a military takeover of hospital management during a crisis.

Opponents, including a national anti-war group called Physicians for Social Responsibility, have said that planning for the results of a nuclear exchange creates the unrealistic expectation that a viable response is possible.

In other action, the hospital board voted to restrict patient smoking to specially designated public areas, such as certain solaria.

Smoking in patient rooms, which until now had been tolerated, would be prohibited except by patients in private rooms unable to go to designated smoking areas. These patients will need the written approval of their doctors.

The smoking policy followed recommendations of an advisory committee which noted that smoking is a fire and health hazard and should be restricted.

The committee, which issued a July 1 report, noted recent studies demonstrating that "second hand smoke" was harmful to nearby nonsmokers.

The new policy also restricts employee smoking to designated areas.

Dec. 11, 1981

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

For a premature infant who relies on someone other than his own mother's milk to survive, the holiday season can bring less than good cheer.

As Mrs. Teresa Asquith of the Mothers Milk Bank in San Jose explains, nursing mothers who donate milk which helps save lives are often too busy during holidays and summer vacations to continue their participation.

And the San Jose bank is the only one of its kind in California, supplying human milk to about 16 hospitals in northern areas of the state. One recipient is Stanford, whose Dr. Philip Sunshine, professor of pediatrics, has served as medical director of the bank since October, 1980.

"When a baby has diarrhea that doesn't respond to intensive medical therapy," says Sunshine, "often what he needs is human milk. But some mothers, for one reason or another, cannot nurse their own babies. That's when we need help from the milk bank."

According to Asquith, there are various medical reasons that people (not necessarily, though predominantly, babies) may require human milk. One of the bank's recipients is a child awaiting a kidney transplant; another recent user was a teenager with an unusual allergy.

"Human milk is more readily digestible than formula or cow's milk," she explains, adding that in the case of a premature infant, formula can sometimes "plug up" a tiny intestine. "There are now some formulas which are really great. But there's nothing yet as perfect as a mother's milk."

And, she notes, there are a variety of reasons that a mother may not be able to supply her own milk. "Especially in the case of premature infants, factors such as stress and the presence of medications may interfere. Also, milk doesn't flow easily without the help of a suckling infant."

"But about 70 percent of mothers who deliver at Stanford do nurse their own babies," stresses Sunshine, "and even in the intensive care nursery, we encourage mothers to express and bring in their own milk for their babies if possible."

And Asquith agrees, "The best milk for any infant is his own mother's. Only in the absence of her milk would we recommend the use of bank milk."

The bank solicits milk from nursing mothers who are healthy non-smokers with no history of hepatitis or systematic disorders, and who are not on medications or birth control pills.

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Prospective donors call the bank, undergo skin tests for tuberculosis, obtain approval from their own obstetricians and pediatricians, and participate in a two-hour in-service where they learn how to express and store milk in the privacy and convenience of their own homes.

"We collect milk under a very strict protocol," says Asquith, who herself visits each donor's home to ensure sanitary conditions and explain the procedure.

"It's really quite simple," she says. First the donor washes her hands with soap and water, and her breast with water only. She opens the bottle in a sterile fashion, without touching the inside.

After she discards the first third of an ounce, the donor expresses her milk directly into the bottle. Then she caps and immediately cools it, marking down pertinent information. The bottle must then be frozen. There is only one expression of milk per bottle, says Asquith.

The use of breast pumps is discouraged to avoid danger of contamination. Donors are provided with sterile bottles, and the milk is picked up once a week by volunteer drivers.

"Many of our donors have chosen to bring it in themselves, however," says Asquith. "We have a cookie jar for the kids, and it's a way of socializing." Those willing to do this, she explains, may claim a tax deduction for mileage at the end of a year.

When brought to the bank's laboratory, the milk is gently de-frosted overnight and kept separate from all other donations. A sample is taken from the middle of the container and tested for bacterial contamination. Then it is incubated for 48 hours, and if its qualities comply with certain technical criteria, it is distributed raw (unpasteurized) and frozen, on a physician's prescription only.

If the milk is found to be at all contaminated, it must be pasteurized in vitro for 30 minutes. Again a sample is taken, and if it passes the test can be distributed. The ordering physician decides, says Asquith, depending on his individual patient's needs, whether to request raw or pasteurized milk.

"Generally, pasteurized milk is considered to be the most bacteria-free," she says. "But we pasteurize a very small amount of milk, because our high standards assure the quality of the raw milk we distribute.

"And we maintain very open lines of communication with our donors," Asquith continues. "We talk to them on the phone a lot, congratulate them on providing good samples of milk, and encourage them to send us more of the same next time. We've found that the personal touch means a great deal."

To maintain as natural a regimen as possible, the recipient baby is given milk from a nursing mother who has a baby of about the same age. Also, an effort is made to retain the same donor for a particular recipient throughout the time that milk is required.

The milk bank began as a separate entity in 1974, says Asquith, after being part of the Northern California Transplant Bank, for which she worked as a technician. Both banks operate under the auspices of the Institute for Medical Research in San Jose.

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"We were given the impetus to separate the milk bank when a seven-month-old baby from Los Gatos developed diarrhea and needed human milk to survive. Then the press picked up the story and contacted us.

"We distributed over 1300 ounces of milk in our first year. I went out the door to pick up our very first ounce."

At that time Dr. James Harrod, of Valley Medical Center, was medical director of the bank. In the seven years of operation since then, says Asquith, 932 nursing mothers have donated milk.

Last year the bank, staffed by Asquith and one full-time assistant, distributed a total of almost 45,000 ounces. Stanford Hospital alone received almost 6,300 ounces in 1980.

How does the milk bank find donors?

"Mostly by word-of-mouth," says Asquith.

Also, the bank has a volunteer auxiliary which helps in creating community awareness and placing pamphlets "all over town."

Physicians and nurses can also pitch in. "Several nurses here at Stanford are very interested in the program," says Sunshine, "and they encourage nursing mothers to get involved."

One problem faced by the bank, says Asquith, is the increased demand for milk and the inability to meet all the requests that come in. "The need for additional milk banks is obviously tremendous," she says.

A grant from the California State Department of Health Services, Division of Maternal and Child Health, effective Nov. 1, 1981, will allow three more banks to be set up in areas of California with large neonatal populations.

The initial stage of grant activities, says Asquith, will consist of gathering and studying information collected from milk banks all over the world. "We'll meet with the advisors, devise a manual on procedures, and then we'll set up the three banks planned."

Meanwhile, she notes, women can continue donating milk to nearby hospitals that need it even while they're off on vacation.

"Wherever they're going, we'll give them supplies, instructions as usual, and a friendly letter of introduction."

Those wishing further information should contact the Mothers Milk Bank, Institute for Medical Research, 751 South Bascom Ave., San Jose, CA 95128.

The bank can be reached by phone at (408) 998-4550 or (408) 279-5103, weekdays from 8:30 a.m. till 4:30 p.m.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Ross Campbell has been appointed by the Stanford University counsel's office as managing attorney for medical affairs effective Dec. 15.

Campbell has served at Stanford since June 1977 as an associate staff counsel. His duties have included both labor law and representing the Medical Center.

John J. Schwartz university counsel said that Campbell "will work closely with Gail Mondry and our other attorneys in specialized fields to provide the complex legal services demanded by a major medical center."

Campbell, 33, graduated from Stanford in 1970 with a degree in history and German. After completing law school in 1974 at the University of Washington at Seattle, Campbell worked for three years at the Department of Health, Education and Welfare in Washington, D.C.

He is a member of American Bar Association, the California and Washington bars, as well as the National Health Lawyers Association.

He replaces Carl Hitchner, who resigned effective Dec. 15 to become a partner in the Los Angeles-based law firm of Weissburg and Aronson. Hitchner will open a San Francisco office for the firm, which specializes in representing hospitals, nursing homes and other care facilities.

Dec. 9, 1981 —30— mg205

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

The National Labor Relations Board (NLRB) regional director has recommended turning aside objections filed by a union which had unsuccessfully sought to represent a group of Stanford University Hospital employees.

A Dec. 1 action by James S. Scott, region 32 director of the NLRB in Oakland, stated that the objection filed by Local Union No. 39, Internatiional Union of Operating Engineers, AFL-CIO "be overuled in its entirety."

The union has until Dec. 14 to appeal the regional director's report to the NLRB in Washington before the recommendation becomes an action of the board.

On Sept. 18, a group of crafts and communications employees and biomedical technicians voted 57 to 22 in favor of no union representation.

Local 39 had contended that "the employer (SUH) gave a substantial raise to the employees and also interfered with employee rights."

In his report, Scott noted that the workers eligible to vote in the election had received wage increases on Sept. 1. But he agreed with the hospital management's position that the increase constituted a market adjustment consistent with what the employer granted all other workers and had granted the persons voting in recent past years.

"Thus, by announcing and putting into effect 1981 market value adjustments on or about Sept. 1, the employer took steps as it would if petitioner (the union) were not in the picture," the report said.

"It is evident that the wage increases in question were intended to help the employer keep existing employees and attract new ones, rather than to undermine employee support for petitioner," Scott concluded.

In addition, the report stated "no evidence was submitted in support of the Union's assertion of other interference with employee rights."

The group of workers rejecting Local 39 had been represented after 1972 by an unaffiliated employee organization, SUMCEDA, which received a plurality of votes in a subsequently challenged 1979 election. While the results of that balloting remained in limbo, SUMCEDA's leadership asked to withdraw as the bargaining unit, a move which was approved earlier this year by the NLRB.

The Sept. 18 election was ordered by the NLRB to clarify representation of the workers.

Dec. 9, 1981 —30— mg205

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

The Medical/Technical Division of the Stanford Bookstore held its grand opening at 135 University Ave., Palo Alto, Wednesday, Dec. 2.

A champagne and hors d'oeuvres reception honored Mr. and Mrs. Walter G. Edwards, Palo Alto residents whose generosity in donating their portion of the co-owned building has made the new store possible.

Formerly located in the Medical Center complex, next to the student lounge, the medical bookstore was "about the size of our present supply area," said Rose Ann Sims, manager of the division.

As a result, the previous store carried only medical books, and very few student and office supplies. There was room for only one or two copies of each book on display. Now, though still limited compared to the campus store, the division carries a wider variety of books and more supplies, including calculators and small computers.

"A Medical Center of Stanford's significance," commented Roy Hoyer, book buyer of the division, "really should have a respectably sized bookstore which can offer both good quality and quantity.

"Try as they could to find us extra space at the Medical Center," he continued, "it couldn't be done and we had to look elsewhere."

During his special presentation, Eldon Speed, manager of the Stanford Bookstore, described how the building downtown was obtained.

"It was up for lease and perfect for our needs, but out of our price range. When I jokingly suggested that the owners give it to us, they naturally laughed. A few days later we received a phone call from Mr. Edwards."

And the new store opened last August.

The Stanford Bookstore is a private, non-profit corporation. The staff of the Medical/Technical Division have encountered very few customer complaints since their move away from campus. To compensate for the farther distance, Hoyer explained, they have expanded operating hours to include Saturdays and Thursday evenings.

"We're very excited about how it's worked out, and we hope to build on our success so far," he added. "The slight inconvenience is far outweighed by the advantages."

Among the honored guests at the grand opening reception were Stanford University President Donald Kennedy and Eric Miethke, who presented Edwards with a state resolution on behalf of Senator Marz Garcia and the Senate Rules Committee commending his philanthropic generosity.

Edwards was also shown a plaque in his honor, to be mounted outside the store.

"I came to Palo Alto 30 years ago," he said, "and Stanford University is a very big part of this community. In both health and welfare, Stanford has contributed to my wife's and my success in this area. So this is our way of saying 'thank you.' "

Edwards and his partner Harvey Koch are in real estate development for northern Santa Clara County.

12-8-81 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Rape, and the need for understanding and compassionate attention toward its victims, has brought about certain changes over recent years in Stanford University Hospital's procedures for dealing with the problem.

Until about ten years ago, rape victims were treated like everyone else, says Pat Taylor, R.N., assistant director of Emergency Services, and were not given any sort of priority care.

She can remember people callously saying, "Oh, I bet she asked for it."

But according to Taylor and Jane Anderson, Hospital liaison for the Mid-Peninsula Rape Crisis Center, there has been a huge turn-around in societal attitude recently—reflected in the policies of such agencies as police departments, state legislatures, judicial systems, and hospitals.

California district attorneys are being tougher on rape suspects, they say, just at about the same time "helping" professions are showing more compassion towards victims.

At Stanford, a written policy has been in effect for about five years regarding the treatment of rape victims in the Emergency Department. The rape protocol calls for seeing the victim immediately, providing maximum emotional support without being moralistic, and minimizing interrogation. "Allow victim to verbalize as she wishes," it reads.

Sexual assault cases are not to be discussed with anyone without specific victim consent, which must also be obtained for medical and legal examinations, and photographs (for the police). The nurse determines who brought or referred the victim, and speaks with the escort if possible.

She assesses the social history surrounding the assault, as well as the victim's present functioning. The pediatric/adolescent resident must be notified for victims 17 or younger.

If not previously informed, the police are contacted to come to the Hospital, day or night, to obtain a report and collect evidence.

The physician's role includes: obtaining a medical history, performing a physical exam, and obtaining medical-legal evidence.

Many precautions are taken, including tests for venereal disease, and administration of tetanus shots and antibiotics when necessary. Injuries are treated, and the victim's wishes are followed concerning hormonal pregnancy prevention, abortion, and menstrual extraction. The physician may request consultations, initially or in a follow-up as indicated.

When the workup is completed, the patient is encouraged to follow up with her private physician, or given an appointment in the Gynecology or Pediatric Clinic in one week. She may also be given an appointment in the Psychiatry Clinic. A test for V.D. should be repeated in eight weeks.

The Emergency Department nurse arranges for an escort home if needed, as well as for temporary housing and clothing.

"Follow-ups, though," says Anderson, "are a big problem because victims often don't come back even if directly asked to." At that point a social worker contacts them again.

"A lot of the initiative is taken here at the Hospital," she says.

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"I think the police in Palo Alto are very sensitive too," says Taylor, "which helps a great deal. They usually come right into the department with the victim."

Anderson agrees. "They used to come in with a 'look how she's dressed' attitude, but recently there's been an emphasis on sensitivity training." She adds that besides police, the crisis center, supported by a grant from United Way, also refers rape victims to the Hospital. An average of one rape case is encountered each week by the Hospital.

Adds Taylor, "Ten years ago we didn't get very many rape reports here—it really was a rarity. Many victims would go to private doctors, and since only institutions were required to report the cases, many of those victims were left out of the statistics."

"It's very hard to tell," says Anderson, "whether we have more rapes reported or more actually happening. But officials believe there are more being reported." (In Santa Clara, they say, the percentage of attacks that are *reported* is thought to be higher than in previous years and higher than in most other areas.)

"People are talking about it now," says Taylor. "Years ago rape victims never wanted anybody to find out. We had a nurse who was raped, and the whole department just rallied around and moved her out of her place that night. I found out at that time that two other nurses had been raped earlier in their lives, and up until that time nobody knew about it."

"I think rape is a big subject right now," says Anderson, "and when a quiet victim sees other women talking about their experiences it gives her strength to do the same."

"Many times," she emphasizes, "the victim is calm right after the attack but will feel the psychological effects later. Fifty percent of rape victims lose their husbands. It starts with a resistance to be touched and continues as an aversion to sex and even a fear to go back to where they lived."

"If everything could hit the papers," says Taylor, "the rape problem would be more easily solved. But some things aren't reportable. The victims understandably don't want any press."

The need for privacy is one reason that, unlike many counties, says Anderson, the police in Palo Alto will take rape calls "blind"—without names. It's also why Hospital staff attempt to get the patient into an area where she isn't discussing what's happened in front of a lot of people.

"The emphasis," explains Taylor, "is on getting the patient in, while having just one nurse follow her through the process. We are attuned to the fact that it's more than a physical need; she has a mental need for support as well."

This is especially true, says Anderson, because the court procedure later can be difficult. "You have to constantly prove that you were attacked."

"There are still many old ideas about rape around," concedes Taylor.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Stanford University's fifth heart-lung transplant of the year was completed Tuesday (Dec. 1).

After a 3½-hour operation, the patient was reported in critical condition but her vital signs were stable, said Dr. Bruce A. Reitz, assistant professor of cardiovascular surgery.

"There were no complications in surgery and the patient is doing as well as could be expected after an operation of this magnitude," Reitz said.

The patient was identified as Darlene Moore Mathern, 37, of Waterloo, Iowa. She suffered from pulmonary hypertension, a condition which she developed about 13 years ago and which had progressed to the point where doctors were convinced she had only a few months to live.

The malady results in high pressure in the arteries serving the lungs. The arteries become constricted, blocking the flow of blood and requiring the right side of the heart to work harder and eventually become damaged.

There is no known cause or treatment for the condition. Therefore, Reitz said the only current hope of patients suffering from this disease is heart-lung replacement.

Stanford's first heart-lung transplant, Mary Gohlke, 45, also suffered from pulmonary hypertension. She was released from the hospital June 1, 85 days after her surgery. She has returned to her home in Arizona.

Three other heart-lung transplant patients were born with congenital heart defects which subsequently damaged their lungs.

Charles Walker, 31, who was operated on May 1, was released from the hospital 47 days after his surgery. He returned to his home in New York State, where he is reported healthy and pursuing an active personal sports program. Barry Davis, 40, received his new heart and lungs Oct. 11. He was reported in satisfactory condition and making progress during Thanksgiving week. He was moved to a general care ward Nov. 9 after an intensive care unit stay of 30 days, the shortest period for any of the surviving heart-lung transplants.

Another heart-lung transplant, Karen Wilson, 28, died of complications Aug. 1, four days after surgery.

"The heart-lung transplant procedure is performed only as a last resort for terminally ill patients," Reitz explained. "And we are encouraged about its therapeutic potential for a group, albeit small, of patients for whom there is no alternative."

The first three heart-lung transplants ever were performed between 1968 and 1971 in Texas, Minnesota and South Africa. The longest any patient survived was 23 days.

The procedure was revived at Stanford this year after clinical tests indicated that a new drug, Cyclosporin A, appeared to be more effective than previous medications at controlling rejection, the natural response of the body to fight off the foreign tissue in the new heart.

Cyclosporin A, a fungal derivative produced in Switzerland for Stanford, appears to offer the dual advantage of fighting rejection while not interfering severely with the ability to fight off infection or with the body's normal healing process. Previous heart-lung transplants died because their severed windpipe failed to heal.

Dec. 1, 1981 —30— mg205

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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TEST BEING DEVELOPED TO AID BEE STING VICTIMS

STANFORD—

If a doctor had an inexpensive, simple and reliable blood test for detecting people's sensitivity to bee stings or other allergic reactions, he could prescribe better therapy, bringing a new measure of relief to the sufferer.

Such a blood test may soon be developed, thanks to recent findings reported by researchers from the Department of Pediatrics of the Stanford University School of Medicine and the Allergy and Clinical Immunology Clinic in Paris at the annual Congress of Allergists in Bal Harbor, Fla. last week.

In allergy, including bee stings, proteins called IgE antibodies are formed in the blood tissues and trigger an immune reaction in the body against the foreign allergens. IgE is one of five classes of antibodies, known to exist in humans, and termed IgG, M, A, D, and E. Each of these has different physical properties and a different role in the immune process. Protection against allergic reactions is believed to reside in the IgG class.

There are also subclasses of immunoglobulins, and one of these, IgG4 for short, has been implicated as the blocking antibody for bee stings.

To determine if IgG4 is the blocking antibody, the researchers George M. Halpern, J. Blessing-Moore, Hao-Pi Hsu, and Richard B. Moss studied three types of people exposed to bee venom: allergic and non-allergic bee keepers, patients with anaphylactic or acute allergic reactions which can result in shock or even death if not properly treated, and bee-sensitive patients on hyposensitization injections with bee venom.

Using an enzyme-linked immunoassay they developed specifically to measure this subclass of antibody, the researchers determined that in patients who had received shots for bee stings there was a rise in IgG4 to levels normally found in the serum of bee keepers who presumably have developed immunity to bee venom, explained Dr. Moss, an assistant professor of pediatrics.

In their test, the researchers coat small plastic wells with bee venom allergen. They add a sample of test serum and pig antibody which reacts against the human IgG4 subclass. Then they add rabbit antibody against the pig antibody to which an enzyme has been attached. A substance in whose presence the enzyme turns blue is introduced into the well.

The intensity of the color change in the well, which can be seen by the naked eye or measured by a spectrophotometer, is proportional to the amount of IgG4 antibody to the allergen present in the test serum.

"This test avoids problems and hazards associated with the traditional radioimmunoassay methods while achieving equal sensitivity and specificity," Dr. Moss said.

While additional research will be needed to confirm that IgG4 is the blocking antibody, the clinical implication is that doctors may soon have a simple, inexpensive immunoassay technique for measuring antibodies of different classes, subclasses and specificities.

Such a technique would provide a much needed guide for the allergist who must know when and for how long his patients need their shots, said Dr. Moss.

(Dr. Halpern, director of the Laboratory for Immunology and Allergology in Paris, has spent the past year as a visiting professor in the allergy division of the Department of Pediatrics at Stanford.)

1-29-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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SCIENCE FOCUSES ON PREGNANCY-RELATED MENTAL ILLNESS

STANFORD—

The risk of pregnancy-related mental illness within the first month postpartum is significantly higher among women who experience abnormal labor or whose infants are stillborn or die within the first month of life, according to Dr. Ralph S. Paffenbarger, Jr., professor of epidemiology at the Stanford University School of Medicine.

"The hazard for mental illness is highest in the first month after delivery," he said. The risk is also increased in women with gestational periods of less than 40 weeks and in those whose babies at birth weigh less than 3,350 grams (7½ lbs.).

In contrast, mental illness developing during pregnancy strikes older women who have had more children and a longer interval since their last viable pregnancy.

The risk of pregnancy-related mental illness is not influenced by the scheduling or amount of prenatal care, differences in obstetric procedures or anesthesia, the sex of the infant or whether the infant is breast or bottle fed.

Paffenbarger spoke on postpartum mental illness at a recent symposium on the changing risk of disease in women at the Johns Hopkins University School of Public Health. He based his comments on a study of the psychiatric records of 1,142 childbearing women treated by public and private psychiatric services in Hamilton County, Ohio, from 1940 through 1958 as well as more recent findings.

His research has been concerned with the more severe forms of pregnancy-related mental illnesses that require hospitalization as contrasted to the common relatively benign "postpartum blues" from which most women spontaneously recover.

According to available figures, the incidence of severe emotional illness following childbirth is about 1 to 2 per 1,000 births. A common example of such illness is obsessive, compulsive behavior often taking the form of rumination about the safety of the baby and intense preoccupation with the details of his care. This behavior may evolve into severe psychosis lasting weeks or months. Other postpartum disturbances have included confusion or delirium together with depression or excitement.

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2-2-2

Women giving birth to a first child are at significantly higher risk of postpartum mental illness than women who have already borne children, Paffenbarger said. Those who have had a severe postpartum reaction are at increased risk of developing mental illness in future pregnancies, especially women who were 25 years or older at the time of the first attack.

"The sudden development of mental illness in the month after the birth of offspring coincides with violent hormone readjustments," Paffenbarger said.

He noted that in women who had subsequent pregnancies the onset of mental illness occurred at exactly the same stage as the original attack—a finding, he added, that should encourage specific endocrinological research.

Paffenbarger said that the incidence of first mental illness during pregnancy was only minimally higher than that among women of comparable age who were not pregnant.

"It leads us to ask whether the low incidence rate during pregnancy is the result of some protective psychological or social process, and whether the sudden increase immediately following the birth of offspring is due to a release of that defense," he said.

Paffenbarger said women who experience a pregnancy-related mental illness are similar to women in the general population in terms of social and cultural variables and show no evidence of greater psychic stress before becoming pregnant. The variables include birthplace and residence, urban or rural; husband's occupation, and the birth of illegitimate children.

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

Collective bargaining negotiations for a new agreement between the Committee for the Recognition of Nursing Achievement (CRONA) and Stanford University Hospital are underway, both teams announced Tuesday, Jan. 26.

Both the Hospital and CRONA agreed to issue joint public statements as necessary during the course of negotiations which started Jan. 13. The current 20-month bargaining agreement expires Feb. 28.

The CRONA team is composed of chief negotiator and organization president Hedy Dumpel, R.N., J.D.; Patti Tharp, Alice Serbein, Sue Healy, Linda Stickles and Jan MacLachlan, all registered nurses.

Representing the Hospital are Priscilla Wheeler, staff counsel and the University's chief labor attorney, who will serve as chief spokesperson for the Hospital in the negotiations; Dan Robinson, assistant director of Personnel; Nancy Madsen, assistant Hospital director and associate director of Nursing; and two assistant directors of Nursing, Joyce Miller and Eileen O'Reardon.

CRONA represents about 1,200 registered nurses at SUH.

No further details on the negotiations were immediately available.

1-26-82 —30— 203

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Nobel Laureate David Baltimore, Ph.D., a professor of microbiology at the Massachusetts Institute of Technology, will give the third John W. Cline Memorial Lecture, January 28 at Stanford Medical School.

Baltimore will discuss "The Transforming Gene of Abelson Murine Leukemia Virus," at 4 p.m. in Fairchild Auditorium. Baltimore will also visit with the faculty Jan. 28 and 29.

Organized by Dr. Saul Rosenberg, professor of medicine and radiology and chief of the Division of Oncology at Stanford, Thursday's seminar will be co-sponsored by the California Division of the American Cancer Society and the John W. Cline Memorial Lectureship Committee.

Dr. John Cline was an associate clinical professor of surgery at Stanford School of Medicine from 1929 to 1964. A native of Santa Rosa, California, he earned his M.D. at Harvard and practiced medicine in San Francisco. Cline was a past president of the American Cancer Society and the American Medical Association. He died in 1974.

The lecture named for Cline is a state-wide program which has supported the visits of prominent cancer researchers to major California medical schools. Previous lectures featured Dr. Jonathon Rhoades, at U.C. Davis, and Dr. R. Lee Clark, at the University of Southern California.

The upcoming seminar will be open to the public. There are no fees or registration required. For further information, call 497-5877.

1-25-82 —30— 203

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Are diabetic patients really deficient in insulin?

Volunteers are sought to help answer this question by participating in research conducted by Dr. Gerald Reaven and associates at the Clinical Research Center of Stanford University Hospital.

Both male and female subjects are needed, of all ages. They should have a history of borderline, mild or moderate diabetes, or a family history of diabetes. They currently must not be on insulin therapy.

Participants will undergo, free of charge:

- evaluation of blood sugar and lipids (cholesterol, triglycerides);
- oral glucose tolerance tests and meal tolerance tests;
- routine health evaluation including liver and kidney function tests, cardiogram, chest X-ray, physical examination, and dietary evaluations;
- evaluation of diabetic management;
- short-term studies (two days with no hospitalization required).

Anyone interested or wishing further information should call Dr. George Liu, at 497-6054.

1-25-82 —30— 203

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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EDITORS: Photos available upon request if not included with story.

STANFORD—

Taking a newborn home for the first time usually means a big adjustment in lifestyle for any parents.

But when birth has been premature or otherwise complicated, leaving for home can be traumatic.

This, says Kathy Petersen, discharge planner of Stanford University Hospital's Intensive Care Nursery (ICN), is because parents there are used to having experienced personnel attend to their infant's needs during an extended stay in the Hospital. And they are also emotionally drained by the unexpected ICN experience itself.

Facing an environment where they alone are to be solely responsible for their baby—who may require continued medical care and equipment—is often frightening.

It was in recognition of the need to better help families make a smooth transition between ICN and home that Petersen's position was recently established at Stanford.

A physical therapist with a master's degree in early education, Petersen had worked with handicapped and developmentally delayed children and infants for twelve years in community agencies.

ICN-experienced infants, she says, are often different from other newborns in terms of needs and behavior patterns. They may have irregular or difficult sleeping and eating habits, for example. Parents must learn to adjust the plans they made before birth, ensuring optimal chances for their baby's healthy development at home.

While in the past physicians, nurses, and social workers have all pitched in as necessary, explains ICN clinical nurse coordinator Kathi Palange, a full-time staff member focusing on such issues and serving as a continued contact at the Hospital has "probably been needed for awhile."

The need has been especially clear since the ICN renovation was completed last April, she says, providing an increased bed capacity (which has been filled from the start) for more acutely ill newborns.

Also, Palange points out, someone like Petersen—who's been serving in the community these past several years—knows more first-hand about the various resources and services available than most hospital-based personnel.

"I'll spend a lot of time coordinating efforts with outside resources," predicts Petersen, "as well as augmenting the home care training offered in the Hospital."

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Her role, she points out, will go hand in hand with that of ICN social worker Charlene Canger, who provides important support for families during the period of their infants' hospitalization.

Petersen's position, which began early this month, comprises a one-year pilot program, made possible through the efforts and generosity of a group called "Friends of Children needing Special Care."

Starting with one family of a cerebral palsied boy Petersen had been treating, the group grew to include four couples, all eager to help sponsor a discharge planning position in Stanford's ICN because of their concern for premature infants and their parents.

Petersen had approached SUH last April, promising to help develop such a program herself. Now that it exists, the donor group as well as the ICN staff hope to see it become a Hospital-funded service after the first year.

"The records we keep and our follow-up evaluations should prove that it's needed," says Palange.

Already, she says, Petersen has been involved in the discharge planning of several families—including a set of premature twins who will be going home soon, both on sleep apnea monitors.

To prepare themselves, the parents of the twins—who have been in the ICN for over a month—have "practiced" caring for them by staying overnight a couple of times in the Hospital's "Parent Room," especially designed for such purposes. Petersen's job, of course, includes facilitating such rehearsals.

Without a strict protocol to follow, Petersen will use intuition, experience, and suggestions from the staff in developing the present discharge program as well as guidelines for the future.

She stresses, overall, the importance of early intervention to help parents participate in their children's best development, and to prevent avoidable problems associated with birth-related disabilities.

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(Editors: This story sent Business Wire Jan. 20)

STANFORD—

A 26-year-old native of Grand Island, Neb., who became terminally ill after suffering from pulmonary hypertension for five years, became Stanford's sixth heart-lung transplant Wednesday morning (Jan. 20) in a three-hour operation which began about 7:30 a.m.

The operation came within two weeks of encouraging followup examinations of Mary Gohlke, 46, who became Stanford's first heart-lung transplant patient March 9, and Charles Walker, 31, who received the second such operation here May 1, 1981.

Cardiologist Sharon Hunt said the heart and lungs of both patients were normal for persons of their age. She added that the results indicated "this is a viable procedure and offers the feasibility of returning the patient to a very normal lifestyle."

The vital signs of the latest patient, Nancy Lassen, were reported stable by Dr. Bruce A. Reitz, the cardiovascular surgeon who heads the heart-lung transplant team and has performed at all six surgeries.

Lassen was reported in critical condition, the standard designation for all heart-lung transplant patients within the first few days of the operation.

The patient was selected recently for the operation after doctors determined that her pulmonary hypertension would lead to certain death within six months. She began suffering from the disease at about age 21 during her first year of nursing school.

Despite her condition, which includes shortness of breath and lack of stamina, Lassen was able to become a professional nurse. She subsequently worked at Children's Hospital in Omaha, Neb., but about a year ago was forced to cutback to a part-time schedule after moving to Phoenix where one of four sisters, a radiology technician, lived. In October, she had to stop work altogether. She is single, and her parents live in Nebraska.

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Her condition is similar to that of Gohlke, and Darlene Moore Mathern, who received the fifth heart-lung transplant at Stanford Dec. 1. Pulmonary hypertension, an incurable disease of unknown cause, results in high blood pressure in the pulmonary circuit. As pressure in the pulmonary arteries, servicing the lungs, increase, the right side of the heart has to work harder to deliver the proper amount of pressure. Eventually the heart becomes irreversibly damaged.

Consequently, the combined heart-lung transplant procedure offers the only current hope for such patients.

Four of the first five of Stanford's heart-lung transplant patients are reported doing well. One patient, Karen Wilson of Mill Valley, Calif., died several days after her July 28 surgery when scar tissue from previous open heart surgery resulted in excessive bleeding.

Only the most recent patient, Mathern, 37, remains hospitalized, although doctors report her progress as good. She is exercising regularly and frequently leaves the hospital on pass.

The first two patients, Walker and Gohlke have been judged fit to participate in any activities normally pursued by persons of their own age.

The earliest heart-lung transplants were performed in South Africa, Texas and New York between 1968 and 1971, but the longest survivor lived only 23 days.

The procedure was suspended worldwide until research disclosed that a new drug, Cyclosporin A, circumvented two previously formidable obstacles: the slow and imperfect healing of the windpipe and life threatening infections.

Reitz said recently that he hopes longevity statistics for heart-lung patients will match those for Stanford's 226 heart transplant patients, who now have nearly a three fourths chance of surviving more than a year. All candidates were selected only after doctors agreed they faced certain death within a year without the surgery.

Stanford's longest living heart transplant survivor is active and has lived more than 12 years since surgery.

Jan. 21, 1982 —30— mg206

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

A new book, *NMR in Molecular Biology,* by Dr. Oleg Jardetzky and C. C. K. Roberts has been published by Academic Press (640 p.p., $59).

The book, a part of a molecular biology series, discusses the applications of the technique of nuclear magnetic resonance (NMR) to a wide variety of problems in molecular biology.

Included in the new volume is a review of the literature on NMR to the end of 1980 and work published in 1981. Among the chief topics presented are the basic principles of the method and critical reviews of its applications to the study of the structure and dynamics of proteins, nucleic acids, and membranes as well as some small molecules of biological interest.

The technique of nuclear magnetic resonance owes its existence to an important discovery made more than 30 years ago. In 1945, Dr. Felix Bloch, now professor of physics emeritus at Stanford, and Prof. E. M. Purcell of Harvard simultaneously discovered and described the phenomenon of NMR.

They were the first to observe that atomic nuclei have magnetic properties, or in other words that all the hydrogen atoms and certain of the carbon atoms in a molecule will respond to a magnetic field. When the two scientists dropped whole molecules into a strong magnetic field, they saw that these atoms would absorb certain frequencies of radio waves. Moreover, each atom in the molecule would give off its own distinct "signature." Thus, they could study the structures of molecules, such as enzymes, antibodies and other immensely complex proteins.

The authors of the new book, Dr. Jardetzky is professor of pharmacology and director of the Stanford Magnetic Resonance Laboratory, and Dr. Roberts is associated with the National Institute for Medical Research at the Ridgeway Mill Hill in London, England.

1-25-82 —30— kc

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

The first nuclear magnetic resonance spectrometer in the United States, based on a persistent (stable) superconducting magnet, will be built for Stanford University under a contract with Japan Electron Optical Laboratories.

"The 600 MHz (Mega Herz) spectrometer will provide to the scientific community at Stanford the most powerful instrument of its kind," said Dr. Oleg Jardetzky, professor of pharmacology and director of the Stanford Magnetic Resonance Laboratory located in the Chemistry Building.

The new instrument is financed by a $660,000 grant from the National Institutes of Health (NIH). The laboratory, which operates as a national resource under guidelines from the Biotechnology Resources Program of the Division of Research Resources of NIH, is available to researchers from all over the country who want to explore various chemical, biological and medical problems.

A similarly powerful spectrometer, said Jardetsky, was constructed in 1979 at the Carnegie-Mellon University in Pittsburgh, Penn., but it is based on a non-persistent magnet, requiring frequent recharging.

Persistent magnets of such a high field and resolution were not technically feasible at the time, he added.

The 14T (Tesla) magnet—the heart of the high-resolution spectrometer—will be built under a subcontract by Oxford Instruments, Ltd., Oxford, England. The company is currently building the prototype magnet for Oxford University.

Delivery of the new spectrometer system at Stanford is scheduled for the spring of 1983, said Jardetzky.

The work of the Stanford Magnetic Resonance Laboratory is devoted to the study of biological structure and function, and the development of possible applications to medical diagnosis, Jardetzky explained.

The method of nuclear magnetic resonance spectroscopy, or NMR for short, makes it possible for researchers to pinpoint all the atoms in a complex protein molecule. Moreover, it allows them to observe exactly how the atoms move through space and time.

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"There are many ways to look at matter and nature up close," he added. "There are conventional optical microscopes, powerful electron microscopes, X-ray diffraction methods and a whole family of spectrometers.

"The NMR spectrometer is one of the most powerful devices in that it allows scientists to 'look' at structures many times smaller than can be seen with even the best electron microscope."

For example, a scientist may label amino acids—the building blocks of proteins—with stable isotopes, and, from NMR spectra, chart changes in protein structure which result from the interaction with drugs or other chemical agents.

The studies are important in understanding disease—for instance, abnormally shaped proteins associated with hereditary disease.

The researcher receives information on molecules as they move through time. The NMR spectra can be blipped onto a screen every few seconds, and the memory of each spectrum is then stored in a computer.

Thus, a scientist can follow the changes of shapes and motions of molecules with the added dimension of time, Jardetzky said.

"We can infer many things about the dynamic movements of these molecules," Jardetzky said. "And we are in a position to develop a model of a protein as it is alive and working."

Other methods of looking at proteins, he said, require that molecules be frozen or otherwise "killed" for viewing. The NMR method, however, allows them to float freely in solution. They are biologically active.

The Stanford laboratory, Jardetzky said, previously pioneered in the development of a 360 MHz NMR spectrometer, which at the time of its installation in 1974 was the most powerful instrument available anywhere.

"Significant advances in our understanding of the structure and dynamics of proteins, nucleic acids and membranes have resulted from the experiments done on this spectrometer since that time," the scientist said.

Over the past two years, applications of NMR at the laboratory have also been extended to living systems, making measurements inside plant and animal cells without destroying, invading or otherwise disturbing the organism.

"The new instrument will allow much better resolution of spectral lines," Jardetzky added, "and therefore still more detailed examination of molecular structures and cell constituents than has been possible so far."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TO: Science and medical writers

The business side of genetic engineering, whose payoffs are at best still several years down the road, captures headlines galore. But many scientists believe the real revolution brought about by genetic research lies in the basic scientific and clinical advances on the non-commercial side.

A new issue of *The Healing Arts*, "The Golden Age of Genetics," describes some of the basic research now in progress in the laboratories of the Stanford University School of Medicine. It shows that, in spite of the immense advances in molecular biology research, there is still a lot more to be learned—and it shows how recombinant DNA techniques, on which genetic engineering is based, are helping.

For example, scientists only now have the tools at their disposal to study what causes living cells to trigger the process by which DNA copies itself and controls growth. Only now can they investigate precisely what makes bacteria become resistant to antibiotics, how cells "talk" to each other, or how bacteria use genetic "tricks" to make people sick.

These are among the topics discussed in "The Golden Age of Genetics." Copies of *The Healing Arts* are available on request, if not included with this notice.

For a copy write:

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1-18-82

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

When a patient is cured of Hodgkin's lymphoma he has conquered the most dread disease—cancer—yet his emotional problems may have only just begun.

In resuming normal lives, recovered cancer patients face unique psychological and social challenges. Doctors, whose training focuses on the biology of cancer and the latest technology for its treatment, often don't know how to help ease their patients' emotional burdens.

Now researchers at Stanford University School of Medicine have launched a two-year study to help fill in the unknowns and smooth the road to full rehabilitation of cured cancer patients.

Among other goals, the Stanford researchers hope to find ways of predicting which cancer patients are at high risk for later emotional troubles, to learn how to help prevent the problems from developing, and then, to incorporate this knowledge into the regular training of young physicians.

The study, funded by a $148,524 grant from The Robert Wood Johnson Foundation of Princeton, New Jersey, is one of 23 new projects aimed at helping people impaired by disease, disorder or injury to conserve or more swiftly regain their ability to perform the tasks of everyday living, the Foundation announced this week.

Only 30 years ago, Hodgkin's disease was considered incurable—today, nearly 80 percent of Hodgkin's patients who receive proper treatment can expect near-to-normal lifespans, according to Dr. Richard Hoppe, assistant professor of radiology who heads the rehabilitation study project. Treatment generally includes radiation therapy, drug therapy, or a combination of the two, Hoppe says.

The radiation and drug treatments themselves occasionally have distressing side effects, which can include sterility, leukemia, inflammation of the heart or lungs and increased susceptibility to infection; since Hodgkin's disease most often strikes individuals in their 20s and 30s, the course of treatment and its impact on life decisions can be great, says Patricia Fobair, the clinical social worker who is assisting Hoppe as coordinator of the project.

"In behavioral terms these problems might be experienced as chronic anxiety, depression, difficulties in motivation and in initiation and development of careers, or problems in achieving intimate relationships," explains Fobair.

"One of the most difficult tasks for survivors is learning to live with the fear of recurrence of the cancer and a sense of uncertainty about the future," she adds.

But the few small studies already done to evaluate quality of life in cured cancer patients point to some encouraging signs, Fobair says.

First, "not every patient becomes a casualty," she says. About one-half the patients interviewed in one study were doing well medically and psychosocially, she reports.

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Furthermore, certain factors may help predict which patients will be least successful in resuming satisfactory lives. This would help doctors or social workers single out these patients for special attention in the form of peer support, skills training or other professional psychological or vocational help.

"Negative outcomes are most often seen among patients who experience 'body damage' as a result of the malignancy or its treatment, those with poor social support, and among those patients whose background includes a history of psychosocial difficulties," Fobair says.

About 9,000 new cases of Hodgkin's disease are recognized every year in the United States; approximately 100 new patients come to Stanford each year for care.

In the last 20 years, 1,116 patients have been treated at Stanford and 922 are disease-free, says Hoppe. During the first few months of the study, many of these patients will be asked to participate in the study by providing information on how they view their mood, self-esteem, coping abilities, social functioning, social support network, body image, and to provide socio-demographic information.

The analysis of this information will help the researchers identify some of the most pressing problems faced by survivors of Hodgkin's disease and the critical times when these problems emerge. From these results, the researchers hope to develop effective criteria for screening patients to find those at highest risk for emotional difficulties.

During the next phase of the study new Hodgkin's patients will be screened and offered different treatment approaches, such as peer group meetings or self-help skills training, to find useful ways of minimizing future psychosocial trauma.

Finally, and perhaps most important in the long run for patients and doctors alike, says Fobair, doctors-in-training and medical students will be taught the new techniques, along with their established courses on radiation therapy and chemotherapy.

"These teaching sessions will be devoted to increasing physicians' knowledge of psychosocial aspects of the cancer experience, methods of early identification of individuals at high risk for problems, and resources available for referral," explains Fobair.

Other researchers who will participate in the rehabilitation project include Dr. Joan Bloom, an associate professor from the School of Public Health at the University of California, Berkeley; Dr. Henry Kaplan, Maureen Lyles D'Ambrogio professor of radiology at Stanford; Dr. David Spiegel, assistant professor of psychiatry and behavioral sciences; Dr. Bradley Efron, professor and chairman of the department of statistics; Dr. Richard Cox, in the division of radiation physics; Dr. J. William Worden. an associate professor of psychology from Harvard University; and Dr. Doug Graham, a resident in radiation therapy.

—30— L110

Mailed Thursday, January 14, 1982.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: Photos available if not included)

STANFORD—

For Angel Nunez, 31, and thousands of other paraplegics, the wrong seat cushion could mean tissue injury, expensive hospitalization, and being off work for months.

So Donna Politi, a clinical evaluation consultant for the Palo Alto Veterans Administration Medical Center, listens attentively when Nunez and about 100 other paraplegics talk about how they feel using a new blue foam cushion.

Nunez, of Honolulu, said the new cushion is by far the most comfortable he has tried since a paralyzing gunshot wound seven months ago.

Not all 100 men trying out the new cushion are unanimous in their praise, but Inder Perkash, professor of surgery at Stanford University and chief of the Palo Alto VA Spinal Cord Injury Service, believes that the unassuming blue foam device might benefit most of an estimated 500,000 paraplegics in the nation.

Perkash is the principal investigator in the project being developed under a VA grant.

The contoured cushion may appear too ordinary to be taken seriously at first glance as an important medical accomplishment. But the contours have been meticulously engineered during years of research so that pressure on the user's thigh and buttocks is minimized, and so that the patient is able to mantain proper posture without slipping.

The danger faced by paraplegics is debilitating sores caused by shear, the pressure on tissue between a bony point and any hard external surface, such as a chair. Perkash estimates that about 15 to 35 percent of paralyzed persons are rehospitalized because of sores, which if left untreated can lead to bone deterioration.

If seated continually in a position of poor posture, paralyzed persons all run the risk of spinal deformities.

Everyone is prone to such sores, but the natural response is to shift position every few minutes while sitting to distribute pressure more evenly. During sleep, we unconsciously shift position periodically.

Unfortunately, paraplegics have no sensation in their buttocks or thighs.

"There's no message from their nervous system telling them, 'Hey, move your tush,'" explained Politi. "That's why the design of a seat cushion is so vital."

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The new cushion, called VASIO (Veteran's Administration Seating Interface Orthosis), has evolved through eight versions since the research project began in 1977. The cushion has been evaluated continually by the paraplegic volunteers who rated it on 10 subjective criteria, including comfort, length of sitting time and ease of transferring from the chair to another vehicle.

In addition, a pressure sensor placed between the buttocks and the cushion was used to determine weight distribution compared to both a theoretical ideal and to currently available seats.

Eventually the particular contours were chosen because they seemed to distribute weight most evenly for most volunteers. The material, a combination of high and low density foam, was selected for both comfort and therapeutic benefit.

Perkash said efforts are now being made with the Tumbleform Co., Dolgeville, N.Y. to market the cushion. He estimated the price would run $100, about half the price of a rubber inflated cushion which most of the volunteers had been using before receiving VASIO cushions.

The cushion does not provide complete protection from shears, and Perkash cautioned that paraplegics still need to consciously shift position—generally by pushing up on the wheelchair armrests—whenever possible. Therefore, Perkash said he has not tested the cushion on quadraplegics, who are totally immobilized. However, some informal trials have shown that VASIO seems to work better for them than other cushions, and he hopes eventually to refine the concept to the point where they will be able to sit for long periods in a chair free of shearing without having to move.

One of the paraplegic volunteers, John Winterholler, 65, of Lafayette, Calif., said after two weeks of testing the cushion that it was similar but not better than his rubber cushion in terms of comfort.

He also said that because the cushion was thicker, he was forced to sit higher off the ground. This, he added, made it harder to reach down and pick up objects or rest his feet on the ground.

"But I have some residual sensation, and so I don't think I'm completely typical of most people who would be using the chair."

However, after three weeks, Winterholler commented, "I'm beginning to like it. I think it's going to work out just fine."

Jim Griffith, 35, a former Army mess sergeant injured two years ago in a traffic accident, said the VASIO not only is more comfortable but has improved his posture and mobility.

Ted Perry, 23, who was paralyzed in an offduty accident seven months ago while serving with the Army in Germany, said he only had one minor complaint about the VASIO:

During fishing trips, the VASIO doesn't float as well as his previous rubber cushion, he said.

Jan. 13, 1981 —30— mg22

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: pictures available if not included)

STANFORD—

Peter J. Levin, former executive director of Stanford University Hospital and associate vice president for medical affairs at Stanford, has accepted a deanship at the University of Oklahoma.

Levin, who was succeeded in November at SUH by Sheldon S. King, will serve as dean of the college of public health and professor of health administration at the university's College of Public Health in Oklahoma City. The appointment is effective immediately.

Levin came to SUH in April 1977 from New York City, where he was an associate commissioner in the city Department of Health.

During his more than four years as executive director at SUH, the hospital's modernization plan was developed and a critical nursing shortage was eliminated.

Levin, who holds a doctor of science (medical care and hospitals) from the John Hopkins School of Hygiene and Public Health, has also served as executive director of New Haven Health Care, Inc., and acting executive director of the Bronx Municipal Hospital Center, N.Y.

He has taught at Albert Einstein College of Medicine of New York University, as well as at Yale University.

He began his career in health management and teaching at the Public Health Service Indian Hospital at the Blackfeet Reservation, Browning, Mont.

Jan. 12, 1982 —30— mg22

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: Photos available if not included)

STANFORD—

Carla J. Shatz, assistant professor of neurobiology, has received a $100,000 grant from The McKnight Foundation to continue her research into how and why nerves properly connect the eye with the brain.

"You might say we must 'use it or lose it.' The theory we're exploring is that the nerves regulating eyesight in newborn primates, including humans, won't make appropriate connections in the brain without normal use of the eye," Shatz said.

"In more formal terms, we're specifically testing the hypothesis that the onset of function occurs at the same time as the sorting out of nerve connections occurs.

The scientist is studying how nerve connections between the eye and the brain develop in cats before birth.

"There has been a lot of research showing that nerve connections in adult mammals are precisely organized. But before birth, the nerve endings don't always lead from the eye to the exact point on the brain where they are supposed to be.

"It's as if the nerve cells have all found the right city but need to locate the exact street address. "Later, usually about the time of birth, the connections tend to sort themselves out beautifully, so that nerves running from the eye to an inappropriate point disappear, allowing correctly placed nerves to flourish."

Although the sorting out process has been well documented, Shatz said that the reasons behind the change are not fully understood.

By studying cats before birth, Shatz is hopeful to learn how the process occurs and whether indeed it is related to function.

"We have some strong evidence from other sources that the use of an organ—in this case the eye—is a vital part of neurological development:

"For example, when a child is born with a cataract in one eye, the other good eye will tend to become strong at the expense of the afflicted eye. Even when the cataract is corrected by surgery, we find that the nerves in the diseased eye will not have developed properly.

"We hope that our study will help us understand show how one eye becomes dominate at the expense of the other eye."

The Minneapolis-based foundation offers about $9 million in various grants yearly. This was the first year of Neuroscience Development Awards, given to 14 persons. Shatz' grant will be given in three equal annual installments.

Shatz previously received grants from the March of Dimes Birth Defects Foundation, the Andrew W. Mellon Foundation of New York, and the National Eye Institute of the National Institute of Health.

She came to Stanford in 1978 after completing her Ph.D in neurobiology and serving as a postdoctoral fellow at Harvard University.

Jan. 12, 1980

—30—

mg22

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD

Statement from Dr. John T. Mehigan and Dr. Cornelius Olcott, IV, clinical assistant professors of surgery at Stanford University, attending physicians for 10-year-old Donald Priest:

"The patient underwent bilateral midcalf open amputations and appears to be a good prospect to later revise the amputations to closed below the knee amputations. Essentially, we are saying that within the next five to ten days, the patient will probably undergo a second amputation. We are optimistic that the operation will be closed below the knee, offering good prospects for later physical rehabilitation. (Retaining a functioning knee improves rehabilitation prospects).

"Despite the fantastic treatment provided at Fresno Valley Medical Center, Donny arrived here pretty sick. Sometime yesterday (Tuesday), a fever had occurred and it looked like infection had set in. His temperature reached 39 degrees centigrade (about 103½ f), and this indicated that surgery should be performed quickly. Since that time (about noon) his fever returned to normal and the threat to his life is only very modest at this moment.

"The operation this morning removed the gangrenous portions of the legs, and we left the wounds open to drain. We are waiting now to see the infection subside, and when this occurs, we will seriously consider the second operation, which will involve modifiying and closing the current wound. "If all goes well, we should have him fitted with artifical legs in four to six weeks. He's a pretty great kid. I told him he would be the bionic kid, and he just laughed and agreed."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Stanford medical students have an opportunity this quarter to learn how to evaluate medical fads and pseudo-sciencetific claims in a course called "Medical Cults and Pseudo-science."

Coordinated by Dr. Wallace Sampson, clinical associate professor of medicine, and Dr. Richard Goode, associate professor of surgery, the course is held weekly from 7 to 9 p.m. Tuesday evenings, in room M110 at Stanford Medical School.

According to Dr. Sampson, members of the community may attend those classes with special guest lecturers.

•February 2—**Factors in the Initiation and Propagation of Cult Behavior (religious cults)**—Hilly Zeitlin, M.S.W., Gary Scharff, M.A., Margaret Singer, Ph.D., University of California at Berkeley.

•February 9—**Malathion and Health; Ecology and Health—DDT; 2-4D; 2, 4, ST**—J. Gordon Edwards, Ph.D., San Jose State

•March 2—**ESP Demonstration and Psychic Surgery Demonstration**—Robert A. Steiner

•March 9—**Physics, Consciousness and Reality**—A panel discussion by several physicists

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STANFORD—

How do oral contraceptives and physical exercise interact to control blood cholesterol levels in women?

Researchers at the Stanford Heart Disease Prevention Program are seeking women volunteers between the ages of 21 and 35 in the following categories to participate in a study addressing the question:

•using oral contraceptives, with a sedentary occupation and no regular physical exercise;

•not using oral contraceptives, with a sedentary occupation and no regular physical exercise.

Volunteers will make one visit to the Heart Disease Prevention Program facilities at 730 Welch Road, where staff will draw small blood samples, conduct a bicycle fitness test, and determine body density by underwater weighing.

Participants will receive detailed information on their blood cholesterol levels, percentage of body fat, and their maximum oxygen transport capability (a measure of physical fitness).

Those interested in volunteering should call Dan Merians at (415) 497-6254 for more information.

—30— L110

Mailed Monday January 11, 1982

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

In contrast to highly-publicized reports that 30 percent of the nation's federal Health Professions Student Loans fail to be repaid on schedule, Stanford Medical School's loan delinquency rate is only 5.8 percent.

This, says the School's financial aid administrator for the past three years, Droni Moo, means that about 19 former students are at least 120 days overdue in their repayment schedules.

The low delinquency rate at Stanford, say Moo and University Bursar Joseph Jedd, contrasts with the national average for medical schools, recently found to be 16 percent.

In an effort by Senator Charles H. Percy (R) of Illinois to introduce crack-down legislation concerning delinquent borrowers, it was discovered that about one-third of the nation's former medical students—many of whom now run successful private practices—are responsible for about $23 million worth of overdue loans.

Since their repayments are meant to be used by universities to finance new loans to present students, the problem manifests itself in tighter distribution budgets.

Stanford Medical School receives only 10 to 20 percent of what it asks for in new loan money each year from the government, says Moo. This, she says, is because of the general trend towards decreasing appropriation of funds for health professions education.

And the impact is worse with the major budget-cutting of the Reagan Administration. In fact, she predicts an advance of less than 10 percent from the government in the coming year. "I foresee in the near future having very few funds to loan out except what we get back as repayments."

She adds that recent press attention regarding the delinquency problem has affected both the attitudes and actions of Congress, whether or not the situation is fully understood in all its complexities.

Legislation being pushed by Percy includes reporting delinquent borrowers to commercial credit bureaus, as well as other measures to aid institutions in loan collection.

"I think his legislative efforts are fine," says Moo, "as long as schools which already have good track records are not penalized along with the rest."

She emphasizes the importance of having the administrator of the program, the Department of Health and Human Services (HHS), clarify policies and collection procedures more thoroughly. "We don't yet have clear directives on who is defined as delinquent." (It is unclear, for example, whether a student is delinquent after 90 or 120 days of non-payment.)

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The HHS cutoff rate for acceptable delinquency at any school is five percent. Stanford, says Moo, is a bit over this rate simply because some students have failed to file the paperwork necessary to defer their loans. (Students are not required to begin paying back loans until they are completely finished with their training.)

At Stanford, the distribution of medical student loans is based solely on need. All who qualify, says Moo, do receive health professions loans, though sometimes in amounts smaller than the ideal.

"It's obvious that what past medical students are doing does affect present and future medical students."

The profile of the delinquent borrower is hard to draw, says Jedd. "Throughout the University, we find that some of our graduates who earn only $12,000 a year are prompt, while some who earn $30,000 are not." He indicates, however, that the number of successful professionals who totally ignore their past college loans at Stanford is very small.

He says 6.7 percent, or $1,700,000, of the total outstanding loans at Stanford are in the health professions area.

In the academic year ending Aug. 31, 1981, only about 33 new HHS loans were issued to Stanford medical students. The Bursar's office keeps very accurate data in the form of a file on every student who receives a loan.

Stanford's collection efforts have been largely successful, says Jedd, because of the vigor and diligence of its policies. A well-staffed professional collection group and an in-house computerized billing service are important components. When necessary, collection agencies are used and court action may be authorized.

"Also," he adds, "Stanford is a prestigious university. It is difficult to get in, and once in students are less likely to drop out." In fact, he explains, some of the delinquent borrowers included in the flaunted national statistics are people who have left school, never attaining the degrees they originally aspired to.

"Or sometimes," he continues, "people don't pay back the *amount* they're supposed to at each installment, but they do pay *something* regularly. And they pay back the full amount they owe eventually."

Asked about medical students' performance compared to other groups on campus, Jedd reports that those receiving health professions loans have behaved similarly to others in terms of repayment.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
(Editors: Photos available if not included)

STANFORD—

Dr. Kenneth Melmon, chairman of the Stanford University Department of Medicine, sits on a brightly lit stool in front of a busy nursing station at Stanford University Hospital.

He's dispensing medical advice, but not to patients. He's filming a segment in a new public television series, **Health Notes,** which began airing on KQED-TV (Channel 9 in San Francisco) in December.

Although medical programs have been produced before, the new series is unusual because the planning intimately involves three eminent doctors from two major medical centers collaborating to produce advice on sensitive and previously little explored topics.

"These are not a series of simple health tips," said Melmon. "What we're dealing with here are controversial health care issues for a bright but nonmedical audience—the sort which people are reluctant to talk about because of their complexity, or because they may challenge authoritarian physicians or 'traditional' medical practices.

"We're dealing with the sort of issues which will allow people to ask their doctors more intelligent questions and become an integral part of their own treatment."

The programs currently are being produced in a three to five minute format, although Melmon hopes they will create enough interest so that funding will someday be available to explore more issues, in greater length and depth.

" . . . We felt institutionally that we have an obligation to the public to get involved in this sort of thing," Melmon added.

Each of the series' 10 parts, scheduled to air through October, 1982, under sponsorship of the Robert A. McNeil Foundation and the Henry J. Kaiser Family Foundation grant, will explore a different topic. The episodes are being sandwiched between regularly scheduled programs and are repeated several times.

Coordinating the series is Dr. David Watts, associate professor of medicine and chief of the gastroenterology clinic at the University of California, San Francisco. He is working closely with Melmon and Lloyd H. Smith, chairman of the Department of Medicine at UC San Francisco.

Drug Interactions was the subject of the episode which Melmon filmed recently.

"There are many drugs which when given in combination produce uncertain results. No one really knows what will happen chemically to the patient when various medications are mixed in new ways," Melmon explained.

"While often the drug interaction is essential to save the life of a patient, an educated public should be aware that prescribing multiple medication is a complex task."

Among other topics scheduled for the series is *Sunshine and What it Does to our Skin* (premiering Jan. 6 at 7:55 p.m.). The series began with a precis of what it means to a patient to be told that he has high serum cholesterol, and how this contributes to arteriosclerosis.

Each episode is filmed in a medical setting intended to augment the expert's verbal explanation.

But Watt said the emphasis is on factual information.

"It's important that the public has access to good information. All too often medical information is sensational, overdramatized, and prematurely definitive.

"New drugs, for example, are presented as if they were coming out tomorrow, and will cure without consequence. The side effects are not mentioned and information is often distorted. It needs to be balanced."

Jan. 11, 1982

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD

"Welcome Santa Cruz Folks," reads the sign on the door. "This may not be home, but at least it's dry."

That's the message greeting kidney diaylsis patients who are unable to obtain vital dialysis therapy in storm-damaged Santa Cruz and have been coming to Stanford Medical Center's Hemodialysis Unit to obtain the life-saving treatments.

At least 60 chronic dialysis patients who normally receive their blood cleaning treatments two to three times per week at Santa Cruz Community Dialysis Center were forced to obtain dialysis elsewhere when their unit shut down Tuesday. Lost telephone lines, intermittent electrical power, and an inadequate supply of water caused by broken mains forced the closure, explained Pam Simmons, clinical nursing coordinator for the Stanford Center.

In order to help out, Stanford has called in nurses and technicians to work overtime and additional dialysis machines have been moved into the unit in order to accomodate 16 or more of the Santa Cruz patients until their local dialysis unit resumes operation, said Dr. Robert Swenson, Medical Director of the Stanford Hemodialysis Unit.

Staff at the Santa Cruz Center have done "an excellent job in placing their patients at several dialysis units in the area." said Simmons, noting that Frank Lacy, the Santa Cruz Center's administrator, and Medical Director Dr. David Gelbart, personally drove miles out of the way in order to phone their patients to let them know where to go for treatment, and to deliver medical records to the other units helping out in the emergency.

(more)

In addition to the 16 or more patients added to the schedule at Stanford Medical Center, Valley Medical Center and Satellite Dialysis, Inc., have each taken in several patients, Watsonville Hospital and Dominican Hospital in Santa Cruz, working on emergency power, also made room for some of the 60 displaced dialysis patients from the Santa Cruz Unit, Simmons said.

A few of the patients were scared and nervous about coming to a new unit, said Simmons, particularly those who were older or who had never been out of Santa Cruz for their dialysis treatments. But several patients interviewed were philosophical about the disruption to their routine. "It's a bit inconvenient having to drive over the mountains to get here," said one man from Aptos, "but I feel terribly lucky compared to the people who have lost their relatives or their homes."

The extra patient load, which will continue indefinitely, is being handled in three shifts at Stanford, running from 7 A.M. until 12:30 A.M., with eight patients per shift, said Simmons.

It marks the second time in the last six months that the Stanford Dialysis Unit has taken on extra patients in an emergency. In August last year, patients from El Camino Hospital had to obtain dialysis elsewhere when their facility closed for several days because of contamination in the water.

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Mailed Friday, January 8, 1982

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EDITORS: Advance for release A.M. Tuesday, January 5, 1982

EDITORS: Details follow asterisks. The following release coincides with publication of the December issue of the *Proceedings of the National Academcy of Sciences*. Photos available on request of Dr. Kornberg and his colleagues and of DNA replication proceeding bidirectionally from the replication origin on a plasmid.

STANFORD—

Biochemists at Stanford University School of Medicine have succeeded for the first time in creating a test tube system with all the ingredients necessary to initiate a round of synthesis of the DNA of a bacterial chromosome.

The work is considered important because it is a first step towards discovering how cells control the frequency of DNA replication initiation, a significant event in controlling the overall rate of cell division and growth, the researchers said.

Since the structure of DNA was discovered nearly 30 years ago scientists have unraveled many mysteries of how the molecule replicates to produce identical copies of itself for the next generation of cells. But one crucial problem has remained obscure: how does a cycle of DNA synthesis begin?

Through their new enzyme system, finally the resolution and analysis of factors that control initiation of a chromosome cycle should become accessible, the researchers predicted.

The feat was accomplished in the laboratory of biochemistry professor Dr. Arthur Kornberg, a Nobel laureate who in 1959 created synthetic DNA for the first time, and in 1967 reported the first successful test tube synthesis of DNA that was demonstrated to be biologically active.

Kornberg called the latest achievement "a milestone" in his laboratory's continuing efforts to understand the complex biochemical basis of DNA replication.

His colleagues on the project are Robert S. Fuller, a Ph.D. candidate in biochemistry and Jon M. Kaguni, a biochemistry postdoctoral fellow. A report of their work was published in the December issue of the *Proceedings of the National Academy of Sciences*.

The beginning of DNA synthesis is a key process in the life of a cell, Kornberg explained, because the point at which chromosome replication gets started is the point of commitment, determining whether or not a cell will double its DNA and therefore, whether or not it will reproduce.

Finding how cells control their growth rate could solve some long-outstanding and fundamental questions, such as how cells become transformed, or cancerous. (Rapid, continuous and uncontrolled growth is a hallmark of cancer.)

Understanding the control of DNA replication initation could also explain why embryonic cells synthesize DNA continually and adult cells remain relatively quiescent, Kornberg said.

But at this stage in the research, it's far too early to speculate about what will be found, Kornberg stressed. "If you ask what we can say about major questions of control of growth and cancer at this time, the answer is very little," he said.

"Not only are we not working with animal cells where these questions have been posed, but comparable questions with regard to simpler bacterial cells have not been broached. We don't anticipate any answers until we know a lot more about the details of the system," Kornberg added.

-more-

2-2-2 Kornberg and his colleagues carried out their work with bacterial plasmids—small circular pieces of DNA independent of the main bacterial chromosome—that were genetically engineered to include the segment of the main chromosome at which DNA synthesis always begins, the so-called origin.

The researchers grew colonies of *Escherichia coli* cells that harbored the origin-containing plasmid, called pSY317. Then they broke open, or lysed, the cells and collected the resulting fluid that was brimming with cell components. But in this rich cell soup, they found that no DNA synthesis was initiated.

"It may not seem reasonable to think that if you start with something inactive, you can then obtain a fraction from it that is active," said Kornberg, "but that's what was done."

By adding just the right amount of ammonium sulfate, a salt that precipitates proteins, the researchers came up with an active fraction.

The amount of salt added is crucial, explained Kornberg—if just a little more is added, an inactive fraction is obtained. By adding the salt, which precipitates certain proteins and other cell components, ingredients necessary for DNA initiation were concentrated or something was excluded that had inhibited initation in the total extract, Kornberg suggested.

The quest to find an active fraction of the bacterial soup in which DNA synthesis could be initiated was an arduous one. "We sought this system for many years," recalled Kornberg, "without success. Many other laboratories around the world were also working very hard on this problem. However, when we found it, the reaction turned out to be much more clear and powerful than we anticipated.

"Initiation of DNA synthesis is actually a rare event—it happens only once in the lifetime of the cell. We are astonished and pleased by the high level of synthesis we have found."

The first attempts to find a system for studying how DNA synthesis begins were carried out using purified proteins known to be involved in the replication of viral DNA, and involved looking for additional factors that would stimulate replication. Only after these attempts proved fruitless did Kornberg's group attempt to extract active fractions from solutions of disrupted bacteria.

Kornberg cites graduate student Fuller's talent and perseverance as "important ingredients" in the lab's latest accomplishment, one that had proved so elusive over many years of hard work.

"Why it took so long to find this DNA synthesis initation system will be answered, in part, by finding out precisely what's in the system that is exacting and irreplaceable," Kornberg said.

"As we sort out the components of this machine, we will learn which elements were absent or defective in previous preparations as compared to the present one. Probably most of our previous failures came about because we were missing several substances in optimal levels. Now we will analyze very precisley, quantitatively, what substances are required.

"The basic processes of synthesizing DNA chains, transcription of this genetic material into the RNA language, and translation of the genetic code into protein are essentially identical in bacteria, plants, animals and humans," Kornberg said.

"For that reason, we have confidence and optimism that understanding these basic processes in bacteria, where research can be done more precisely and easily, will give reliable insights into how these processes occur in higher levels of organisms.

"That there is a universal use of basic biochemical patterns throughout nature warrants our confidence that regulation of these processes, when understood in one system, will become far easier to understand in all systems.

"It is my conviction that the most important elements in understanding the process of chromosome replication initiation will come through knowing its biochemistry," Kornberg added.

The research was supported in part by grants from the National Institutes of Health and the National Science Foundation and by fellowships from the American Cancer Society and the Damon Runyon—Walter Winchell Cancer Fund.

-more-

Placing the *E. coli* origin on a plasmid (using recombinant DNA techniques) contributed significantly to the recent success, explained Kornberg. The origin-containing plasmid used in these experiments was first constructed in Japan by biochemist Dr. Seiichi Yasuda, who later worked in Kornberg's laboratory during the years of 1978-79.

Inserting the origin sequence in a plasmid was really a strategy to enrich for the origin region, which is otherwise a relatively short portion of the *E. coli* genome, occurring just once per chromosome molecule.

It's probably impossible, said Kornberg, using even the most sophisticated techniques, to extract the entire *E. coli* chromosome intact from an *E. coli* cell; it's an intricately coiled string of approximately four million nucleotide base pairs. But a plasmid is a more manageable molecule a few thousand nucleotides long (approximately one-thousandth the size of a chromosome) and it will remain intact when the bacterial cell is broken open.

If the origin were not embedded in a plasmid, trying to locate the sequence, which is only 245 base pairs long (or 1/16,000 the length of the chromosome) would be like trying to find the "needle" in a "haystack" of fragmented pieces from the cell, Kornberg mused. "By placing the origin on the much shorter plasmid, we enriched for it approximately 400-fold," he remarked. "What's more," he continued, "because a plasmid can replicate independently in the bacterial cell, we can obtain as many as 100 copies of the origin, instead of just one, from each bacterial cell."

The new system behaves much like the DNA replication initiating machinery inside an *E. coli* l. This gives the researchers confidence that their test tube system is physiologically genuine, that it represents the intiation process as it is actually carried out in living cells. For instance, it is knocked out by the same poisons that are capable of blocking initiation in living bacterial cells, and its activity requires the presence of certain genes and enzymes already known to be required for initiation.

Another expectation of a genuine DNA synthesis initiation system is that it would start replication going in both directions from the point of origin—this is known to be the case in *E. coli*, Kornberg said. By examining with the electron microscope origin-containing plasmids from the test-tube system, the researchers confirmed that replication did proceed bidirectionally. This was an added proof that the system was physiologically relevant, they reported.

The eventual aim of this research, Kornberg said, is to characterize the genes and the proteins involved in carrying out and controlling initiation of DNA synthesis. Most likely, several proteins are required, and in fact, some of these are already known. Others await discovery.

And although the 245-nucleotide base pair origin sequence enables replication to begin on the plasmid, "adjacent sequences may be important for more complex behavior expected of the *E. coli* chromosome," Kornberg and his colleagues suggested. Just how the adjacent sequences play such a modulating role will be a focus of study using the new system, they said.

"Ultimately, the exploitation of this system should allow a direct biochemical approach to the regulation of replication," the researchers said. "The availability of an authentic system for the replication of the *E. coli* chromosomal origin should allow the isolation of those factors as well as the understanding of those processes which control the frequency of origin-initiation and couple the rate of chromosomal lication to that of the cell as a whole."

Mailed January 4, 1981.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

A Tuesday noon lecture series on *Women and Health*, sponsored by Stanford Medical School's Division of Family Medicine, will begin Jan. 5.

All lectures, open to the public without charge, will take place in room M106 in the School of Medicine. The presentations include:

- **Jan. 5—Strategies for Life Enrichment**—with Mary Ann Tyson, Ph.D., a clinical psychologist;
- **Jan. 12—Exogenous Hormones and Women's Health**—with Jane Zones, Ph.D., a public health sociologist and researcher;
- **Jan. 19—Self Care for Women in Clinical Practice**—with Susan Baldi, R.N., M.D., health consultant;
- **Jan. 26—Women and Health Policy in the U.S.**—with Jane Zones, Ph.D.;
- **Feb. 2—Mothers and Children: Seeking Health in an Unhealthy World**—with Julie Olsen Edwards, director of the Department of Early Childhood and Family Life Education, Cabrillo Community College;
- **Feb. 9—Holistic Spirituality and Well Being**—with Alla Bozarth-Campbell, an Episcopal priest, gestalt therapist, and feminist poet;
- **Feb. 16—The Health of Older Women**—with Mary Averill, M.D., a fellow in geriatric medicine, Palo Alto Veterans Administration Hospital;
- **Feb. 23—When the Doctor is a "Lady": power, status and gender in physician-patient relationships**—with Candace West, Ph.D., assistant professor of sociology, U.C. Santa Cruz;
- **March 2—Women and Sexuality in Medicine**—with Judith Martin, M.D., Division of Family Medicine, Stanford.

The Division of Family Medicine is part of the Department of Family, Community and Preventive Medicine at Stanford. The lecture series, designed to address women's health issues not ordinarily included in medical education, may be taken for academic credit by medical and other Stanford students.

A discussion group with case presentations will be held for enrolled students following each lecture, from 1:15 till 2 p.m., with speaker Marita Grudzen, health care consultant, and Dr. Judith Martin, both from the Division of Family Medicine.

The course, says Martin, though not comprehensive, aims to provide a holistic and interdisciplinary approach to women's well-being.

For further information, call 497-7874 or 497-6431.

1-4-82 —30— 202

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Seven assistant professors at the Stanford University School of Medicine are recent recipients of Biomedical Research Support Grant awards, sponsored by the National Institutes of Health.

Their names and projects follow:

Jeffrey Sklar, M.D., Ph.D., of the Department of Pathology, is studying "*In Vivo* transcription of human globin genes cloned in eukaryotic DNA vectors."

Peter Parham, Ph.D., of the Department of Structural Biology, is conducting an "Investigation of the immunological roles of coated vesicles, their assembly and biosynthesis."

Howard Schulman, Ph.D., of the Department of Pharmacology, is studying "Calcium- and calmodulin-dependent protein kinases."

Arnold Kriegstein, M.D., Ph.D., of the Department of Neurology, is studying "Long-term neuropathological changes in an animal model of febrile convulsion."

Diana F. Guthaner, M.D., of the Department of Radiology (Division of Diagnostic Radiology), is studying the "Significance of errors in quantitative cardiovascular CT."

Robert V. Rouse, M.D., of the Department of Pathology, is studying "*In Situ* antigen specific events in the immune response."

Bruce G. Wallace, Ph.D., of the Department of Neurobiology, is studying the "Identification of factors mediating synapse formation."

A faculty committee headed by Dr. Eric Shooter, professor and chairman of the Department of Neurobiology, selects the award recipients at Stanford each year.

The purpose of the grant is to assist young scientists in funding basic and clinical investigations.

1-4-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

LOW CALORIE DIETS AND HEART ATTACKS: A WARNING

STANFORD—

Persons on diets of 800 kcals or less per day may be endangering their health even if under a doctor's supervision, say both a physician and a dietician at Stanford University Medical Center.

"It is certainly sound advice for persons to work with their physician when starting a diet. But extremely low calorie diets may cause a breakdown in structural protein, including heart tissue," said Peter Rudd, assistant professor of medicine.

"With a breakdown in heart tissue comes a risk of cardiac problems. These can occur suddenly and without warning. Even if a patient is hospitalized and constantly monitored, heart problems may still occur. Some are easily corrected, but others could be fatal," said Rudd, an internal medicine specialist.

Rudd and Stanford University Hospital (SUH) registered dietitian Jane Woeckener were interviewed separately in the wake of public interest triggered by the death of a Bay Area woman who reputedly adhered to a low calorie diet and by articles offering reassurances about various diet plans.

"There are no easy answers when it comes to dieting," said Woeckener, who serves as assistant director of dietetics at SUH. "But the safe and sensible way to lose weight involves eating a wide variety of low calorie foods from the basic four food groups (dairy, meat, fruits/vegetables, breads/cereals) and planning a slow, steady weight loss of about two pounds per week.

"Diets below 1,200 kcals for women and 1,500 kcals for men are generally not recommended because they almost always are lacking in important nutrients needed to meet minimum Recommended Dietary Allowances (RDAs) and to maintain health. (Kcal is short for kilocalorie and is the commonly accepted measurement of the energy value of food.)

"Behavior modification and changing the attitudes and habits which lead to being overweight in the first place are crucial components of weight loss. Crash diets with temporary results do not significantly lower the risks associated with obesity," Woeckener added.

Both Woeckener and Rudd cited recent studies suggesting that diets of fewer than 800 kcals per day are potentially dangerous. These studies, Rudd noted, examined several different nutritional regimens. The number of calories and variety of components appeared to be more important than the specific content of the diet, he said.

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Woeckener and Rudd said that an extremely low calorie diet may be desirable only when someone is so obese that the risk of sudden death is high unless weight loss begins quickly.

"In these circumstances, the patient frequently is already hospitalized. Close observation will not eliminate the risk of sudden death while rapidly losing weight but would at least permit health professionals to respond quickly to a cardiac arrest," Rudd said.

He added that the heart is especially vulnerable to damage on a low calorie diet, even if protein is its main component. The addition of modest amounts of carbohydrates may reduce breakdown of the body's structural protein and may help protect the heart.

"But there have been reports of lowered potassium, calcium and magnesium, which could make irregular heart rhythm more likely. These electrolytes (blood minerals) are necessary, and they are best provided within the context of a well balanced diet," he added.

Among the studies cited by Rudd and Woeckener was one published in the April 1981 edition of *The American Journal of Clinical Nutrition*. Authors included Harold E. Sours, M.D., formerly of the Bureau of Epidemiology of the Center for Disease Control in Atlanta, and Victor P. Frattali, deputy director of the division of nutrition of the Food and Drug Administration, which currently is examining low calorie diets.

The article studied 17 individuals who died of heart attacks suddenly after long periods on very low calorie diets, consisting entirely or primarily of protein.

"The deaths appeared to be independent of type of medical supervision received during the diet, daily dosage of potassium supplementation and biological quality of the protein product used," the authors said. The 17 individuals had been on diets of about 300 to 400 kcals per day.

"We conclude," the article stated, "that use of very low calorie weight reduction regimens should be curtailed until further studies determine what modifications if any can insure their safety."

Contacted in Washington, Frattali said the article represented the research of himself and colleagues and did not indicate an official agency endorsement or warning. Officially "we're trying to keep ourselves informed in regard to low calorie diets," he said.

On Dec. 30, the FDA issued a public statement that diets under 400 kcals per day "are physiologically unsound regardless of their overall nutrient composition.

"FDA believes their use should be considered experimental and patients should have full knowledge of the risks, and undertake the diet only with proper medical supervision."

Diets under 800 kcals per day should be used only under proper medical supervision, the FDA said.

(Editors: The Medical Center News Bureau has available for the news media a packet of recent articles, including the Sours/Frattali piece, which will be mailed on request.

Jan. 3, 1982 —30— mg2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

FIGHTING GONORRHEA: GENETIC ENGINEERING PROVIDES CLUES

STANFORD—

Stanford microbiologists are using genetic engineering techniques in an attempt to "pull the teeth" of the organism that triggers gonorrhea.

By manipulating the genes of gonococcus bacteria, the scientists have, for the first time, found a way to test an enzyme long suspected to be a weapon the bacteria use to produce the malady.

"If the enzyme turns out to be as important as we think it may be, it could be useful in constructing new ways to provide protection against gonorrhea," said Stanley Falkow, chairman of Stanford's department of medical microbiology.

Knowledge about the enzyme may lead to a vaccine or similar combatant against gonorrhea, Falkow said.

A major obstacle to creating a useful gonorrhea vaccine has been the gonococcus bacterium's ability to disguise itself, said Falkow.

Most bacteria wear a membrane coat that is studded with protein tags. Cells in the human immune system use these tags to identify the foreign bacteria, which they then destroy.

But the gonococcus can mutate and subtly change the configuration of its proteins, effectively camouflaging itself against the body's defenses.

"What you would like to do with an organism that can change its face like that is pull its teeth so that it can't cause an infection," Falkow said. "In other words, it could still multiply in the body, but not cause tissue damage."

The "tooth" in the case of gonorrhea may be an enzyme, called "IgA1 protease," that Falkow and a graduate student, J. Michael Koomey, have studied.

The bacterium uses the enzyme as a chemical cleaver that snips in two the normal antibodies a healthy person makes to fight off infection.

In response to an increasing number of invading bacteria, the human body produces more antibody. In turn, the bacteria produce more enzyme to destroy the antibody. The infected person loses the battle as he develops the genital sores and sometimes serious complications associated with gonorrhea.

-more-

Koomey and Falkow have identified the gene that is responsible for "telling" the bacteria how and when to produce the enzyme. Through a series of steps, described in the December *Proceedings of the National Academy of Sciences*, the scientists have been able to eliminate that single gene from the bacteria, creating an organism that is like gonococcus in every way, except that it can't make the critical enzyme.

The "impotent" organism now serves as a research tool in understanding the role of the enzyme in causing disease.

Normally, the next step in research would be to compare the responses of laboratory animals injected with either gonococcus or the engineered bacteria. But the crucial enzyme destroys only one specific human antibody, which is not present in animals.

This specificity makes the usual testing of the virulence of the bacteria in rodents and primates impractical, Falkow said, and has slowed research.

"If we can prove that the enzyme plays a role in disease, there are research groups interested in carrying the work a step further, to determine whether or not the engineered bacteria could be useful in providing protection against disease," Falkow said.

Although penicillin and its derivatives can effectively stop most acute bouts of gonorrhea, the antibiotics are only a temporary solution to the sexually transmitted disease, he added. Already, virulent strains of the bacteria have evolved that are resistant to penicillin.

"Another important reason we're interested in this particular enzyme is that it is also found in several organisms that cause meningitis (a dangerous infection of the membranes that surround the brain and spinal chord)." In contrast to gonorrhea, meningitis is not easily treated with antibiotics and is often fatal.

"The three major forms of bacterial meningitis all probably have this enzymatic strategy," Falkow said. "So we aren't just addressing the problem of gonorrhea, but also the more general question of the strategies bacteria use to cause disease.

"From the 1940s through the '60s, it was usually felt that through the use of antibiotics, infectious diseases caused by bacteria would be conquered, that we'd simply be able to treat them," Falkow said. "But through the advent of resistance, it became apparent that this was not going to be possible in many cases.

"There's another fundamental flaw in antibiotics," he added. "You have to wait for someone to get ill, and the whole basis of medicine really should be preventative."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: MIKE GOODKIND (415) 497-6911

STANFORD-THE NEGOTIATING TEAM REPRESENTING THE COMMITTEE FOR THE RECOGNITION OF NURSING ACHIEVEMENT (CRONA) ISSUED ON FRIDAY NOTICE OF INTENT TO STRIKE STANFORD UNIVERSITY HOSPITAL EFFECTIVE AT 12:01 A.M. MARCH 9 UNLESS DISAGREEMENTS LEADING TO A NEW LABOR CONTRACT ARE RESOLVED BY THEN.

THE NOTICE WAS DELIVERED BY THE UNION TO THE HOSPITAL NEGOTIATING TEAM HEADED BY PRISCILLA WHEELER, STAFF COUNSEL AND THE UNIVERSITY'S CHIEF LABOR ATTORNEY.

NO NEGOTIATIONS WERE SCHEDULED DURING THE WEEKEND, WHEELER SAID.

BECAUSE OF THE POSSIBILITY OF A STRIKE, THE PATIENT ADMITTING SERVICES DEPARTMENT HAS CANCELLED 13 OF 52 ADMISSIONS SCHEDULED FOR SATURDAY AND SUNDAY.

SHELDON KING, EXECUTIVE VICE PRESIDENT AND DIRECTOR OF THE HOSPITAL, SAID IN A STATEMENT, "WE ARE MAKING PLANS TO ENSURE THAT OUR CRITICALLY ILL PATIENTS WILL BE COMPLETELY CARED FOR. WE ARE CERTAIN THAT OUR NURSES WILL RECOGNIZE THE RESPONSIBILITY TO PROVIDE THIS SERVICE AS THEY HAVE IN THE PAST."

"IN THE EVENT OF A STRIKE, WE ARE CERTAIN THAT STANFORD UNIVERSITY HOSPITAL WILL PROVIDE THE SAME STANDARD OF EXCELLENT CARE WE ALWAYS HAVE, ALBEIT FOR A SMALLER NUMBER OF PATIENTS, THOSE WHO TRULY NEED IMMEDIATE CARE."

A 20-MONTH CONTRACT IS SET TO EXPIRE AT MIDNIGHT SUNDAY. TALKS HAVE BEEN UNDERWAY REGULARLY BETWEEN THE HOSPITAL AND CRONA FOR ABOUT A MONTH.

THE CONTRACT DISAGREEMENT CENTERED ON A VARIETY OF ISSUES INCLUDING THE COMPENSATION PACKAGE, WHEELER SAID. DETAILS WERE NOT IMMEDIATELY RELEASED PENDING FURTHER DISCUSSIONS BETWEEN THE HOSPITAL AND UNION.

CRONA REPRESENTS THE APPROXIMATELY 1,200 NON-SUPERVISORY REGISTERED NURSES AT THE 663-BED HOSPITAL.

(EDITORS: PRISCILLA WHEELER MAY BE CONTACTED DIRECTLY AT (415) 497-3628, OR AT HOME (415) 964-2418.

FEB. 26, 1982 -30- MG206

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

MEETING TO DISCUSS ACADEMIA-INDUSTRY RELATIONS

Science writers: The meeting described below will be closed to the press. However, if any agreement on principles to guide future academia-industry relationships is reached, we will make the results public as promptly as possible. It should be noted that any principles agreed upon at this meeting will be suggestions only to assist the universities involved in developing future policies in consultation with their faculties. If you are interested in being notified of the time and place of any follow up announcements, call my office (415) 497-6911.

STANFORD—

The presidents of five leading research universities will meet with their counterparts of several high technology firms as well as academic scientists March 25 through 27 to consider possible guidelines for the complex relationships that have sprung up between industry and academe.

The invitational meeting, funded by a grant from the Henry J. Kaiser Family Foundation of Menlo Park, will be at Pajaro Dunes, on the Monterey Peninsula.

Among the issues on the agenda: Should universities seek to return value from research developments to nurture the research enterprise and if so under what constraints? Should all research agreements between universities and companies be made public? Should universities aggressively patent and license faculty inventions? What should be the guidelines for universities holding stock in companies owned by faculty members? What are the consequences of industry-supported programs to the free exchange of knowledge and to the training of graduate students? How can the traditions of open research be preserved without forfeiting property rights necessary for companies to make commercial use of the research results? Are new conflict of interest rules needed?

"The main business of the meeting," said Stanford public affairs vice president Robert Rosenzweig, "will be to see if agreement can be found on a set of principles that might guide the growth of biotechnology as that industry interacts with universities."

Rosenzweig added that any agreement reached at the meeting will be made public.

The idea for such a high-level meeting was first suggested by Stanford University President Donald Kennedy in a speech at the University of Pennsylvania a year ago.

Kennedy, a former commissioner of the Food and Drug Administration and a member of the National Academy of Sciences, had expressed concern about the increasing interactions between academic scientists and industry, particularly in the field of gene-splicing, and their potential for subverting academic missions.

While universities need more interaction with industry, Kennedy said, "we need it on thoughtfully structured terms."

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Rosenzweig said the five university presidents who organized the meeting have both experience and strong interest in national research policy. In addition, each has important reasons for making this matter a high priority in the development of policies for his own institution.

"They made a commitment to participate actively and developed the format of the meeting and list of attendees," he explained.

The university presidents are Derek Bok, Harvard; Marvin Goldberger, California Institute of Technology; Paul Gray, Massachusetts Institute of Technology; Donald Kennedy, Stanford University; and David Saxon, president of the University of California system.

The industry corporate executives are Arnold O. Beckman, Beckman Instruments, Inc.; Albert Bowers, Syntex Corp.; Ronald Cape, Cetus Corp.; Robert A. Charpie, Cabot Corp.; Samuel Eletr, Applied Biosystems, Inc.; David I. Kosowsky, Damon Corp.; Coleman Mokler, Gillette Corp.; Cornelius W. Pettinga, Eli Lilly and Co.; William Simeral, E. I. Dupont de Nemours, Inc.; and Robert Swanson, Genentech.

Faculty attendees and their institutions are Frederick Anson, professor of chemistry, and Norman Davidson, professor of chemistry, Cal Tech; David Hamburg, professor of health policy, Henry Rosovsky, dean of the College of Arts and Sciences, and Daniel C. Tosteson, dean of the School of Medicine, Harvard; Michael L. Dertouzos, professor of electrical engineering and computer science, and Phillip A. Sharp, professor of biology, MIT; Charles Yanofsky, professor of biological sciences, and Channing Robertson, professor of chemical engineering, Stanford; Paul Boyer, director, Molecular Biology Institute, UCLA; Julius Krevans, chancellor-designate, and William Rutter, professor of biochemistry and biophysics, UCSF.

Special guests are William H. Danforth, president Washington University; and Robert J. Glaser, President, Henry J. Kaiser Family Foundation.

Some administrators from each university will also attend.

2-25-82 —30— kc

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Site clearance is to begin Monday (Feb. 22) on the $14 million cardiovascular research building, expected to be completed in October 1983.

The 52,000 square foot building will house the academic and research programs of the department of cardiovascular surgery headed by Norman Shumway, Frances and Charles Field professor of cardiovascular surgery; and the division of cardiology, headed by Donald Harrison, William G. Irwin professor of medicine.

Roger Buckhout, project manager, said actual groundbreaking is expected to start March 1, and a formal ceremony marking the start of construction will be held April 14 "at a time convenient to the principal donors to the project."

A $4 million grant in 1979 from the Max C. Fleischmann Foundation of Nevada enabled the university to begin planning for the building. Since then, virtually all of the total has been raised or pledged.

The facility will be located on the east side of the hospital, between the medical center and Stanford Shopping Center.

Currently, the research and office facilities of two premier scientific and patient treatment programs at Stanford have been carried out in crowded quarters scattered throughout the hospital, campus and rented office space on Welch Road in Palo Alto.

On Thursday, Lawrence Crowley, the university's vice president for medical affairs said:

"The research and clinical efforts of the teams headed by Drs. Harrison and Shumway have been carried out despite the handicaps of space. The physical facility will help integrate ongoing research in the two important areas and will permit a more comprehensive attack on outstanding problems of cardiovascular disease,"

The two lower floors of the building will provide laboratory space, while the top floor will house offices. Patient care will continue to be provided at Stanford University Hospital or the medical center clinics.

The project was designed by Hellmuth, Obata and Kassabaum Inc. of San Francisco. Dillingham Corp. of San Jose is the general contractor.

A recent parking lot restriping project has compensated for a loss of parking spaces displaced by the impending site clearing and construction.

Feb. 18, 1982 —30— mg206

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Dr. Marian E. Koshland, an internationally known immunologist, will deliver the ninth annual **Katharine D. McCormick Distinguished Lecture** Tuesday, Feb. 23.

Her talk, "Control of Gene Expression in the B Cell," will begin 5 p.m. in Fairchild Auditorium at **the Medical School.**

Presently a professor in the Department of Microbiology and Immunology at U.C. Berkeley, **Koshland is known** for her basic research in biochemical immunology—especially for her investigations of the structure and function of immunoglobulin chains, as well as the regulation of lymphocyte differentiation, activation, and antibody secretion.

She has served on a number of national advisory boards and editorial boards, is a member of the **National Academy of Sciences,** and is currently president of the American Association of Immunologists.

Koshland received her Ph.D. in immunology from the University of Chicago in 1949, and went on to continue her research at Oakridge, Harvard, and Brookhaven before joining the faculty at Berkeley in 1965.

The McCormick Lectureship honors Katharine Dexter McCormick, who donated $5 million to **Stanford Medical School** in 1969 with the expressed wish that it be used "for the encouragement and assistance of women pursuing the study of medicine, in teaching medicine and in engaging in medical research."

Katharine McCormick was a co-founder of the League of Women Voters and a vigorous champion of women's rights.

Previous McCormick speakers at Stanford include Drs. Maria I. New, Rose O. Payne, Rita Levi-Montalcini, Elizabeth D. Hay, Barbara M. Korsch, Rosalyn Yalow, Helen M. Ranney, and Mary Ellen Avery.

Koshland's lecture will be open to the public, with continuing medical education credit available to M.D.s. A reception in the Fairchild lobby will follow the presentation.

2-17-82

—30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

DNA DEMYSTIFIED IN INFORMATIVE AND FUNNY FILM FOR PEOPLE WHO HATE SCIENCE

STANFORD—

DNA: it's splashed across the covers of national magazines, heralded as the source of new medical miracles, and discussed in universities and "think tanks" across the country. But do you know what DNA really is?

If not, there's a new film by a Stanford University medical student that will gently coach you through the ABC's of DNA.

Medical student Joe Sachs, who is also working on his masters degree in film, produced the 15-minute educational comedy in order to demystify that grand chemical of genetics, DNA (deoxyribonucleic acid). He will introduce the feature at its premiere performance Sunday, February 28 at 2 p.m. at the New Varsity Theater in Palo Alto.

For Sachs, one challenge in producing the film, called "Just What is DNA?," was to explain a complex aspect of biochemistry to people who know nothing about it. "I have always been interested in health education," he explains, "but I wanted to approach the field in a creative way."

The result Sachs himself describes as a "fast-moving 'Sesame Street' for adults."

The film opens in a classroom where diligent students scribble notes furiously in an effort to keep up with a professor who is speaking way over their heads about the chemical structure of DNA. The panning camera stops when it reaches the "hero" of the film, a perplexed student named Arnold, who scratches his head and, in frustration, asks the camera "what the hell is this guy talking about?"

The heart of the film is Arnold's whimsical odyssey in pursuit of knowledge about the genetic material. He is guided in his quest by an all-knowing, invisible narrator who leads Arnold, along with the audience, through a maze of information presented in a combination of striking visual metaphors and colorful animated sequences.

By the end of the film, Arnold feels self confident enough to discuss DNA with Stanford biochemistry professor and Nobel laureate Paul Berg—in fact, he has learned so much that, at the close of the film when Berg recapitulates some basic information about DNA, Arnold, the former nucleic acid novice, slyly tells the audience, "I already knew all that."

-more-

The film represents Sachs' first endeavor in the cinematic world. He entered Stanford's master degree film program without any previous knowledge of the craft, but with considerable enthusiasm. "Entering film school had always been a fantasy of mine," he recalls.

If the film had been commercially produced, Sachs estimates it would have cost about $50,000, the animation alone about $10,000. But the student film crew and actors (Jay Martel played Arnold) donated their time, and Sachs and an undergraduate collaborator taught themselves animation. Sachs himself financed the remainder of the production costs, about ten percent of the overall estimate.

The film has been in the works for about a year, beginning with the script-writing phase last spring. Sachs put aside his medical studies briefly to work fulltime on filming and editing the project, continuing with the sound and animation portions during summer and fall.

Now Sachs hopes to find a distributor for the film, which is generally aimed at high school and junior college audiences, as well as for adult education. He also confesses a desire to explore the possibility of showing the film to a national audience, perhaps through an educational television network such as the Public Broadcasting System.

But regardless of its eventual fate, the DNA film has served mainly as a demonstration project, says Sachs, to show himself (and others) how basic science knowledge could be approached entertainingly and informatively through the medium of film.

His next project will be more clinically inclined, says Sachs, and during his upcoming clerkships he plans to be looking at what areas of medicine need demystifying.

Farther into the future, Sachs sees himself spending half of his time in clinical medicine and half-time working on health education projects.

Faculty consultants who assisted Sachs in the DNA film were Lubert Stryer and Roger Kornberg, professors of structural biology; Paul Berg, professor of biochemistry; adjunct communication professor emeritus Julian Blaustein and adjunct communication professor Ron Alexander.

—30— L111

Mailed Wednesday, February 17, 1982.

EDITORS: Sachs can be contacted at (415) 328-2993.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Dr. Kenneth P. Johnson, a neurologist from the University of Maryland School of Medicine, will deliver the sixth annual George A. Zimmermann Lecture at Stanford University Medical School on Feb. 18.

His talk, to begin at 5 p.m. in room M106, will be on the "Current Status of Experimental Therapy of Multiple Sclerosis." It is open to the public.

Johnson, an internationally recognized authority on demyelinating diseases (multiple sclerosis and related disorders), is professor and chairman of the Department of Neurology at Maryland. He has made a number of important contributions in the fields of neuroimmunology and neurovirology, and has been instrumental in the development of cerebrospinal fluid examination in the diagnosis of demyelinating diseases.

A graduate of the Jefferson Medical College and former professor of neurology and pathology at U.C. San Francisco, Johnson is the author of more than 80 papers in the medical journals and books.

The Zimmermann Lectureship was established by the Department of Neurology in 1977, as part of a gift by the late George A. Zimmermann, a long-time San Francisco businessman.

2-16-82 —30— 203

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

"The Child: Optimizing Growth and Development" will be the focus of this winter's Progress in Medicine lecture series, a community outreach program sponsored by the Stanford University Medical Center.

The quarter will open Feb. 24 with an introductory presentation by Dr. Irving Schulman, professor and chairman of the Department of Pediatrics.

Also speaking will be Dr. Philip Sunshine, professor of pediatrics and director of the intensive care nursery. He will discuss "New Concepts of Nutrition in Infancy," with an emphasis on the immunological and environmental aspects to the use of human milk.

On March 3, Dr. Bryna Siegel-Gorelick, a postdoctoral fellow in the Division of Child Psychiatry and Child Development (Department of Psychiatry), will speak about "Early Day Care and Implications for Child Development." Her discussion will include types of day care, a review of the research, and the application of child development knowledge in choosing and using day care.

Dr. Ron G. Rosenfeld, assistant professor of pediatrics, will lecture on "Growth in Childhood," and new approaches to the evaluation and management of growth disorders, March 10.

The Progress in Medicine lectures were initiated at Stanford in 1966 by Dr. Joshua Lederberg, then professor and chairman of the Department of Genetics, to provide an opportunity for leaders in academic medicine to share their insights and perspectives with the community.

Lederberg had observed: "The community has little opportunity to be informed of the exciting developments in medicine. Public understanding of these developments is of the utmost importance to social decisions."

This year the series focuses on a single theme—the development of the child. "The Science of Birth" was part one, taking place during the fall. The spring schedule will be announced at a later date.

All winter quarter presentations will take place in the Medical Center's Sherman Fairchild Auditorium, at 7:30 p.m. Admission is free, and seating is limited. There are no reserved seats, and no tickets will be issued. Early arrival is recommended to permit the best choice of parking and seats.

For further information and registration forms, call the Medical Center's Office of Public Events, at 497-6389.

2-16-82 —30— 203

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: Please hold for release 6 p.m. Thursday, Feb. 18)

SLEEP—WAKE COMPLAINTS DIAGNOSED IN FIRST LARGESCALE STUDY

STANFORD—

A nationwide study of nearly 5,000 patients suffering from insomnia and other sleep disorders may help clinicians pinpoint the most appropriate treatment for each case.

"This was the first time that a large number of patients with sleep-wake complaints have been diagnosed by both a common classification system and objective sleep monitoring." said Dr. Richard Coleman, co-director of the Stanford Sleep Disorders Clinic,

"Identifying and diagnosing sleep-wake complaints increases the potential to treat them properly," said Coleman, a clinical psychologist who headed the study.

Since a variety of causes may be responsible for conditions exhibiting similar symptoms, "clinicians may need to pay closer attention to precise diagnoses since treatment can differ depending on the exact condition," said Coleman.

The investigation included Stanford and 10 other specialized sleep disorder clinics across the United States which are members of the Association of Sleep Disorders Centers.

The results, compiled by Coleman and 16 co-authors, were published Feb. 19 in the **Journal of the American Medical Association**.

The four major diagnostic categories were insomnia, excessive daytime sleepiness, sleep-wake schedule disorders and parasomnias (abnormal behavior during sleep such as sleepwalking).

Insomnia accounted for about one third of all patients studied, and 35 percent of this sleepless group were found to be suffering from psychiatric disorders such as depression or chronic anxiety.

"Although short-term sleeping medications together with psychiatric referral might be appropriate treatment for these patients, the same medications are dangerous in another smaller group of insomnia patients, the 6.2 percent suffering from sleep apnea syndrome.

"Such individuals awaken during sleep because of a halt in breathing, so sleeping pills might interfere with the body's ability to arouse itself when breathing stops."

Other important causes for chronic insomnia included stress disorders, periodic leg movements causing awakenings during sleep, and drug or alcohol dependency.

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"A wide variety of conditions can be responsible for insomnia. Persistent stress-insomnia patients, for example, may benefit from a combined program of sleep hygiene, relaxation and counseling."

In another group of patients, doctors found no objective signs of insomnia on the nocturnal sleep test, which involves all-night monitoring of brain waves, eye movements, cardiorespiratory functions and muscle activity.

"These individuals simply underestimate their total sleep time, and for them, reassurance rather than medication is indicated."

Sleep apnea, 43 percent, and narcolepsy, 25 percent, were the largest categories among pateints who were abnormally sleepy during the day.

"If significant daytime sleepiness exists, then sleep apnea and narcolepsy become the primary diagnostic possibilities. Until the past few years, these conditions were frequently confused for one another. The symptoms are similar but the treatment is not.

"Stimulant medication may help narcoleptics but could be dangerous for sleep apnea patients who may instead need surgery."

Persons who fell asleep inappropriately during the day outnumbered insomniacs 1,983 to 1,214, but Coleman believes that this doesn't necessarily mean excessive daytime sleep (hypersomnia) is more prevalent than insomnia.

"People who fall asleep in embarrassing or dangerous daytime situations, for example while driving or at work, are more motivated to seek help at a sleep center."

Another malady, disorders of the sleep-wake schedule, probably were underrepresented in the study, because these syndromes only recently have been described. These conditions are marked by unconventional and abnormal sleep schedules, and include, for example, persons who regularly cannot fall asleep until 4 or 5 a.m., even though they try to live on a normal daytime schedule.

"Often people with sleep scheduling disorders do not think of their condition as a medical problem and hence do not seek help from a sleep clinic. Therefore we do not have a really good idea of their prevalence at this point," Coleman said.

About 15 percent of the studied patients suffered from a wide range of parasomnias, such as sleepwalking or nocturnal seizures.

The researchers emphasized that the patients included in the study represented referrals of longterm sufferers of sleep-wake disorders to sleep clinics. Many people, Coleman said, experience temporary insomnia or even daytime sleepiness, often as a result of a crisis.

"These individuals generally do not require referral to a specialty sleep clinic. Often consultation with a family physician, short-term medications, or the passage of time alone are sufficient," Coleman said.

A total of 4,694 patients were studied, including 798 persons evaluated with sleep monitoring for impotency.

Feb. 16, 1982

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

ASIAN EDUCATOR SEES GIFT MATERIALIZE

STANFORD—

A dedication ceremony was held last week at the Medical Center to open the new Wilson T.S. Wang Library in the Division of Otolaryngology/Head and Neck Surgery, and to honor the Hong Kong resident for whom it was named.

A former patient in the Division, Mr. Wang donated a total of $108,000 towards development of the library, now ready for use in room R117 of the Medical Center.

"He walked into my office with a checkbook and asked, 'What does your program need that I might help with?' " recalled Dr. Willard E. Fee, Jr., chief of the Division and Wang's primary physician while he was hospitalized almost two years ago.

Wang, speaking at the ceremony, said he knew from experience on a hospital board in Hong Kong—and by the budgetary constraints faced in this country—that no physician would turn down his offer.

"And I wanted to somehow pay for a part of my care which didn't appear on the bill—the wonderful, personal concern of every doctor, nurse and staff person I came across.

"It seemed a blessing in disguise that I had come here for medical treatment, because I left with the feeling that I'd made many new friends," he said.

Guest speaker at the ceremony Dr. Lawrence G. Crowley, vice president for medical affairs, noted, "This is the first time we've been privileged to honor a citizen of an Asian country in this way at Stanford Medical Center."

He pointed out that the plaque awarded Wang, printed in both English and Chinese, is a symbol of the Medical Center's aim to be a medical resource for patients on both sides of the Pacific.

Agreed Wang, "The number of miles between us doesn't make a difference. The world is big or small, just depending on how you look at it."

Another special guest at the ceremony was Mrs. I. James Quillen, widow of the former dean of Stanford's School of Education, which Wang visited 32 years ago under a State Department program.

Wang is the owner and director of Hong Kong's New Method College, consisting of five private elementary and high schools in the city. New Method is the largest college of its kind in Hong Kong.

According to Fee, developing the new library has involved much renovation and reconstruction since the project began last April. "Before, we had only a small library. Now it's a nice-sized facility."

An especially proud feature of the new library is a self-contained, sophisticated projection system with capacity for many kinds of audio-visual activities. The system, which includes such equipment as a double screen, a tape recorder, a selection of video tapes, and more, was custom-made for the Division as a part of Wang's gift.

2-16-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: This story sent Business Wire Feb. 12)

STANFORD—

Nancy Lassen, who Jan. 20 became Stanford's sixth heart-lung transplant patient, died Friday (Feb. 12) after doctors determined she had slipped into an irreversible coma.

Physicians disconnected the respirator which had supported her heart and lung functions in midmorning, some 20 hours after the second of two electroencephalogram (EEG) tests determined the 26-year-old native of Grand Island, Neb., had been brain dead for at least three days. Time of death was listed officially as 11:05 a.m.

"We will be performing an autopsy to determine what caused Nancy Lassen to slip into a coma," said Dr. Bruce Reitz, her physician.

Complete autopsy results are not expected for at least six weeks, because the brain tissue which might offer the key to the unexpected death must be chemically treated for that long, Reitz explained.

Reitz, an assistant professor of cardiovascular surgery who has performed all six of Stanford's six heart-lung transplants, said Lassen had slipped into a coma Feb. 4.

Lassen's condition was critical but stable shortly after surgery, even though she suffered from kidney and liver damage and exhaustion after a five-year battle against pulmonary hypertension, a usually fatal lung disease of unknown origin which subsequently damages the heart.

"It was clear that at the time of surgery, she only had a few weeks to live and that the transplant operation offered her only hope for survival," Reitz said.

Like several of her predecessors, she was placed on kidney dialysis a few days after surgery, but unlike the others, her kidney function did not return.

"We simply do not know at this time whether any or all of these conditions contributed to her slipping into the coma which ultimately led to death, and this is what we hope the autopsy to determine," Reitz said.

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Reitz said the program is continuing and two persons currently are waiting for the operation.

Lassen's family, including father, mother, stepmother and four sisters joined in the decision to withdraw the artifical life support system, Reitz said.

Lassen, who lived the past year in Phoenix with a sister, was single and had worked as a professional nurse until she was forced to quit because of ill health last October, nearly five years after she developed pulmonary hypertension while attending nursing school in Nebraska.

Surviving are her father and stepmother, Robert and Shirley Lassen of Grand Island, Neb., and her mother, Lilla Lassen, also of Grand Island.

The sisters include Jan Mohs, 30, Menlo Park, Calif.; Barbara Huff, 28, Phoenix; Sally Lassen, 22, and Jeanie Lassen, 20, both of Lincoln, Neb.

The family said a memorial service is scheduled at the First Presbyterian Church, Grand Island, Neb. 68801, at 2 p.m., Feb. 20. In lieu of flowers, the family requests contributions to a Nancy Lassen Memorial Fund, which will be used for a nursing scholarship. The church is coordinating the fund, the family said.

Heart-lung transplants began at Stanford March 9, 1981, after more than 10 years experience with more than 200 heart-only transplants. Cyclosporin A, a fungal derivative, made feasible the dual organ transplants.

Four of the first six heart-lung transplant patients are living and have returned to productive activity.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STANFORD—

Stanford University Hospital is not prepared at this time to sign a contract to participate in the Pentagon's controversial Civilian-Military Contingency Hospital System (CMCHS), the Hospital's board of directors decided Wednesday.

Instead, the board said the Hospital will "continue to participate in all appropriate regional and other disaster preparedness activities and in any appropriate network.

"The Hospital is also committed to assisting in the rapid response to civilian and military casualties by attempting to provide whatever beds it can without violating its commitment to its local and broader communities."

The CMCHS contains provisions that the Hospital is unprepared to accept, the board said. Among them are provisions calling for commitment of a specific number of beds for use by war casualties and the release of certain personnel information, including employees, military affiliations, either past or present.

But instead of rejecting a contract outright, as some hospitals have done, the Board left open the possibility of further exploring these issues with the Department of Defense. The Board directed Hospital officials to consult with other teaching hospitals and to initiate discussions.

The Board said certain provisions in the CMCHS proposal did not appear to be essential to the Hospital's commitment to the national effort, in addition to resulting in unnecessary expenditures.

The goal of the CMCHS is to make 50,000 civilian hospital beds available to receive injured soldiers airlifted from battle zones, such as Western Europe. Analysts have noted that civilian hospital participation would be vital to provide care for U.S. casualties following a limited war.

Opponents, including a national anti-war group, called Physicians for Social Responsibility, have said that planning for the results of a nuclear exchange creates the unrealistic expectation that a viable response is possible.

In December, the Hospital's medical board had recommended to the Hospital Board that no contract be signed with the Department of Defense.

The medical board, which represents the medical staff of community and faculty physicians, had suggested that the hospital should inform the government on a continuing basis about the number of beds which might be available for wartime emergency patients, but objected to reporting personnel information.

Transmitted over Business Wire 2-11-82 —30— KC

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

TRUSTEES APPROVE MEDICAL SCHOOL TUITION INCREASE OF 15.0 PERCENT.

STANFORD—

A 1982-83 tuition increase of 15.0 percent for M.D. students in Stanford's School of Medicine was approved today (Tuesday, February 9) by the University's Board of Trustees.

The Trustees' action brings the 1982-83 tuition rate per regular quarter to $3,197 for medical students, a rise of $417 over last year's quarterly tuition of $2,780; the nine-month tuition at the Medical School will be $9,591, an increase of $1,251 over last year's $8,340 tuition fee.

Since Stanford usually announces its tuition fees in advance of other private universities, exact rates of increase for other medical schools are not as yet available.

However, preliminary figures recently circulated among the financial officers of several major private medical schools place Stanford's tuition hike somewhere in the mid-range, according to Medical School controller Kathleen Roberts.

Dr. John Steward, associate dean for student affairs, noted that about 80 percent of Stanford M.D. students receive loans or other sources of financial aid to support their medical education. As in past years, the Medical School intends to provide aid to all students who demonstrate financial need through the coming year, Steward said. However, federal cutbacks in financial aid programs and higher interest rates could cloud the Medical School's future ability to meet the demonstrated need of every M.D. student, Steward added.

Under the current medical school tuition program, M.D. students are charged for 13 quarters of study, regardless of the number of quarters for which they register. They pay a special fee for quarters beyond the thirteenth—the terminal graduate registration fee—which for 1981-82 was $200.

This policy, adopted in 1980, encourages medical students to spend more than four years in medical school so that they may participate more fully in the Stanford program and elective scholarly acitivities, according to Steward.

Last year, medical school tuition at Stanford was boosted by 13.6 percent.

(This year's Medical School tuition hike was granted by the Trustees along with a 15.1 percent increase in tuition for Stanford undergraduates, a 15.5 percent increase in room and board rates for undergraduates and a 14.8 percent increase for students in the Law School.)

—30— L111

Mailed Tuesday, February 9, 1982.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STUDY TO ADD PUNCH TO MEDICINE'S MANAGEMENT

STANFORD—

A major project to develop, test, and implement new management techniques for the practice of medicine in the academic setting has been launched by the Stanford University School of Medicine.

The project, initiated by a $50,000 grant from the Commonwealth Fund of New York will be centered in the Department of Medicine, the largest clinical department at Stanford employing about 20 percent of the Medical School's faculty.

A two-step process will be involved in the study, according to David S. P. Hopkins, director of analysis and planning at the Stanford University Medical Center. The first step will be a 10-year retrospective analysis of changes in the Stanford Department of Medicine and four other departments of medicine at selected academic health centers.

The second step, for which additional funding will be sought, will entail the development of a computer-based strategic planning system.

"Such a system," Hopkins explained, "would enable departmental chairmen to do better projections of revenue changes, plan for new academic programs, and determine compensation plans for their faculties."

Hopkins specializes in development of computer-based planning models for university administration and financing. He is co-author (with William F. Massy) of a recent book on this subject by the Stanford University Press. He will co-direct the project with Dr. Kenneth Melmon, chairman of the Department of Medicine at Stanford. Participating department of medicine chairmen from other schools are: Dr. Philip Fialkow (University of Washington, Seattle), Dr. Richard V. Hornick (University of Rochester), Dr. Arthur Rubenstein (University of Chicago), and Dr. Kennith Shine (University of California at Los Angeles).

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According to Dr. Melmon, the growth of faculty in schools of medicine has been staggering in recent years. This growth is substantiated by figures showing that the number of salaried faculty clinicians in the United States increased from 2,200 in 1950 to 36,500 in 1979.

"Many departments of medicine now have revenues in excess of $30 million a year," Melmon said, "and there's general agreement that chairmen are administratively overwhelmed."

Moreover, since most chairmen are clinical scientists who for career reasons take up administrative duties on a short-term basis, there is continuing turnover of chairmen whose tenure on the job is less than six years. It has been estimated that at any given time as much as 20 percent of Medicine chairmanships are undergoing change.

Improved information and planning systems will most probably not eliminate this problem, Melmon said. But it would give chairmen quick access to accurate information relating to the management of their departments and compensation of their faculty.

Traditionally, he explained, medical education has been supported by tuition, grants, private gifts and patient care revenues. Until recently the association between sources of funds and their actual programatic use has been somewhat informal.

For example, revenues generated by patient care have been available for funding a portion of teaching and research, he said. The tightening of public expenditures for medical care and research and demands for stricter accountability have led to greater dependence on each source to cover just the main purpose for which it was intended.

Moreover, he said, medical school departments must cope with new technologies, and shifts in the mix of skills needed to treat patients as patterns of illness change.

"This is why improving the administrative capabilities of departments in schools of medicine is especially important now," Melmon said.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

Toxic shock syndrome discussed

STANFORD—

Toxic shock syndrome (TSS) is a dramatic illness affecting nearly every organ system of the body. It can often lead to shock and even death if not properly treated.

Though commonly associated with tampon use, 10 percent of TSS cases do not even occur in conjunction with menstruation, said Dr. Iris Litt at a recent Pediatrics meeting.

Furthermore, at least one autopsy of a TSS victim showed that the woman had not been using tampons at all.

"Wound infections and abscesses are the usual sites for the TSS bacterium, called *Staphylococcus aureus,* in these cases," explained the associate professor of pediatrics and director of the Division of Adolescent Medicine.

And though almost all the literature so far on TSS has appeared in fields other than pediatrics, she said, 11 to 19 year-olds account for 42 percent of the disease's incidence.

"The majority of TSS cases involve tampon users below the age of 19, though the reasons for this are still a mystery," she said. "This group composes only 17 percent of the total number of tampon-using women in this country."

Litt, who serves on the Institute of Medicine's committee on TSS, went on to describe other mysteries surrounding the disease. "Though it's a rare one, there are currently 45 to 60 cases reported nationwide each month," she said. "But outside the U.S., there have only been 150 cases reported worldwide, ever—and only in 12 countries." (Later questioned about the possibility of tampons elsewhere being made of different materials, Litt dismissed this as untrue.)

She continued, "There are lots of remaining questions regarding the epidemiology of TSS. For example, in menstruating women, 98 percent of patients are white. But in non-menstrual cases, the races are represented in proportion to their numbers in the total population."

TSS patients manifest a predictable range of clinical symptoms. Within the first four days of menstrual cases there are changes in skin and mucous membranes. Also apparent early on are high fever, headache and vomiting, diarrhea, confusion, abdominal pain, and weakness.

The phenomenon known as "strawberry tongue" is common, as is a history of diarrhea. Later, patients develop mouth ulcers, rashes and other dermatologic problems, with a loss of hair and nails reported between 60 and 90 days of onset.

While a variety of abnormal lab tests, some fairly consistent, are observed, said Litt, none are yet diagnostic. TSS symptoms seem to resemble those of various other diseases—a fact which often led to misdiagnosis in the past.

"Treatment has been hampered by lack of any controlled studies," she said. "Specific therapy includes the use of beta-lactamase-resistant antibiotics, though evidence so far shows only that these reduce the likelihood of recurrence in first-time patients." 35 percent of all TSS patients experience recurrence within three months, she explained.

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"Those who are treated with these antibiotics *and* stop using tampons have a recurrence rate of only 15 percent. By contrast, those who are not treated and continue using tampons have a 75 percent recurrence rate."

Other treatments currently being tried include hemodialysis and steroids but, said Litt, "A complete investigation remains to be done."

For one thing, the connection with tampon use, though obvious, is still not fully understood. "Since Proctor and Gamble withdrew Rely tampons from the market after the press first reported a possible association with TSS in the summer of 1980," said Litt, "the incidence of the disease has not significantly decreased, much less disappeared.

"Except during the peak period of mild hysteria when the number of cases reported shot up, TSS has not let up—especially not in non-menstrual cases."

At the time the connection with tampon use was first noticed, she said, Rely happened to be the brand used by most TSS patients. But since then, "the other popular brands have taken up the slack."

The degree of absorbancy, she said, appears to be a determining risk factor. The greater the absorbancy, the higher the risk. Only in recent years have synthetics and other materials been added to the cotton in tampons to increase absorbancy.

Also, the bacterial organism found in the genital region of women with TSS (though discovered as well in some other women) has appeared to be toxin-producing only in the past decade.

Whether these observations are coincidental or not remains to be seen.

Certain variables thought to be TSS risk-producing but proved otherwise by research include personal hygiene and sexual activity, said Litt. "Some studies, however, do indicate a difference in risk between continuous and discontinuous use of tampons."

Litt said doctors should advise their patients not to use tampons at all. "But realistically, we can't expect all women to follow this counsel." (A year after the media focused attention on TSS, she recalled, 60 percent of the women who at first had stopped using tampons returned to them.)

"Patients should be told if they must use tampons to make sure they're not using the high or super-absorbancy kinds," said Litt, "to change them every four to six hours, to use pads at night, to wash their hands before tampon insertion, and to use an applicator for insertion."

Preliminary studies indicate, she said, that too much handling of tampons may contribute to risk factors in TSS.

"If a woman notices symptoms, she should remove her tampon immediately and save it for culturing. And she should seek medical help."

The fatality rate associated with TSS, usually between three and 14 percent, seems to be dropping off recently with improved treatment, said Litt.

"But," she added, "the challenge to modern medicine of becoming more effective in preventing this disease is still before us."

2-8-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: WEXLER IS FELLOW; PROGRAM GIVES WORKSHOPS: Lisa Ames (415) 497-6911

STANFORD—

Dr. Lewis Wexler, professor of radiology, has been named one of six Robert Wood Johnson Health Policy Fellows for the academic year 1982—83.

Run by the Institute of Medicine, a branch of the National Academy of Sciences, the program was started in 1974 with a grant from the Robert Wood Johnson Foundation of Princeton, New Jersey.

Fellows are chosen on a competitive basis from nominations by academic health centers across the country. All mid-career health professionals, they spend a year in the nation's Congressional offices, studying and participating in the processes by which health programs and policies are formulated.

The dissemination of this new knowledge upon their return is hoped ultimately to improve understanding between the government and medical faculties.

A faculty member at Stanford Medical School since 1967, Wexler for the past two years has served on the board of the Santa Clara County Health Systems Agency.

"I wanted to expand my horizons," he says, explaining that one of his main interests is the impact of governmental policy on the functioning of academic medical centers.

Wexler plans to begin his year in Washington, D.C., when the program starts in September.

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STANFORD—

The Community Outreach Project of the Primary Care Associate Program is offering a series of informative workshops this month to introduce the program to interested members of the community.

Especially intended for those thinking about applying to it, the workshops will acquaint participants with the program's facilities and opportunities, and help to answer their questions.

Prospective students in the program—which trains physicians' assistants and family nurse practitioners—will be able to review their applications, prepare for interviews, and discuss in depth any particular phase of the program in which they have a special interest.

To be held in room A106 of the Medical Center, the workshops will take between two and three hours. The remaining sessions are: Feb. 11, 7 p.m.; Feb. 13, 10 a.m.; Feb. 23, 7 p.m.; Feb. 25, 7 p.m.; and Feb. 27, 10 a.m.

Reservations are required, since space in each workshop is limited. Those interested should call 497-6431 to schedule in advance.

The Primary Care Associate Program is currently accepting applications for the semester beginning Sept., 1982. All interested individuals should call the above number for further information regarding prerequisites and courses offered.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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BRAIN STIMULATION AID FOR CEREBRAL PALSY TO BE TESTED

STANFORD—

A technique of electrical stimulation of the brain as a treatment for improving function in patients with cerebral palsy will be evaluated in the coming 18 months by Stanford University researchers.

The project is designed to assess the claimed clinical benefits of the treatment, and to hopefully end a medical controversy surrounding the procedure, according to Dr. Richard H. Britt, assistant professor of surgery and director.

"If the results of the Stanford study turn out to be as positive as earlier claims, the technique might be rapidly accepted, leading to significant improvements in the lives of some 700,000 disabled patients in the United States," Dr. Britt said.

The study, funded by a $149,970 grant from the Robert Wood Johnson Foundation of New Jersey, is one of 23 new projects aimed at helping people impaired by disease, disorder or injury to regain their ability to perform the tasks of everyday living, the Foundation has announced.

The technique, known by the technical name of "cerebellar stimulation," was introduced in the early 1970s by Dr. Irving Cooper, a New York neurosurgeon. It combines the use of an implantable pacemaker that provides continuous electrical signals to stimulate the cerebellum like a pacemaker regulates heartbeat. The cerebellum is the lower back part of the brain that controls body-balance and muscular coordination.

"About 1,000 patients with cerebral palsy have been implanted with first generation of cerebellar stimulators over the past decade," explained Dr. Britt.

"Prospective studies have indicated that between 60 and 90 percent of patients with cerebral palsy benefit from the procedure."

Evidence for this comes from Dr. Cooper's own studies of the technique which showed improvement in speech communication, and a reduction in spasticity allowing patients to function in terms of being able to feed themselves, dress and generally take part in activities of daily living, Dr. Britt said.

Dr. Cooper's studies also noted significant improvement of athetoid movements, a condition characterized by constant, uncontrollable slow motion of the fingers, toes, hands, feet and other parts of the body, he said.

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More recent research by Dr. Ross Davis of Mount Sinai Hospital in Miami, Fla., seems to corroborate these findings.

"In his experience," Dr. Britt said, "the primary effect of cerebellar stimulation has been a lowering of spastic muscle tone in 90 percent of his patients."

But in contrast to these glowing reports, Dr. Britt explained, controversy has arisen as to the "real" benefit of cerebellar stimulation.

The criticisms derive from results of studies involving only limited numbers of patients, he said. These studies have indicated that if the observers and patients do not know whether the stimulator is on or off, no differences can be detected between control and stimulated patients.

The patients in some studies had stimulators of different types with different electrode arrays and a wide range of stimulation rates. In some instances the stimulators did not work, distorting the research conclusions.

"For this reason," said Dr. Britt, "clinicians dealing with cerebral palsy children and adults agree that a well-designed double-blind, cross-over study is required to prove the value of cerebellar stimulation."

In the Stanford project, which has received approval from the human subjects committee, 50 patients with significant spasticity will have placement of a totally implantable stimulator developed by Pacesetter Systems, Inc. of Sylmar, Cal., a leading manufacturer of cardiac pacemakers, Dr. Britt explained.

The stimulator, called the Neurolith system, operates on a lithium-iodide battery replaceable every five years. The electronics of the device and battery are encased in an ultra-thin 3 x 2-inch metal box similar to those used for heart pacemakers. The device is implanted by a simple surgical procedure at the abdomen under the skin where it protrudes as a slight bump. Tiny electrodes tunneled through the skin connect the device to the back of the brain through two tiny openings.

Several specialists will participate in the study. They include Dr. Dorothy A. Huntington, an associate professor and specialist in speech and hearing science; Dr. Barry R. Tharp, an associate professor of neurology; Dr. Eugene E. Bleck, professor of clinical surgery specializing in the orthopedic management of children with cerebral palsy; Thomas Ryan, research associate; and Claire Houston, R.N.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
EDITORS: Photo available on request if not included.

STANFORD—

Dr. Roger Kornberg, professor of structural biology at Stanford University School of Medicine, has been selected to receive the 1982 Passano Foundation Young Scientist Award.

Kornberg, who is 34, is being honored for his research on the structure of chromatin, the protein/nucleic acid complex that encodes hereditary information in the cells of higher organisms.

On March 30, 1982, he will receive the award and a $5,000 honorarium at the Passano Foundation's award-presentation dinner in Baltimore.

Kornberg's work on chromatin structure is helping to explain how the orderly expression of genetic information is accomplished in cells.

In 1974, he proposed a three-dimensional model of chromatin structure which has been widely accepted. The elementary subunit of chromosome structure that Kornberg discovered has been called the nucleosome.

Each nucleosome is a highly ordered collection of eight proteins, called histones, around which a brief stretch of the lengthy DNA double-helix is coiled. Through the electron microscope, nucleosomes look like beads on the string-like chromatin fibers.

The nucleosome's property of holding DNA in a tightly condensed form is thought to help explain how such enormous lengths of DNA can be wound up and packed into the small volume of a cell's nucleus.

The nucleosome structure may also be at the basis of controlled coiling and uncoiling of DNA. Localized unfolding of DNA exposes genes along a short stretch to the cell machinery that eventually enables those genes to be expressed; the re-folding process hides those genes away from the rest of the cell, extinguishing their expression.

Kornberg obtained his bachelor's degree with honors from Harvard in 1967 and his Ph.D. from Stanford in chemistry in 1971. Before coming to Stanford in 1978, he taught biochemistry at Harvard.

The Passano Foundation of Baltimore presents an award each year to one or more individuals who have made an outstanding contribution to medical science in the United States.

Founded by the late Edward Boteier Passano, then chairman of the board of the medical and scientific publishing interest, The William and Wilkins Co., the Foundation has honored more than 40 scientists. Nine have subsequently won a Nobel Prize for their work.

—30— L111

Mailed Wednesday, February 3, 1982.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Daniel E. Koshland, Jr., professor in the Department of Biochemistry at U.C. Berkeley, will present the ninth annual Linus Pauling Lecture, Feb. 10, at Stanford University Medical Center.

Koshland will discuss "Sensing and Adaptation in Biological Systems," 4 p.m. in the Sherman Fairchild Auditorium.

The lecture, which is open to the public free of charge, is sponsored by the Departments of Biochemistry, Biology, Chemistry, Genetics, Medical Microbiology, Structural Biology, and the Stanford Magnetic Resonance Laboratory.

Previous speakers have included Nobel Laureates Linus Pauling, Arthur Kornberg, Gerald Edelman, and William Lipscomb; and Drs. Seymour Benzer, Charles Yanofsky, Hugh Huxley, and Harden McConnell.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

MEDIA BRIEFING FOCUSES ON SCLERODERMA DISEASE

STANFORD—

Scleroderma, a little known but crippling and sometimes fatal rheumatic disease affecting about 100,000 Americans, will be the subject of a news media briefing at 10 a.m., Wednesday, Feb. 10 in room TA137.

The session is to focus on a dual achievement: For patient Victor Cervantes the session represents a personal triumph over pain and death. For researcher James Fries, an associate professor of medicine at Stanford, the conference punctuates the unraveling of a medical mystery through an experiment involving aggressive treatment.

This is the first media briefing in an informal series Stanford Medical Center expects to sponsor periodically. It is being held in conjunction with National Scleroderma Week, recently designated as Feb. 7-12 by an act of Congress.

Scleroderma, related to arthritis, rheumatism and other diseases of the connective tissues, has been described in medical literature in its most typical form as causing its victims to be "encased like a mummy in a slowly shrinking, ever contracting skin of steel." The origin or cause of the disease is unknown.

The tightening of the skin is caused by scarring of the blood vessels near the surface, and in advanced forms, blood vessel damage may extend into the body and eventually cause malfunction of the lungs and the upper gastrointestinal tract. But in its most ghastly form, scleroderma crisis, the malady causes the blood pressure to rise to catastrophic levels and the kidneys to fail.

This condition, which occurs in about 25 percent of scleroderma patients, was reported as universally fatal within six weeks when Cervantes developed it in 1971. He also suffered from blindness and malignant hypertension (a form of rapidly worsening high blood pressure) as a result of the disease.

Today the San Jose resident's health has returned to near normal, and his personal life has prospered with marriage and a new child.

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And Fries has the satisfaction of helping Cervantes to become the second person in recorded history to survive kidney scleroderma crisis.

The remedy was found in massive treatment with multiple antihypertensive drugs, proving the researchers' suspicion that the disease had a microvascular origin and could be treated by providing relief to vascular injury.

Fries and his colleagues "loaded the patient with toxic doses of five hypersensitive drugs," medication intended to lower Cervantes' blood pressure, the researcher said.

"We just kept on increasing the dosage beyond what ordinary standards would dictate. Of course there were risks. Quite honestly, we ran the risk of increasing the damage to his kidneys. But the man was facing certain death and we had to do something.

"What we found was that when the blood pressure was lowered sufficiently, the damaged blood vessels in the kidney were able to regenerate and permit the organ to regain adequate function."

Today, Fries said, about half of the scleroderma patients who suffer scleroderma crisis are able to survive.

Current research into scleroderma, which as a disease of the connective tissue is related to arthritis, is being funded under a $650,000 bequest from the estate of Hertha Magnus of San Francisco. That money, combined with other funds Stanford currently is soliciting, will fund a two year study on 28 patients to see if the same drugs which saved Cervantes life can be used in smaller amounts to relieve the suffering of scleroderma patients with less lethal symptoms.

Research efforts also include a study of 800 patients suffering from scleroderma and other rheumatoid diseases to determine the longterm outcome of treatment.

Room TA137, site of the news briefing, is in the physical therapy division of the Medical School. It is located in the redwood temporary buildings at the extreme western edge of the medical center complex near the Medical Center News Bureau. Parking is nearby.

Fries and Cervantes will be available to discuss the ailment and their personal reflections on its conquest.

Feb. 4, 1982 —30— mg22

DR. JAMES FRIES MAY BE CONTACTED AT (415) 497-6003.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

SHERLOCK HOLMES, NEUROSURGERY AND DR. JOHN W. HANBERY

(Editors: Pictures of Hanbery available on request if not included)

STANFORD—

One of Dr. Roy Cohn's favorite stories about his friend John W. Hanbery was born at a cocktail party.

"I was walking by a group of men I didn't know," begins Cohn, a professor of surgery.

"One of these guests was talking about a recent sea cruise and said he kept running into 'a woman who was constantly taking pictures and her husband who stood around smoking a pipe and never said anything.'

"I knew immediately that he was talking about Jake Hanbery and his wife, Shirley."

The artistic, enthusiastic spouse, Hanbery's legendary taciturnity, and even the pipe provide clues to the man who has headed Stanford's division of neurosurgery since 1964.

"He was the one man who could have held this division together for the past 20 years," says Richard Britt, one of Hanbery's 18 former residents and now an assistant professor with a bias for research.

Sucking on a pipe, Hanbery just might look like his favorite non-medical hero, the fictitious Sherlock Holmes. But the resemblance is more striking when you observe the reason that Hanbery has devoted a small part of his largely medical personal library to collecting the works of his hero.

Deduction, cold, clearheaded reasoning, was the ingredient with which Holmes' cases were solved. And Hanbery doesn't disagree that the same sort of deductive reasoning, the same love of problem-solving is the stock in trade of the neurosurgeon.

"Neurosurgery is greatly different from other surgical specialties," Hanbery explains. "For example, you can open and explore an abdomen. You can't open and explore a head."

But a colleague suggests—a bit mischievously—another explanation for Hanbery's love of Holmes: "It just might be because Holmes' trusted confidant was a doctor."

That was not a remark offered totally in jest. It reflects Hanbery's almost singleminded interest in his profession.

"My interests (Holmes, general history and travel nonwithstanding) are clearly related to my profession," he admits.

Even the taciturnity, the lack of interest in small talk and perhaps even some social amenities reflect what many of his colleagues and former students perceive as nearly compulsive dedication.

"His work sort of occupies his entire being," explains Britt.

"He is such a straight shooter that he probably does offend some people," comments another former resident, George H. Koenig, who now practices in Redwood City and Palo Alto.

"If you haven't distinguished yourself in caring for a patient, you'll really hear about it," continues Koenig.

"But his real personal strength reflects in his teaching.

"The thing that first impressed me as a student, was when he explains something to you, it's so clear that if you don't understand it, it's got to be your fault," Koenig adds.

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Britt and another former resident, now associate professor Gerald Silverberg, attest to the seeming conflict between a brusque manner, strong friendships, and excellence in medicine.

"He has more strong friendships over the years than many people who give a more pleasant first impression," says Silverberg. "Of all the people who have influenced me in my life, he is the strongest....He never abandons a patient, he always admits a mistake. But he is more likely to be right than anyone else in neurosurgery."

Another former resident, Don Prolo, now a practicing neurosurgeon in San Jose, says, "I always felt fortunate that we were all working for a man who is smarter than we are."

Hanbery's former students without contradiction believe that their former mentor was a leader, almost a father figure.

(Not all of the former students are "sons," by the way. Frances Conley, now as recently promoted to associate professor of neurosurgery, was the 1969 resident with Hanbery).

"He's fiercely loyal to the people he has accepted into his program," says Britt. "He is bound and determined once he has selected them to ensure they are excellent neurosurgeons," after completing a five-year residency in what might arguably be called the toughest subspecialty in medicine.

"He will guarantee by the sweat of his own brow that you will be a competent neurosurgeon and a credit to Stanford," says Koenig.

Britt explains that "one of the keys to his (Hanbery's) teaching success, beyond his enormous dedication and expertise is that he combines a unique intellect with a lot of common sense."

If anything comes before his students, it's the patients. And perhaps unusual in a teaching hospital setting, Hanbery won't hesitate to place patient care ahead of research when warranted.

Prolo recalls an incident from his residency days:

"I was working on a paper and needed to run a pneumoencephalogram on a patient to round out my results. The test was unneccesary for the patient's health. It would not have been harmful, although it might have been mildly uncomfortable for the patient. But it was vital for my research.

"But Jake said, 'screw your paper.'

"Sure I was angry at the time. But he was right."

Although he engaged in basic research in his early career—and has since aggressively fought for research programs spearheaded by his colleagues—Hanbery remains primarily a clinical doctor and teacher and believes that the emphasis on basic research may have been carried too far in such an exacting specialty in a university setting.

He favors "a more pliable system" which would not penalize the careers of academic physicians who wish to concentrate on clinical activities and research in favor of basic research.

"I think there are certain fields in medicine—and I think neurosurgery is one of them—where one ought to be able to achieve the same degree of acceptance academically whether one takes a clinical route or a laboratory route."

The demands of saving lives using the intricate tools of a specialized surgeon—along with teaching duties—might preclude a dedicated doctor from giving full attention to research duties.

The 18 neurosurgeons who have completed the program have honored their mentors in two formal ways. Late last year, the residents announced at a formal banquet that they had established a John and Shirley Hanbery Scholarship in the Neurological Sciences.

The fund totals about $20,000 and includes contributions from every one of his former residents, along with gifts from other friends.

And earlier, in 1974, the first 10 residents founded the John W. Hanbery Society which meets annually.

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The gathering is hosted each year by a different resident, usually at a resort.

The sessions are enjoyable reunions, say the participants, with Hanbery as guest of honor. But they also involve serious discussions, and all members present a paper.

"It's utterly amazing how some of these guys who probably would never present a paper under any other circumstance will scratch their heads and work throughout the year to prepare a paper which will be acceptable to this very, very tough audience," explains one of the society members.

Physicians who don't know Hanbery very well sometimes find it curious that he spends many hours each week reviewing industrial accident cases. But even this serves the dual goals of education and patient treatment, his close colleagues believe.

"I think he genuinely feels that a university has an obligation to serve the community," explains Britt.

Koenig agrees with this assessment but sees another purpose:

"This sort of work generates a lot of referrals, particularly of lower back problems which are the mainstay of any neurosurgeon in private practice. "And I think Jake Hanbery believes he has an obligation to ensure that his residents have plenty of experience with this sort of work during their training."

Hanbery, of course, was once a student himself. Both he and his wife, the former Shirley Wendt, are virtually pure Stanford products, starting here as undergraduates. In fact, as Prolo likes to tell, the couple met at a preregistration "Jolly-Up Dance" in 1938.

During that first meeting, Hanbery might have told his new friend—who since then joined him in raising four children, now aged 29 to 37—that he intended to be a doctor:

"By high school, there was no doubt in my mind that medicine was what I wished to go into."

But his desire to become a doctor "was deeply colored" while at age 7 he spent about two months in the hospital recuperating from osteomyelitis of the hip, an ailment which has left some physical side effects to this day.

"There was a deep patient/physician relationship which developed between me and my treating physician, Burns Chaffee, who at that time was I think the leading general surgeon in my hometown of Long Beach."

Hanbery may be faintly fearful that his cherished boyhood memory of a doctor who helped him recover at Seaside Hospital in Long Beach might be misinterpreted as a cliche.

"Look," he explains forcefully. "There was never any time when I was 7 years old that I was lying there in the bed talking to Dr. Chaffee saying 'I'm going to be a doctor.' That's bullshit. But those were seeds that were planted at an early age and it was a very impressionable age.

"It was something more than you would see on T.V. or read in a magazine."

It was Chaffee who recommended Stanford to Hanbery and to the boy's father, who was in the real estate and loan business in Southern California after moving the family, including Jake at age 6 months, from Enid, Okla.

A shy young man, still fighting residual symptoms of his boyhood malady, prospered at Stanford and continued on into medical school, where during his first year he decided to become a neurosurgeon.

He credits Hadley Kirkman, now an emeritus professor of anatomy, and Robert Turner for sparking his interest in "anatomy and especially in the microscopic anatomy of the central nervous system."

Hanbery reminisces fondly about Turner's neuroanatomy course and an elective exercise.

Each week, Turner would pass out a sheet of paper giving a clinical synopsis of a patient, "and then he wanted us to list all of the symptoms and then opposite each symptom to put the anatomical area of the brain or brainstem or spinal cord that would be responsible for that symptom."

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The students would be expected to localize the lesion.

"It was an intellectual exercise. It was something that introduced us at a very early stage in medical school to something that related to sick people.

"I often think young medical students are eager and hungry even before they should be for clinical applications. That sort of an intellectual exercise was extremely stimulating to me. I enjoyed it thoroughly. I certainly participated in the elective part of the course and I think that was really one of things that turned me on."

Hanbery spent a year as a general surgery resident, a year in orthopedic surgery and then a year as chief general surgery resident at Stanford University Hospital.

Then in 1948, he went to the Montreal Neurological Institute, perhaps the most prestigious center at the time for neurosurgery on the North American continent.

Silverberg says Hanbery's strong clinical bias was clearly evidenced by the time he arrived in Canada.

"The man who was widely known in Montreal, who attracted top students was a man named Wilder Penfield," Silverberg says. "But Jake Hanbery most often talks about another doctor, William Cone, who was more intimately patient oriented."

Hanbery stayed in Montreal until 1954, spending his final year on the faculty, before returning to Stanford as an assistant professor in 1954.

He has remained on the faculty of his alma mater—first in San Francisco, then on the Stanford campus—ever since, except for a brief period during five years of private practice at Palo Alto Medical Clinic. (He spent most of his private practice years on the Stanford voluntary faculty).

The years, Hanbery explains, have made him contented:

"I think it was always my dream to establish a neurosurgery training program at Stanford where there had never been one. I think being able to realize that goal and the continued association with the young people is the thing that's made it so enjoyable for me."

March 31, 1982

—30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Health Policy Conference Scheduled April 17

STANFORD—

"Making Health Policy: By Decision or Default?" is the focus of an April 17 conference open to the public in Fairchild Auditorium at the Stanfor University Medical Center.

Sponsored by the Consortium for Health Research and Policy at Stanford, in association with area Leagues of Women Voters, the conference will include lectures by eight medical experts, and 10 workshops covering various planning issues.

Speakers include Victor Fuchs, Stanford University professor of economics, discussing "**Who Shall Live** Revisited. The lecture will update Fuchs' book of approximately a decade ago.

"Amcng changes which we've perceived," said Fuchs, "is the role of the physician on the health care planning team. In my book I called him the captain. Now we are referring to the doctor as the co-captain, a role the physician shares with management."

Other speakers include Stanford University President Donald Kennedy; Ralph Schaffarzick, medical director senior vice president of Blue Shield of California and a member of the Stanford clinical faculty; Philip Lee, professor of social medicine and director of the Institute for Health Policy Studies at the University of California at San Francisco; James Fries, associate professor of medicine at Stanford and the author of a bestselling consumer health guide.

Also, Count Gibson, chairman of the department of family, community and preventive medicine at Stanford; Halsted Holman, professor of medicine; and Nathan Maccoby, director of the Institute for Communications Research at Stanford.

Among the 10 afternoon workshops are "The Educated Patient," Health Care for the Disadvantaged," "A Mental Health System: Effective and/or Affordable," "Humanistic Medicine," and "The Government as Purchaser."

Continuing education credit is available for both doctors and nurses.

who attend.

Registration payable by April 14 is $10. A box lunch is available for $5.

For further information, contact the League of Women Voters of South San Mateo County between 10 a.m. and noon weekedays, (415) 325-5780.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STUDY NEEDS VOLUNTEERS ON ORAL CONTRACEPTIVES

STANFORD—

The Stanford Heart Disease Prevention Program (SHDPP) is attempting to complete its two-year investigation of the mutual effects of exercise and oral contraceptive use on blood cholesterol levels.

The investigators are currently seeking women volunteers who are sedentary, use oral contraceptives, *and* are between the ages of 21 and 35. Participants must be non-smokers.

Testing will involve one visit to the SHDPP facilities at 730 Welch Road, where staff will draw a small blood sample, conduct a bicycle fitness test, and determine body density by underwater weighing.

Participants will receive detailed information on their blood cholesterol levels, percentage of body fat, and maximum oxygen transport capability.

Women interested in volunteering for the study should call Dan Merians at 497-6254 for further information.

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STANFORD UNIVERSITY MEDICAL CENTER
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WHEN STUDENT "DOCTORS" TREAT COMPUTER "PATIENTS"

STANFORD—

A Stanford project to develop a computer program for teaching medical students the diagnostic process has been awarded a two-year grant of $99,248 from the National Fund for Medical Education (NFME).

The goal of the project, says its director Dr. Roy H. Maffly, professor of medicine, is to instruct students in a "hypothesis-directed" approach to diagnosis.

"Traditionally," explains Maffly, "medical students are taught to evaluate patients by first obtaining a large body of standard information and then developing a list of possible diagnoses (hypotheses) which are then followed up by laboratory work and procedures.

"Over the past decade it has been shown that expert physicians use a quite different approach. They obtain a few pieces of important information about the patient's complaint, they develop a short list of hypotheses which can explain this information, and they then gather information based on these hypotheses—looking for evidence which supports or refutes each possibility.

"This approach is less costly and more efficient than the one most medical students are taught."

Maffly, who is director of StanMed, the Medical School's computer system for medical education, says that students' interest in computerized instruction has been growing over the past few years.

So far StanMed, which began in 1968, has offered specialized programs in such areas as physiology; physical diagnosis; water and electrolyte disturbances and treatment; primary care; gynecology and obstetrics; gross anatomy; and nephrology.

But when he applied for funding for his new project, Maffly realized it entailed an idea more ambitious than previously attempted. "This computer program would not only simulate a patient and his symptoms, as others have done before, but it would encourage students to mimic the way that a practicing physician actually arrives at diagnosis," he says.

He explains that a talented Stanford undergraduate, John Macias, has started developing a computer program for use with this approach.

"If the project is successful, a medical student will be able to sit at a terminal, be presented with a patient who has a major symptom, and develop a list of possible diagnoses. The student will then evaluate each hypothesis by "taking" a relevant history, inquiring about physical findings (like blood pressure), and requesting relevant laboratory tests and procedures.

"At selected points along the way the student will be asked to evaluate the likelihood of each hypothesis. The computer will offer advice and criticism, based on its own assessment of all the patient information both known and unknown to the student."

When the exercise is finished, he says, the computer will analyze and critique the efficiency of the student's diagnosis.

While Maffly readily agrees with the sceptics that machines cannot replace human instructors, he stresses that the use of computers in all aspects of medical education and practice is on the rise, as it probably will be for the next few decades. "Computer costs are going down as the quality of programs improves."

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And he sees certain benefits in computerized instruction for the medical student, including the ability to actively "practice" medicine on a simulated patient, even before actual clinical training begins.

He says he's observed that if students' computer patients should die, for example, they take it very seriously and strive to learn where they made their mistakes. "It shakes them up, and they learn from that," he says.

Maffly also sees some benefits for the faculty members involved. "For one thing, it's very easy using these systems to gather responses from students and evaluate the overall effectiveness of the information you're presenting."

Also, he notes, because computers require definitive information and responses, the very act of writing a good program presents a challenge to the faculty person in terms of honing in on precise knowledge and theory. "When you're giving a lecture it's easier to fuzz over things you may not be quite sure about," he explains.

The real challenge for physicians, he says, is to avoid feeling threatened by the computer's potential. (That includes the type of activity Stanford's SUMEX-AIM program is involved with—the application of artificial intelligence to medicine, whereby a computer will actually aid a practicing physician in reaching a diagnosis).

Since 1975 StanMed has been incorporated in a dedicated minicomputer located at the Veterans Administration Medical Center in Palo Alto. Two microcomputers were recently purchased to expand the capacity of the system.

Students have direct access to the system via terminals in the Fleischmann Learning Resource Center. Also, any terminal with phone access may be used. (One is actually available for students to borrow and take home if they wish.) The only expertise students need is typing; no computer background is necessary.

The NFME grant, Maffly notes, will enable Stanford to purchase additional hardware, including another microcomputer.

In addition to StanMed, Stanford medical students have access to the "Health Education Network," through which students nationwide may gain access to various teaching programs by telephone. Maffly serves on the board of directors of this Network, which includes systems from Ohio State University and Massachusetts General Hospital.

"If successful our new diagnostic program can be added to the offerings of the Health Education Network, which will ensure an increasingly wide, national dissemination."

The National Fund for Medical Education is a public foundation that was chartered by Congress in 1954 to mobilize voluntary support for medical education. It has awarded over $55 million to medical schools, societies and consoria since its founding. The primary mission of the Fund is to promote the best possible health care for the American public by supporting improvements in medical education.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

PAJARO DUNES—

A deep commitment to the preservation of academic values must underlie all research agreements between universities and private companies seeking to apply the discoveries of university research, a two-day conference on biotechnology concluded on March 27.

"Agreements should be constructed, for example, in ways that do not promote secrecy that will harm the progress of science," the participants agreed.

Universities must also avoid entering into agreements that might impair the education of students, interfere with the choice by faculty members of the lines of inquiry they pursue, or divert the energies of faculty members from their primary obligations to teaching and research.

The meeting was convened by the presidents of the five leading research universities, Donald Kennedy, Stanford; Marvin Goldberger, California Institute of Technology; David Saxon, University of California; Derek Bok, Harvard; and Paul Gray, Massachusetts Institute of Technology. There were 35 participants which included faculty scientists, industry representatives, and other university administrators.

The purpose of the conference was to consider the problems that have sprung up in the relationships between industry and academe, which some fear may lead to a distortion of the purposes of the university, if not thoughtfully constructed.

"The conference made encouraging progress at defining issues and testing agreement," said Kennedy, one of the meeting's key organizers.

He stressed the meeting did not prescribe policies, but guidelines for groups and institutions that will ultimately make policy.

"We considered a range of issues," he said. "They included the importance of the field of biotechnology, the qualities of the university research enterprise that require protection, the need to develop 'intellectual property,' and the possible conflicts between that and other values and the problems associated with the undertaking of entrepreneurial roles by faculty members and the universities."

A preliminary statement given to reporters after the private conference "sketches the positions at which we arrived," Kennedy said. He stressed these ideas would be evaluated at each university, at other universities that were not represented at the meeting, and at national associations of universities concerned about these issues.

"Research of the past several decades, through enlightened public support, has profoundly advanced the understanding of life processes," began the statement. "A new biotechnology of extraordinary promise has emerged.

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"While much of great importance remains to be learned at the most fundamental level about living organisms, applications of present knowledge can be foreseen that are likely to be of far-reaching benefit to people everywhere.

"These useful applications may well improve health, enhance food and energy supplies, improve the quality of the environment, and reduce the cost of many industrial processes and products."

With such beneficial possibilities at least dimly foreseeable, the participants agreed, it becomes a matter of concern to take constructive steps toward their fulfillment.

"The chain of progress from basic research to useful applications necessarily involves universities and industry," the participants said. "For the promise to be fulfilled all the links of the chain must be strong." That would require thoughtful restructuring of the relationships between academia and industry in order to transfer research results promptly into human services.

The new relationships offer, at the same time, limited assistance in returning to the universities some of the external value generated by the research of their faculties.

The conference discussed these topics, which were analyzed by smaller groups, then evaluated at Saturday's plenary session:

- The research environment in the universities has special properties that promote the quality of original work and graduate training. These include openness of communication, the freedom to choose research pathways, and faculty commitment to the primary goals of teaching and research.

These properties are important to preserve. Ways should be found to satisfy the university community and the public that agreements with industry are constructed so as not to limit openness of communication and freedom of scholarly direction, nor to deflect the energies of faculty members from their primary obligations.

- Universities are a repository of public trust and, in many cases, of public funds as well. They have an obligation to the public as well as to their students and faculty to ensure that they remain devoted to their primary goals, and that their facilities be properly used in their pursuit of these goals.

- The quality of openness in research communication has special value. Exceptions to the rule of prompt disclosure made for research agreements may entail only brief delays to allow for patent filing.

- Patent licensing programs by universities are desirable ways of promoting technology transfer and of returning value to the institution provided that steps are taken to protect the values of openness.

- Where faculty members have significant financial interest in a company, and their activities are important in the financial success of that firm, it is generally not advisable for the university to be direct investor.

The participants agreed that in many fields faculty involvement with the commercial world provides material for teaching and research, career opportunities for students, and support for institutional activities.

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"Notwithstanding these benefits," the participants said, "professors' relationships with commercial firms should not be allowed to interfere with their obligation to the university to fulfill their primary responsibilities of teaching and research."

In recent years, the report noted, the problems of achieving this goal have assumed greater urgency because of the growing tendency, in the biotechnology field, for professors to own significant blocks of stock in commercial enterprises, to assist in their formation, or even assume substantial executive responsibilities.

"Conflicts of interest may arise through combinations of public funding, private consulting, and equity holding in a faculty member's area of research," the report said.

"These developments underscore the need for universities to consider the rules and procedures needed to insure that faculty members fulfill their responsibilities to teaching and research, and to avoid conflicts."

The participants agreed that universities have a responsibility of not only maintaining academic values, but also satisfying faculty, students, and the general public that they are being maintained. But they disagreed on the method by which this can be done.

"One way of accomplishing this result is to make public the relevant provisions of research contracts with industry," the report said. "Another method may be to allow a faculty committee or some other competent body to examine all research contracts with industry and assure that their terms are consistent with essential academic values."

The statement added, "Although we see no single 'right' policy, we do believe that each university should address the problem vigorously and make efforts to publicize widely and effectively the rules and procedures it adopts."

The participants said copies of applicable rules should be available to companies that hire faculty consultants, and that companies should be expected to act in conformity with these regulations.

The conference considered whether university patent programs should grant exclusive or nonexclusive licenses to companies. "Some people fear that allowing a single firm the sole right to develop a patent will necessarily remove competition, slow development of the patent or even prevent development altogether," the participants said.

"This fear is exaggerated. Although, in some cases, multiple licenses will speed development, in other cases, exclusive rights are essential if development is to take place since no firm will expend large sums for development if others can reap the fruits."

The participants said that exclusivity in certain cases is recognized under federal law. "However, when exclusivity is allowed, it should be permitted only for the interval that is necessary to encourage the desired development," they said.

At a press conference after the meeting, it was pointed out that these suggestions were not intended to encompass activities of the field of biotechnology only, but extended to "all faculty members, scientists and nonscientists alike" engaged in outside activities.

They stressed that what was produced at Pajaro Dunes was not policy, but an agenda of issues that may "be a useful framework for the development of policy."

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

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FOR IMMEDIATE RELEASE
STANFORD—

The traditions of open research should apply to corporate-sponsored projects on campus, executives from nine firms agreed Saturday, March 27, with the presidents of five major universities.

The executives, drawn mainly from companies active in biotechnology, were invited to a three-day private session at Pajaro Dunes by the presidents of Stanford, Harvard, MIT, the University of California and California Institute of Technology.

Patent licensing and professorial conflict of interest were the toughest issues discussed, President Donald Kennedy of Stanford told a news conference Saturday.

"There was much less fundamental disagreement than might have been supposed" at the outset, Harvard President Derek Bok said.

Except for brief periods when patents are pending, he said, "there was no dissent from anyone" that "secrecy should be ruled out" in any corporate research on campus.

UC-Berkeley Chancellor Ira Hayman was "surprised at the unanimity" that "the doctrine of trade secrets should play no part in the research process" on campus.

Syntex Corporation President Albert Bowers said secrecy concerns had been "blown up out of proportion." Author of 90 scientific papers and holder of 120 patents, Bowers said any delays resulting from patent applications should be a matter of "days or weeks, not months or years."

UC President David Saxon said universities are "extremely unhappy" with federal agency contracts which may result in "substantial delays" of "months" in publication, although these provisions are "rarely invoked."

Bok said: "I'm considerably more concerned about secrecy restrictions being advanced by the government" than from business.

Where a university might decide against a particular corporate proposal, "if you're going to do any science at all, you're going to have to deal with the government. Their power is much more pervasive.

"To the extent that they begin to say foreign nationals can't come in classrooms or seminars. . . or that information is 'born secret,' that raises much larger problems for science."

Saxon said it was "ironic" that in its groping for policy in this area, the government is "as much conerned about Japan as it is with the Soviet Union."

Reporters, representatives of the Natural Resources Defense Council, and graduate students at Stanford all asked that the Pajaro conference be open to them. Two business participants in the new conference, Bowers and Applied Biosystems President Sam Eletr, indicated the discussion would not have been inhibited by the presence of the press. Kennedy, who convened the group, felt it would have been "somewhat more difficult" to reach agreement with a large audience.

Kennedy said he had "no objection in principle" to helping the NDRC contact possible funding sources for public conferences on the same subject, but felt it might be "more valuable" to have other groups besides those at Pajaro Dunes brought into the dialogue. "After all, our work product is out there," he explained.

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Kennedy told reporters that while participants "concur overwhelmingly with the statement," each remained free to agree or disagree on specific points.

Participants included:

Stanford: Donald Kennedy, president; Lawrence Crowley, vice president for medical affairs; Robert Rosenzweig, vice president for public affairs (conference organizer); Gerald J. Lieberman, vice provost and dean of research and graduate studies; Charles Yanofsky, professor of biological sciences; Channing Robertson, professor of chemical engineering; Robert Swanson, president, Genentech; and Albert Bowers, Syntex Corporation.

Massachusetts Institute of Technology: Paul Gray, president; Francis Low, provost; Kenneth A. Smith, associate provost and vice president for research; Michael L. Dertouzos, professor of electrical engineering and computer science, and director of the Laboratory for Computer Science; Phillip A. Sharp, professor of biology; Robert A. Charpie, president, Cabot Corporation; and David I. Kosowsky, president, Damon Corporation.

Harvard: Derek Bok, president; Henry Rosovsky, dean of the College of Arts and Sciences; Daniel Steiner, general counsel; Daniel C. Tosteson, dean, School of Medicine; David Hamburg, professor of health policy; Colman Mockler, Jr., president, Gillette Corporation; and Francis H. Burr, fellow of Harvard College.

California Institute of Technology: Marvin Goldberger, president; John Roberts, provost; Donald Fowler, general counsel; Fred Anson, profesor of chemistry and chairman of faculty; Norman Davidson, professor of chemistry; Sam Eletr, president, Applied Biosystems, Inc.; and William Simeral, Vice President, E.I. Dupont de Nemours, Inc.

University of California: David Saxon, president; Ira M. Heyman, Chancellor, UC-Berkeley; Robert Sinsheimer, Chancellor, UC-Santa Cruz; Julius R. Krevans, dean, School of Medicine, UC-San Francisco; William Rutter, professor, biochemistry and biophysics, UC-San Francisco; Paul Boyer, professor of chemistry, UC-Los Angeles; and Ronald Cape, chairman and chief executive officer, Cetus Corp.

Invited Guests: Robert Glaser, president, Henry J. Kaiser Family Foundation; William Phillips, professor and chairman of chemistry, Washington University; and Arnold O. Beckman, chairman of Board, Beckman Instruments, Inc.

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EDITORS: Text of rough draft statement available on request.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

PAJARO DUNES—

A deep commitment to the preservation of academic values must underlie all research agreements between universities and private companies seeking to apply the discoveries of university research, a two-day conference on biotechnology concluded on March 27.

"Agreements should be constructed, for example, in ways that do not promote secrecy that will harm the progress of science," the participants agreed.

Universities must also avoid entering into agreements that might impair the education of students, interfere with the choice by faculty members of the lines of inquiry they pursue, or divert the energies of faculty members from their primary obligations to teaching and research.

The meeting was convened by the presidents of the five leading research universities, Donald Kennedy, Stanford; Marvin Goldberger, California Institute of Technology; David Saxon, University of California; Derek Bok, Harvard; and Paul Gray, Massachusetts Institute of Technology. There were 35 participants which included faculty scientists, industry representatives, and other university administrators.

The purpose of the conference was to consider the problems that have sprung up in the relationships between industry and academe, which some fear may lead to a distortion of the purposes of the university, if not thoughtfully constructed.

"The conference made encouraging progress at defining issues and testing agreement," said Kennedy, one of the meeting's key organizers.

He stressed the meeting did not prescribe policies, but guidelines for groups and institutions that will ultimately make policy.

"We considered a range of issues," he said. "They included the importance of the field of biotechnology, the qualities of the university research enterprise that require protection, the need to develop 'intellectual property,' and the possible conflicts between that and other values and the problems associated with the undertaking of entrepreneurial roles by faculty members and the universities."

A preliminary statement given to reporters after the private conference "sketches the positions at which we arrived," Kennedy said. He stressed these ideas would be evaluated at each university, at other universities that were not represented at the meeting, and at national associations of universities concerned about these issues.

"Research of the past several decades, through enlightened public support, has profoundly advanced the understanding of life processes," began the statement. "A new biotechnology of extraordinary promise has emerged.

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"While much of great importance remains to be learned at the most fundamental level about living organisms, applications of present knowledge can be foreseen that are likely to be of far-reaching benefit to people everywhere.

"These useful applications may well improve health, enhance food and energy supplies, improve the quality of the environment, and reduce the cost of many industrial processes and products."

With such beneficial possibilities at least dimly foreseeable, the participants agreed, it becomes a matter of concern to take constructive steps toward their fulfillment.

"The chain of progress from basic research to useful applications necessarily involves universities and industry," the participants said. "For the promise to be fulfilled all the links of the chain must be strong." That would require thoughtful restructuring of the relationships between academia and industry in order to transfer research results promptly into human services.

The new relationships offer, at the same time, limited assistance in returning to the universities some of the external value generated by the research of their faculties.

The conference discussed these topics, which were analyzed by smaller groups, then evaluated at Saturday's plenary session:

- The research environment in the universities has special properties that promote the quality of original work and graduate training. These include openness of communication, the freedom to choose research pathways, and faculty commitment to the primary goals of teaching and research.

These properties are important to preserve. Ways should be found to satisfy the university community and the public that agreements with industry are constructed so as not to limit openness of communication and freedom of scholarly direction, nor to deflect the energies of faculty members from their primary obligations.

- Universities are a repository of public trust and, in many cases, of public funds as well. They have an obligation to the public as well as to their students and faculty to ensure that they remain devoted to their primary goals, and that their facilities be properly used in their pursuit of these goals.

- The quality of openness in research communication has special value. Exceptions to the rule of prompt disclosure made for research agreements may entail only brief delays to allow for patent filing.

- Patent licensing programs by universities are desirable ways of promoting technology transfer and of returning value to the institution provided that steps are taken to protect the values of openness.

- Where faculty members have significant financial interest in a company, and their activities are important in the financial success of that firm, it is generally not advisable for the university to be direct investor.

The participants agreed that in many fields faculty involvement with the commercial world provides material for teaching and research, career opportunities for students, and support for institutional activities.

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"Notwithstanding these benefits," the participants said, "professors' relationships with commercial firms should not be allowed to interfere with their obligation to the university to fulfill their primary responsibilities of teaching and research."

In recent years, the report noted, the problems of achieving this goal have assumed greater urgency because of the growing tendency, in the biotechnology field, for professors to own significant blocks of stock in commercial enterprises, to assist in their formation, or even assume substantial executive responsibilities.

"Conflicts of interest may arise through combinations of public funding, private consulting, and equity holding in a faculty member's area of research," the report said.

"These developments underscore the need for universities to consider the rules and procedures needed to insure that faculty members fulfill their responsibilities to teaching and research, and to avoid conflicts."

The participants agreed that universities have a responsibility of not only maintaining academic values, but also satisfying faculty, students, and the general public that they are being maintained. But they disagreed on the method by which this can be done.

"One way of accomplishing this result is to make public the relevant provisions of research contracts with industry," the report said. "Another method may be to allow a faculty committee or some other competent body to examine all research contracts with industry and assure that their terms are consistent with essential academic values."

The statement added, "Although we see no single 'right' policy, we do believe that each university should address the problem vigorously and make efforts to publicize widely and effectively the rules and procedures it adopts."

The participants said copies of applicable rules should be available to companies that hire faculty consultants, and that companies should be expected to act in conformity with these regulations.

The conference considered whether university patent programs should grant exclusive or nonexclusive licenses to companies. "Some people fear that allowing a single firm the sole right to develop a patent will necessarily remove competition, slow development of the patent or even prevent development altogether," the participants said.

"This fear is exaggerated. Although, in some cases, multiple licenses will speed development, in other cases, exclusive rights are essential if development is to take place since no firm will expend large sums for development if others can reap the fruits."

The participants said that exclusivity in certain cases is recognized under federal law. "However, when exclusivity is allowed, it should be permitted only for the interval that is necessary to encourage the desired development," they said.

At a press conference after the meeting, it was pointed out that these suggestions were not intended to encompass activities of the field of biotechnology only, but extended to "all faculty members, scientists and nonscientists alike" engaged in outside activities.

They stressed that what was produced at Pajaro Dunes was not policy, but an agenda of issues that may "be a useful framework for the development of policy."

STANFORD UNIVERSITY MEDICAL CENTER
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INTERFERON HELPS REDUCE COMPLICATIONS OF CHICKEN POX IN CHILDREN WITH CANCER

EDITORS: Advance embargoed for release until Thursday AM April 1 to coincide with publication in *The New England Journal of Medicine.*

STANFORD—

Interferon effectively reduces life-threatening complications of chicken pox in children who have cancer, according to a recent study led by researchers from Stanford University School of Medicine and published in the April 1 issue of *The New England Journal of Medicine.*

The study, conducted in pediatric patients at the Children's Hospital at Stanford, St. Jude Children's Cancer Research Hospital in Memphis, and by physicians in the Children's Cancer Study Group (a national group that aims to standardize treatment of childhood malignancies), is a first step toward establishing interferon's usefulness as a chicken pox remedy for people who develop a severe case of the disease, said Dr. Ann Arvin, assistant professor of pediatrics at Stanford.

Chicken pox is a common and highly contagious childhood disease caused by the *Varicella* virus. It is a relatively benign illness and requires no more than careful home treatment in the majority of patients. But under some circumstances the disease becomes a serious and life-threatening infection, and for these cases, an effective drug treatment is badly needed, Arvin explained.

For instance, people whose natural disease-fighting defense (immune system) is out of commission are at high risk for developing a severe case of the rash-producing disease.

Children with cancer, whose disease is treated with anti-cancer drugs or radiation that also suppress the immune system, are particularly vulnerable.

Over 30 percent of children undergoing anti-cancer therapy who contract chicken pox may sustain life-threatening spread of the disease—often leading to pneumonia or hepatitis— and as many as ten percent may die. It is for this reason that Arvin and her associates, Drs. Joseph Kushner, Sandor Feldman, Robert Baehner, Denman Hammond and Thomas C. Merigan, performed the research in pediatric cancer patients.

In 44 children with varying types of cancer who also came down with chicken pox, interferon therapy was administered to 23, while a harmless placebo was given to 21. The trial was divided into two phases, with some of the interferon-treated children receiving higher doses of the natural virus-fighting substance than others.

After seven days, 90 percent of the interferon recipients had been free of new rashes and spread of disease for at least a day, as compared with 56 percent of the placebo recipients.

In the higher-dose phase of the trial, after six days, 92 percent of the interferon recipients showed no new evidence of spread of disease for at least a day as compared with 45 percent of placebo patients.

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Overall, the incidence of "fatal and life-threatening varicella was 8.6 percent (two of 23) in the interferon group and 28.6 percent (six of 21) in the placebo group," the researchers reported.

"Our study showed that intramuscular interferon could be safely administered to immuno-compromised patients with varicella (chicken pox) on an outpatient basis," they added. "With the availability of large quantities of interferon from new sources, its use for the treatment of varicella and herpes zoster (shingles-- another form of disease caused by the same virus) in high-risk patients has become practical."

A case of chicken pox usually erupts in an unvaccinated patient about three to seven days after exposure to the virus. A severe case, if untreated, may involve spreading viral infection in the lungs, the liver and the brain five to seven days after the initial rash, fever and other common symptoms first appear.

Currently, the only treatment for chicken pox is a preventive one—an immune globulin that must be injected very shortly after the person is exposed to the virus. But "varicella develops in many children without an identified exposure," the authors pointed out, leaving immuno-compromised patients at high risk if their exposure to the disease goes undetected.

Right now, the researchers are continuing to investigate interferon therapy in immune-weakened children with cancer because they are the most susceptible to damaging or deadly complications of the disease.

Before biosynthetic interferon could be used routinely to treat chicken pox, Arvin said, its side effects must be carefully documented. Even if the side effects are minimal, its use would best be restricted to those likely to have serious complications. And, thus far, there is no way of predicting, except in immune-weakened patients, who is in this high-risk group, Arvin said.

The type of interferon used in these studies was derived from human blood cells, or leukocytes. The amounts if this substanace available for clinical testing have been minute and extremely costly.

But the growing recombinant DNA industry is churning out biosynthetic interferon at much lower cost, making the prospect of interferon therapy more practical for a variety of diseases.

Even so, "prevention of the infection must be the goal for the management of varicella in children at high risk," the authors cautioned.

"Although treatment with interferon and other antiviral agents benefits immuno-compromised patients with varicella, it is likely that this primary systemic viral infection will continue to cause morbidity and mortality in some patients," they wrote.

"In addition to zoster immune globulin and varicella vaccine, antiviral agents may have a role in preventing varicella when they are given during the incubation period to children whose exposure is identified too late for protection to be provided by the administration of passive antibody," the researchers concluded.

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"HONEYMOON" IS OVER FOR INTERFERON

EDITORS: ADVANCE FOR RELEASE FRIDAY MARCH 26, TO COINCIDE WITH PUBLICATION IN *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.*

STANFORD—

Interferon trials in human patients are entering a new phase, according to Dr. Thomas Merigan, a pioneer in interferon research at Stanford University School of Medicine.

Now that the "honeymoon" is over and people are no longer expecting magical cures from the highly publicized substance, the long hard work of establishing interferon's usefulness in therapy has begun, Merigan said.

What makes interferon's future bright, Merigan said, is that the previously rare and precious protein is becoming inexpensive and widely available through recombinant DNA techniques. And it has now been confirmed that the recombinant DNA-produced substance has properties nearly identical to those of the naturally derived protein.

"It's disappointing to some, but not surprising to those of us who work in the field, that interferon will not bring miracles as some people once hoped," Merigan said. "However, we are optimistic about the medical potential for interferon. Now we can seriously begin to study the material with the knowledge that there will be plenty available to treat patients in whatever diseases it may prove useful," Merigan observed.

Results from one of the first trials of gene-spliced interferon were published by Merigan and colleagues Sandra Horning, Jedd Levine, Richard Miller and Saul Rosenberg in the March 26 issue of the *Journal of the American Medical Association.*

In a "phase I" trial designed to determine toxicity and pharmacokinetics, monitor side effects and determine tolerable doses of the "cloned" substance in cancer patients, the researchers found that the properties of biosynthetic interferon did not differ significantly from those of the natural protein. (Even the side effects—which are mild compared to many conventional anti-tumor methods—mimic those of the natural substance. They include fever, headache, muscle ache, fatigue and nausea.)

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(Horning presented pre-publication results of this study October 1981 in San Francisco at a meeting of the International Congress for Interferon Research.)

The new era of interferon testing will translate the discovery of interferon's biologic activities into effective medications through rigorous controlled "phase III" trials, Merigan explained.

(In the complex new drug evaluation process, a phase I trial is designed to measure toxicity, side effects and dosage ranges; phase II trials measure how effectively the drug combats disease; and phase III trials provide data about the drug's long-term effects and abilities to counteract disease in comparison to other therapy.)

Other recent work by Merigan and colleagues has paved the way for just such a definitive trial of interferon in patients with chronic hepatitis B infections, he noted. A second *JAMA* paper, to be published in a later issue, will report on a phase I pilot program of administering interferon and another drug, adenine arabinoside monophosphate (ara-AMP), to hepatitis sufferers.

"Currently there is no proven treatment for chronic hepatitis," Merigan said. "Based on results from this pilot study where interferon/ara-AMP therapy seems to work, we feel further testing is clearly worth while in a controlled clinical study with large numbers of hepatitis patients."

Merigan's colleagues on the study are Drs. Coleman Smith, Lynn Kitchen, George Scullard, William Robinson, and Peter Gregory.

(The phase III trial, which will last about five years, still has openings for volunteer hepatitis patients who are urged to call 415: 497-5315 if they wish to participate in the trials free of charge.)

Merigan and his colleagues in oncology, Drs. Horning and Rosenberg, are also planning a phase III study in cancer patients, specifically individuals with a form of lymphoma, a cancer of the lymphatic system.

In recent phase I and phase II testing, interferon has been observed to shrink lymphoma tumors in some patients, Merigan pointed out. The phase III study being put together at Stanford will test the ability of interferon combined with conventional chemotherapy methods in controlling lymphomas.

Phase III trials such as these generally take five years or more, Merigan explained, because the long term effects must be examined. In the case of hepatitis patients, the substance's long term effects on liver disease and prevention of liver cancer are of concern and for patients with non-Hodgkin's lymphoma, the recurrence of tumors and mortality must be determined, he said.

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"We believe that the eventual niche for interferon in cancer therapy will be found in combination with other agents," Merigan said.

He stressed that basic investigations into how interferon works must continue along with clinical work.

"We can only fully exploit the clinical potential of the interferon system against disease if we also have much greater understanding of its mechanism of action and method of production," he stated.

A few things are already known about the way in which interferon works, Merigan reported, but much more remains to be uncovered.

Two primary activities of the substance are enhancement of the body's own immune system and a slowdown or halt in cell division in those tissues treated with interferon. (There is some evidence that the anti-proliferative effect may be accomplished through inhibition of DNA synthesis, he said.)

Both of these activities play a role in interferon's therapeutic effects, Merigan believes, but research has not yet sorted out the contributions of each.

Another yet to be solved riddle is why the body produces so many different types of interferon—at least 15 at present count—and what accounts for their varying potency against different types of disease.

"We don't yet know why there are different types—but once we know their functions, we can start to determine which is the best type of interferon to use for any particular disease," Merigan said.

This is where basic research could speed up the clinical side, Merigan said. The laborious process of testing each type of interferon in a lengthy trial against each conceivably treatable disease could be short-circuited by learning the biological basis for how interferon works, he explained.

Basically, three different classes of interferon (leukocyte, fibroblast and immune) are produced by their respective cell types, and each class consists of several sub-types with slightly differing chemical structures.

It seems likely that malignancies and diseases would be most effectively subdued by the type of interferon produced in cells most closely associated with the diseased tissue, Merigan said.

There is already evidence, he noted, that tumors of the blood are more responsive to leukocyte interferon and solid tumor cell lines in tissue culture are most sensitive to fibroblast interferon.

In some cases the different interferons operate synergistically, two or more together having a greater effect than expected, Merigan said.

A newly discovered type of interferon, known as gamma, is particularly intriguing. Chemically it is quite different from all other interferons and appears to interact with receptors on the cell surface in an entirely unique way, Merigan said. Its early clinical testing is just now beginning.

Viral diseases that have already shown some promise for treatment by interferon are conditions such as herpes zoster, herpes simplex, cytomegalovirus, rabies, and chicken pox; Merigan and colleagues are also examining interferon's ability to prevent spread of disease in patients whose immune systems are suppressed, such as those who have received organ transplants or who receive cancer-fighting immunosuppresive therapy.

Even multiple sclerosis is being studied for potential response to interferon.

At Stanford, malignancies currently under study with interferon include breast cancer, nodular lymphoma, nasopharyngeal cancer, and Kaposi's sarcoma.

Ultimately, interferon likely will be most useful in suppressing and treating certain types of chronic viral infections (such as hepatitis B), in supplementing conventional anti-tumor methods in certain types of cancer, and in controlling or preventing some acute viral diseases (such as the common cold), Merigan predicted.

"But there's still a long road ahead for the patient who is afflicted with one of these diseases," Merigan emphasized. "Right now, we can only consider interferon as a compound with biologic activity. Until it's completely confirmed in rigorous tests to extend life or to extend the disease-free interval, we just don't have sufficient assurance to promise effective interferon therapy for any disease."

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END ADVANCE FOR RELEASE FRIDAY, MARCH 26

Mailed Monday, March 22, 1982.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NUTRITIONIST SAYS DIET IS CONSTANT LIFE-AND-DEATH MATTER FOR KIDNEY PATIENTS

STANFORD—

Registered dietician Janet Cecchino, of Stanford University Hospital, can't think of an area where nutrition plays a more critical role in overall medical care than in the treatment of kidney disease.

That's why she chose, while completing her degree at U.C. Davis several years back, to specialize in the field of renal nutrition.

"I felt it was the area where I could do the most," she says, explaining that her patient load at Stanford's Dialysis Center is usually between 35 and 50 at any time.

Her patients, says Cecchino, fall into two categories of renal disease. With chronic renal disease, there is a slow loss of kidney function over months, years, or even a lifetime.

With acute renal failure, says Cecchino, there is a sudden shut-down of kidney function within a matter of days. This is usually caused by physical trauma or stress.

"In these cases," says Cecchino, "the kidneys will usually return to functioning within several weeks."

Healthy kidneys excrete all the waste products of the body and regulate salt and water balance, acid-base balance, and other body functions, explains Cecchino.

"They also produce a hormone which stimulates red blood cell production, and convert vitamin D to its active form.

"Renal failure occurs when all of these processes either stop, or drop to a minimum level not compatible with life."

The way a dialysis machine works is to circulate the patient's blood through an artificial kidney, where waste products are removed by diffusion into a washing solution.

"But the machine is not a replacement for a kidney," says Cecchino. "There are still certain things it won't do."

For one thing, she points out, real kidneys function 24 hours a day seven days a week, whereas patients undergo dialysis only three times a week, for three to five hours each time.

Therefore, the day or two in between dialysis sessions is a crucial time for patients, Cecchino says. If they neglect the guidelines of their special diets, they may gain lots of weight or attain dangerously high potassium levels.

The three key requirements of her patients' diets, says Cecchino, are: to restrict salt (sodium) intake; to restrict potassium intake; and to restrict liquid intake depending on how much urine is passed.

"My whole job at the Dialysis Center, really, is to counsel and educate patients so they stick to their diets."

To avoid salt, she says, kidney patients are not supposed to eat commercially prepared Chinese food, Italian food, Mexican food, excessive cheese, canned vegetables, canned soups, or salty snack foods.

A potassium level which gets too high can lead to cardiac arrythmias (irregular heartbeats) and eventual cardiac arrest. And potassium is found mostly in many fruits and vegetables—foods Californians love to eat, notes Cecchino.

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Kidney patients, she says, are always on large doses of vitamin B (folic acid) as well as a multivitamin, in order to supply nutrients left out of their meals and replenish those lost to dialysis.

One cause of chronic renal failure, says Cecchino, is hypertension. To control it is an important prevention measure. Another condition leading to such problems is diabetes. In some cases, a predisposition for kidney disease is inherited. "And in other cases we don't know what caused it."

For the more than 50,000 Americans on dialysis today, says Cecchino, an increasing worry is bone disease as longer survival becomes common with the new technology.

"Their kidneys are not producing the active form of vitamin D, a requirement for healthy bones." Luckily, she says, there are now several types of vitamin D preparations on the market which are given to long-term kidney patients.

Another problem affecting bones, says Cecchino, is an overaccumulation of phosphorus in the blood which binds to the person's calcium supply, in the long term creating a calcium deficiency and a resultant overactivity of the parathyroid gland.

This is why most of Cecchino's patients, she says, take phosphate "binders" with their meals, and/or decrease their intake of milk and dairy products.

How well do Cecchino's patients follow her instructions?

"I get frustrated a lot," she concedes. "I have probably fewer than 10 patients who comply with everything in their diets."

As a result, she says, her job entails a lot of repetition each month when the patients have blood work at the lab.

Some of her dialysis patients, says Cecchino, have had kidney transplants at Presbyterian or U.C. San Francisco Medical Center. The surgical procedure involves transplanting one kidney either from a cadaver or a family member of the patient.

Those who have successful transplants, says Cecchino, still face dietary restrictions, mainly due to the side effects of steroids they take to prevent rejection.

Besides her work at the Dialysis Center, Cecchino sees patients at the renal clinic Wednesday mornings. "These people have varying degrees of renal insufficiency, and many are already on special diets." It's been shown, she says, that a rigorous restriction of protein intake can often slow the progression of renal failure.

Nobody yet knows, says Cecchino, how long a person can live on dialysis, since the treatment has been available for only about 20 years. Some patients so far have survived for that long.

Cecchino received her training in renal nutrition during a graduate internship at the Ruth Presbyterian St. Luke's Medical Center in Chicago.

She has been at SUH for two and a half years, where before serving as renal nutritionist she worked in general medicine. Even now, Cecchino really has two positions, working part-time with surgery patients. "But renal nutrition is my true love," she admits.

Cecchino is a member of the National Kidney Foundation, which has a section called the Council on Renal Nutrition.

She is now busy as publicity and fund raising chairperson for a scientific meeting of the Council, on the medical and nutritional management of renal disease, to be held in San Francisco this June.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

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PAJARO DUNES PRESS BRFIEFING SATURDAY, MARCH 27

Science writers/editors:

Last month, Stanford University announced that the presidents of five major research universities would meet privately this week with their counter parts from several high tech firms as well as faculty members to hammer out suggestions for guiding the complex relationships that have sprung up between industry and academe. The meeting, organized by the presidents of the University of California, Caltech, rvard, MIT, and Stanford, will be held in Pajaro Dunes on the Monterey Peninsula.

Because of a high-level of media interest in this meeting and in accordance with our earlier intentions, we have scheduled a press briefing at the end of the conference to discuss whatever conclusions the participants may reach.

The briefing will be **2 p.m. Saturday, March 27 in Pajaro Dunes.** Stanford University President Donald Kennedy and Public Affairs Vice President Robert Rosenzweig will be available to discuss the meeting and answer questions. Other attendees who wish to meet with reporters have been asked to join.

March 22, 1982 —30— mnc

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: The following is embargoed for release for AM newspapers Thursday, March 18 to coincide with publication in *The New England Journal of Medicine*)

STANFORD—

New medical treatments often are denied to the public or provided at inflated costs because of flaws in the way health care is evaluated nationally, a Stanford University researcher has concluded.

To remedy the problem, Dr. John P. Bunker and his colleagues have proposed that a non-governmental Institute for Health Care Evaluation (IHCE) be established to unravel whether a particular treatment, for example, is a cure, an experimental effort, or even fraud.

Bunker is a professor of family, community and preventive medicine and director of the division of health services research at Stanford. His health evaluation blueprint was set forth in a two-part series appearing in the March 11 and 16 issues of *The New England Journal of Medicine* and was based on a report submitted to the Congressional Office of Technology Assessment.

Co-authors of the articles were Jinnet Fowles, PhD, a communication specialist in Bunker's division of health service research; and Dr. Ralph Schaffarzick, medical director of Blue Shield of California and a member of the Stanford clinical faculty.

"The absence of a consistent and explicit policy for reimbursement for new technologies results in the escalation of charges and at the same time provides incentives to conceal innovations," the authors concluded in the second article.

In addition, since there is no clearing house for evaluating new procedures, there is no consistent basis for insurance carriers, doctors or the public to learn whether a new technique, drug or other innovation is effective, he said.

Currently, experimental procedures—those whose outcomes are truly unknown—are generally not covered by private or other non-governmental insurance carriers. Therefore, doctors are given an incentive to disguise new techniques when submitting claims, the authors contend. For example, doctors performing an experimental procedure might submit an insurance claim for a similar but more conventionally accepted procedure.

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Computerized billing codes, Bunker contended, also tend to discourage realistic categorizing, since doctors may tend to lump innovative procedures into outdated and oversimplified preexisting codes.

The lack of a review process has caused other difficulties. Medical fees have escalated as a result of physicians submitting larger bills for new procedures—which may be simpler and less costly than the treatments they replace.

The authors have proposed that the new institute should be managed by representatives of academic and practicing physicians, health care insurers, the government and the public, including representatives of employer and employee groups.

The institute would try to fulfill four major objectives:

•Development of a uniform data base — So that treatment data can be analyzed, the institute would need to develop guidelines for filling out patient evaluation forms. Data would be stored locally and made available anonymously to ICHE researchers.

•Authority to serve as a clearinghouse for innovation — The institute would have the authority to survey professionals to learn about proposed or needed innovations in their fields.

•Participation in clinical trials or retrospective studies — "Clinical trials, although complex, time-consuming, and resource-intensive, remain our best method of determining the relative values of alternative medical technologies," the authors said. The current number of trials, often funded by the National Institutes for Health, is too small to serve the needs of change, the article contended.

•Returning results back to participants — The medical community and public would need to acquire the data generated by the ICHE in order to make innovations.

Bunker recommended that ICHE be a nonprofit group funded by insurance carriers through voluntary contributions.

The need for the group is more urgent, the article contended, now that federal sources of health care planning funds may be drying up as part of a general federal cutback.

(Editors, news directors: Dr. John Bunker is available for interviews and may be contacted directly at (415) 497-6426)

March 17, 1982 —30— mg21

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Dr. Bruce A. Reitz has been appointed professor and director of the division of cardiac surgery at the Johns Hopkins School of Medicine effective June 1.

Reitz, recently promoted at Stanford to associate professor of cardiovascular surgery, will also serve as chief of cardiac surgery at Johns Hopkins hospital.

Dr. Norman Shumway, Frances and Charles Field professor of cardiovascular surgery and chairman of the department of cardiovascular surgery at Stanford, said in a statement, "Johns Hopkins is gaining a fine surgeon and an excellent academician. We will miss Dr. Reitz, but it is gratifying for us to see such worthy faculty members being given an opportunity to take charge of cardiovascular surgery departments at institutions elsewhere."

Shumway noted that Stanford-trained faculty members have gone on to direct at six cardiovascular surgery programs at major medical institutions throughout the nation and overseas.

The heart-lung transplant program will continue at Stanford under the direction of other faculty members, Shumway explained.

Hopkins said a search team unanimously recommended Reitz to replace Dr. Vincent L. Gott, who has headed Hopkins' cardiac surgery division since it was established as a separate division in 1965. Gott has asked to be relieved of his administrative duties but will continue his surgery and clinical research, Hopkins announced.

Reitz, 37, was appointed assistant professor of cardiovascular surgery at Stanford in 1978. A native of Seattle, he received his M.D. degree at Yale in 1970. He served his residency at Stanford from 1974 to 1978, including a tour as chief resident in the cardiovascular surgery program.

In addition to transplantation, Reitz' clinical interests include general cardiothoracic surgery with a special interest in pediatric cardiac surgery.

Reitz will be joined at Johns Hopkins by Dr. William A. Baumgartner, 34, who will become an assistant professor of cardiac surgery. Baumgartner, currently a clinical assistant professor of cardiovascular surgery at Stanford, served as chief resident in cardiovascular surgery at Stanford in 1977-78 and chief resident in general surgery in 1980-81.

He is a graduate of the University of Kentucky Medical School.

March 16, 1982

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mg21

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

VOLUNTEERS NEEDED FOR DIABETES STUDY

STANFORD—

Volunteers are needed for a study designed to determine if the abnormalities associated with adult-onset diabetes can be corrected with insulin treatment. This research is being conducted in the Stanford University Clinical Research Center, under the direction of Dr. Gerald M. Reaven, professor of medicine, and associates.

The goal of the study is to determine if optimum diabetic control with insulin will improve the insulin sensitivity and lipid abnormalities in patients with adult-onset diabetes. To eliminate much of the trial and error in establishing the optimum daily insulin dose, a non-implantable artificial pancreas and a new portable pump system will be used to exactly determine each patient's daily insulin requirements.

Participants will administer their own insulin as outpatients for a period of six weeks and then be retested. Subsequent treatment will be evaluated individually and may include diet, oral medication, or insulin therapy.

Prospective participants must have adult-onset diabetes. They should never have been on prolonged insulin treatment, and be no more than 25 percent overweight. Volunteers accepted into the study will receive a complete medical examination including laboratory tests, dietary consultation, and education in diabetes management.

During the study, insulin and syringes will be provided. The program requires approximately 14 days of hospitalization within the six-week study period. No charges will be made to participants.

Anyone interested or wishing further information should call Dr. Michael Greenfield or Dr. Claude Lardinois at 858-3933, 9 a.m. to 5 p.m.

3-15-82 —30— 207

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD TO EXPAND CANCER RESEARCH AND SERVICE CAPABILITIES

STANFORD—

Stanford University Hospital has been granted its first Certificate of Need (CON) by the state of California, for a $2,900,000 project to upgrade and expand its radiation therapy service capabilities.

The project, first recommended for approval by the Santa Clara County Health Systems Agency in January, involves aquiring two new linear accelerators—the high technology radiation equipment used in cancer treatment—and a multi-purpose simulator, which serves as a computerized guide for this treatment.

The CON, issued late last month, is the state's approval to go ahead with the project. A CON is required only for capital expenditures of over $400,000 or renovations over $600,000, or when a special service such as radiation therapy is involved, explains Ron Hill, assistant director of SUH and director of Health Services Planning. The idea behind the 1976 federal legislation requiring CON review, he says, is to promote cost containment in health care.

"Basically," he says, "we argued the special needs and circumstances of a tertiary care, teaching institution which is also an international cancer research center."

(A CON was never required at Stanford before, he explains, because of the non-reviewable nature of earlier projects and the existence of a special "certificate of exemption" which covered the entire Phase I building.)

Currently, says Hill, the Hospital has three low energy linear accelerators. The approved project will bring the number up to four by allowing the Hospital to replace one of the existing machines with a new low energy accelerator, as well as to acquire an additional more powerful, medium energy accelerator with electron beam capability for use with special cancer cases. Also, the simulator currently used with the obsolete accelerator will be replaced.

Therefore, the project is both a replacement and addition to the existing Radiation Therapy Division, headed by Dr. Malcolm Bagshaw, professor and chairman of Radiology.

A fourth specially shielded vault will be built in existing departmental space to house the medium energy accelerator, while the other new equipment will be accommodated without necessity of major remodeling.

Now that the CON has been granted, says Hill, the construction packet is being put out to bid. "We've already made some progress looking for architectural firms and structural engineers."

The new linear accelerators will be purchased from Varian Associates, and the simulator from a Canadian company.

The hope in having a medium energy (20 megavolt) accelerator, says Hill, is to not only increase patient care potential, but also facilitate certain research projects in the Division of Radiation Therapy.

3-15-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NEW HOSPITAL UNIT WELCOMED AS CORNERSTONE

STANFORD—

A new unit for patients with compromised immune systems, who need special protection from exposure to germs and other harmful particles, has been opened at Stanford University Hospital.

Called the "compromised host unit," it includes six private rooms on the Hospital's east wing. The rooms, equipped with filtering systems to provide an extra clean environment, will be used mainly by patients with acute myeloid leukemia who are especially susceptible to infections, and by future patients of a planned bone marrow transplantation program, to be launched at Stanford in the near future.

Dr. Stanley L. Schrier, professor of medicine (hematology) and chief of the Division of Hematology, first suggested such a unit in 1974. He explains that acute myeloid leukemia is a devastating form of cancer, often requiring 30 to 36 days of hospitalization in isolation, and posing a great risk of death.

"It wasn't until the late 1960s or early 70s that certain effective drugs became available, but unfortunately both the treatment and the disease cause these patients to be immunocompromised."

Their immune systems are not good at fighting off infection, he explains, because their white blood cell count is "unbelievably low."

According to Dr. Kenneth Melmon, professor and chairman of the Department of Medicine, the compromised host unit is "also a cornerstone in our plans for bone marrow transplantation, since patients in that type of program are almost all compromised hosts."

He says, "Such a program could not exist without a unit such as this. And an institution like Stanford should not be without such a program."

Speaking at a March 11 open house, Schrier said, "This unit is designed for patient comfort, to provide a nourishing, favorable environment for them and their families."

He also pointed out, "I think it's a success largely because clinical faculty from the University have worked very closely with the Hospital on an identified goal. We all had to work hard and make the necessary compromises."

The unit will make use of such techniques as the filtration system mentioned above, rigorous hand washing, and slightly positive air pressure (to direct air flow away from patients). Richard Booth of Medical Center Facilities was project director of the necessary renovation, which began last August.

Anna Olsen, R.N., will be clinical nursing coordinator of the compromised host unit, which will be staffed by nurses with specialized training and two medical directors yet to be named.

Olsen attested, "It's really been difficult for us to take care of these patients in the past. This new environment should make it possible for all health professionals to work together as a team."

The station support space is not yet ready, she said, while the solarium is still being planned as a comfortable area for family members. Three of the patient rooms are already occupied, and the unit is functioning with the temporary help of the East 1A support station.

Judy Lanigan, R.N., assistant director of Nursing for medical/pediatrics, thanked the surgical region for housing displaced patients during the period of unit renovation.

3-15-82

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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SPECIAL GROUP FOUND TO INCREASE MORALE AND COOPERATION AMONG HEALTH PROFESSIONALS

STANFORD—

Like in many high-powered and stressful hospital units, the doctors in the Stanford University Hospital intensive care nursery often complained about their nurse colleagues to the director, Dr. Philip Sunshine.

And not surprisingly, nurses there voiced a seemingly equal volume of complaints about the doctors they worked with to their supervisor, clinical nursing coordinator Kathi Palange.

"Dr. Sunshine and I really got tired of talking to each other about second-hand complaints," says Palange, so last summer the two organized a nurse-physician group for the airing of grievances and problems.

Informally led by the unit's social worker Charlene Canger, the group sessions represent a new, structured beginning for a project first attempted in the mid 1960s.

Explains Sunshine, "The need for group discussions was recognized back then, specifically during a maternal/infant interaction study in the nursery, when misunderstandings developed with the nursing as well as the medical staff."

The study, he says, involved allowing mothers into the nursery for a four-month period to help care for their infants. This was followed by another four-month period without mothers being allowed in the nursery.

"We wanted to see if letting a mother in would lead to increased risk or danger to her baby, or if, by contrast, it would foster healthier psychosocial bonding between the two."

When researchers discovered a sort of competition developing between mothers and nursing staff to care for the babies, they decided to initiate discussions with the nurses, recalls Sunshine. At first, he says, the sessions were meant to resolve the specific problem at hand and to request the nurses' help in gathering data.

"But naturally, people started talking about other things, including ethical issues and staff problems." Psychiatrist P. Herbert Leiderman conducted the sessions for about two years, until then unit social worker Rose Grobstein took over.

The "Rose meetings," as they were called, comprised a loosely structured program—at times scheduled, at times specially called to deal with a crisis situation.

Grobstein, presently chief pediatric social worker at the Hospital, says that while there was never a strict agenda, often specific patient cases were discussed in depth by the nursing staff, house staff, and faculty physicians present.

Says Sunshine, "We discussed issues like how to go about discontinuing care when there was no hope for a baby; and how to communicate with community physicians and parents."

One crisis he recalls happened about three years ago, when nurses felt there weren't enough doctors on call at night to deal with more and more sick infants.

"We tried to remedy this by having the attending physician or the neonatology fellow conduct rounds at 10 p.m. But it wasn't enough."

Finally, he says, the Hospital arranged to have one extra resident each night in the nursery. And their necessity made clear, the group sessions continued on a regular basis until managerial and staff changes in the nursing program forced an extended interruption.

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Now the group meets monthly, and both Sunshine and Palange are enthusiastic that similar inter-professional groups could be productive throughout the Hospital, particularly in intensive care units where tensions may run highest.

Sunshine says the program "has been fantastic" at ironing out differences, but requires an adjustment by the faculty, graduate fellows and housestaff.

"It's really threatening to the younger physicians, because the nurses are telling them when they screw up... The only way it's going to work is if the senior faculty are actively involved in the discussions," he says, indicating that so far they have been.

Palange says the dialogue has helped reduce the feeling that nurses and doctors are in two separate camps.

"It's shown through discussion that nurses are different from one another, and doctors are different from one another, too.

"... It's really made a difference in the general morale of the unit, since it's shown there is an alternative to having physicians go into their own group to gripe and nurses grumbling to each other."

She adds, "We've seen the dialogue which is begun in meetings carry on throughout the month."

(The sessions, of course, supplement the regular nursing staff meetings and management meetings where, says Sunshine, problems can often be "nipped in the bud.")

An example of an issue which the group has sorted out in recent months is the rising incidence of "retrolental fibroplasia" (RLF) among the premature infants.

RLF, explains Sunshine, is a condition in which the underdeveloped vessels of the retina in certain premature infants grow in an aberrant way. If not surgically treated, it can eventually lead to blindness.

"There were a lot of bad feelings and even some guilt at the larger number of infants with RLF," says Palange. "But when we talked about it, we were able to determine that the problem was an unfortunate but currently unavoidable byproduct of saving increasingly smaller and smaller babies." (Sunshine says an alleviating ingredient has been greater awareness of the situation through involvement by members of the Division of Ophthalmology).

"This was an excellent example of nurses and doctors putting our heads together and discussing a problem facing us all, while at the same time relieving tensions caused by a lack of knowledge," Palange says.

Adds Sunshine, "We also realized we'd be seeing more of this particular disorder and became more alert in looking out for it."

Though attendance at the meetings is optional, says Sunshine, "the room is always packed." At least 20 persons attend each time. This includes personnel other than nurses and physicians, such as respiratory therapists, who are also invited to attend.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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AUSTERITY BUDGET APPROVED FOR MEDICAL SCHOOL

STANFORD—

Stanford University School of Medicine will have a balanced operating budget in fiscal 1982-83, but austerity measures were necessary to achieve it.

Approved Tuesday by the University Board of Trustees, the School's $26.6 million budget will be 8.5 percent higher than the current year's $24.5 million. The operating budget, which excludes sponsored research and Faculty Practice Plan, covers faculty and staff salaries and benefits, academic support services, administration, maintenance, utilities, and the Lane Medical Library.

According to Dr. Lawrence G. Crowley, vice president for medical affairs and acting dean, a long-range forecast had predicted that two of the largest expense categories—salaries and staff benefits, and utilities—have been growing much faster than income.

Consequently, Crowley explained, the budget strategy for the coming year was to fund at the necessary levels those functions controlled centrally—utilities, operations and maintenance, and academic support—while reducing the growth rate in administration and obliging academic departments to increase their reliance on departmental gifts and other discretionary funds.

Crowley said very limited growth in faculty size is anticipated in the new budget. Faculty and staff salary increases will follow the general University guidelines, and internal inequities and market comparisons will be addressed as needed.

(Under the general guidelines faculty salaries would increase 10.5 percent, with raises above that level in special cases. A general range adjustment of 10 percent plus step or merit zone increases is proposed for nonexempt employees.)

Energy costs, a large budget item, are predicted to increase 16.8 percent. Utility bills comprise 13 percent of the Medical School's operating budget for the coming year.

Sources of income for the School's operating budget include indirect costs on sponsored research (40 percent); tuition income (19 percent); and income from the Faculty Practice Program (7.4 percent). The balance of income is provided by unrestricted gifts, earnings on reserves, and the payout from endowment.

"Attention in developing the new budget," Crowley said, "has been focused on the total financial needs of the School over the next several years.

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"These needs include not only monies to fund the operating budget, but also funds to increase the operating reserve and funds for capital projects."

Noting that already several major capital projects have been planned and approved by the trustees, Crowley said the reserve must be maintained and replenished so that future projects can be funded.

About $2 million or more per year, based on the present value of the School's capital facilities, will have to be put in reserve each year, Crowley said.

"Because of the current financial climate, the amount budgeted for capital needs reaches about half that goal," he added. "But we believe it is a significant step in the development of a responsible capital plan."

Crowley said the School is also establishing "a research facilitation fund" beginning with the 1982-83 budget. This is in anticipation of potential shifts in federal research policy and funding levels.

"The fund is designed to provide interim one-time funding to researchers who have had their grants reduced and who have no other resources available to assume the short fall," he said.

Crowley pointed out that although the faculty has done well in past periods of tight federal funding, nearly all of the Medical School's income sources are highly vulnerable to changes in government fiscal policies.

"Medicare affects the Faculty Practice Plan's income," he said. "Research support affects indirect cost recovery, and interest rate fluctuations affect earnings on the School's reserves and endowment while tax laws affect gift income.

"We, therefore, must continue to monitor income and expense to remain viable as an institution during the difficult times ahead."

3-9-82

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: Photos available on request if not included).

STANFORD—

Sheldon King, the new director of Stanford University Hospital, is clearly at home in the academic world which surrounds his hospital environment.

"I've been involved in health care policy formation at the state and federal levels, but that has been an interest secondary to hospital management," he says.

"I believe I do understand what it takes to make a large teaching hospital run effectively. That's what I'm here for, and essentially it is what I'm interested in professionally.

"But I keep in mind the unique characteristics of a teaching institution and have always felt that teaching actively helps me to understand the academic interest better. Working with students is something I enjoy."

King, 50, has spent all his working life in teaching hospitals, starting as a $35 a month administrative intern at Montefiore Hospital in his native New York City.

"I've worked only in teaching hospitals, and over time I understood that this is where most of the progress in American medicine takes place. I want to continue to be part of that field."

His current focus is a 663-bed hospital which must delicately balance the research and teaching needs of a university with the patient care needs of an urban community.

King's job, among other things, is to help keep that balance.

The first scene, that first teaching hospital assignment at Montefiore, was interrupted after a few months in 1953 when King was drafted.

"But I had discovered that I enjoyed that kind of work and so I applied to the Yale University graduate program while I was in the Army."

Back in the hospital world, King served in several slots, including director of planning at The Mount Sinai Hospital in New York, then moved to Albert Einstein College of Medicine—Bronx Municipal Hospital Center as executive director from 1968 to 1972.

Then he moved West. Until he came to SUH last November, King served for almost 10 years as director of hospital and clinics at University Hospital, University of California Medical Center in San Diego.

"At the risk of sounding immodest, my main accomplishment was assembling and leading an administration which worked with the faculty to turn that facility from a county hospital into a signficant teaching hospital."

Then it was time to move on.

"I think that when someone has been a major teaching hospital director at any institution for a significant period, it's time to take a very careful look and decide whether there is any point in continuing there.

"i think you can run out of fresh ideas which can be applied to the same place. You tend to become less creative if you stay in one place if the major challenges have faded.

" . . . The way I felt was that after the number of years I had worked in the governmental sector, I was looking for a system which was flexible and freer to direct its own future. I believe that is what Stanford represents and does.

"The involvement of the president of the University in this medical center was a signficantly positive point.

" . . . Frankly, Stanford was one of the few places I felt I could live and work, and when the opportunity presented itself, I took advantage of it."

Leaning back in his chair, King reflects on a lot of specific issues. Since he's only been on the job since last Nov. 9, he admits a bit of conflict between a need to study and learn his new arena and a desire to move ahead. He constantly reminds himself that his job indeed is to *run* an efficient, effective hospital.

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Yet, King concedes that he cannot divorce himself from larger issues, like serving on a reasonable number of national health advisory committees (including the Council of Teaching Hospitals).

He has written papers and articles on techniques of management. He is a proponent of what he calls the management planning program, a system of leadership in which annual goals are developed by the director and the staff and then negotiated as specific objectives to be accomplished by individual staff members.

The goals are listed on checkoff sheets, providing a clearcut record of expectations and a method for administrators to judge the accomplishments of subordinates through benchmarks and measurable results.

King quickly acknowledges that he is too new to have completely firmed up all specific policy directions for his new hospital.

But he emphasizes that his general views on how teaching hospitals should be run are firmly in place on such issues as the role of the institution in the community, the relationship of a hospital with doctors, and the issue of providing balanced health care programs.

On the latter, King firmly believes that Stanford can combine its role as a tertiary, or highly specialized facility, with its role as a community hospital.

"I think we can do both . . . that with 650 beds we're large enough."

The Hospital Modernization Project (HMP) will enable SUH to combine both roles more effectively, King believes, and he points as an example to the expansion of the operating rooms from 16 to 24 as part of the sweeping improvement project.

Key to providing a balance of community and research services is a harmonious relationship between the full-time faculty and local physicians in private practice who treat their patients at Stanford.

"There's a board committee looking at access now, and I think that is going to be an extraordinarily important committee.

"I think that access is an essential issue for our community physicians."

But another issue, said King, is to increase patient amenities to ensure that Stanford will continue to be a hospital of choice for the community.

"Now I'm not necessarily talking about providing lobster and filet mignon at every meal, but I am talking about providing an improved environment. Some improvements can be made at little or no cost.

"Of course until the HMP is completed, the Hospital is limited physically. It doesn't take more than a glance to tell you that the rooms are too small—patient care rooms are just too small.

"How much can we do about that? I don't know yet. But certainly there are some basic things which could make a lot of difference.

"The plant needs a general freshening. I think it needs a general spruce-up. I think a number of the service areas need work—that's where an emphasis should be placed. Much of our task is not just changing things physically, it's the way people relate to patients.

"And certain other changes might not even require any money. For example, I think there is a failure to understand the Hospital bill. Now to produce a bill that the patient can understand doesn't cost any more than one they can't understand. Is that a patient amenity? I think it is."

A sensitive issue for King is balance among clinical programs:

"What I pushed for in San Diego was a hospital that was generally excellent. Maybe it really had no superstars. There were several things (including a neonatal intensive care unit) which they did extraordinarily well. Perhaps not as well as Stanford does the things it does extraordinarily well. But as a hospital it was solid at every level.

"I'm not sure that we are quite as well balanced at this point, meaning that quite frankly, some of our programs are outstanding, while others aren't."

" . . . One wants to preserve the excellence that already exists. But it has to be done in an environment that gives other programs a chance to develop, too. So the answer is probably that there will be compromises that haven't existed before and inevitably some reshifting in priorities.

"It comes back to being able to develop a medical center that fulfills one of its main purposes, which is the education of health care professionals. You do not educate medical students and housestaff well in anything other than an environment which is well balanced, one where patient care is our primary concern."

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3-3-3 King believes that his role as a nonmedical person is crucial in bringing balance, partly because doctors may have a blind spot when it comes to management and tend to focus exclusively on their specialties.

"And that's also one of the reasons departments become singularly successful, but it's also why you need a general manager—to make sure the priorities and the allocations are reached in a reasonable way."

Specifically, King would seek to attract new kinds of patients, including the elderly who are making up an increasingly larger proportion of both the nation's and the Peninsula's population. And in a second category, "I think we're going to have to relate to HMO (health maintenance organizations, prepaid plans) populations in different ways than we do now.

"I don't know what all the conditions are, but it's clear that in a competitive market with the continued emphasis on prepayment plans and on buying the least expensive comprehensive plan possible, we're going to have to get into that business either cooperatively or independently—and that's an issue both for the faculty and for the Hospital.

King also cited Stanford faculty and staff as potential patients.

"We ought to be able to make this place so attractive to them for care that they don't go anywhere else. I don't know that we do that yet.

". . . Again, it's really an issue of balance and an agreement on goals and directions. After these are determined, we must proceed towards our objectives in an integrated and measurable way. That's simple to say, but I've not experienced it to be simple to do.

"That's the challenge, and I wouldn't have come here without challenges. It's stimulating to come to a hospital that's not in crisis, where the opportunities lie before us."

And on his leadership role there appears room for subtlety but not ambiguity.

For example, King's office is decorated with professional quality photos he has taken of his Indian pottery collection. ("I never thought of the collection as a hobby, and I certainly didn't think of the photos I took for insurance purposes as a hobby. But I guess they are.")

His office wall also includes a painting of a tiger with flattened ears.

"The position of those ears is important," King explains. "That means he's alert, he's ready and tough. I do feel that represents my own attitude, at least at times. I have a habit of pointing out the signficance of that painting to friends on the faculty only when necessary."

King says he believes in participation in management by as many of the staff as possible and feels that department heads—not top administrators—are the key management group in the Hospital.

"I don't know whether we tap them for the advice that we ought to. There's a tendency for hospital directors to try to make decisions at some lofty level. I think that's an error.

". . . (But) I am also not a democrat. I believe there is a participatory process—but without voting. And if I decide after listening to everyone that I should do what two-thirds think is not going to be done, we're going to try it anyway. Because that's what I'm here for.

"I believe in delegating as much as I can to anyone who will take on authority and is capable of making decisions intelligently, responsibly and in the context of what the overall plan is. But I intend to be part of the process."

For the future, King believes that perhaps too many levels of management exist and that some long-term restructuring might be desirable. But he adds that no precipitous changes are in the offing.

"I would hope to try to establish an environment in which people are less suspicious of each other and perhaps prepared to work together."

King's move to Stanford involved some personal sacrifice, since his family will not be able to join him until next summer, when his daughter will finish high school and his wife will have fulfilled her work obligations. King's wife, Arden, is administrator of the San Diego Psychoanalytic Institute, "and has gotten to the stage in her career where she's ready to change jobs, too."

The Kings' older daughter, Tracy, is 20 and a junior at Princeton, majoring in American literature and American studies. The 17-year-old daughter, Meredith, is a senior at La Jolla High School, a promising volleyball player who had considered seriously applying to Stanford before her dad decided to move north. A son, Adam, 14, "is looking forward to coming here. He's the only one of the children who will be affected by the move in terms of where he goes to school."

March 9, 1982

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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MEDICAL SCHOOL COMMITTEE WANTS TOUGHER CONSULTING RULES

STANFORD -

A special committee of the Stanford University School of Medicine has recommended that faculty members be required to disclose their private consulting ties.

The committee wants tougher rules not only because outside faculty activities have the potential of distorting the Medical School's educational objectives, but also because the faculty plays a unique role in the development and application of new diagnostic tools and therapies ultimately tested and used on patients.

"Certain abuses of consulting privileges," explained committee chairman Eric Shooter, "could diminish public trust in biomedical research, in its practitioners and applications."

Shooter, professor and chairman of the Department of Neurobiology, headed the eight-member faculty committee which formulated the newest recommendations. They will be debated by the faculty and the School's executive committee before they are approved by the dean of the Medical School and the vice president for medical affairs.

The committee was appointed a year ago by Dr. Lawrence G. Crowley, vice president for medical affairs, to examine the rules that should govern nonclinical consulting activities of the full-time medical faculty in light of Stanford's consulting policy.

Under Stanford's policy, faculty members with full-time 12-month academic appointments may consult one day per week or 52 days per year. Potential conflicts of interest must be disclosed "upon request" from the relevant dean, the provost or the president.

The Shooter committee agreed with the University policy and its definition of consulting, but determined that disclosure "upon request" may not be sufficient to cover possible conflicts of interest in the Medical School.

The faculty "should report their consulting activities to the department chairperson on a continuing and formal basis," the committee suggested.

Disclosure reports could be made on a simple standard form that would elicit information concerning the nature and scope of the faculty member's nonclinical consulting activities.

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"These reports," the committee added, "would be reviewed by department chairpersons who may request additional information. A faculty member would be expected to answer relevant inquiries regarding financial arrangements and commitment of time to . . . consulting activities."

Department chairmen would submit reports about their own consulting to the dean.

The committee expressed concern about potential conflicts that may arise during clinical trials in which faculty members test new procedures, drugs, or equipment.

"There is a reasonable likelihood that materials being studied in the trials will be supplied by commercial entities with which they (faculty) consult or in which they have substantial financial interest, or by companies that are competitors of the companies with which they consult.

"To blunt or eliminate the perception of conflict of interest, but not to deny the opportunity to conduct such trials to faculty members, we recommend that the Human Subjects Experimentation Committee devise a procedure which discloses the relevant consulting or financial interests of the faculty member . . . during the review of experimental protocols."

The committee listed examples of practices that it believes present potential conflict of interest or commitment. These include:

- instances in which a faculty member directs students into research devised principally to serve his or her interests and from which there may be financial gain.
- Placing the financial interests of an outside firm ahead of those of the University.
- Transferring the fruits of University research without approval to a commercial enterprise from which a faculty member receives consulting fees.

"Less blatant, but no less serious to the intellectual aims of the School are activities which create conflicts of commitment, that is situations in which . . . creative energy that faculty members devote to consulting compromises their commitment to University responsibilities," the committee said.

Conflicts of commitment, the committee added, can arise not only from industrial consulting, "but also from excessive teaching or collaboration at other institutions, commercially-run postgraduate courses, participation in nonscholarly writing, movies or moonlighting."

In addition, the committee addressed an issue which is unique to the Medical School. While all medical faculty members may engage in nonclinical consulting, the prevalent form of consulting for clinical faculty is when they are requested to assist a colleague on a case, provide a second opinion and so on. Under present rules, faculty clinicians must turn over their consulting fees to the Faculty Practice Program.

This requirement was imposed because of the need to protect the availability of teaching patients and the clinical income which supports in part the clinical departments and the operating budget of the School.

The committee said "now is an opportune time for an appropriate faculty group to determine if the two forms of consulting income are appropriate."

The School, it suggested, might consider "devising a mechanism, perhaps, but not necessarily analogous to the Faculty Practice Plan, for sharing nonclinical consulting income for the general purposes of the School."

The committee members included Paul Berg, professor of biochemistry; Stanley Cohen, professor and chairman of the Department of Genetics; John A. Collins, professor and chairman, Department of Surgery; Hugh O. McDevitt, professor of medical microbiology and medicine; Kenneth Melmon, professor and chairman, Department of Medicine; William H. Northway, Jr., professor of radiology; and John L. Wilson, professor of surgery and associate dean for faculty affairs.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NEW BANK MAKES LANGUAGE LOANS

STANFORD—

For Stanford patients who don't speak English, the Hospital environment can be extra frightening and relaxation nearly impossible.

It is for this reason that the Department of Community Relations has developed a "translator bank" of community members willing to volunteer linguistic assistance to patients when such need arises.

Although four professional Spanish interpreters, one deaf interpreter, and many bi- and multi-lingual Hospital employees regularly provide translation services, they cannot handle all the assistance needed in languages from all over the world, explains Jeanne Kennedy, director of Community Relations.

"And we never know how much help we'll need in a specific language. Any day someone might come in who speaks a language we've never dealt with."

Through the efforts of Kennedy's office, the Hospital now has a reserve of 52 volunteers representing 23 different languages to draw upon.

The number of times each volunteer will be asked to help is probably small, Kennedy says, perhaps only once a year. But the effect on the patient's welfare will be enormous, she predicts.

While the group may well increase in the future, the languages so far included in the bank are: Armenian, Brazilian Portuguese, Chinese, Dutch, Finnish, French, German, Greek, Indonesian, Italian, Japanese, Persian, Philippino, Polish, Russian, Serbo-Croatian, American Sign Language, Spanish, Swedish, Taiwanese, Turkish, Ukrainian, and Yiddish.

Volunteers vary in their degree of fluency, which is part of the information listed in the Translator Directory recently distributed in the Medical Center. Also included in the directory are the participants' available hours and phone numbers.

The Office of Community Relations, says Kennedy, is to serve as home base for the program, as well as the place to go when questions or problems occur.

An orientation program was held recently for the volunteer translators, to offer an idea of what kinds of situations may be encountered as well as possible ways to deal with them.

During the orientation, one volunteer shared a previous translating experience she'd had when the mother of a Finnish teenager who was about to undergo a heart transplant at Stanford couldn't have been more grateful for the supportive assistance she provided.

Many of the new volunteers, says Kennedy, are not new to translation, having participated in such programs at other hospitals. Several of Stanford's Auxiliary members have joined the group, which includes people from all walks of life.

Those with specific questions about the new translator bank should call Community Relations, at 497-7167, and ask for Marty Kortebein.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

HOME PROJECT GIVEN BOOST

STANFORD—

The Lowell Berry Foundation of Oakland has given $4000 to the Assistance League of Santa Clara County to be used by its committee on Housing of Medical Emergencies, HOME.

For about four years, HOME has provided subsidized housing at the Oak Creek apartments for a few Stanford outpatients and their families, according to financial and medical need.

Each of four furnished apartment units houses two people: the patient and a relative. The charge is much less than that of nearby motels or rental housing. Among the long-term patients who have benefited under the program are heart transplant recipients and people with cancer.

To support its activities, the Assistance League runs an on-going fund raising program in the form of a costume rental shop at its chapter house in Los Altos.

The Lowell Berry Foundation, established in 1951, generally supports religious, Christian-oriented programs, as well as some civic organizations. Berry was a 1924 Stanford graduate who demonstrated generosity towards the University throughout his lifetime. Among other gifts was the establishment of an endowment fund in the name of one of his daughters, Jayne Annette Berry.

Current directors of the Foundation chose to help HOME when they read an article about the program in Stanford's *Campus Report* last fall. Their gift arrived with no stipulations at the end of February, and has already been put to use refurbishing two of the apartments.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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COURSE EXPLORES MORAL DILEMMAS OF CRITICAL CARE

STANFORD—

In a classroom on the Stanford campus crammed with undergraduates, the young doctor takes the podium as the pre-class hubbub falls away. He begins: "In the last 11 days in the intensive care units of Stanford Hospital we helped four people die. As health professionals, we do not only fight death. We accept death when it is inevitable."

Clearly, this course is not the usual classroom fare.

The day's topic is death and dying; the course, offered through the program on human biology, is called "Intensive life support systems: present practice and moral issues." The syllabus is packed with highly emotional and controversial topics to make the squeamish cringe: coma, intensive care unit psychosis, the dying patient, withdrawing life support from the critically ill patient, cost-effectiveness of intensive care units.

But the students who signed up for the course are far from squeamish. Many of them are "pre-med," intent on entering medical school. They are hungry for knowledge about current medical practice.

The course was organized by Dr. Thomas Raffin, assistant professor and assistant chief of medicine and associate director of the Hospital's intensive care units, and Charles Weitz, a 4th-year medical student.

It is organized into three components: the biomedical technology that makes intensive care possible; the psychological, social, legal and ethical issues surrounding death and dying; and the costs of intensive care medicine.

"Through this course, we hoped to focus on the moral issues surrounding which patients should be admitted to intensive care units, how to help those who can live, and how to help those who are dying to have a good death," Raffin explains.

Biotechnology has spawned marvelous equipment and life support systems that can prolong life: the challenge is to know when and how to use this technology in the best interest of each patient and society as a whole, Raffin adds.

"We knew undergraduates are very excited at the idea of learning about intensive care units and grappling with the issues that arise—but they just haven't had access to this information," Weitz explains. Judging from the enrollment, the course does seem to have struck a chord—over 100 students are taking the elective.

But if the fuel for the course is intensive care medicine, the burning issues involve death.

"Today, up to 80 percent of people die in institutions, whereas in the early 1900s only 10 or 20 percent died outside their homes," Raffin points out. "Coping with death has now become a routine part of intensive care medicine."

Raffin emphasizes that the key to humane practice of ICU medicine is in the approach to death. "If death is inevitable, dignity is essential," he stresses. "Is it dignified to die naked under a sheet with 14 tubes coming out of your body? If you withdraw support, let the patient die with dignity. If the patient has a month left to live, and is able to go home, let him."

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A large problem in ICUs is the "distancing" that goes on, both on the part of patients and family, and by physicians and other medical personnel, Raffin says.

The words 'death' and 'dying' need to be used if they are applicable, according to Raffin. "Some physicians use elaborate euphemisms to avoid this," Raffin observes, "such as 'your wife is as sick as any human can be'.

"These doctors don't have bad intentions—it's just that they know the word 'death' can trigger an outpouring of emotion, and many physicians find the stress of dealing with this emotion on a daily basis too much to bear. It's a self-protective device."

Raffin told the class an anecdote about a five-year old boy with leukemia whose parents couldn't face telling the boy that he was dying. One night his nurse came in and the child asked her to sit by him holding his hand. Then, according to Raffin, he told the nurse that he thought he was dying. That evening he was dead.

"If you can't fool a five-year old child, you certainly aren't fooling an adult when you deny impending death," Raffin remarks.

"It's important that everyone get an understanding of intensive care units," Raffin contends. "Their relatives, friends and they themselves stand a good chance of being treated in an intensive care unit or of dying in one."

How closely ICUs have touched many was revealed early in the course, Raffin recalls. On the first day of class, he requested a show of hands to determine how many students had seen an intensive care unit. "About half had visited one, and two students had actually been intensive care patients themselves," Weitz adds.

But in addition to providing a personal understanding of ICUs and hospital care, the course is important for another reason, Raffin says. "These students (in the human biology program) have a broad social science background. In the future, they may be able to lend insight on problems of intensive care and are likely to be involved in policy decisions that affect medical practice."

One of the requirements for passing the course is a visit to the ICU at Stanford University Hospital, Raffin says.

Small groups of students meet with several intensive care nurses who show them the ins and outs of routine ICU care and life support procedures.

The nurses also demonstrate and explain ICU equipment: ventilator, intra-aortic balloon pump, chest tubes, cooling blanket, dialysis machine, emergency trays. And they discuss with the students the painful process of withdrawing life support, in which the entire medical care team and the family must participate.

The students must also prepare term papers dealing with intensive care, says Weitz. "They range from nurse burnout in ICUs to the biomedical science behind transplantation."

Raffin and Weitz feel gratified at the impact of the class. Despite its large size, people don't hesitate to speak up frequently with questions and in discussions.

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Mailed Monday, March 8, 1982.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

DIAGNOSTIC TESTS FOUND TO HAVE PLACEBO EFFECT

STANFORD—

If a doctor orders certain types of diagnostic tests it can speed a patient's recovery even if the tests provide no useful medical information, according to a recent Stanford University School of Medicine study.

The mere fact that the tests have been performed seems to have a positive psychological effect that translates into more rapid return to full activity in patients with minor chest pain, said Dr. Harold Sox, associate professor of clinical medicine and head of the division of general internal medicine at Stanford.

"This is the first study to systematically examine the psychological effects of diagnostic tests on patient outcome," Sox said. "The study ties together previous information documenting that placebo drugs (medications with no objective treatment value) can reduce disability and pain, with physicians' intuition that administering laboratory tests may help patients recover more quickly.

"Just as with prescribing placebos, many doctors believe that certain patients will benefit from having tests that are almost certain to be normal. Our study provides for the first time a scientific basis for this belief," Sox added.

The study was carried out on 176 patients complaining of chest pain in whom heart disease was ruled out as the cause. This was done by applying previously validated rules to analyze the medical information obtained from a carefully formulated set of questions asked during the patient's physical examination.

The selected patients were told that there was very little chance of their pain being caused by heart disease, and then they were placed in two groups for follow-up. One group received no further diagnostic testing, while patients in the other group underwent blood-enzyme tests for heart disease and a 12-lead electrocardiogram (ECG), even though a cardiac basis for their pain had already been eliminated.

At a follow-up examination three weeks later, about four-fifths of the patients who had received the diagnostic tests were fully active while about half of those patients who had not received the ECG and blood test were inactive and still complained of disability. (At a four-month follow-up, the percentage of patients still debilitated by their pain equalized in both the test and no-test groups.)

"Our results show that diagnostic tests have side effects which measurably influence patients," Sox noted. "We suspect that reassurance plays a role in hastening recovery in those patients who undergo the diagnostic tests, but we have no direct evidence for this as yet."

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Results of the study, carried out by Sox and two associates, Iris Margulies and Carol Hill Sox, were published recently in the *Annals of Internal Medicine*. The research was funded by grants from the Veterans Administration.

Sox cautioned that the results from this study should not be applied indiscriminately.

"So far, we have only looked at patients with chest pain and the use of ECG and serum creatine phosphokinase (blood test). That does not mean doctors should, for example, automatically order x-rays of the back for every patient with back trouble. You have to balance the cost and risks of the tests with the possible psychological benefits to the patient, as documented in reliable scientific studies," he said.

Sox acknowledged that, at first glance, results from his study may seem to run counter to the move towards cost containment in medical care: ordering laboratory tests with minimal diagnostic value does not seem cost-conservative.

However, the goal of cost containment is to reduce as far as possible the overall cost of illness to society. This includes indirect costs of disability such as lost time from work and frequent patient visits to the physician. Since these are minimized when patients recover quickly, he noted, tests done solely for psychological benefit may be justifiable for some patients.

Not every patient benefits from the psychological boost of a diagnostic procedure, Sox added. "For instance, in our study, patients who were under 50 years old, those who said they could 'do anything' in the month before coming to the doctor and those who felt very healthy except for the chest pain, gained no psychological edge from additional diagnostic testing," Sox observed.

He also pointed out that occasionally even highly reliable laboratory tests give "false positive" results, indicating presence of illness where there is none. This can lead to worry and even further unnecessary testing, Sox said.

False positive results, which can occur in as many as 10 percent of normal persons with many diagnostic tests, underscore the need to be sure of reasonable benefit before ordering tests just for their psychological effect, Sox said.

In future studies, Sox and his colleagues plan to test methods for predicting which patients are most likely to reap psychological benefit from diagnostic testing. They also intend to compare recovery rates in patients who receive diagnostic tests with those who simply receive words of reassurance in the examining room by the physician or other health care provider.

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Mailed Monday, March 8, 1982.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: The following story was released via telecopied transmission and regional wire service distribution on Sunday, March 7)

STANFORD—

Registered nurses at Stanford University Hospital have overwhelmingly ratified a two-year collective bargaining agreement, the hospital and the union representing the nurses announced Sunday.

In a joint statement, Priscilla Wheeler, Stanford's chief labor attorney; and Hedy Dumpel, president of the Committee for Recognition of Nursing Achievement (CRONA) said:

"We are pleased that through the process of bargaining in good faith, we are able to mutually develop an agreement which meets the needs of the hospital and the nurses.

"The new contract provides for increased wages for the nurses while recognizing the hospital's responsibility to continue to provide the highest quality health care at the fairest possible cost."

Wheeler and Dumpel headed the respective negotiating teams which had been talking regularly since Jan. 13.

One feature of the pact is the establishment of a Committee on Nursing Practice to discuss issues relating to the profession, including standards.

"It's important to recognize that nursing is a profession with high standards to uphold, Dumpel said.

The approximately 1,250 nurses represented by CRONA accepted the new contract by a more than 10 to 1 margin. The tally disclosed that 912 of 992 nurses voting in all-day elections Saturday favored the new contract, which will give nurses at the highest skill level with more than 5-and-a-half years experience a base salary of $31,283 the first year, rising to a maximum of $35,298 in the second year.

Starting nurses will receive a minimum of $21,985, while the night differential has been increased from 14 to 16 percent of base pay.

Both the old and new contracts had provided four skill levels. The old contract had six steps within each level, while the new agreement adds a seventh step for nurses with 5-and-a-half or more years of service.

In general, the new contract provides at least a 10 percent increase the first year, with an 8 percent rise in the second year. The negotiators said adjustments to length of service steps on the pay scale will further increase most nurses' base wages from 1 to 4 percent depending on step placement. Nurses in the new seventh step will receive the highest increase.

In their last 20-month contract, ratified July 8, 1980, nurses received three wage increases of 12, 3 and 9 percent.

Tentative agreement was reached last Thursday, four days after a 20-month contract had expired. At the same time, a 10-day strike notice issued Feb. 26 was rescinded.

The hospital cancelled a small number of scheduled non-emergency admissions after a 10-day strike notice was isssued Feb. 26, but operations at the 663-bed hospital were returned to normal immediately after tentative agreement was reached and the strike notice rescinded.

The hospital negotiating team included Wheeler, Dan Robinson, assistant director of personnel; Nancy Madsen, assistant hospital director and associate director of nursing; and two assistant directors of nursing, Joyce Miller and Eileen O'Reardon.

Representing CRONA were Dumpel; and five registered nurses, Patti tharp, Alice Serbein, Sue Healy, Linda Stickles and Jan MacLachlan.

March 8, 1982

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: MIKE GOODKIND (415) 497-6911

STANFORD-REGISTERED NURSES AT STANFORD UNIVERSITY HOSPITAL HAVE OVERWHELMINGLY RATIFIED A TWO-YEAR COLLECTIVE BARGAINING AGREEMENT; THE HOSPITAL AND THE UNION REPRESENTING THE NURSES ANNOUNCED SUNDAY.

IN A JOINT STATEMENT; PRISCILLA WHEELER; STANFORD'S CHIEF LABOR ATTORNEY; AND HEDY DUMPEL; PRESIDENT OF THE COMMITTEE FOR RECOGNITION OF NURSING ACHIEVEMENT (CRONA) SAID:

''WE ARE PLEASED THAT THROUGH THE PROCESS OF BARGAINING IN GOOD FAITH; WE ARE ABLE TO MUTUALLY DEVELOP AN AGREEMENT WHICH MEETS THE NEEDS OF THE HOSPITAL AND THE NURSES.

''THE NEW CONTRACT PROVIDES FOR INCREASED WAGES FOR THE NURSES WHILE RECOGNIZING THE HOSPITAL'S RESPONSIBILITY TO CONTINUE TO PROVIDE THE HIGHEST QUALITY HEALTH CARE AT THE FAIREST POSSIBLE COST.''

WHEELER AND DUMPEL HEADED THE RESPECTIVE NEGOTIATING TEAMS WHICH HAD BEEN TALKING REGULARLY SINCE JAN. 13.

ONE FEATURE OF THE PACT IS THE ESTABLISHMENT OF A COMMITTEE ON NURSING PRACTICE TO DISCUSS ISSUES RELATING TO THE PROFESSION; INCLUDING STANDARDS.

''IT'S IMPORTANT TO RECOGNIZE THAT NURSING IS A PROFESSION WITH HIGH STANDARDS TO UPHOLD; DUMPEL SAID.

THE APPROXIMATELY 1;250 NURSES REPRESENTED BY CRONA ACCEPTED THE NEW CONTRACT BY A MORE THAN 10 TO 1 MARGIN. THE TALLY DISCLOSED THAT 912 OF 992 NURSES VOTING IN ALL-DAY ELECTIONS SATURDAY FAVORED THE NEW CONTRACT; WHICH WILL GIVE NURSES AT THE HIGHEST SKILL LEVEL WITH MORE THAN 5-AND-A-HALF YEARS EXPERIENCE A BASE SALARY OF $31;283 THE FIRST YEAR; RISING TO A MAXIMUM OF $35;298 IN THE SECOND YEAR.

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STARTING NURSES WILL RECEIVE A MINIMUM OF $21,985, WHILE THE NIGHT DIFFERENTIAL HAS BEEN INCREASED FROM 14 TO 16 PERCENT OF BASE PAY.

BOTH THE OLD AND NEW CONTRACTS HAD PROVIDED FOUR SKILL LEVELS. THE OLD CONTRACT HAD SIX STEPS WITHIN EACH LEVEL, WHILE THE NEW AGREEMENT ADDS A SEVENTH STEP FOR NURSES WITH 5-AND-A-HALF OR MORE YEARS OF SERVICE.

IN GENERAL, THE NEW CONTRACT PROVIDES AT LEAST A 10 PERCENT INCREASE THE FIRST YEAR, WITH AN 8 PERCENT RISE IN THE SECOND YEAR. THE NEGOTIATORS SAID ADJUSTMENTS TO LENGTH OF SERVICE STEPS ON THE PAY SCALE WILL FURTHER INCREASE MOST NURSES' BASE WAGES FROM 1 TO 4 PERCENT DEPENDING ON STEP PLACEMENT. NURSES IN THE NEW SEVENTH STEP WILL RECEIVE THE HIGHEST INCREASE.

IN THEIR LAST 20-MONTH CONTRACT, RATIFIED JULY 8, 1980, NURSES RECEIVED THREE WAGE INCREASES OF 12, 3 AND 9 PERCENT.

TENTATIVE AGREEMENT WAS REACHED LAST THURSDAY, FOUR DAYS AFTER A 20-MONTH CONTRACT HAD EXPIRED. AT THE SAME TIME, A 10-DAY STRIKE NOTICE ISSUED FEB. 26 WAS RESCINDED.

THE HOSPITAL CANCELLED A SMALL NUMBER OF SCHEDULED NON-EMERGENCY ADMISSIONS AFTER A 10-DAY STRIKE NOTICE WAS ISSSUED FEB. 26, BUT OPERATIONS AT THE 663-BED HOSPITAL WERE RETURNED TO NORMAL IMMEDIATELY AFTER TENTATIVE AGREEMENT WAS REACHED AND THE STRIKE NOTICE RESCINDED.

THE HOSPITAL NEGOTIATING TEAM INCLUDED WHEELER, DAN ROBINSON, ASSISTANT DIRECTOR OF PERSONNEL; NANCY MADSEN, ASSISTANT HOSPITAL DIRECTOR AND ASSOCIATE DIRECTOR OF NURSING; AND TWO ASSISTANT DIRECTORS OF NURSING, JOYCE MILLER AND EILEEN O'REARDON.

REPRESENTING CRONA WERE DUMPEL; AND FIVE REGISTERED NURSES, PATTI THARP, ALICE SERBEIN, SUE HEALY, LINDA STICKLES AND JAN MACLACHLAN.

MARCH 7, 1982-30-HG206

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

EVERYTHING YOU WANTED TO KNOW ABOUT STANFORD MEDICAL CENTER OFFERED IN NEW TOUR

STANFORD—

It may not be in the Michelin guide, but Stanford University Medical Center nevertheless draws an international crowd of tourists.

Of course, the Eiffel Tower and Disneyland probably pop into your mind first when you think of tourist attractions, but you might be surprised to know that a regular flow of wide-eyed visitors also streams through Stanford Medical Center.

Over 1,000 visitors in the last nine months have been guided through the research and patient care labyrinth that makes up the sprawling medical complex, as part of a new and upgraded tours program based in the Medical Center's Office of Public Events, which is headed by Michael Cowan.

Like tourists anywhere, they come in all shapes and sizes, says Linda Northway, who put together and coordinates the new tour package. One day, a group of eager and career-curious high school students from San Jose will file through; the next day, it might be a dozen camera-laden surgeons from Japan.

Conducting the tours is "fascinating and fun," confesses Northway. "We meet people from all over the world."

"What we try to stress to all of our groups is the uniqueness of a university medical center, and the way in which patient care, teaching and medical research coalesce," Northway explains.

Among the stops along the tour route are two intensive care units—one for infants and one for adults—the emergency department, the operating room suite, one of the science research buildings, the clinics, and the teaching wing of the Medical School.

This spring, the tour program is swinging into high gear, with the help of five docents who just completed Northway's rigorous training course: four volunteers from the Medical Center Auxiliary—Linda Gill, Dorothy Mintz, Joan Naber, and Del Winslow—and public events assistant Marty Vetter. In addition to leading the regularly scheduled hour-long Thursday tour that begins at 1:30 p.m., Northway and her newly trained guides conduct special tours for groups on a request basis.

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If there are special interests, tours can be modified to include special stops or speakers who can elaborate on a specific subject. "Staff and faculty have been wonderfully helpful," Northway says, "particularly in the time they put aside to help young people who are interested in health care careers."

The new tours have been popular not only with out-of-towners and young people—there is growing demand for the tour from people in the community and, particularly gratifying to Northway, from those who work in the medical center and want to find out more about the institution.

The tour provides an illuminating glimpse of a modern medical center, highlighting new treatments and advanced basic research. "We try to convey the excitement and sense of purpose in this busy medical center," she says, "without overwhelming people."

Northway spent several months collecting information from a cross-section of faculty and staff in the medical center, distilling the reams of knowledge into a handbook of source material for her tour guides' training. For four months, the tour guides-to-be then studied the handbook for three hours each week and visited areas in the center to learn first-hand about its myriad activities.

"We have all ended up with extensive background that enables us to answer many questions in depth," says Northway, who is no novice at tour activities. (She spent ten years as a docent with the Stanford Museum and several more in charge of tours through Frank Lloyd Wright's Hanna-Honeycomb house on the Stanford campus.) "We wanted to match the high professional caliber of Stanford Medical Center with an equally professional tour program."

For information about routine tours or to schedule a special one for a group, call Northway at 497-6389. The tour program will be recruiting additional guides as time goes on. Anyone interested in further information about training to become a guide can also give Northway a call.

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Mailed Thursday, March 4, 1982

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NEW WAY TO DIET RELIES ON THE POST OFFICE

STANFORD—

Losing weight by mail may sound like someone's idea of a joke, but Stanford researchers believe it may be one of the best dieting methods yet discovered.

Their conclusions are based on preliminary results of a correspondence course for overweight people, attempted for the first time last fall in Monterey.

Dr. Todd Rogers, senior research fellow at the Stanford Heart Disease Prevention Program (SHDPP), says the idea originated several years ago when a community survey showed that most people prefer to lose weight in privacy (rather than classes), using printed materials as their guide.

The survey also revealed that respondents' number one personal health concern was overweight. This is not surprising, Rogers says, considering that the average American adult is above ideal weight.

The home-study course developed by the researchers, called "Drop it off--Weight Loss by Mail," was offered through the Monterey Peninsula College (MPC) for academic credit and a registration fee of $7, and was open only to residents of Monterey. It is being repeated this semester for a new group of Monterey participants.

The course is part of the SHDPP's "five city project," says Rogers, a heart disease risk reduction program based in two "education communities"—Salinas and Monterey, and three "reference communities"—Modesto, San Luis Obispo, and Santa Maria. The project is directed by Dr. John W. Farquhar, professor of medicine at Stanford.

"Our goal in this particular course," Rogers says, "is to reduce the amount of obesity in Monterey County, which will have a favorable impact on morbidity and mortality due to cardiovascular disease."

Twenty-five percent of last semester's participants, he says, had been diagnosed as having high blood pressure—a fact which spurred them on to take the course.

"From a public health perspective," he continues, "we want to try to help prevent future weight gain too, and encouraging people to think about their lifestyle is an important part of this."

The course emphasizes the importance of good nutrition; that is, not just low calorie but low sodium, low fat, and low cholesterol intake.

Participants receive 15 weekly "lessons" in the mail, with informational materials and homework assignments. They send progress reports to their MPC instructor/coordinator, Vicki Schermer-Kleinkopf, R.N., M.P.H.

"We don't provide standardized remedies," explains Rogers. "We try to get people to adapt the flexible guidelines to their own lives."

Phase one of the course, he explains, covers nutrition, physical exercise, and food management techniques.

Phase two is the more theoretical, problem-solving part represented by its acronym "IDEAS," in which each letter stands for a distinct step. One must *identify* personal problems leading to overweight; *develop* various solutions; *examine* the solutions; *act* on the solutions; and "*see* how you're doing."

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"We're teaching not just weight control skills," says Rogers, "but skills for healthy living."

Phase three, he explains, is the relapse prevention and maintenance portion of the course.

Before embarking on the semester, each participant goes through an initial assessment. While students set their own weight loss goals, the researchers do watch out for people who may not really need to lose.

"And we recommend," says Rogers, "that nobody lose more than 30 pounds in 15 weeks." (The average goal last semester, he reports, was 19 pounds.)

Every student is asked to designate a family member or friend as "weight loss collaborator." Explains Rogers, "This supplies a social support system that is not artificially contrived."

Course participants are asked to make a voluntary deposit of $30. How much they get back at the end is proportional to how often they do their "homework" and attain their weight loss goals.

Rogers says preliminary results of the first "Drop it off" course are overwhelmingly positive. "Our aim," he explains, "was to test the course as a beneficial and cost-effective program, for both the participants and the implementing institution."

"The relative weight loss experienced by participants turned out to be, on average, equivalent to that in high-effort, expensive weight programs," he says, adding that these conclusions do not negate the usefulness of group programs for those individuals who prefer them.

"But this sort of course is able to reach more people, many who couldn't afford or wouldn't attend the other programs available."

Of the 75 people who completed the first course, says Rogers, not one reported dissatisfaction at the end. "Everyone had positive things to say."

On average, he says, the men lost 76 percent of their original weight loss goals. Women lost 50 percent of what they had hoped for.

All in all, by the end of the course Monterey County was 682 pounds lighter than it had been at the start.

Rogers' collaborators in the weight loss by mail project, all of the SHDPP, are: Joel Killen, pre-doctoral fellow from the Department of Counseling Psychology; Roy Cameron, Ph.D., visiting scholar from the University of Saskatchewan; and Elizabeth Weinberger, Ph.D., postdoctoral fellow.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors, news directors: The following story was sent *Business Wire* at 12:13 p.m. Thursday.)

STANFORD—

A tentative contract settlement between Stanford University Hospital and the Committee for the Recognition of Nursing Achievement (CRONA) was announced Thursday.

The pact is scheduled to be presented for a ratification vote on Saturday to the approximately 1,250 registered nurses at the 663-bed hospital who are represented by CRONA.

The tentative agreement was announced jointly by the hospital and CRONA negotiating teams, which had been meeting regularly for about a month.

Details of the pact will be released only after nurses review the proposed package, announced Priscilla Wheeler, chief hospital negotiator, and Hedy Dumpel, CRONA president and chief of the union's bargaining team.

A notice of intent to strike, issued by CRONA Feb. 26, was rescinded Thursday morning, said Wheeler, a staff counsel and the university's chief labor attorney. The notice would have authorized a strike effective March 9.

Dr. James F. Silverman, the hospital's chief of staff, said patient admission procedures were returned to normal Thursday morning. A small number of non-emergency scheduled admissions had been cancelled after the strike notice was issued last week.

Negotiations continued through Wednesday night. A 20-month contract expired at midnight Feb. 28.

Results of the ratification vote are expected to be announced by CRONA by late Sunday.

(**Note:** Neither the hospital nor CRONA plans any further announcements until Saturday's ratification vote)

March 4, 1982 —30— mg203

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

CAUTIOUS REPORT ON "CUSTOM—TAILORED" ANTIBODY TRIAL

EDITORS: Advance for release AM Thursday, March 4 to coincide with publication in the *New England Journal of Medicine.*

Because of the preliminary nature of this report and the possibility that news coverage could raise false hopes of cancer patients that a new treatment is available, the News Bureau did not initiate coverage of the story. However, because of numerous press inquiries the following release was prepared in order to put the report in perspective. Levy is out of town and is not available for interviews.

STANFORD—

An experimental approach for treating B-cell lymphoma (a type of cancer of the immune system's antibody-producing cells) has produced a nine-month remission in one patient, according to a report by researchers at Stanford University School of Medicine in the March 4 issue of the *New England Journal of Medicine.*

The treatment involved administering a specially prepared monoclonal antibody to a patient with advanced disease, according to Dr. Ronald Levy, associate professor of medicine (oncology) and leader of the Stanford team of researchers.

Over the past year, Levy and his colleagues have administered monoclonal antibodies to ten patients with leukemia or lymphoma, with varying results.

(These antibodies were produced by cells from mice which had been injected with leukemia cells.)

Several of the patients experienced temporary or partial improvements in their cancers. Thus far, only the patient described in the *New England Journal* report has achieved long-lasting remission of disease, Levy said.

Levy suspects that the good results in this one case may be because the monoclonal antibody preparation was "custom-tailored" to recognize this patient's tumor cells through a complicated procedure that took six months to carry out.

However, Levy strongly cautioned against undue optimism about the experimental technique based on this preliminary result in a single patient.

"The improvement of this patient's lymphoma with monoclonal antibody administration is a single observation that must be confirmed in other patients before we can draw any conclusions about the effectiveness of this technique," he said.

"Moreover," he added, "this technique of custom-tailoring antibodies applies only to B-cell lymphomas and not to other types of cancer."

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Levy and his colleagues are now preparing to test the highly specific, individualized mouse monoclonal antibodies in several other patients with B-cell lymphoma. No new patients are currently being accepted into the experimental treatment program, he said.

Because it takes approximately six months to prepare a "custom-tailored" antibody preparation for each patient's tumor, "there are serious constraints to this approach," Levy said.

"If the therapeutic effects can be reproduced in other patients and if effectiveness depends on the specificity of the antibodies, more streamlined procedures for the production of these antibodies must be designed," he added.

Levy pointed out that his work is highly dependent upon advances in basic research which were originally made in a number of different laboratories around the world.

"Much of this research was not performed with a clinical application in mind," he said. "One cannot always predict which lines of research will lead to clinical advances," he added. "That is why we must renew the commitment to the basic research effort."

The production of monoclonal antibodies is based on the 1975 discovery by George Kohler and Cesar Milstein in Cambridge, England, that mouse tumor cells can be fused with antibody-producing cells of the immune system called lymphocytes, to create a new cell called a hybridoma.

Hybridomas inherit the quality of immortality from the cancer cell progenitor, and the ability to produce a specific antibody from the lymphocyte.

Methods are available to select out from millions of hybridoma cells the one that secretes the desired antibody. In this case the desired antibody recognizes a specific protein on the surface of the patient's tumor cells.

The experimental therapy was administered to the patient described in the *New England Journal* article only after all other conventional therapy failed to halt progression of his disease.

The current treatments for leukemia and lymphoma include chemotherapy and radiotherapy. These treatments are effective and widely available, Levy noted. "New experimental approaches for the time being are no substitute for the traditional therapies," he added.

Levy's colleagues in the research are Richard Miller, David Maloney, and Roger Warnke. The research was carried out with grants from the National Institutes of Health, the American Cancer Society, the Howard Hughes Medical Institute.

—30— L111

END ADVANCE FOR RELEASE AM THURSDAY, MARCH 4.

Mailed Tuesday, March 2, 1982.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

To: Medical and Science Writers or City Desks

STANFORD—

You are invited to a press briefing organized to discuss "Twenty Years of Research Progress in the Treatment of Hodgkin's Disease" at 10 a.m. Friday, May 7 at the Stanford University Medical Center in Room TE 110, Psychiatry and Behavioral Sciences Building.

The press briefing will be held in advance of a day-long seminar scheduled Saturday, May 8 to report on scientific progress in the treatment of this form of cancer, and to honor some 500 patients who were treated at Stanford during the past 20 years as participants in the experimental trials.

When these trials began in the early sixties, Hodgkin's Disease was a lethal form of cancer. Today, thanks to the efforts of researchers as well as the patients who took part in these trials, there is better than 80 percent survival at five years for all stages of the disease, with 75 percent of the patients permanently cured.

At the briefing Friday, May 7, Dr. Henry S. Kaplan, D'Ambrogio Professor of Radiology, and Dr. Saul Rosenberg, professor and head of the Division of Oncology at Stanford University School of Medicine, will review the progress of the past 20 years, and patients will be available for interviews. Kaplan and Rosenberg pioneered many of the new treatments.

Your reporters are also welcome to attend the scientific symposium, from 9 a.m. to noon Saturday, May 8, 1982 in the Sherman Fairchild Auditorium. This portion of the program is open to the public.

Among the speakers, besides Kaplan and Rosenberg, will be Dr. Vincent T. DeVita, director of the National Cancer Institute, Bethesda Maryland, who will discuss "Advances in Chemotherapy."

The afternoon program from 2 to 4:30 p.m. at Dinkelspiel Auditorium is a tribute to more than 500 of the 800 patients who took part in the clinical trials at Stanford. The program will feature talks by Armand Hammer, chairman of the President's Cancer Panel; DeVita, Kaplan, Rosenberg and Dr. Albert Jonson, professor of ethics in medicine at the University of California, San Francisco, as well as patients. The program will be followed by a reception at the Bowman Alumni House grove. (This program is by invitation only because of the limited seating capacity of Dinkelspiel. However, members of the press are invited.)

If you plan to attend the briefing Friday, May 7, please phone the News Bureau, (415) 497-6911.

Packets of background information will be available at the briefing.

—Spyros Andreopoulos

4-30-82

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind, (415) 497-6911 STANFORD—

Theodore R. Marmor, chairman of the Center for Health Studies in the Institution for Social and Policy Studies at Yale University, will speak on "Government and Medical Care in North America: Canada's Path, America's disquiet," May 3 at 4 p.m. in Annenberg Auditorium.

Marmor is an advocate of government involvement in health care financing, such as Canada has developed. He has recently completed a comprehensive comparative study of the role of government in Canada and the United States.

He received his Ph.D. from Harvard and taught at the Universities of Minnesota, Wisconsin, Essex (England) and Chicago before joining Yale's faculty. Marmor served as special assistant to the Department of Health, Education and Welfare in 1966 and on the recent Presidential Commission on a National Agenda for the '80s.

The lecture, open to the public, is sponsored by the Consortium for Health Research and Policy.

April 28, 1982 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NURSING RECRUITMENT DRIVE NOT IN VAIN

STANFORD—

Unlike hospitals still facing a persistent nursing shortage, Stanford University Hospital has witnessed a steady decline in vacancies since reaching a high point almost two years ago.

Associate director of Nursing Services Nancy Madsen, R.N., M.S., recalls that at one time, Stanford had over 100 fewer full-time nurses than it needed, and had to close down 20 patient beds.

"That was when we really stepped up our recruitment drive," she says, noting that current nursing vacancies have dropped to a handful—three or four on any given day. Madsen explains that the success of Stanford's effort is due to four major areas of emphasis:

Salaries and benefits—Stanford nurses' salaries, Madsen says, have been highly competitive over the past few years. The most recent two-year collective bargaining agreement, reached in March, gives nurses at the highest skill level with more than five-and-a-half years' experience a base salary of $31,283 the first year. Starting nurses receive a minimum of $21,985.

According to Duane Walker, director of Nursing Services, there are two professional ladders for Stanford nurses to climb: the clinical and the administrative. "That way, nurses don't feel forced to leave the bedside in order to advance," he says.

About 80 percent of Stanford nurses do not work full 40-hour weeks. "And those who work half-time or more still receive full benefits," says Madsen.

"We try to honor requests for flexible schedules as often as possible," she adds. "In the past, hospitals were rigid in keeping nurses to exact shifts. We didn't even consider letting a mother get her children off to school and come in at 9 a.m."

Educational programs—Nursing Educational Services has increased its offerings for both Stanford and regional nurses, and has begun an effort to present special symposia on a national basis.

Nurses who have been out of the work force for some time and wish to return to the bedside attend refresher courses at De Anza College, so they can come back and work at the Hospital.

Another project, the baccalaureate preparation program, has been offered at Stanford to working nurses since last fall through an arrangement with San Jose State University.

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Stanford's postgraduate program in cardiovascular nursing, centered around the north ICU, opened in January. "Our hope," Madsen says, "is that nurses attending the program will be attracted to stay and work at Stanford."

"Our regular research program for nurses," she continues, "has engendered an enrichment and interest on the part of our nurses that is one of those retention factors you can't emphasize enough."

Besides helping experienced nurses attain new knowledge, Madsen points out the importance of helping new nursing graduates gain bedside experience.

A preceptor program teams up the new nurse with an experienced nurse on the floor for a minimum of eight weeks. It follows an orientation, which provides classroom discussion and clinical reviews.

The summer student nurse program is a way of reaching people even before they're ready to join the staff, says Madsen. "It's a definite vehicle for recruitment."

Yet the Hospital has not lowered its standards to hire more nurses, Madsen insists. "To the contrary— the state has been pushing a change because of the perception that on-the-job training is sufficient. This is a concept that we, and many of our staff nurses, are strongly opposed to. We believe formalized education is necessary for nurses."

Boosting morale—"We've involved staff nurses in goal setting, and raised everyone's awareness that we are all recruiters." (The Hospital, Madsen explains, now has three full-time nurse recruiters. Kathryn Stucki and Hazel Leavitt work under the direction of coordinator Karen Richards, R.N.)

Nursing administration at Stanford has conducted job satisfaction surveys in recent years, used regular staff meetings to discuss concerns, and stepped up its publications efforts.

Another forum for nurses' concerns has been provided by various nurse-physician groups around the Hospital. "In these groups, such as the one in the intensive care nursery," says Madsen, "both doctors and nurses have a chance to air their confusions and grievances."

Also a boost to Stanford nurses' morale has been the initiation of a nurse-to-nurse consultation program for stress reduction, developed and conducted by Dr. Ann Baldwin, R.N.

And Nursing Services is starting a newcomers' club, says Madsen, to encourage socializing as well as provide information on housing and other practical matters. "The union, CRONA (Committee for Recognition of Nursing Achievement), is going to take a very active role in that project."

Advertising—"We got involved in 'job fairs' across the country, always emphasizing professionalism and staying away from such teasers as 'Come to sunny California and find the man of your dreams,' " says Madsen.

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To attract nurses to the expensive Bay Area, the Hospital offers temporary housing when they arrive. "We still seem to be drawing very well from the east—the northeast particularly."

Nurse turnover at Stanford over the past six months has been from 17 to 20 percent, says Madsen, a decrease from the rate of about 25 percent a year ago. "We compare very well to most hospitals nationally," she says, citing *RN Magazine's* recent estimate of 40 percent for the national nursing dropout rate.

"We at Stanford are now focusing on retention—what we can do to show nurses recognition and respect so they'll continue to want to stay," says Madsen.

"Friends of Nursing," a new community group, is working to raise public awareness of the professional status of R.N.s—"what nurses really do versus the stereotype or the soap opera variety."

"The efforts of this group will help keep Stanford's name out in front of people," says Madsen.

Does this country still face a nursing shortage?

"I think so," says Madsen, adding, "Even the state of California has to face the fact that with only 19 baccalaureate programs we are not preparing enough new nurses."

The situation is aggravated by the reality that many women today are choosing other careers, as a wide range of professional options becomes open to them like never before.

"Still," says Madsen, "we probably do have enough trained nurses in the U.S. The problem is they're not all working." Her observation is corroborated by the American Nurses' Association's recent estimate that 30 percent of the 1.4 million qualified, nonretired R.N.s in this country are currently choosing not to work as nurses.

"At Stanford therefore," Madsen notes, "we can't afford to blissfully back off now."

4-26-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

STATE REPORT LAUDS MEDICAL SCHOOL'S MINORITY ENROLLMENT

STANFORD—

Stanford University School of Medicine is the model of how to attract and enroll minority medical students, the Office of Statewide Health Planning and Development said Friday in Sacramento.

The office issued its report, "1981 California Health Manpower Plan—Biennial Update," which serves as planning guide to the state government and the legislature.

The report said minorities represented 25.6 percent of the entering class at Stanford Medical School in 1980, marking the third consecutive year of minority enrollment increases in the School.

Minorities also comprised 25.3 percent of the total medical student body at Stanford, the highest among California medical schools.

The report said all California medical schools should adopt minority enrollment goals matching Stanford's 1980 figures, with attention given to Chicano, Black, and American Indian applicants.

(Stanford's 1981 figures show a minority enrollment of 26.7 percent in the entering class: 10 Blacks, nine Chicanos, three Native Americans, and one Hispanic, according to the Office of Student Affairs—Editor).

"Since the University of California is a public tax-supported institution," the report noted, "it is reasonable to expect that it will be more responsive to statewide needs and priorities in the education of physicians than will private schools of medicine."

The report said the UC system is making "considerable progress" at most campuses, and should be expected to achieve Stanford's levels by 1983.

California minority populations are increasing, the report stressed, without any similar increase in minority physicians.

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"Four million-plus minorities living in medically underserved areas may constitute the largest unmet need for health care service and personnel in the state," the report said.

Dr. Marvin Karasek, chairman of the ad hoc committee on minority student recruitment at Stanford, said he is pleased by the report.

But he added, "Besides achieving numerical representation of minority students, the Stanford Medical School's thrust is now to address the problem of underrepresentation of minorities in academic medicine.

"Today there are few professors from minority backgrounds either at Stanford or any other medical school," Karasek said.

"We will seek out minority candidates with strong interest in biomedical research and careers in academic medicine, and increase our efforts to recruit them," he said.

The state health plan calls for racial and ethnic parity in the health professions by year 2000. By parity is meant that the percentage of minority physicians should be proportionate to the minority populations in the state.

To achieve that goal, the report said, California medical schools must significantly increase their enrollment of minority students.

Presently total enrollment of minority students in California medical schools is 12.8 percent compared to a minority population of 29.4 percent.

Percentage-wise minority medical student enrollments in the entering classes for the three-year period 1979-81 were:

Stanford University School of Medicine, 25.5; University of California, Irvine, 21.2; University of California at Los Angeles, 17.6; University of California, San Francisco, 15.5; University of California, San Diego, 14.8; University of Southern California, 10; University of California, Davis, 5.7; and Loma Linda School of Medicine, 4.7, according to the report.

Because of differing class size, however, numerically UC, San Francisco had the highest number of minority medical student body with a total of 100, followed by Stanford with 87, UCLA with 80, and UC Irvine with 77.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

"New Ways to Think About Chronic Pain," is the focus of a special program scheduled for Thursday, May 6 at 8 p.m. in Fairchild Auditorium at Stanford University Medical Center.

The speaker will be Dr. Lorrin Koran, associate professor of clinical psychiatry and behavioral sciences, and director of the Comprehensive Medical Unit at Stanford University Hospital.

Dr. Thomas Gonda, professor and chairman of the department of psychiatry and behavioral sciences, will also speak.

The program, free and open to the public, is sponsored by The Friends of Psychiatry and Behavioral Sciences.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Stanford University Hospital (SUH) will raise room rates 5.9 percent and operating room prices an average of 7 percent effective May 15, the Board of Hospital Directors has announced.

In several common categories, the daily cost for medical, surgical and gynecology services will rise from $276 to $292, $293 to $310 for semi-private, and $337 to $357 for private rooms. The rate is $20 less for patients admitted by community physicians who do not need the services of the hospital's interns and residents.

Daily bed rate increases for other types of services vary. New prices range from $248 for a bed in the obstetrics ward without housestaff service to $1615 per day for the few patients requiring the highest level of intensive care.

The 7 percent increase for operating room prices will vary depending on the type of procedure and will range from no change to 15 percent for a small number of services, said Dan Heath, associate director of finance.

The price changes, approved at the hospital board's April 14 meeting, are designed to compensate for increases in hospital costs because of inflation—including rising labor costs—and also decreases in reimbursement to the hospital from the federal Medicare and the state Medi-Cal programs, said Lawrence G. Crowley, vice president for medical affairs.

A recent survey disclosed that 12 Peninsula and South Bay hospitals lose an average of $164 per patient per day for each Medicare or Medi-Cal patient treated. Stanford, included in the survey conducted by the hospitals, loses an average of $315 per patient per day, according to Heath.

About half of the nearly 25,000 patients cared for annually at Stanford are supported by Medicare or Medi-Cal.

Crowley noted that as a teaching hospital and referral center, Stanford draws a larger share of critically ill patients who cost more per day because they need more services and more nursing care. In addition, Heath noted that the average patient at SUH is sicker than a year or two ago and requires more care, particularly nursing.

Patient revenues make up about 99 percent of the hospital's $177.1 million budget, unlike many neighboring facilities which receive tax support.

Stanford last raised room rates Sept. 1, 1981. The increase then was an average of 12.2 percent.

April 21, 1982 —30— mg220

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NURSES' POWER: REAL OR IMAGINARY?

STANFORD—

"Nursing Influence: Shadow or Substance?" is the topic of a workshop to be offered to the public May 14, by the Friends of Nursing, a Stanford community group concerned with fund raising and public awareness.

Topics to be covered in the program include "Power and Diplomacy," "Exercising our Professional Selves," and "Beyond Assertiveness." A question and answer session will follow the presentations.

Key speakers at the workshop—to be held from 8 a.m. till 3:45 p.m. in the Medical Center's Fairchild Auditorium—are Shirley S. Chater, R.N., Ph.D., F.A.A.N., of the University of California; Angela B. McBride, Ph.D., R.N., F.A.A.N., of Indiana University; and Jeanne Flyntz DeJoseph, C.N.M., Ph.D., an assistant director of Nursing Services at SUH.

Eleanor Hedenkamp, R.N., a pediatric cardiovascular nurse specialist who has chaired the planning committee for the program, asserts, "Nursing is changing—not only the public perception of nursing, but nurses' perceptions of themselves. Nurses are beginning to realize their value as professionals and the real power and influence they can exert.

"The goals of this workshop are to explore the extent of that influence—how it is affected by the public perception of nursing, as well as by the nurses' view of themselves, both as professionals and as people."

Upon completion of the program, she says, participants should be able to identify three strategies which individual nurses can use to enhance public perception of themselves as professionals, public perception of the nursing profession, and individual influence or power in the practice setting.

The workshop will be open to the public, and lunch will be served. A fee will be charged. Continuing education credit is available to nurses participating in the workshop.

Attendance is limited, and the registration deadline is May 10. For further information call Chris Lindauer, at 497-5311.

4-19-82

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

TALKS ON TEENAGERS

STANFORD—

"Adolescence: The Interaction of Physical and Social Development" will be the focus of this spring's Progress in Medicine lecture series, a community outreach program sponsored by the Stanford University Medical Center.

The season will open April 28 with an introductory presentation by Dr. Irving Schulman, professor and chairman of the Department of Pediatrics.

Also speaking will be Dr. Iris Litt, associate professor of pediatrics and director of Adolescent Medicine. She will discuss "What you should expect from your adolescent's doctor," stressing considerations that address adolescent health and well-being.

On May 5, Dr. Ruth Gross, professor of pediatrics and director of General Ambulatory Pediatrics, will speak about "Patterns of maturation: their effects on behavior and development."

Dr. Gurdon Pulford of the Palo Alto Medical Foundation, a clinical professor of pediatrics, will lecture on "Psychosocial stressors of adolescence and their relationship to disease," May 12.

The Progress in Medicine lectures were initiated at Stanford in 1966 by Dr. Joshua Lederberg, then professor and chairman of the Department of Genetics, to provide an opportunity for leaders in academic medicine to share their insights and perspectives with the community.

Lederberg had observed: "The community has little opportunity to be informed of the exciting developments in medicine. Public understanding of these developments is of the utmost importance to social decisions."

This year the series has focused on a single theme—the development of the child. "The Science of Birth" was part one, last fall. "The Child: Optimizing Growth and Development" was the winter's topic.

All spring presentations will take place in the Medical Center's Sherman Fairchild Auditorium, at 7:30 p.m. Admission is free, and seating is limited. There are no reserved seats, and no tickets will be issued. Early arrival is recommended to permit the best choice of parking and seats.

For further information and registration forms, call the Medical Center's Office of Public Events, at 497-6389.

4-19-82

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

TEENS TO LOSE WEIGHT AT SUMMER CAMP

STANFORD—

Stanford's Behavioral Medicine Program this year is offering a summer weight-loss day camp for teenagers, ages 12—17, on the University campus.

Encouraging campers to take charge of their own weight management, the program will teach them to lose weight safely through eating and exercise patterns that promote permanent weight control.

Intended specifically for teenagers, the camp will allow them to have fun and develop skills while slimming down. Included will be group seminars in behavioral change techniques and nutrition education; aerobic activity, tennis, swimming, and other recreational activities; group lunches on campus; and weekly seminars for parents.

(An important feature of the camp is consistent weight-loss management achieved through the intensive day program combined with parental support at home.)

Faculty will include staff from the Behavioral Medicine Program of the School of Medicine.

Two sessions will be offered, and a fee will be charged. The first session will run from June 21 through July 15; the second from July 19 through August 12. Both will take place Mondays through Thursdays, from 9 a.m. till 1 p.m. Campers may register for one or both sessions.

Early enrollment is recommended, as space is limited. For further information call Dr. Mary Southam at 497-5065.

4-19-82

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: The following embargoed for release at 6 p.m. Wednesday, April 14 to coincide with dinner ceremonies announcing the building's name)

STANFORD—

Stanford Medical Center's $14 million cardiovascular research building, scheduled to be completed in October 1983, was named Wednesday (April 14) in honor of a Chicago surgeon and medical equipment manufacturer.

The Dr. Ralph and Marian Falk Cardiovascular Research Center will house the academic and research programs of the department of cardiovascular surgery headed by Norman Shumway, Frances and Charles Field Professor of Cardiovascular Surgery; and the division of cardiology, headed by Donald Harrison, William G. Irwin Professor of Cardiology.

The building was conceived to alleviate crowded lab and office space faced by Harrison and Shumway, whose programs have been carried out in quarters scattered throughout the hospital, campus and rented office space on Welch Road in Palo Alto.

Shumway, in addition to the widely reported development of heart transplantation, has been a pioneer in the field of pediatric open heart surgery. The department he heads at Stanford performs an average of more than 20 open heart surgeries each week.

Harrison is an authority on cardiac arrhythmias and has developed along with colleagues a variety of noninvasive procedures for early diagnosis of heart disease.

The building is located on the east side of the hospital, between the medical center and Stanford Shopping Center. The two lower floors of the building will provide laboratory space, while the top floor will house offices. Patient care will continue to be provided at Stanford University Hospital or the medical center clinics.

Groundbreaking on the 52,000-square-foot building began March 1, and a formal dinner ceremony was postponed until Wednesday for the convenience of major donors.

Mrs. Falk was the largest individual donor for the project. The amount of her contribution was witheld at her request.

A $4 million grant in 1979 from the Max C. Fleischmann Foundation of Nevada enabled the university to begin planning for the building. A second institutional grant of $400,000 in mid-March from the Conrad Hilton Foundation completed pledges needed for the building. In addition, 10 other gifts in excess of $100,000 were pledged.

For many years Mrs. Falk had supported the work of three researchers—including Shumway. The other researchers are Louis J. Bluemle Jr., president of the Thomas Jefferson University of Philadelphia, where Dr. Falk attended medical school, and Dr. David Skinner, professor of surgery at the Pritzker School of Medicine at the University of Chicago in her hometown.

At the dedication ceremonies, Donald Kennedy, president of Stanford, thanked Mrs. Falk for choosing Stanford as the institution to memorialize her husband, who died in the early 1960s. He was co-founder of Baxter Laboratories, developers of prepackaged intravenous units.

The project was designed by Hellmuth, Obata and Kassabaum Inc. of San Francisco. Dillingham Corp. of San Jose is the general contractor.

April 14, 1982 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Stanford University Medical Center has been selected to participate in a federal study intended to help Medicare officials decide whether to fund heart transplant operations.

Six medical centers, including Stanford, will share $2 million to conduct the study, said Donald A. Young, acting deputy director of the bureau of program policy for the Health Care Financing Administration.

About $1.5 million will be used to fund a limited and still undetermined number of transplants at the six medical centers, while $500,000 will be used to pay for research into the efficacy of funding transplant operations on a routine basis, HCFA said.

Stanford has maintained that the operations is the only viable medical procedure for a limited number of end-stage heart disease patients who otherwise face virtual certain death within a few months.

Currently, Medicare does not pay for heart transplant operations, although partial treatment costs of some eligible cardiac patients who ultimately receive the operation are funded under the federal program.

Medicare has in the past paid specifically for transplants. Payments under the HCFA-administered program were authorized in Nov. 1979 on an interim basis.

In June 12, 1980, the secretary of Health and Human Services announced that the cost of the transplant operation would be excluded from Medicare coverage pending results of the current study, which is expected to take about two years to complete.

HCFA said recently it had suspended coverage because of insufficient data on such issues as the patient selection process, the basis for assessing safety and efficacy, the longterm social and economic consequences of the procedure, broad ethical considerations, the cost effectiveness of the procedure, and the potential, if any, for substantial expansion in the availability of heart transplantation."

Those issues will be reviewed in the present study, using data both from the records of participating centers and data on the limited number of patients selected specifically for the study, Young said.

Among policy issues, Young said, is the usual requirement of Stanford and some other centers to limit the operation to persons under 55 years of age.

"For example, what consequences does this pose for a society that is aging," said Young. "Is this age discrimination or is there a real medical barrier to safety of performing this operation on older people."

Physicians at Stanford and elsewhere have maintained no rigid age barrier exists for heart transplants. But at Stanford and other institutions, general health, including the effects of aging, are taken into consideration when choosing heart recipients.

Selection criteria are particularly crucial for heart transplants, since the number of operations are ultimately limited by the number of available donors, which are often scarce, Young noted.

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Another public policy issue, said Young, is how hospitals should be chosen to perform transplants if a decision is made to fund the operations.

"There is an unusual situation with heart transplants," said Young, "because many hospitals technically are able to perform the surgery, but it may be that only a small number have the specifically trained staff to provide the delicate followup care to prevent rejection and other complications.

"Among many things, this study will seek to determine if certain centers are uniquely able to provide the necessary care," he added.

Young said the cost of transplants will be explored, "but primarily to determine the differences between centers. It would be inappropriate to focus on whether the cost justified the surgery, and in fact the cost of a heart transplant is less than some other services which are routinely paid for under Medicare."

Critics of heart transplantation have noted that the one year survival rate is about two thirds with nearly half surviving five years. Young said that figure parallels the survival rate of some procedures, including the Whipple procedure (radical removal of pancreatic cancer), for which Medicare routinely pays, since they are deemed effective at improving quality of life rather than simply increasing longevity.

(Another example is cadaver kidney transplants, covered by Medicare. According to the 1977 Human Renal Transplant Registry, one year survival was 46 percent, nearly 20 percent less than heart transplants).

Members of the cardiovascular surgery team which performs heart transplants have contended that the operation can save money for society, because it returns patients to the job market.

At Stanford, the cost of heart transplants average about $50,000 and are paid for in a wide variety of ways, including private insurance money, fund raising efforts, personal finances, and federal research grants.

Stanford has performed some 230 transplants since it became the first center in the United States to attempt the operation in December 1967. Currently, Stanford performs more transplant operations per year—about two dozen—than any other institution.

The other centers selected to participate in the research are the University of Arizona medical Center at Tucson, the University of Minnesota Hospitals at Minneapolis, the University of Pittsburgh School of Medicine, the Medical College of Virginia at Richmond, and Columbia Presbyterian Medical Center in New York City.

Young said the six hospitals chosen to particpate were informed of HCFA's decision in a March 23 letter. Young wrote that his staff would be meeting with officials of each of the institutions in the near future to work out details of the demonstration project.

The six centers were selected from among 12 applicants by an independent team of medical experts. Selection was based on recent experience with heart transplantation and whether the center has extensive criteria to select recipients.

April 8, 1982 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

BEDSIDE NURSES CONDUCT RESEARCH IN PURSUIT OF QUALITY PATIENT CARE

STANFORD—

A Stanford nurse noticed that emotions can run high between nurses and their pediatric patients. She wanted to find out more about these special attachments.

Another nurse found that certain patients were more at risk for falling while hospitalized than others. She wanted to know why.

Both, with help from Stanford's department of nursing research, have developed study proposals which may lead to some answers.

"We believe the basic problems faced in nursing care can best be identified by the nurses providing that care," explains director of the Department Dr. Lois Welches, R.N.

Nurses, she says, are not only in a position to collect data, but also to implement significant research findings at the bedside, and to disseminate any new knowledge they have gained. "They can also help to contain costs through research," says Welches.

The Office of Nursing Research was established in 1978. Its projects currently deal with physiological and psychosocial responses to nursing care; and leadership and administrative research.

Already a study to compare treatments of bedsores has resulted in conclusions favoring the use of one product—a transparent elastic which provides a moist wound environment—over another, which combined with the use of heat lamps keeps the wound dry.

The principal investigators, Gladys Kurzik, Alba Palmieri and Linda Simpson, had to periodically assess bedsores treated with each substance for size, depth, redness, drainage and granulation.

Prior to their study, the Hospital had no standard policy for the treatment of bedsores (or "decubitus ulcers") with any particular product.

Their findings have led to plans for a follow-up study to be conducted in a group of area hospitals, including Stanford. "Hearing of our results, a pharmaceutical company asked if we would compare a new, less costly substance of theirs with the one formerly established as more effective," explains Welches. "And they agreed to fund the research."

The hospitals to be involved, along with the Home Health Agency (a visiting nurses association), form a unique consortium of nursing research.

Explains Welches, "During my first year here, I began to realize that because patients stay such a short time in the Hospital, it's hard to get a sufficient sample unless you collect data for years.

"So we invited some of the Bay Area hospitals to join us in our efforts by banding together for larger research projects."

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Presently included in the consortium are: Mount Zion of San Francisco, Children's of San Francisco, Veterans Administration of Palo Alto, O'Connor of San Jose, El Camino, Mills of San Mateo, Children's at Stanford, Santa Clara County Visiting Nurses Association, and Stanford University Hospital.

Any nurses who wish to participate in research, Welches explains, will attend the educational programs offered by Stanford's department.

Two basic courses were launched at Stanford last year. The beginning course, aimed at nurses who have never before conducted research, introduces the concepts and helps nurses to draw up their first proposals. The intermediate course is for those with some prior experience who need to sharpen their skills before embarking on more advanced studies. A statistics course will soon be added.

"We then provide consultation for the nurse throughout the entire research process," says Welches.

"Because our educational program has proven so successful," she adds, "we now count 27 projects either completed or in progress."

One study in the nurseries will compare the bacterial and viral contamination resulting from four different methods of collecting breast milk for hospitalized infants.

The principal investigator, Joanna Ward, R.N., plans with the assistance of two other nurses, Penny Rau and Gigi Harvey, to compare samples of milk collected with an electric breast pump, two types of hand pumps, and manual expression.

Ward hypothesizes that the less equipment is used, the less bacterial and viral contamination will result. She hopes her research will provide the basis for a standardized collection procedure.

Two additional research questions will be asked: how commonly is the contaminant cytomegalovirus (CMV) excreted in mothers' milk; and what effect does freezing the milk have on both CMV and the herpes simplex virus.

This latter part of the study will be funded by the lab of Dr. Anne Yeager, associate professor of pediatrics, who has shown constant support and encouragement of the project since its inception.

"We encourage collaboration with physicians," says Welches. "Some of them like and welcome it."

However, she explains, "Many nurses here and at the Medical School collect data to assist in physicians' research. Some doctors have a difficult time seeing nurses do their own research."

Welches noted that one of the "positive side effects" of the research program has been to boost morale and self-esteem among nurses. "Instead of complaining, nurses, by participating in research, can go to administration armed with the facts. That's much more constructive, and it gains them respect from other professionals."

Some of the nursing studies completed or in progress at the Hospital since 1979 include:

- a comparison of the effects of two types of electrodes on monitor readings of cardiac patients;

- a units survey of dietary problems as perceived by nurses and dieticians;
- an investigation of the needs of parents of critically ill children;
- an evaluation of the chemotherapy certification program for nurses;
- the identification of factors in retention of nursing administrators in the U.S.;
- a look at physical location of childbirth and its relationship to maternal perception of the birth experience;
- a look at external factors influencing the incidence of medication errors by nurses;
- a job satisfaction survey repeated every two years to determine the effects of planned intervention in areas of work dissatisfaction; and more.

All proposals for research, explains Welches, must be reviewed by a Hospital committee made up of nurses from all levels. Projects must also be approved by the Department of Nursing Research, and by Stanford's Medical Committee for the Protection of Human Subjects in Research.

Conducting clinical research at SUH, she notes, is not off limits to nursing faculty and students from elsewhere. And besides to its other outreach activities, the Department is planning its first national research symposium, to be held in San Francisco this coming November.

Because research impacts the quality of nursing care, says Welches, Nursing administration recently placed responsibility for the Nursing Quality Assurance Program with her office. Dr. Marianne Zalar, R.N., is in charge of the program.

Explains Welches, "A quality assurance program is mandated by law. We decided if we really want to know what the problems are on the units and provide assurance to our patients that the care is of high quality, then we ought to combine these efforts with the research program."

In the final analysis, she says, administrative support is the single most important factor in the development of any effort to critically examine nursing practice. "Duane Walker, our director of Nursing Services, accepted his position contingent upon the existence of a full-time position for a doctorally prepared nurse researcher. Nancy Madsen, Duane's associate, and all the assistant directors have been a constant source of support."

She adds, "We continue to identify more questions than solutions. But each solution leads us to a more relevant question as we struggle to provide for our nurses an environment of challenge and searching, which we believe will lead to the ever improving delivery of nursing care."

4-6-82

—30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

ALCOHOL SERIES OPEN TO PUBLIC

STANFORD—

The Stanford Alcohol Clinic is presenting a series of three public programs on alcohol awareness, to be held Monday evenings at 8 p.m., in room M112 of the Medical School.

"Alcohol and the Human Body" will be the topic of a talk April 12 by Dr. Dennis Low, a substance abuse fellow at the Palo Alto Veterans Administration Hospital.

On April 19, Dr. Susan Beletsis will discuss "Adult Children of Alcoholics." Beletsis is a clinical psychologist at the Stanford Alcohol Clinic.

A preview showing of the film "The Last to Know" will be presented April 26. The film concerns women's abuse of alcohol and prescribed drugs. Dr. Stephanie Brown, clinical psychologist and director of the Stanford Alcohol Clinic, will introduce the film and lead the discussion afterwards. This evening will be co-sponsored by the Stanford Center for Research on Women.

No fees will be charged, and no registration is required. For further information regarding any aspect of the series, call Emily Garfield at 321-3727.

4-5-82

—30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Donnie Priest, who lost both feet following a plane crash in the Sierra last January, is to stand in front of home plate Tuesday to toss the first pitch of the Oakland A's season opener.

"(Pitcher) Mike Norris and (leftfielder) Rickey Henderson wrote me a letter," the 11-year-old boy said Friday. "I get to talk with all the players and watch the game." Donnie said he was an A's fan but that Tuesday night's opener (April 6, 7:35 p.m.) against the California Angels will be the first time he's been to one of the Oakland team's games in person.

"They (Henderson and Norris) were really impressed with his progress so far," team spokesman Rick Moxley said of the invitation by the two players.

Henderson, Norris and young Priest had met at a Fresno hospital in early January after the boy had been plucked from the wreckage of the plane, where he had spent five days in subfreezing temperatures. The crash had killed his mother and stepfather, but Donnie had managed to stay alive by huddling in sleeping bags stored in the rear of the single-engine private plane.

Priest was moved to Stanford University Medical Center Jan. 12, where both of his gangrenous legs were amputated the next day at midcalf. When he arrived by ambulance, he was wearing an Oakland As cap.

After Donnie was released from the hospital, he continued in a physical therapy program at Stanford. He was fitted with artifical legs March 12.

"He's doing outstandingly well," physical therapist Sandy Kasura said Friday. "He's walking for short distances without his crutches. He has been playing volleyball from his wheelchair during gym class, and he has been doing his own exercises during gym while the other children do theirs."

Kasura said she expects Donnie to complete his formal therapy program—consisting of three weekly visits—in about a month.

With his artificial legs, physical therapists and doctors predict that Donnie will be able to return to lead an active life, including participation in sports such as swimming, jogging—and perhaps some baseball.

Moxley said the boy is to throw out the ceremonial pitch at the season opener, even if it is postponed by rain to later in the week.

April 2, 1982 —30— mg207

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

The Board of Hospital Directors at Stanford has recommended approval of a revised design for the Hospital Modernization Plan (HMP).

Approved unanimously by the 14 of 16 board members present at a special meeting Monday afternoon, May 24, the revised plan will be offered for final approval June 11 to the Stanford University Board of Trustees meeting as General Members of the Hospital.

Dr. Lawrence G. Crowley, Stanford's vice president for medical affairs, said the revised design offers a tighter, more environmentally sensitive design which will enable future modifications or additions if needed either during construction or after the project is completed by a target date of May 1987.

Fundamental changes in the design include the addition of three basements—representing about 30,000 additional square feet—to be used as administrative office space. The project would be redesigned from four to three units per floor. However, reductions in the number of units (or pods) will not substantially alter the size of usable space and will actually increase by 110 the number of beds in use at the main hospital center by allowing closing of more beds at the Hoover Pavilion annex.

The HMP is intended to provide more modern and comfortable care via technological improvements and increased floor space per patient beds. Only a handful of additional beds will be added to the current licensed capacity of 663, and this is expected to accommodate patient care needs through the 1990s, Crowley said.

Elvia Garwood, HMP director, said the three-pod plan allows for more open space in the area because it is more compact. The previous design would have required building over Blake Wilbur Drive, a move which would have required restructuring traffic flow in the area.

"We believe that this plan not only will provide us with the optimum potential for longterm expansion and remodeling," said Crowley, "but it will enable us to enhance our role as a good neighbor to the surrounding communities by improving traffic flow and providing an even more aesthetically pleasing development than originally contemplated."

If approved by the General Members on June 11, the revised plan authorizes a construction budget of $71.4 million and a total project budget of $123.9 million. Originally, the General Members, the corporate overseers of the hospital, approved a construction budget of $67.8 million and a total cost of $114.8 million.

May 25, 1982 —30— L112

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

STANFORD—

Spyros Andreopoulos, the Medical Center's public information officer, has been appointed director of the Center's new Office of Communications.

The announcement was made May 20 by Dr. Lawrence Crowley, vice president for medical affairs. Andreopoulos' appointment is effective immediately.

The Office of Communications has overall responsibility for the organization and conduct of both news information and public relations activities for the entire Medical Center, including the School of Medicine, the Hospital and the Clinics, Crowley said.

In making the announcement, Crowley noted that the Medical Center is entering a new phase of development, one aspect of which includes the Hospital Modernization Project. A stepped-up program of public information is an essential component in this new era of Medical Center activities, he said.

"It is encumbent on all of us to help create a well-coordinated communications program directed towards improving public understanding of the needs of the Medical Center and its achievement and value to the local and national community," Crowley said.

"Spyros Andreopoulos is well known to all of us in his position as the Medical Center's director of public information for 19 years," Crowley added. "He is ideally suited for this expanded role as director of the Office of Communication and coordinator of all communications activities in the Center."

As director of communications, Andreopoulos reports directly to the vice president for medical affairs and is a member of the Medical Center's administrative policy group.

He will also chair a " communications coordinating council" that includes the directors of the offices of Hospital Community Relations, Medical Center Public Events, News Bureau, and Development, as well as a representative of Clinic administration.

Andreopoulos, a native of Greece, was assistant director of information services for the Menninger Foundation in Topeka prior to joining the Stanford Medical Center News Bureau in 1963.

5-25-82 —30— L112

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Aaron Smith, a Stanford social worker since 1969, has been named the 1982 Thomas A. Gonda Employee of the year.

Smith, who serves in the cardiac care unit of Pediatrics, was presented with the top employee award at a May 18 banquet ceremony by Dr. Thomas A. Gonda, a former director of Stanford Hospital and the man for whom the annual prize was set up to honor in 1975. Gonda currently serves as chairman of the Department of Psychiatry and Behavioral Sciences in the School of Medicine.

The Gonda Award winner was selected by a committee from among 49 persons nominated by fellow employees.

"The patients and families just love Aaron Smith and think the world of him," said director of Hospital Personnel Management Don Thomas. "He is warm and giving."

One nomination letter said, "He'll return to the Medical Center at any hour of the day or night to help a family in crisis."

Smith is co-founder and chairman of the board of the Mid-Peninsula Sickle Cell Anemia Foundation. He also serves on the scientific advisory committee for the National Association for Sickle Cell Disease. His research has included a three-year study on the impact of leukemia on the family unit.

Colleagues praised Smith, a father of two, for being a very family-oriented person and a deeply caring, compassionate human being.

"For once I'm speechless," said Smith during an acceptance speech at the awards banquet. "All I can say is thank you."

In addition to the Gonda Award, five other special awards (plaques) were given to runners-up at the 24th annual Hospital awards banquet.

These winners included Rita Klier of the phlebotomy lab; Richard Peterson of Transport Services; Rosie Rice of Patient Admitting Services; Rhetta Morre of Nursing Services; and Victor Hupman of the Print Shop.

Also, an award was presented to Lauren Fuentes in honor of her late husband Alex, who drowned in a small boat accident last February. Fuentes was regional operations manager at Hoover Pavilion. Jean Bronstein, assistant director of Nursing and a close working colleague of Fuentes, presented the memorial award.

In addition to the awards, over 400 Hospital employees attending the event received pins or other engraved items honoring five to 30 years of service. Retirees with 20 or more years of service were honored as well.

5-25-82 —30— L112

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Dr. Norman Shumway, professor and chairman of Cardiovascular Surgery, and Dr. Paul Berg, professor of biochemistry and 1980 Nobel Laureate, are scheduled to deliver the convocation addresses at Stanford University Medical School commencement exercises June 13.

The two Stanford faculty members were selected as noted spokesmen, one from more of a clinical perspective and the other from basic sciences. They were chosen by a vote of the students in the graduating class.

Dean of the School of Medicine, Dominick P. Purpura, will also speak at the ceremonies, which are open to all members of the Medical School community.

In addition, members of the graduating class of medical students will present special awards to selected faculty members.

The Office of Student Affairs is expecting over 125 Medical School graduates this year, according to student affairs director Diane Winkle. These would include 81 graduates of the M.D. program, 24 graduates of Ph.D. programs, 33 masters degree recipients (including 27 physical therapy graduates), and 12 diplomates from medical microbiology, who are receiving B.S. degrees.

Medical School students will first participate in Stanford University's 91st annual commencement, at 10 a.m. in the Frost Amphitheater.

Then, the Medical School ceremony is to be held at 2 p.m. at Alumni Green, following a 12:30 noon reception in the Dean's Courtyard. After the ceremonies, a champagne toast will also take place at the Dean's Courtyard.

Students are asked to let the Office of Student Affairs know how many family members plan to attend the ceremonies. For further information, call 497-6951.

5-25-82 —30— L112

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

STANFORD—

Dave (not his real name) comes to Stanford Hospital every five weeks to receive chemotherapy treatment for bone cancer. He's a hefty man, but after four and one half years of the treatment, he's lost five inches off his former height of six feet two inches. He "eats like a horse" for about two weeks, to combat the effects of the chemotherapy. He tries to diet the remaining three weeks, but his weight is up to 265 lbs. Dave needs to lose weight—the opposite of most cancer patients—and has a lot of questions about how to go about it.

Jane (not her real name) is about to begin treatment for a tumor in her stomach area. She'll be coming to Stanford every three weeks for chemotherapy, then radiation as well. She's never had much problem keeping her weight within normal range. She's followed a few health food fads, but, unsure of what effects to expect from the treatment, has a lot of questions about nutrition in general.

Dave and Jane can get answers to all their questions at unique workshops offered by Stanford Hospital's dietetics/nutritional department. The weekly sessions provide outpatients being treated for cancer the opportunity to learn about their individual dietary needs. With the help of a hospital dietician, they also develop a plan to achieve and maintain a high nutritional level in order to obtain full benefits from the cancer therapy.

Good nutrition is especially important for cancer patients undergoing therapy. A proper diet enables them to withstand the treatment for longer periods of time, reduces their susceptibility to infections, and in general, makes them feel more energetic. The treatment can cause patients to experience a number of side effects—loss of appetite, nausea, vomiting, dry mouth and throat, constipation, or diarrhea—at various levels of severity. If these side effects interfere with the patient to the point of lowering their nutrition level, treatment may have to be stopped. *Nutrition for Cancer Patients*, which is handed out at the workshop, explains how to cope with the side effects, and how to keep up the nutrition level.

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2-2-2

The dietician leading the informal workshops discusses why it is important to eat well. She has the patients fill out a form with everything they eat in a typical day. She then analyzes it with them, explaining the importance of each item in terms of it's caloric, protein, liquid content, and the food group in which it falls. With this the patient can see exactly what they lack, or of what they have too much.

Pat Kearny, the dietician working with Dave and Jane, stresses how important it is to let the patients arrive at their own answers. "Most patients have very poor nutrition backgrounds when they come in," she says. "If we just told them what we thought they should do, they'd go home and forget every word. But when they figure it out, it sticks."

Dave, for instance, drinks a lot of cranberry-apple juice, to help break the monotony of drinking so much liquid, which is essential. When Kearny points out the high caloric content of the juice, Dave is amazed. "I've just got to drink something else with fewer calories," he concludes. Kearny smiles her approval, and suggests water with lemon, or perhaps, iced tea.

Jane, on the other hand, asks a lot of questions about health food supplements, of which she takes quite a few. Kearny tells her they are most likely useless—perhaps even harmful since the content is not known. "Our biggest fear is that patients are throwing their money away on some 'magical' health food cure," she says. She tells Jane to concentrate on eating a balanced, high-protein, low-fat diet instead. Jane leaves, relieved of some of her anxiety of what the treatment will bring.

The patients are charged a nominal fee the first time they come to the workshop, but are encouraged to come back whenever they have a question, or even just to hear a supportive word. Many patients do come back again and again, Kearny says, allowing the dieticians to see the effectiveness of the workshops.

"The cancer treatment is devastating, but the worst thing is if the patients loose weight and treatment has to be stopped," she adds. "If we can help patients get through it just a little bit easier, then its worthwhile."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

MEDICAL ALUMNI REUNION 1982

STANFORD—

Nightwatch: New Perspectives on Sleep Disorders and their Treatment will be the major focus of this year's medical alumni reunion day, to be presented June 5 by the Stanford School of Medicine's Alumni Association.

In the afternoon, a special feature on cancer patient care will complete the day's presentations.

The program, open to all faculty, students, and alumni, will open 8:15 a.m. in the Fairchild Auditorium.

The morning speakers on various sleep-related topics will be Dr. William Dement, professor of psychiatry, director of Stanford's Sleep Disorders Center, and president of the Association of Sleep Disorders Centers; Dr. Vincent Zarcone, Jr., professor of clinical psychiatry; Gary Richardson, a medical student and director of the chronobiology program; Dr. Christian Guillemenault, associate professor of psychiatry; and Dr. Laughton Miles, clinical assistant professor in Psychiatry and medical director of the Sleep Disorders Center.

The morning program will include a Science Day Poster Exhibit, illustrating student projects in investigative medicine. The morning program is acceptable for continuing medical education credit. A certificate of attendance will be available on request.

A 12:30 luncheon will be held at the Faculty Grant Courtyard. This will precede the Alumni Association Annual Meeting. A keynote address will be presented by Dr. Dominick Purpura, dean of the School of Medicine.

The 3 p.m. presentation entitled "A New Concept in the Total Care of the Cancer Patient" will be followed by a guided tour of the Debbie Probst Oncology Day Care Center. Speakers will be Dr. Charlotte Jacobs, assistant professor of medicine and director of the Oncology Day Care Center; and Dr. Saul Rosenberg, professor of medicine and radiology and chief of the Division of Oncology.

At 5 p.m., cocktails will be served at the Stanford Faculty Club. At 7, reunion dinners for the 50th year class (1932) and the 25th year class (1957) will be held. Also, the classes of 1937, '42, '47, '52, '62, '67, and '72 will gather for dinner at various locations.

Registration materials for the day's events may be obtained by calling 497-5064. Reservations should be returned by May 28.

5-17-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Although Stanford has the highest percentage of minority students among California's medical schools, it should nevertheless seek more minorities interested in academic medicine, the faculty senate has recommended.

A $360,000 scholarship fund and the hiring of an assistant dean for student affairs to identify and lure outstanding minority students who are headed for academic careers was specifically recommended by the medical school faculty senate to augment Stanford's existing recruitment efforts for minoritiesu.

The proposal, adopted April 30, was sent to Dean Dominick P. Purpura who would be charged with its implementation.

A Committee on Minority Student Recruitment concluded in a report presented to the faculty senate that the proposed $360,000 funding would be sufficient to pay for 10 students a year for three years.

Students accepted for the program would begin a research project during the summer after finishing undergraduate training and would continue to pursue their research through their first and second year.

By providing students the funds and opportunity to begin their research early, the committee said it hopes to prevent research oriented minority students from being wooed from Stanford to other major institutions.

A particular goal of the program, the committee suggested, is Stanford's Medical Science Training Program, a five-year research track leading to both the M.D. and Ph.D. degrees. The committee noted that in the past three years, the only minority student accepted for the MSTP program chose another university. (Although minority students had been admitted to the select program earlier, including a black medical scientist graduating this June).

The committee had sent questionaires who were accepted at Stanford in 1977 through 1981 but who decided to attend medical school elsewhere. Thirty-six percent said they chose to go elsewhere because of cost or financial aid.

Minorities comprised 25.3 percent of the total medical student body at Stanford, the highest among California medical schools, according to an office of Statewide Health Planning and Development report issued April 23. Stanford's own figures show that the 1981 entering class showed an increase in minority (blacks, Hispanics and native Americans) enrollment, 26.7 percent of the 86-student class.

But Marvin Karasek, associate professor of biochemistry and chairman of the Committee on Minority Student Recruitment, said simply increasing the numbers of minority students is insufficient.

"Besides achieving numerical representation of minority students, the Stanford Medical School's thrust is now to address the problem of underrepresentation of minorities in academic medicine. Today there are few professors from minority backgrounds either at Stanford or any other medical school.

"We will seek out minority candidates with strong interest in biomedical research and careers in academic medicine, and increase our efforts to recruit them," Karasek said.

In addition to Karasek, the committee included Roger Peeks, a physician specialist in general internal medicine and assistant director of the admissions office; and Carla Shatz, assistant professor of neurobiology.

May 17, 1982 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

Editors: The Heart Research Foundation has informed us that Shumway will be available to the news media 2 p.m. Tuesday, May 18, at the Mount Sinai Medical Center, NYC. He will discuss with reporters his work with heart and heart-lung transplantation.

STANFORD—

Heart surgeon Norman E. Shumway, professor and chairman of Stanford's department of cardiovascular surgery, has been named the 1982 recipient of the Heart Research Foundation's International Recognition Award for his "distinguished pioneering contributions to cardiac surgery, including transplantation of the heart and lung."

Shumway will be honored during a dinner Tuesday evening, May 18, at the Helmsley Palace Hotel in New York City.

At Stanford, Jan. 6, 1968, Shumway performed the first human heart transplant in the United States. Since then, Shumway and his associates have performed a total of more than 230 heart transplants. More than 90 patients have survived until today, four of them for 10 or more years.

In March, 1981, Shumway's team was the first to overcome complications in the transplantation of both the heart and lung. Since then, six heart disease patients have received heart-lung transplants, and four (including the first patient) have returned to active work and family life.

"Dr. Shumway has earned admiration from both the medical profession and the general public," said Philip Zimmerman, president of the New York based foundation, in announcing the award. "The Heart Research Foundation, which supports and encourages research into the diagnosis, treatment and prevention of heart disease, believes his work dramatically demonstrates the progress being made in efforts to conquer heart disease."

Dr. Richard Gorlin, chairman of the Heart Research Foundation's Medical Committee, said one remarkable aspect of Shumway's work is the increase in survival rate for heart transplant patients during the past decade. Presently, about half of all transplant patients can expect an additional five years of life.

Shumway is the third recipient of the Heart Research Foundation's International Recognition Award. In 1980, the award was presented to Dr. Peter Rentrop of Mount Sinai Medical Center in New York City. Dr. Burton E. Sobel, of the Washington University School of Medicine in St. Louis, Missouri, received the award last year.

5-17-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

The division of cardiology at Stanford University Medical Center and Hewlett Packard Company have expanded their ongoing research collaboration with a contribution from HP for basic cardiovascular research and an agreement to hold joint development meetings for discussing future projects.

In an April 30 letter, Emery Rogers, chairman of HP's National Grants Review Board, told cardiology division chief Donald C. Harrison that a $250,000 annual contribution for three years is "contemplated in recognition of the increasing importance of corporate support of academic research."

Gary Steinman, technical director of the cardiology division, said the only restriction on the contribution is that it be used for basic cardiovascular research at Harrison's direction. He said the funds would be used in the general areas of engineering, bio-engineering and computer science.

The purpose of the developmental meetings is to identify specific research projects to be undertaken with contract support from HP.

Harrison said developmental meetings will enhance an ongoing relationship of research contracts and informal knowledge sharing which already exists between the division and the company.

"It provides a convenient mechanism for entering into separate research contracts with HP and for working together on projects of mutual interest," Harrison said. "Model contracts have been developed to streamline the process of implementing individual projects. We don't have to negotiate a new contract each time a new project is to begin."

During the past 13 years, HP and the cardiology division have collaborated on the development of several medical systems including an arrhythmia monitoring system in use in more than 1,000 coronary care units around the world, and computer-based systems used in the production and analysis of electrocardiograms, ultrasonic images of the heart (echocardiography), and X-ray images of the heart in the cardiac catherization laboratory.

Harrison emphasized that research grants and contracts with industry are especially important now that federal sources of funds are shrinking.

"But perhaps more importantly, support of this type permits the results of basic research to be transferred promptly to the clinical setting where these results can be applied to patient care."

Also, Harrison said these research programs would enhance the opportunity for graduate students and post-doctorals to participate in advanced cardiovascular research.

"It is particularly satisfying that we are to receive support from a high technology corporation which performs important research of its own and is willing to share its knowledge both through collaborative research projects and through informal interaction among our scientists."

May 10, 1982 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
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THE HODGKIN'S DISEASE SUCCESS STORY: HOW THEY DID IT.

STANFORD—

Stanford University Medical Center—home of some of the most advanced cancer research in the world—will celebrate an anniversary this week with a unique scientific symposium updating progress in Hodgkin's disease and paying tribute to the hundreds of patients who helped make it possible.

The anniversary marks a full 20 years since Stanford launched a series of daring experimental trials to treat patients with both early stage and advanced Hodgkin's disease.

Until that time treatments, mostly with low voltage radiation, were palliative and this cancer of the lymphatic system, which strikes about 8,000 people a year between the ages of 20 and 40, was commonly believed to be incurable.

Today aggressive diagnosis and treatment can lead to better than 80 percent survival at five years for all stages of the disease, according to Stanford's published figures. Seventy-five percent of the patients are permanently cured.

Even more dramatic have been the cure rates in children, with a 96 percent survival rate at 11 years, and with 93 percent of the children never experiencing a relapse.

The anniversary symposium Saturday, May 8, in the Sherman Fairchild Auditorium was organized by two pioneers in the field of Hodgkin's disease, Dr. Saul Rosenberg and Dr. Henry S. Kaplan. It will focus heavily on the work of Stanford faculty members, their past accomplishments and future directions.

And it will include talks by another important figure in the field, Dr. Vincent DeVita, director of the National Cancer Institute in Bethesda, Md.

It was DeVita who in the mid-sixties introduced the concept of clinical trials using a four-drug combination in patients with advanced Hodgkin's. And it was this combination called MOPP, which stands for the first letter of each drug—mustard, oncovin, procarbazine, and prednisone—that in later Stanford trials was used in conjunction with radiotherapy to produce even more dramatic results than those obtained by radiation alone.

But the real stars in the anniversary event, according to Kaplan and Rosenberg, will be the patients. More than 500 of the 800 patients who took part in Stanford's clinical trials, and who are now cured of Hodgkin's disease have accepted invitations to attend.

Clinical trials of new procedures and treatments are conducted only when the benefits are believed to outweigh the risks to the patient. They must also provide information that would be of benefit to society's future patients.

Nevertheless, terminal cancer patients taking part in experimental trials do risk side effects, pain and possible disability for a chance at life. And for this reason, the role each patient has played in making new procedures more effective and safer for the next generation of patients cannot be overemphasized, according to Kaplan and Rosenberg.

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"Many of the best insights, the most productive insights that we have gotten along the way, came from observations in particular patients," said Kaplan. "They taught us new lessons which gave us the new ideas."

It was in the mid-1950s, when Kaplan began treating Hodgkin's patients with orthovoltage radiation and nitrogen mustard in an attempt to cure the disease while it was still localized.

Experience with a handful of cases, mainly those of Dr. Vera Peters of Toronto, suggested that radiation would do the job, but in half the patients recurrences developed in the next chain of lymph nodes beyond the last one that had been irradiated.

Judging correctly that the effectiveness of radiation treatment was limited by the low-powered kilovolt X-ray equipment, Kaplan worked with Prof. Edward Ginston and a group of physicists at Stanford and helped develop the first megavoltage clinical linear accelerator to be made in the western hemisphere.

In the early 1960's Kaplan, using the linear accelerator, was able to deliver large tumor-killing doses of radiation—as high as 4,500 rads—deeper into the bodies of patients with advanced Stage III Hodgkin's. Treatments were spread over a period of up to four weeks and could be tolerated safely by the patients' skin.

(The disease is classified into four stages. When confined to one lymph area, it is classified as Stage I. If it is spread to adjacent lymph regions but is confined either above or below the diaphragm, it is called Stage II. When it involves lymph regions both above and below the diaphragm, it is Stage III disease. Hodgkin's disease that has spread to lung, liver, bone, bone marrow or other tissues is called Stage IV. Each stage is divided into groups A and B according to whether or not the patient experiences weight loss, fever, or night sweats—Editor.)

The procedure Kaplan used is called total lymphoid irradiation. It involved giving massive radiation doses to nearly all the lymphoid tissues of the body, while protecting other vital organs from ill effects by the use of lead shields tailor-made for each patient.

Even though the patients with the advanced disease had no chance of cure, the idea of total lymphoid irradiation was criticized at the time by some of Kaplan's colleagues.

"Radiotherapists of that day had an almost superstitious fear of treating people both above and below the diaphragm with large doses of radiation," Kaplan recalled.

"But today above 40 percent of the patients treated 20 years ago with the so-called radical high dose are still alive. They represent the first group of Stage III patients ever cured."

Success required not only the accelerator, but also other developments. One was the histopathologic staging of the disease, accomplished at the Armed Forces Institute of Pathology by Dr. Robert Lukes. Another was lymphangiography, a diagnostic test developed in Europe. This test uses an opaque dye, injected into the small lymph channels of the feet, to highlight the lymph nodes in the abdomen in X rays.

The Stanford group used lymphangiography routinely for all patients in their clinical trials as well as all other Hodgkin's patients.

"These studies added a great deal to the understanding of the natural history of Hodgkin's disease," said Kaplan. "We succeeded in showing that in probably 90 percent of all cases the disease disseminates as if it originated in a single site and progressed by what we call contiguous spread within the lymphatic vessels.

"It doesn't just appear helter-skelter all over the body. It has a highly predictable pattern of spread, while in the remaining cases, the disease is presumably disseminated through the circulatory system."

As a result, the Stanford collaborators developed an aggressive program against Hodgkin's disease that routinely included laparotomy and splenectomy as well as radiotherapy, with chemotherapy added in the advanced stages as a potential treatment ally.

Laparotomy and splenectomy involve a surgical incision in the abdominal region to remove tissue samples from the liver and lymph nodes near the spine, and to remove the spleen for biopsy.

An important discovery of the Stanford group was that the spleen in Hodgkin's patients was often a site of silent disease virtually undetectable by the lymphangiogram. Another finding was that the cancer spread by travelling from the spleen to the liver and possibly to the bone marrow.

In about 30 to 35 percent of the cases the extent of lymph involvement had been misdiagnosed. With laparotomy and splenectomy added to lymphangiography, the group was now able to determine accurately the extent of anatomic spread of Hodgkin's disease and then properly treat it with intensive megavoltage radiation.

As Kaplan was establishing the usefulness of the linear accelerator, Rosenberg was working with him and pioneering new developments in cancer clinical trials and chemotherapy as director of the Division of Medical Oncology.

"Twenty years ago the field of chemotherapy and medical oncology didn't exist at Stanford and in most places in the world," Rosenberg said.

"This division has grown from one faculty member, in 1965, to more than 65 people today, and is one of the largest in the Department of Medicine."

Rosenberg's interest has been developing protocols to improve the treatment of lymphomas. He helped establish the value of the laparotomy and bone marrow biopsy techniques. Starting in 1968, he began testing with Kaplan the value and role of MOPP treatment in combination with radiotherapy in patients with Stage I, II, III of Hodgkin's disease.

The combined therapy, according to Kaplan and Rosenberg, proved beneficial for many patients, and these series of treatment trials, conducted over a six-year period, improved the survival and cure statistics beyond what they had been.

In 1974 Kaplan and Rosenberg began new studies in which radiation and chemotherapy alternated, less toxic drug combinations were used, and new patterns of radiation and drugs were attempted in patients with the most advanced disease.

Among the less toxic drug combinations was PAVe, which stands for a three drug combination similar to MOPP. It is used as an alernative to MOPP because it is better tolerated by the patients.

Those trials were ended in 1980 and are still being evaluated, but it is clear, according to Kaplan and Rosenberg, that PAVe has proved to be every bit as good as MOPP, and more acceptable to the patients.

Kaplan and Rosenberg are now trying to perfect the powerful treatment programs with even less toxic drug combinations, without adversely affecting the cure rates.

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Instead of MOPP and PAVe, which almost invariably render males sterile and produce the risk of leukemia developing later, patients will be given a combination of the drugs vinblastine, bleomycin, and methotrexate, or VBM for short, after receiving radiation treatment.

Patients in the middle or advanced stages will also be treated with drugs other than MOPP, with MOPP reserved for cases when relapse occurs after initial treatment.

Kaplan's and Rosenberg's major concern now is the patients' quality of life. Even during the early years, radiation therapy was frequently associated with complications in some patients. They included radiation damage to the heart muscle, bone growth abnormalities, acute leukemia, and sterility in both males and females.

Modifications in techniques have prevented many of these from happening today. Children, for example, with Hodgkin's disease can now be treated without the impairment of bone and muscle growth induced by radiation. Kaplan solved the problem by reducing the dose and extent of radiation and adding chemotherapy.

Recently, the group also reported that 20 of 26 women had succeeded in becoming pregnant following treatment for Hodgkin's disease at Stanford, and giving birth to healthy babies.

"It's a measure of our success that in a disease that was once invariably fatal, we now have the luxury of looking into (the quality of life,)" Kaplan and Rosenberg told a reporter recently.

Using, for example, less toxic drug combinations such as VBM is perfectly justified in patients with favorable prognosis, they believe.

"If VBM works it would be a substantial contribution," Kaplan said. "If it proves not to be sufficiently effective, then we have MOPP in the background as a salvage regimen since its efficacy has already been well proved in patients relapsing after treatment of limited disease."

Kaplan and Rosenberg said that the major advances made at Stanford in two decades of clinical trials with Hodgkin's disease patients were based on clinical guesses—and the guesses usually have turned out to be right.

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(Editors: This feature may stand alone or accompany a related release mailed concurrently, "The Hodgkin's Disease Success Story: How They Did It.")

THE HODGKIN'S DISEASE SUCCESS STORY: TWO PATIENTS

STANFORD—

While their classmates faced parties and classes, Mary Murray and Douglas Eads faced the probability of death.

In their 21st year, the two young people learned they had Hodgkin's disease, a once universally fatal malady which attacks the body's lymphatic system.

But almost immediately they also learned of a bold, experimental program which helped them through occasional uncertainty and doubt to achieve more than a decade of cancer-free life.

Although their paths crossed scientifically, Murray, 35, whose married name now is Vidal, and Eads, 38, don't know each other. They were to meet for the first time May 7 at a news conference heralding 20 years of study and treatment of Hodgkin's disease, which usually afflicts victims in their 20s or 30s.

The following day, Eads and Vidal were to meet about 400 other former patients who graduated to a normal life expectancy from uncertain, often uncomfortable, clinical trials during the 1960s and 1970s at Stanford University Medical Center.

Although some of the patients in the trials were not so fortunate, the 400 survivors indicate that from the experimental work started in 1962, Hodgkin's has evolved from an almost invariably fatal disease to one which after treatment leaves 80 percent of its victims free of all symptoms for the rest of their lives. Survival is more than 90 percent for patients who are treated quickly after the first symptoms appear.

Vidal now lives in the Berkeley hills with her husband, Elie, a professor of French literature at Cal State Hayward, and the couple's 5 1/2-year-old twin daughters, Deborah and Anna.

Vidal, a teaching assistant in art history at UC Berkeley, recently completed her Ph.D. exams and hopes to travel with her family to France soon to work on her dissertation.

Eads, a senior administrative assistant for the Fremont city government, met and then married his wife of 13 years, Paula, while completing graduate school after his cancer was controlled. The couple lives in Fremont with sons John, 6, and Daniel, 4.

Vidal, the art historian, and Eads, the public servant, had much in common starting with a suspicious lump initially misdiagnosed by incredulous physicians. They just didn't associate a relatively rare and lethal disease with their vibrant young patients.

"I was going to school (at Cal State Hayward) and working parttime as a secretary in the Foreign Languages Department," recalls Vidal.

"It was early 1969, I was in my senior year. I felt this lump under my arm. . . I never had anything quite like that. An annoying thing that just wouldn't go away."

Vidal said she had night sweats and started requiring more sleep than usual. Later she learned these were common early signs of Hodgkin's, which attacks the lymph nodes and later spreads throughout the body.

"But at the time, it was just this annoying thing that just wouldn't go away."

She thought she had infectious mononucleosis, and at first so did the student health service at her school. But this was ruled out.

Struggling to recall what they next suspected, Vidal laughs:

"They thought I had an infected pore under the skin. They were wrong."

Her family doctor in her hometown of Oakland referred her to a specialist.

"At this point no one appeared in a great hurry to come up with any sort of an answer. I waited a couple of months, and then I went back to see the specialist. At this point he was anxious, and said, 'well I think it's serious; you're going to need some treatment.' "

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Vidal recalled the doctor recommended Stanford as much because the research program provided free treatment as because he felt the major center provided her best hope for what he strongly suspected by then was Hodgkin's.

For Eads, the lump started in the groin area and his family doctor sent him to the hospital for a hernia operation.

It was early fall in 1965, and Eads had been working through the summer before his senior year at San Jose State in a fruit packing house.

"Looking back I may have noticed signs, I might have been a little more tired than usual. But it was nothing really pronounced."

Eads actually was operated on for a hernia. When his doctor found during surgery that it didn't exist, he sewed the patient up and ran a battery of tests. His results came back a lot more quickly than Vidal's.

"I was still in the hospital recovering from my 'hernia' operation. I knew something was really wrong when the doctor walked to the door of my room, paused, and then walked away. He did this twice. The third time he came in and broke the news.

"I guess because he had a son about my age, he got a little more personally involved than usual. He sat down. I remember he had a medical encyclopedia in his hands and he was reading to me about Hodgkin's disease—how it was always fatal within three to five years.

"For about three weeks I thought I had a fatal disease. I don't imagine you could call me passive, but I was resigned . . . .Death is a little bit easier to face when there really is no alternative."

But Eads' doctor hadn't given up, despite the grim news in the medical encyclopedia.

"He checked around and found that they were doing some new things up at Stanford involving extensive use of radiation and chemotherapy, and he put me in touch with the program."

And Eads drove a few miles up the freeway to Stanford, where he entered the research protocol hoping for a reprieve from his death sentence.

On the other hand, Vidal said the realization of her serious condition did not come until she was deeply immersed in the Stanford program.

"I remember during one of my first interviews over there asking, 'What is Hodgkin's disease?' It seems to me someone had told me that if it wasn't cancer it was a first cousin to it."

" . . .The program was always very encouraging. I knew I was very sick and I finally knew that I had cancer. But always there was this attitude from the doctors, 'we have good success and people are being well treated.' "

Vidal's cancer had spread from the lymph node under her arm to other parts of her lymphatic system by the time doctors admitted her to the hospital, where they removed her spleen during a diagnostic procedure called a laparotomy, a surgical opening of the abdominal wall to permit examination of internal organs. The spleen is removed and examined closely in the lab, helping doctors chart a course of treatment.

When the result came back, Vidal started radiation therapy in the early spring of 1969.

"That was the easiest part of the treatment. I would come to Stanford about twice a month.

"I would get badly sunburned, and I lost part of my hair, and I was tired."

"And then I started chemotherapy, and that was rough—at least for me, although I understand that isn't true for everyone.

"The nausea was tremendous." A decade ago, chemotherapy was administered intravenously, and "I would have to go over to Stanford about once every two weeks. Afterward, before I could get across the Dumbarton Bridge, the discomfort became extremely severe."

Perhaps ironically, the months of treatment were kinder to Eads but ultimately riskier.

"I came up from Santa Clara (where he lived) for radiation therapy treatment almost every day for about a month," Eads recalls. "I was in the research group which was not given chemotherapy and my spleen was not removed" during the laparotomy.

Because the effort was experimental, the men who directed the program, Dr. Henry Kaplan, a radiology professor, and Dr. Saul Rosenberg, a professor of medicine and oncologist, weren't sure which forms of treatment would be the most effective.

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Eads, Vidal and hundreds of their generally young fellow patients over the years were told that not all patients would be getting the same treatment.

"At the time I seem to recall that I was grateful that I would avoid chemotherapy.

"But I was lucky." Only about one third of the protocol patients who received only radiation therapy survived. Today, radiation and chemotherapy are usually combined in relatively advanced disease, and the spleen is usually removed as a diagnostic aid.

(Although both Vidal and Eads suffered from an intermediate stage of Hodgkin's, Kaplan said Eads' condition was less advanced than Vidal's and probably would have been treated today without chemotherapy.

"But he was lucky," Kaplan recalled recently, "because his spleen wasn't removed" and thus doctors could not check for a hidden spread in his condition.)

It was during the active treatment stage that Eads was shown just how grim it would be if his treatment failed.

"Very early in my treatment phase I was kept in the hospital for some tests." I'm sure it wasn't intentional, but I was placed in the same room with a guy who was only a few years older than I in his mid-20s.

"He was suffering from very advanced Hodgkin's, and he didn't have long to live. And he knew it. He was crying regularly. I don't think he felt any pain. He just didn't want to die, and I think some of the medication might have had an effect on his emotional state.

"And I thought, 'well, this might be me in a few years.' "

But it wasn't.

Eads and Vidal both completed the active stage of treatment. Although both were tired and felt the uncertainty of whether they were sick or well, both young people were able to find brief diversions in the form of foreign vacations.

Eads said he accepted an invitation to spend six weeks in Colombia where his aunt and uncle were living, "and this was really one of the highlights of my life."

Vidal traveled to France for 2 1/2 months with Elie, whom she had met while working at the foreign languages department at Hayward State. She said he had become her closest friend and confidant during the ordeal of treatment.

But the relatively blissful and trouble-free world of travel predictably ended, and the period of waiting and uncertainty continued.

Patients are considered almost certainly cancer-free after five years, but during that waiting period, symptoms may recur at any time if treatment is incomplete.

Vidal and Eads say the period of about two years after treatment was one of ambivalence, when no clear direction was yet possible.

Vidal finished the last few credits and received her B.A. in political science by taking one or two courses at a time.

"I lived with my younger sister in an apartment for awhile. Then I lived alone. Looking back, I think it would have been better if I had been busier.

Perhaps the most positive outcome of the post-therapy years, says Vidal, is the beginning of her passion for art history. "After I completed courses for my B.A. I took a few art history courses just for personal enrichment. And I was hooked."

Eads also tied up the loose ends to secure his degree while he rested up. Then he went to graduate school in public administration and began work in 1967 as an administrative aide with the city of Saratoga.

Each year Vidal and Eads went back to Stanford for checkups.

And each year they were declared healthy, and each year their odds for longterm survival improved as they moved toward the five-year mark.

As time went by, say both Eads and Vidal, their confidence improved along with an ability to plan for a future.

So when the five-year mark arrived, it was an important but not dramatic occasion.

"I came in for my checkup," Vidal recalls, "and Henry Kaplan just said, " 'well, it's been five years.' It wasn't dramatic, but I certainly was happy to hear him say that."

Eads doesn't recall the benchmark moment. "It was a gradual thing. -more-

4-4-4 "Well, I've got to admit I was pretty nervous each year just before I went in for my checkups, but each year it got less and less, until now I don't really worry about it."

It may have been coincidence, but it also may have occurred partially as a consequence of living cancer-free for several years—major changes occurred in the lives of the two former patients.

It was a bit before the five year mark for Eads, but in 1969 he and Paula were married, and shortly afterward he moved from Saratoga to the city administration in Fremont, the only job change he has made in his career.

Five years after treatment for Vidal was 1975, and in that year she and Elie moved to their present house in Berkeley. A year later she began graduate studies in art history.

Both former Hodgkin's sufferers say the lingering effects of their ailment are minimal or nonexistent.

"If I don't get eight hours of sleep each night I just don't function at peak efficiency," says Eads, "but I'm not really sure that is a result of Hodgkin's.

Vidal says she might tire a bit more easily than before. The removal of her spleen may have left her with a less than normal ability to ward off infection.

But both are active in sports, running several miles several times a week. Vidal plays tennis, Eads plays racquetball and also skis when he gets an opportunity. And both have young children who demand attention and energetic parents.

Vidal's daughters are adopted. She and her husband had difficulty conceiving a child, and this probably resulted from the radiation therapy, she said. Precautions to prevent radiation damage to the ovaries were not as sophisticated in 1969 as they are today, when a majority of women who undergo radiation treatment for Hodgkins are able to bear children.

But it is the possible problems with adoption agencies her cancer may have caused which lingers longer in her memory than her inability to bear children.

"Elie and I had been turned down by one adoption agency and discouraged by others. They never gave a reason, but in each case there were medical forms, and of course I told them that I had cancer. I also explained that it was a long time ago, and I offered letters from my doctors. We will always wonder if my past illness made it more difficult to adopt."

But Vidal says her odyssey for children ended happily with the adoption two years ago of Deborah and Anna from a French agency. The two twin girls were 3 1/2 at the time.

"Right now Elie and I are going about the business of being young parents—at 35 and 55.

"We do all the things young parents do, and it's just great."

Although her cancer is just a lingering memory, Vidal had a particularly tragic reminder two years ago that the battle against cancer—nearly completed for Hodgkin's—is just beginning for other forms of cancer.

"This is really hard for me to talk about," explains Vidal, "but two years ago my older brother died of lung cancer."

She was in France at the time, going through the process of adopting Deborah and Anna, when her brother, who was 40 and had worked in medical labs, died after a short illness.

"I was cured," she says, "but there was no cure for him. It shows that there is a long way to go."

Eads had a less tragic reminder of cancer two years ago. He contracted skin cancer on the side of his face. But it was quickly removed with no after effects.

Eads' plans for the future are tied to the business of living—raising a family, progressing steadily in a public service career. Vidal's plans also are tied to her family and her burgeoning career as an art historian.

It's been more than a decade since they faced a disease which just a few years earlier had been a death sentence.

They have survived to a time when three quarters of Hodgkin's sufferers can expect to have normal lifespans and the potential, like Vidal and Eads, for lives unfettered by disease.

May 7, 1982 —30— bj3

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STANFORD—

The federally mandated committees that oversee recombinant DNA research have set a precedent for involving the public in decisions about science and technology, according to a report by two Stanford University scholars in the May 6 issue of *Nature*, a British scientific journal.

These committees represent a possible future model for "the way society will deal with scientific and technological innovations involving potential risks," say Stanford authors Dr. Diana B. Dutton and John L. Hochheimer.

The most innovative aspect of the federally mandated recombinant DNA biosafety committees has been the requirement that two members on each local committee must represent the interests of the community in which the research is carried out, Dutton says. Giving the public a say in how scientific research is conducted is a controversial idea, she adds.

In an attempt to learn how effectively that "direct public voice," has functioned in making science policy decisions at the local level, Dutton and Hochheimer surveyed chairmen of 19 such committees throughout California and 45 "public" non-scientist committee members.

In their *Nature* report, they discuss the varying responses and conclude that, overall, the recombinant DNA committee framework has established a "workable mechanism for public participation in the decision process concerning science and technology."

However, they note that the widely varying modes of operation of committees around the country point to the need for the public voice to be more closely specified.

For instance, the authors report that although federal guidelines state that public members should represent the health and environmental interests of the neighborhood where the research takes place, 25 percent of public members were actually recombinant DNA researchers or biological scientists affiliated with other institutions in the community.

"Although most such scientists were well qualified technically, their qualifications for representing community interests on public health or environmental issues were not evident from their *curricula vitae*," Dutton and Hochheimer say.

And although the guidelines encourage committee meetings to be open to the public, almost half of the California committees held no open meetings, the researchers discovered. Among the 11 committees surveyed that did have open meetings, only five held them on a regular schedule. None of the meetings was publicly announced.

"In committees that had open meetings, however, almost all the chairmen thought they were desirable, for reasons ranging from preventing public misconceptions to informing committee members about community views," the researchers found.

In addition to differences in public representation and access to biosafety committees, Dutton and Hochheimer found considerable variety in overall committee function. For instance, eight of 19 committees held no regularly scheduled meetings. In 1979, about 60 percent of all committees reviewed ten or fewer research proposals—several California committees did not review any proposals while one committee reviewed 68.

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Overall, the California committees approved 96 percent of the research proposals reviewed in 1979. The majority of committees, 11 of 19, rejected none of the proposals considered. And although the federal guidelines mandate committees to include periodic ongoing review of approved experiments, about one-third of 200 national committee chairmen reported that their committees did not carry out this function.

Committees with non-scientist citizen members reviewed about twice as many research proposals during 1979 as those with no lay members, and also spent a larger fraction of meeting time discussing policy issues, Dutton and Hochheimer found. This belies the argument that benefits of public participation come at the cost of decreased efficiency or incompetent review, the two authors observe.

Dutton and Hochheimer identified other areas where committee functions may have been deficient. For instance, in California 13 of 19 committees reported no health surveillance programs for recombinant DNA laboratories despite general agreement that such a program would be necessary to detect low level health effects.

They also found that committees interpreted responsibility for training their members quite differently. Some offered no training at all while others trained their members from a combination of university courses, manuals and laboratory tours.

Overall, Dutton and Hochheimer say, the survey results suggest that "given a chance, public participation seemed to work fairly well. Most community representatives contributed to effective committee performance by broadening discussion and encouraging more critical scrutiny of research proposals. Public meetings appeared to give committees a better understanding of community concerns."

In a sense, Dutton and Hochheimer say, the public role on biosafety committees has been an "experiment in public participation in science policy." They note that an Office of Technology report calls the committee framework "a possible model for societal decision-making on technological risks."

However, in order for such a local regulatory structure to work effectively, "clear minimum standards" for biosafety committees are needed, the researchers stress. "Such standards are vital in a decentralized regulatory system where effectiveness depends largely on local structures and procedures. Without mechanisms for assuring accountability to community interests, public participation in biosafety committees has not been fully tested."

Dutton is assistant professor of family, community and preventive medicine in the School of Medicine, and assistant professor of sociology. Hochheimer is a doctoral student in the department of communication.

Support for Dutton and Hochheimer's study was provided under a grant from the National Science Foundation's Ethics and Values in Science and Technology program and the National Endowment for the Humanities.

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STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

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FOR IMMEDIATE RELEASE
STANFORD—

Prominent Mexican scholars and professionals in education, industry, finance, the arts, science and technology will give nine free public talks on "Contemporary Mexico: An Inside View" at Stanford Monday through Friday, May 10-14.

Organized by the Association of Mexican students at Stanford, a group of more than 130 graduate students, the week-long program will open with "A Preliminary Evaluation of the Mexican Education Plan: 1976-82" by Jose Angel Pescador, director of the National Council on Education, Public Education Ministry, at 3:30 p.m. Monday, May 10, in the Auditorium of the Center for Education Research at Stanford (CERAS).

Following his talk, Alfonso Rangel Guerra, director of higher education in the Public Education Ministry, will speak on "Higher Education in Mexico: Present State and Perspectives." Prof. Robert E. Ward, director of the Stanford Center for Research in International Studies, will introduce the program, while Prof. Henry M. Levin of the School of Education will moderate.

Salvador Kalifa, director of industrial economy for ALFA Industries, will discuss "Mexican Industry" at 4:45 p.m. Tuesday, May 11, in Bishop Auditorium of the Graduate School of Business. George C. Parker, director of executive education in the School, will moderate.

"The Current Economic Situation in Mexico" will be discussed by Guillermo Ortiz, manager of economic and finances research for Banco de Mexico, at 3:30 p.m. Wednesday, May 12, at the CERAS Auditorium. "The Economic Outlook for the Next Administration" will then be covered by Jose Julian Sidaoui, adviser in economics research for the Banco de Mexico. Prof. Clark Reynolds of the Food Research Institute will moderate.

"Mexican Literature in the Eighties" will be discussed by Gustavo Sainz, director of literature for the National Institute of Fine Arts and Literature, at 3:30 p.m. Thursday May 13, in the CERAS Auditorium. The "Templo Mayor Project" will then be described by Eduardo Matos Moctezuma, anthropologist for the National Institute of Anthropology and History. Moderators will be Stanford Profs. Jean Franco of the Spanish and Portuguese Department, and John W. Rick, anthropology.

"Miguel S. Wionczek, researcher with El Colegio de Mexico, will describe "Problems of Science and Technology in Mexico" at 3:30 p.m. Friday, May 14, in the CERAS Auditorium, followed by Leopoldo Garcia Colin, researcher at the National Autonomous University of Mexico, who will cover "Science and Technology in Mexico: The President and the Future." Prof. Van R. Whiting Jr., Berkeley political scientist, will moderate.

—30—

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
STANFORD—

Dr. Bruno Bettelheim, widely-known child psychologist and visiting professor of education emeritus at Stanford, will give a lecture Friday, May 7 at 8 p.m. entitled "Misconceptions about Freud."

The talk is free and open to the public at Stanford University Medical Center in Fairchild Auditorium.

Bettelheim attracted international attention for his work with emotionally disturbed children.

His lecture is sponsored by the Clinical Faculty Association and the Department of Psychiatry at the Medical Center.

May 6, 1982 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Doctors have known for years that elderly patients require less surgical anesthesia than younger patients.

Now a Stanford researcher—in cooperation with five colleagues at the UC San Francisco Medical Center—is trying to learn precisely why, in hopes that doctors will be able to administer anesthesia more precisely and even more safely to an increasingly older population undergoing surgery.

Dr. Donald R. Stanski, assistant professor of anesthesiology and medicine (clinical pharmacology), recently received $520,000 to study the effects of barbiturates on elderly patients. These are the drugs, usually thiopental and methohexital, which patients are given to put them to sleep before longer acting inhaled anesthetics are provided.

His study is part of a $2.6 million grant to the six researchers through UCSF from the National Institute of Aging.

Stanski said he hopes to learn whether older people are more sensitive to the drugs. In other words, will an older person's brain be more affected by a given amount of a drug than someone younger? This is called pharmacodynamics.

In order to closely examine the dynamics of drug effects, Stanski said he will carefully monitor the brain waves of patients by using an electroencephalogram (EEG).

The second dimension, he explained, is that in older people, the drugs might actually be metabolized or distributed through the blood system differently than in younger, more active patients. This is called pharmacokinetics, and can be studied by measuring precisely the drug composition of the blood before, during and after anesthesia.

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"Ultimately we will be studying the relationship between EEG and blood levels and what effect that had on the patient in terms of providing the proper level of sleep for surgery," Stanski explained.

This research, he said, is becoming increasingly important as "the surgical population is getting older. What we're seeing clinically is an older and sicker popuation being operated on, and we need to know how to adjust our drug therapy."

Stanski said that proper dosage is especially critical for elderly patients, since they are more fragile. "If we make a mistake, the consequences are of a greater magnitude," he said.

The principal investigator for the project is Edmond I. Eger, professor and vice chairman for research of the department of anesthesia at UCSF. He will lead research on the effects of aging on the pharmacokinetics of inhaled anesthetics.

The other participants, all from UCSF, include Anthony J. Trevor, professor and vice chairman of the department of pharmacology, who will investigate morphine and ketamine. Ronald D. Miller, professor of anesthesia and pharmacology, will examine muscle relaxants, drugs which temporarily paralyze the muscles so surgeons can work effectively.

Michael F. Roizen, associate professor of anesthesia and medicine, will study the effect of aging on cardiovascular and autonomic control. He will be testing the hypothesis that an older person's autonomic nervous system may react differently to pain and physical stress than a younger person's.

Lewis B. Sheiner, associate professor of laboratory medicine, will work in computer modeling and data analysis, assisting the other researchers in computer simulations and models to predict potential results of the experiments.

May 4, 1982 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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TEENS—PUZZLED PARENTS, CHALLENGED PHYSICIANS

STANFORD—

Youth is the healthiest time of life.

This popular belief, though true for some, misleadingly assumes all teenagers are health problem-free. The fact is, adolescence presents a wide range of special medical needs only recently addressed as such by the medical profession.

So said Dr. Iris Litt, associate professor of pediatrics and director of Stanford's division of adolescent medicine. She spoke last week on "What to expect of your adolescent's doctor," the first of the spring's public Progress in Medicine lectures.

She said the first opportunity for health assessment of teens as a group came in the late 60's and early 70's, when phenomena like drug abuse, venereal disease, and unwanted pregnancies reached alarming proportions requiring governmental, parental, and medical attention.

"From statistics gathered at that time," she said, "we finally had enough information to form a good picture of the major health problems of teens."

Most of these, said Litt, are associated with pubertal growth. "They are commonly orthopedic, endocrinologic, dermatologic, gynecologic, and dental in nature."

Also, certain cancers and other tumors are more prevalent among teens than other population groups. Hodgkin's disease, said Litt, is most common in late adolescence and early adulthood.

"Infectious diseases of teens," she continued, "include mononucleosis, Rubella (German Measles), atypical measles, gonorrhea, tuberculosis, and toxic shock syndrome."

Problems associated with adolescents' psychosocial development are pregnancy; drug and alcohol abuse; automobile accidents (the leading cause of death and morbidity for teens); depression and suicide; and anorexia nervosa.

"We also have to deal with those teenagers who not long ago wouldn't have survived past childhood, but because of modern medical treatments have made it to adolescence."

These patients, she said, have undergone such treatments as cancer chemotherapy, renal transplantation, and cardiac surgery. "A physician's approach towards them at this stage must take into account all the other issues important to them because they are teenagers."

An example is acne. "We've seen teens with much more serious diseases care most about getting rid of acne."

Certain forerunners of "adult" health problems are also found in teenagers, said Litt. These include hypertension, high cholesterol, cancer of the cervix, and cigarette smoking (the prevalence of which is on the rise among adolescent females).

"But by and large," Litt asserted, "most adolescents are healthy." Therefore, she said, the major role of the doctor consists of maintaining this health and educating teens to become wise consumers of medical care.

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The usual three actors in a "well-adolescent" visit to the doctor, said Litt, are the teen, the doctor, and a parent. Each has his or her own agenda.

Teenagers want to know whether they're "normal"; whether the doctor can tell everything about them through examination; and whether they can count on confidentiality. "Teens are protective of their parents and don't want to upset them if something is wrong," said Litt.

Parents too want to know if their teenagers are normal (with boys the big question is height; with girls, menstruation). They also ask, "Where did I go wrong?"

The physician's major concerns during the "well-adolescent" visit are health screening, prevention, education, role modeling, and vocational counseling.

Prevention may be through immunization, or it may take another form. "Since traffic accidents account for so many adolescent deaths, we as physicians need to take on an advocacy role, as pediatricians have done with baby car seats," said Litt. "We must learn to predict who's at risk of not using a seat belt, and then find ways to appropriately intervene." (It's been found, she said, that nonusers of seat belts are more depressed and suicidal than users.)

"Teens who feel good about themselves and responsible are the ones who identify with the therapeutic goals of the physician," said Litt. "So these are important factors for us to consider."

Education during the visit means the doctor should not only examine, but teach the teen to examine her own breasts, or his own scrotum, for example.

Physicians dealing with teenagers should always keep in mind the developmental tasks faced during adolescence. These, said Litt, include: establishing independence from parents; establishing sexual adequacy; developing vocational and educational goals; establishing a positive self-image; and developing a capacity for intimacy.

"Often the extent of a teenager's rebellion towards his or her parents is directly proportional to the degree of previous closeness in the family," said Litt. "We physicians can help to reassure parents by pointing out the reasons for this natural rebellion, and reminding them that it doesn't last forever."

As for vocational counseling, Litt said, "The aim is to make sure, at an early age, that patients' career goals and expectations are reasonable given what we know about their physical capabilities."

Should teens all have their own doctors, specialists in adolescent medicine? Litt answered her own question:

"First of all, looking at sheer numbers, there aren't enough adolescent specialists to go around. But besides that, I've come to believe that the best doctor for any teen is whoever he or she feels comfortable with, as long as the physician is knowledgeable concerning adolescents."

She didn't always look at it that way, and recalls a time she shuddered at the thought of how a teenager must feel sitting in the pediatrician's lobby surrounded by babies and toddlers.

"But my teenaged sitter made a comment I'll never forget," said Litt. "She said, 'Sometimes when you're sick, you like to be babied.' "

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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TINY GAS BUBBLES IMPROVE ULTRASOUND DIAGNOSIS

STANFORD—

Tiny gas bubbles swathed in gelatin are helping researchers at Stanford University Medical Center to take improved ultrasound scans of malignant tumors and brain abscesses.

Though tests in humans are still several years away, preliminary animal studies, published in recent issues of *Radiology* and the *American Journal of Neuroradiology* suggest that the bubbles of nitrogen gas may significantly increase the value of ultrasound as a diagnostic tool in noninvasively distinguishing between normal and abnormal soft tissues deep within the body.

Dr. Barbara Carroll, assistant professor of radiology, leads one Stanford team that is refining and expanding the technique for clinical use.

"Contrast agents"- substances taken into the body that absorb or reflect energy waves differently from the tissue that surrounds them - are familiar tools in radiology. Milkshakes laced with barium outline abnormalities in a stomach or bowel that is exposed to X-ray beams. Injections of iodine can detail faulty blood flow in the veins and arteries that serve the heart.

But an effective contrast agent for the ultrasound scan, an exploratory tool favored by physicians for its convenience and apparent lack of side effects, has been elusive.

Ultrasound waves produce images by bouncing high frequency sound waves off soft body tissues, and recording the reflections. The returning echos are timed, analyzed and converted to electrical signals that can be displayed as two dimensional images on a video screen.

Microbubbles have been recognized for a decade as the best enhancer of ultrasound imaging, because they reflect ultrasound waves 10,000 times more efficiently than an equivalent volume of liquid or solid particles.

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But to increase clinical utility, the bubbles should be uniform in size and shape, injectable in measured quantities, and deliverable at precise rates. Bubbles developed by a bay area research team in collaboration with Carroll and other scientists, seem to meet each criterion.

The gelatin-encapsulated microbubbles (GEM) can be precision-made in sizes varying from 12 to 100 micrometers in diameter. Researchers can choose bubble size and density in the gelatin to complement the size of the vessels they wish to image.

Carroll's group has been using predominantly 76-micrometer bubbles of nitrogen gas - each smaller than a pin prick- to elucidate the twisted, turning blood vessels that characterize V2 carcinomas in the thighs, liver and kidneys of rabbits. Nearly 200,000 of the bubbles can be packed into a milliliter dose of gelatin.

A solid when refrigerated, the gelatin becomes a liquid at room temperature, and carries bubbles throughout the site to be scanned. The bubbles are large enough to stay within the vessels to be mapped (instead of migrating into surrounding tissue as liquid contrast agents do), but small enough to avoid vessel clogging.The gas dissolves within five to fifteen minutes, the smallest bubbles disappearing first.

Researchers currently are experimenting with alternatives to gelatin that could lengthen the life of the bubbles, permitting simple injection into peripheral veins, instead of catheterization of major vessels. Ideal bubbles would be small enough and long-lasting enough to traverse vessels from a vein in the arm or leg through the cappillaries of the lung and out into a target organ before dissolving.

Potential uses of the bubbles reach beyond tumor imaging. Dr.Richard Popp, professor of medicine/ cardiology, is experimenting with microbubbles encased in a polysaccharide coating in studies aimed at measuring blood pressure around the heart noninvasively.

Eventually, microbubbles conceivabley could be used to carry chemotherapeutic agents or cancer-fighting antibodies to target tumors, sparing normal tissue, Carroll said. They might also be used to enhance ultrasound hyperthermia treatments of tumors.

Before the therapeutic value of the bubbles can be explored thoroughly, she added, toxicity tests in animals and humans must be completed.

Carroll's research is sponsored by a grant from the National Cancer Institute.

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

Donald B. Tower, 39, of Columbia, Missouri has been appointed executive director of the Faculty Practice Program at the Stanford University School of Medicine.

His appointment, announced by Dr. Lawrence G. Crowley, vice-president for medical affairs, will be effective September 1, 1982.

"The FPP is an essential component of the medical center," Crowley said. "It is the base of the clinical practice of the faculty that serves patients throughout the state and the community as well as the teaching programs of the School of Medicine conducted through the Stanford University Clinics."

Tower will be responsible for administrative affairs, business operations, and policy and financial planning for the FPP in close liason with the FPP's executive committee and the vice president for medical affairs.

He will also be responsible for developing and maintaining all aspects of administrative and operational procedures of the FPP and the Clinics.

Tower is leaving his current position as administrator of the University Physicians, a practice group in Columbia, Missouri. He is known for the development of innovative computerized systems in the areas of patient reguistration, physician and hospital billing, and is experienced in the administration of large ambulatory care facilities.

Prior to his present position, he was executive director of Faculty Medical Practice, Memphis, Tennessee; assistant director of business and finance, Arizona Medical Center, Tuscon; and executive assistant director of admissions at the Los Angeles County Department of Hospitals.

Tower received a bachelor of arts degree in public administration from the University of California at Los Angeles, and has done graduate work in psychology at UCLA and in organization and systems design at the University of Colorado.

The Stanford University Clinics consist of about 82 specialty and subspecialty clinics. They recorded more than 134,000 patient visits in fiscal 1980-81, and gross income for the FPP for both inpatient and outpatient services was approximately $34 million.

6-29-82

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SK

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Joe McDermott, 22, died early Saturday (June 26) while undergoing a heart-lung transplant operation.

Dr. Stuart Jamieson, assistant professor of cardiovascular surgery and attending physician during the eight hour operation, said the Schenectady, N.Y. man's new lungs "failed for an as-yet unknown cause."

An autopsy was conducted Sunday.

Failure of donor organs is "a remote but nevertheless ever-present possibility during transplant surgery," said Jamieson, a veteran cardiac and heart transplant surgeon who has taken over the heart-lung transplant program from Dr. Bruce Reitz, now chief of cardiac surgery at Johns Hopkins University in Baltimore.

The first of Stanford's six previous heart-lung transplants was performed March 9, 1981 on a 45-year-old Mesa, Ariz., woman, Mary Gohlke.

Four of the first six combined transplant patients, including Gohlke, have returned to active lives.

Examinations earlier this year have led doctors in the Stanford program to comment that the procedure is viable for a select group of patients who otherwise would have no hope of surviving.

The other successful patients include Charles Walker, now 31, who was transplanted May 1, 1981. He exercises regularly and recently began a career in public relations in Northern California.

Barry Davis, 41, Redwood City, Calif., transplanted Oct. 10, 1981, and Darlene Moore Mathern, 37, Waterloo, Iowa, who was transplanted Dec. 1, 1981, are also reported leading active lives.

Karen Wilson, 27, died several days after her July 28 surgery when scar tissue from previous open heart surgery resulted in excessive bleeding.

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Nancy Lassen, 27, Phoenix, Ariz., the most recent heart-lung transplant patient died Feb. 12 after slipping into an irreversible coma. Her surgery was Jan. 20.

An autopsy performed on Lassen has been inconclusive, Jamieson said.

Recent heart-lung transplants have been made possible by the discovery of Cyclosporin A, a fungal derivative. The drug reduces the body's tendency to fight off or reject foreign tissue.

Previous drugs had the adverse side effect of preventing the windpipe from healing, and early attempts at heart-lung transplantation between 1968 and 1971 resulted in a survival rate of no longer than 23 days.

McDermott had been born with a condition called patent ductus arteriosus, a hole between the aorta and the pulmonary artery. Infants in the fetal state ordinarily have such an opening in their heart, but customarily it closes at birth.

The condition generally does not result in immediate symptoms and can go undiagnosed for long periods. In McDermott's case, the malady went uncorrected until he underwent surgery at age 12.

The opening was successfully closed, doctors said, but by that time his lungs were already damaged by pulmonary hypertension, a constriction of blood vessels in the lungs which leads to high blood pressure in the lungs and subsequent damage to the heart.

McDermott's health deteriorated slowly, and he was able to participate in sports, including water skiing. After graduating from high school in Yonkers, N.Y., he went to work as a tire buster enroute to a hoped-for career as a mechanic. But by January 1981 he was forced to quit work when his condition worsened.

Late last year the cardiovascular surgery team decided that he faced almost certain death within a year, and that his only hope was to replace both his damaged heart and lungs.

A memorial service was scheduled for Tuesday (June 29) at Memorial Church, conducted by Father John Hester, the Roman Catholic chaplain at the Hospital.

STANFORD UNIVERSITY MEDICAL CENTER
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INVENTORS HALL OF FAME CITES STANLEY N. COHEN

STANFORD—

Stanley N. Cohen, a key pioneer in the field of genetic engineering, was one of four charter members to be inducted into the "California Inventors Hall of Fame" at an awards ceremony Friday in San Francisco.

Professor and Chairman of the Department of Genetics at Stanford University Medical Center, Cohen is being honored for his work with Herbert W. Boyer of the University of California, San Francisco.

In 1980, Cohen, Boyer,and their respective universities, patented a technique that permits genetic material from the cells of animals to be dissected, recombined in new ways, and then spliced into the genetic material of bacteria.

In addition to creating a powerful research tool for analyzing the complex workings of genes, the technique makes possible the construction of "bacterial factories" that can safely produce large quantities of compounds important in medical treatment.

Because, in principle, bacteria could be engineered to produce almost anything created naturally by plant and animal cells, the technique developed by Cohen and Boyer may have significant applications in industries as wide ranging as energy, chemicals and agriculture.

The hall of fame is sponsored by the Philo T. Farnsworth Foundation, a non-profit corporation named for the San Francisco engineer who invented and patented the first electronic television 55 years ago.

Award winners were selected from more than 100 nominees by a committee of Californian representatives of national science and technological societies, who judged the " extent of the effect of the invention on the public welfare and the advance in science and the useful arts in the United States," according to Alice Bryant, coordinator of the awards.

The California project will be modeled after the National Inventors Hall of Fame, based in Arlington Virginia, which honored Thomas Alva Edison as its first member in 1973.

In addition to the citation of Cohen and Boyer, Farnsworth and Ernest Orlando Lawrence will be inducted posthumously into the Hall. Lawrence, a Nobel Prize winning physicist who died in 1958, has been cited by the hall for his development at the University of California, Berkeley, of the "cyclotron," the progenitor of a whole class of accelerators that use intense beams of particles to probe atomic nuclei.

6-24-82 —30— df

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

The Stanford Heart Disease Prevention Program is looking for 30 volunteers with high blood cholesterol to test a new cholesterol lowering agent.

The study's purpose is to test the effectiveness and side effects of Fenofibrate, which has not yet been licensed by the FDA for general use.

The program is optimistic that the agent will offer substantial help in controlling elevated cholesterol.

Subjects, who must be between 18 and 65, will be selected for the 18-month study after a six week evaluation. No hospitalization is required. Selected subjects must have sufficiently high cholesterol levels on three consecutive tests.

The investigation is being directed by Dr. Robert Superko, a physician specialist in the Department of Medicine.

Individuals who believe they might meet the criteria, or physicians who have patients who might qualify, are invited to contact Superko at (415) 497-6254.

June 22, 1982 —30— 506

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

(Editors: Photo available on request)

STANFORD—

J.M. Stephen Peeps, currently assistant to Stanford University President Donald Kennedy, will join the Office of Development July 12 in a new role as associate director of corporate relations.

Reporting jointly to the director of medical development and to the director of corporate relations, Peeps will organize and implement fund raising efforts in the corporate community for the university, espeically the Medical Center which conducts its own fundraising activities.

Bruce Hinchliffe, acting vice president for development, said the corporate community contributed $15.5 million to the university last year, an 87 percent increase over the 1978-79 contribution.

After earning an A.B. in English "with distinction" from the University in 1974, Peeps joined the Admissions Office, first as assistant director, then as associate director of Undergraduate Admissions. He left Stanford in 1980 to earn a masters' degree in Education from Harvard University before returning to serve as Kennedy's assistant in 1981.

June 22, 1982 —30— 506

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Dr. Roy Cohn, Atherton, is the new president of the Stanford Medical Alumni Association, and Dr. Donald Prolo, San Jose, is the president-elect for 1982-83.

Prolo's election was announced at the recent alumni reunion held at Stanford University School of Medicine, which coincides with the organization's annual meeting.

Cohn, class of 1933, practices general surgery at Stanford. He has been a member of the association's board of governors, and member of the editorial committee for *Stanford M.D.*, the association's magazine. He has served on the medical school's faculty since 1938, and was the first holder of the Walter Clifford Chidester and Elsa Rooney Chidester Professorship in Surgery until he became emeritus professor in 1975. He succeeds S. Gainer Pillsbury, class of 1957.

Prolo practices neurosurgery in San Jose. He has served on the association's board of governors, and is regional chairman for the south peninsula chapter of the Medical Fund, which provides financial aid for medical students.

In other action, the alumni association recently gave medical school dean Dominick Purpura a gift of $20,000 to use at his own discretion to aid medical students.

6-18-82 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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VA FUNDS SCHIZOPHRENIA RESEARCH CENTER

STANFORD—

Targeting for research a mental disease that cripples one fourth of all patients hospitalized in the United States, the Veterans Administration has established a Schizophrenia Biologic Research Center (SBRC) at the Palo Alto Veterans Administration Medical Center.

A five year grant of between $230,000 and $250,000 each year will fund the center which will be directed by Stanford University School of Medicine researchers Philip A. Berger and Walton T. Roth, associate professors of psychiatry and behavioral sciences.

"Our goal is to classify schizophrenic patients using biological criteria," said Berger, who has directed the Stanford Mental Health Clinical Research Center for nine years. The "biological criteria" to be researched at the SBRC include studies of biochemistry, pharmacology and brain structure, as well as brain blood flow, psychological performance, and waking and sleeping electrophysiology of up to 100 veterans who are afflicted with schizophrenia.

For two decades researchers have been collecting bits and pieces of the biochemical puzzle that relates brain processes to behavioral disorders.

While definitive answers still are elusive, current theories suggest that an imbalance of one or more of the chemical messengers in the brain that include dopamine, serotonin, norepinephrine and enkephalins may be associated with the devastating set of mental disorders collectively called schizophrenia.

A long term aim of the center, Berger said, will focus on using the biological classification system to predict which patients will respond best to which types of drug and psychological therapies.

While several new lines of research will be explored in SBRC studies, the center's biggest contribution towards finding effective treatments for schizophrenia may lie in the large number of patients it will provide for study under controlled conditions from a wide variety of research angles, said Jack D. Barchas, Nancy Friend Pritzker professor of psychiatry.

As director of the Pritzker Laboratory of Behavioral Neurochemistry, Barchas has been closely involved in research probing the relationship of dopamine to both depression and schizophrenia and has been a pioneer in psychiatric neurochemistry.

He will coordinate the biochemical studies of neurotransmitters and their metabolites in samples of blood, urine and spinal fluid to be done under SBRC auspices.

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Although most of the SBRC studies will be based at the Palo Alto VA Medical Center, an important collaboration with the University of California's Donner Laboratory in Berkeley will focus on recent advances in biophysics using a process (named PETT for Positron Emission Transaxial Tomography) aimed at mapping the flow of blood in the brains of schizophrenic patients.

Still an experimental technology less than a decade old, PETT has been used primarily to detail blood flow in living heart and tumor tissue, but is also "a very powerful tool" in the research of mental disease, Berger said.

PETT scans trace blood flow by recording the radiation emanating from glucose molecules that have been specially tagged with radioactive fluorine atoms, and then injected into the bloodstream to travel throughout the brain. The more active a specific portion of the brain is, the more energy it will need to perform its task. Since glucose is the major energy source used by the brain, researchers studying PETT scans can be confident that the colorful two-dimensional pictures of the brain, composed by computers analyzing the radiation patterns, accurately reflect the energy use of each brain part.

"If schizophrenics have an abnormality in some area of the brain, they might be getting either more or less blood to that area," Berger explained. "We want to see (by using PETT scans) if schizophrenics' regional blood flow is different from normal subjects."

Electrophysiological studies will monitor both sleeping and waking brain wave patterns. Tentative findings from the laboratory of Dr. Vincent P. Zarcone, professor of clinical psychiatry, suggest some schizophrenics show an abnormally high rate of contractions of their middle ear muscles during Rapid Eye Movement (REM) sleep - the period of sleep when dreams most often occur.

Preliminary hints that middle ear muscle activity might be related to severity of schizophrenia or to responsiveness to medication will be one of several types of electrophysiological studies to be followed up in SBRC research, Zarcone said.

In addition to the neuroleptic drugs commonly prescribed to curb schzophrenic hallucinations and delusions, the effects of endorphins - morphine-like substances that occur naturally in the human brain - will be prescribed in double- blind tests controlled with placebos.

Naloxone, a substance sometimes used to treat heroin addicts, which blocks the effects of both opiates and endorphins, also will be administered to patients in an attempt to better understand the role that naturally occuring endorphins might play in subgroups of the disease.

Stanford's SBRC will share data and methods with an analogous center funded by the VA, to be headquartered at the Bronx Veterans Administration Medical Center in New York, Berger said, as well as with the several non-VA-affiliated schizophrenia research centers around the world.

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(EDITORS: Sarnquist may be contacted at (415-493-5000, ext. 5638 or 5529).

STANFORD—

Stationary exercise bicycles aren't usually part of the gear that Sherpa porters are expected to carry up Mt. Everest.

But such bicycles were needed in research by the 1981 American Medical Research Expedition to the world's highest mountain and so were agonizingly lugged through ice fields to wind-whipped heights.

Results of a variety of high altitude studies conducted during the expedition—which included scientists, professional climbers and local guides—will be discussed by expedition leader Dr. John West, professor of medicine and biophysics at the University of California at San Diego.

West's lecture, "Scientific Expedition to the Top of the World," is free and open to the public Monday, June 21, from 4 to 6 p.m. at Fairchild Auditorium at Stanford University Medical School.

The talk is sponsored by the Department of Anesthesia at Stanford. Dr. Frank Sarnquist, assistant professor of anesthesia, was an expedition member.

Several experiments were conducted at the summit of the 29,028-foot peak by the two physician members who became the 10th and 11th Americans to reach the highest point on earth.

Sarnquist said Mt. Everest offered a unique—and admittedly glamorous—setting to conduct a variety of blood, pulmonary and other high altitude physiological tests, including the bicycle ergometer tests, "which puzzled the Sherpas who carried up the bicycles until we explained what we were trying to do," Sarnquist said.

June 15, 1982 —30— 210

STANFORD UNIVERSITY MEDICAL CENTER
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HMP PLAN RECEIVES GENERAL MEMBERS' APPROVAL

STANFORD—

The design for Stanford University Hospital's Modernization Plan (HMP) was approved Friday (June 11) by the Board of Trustees meeting as General Members of the Hospital.

The plan, or schematic design, was sent to the General Members, corporate overseers of the hospital, after approval May 24 by the Board of Hospital Directors.

The project, expected to be completed in May 1987, has a construction budget of $71.4 million and a total budget, including financing, of $123.9 million.

In Oct. 1980, the General Members authorized a construction budget of $67.8 million and a total cost of $114.8 million.

The increased cost represents the physical modifications and the added cost of finance in today's high interest money market, said Elvia Garwood, HMP director.

The HMP is intended to provide more modern and comfortable patient care via technological and functional improvements and increased floor space per patient bed.

Six neonatal intensive care beds are the only addition to the hospital's current licensed capacity of 663 beds. This is expected to accommodate patient care needs through the 1990s, said Dr. Lawrence G. Crowley, Stanford's vice president for medical affairs.

Twenty-two new operating rooms will be provided to replace the 14 currently in use.

Garwood said the new plan provides for three nursing units per floor in the three-story nursing addition and the addition of basements. A design approved late last year, would have provided four nursing units (or pods) per floor. That design, she said, would have resulted in a modification to Blake Wilbur Drive if the consolidation with Children's Hospital now under study were to occur in the future.

The new plan, she said, also allows for more landscaping and parking through more efficient land use.

Crowley said the revised design offers a tighter, more environmentally sensitive design which will allow for future modifications or additions if needed either during construction or after the project is completed.

June 14, 1982 —30—

Editors: Elvia Garwood is available to answer questions at (415) 497-7474.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

STANFORD—

Eighty graduates of Stanford University Medical School received their M.D. degrees last Sunday during the ceremony on the medical school's alumni green.

In return, the graduates honored six professors for excellence in teaching. The Henry J. Kaiser Family Foundation Award for Excellence in Teaching for preclinical students was awarded to Patricia Cross, M.D., professor of structural biology, and Stanley Falkow, M.D., professor of medical microbiology. The Kaiser award for clinical students was awarded to Jon Kosek, M.D., professor of clinical pathology, and Ron Merrill, M.D., professor of surgery. The Arthur L. Bloomfield Award in Recognition of Excellence in Teaching was awarded to William Watson, M.D., professor of clinical dermatology.

At graduation ceremonies for the entire university earlier in the day, Roy Maffly, M.D., professor of medicine, was awarded the Walter J. Gores Award for Outstanding Teaching. The annual award is presented to three professors from the entire university.

Also at the ceremony were students receiving undergraduate degrees in basic medical sciences, and medical microbiology; master's degrees in medical sciences, physical therapy, health services research, and physiology; and doctorate degrees in biochemistry, genetics, hearing and speech sciences, medical microbiology, neurosciences, pharmacology, and physiology.

Physical therapy graduates awarded the Lucille Daniels Recognition Award for Outstanding Contributions to Physical Therapy at Stanford to Katherine F. Shepard, professor of physical therapy.

Keynote speakers at the ceremony were Paul Berg, Ph.D., nobel laureate and professor of biochemistry, and Norman E. Shumway, M.D., professor and chairman of the Department of Cardiovascular Surgery.

Berg told the graduates, "Our expectations for your future accomplishments are no less demanding as when you arrived to Stanford. You have a payback obligation to restore the knowledge you've taken."

On a lighter note, Shumway said the honor of being chosen as keynote speaker was "only slightly tarnished by knowing M.A.S.H. actor Alan Alda was the first choice."

6-14-82 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FUNDING FOR BOSWELL BUILDING IMPROVEMENTS APPROVED

STANFORD—

Stanford University Clinics will undergo extensive improvements under a $6.5 million construction and remodeling program approved Friday (June 11) by the Board of Trustees.

The project involves renovation of the first two floors of the Boswell Building, the facility adjacent to Stanford University Hospital where a majority of the 82 outpatient medical clinics will be located.

"This major effort will enable us to anticipate and prepare for technological developments in medicine expected in the coming decades," said David Mendelow, associate dean of the medical school and administrator of the clinics. "We will be able to offer a more comfortable and efficient service to our patients, as well as providing an even more focused educational opportunity for our medical students, housestaff and faculty," Mendelow said.

The project is expected to be completed in the fall of 1984.

About 135,000 patient visits are recorded annually at the clinics, which serve the Stanford Faculty Practice Plan, a university based group medical practice. Clinic doctors include some 234 fulltime university faculty members. Community physicians also care for patients as voluntary medical faculty members.

The clinics are a separate outpatient care facility from Stanford University Hospital since September 1981.

Improvements include completely redesigned and larger patient treatment rooms, achieved in part by construction which expands clinic space into a few feet of what is now the building's courtyard.

To accommodate teaching activities, four major conference rooms and 17 teaching rooms will be placed in the clinics area, said Langston G. Trigg, assistant director of facilities and project manager.

Procedures requiring local anesthesia but not requiring overnight hospitalization will be performed in four special procedure rooms.

"For the past two years we have been analyzing our needs and attempting to see how we might make the clinics a more comfortable place for patients to seek medical treatment," Trigg said.

"For example, among changes will be a shorter journey for orthopedic patients from their clinic to X-ray. The opthalmology clinic, which obviously serves the largest percentage of visually impaired patients, is specifically being placed in an easy-to-find location," he added.

"A lot of changes which superficially might be seen as technical or procedural will in fact make visits to the clinics more comfortable for patients."

For example, Vera C. Waechter, manager of clinic patient services, said that patient registration is being decentralized to four separate areas.

"This will reduce the amount of time patients will have to wait before seeing their doctor, since they will no longer have to check in with a central desk and then with a receptionist at their individual clinic," Waechter said.

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Clinic renovation has already begun, Trigg said, at Hoover Pavilion, where the plastic and reconstructive surgery clinic and the pain clinic will be housed. Portions of these two clinics activities are already at Hoover, a separate Medical Center building which once housed Palo Alto Hospital.

Other clinics to be located outside the Boswell Building are psychiatry, which occupies its own building on the west edge of the Medical Center; neurosurgery and ENT, located next to the Boswell Building in the Edwards Building, and oncology, which is located in the basement of Stanford University Hospital.

"There will be little disruption of patient care during construction because of the staged approach to the project," Trigg said. "Patients will receive information about the location of their clinic during construction at an information booth to be located near the front entrance."

Designers of the Boswell project are Almeter and Finley, Architects of Palo Alto.

Funding is coming from a variety of sources, including at least $3 million from the Boswell Foundation, the original contributors to the existing facility. Medical School and Faculty Practice Plan reserves are expected to account for $2 million.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

New research animal facilities should be built at Stanford University to replace existing facilities which are old and outmoded or temporary, the Board of Trustees was told Friday (June 11).

David Mendelow, associate dean of the School of Medicine, said in a written report to the trustees that an architect is to be hired this summer to begin planning for a new consolidated animal facility estimated to cost between $9 million and $12 million.

The trustees will be asked to approve the project in early fall after the schematic drawings are completed and sources of possible funding have been identified, the report said.

Current facilities, at several locations around the university, received probationary accreditation from the American Association for the Accreditation of Laboratory Animal Care in 1980.

Implicit in the probationary status, said Mendelow, was Stanford's willingness to overhaul its animal facilities.

A tentative schedule calls for completion of project design during the fall of 1983. The facility, to be located next to Fairchild Auditorium on the west side of the Medical Center, would be opened in mid-1985, according to current plans.

The building would be connected by tunnel to the main Medical Center complex, where most research using animals is conducted, the report said.

The Outdoor Primate Facility west of the university has been improved to serve as a longterm holding facility for dogs, farm animals and monkeys and further improvements are contemplated, Mendelow said.

To provide proper care until the new facility is built, temporary buildings have been constructed in back of the museum, and other holding areas are being improved at a total cost of $1.4 million.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

Researchers at Stanford University School of Medicine are seeking 20 female volunteers who are at least 48 years old and who experience regular menstrual periods to complete a study of the changes women undergo as they approach menopause.

Because the study will examine the hormonal changes associated with menopause, volunteers should not currently be taking oral contraceptives or be receiving hormone replacement therapy.

Dr. Jean Dixen, postdoctoral fellow, and Dr. Julian Davidson, professor of physiology, are conducting the research as part of a larger investigation of the links between the psychology and physiology of sexuality and aging.

The current study builds on their recent findings that post-menopausal women approximately 57 years of age show a physiological response to visual sexual stimuli that is different from that experienced by women 10 to 20 years younger. Dixen and Davidson are eager to determine whether the difference is a function of age or of the hormonal changes of menopause.

Understanding the relationship between normal hormonal changes and sexual function is a first step, says Davidson, towards developing effective treatments that might alleviate the insomnia, depression, muscle and joint pain, hot flushes or sexual difficulties that plague some women during menopause.

Women interested in obtaining further information or volunteering for the project can contact Dixen at 497-2432.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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SELFLESS SERVICE EXEMPLIFIED BY EMPLOYEE OF THE YEAR

Editors: Photo available upon request if not included

STANFORD—

Clinical social worker Aaron Smith believes that sometimes the best thing you can do for someone in distress is nothing, "rather than to jump right in and do anything."

He speaks with authority, having worked in his field at Stanford University Medical Center for almost 13 years.

Smith, a recent winner of the Hospital Employees' 1982 Gonda Award, specializes in pediatrics, helping young patients and their families to cope with the stressful experience of hospitalization as best they can.

"We encourage parents to stand still for awhile in their anguish," he explains, "and to allow themselves to experience it." Tears, he claims, can be very therapeutic, and some people just need a place to be comfortable letting them flow.

"Some parents think they have to be brave throughout," says Smith. "We can help them to recognize the courage they already have."

Smith speaks of his families with great concern and compassion. For the past eight years he has dealt exclusively with patients in pediatric cardiology and cardiovascular surgery.

"My days are spent with families of children who have had, or may have to have, open heart surgery."

Conducting both individual and family counseling, Smith tries to help people understand what problems they are bound to encounter with a critically ill child, and what sort of outside supports they might need.

"Most of the support I provide is emotional," he explains. "Even the seemingly minor issue of being away from home—for those who have ventured far to be at Stanford—can create enormous stresses for parents and siblings alike."

Smith helps families understand the diagnosis, so that they may explain it to their child. "We also need to explain procedures, such as catheterization, so that everyone is prepared." In this capacity, Smith facilitates communication between the family, patient, and physician.

"I've been fortunate," he says, "since my professional opinion has always been respected by the physicians and nurses I've worked with." Whatever pertinent information he has about a family, says Smith, he shares with the staff.

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Smith also must be familiar with community resources and agencies that can help families when they leave the Hospital. "Sometimes a patient is here for so long that it's very difficult for the family to return home confidently." For this reason Smith and other social workers are heavily involved in discharge planning, in cooperation with other staff.

During hospitalization, they help families with small amounts of financial aid for food, transportation, and lodging whenever really necessary. "We provide some assistance through outside contributions, and through arrangements we have with certain nearby motels and hotels," he explains.

In some cases, families that have been through similar experiences are willing to help out with lodging or other needs.

Smith says the major change in his field that he's witnessed over the past 13 years has to do with approach: "Now that we have a large body of experience, we're acting on it more assertively in our efforts to help people. Since we know what can happen without support, we no longer wait for families to come to us. We can approach them with authority," he concludes.

Some people, he's observed, can end up using a painful experience—even the death of a child—in a creative way. "When we see families later they seem to be okay. And it helps a dying child to know that his family will survive, though suffer a great loss, after his death."

In the past Smith co-led bereavement groups at the Hospital, for parents whose children had died. At the moment he refers these parents to outside groups, though he hopes they will someday be reestablished at Stanford.

It's not hard to sympathize when Smith concedes, "You really have to get away from all this, in order to get back to it." Luckily, Smith has two daughters who draw him away, often enough, to attend their piano recitals up and down the Peninsula.

Angela, 17, is interested in chemical engineering while Amy, 13, wants to be a doctor someday. Smith's wife Anna is also a social worker, for the Child Protective Services of Santa Clara County. The family is involved in social groups and church activities near their San Jose home.

Smith says receiving the Gonda Award at the recent Hospital Employee awards banquet was a total surprise. "I suppose I was nominated because people are impressed that I constantly listen to other peoples' problems—but other social workers do that too," he modestly asserts.

Smith received his masters in social work at Howard University in 1964. He earned a masters in public health at U.C. Berkeley in 1968, and is now working on his dissertation for a Ph.D. in medical sociology from U.C., San Francisco.

He is the social worker advisor to a support group called "Parents for Heart," sponsored by the Santa Clara County Chapter of the American Heart Association. He also serves on both the Mid-Peninsula Sickle Cell Anemia Foundation and the National Association for Sickle Cell Disease.

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD—

In keeping with a long standing tradition, 61 of the 80 medical students graduating from Stanford University School of Medicine this year have been matched to one of their top three choices for internships.

Overall, 48 students will be interning in a university hospital, with Stanford University Hospital receiving 11 graduates.

Also in keeping with past years, the largest number of graduates, 28, will continue their medical training in internal medicine. Other popular choices include family practice, surgery, pediatrics, and flexible internships.

Four members of the graduating class will pursue post-doctoral research fellowships in the coming year.

The medical students' success in the intern matching process is a reflection of their strong clinical performance, according to Dr. Elizabeth Short, associate dean for student affairs, as well as a counseling program that helps them apply for programs most appropriate to their level of experience and career goals.

6-8-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

A distinguished award to honor Stanford's best and brightest in academic medicine has been created by the medical school's department of medicine.

The award is named in honor of Albion Walter Hewlett, MD, an internationally known professor of medicine and leader in clinical investigation at Stanford from 1916 until his death in 1925.

The Albion Walter Hewlett Award, symbolized by a metal sculpture by acclaimed sculptor Agnese Udinotti of Scotsdale, Arizona, is the brainchild of Dr. Kenneth Melmon, chairman of the Department of Medicine.

The sculpture, unveiled last Thursday in Fairchild Auditorium, depicts "man—his isolation intensified by disease—and the evolution of his integration with society through the intervention of the physician," according to Udinotti and Melmon.

The sculpture will be housed in the hospital's main lobby, together with some of Hewlett's books. A slide presentation, shown at the unveiling of the award, will be included in the display for viewing.

Recipients of the award, to be given at most once a year, will receive a parchment seal depicting several figures from the sculpture, a silver medallion made from the seal, and an undetermined amount of money with which they can select books or journals for the Hewlett Library.

A special committee will choose the recipients from nominations by anyone involved in the Stanford academic community. "Nominees should be living physicians who have some Stanford background and are well-known as dynamic role models for future academicians and practitioners of scientific medicine," according to the department. "They should symbolize the ideal portrayed in the sculpture: the physician of care and skill who is committed to discovering and using biologic knowledge, wisdom, and compassion to return patients to productive lives."

Authoring almost 100 publications were among Hewlett's contributions to medical science. He was among the first to demonstrate the effect of quinidine in cardiac arrhythmias, and to use large doses of digitalis in heart failure. He was known as a great teacher, and a compassionate and skillful practitioner as well. A library-conference room at Stanford is named after him, and 'Hewlett Clubs' exist in Los Angeles, San Francisco, and Oakland.

Hewlett's daughter, Dr. Louise Nixon, who received her MD degree from Stanford in 1951, was present at the unveiling, as were three grandsons, Jim Hewlett, a scientific programmer, Walter Hewlett, who is involved in the computer business, and William Hewlett, a sixth year medical student at Stanford.

Son William Hewlett, of Hewlett Packard Company, was in Europe and unable to attend.

6-7-82 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD UNIVERSITY HOSPITAL SEEKS IDENTITY OF ELDERLY PATIENT

(Editors: The following story sent Business Wire Wednesday, June 2)

STANFORD—

The identity of a man believed to be in his late 70s has stymied Stanford University Hospital officials for 10 days.

"I've worked here for 16 years and this is the first time that we've ever had a live 'John Doe' unidentified for more than a few hours," said social worker Juanita Smith. She has spent the past week making phone calls and other inquiries in hopes of unraveling the mystery of the thin, mustached man of average build who has been occupying a room since shortly after he was brought to the emergency room on May 24.

Smith said witnesses called an ambulance after the man, who has mixed black and white hair, collapsed and fell at the corner of El Camino Real and Oakwood in Redwood City.

He was wearing a navy blue jacket, gray pants "and appeared to have been well taken care of. He didn't look like a derelict," Smith said Wednesday.

He has responded to the Italian language spoken by a medical student and has mentioned the name "Joseph Raffino," although an exhaustive check of local agencies and records has failed to produce a missing person of that name in the area, Smith said. Moreover, she said the puzzling contexts of his conversations indicate he may be referring to another person named Raffino, not himself.

He has told medical personnel that "his wife and son are dead and he lives with some other men," said Elizabeth Taft, director of discharge planning at the hospital.

He had no wallet and only $2 in cash was found on him when he was brought to the emergency room, Smith said.

He was suffering from a minor head injury, although that appeared to have been caused by the fall to the pavement, said Dr. Edward Novotny, a neurology resident who has been caring for the unidentified man. Novotny added it is possible although unlikely that the head injury could have been caused by a mugging.

The man suffered no other injuries and appears to have been suffering from a long-term loss of mental function with the symptoms of senile dementia, Novotny said.

"He has a short attention span and his answers frequently are *non sequiturs* ," Novotny added.

The physician said the man also suffered from dehydration but this has been corrected with proper nutrition.

By Wednesday morning, Novotny said, the man was well enough to be released from the hospital if proper supervision—such as a nursing home or a relative—were available.

Smith said persons who think they might have information about the man's identity are urged to call (415) 497-5091.

June 2, 1982 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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WHICH STRESS IS STRESSFUL?

STANFORD—

Just before a dried out alcoholic is ready to leave a detox center, he tells a screening psychologist that his wife just died.

The psychologist—by training and common sense—writes down that the patient has an environmental stress in life and therefore might run a higher than average risk for hitting the bottle and winding up back in the detox center.

But Rudolf Moos, professor of psychology and director of the Stanford Social Ecology Laboratory, thinks more persons, particularly psychiatric patients or others suffering from emotional disturbances, could be helped if health professionals could be provided with more accurate definitions of stress and how people respond to it.

Moos, who also directs psychiatric research at the Palo Alto Veterans Administration Medical Center, is conducting a study to find out how to define stressful incidents and how individuals respond to these pressures.

Moos has received a $295,306 grant from the John D. and Catherine T. MacArthur Foundation to continue his work, "Measuring Environmental Stressors and Coping Resources."

When a patient says "my wife just died," health professionals uniformly regard this as an environmental stress, says Moos. They are trained to make predictions about the patient's potential outcome and to some extent how the person will respond to the situation based on the simple statement, he adds.

But Moos says at the very least we need further information. How long had the widow or widower been married? Was it a loving relationship or a distant one that the patient might in fact be relieved to see ending?

"Before we can accurately screen patients, we need to learn to ask these sorts of questions, then we need to learn how people cope with specific life crises," Moos explains.

The three-year study, he says, will seek to categorize various stresses which ultimately may have mental health implications. The study will then look at how people respond to situations which indeed are stressful, and also how social resources, such as family or friends, affect the response to stress.

After developing ways to measure stress factors and coping resources, Moos hopes to use the information to identify individuals who face the highest risk for a recurrence of such illnesses as depression or alcohol abuse. The information would help clinicians provide preventive measures to increase the chances that treatment will be successful.

The Chicago-based MacArthur Foundation is a private philanthropic organization which provides research funding in such fields as mental health research, education, public affairs, communications, and the justice system.

June 1, 1982

—30—

STANFORD UNIVERSITY MEDICAL CENTER
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LEARNING TO LOVE SPIDERS: AN ANTI-PHOBIA PROGRAM

STANFORD—

Jean Oxe realized the severity of her spider phobia about a year ago. The apartment in which she was living seemed to be overrun with them. She got so paranoid, she said, that she would check behind her headboard—where she was convinced they were waiting to attack her—each night before she got into bed. The final thread in the web came one evening when there seemed to be a spider everywhere Oxe turned. "I flipped out," she recalled. She fled her apartment, spent the night at a friend's, and soon after moved.

Oxe said she "broke out in a cold sweat" at the mere sight of a spider. So when a colleague at work pointed out a study being done at Stanford to help people overcome spider phobias, she decided to volunteer. After just a few hours of treatment under the direction of psychologist Lloyd Williams, Oxe was not only cured of her fear, but seemed to enjoy playing with the spider as it crawled on her hands and forearms.

Williams helped Oxe overcome her phobia with a treatment called participant modeling, developed by psychology professor Albert Bandura. By measuring Oxe's, and other subjects', levels of catecholamines, a group of hormones including adrenalin that the body releases in reaction to stress or fear, Bandura and Williams are studying their theory that confidence, or self-efficacy, is a central factor in fear. If an individual can be made to feel confident or in control while in the presence of spiders, for example, the fear will be reduced.

Oxe began her treatment with a number of exercises, such as looking at a spider inside a glass container. Despite her constantly reassuring herself, she balked at putting her hand in the container with the spider. Thus, her level of fear was determined.

She then filled out a form rating her own confidence levels. Statements referring to simply being in the same room as a spider presented no problem to Oxe; she rated herself near 100 percent. When it came to coming in direct contact with the spider however, her confidence quickly dwindled to near zero percent.

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The next step was Williams'. Sitting across the room from Oxe, he told her about spiders: their timidness, their habits, and their nature. He simultaneously let the spider crawl on his hands and forearms. He demonstrated picking up a spider with a cup and a piece of paper, to dispose of it without having to touch or kill it. Oxe sat staring fixedly, looking uncomfortable at the prospect.

"I can't stand the thought of killing the spiders, but I don't want them around either," she remarked. "It's all the little legs running around that scare me."

Oxe was then hooked up to a machine that would measure her catecholamine levels. Williams proceeded to encourage her to put her hand in the bowl with the spider. She was a bit jumpy at the initial touch of the spider, but soon relaxed enough for Williams to put the spider on her hand. Others first use a garden glove. From there, it was just a matter of moments before Oxe and the spider became good friends.

"I'm absolutely amazed. I'm really proud of myself," she exclaimed.

Williams reinforced Oxe's new attitude by having her repeat the exercises with two other spiders. She completed another confidence form, to show her the progress she'd made, and with that, Oxe was "cured."

Oxe is just one of many volunteers Williams and his colleagues are helping while atudying their theory.Even those with seemingly incurable fears are able to overcome them with the treatment. The results should be published by mid summer, Williams predicted, leaving the room.

Oxe however, was long gone. She was going, she said, to find some spiders.

STANFORD UNIVERSITY MEDICAL CENTER
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PALO ALTO CITY COUNCIL CONSIDERS HMP RESOLUTION

STANFORD—

The Palo Alto City Council Monday night (July 27) postponed until Aug. 9 a decision on whether to pass a resolution formally supporting the Stanford University Hospital Modernization Plan (HMP).

The resolution is not required for work to continue on the project, but hospital officials are seeking the action as a testimony of support from the council as the HMP faces review by state and county agencies.

"We are seeking the voice of a friend and neighbor who will vouch for us as we move through the governmental approval process in the weeks, months and years ahead," Lawrence G. Crowley, Stanford's vice president for Medical Affairs told the council Monday.

Crowley said SUH plans to seek similar resolutions from neighboring communities in the future.

Councilmember Emily Renzel, who was absent, had written her colleagues requesting a postponement until the council was able to seek assurances from Stanford on several issues, including the issue of access to hospital-based services by community physicians and financial issues relating to the hospital and HMP.

Councilmember Larry Klein, who in Renzel's absence sought the continuance Monday night, said "it was not appropriate" for the council to become involved in disucssions of Stanford finances. But he recommended—and the council subsequently adopted unanimously—his motion that a public hearing be held Aug. 3 to discuss the access question and other issues relating to the hospital's HMP request.

The hearing would be conducted by his council hospital subcommittee which will report back for full council action on the resolution Aug. 9.

Stanford asked the council to approve a resolution saying "the City of Palo Alto supports modernization of the Stanford University Hospital."

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The measure states that approval "does not constitute advance approval by the City of Palo Alto of any of the financial, environmental or physical aspects of the modernization project."

Full public hearings by the city would be held when the hospital seeks a favorable environmental impact report and building permits.

The $123.9 million HMP is intended to bring the hospital up to modern standards and fulfill the patient care and teaching needs of the community and medical center through the 1990s.

"Everything in the plan is necessary for the hospital's survival," Sheldon King, director of SUH told the council Monday.

Paul Cooney, a Palo Alto physician and clinical professor of medicine, told the council that the access question was like the "rock of Sisyphus," an obstacle which in recent years has caused discord between the hospital and some physicians and needs to be resolved.

But Cooney said he favored the HMP: "It's a given. There's no right-minded physician who wouldn't be" in favor.

Geraldine Steinberg, a lay member of the hospital board and former member of the Santa Clara County board of supervisors said "access and the need to modernize are two different issues."

Both she and Walter Arons, a Palo Alto physician who also serves on the hospital board, said that discussions between hospital and community physicians are making progress and should be conducted independently of the HMP question.

The question of access has not involved the admission of patients, since all qualified community physicians may admit their patients to SUH, and Palo Alto residents have priority for elective admissions.

At issue is the question of whether doctors who are not fulltime faculty members may have unrestricted or greater privileges to perform certain procedures in hospital or university operated labs or facilities, such as radiology.

STANFORD UNIVERSITY MEDICAL CENTER
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"FEMININE" FIELD OF NURSING OPENS DOORS TO BOTH SEXES

STANFORD—

The nursing profession is ready to welcome more men to its ranks, says Duane Walker, Stanford's director of nursing services.

Though the field is usually perceived as "feminine," Walker insists that any profession can only benefit from the variety of input provided by both sexes.

Still, while society's expectations change and more women enter traditionally male-dominated fields, there is not yet a corresponding rise in the number of males choosing "female occupations" like nursing.

"Nationally as at Stanford," observed Walker in a recent interview, "only about three percent of nurses are men." The profession, he said, is beset with persistent stereotypes—including the idea that it is a secondary career, a step down from medicine.

William Thompson, R.N., who works on NOA (behavioral medicine unit) said the decision to enter nursing was a real struggle for him. "First I had to feel comfortable with my own masculinity."

Mike Lazzeri, R.N., a cardiovascular intensive care nurse, agreed. "I knew I wanted to work in health care, and it came down to a choice between medicine and nursing."

He first resisted nursing for two basic reasons, Lazzeri explained: the economic reality ("...it will hardly make one rich..."); and the traditional image of nursing as "woman's work."

Lazzeri came to grips with his hesitations.

"But it was very hard for me to tell my parents, and ten times harder to tell all the guys I played basketball with." Lazzeri's wife Mary, also a nurse, was "a gentle support throughout," and the others encouraged him as well.

He explained his choice: "The difference between medicine and nursing, as I've always seen it, comes down to an approach to people and how one feels in that approach. Physicians must look at people primarily in terms of data and statistics. While nurses too are concerned with these aspects, they tend to regard their patients primarily as people.

"It's not that doctors don't care as much, but there is definitely a greater closeness allowed for nurses."

Both Lazzeri and Thompson came to nursing in a roundabout fashion. Thompson, a free-lance photographer with a psychology degree, worked at all sorts of odd jobs until becoming interested in nursing. He came to Stanford over two years ago, first working in medical oncology.

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Lazzeri, at Stanford two years, was recruited directly to the cardiovascular intensive care unit, since the nurse shortage at that time necessitated hiring new nursing graduates.

Both intend to remain in nursing, though they may not hold rigidly to any specialization. Explained Thompson, "You can always change areas in nursing. That's what makes it exciting."

Added Walker, "Unfortunately most of the men who *have* entered nursing, thus far, have been pushed into a few areas. These include psychiatry, management, and teaching—all of which keep them further from the bedside."

His own story serves to illustrate: "I loved bedside nursing, but became an administrator because I wanted to have a greater impact on professional issues, and because of the greater pay. Often I do miss the direct contact with patients and families."

How do patients and families, as well as fellow staff and physicians, respond to male nurses?

The answers vary, but the overall consensus is that individual traits, not gender, make the difference in how people feel about their nurses.

As Lazzeri pointed out, "When patients first meet me they take a hard look and then say, 'Fine.' Once they know me they often ask, 'Why are you in nursing? Do you plan to go on in medicine?' "

Agreed Thompson, "With female nurses they don't assume these things."

Both men have noticed that they are referred to, especially by older patients, as "my male nurse," rather than simply "my nurse."

Sometimes a sort of reverse prejudice is found, when people actually express a preference and greater respect for male nurses.

According to Lazzeri, "Being a man does often help me get my foot in the door with the doctors. Then I have to prove myself like everyone else."

Most female nurses, said Lazzeri, agree the profession needs more men, and he has never experienced discrimination in terms of assignments or promotions.

"Let's face it," said Walker. "Anyone who has a problem accepting the opposite sex at work must really be threatened by his or her own insecure sexual identity.

"I'm a caring, sensitive individual, and I'm also a man. I don't have to drive a truck to prove it."

Both Thompson and Lazzeri feel that by simply doing their jobs and being themselves, they're serving to reinforce the concept that anyone with human warmth and intelligence can be a good nurse—regardless of gender.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911 at Stanford University Medical Center or Vicki Applegate at Children's Hospital at Stanford 327-4800 ext. 363

The following release is being issued jointly by Stanford University Medical Center and Children's Hospital at Stanford.

HOSPITALS TO CONSOLIDATE PEDIATRIC FACILITIES

STANFORD—

The boards of directors of Stanford University Hospital (SUH) and Children's Hospital at Stanford (CH@S) have agreed in principle to consolidate the pediatric facilities of both institutions.

The agreement was accepted unanimously by the SUH Board of Hospital Directors Wednesday morning (July 21) after the CH@S board had voted agreement the night before.

Kenneth H. Sayre, chairman of the board of CH@S, and Dr. Lawrence G. Crowley, president of SUH, said details of a contract formally establishing the new hospital must still be completed with agreement expected within a few weeks.

The new hospital, which will retain the name Children's Hospital at Stanford, will be housed in a new facility to be built at an estimated cost of $40 million in conjunction with Stanford's Hospital Modernization Project, a $71.4 million construction project ($123.9 million including financing and other costs) expected to be completed in May 1987.

Physically attached to SUH, the new facility will consolidate the 60 beds of CH@S and the 44 pediatric acute medical-surgical and pediatric intensive care beds of SUH. The new facility will also house the Stanford-Children's Ambulatory Care Center, which provides 27 separate clinic services, including such specialties as cardiology, birth defects, oncology and child psychiatry.

The new children's medical center will continue to provide inpatient services in the 15 specialties now offered by both hospitals. These include such specialties as orthopedics, genetics, neurology, and neonatal intensive care.

Following the action of both boards, Sayre and Crowley issued a joint statement:

"We're confident that our action will lead to providing the highest quality and most efficient care for the children of the region. Equally important, it will also serve as a premier referral, teaching and research center for children everywhere.

"The effort is exciting because it centralizes under one roof the resources of two institutions which already share a great wealth of resources, skills and services."

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The new CH@S will have its own corporate identity with a board of directors comprised of five members of the current CH@S board and five from SUH's board. The new CH5S board and the SUH board will participate jointly in raising the $40 million in project costs.

The present CH@S hospital would continue to be occupied until the new facility is ready for occupancy. Plans for the present building are not final, and an architect for the new building will be selected by the new board after a formal contract is ratified.

The new agreement in principle divides responsibility for providing various patient care and support services between SUH and CH@S. For example, inpatient pediatric services will be located in the new CH@S, while operating rooms, emergency services, normal newborn nurseries and radiation therapy will be provided by Stanford. The neonatal intensive care unit will continue to be located at SUH but will be managed by CH@S.

The new CH@S will have its own executive director, appointed by the new CH@S board, and a chief of staff appointed by the same board in consultation with the dean of the medical school.

CH@S, a nonprofit institution, and the Stanford University School of Medicine have maintained close ties since the pediatric institution was established at the campus in the 1920s. In recent years, Children's has been an affiliated teaching hospital of the medical school.

Both hospitals share a common medical staff whose members serve on the Stanford medical faculty, and Stanford interns, residents and medical students serve at CH@S.

Formal planning for development of a single children's medical center was begun by both boards in November 1981. A joint planning committee was established and a feasibility study was undertaken.

But informal consolidation discussions have been occurring for many years and have centered on rising costs, concerns about duplication of services, as well as trends in pediatric care, which resulted in attracting to Stanford the more difficult-to-treat cases.

Physically, the hospitals are now one mile apart and separated by a major throughfare. This has required the transportation back and forth of more than 2,500 patients yearly who must receive specialized services available only at SUH.

The consolidation must still pass through the review process of state and local agencies.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Could diabetics better control their blood sugar through the use of both insulin and oral agent therapy?

Diabetic volunteers are needed to help answer this question by participating in research conducted by Dr. Gerald Reaven and associates at the Clinical Research Center at Stanford University Hospital.

To be eligible for this study, volunteers must have adult onset diabetes; be aged 20 to 69, male or female; be currently on insulin; and not be on oral agents.

Participants will be offered the following free of charge: evaluation of blood sugar, insulin and lipids (cholesterol and triglyceride); hospital and skilled dietitian-supervised weight reduction; routine health evaluation including liver and kidney function tests, cardiogram, chest X ray, physical exam, and dietary evaluation; and meals during the entire study period.

Anyone interested or wishing further information should call Dr. George Liu or Dr. Claude Lardinois, at 497-6054 between 9 a.m. and noon; or Ann Coulston, R.D., at 497-5430 between 1 and 5 p.m.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

POTENTIAL MEDI-CAL, MEDICARE IMPACT STUDIED BY COMMITTEE

STANFORD—

The potential impact on Stanford University Medical Center of recent Medi-Cal changes will be studied by a special committee, Dr. Lawrence G. Crowley, vice president for medical affairs, announced Wednesday (July 14).

"In order to ensure a continuously improving level of patient care and teaching excellence at Stanford University Hospital (SUH) and the Stanford University Clinics, we need to examine very closely what impact, if any, will result from changes earlier this month in California's Medi-Cal legislation," Crowley said.

The committee will be chaired by David S.P. Hopkins, director of the Medical Center's office of analysis and planning and executive assistant to Crowley.

Hopkins said he hopes the committee will be able by Sept. 30 to summarize the potential effects of new laws and possible action which might be needed by the hospital and the clinics.

Included in the analysis, he said, will be potential effects of impending federal Medicare legislation, particularly proposed funding cutbacks and belt tightening moves.

Gov. Jerry Brown signed into law June 30 a Medi-Cal bill which potentially alters where both Medi-Cal and privately insured patients may seek medical attention.

Currently the Medi-Cal program is conducted on a fee-for-service basis, permitting recipients a free choice of providers or prepaid health plans.

The new bill authorizes the state Department of Health Services to negotiate contracts with hospitals, clinics or physicians. Patients would then be sent to a facility or physician with a state contract. Selection could be made on the basis of competitive bidding or negotiation, although other mechanisms could also be used.

"Fortunately the bill was amended just before passage to recognize that teaching hospitals, such as Stanford, provide specialized care for very sick patients or those with unusual maladies," Hopkins said.

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"We are hopeful that the state will continue in fact to allow patients to be matched with the most appropriate health facility for their own needs while continuing to pay a fair share of patient costs," he added.

Related legislation also enables insurance companies to select via contracts specific hospitals, clinics or physicians to care for private policyholders. This would enable private insurance companies to tell their policyholders where to seek treatment.

Hopkins said the committee will be investigating whether cutbacks and restrictions about where treatment is delivered could tend to create a "two-tier" health system, requiring poorer patients to seek treatment in cheaper or publicly supported-hospitals, leaving the more expensive non-government supported hospitals for those wealthier patients who need not rely on Medi-Cal or insurance payments.

In the fiscal year which ended last Aug. 31, Medicare accounted for 25 percent and Medi-Cal represented 15 percent of the approximately 23,000 patients at SUH. During the same period, Medi-Cal constituted 13 percent and Medicare represented 12 percent of the approximately 50,000 patients at the out-patient clinics, which are operated separately from SUH and staffed with physicians from the Faculty Practice Plan who work closely with interns and residents.

Crowley added that he wanted the committee to study closely what impact the new legislation might have on the university's teaching programs.

"Both the hospital and the out-patient clinics depend on a diverse population of patients so that medical students and interns and residents may secure the experience they need to they complete their education. The effect of the new legislation is truly uncertain; that's why we need this study."

Other changes included in the California legislation more narrowly define the categories of persons who will be eligible to receive state medical assistance. For example, the bill reduces the maximum income of potential recipients and sets a lower limit for the amount of real property which a recipient may own and still be eligible for Medi-Cal.

Members of the committee, besides Hopkins, include Sheldon King, director of SUH; David Mendelow, associate dean for Medical School administration; Donald Tower, director of the Faculty Practice Plan; Dr. James F. Silverman, chief of staff for SUH; David Sakai, SUH director of finance; Dan Heath, associate director of finance for SUH; Dr. David Korn, chairman of the department of pathology; Roland Merchant, director of the SUH office of management and strategic planning; and David O'Brien, planner-analyst in the office of analysis and planning.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

STANFORD—

Pilar Estassi came to California from Columbia when she was 18, intending to earn a nursing degree. This fall, 12 years later, she is going back to South America without a nursing degree, but with experiences and qualifications she considers to be of much greater value. A graduate of Stanford University Medical Center's physician assistant (PA) program, Estassi is going to Venezuela to assist in developing a similar program—an opportunity she doesn't think she would have been given without her preparation at Stanford.

PAs in the United States are trained to provide primary health care under physician's supervision in areas—primarily rural or inner-city—in which there is a shortage of physicians. In Venezuela, there are no PAs, and nurses are not as highly trained as in the U.S. either, Estassi says. She and three others will be working under the direction of Dr. Pablo Pulido, medical director of the Medical Center La Trinidad, in Caracas. With funds from the World Health Organization and the United Nations, Pulido's longterm goal is to set up a health care delivery system through which all South Americans will be able to obtain adequate primary care. He plans to do this by creating small centers throughout rural regions staffed by nurses trained in 'simplified diagnostic medicine,' which is similar to PAs' training, Estassi says. Her job is to help develop the curriculum for the Venezuelan program, and to help train the nurses as well.

"If I hadn't come to Stanford," Estassi notes,"I would've missed out on a lot of important experience." As a translator at Stanford Hospital for three years prior to entering the PA program, Estassi worked with many Latin American patients. Many had obviously been medically underserved their entire lives, she says.

"I saw how many of their problems could've been prevented with preventive health care and education," she continues. Realizing the needs of the patients and being exposed to various professions within the health care field helped Estassi decide to become a PA.

"I wanted to be more involved in decision-making than I thought I would have been as a nurse," she recalls. "And I didn't think I could afford medical school."

In order to qualify for Stanford's PA program—one of only five in the state—Estassi, like other applicants, had to be a U.S. citizen or have a permanent visa, had to have a high school diploma or equivalent, and six months experience in direct patient care. Estassi satisfied this requirement with her translator work at the hospital, in addition to work at Alviso's Women, Infants, and Children Clinic, geared towards helping women with high-risk pregnancies and high-risk infants.

The first year of the tuition-free program is spent doing coursework in subjects such as anatomy, physiology, and biology. The second year is almost entirely clinical.

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Estassi and other students are required to find a preceptor—a physician who will sponsor them so they may complete the clinical requirements. It is during this year that they become skilled in taking patient histories and complete physical exams, performing and assisting in routine lab and screening procedures, routine therapeutic procedures, and various other duties that make up their scope of practice.

Following completion of the program, they must pass an exam administered by the National Commission on Certification of PAs for certification. They can then practice under the supervision of a sponsoring physician, as specified by their regulating body, the Board of Medical Quality Assurance, which is part of the state's Department of Consumer Affairs.

Estassi completed her clinical work at clinics in Alviso and at the hospital's emergency room. Her experiences, which primarily consisted of dealing with medically underserved minorities in pediatrics, obstetrics and gynecology, and nutrition, will help her out in Venezuela where she hopes to practice as a PA in addition to helping develop the program. She also forsees dealing with many tropical diseases, about which she is anxious to learn.

One of the major roles she sees for herself, both in Venezuela and in California, where she plans to return, is that of the patient educator.

In addition to the challenges patients will present during her Venezuelan stint, Estassi will face the challenge of being the first, and most likely the only, PA in Venezuela.

"In the U.S. there is some friction between physicians and PAs because some physicians resent having a PA, who has only gone to school for two years, want to diagnose and treat patients. You just have to understand your limitations as a PA, and prove yourself," she explains. "In Venezuela though, they have no idea what a PA is. I feel it's up to me to make a good impression for the whole profession."

And with her preparation at Stanford, Estassi is confident she has the ability to do just that.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD—

Alumni and friends of Stanford University School of Medicine contributed $563,937 for medical scholarships from September 1980 to December 1981.

The contributions qualified the Medical School Alumni Association's Medical Fund for a $50,000 matching grant from the Henry J. Kaiser Family Foundation.

The gifts amounted to a 150 percent increase over the base years of 1978-79, said Harold Boyd, director of the Medical Fund. The total number of new donors increased 47 percent. Forty percent of those who gave during 1978-79 increased their gifts during the challenge period.

The challenge grants were offered to 13 private medical schools. They were accompanied by an outright gift of $100,000.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

STANFORD—

Eleven assistant professors at the Stanford University School of Medicine were awarded research funds in June through the Biomedical Research Support Grant program, sponsored by the National Institutes of Health.

Award winners and their projects include:

Frank M. Torti, M.D., of the Department of Medicine, who is studying "Evaluation of Response or Progression in Metastatic Prostrate Cancer."

Mervyn Maze, M.D., of the Department of Anesthesia, who is studying "Adrenergic Function and Cardio-Pulmonary Bypass."

Brian Hoffman, M.D., of the Department of Medicine, who is studying "Monoclonal Antibodies to Adrenergic Receptors."

Walter Holder, M.D., of the Department of Surgery, who is researching "Isolation and Characterization of Human Breast Cancer Immune Complex Antigens."

Ron G. Rosenfeld, M.D., of the Department of Pediatrics, who is studying the "Interaction of Somatomedin with Receptors of Human Cell Lines."

Paul F. White, Ph.D., M.D., of the Department of Anesthesia, who is studying "Pharmacokinetics and Pharmacodynamics of Ketamine and Its Optical Isomers."

Vera Morhenn, M.D., of the Department of Dermatology, who is researching the "Inhibition of Human Keratinocyte Growth Using a Murine Monoclonal Antibody Directed Against Benign and Malignant Human Basal Cells of the Skin."

Thomas Okarma, Ph.D., M.D., of the Department of Medicine, who is studying the "Intervening Sequence Recognition by Small Nuclear Ribonucleoproteins: Characterization of snRNA-Associated Peptides."

Ann M. Arvin, M.D., of the Department of Pediatrics, who is researching an "Analysis of Immunoglobulins to Varicella Virus by Radioimmunoassay and by Immunoelectrophoresis."

John C. Giacomini, M.D., of the Department of Medicine, who is studying "Resolution of the Optical Isomers of Verapamil."

Paul T. Pitlick, M.D., of the Department of Pediatrics, who is researching the "Dose Response of Prostaglandin E1 in Newborn Piglets: Evaluation by Cardiac Catheterization and Digital Subtraction Angiography."

A faculty committee headed by Dr. Eric Shooter, professor and chairman of the Department of Neurobiology, awarded each researcher a $5,000 suballocation from the NIH grant.

The grant is designed to aid young scientists in initiating basic and clinical investigations, particularly in the areas of biomedical and behavioral research.

7-6-82 —30— DF

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STANFORD—

Is it possible for obese diabetics to control their blood sugar through use of an oral agent combined with weight reduction?

Volunteers are needed to help answer this question by participating in research conducted by Dr. Gerald Reaven and associates at the Clinical Research Center at Stanford University Hospital.

To be eligible for this study, volunteers must have adult onset diabetes; be aged 20 to 69, male or female; be currently on an oral agent without good control of blood sugar; and not be on insulin therapy.

Participants will be offered the following free of charge: evaluation of blood sugar, insulin and lipids (cholesterol and triglyceride); hospital and skilled dietitian-supervised weight reduction; routine health evaluation including liver and kidney function tests, cardiogram, chest X ray, physical exam, and dietary evaluation; and meals during the entire study period.

Anyone interested or wishing further information should call Dr. George Liu or Dr. Claude Lardinois, at 497-6054 between 9 a.m. and noon; or Ann Coulston, R.D., at 497-5430 between 1 and 5 p.m.

7-6-82 —30— DF

STANFORD UNIVERSITY MEDICAL CENTER
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CORRECTION

In a release dated Aug. 5, 1982, entitled **GENETIC ENGINEERING PATENT DELAYED**, *The Stanford University Medical Center News Bureau erred by calling an "office action" issued by the U.S. Patent Office a delay in the patent. While Stanford officials believe that the patent ultimately will be issued, the press release should have called the action a tentative rejection, since technically that was the action taken by the Patent Office. We regret the misinterpretation.*
For publications which may still wish to consider offering their readers an account of the Patent Office's action, we offer the following clarified version:

Stanford University officials were told Wednesday, Aug. 4, why the U.S. Patent Office tentatively rejected claims in support of a genetic engineering patent sought by Stanford and the University of California.

The Patent Office issued an "office action" or decision on Monday, Aug. 2, which Niels Reimers, director of Stanford's office of technology licensing, received Wednesday.

News accounts had indicated in late June that the patent might be delayed, and while the office action constitutes an initial rejection, Reimers expressed confidence that the University's response will overcome the rejection. He said the university expects to file a response to the issues raised in the "office action" before a three-month deadline.

The patent application covers the products of basic gene splicing and cloning methods invented by Stanley N. Cohen, professor of genetics at Stanford, and Herbert W. Boyer, professor of biochemistry at the University of California at San Francisco (UCSF). An earlier patent covering basic techniques involved with the process had been issued in December, 1980.

"In its action this week, the Patent Office raises several questions which must be addressed before the patent can be issued, but none of the issues seem to be insurmountable problems," said Reimers.

"While not a patent attorney, I have reviewed the office action issued last Monday and anticipate that our patent attorney will be able to prepare a response that will allow the patent to be issued," Reimers said.

Normally the patent prosecution is confidential until the patent is issued. In this case Stanford chose to open up the process for public scrutiny to ensure that all potential objections might be raised.

Chief among the issues raised by the Patent Office is the question of whether or not the patent as filed was "enabling"—accurate and detailed enough to permit other researchers to use the genetic engineering techniques described.

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The patent includes a description of how a particular plasmid (a circular form of DNA) formed during Cohen's and Boyer's original experiments. However, later experiments by Cohen showed that the interpretation detailed in the patent was incorrect.

Reimers said that the description was a tangential issue, since the basic genetic engineering process described in the patent has been proven to work in laboratories throughout the world.

A second issue is that a DNA process analogous to the one described in the patent can occur in nature under special circumstances. However, Reimers said scientists have pointed out that the naturally occurring process happens too infrequently to be useful for commercial gene cloning.

Third, the Patent Office noted that a 1980 news article in the British scientific journal *Nature* reported that Robert B. Helling, one of the collaborators on the original gene cloning experiments, had declined to sign a disclaimer of inventorship. He was a visiting scientist at UCSF at the time.

Reimers noted that Stanford's patent attorney has judged Cohen and Boyer to be the sole inventors, but the attorney has requested further information about Helling's role in the research and would be prepared to consider any evidence he might provide.

Reimers said the patent attorney representing Stanford, Bert Rowland, was expected to respond to the U.S. Patent Office well in advance of an early November deadline.

A first patent, which covers the basic techniques of gene cloning, was the first of its kind to be issued in the United States in 1980. The second patent—the subject of the current office action—was filed in 1974 and covers products resulting from the use of the technique. (These products, called transformants, are the result of intermediate steps between the genetic raw material and the desired commericial product).

Licenses are being granted by Stanford and UC to industry on a non-exclusive basis for reasonable royalties based on the gene cloning techniques, Reimers said.

Licenses issued so far to 73 firms have resulted in income to the universities of about $1.4 million, he added.

No products are commercially available now, Reimers said, but insulin, a human growth hormone, and a vaccine for scours (a disease of swine) are expected to be available by the end of the year.

In the case of the recombinant DNA method and product patents, both Cohen and Boyer have waived their right to personal royalties from payments accrued from licensing of the patents.

In addition to creating a powerful research tool for analyzing the complex workings of genes, the techniques make possible the construction of "bacterial factories" that can safely produce large quantities of compounds important in medical treatment.

Because bacteria theoretically could be engineered to produce almost anything created naturally by plant and animal cells, the techniques developed by Cohen and Boyer may have significant applications in industries as wide ranging as energy, chemicals and agriculture.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames (415) 497-6911

STANFORD—

"Infancy: New Research and Clinical Implications" is the theme of the second annual symposium on Advances in Developmental Knowledge to be held at the Stanford University School of Medicine Nov. 13 and 14, 1982.

Key-note speaker for the symposium will be Daniel Stern, M.D., from the Cornell Medical Center and the Columbia University Center for Psychoanalytic Training and Research.

Major presentations will be made by Thomas Anders, M.D., head of Stanford's division of child psychiatry, Anneliese Korner, Ph.D., research psychologist, and Isabel Paret, child analyst from Stanford's department of psychiatry.

To be held in the Fairchild Auditorium at Stanford, the symposium will consider the research and clinical aspects of biological and psychological development in early infancy. Scientific papers and discussions will address both normal development and the possible pathologies arising from this period. Small discussion groups will be held as part of the program.

Included among the participants will be Jeree Pawl, Ph.D., from the Frailberg Project at San Francisco General Hospital, and child analysts Joseph Afterman, M.D., Philip Spielman, M.D., and Calvin Settlage, M.D. Professor Colin Pittendrigh of the Hopkins Marine Station, an authority on biological rhythms, will also be present.

The symposium is sponsored by Stanford's division of child psychiatry, Children's Hospital at Stanford, and the extension division of the San Francisco Psychoanalytic Institute. It is intended for researchers, clinicians, mental health professionals, nurses, pediatricians and academicians interested in human development.

Early enrollment is recommended. The registration fees will include a box lunch and reception Saturday afternoon. For program and registration information, call (415) 563-5815.

STANFORD— —30—

What is the impact of diet on aging? What are the effects of age on dietary requirements?

Research volunteers are needed to help answer these questions, by participating in short-term studies in nutrition and metabolism conducted by Dr. Robert Marcus and associates at the Aging Study Unit, Veteran's Administration Medical Center, Palo Alto.

In order to participate in these studies, volunteers must be over 20 years old and be in good health. Participants will be offered free of charge a comprehensive health screening examination, including history and physical examination, blood pressure and glaucoma checks, chest X-ray and electrocardiogram, and complete blood count. Volunteers will be admitted overnight to the Aging Study Unit, where dietary evaluation and meals will be provided during the entire study period.

Anyone interested in participating in a study, or in obtaining additional information about the program, should call Pam Wooldridge between 8:30 a.m. and 4 p.m. weekdays, at (415)493-5000, extension 4572.

STANFORD UNIVERSITY MEDICAL CENTER
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RISING PRICETAG ON ENERGY URGES REDUCED USE

Editors: Graphic summary of current avoided costs available if not included

STANFORD—

In the face of high energy costs certain to escalate dramatically within a year, the Medical Center has stepped up measures to reduce both energy usage and expenditures.

According to conservation coordinator Sean Mooney, activities have centered around the modifications of building systems, new projects, and long-term planning—with future guidance from the committee on energy resources.

But budgeting for energy consumption poses other challenges, since it necessarily reflects changing policies and numerous factors outside the Medical Center's control. Over the last few months the economics surrounding local and national energy matters have proved erratic.

"That's why it's crucial for us to move forward agressively with our own conservation efforts before the inevitable price rises hit," said Mooney, "and to monitor external developments closely."

The City of Palo Alto, Mooney explained, is the Medical Center's major electric utility supplier, furnishing approximately 26.4 million kilowatt hours (KWH) per year. At present rates this amounts to $715,800 for 1981-82.

The city purchases most of its power from the federal government. Last spring it was announced that because of a federal rate adjustment, there would be an increase in commercial user rates of approximately 80 to 90 percent by May of 1983.

Combined with a July 1, 1982, rate increase of approximately seven percent and based on the Medical Center's consumption, said Mooney, this would increase the cost of electricity in 1982-83 to at least $995,000.

Meanwhile, the Medical Center's total gas expenditure for 1982-83 is expected to be approximately $1.6 million. Proposals to accelerate decontrol of natural gas could increase costs by 1985, without inflation, by between 60 and 95 percent.

If consumption rates are held approximately constant, this would mean a 1985 gas bill of $2.6 to $3.2 million, said Mooney.

"Obviously, the energy situation at the Medical Center right now demands both our attention and our action."

He stressed, "There is hope for saving energy if everyone who works here pitches in." Posters encouraging conservation have been placed throughout the Medical Center, and an outdoor display on the Center's efforts is in the works.

A new Energy Information Service is available with conservation tips for office and home; members of the Medical Center community have been encouraged to call with questions and ideas.

Already, said Mooney, measurable progress has been made. The Medical Center experienced a 2.9 percent overall reduction in energy use in 1980-81, compared to base year 1979-80. The projected decrease over the base year for 1981-82 is 4.9 percent.

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Currently, the Facilities Department's premier project involves tackling a heating problem the Medical Center has had since it was built, said Mooney. Modification of the heating system will first take place in the Edwards Building, with all other similarly heated buildings to follow.

"The existing system was built in such a way that the whole building comprises one heating zone, with no occupant control of heating levels. This has caused discomfort as well as major energy waste over the years," he explained.

The project, which Mooney said he hoped to see accomplished over the summer, will divide the building into twelve zones, each of whose occupants will be able to regulate their heating. Total project cost is estimated at $35,000 to $45,000. Steam savings are estimated at $29,000 per year, at 1982-83 rates.

Another major project is to upgrade the flood lighting around the Medical Center's perimeter. The present lighting consists of 18 incandescent fixtures of 1,500 watts each, Mooney explained. "The fixtures are quite old and in varying states of disrepair, causing constant relamping and maintenance problems."

If the existing fixtures are replaced with fifteen 400 watt high pressure sodium units, he said, light output will increase by 40 percent per fixture while electrical usage will be reduced by 74 percent.

"We'll avoid spending $6,000 per year for operation and maintenance," said Mooney, "at present cost levels." The project cost is estimated at $8,500.

Yet another conservation effort involves removing one-half the lamps or introducing special energy saving devices in appropriate fixtures throughout the Hospital's main public corridors.

"The existing fixtures were installed at the time of initial construction and have deteriorated due to accumulation of dirt and discoloration," said Mooney.

Their present total electrical usage is 367,000 KWH per year. Savings resulting from the project will be 166,000 KWH per year, with total operational and maintenance avoided costs of $13,200 at present rates. The project cost is estimated at $30,000.

Mooney is hopeful that other similarly optimistic projects will be undertaken at the Medical Center.

"With more internal metering and expanded analysis, we will be better able to define usage patterns and also refine our budgeting process," he said.

Hoping for greater control of escalating utility rates, Stanford's Energy Program Office recently hosted a meeting to plan an Energy Consortium of colleges, universities, and hospitals throughout California.

"This will enable us to have a direct impact on the rate-making process, something we don't presently have as institutions and major energy users," said Mooney, adding that the Medical Center lends this University-wide effort its full support.

8-9-82

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

PALO ALTO CITY COUNCIL ADOPTS RESOLUTION SUPPORTING HMP

STANFORD—

The Palo Alto City Council approved unanimously Monday night (Aug. 9) a resolution supporting Stanford University Hospital's Modernization Project.

The council also told Stanford that it reserved the right to rescind its endorsement in 90 days if a hospital-based committee had not made what council members deemed sufficient progress toward settling longstanding discussions about physician access to hospital-based services.

The council's endorsement for the $124 million project was sought by SUH as it files for a certificate of need (CON) from public agencies. The council endorsement is not required. However, the state and regional agencies which issue the CON, review local community support while assessing whether the requested improvements are needed in the local area.

The resolution sought by Stanford and approved Monday night was an endorsement offering support for the project in principle. The resolution specifically noted that the support "does not constitute advance approval by the City of Palo Alto of any of the financial, environmental or physical aspects of the modernization project. The action of the City on those aspects within its regulatory authority must await full public hearings and review in accordance with the City's adopted procedures."

Mayor Fred Eyerly noted that Stanford has told him that it plans to seek state—and not city—backing for the $80 million portion of the project Stanford plans to finance with revenue bonds.

The resolution was first presented to the council July 27, and since then has served as the focal point of a debate about access by community physicians to hospital-based services.

For many months, SUH and local physicians have been negotiating the rules for community physicians' use of certain hospital-operated medical services, such as clinical labs, cardiac catheterization, radiology and the hemodialysis center.

At the most recent council session, Councilmember Emily Renzel said that she would monitor closely the access issue during the 90-day period.

"I will look very closely . . . . (Access to beds by patients) is meaningless if our citizens do not have a meaningful choice of health care."

She referred to whether patients will be able to choose their own community doctor to perform services.

She said that while she supported the HMP, the issue of access must be "at some point resolved to our satisfaction."

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Councilmember Larry Klein, said the council's interest in the access question centers on whether alo Alto residents are provided with the care they desire "not with whether a certain group of doctors have an opportunity to go in and make a lot of money."

Sheldon King, director of SUH, has said that no major hospital can operate without providing restrictions on which physicians have access to labs operated by the facility.

The 90-day period set forth by the council was timed to provide the access committee, which consists of Stanford physicians, local doctors, and lay community members, an opportunity to smooth over differences about the principles on which access is based.

Since final action by the HSA is not feasible within 90 days, the time frame could give the council time to withdraw its support.

However, the resolution sent to public agencies Monday makes no reference to conditional support or the council's intention to review the matter in coming months. These issues were handled in two separate actions passed Monday.

Stanford and Palo Alto's discussions about hospital matters began prior to 1959, when Stanford University Medical Center moved to Palo Alto from San Francisco, and the university began operating a hospital jointly with the city. In 1968, Stanford bought out Palo Alto's interest in the hospital and entered a 10-year contract to provide community hospital services to the city, including reserving 370 beds for community physicians.

"You all know," Stanford President Donald Kennedy told the council, "that the Stanford Hospital operates under a set of access arrangements that is unique in academic medicine. They derive directly from the nature of the arrangements under which the hospital was built."

In asking support, Kennedy said, "there is nothing that this council can do that will be more influential in improving the conditions of medical care for the community, or that will more dramatically improve the conditions of medical practice, including access to facilities, than to lend its wholehearted support to the HMP."

The HMP will provide about 325,000 square feet of new space at the Main Center and will renovate about 165,000 square feet of existing space. It will provide some 190 new replacement beds, including new critical care bed units. Also planned is a new 22-room operating suite.

The plan is essentially not an expansion of the hospital, and will add only six beds to the current licensed total of 663.

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SEVERE ACNE ALLEVIATED BY NEWLY APPROVED DRUG

STANFORD—

Oozing, bean-sized abscesses that covered his face and neck made it difficult for David Smith (not his real name) to make friends, stay in school or even hold down a job.

"It became very hard not to have a desolate life," said Smith, 22, who for six years suffered from cystic acne, a severe form of scarring acne that resists traditional treatment and blights the skin of 350,000 young people worldwide.

Today Smith's face is clear, after a several-month treatment at Stanford with daily oral doses of Acutane (13-cis retinoic acid), a drug approved by the Food and Drug Administration last spring and slated to be available by prescription to the general public in mid-September. Eugene Farber, chairman of Stanford's department of dermatology, has directed one of several research teams appointed to evaluate the effects of Acutane in clinical trials.

"There never has been a drug that was as effective for severe acne," Farber said in an interview. "Acutane has been dramatic in almost everyone who has taken it."

The drug is one of a family of chemicals called retinoids that are derived from vitamin A and have been investigated for six or seven years for their ameliorative effects in various skin diseases and cancer. Acutane, manufactured by Hoffmann-La Roche, Inc., is the first of the group to gain FDA approval for acne treatment.

The drug's mode of action in the body is not completely understood, Farber said, although most research indicates that acutane shrinks the oil secreting glands that tend to be large and overactive on the face, back and chest of cystic acne sufferers.

Though a major boon to those with cystic acne, Farber cautioned, the drug carries with it a number of side effects that preclude its use in the mild acne associated with puberty and nervous tension."Cosmetic acne" responds well to milder, traditional treatments, he said.

Chapped lips, dry nose and throat, and peeling palms are typical side effects of Acutane treatment. Because the drug temporarily raises the blood levels of triglycerides (fatty acids implicated in heart disorders), persons with heart disease should not take Acutane, Farber said.

Retinoids have been associated with birth defects in animals, and remain biologically active for several months after the last dose, he added, so women considering pregnancy within six months after acne treatments end also should avoid the drug.

8-11-82 —30— df2

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AUTISM FOCUS OF $150,000 AWARD

FOR IMMEDIATE RELEASE

STANFORD—

Hints that autism might be related to an overabundance of a chemical messenger in the brain soon will be tested by Roland Ciaranello at Stanford, under a three-year $150,000 award from the John Merck fund.

Ciaranello, 39, an associate professor of psychiatry, is one of the first two recipients of a "John Merck Research Fellowship."

Ciaranello said he will use the grant to expand an ongoing study of the biochemical roots of autism, an illness that strikes one of every 2,000 children, and is often marked by debilitating social and emotional withdrawal, and severe language disability.

Research of the last decade has indicated that up to 40 percent of autistic children may have abnormally high blood levels of serotonin, a chemical messenger between nerve cells in the brain.

No one yet understands the significance of elevated serotonin levels, or how levels measured in the blood are related to levels in the central nervous system, Ciaranello said.

However, a preliminary study from University of California, Los Angeles researchers, published in the July 15 *New England Journal of Medicine*, reported that three autistic children treated with fenfluramine, a drug that temporarily reduces brain serotonin levels in animals, showed a reduction in both the behavioral symptoms of their disease and levels of serotonin in their blood.

The UCLA study provides yet another clue that the disease is biological rather than psychological in origin, said Ciaranello, though mechanisms of the disorder are far from understood. While it is important to dispel the myth that autism is caused by cold, neglectful parenting, further exploration of the biological changes associated with the disease is crucial, he said.

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"It is premature to congratulate ourselves on our enlightenment simply because we no longer blame parents," Ciaranello wrote in an editorial also published in the July 15 *Journal*. "Without biologic markers, diagnosis remains heavily dependent on behavioral criteria. Yet early diagnosis, even as early as infancy, may be critical in the successful implementation of language and educational programs."

Since 1979, a team of researchers led by Ciaranello and Thomas Anders, professor of psychiatry, has been collecting biochemical and behavioral information from 106 autistic children in the bay area but has lacked funds to complete a detailed analysis of the information.

The Merck fund grant will enable the scientists to increase the size of the group studied, Ciaranello said, and to compare the behavioral patterns and levels of serotonin and its byproducts in three groups of children: those with autism, those who are mentally retarded but not autistic, and normal children.

In a separate study, levels of endorphins, another set of brain chemicals implicated in pain perception and in several mental disorders, will be measured, he said, to test the theory that autustic children have a diminished response to pain.

"Since endorphin and serotonin-containing nerves interact, there is a possibility that the two studies will yield very interesting data," he said.

A 1970 graduate of Stanford University Medical School, Ciaranello received his undergraduate degree from Union College in New York. He has been a member of the Stanford faculty since 1978 and previously was a research associate at the National Institute of Mental Health in Maryland.

Initiated in 1982, the Merck fellowship funds "promising young professionals" who are studying the problems of "doubly disabled children"—those with both mental and emotional disorders—said a Fund spokesman. James Leckman, a child psychiatrist at Yale University, is the other 1982 Merck Fellow.

Serena S. Merck, wife of the late George W. Merck, former president and chairman of the board of Merck and Co. Inc., established the Fund in 1982 to honor their son, John.

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HOSPITAL RECEIVES THREE-YEAR ACCREDITATION

STANFORD—

Stanford University Hospital has become one of the first university teaching hospitals in the nation to receive three-year accreditation from the Joint Commission on the Accreditation of Hospitals.

In an accreditation letter received Aug. 3 by Sheldon King, executive vice president and director of SUH, the commission said the Hospital "is to be commended for its efforts in providing high quality patient care."

However, the commission noted an excessive number of delinquent medical records, and told Stanford its accreditation "was contingent upon quarterly written progress to be submitted for a period of 12 months."

Four months before the survey, the number of incomplete patient charts had reached nearly 4,000.

The number was reduced to less than 600 at the time of the survey team's March 15-17 visit. Stricter procedures, including disciplinary measures, were instituted to ensure that physicians, including housestaff, would finish their records in a timely fashion and continue to reduce delinquent records to manageable levels, said Mary Catherine Krawec, the associate hospital director responsible for JCAH preparations.

"What is most significant," said King, "is that our survey showed the level of care at the Hospital to be consistently excellent. The survey results stem not only from the effort expended to prepare for the survey, but more importantly, from the continuous day-to-day work by employees and medical staff.

"The notice we received about medical records should be a clear message that we cannot reduce our efforts or neglect any aspect of our hospital operation.

"We will be watched very closely during the next 12 months and throughout our three-year accreditation. If we view this as a lesson to sober us, not a burden to avoid, we will head into the next inspection with greater strength."

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Krawec emphasized that the problems with the medical records involved no threat to safe patient care. The omissions included such technical matters as missing physician signatures or routine record-keeping data.

The JCAH inspection was conducted as part of a Consolidated Accreditation and Licensure Survey, which also included inspection teams from the state Department of Health Services and the California Medical Association. SUH's California license was renewed in early June.

Krawec said JCAH accreditation ensures that SUH is linked philosophically to the top hospitals in the country and serves as an endorsement in attracting personnel, including housestaff and faculty.

The accreditation requires that Stanford conduct its own survey in 18 months, mid-way through the three-year accreditation. Previously JCAH granted one and two-year accreditations, requiring more frequent on-site visits by JCAH physician-inspectors.

Now that the current inspection has been completed, Krawec said she is pleased but doesn't plan to disband the approximately 35-member committee which worked to prepare for the survey.

"In years past a different procedure was used. Administrators would each take responsibility for a particular aspect of preparation for the inspection," Krawec said.

But this year, several months before the inspection, Krawec said she met with a group of department heads from units where preparations were most critical.

"And this group expanded quickly to about 35 people representing every area of the hospital, who worked together to evaluate what needed to be done, and then they went back and worked with their own people to implement it" in time for the inspection.

"This approach really made the preparations a team effort, and by keeping the team intact, we'll be able to keep things in order so that preparations for the next inspection in 1985 will be a continual, orderly affair."

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SUH APPROVES 1982-83 BUDGET AND ROOM RATE INCREASE

STANFORD—

The Board of Hospital Directors of Stanford University Hospital (SUH) approved Wednesday (Aug. 18) a 1982-83 net operating budget of $161.9 million and a capital improvements budget of $7.2 million.

Also approved was a 13 percent average increase in the price of rooms effective Sept. 1.

The capital improvements budget included $1 million for a computerized admission, transfer and discharge system, which is expected to signficantly speed-up and streamline the processing of patient data. The capital budget also contained some $1.5 million for a computerized tomographic scanner and a linear accelerator to permit the hospital to incorporate the most advanced diagnostic and treatment techniques in the field of radiology, said Sheldon King, executive vice president and director of SUH.

When the fiscal year ends Aug. 31, the hospital is expected to have gross revenues totaling $192 million, an 8.1 percent increase over the $177 million predicted at this time last year.

The rising revenue, King said, resulted from approximately a 1.5 percent larger-than-expected patient population. In addition, King said, patients were on the average more acutely ill than predicted, and therefore needed more costly services.

In the 1982-83 fiscal year, the hospital is projecting total revenues of $226,982.

In addition to room prices, the board also approved a variety of price increases for various services, including an 11.6 percent rise for the operating room and 17 percent for use of the delivery room.

A typical room rate increase would be from $272 to $308 for a medical or surgical ward bed without intern or resident service.

Similar patients on the teaching service—those receiving the support of interns and residents—will pay $22 more.

Thirty-seven different rates, depending on the type and acuity of care, currently are in effect at SUH. These range from $205 per day for healthy newborn babies, to a maximum of $1,825 for the highest level of intensive and coronary care.

SUH last raised room rates May 15 an average of 5.9 percent.

Also contributing significantly to higher rates, King said, were shrinking revenues from Medi-Cal and Medicare, whose funding accounts for about half of the 25,000 patients cared for annually at Stanford.

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He said that the difference between costs to the hospital and the amount of reimbursement made by Medicare and Medi-Cal will represent a $14.6 million loss to the hospital unless the non-public health patients and insurance providers make up some of the difference as they have in the past two years.

King noted that pending legislation could alter radically the way in which state Medi-Cal and federal Medicare services are dispensed, leaving the hospital's financial projections for future years uncertain.

And Donald Kennedy, president of Stanford University and chairman of the hospital board, cautioned "that predictions can only be based on what has already happened to our cost. Issues, such as the future directions of Medi-Cal or funding are too uncertain for reliable indicators of the future."

The increased prices, said King, were intended to compensate for inflation—including rising labor costs.

Less than 1 percent of the room increase would be used to help finance Stanford's Hospital Modernization Project, the improvement project expected to bring the hospital up to modern standards needed in coming decades, the director said.

King said that rising costs in a hospital environment are less controllable than in less critical environments.

"Obviously," he said, "we are doing all we can through careful management to reduce the impact of inflation and other costs. But this is extremely difficult in a high technology world where complex new technology and discoveries can't be ignored or delayed."

In another matter, the board made permanent its temporary committee seeking to answer questions of access by community physicians to hospital services.

Dean Morton, a community hospital board member who serves as chairman of the Board Access Committee, said the group is making progress and fully expects to meet a 90-day time frame requested by the Palo Alto City Council.

The city on Aug. 9 unanimously adopted a resolution supporting the HMP, but said it reserved the right to rescind its endorsement in 90 days if the committee had not made notable progress toward settling the longstanding access dispute.

An endorsement of the project from Palo Alto is not required, but Stanford had sought the action because support by state and regional agencies which must approve the project review community support while assesing whether requested hospital improvements are needed.

The new committee, which is responsible for monitoring the implementation of the hospital's physician access policy, includes both community and fulltime Stanford faculty physicians.

Kennedy said he would draft and send a joint letter with Lawrence G. Crowley, vice president for medical affairs, informing the City Council of the new standing committee and its charge.

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DRUG GIVEN TWO WAYS TO ABORT HEART ATTACKS

STANFORD—

Two methods for administering streptokinase, a drug newly used for treating heart attacks in progress, are being compared for effectiveness at Stanford University Hospital.

When given via the intracoronary route, streptokinase is infused directly into a blocked artery, explained Dr. Edwin Alderman, director of the Catheterization-Angiography Laboratory. Alternatively, the drug may be given intravenously, which is the method Stanford is testing.

The study is important, said Alderman, because thousands of hospitals do not have instant access to the cardiac X-ray filming equipment which the standardly used intracoronary route requires.

"Intracoronary infusion requires first performing catheterization and other tests on the patient, in order to determine exactly where the blood clot causing the heart attack is located," said Alderman. (In cardiac catheterization, dye or radio-opaque contrast substance is injected into the coronary arteries and movie pictures recorded.)

"If established as equally effective, the intravenous method would be much simpler and also faster. It could save 30 minutes to an hour in treatment time," he said.

Alderman is an associate professor of medicine in the Cardiology Division. His colleague in the study is Dr. Michael Eliastam, director of Stanford's emergency services department and assistant professor of medicine and surgery.

"Our impression so far, after treating 12 patients randomly one way or the other, is that the intravenous route is just as beneficial as the more complex, direct intracoronary route," said Alderman, cautioning that their data have yet to become statistically significant.

Streptokinase is an enzyme which activates the body's own blood-clot fighting mechanisms, to actually interrupt an attack and reduce the extent of irreversible heart muscle damage.

A heart attack, Alderman explained, in 85 percent of cases is precipitated by blood clot formation (or "thrombosis") in a coronary artery, at the site of a severe narrowing. The resulting attack is called an "acute myocardial infarction."

Alderman noted, "The initial process is a build-up of fatty material inside the wall of the artery, which leads to the narrowing."

Particularly if the narrowing becomes ulcerated and irregular, he said, it paves the way for thrombosis by the body's natural clotting mechanism.

The clot then obstructs blood flow, causing the heart muscle which had been supplied by the artery to die within hours, said Alderman.

Myocardial infarctions, he explained, have traditionally been handled from the standpoint of complication-free recovery rather than interruption, and post-attack care has been stressed.

"But initial investigations in the U.S. and Germany recently indicated that streptokinase infused promptly into a blocked coronary artery can result in thrombolysis (clot dissolution) in 85 percent of infarction cases," Alderman said.

-more-

He, Eliastam, and other faculty members have been collecting their own data since April. Many related studies worldwide are under way or being planned, Alderman noted.

A protein which comes from the bacteria streptococcus, streptokinase has been in use for several years to dissolve blood clots in pulmonary arteries and elsewhere in the body, said Alderman. It was only about a month ago, however, that the Food and Drug Administration approved the drug for intracoronary use in the treatment of acute infarction.

"With streptokinase therapy, time is of the essence," Alderman said, explaining that a heart attack patient must receive emergency evaluation within three hours after the onset of severe symptoms in order to maximize myocardial salvage.

Stanford's emergency department, he said, is prepared to provide streptokinase therapy at all times.

Alderman stressed, "Doctors should remind patients with known chronic anginal symptoms to contact them and report to the Emergency Department immediately whenever they suffer severe symptoms unresponsive to their usual medications."

Clinical reasons for excluding patients from streptokinase therapy include cardiac-originated shock, significant kidney or liver impairment, age greater than 75, or a severe life-limiting medical condition.

If the qualifications are met, and both the patient and attending physician consent to attempted thrombolysis, the necessary testing is carried out and streptokinase administered. Afterwards, the patient is admitted to the Hospital's coronary care unit.

Just prior to discharge, patients are asked to undergo further tests in order to help assess the extent of myocardial preservation.

"Using streptokinase is basically a matter of buying time," said Alderman. "Once you've aborted the heart attack you can go on to deal with the underlying arterial narrowings, plan further patient management, and hopefully prevent any recurrent attacks."

8-23-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
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EXERCISE VOLUNTEERS SOUGHT FOR HEART DISEASE STUDY

STANFORD—

A team of Stanford University investigators will attempt to learn whether a drug taken by millions of heart disease sufferers will interfere with their ability to get in shape via exercise.

Some preliminary experiments with rats have indicated that beta blockers, drugs given to lower blood pressure and oxygen use by the heart muscle, might impede the cardiovascular system's ability to become healthier through exercise, said Mike Savin, a research associate in the Division of Cardiology.

On the other hand, at least one study has indicated that the drugs might actually enhance their takers' ability to improve cardiovascular fitness, while still other work suggests that the drugs have no affect on fitness.

Beta blockers, sold under such names as atenolol and propranolol, are the most widely prescribed category of cardiovascular drugs, and account for about $370 million in sales annually in the nited States, said Savin. They lower blood pressure and heart rate by attaching themselves to receptors at nerve endings in the body. The beta blockers serve as barriers to halt incoming chemical messengers which otherwise would tell the heart to speed up.

Elaine Gordon, a postdoctoral research fellow in cardiology, said it is possible that the interaction between the chemical messengers and the receptors—which does not occur while people take beta blockers—may be the stimulus causing improved fitness.

However, because of the inconclusive and sometimes contradictory data, Gordon said Stanford Heart Disease Prevention Program researchers are looking for 45 healthy but sedentary men between 20 and about 40 years old who will volunteer to take beta blockers while simultaneously starting an exercise program.

The volunteers will be divided into three groups. Fifteen volunteers will be given a beta blocker which works almost exclusively on the nerve endings in the heart (atenolol). A second group of 15 will receive beta blockers which are more general (propranolol) and will affect nerve endings in the heart as well as other parts of the body, Savin said. A third group will be given a placebo.

Potential volunteers must be in excellent health but should not have been involved in a physical fitness program for at least the past eight months, Savin said.

"We need to ensure that people are healthy enough to begin a vigorous exercise program, but we need people who are not in top shape so that they have margin to show measurable improvement."

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All of the volunteers will be placed on a six-week personalized exercise program, consisting primarily of stationary bicycle riding. Progress will be carefully and continually monitored by researchers in a Stanford gym, the researchers said. Participants are expected to exercise for about 40 minutes, five or six times each week.

Neither the researchers nor the volunteers will know who is receiving drugs or the placebo, Gordon said. Volunteers will be given increasingly larger doses until their heart rate is lowered.

"At the end of the study, participants will receive extensive medical and fitness testing, and we will then compare if the placebo group showed more improvement than the volunteers taking beta blockers," Gordon added.

If the results show that healthy volunteers taking beta blockers fail to get in shape, "we will need to run further studies to learn if people who need beta blockers for therapeutic reasons are affected in the same way," Savin said.

The researcher said that the beta blockers pose no significant risks to healthy volunteers, although participants may experience some minor discomfort. Among anticipated side effects, he said, is possible dizziness and lethargy, since their blood pressure could be lowered below normal levels. "These effects, if they occur, can be stopped immediately when the drug is discontinued," Savin said.

Gordon said persons who regularly operate machinery would be eliminated as volunteers, since they would be prone to some risk. Also to be eliminated are persons suffering from asthma or diabetes, since their ailment could be aggravated by the drug, she said.

Potential benefits to volunteers "include the very strong possibility that they will be able to get in good physical shape. We are offering an extensive, well organized exercise program."

"If we find that volunteers in the group receiving beta blockers have failed to make physical improvements, we will work with them after the study to begin a personalized program off the drugs," Savin said.

Subjects will be paid $200 for the duration of the study, including $25 after the initial physical screening and a pre-exercise physical fitness test. The remaining $175 is to be paid after the test is completed.

Potential applicants are invited to call Savin or Gordon at (415) 497-6461 for further information or to enquire about an orientation meeting to be scheduled before the end of August at Stanford Medical Center.

The experiment has been approved by Stanford's Medical Committee for the use of Human Subjects in Research.

Researchers, in addition to Savin and Gordon, include William Haskell, clinical associate professor of family, community and preventive medicine.

Aug. 24, 1982

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STANFORD UNIVERSITY MEDICAL CENTER
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The following release is being issued jointly by Stanford University Medical Center and Children's Hospital at Stanford

CONSOLIDATION AGREEMENT SIGNED BY HOSPITALS

STANFORD—

The articles of incorporation for a consolidated pediatric medical facility have been approved by the boards of directors of Stanford University Hospital (SUH) and Children's Hospital at Stanford (CHS).

"We look forward to creating something truly superior," said Kenneth H. Sayre, chairman of the board of CHS. His board unanimously approved the formal agreement at a meeting Monday night (Aug. 23). The SUH board acted unanimously Aug. 18.

In July, both boards had formally approved the consolidation in principle.

The most recent action provides a formal corporate framework for the new $40 million pediatric hospital to be built in conjunction with Stanford's $71.4 million Hospital Modernization Project.

The pediatric facility, which will retain the name Children's Hospital at Stanford, will be physically attached to SUH and is expected to be completed in 1987.

Lawrence G. Crowley, vice president for medical affairs at Stanford, said, "With the consolidation, the close working relationship of our two institutions will grow even stonger, allowing our health professionals to provide increasingly excellent research and teaching facilities. Certainly children in our region will be the major beneficiaries of this move. But the impact of this new institution will surely be felt nationally."

The new CHS will have its own corporate identity with a board of directors comprised of five members of the current CHS board and five from SUH's board.

The medical center will consolidate the 60 beds at CHS and the 44 pediatric beds at SUH. New CHS will continue to provide inpatient services in the 15 specialties now offered by both hospitals and will house the Stanford-Children's Ambulatory Care Center, providing 27 separate clinic services.

CHS, a nonprofit institution, and the Stanford University School of Medicine have maintained close ties since the pediatric institution was established at the campus in the 1920s. Formal planning for development of a single children's medical center was begun by both boards in November 1981.

Currently the hospitals are one mile apart and separated by a major thoroughfare.

The consolidation must still pass through the review process of state and local agencies. The articles of incorporation must also be ratified by the trustees of Stanford University, when they meet Sept. 13 and 14 and hold a session as general members of the hospital.

8-24-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
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JARDETZKY NAMED TO HEAD NEW DIVISION

STANFORD—

Oleg Jardetzky, director of Stanford's Magnetic Resonance Laboratory, has been named chairman of the board of a new division of biology and medicine of the International Society of Magnetic Resonance(ISMAR).

Formation of the new group was prompted by burgeoning uses for magnetic resonance as a diagnostic and exploratory tool in the life sciences, an ISMAR spokesman said.

First discovered in 1945 by Felix Bloch, a Stanford physicist, and E.M. Purcell of Harvard, nuclear magnetic resonance, or NMR, describes the tendency for the electrically charged cores of atoms to vibrate when placed in a strong magnetic field.

The phenomenon found its first use in physics and chemistry, where it permitted scientists to finely tune their views of the structure and behavior of complex molecules.

Since 1956, Jardetzky has pioneered efforts to turn the technique towards living cells, in hopes of establishing a molecular meter of the metabolic status, or healthiness, of organs such as the blood, kidney, or brain.

The International Society of Magnetic Resonance was founded in 1967 to promote applications of magnetic resonance in physics, chemistry, biology and medicine, and draws members from more than 50 countries.

"The establishment of the new division (of biology and medicine) is especially timely," Jardetzky said, "in view of the major contributions which NMR is making to the study of molecular biology, to the non-invasive investigations of biochemical pathways and control mechanisms in vivo, and, more recently, to the diagnosis of metabolic diseases. The task of the division will be to coordinate information and promote further advances in all of these areas."

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A $660,000 nuclear magnetic resonance spectrometer, to be installed at Stanford in the fall of 1983, will bring to the United States the most powerful instrument of its kind. Financed by the National Institutes of Health (NIH), the spectrometer will be based on a persistant (stable) superconducting magnet with a strength of 14 Tesla—twice the strength of the spectrometer used now.

"The 600 megaherz spectrometer will provide to the scientific community at Stanford the most powerful instrument of its kind," Jardetzky said.

The 11-member board of directors of the new ISMAR division represents the full range of biological and medical applications of NMR, Jardetzky said, and is composed of individuals who have played a key role in their development.

The members of the board are: E.R. Andrew,FRSE (Physics, Nottingham, England), Mildred Cohn (Biochemistry,University of Pennsylvania), R.R. Ernst (Chemical Physics, Eidgenoessische Technische Hochschule, Zurich, Switzerland), J.J. Fischer (Radiology, Yale University), Sture Forsen (Biochemistry, Lund, Sweden), W.D. Phillips, (Chemistry, Washington University, St. Louis), A. Redfield (Physics and Biochemistry, Brandeis University), Sir Rex Richards, FRS (Biochemistry and Physical Chemistry, Merton College, Oxford University, England), Gordon Roberts (Biochemistry and Pharmacology, National Institute for Medical Research, London, England) and Kurt Wuthrich (Biophysics, Eidgenoessische Technische Hochschule, Zurich, Switzerland).

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NEWS CONFERENCE TO HIGHLIGHT INTERNATIONAL NMR MEETING

Science writers: If you plan to attend the news briefing on nuclear magnetic resonance, please phone the News Bureau (415) 497-6911. Copies of the program are available on request if not included with the story.

STANFORD—

Chemists, physicists, biologists and physicians from 19 countries will meet at Stanford University Aug. 29—Sept. 3 for the Tenth International Conference on Magnetic Resonance in Biological Systems.

A news briefing by a panel of scientists to highlight the potential uses of nuclear magnetic resonance (NMR) in medicine is scheduled at 10 a.m. Friday, September 3. The briefing will be held in room TE 110, Psychiatry and Behavioral Sciences Building.

Oleg Jardetzky, director of Stanford's magnetic resonance laboratory, will lead the briefing which will precede an afternoon-long symposium for medical professionals in Fairchild auditorium on the clinical uses of NMR.

More than 300 lectures, symposia, and poster sessions during the six-day meeting will focus on NMR, the tendency for the core of an atom to vibrate in predictable ways when subjected to a strong magnetic field.

First valued as a tool to help organic chemists understand the structure of complex molecules, NMR spectroscopy has moved out of the chemistry laboratory in recent years and into a few major medical centers, as a still experimental method of diagnosing disease and imaging the interior of the human body.

8-24-82 —30— df2

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The pediatric facility, which will retain the name Children's Hospital at Stanford, will be physically attached to SUH and is expected to be completed in 1987.

Lawrence G. Crowley, vice president for medical affairs at Stanford, said, "With the consolidation, the close working relationship of our two institutions will grow even stonger, allowing our health professionals to provide increasingly excellent research and teaching facilities. Certainly children in our region will be the major beneficiaries of this move. But the impact of this new institution will surely be felt nationally."

The new CHS will have its own corporate identity with a board of directors comprised of five members of the current CHS board and five from SUH's board.

The medical center will consolidate the 60 beds at CHS and the 44 pediatric beds at SUH. New CHS will continue to provide inpatient services in the 15 specialties now offered by both hospitals and will house the Stanford-Children's Ambulatory Care Center, providing 27 separate clinic services.

CHS, a nonprofit institution, and the Stanford University School of Medicine have maintained close ties since the pediatric institution was established at the campus in the 1920s. Formal planning for development of a single children's medical center was begun by both boards in November 1981.

Currently the hospitals are one mile apart and separated by a major thoroughfare.

The consolidation must still pass through the review process of state and local agencies. The articles of incorporation must also be ratified by the trustees of Stanford University, when they meet Sept. 13 and 14 and hold a session as general members of the hospital.

8-24-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

EXERCISE VOLUNTEERS SOUGHT FOR HEART DISEASE STUDY

STANFORD—

A team of Stanford University investigators will attempt to learn whether a drug taken by millions of heart disease sufferers will interfere with their ability to get in shape via exercise.

Some preliminary experiments with rats have indicated that beta blockers, drugs given to lower blood pressure and oxygen use by the heart muscle, might impede the cardiovascular system's ability to become healthier through exercise, said Mike Savin, a research associate in the Division of Cardiology.

On the other hand, at least one study has indicated that the drugs might actually enhance their takers' ability to improve cardiovascular fitness, while still other work suggests that the drugs have no affect on fitness.

Beta blockers, sold under such names as atenolol and propranolol, are the most widely prescribed category of cardiovascular drugs, and account for about $370 million in sales annually in the United States, said Savin. They lower blood pressure and heart rate by attaching themselves to receptors at nerve endings in the body. The beta blockers serve as barriers to halt incoming chemical messengers which otherwise would tell the heart to speed up.

Elaine Gordon, a postdoctoral research fellow in cardiology, said it is possible that the interaction between the chemical messengers and the receptors—which does not occur while people take beta blockers—may be the stimulus causing improved fitness.

However, because of the inconclusive and sometimes contradictory data, Gordon said Stanford Heart Disease Prevention Program researchers are looking for 45 healthy but sedentary men between 20 and about 40 years old who will volunteer to take beta blockers while simultaneously starting an exercise program.

The volunteers will be divided into three groups. Fifteen volunteers will be given a beta blocker which works almost exclusively on the nerve endings in the heart (atenolol). A second group of 15 will receive beta blockers which are more general (propranolol) and will affect nerve endings in the heart as well as other parts of the body, Savin said. A third group will be given a placebo.

Potential volunteers must be in excellent health but should not have been involved in a physical fitness program for at least the past eight months, Savin said.

"We need to ensure that people are healthy enough to begin a vigorous exercise program, but we need people who are not in top shape so that they have margin to show measurable improvement."

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All of the volunteers will be placed on a six-week personalized exercise program, consisting primarily of stationary bicycle riding. Progress will be carefully and continually monitored by researchers in a Stanford gym, the researchers said. Participants are expected to exercise for about 40 minutes, five or six times each week.

Neither the researchers nor the volunteers will know who is receiving drugs or the placebo, Gordon said. Volunteers will be given increasingly larger doses until their heart rate is lowered.

"At the end of the study, participants will receive extensive medical and fitness testing, and we will then compare if the placebo group showed more improvement than the volunteers taking beta blockers," Gordon added.

If the results show that healthy volunteers taking beta blockers fail to get in shape, "we will need to run further studies to learn if people who need beta blockers for therapeutic reasons are affected in the same way," Savin said.

The researcher said that the beta blockers pose no signficant risks to healthy volunteers, although participants may experience some minor discomfort. Among anticipated side effects, he said, is possible dizziness and lethargy, since their blood pressure could be lowered below normal levels. "These effects, if they occur, can be stopped immediately when the drug is discontinued," Savin said.

Gordon said persons who regularly operate machinery would be eliminated as volunteers, since they would be prone to some risk. Also to be eliminated are persons suffering from asthma or diabetes, since their ailment could be aggravated by the drug, she said.

Potential benefits to volunteers "include the very strong possibility that they will be able to get in good physical shape. We are offering an extensive, well organized exercise program."

"If we find that volunteers in the group receiving beta blockers have failed to make physical improvements, we will work with them after the study to begin a personalized program off the drugs," Savin said.

Subjects will be paid $200 for the duration of the study, including $25 after the initial physical screening and a pre-exercise physical fitness test. The remaining $175 is to be paid after the test is completed.

Potential applicants are invited to call Savin or Gordon at (415) 497-6461 for further information or to enquire about an orientation meeting to be scheduled before the end of August at Stanford Medical Center.

The experiment has been approved by Stanford's Medical Committee for the use of Human Subjects in Research.

Researchers, in addition to Savin and Gordon, include William Haskell, clinical associate professor of family, community and preventive medicine.

Aug. 24, 1982

—30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

PROMINENT FRENCH PHYSICIAN TO SPEAK ON PREVENTION OF PRETERM BIRTH

EDITORS:

Dr. Emile Papiernik will speak to the medical community on "Prevention of Preterm Birth," at 8 a.m. Friday, Sept. 3 in Fairchild Auditorium at Stanford University Medical School. Members of the press are also invited to this early morning session.

Papiernik, an internationally renowned pioneer in his field, is a professor of gynecology and obstetrics at the Faculty of Medicine, University of Paris.

His work of the last 15 years, on the early detection and recognition of preterm birth, has greatly contributed to a reduction in perinatal morbidity, mortality and birth defects.

Emphasizing patient self-care, Papiernik has encouraged physicians to listen to what patients say about their bodies.

Towards the end of his medical residency in the early 1960s, he received a gold medal from the University Hospitals of Pairs.

The upcoming talk, a regional perinatal event, is presented by Stanford's Department of Gynecology and Obstetrics, and the Mid-Coastal California Perinatal Outreach Program. A reception will be held courtesy of Astra Pharmaceuticals.

Anyone interested in attending the lecture should call Ria Church at (415) 497-5763.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

RESEARCH PHYSICIAN CRITICIZES WILSON STROKE THEORY

STANFORD—

A Stanford researcher has seriously questioned a theory that Woodrow Wilson suffered a series of debilitating strokes in his pre-presidential years.

Dr. Michael F. Marmor, associate professor of ophthalmology at Stanford Medical School, had been asked by two Stanford Wilson scholars for a "second opinion" on the medical evidence. He has concluded that writer's cramp, neuritis or stress were more likely causes than a brain-damaging stroke for a series of ailments Wilson himself reported in correspondence to friends, relatives and physicians.

Marmor, writing in the Aug. 26 issue of the **New England Journal of Medicine**, questioned the methods and conclusions of Edwin A. Weinstein, a psychiatrist and emeritus professor of neurology at Mt. Sinai Medical School in New York. In a 1970 article in the **Journal of American History** and in a 1981 biography, Weinstein contended Wilson suffered a long series of incapacitating strokes starting in 1896 when he was 40 years old. These episodes, Weinstein said, may have been responsible for Wilson's enigmatic behavior.

"I question his (Weinstein's) presentation of evidence and his interpretation of it, and conclude that strokes were very unlikely prior to Wilson's severe stroke in 1919" which left the 28th president permanently paralyzed and disabled, Marmor said in an interview.

"A major problem," he continued, "is that Weinstein has presented a hypothesis as if it were accepted fact—and this theory has found its way without qualification into important historical documents. Future scholars will be severely misled if the record is not corrected.

Marmor, an ophthamololgist specializing in retinal disease, focused most closely on a 1906 episode when Wilson had complained of visual loss in one eye. Weinstein asserted unequivocally that the incident was a major stroke, but Marmor said "historical evidence—which Weinstein failed to report—shows the condition was a retinal hemorrhage which essentially rules out the diagnosis of an acute carotid stroke."

However, Weinstein, contacted by phone in Bethesda, Md., agreed Wilson had suffered a retinal hemorrhage which he said "was a manisfestation of carotid artery disease . . . .(Marmor) doesn't understand carotid artery disease."

(Weinstein said Thursday, Aug. 26, that he was unaware of the journal article. He added he would draft a reply to the article after he had a chance to read it).

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Complaints in 1896 by Wilson of arm and finger pain and numbness was more likely writer's cramp than the initial stroke postulated by Weinstein, Marmor wrote.

Weinstein said the diagnosis of "writer's cramp" was "very vague," and he reaffirmed that a stroke was the likely cause.

Marmor said both he and Weinstein had access to the same evidence, which consisted largely of letters to and from the Wilson family, as well as later reminiscences.

Marmor noted, "These data are inadequate for definitive diagnosis. There are various possibilities and none—including stroke—should be viewed as accepted fact.

Referring to the evidence, unreported by Weinstein, of Wilson's eye hemorrhage, Marmor said in the article that "an omission of this magnitude is indefensible on scholarly grounds, and is particularly dangerous since the average reader (who lacks access to the primary sources) will assume that the data has been fairly presented, and will not realize that alternate interpretations are possible."

He said that while early strokes were not impossible, they were less likely than other alternatives, and "in the absence of clear evidence to the contrary, the most reasonable diagnosis for a historical figure is the most prevalent and ordinary condition.

"There is no better application for the old medical school adage, 'When you hear hoofbeats, don't think of zebras,' " Marmor said.

Weinstein, on the other hand, said that "to the best of my knowledge, all of the evidence points to my published conclusions" of pre-presidential strokes.

Marmor undertook the project because he had been asked to review available evidence by Alexander and Juliette George, co-authors of a personality study of Wilson. Alexander George is a professor of political science at Stanford.

The Georges said they were anxious for a second medical opinion on Wilson because Weinstein's theory had been picked up as fact in notes accompanying Arthur S. Link's 40-volume compendium of Wilson's papers. The work of Link, a professor of American history at Princeton, is considered the definitive historical collection on Wilson.

Juliette George said it was important to offer criticism of Weinstein's work, since it was in danger of being perpetuated as fact in the historical record.

The stroke theory has been used as a core for offering possible motives for Wilson's behavior.

Weinstein theorized that neurological damage was responsible for Wilson's self-defeating stubbornness at critical times in his life.

The Georges contend that Wilson's sometime "very stubborn" behavior was an integral part of his personality.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

STANFORD—

A method of peering beneath patients' bones to diagnose disease in soft underlying organs—those not easily seen in X-rays—will be the focus of a news briefing at Stanford University Medical Center today, September 3 at 10 a.m.

Advances in the diagnosis of degenerative nerve diseases such as multiple sclerosis, and clearer ways of distinguishing between cancerous and normal tissue deeply embedded in organs such as the brain, liver, and heart are just two of a rapidly growing number of clinical applications for studies of nuclear magnetic resonance (NMR) - the tendency for the core of atoms to vibrate when placed in a strong magnetic field.

"NMR imaging is an exciting tool with a lot of potential," said Joseph P. Kriss, professor of radiology and chief of the division of nuclear medicine at Stanford.

"It introduces many more possibilities beyond strict anatomical information. You begin to combine anatomical data with information about the movement and biochemistry of molecules (within the body)," he said.

Kriss will address physicians and interested community members on "NMR from a Clinician's Perspective," as part of an afternoon-long symposium on the medical uses of NMR , following this morning's news conference.

The symposium, which will cap the six-day "Tenth International Conference on Magnetic Resonance in Biological Systems," will be held in Fairchild Auditorium at the Medical School from 1 to 6 pm. Members of the press are welcome to attend the symposium, which will feature experts in NMR from the United States and England, discussing both the principles and medical applications of NMR.

Like computer tomographic or "CT" scans—pictures constructed by a computer that stacks a series of X-rays—an NMR image reveals a slice of the body along any axis by compiling multiple scans taken several times each second.

Unlike a CT scan, an NMR image can be made without potentially hazardous X-ray radiation. Bones, outlined in X-rays, disappear from an NMR scan, to reveal the inner workings of blood vessels, and internal organs. Lungs, which often obscure pictures made via ultrasound imaging, prove to be no barrier for NMR.

The intact spinal chord, encased in its bony vertabrae coat, can't be seen at all via conventional X-rays or ultrasound, but can be studied in vivid detail using NMR imaging.

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NMR is a classic example of a basic research experiment that turned out to have broad practical and commercial value totally unknown to the experimenters.

The work stems from research into the magnetic properties of atomic nucleii.

The protons of atoms spin like tops, a spin that produces a magnetic field. If external magnets are placed at right angles to the proton's magnetic field, the proton will flip over toward the magnet, and then quickly right itself.

In 1945-46, two teams of experimenters, one led by Felix Bloch at Stanford, the other by Edward Purcell at Harvard, demonstrated ways of detecting "resonance." Since the protons absorb radio waves at a particular fequency, it was possible to measure the length of time it took the protons to resume their usual attitude. Bloch and Purcell shared the 1952 Nobel prize in physics for this work.

The practical uses of NMR were not immediately obvious. Nonetheless, in 1948 a group of physicists in the Stanford physics department, led by the Varian brothers, formed a company, Varian Associates, with essentially two assets: the Varian patent on the klystron, which generated microwaves, and a patent on Bloch's work with NMR.

A group headed by Martin Packard was producing NMR devices in the Stanford lab to detect the resonance. One day in 1951 they were preparing a hand-made instrument when an Indian post-doctoral candidate, S. Dharmati, asked what would happen if Packard put an organic liquid in the magnetic field. He worked up a concoction of ethyl alcohol.

Chemists believed that ethyl alcohol contained three clusters of hydrogen atoms in its molecule, but had never actually seen them.

When the experiment was run, the device clearly showed jumps in the graph for three clumps of hydrogen in exactly the proportion chemists envisioned.

Since each element apparently has its own resonance properties, it was apparent that this was a good way of making chemical analyses in laboratories.

In the ensuing years Varian produced a whole family of NMR devices, which became standard for scientific research. When the patent expired, other companies joined in the business.

Only in the last few years, with advances in technology, particularly computers, has NMR's other potential uses received considerable attention.

Rather than replace other imaging tools such as X-ray CT and ultrasound, NMR imaging is carving out its own niche in diagnostic medicine, permitting physicians to see living organs in ways never before possible, said Paul Lauterbur, professor of chemistry at the State University of New York and early pioneer in NMR imaging.

"It (acceptance of NMR) seems to have passed the threshold more or less within the past year or so," Lauterbur said, "from very much a 'wait and see' attitude to what seems to be a certainty on the part of a large segment of the radiological community. It's going to have a role that's at least comparable to X-ray CT.

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"This is a very exciting era for medical diagnostic imaging," he added.

Just over a period of a couple of decades, physicians have gone from having only a very dim partial view of the anatomy of the body, to many ways of having a very detailed view of the inside of the body."

In addition to its role in diagnostic imaging, the NMR spectrometer is being used by physiologists and biochemists to study the energy use of cells, muscle tissue, and whole organisms.

While spectrometers used in imaging rely on the properties of water molecules in different tissues to create contrasts between dense tissues and tissues that are less dense, the instruments used in metabolism studies focus instead on compounds containing isotopes of phosphorous and hydrogen.

Critical to the ability of living organisms to convert nutrients into useable energy, the changing levels of phosphorous compounds in various tissues are good indicators of a healthy metabolism.

"Here the NMR method is essentially an assay method for determining concentrations of these compounds in the tissue," said Oleg Jaretzky, professor of pharmacology and director of Stanford's magnetic resonance laboratory. "It's main advantage is that it is completely noninvasive and nondestructive.

"The principle application, I would say, is going to be in looking at control mechanisms of metabolism in normal people, and also in those with disease," he said. "Where there is derangement of control, it is going to be very useful to monitor things without destroying the tissue, and without interfering with the process."

Current methods of studying metabolism are indirect, relying , for example, on measurements of enzyme levels in blood or tissue biopsies, he said.

"Those measurements tell you that something has gone wrong," Jardetzky said, "but they don't allow you—or at least not as easily— to follow all of the reactions that are relevant simultaneously or to watch the response to some modifying agent.

"When using current (indirect) methods, there is always a lag in time," Jardetzky said. "If you have to kill the tissue and grind it up to determine the compounds, you can never be sure that you have not really changed the relative concentrations, because these control mechanisms are relatively subtle

"NMR is extremely useful in discovering these subtle changes," he said, " to be able to watch things in vivo without disturbing the system at all."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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SYMPOSIUM ALERT: CURRENT PRACTICES IN NUTRITION

STANFORD—

Dr. Allen Cooper, associate professor of medicine, and Jo Ann Hattner, perinatal nutritionist, will be among the speakers for "Recent Advances in Nutritional Care," a Department of Dietetics symposium to be held Oct. 5 in the auditorium of Children's Hospital at Stanford.

Also making presentations will be Dr. Michael Mequid from the City of Hope National Medical Center in Duarte, and Judith Ashley, nutrition consultant from Los Angeles.

The symposium of current practices, intended for dietitians, nurses, pharmacists, physicians, medical students, and allied health care professionals, will run from 8 a.m. till 1 p.m. It is open to the public.

Topics will include "Current Practices of Nutritional Support of the Cancer Patient," "Nutritional Support of the Pediatric Oncology Patient," "The Compromised Neonate: A Look at Prematurity and its Nutritional Challenge," and "Dietary Cholesterol Metabolism: The Molecular Basis for Practical Considerations."

Pre-registration deadline for the symposium is Sept. 24. For further information regarding fees, continuing education credit, and program objectives, call Jane Woeckener, R.D., at 497-6904.

9-7-82 —30— 213

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

TEENS TAUGHT TO LOSE WEIGHT SAFELY

STANFORD—

Stanford's behavioral medicine program is offering a weight-loss course for teenagers, ages 12-17, on the University campus during the fall quarter.

Encouraging students to take charge of their own weight management, the program will teach them to lose weight safely through eating and exercise patterns that promote permanent weight control.

The program, intended specifically for teenagers, will include group seminars in behavioral change techniques and nutrition education; aerobic activity; group meals on campus; and monthly seminars for parents.

(An important feature of the program is consistent weight-loss management achieved through personal habit change combined with parental support at home.)

Faculty will include staff from the behavioral medicine program of the School of Medicine.

The sessions will run from 3:30 till 5:30 p.m., Wednesdays, Sept. 22 through Dec. 7. A program fee will be charged.

Early enrollment is recommended, as space is limited. For further information call Dr. Mary Southam, at 497-5065.

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STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Karen Bartholomew

FOR IMMEDIATE RELEASE

FEDERAL MEDIATOR TO STEP IN AT STANFORD

STANFORD—

A commissioner from the Federal Mediation and Conciliation Service will meet Friday, Sept. 17, with representatives of United Stanford Workers and the University to "try to get movement toward a settlement" of the strike by technical, maintenance, and service workers at Stanford, now in its sixth day.

Commissioner Dorothy Christiansen confirmed Wednesday, that she would meet for voluntary mediation at 10 a.m. Friday, Sept. 17, at a location to be selected by Michael Baratz, executive secretary of Local 715. Baratz initiated the request for FMCS assistance.

Christiansen said University labor counsel Prisciila Wheeler agreed to the plan. Christiansen's role will be to "act as an interpreter and objective observer." She has no power to impose a settlement on the parties, she said. FMCS is an autonomous agency of the federal government.

Baratz said he requested the mediation because it was "clear in the University response to our request (to return to the table) that they weren't prepared to negotiate in good faith. We needed another mechanism. We want to try to settle," he added.

Meanwhile the number of workers staying off the job Wednesday remained stable at about 800 or approximately 73 percent of the bargaining unit.

USW leaders pulled pickets away from construction projects, redeploying them to high visibility locations on campus.

Baratz said USW wanted construction workers at the 800-unit student housing project to proceed with work on the complex. Work also continued at the Braun Music Center and Cardiovascular Research Building. Contractors reportedly were seeking an injunction against picketing.

USW pickets Wednesday shut down work on an addition to the test laboratory at SLAC for the first time. Approximately a dozen employees of the contractor refused to cross the picket line on the grounds that the Alpine Road entrance to SLAC did not qualify as a "reserve gate" because SLAC employees were using it.

According to Stanford Police Chief Marvin Herrington the campus was "relatively quiet" Wednesday.

Pickets stopping or delaying vehicles was the biggest problem, he said.

Two stink bombings were reported at about 2 p.m. at Bonair Siding. Police said a private vehicle and a University truck were somehow doused with a pungent substance, possibly butric acid, when their drivers crossed the picket line. Police have no suspects.

USW has scheduled a meeting/rally for members at noon Thursday, Sept. 16, at the Bonair Siding parking lot.

9/15/82 —30—

EDITORS: Dorothy Christiansen can be reached at (415) 556-1665

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(EDITORS: Photo available if not included)

STANFORD—

A filmless x-ray system intended to make certain diagnostic procedures safer while simultaneously making patient care more efficient was installed this week at the Stanford University Medical Center.

The new system, called digital fluoroscopy, employs a television camera which projects the image of the particular body part or tissue under study on a video screen. The picture is created from digital, or computer data, which allows the patient's picture to be stored on video or magnetic tape to be called up later by the doctor who can view it on a video screen.

"Within the next ten years, we expect systems employing video to totally revolutionize X-ray as we know it now," said Dr. Dieter Enzmann, head of the digital fluoroscopy program at Stanford.

The current system, manufactured by the General Electric Co., is expected to be in use treating patients by the end of October, Enzmann explained.

It was on display for approximately 400 persons attending the Sept. 14-15 Conference on Digital Radiography sponsored by the International Society for Optical Engineering, Stanford's Department of Radiology and the federal Bureau of Radiological Health.

Specifically, the device will be used initially for patients suffering from various blood vessel ailments.

Digital fluoroscopy enables good pictures of arteries to be recorded without the risk of inserting catheters (tubes) near the heart or brain. Such intrusions deep into the blood vessels to inject a dye could result in heart attacks or strokes.

In digital fluoroscopy, the dye, which is used to highlight the arteries, is injected into the veins in the arm, which is much less dangerous, simpler, and thus may be performed as an outpatient procedure, said Enzmann.

The individual picture produced of a blood vessel or soft tissue is not as detailed as the view produced from traditional catheterization.

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But, Enzmann pointed out, the diagnostic capability is approximately the same, since the video console permits an imaging technique called subtraction.

First a picture of the patient is taken without a dye.

Then the same view is taken with the dye. The two views are combined on the screen in such a way as to eliminate unwanted structures (body parts), allowing the physician to observe areas of interest.

Hospitals may add the video camera and display console to their existing X-ray suite for about $200,000. Thus, Enzmann said, it is economically feasible now for use in many hospitals.

In addition, it provides potential efficiency and cost saving advantages for the hospital, patient, and the nation.

One of the largest savings, Enzmann said, is that hospital beds will be freed, because patients need not be hospitalized overnight as is necessary with catheterization.

"Eventually expensive X-ray film will be eliminated, and patient X-rays will be stored in a variety of ways, including digital and video disc and magnetic tape. Ultimately this could save hospital storage space and would be cheaper than film, but technological developments still are necessary for this development to become feasible," he said.

Within the next decade, Enzmann predicted it will be practical to transport X-ray pictures via cable to various locations, allowing a consulting physician in a nearby hospital, for example, to quickly view a patient X-ray transmitted to his own video terminal.

Other pioneering techniques in X-ray will also become increasingly available in the coming years.

One such system is "dual energy imaging," which is being used experimentally at Stanford under the direction of Dr. William Brody. This technique involves two nearly simultaneous X-ray photos of the same area taken at differing energy levels. The computer then constructs a picture on the video screen of the artery or material of interest to the physician.

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

FOR INFORMATION CONTACT: Bob Beyers or Karen Bartholomew
FOR IMMEDIATE RELEASE

KENNEDY CANCELS EMPLOYEES DAY

STANFORD—

President Donald Kennedy of Stanford Thursday, Sept. 16, cancelled a planned Employee Day program preceding Saturday's football game with San Jose State, citing the risk of "serious disruption" by striking United Stanford Workers.

Picketing in the seventh day of the walkout by 800 workers focused on television trucks preparing to broadcast the game from Stanford Stadium.

The regional CBS telecast, scheduled to start at 1 p.m. on KPIX (Channel 5) provides $600,000 in revenues, divided among the two universities, and their respective conferences. Stanford's direct share is $192,000, with another $108,000 shared by the PAC-10 conference and other member institutions. San Jose State and the Pacific Coast Athletic Association would share the remaining $300,000.

Supervisors and student athletes pitched in to help with pregame preparations. "It seems to be going OK," an Athletic Department spokesman said.

Federal mediator Dorothy Christiansen plans to meet off campus at 10 a.m. Friday, Sept. 17, with USW Executive Secretary Michael Baratz and University Labor Counsel Priscilla Wheeler for voluntary mediation, requested by Baratz.

Three pickets were injured by drivers Thursday, and two pickets were arrested for earlier strike-related incidents. None of those hit required hospitalization.

A SLAC technician was struck by a car which had stopped, then accelerated through the SLAC main gate. The driver, a job-shopper, was promptly dismissed by SLAC. The technician was taken to Kaiser in Redwood City, where x-rays showed no broken bones. He was sent home with a bruised leg.

Two pickets struck by a truck at the Medical Center were transported by wheelchair to the emergency room, where they were found to have knee abrasions. Two pickets were arrested on outstanding warrants, one for allegedly spitting on a student driver and the other for allegedly cracking an independent trucker's windshield.

In cancelling Employee Day, scheduled for 11 a.m. Saturday at Frost, Kennedy said USW had stated its intention to come to the party for the purpose of confrontation and had announced plans to invite people outside Stanford to help them.

"In any such confrontation, the possibility of more serious disruption is always present, especially since this strike continues to be marred by threats to nonstriking employees, by vandalism of personal and University property, and by a number of incidents of personal violence."

Baratz replied that "blaming us for his cancelling is irresponsible." He said the union membership had been clearly told not to provoke incidents and not to commit vandalism.

"If the mere act of people looking at him confronts him, then he has a very thin skin and no understanding of what's happening," Baratz added.

Union flyers suggest members planned to distribute leaflets and picket at Frost. "We will receive assistance from local union members throughout the Bay Area in the Saturday 'party,' " the flyers added. "Plan to be there—let the University administrators know how you feel."

Reporters estimated about 100 persons attended a union membership meeting called for noon Thursday at Bonair siding. Rain and threatening skies may have reduced attendance.

Construction on most major projects appeared to have returned close to normal. Some bus drivers refused to cross picket lines near the Medical Center.

9/16/82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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HOSPITAL AGREES TO MALPRACTICE SUIT SETTLEMENT

STANFORD—

Stanford University Hospital (SUH) agreed Thursday (Sept. 16) to settlement of a lawsuit filed on behalf of an infant born in the facility's delivery room April 7, 1980.

The settlement calls for lifetime support for Anna Younger, a spastic quadriplegic who according to the plaintiffs "sustained severe and permanent brain damage" because she stopped breathing for some minutes in the first hour after birth.

Named as defendants are SUH, Dr. Joseph R. Hopkins and Mid-Peninsula Health Services, Inc., a member-owned health care organization where Hopkins practices family medicine and serves as medical director. The defendants have denied allegations of negligence. No personnel at SUH were identified by name in the suit.

The agreement, ratified by Santa Clara County Superior Court Judge Edward Panelli, calls for an annuity to be established for support of the child, who most recently lives in a Santa Clara County foster home under voluntary arrangements of her parents.

The suit was filed by Anna's mother, Jocelyn Cunningham, 34, an accountant. She and her husband, Charles Younger, 37, a computer programmer, were Los Altos residents at the time of their daughter's birth.

Support payments for the child are to start Oct. 1 at $81,960—and increase according to a predetermined formula annually. By the year 2002, the child will be receiving more than $275,000 per year, according to the complex formula.

SUH and its malpractice insurer are responsible for funding the annuity during the life of the child, estimated by medical testimony and actuarial data to be 76 more years.

Thaddeus John Whalen, professor of economics at the University of Santa Clara, stated in a declaration filed by the plaintiffs that the present cash value of the settlement—taking into account tax advantages and other economic parameters—was at least $8.1 million.

In addition to personal damages for the child, SUH was to split a $1.2 million payment with Hopkins and Mid-Peninsula. Of this figure, about $200,000 is to be used for the child's current medical expenses, $150,000 was earmarked as personal and economic damages for each of her parents, with the remainder of the money going for plaintiff attorneys fees, court costs and related contingencies.

A review of the delivery room records filed as an exhibit with the court by Dr. L.L. Trigiano stated that a pediatric resident had examined the child moments after birth and "concluding she (the infant) was normal, returned her to her mother's arms." Trigiano, a San Francisco physician, had been asked by the plaintiff's attorney to review medical records and examine the child.

"...At approximately one hour of age in response to a remark from the father of the child as to whether the child was living, the nurse in the delivery room called attention to Dr. Hopkins, the obstetrician (family medicine specialist), that the child was found to be flacid with no respirations and no detectable apical (heart) pulse.

"Cardiopulmonary respiration was begun immediately with an urgent call to the neonatal intensive care nursery for return of the staff with subsequent full resuscitative measures to the infant."

The baby was transferred to the intensive care nursery, Trigiano's review said, where a CAT scan indicated oxygen deficit and death of brain tissue. The child was discharged a week later but continued to receive frequent medical care at a variety of institutions.

Trigiano, who examined Anna on July 12, predicted she will require constant custodial care for the rest of her life.

Sept. 16, 1982 —30— bj3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

A new artificial pancreas is being used at Stanford University Hospital in efforts to help insulin resistant diabetics.

Dr. Michael Greenfield, an endocrinologist, said blood sugar level has been successfully controlled so far in six diabetics who volunteered to participate in a pilot study.

The experiment was started about six months ago under a grant by the National Institute of Health and the Nora Eccles Treadwell Foundation. Dr. Gerald M. Reaven, professor of medicine, is the principal investigator.

The artificial pancreas is a mechanical device which permits the patient's insulin needs to be monitored on a minute-to-minute basis. The machine calculates and then administers the precise insulin dose needed at various times of the day to maintain proper blood sugar level.

About 10 million Americans suffer from diabetes, a disorder in which the body is unable to properly oxidize carbohydrates—specifically blood sugar—because either the pancreas fails to produce sufficient insulin or the body is incapable of utilizing its existing insulin supply. The amount of insulin needed at any given time is highly variable, and depends on such factors as food intake (which supplies glucose or sugar) and amount of exercise.

In the Stanford program, patients are hospitalized for about two weeks. Volunteers are connected to the mechanical pancreas, where for 24 hours blood in minute quantities is drawn from one arm and analyzed by the machine. The device, which costs $50,000, vaguely resembles in size and appearance a battery charger used by service stations.

"The blood is analyzed for glucose level every 10 seconds and the appropriate insulin dosage is thus computed. Then the machine injects insulin into the other arm at the precisly computed dosage," explained Robert Solomon, a research fellow.

Greenfield said the technique "is particularly significant for the millions of non-insulin-dependent diabetics who previously have been treated unsuccessfully with other drugs.

"There are people whose bodies produce an average or only slightly below average amount of insulin. What happens, though, is that for some reason their system is unable to use their own insulin to control the amount of blood sugar.

-more-

2-2-2 "Physicians in the past sometimes gave them massive doses of insulin in order to try and control the diabetes. But that approach was not effective, because we didn't know how much the patient needed at a particular time of the day," Greenfield added.

During the past decade, these older diabetics have been treated with drugs intended to help their bodies utilize their own insulin. But Greenfield explained that these drugs, while often offering temporary relief, may not sometimes provide any longterm benefits.

(In contrast, diabetics whose bodies fail to produce sufficient insulin have been treated successfully for many years with insulin injections. Because their insulin needs are smaller and more predictable, doctors have found it easier to prescribe proper dosages for these patients, who usually are younger than the insulin-resistant diabetic.)

Solomon said that the amount of blood used during a two-week hospitalization would be about the same as a single blood bank donation.

About 21 artificial pancreas machines currently are being used nationally, but Greenfield said he believes Stanford is the only facility using the gear for treatment research into non-insulin dependent diabetes.

Greenfield and Solomon said the current volunteers all have shown significant improvement in their blood sugar as they are continued to be monitored by their private physicians and the Clinical Research Center at Stanford University Hospital.

Eventually, the researchers hope that a miniaturized version of the artificial pancreas might be developed, so that a patient's insulin dose might continue to be monitored and administered. But Greenfield said the predictions based on the two-week monitoring seem to work effectively for the group tested so far.

Solomon and Greenfield both said current research would have to be expanded if scientists are to learn why some people build up a resistance to insulin or if the resistance is the preexisting condition which hinders the body's ability to burn blood sugar or produce insulin efficiently.

Doctors, who hope to complete the study in about a year, are searching for additional volunteers.

Criteria include persons suffering from diabetes who are otherwise in reasonably good health. They should never have been treated with insulin before. The researchers would prefer persons who are not more than about 25 percent overweight.

The volunteers will be treated without charge, including free insulin supplies, Greenfield said.

Persons or referring physicians who wish to contact the program may call Greenfield or Solomon or Claude Lardinois at (415) 497-6973 or 497-6054.

Sept. 9, 1981 —30— mg20

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

HOSPITAL LAUNCHES NON-SMOKING CAMPAIGN

STANFORD—

This week marks the official "kick off" of the Hospital's new non-smoking policy, passed by both the Medical and Hospital Boards.

Activities throughout the week are designed to introduce patients, faculty, staff, students, and visitors to the present regulations, which clearly delineate smoking from non-smoking areas.

A poster campaign has begun, signs have been posted, and patient information is being distributed. A series of quit smoking classes for employees will begin this fall.

All Hospital employees are being provided with "non-smoking cards" to hand to persons smoking outside a designated area.

For a couple of days this week, a booth has been installed between the cafeteria and the patient admitting area to distribute informational materials, balloons, buttons, and other items. Those lunching in the cafeteria are treated to a clown performance in honor of the non-smoking campaign.

The general guidelines of the Hospital's new non-smoking policy follow:

- In public areas of the Hospital, including waiting rooms, cafeterias, public hallways and lobbies, smoking is not permitted except in specially designated smoking areas.
- Where smoking is not permitted, conspicuous signs stating this fact shall be posted in both English and Spanish or by a generally recognized no-smoking symbol.
- Smoking is not permitted in any Hospital elevator, escalator, or stairwell.
- Smoking is prohibited in any area of the Hospital where flammable liquid or gases or oxygen are in use or stored.
- Visitors are not permitted to smoke in patient rooms at any time. For patients, smoking is permitted only in specially designated areas. The exception to this rule is a patient in a private room unable to go to a designated smoking area. Such a patient may smoke in the private room only on the written order of a physician.
- If an unsafe situation exists (for example, a patient is affected by medication), smoking materials may be removed.
- Employees, physicians, and students are not permitted to smoke in patient rooms at any time. No smoking is recommended in meeting rooms and classrooms.

Dr. James Silverman, chief of staff, has stressed the importance of the physicians' role in implementing the new policy. "The concept of non-smoking needs repeatedly to be emphasized because of the disastrous health consequences which come with the habit," he said.

The non-smoking campaign grew out of concern expressed to the Department of Community Relations by patients and their families, according to director Jeanne Kennedy. At that point, an advisory committee for patient relations was established, reporting to Kennedy.

Evaluation of the non-smoking policy and its implementation is hoped to be completed by December.

For further information regarding this week's activities, or the non-smoking campaign in general, call Community Relations at 497-7167.

9-20-82 —30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES: Lisa Ames (415) 497-6911

STANFORD—

Dr. Robert M. Zollinger, emeritus professor and chairman of surgery at the Ohio State University College of Medicine, will present the eleventh Louis and Dorothy Kovitz visiting professorship lecture at Stanford School of Medicine Friday, Sept. 24.

Zollinger will speak from 5:30 till 6:30 p.m. in Fairchild Auditorium. His topic will be "Islet Cell Tumors and GI Hormones." The lecture is open to the public.

Zollinger will also present the surgical grand rounds on Saturday, Sept. 25. He will discuss "Reflections on Gastric Surgery" at 8 a.m. in room M106. This talk will be geared towards medical and health professionals, and medical students.

Zollinger is former president of the American College of Surgeons and the American Surgical Association. He is one of the best known and widely respected surgeons of his generation.

Prior to joining Ohio State's department of surgery in 1946, he served on the faculties of Peter Bent Brigham Hospital and Harvard Medical School. He received his M.D. degree from Ohio State, and holds many national and international awards, honors, and honorary degrees.

The Kovitz lectureship was established in 1969 by Dr. and Mrs. Kovitz of Los Altos to bring outstanding lecturers in medical and surgical fields to the Medical Center. Dr. Kovitz died in 1979.

9-20-82 —30— 213

STANFORD—

Healthy volunteers are needed to serve in control groups for diabetes research being conducted by Dr. Gerald Reaven and associates at Stanford University's clinical research center.

To be eligible, volunteers must be between 30 and 70 years of age, male or female, and without diabetes.

Participants will be offered the following free of charge: an evaluation of blood sugar, insulin and cholesterol; routine health evaluation including liver and kidney function test, blood chemistry, cardiogram and physical exam; and meals during the entire study period.

Anyone wishing further information about the ongoing studies should call Clarie Hollenbeck, Ph.D., or George Liu, M.D., between 9 a.m. and 5 p.m., at 497-6973.

9-20-82 —30— 213

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

PROGRAM TO HELP CHILDREN AND PARENTS DEAL WITH PUBERTY

STANFORD—

Puberty can be a bewildering and traumatic time for children who don't understand what is happening to their bodies. To ease the transition into adulthood, Paula Maguire Duke, M.D., assistant professor of pediatrics at Stanford University School of Medicine, is offering two puberty education courses to boys and girls, ages 10-12, and their parents.

Often, puberty education isn't offered until children are already experiencing it, Duke said. "By that time, it's too late. Children need information about the changes that are going to happen before then happen. Unlike most other things, puberty is a very individual process. If children don't know what to expect, it can make them feel like an 'outsiders' compared with their peers."

"What we really need to stress is that there is a very wide range of normalcy," she said.

Educating children early, Duke said, may help to avoid negative body images that often accompany their developing sexuality.

For example, 1981 studies in a high socioeconomic area showed 65 percent of 12-year-old girls wanted to be thinner, and 73 percent of boys wanted to be more muscular. But, there are physiological reasons why pre-pubertal boys cannot develop large muscles, and why pubertal girls experience weight gain and increase in body tissue, Duke said.

The courses, which will not include any discussion of moral values, consist of two hour-long sessions at Children's Hospital at Stanford. The first is scheduled for October 27 and November 3. The second is scheduled for November 9 and November 16.

Parents are included, Duke said, because studies have indicated that up to 70 percent of children in that age group want to hear such information from their parents. Many parents forget what puberty was like, Duke said, and are uncomfortable or unsure of how to approach and discuss the topic.

The first session, for boys, girls, and parents, will include discussion of the physical changes and development of secondary sex characteristics. The second session will provide more detailed information, with separate groups for each.

Participants will be questioned about their knowledge, and their attitudes before and after the sessions.

The questionaires will indicate if children feel more at ease with puberty as a result of the early education.

"Our goal is to change the way children deal with puberty by intervening at an early age. If children, and parents, start talking about these issues early enough, by the time they need to discuss interactive sex they will feel more comfortable."

Duke has been researching puberty education for about five years. She was instrumental in incorporating sex education in Palo Alto Unified School District's seventh grade curriculum.

For more information, or course registration, call 415-327-4800, ext. 538.

9-20-82 —30— 213

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

Science writers and city desks: The press is invited to attend the scientific sessions.

STANFORD—

A day-long scientific symposium on advances in organ transplantation will be held Friday (Sept. 24) in the Fairchild Auditorium of the Stanford University School of Medicine.

The meeting, sponsored by the National Kidney Foundation and Stanford's Division of Nephrology, will present an update of present concepts of transplantation of kidney, heart, bone marrow and pancreas and of the underlying genetic and tissue typing principles.

Simultaneous sessions will be held for physicians and for nurses, technicicans, social workers and dieticians. The latter will be held in Room 101, Physics Hall.

The symposium, which will begin at 8:40 a.m., honors the memory of Dr. Samuel L. Kountz, a pioneer transplant surgeon who held faculty posts at Stanford, the University of California in San Francisco, and Downstate Medical Center, New York City, before his untimely death last December.

Among participants presenting reports are some of the leaders in the field of organ transplantation. Program details and topics follow asterisks.

* * * * *

9 a.m.	Hugh McDevitt, Stanford, "Advances in Genetic Organization of the HLA Transplantation System."
9:50	Carl Grumet, Stanford, "Advances in HLA Typing."
11:10	Folkert Belzer, University of Wisconsin, "Advances in Kidney Transplantation."
2 p.m.	Edward Stinson, Stanford, "Advances in Cardiac Transplantation."
2:50	Rainer Storb, University of Washington, Seattle, "Advances in Bone Marrow Transplantation."
4:00	David Sutherland, University of Minnesota, "Advances in Islet Cell Transplantation."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind, (415) 497-6911

FOR IMMEDIATE RELEASE

VOLUNTEERS SOUGHT FOR SLEEP STUDY

STANFORD—

The Sleep Disorders Research Center at Stanford University Medical Center is seeking about 25 volunteers suffering from insomnia or a related disorder to participate in a study.

Research assistant Sue Cohen said participants must be between 55 and 70 years old willing to take sleep medication. They must remain a total of nine nights and eight days in a Palo Alto lab, broken into two segments with an opportunity to go home between sessions. Volunteers are needed for two time period, Oct. 4-16 or Oct. 18-30.

Participants will be paid $300. In addition, they will be given free the results of two extensive physical exams conducted in conjunction with the research and will receive free all meals while at the lab.

The purpose of the experiment is to test the daytime alertness of persons taking Halcion and Restoril, two potentially widely applicable benzodiazapines. These medications, similar to Valium, are mild tranquilizers intended to relieve sleeplessness.

The volunteers will be electronically monitored at night to record their sleep habits. Cohen said various skill tests will be given during the day to test their alertness.

Volunteers will be divided into three groups, including those volunteers taking one of the two medications and a placebo group.

Insomnia sufferers are particularly being sought, Cohen said, while persons with narcolepsy, apnea or other longterm chronic disorders will not be accepted, Cohn said.

For further information, physicians or patients may call the sleep center at(415) 497-7134 or 325-4697.

Sept. 23, 1982 —30—octupdt

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

FINANCIAL WORRIES CONCERN MEDICAL SCHOOL STUDENTS, ADMINISTRATORS

STANFORD—

Michael Laufer is worried. A third-year medical student at Stanford University School of Medicine, he had arranged to get a research grant for the summer. The grant would have given him remitted tuition benefits, enabling him to enroll for some classes without cost. But the funding fell through, and Laufer spent the summer working odd jobs, barely making enough money to scrape by. His savings, which he earned working as an engineer prior to entering medical school, are depleted.

Laufer receives the maximum amount of money from various grants to pay for his education. Yet he finds himself relying increasingly on loans to be able to meet his financial needs. Low-interest loans came through for him at the last moment this year. They had been delayed because of uncertainty of available federal funds. Next year, however, Laufer says he doesn't think those loans will be available.

Laufer could have planned to graduate in four years, but opted for five so he could work during school. By doing so, he hopes to keep the amount of his debts as low as possible. Not only will financial obstacles keep Laufer from graduating on time, but they may in fact influence his entire career, forcing him to choose a specialty that pays more or requires less training so he can pay back his loans.

"It's pretty depressing," Laufer admitted. "I deal with money problems on a crisis basis—facing them only when I'm forced to."

Laufer is not the only one worried. More than 80 percent of Stanford's medical students receive at least some financial assistance. Proposed federal legislation may result in a 50 percent decrease in available low-interest funding for student loans, according to the School's financial aid administrators' predictions.

In order to pay for spiraling living and educational expenses, budgeted at $20,000 this year, students are finding it necessary to consider alternative financing methods. Their parents' contributions account for an increasingly large share of the total budget.

Students and administrators alike fear that the number of applicants to medical school—at Stanford and elsewhere—will decrease. Those who do apply will most likely be from a more homogeneous segment of society.

"The impact of the cutbacks may decrease the diversity of our classes," predicted Dr. John Steward, associate dean of student affairs. "We worry that medicine may revert to being a profession that is the privilege of the well-to-do."

There is some evidence this may already be happening, said Katherine Kraus, financial aid administrator. She estimates the current first-year class parents are being expected to contribute 60 percent more than did last year's first-year class parents.

Because students who are not U.S. citizens or permanent residents are inelgible for federal loan funds, new admission policies require foreign students to deposit in a local bank enough money to cover four years' worth of expenses. At current rates, this amounts to about $80,000.

And Dr. Roy Maffly, director of admissions, estimates that three-quarters of those applicants who were accepted for the 1982-83 school year, and decided not to come to Stanford, based their decisions on financial reasons.

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This particularly concerns Stanford, Steward said, which consistently has one of the highest percentages of students from minority and disadvantaged backgrounds. "This puts an extra heavy burden on our financial aid programs," he noted. "And with the School's goal of producing academicians and researchers, who are among the lowest paid in the field, we must provide enough aid to allow students to pursue these areas."

"This school is strongly dedicated to keeping its diversity," he stressed. "We'll do everything within our capabilities to include students from all backgrounds, and to encourage them to pursue careers in academia and research."

With this objective, the School takes as big an interest in students' financial situations as in their educations. Upon a student's acceptance, Kraus and her colleague, Stuart Rosse, use a standard needs analysis system to calculate how much parents are able to contribute, whether or not the student is independent.

First-year students are expected to contribute at least $700 from summer jobs, savings or other sources. Kraus and Rosse subtract these contributions from the individual budget to determine the students' needs.

Students are expected to borrow at least $3,000 per quarter, for a minimum of $12,000 per year.

As of now, the main loan sources include National Direct Student Loan (NDSL), at five percent interest; Guaranteed Student Loan (GSL) and Health Professions Student Loan (HPSL), at nine percent; and Auxililary Loan to Assist Students (ALAS), at 12 percent interest. Stanford also issues loans at up to ten percent interest.

Unfortunately, except for Stanford's loans, these sources are under the federal axe. New HPSL and NDSL allocations are unlikely for the future, Kraus said. And GSL, which provided about $1.5 of $2 million borrowed last year, is a "yearly fight to keep."

Formerly available to anyone, GSL eligibility has been made much more difficult since the government instituted a needs analysis system in 1981. Other loans, such as Health Education Assistance Loan (HEAL), are more readily available. But with interest rates at three-and-one-half points above treasury bill rates, students understandably try to avoid them.

Once students take out the required amount of loans, additional money—up to $2,000 per quarter—is available in cases of legitimate need from Medical School grants. Financial gifts are solicited primarily by the Office of Medical Development.

Of nearly $23 million received by the School in 1980-81, for example—of which medical alumni and associates gave about $254,000—about $1.5 million was earmarked for student aid, according to Sally Agle, deputy director of the Office.

Unrestricted gifts ordinarily are not used for financial support. However, a report prepared by the Office of Student Affairs warns that this year the reserve of financial aid funds will begin to be depleted. It also states that by the 1984-85 school year, in order to maintain the current level of assistance, money allocated to general operating budgets will most likely need to be used for financial aid. Stanford is the only one of its 13-medical school consortium that has yet to take this step.

"We've saved the reserves for a 'rainy day,' and this is it," Steward said. "Our financial aid programs are okay for a while, but truthfully, we aren't sure what will happen after the next couple of years."

"Luckily, we've had the foresight to plan ahead," Agle added. "In recent years the emphasis for gifts has been increasingly for students' financial aid. Private support is the main source of financial aid obtained through the Development Office. Until other sources can be identified, it is essential that individuals, such as alumni, realize the importance and necessity of their contributions."

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"The problem," explained Laufer, who represents Stanford's medical students in the American Medical Association and the American Association of Medical Colleges, "is that the federal government perceives medical students as having a big earning potential, and not in need of as much aid as other students. What they don't realize is that during school we have almost no earning power. And during internships and residencies, medical students are working 60-100 hours a week for relatively low wages."

Most students graduating now have about $20,000 to $30,000 worth of debts, surveys show. Even with low-interest loans, payback estimates are about $500 per month. The average housestaff salaries this year, for example, are under $25,000 for the first four years following graduation.

"With living espenses, and possible loans from undergraduate schools to pay back, there is simply no way a medical student can afford to pay back large amounts of high-interest loans," Kraus said.

The Medical School does have other ways for students to finance their education, however. The Alumni Association's Medical Scholars Program and the Medical Science Training Program, for example, provide support for qualified students to do research.

The academic program gives students the flexibility—and many choose this route—to stay in school an extra year. Those working towards the M.D. degree are required to pay full tuition, currently $3,197 per quarter, for 13 quarters. After that, they are currently charged only $270 per quarter.

Stanford is also unique in that it encourages students to work while taking pre-clinical courses, especially in positions related to their interests in science or medicine. As a research or teaching assistant, a student not only earns a stipend, but has remitted tuition benefits as well. About 150 medical students took advantage of this opportunity during the 1981-82 school year, in addition to a variety of other jobs.

But even with these possibilities, some students feel there is a price to pay. "If you take extra time for school," Laufer explained, "it cuts down your earning potential and ability to pay back your loans."

And not all students think the opportunity to work is such a great idea. "Stanford is one of the few schools that encourage students to work while in school," said Cliff Greyson, a third-year student.

"It's fine if you're lucky enough to find a position in which you're interested. But the necessity to work, even if you don't like what you're doing, creates neurotic, unhappy people—especially when you're supposed to 'sleep, eat, and breathe medicine,' " he added, quoting a professor's welcoming remarks.

Gary Schwartz worked for a few years to earn some money before starting medical school. Now in his second year, he works as a research assistant in the Department of Medicine. He plans to spread out his pre-clinical course work for three years, so he can get tuition benefits through his work.

He'll have to quit his assistantship when he begins his clinical work, but at that point he'll only have one more quarter for which he'll have to pay full tuition. Schwartz has another problem, however. The financial aid administrators determined his mother should contribute $1,600 per year for his education.

"My mother is widowed and makes only $16,000 a year," he said. "I don't think it's fair to expect her to contribute at all."

So, Schwartz has been contributing her portion from his savings, in addition to his own contribution. "My savings are quickly being depleted, so I've resigned myself to having to take out loans."

Even so, Schwartz said, he'll be in his thirties by the time he finishes his training. "It's hard to live like a student and restrict your lifestyle until you're 35 or so. But," he added, "Stanford is doing a good job in giving me what they think I'm entitled to."

Not everyone is as appeased as Schwartz, however. Greyson has GLS, ALAS, and Stanford loans. He's worked as research and teaching assistants, and has always held summer jobs. His parents' contribution was set at $10,000 per year, but not wanting to take their money, he's provided their contribution as well as his own.

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Recently however, his parents' financial status took a "nosedive," and Greyson suddenly finds himself available for much more assistance.

"It's ironic that even though *my* financial situation hasn't changed one bit, suddenly I'm elgible for so much more aid," he said.

Greyson said he doesn't need as much money as he's allocated on which to live. Others, such as those living in married student housing, are being subsidized on both ends. Meanwhile, those who need more money may have to resort to high-interest loan sources, he explained.

"Stanford has a limited amount of money to give," he charged. "It should be allocated through assistance programs tailored to individual needs."

In response to Greyson's criticism, Kraus said the School is bound by certain regulations in determining financial aid, but tries to tailor it as much as possible. "We are responsive to students' changing needs," she said. "We encourage students to live on less than the budget, hoping that perhaps they won't have to take out a high-interest loan. But most feel the budget is pretty frugal."

Greyson shares the feeling that future classes will be more homogeneous. "Those from low-income families can't afford to come to medical school," he said.

Laufer agrees. "Why should they bother? They struggle to get to medical school, struggle while they are in medical school, and struggle once they get out. It's just not worth it. They can make more money more easily in another profession."

The challange for the Medical School, then, is keeping the best students from opting for other professions. Students like Laufer are becoming politically involved to enlighten the federal government to medical students' plight. Administrators are continually seeking out new sources of financial support.

Meanwhile, they are trying to educate students in debt management, hoping to make them a little more at ease with the prospects. But for many, the bottom line is just how much an individual wants to be a physician.

"Students will have to make sacrifices, just as I and my classmates are," Laufer said. "But the end justifies the means. And with help from the federal government, we'll make it to the end."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Marcus A. Krupp, M.D. (415) 326-8120 or Deborah Franklin (415) 497-6911

City desks:Story is released jointly by the Research Institute of the Palo Alto Medical Foundation and the Stanford University School of Medicine

STANFORD— **FETAL INFECTION MAY CAUSE DEFECTS YEARS LATER**

An infection acquired during pregnancy that is responsible for more birth defects than herpes, rubella and syphilis combined may be even more common and insidious than researchers first thought, according to studies by scientists at the Palo Alto Medical Research Foundation and Stanford Medical School.

Toxoplasmosis, a disease triggered by a parasite that passes across the placenta to cause blindness, deafness or mental retardation in more than 3500 developing fetuses in the United States each year, may lie dormant in some children, according to Jack S. Remington. These children appear normal at birth but as many as 90 percent will develop symptoms of the disease in their first decade of life, he said. Yet the disease, he emphasized, is preventable.

Remington, chairman of the department of Immunology and Infectious Diseases at the Foundation and professor of medicine at Stanford University, will present his findings at a world conference on the "Prevention of physical and mental congenital defects" October 10-16 in Strasbourg, France.

"Most people thought that these apparently normal babies (whose mothers contracted the infection late in pregnancy) were normal the rest of their life," Remington said. "Now we know that there may be a long latent period before the disease becomes apparent. Thus, there is a tremendous iceberg beneath the surface. If we could detect these babies early enough, there is some evidence to suggest that treatment early in life could prevent the damage that otherwise follows."

Nearly 50 percent of U.S. residents are chronically infected with the parasite *Toxoplasma gondii*, Remington said, though only a fraction of those suffer serious symptoms from their infection. Women who harbor the organism before they become pregnant (approximately one fourth of all women of child-bearing age) pose no danger to their unborn child.

But when a woman contracts the disease during her pregnancy, her child stands a 45 percent chance of acquiring an infection that can cause significant damage to vital organ systems, Remington said.

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Currently no vaccine exists to inoculate women against the disease, though a simple blood test can detect the infection. While some countries require that blood tests for the infection be performed at least once during each trimester of pregnancy, most American women—and many of their physicians—don't even know the disease exists, Remington said.

"The message is that this is a major, preventable disease that is not appropriately appreciated by the public at large," Remington said. "You can't find a woman in Paris who doesn't know what toxoplasmosis is, but physicians in this country are not informing their patients. Women here don't even know about it so they can't prevent it."

Undercooked meat, unwashed vegetables, and cat feces are common transmitters of the parasite. If women take a few simple precautions while they are pregnant, they can greatly reduce their chances of acquiring the infection, Remington said.

Such precautions include avoiding raw and rare meat by smoke-curing or cooking above 151 degrees Fahrenheit, washing hands after handling raw meat or unwashed vegetables, avoiding contact with stray cats, letting someone else change the cat litter, and wearing gloves while gardening or working in the soil.

If a pregnant woman contracts the infection, she has several options which she should discuss with her doctor, Remington said, depending upon the seriousness of her infection. The choices include antibiotic therapy, therapeutic abortion, or risking infection of the fetus.

Results are still not in from all the international studies following children whose mothers were exposed to the parasite late in pregnancy, Remington said, but preliminary data indicate that such children who are identified and treated with antibiotics in the months after birth fare better than untreated children.

"We know that in animal models (the drugs given after birth) will eradicate the destructive form of the organism and cure the disease," said Remington.

"The important point that I wish to emphasize is that this is a preventable infection and a treatable infection," he said, suggesting that pregnant women insist upon the blood test and get additional information about the disease from their doctors.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

POWER OF SUGGESTION HELPS HYPERTENSIVES RELAX

STANFORD—

Studies over the past few years have shown that muscle relaxation training can, at least for a period of time, successfully supplement medical treatment of high blood pressure.

A new set of findings at Stanford has led researchers to believe that patients' *expectations* influence the outcome of this therapy.

Hypertensive patients randomly assigned to two groups received three relaxation training sessions. Half were told to expect blood pressure lowering immediately; the other half were told that benefits would come gradually, after the first three sessions.

Dr. W. Stewart Agras, professor of psychiatry, reported in the Sept. 27 issue of *Psychosomatic Medicine:* "Participants given the expectation that the blood pressure lowering effects of relaxation would be delayed showed significantly less (initial) reduction in. . .blood pressure than those who were told that relaxation would produce an immediate effect."

Moreover, Agras concluded that cognitive processes have an "obscure" power to promote, or interfere with, relaxation techniques for hypertensives.

These techniques are taught to about ten patients sitting quietly in a group. They breathe deeply and slowly, sequentially tensing and relaxing all the major muscle groups of the body, while imagining pleasant scenes.

"It's amazing to me," said Agras, "how many people say they've never felt like that before!"

The major predisposing factors for high blood pressure, he explained, are heredity and overweight. "But now, chronic stress is also widely suspected as a contributing factor."

Agras said that the main dangers associated with high blood pressure are increased risks of stroke, heart attacks, and heart failure.

He recommends the relaxation procedure as an adjunctive method of treatment for hypertensives who respond poorly to pharmacological treatment. "But relaxation is not a replacement treatment," he emphasized. "Medication is still a must for most hypertensive patients."

Training in muscular relaxation, Agras said, usually takes about eight separate hour-long group sessions. Patients also practice at home for about 15 minutes a day, five days a week, with therapist-prepared audiotapes.

Participants, he added, are taught to detect their tension levels during the work day, and eventually can relax instantaneously.

-more-

The effects of relaxation training on hypertensives were first observed by researchers as far back as 50 years ago, Agras explained.

"Perhaps due to the discovery of effective pharmacological measures to reduce blood pressure, this method was largely ignored until the mid-60s when reports of the effects of meditation and biofeedback rekindled interest in the psychological treatment of hypertension."

In studies since then, relaxation training has been proven superior to placebo procedures in working with medication to help reduce high blood pressure. (Relaxation effects have not yet been directly compared to those of salt restriction, weight loss or exercise.)

"At Stanford we've been researching relaxation's effects on blood pressure since about 1975," Agras said. Once convinced of the training's immediate benefits, Agras and his team went on to demonstrate that they last around the clock, even under stressful work environments.

In Stanford's longest published follow-up study so far, Agras and his associates found that the blood pressure lowering effects of relaxation therapy on hypertensives persist for at least six months after the initial training series.

"These were people who continued practicing three to five times a week with audiotapes, and whom we met with monthly to retrain," he said.

Beyond that period, however, the effects remain to be seen. "Whether relaxation therapy affords long-term benefits is now the big question," Agras added.

Researchers also want to determine who benefits the most from the treatment. Agras suspects that those with hypertension most out of control or who've had the condition a long time will reap the most, with borderline patients benefiting little.

Besides helping to lower blood pressure, relaxation training has been found to effect dramatic drops in anxiety, depression, and "high-strung" behavior. Other investigators, Agras said, have discovered that relaxation therapy reduces insomnia and the pain of tension headaches. "So we're seeing the beginnings of a general stress reduction approach," he said.

"Although relaxation training is not yet an established form of treatment, it's to the point where there's enough evidence—at least of its adjunctive merit—that we're beginning to see its applications," he added.

Agras' study on expectation and the blood pressure lowering effects of relaxation was supported in part by a grant from the National Institutes of Health.

10-4-82

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LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

UNIT CLOSED IN RESPONSE TO HOSPITAL'S LOW OCCUPANCY

STANFORD—

A lower patient census than expected has forced Stanford University Hospital officials to close a nursing unit in the Hoover Pavilion last week.

The drop in patient census at the 663-bed hospital began in June. Normally during the summer months Hospital occupancy remains at about 75 percent or more. This year it dropped to about 66 percent in July and 69 percent in August.

"We are not the only hospital facing a low census, probably due in part to the overall economic recession," said Duane Walker, R.N., M.S., director of Nursing Services. "This is happening throughout California, the western states, and most of the country."

Sheldon King, executive director of SUH, said that the situation is parallel in many private doctors' offices. "With high unemployment nationwide, I would guess that many people have used up their medical insurance and are simply not seeking medical care unless absolutely necessary."

Another cause of the unusually low census, King said, is the Department of Health and Human Services' guidelines which approve the admission of Medi-Cal patients only in cases of emergency or function-threatening conditions.

Nursing Administration, Walker said, is working closely with the union, CRONA, to keep all of Stanford's permanent nursing staff employed. The clinical nursing coordinator and staff of the closed unit (N2A) have moved to other nursing units at Hoover and the main center. Surgical patients usually admitted to N2A will be accommodated elsewhere.

In closing N2A, a surgical unit specializing in sports medicine, Hospital administrators hope to allow other nursing units to provide cost efficient patient care by maintaining a fuller census.

King said that Hospital and Nursing Administration would examine whether another nursing unit should be closed in the near future. "Our reaction to the low census," he said, "must be to reduce resources to match patient needs." He explained that the first step taken on N2A was to reduce its operations to a five-day week.

Walker said that most of the nurses have responded well to the uncertainty that's prevailed throughout the underpopulated units. "One unfortunate aspect is that we're simply unable now to use most of our relief nurses, who have in the past provided a pool of people available to fill in and work certain hours as needed. Until recently we've always been able to utilize them."

Both King and Walker declined to predict when the situation might reverse itself, returning the patient census to expected levels. They think improvement in the economy, when that happens, will probably be the best indicator. Said King, "The number of Hospital reservations has increased again slightly, but not to any significant degree."

10-11-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

INVITATION TO SECOND ANNUAL SAFETY FAIRE

STANFORD—

Ever wish you knew more about preventing crime in your home, or that you were better prepared for accidents and earthquakes?

The Hospital's second annual safety faire, to be held the week of Oct. 18-22, should help answer these questions and more. All members of the community are invited to attend.

A different presentation will take place each day of the week, in the corridor outside the main center cafeteria:

- Monday is "Health Awareness Day," 10 a.m. till 4 p.m., with exhibits by the Pharmacy and Dietetics Department. The American Red Cross and Stanford Heart Disease Prevention Program will present exhibits as well.
- Tuesday is "Attack on the Back Day: The Stanford Back Trak," 7 a.m. till 5 p.m., to consist of a self-guided exhibit made up of several informational stations.
- Wednesday will feature "Patient, Employee, Chemical, Radiation Safety," from 10 a.m. till 4 p.m. Presentations will be made on radiation and chemical safety, hazardous wastes, and safety with sharp objects.
- Thursday is "Disaster Preparedness Day," from 10 a.m. till 4 p.m., with exhibits covering the 1906 earthquake, HAM radio operations, laboratory disasters, earthquake preparedness, plus a presentation by a renowned luncheon speaker.
- Friday will feature "Fire/Electrical/Rape Awareness/Protection in the Home," from 10 a.m. till 4 p.m. Displays by the Palo Alto Fire Department will include use of fire extinguishers, smoke detectors, and fire hazards at home. Fire extinguishers will be available for purchase. The Security and Clinical Engineering Departments will have displays on their services. "Blow the Whistle on Crime" is the theme for the day.

Film presentations during the week will include "Hospitals Don't Burn," "Rape: Preventive Inquiry," "Look Before You Eat," "Heimlich Maneuver," "Code 101," "CPR," "Code 10—Bomb Threat," and "General First Aid."

Showings will be continuous from noon till 8 p.m. on Wednesday, Oct. 20, in the Hoover Pavilion, room NC09; and from 10 a.m. till 8 p.m. Friday, Oct. 22, in the main center, room W003.

The faire is presented by the Hospital's Environmental Health/Safety Committee. Training sessions meet the in-service requirements of the Joint Commission for the Accreditation of Hospitals.

For further information call Hilary Ryniewicz, at 497-7224.

10-12-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NCCP SYMPOSIUM ALERT

STANFORD—

A symposium on the mechanisms of resistance to anticancer drugs will be held from 9 a.m. till 3 p.m. Saturday, Oct. 23, in the Fairchild Auditorium at Stanford University Medical Center.

The second in a series of one-day symposia sponsored by the Northern California Cancer Program, the day's discussion will focus on alkaloids, antibiotics, and alkylating agents. Advance registration is encouraged.

Specific topics addressed will be "Overproduction of a plasma membrane glycoprotein in multi-drug resistance," "Multiple drug cross-resistance in mouse neuroblastoma cells," "Alkaloid resistance and cross-resistance in human leukemia cells," "Mechanisms of resistance to bleomycin," and "Mechanisms and modulation of resistance to alkylating agents."

Dr. Branimir Ivan Sikic, assistant professor of medicine (oncology and clinical pharmacology), will co-chair the event with Dr. George Stark, professor of biochemistry, and Dr. Victor Levin, associate director of the Brain Tumor Research Center at U.C.S.F.

Speakers will also include Drs. J.R. Riordan (visiting from University of Toronto, biochemistry), Fred Baskin (University of Texas), William Beck (St. Jude's Children's Research Hospital), and J. Martin Brown, associate professor of radiology at Stanford.

A box lunch, courtesy of NCCP, will be served. The symposium is supported in part by a grant from Adria Laboratories. For further information contact Martha Kaplan, at 497-7431.

10-12-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

MEDICINE AND COMPUTERS COMBINED IN DEGREE PROGRAM

STANFORD—

A graduate program integrating medicine and computer science has been established at Stanford University.

The melding of medicine and computer science has led to such recent innovations as helping doctors diagnose patient ills by using computers to analyze their symptoms and medical history.

The new Ph.D. and master's degree program in Medical Information Sciences (MIS) was approved Thursday (Oct. 14) by the Faculty Senate. University President Donald Kennedy praised Edward H. Shortliffe, assistant professor of medicine and computer science, for a "thoughtful, thorough, impressive" defense of the program before the senate.

Shortliffe is chairman of the interdisciplinary Committee on Medical Information Sciences which proposed the program.

Shortliffe said the normal pattern has been for M.D.s interested in MIS to get a Ph.D. in computer sciences after medical school. He told the senate that such an approach provided the physician with a "highly theoretical" computer orientation often failing to relate effectively to the clinical environment.

Although Stanford has been training a handful of students in the dual discipline of medicine and computer science for several years, Shortliffe explained "that one of the big problems was meeting the numerous requests from students who want to study medical information sciences at Stanford. While the expertise exists here, previously there was no formal program for them to apply to (although formal MIS programs exist at a few other schools around the nation.)

"Perhaps equally important, there was no structured curriculum to channel students' efforts once they arrived here with an interest in the field."

Shortliffe said about 45 potential students, mostly M.D.s, have inquired about the program since its development was made known several months ago.

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The new program will be oriented toward persons interested in research and an academic environment, Shortliffe said. During the first year, he said, the program expects to attract two Ph.D. and two master's candidates.

Transfer students can start the program this year, with new admissions to begin in the fall of 1983.

Among potential students are physicians who wish to enhance their knowledge of computer science or of formal medical decision-making ability. Other students could be computer science majors with a background in biology or a related field who wish to make a commitment to medical information.

Ph.D. and two-year M.S. programs, according to the committee, are intended primarily for persons who are medical students or who already have an M.D., as well as other students seriously interested in MIS as a career.

A limited one year master's program is intended, Shortliffe said, as supplemental training for researchers who want a background in computer decision making to facilitate their work.

"We are hoping to develop a small cadre of students who will enter this program with a commitment to stay in the medical computer field.

"Without the specialized degree which this program offers, students who combined the two disciplines on an informal basis often were enticed into other areas of the rapidly expanding computer science field," Shortliffe said.

Members of the committee, in addition to chairman Shortliffe, include Bruce G. Buchanan, adjunct professor of computer science; Edward A Feigenbaum, professor of computer science; Michael L. Genesereth, assistant professor of computer science; Richard L. Popp, professor of medicine; Allen K. Ream, associate professor of anesthesia; Harold C. Sox, associate professor of medicine (clinical); Gio C.M. Wiederhold, assistant professor of computer science; and Leslie Zatz, professor of radiology.

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City Desks: Photos available on request if not included with story.

A NEW ANSWER FOR MILD HEARING LOSS

STANFORD—

A new non-electronic hearing aid, which provides as much improvement as listening to speech or music with one's hand cupped behind the ear, was unveiled by Stanford University School of Medicine researchers Monday (Oct. 18).

"The device, called an Earesonator, can be an answer for mild hearing loss affecting more than a million Americans," said Dr. Richard L. Goode, professor of surgery.

Goode and his colleague, Richard O'Keefe, worked on the Earesonator for the past four years to perfect it.

"So far 30 patients with mild hearing loss have been fitted with the tiny plastic device," Goode reported. "The patients studied with pure tone audiometry have shown improvement of 10 to 20 decibels at key speech frequencies."

The new device, designed to be custom-fitted and worn within the ear, was introduced as part of a scientific exhibit at the annual meeting of the American Academy of Otolaryngology and Head and Neck Surgery in New Orleans, LA.

The average external ear only resonates at the high frequencies between 2800 to 4000 Hertz producing 10 to 15 decibels of sound amplification, Goode explained in an interview. A hertz, or Hz for short, is a unit of sound frequency measurement.

"Essentially, the external ear provides no amplification for the middle frequencies of 1000 to 2500 Hz, which comprise a very important speech range," he said.

"When the Earesonator is inserted into the ear, it changes the opening size and volume of the ear cavity, shifting the resonant frequency downward. This provides a sound boost of 10 to 15 decibels in the important 1000-2500 Hz speech frequency range."

By adjusting the size of the opening in the plastic device, the Earesonator can be fine-tuned to provide maximum amplification at the frequency the patient needs most.

"Potential users," Goode said, "can get some idea of the improvement that can be obtained by listening to speech or music with their hand cupped behind the ear—something many people do regularly."

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Goode said anyone with mild unilateral or bilateral hearing loss should be helped by the device. Most people would require two, one for each ear.

For binaural fittings, each device is tuned to a slightly different resonance peak to expand the useful bandwidth of amplification.

Goode said the Earesonator cannot provide the same amount of amplification as an electronic hearing aid. But in cases of mild hearing loss only a small amount of amplification is needed.

"These people don't feel they need a conventional electronic hearing aid since they only have trouble hearing at certain times, such as when background noise is present or the speaker's voice is soft or high pitched," Goode said. "At other times they may get along quite well. They don't want to bother or spend as much as $300 for an electronic hearing aid. Now there's a choice."

Goode said the Earesonator, estimated to cost $50, is actually an extension of acoustical in-the-ear devices that have been around since the mid-1800s.

"But none of these earlier models provided adequate amplification for a variety of reasons," Goode said. In fact, he obtained some of the old devices from the hearing aids museum at Kent State University in Ohio and tested them.

"They made wonderful earplugs," Goode commented. "This is because the earlier inventors did not fully understand acoustical principles and did not have the sensitive sound measuring instruments now available."

This is how a patient is fitted with the Earesonator at the Stanford Ear, Nose and Throat Clinic:

First, a pure tone audiogram is made to determine the patient's thresholds in the mid-range sound frequencies. Next an impression is made of one ear or both, and impressions and audiogram are mailed to a laboratory.

In three weeks, the finished devices made of butyrate (clear) plastic and methyl methacrylate, a material used in dentures, are mailed back to be fitted and fine-tuned.

For the time being the Earesonator is available for research purposes at Stanford and the affiliated Palo Alto Veterans Administration Medical Center only. But Goode hopes they will be eventually mass produced if a manufacturer is interested.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

CITY DESK: RELEASE SENT OVER BUSWIRE 10-18. PHOTOS AVAILABLE ON REQUEST.

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

STANFORD—

Dr. Loren R. "Yank" Chandler, noted surgeon and dean of Stanford University School of Medicine from 1933-53, died Saturday (Oct. 16) in Palo Alto following a brief illness. He was 88 years old.

"Defying the average term for deans of five years, Chandler remained dean for 20 years. He graduated 21 classes of physicians from the San Francisco campus, many of whom have since gained national prominence," said Dr. Lawrence G. Crowley, vice president for medical affairs at Stanford University Medical Center.

Chandler saw the Medical School through the Depression and WWII. He was a favorite of both faculty and students. He believed a good faculty was the key to a good medical school.

"You can have all the buildings you want, but you must also have the experts—the masters who can make a thing so simple that the student wonders why he didn't think of it himself. You need experts who can teach. And good teachers will produce others, who at the same professional age, will be better than they were."

" Chandler was just as likely to have been the attending faculty member on surgical wards of a hospital as one to whom students turned to when they needed a friend to provide warm encouragement and guidance about future careers," said Dr. Dominick P. Purpura, dean of the Medical School.

Wrote the *San Francisco Chronicle* when Chandler retired from the deanship in 1953, "Yank Chandler has been a notable dean and his administration has lent distinction to Stanford's place in medicine."

Considered a leader in the development of medical education, Chandler was president of the Association of American Medical Colleges from 1941-42, and president of the California Academy of Medicine in 1942.

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His leadership exceeded the boundaries of medical education, however. He was on numerous federal commissions, and in national, state, and local organizations. He was president of the Pacific Coast Surgery Association in 1954-55; president of the San Francisco Surgical Society in 1948; and a fellow in the American College of Surgeons. He was also associated with the San Francisco Medical Society, the California Medical Association, the American Medical Association (AMA), and the American Surgical Association.

In 1950, Chandler was one of three men appointed to a commission of the AMA to study the effects of the British National Health Science Act. He concluded that it would be a "folly" to institute such a plan in the United States.

During a sabbatical in 1955, Chandler organized the staff and was chief surgeon at the Albert Schweitzer Hospital in Deschappelles, Haiti.

Chandler was an advocate of prepaid medical care, and was instrumental in developing the California Physicians Service and Blue Cross.

Born in Fresno, Calif. in 1895, Chandler received his A.B. degree from Stanford in 1920, and his M.D. degree in 1923. He was a surgery intern and resident at Lane Hospital from 1923-25, and then went into private practice. He maintained his association with the Medical School as clinical professor of surgery. He was appointed associate professor of surgery in 1933, and full professor of surgery in 1938.

From 1959 until his retirement, he served as chief of surgery at the Palo Alto Veterans Administration Hospital, of which he was a key planner.

In 1959 Chandler was made honorary fellow of Stanford University, the highest and seldom bestowed honor of the University.

Chandler is survived by his wife, Elvia Beal; son Craig; daughter Loran McIvor; and grandchildren.

At Chandler's request, there will be no memorial services. According to the family, memorial contributions can be made to the Loren R. "Yank" Chandler Memorial Fund, c/o Stanford University Medical School, or any preferred charity.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

PUBLIC INVITED TO PSYCHIATRY LECTURE

STANFORD—

"Psychobiology: New Approaches to Mental Illness" is the topic of a public lecture to be held 8 p.m., Thursday, Oct. 28, in the Sherman Fairchild Auditorium at Stanford University Medical Center.

Speaker for the special program will be Dr. Jack Barchas, Nancy Friend Pritzker Professor of Psychiatry and Behavioral Sciences at Stanford and director of the Nancy Pritzker Laboratory of Behavioral Neurochemistry. Dr. Thomas Gonda, professor and chairman of the Department of Psychiatry and Behavioral Sciences, will serve as moderator.

Admission to the lecture is free, and there are no reserved seats. The program will be sponsored by the Friends of Psychiatry and Behavioral Sciences at Stanford. For further information and to help the organizers plan for adequate seating, please call 497-6376.

10-19-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415)497-6911

STANFORD—

An election has been scheduled Nov. 5-6 on the issue of whether about 1,200 service and maintenance workers at Stanford University Hospital wish union representation.

The election was ordered earlier this month by the National Labor Relations Board following a petition by Local 715 of the Service Employees International Union AFL-CIO.

Eligible to vote are a variety of job categories, including nursing assistants, unit service assistants, housekeeping and dietary workers, and maintenance employees.

No employees are now represented by Local 715 at the Hospital, a wholly-owned non-profit subsidiary corporation of Stanford University.

The only union bargaining unit now at the Hospital is the Committee for the Recognition of Nursing Achievement (CRONA), which represents about 1,250 registered nurses.

At the University, a Local 715 contract covers a bargaining unit covering 1,350 workers.

10-26-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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COMMUNITY AWARD GOES TO LOCAL MORTUARY OWNERS

Editors: Photo available upon request if not included.

STANFORD—

Stanford University Hospital's first community service award has been presented to Charles and Rose Jones of East Palo Alto for what was termed "a lesson in lived compassion."

Mr. and Mrs. Jones, owners of the Jones Mortuary in East Palo Alto, were commended for their distinguished service to the Hospital and community. They were presented with a plaque in grateful recognition of their unique contributions.

Over the past six years, the Jones Mortuary has provided burial services, free of charge, for more than 100 SUH babies and stillborns less than 30 days old—a service many insurance companies do not cover. Director Charles Jones has made special arrangements and allowed discounts on his services in many adult cases as well.

Dean Robert Hamerton-Kelly of the Stanford Chapel remarked at the ceremony, "When I hear about people like the Joneses, I have two responses: humility, and exhaltation at an instance of such humanity, which makes us all feel better about the human race."

He added that what the Joneses do "lies beyond our ability to honor," and thanked them for a "lesson in lived compassion."

Presenting the award, SUH director Sheldon King said, "The Jones' generosity respresents devotion to the community beyond that which most of us are capable."

Dr. Lawrence G. Crowley, vice president for medical affairs, said that the Jones' reception is expected to be the "first of many occasions like this, for presenting community service awards." He added, "Without the help of volunteers, our tasks would be impossible. This type of service improves the overall quality of the Hospital's mission."

Present at the event along with other special guests were Mayor Fred Eyerly of Palo Alto, and Mayor Barbara Mouton of East Palo Alto.

Director of Community Relations Jeanne Kennedy explained how her office, in conjunction with the Chaplains Office and Social Services, had worked to bring about the award. A brass plaque, said King, will hang prominently in the Hospital to honor the award and list present and future recipients.

The Jones Mortuary's generosity is largely due to Rose's childhood memory of a baby brother's death, when her family could not pay for the burial right away. She hoped never to see another family go through what hers had.

"It was important to me to provide this service free of charge, because people don't always have the money," she said.

Charles Jones dedicated half of the award to his mother, who died last month. "I would have wanted her to see this," he said.

Last January, the Jones Mortuary was a victim of criminal arson. The destruction caused by the fire resulted in an estimated $250,000 worth of property damage. The Joneses said they hope their building will be ready for use again by November.

10-26-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

'SUPER DONORS' CUSTOM-MATCH BLOOD TO MEET SPECIAL NEEDS

STANFORD—

Les Chibana arrived at work three and a half hours late one day last month so he could help keep a leukemia patient alive for a week or more.

Chibana's commute from San Mateo to Palo Alto included a stopover at the Stanford University Blood Bank where he became one of a small but special group of "super donors."

The life-supporting blood removed from his arm was less than the usual one-pint donation, but through a procedure called "platelet apheresis" he was able to give, with no danger to himself, between six and ten times the number of platelets usually found in a pint of whole blood.

"Knowing that there's a specific patient who needs my platelets makes a big difference to me," said Chibana, a graphic designer. Even before donation, Chibana's platelets were earmarked for a specific patient whose needs were made known to him by an urgent phone call.

Through apheresis, donors can be custom-matched to recipients, reducing the risk of rejection and decreasing the adverse reactions that can occur when patients receive blood from many unmatched sources.

In the same way that a cream separator skims rich froth and leaves milk, the apheresis machine pipes blood into a centrifuge from one arm of the donor, separates the blood components by weight, and returns the majority of the blood—"rehomogenized"—to the donor. Only the component needed most—usually platelets or white cells—is removed.

Less than a pint of the volunteer's blood is out of his body at any one time, enclosed within the sterile, disposable plastic tubing of the machine. The platelets taken—about eight tablespoons—will be replaced by fresh cells from his bone marrow within 24 hours.

Because a smaller quantity of blood is drawn, a super donor can give blood components more frequently than a whole blood donor, who is advised to allow eight-week intervals to pass between donations.

Leukemia patients use most of the platelets and white cells gathered through apheresis at Stanford's blood bank, said Pauline Burn, apheresis coordinator. Last year 64 patients received components garnered through 439 apheresis procedures, she said.

Most patients who need blood only require that it be matched to their ABO and Rh type. But for patients who receive multiple transfusions (such as leukemic patients who can require up to ten units of platelets daily during a crisis period), the two-way matching is not enough.

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Each time a person receives blood from someone else, he risks developing antibodies that can attack foreign antigens (such as those from a blood donor) and destroy the transfused platelets. After multiple transfusions with blood from different donors, the patient can become completely unresponsive to the new platelets, destroying them almost as fast as they are introduced.

The troublemakers in these cases appear to be human leukocyte (called HLA) antigens—protein complexes that stud the membranes of platelets and other cells. Vital to the immune system in helping the body distinguish between itself and foreign matter, such antigens can cause problems for patients receiving needed transplanted tissue such as a heart, a kidney, or multiple transfusions of blood.

As specific to each individual as his fingerprint, the pattern of genes that code for antigens could never be matched exactly between any two individuals except identical twins. Fortunately, a mismatch of most antigens appears relatively harmless to patients. By carefully matching for the HLA antigens, which are known to cause trouble, physicians can avert the patient's "seek and destroy" response to the transfused cells.

Siblings often provide the best HLA match, but when a patient's need outstrips a family's ability to give, their only resort is to seek help from volunteer donors.

Stanford maintains a computerized list of 640 volunteers who have been HLA typed and have agreed to donate a component of their blood if and when it matches a patient's tissue type.

Burn encourages all those who donate whole blood to consider becoming apheresis super donors. Restrictions on who can donate are the same for both kinds of volunteers, except that super donors are requested to refrain from taking aspirin for three days prior to undergoing apheresis. (Aspirin interferes with the clotting action of the platelets.)

The number of times a volunteer will be requested to donate varies, but a typical super donor will be called to give once a week for two or three weeks in a year, Burn said. The larger the super donor pool, the greater the likelihood that several matches can be found, and the smaller the burden on any single donor.

Additional apheresis products are sometimes available through exchanges with other blood centers, Burn said, but because of the problems involved in shipping these fragile products, it is important to have as many local donors as possible.

"With a base of 2,000 super donors we could meet well over 90 percent of Stanford patients' needs," said Carl Grumet, associate professor of pathology and director of the Stanford Transfusion Service. "However, there's a complicating factor.

"In the Bay Area, we could have 2,000 Caucasian donors, but if a Chinese patient came in who had a type that was extremely rare or nonexistent among Caucasians, we'd have trouble finding a good match. We really need more non-Caucasian donors." (HLA types are not strictly tied to race, but a few types appear more commonly in some ethnic groups than in others.)

The need for apheresis blood products is growing all the time, Grumet said. An even more urgent need for both platelets and white cells will develop within a few years once Stanford's bone marrow transplant program is established.

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Often apheresis matching takes on the character of an intensely personal drama.

In late September the Blood Bank began selectively harvesting young red cells for Brian Pavon, a Bay Area six-year-old who has beta-thalassemia major.

In this rare disease, the oxygen-carrying component of the red cell is defective, withering and misshaping the cell structure and speeding its destruction long before its normal 120-day lifespan.

Because his body can't adequately replace the cells he needs to meet his body's oxygen needs, Brian must rely on monthly transfusions of packed red blood cells.

But the gift of life carries a nasty chaser: frequent transfusions poison the body with more iron than it can handle. While the short-term effects are few, monthly transfusions year after year take their toll on a growing body, and thalassemic adolescents and young adults often die of congestive heart failure associated with the accumulated iron overload.

Because red cells normally live up to four months, by giving Brian only the youngest red cells (neocytes) via apheresis, his transfusion frequency may be reduced by as much as a third, thus cutting down his risk of iron overload. If the procedure is successful, it will used for other thalassemic patients, Burn said.

The future of apheresis may be bright in further honing medical treatment, but its success depends ultimately on volunteer blood donors, she added.

"The key thing is having a larger donor base," said Fran Bliven, an apheresis nurse at the Blood Bank. "We can have all the expertise and technical ability to get a good HLA match, to get each patient the blood product he needs. But all that expertise is wasted if we can't get enough donors."

One typical recipient, a man in his early 50's, was treated with chemotherapy for a month at Stanford for his acute myelocytic leukemia. He needed platelets four or five times each week for three weeks last spring. Keenly aware of his family's debt to several strangers, the patient's son wrote the following open letter to volunteers who were donating platelets:

TO A BEAUTIFUL PERSON:

I am the son of the man you are donating platelets for. I and my whole family think you are a wonderful, wonderful person and with your help and the Lord's we have come a long way with this disease.

You know our family is very close, and I can't imagine living a day without my father being there with us. With your help it looks like he is going ~~to be here~~ for a long, long time. The doctors have got this disease under complete remission. In about ten days from today he will be coming home.

Thanks again. We love you!

STANFORD UNIVERSITY MEDICAL CENTER
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BATTLE FOR CONTROL OF HEALTH CARE SEEN BY ECONOMIST

STANFORD—

"Physicians face the likelihood of several unpleasant battles for control of health care," warns Victor Fuchs, a respected Stanford University health economist and a leading figure at the National Bureau of Economic Research.

Among the battles is one that reflects a larger set of issues. "This battle pits university physicians and hospitals against community physicians and hospitals," he said.

"Biomedical research funds are flat or falling," Fuchs said. "Medical education support is dwindling and, increasingly, the university medical centers are looking for patient care to shore up their revenues.

"At the same time, these centers dread the notion of having to compete for patients in a tight economic environment. In many cases their concern is well justified. When it comes to delivering bread-and-butter care, the chances are the community physicians and community hospitals can render this care less expensively.

"On the other hand, community physicians also feel threatened. They see these gleaming medical centers, big and powerful, and they see the famous specialists, and they wonder how the medical centers will use their power, and whether it will be at the expense of community physicians and hospitals."

Fuchs expressed his views in a recent article in *Health Affairs*, a professional journal.

The Stanford economist said the conflict among physicians is exacerbated by the proliferation of activities at the frontier of medicine that should be done primarily in medical centers, but which increasingly are being undertaken in community hospitals.

"This proliferation frequently is bad economics and bad medicine," Fuchs wrote. "Eventually, this conflict is going to produce a need for better understanding, a ned for compromise, a need to realize the legitimate concerns of each part of the health care enterprise."

Fuchs said he is particularly concerned about what will happen to medical research.

"Without research, without advancing the state of knowledge, medicine will begin to run up against blank walls," he said. "There is only a limited amount of improvement in health that can be purchased by increasing the number of physicians or by adding hospital beds.

"The great advances have always come from figuring out better and newer ways of preventing or treating disease. Somehow there have to be enough funds generated in medical centers to support research and to employ faculty who are actively engaged in research."

Fuchs feels society would benefit from the evolution of a medical care system where academic medical centers concentrated on research, teaching, and activities at the frontier of medicine, and did only as much primary and secondary care as necessary for them to carry out their principal missions.

"Complex, tertiary care," Fuchs wrote, "should be limited primarily to regional medical centers because they provide the specialized services more efficiently, offer higher quality of care, and carry out the research that should accompany all innovations in medicine."

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Internal battles for control of health care also take place, said Fuchs, and are not limited to the academic medical centers. It is a general problem within the entire health sector in which practicing physicians and the managements of their hospitals are also fighting for control.

Curiously, government has not been one of the chief contestants. "This may come as a surprise," Fuchs said, "because the battle for control of health care is often depicted as one of medicine against government.

"Unfortunately, the medical profession is not using this breathing space as creatively and as constructively as it might. This is a shame because, while the regulatory threat went away for a time, medicine should not think that it has disappeared forever. It could come back quickly and heavily."

Fuchs urges physicians and other health care specialists to try to understand the reasons for conflict and to work for change.

"Let practicing physicians concentrate on treating patients and on less intensive forms of care," he advised. "Let academic physicians in medical centers concentrate on teaching, research, and tertiary care and only as much primary and secondary care as is necessary.

"Unless the necessary compromises are struck, American medicine will be consumed with conflict in the years to come, and patients and society will be the major sufferers."

STANFORD UNIVERSITY MEDICAL CENTER
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CONSUMER ADVOCATE TO ADDRESS ALCOHOLISM

STANFORD—

"Alcohol Use and Abuse: The Health and Social Consequences" will be the topic of a public talk 7 p.m., Nov. 8 in the Fairchild Auditorium, by Dr. Michael Jacobson, nationally known consumer advocate.

He will discuss ways for health professionals, community groups and individuals to help combat alcoholism. "Alcohol abuse costs society over $100 billion per year and results in an estimated 200,000 deaths of Americans annually," noted Holly Nickels, R.D., of the Department of Dietetics.

Some of Jacobson's suggestions, she said, include educational efforts, an increase in alcohol taxes, and building of coalitions to put pressure on legislators and the alcohol industry. He is also involved in pressuring the broadcast industry to ban liquor advertising.

Jacobson is executive director of the Center for Science in the Public Interest, a nonprofit organization based in Washington, D.C., active in nutrition education and government policymaking in food and health issues.

Under his direction the Center, along with 16 other health and consumer groups, recently appealed to the liquor industry to print health and safety warnings and ingredients on all alcoholic beverage labels, to contribute funds for public service messages to discourage drinking, and to halt marketing and advertising aimed at children and teenagers.

Jacobson's talk is being sponsored by the SUH Department of Dietetics, San Jose Peninsula Dietetic Association, and the San Mateo County Nutrition Council. Attendance is free of charge.

For further information contact Nickels or Jane Woeckener, at 497-6904.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Stanford University has responded to issues contained in an Aug. 2 "office action" by the U.S. Patent Office which had rejected a genetic engineering patent application.

The patent application covers the products of basic gene splicing and cloning methods invented by Stanley N. Cohen, professor of genetics at Stanford, and Herbert W. Boyer, professor of biochemistry at the University of California at San Francisco.

Niels Reimers, director of Stanford's office of technology licensing, said the response addresses all objections raised by the Patent Office "and we anticipate it will result in issuing of the patent in the near future."

Reimers said the Patent Office confirmed receipt of the document on Monday (Nov. 1). The university had three months from the Patent Office's August action to respond.

Reimers said he could not predict whe a response would be available from the Patent Office.

The university's response included a 22-page amendment and remarks to the original patent application, as well as declarations by several scientists, including Cohen, Boyer and Bernard Weisblum professor of pharmacology at the University of Wisconsin Medical School, who said information contained in the application was "enabling"—accurate and detailed enough to permit other researchers to use the genetic engineering techniques described.

The attorney noted that issue had been considered crucial, since the patent application includes an incorrect interpretation about how a particular plasmid (a circular form of DNA) was formed during Cohen's and Boyer's original experiments.

However, Weisblum and the university contend that sufficient information was provided in the application to enable scientists to perform the basic genetic engineering process.

"The numerous publications subsequent to the filing of the subject application support the fact that by following the teachings of the subject application one can prepare functional plasmids and and clone foreign DNA," stated Bertram I. Rowland, of Townsend and Townsend attorneys of San Francisco, which prepared the amendment.

In addition, Cohen and Boyer had made the plasmid in question available to researchers, enabling them to apply the technique without regard to the description of the plasmid.

In addition to Cohen, Boyer and Weisblum, other declarations were offered in the case about the enabling issue by Stanley Falkow, chairman of the Medical Microbiology Department at Stanford; David Hogness, professor of biochemistry at Stanford; and David Helinski, professor of biology at the University of California San Diego.

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The amendment also addressed what Rowland called the "Darwininian" rejection. This was raised by the Patent office which noted that a DNA process analogous to the one described in the patent can occur in nature under special circumstances.

"Based on the frequency of mutation and selection of individual species, the evolutionary process is statistically unlikely to have occurred in the time span which was available." The amendment continued by noting that "an evolutionary time scale of hundreds of thousands of years and not the lifetime of a patent" is not relevant to consideration of the application.

"The next objection," read the attorney's remarks, "concerns the question of whether Professor Robert Helling of the University of Michigan is a coinventor. Helling has declined to sign a disclaimer of co-inventorship. He also has declined to respond to queries from Rowland about what role he played in the invention, the document said. Although Helling had co-authored a journal article with Boyer and Cohen, "the doctrine that co-authorship is **prima facie** evidence of coinventorship has always been considered by this attorney to be mischievous," Rowland wrote. He also noted a recent case which he said ssupported that premisef

The patent application follows another issued to Stanford in 1980 which covers the basic techniques of gene cloning. The current application was filed in 1974 and covers products resulting from the use of the technique. (These products, called transformants, are the result of intermediate steps between the genetic raw material and the desired commercial product).

Seventy-three licenses have been issued by Stanford and UC on a non-excluive basis for reasonable royalties based on the gene cloning techniques, Reimers said. Income to Stanford and UC so far has reached about $1.4 million.

Two products recently became commercially availiable, including insulin and a swine vaccine.

The techniques are powerful research tools for analyzing the working of genes. They also make possible the construction of "bacterial factories" that can safely produce large quantities of compounds important in medical treatment and other fields.

Because bacteria theoretically could be engineered to produce almost anything created naturally by plant and animal cells, the tenchiques developed by Cohen and Boyer may have significant applications in such diverse industries as energy, chemistry and agriculture.

Nov. 1, 1982 --30— mg1

STANFORD UNIVERSITY MEDICAL CENTER
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A VISION OF THE PSYCHIATRY OF THE FUTURE

STANFORD—

Imagine a psychiatric clinic of the future.

A patient comes to the psychiatrist's office, obviously in a severely agitated or depressed state.

A blood sample, or perhaps a spinal fluid sample, will be drawn from the afflicted person. The analysis of the substance will be put into a mass-spectrometer, a $175,000 sophisticated machine now found in a small number of psychiatric research laboratories.

Simultaneously, the psychiatrist will draw from the patient a clinical history of his mental illness. Then, on the basis of the history and testing, the psychiatrist will be able to discuss with the patient the disorder and the subtype that the patient has. From the testing they will be able to identify immediately the optimal drug therapy.

That pharmacotherapy, combined with psychotherapy, will provide more specific, rapid, and effective treatment.

This vision of the psychiatry of the future was described recently by Dr. Jack Barchas before an overflow crowd in the Sherman Fairchild Auditorium of the Stanford University School of Medicine. His talk on "Psychobiology: New Approaches to Mental Illness" was sponsored by the Friends of Psychiatry and Behavioral Sciences at Stanford University Medical Center. The talk centered around new developments in the area of behavioral neurochemistry and the ways in which the new information might impact on diagnosis and treatment.

Barchas, a professor and director of the Nancy Pritzker Laboratory of Behavioral Neurochemistry at Stanford, is considered a rarity among the 30,000 psychiatrists in the United States. This is because perhaps only less than two dozen of them, like Barchas, are devoting their professional lives exclusively to researching the basic causes of mental illness at the biochemical level.

Schizophrenia no longer pertains to just that old bromide of split personality, according to the newest research findings. "It is most likely," said Barchas, "several different illnesses, say half a dozen, that we lump together because right now that's the state of knowledge. But information is developing very rapidly."

His laboratory, with private and government support, he said, is totally absorbed in a scientific search to discover what happens in the brain to cause severe mental disorders, such as schizophrenia that affects one percent of the nation's population, depression which affects five percent, and various addictive states.

A key aspect of the search at Stanford is the involvement of several faculty members who work together in a collaborative way.

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Barchas emphasized those cross connections which include a close collaboration between the members of the Pritzker Laboratory and the Stanford Mental Health Clinical Research Center, directed by Dr. Philip A. Berger, associate professor of psychiatry.

At the Clinical Research Center, patients can be studied in careful detail with excellent monitoring of clinical status. Patients there may also be studied in a medication-free state. "We all owe a great deal to these volunteers who are willing to enable studies to take place in the hope of preventing others from having similar problems," said Barchas.

"Half the beds in hospitals in the United States," noted Barchas, "are devoted to patients in one or another form of psychiatric illness. Forgetting the pain of the families involved, these diseases probably cost the country over $51 billion a year in lost productivity and medical costs.

"The issue of research funding for mental illness is an overwhelming problem. Researchers in the field of psychiatry have fewer funds available in real money than in 1969."

Barchas noted that the annual spending for mental illness research is $6 per patient compared to approximately $100 and $200 spent respectively for heart disease and cancer research. The absolute amounts spent on research in mental illness are low compared to that for other serious disorders.

He said there has not been a strong tradition for government policy to support research into mental illness with the vigor that occurs for other serious illness. The private sector has also not been as active and there is not the type of private support which exists in other areas of health.

"Yet there's been an explosion of knowledge which needs to be explored," he said. "The basic sciences of neurochemistry and neuroscience have developed important information that is now incorporated into psychiatric research.

"We're learning all sorts of things, such as what neurotransmitters are present and how they work biochemically and physiologically. There was very little study of these problems until a few decades ago."

At that time, one of the shining lights of discovery that opened a new vista into the complex mechanisms of the human mind was turned on by a Swedish scientist, Arvid Carlsson. During chemical analysis of transmitters in the brain, he noticed a previously unrecognized spot on a sheet of chromatographic paper. It had never been identified before, explained Barchas, and he quickly related it to adrenaline in chemical structure. The compound that Carlsson discovered was dopamine.

"That discovery had implications for a number of different diseases," Barchas explained. "We now know that dopamine is important in Parkinson's disease, a movement disorder.

"It may also be important in some forms of depression. Knowledge about dopamine has led to a whole new way of thinking about schizophrenia, which suggests that a relative excess of dopamine may be involved in schizophrenia or in its treatment.

"That information ties in with other evidence about schizophrenia which suggests that the disorder may have biochemical and genetic aspects."

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Barchas described some of the work of the Nancy Pritzker Laboratory in terms of dopamine and mental disorders. Members of the laboratory recently were the first to purify the critical enzyme from brain which controls the formation of dopamine and to determine some of its characteristics, including a marked activation during stress. They believe that increase in enzyme activity is a result of the addition of a phosphate group to the enzyme.

Barchas described two of his collaborations with other faculty. The first is with Dr. Roland Ciaranello, associate professor of psychiatry, with whom it was demonstrated that the amounts of the enzyme are controlled genetically. With Dr. Lawrence Kedes, associate professor of medicine, and postdoctoral fellows in his group, it has been possible to investigate the molecular genetics of the formation of dopamine.

Drs. Barchas, Ciaranello, and Kedes are now involved in a study of the processes regulating the formation of dopamine. The three of them, in association with Berger, expect to extend their studies on patients to determine whether individuals with schizophrenia, depression, autism, or borderline schizophrenia have changes in those genetic mechanisms.

The combination of basic science and an appropriate clinical environment is a critical factor in the effectiveness of the Stanford program, Barchas said.

New medications, Barchas stated, have resulted in a major change in the treatment of those with severe mental illness. In France, he observed, it was discovered almost by chance that a group of drugs called phenothiazines were effective in the treatment of many schizophrenics.

These antipsychotic drugs—such as thorazine, stelazine, melaril—are believed to block the brain's receptors for dopamine, stopping the relative excess of the neurotransmitter.

"They have been miraculous," said Barchas, "because prior to World War II, schizophrenia was a disease which almost inevitably resulted in a very bad outcome. Now an acute schizophrenic taking the medications will usually be markedly improved, and after a while will be finished with the treatment."

But this doesn't apply to all schizophrenia patients. Between 25 to 50 percent of the mentally disturbed patients get no help, or only temporary help in which they are improved but basically are still profoundly disturbed, he said. An analogous situation exists for depression. In both cases marked progress is being made.

But Barchas cautioned that such illnesses as schizophrenia and depression may have no single cause. The biochemical approach to finding out their cause is only one avenue. There is the psychological side, with attendant stresses and the psychological meaning of events; the social with family and interactional processes and role theory, as well as hereditary factors.

As part of the discussion of the psychiatry of the future, Barchas emphasized his view that ultimately there would be need for a new approach that would combine the advances in neurobiology with the behavioral approaches.

"We need to understand the ways in which behavior changes biochemistry and how the altered biochemistry in turn affects subsequent behavior," he stated. "Out of these concerns may come a new psychiatry perhaps requiring a different language to express those interrelationships which we can now only glean.

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"A powerful early example of the need for multiple approaches is shown in the treatment of schizophrenia," he explained. "We are just learning that the best approach to treatment for many patients involves a combination of psychopharmacology with social and psychological approaches. That combination can be expected to be quite important in the future."

Scientists, Barchas said, are also interested in affective disorders such as mania and depression. His own laboratory, in collaboration with the Stanford Mental Health Clinical Research Center, is searching for biochemical bases of depression which is associated with several important neurotransmitters, such as serotonin and norephinephrine.

The two are distributed in varying concentrations throughout the brain, with the greatest concentration in nerve cells from areas thought to control emotion and mood.

"The most important biochemical theory of derpession," said Barchas, "states that it's associated with a deficit in serotonin or norephinephrine at critical synapses, the microscopic gaps between nerves cells."

Barchas said brain chemicals other than serotonin and norephinephrine may also be involved in depression. One group of these, called endorphins, has some actions similar to those of morphine and other opium derivatives.

"Since morphine can cause profound euphoria when injected intravenously and a state of great discomfort during withdrawal, it has been hypothesized that these morphine-like compounds are involved in depression," he said. Two scientists in the Pritzker Laboratory, Drs. Eckard Weber and Chris Evans, have found several new, previously unrecognized forms of endorphins and related substances.

"The finding of such substances is quite exciting," Barchas said. "We are at a phase of neurobiology similar to that of the finding of continents and islands. We know the finding of new neurotransmitters will be important for treatment and diagnosis in the future but do not yet know exactly what their significance will be or in what disorder they will prove important."

"The first demonstration that the endorphin-like substances in brain could be changed by stress was made by Dr. John Madden, then a predoctoral student at Stanford," Barchas said. Madden demonstrated that in certain types of stress the amounts of the endorphin-like materials are increased in the brain. At the same time there is a change in pain threshold. His findings may explain the oft-noted reports of soldiers in battle or of accident victims who suffer an injury but do not feel pain, he added.

In another Stanford study, Madden, now a member a of the Pritzker Laboratory, is working with Dr. Richard Thompson, professor of psychology. They are investigating the role of endorphins in certain types of learning, Barchas said. There is also evidence that endorphins may be important for a model of depression, the type referred to as learned helplessness.

"A great deal of work at Stanford and elsewhere is now underway to determine the role of endorphins in mormal metabolism and in psychiatric disorders," he added.

STANFORD UNIVERSITY MEDICAL CENTER
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Science writers: Background information on topics covered in the Progress in Medicine lectures follows asterisks.

HERPES: RISKS, PREVENTION, AND TREATMENT

STANFORD—

Sexually transmitted herpes viruses, their risks, prevention, and promising treatments, will be the focus of a three-part "Progress in Medicine" lecture series, sponsored by Stanford University Medical Center, November 9, 16, and 23.

Each lecture is open to the public free of charge, and will take place at 7:30 p.m. in the Medical Center's Sherman Fairchild auditorium.

Thomas C. Merigan, Anne S. Yeager, and John Mills, three eminent researchers in infectious diseases, will describe recent advances in understanding and controlling two varieties of the herpes simplex virus, sources of cold sores and genital infections that afflict at least 15 million Americans, and their lesser known viral relative, cytomegalovirus (known as CMV).

As a part of the first lecture, Mills, a visiting scholar at Stanford from the University of California, San Francisco, will discuss his studies of the role CMV plays in a mysterious crippler of the immune system that has killed hundreds in the last year in an epidemic that stretches across the continent. Labeled "acquired immune deficiency syndrome" (AIDS), the disease seems particularly prevalent in male homosexual communities, for reasons still unclear to researchers.

Yeager, associate professor of pediatrics at Stanford, will describe herpes' effects on young children in her presentation November 16 entitled "Risks for fetuses and infants in contact with infected adults." Both herpes simplex and CMV can be deadly for the fetus and newborn, whose immune systems are still underdeveloped.Yeager was instrumental in developing a test for CMV in transfused blood. Use of the test to screen all blood given to newborns at Stanford has nearly eliminated the threat to these patients.

Merigan, Becker professor of Medicine and a leader in Stanford's research of the anti-viral compound interferon, will discuss "Present and future methods of prevention and treatment" of herpes on November 23.

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In addition to testing ways to prevent a dangerous CMV infection in immune suppressed patients, Merigan and colleagues are testing antiviral drugs such as leukocyte interferon and adenine arabnoside to halt the infection once it starts.

Seats for each lecture will be made available on a first come, first served basis, so early arrival is recommended.

Those interested in further information or registration forms can call the Medical Center's office of public events at 497-6389.

* * * * *

A usually innocuous virus contracted by 40 percent of all Americans sometime during their lifetime, CMV has been found to suppress the immune system in laboratory animals and some humans, and to convert normal cells to cancerous ones in test tube cultures. CMV is also known to cause severe disease in recipients of organ transplants who are given drugs that suppress their immune systems.

In collaboration with the bone marrow transplant program at the University of California, Los Angeles, Merigan recently gave transplant patients blood plasma containing high concentrations of anti-CMV antibodies. (Because of the strong radiation treatments the transplant candidates must undergo, their immune systems are extremely suppressed and their risk of contracting CMV is high.)

Results of the study, published in the July 8 *Annals of Internal Medicine*, showed that while the CMV infection itself was not prevented by the antibody boost, dangerous complications of the infection, such as pneumonia, hepatitis, and encephalitis were significantly reduced.

The researchers currently are repeating the experiment with a modification: instead of giving the antibody as a component of plasma, which can only be given in small, limited quantities, they are now injecting the patients with pure antibody, in hopes of maximizing the therapeutic effect.

As yet, no long lasting, effective treatment exists for the herpes viruses, Merigan said, though several promising drugs have been made available recently for testing.

"These are the first drugs that seem active against these infections and I think we'll see them widely studied in the next few years," he said. "There are other drugs coming up which will be even more effective, judging from the first experiments in animals. I'm not saying these will cure the infection," Merigan cautioned. "The real challenge for the future will be total prevention of the infection. We need further understanding of the disease mechanisms in order to pinpoint factors that cause their occurence."

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or Vicki Applegate at Children's Hospital at Stanford (415) 327-4800 ext. 363

The following release is being issued jointly by Stanford University Medical Center and Children's Hospital at Stanford.

HOSPITALS SIGN CONSOLIDATION AGREEMENT

STANFORD—

A formal agreement consolidating Children's Hospital at Stanford (CHAS) and the pediatric facilities of Stanford University Hospital (SUH) was signed Thursday night (Nov. 4) at ceremonies attended by the new organization's recently chosen board of directors.

"Just like a marriage courtship, we have spent the past year getting to know each other's needs and expectations, and we are now joyously celebrating a bonding of our goals and interests," said Lawrence G. Crowley, chairman of the new 10-member board and President of SUH.

"And like a marriage, we must marshal the groundwork and bond thus far achieved to forge an ongoing relationship," added Crowley, who also serves as vice president for Medical Affairs at Stanford University.

"We will now get on with the business of taking two dynamic institutions and creating a new entity which is even greater than the sum of its individual parts," said Kenneth H. Sayre, of Menlo Park, chairman of the original CHAS board and member of the new CHAS board which will now guide the consolidation through final planning and construction. The $40 million hospital is to be a separate building physically attached to SUH and ready for occupancy by a target date of May 1987.

The formal contract was signed by Sayre and Crowley, representing the two hospitals, and by Donald Kennedy, president of Stanford University, which operates SUH as a wholly-owned subsidiary. The agreement creates a new corporation to operate the consolidated children's medical center and mandates the new board to begin planning for construction and other details.

Five of the new CHAS board members were selected by and from SUH's board, while five others were chosen from CHAS' current board, which will continue to operate the existing hospital until it is moved to the new facility. The existing CHAS and SUH boards will serve as the parent governing bodies of new CHAS, Crowley and Sayre said.

Members of the new board from CHAS include Charles A. Anderson, Menlo Park, formerly chief executive officer of SRI International; Birt Harvey, a Palo Alto pediatrician; Shirley Oneal, San Jose, president of the CHAS association of hospital auxiliaries; Lucile Packard, Los Altos Hills, vice chairman of the current CHAS board; and Sayre, a vice president of Kidder, Peabody and Co., San Francisco.

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SUH's members include, in addition to Crowley, Conrad F. Gullixson, a Palo Alto attorney, former city councilman and past president of SUH's board; Linda Meier, Atherton, an active Stanford alumna and community leader; Dominick P. Purpura, dean of the Stanford University Medical School; and Frank Roberts, senior partner with the San Francisco law firm of Pillsbury, Madison and Sutro and former SUH board president. Meier and Roberts had also served on the old CHAS board until they resigned last month to be among SUH's appointees to the new CHAS board.

In addition to regular members, each originating board appointed two alternates.

CHAS' alternates are Mary Elizabeth Kendrick, of Atherton, a community leader; and Lawrence R. McDonnell, of Palo Alto, retired vice president of public information for Pacific Gas and Electric Co.

SUH appointed William F. Massy, Stanford's vice president for business and finance; and David J. Stone, a Palo Alto businessman.

The contract approved during Thursday's ceremony stipulates that Crowley, as vice president for medical affairs, will serve as ex officio chairman until the new hospital is occupied.

Most provisions of the contract were announced in July when both parent boards signed an agreement in principle to consolidate.

Formal planning for a single children's medical center was begun by both boards in November 1981, but informal discussions have been occurring for many years. Central issues included rising costs, concerns about duplication of services, as well as trends in pediatric care, which resulted in attracting to Stanford the more difficult-to-treat cases and the need for a comprehensive approach to the care of children.

About 2,500 patients yearly must be shuttled one mile across a busy thoroughfare between the hospitals for specialized treatment at SUH.

The new facility will consolidate the 60 beds of CHAS and the 44 pediatric acute medical-surgical and pediatric intensive care beds of SUH. The new facility also will house the Stanford-Children's Ambulatory Care Center, which provides 27 separate clinic services, including such specialties as cardiology, birth defects, oncology and child psychiatry.

The new children's medical center will continue to provide inpatient services in the 15 specialties now offered by both hospitals.

The existing CHAS facility at 520 Willow Road in Palo Alto will continue to operate until the new building is completed. The consolidation must now pass through the review process of state and local agencies.

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EIGHTH HEART-LUNG PATIENT REPORTED STABLE

STANFORD—

A 40-year-old Ventura, Calif. man was reported in stable condition Monday, three days after he became Stanford University Medical Center's eighth heart-lung transplant recipient.

Medical personnel said Monday Ronald Grunden was progressing well and has been able to sit in a chair and take some medications orally.

On Friday, Grunden was reported in critical condition, the standard designation for patients who have just completed the double transplant.

The five-hour operation was performed by Dr. Stuart Jamieson, assistant professor of cardiovascular surgery, and five physician colleagues on the transplant team.

"While the most important period is still to come, we are optimistic that Mr. Grunden will return to an active and productive life in the coming months," said Jamieson, who directs the heart-lung program.

The double transplant was the first performed at Stanford in nearly five months, although four candidates have been waiting for donors.

"This procedure benefits a select group of patients who otherwise would die within months," said Jamieson.

"Our greatest difficulty is the limited supply of donors which makes this operation a reality for only a very small number of people. Several potential recipients have died in the last few months for lack of donors."

But Jamieson said more operations could be performed if more individuals would make their intentions to donate their organs clear to their families or sign donor statements on their driver's licenses.

Several potential recipients are always waiting, since the recipients and donors must be matched by size and also by blood type and tissue type to reduce the impact of rejection, the body's natural tendency to fight off foreign tissue.

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Grunden suffered from a congenital abnormality of the heart called a ventricular septal defect (VSD). A hole present from birth allowed blood to flow between the chambers of the heart, causing a volume overload of blood in the lungs.

This overcirculation causes pressure to increase in the pulmonary arteries that the right ventricle of the heart is unable to overcome.

Therefore, both the heart and lung become damaged over many years, leaving a heart-lung transplant as the only viable alternative to death.

VSD usually can be corrected in small children by surgery, but the operation was not available in Grunden's youth.

Despite a slowly deteriorating condition, Grunden was able to work as a computer technician and typesetter until February 1980.

Stanford performed its first heart-lung transplant surgery on March 9, 1981, on 45-year-old Mary Gohlke of Phoenix, Ariz., after researchers at Stanford had tested a new drug which was effective at fighting rejection, while allowing the windpipe to heal and much of the body's natural defense mechanism against infection to remain intact.

The new drug is cyclosporine, a fungal derivative, which until a few month ago was known as Cyclosporin A. The Food and Drug Administration ordered the change, contending the first name was too similar to another class of drugs and might be confusing.

Early attempts at heart-lung transplantation between 1968 and 1971 in Texas, New York, and South Africa, resulted in a survival rate of no longer than 23 days.

Four of the first seven Stanford transplant patients have returned to active lives, including Gohlke, who has gone back to a career in newspaper advertising. Two of the patients died of complications encountered because of previous surgeries, while a third died nearly a month after her operation as a result of kidney failure, attributed at least in part to exhaustion rendered by a five-year battle against pulmonary hypertension.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

STANFORD—

'RIGHT TO DIE' TOPIC OF TV SHOW FEATURING STANFORD UNIVERSITY MEDICAL CENTER PHYSICIAN, CHAPLAIN

Case: A 25-year-old man lies comatose in an intensive care unit of a hospital after being critically injured in a car accident. Not only will he never be able to resume his formerly active lifestyle, but his basic life functions are being sustained only with the aid of machines.

Dilemma: Should the man be kept on life support systems indefinitely, or should he be taken off them and allowed to die?

With the advent of modern medical technology and intensive care units, the question of the right to die is coming up more frequently. Stanford University Medical Center's Dr. Thomas A. Raffin, director of respiratory therapy and asistant chief of medicine; Dr. Ernle Young, chaplain; and Attorney Morris Abram, chairman of the President's Council on Bioethics discuss this topic on the Nov. 25 segment of "Over Easy", a Public Broadcasting System talk show. It will be aired at 7:00 pm, and again on Nov. 26 at noon.

"If a patient is on life support systems, we go by these guidelines: cause him no harm, restore him to health, and relieve suffering," Raffin said. "Our goals are either to save the patient and restore the salvagable functions, or to help him die a dignified death."

Young added what he believes should be another guideline: patient autonomy. "The patient should be able to determine what he'd like the quality of his life to be," he said.

"Technology has accelerated, but the ability to handle the technology at a moral level has often lagged behind," he added.

Often, he explained, family members are torn between the emotion of wanting to keep their relative alive, regardless of his condition, and the practicality of doing what is medically, humanely, and financially the best option. Reaching these decisions often causes conflicts between family members, and physicians. Chaplains, social workers, and other trained professionals are especially helpful in these circumstances, all three guests agreed.

One way to avoid forcing family members to make these decisions, they advocated, is for individuals to discuss the options with family members in advance. Individuals can also sign a "living will," available through the Society For The Right To Die. "The document is not legal, but it does express the person's wishes," Young said.

"Over Easy" is a national daily, half-hour talk show. In its sixth season, it is aired locally on KQED, San Francisco. Hosts Mary Martin and Jim Hartz feature guests who are authorities in subjects pertinent to growing, changing adults.

sk —30—

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NEW PSYCHIATRY FACILITY BILLED AS UNIQUE IN WESTERN U.S.

STANFORD—

A new facility for neurochemical research has been dedicated at the Stanford University School of Medicine.

The new facility, established as part of the Nancy Pritzker Laboratory of Behavioral Neurochemistry, was dedicated to the memory of Jack D. and Sophie A. Pasarow, parents of the major donor to the project.

The new Pasarow Analytical Neurochemistry Facility has equipment and expertise which are unique in the western United States, said Dr. Jack Barchas, director of the Nancy Pritzker Laboratory.

The dedication ceremony launched the new facility and thanked the donors who made a fund drive for the refurbishing and remodeling of the Nancy Pritzker Laboratory successful.

According to Barchas, the Pasarow Facility is intended to support neurochemical research, which requires the detection and measurement of neurotransmitters—chemicals that transmit information from one nerve cell to another. For this purpose the facility has equipment which can identify substances present in minute amounts and which will aid studies in severe mental disorders in adults and children. The equipment includes a new top of the line Hewlett Packard mass spectrometer.

Dr. Dominick Purpura, dean of the Medical School, said that recent developments in psychiatry are permitting the field to move with effectiveness toward an understanding of the critical problems of mental illness which affect millions of people.

The Pasarow Facility comprises one of five divisions of the Nancy Pritzker Laboratory. The others are peptide chemistry, biochemical neuroanatomy, biochemical regulation, and behavioral neurochemistry.

The remodeling and refurbishing of the Nancy Pritzker Laboratory and the establishment of its Pasarow Facility were made possible by a combination of private donors, private foundations, and government sources. Besides Claire and Robert J. Pasarow of Southern California, other private donors included: Moshe and Margaret Alafi of Berkeley, Bill and Diane Bridgford of Fullerton, John and Marjorie Hines of Chicago, Peggy and Albert Orschel of Chicago, Peter and Barbara Pande of Palo Alto, Al and Edie Shansky of Hillsborough, and Garland and Pauline Sinow of Long Beach.

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"We are deeply appreciative of the gracious help and key role the donors had in providing for this important research unit," stated Barchas.

The ceremony took place five years after the opening of the Nancy Pritzker Laboratory, established with a gift from the Pritzker Foundation. Several foundations including the Grant, MacArthur, McGraw, Norris, and Pritzker, were important in the current remodeling and refurbishing effort.

In addition, government support was received from the National Institute of Mental Health and the Office of Naval Research. "Individuals, foundations, and government are all important in research on mental illness, where there has been so little tradition of support," noted Barchas, Nancy Friend Pritzker Professor and associate chairman of psychiatry. "Each sector performed a needed role in this three-year $1,000,000 fund drive."

Dr. Kym Faull, senior research associate in psychiatry, will head the Pasarow Facility. Said Barchas, "Dr. Faull is one of the leading experts in this country on the application of mass spectrometry to the analysis of neurotransmitters and their metabolites."

"We are delighted to be in the remodeled space," he concluded, "and the work is already going full speed ahead."

11-8-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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HOSPITAL WORKERS VOTE AGAINST JOINING UNION

STANFORD—

Service and maintenance workers at Stanford University Hospital have voted against representation by Local 715 of the Service Employees International Union AFL-CIO.

The final tally Saturday night showed a vote of 778 against, 253 in favor, with 22 ballots void or challenged. Approximately 1,150 employees were eligible to vote, showing about a 90 percent turnout during National Labor Relations Board voting Friday and Saturday.

"We are very pleased with the results," said Dan Robinson, SUH assistant director of personnel and manager of labor relations. "We feel that it is a strong vote of confidence. We will continue to live up to this very strong vote of confidence which our fellow workers have shown."

An NLRB representative said the election would be certified after 10 days unless either the employer or the union filed objections.

Michael Baratz, executive secretary of Local 715, said after the election he was unsure whether the group will file objections to the results.

Workers eligible to vote included a variety of job categories, including nursing assistants, unit service assistants, housekeeping and dietary workers and maintenance employees.

No employees currently are represented by Local 715 at the hospital, a wholly-owned non-profit subsidiary corporation of Stanford University.

A nonaffiliated union, the Committee for the Recognition of Nursing Achievement (CRONA), represents about 1,250 registered nurses and is the only union currently representing employees at the hospital.

At the university, a Local 715 contract covers a bargaining unit of 1,350 workers.

Nov. 8, 1982 —30— mg2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

STANFORD COMMUNITY OF INTERNISTS SPONSOR ONE DAY SYMPOSIUM

STANFORD—

Stanford Community of Internists (SCI) is sponsoring a one day symposium featuring Lloyd H. Smith, Jr., M.D., professor and chairman of the Department of Medicine at University of California, San Francisco on Nov. 18.

Smith is scheduled to present the Grand Rounds lecture—"Pathogenesis and Treatment of Gout"—in Fairchild Auditorium at 8:30 a.m.

He will also lead a lunchtime conference with housestaff and students on "Urolithiasis". The public is welcome at both events.

A dinner is scheduled for members of SCI later that evening, at which Smith will lead an informal discussion on "Reflections of Academic Medicine".

Smith is also physician-in-chief of the Medical Service at University of California Hospitals, San Francisco. He has been a visiting professor at University of Geneva (Switzerland), Pahlavi University (Iran), University of Sydney, and University of Auckland (Australia). He serves on numerous professional and editorial boards, and is the author of at least six books and 89 journal articles.

SCI, formed in 1979, is an organization of community and Stanford University Medical School faculty internists. With about 135 members, the group sponsors a number of educational events each year. For further information, call Sally Mixer at 497-5454.

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—30—

11/8/82

STANFORD UNIVERSITY MEDICAL CENTER
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'TWIXT NERVE AND MUSCLE: CAUSES, TREATMENTS OF MYASTHENIA GRAVIS HIGHLIGHTED IN UPCOMING LECTURE

STANFORD—

Daniel Drachman, a renowned researcher in the causes of the neuromuscular disease "myasthenia gravis," will address Stanford community members next week in the first annual lecture of a series on the causes and treatments for the disease. The lectureship is sponsored by the department of neurology with a grant from the H. S. Kittredge Research Fund.

Open to the public, the presentation will be held in room M104 of the Stanford University Medical School at 5:00 p.m. on Thursday, November 18.

Double vision, weakness that gets worse as the day wears on, and sometimes fatal paralysis are symptoms of the disorder that effects between five and ten thousand persons in the United States each year. The disease seems to stem from malfunctions in an overzealous immune system at neuromuscular junctions, places in the body where nerve and muscle meet.

Drachman, a professor of neurology at Johns Hopkins University in Baltimore, Maryland, has been a leader in understanding the disease for the last fifteen years, according to Lawrence Steinman, assistant professor of neurology at Stanford.

"It was Drachman who really showed how the receptor for acetylcholine (a chemical messenger at the nerve junction) was involved in the development of myasthenia gravis," Steinman said. "He showed that when antibody binds to the receptor, the receptor is shed and you lose the ability of the muscle to respond to the nerve impulse."

Florence and H.S. Kittredge, long-time residents of the Santa Clara Valley, donated, "a generous grant" to Stanford University Medical Center in 1972 for studies of the causes, treatments, and potential cures for myasthenia gravis, Steinman said. A portion of the grant was set aside in 1982 to fund the neurology lectureship which is scheduled to bring to Stanford each year "people of national and international reputations who are making direct contributions to clinical treatments of the disease."

11-8-82 —30— df4

STANFORD UNIVERSITY MEDICAL CENTER
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ELDERLY ATHLETES NEEDED

STANFORD—

About 30 active, healthy, male volunteers over 60 are needed to participate in a study at Stanford University Medical School on the relationship between metabolism and physical conditioning.

Dr. Mark Rosenthal of the Division of Gerontology has been researching glucose metabolism in the elderly. His findings, published in last month's issue of the *Journal of the American Geriatric Society,* indicate that the so-called "glucose intolerance of the elderly" happens only in certain individuals.

"While other researchers claim that poorer handling of glucose is inevitable in aging, I found that some 80-year-old subjects had perfectly normal glucose tolerance and were better than normal in their sensitivity to insulin," he stated.

Rosenthal has theorized that physical fitness is one factor that might explain his observations, that perhaps "staying in good shape" prevents any deterioration of glucose metabolism, or promotes normal handling of glucose.

Rosenthal recently observed a correlation between insulin sensitivity and physical fitness as measured by maximal exercise testing in subjects up to age 50. Now he wants to extend the study to a group of older men.

Athletes currently in training are preferred for the study, which requires spending two nights and two mornings in the clinical research center (CRC) at Stanford. Rosenthal will compare well conditioned elderly athletes—mostly runners and swimmers—with more sedentary men of the same age group.

Participants will undergo, at no cost to themselves, glucose tolerance testing, testing for insulin sensitivity, and basic lab tests. Medical histories will be taken and complete physicals including EKG performed.

As outpatients, volunteers will go through exercise testing on a bicycle ergometer at the Stanford Heart Disease Prevention Program. Also, percentage of body fat will be measured by underwater weighing.

Rosenthal has already tested eight subjects, and expects the study to last until spring. For further information, contact him from 9-5 weekdays at 858-3933.

11-8-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
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NINTH HEART-LUNG TRANSPLANT PERFORMED AT STANFORD; EIGHTH DOING WELL

Editors: The following release was sent out Tuesday p.m. via Business Wire:

STANFORD—

Philip McGrath, who doctors said faced death within a few months, became the second heart-lung transplant patient at Stanford within four days.

The 22-year-old Islip, N.Y., man was reported in critical but stable condition following the five-hour operation performed Tuesday by Dr. Stuart Jamieson and five colleagues from the Department of Cardiovascular Surgery.

The operation was the ninth heart-lung procedure performed since Stanford began the program in March 1980.

Jamieson said the transplant was performed without complications, offering the former college student a potential reprieve from the death sentence imposed by his condition, known as a ventricular septal defect (VSD).

The abnormality was the same which led to last Friday's heart-lung transplant for Ronald Grunden, 40, of Ventura, Calif.

Jamieson said Grunden was making excellent progress and has been able to sit up in a chair and eat solid foods. He was listed in satisfactory condition Tuesday.

"I think we have been able to offer both Mr. McGrath and Mr. Grunden at least a fighting chance for productive lives," said Jamieson, an assistant professor of cardiovascular surgery who directs the heart-lung transplant program.

Both McGrath and Grunden previously had led active lives as long as their conditions permitted. McGrath had attended Suffolk Community College on his native Long Island until September 1980, when he withdrew for medical reasons. Grunden had worked for a Southern California newspaper as a computer technician and typesetter until ill health forced him to leave in February 1980.

VSD sufferers are born with a hole between the left and right chambers of their heart. Surgeons currently can correct the hole in infants, but that procedure was unavailable to McGrath and Grunden.

When left uncorrected, the hole allows blood to flow between the chambers of the heart, causing too much blood to enter the blood vessels in the lungs.

The overcirculation causes pressure to increase in the pulmonary arteries that the right ventricle of the heart is unable to overcome.

Therefore, both the heart and lungs become damaged over many years, and a heart-lung transplant becomes the only viable alternative to death.

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VSD is one of two common conditions which currently is correctable only by the double transplant operation. The other condition is pulmonary hypertension, in which the blood vessels in the lungs constrict for reasons not yet learned. In this condition, blood cannot flow effectively through the lungs, creating a backlog which ultimately damages the heart.

Since the recipients and donors must be matched by size and also by blood type and tissue type, three recipients at Stanford currently are waiting, ensuring that if a heart and lungs become available, a matching recipient will be ready.

"There are literally hundreds of people who could benefit from thi operation, but the difficulty in obtaining donors has meant nearly all of these will die before any real chance of surgery," Jamieson said. The doctor added that Stanford physically could only accommodate 12 heart-lung transplants a year, but if donors were available they might be accommodated elsewhere.

Although Jamieson said he was pleased with the initial outcome of the two latest transplants, he cautioned that recuperation will be a lifelong process.

Although several of the nine heart-lung transplants, and many of the 244 heart-only transplants performed at Stanford have returned to active, even athletic lives, they must take medication for the rest of their lives to minimize the impact of rejection, the body's natural tendency to fight off foreign tissue.

The discovery of Cyclosporine (formerly called Cyclosporin A) was the impetus that allowed the heart-lung procedure to be revived last year after an 11-year hiatus.

The new drug overcomes problems which caused the three earlier attempts in New York, South Africa, and Texas, to result in failure. Cyclosporine, used on both heart and heart-lung transplant patients at Stanford since December 1980, is more effective than older immunosuppressives at fighting rejection while minimizing the possibility of infection. But more importantly, it allows the windpipe to heal and the lungs to function.

Four of the first seven Stanford transplant patients have returned to active lives. For example, the first Stanford heart-lung transplant, Mary Gohlke, 45, Phoenix, Ariz., has returned to a career in newspaper advertising.

Three of the patients died, all within a month of their surgeries. Doctors said two patients died of complications encountered because of previous heart surgeries, while another death was attributed to kidney failure, resulting at least in part to exhaustion rendered by a five-year battle against pulmonary hypertension.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD UNIVERSITY HOSPITAL DEDICATES NEW CHAPEL

STANFORD—

The dedication ceremony for Stanford University Hospital's new chapel is scheduled for 4 p.m. Nov. 17, culminating an open house scheduled to begin at 2 p.m.

Located across from the hospital gift shop, the new facility is being completed just about a year after the former chapel was eliminated as part of patient admitting services' renovation.

The chapel features a floor-to-ceiling stained glass window, created by artist Ginny McAfee. The window symbolizes "hope in the midst of pain and despair," said Dr. Ernle Young, chaplain. It contains no sectarian elements, he added, to maintain the hospital's nondenominational policy. The window is bordered by tiles from the University's original Memorial Chapel, which was rebuilt after the 1906 earthquake.

"The chapel has really been missed," Young said. "Staff as well as families and patients need a quiet place available to them."

Young, who organized the chaplaincy at SUH 10 years ago, said he and his colleagues, Reverend Frank Geer and Father John Hester, serve those who seek them out by simply responding to their needs—ranging from finding accomodations at a local hotel or buying an airline ticket, to carrying out religious functions or just listening to people express their feelings.

"The most challanging function for me is to deal with people's existential questions about life and pain, and helping them find satisfactory answers," Young said.

About 65 percent of the patients Young deals with are critically or terminally ill and are concerned with issues such as the right to die and the quality of life. In such cases, Young said he tries to present all options to families and patients, and help them decide what may be the best for all involved.

Young said he encourages local clergy to continue caring for their congregation members while they are in the hospital. "Our offices serve as a base for clergy. We don't want to come in between them and their members, but rather we are here to supplement their services."

The chaplains' offices are located in C112A, next door to the new chapel, and they can be reached at 497-5101. The chaplains are there during regular business hours, and are always on-call.

sk —30—

11/9/82

STANFORD UNIVERSITY MEDICAL CENTER
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HERPES SIMPLEX: TRIMMING FICTION FROM FACTS

STANFORD—

Despite a "herpes hysteria" arising from increasing media coverage of the sexually transmitted virus, the disease is probably not as infectious as most people believe, said John Mills, a visiting scholar in infectious diseases from University of California, San Francisco.

Mills spoke Tuesday night in an overview lecture on the clinical problems with herpes simplex viruses in adults, in the first of a three-part series of public talks on the viruses.

"Herpes, both in the perception of the physician and the lay public is, at the present time, a fairly serious problem," Mills said. "What is not clear is whether there has been a real increase in the incidence of this disease in recent years."

Though Mills cited one study that showed a nearly ten-fold increase in the reporting of herpes simplex outbreaks between the years 1966 and 1980, he said the jump could be simply a result of the public's increasing awareness of the disease and willingness to report symptoms to physicians.

The two herpes simplex viruses that afflict at least 15 million Americans with recurrent cold sores and genital infections stem from a family of viruses that include those causing chicken pox, shingles, and mononucleosis.

Currently there is no cure for herpes simplex infection. Though outbreaks of the open sores symptomatic of the infection usually last less than a week or two, and may occur only once or as often as several times a year, the virus remains in the body as long as the person lives, and can become active at any time without warning.

Nearly 90 percent of all Americans have antibodies to herpes simplex virus I (HSV-I), indicating that sometime during their life they were exposed to the infection, according to a recent study. Usually associated with milder, less frequent outbreaks of blisters than HSV-II, HSV-I most often causes sores in and around the mouth (though genital infections are possible), and can be contracted simply through contact with an infected person's saliva, Mills said.

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HSV-II, the virus most often associated with genital inflamation, occurs less frequently—in between one and ten percent of all Americans—the same study showed. Current commercially available blood tests don't distinguish between HSV-I and HSV-II, so patients may learn they have contracted herpes, but not know which variety they have.

Immunologic tests and probes using monoclonal antibodies can accurately identify each virus strain, and should be ready to move from the laboratory to the physician's office within three or four years, said Mills, who is chief of infectious diseases at San Francisco General Hospital.

Despite its reputation, HSV-II "is not terribly infectious," Mills told the crowd. "Everybody worries a bit about getting the infection from a toilet seat or towel, but it takes sexual contact or the equivalent for transmission of the virus."

Because herpes has a thin protein coat that dries out easily, the virus can't survive more than 24 hours out: ? the body and has a tough time infecting healthy, unbroken skin. "Skin-to-skin or mucous-to-mucous contact is required for infection," Mills said.

People with herpes frequently ask whether they can inadvertently transmit the infection to a sexual partner during the disease's dormant periods. The answer is a qualified no, according to Mills. "You probably don't get herpes from people who are completely asymptomatic," the scientist said, "but because symptoms can be mild most individuals don't realize they have the disease."

"Barrier" birth control methods such as condoms, and "open, empathetic communication between sexual partners" can help minimize the risk of infection, Mills said.

Dentists, anesthesiologists, and other health professionals who work in patients' mouths should wear rubber gloves, he said, to avoid contracting the oral form of the virus.

While herpes is bothersome but not life-threatening for the great majority of adult sufferers, the infection can be fatal in newborns. Anne S. Yeager, associate professor of pediatrics at Stanford, will describe the "risks for fetuses and infants in contact with infected adults" in the second lecture of the series on November 16.

Thomas C. Merigan, professor of medicine in infectious disease will profile current and future treatments for the disease in the final lecture on November 23. Both presentations will be held at 7:30 p.m. in the Medical School's Sherman Fairchild auditorium.

11-10-82 —30— df4

STANFORD UNIVERSITY MEDICAL CENTER
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(ADVANCE) FOR PM RELEASE MONDAY, NOVEMBER 15, 1982

COMPUTERS TO CUT COSTS OF CLINICAL TRIALS, CARDIOLOGIST SAYS

STANFORD—

Because of advanced technologies, such as computerized image processing, doctors can now study heart disease in new types of less costly clinical trials, according to the president of the American Heart Association.

"Such studies could utilize a few hundreds of volunteers instead of the many thousands demanded by most of today's large scale clinical trials," said Dr. Donald C. Harrison, Irwin Professor of Medicine and chief of the Division of Cardiology at the Stanford University School of Medicine.

"The duration of such studies would only be a few years, the costs would be acceptable and therapeutic interventions would be rigorous," he said.

The new type of clinical trial would evolve a new strategy to study the factors which result in progression and hopefully regression of atherosclerosis, or hardening of the arteries, Harrison said. Physicians would visualize the development of atherosclerosis by computer-based techniques, so that treatment may begin at earlier stages of the disease.

"Such techniques have been already developed for studies of femoral and coronary arteries," he said.

Harrison addressed the annual meeting of the American Heart Association in Dallas, Texas, Monday (Nov. 15).

Clinical trials that compare prospectively the effects and value of a given treatment against a control in human patients have long been regarded as the cornerstone of modern clinical medicine.

They include the so-called "therapeutic trial" in which doctors document statistically one treatment as being superior to another, and the "intervention trial" which determines the probable effect of a treatment on the biological processes of man.

Clinical studies have been utilized with an increasing scientific basis and sophistication, and more of them have been performed in the past 20 years than in all of recorded medical history, Harrison said. Yet there's more controversy about them than in any previous time.

-more-

Harrison cited these reasons:

- clinical trials require long-term commitments for study and are expensive.
- they compete for research dollars for basic and clinical research of many institutions.
- they fail to provide answers, and they become self-perpetuating in that one trial uncovers multiple other questions requiring more clinical trials.

"This results in massive costs," Harrison said.

He cited a recently federally-funded study on the value of trying to diminish the major risks associated with heart disease that cost $115 million. The study found no significant difference in deaths between a group that received special medical treatment and one that received more ordinary care.

"Results may be influenced by multiple uncontrollable factors, especially in field trials in free-ranging populations," Harrison said. "Control populations modify their behaviors with societal changes and thus confuse the results. This clearly occurred in the multiple risk factor study."

In addition, Harrison said, not everyone agrees with trial design. Some are timed poorly after the questions they seek have already been answered by ordinary clinical practice. And there are moral and ethical limits to clinical trials.

"These controversies," Harrison said, "suggest that we need to examine ways to improve clinical trials in the future."

Harrison described an example of a model computer analysis system that he developed with his colleagues, Dr. Edwin Alderman and William Sanders, for studying coronary arteries.

The system provides direct visualization of the extent of atherosclerosis in arteries so that treatments may be applied at earlier stages of the disease.

The computer is programmed to provide volumes, diameters, areas and degree of narrowing of multiple segments of the vessel. These variability limits are used to set boundaries and quantify vessel changes in atherosclerosis.

"The value of this technology is that it provides a continuous variable measure, from small lesions to large ones," Harrison said. "Every participant in the study contributes a value rather than a small percent of patients having death or infarction (heart attack) as occurs in regular clinical trials."

Numerous technologies now available will permit new horizons for clinical trials in the next two decades, he predicted, and "we should use them."

STANFORD UNIVERSITY MEDICAL CENTER
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GUEST LECTURER TO SPEAK ON OBESITY

STANFORD—

"Obesity: Why the Losing Battle?" is the topic of the tenth annual Katharine D. McCormick Distinguished Lecture to be held at Stanford Medical Center 5 p.m. Thursday, Nov. 18.

The speaker, Dr. Judith Rodin, is a leader and respected investigator in the field of behavioral medicine. She is presently a professor of psychology and psychiatry at Yale University.

Rodin's approach to the problem of obesity has been largely responsible for current methods of treating and understanding this major medical problem. Using rigorous methodology, she demonstrated the importance of behavior in understanding the pathophysiology of obesity.

Recently Rodin studied aging using similar methods and showed dramatic effects on the aged when behavioral interventions were introduced.

Rodin's most recent honor is election to the Institute of Medicine of the National Academy of Sciences. She has served on a variety of editorial boards and professional societies, been the recipient of numerous honors and professional recognitions, and published widely.

Rodin graduated from the University of Pennsylvania in 1966, received her Ph.D. from Columbia University in 1970, and continued her education as a postdoctoral fellow at the University of California, Irvine, in 1971. She joined the faculty of New York University in 1970, and transferred to Yale in 1972.

The McCormick Lectureship honors Katharine Dexter McCormick, who donated $5 million to Stanford Medical School in 1969 with the expressed wish that it be used "for the encouragement and assistance of women pursuing the study of medicine, in teaching medicine and in engaging in medical research."

Katharine McCormick was a co-founder of the League of Women Voters and a vigorous champion of women's rights.

Previous McCormick speakers at Stanford include Drs. Marian Koshland, Maria New, Rose Payne, Rita Levi-Montalcini, Elizabeth Hay, Barbara Korsch, Rosalyn Yalow, Helen Ranney, and Mary Ellen Avery.

Rodin's lecture will be open to the public though specifically addressed to the medical community. (Continuing medical education credit is available.) The presentation will take place in the Fairchild Auditorium, with a reception in the lobby to follow. For further information call 497-6038.

11-15-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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HOFFMAN NAMED HARTFORD FELLOW

STANFORD—

Dr. Brian Hoffman, assistant professor of medicine, has been named one of twelve 1983 John A. and George L. Hartford Fellows by the Harford Foundation in New York City.

Each Fellow will receive $105,000 over a three-year period as support for the early stages of his medical research career, as well as a stipend paid to the sponsoring institution for research expenses. Each Fellow is a young physician beginning on a faculty track in a U.S. medical school who plans to pursue a career in medical research.

Hoffman is interested in the mechanisms by which catecholamines, such as adrenalin, activate cells. He is particularly interested in the inhibition of the enzyme adenylate cyclase. His fellowship support will begin in July, 1983.

The 1983 Hartford Fellows are the fourth class of Fellows to be supported by the Hartford Foundation since the program was established in 1979. The objective of the program is to encourage promising and highly qualified young physicians to pursue medical research careers.

Twelve Fellows are selected annually through a national competition. This year, 94 individuals were nominated by 62 American medical and research institutions. The Fellows were selected by an advisory committee of prominent medical researchers.

In addition to the Fellowship program, The John A. Hartford Foundation makes grants to stimulate health care payment system reform and to promote efficient energy use. In 1981, the Foundation gave more than $10 million to projects in these three areas.

11-15-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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HOLISTIC HEALTH TOPIC OF NURSES' CONVENTION

STANFORD—

The public is invited to attend "The Nurse as Healer: Self and Others," a program planned for the 1982 CRONA (Committee for the Recognition of Nursing Achievement) Convention, to be held Nov. 22 and 23 in the Fairchild Auditorium.

Topics of the first day will center on holistic health, with continuing education credit available. Speakers Joyce Lechuga and Katharine Riordan will address such issues as "Disease, Holistic Health and Personal Responsibility," "Concept of Stress/Message and Benefits of Illness," "Mind/Body Relationship in Creating Illness and Health," "Role of Nutrition in Health Treatment for Healthy, Vital Nurses," and "Experiential Visualization in Healing."

The registration deadline is Nov. 18 for both days' programs and Monday's banquet dinner at Rick's Swiss Chalet in Palo Alto, which will include a discussion by Bonnie Berg of "Women's Health from a Holistic Perspective." Fees will be charged for that day.

Tuesday will consist of the CRONA business meeting, including a talk by President Hedy Dumpel on "CRONA's Art of Collective Bargaining," as well as discussion of bylaws, resolutions, and budget. Attendance at the business meeting is mandatory for area representatives.

For further information call the CRONA office in Palo Alto at 325-2801.

11-15-82 —30— LA

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

STANFORD UNIVERSITY MEDICAL SCHOOL SPONSORS ACADEMIC EXCHANGE BETWEEN AMERICA, ASIA

STANFORD—

A program promoting the exchange of medical education and research between Asia and America has been established by Stanford University School of Medicine's Department of Medicine, according to Dr. Thomas Raffin, assistant chief of the department.

Stanford University-Asia Medical Fund (SAMFUND) will sponsor the exchange of research fellows, and eventually faculty and educational and research programs between universities in Asia and Stanford, he said. The first group of up to four fellows is expected to arrive at Stanford for the 1983-84 school year for up to a three-year stay.

"The purpose of this funding is to improve health care and increase communication and understanding," Raffin said. "By bringing together people from the Pacific Basin and America to compare and exchange ideas, a framework will be established for learning, understanding, and growth."

Specifically, Raffin said, the fellows will "work in some of Stanford's top investigative laboratories. They can then take their newfound knowledge and expertise back to their own universities and continue developing their own careers."

In turn, he continued, "there is exciting opportunity for Stanford fellows and faculty to spend time at Asian universities investigating specific diseases—bilary tract disease, hepatitis-B, and certain cancers—indigenous to those areas.

"Stanford researchers have a unique opportunity to collaborate with some sophisticated programs of investigative groups at these universities," Raffin said.

The program was spearheaded by Raffin, who first traveled to Japan and Hong Kong in 1978 to explore the possibilities of setting up such an arrangement. In 1981, the Ishiyama Foundation of San Francisco contributed $500,000 to the Department of Medicine to establish SAMFUND. The same year, Dr. Anthony Felsovanyi, clinical professor of medicine, traveled to Hong Kong with Raffin to establish an advisory board of civic and corporate leaders, who contributed another $500,000 to SAMFUND.

The advisory board members include Stanley Ho, chairman; Li Ka Shing, vice-chairman; Ho Tim; Ho Yin; Woo Hon Fai; Fung King Hey; Cheng Yu Tung; and Liu Lit Chi.

The organization's board of directors was formed in 1982. In addition to Raffin and Felsovanyi, the board includes Drs. Kenneth L. Melmon, chairman of the department of medicine and of the board; Richard Popp, vice-chairman of the deparment of medicine; and Ferid Murad, chief of medicine at the Palo Alto Veteran's Administration Medical Center.

The advisory board in Hong Kong is responsible for helping to support the Hong Kong-Stanford program.Similar boards will be established in other Pacific Basin areas including Japan and possibly mainland China.

Raffin said he hopes SAMFUND will attract sufficient funding to support these academic exchanges. Said Melmon of the program, "this is an important academic program with great potential for strengthening medical investigation in Asia and at Stanford."

11-15-82

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STANFORD UNIVERSITY MEDICAL CENTER
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BATTLING HERPES IN THE NEWBORN

STANFORD—

Infants born to mothers who never have had herpes simplex run a greater risk of being harmed by the disease than the children of women who have had recurrent bouts of the infection, according to a researcher at the Stanford University Medical School.

"The woman who has herpes is in good shape if she knows she has it," said Anne S. Yeager, associate professor of pediatrics at Stanford. "The problem comes for the mother who doesn't know she has it." Yeager described the dangers of herpes simplex and cytomegalovirus to fetuses and infants Tuesday (November 16) in the second of a series of public "Progress in Medicine" lectures on the herpes viruses.

Women who carry the virus chronically have antibodies in their blood which they pass on to a developing fetus as a protective cloak of immunity, Yeager said. But if a woman never has contracted herpes, or has contracted it recently, her infant is born without antibodies to the virus and, for the first few weeks of life, is vulnerable to an infection that can severely dammage vital organs such as the brain, liver and adrenal glands.

The two herpes simplex viruses (labeled HSV-I and HSV-II) that afflict at least 15 million Americans with recurrent cold sores and genital infections are annoying but non-life-threatening infections for most adults. HSV-I is responsible for most oral infections while HSV-II is most often linked to recurring genital blisters, though both viruses have the ability to attack mucous membrane anywhere in the body.

Yeager emphasized that both viruses are equally dangerous to infants in the first weeks of life and the mother is not the only source of infection. Grandparents or friends with open cold sores caused by herpes can occasionally transmit the virus through a kiss to the infant.

"Adults and children who have herpes and are in contact with an infant whose mother has never had herpes, and therefore has not passed on immunity to her infant, can give the baby the infection," Yeager said.

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A decade ago obstetricians routinely delivered infants by Caesarean section if mothers had experienced an active episode of genital herpes sores within the last trimester of pregnancy. Once the sack of amniotic fluid that surrounds the developing infant during pregnancy ruptures in the hours before delivery, the child takes fluid into his lungs, along with any viruses present in his mother's birth canal. Via Caesarean section, physicians can remove the baby directly from the uterus before the sack is ruptured.

More recent studies have shown that men and women with herpes usually only are able to transmit the virus for a few days when open sores are present, so women with herpes now have routine vaginal deliveries unless they have an outbreak of sores the day of the delivery. Recurrent blisters last an average of nine days, and contagious virus cells are shed only during the first four days.

Yeager quoted studies from her own and other laboratories that indicate the group of susceptible infants may be even narrower. She cited a study conducted at Emory University several years ago which showed that three of six infants delivered vaginally who contracted herpes at birth all had mothers whose tissue cultures showed that they were shedding active virus the day of delivery. The three women were experiencing their first outbreak of the disease.

This study is frequently quoted, Yeager said, as evidence that 50 percent of infants exposed to herpes at birth will contract the infection.

"Less quoted is the fact that, in the same study, of the 23 women who had experienced recurrent infections (as opposed to primary infections) and were virus positive on the day of delivery, only one baby became infected." Yeager has since studied 204 women who had herpes sometime during their pregnancy, and none of the babies have developed the severe symptoms of a herpes infection. Apparently these infants were "protected" by antibodies they received from their mothers, Yeager said.

Though the remote possibility of "silent shedding"—transmitting the virus when no sores are present—exists, even this process could be detected through a tissue culture or blood test on the day of delivery. "We think eventually that it's not going to be so helpful to culture throughout the pregnancy, but perhaps only on the day of delivery to detect the virus," Yeager said. Infants who have definitely been exposed to active virus can then be watched for signs of disease and quickly treated with a battery of newly developed antiviral drugs.

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"If the virus is suspected in babies, and the infants are offered anti-viral therapy within three days of the first sign of illness, as a general rule, they do very well," Yeager said. Studies are currently underway at Stanford and other research centers to determine whether the antiviral drug acyclovir or adenine arabinoside is more effective in treating neonate infections.

"The thing to remember is that only half of these babies have skin lesions. If you wait for the skin lesions to make the diagnosis, you're going to miss half the cases."

If a baby suddenly becomes lethargic or develops an enlarged liver or spleen and shows a sudden drop in platelets for no apparent reason, but doesn't have a bacterial infection, it probably has herpes, Yeager said. Premature infants are especially vulnerable to the disease and timeliness of treatment is crucial for these children.

Cytomegalovirus (called CMV) is a less famous member of the herpes virus family, but "overall may be of more importance to the average parent than herpes simplex," Yeager said. The virus is a threat because 50 percent of American women have never been exposed to the virus, so can't transmit immunity to their infants.

CMV can be transmitted through blood transfusion or through other body fluids. Yeager and her Stanford colleagues developed a screening test for donated blood in 1977 that has eliminated transfusion-acquired infections in vulnerable premature infants. Still, studies indicate that 15 percent of all pregnant women shed CMV virus sometime during their pregnancy, and can infect the developing infant.

"In addition to the one in every hundred infants who are born with the infection, five in a hundred will acquire it within six weeks of age," Yeager said. This figure compares to the one in 10,000 who develop defects from a congenital rubella infection acquired in the first trimester of pregnancy.

While effects of the infection can range from slightly stunted growth to mental retardation, liver dammage, and even death in some infants, the most common effect of CMV is deafness.

"It is especially important that these babies be identified early because there's good data that indicates that their hearing actually gets worse between one and two years of age," said the scientist. If the babies can be diagnosed early, they can often be treated successfully. "One out of every 100 American babies is born with this problem," Yeager said. "It is a major health hazard."

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VACCINE ON THE HORIZON FOR HERPES PREVENTION

STANFORD—

A vaccine that prevents herpes simplex infections without exposing the recipient to the virus may be a decade away, said Thomas C. Merigan, Becker professor of medicine and head of infectious diseases at Stanford University Medical School. In the meantime, a new generation of anti-viral drugs recently approved for herpes treatment can curtail both the severity and duration of blisters though they can't keep the outbreaks from recurring.

"It looks like recurrence is still a problem, even with the most potent agents available today," said Merigan in a public lecture held at Stanford Tuesday (November 23) describing current and future treatments for herpes viruses.

Many of the 40 million Americans who suffer from recurring herpes blisters on their mouths or genitals wonder why effective treatments and vaccines have taken so long to be developed. The answer, Merigan said, lies in the large and complex structure of the virus which, until the advent of recombinant DNA technology, has been inscrutable to researchers.

"These viruses are also particularly challenging because they persist and can cause recurrent infections in the presence of immunity," Merigan said. "Once we are infected, we are infected for life, though the symptoms appear only periodically and, in most people, eventually disappear completely." In comparison to polio, which has a much smaller and simpler structure, herpes viruses are made up of a number of proteins in a complex structure.

When the active herpes virus, a naked package of genetic material, invades a cell in a patient, it takes complete control of the host cell's functions, diverting nearly all the cell's energy to the replication of viruses. In this way, thousands of copies of the virus are produced that can spread to other cells.

The problem with most anti-viral drugs is their toxicity. In order to thwart the virus, an effective agent must somehow influence the growth of the virus in infected cells. But, in many respects, herpes-infected cells look a lot like normal cells. The challenge to researchers has been to develop drugs that can zero in on infected cells without harming healthy ones. (Adenine arabinoside called ara-A) and acyclovir are two effective drugs now available to the public which have the necessary specificity, Merigan said.

First used in 1972 to treat herpes simplex infections in the eye, adenine arabnoside has a very similar structure to a component of the herpes simplex DNA. But the drug has an important structural difference: once incorporated into the genetic code of the virus, it turns off the action of an enzyme that the virus needs to reproduce itself. Once the virus stops replicating, the infection is arrested and can't be spread to other cells.

Acyclovir, an even more powerful drug, according to Merigan, works on the same target as ara-A, but has an additional degree of specificity. The drug, first used in clinical trials in 1979, only becomes active once it is inside a virus-infested cell. This specificity gives healthy cells, such as those in the bone

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marrow that can be especially vulnerable to DNA-altering drugs, an added measure of protection, the scientist said.

The two antivirals have been especially useful in treating herpes infections in "immunosuppressed patients," such as those with organ transplants or some types of cancer, whose normal immunities to infections have been drastically reduced by the drug therapies they need to stay alive. Infections in such patients caused by herpes simplex or cytomegalovirus (CMV), another variant of herpes, can spread to vital organs such as the heart and kidneys and be fatal. Although the antivirals can't prevent infections, they can greatly reduce the serious complications associated with the infections, Merigan said.

Though a tremendous boon to immunosuppressed patients with prolonged herpes simplex infections, antivirals have been less useful for herpes sufferers with short-lived infections because the time in which they are most effective is the first few days of infection.

"These are exciting drugs, but they have to be given early," Merigan said, "probably within the first few days (after symptoms begin to develop)." Patients are often slow to bring the infection to the attention of their physician, and most hospitals are not equipped with viral diagnostic laboratories that can make a quick, positive diagnosis of herpes, he said.

Chronic, low-level doses of the drugs might be a solution for some patients, except that the virus could subtly change its structure and become resistant to such therapies. In addition, Merigan said, the possible side effects of long-term exposure to the drugs could outweigh the benefits.

Ultimately, the best way to stop a "herpes epidemic" is to prevent infection, and several research teams around the world are working on different types of vaccines that could do just that, Merigan said. An "attenuated virus" vaccine, injections of a live virus that has been altered slightly to give recipients a very mild virus infection without the accompanying disease, is useful against diseases such as polio or measles which can only be contracted once in a lifetime. Once exposed to the vaccine, the body makes antibodies and other factors to thwart a future infection.

But, because herpes can lie dormant in a patient without producing symptoms, recipients of an attenuated virus vaccine might run the risk of developing herpes years after the inoculation. Such an infection might be dangerous for patients who were healthy when they were vaccinated, but later became immune suppressed.

Recombinant DNA technology will permit a different kind of vaccine, Merigan said. As scientists break up the DNA of the virus into specific components, they are also able to isolate fragments that code for proteins on the virus surface. Such fragments have been used to make a vaccine in bacteria that can stimulate herpes directed antibodies in animals.

Thus, it might eventually be possible to initiate the recipient's natural immune response without exposing him to infectious components of the virus. In addition, further studies of immunity and resistance to infection will be required, Merigan said, to know how best to deliver this vaccine to produce enduring protection.

"I'm enthusiastic about the vaccines, but I think it's going to take at least another decade of research to perfect them," Merigan said. "But at least with recombinant DNA techniques, we have hope that they are possible."

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SAFER, CRIBSIDE DIAGNOSIS FOR SICK INFANTS

STANFORD—

Stanford University scientists have demonstrated a new use for ultrasound diagnostics—to detect blood clots in the vessels of critically ill infants who are being monitored by umbilical artery catheters.

The use of noninvasive ultrasound, they hope, will spare newborn babies from the potentially negative effects of radiation, while providing doctors with a quick and safe screening method for a variety of catheter-associated complications.

These babies in the past have been subjected to the use of angiography, a method which provides doctors with X-ray visualization of blood vessels following the introduction of contrast material.

But now with his faculty colleagues, a Stanford resident, Dr. David Oppenheimer, has found that sonography—previously used effectively to *locate* umbilical artery catheters—is equally suited for detecting thrombosis, or clot formation, in the aorta and nearby arteries.

In a paper scheduled for presentation to the 68th Scientific Assembly of the Radiological Society of North America on Monday, Nov. 29 in Chigago, Oppenheimer explained, "Sonograms can be performed at cribside without removing infants from the intensive care environment. Diagnostic information is obtained without associated ionizing radiation and iodinated contrast material."

In a clinical study at Stanford, 71 neonates with umbilical artery catheters received a series of ultrasound exams. All echoes *not* representing the catheters themselves were considered indicative of an abnormality. (Normal arterial vessels, Oppenheimer said, are free of these types of echoes.)

In one instance the catheter itself, by completely filling an inner blood vessel, appeared to obstruct normal blood flow. This caused ischemia, or blood deficiency in the area, and normally present pulsation was absent. Vascular pulsations returned when the catheter was withdrawn.

(Oppenheimer explained that umbilical artery catheters are never used unless absolutely necessary in patient treatment, but that without them "many more babies would die." The umbilical artery provides the easiest route for monitoring patient hemodynamics, the movements and forces involved in blood circulation.)

Twelve infants had clinical signs of complications, including bluish or blanched extremities or toes, malfunction of a catheter, decreased peripheral pulses, leg swelling, and hypertension. Catheters had been in place between two and 35 days before symptoms developed. Ultrasound demonstrated abnormal echo collections of various sorts in ten of these infants.

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Other causes were hypothesized in two symptomatic children with normal ultrasound exams. In one of these, the catheter had recently been removed, possibly causing an associated clot to fragment and then lodge in a more peripheral blood vessel. Oppenheimer said that most neonatal clots tend to resolve without the need for surgical intervention.

In his study he found that ultrasonically detected abnormalities persisted from two to more than 70 days. Many of these lasted long after the clinical symptoms had resolved.

In one baby, Oppenheimer said, the abnormality was mobile rather than fixed to the vascular wall. This moving "flap," he said, may have been causing the patient's hypertension. He hypothesized that the flap represented either a "floating" clot or a layer of vessel wall which had torn off during catheter insertion.

He added, "This type of abnormality has not previously been demonstrated in a catheterized infant. Our ultrasound exams led us to detect it."

Moreover, in a variety of cases ultrasound was able to identify clots and other obstructions causing ischemic symptoms in the babies. Further work, Oppenheimer said, is required to determine the long-term prognostic significance of ultrasonically detected vascular abnormalities and the impact of their detection on patient care.

What he has demonstrated, however, is that ultrasound is useful as a diagnostic tool in catheterized infants. "It is likely that future diagnostic techniques will provide even more accurate analysis of flow limiting lesions," he concluded.

Oppenheimer's research was supported in part by a grant from the General Clinical Research Centers Program of the Division of Research Resources, National Institutes of Health.

His report was co-authored by Drs. Barbara Carroll and Karen Garth of the Division of Diagnostic Radiology, and will appear in the December, 1982 issue of *Radiology*.

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STOP SNORING WITH PALATOPHARYNGOPLASTY

STANFORD—

Snoring affects nearly half of all adults and can often threaten the snorer's health. But doctors at a recent conference of ear, nose and throat specialists in New Orleans, La. were told that snoring can be cured.

Severe cases of snoring can now be cured by a simple operation, long used in Japan and called palatopharyngoplasty, said Dr. F. Blair Simmons, professor of surgery at the Stanford University School of Medicine.

The procedure, said Simmons, was recently "discovered" in this country and it always works. In many cases, it stops snoring completely. In others, it significantly reduces the sounds of snores, "to levels that allow these patients' bed partners to sleep in the same room."

The jawbreaker word for snore-stopping surgery eliminates the problem by removing the offender's noise-maker—unneeded tissue in the upper throat.

As the sleeper breathes, the tissue vibrates and produces the nocturnal snorts and snuffles in much the same way blowing against the reed in a horn produces more melodious sounds. Snoring is an involuntary process and snorers cannot be conditioned to stop. The so-called "heroic" snorers are typically le and have their onset of snoring in their midthirties.

According to Simmons who has operated successfully on more than 80 patients, when one has an excessive amount of upper throat tissue, "excessive snoring always accompanies the condition."

"Anyone who snores in every position, is loud enough to be heard at least one or two rooms away and whose bed partner has moved elsewhere to sleep is a candidate for the treatment," Simmons added.

The operation was originally applied by specialists at Henry Ford Hospital in Detroit to treat sleep apnea. This is a life-threatening condition marked by cessation of breathing during sleep.

Earthquake-scale snorers actually may stop breathing for 15 seconds or more, several hundred times a night, then wake up with a loud snort as their blood's oxygen level drops. Sleep apnea causes daytime sleepiness and seriously taxes the heart and lungs.

At Stanford, Simmons said, half of the patients suffering from sleep apnea have benefitted from the operation. But the results also showed clearly that the social snoring problem of most other patients could be corrected with the new procedure.

"Snoring is socially a very big problem," Simmons noted. "It has been neglected by medicine because nobody knew how to treat it and it was considered funny to even try it."

Palatopharyngoplasty is as simple as removal of the tonsils. It is performed in a hospital under general anesthesia. It involves removal of about the back half of the soft palate, tonsils if they are present, and any extra tissue on the sides and back wall of the throat. After the unneeded tissue is removed, what remains is stretched and sutured together again. Postsurgical discomfort may involve a sore throat which requires a four- to five-day hospitalization.

"It's actually nothing more than a kind of facelift of the oral pharynx," Simmons explained.

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FOR IMMEDIATE RELEASE

STANFORD ASKS PATENT OFFICE TO CLOSE FILE ON RECOMBINANT D.N.A. FROM PUBLIC SCRUITNY

STANFORD—

Stanford University Monday, Dec. 6, asked the U.S. Patent Office to close the files on the patent application for recombinant DNA from public scrutiny until action on the application is complete.

Noting that the initial decision to hold the files open to public view was "unprecedented," Robert M. Rosenzweig, Stanford vice-president for public affairs, said Monday's action was "taken with some regret."

The initial decision to keep the file open to the public was "an experiment with some risks attached," he noted. "We were prepared to take the risk because of the wide interest in the subject of the application and because we believed we would emerge at the end with a stronger patent.

"The latter may still be true, but in our judgment, the experiment has failed. It is better to recognize that fact before more damage is done.

"Unfortunately, there has been no effective way to correct the erroneous public impressions resulting from the way in which the Patent Office acquires additional information. It does that by formally rejecting the application. The reason given for the rejection then tells the applicant what new information needs to be supplied.

"In practice, however, when an application is contested, the result of this process is to separate the allegations from the answers to them. As is so often the case when this happens, the charge is newsworthy but the answer to it is not. The two should appear together.

"When the application process is completed, the file will be open for public inspection. Until then, it is better that it not emerge in piecemeal fashion."

12/6/82 —30— rwb2patent

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ARMAND HAMMER SALUTES LEVY'S RESEARCH ON MONOCLONAL ANTIBODIES

STANFORD—

A Stanford cancer researcher became the first beneficiary today of an annual prize established by the Armand Hammer Foundation to reward "the person or persons deemed to have made the greatest contribution to the cure for cancer."

Ronald Levy, a Stanford associate professor of medicine (oncology) will share the first $100,000 prize with an Australian researcher, George Telford Stevenson, for their research using polyclonal and monoclonal antibodies in the treatment of cancers of the blood and lymph glands.

First developed in England in 1975, monoclonal antibodies are proteins made by "hybridomas," biological factories created when scientists fuse an antibody-producing cell of the human immune system with a cell from a mouse tumor. Inheriting characteristics from both parent cells, the new hybridomas are able to produce virtually unlimited quantities of a desired antibody.

Once released in the blood stream, such antibodies travel throughout the body, seeking cells that carry matching protein "antigens" on their membrane coats. The antibody locks on to the antigen, labeling the cell for destruction by other cells of the immune system.

Levy and Stevenson adapted monoclonals for use as weapons in fighting leukemia and lymphoma of B-cells—blood cells in the human immune system that normally produce infection-fighting antibodies.

Stevenson found that leukemia cells of the B-cell type have proteins on their surface, called "idiotypes" which are not found on normal cells. In effect, these idiotypes serve as a finger print for the leukemic cell—a B-cell turned cancerous will produce millions of descendants all with the same fingerprint, and therefore all distinguishable from the normal B-cells and every other cell in the body.

Levy and his colleagues produced monoclonal antibodies against such idiotypes and are using the compounds in treatment. One patient with B-cell lymphoma was given multiple doses of such antibodies in 1981 when conventional therapy failed to halt his cancer. Eighteen months later, the patient is still in complete remission.

Though monoclonal antibodies seem promising in treating B-cell lymphoma, Levy cautioned earlier this year when the case was reported in the *New England Journal of Medicine* against making generalizations about the experimental therapy.

"The improvement of this patient's lymphoma with monoclonal antibody administration is a single observation that must be confirmed in other patients before we can draw any conclusions about the effectiveness of this technique," he said, adding that the characteristics of B-cell malignancies make them especially responsive to treatment with the custom-made antibodies in ways that other types of cancer might not be.

Levy, 41, graduated from Harvard University and received his M.D. degree from Stanford University in 1968. From 1973 to 1975 he served as a fellow of the Helen Hay Whitney Foundation in the department of chemical immunology at the Weizmann Institute of Science in Rehovot, Israel.

A member of the Stanford faculty since 1975, Levy has served on the editorial boards of the medical journals *Hybridoma* and *Blood*.

12/2/82 —30— df4

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The following release was transmitted to wire services and Bay Area news sources Monday.

EDITORS:

(Because of the increasing frequency of heart-lung transplants, the Stanford Medical Center News Bureau will no longer routinely issue releases each time a heart-lung transplant occurs. Naturally, we will provide stories when conditions make a particular transplant newsworthy for scientific or human interest reasons. Reporters, of course, are welcome to call with queries about individual patients in the program, and we will respond just as we have for heart-only transplant patients. The News Bureau welcomes your suggestions about how we might better provide each of you with information most relevant to your needs and the interests of your audiences.)

STANFORD PERFORMS 10TH HEART-LUNG TRANSPLANT

STANFORD—

A San Rafael, Calif. man Monday, Dec. 6, became Stanford's 10th heart-lung transplant patient, the third recipient of such surgery here in just over a month.

The patient, Frank LaForge, was born with a heart defect which had relentlessly caused his health to deteriorate throughout his 27 years, said Dr. Stuart Jamieson, assistant professor of cardiovascular surgery and head of the heart-lung program. Jamieson led the five-physician team which performed Monday's five-hour surgery.

On Monday, LaForge was reported in critical but stable condition, the standard designation immediately after the double transplant. On Tuesday, he was taken off the respirator at 6:30 a.m., and still listed in critical but stable condition.

Two other heart-lung transplants, Philip McGrath, 22, East Islip, N.Y., and Ronald Grunden, 40, Ventura, Calif., were reported in stable condition Tuesday. McGrath, who received his replacement organs Nov. 9, and Grunden, whose operation occurred four days earlier, were both progressing and are able to walk around as they gain strength, the doctor said.

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All three of the most recent recipients suffered from ventricular septal defects (VSD), characterized by holes between the left and right chambers of the heart. This allows blood to flow between the chambers, resulting in too much blood entering the blood vessels in the lungs. Eventually, the overcirculation causes pressure to increase in the pulmonary arteries, and the right ventricle of the heart is unable to overcome the pressure.

In recent years, surgeons often have been able to correct the condition in infants. If left uncorrected, however, both the heart and the lungs become irreversibly damaged.

LaForge is married and had worked as an accountant until his condition deteriorated and he was forced to restrict his activities severely. Jamieson said his life expectancy was estimated at only a few months without the operation.

"Our research and clinical experience indicate that the heart-lung procedure is a viable therapeutic treatment for these patients," Jamieson added.

"We are limited in our efforts to perform these procedures by the number of families who are unaware of the urgent need for donors. We and the families of our recipients are indeed grateful to families who make this program possible."

Despite the encouraging prognosis for the latest patients, Jamieson cautioned that all three men face lifelong regimen of monitoring and medication intended to prevent the body's tendency to reject the new organs.

LaForge is the 10th heart-lung transplant patient since Stanford began its program March 9, 1981. Seven of the patients, including the first recipient, are doing well. Three of the patients died, all within a month of their operations.

Heart-lung transplants were first performed 12 years ago, but all three patients—transplanted in South Africa, Texas and New York—soon died.

The procedure was revived here last year with the discovery of Cyclosporine (formerly called Cyclosporin A), which allows the windpipe to heal while working to prevent rejection.

Cyclosporine has also been used at Stanford since December 1980 on heart-only transplants, and Jamieson and his colleagues credit its use in helping to increase the one-year survival rate to approximately 80 percent. Stanford has performed 248 heart transplants since Dr. Norman Shumway pioneered the procedure in this country in January, 1968.

Dec. 7, 1982 —30— mg2

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CLINICS RENOVATION TO BEGIN AT STANFORD

STANFORD—

A construction firm in Foster City has signed a contract with Stanford to undertake a major program to extensively upgrade the physical facilities of the Stanford University Clinics.

The project involves renovation of the first two floors of the Boswell Building, the facility adjacent to Stanford University Hospital where a majority of the 82 outpatient medical clinics will be located.

The $6.5 million construction, equipment and remodeling program was approved last June by the University's Board of Trustees. Improvements will include completely redesigned and larger patient treatment rooms, achieved in part by construction which expands clinic space into a few feet of what is now the building's courtyard.

Other improvements will be: decongested corridor traffic; a larger outpatient pharmacy; expanded office and storage space; four treatment rooms and five recovery spaces in a special procedures suite, to accommodate minor surgical procedures not requiring overnight hospitalization; and a better overall atmosphere. The renovation plan includes increasing the size and number of clinics to be accommodated in the Boswell Building by moving certain academic and research functions elsewhere.

The firm S.J. Amoroso signed as general contractor for the project Tuesday, Dec. 7, following signatures a week earlier by Dr. Lawrence G. Crowley, vice president for medical affairs at Stanford, and William Massy, vice president for business and finance. The total construction contract is for $3,852,600, according to Betty Rose, assistant director of Facilities Projects at SUMC.

"The modernization of the Boswell Building is a first step in our efforts to expand the dimensions of faculty medical practice in order to serve the community more effectively, and with the maximum comfort for our patients," said Donald Tower, director of the Stanford University Clinics and Faculty Practice Program.

"The Faculty Practice Program is being reorganized," he added, "to provide comprehensive medical care, consultation, diagnosis and treatment, sharing responsibility for the sustained good health of families choosing faculty physicians as their doctors.

"These physicians will work as a team to bring their specialized areas of knowledge and experience to the patient's medical problem."

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Presently, the specialty and subspecialty clinics, staffed by faculty physicians, receive about 135,000 visits per year, with patients referred from all over northern California, the west, other states and even other countries, Tower noted.

Work will begin under the 880-day contract Dec. 22, although the beginning stages of construction are not expected to impact the normal activities of patients and staff. In fact, said Langston Trigg, Jr., assistant director of Facilities and project manager, there will be little disruption of patient care throughout construction, because of the staged approach to the project.

Periodic updates on the status of construction will soon be available to patients and others at an information booth located near the front entrance of the Boswell Building.

The Boswell Building was built in 1959, and has had only minor, occasional renovation since. The present renovation is intended to make the Clinics a more comfortable and efficient place for patients to seek medical care.

The Boswell Renovation and related projects will result in relocation of many of the clinics. The clinics to move are: Cardiovascular Surgery; Dermatology; Medicine (allergy, cardiology, chest, endocrine, gastroenterology, hematology, immunology, internal medicine, nephrology, preventive medicine, and Stanford Medical Group); Neurology; Pain Clinic (already moved); and Surgery (eye, general surgery, hand, orthopedics, plastic and reconstructive, thoracic, and urology).

The clinics to remain where they are include: Gynecology/Obstetrics; Medicine (oncology); Pediatrics; Psychiatry (including Sleep Disorders); and Surgery (audiology, ENT, neurosurgery, and pediatric surgery).

The Clinics are a separate outpatient care facility from Stanford University Hospital since September, 1981. They have a close relationship, however, with both the Hospital and the Stanford University School of Medicine, the three interdependent components together comprising the Stanford University Medical Center.

"For the past two and a half years we have been analyzing the Clinics' needs," said Trigg, who will be assisted by Erik Lund of Facilities. (Lund will handle the project once construction begins.)

"For example," said Trigg, "among changes will be a shorter journey for orthopedic patients from their clinic to X-ray. The ophthalmology clinic, which obviously serves the largest percentage of visually impaired patients, is specifically being placed in an easy-to-find location," he added.

"A lot of changes which superficially might be seen as technical or procedural will in fact make visits to the Clinics more comfortable for patients."

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For example, Vera Waechter, R.N., assistant FPP director for the Clinics, said that patient registration is being decentralized to the individual clinic areas.

"This will reduce the amount of time patients will have to wait before seeing their doctor, since they will no longer have to check in with a central desk and then with a receptionist at their individual clinic," Waechter said.

She added, "We're proud of the quality patient care provided at our clinics by Stanford medical faculty, and we'd like the physical setting to reflect that high quality." In that respect Waechter hopes to see positive results for the Clinics over the next few years.

Designers of the Boswell Clinics Renovation Project are Almeter and Finley, Architects of Palo Alto.

Funding will come from private sources, including a major gift from the James G. Boswell Foundation, the original contributors to the existing facility. Additional gifts to Stanford University Medical School for the Boswell Clinics Renovation Project are still being sought and gratefully accepted. Part of the costs will be covered by the Faculty Practice Program and the Medical School's capital budget.

Inspector for the project will be Morrie Grove of the SUMC Facilities Projects Office, under the direction of Howard Mark, manager of construction.

The improvements are intended to prepare the Clinics for technological advances in medicine in the coming years. They are also designed for greater flexibility than is now provided. Additional conference rooms will be added for teaching purposes in the Clinics area, said Trigg.

During construction, things may sometimes seem hectic in the Boswell Building, he added. There will be some noise, and perhaps some dust near construction areas. The final benefits, however, are hoped to outweigh the temporary inconveniences which may occur.

"Since greater convenience for all is the ultimate goal, everyone's cooperation and patience should prove more than worthwhile," added Tower.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

TAMING THE SIDE EFFECTS OF WHOOPING COUGH VACCINE

STANFORD—

A Stanford neurologist has found genetic clues which he believes could help predict which children are most likely to be harmed by whooping cough vaccine.

The answers may help doctors decide who should be vaccinated and who shouldn't.

"The whooping cough vaccine is one of the crudest vaccines currently given to kids," said Lawrence Steinman, assistant professor of neurology. "It's the whole organism, killed and ground up for injection."

When a few healthy British infants developed brain damage and epilepsy a few days after routine whooping cough immunization several years ago, some parents panicked and refused to have their children vaccinated.

The result: more than 100,000 children contracted whooping cough, and at least 30 died.

"But for now, the vaccine has to be used because the risk of reintroducing the natural disease in the community is higher than the rare complications from the vaccine," Steinman said.

Controversy over the vaccine continues, although most physicians agree that the dangers of the disease outweigh the risks of immunization. While whooping cough is not itself fatal, it can leave a child vulnerable to viral pneumonia and other infections that can kill him.

In a study published recently in the British science journal, *Nature*, Steinman reported injecting several inbred strains of mice with the vaccine. While a fraction escaped unscathed from the experiment, all the animals possessing specific factors in their genetic code suffered convulsions and died within two hours of immunization.

Autopsies of the mice showed physical and chemical changes in their brains that were "nearly identical" Steinman said, to the damage found in the brains of children who died after receiving the vaccine.

The genetic factors that the stricken mice had in common were located on the "immune response chromomsome," the cluster of genes in every cell that seem to control how an animal responds to infection.

Humans have an analagous gene cluster called the "histocompatibility complex." In the last decade, scientists studying the complex have recognized that some genes appear more frequently in persons with certain diseases.

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Multiple sclerosis, juvenile diabetes, and "poker spine" all are associated with specific genes which physicians sometimes can use as easily detected signposts for disease susceptibility. But Steinman's work is the first hint that adverse responses to routine immunizations might also be under genetic control.

Research teams in England have just begun studies of children who develop complications from the vaccine, in hopes of finding a similar genetic marker. "We hope to identify a subpopulation of children who are at greater risk and exclude them from immunization," he said.

Currently one in 1,000 children who receive the vaccine will develop mild fever or irritability, and one in 50,000 will suffer severe brain damage.

"One out of 50,000 is not very many except that when every kid gets the vaccine, it takes its toll," Steinman said. "But five times that number will be damaged if we don't immunize. It's a risk that I think is worth taking, but it's a situation that should be improved."

The vaccine research was funded by a grant from the National Institutes of Health.

12-13-82 —30— df4

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

TRUSTEES OKAY FURTHER PLANNING FOR ANIMAL FACILITY

STANFORD—

Stanford University School of Medicine Monday (Dec. 13) received approval by the University Board of Trustees to proceed with final planning for a new, modern animal research facility.

The project, estimated to cost between $10 to $12 million, envisions a single-level underground facility located south of the Sherman Fairchild Auditorium. The facility of approximately 32,000 gross square feet, will be connected to the main Center by an underground tunnel, and will replace approximately half of the existing animal research facilities of the School of Medicine, which do not meet present codes.

The facility would be equipped with ventilation stacks about forty feet above ground and located in the greenbelt near Campus Drive. Parking space adjacent to the Fairchild Auditorium would be restored after construction of the facility is completed.

The trustees approved the building site based on drawings prepared by the architectural firm of Stone, Marraccini and Patterson of San Francisco, the project's consultants. Completion of design is expected by early summer of 1983, with construction scheduled to begin shortly thereafter. The building is expected to be completed in late 1984.

The project will be funded by about $3 million of University and Medical School reserves, and the balance will be a candidate for financing by tax-exempt bonds through the California Educational Facilities Authority (CEFA), according to David Mendelow, associate dean for administration.

"Laboratory animals are an essential component of biomedical research," said Dean Dominick P. Purpura of the School of Medicine. "Virtually every new surgical procedure is first tested for feasibility and safety in animals. No new medication is ever released for application in patients without extensive animal testing for efficacy and toxicity.

"In the basic sciences, advances in such fields as immunology, physiology, and microbiology are owed to studies in animals.

"A prerequisite to the use of animals in research is that they be maintained in excellent health and as free from stress as possible. While there is active research to find alternatives to animal experimentation when possible, it is fair to say that for the foreseeable future, laboratory animals would continue to play an important part in basic and clinical research."

Three quarters of the Medical School's principal investigators make use of laboratory animals in their studies. On the average, close to 30 different species or types of animals totalling 8,000 are accommodated within the facilities of the Medical School's Division of Laboratory Animal Medicine. An additional 45,000 animals, principally rodents, are held in departmentally administered facilities within the Medical School, according to Mendelow.

"Existing facilities do not properly support the extensive animal-related research programs of the School," Mendelow said. "They are not in compliance with applicable codes and guidelines, and are difficult to maintain and poorly designed for effective use.

"External agency reviews in the past two years have substantiated the urgency of instituting corrective measures," he added. "While temporary measures at a cost of $1.3 million have been taken to alleviate deficiencies, these are not sufficient."

The proposed facility, Mendelow said, would permit improved quality animal care, and centralized operations, with greater efficiency.

12-14-82 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino (415) 497-6645

STANFORD—

Planning for the new construction and remodeling of Stanford University Hospital continues, though with some reductions in the amount of initial work to be done.

The Hospital Modernization Project staff reported at the regular Dec. 15 meeting of the Board of Hospital Directors that these revisions would not reduce the scope of the master plan for the hospital.

Planners and architects had been working during the past several months on belt-tightening measures for the project. The revised plans are designed to take into account uncertain future reimbursement levels and a changing economic climate, according to Elvia Garwood, director of the project.

"Our needs for a project of the same scope as originally planned have not changed," she said. "But we wanted to prepare for a less favorable financial climate, and build into the plans somewhat reduced initial construction and modified remodeling phases. This will extend the time for completion of some parts of the project, but preserve the modernization program objectives. The design takes into account construction options which may be included when the financial picture improves."

The new plans call for construction of a new addition near the north end of the present hospital which would be devoted entirely to direct patient care. Earlier plans had called for three structural elements with part of each devoted to administrative and support activities.

A planned new wing for diagnostic and treatment services is also reduced in the initial construction phases. Eighteen new operating rooms would be constructed, instead of the original 22. Four existing operating rooms, two at the main center and two at Hoover, would be maintained.

The modernization is designed to take place in three steps, beginning with completion of the Phase I building expansion of 1978, then adding in new construction a diagnostic and treatment wing and the first segment of eight new nursing units of 22 to 24 beds each, and lastly remodeling existing areas to meet building codes. Construction could begin as early as April 1984.

These first steps allow for the closing of 83 beds at the Hoover Pavilion. The long range plan calls for complete closing of Hoover and the beds are accommodated in subsequent new construction at the main center.

Current plans also take into account the consolidation of Children's Hospital at Stanford that ultimately will be located adjacent to the new nursing units at SUH.

As outlined to the Board of Hospital Directors, the initial stage of the project would have a construction budget of $62 million and a total project budget of $100 million. Earlier budgets were $78.4 million for construction and $123.9 million total project cost.

Sheldon S. King, executive vice president and director of SUH, said the new directions represent "a very solid plan, which meets our critical needs for bringing the physical structure of the hospital into balance with the advanced state of care provided to our patients."

The project focuses more on modernization than expansion of services with only six new beds (for neonatal intensive care) added to the total current bed capacity of 663.

The hospital modernization is being designed by the Naramore Bain Brady Johanson Group, an architectural firm based in Seattle with an office in Palo Alto.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911 or Dr. Stewart Agras (415) 497-7107

BATHS, BIOFEEDBACKS CAN BE ASPIRIN SUBSTITUTE, PSYCHATRIST SAYS

STANFORD—

The best aspirin substitute for a tension headache might be relaxation training, biofeedback, or perhaps even a nice hot bath, says a Stanford psychiatrist.

Besides avoiding the small but ever present medical risks of any medication, people who turn to nonpharmaceutical solutions for simple tension headaches receive "an extra dividend, a philosophical advantage.

"People feel so much better when they're not dependent on drugs," explained Dr. Stewart Agras, professor of psychiatry and director of Stanford's Behavioral Medicine Clinic.

"There is a growing feeling that people should take control of their own health care. What better way than to shift from drugs—a passive solution—to self-management."

The holiday season is a time of high stress for many people, a time when the muscles in the neck and head are prone to stiffen, producing a classic tension headache.

"For many people the answer is as simple as a warm, relaxing bath. Or perhaps they just need to stop for a moment and take the time to calm down."

For more persistent headache problems, Agras said, relaxation training or biofeedback might help.

"Although we do not have scientific research comparing the effectiveness of these techniques with such drugs as aspirin, aspirin substitutes or mild tranquilizers, we have found in the clinical setting that many patients have had excellent results. Some patients have become headache-free using these techniques after using medication for years without success.

"We also have 15 or 16 thorough studies conducted around the country which show that biofeedback and relaxation training are more effective than placebos" ("fake" pills which subjects believe are real medicine).

Typically, relaxation training involves seven or eight weekly sessions where patients are coached on how to consciously make various muscles of their body become tense and then relax. Patients practice at home for 20 minutes every day using tape recordings which reinforce the message learned in class.

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Biofeedback involves many of the same techniques but uses electronic equipment to show a visual picture or audio interpretation of blood pressure or heart beat. This enables the patient to strive consciously to alter positively these symptoms of tension.

"Most people would want to try relaxation training first before being hooked up to $20,000 worth of equipment," Agras said.

Agras cautioned that "since headaches can sometimes be symptoms of more serious problems, people might be well advised to check with a physician to rule out the possibility that their headaches are being caused by something more serious than tension."

Everyone clearly is not a candidate for relaxation training or biofeedback, Agras said, "but if you're getting a tension headache just about every day for about 20 minutes, it might be something to consider."

Agras said relaxation training and biofeedback are becoming widely available through clinics, community colleges or on referral from physicians. Stanford provides such services under the auspices of its Behaviorial Medicine Clinic.

The psychiatrist said he won't rule out the use of an occasional aspirin, aspirin substitute or mild tranquilizers. He said aspirin itself seems to be the most effective of the three groups, and that its potential side effects—such as stomach upset or ringing of the ears—are usually not serious.

And for non-tension headaches, the ones that occur in minor epidemic form during the holidays from overeating or too much drinking, Agras recommends the most simple solution of all:

"Moderation, or if that fails, a large glass of water or perhaps juice. These headaches are caused by a loss of body fluid."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino (415) 497-6645

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12-15-82 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

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12-14-82 —30— swn1

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
(415) 497-2558

FOR INFORMATION CONTACT: Joel Shurkin

EDITORS: The following story was written by Kristen Christopher, a student intern at the Stanford News Service. Stanford has a financial interest in the technology reported here.

STANFORD DEVICE IMPROVES ULTRASOUND IMAGING OF INNER EYE

STANFORD—

A new device developed at Stanford University greatly improves ultrasound imaging of the inner eye.

Called the A/B Scan, this machine's basic components are a hand-held probe and a television screen, but its electronics are so complex they will enable opthalmologists to make more precise diagnoses than ever before.

Doctors can now view a "real-time" or television-like picture of events in the eye, thanks to the work of electrical engineering Prof. James Meindl, Alan Susal, a physician specialist in opthalmology, and Terry Walker, a senior engineering research associate at the Stanford Electronics Laboratory.

The group began work on the B scanner in the spring of 1977, after the National Institute of Health issued a supplemental grant to Meindl and the Electrical Engineering Department. The machine was licensed through Stanford's Office of Technology Licensing and is being manufactured and shipped by STORZ Instrument Company of St. Louis, Mo., which specializes in the sale of opthalmic equipment.

The scanner may be used for imaging small body parts, Walker said, but it was designed primarily for opthalmic exams.

The machine is used every Tuesday at the Stanford Eye Clinic under Susal's direction. "It has the clinical features that one would expect from a whole new generation of technology," Susal said.

The patients examined by the scanner have special problems, according to Walker.

"Usually the nature of the problem is that there is something wrong with the eye that makes it difficult or impossible to see into it visually," he said.

For example, the patient might have a cataract or a hemorrhage from an accident. The opthalmologist then needs to determine the feasibility of surgery, and "the only way to find out is to use ultrasonic imaging," Walker said.

Machines called static B-scanners have been used in the past but they are not able to provide any information about movement within the eye, which is important in telling if a retinal detachment can be repaired.

A B-scan instrument is one which produces a cross-sectional image of the part of the body that is being studied.

The probe has 32 transducer elements on the front of it, and in the case of the eye, the transducer face is placed against a special liquid on either the cornea or the eyelid, depending on the case. Ultrasonic beams are sent out from the transducer elements in a sequence, forming the scanning process.

"It works like a radar system, so if there's anything out there that produces a disturbance in the medium, either a tissue or changes in the type of medium, like going from water to the vitreous humor that's inside the eye, you get an echo," Walker said.

The transducer is a special type of electronic material which translates an electrical force applied to it into sound waves. When ultrasonic echos come back from the eye, they are converted back into electrical signals and then amplified in the probe and sent to the computer behind the television screen.

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Each transmission and echo sequence takes 80 millionths of a second. The entire sequence occurs 60 times per second, and the television display that is on the main instrument is synchronized with this time period.

"So you get 60 complete ultrasonic images a second on the screen so that it produces a real-time moving image on the display, and that's an important feature," Walker said.

Machines in the past were only capable of displaying an image eight of 10 times per second, according to Walker, and therefore, the image would jump or flicker on the screen. "On this one the scanning is fast enough at 60 times a second so that you get a perfectly smooth motion, just like watching ordinary TV or a movie," he said.

A problem in producing a real-time image is that it is necessary for the returning echo to be matched up with the transducer element it was sent from. The matching process, called electronic multiplexing, is done with special integrated circuits developed in the Integrated Circuits Laboratory at Stanford.

The circuits, which Walker referred to as "a key ingredient to the production of this type of instrument," were first developed by electrical engineering Prof. James Plummer under an NIH grant on ultrasonic imaging. Walker and Plummer modified them for the A/B Scan and they are now being produced for STORZ by a commercial firm.

When the echos from the transducer get to the main instrument, they are amplified and processed by a "fairly sophisticated radio receiver."

"That's all handled by complex digital electronics custom-made specifically for this," Walker said.

By designing a memory unit that is divided into many sections, the scan's designers were able to produce another innovation: the data is stored into a memory unit at the same time it is being presented on the television screen.

The information is not only stored in the computer, but it can also be put onto a videotape, which can be used in any standard video player. "The doctor can then play it back at his convenience later and reexamine the patient and see if he missed anything," Walker said.

Markings, such as patient number and lines indicating measurement, normally on the machine's screen are also put onto the tape.

The screen has two main displays: the upper region corresponds to the B-scan. The lower to something called an A-scan.

The A-scan is generated by a separate circuit, "which allows you to select some part of the center of the image and display as a function of distance, the strength and echo," according to Walker.

The computer that controls the whole system is "user-friendly" or user-oriented, Walker said. "That is to say all of the controls on the control panel were thought out very carefully as towards what the user wants to do, not necessarily what the machine wants to do."

Three buttons on the probe also provide a convenience for the physician. They are duplicates of buttons on the main instrument but allow the doctor to examine the patient and look at the display without having to reach over to it.

One of the buttons is for "frame freeze," which allows the doctor to study an image for a longer period of time. Walker said that an opthalmologist might stop the picture and then instruct the computer to set some marks on the screen and measure the distance between them, equivalent to the distance in the eye.

Precise measurements are important when a patient needs a cataract lens replacement, Walker said, "because the lens which is put in has to have the proper strength or the person won't be able to see without using strong glasses."

12/10/82 —30— EE 2

EDITORS: Prof. Walker may be reached at (415) 497-1159.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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MEDICAL STUDENTS LEARN ABOUT COST-CONTAINMENT

STANFORD—

The education of most medical students includes anatomy, pathology, and the usual basics. Students at Stanford University School of Medicine learn the basics, and much more. In a novel addition to what perhaps is the core of medical education, clinical medicine, students are learning how to make clinical decisions incorporating a relatively new medical concept—cost containment.

"Health care costs have become a real concern in the past decade, so there is a big interest in cost containment," said Dr. Harold Sox, Jr., associate professor of medicine (Clinical).

"The course we teach has come into its own time. It wouldn't have been taught five or ten years ago," added Dr. Keith Marton, assistant professor of medicine.

The concept behind the course, Sox explained, is that costs are generated by physician decisions about the treatment of their patients. What test to administer, whether to admit patients to a hospital, and how long to keep them there, for example, all affect the total cost of health care. If physicians learn to make the best possible decisions, the costs will be kept to a minimum.

Physicians, estimates show, control as much as 91 percent of expenses for hospital services, and 76 percent of expenses for physician services.

Sox and Marton teach students to make decisions by using probabilityto express their uncertainty about the diagnosis, and something called Bayes Formula, an algebraic formula that "allows the clinician to answer the all-important question: 'how likely is it that my patient with this test result has disease X?' "

Consider, for example, a patient in the hospital recovering from a hip replacement, Sox said.Suddenly, he experiences shortness of breath, and his heart rate elevates. His physician immediately thinks he may have pulmonary embolus, a blood clot that starts in the legs and sometimes travels to the lungs. Any of three tests could possibly determine the cause of the patient's symptoms. To determine which test to give, Sox continued, the physician must know how likely it is that the patient does, in fact, have pulmonary embolus, based on the history and physical examination; the frequency of false positive and false negative results; and the minimum probability at which the physician would treat the patient for pulmonary embolus.

On the basis of this knowledge, the physician can determine which of the three tests will be of the most value, and administer it without wasting time and money administering the other two.

While this formal procedure may seem unnecessary for physicians with years of diagnostic experience, it is a boost for medical students or new physicians.

Sox and Marton also teach students decision analysis, using a "decision tree" to weigh the benefits and doubts of alternative treatments.

"The attitude used to be to try one alternative, and if that didn't work, try the next option on the list," Sox said. "We teach students to determine which test is best to administer, and to forecast the effects of various tests' results on what they would do for the patient, in order to decide which is the best treatment option."

Not only is the subject matter innovative, but the way in which it is taught is unique also. Sox, who started researching medical decision making about ten years ago, got together with Marton and Michael Higgins, Ph.D., a medical decision analyst. With a two-year grant totaling almost $59,000 from the Schering-Plough Foundation through the National Fund for Medical Education, they put together a series of lectures on medical decision making, and recorded them on videotape.

Over the past two years, they've tested various methods of teaching the material. The best, they've concluded on the basis of a controlled study, is tutored videotape instruction. A small group of students watches the videotapes, and a tutor is present to answer questions, emphasize specific points, or be of assistance in any other way necessary.

"We are really impressed by the students' interest in the material," Sox said.

The team has already sent the videotapes to two other medical schools, and is working on a handbook to go along with them. "There is no comparable opportunity at other medical schools to learn about medical decision making in this way," Sox said. "We've gotten a lot of requests for the materials. We'd like to make them more available to other schools."

12-20-82

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Myron L. Weisfeldt, professor of medicine at Johns Hopkins University, will discuss "Age Associated Alterations in Cardiac Function and Exercise Response" at 5 p.m., Monday, Jan. 17 in Fairchild Auditorium at Stanford Medical School.

Weisfeldt serves as director of the division of cardiology at John Hopkins in Baltimore. His major areas of research interests have been in aging changes in cardiac function, ventricular function, ischemic heart disease, and more recently in certain aspects of cardiopulmonary resuscitation.

The talk is the 16th John Kent Lewis Memorial Lecture, named in honor of a Stanford physician and scholar who died in 1961. The lectureship seeks to bring outstanding cardiologists to lecture at Stanford, said Donald C. Harrison, chief of the cardiology division at Stanford.

The talk is open to the public and continuing education credit is available for physicians.

Dec. 20, 1982 —30— mg2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

THE END OF THE NURSING SHORTAGE

STANFORD—

Two years ago, Stanford University Hospital (SUH), like all hospitals, faced a severe nursing shortage. Today, in a completely reversed situation, it is finding itself with too many nurses.

"We are not doing any hiring," said Duane Walker, R.N., M.S., director of SUH nursing services. "Two years ago the turnover rate was 37 percent, which was very low nationally. Now it is less than one percent."

What's more, Walker added, nurses want to work more hours. "Sixty percent of the nurses here are the primary wage earners. They can't afford to work less than fulltime anymore," he said.

Three units at SUH have closed indefinitely because of low patient census. The nurses, and patients, have been transferred to other units. Unlike many other hospitals, Walker said, SUH has not laid off any nurses. Instead, they are being asked to take a day off—about one each month—to compensate for the decreased need for their services.

"The nurses are responding very well. They would rather take a day off than see their colleagues laid off," Walker said.

"Its much more difficult to have too many nurses than not enough nurses. The feelings are much more intense when they see less money in their paychecks. We are trying to be fair, however. We're working closely with the nurses' union to ensure job security," he continued.

With the oversupply of nurses, the massive recruiting efforts of two years ago have been cut back as well. SUH representatives used to go on about 20 recruiting trips each year, in addition to attending all nursing conventions, Walker said. Now, they have combined their efforts in about ten trips per year. "We still want to maintain our visability," he explained., "so we can continue to attract the best nurses."

In order to do this, they are keeping up their marketing efforts. "Rather than saying 'come to Stanford', we market the reserach, education, and work programs we have here. We still get a lot of inquiries from nurses all over the country," he said.

The current situation is the opposite of two years ago, when nurses had their pick of jobs. Hospitals actively recruited them, offering every possible incentive from flex-time scheduling to monetary bounties to get them to come to work.

Walker credits the distressed economy with causing the oversupply. People are unable to afford health care, foregoing elective procedures and keeping essential hospital stays to a minimum. The result is too many empty beds; many hospitals have been forced to close entire units due to low census. An annual American Hospital Association survey showed a 13 to 21 percent decrease from 1980 to 1981 in the number of nursing job vacancies. And high unemployment rates are forcing many nurses, who would otherwise choose not to work, back into the job market.

Nursing schools are responding to the oversupply by cutting back on their programs and the number of students they accept, Walker said. "If the economy comes around the situation will change, and there will be a shortage again," he predicted.

12-27-82

—30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

PHYSICIAN ASSISTANT APPLICATIONS SOUGHT

STANFORD—

Qualified minority candidates for the Primary Care Associate Program are currently being recruited by the Community Outreach Project at Stanford University Medical Center.

Application forms for the first-year class beginning September, 1983, are now available upon request, and along with all supporting documents must be returned by March 15, 1983.

The two-year program trains highly skilled health providers called physician assistants (PAs). Selected are mostly students showing a strong commitment to work in medically underserved communities. Through the program, they gain the academic and clinical experience they need.

PAs and family nurse practitioners function in association with physicians in the maintenance and delivery of primary health care in areas—primarily rural or inner-city—in which there is a shortage of physicians. PAs can handle many medical tasks.

The Primary Care Associate Program was established at Stanford in 1973, and is administered in cooperation with Foothill Community College in Los Altos. The program is run jointly with a consortium of community colleges around the state.

The first year of training is spent in pre-clinical classroom work at one of the consortium colleges. Clinical work carried out during the second year is coordinated through Stanford and consists of didactic and clinical teaching at the Medical Center as well as preceptorship training with a physician in the community.

The Community Outreach Project was initiated in 1980 by the Primary Care Associate Program specifically to recruit minority applicants.

To obtain application forms or for further information regarding a career as a PA, contact George Villaneuva at the Primary Care Associate Program, 703 Welch Road, Suite F-1, Palo Alto, CA 94304; or phone him at (415) 497-6431. Applicants must be U.S. residents or have a permanent visa.

12-29-82 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino (415) 497-6911 or 497-6645

HEALTH CARE FOR INDIGENTS TRANSFERS TO COUNTIES

STANFORD—

Stanford University Medical Center physicians were notified this week by Chief of Staff James Silverman that because of the state's restructuring of the Medi-Cal program January 1, the responsibility for care of Medically Indigent Adults (MIAs) is being transferred to county governments.

This means that there will be no reimbursement to the hospital for any care given to such patients, and they should be referred to county health facilities.

MIAs are generally low income adults, between 21 and 64 years of age who have major medical needs, are not otherwise eligible for Medi-Cal, and who cannot pay their hospital or doctor bills. They are often called the "working poor."

Both community and faculty physicians at Stanford were sent information about the new law in a letter from Dr. Silverman. He noted that patients who are not covered by private health insurance, Medicare, Medi-Cal or who cannot pay for hospital health care services, will be referred to county health facilities, based on their county of residence.

The physicians were asked to refer MIA outpatients to county clinic facilities. Inpatients will only be admitted to Stanford if emergency care is needed, and they will need to be transferred when their condition stabilizes. Emergency care will be provided regardless of the patient's ability to pay.

Santa Clara county residents will be directed to Santa Clara Valley Medical Center, 751 Bascom, San Jose, telephone (408) 279-5100.

San Mateo county residents, to Chope Community Hospital, 222 W. 39th Avenue, San Mateo, telephone (415) 573-2222.

Residents of San Francisco county will be referred to San Francisco General Hospital; Marin county residents to Marin General Hospital; Alameda county residents to Highland General Hospital, Oakland; and Contra Costa residents to Contra Costa County Hospital in Martinez.

Before the new law, MIAs could receive Medi-Cal benefits at any hospital in the area. The state reimbursed the hospital a percentage of its cost of providing the care. Under the new law, these patients can no longer receive public assistance benefits at whatever hospital they or their physician choose, but must use county-designated facilities.

MIAs comprise about three percent of the total patient population at Stanford, or about 1,000 patients per year.

In the Emergency Department, Stanford emergency physicians will continue to treat all patients, including MIAs. But MIAs who need hospital admission will be treated and then will need to be transferred to a county facility when their condition is stabilized and they can be safely transported.

According to Michael Eliastam, director of the Emergency Services, "conditions such as serious trauma, heart attack, or any other situation where immediate care is required, will certainly be treated at Stanford." However a patient who may need elective surgery, as for hernia repair, which is not an emergency, will be informed of the need for surgery or other care and will be advised to go to a county facility.

The change in law will affect approximately 270,000 Californians. For many it may mean changing the doctors and hospitals they have been accustomed to using.

According to the law, some persons in the MIA category will continue to receive Medi-Cal benefits after January 1 at whatever facility they or their physicians choose. These include individuals in skilled nursing or intermediate care facilities, medically indigent children, pregnant women, and refugees in the United States less than 18 months.

12-30-82 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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HEALTH INFORMATION: SEX AFTER A HEART ATTACK

STANFORD—

"The Loving Heart: Sex after a Heart Attack" is the topic of a program to be held 7-10 p.m., Thursday, Feb. 10, in the Sherman Fairchild Auditorium at Stanford University Medical Center.

Sponsored by Stanford Nursing Services, the workshop will attempt to provide factual information to health care professionals, increasing their ability to contribute to patient awareness and understanding.

A lecture-slide presentation will identify numerous myths associated with the subject, describe the phases of sexual activity, discuss various positions for sexual relations, and review medications and their effects on the heart and sexual functions.

Speaker for the program will be sexologist Richard Sharon, M.A., Ph.D., who has his doctorate from the Institute for Advanced Study of Human Sexuality where he studied under Dr. Wardell Pomeroy, co-author of the Kinsey Reports.

Sharon has published in the *Journal of the American Medical Association* and is the author of two books and numerous articles dealing with sex-related issues. Currently practicing in Burlingame, California, Sharon has completed a large research study on the effects of heart attacks on the sexuality of men, women, and their respective partners.

Fee for the course will be $5, which can be paid at the door, with an extra $10 for nurses who wish to receive continuing education credit. Net proceeds will go to the Friends of Nursing Scholarship Fund.

The program is open to the public. For further information, call Katherine Barnett, R.N., at (415) 494-8074.

1/31/83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

(*Editors: This release is being sent out simultaneously with*Clinic Relocates To Hoover Pavilion)

THE STATE OF THE ART IN PLASTIC AND RECONSTRUCTIVE SURGERY

STANFORD—

Imagine a young man losing his arm in a car accident. So badly mangled, it cannot be surgically reattached. Instead, surgeons attach a new arm—received from a donor. With proper medication and physical therapy, the young man gains full use of his new limb.

Sound impossible? Not at all, predict leading plastic surgeons at Stanford University Medical Center. "We've got the technical know-how now," said Dr. Lars Vistnes, surgery professor and chief of the Plastic and Reconstructive Surgery Clinic. "As soon as we can overcome the immunological barriers, we'll be able to transplant limbs. It's the next big leap."

The "immunological barrier"—rejection of the limb—is being broken down, however, Vistnes adds, with the development and refinement of immunosuppressant drugs, such as Cyclosporine, which are used in heart and lung transplants.

"The reason we won't risk transplanting limbs and possible rejection by the patient is because a limb, unlike a heart or a lung, is not essential to sustain life," explained Dr. Robert Chase, surgery professor and head of the hand unit of the Clinic.

Powerful immunosuppressants always compromise the body's ability to fight off infections. Transplanting limbs, the surgeons believe, is not yet sufficient trade-off if the infection risks are high.

Vistnes and Chase are cautious, but optimistic about the future of plastics and reconstructive surgery. Their optimism is based on the recent development of techniques that have enabled their specialty to advance in great strides.

The two major developments in the last decade, Vistnes said, are the discovery that it is possible to move entire units of skin, based on the underlying muscles and blood supply, and microsurgery.

Until recently, Vistnes elaborated, surgeons thought skin could only be moved if the blood supply remained intact. For example, in order to graft skin from one part of the body to another, it was necessary to bind the two parts together, let the skin begin to grow on the new area while still being kept alive by its attachment to the original area, and then separate the two parts once again.

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Now surgeons can completely remove a unit of skin and muscle from one area, and transfer it to a new area, without the two areas having to be physically attached to each other during the process.

"This discovery shortens the hospital time for the patient, cuts the number of operations to only one, allows the patient more comfort, and it doesn't ruin the site the skin is taken from," Vistnes explained.

What's more, he continued, it enables surgeons to do procedures such as reconstructing breasts on women who have had masectomies, and replanting patients' limbs that have been severed.

"For example," Vistnes said, "some time ago an Alaskan man caught his hair in a machine and his whole scalp was torn off. The man was flown down to Stanford, with his scalp in a bucket of ice. Dr. Vincent Hentz (associate professor of surgery) replanted it, and today he has a full head of hair. Ten years ago this wouldn't have been possible."

Not to be overlooked in the success of such procedures is the use of microsurgery techniques. With the aid of microscopes, surgeons can now see how to reconnect miniscule tendons, blood vessels, muscles, and other components of the body. This ability, Vistnes said, enables surgeons to "salvage severely mangled extremities that would otherwise have to be amputated."

"Microsurgery is the most dramatic technical advance in years because it allows surgeons to transfer parts of the body, including skin, bones, soft tissue, and entire parts from one place to another," said Chase. "What's also very exciting is the transfer of muscles, often from lower to upper limbs, to take over the function of muscles that have been lost."

Other advances in the area of hand surgery, Chase continued, include the management of fractures. "By using mini mechanical gadgets, such as pins and screws, to hold the fractures in place we can mobilize the hand immediately even though the bones are broken," he said.

This also cuts down on the length of time casts are used, if at all.

More implantable devices, such as artificial joints and bones, aid in the management of degenerative diseases, such as arthritis, Chase added.

Considered by many to be the "father" of hand surgery, Chase is also developing a computer image of the hand. By converting each component of the hand to a numerical formula, it will be possible to get a multidimensional image on a screen. By making all the components movable, Chase said, surgeons will be able to learn the biomechanics of the hand to aid them in managing hand injuries, and in building robotic hands.

1-26-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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Two-pound premature infants weren't struggling to stay alive in incubators when Marie Jorgensen became Stanford's first social worker in May 1913.

Jorgensen's duties, from the scanty records which remain, probably centered on ameliorating financial hardship and providing general hygiene information for about 1,000 patients that first year at Lane Hospital. That was Stanford's San Francisco teaching hospital before the medical campus moved to Palo Alto in 1959.

Jorgensen's formal career as a social worker began at Stanford only eight years after what is regarded as the nation's first Social Services Department was established at Massachusetts General Hospital in Boston.

Now it is 70 years later, and social workers Charlene Canger and Rose Grobstein bristle at the stereotype of a social worker—the smiling bearer in a wicker basket of goodies or money for the humble poor.

Although they often help families find financial resources, they said most of their work involves family issues which are changing as rapidly as science constantly pushes the state of medical technology.

In fact many of the most important changes have occurred not since Jorgensen rode in a carriage to work. Instead, the most dramatic years may have come between 1962, when Grobstein helped start the first intensive care nursery at Stanford, and the present when Canger is the fulltime social worker in the ICN under Grobstein's supervision.

Some of the changes will be discussed by Canger and child psychiatrist Charley Zenah at a seminar for ICN professionals scheduled at Stanford on Jan. 28. The seminar is part of a year-long celebration as social services at Stanford celebrates its 70th anniversary.

"The preemie babies of 1962 are not the preemie babies of 1983," says Canger.

"It used to be that babies were critically ill and then either died or got well quickly."

But now the babies are smaller, less developed, "and we are finding that they sometimes go from being acutely ill to a long period of chronic illness."

Although they are saved at a premature age and low birth weight that would have been inconceivable even five years ago, they go home with serious physicial problems which the family must deal with.

"We have to help the families go home with a greater degree of uncertainty . . . . The support which is needed is more extensive, and by necessity, our jobs become more complex, Canger continued."

"Nobody says life is fair," reads the sign in Grobstein's office. It's a summary of her battle for realism.

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"Fairness is a real issue," interjected Canger. "You'd be surprised at the number of parents who say after the death of an infant: 'But I took such good care of myself.' Or sometimes they'll grieve that their baby is dead or deformed 'while that mother who didn't even want a child had a healthy baby.'"

Grobstein's battle to help patients deal realistically with issues began, she said, when she was a young social worker more than 40 years ago in the coastal hills of Oregon.

"I visited one particular family whose unclean house I thought might jeopardize the health of a newborn child. So another social worker and I brought cleaning materials up to their cabin one month and helped them clean up.

"When I returned a month later the place was just as dirty as before. It was then I realized that people had to do for themselves."

Helping patients and their families, Canger and Grobstein explained, is a major duty of the hospital's 21 social workers.

"But we also have a role at helping the other members of our teams—including doctors and nurses—cope with the stresses of the environment.

"In the ICN one recent week we had six (premature infant) deaths. The amount of stress this produced could have been intolerable for all of us. But we were able to talk."

Discussion among staff was begun in what ICN physicians and nurses have lauded as an innovative pilot program under Grobstein's direction in the mid 1960s.

A study was underway to learn whether contact between preemies and their mothers would foster bonding without being a safety risk.

Dr. Philip Sunshine, professor of pediatrics and director of the ICN, said the experiment produced some tensions and feelings of competition between the mothers and nurses, who previously had a "monopoly" on the infants' attentions.

Grobstein initiated frequent staff meetings for the nurses and doctors, a tradition which was expanded to deal with other tensions in the unit. These meetings continue today under the informal leadership of Canger.

Grobstein has left the ICN for a role as chief pediatric social worker but she still sees clients, among them participants in a genetic counseling program.

"That's an attempt to deal with problems before they appear in the nursery," Grobstein said.

Although terminating a birth is sometimes an option, Grobstein said her role can often be helping families to prepare for a birth where prenatal testing has revealed damage or a genetic defect.

Grobstein said she came to Stanford from a job with an adoption agency in San Jose "because I was looking for some answers. I wanted to do some research and the opportunity was here at Stanford."

Results of her subsequent research include more than 14 authored or co-authored articles and book chapters, as well as an appointment as a lecturer both in Stanford's Department of Family, Community and Preventive Medicine (FCPM), and at the School of Health and Medical Sciences at UC Berkeley.

STANFORD UNIVERSITY MEDICAL CENTER
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(Editors:Please note sidebar on THE STATE OF THE ART IN PLASTICS AND RECONSTRUCTIVE SURGERY *mailed simultaneously with this story)*

CLINIC RELOCATES TO HOOVER PAVILION

STANFORD—

Stanford University's Plastic and Reconstructive Surgery Clinic has a new home at Hoover Pavilion as of Feb. 1, 1983.

The move, part of the Stanford University Clinics renovation project, consolidates the Clinic to allow patients to register, and receive treatment and therapy all in one area.

Hoover Pavilion is Stanford University Hospital's annex on Quarry Road and El Camino Real, Palo Alto.

"Our offices used to be in one place, our clinics in another, and our research laboratories in yet other place," noted Dr. Lars Vistnes, Clinic chief. "Now we have everything concentrated in one area to offer care more efficiently."

The new Clinic has access to two operating rooms for major operations, an outpatient minor operating room, available hospital rooms within the proximity, and laboratories in addition to larger examining rooms.

"We're gaining hours of availability in addition to space," Vistnes explained. "Before we had to share the rooms with other specialties. This is all ours."

Vistnes is also excited about the chance to offer patients increased continuity of care. Because of the proximity, the nurses in the Clinic will be able to see hospitalized patients as well, he said. Occupational and physical therapists will also be at the Clinic. "It will be more of a family affair," Vistnes concluded.

"We're quite excited about the move because it places us in direct relationship to inpatient and outpatient services, just one floor below the operating rooms, and near occupational and physical therapists," added Dr. Robert Chase, chief of the hand unit of the Clinic.

The Clinic is open from 8 a.m.-5 p.m. Monday through Friday. General plastics and reconstructive surgery patients should call 497-7001, and hand surgery patients should call 497-5256 for information and appointments.

1-26-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

HEALTH RESEARCH POLICY BUILDING TO OPEN

STANFORD—

Members of the Consortium for Health Research and Policy at Stanford will move to new headquarters in the campus building which formerly housed the Medical Microbiology Department, now located in the Fairchild Building. The move is scheduled for completion by Feb. 1.

In all, about 75 persons will be stationed in the renovated building. Designed by architect John Northway (of Stoecker and Northway, Inc.), the renovation is intended to give a physical boost to the concept of group health planning as conceived by the Consortium for Health Research and Policy.

Located at the north end of the Basic Sciences Building across Campus Drive from the Medical Center, the site had originally been a part of the Stanford Museum, until after the 1906 earthquake when it was approved by the Trustees for use by the basic medical sciences.

President Donald Kennedy now has approved a new name for the building, to be known henceforth as the Health Research Policy Building.

Among other renovations, the Schultz Auditorium has been remodeled for the academic functions to be housed in the building. Project manager for construction was David Jerome of University Facilities.

Included in the move will be the entire Department of Family, Community and Preventive Medicine, except for the Division of International Health.

Count D. Gibson, Jr., chairman of the department, explained that the two components until now housed at 703 Welch Road—the Division of Health Services Research and the Primary Care Associate Program—will be joining the rest of the department as a result of the move.

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Director John Farquhar, Dr. Stephen Fortmann, and administrator Lillian O'Toole from the Stanford Heart Disease Prevention Program will also be moving with their office staffs to the renovated building.

Co-director of the SHDPP, Nathan Maccoby of Communications, along with the program's community education group, will move from their present location in Cypress Hall. And all SHDPP postdoctoral fellows, presently scattered at Cypress and throughout the Medical Center, will join the group as well.

(Drs. Peter Wood and William Haskell, and the rest of the SHDPP staff, will remain at 730 Welch Road.)

Drs. James Fries and Halsted Holman of the Division of Immunology will also be included in the move. Fries and Holman are responsible for the Stanford Arthritis Center, including the American Rheumatism Association Medical Information System. The Clinical Scholars Program, directed by Holman, will move as well.

About two years old, the Consortium is a group of Medical School faculty members joined with colleagues from other Stanford University departments to focus their separate research programs on issues of national health policy and service.

Research requirements in these areas include, in addition to medicine, a variety of social science skills, including economics, sociology, psychology and communications. Hence the renovated building will serve as an interdisciplinary research center.

The Board of Trustees approved the $1.5 to $2 million remodeling project in October, 1981, aiming to move many of the Consortium's key members into a single office complex.

STANFORD UNIVERSITY MEDICAL CENTER
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HUMANISM NEEDS TO BE INCORPORATED IN MEDICAL EDUCATION, SYMPOSIUM CONCLUDES

STANFORD—

Getting humanism back into medical education was the key concept that emerged at a Stanford University School of Medicine symposium Jan. 22.

The symposium, which discussed aspects of the general professional education of the physician, was spurred by the Association of American Medical Colleges' ongoing national study of medical education in the United States.

Three panels, made up of faculty and students, considered separate aspects of medical education including essential knowledge, fundamental skills, and personal qualities, values and attitudes of physicians.

What panelists concluded is that humanism begins to be eliminated starting with the "pre-med syndrome" before students even start medical school.

Almost 90 percent of pre-medical students major in science, said Dr. Robert Cutler, professor of neurology and associate dean of medical education. "Is that emphasis necessary?" he asked.

"Students know what they need to get into medical school and that dictates the way they become," said Dr. Lawrence Mathers, pediatrics intern at Stanford University Hospital. "Until the admissions standards are changed to consider other qualifications besides facts and numerical scores, nothing will change."

"Medical school requirements should not interfere with students' undergraduate education," added Dr. Saul Rosenberg, professor of medicine. "Their education needs to be broad and diverse, including all areas and not just science. They do need basic scientific facts to be able to proceed with their medical education, but they don't necessarily need A's in those courses, nor do they need to get involved in other activities such as research or hospital work.

"Students coming into medical school know lots of facts," continued Rosenberg, who took a year-long sabbatical to research the problems of premedical students competing to get into medical school. "But they are deficient in other skills such as communication, observation, problem-solving, and judgement-making. These are the skills involved in everyday practice as a physician, not the facts.

"Premedical students are too concerned with their grade point averages, and come out too narrow minded," Rosenberg concluded. "Premeds who are nerds become medical students who are nerds become doctors who are nerds and parents and spouses who are nerds."

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The lack of humanism is apparent in the admission procedures as well as requirements, Mathers added. "It's impossible to find out if a student will be a good doctor on the basis of an hour-long interview. And Stanford, having incorporated a computer to do preliminary screening of applicants, is moving towards a more mechanized, less personal admissions approach."

The lack of humanism continues once the students get to medical school, panelists noted, in the manner that fundamental clinical skills are taught. The physician-patient relationship needs to be nurtured in courses, said Aria Dibiase, third-year medical student."Students don't get enough preparation in these skills. On their clerkships they have the most responsibility to talk with the patients. There is a lack of good role models. Students need to be taught how to be educators and communicators as part of being a physician," she added.

"The clinical experience always starts with an introduction, taking the history, having the patient disrobe and doing the physical exam. At the end of this initial encounter the physician can tell the patient what to do," said Dr. Mark Perlroth, associate professor of medicine. "A special bond needs to be created between patient and physician in order to be effective. Without it, everything else—knowledge, facts—is useless."

Dr. Edward Shortliffe, assistant professor of medicine, stressed the need for medical students to become familiar with computer technology because of its increasing use in medicine. "Students and physicians need to be familiarized with computers or they will be disinfranchised from the practice of medicine," he predicted.

In response to criticism that computers would make medicine even less personal, Shortliffe argued that the time saved by using computers would, in fact, give physicians more time to spend helping their patients adapt emotionally to their conditions.

Dr. Harold Sox, Jr., associate professor of medicine, stressed the need to educate students in clinical decision-making as another fundamental skill. "Students are not being adequately prepared for today's situation of limited resources. They need to be encouraged to make decisions that will allow them to give the highest quality of care for less cost," he said.

Rather than concentrate only on what students need to be taught, said Dr. Kelley Skeff, assistant professor of medicine, the method of teaching should also be considered. "We need to consider the skills and approaches of individual teachers, and the effect on learners," he said.

"With increasing emphasis on attracting a diverse group of learners, we need to diversify teaching methods because everyone does not respond the same way. We need to assist the faculty by creating an environment in which their individual traits, such as humanism, can be brought out to the utmost."

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3-3-3

Perhaps the ultimate area in which humanism is ignored, panelists contended, is with the medical students themselves.

"About 26 percent of the fourth-year medical school class is in counseling at Cowell Student Health Center," said Dr. Harvey Weinstein, assistant clinical professor of psychiatry. He identified medical students' greatest problems, as depression, lack of self-concept and anxiety, and education's impact on personal relationships.

"Physicians take on a great deal of responsibility for society's characteristics, and for having mass amounts of knowledge. They are constantly performing—in school, on hospital rounds—and are always under scrutiny. They are taught to put their own needs last, and are encouraged, and rewarded, for ignoring time," he explained."There's a discrepancy between physicians' caring for others and caring for themselves.

"My concerns about medical education," Weinstein continued, "are that it doesn't teach students to learn about feelings, and it doesn't give them time to assimilate feelings and experiences and to deal with personal problems. This attitude—humanism—needs to be built into the curriculum, and the faculty has to be taught how to teach it."

"We act as though our patients have no needs of us other than an accurate diagnosis and a treatment," summarized Dr. Allen Barbour, Medical School ombudsman. "We act as though our feelings will simply get in the way of our more important cognitive judgements and that it is okay to ignore the human condition and problems of our patients and each other.

"The main impediment to the growth of these desirable traits in our students is our total emphasis on facts, figures, techniques, and academic excellence combined with a corresponding exclusion of caring, understanding, empathy, collaboration, feelings, or an honest awareness of all that is human in our interactions. We could make a big step forward by affirming these qualities clearly as ideals; by looking for them in admission interviews; by practice in our interactions with patients, students, and all others; and by active discussion at rounds and other opportunities."

STANFORD UNIVERSITY MEDICAL CENTER
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(Editors: Pictures of Shortliffe available on request if not included)

SHORTLIFFE NAMED KAISER FACULTY SCHOLAR

STANFORD—

Edward H. Shortliffe, assistant professor of medicine and computer science at Stanford, has been named a Henry J. Kaiser Family Foundation Faculty Scholar in General Internal Medicine.

The foundation said the award provides a $50,000 annual grant for three years, with an option by the giver to renew for two more years. The annual grant includes $35,000 for salary support and $15,000 in unrestricted funds to support research.

The primary research effort of Shortliffe— one of four academic physicians nationwide to receive one of this year's Kaiser grants—is the the SUMEX-AIM Computing Resource, which is develping computer systems to aid physicians make difficult and sophisticated diagnoses of patients. Shortliffe is the chief physician scientist on the project.

The holder of both a Ph.D. in medical information sciences (computers) and an M.D. from Stanford, Shortliffe recently spearheaded the creation of a graduate program integrating medicine and computer science.

Other recipients this year—the third Kaiser has awarded the five-year honor—are Randall D. Cebul, the University of Pennsylvania, Philiadelphia; Mark R. Cullen, Yale University, New Haven, Conn.; and Daniel E. Singer, Harvard University, Boston.

The Stanford recipient joined the faculty in 1979 as an assistant professor.

The foundation, based in Menlo Park, Calif., was founded in 1948 as a charitable trust by the late industrialist Henry J. Kaiser.

In 1982, the foundation authorized grants of more than $15 million to support efforts in the field of medicine and health.

Jan. 24, 1983 —30— mg3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

DIABETIC VOLUNTEERS NEEDED

STANFORD—

Are high carbohydrate diets really effective in controlling diabetes?

Volunteers are needed to help answer this question by participating in research conducted by Dr. Gerald Reaven and associates at the clinical research center at Stanford University Hospital.

To be eligible for this study, volunteers must have non-insulin treated diabetes; be currently treated by diet or oral agent; be between 20 and 69 years old; and be otherwise in good health.

Participants will be offered the following free of charge: evaluation of blood sugar, insulin, lipids (cholesterol and triglycerides), routine health evaluation including liver and kidney function test, cardiogram, physical exam, dietary evaluation and meals during the entire study.

Anyone interested or wishing further information should call Dr. Clarie Hollenbeck or Dr. George Liu at (415) 497-6973 between 9 a.m. and 5 p.m., or Ann Coulston, R.D., at (415) 497-5430 between 9 a.m. and 12 noon.

1-24-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911 or -7591

PSYCHIATRISTS DISCUSS ANXIETY DISORDER TREATMENTS

STANFORD—

Psychiatrists have come to agree that anxiety disorders, such as claustrophobia, fear of heights, or agoraphobia, are not merely symptoms of other diseases as was once thought, but rather are separate diseases.

They also agree that separate treatments are necessary to treat anxiety disorders, and in the last decade or so several have been developed.

What the psychiatric community does not agree on is which of these treatments is the most effective. Some of psychiatry's leading authorities shared their experiences with their preferred treatments—behavior therapy, drug therapy, or psychotherapy—at a recent symposium at Stanford University.

Anxiety disorders, or phobias, are triggered by events coming from within the patient, such as fear of eating solid food; or from outside the patient, such as fear of snakes.

What starts out as a simple fear may develop into a severe disease, said Dr. David V. Sheehan, Harvard assistant professor of psychiatry and director of the Hypnosis and Psychosomatic Medicine Unit at Massachusetts General Hospital.

A patient may start out experiencing dizzy spells, for example, he explained. These dizzy spells become more concentrated, eventually causing the patient to become hypochondriacal. They often attach that hypochondria to a concrete situation, such as a simple phobia. 'I'm feeling dizzy,' the logic goes, 'because of my fear of spiders.' This simple phobia, fear of spiders, may expand to social phobias, fear of groups, to agoraphobia and multiphobias. The end stage is often depression, Sheehan continued, which can result in suicide.

Becuase of this progression, anxiety disorders need to be treated.

"Many patients think they're the only ones with these fears," said Dr. Walton T. Roth, associate professor of psychiatry and chief of the Psychiatric Consultation Service at the Palo Alto Veterans Administration Center. "They think they are just disasters. They're relieved when the find out this isn't so."

Treatments have developed in three major areas. Dr. W. Stewart Agras, professor of psychiatry and director of the Behavioral Medicine Program at Stanford, said research shows behavioral therapy is effective in treating anxiety disorders. Systematic desensitization—having patients imagine the phobia until they learn to relax—is more effective than the more traditional psychotherapy, he said. Implosion therapy—having patients start off in the worst possible situation—is also effective.

The best behavioral therapy treatment, however, is exposure to the feared situation, Agras' research showed. Exposure increased the time the patients were able to spend in the situation. Their heart rates decreased also, proving that the longer patients were exposed to the situation, the more comfortable they grew to feel.

Behaviorial therapy combined with drug therapy—anti-depressant drugs specifically—had even better results, Agras continued.

"By themselves, the drugs have little effect. But the combination with behavior therapy has a great effect," he said.

"The active ingredient in behavior therapy is that it is real life," Sheehan conferred.

Dr. Alan Skolnikoff, associate clinical professor of psychiatry at University of California, San Francisco and training and supervisory analyst at San Francisco Psychoanalytic Institute, however, said psychotherapy is the desired treatment for most phobias. "The phobia is just a cover up for a much larger anxiety," he explained. "Uncovering that anxiety through psychotherapy cures the phobia in the process."

Skolnikoff advocated transcendental meditation and other relaxation techniques also as anxiety-reducers.

Dr. Robert E. Fowles, assistant professor of medicine and director of the Noninvasive Cardiovascular Laboratory at the VA, brought up another controversial issue. Whether mitral valve prolapse is a symptom or a cause of anxiety disorders has been questioned since the condition was first diagnosed among soldiers in 1871.

Mitral valve prolapse is a condition in which the valve regulating blood flow between the left ventricle and left atrium fails to do so efficiently. This causes a backflow of blood in the heart, which in turn may cause circulatory problems.

It may cause 'funny sensations' that may cause anxiety among patients, he said, but research at Stanford has shown that the presence of mitral valve prolapse is not necessarily connected to anxiety disorders.

"It doesn't matter what anxiety disorder treatment is used, just so the patients get better," Sheehan concluded. The physicians' treatment should aim to get rid of the immediate symptoms with medication; eliminate the phobic behavior with behavior therapy; eliminate any underlying causes with psychotherapy; and finally encourage long-term control of the phobia with patient education, he said.

Jan. 24, 1983 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino · (415) 497-6911 or 497-6645

HOSPITAL PLANS WAYS TO CUT STAFFING COSTS

STANFORD—

Guidelines to reduce staffing costs, such as temporary reductions in workdays or reduced work weeks, were outlined to Stanford University Hospital department heads Tuesday, Jan. 18.

No employees are being laid off their jobs at this time. "We want to do everything possible to avoid layoffs," said Sheldon S. King, executive vice president and director.

Cost reductions are necessary because of low patient census during the past few months, said King. He cited the distressed economy as a cause of the low census. With high unemployment rates, more people are delaying elective procedures and keeping hospital stays to a minimum.

Hospital use throughout California has been dropping steadily since 1980, according to a recent quarterly report by the California Health Facilities Commission. The number of patients discharged from hospitals in Santa Clara County was down 3.3 percent in October 1982, compared to the same quarter in 1981, and the number of patient days of care was down 9.0 percent.

Because of reduced needs, some patient care units at Stanford have been closed and staff asked to take an extra day off periodically.

The new staffing guidelines are not related to whether the hospital receives a contract from the state to treat Medi-Cal patients. The hospital is still waiting to hear whether or not a contract will be awarded to Stanford. In the meantime, the hospital is continuing to admit authorized Medi-Cal patients.

More severe cost reduction measures may be considered in the event the hospital does not receive a Medi-Cal contract or if low census figures continue, King said. In that case, administrators would try to set a specific monetary goal for reductions.

The hospital employs 4,497 people, including more than 1,400 nurses.

Some hospital departments, such as nursing, housekeeping, respiratory therapy and others have staffing cost reduction plans already working. Some nurses, for example, have been asked to take one day off each month. The new guidelines are meant to assist department heads throughout the hospital in examining and dealing with alternative ways they can reduce staffing as they consider appropriate to their area.

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In some departments, employees may be asked to take reduced workdays on a temporary basis. In other departments reduced workweeks might be recommended.

Before reduced workweeks are put in effect in a department, said King, affected employees will be given at least two weeks written notice. They would be able to use Paid Time Off (PTO) or Absent Time (time off without pay) to cover the days reduced from their previous schedule.

At this time, employees whose hours are reduced will still remain eligible for benefits, even though their hours may fall to less than the 50 percent benefit requirement.

Department heads will work with their line administrators and the Director of Personnel before any plans are presented to employees.

Other alternatives, which will be evaluated by individual departments and implemented on an as-needed basis, include:

- extending the period that jobs are held open before authorization to hire is given. Job vacancies are now held open for 30 working days. The new guidelines call for an additional 30 calendar days vacancy period;
- increased scheduling of PTO or Absent Time before a shift is completed, releasing employees from their jobs early;
- contacting employees at home if it appears at the start of a shift that the full amount of scheduled staff will not be needed.

In all of the alternatives, employees would be asked to voluntarily participate, depending on the department's needs. If there are not enough volunteers, then there may be mandatory reductions, based on seniority, which may ultimately affect all employees.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911 or -7591

STANFORD UNIVERSITY MEDICAL SCHOOL COURSE HELPS STUDENTS DEAL WITH STRESS

STANFORD—

Teaching students how to face the stress and strain of modern medical education is now part of the curriculum at Stanford University School of Medicine.

Everyone is aware of the varying degrees of tension that afflict medical students, interns, and residents. And much has been written about medical training's impact on their well-being, including depression, dehumanization, stress, anxiety, cynicism, and even suicide.

What is new is that a few schools—including Stanford—are beginning to offer students information about and ways to alleviate potential problems as part of the curriculum. A ten-week course entitled *The Human Costs of Medical Education* offers students and Stanford University Hospital housestaff the opportunity to discuss what they're going through with classmates and professionals.

"The course lets students know they're not the only ones going through tough times and that it is all right to feel what they may be feeling, what they may go through farther along in their training, and ways to cope with potential problems," said Dr. Harvey Weinstein, clinical assistant professor of psychiatry.

Weinstein coordinates a faculty of 13 who contribute to the course. The faculty consists not only of physicians, but sociologists and anthropologists as well. "I've never seen so much cooperation and effort go into planning a course," Weinstein noted.

The course, offered once each academic year, is run informally, with lots of discussions, panels, and sharing of experiences and feelings. The weekly sessions take on themes such as "The Formation of a Physician Identity", "Learning from Physicians","The Emotional Costs of Patient Care", "The Benefits of a Medical Career Choice", "Life Beyond Medicine: The Effects of Medicine on Personal Relationships", "Institutional Constraints, Traditions, and Individual Response", and "The Winds of Change: Political Aspects of Care, and Change in Culture".

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The course was formed one year ago when its need was identified by the Medical School's Committee on Well-being for Medical Students and House Staff (CWBMS). CWBMS, made up of students, housestaff, and faculty, was established in 1978 to assess the problems and needs of students and housestaff, and to recommend and institute appropriate programs.

Weinstein, who counsels many medical students as part of his practice at Cowell Student Health Center, said they are mostly affected by their inability to cope with the demands of medical school, and the impact those demands may have on their personal relationships.

"Most medical students don't have the time to assimilate what's happening to them," he explained. "They develop the process of not talking about it to their spouses or friends. This causes them to become alienated. They learn to ignore their own and their families' interests and needs."

If medical students develop these habits early on, Weinstein concluded, they can develop into more severe distress, and often impairment such as alcoholism or drug addiction.

For more information, call Dr. Weinstein at 497-3785, or the Office of Student Affairs at 497-6951.

1-19-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

GENETIC PATENT ROYALTIES TO FUND POSTDOCTORAL FELLOWSHIPS

STANFORD—

Royalties awarded to Stanley N. Cohen, professor of genetics, for his role as co-inventor of specific gene splicing and cloning methods, will be pumped back into education to fund fellowships for young scientists, Dominick P. Purpura, Dean of the Stanford School of Medicine, announced today.

Named the "Bernard Cohen Fellowship Fund," in memory of Cohen's father, the initial contribution of more than $150,000 is the beginning of an endowment intended to "provide long-term support for postdoctoral trainees at Stanford," Cohen said.

"One of the greatest needs in any area of science today is to support the training of young scientists," he said. "With the cutback in federal funds for training purposes, that need has become especially acute in recent years."

Postdoctoral students from throughout the School of Medicine and Department of Biology will be eligible to apply to the Fund, which will be administered by the Dean's Fellowship Fund committee.

To date, $1.4 million in gross revenue has accrued from the 73 genetic engineering firms licensed to use techniques described in the first Cohen/Boyer patent, which was issued in December, 1980.

Cohen's personal share of this revenue constitutes seed money for the endowment.

The patent covers fundamental techniques that Cohen and Herbert W. Boyer of the University of California, San Francisco developed to rearrange the genes of common bacteria.

By inventing ways to replicate genes that code for desired traits within microorganisms, Cohen and Boyer developed a powerful tool for investigating the organization and function of genes.

The techniques also made possible the construction of "bacterial factories," new sources of such medically useful, but difficult to obtain products as insulin, human growth hormone, and the anti-viral drug interferon.

The United States Patent Office has not yet approved a second Cohen/Boyer patent, which would license the intermediate products of the techniques.

But the revenues used to set up the Bernard Cohen Fellowship Fund will not be affected by the Patent Office's ultimate decision on the second patent, according to Niels Reimers, director of Stanford's Office of Technology Licensing.

Born in Perth Amboy, New Jersey in 1905, Bernard Cohen was a merchant with "a great deal of interest in science," according to his son.

"He was a remarkable man and an inventor of sorts," Cohen said. "I wanted to honor his memory."

1-19-83 —30— df5

STANFORD UNIVERSITY MEDICAL CENTER
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NIH BIOMEDICAL RESEARCH GRANTS AWARDED

Details follow asterisks

STANFORD—

The molecular biology of sleeping sickness, effects of psychological stress on the immune system, and the physiology of epilepsy are among the newly funded research topics of ten young scientists at the Stanford University School of Medicine.

Each researcher was awarded a $5,000 allocation January 1 from the Biomedical Research Support Grant, provided twice each year by the National Institutes of Health, and administered by a Stanford faculty committee.

The grant is designed to help young scientists establish research programs in areas of basic and clinical research.

The ten assistant professors awarded one-year grants are: John C. Boothroyd (medical microbiology), Christopher L. Coe (psychiatry), Barry W. Connors (neurology), Kevin Fish (anesthesia), Andrew Hoffman (medicinendocrinology), Fredric Kraemer (nephrology), Fred Mihm (anesthesia), Edward S. Mocarski (medical microbiology), Jane Parnes (medicinemmunology), and Paul Ponganis (anesthesia).

* * * * *

Boothroyd will use his grant to study African trypanosomes, parasites that cause "sleeping sickness" in humans. A large part of the organism's ability to cause disease is linked to its talent for altering the proteins that stud its membrane coat. Boothroyd is studying the genes that control the changing protein pattern.

Parnes, too, is studying genes, this time as they relate to the human immune system. The several classes of "T-lymphocytes," white blood cells that control the immune system, have unique functions that may be associated with their protein coats. Parnes will investigate the role the proteins play in enabling the T-cells to do their work in battling infection.

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Coe will study immunity from a different angle: the effects of psychological stress on immune responses. "Although it is generally acknowledged that stress can compromise resistance to disease," Coe said, "further investigation is still needed to determine how different types of stress affect specific aspects of immune responses."

Epilepsy is the target of Connors' research. Large bursts of electrical activity in the brain signal an epileptic seizure, but between seizures, small abnormal discharges of electricity are often detected in the nerve cells of persons with epilepsy.

Connors will study these small events to capture a more detailed picture of the electrical and chemical disturbances that underly epilepsy.

Kraemer is investigating the way hormones regulate atherosclerosis, a clogging of the arteries with fatty plaques. Mocarski is studying the replication of DNA in cytomegalovirus, a variety of herpes virus that can be life-threatening in persons with a suppressed immune system.

Finetuning respiratory therapy is the goal of Mihm's research, as he studies a new method of monitoring the levels of oxygen in a patient's blood.

Fish will focus on the effects of the common anesthetic "halothane" on the metabolism of other drugs often given during anesthesia.

The effects of several anesthetic agents on the ability of muscle to contract will be the subject of Ponganis' research. Studies of postoperative patients indicate that volatile anesthetics can, in a few cases, trigger a disease known as malignant hyperthermia, in which the contraction of certain muscles is uncontrollable, and the subsequent rise in body temperature can kill the patient. Ponganis aims to elucidate the mechanism of the interaction between the anesthetic and the muscle.

Hoffman will study three chemical messengers in the brain (epinephrine, corticotropin releasing factor and vasopressin) as they interact to influence the output of the pituitary gland. Hoffman said he is especially interested in the pituitary because of the hormones it activates during periods of stress.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

BULIMICS NEEDED TO JOIN STUDY AT STANFORD

STANFORD—

Volunteers are needed to participate in a study being conducted at Stanford's behavioral medicine clinic, to determine the relative effectiveness of two approaches in the treatment of bulimia—the binge/purge eating disorder.

"We've already seen positive results with the use of group therapy sessions," said Dr. Betty Kirkley, postdoctoral fellow. "Based on those results we're conducting this study, to test two variations of group therapy."

The first treatment groups are already under way, and the next ones should start in about a month and a half, said Kirkley, who needs to hear from potential participants as early as now.

Free treatment for bulimia will be provided to women between the ages of 18 and 49 who binge eat and vomit afterwards. The treatment program will consist of 16 weekly group therapy sessions, with seven people in each group.

Before entering the program, participants will be required to have a thorough medical examination. They will complete questionnaires at the beginning and end of the program.

For further information call Kirkley, at (415) 497-~~5868.~~ 7871.

1-17-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
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COHEN OF VANDERBILT TO GIVE PUBLIC LECTURE

STANFORD—

"Epidermal Growth Factor" is the title of the ninth Windsor C. Cutting Memorial Lecture, to be held 4:15 p.m., Thursday, Jan. 20, in the Fairchild Auditorium at Stanford School of Medicine.

The public lecture will be given by Dr. Stanley Cohen, of the department of biochemistry at Vanderbilt University School of Medicine. His presentation is sponsored by Stanford's department of pharmacology.

Cohen is a pioneer in researching hormones which promote the growth of different types of cells, according to Dr. Tag Mansour, professor and chairman of pharmacology. Studies of these hormones lend insight into the control of the growth of normal cells and are hoped to further an understanding of the abnormal growth of cancer cells.

Cohen was co-discoverer of the first factor implicated in the growth of the nervous system in mammals (the "nerve growth factor"), said Mansour. He recently discovered the epidermal growth factor, and is actively engaged in identifying its mechanism of action in cell cultures.

Mansour said that eventually many more of these factors may be discovered. "Cohen's work represents a very important start in the area of the development and differentiation of cells," he said. "His research on the growth and development of mammalian cells may lead us to a rational approach in finding the origin of cancer."

A graduate of Brooklyn College, Oberlin College, and the University of Michigan, Cohen has published widely and been the recipient of many awards. These include the National Paraplegia Foundation's William Thomson Wakeman Award, the H.P. Robertson Memorial Award from the National Academy of Sciences, and the General Motors Cancer Research Foundation's Alfred P. Sloan Award.

He is a member of the National Academy of Sciences and has been an American Cancer Society Research Professor of Biochemistry.

The Windsor Cutting Lectureship was established in 1973 by the faculty of the Department of Pharmacology, and is supported by private contributions. It honors the memory of Dr. Cutting, professor and former chairman of the department.

Cutting, who died in 1972, also served as dean of Stanford Medical School from 1953-57, and as dean of the University of Hawaii Medical School, 1963-71.

The lectures are presented by speakers prominent in the field of pharmacology, and they are open to the medical community and to the public.

1-17-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
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COMMITTEE CHARGED WITH MONITORING QUALITY OF CARE AT STANFORD UNIVERSITY CLINICS

STANFORD—

A committee to provide for communication, coordination, and quality control has been formed at the Stanford University Clinics, announced Dr. Lawrence G. Crowley, president of Stanford University Hospital.

The Professional Practice Committee, including physician representatives from each clinic, will function as "somewhat of a board of directors for the Clinics," said Chairman Dr. Ron Merrell, assistant professor of surgery. It has the authority to govern the Clinics under the general guidelines approved by the Executive Board, according to Don Tower, Clinics director. Its responsibilities include ensuring the quality of patient care, recommending policies and procedures for patient care, recommending appointment of physicians to the Clinics staff and responding and acting appropriately to patient complaints.

"The Clinics represent a large group of multidisciplinary physicians," Merrell noted. "We've never had a great deal of coordination among the physicians. Now with the renovation project underway, it's a good time to coordinate the physicians in their efforts to ensure superior care and patient satisfaction."

"The Committee illustrates our commitment to assuring Clinics patients the most effective, high quality health care," said Tower.

Committee members will be appointed annually, Crowley explained. They will serve on various subcommittees—each responsible for part of the Committee's charge as a whole—including the ancillary, medical records, policy review, and Boswell (Clinics renovation project) subcommittees.

"We wanted the Committee to include active physicians that are deeply involved with the Clinics and familiar with their operation. This is a unique opportunity for them to determine the structure for the future," Tower said.

The Clinics receive about 135,000 patient visits annually, and provide outpatient care by fulltime university faculty members. The Clinics are undergoing a $6.5 million construction, equipment, and remodeling program, scheduled to be completed in 1985. The renovation includes increasing the size and number of clinics and providing for a larger outpatient pharmacy and decongested corridor traffic.

1/14/83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino, (415) 497-6911; Jay Thorwaldson, Palo Alto Medical Foundation, (415) 321-4121; or Carroll Harrington, Peninsula CATV Assn., (415) 321-9594

Editors: This information is released jointly by the Palo Alto Medical Foundation and Stanford University Hospital. You are invited to attend the program. A descriptive flyer is available on request.

STANFORD—

"Medical and Health Care Uses of Cable Television," a community conference designed for physicians, nurses, and other health professionals, will be held Saturday, Jan. 29, from 8:30 a.m. to 1 p.m. in the Palo Alto Medical Foundation Auditorium, 920 Bryant Street.

The conference, which is open to the public, is sponsored by the Palo Alto Medical Foundation and Stanford University Hospital. It is coordinated by the Peninsula Community Access Television Association.

Applications of video and cable television in the health care field include education, clinical research, computer data banks, and internal communications, according to Robert Hecht, Stanford division coordinator of Instructional Media in the Medical Center. Hecht and Michael Yonchenko, Stanford audiovisual director and producer, will present the introductory remarks for the program. Potential uses include video teleconferencing among hospitals, nationally and locally produced health programming, staff training, and a variety of informational uses.

According to Tony Browne, assistant director of Public Information with the California Hospital Association, more than 300 cable systems are serving nearly 2.5 million subscribers in California. The cable companies feed signals from traditional broadcasters and the special cable network companies. With the technological improvements and more public awareness, cable franchise agreements with cities and counties are including more community services, such as public access and dedicated channels for special community interests. At Stanford, the University's Cable TV Steering Group, headed by Associate Provost Michael Oman, is working with Palo Alto officials on plans for cable services.

At the conference, Browne will discuss community involvement in the cable franchise and refranchise process.

Speakers also include David Watts, associate professor of Medicine, University of California, San Francisco, who produces the KQED television and radio "Health Notes" program.

Tom Rasmussen, director of satellite operations for the Hospital Satellite Network in Los Angeles, will discuss programming via satellite to health care professionals.

Tom Clayton of Peninsula CATV will moderate a panel discussion with questions from the audience. A complimentary lunch will follow the program.

There is no charge for the conference, but reservations are required because of limited space. Reservations may be made with Carroll Harrington of Peninsula CATV, 348 Waverley St., Palo Alto, 94302, or call (415) 326-0882.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

LAW GRANTS ACCESS TO MEDICAL RECORDS

As a result of a new California law effective January 1, Stanford University Hospital patients and former patients now have access to the information in their medical records.

The law guarantees all patients in California the right to inspect or receive copies of their medical record information. Physicians have the alternative to provide a written summary of the record and assume the responsibility for preparing it.

Advance written request and payment of fees is required.

According to the law, requests for inspection must be granted within five working days after receipt of the written request. Requests for copies of the record must be granted within 15 calendar days. If a summary report is prepared, it must be available within 10 working days or 30 calendar days if the patient has been discharged from the hospital within the previous 10 days, or if the record is lengthy.

At Stanford, forms to request medical record information are available from the Dept. of Medical Records. Information is available from that office only during regular business hours, 9 a.m. to 4 p.m., Monday through Friday. Charges, to be paid in advance, are for clerical services, copying and mailing. The physician may also charge for the time spent in preparing a summary alternative.

Because many medical records are lengthy, patients may limit their request for copies to specific items that meet their needs.

Medical Records personnel will not attempt to explain or interpret anything in the record. Patients will be directed to their physician or other health professional for assistance in understanding the information contained in the record.

Access is granted only to living adult patients, unless there is a conservatorship of the person. Then the conservator has the right of access as the patient's representative. If the patient is a minor, the parent or guardian has access unless the minor had the right of consent to the treatment given.

There are special requirements relating to the release of information from psychiatric records or alcohol and drug abuse records.

The Hospital and physicians will continue to furnish information necessary for continuing a patient's care when it is requested by another physician or hospital, and consented to by the patient. Normally, insurance companies, schools, employers or other third parties who need information for a record request it directly, with the patient's written consent.

Questions concerning medical record access should be directed to the Correspondence Section, Medical Records Department, at (415) 497-5418.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

NATIONAL STUDY SPURS STANFORD SYMPOSIUM ON M.D. EDUCATION

STANFORD—

A day-long symposium to discuss aspects of the general professional education of the physician will be held Saturday, January 22 at the Stanford University School of Medicine.

The purpose of the meeting is to generate ideas that might be useful to a national study of medical education in the United States now conducted by the Association of American Medical Colleges (AAMC), according to John W. Steward, associate dean.

The symposium, chaired by Dean Dominick P. Purpura of the medical school, will be held from 8:30 a.m. to 1 p.m. in Fairchild Auditorium. It will consist of three panels, each dealing with a specific aspect of medical education.

A panel, led by Dr. Robert Cutler, associate dean for medical education, will address these issues: promoting broad baccalaureate education, essential biomedical science knowledge, and teaching of essential concepts in medicine.

A second panel, chaired by Dr. Roy Maffly, chairman of the Medical School's admissions committee, will review the development of clinical skills during medical school and the acquisition of computer technology skills by medical students.

Dr. Steward's panel will examine personal qualities, values and attitudes of medical students, as well as the problems of students in dealing with emotional stress.

The AAMC-sponsored national study will be conducted by an 18-member panel of administrators and medical educators. Dr. Steven Muller, president of Johns Hopkins University, chairs the panel. The three-year project, the first such a comprehensive review of medical education since 1932, is jointly funded by the Henry J. Kaiser Family Foundation of Menlo Park, and the AAMC, which represents 127 medical schools in this country and 16 in Canada.

The review is necessary, the panel recently stated in an overview paper because since 1932, the purpose of the educational program leading to a medical degree has changed.

"Specialization and the rapid rate of advancement of knowledge and technology," the panel said, "may tend to pre-empt the attention of both teachers and students from the central purpose of medicine, which is to heal the sick and relieve suffering."

The 60-page overview paper, along with a questionnaire, has been distributed to medical educators and students in the United States and Canada.

The AAMC panel plans to hold regional hearings for the purpose of allowing medical school administrators, faculty, students and others to present views. Results of the Stanford symposium will comprise part of Stanford's contributions to the regional proceedings.

The first regional meeting has been scheduled January 27-28 at the University of California in San Francisco. Other hearings will be held in various part of the country through May 1983.

The final project report will be presented at the annual meeting of the AAMC in November, 1984.

1-6-82 —30— swn1

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

ORTHOPEDIC SURGEON DIES

STANFORD—

Dr. Cly Howard Hatcher, professor of surgery emeritus and former chief of Stanford University School of Medicine's division of orthopedic surgery, died Dec. 29 at Stanford University Hospital from a massive heart attack. He was 82 years old.

Hatcher came to Stanford in 1960 after 30 years on University of Chicago's faculty. Following his retirement in 1965, he served as a consultant at Stanford and Palo Alto Veterans Administration Medical Center, and had a private practice in orthopedic surgery in Palo Alto.

He was a member of numerous professional societies, including the American Academy of Orthopedic Surgeons, the American Orthopedic Association, and the American Medical Association. He was an honorary fellow in the British Orthopedic Association, and served as a orthopedic consultant to the United Nations Relief and Rehabilitation Administration in Greece in 1946.

Hatcher received his bachelor's degree from University of California, Berkeley, in 1924, and his medical degree from University of California, San Francisco in 1929. He did postgraduate work in pathology at University of Innsbruck, Austria. His special interest was in bone diseases, especially tumors of the bone.

Hatcher is survived by three children: Barbara Ann of San Francisco; Nancy Hope Kagan of Chicago; and Henry Clark of Belmont. He is survived by two grandchildren as well. His wife, Annabel Clark, died in 1980.

Memorial services were held Jan. 3. Contributions can be made to the C. Howard Hatcher Memorial Fund at Stanford University.

1-11-82 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

ANXIETY DISORDERS SYMPOSIUM

STANFORD—

Anxiety disorders, such as claustrophobia, fear of heights, or agoraphobia, used to be considered symptoms of other diseases by the psychiatric community.

In recent years, however, psychiatrists have come to understand them as separate diseases, and have developed therapies with which to treat them. Stanford University School of Medicine's Department of Psychiatry and Behavioral Sciences is sponsoring a one-day symposium reviewing these developments Saturday, January 15, 1983.

Psychiatrists are now using new behavior therapy treatments, in which they help patients confront their fears, said Dr. Walton T. Roth, associate professor of psychiatry at Stanford and chief of the Psychiatric Consultation Service at the Palo Alto Veterans Administration Medical Center (VA).

Antianxiety drugs are being refined in ways to allow their usage for specialized therapies also, Roth added, thus providing for another treatment method.

Discussing all aspects of anxiety disorder characteristics and treatment will be some of ychiatry's leading authorities, including Drs. W. Stewart Agras, Stanford professor of psychiatry and ector of the Behavioral Medicine Program; Philip A. Berger, Stanford associate professor of psychiatry and director of the Stanford-VA Mental Health Clinic Research Center; Robert E. Fowles, Stanford assistant professor of medicine and director of the VA's Noninvasive Cardiovascular Laboratory; Leo E. Hollister, Stanford professor of medicine, psychiatry, and pharmacology and director of the VA's psychopharmacology research; Mardi J. Horowitz, University of California, San Francisco professor of psychiatry and director of the Center for the Study of Neuroses, Langley Porter Psychiatric Institute; and David V. Sheehan, Harvard assistant professor of psychiatry and director of the Hypnosis and Psychosomatic Medicine Unit at Massachusetts General Hosptial.

Discussion promises to be stimulating, Roth said, since the speakers differ in their belief of which method of treatment is most effective.

The course, which will be held at Tresidder Memorial Union on the Stanford University campus, will provide continuing education credit for physicians. Tuition is $60. Residents, interns, and medical students will be charged $10. For more information, call 497-5594.

1-10-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

NURSES HELP CUT HOSPITAL COSTS

STANFORD—

The surgery unit gives out the "golden towel award". Other units post lists of supply costs on the wall. And still others post graphs showing supply usage. Stanford University Hospital nurses are going all out in their efforts to cut expenses as part of a Hospital-wide cost-containment program.

"Cost-containment has permeated every unit. It's the byword now," said Joyce Miller, associate director of nursing. "We're not decreasing the quality of patient care at all, but we want to make sure we're doing all we can to cut costs."

The nurses' greatest effort has been in using linen more efficiently, Miller said. Their goal is to decrease the amount used for each patient by two pounds from the 1982 average of 21 pounds per patient each day. This alone will save the Hospital $150,400 each year in laundry services, she explained.

"We used to put just one linen cart on each unit, so nurses would take more than they needed to avoid an extra trip," Miller continued. "Now we put a cart on each end of the unit, so nurses can get more linen easily, but only if they need it."

They are also developing new ways to make beds that use less linen, and are discouraging nurses from using heavy blankets, which cost more to clean because they weigh more, to wipe up spills, for example. Staff members of departments such as X-ray and physical therapy, who used to automatically grab for linen to use indiscriminately, are being encouraged to use appropriate products.

Unfortunately, it isn't all so easy, Miller said. The Hospital has to replace $500,000 worth of linen each year, 80 percent of which is unaccountable. Operating room scrub clothes alone cost the Hospital nearly $94,000 each year. "We want to get everyone sensitized to the problem. We want all staff members to realize that when they take Hospital property it costs money," she stressed.

"There is not much more we can do but to try and control the problem by making the nursing service aware of the situation," added James Staight, director of patient transport services.

Aside from cutting linen usage, nurses are looking at other supplies that are being wasted. Switching to a larger size of absorbant pads, used to soak up discharge, for example, is enabling nurses to use fewer pads, Miller said. And rather than preparing products in advance that are not reusable, such as IV set-ups, she added, nurses are being encouraged to wait until the products are actually needed.

Physicians can help out in this area, Miller said, by reconsidering various procedures to determine if they're really necessary.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

ADVISORY

Editors, news directors, assignment editors, reporters in the greater Bay Area:

We thought you might be interested in seeing the enclosed press code, which has been distributed to medical and administrative personnel at Stanford University Medical Center. It was revised and streamlined recently to comply with current legislation and is intended as a guide to what information may be disclosed about patients by hospital personnel.

Conversely, the guidelines indicate what information reporters might expect from the Medical Center. Despite our desire to comply quickly and efficiently with news media inquiries, we hope everyone understands that occasional delays will result as medical personnel deal with urgent medical needs. But the Medical Center's commitment under the Press Code will be met at the first feasible moment.

During business hours, the News Bureau will be happy to answer patient inquiries. After hours, a nursing supervisor is on call at (415) 497-6661 to help with routine inquiries. A member of the News Bureau staff is also on call through that same number if you need assistance.

If you have any questions about the Code, please feel free to call the News Bureau at any time.

Sincerely,

Mike Goodkind

(415) 497-6911

Jan. 6, 1983

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

ANXIETY DISORDERS SYMPOSIUM

STANFORD—

Anxiety disorders, such as claustrophobia, fear of heights, or agoraphobia, used to be considered symptoms of other diseases by the psychiatric community.

In recent years, however, psychiatrists have come to understand them as separate diseases, and have developed therapies with which to treat them. Stanford University School of Medicine's Department of Psychiatry and Behavioral Sciences is sponsoring a one-day symposium reviewing these developments Saturday, January 15, 1983.

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1-10-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

INSOMNIACS NEEDED FOR RESEARCH STUDY

STANFORD—

The Sleep Disorders Research Center at Stanford University Medical Center is seeking about 30 volunteers to test the daytime alertness of persons taking sleep medication.

Sue Cohen, a research assistant, said volunteers should be men or women aged 21 to 60 who are suffering from insomnia. They must be willing to take sleep medication during a 21-day period and spend 11 nights and six weekend days at the Sleep Center's lab in Palo Alto.

Three or four separate starting dates will be available through April, Cohen said.

Some volunteers will receive medication while others will get a placebo. Participants will be electronically monitored in the lab at night and perform skill tests during the day to test alertness.

Volunteers will be paid $400 and receive two free medical exams. Meals will be provided free during the live-in phase. Private rooms and amenities—including free movies—will be furnished.

For further information, contact Cohen at (415) 325-4697.

Jan. 6, 1983 —30— mg3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

STATUS OF SCHOOL'S AFFIRMATIVE ACTION

STANFORD—

Despite inflation, cuts in funding, and an adverse climate for higher education, the School of Medicine has maintained its commitment to affirmative action, according to a faculty report recently made public.

Still, the Faculty Affirmative Action Committee added, there is much progress to be made in the area of minority recruitment at the Medical School, especially for minority faculty.

Minority representation in the various student categories as percents of the totals for 1981-82 was as follows (figures include Asian Americans, who, although not considered a disadvantaged minority by Stanford's internal criteria, must be included in statistics for federal reporting purposes):

- **M.D. degree candidates:** 34 percent;
- **Masters candidates:** 9 percent;
- **Ph.D. candidates:** 12 percent;
- **Housestaff (interns and residents):** 13 percent;
- **Postdoctoral fellows:** 7 percent.

Discounting Asian Americans, however, under nine percent of the total number of masters candidates, medical students, Ph.D. candidates, housestaff, and postdocs was comprised of minorities.

The percentages for women were:

- **Medical students:** 34 percent;
- **Masters candidates (mostly physical therapy students):** 81 percent;
- **Ph.D. candidates:** 31 percent;
- **Housestaff:** 27 percent;
- **Postdoctoral fellows:** 30 percent.

According to Dr. John Steward, associate dean for student affairs, "Women, like Asian Americans, are not considered a disadvantaged group, and there is no longer a special effort required to recruit them as students."

"All statistics on health, education, income, welfare, etc., identify the Black Americans, the Hispanic Americans, and the Native Americans as our currently disadvantaged citizens," states the report.

As documented, disadvantaged minorities were rarely found in the graduate programs or postdoctoral fellowships, where they could be prepared for academic posts.

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"Changing this situation should be a top priority in affirmative action in the coming years," the report asserts.

"Faculty members traditionally come from a pool of postdoc M.D.'s and Ph.D.'s, so it's important to see who is 'in the pipeline' for future appointments at Stanford and elsewhere," explained committee chairwoman Alberta Siegel, professor of psychology.

The School made no progress in recruitment of minority faculty in 1981-82, as was true the previous year, the report found.

Women, however, comprised 23 percent of the 22 faculty members appointed, compared to 15 percent the previous year.

Still, the report indicates that for the past two years all faculty appointees at a rank higher than assistant professor were white males.

Siegel explained her committee's role in seeing to it that all faculty searches are widely advertised, and conducted along affirmative action guidelines.

Dr. John Wilson, associate dean for academic affairs, said, "As I sense it, the faculty and department chairmen are committed to affirmative action and the spirit of it as well."

The problem with disadvantaged minorities, he said, is "not that we don't look for them, but there really aren't large numbers of them to consider for the posts we have available."

He explained, "The standards for faculty appointment at Stanford are the same for all applicants. It's when you have two equally qualified candidates—which would happen very rarely—that you'd apply the principles of affirmative action in the selection process."

Steward said, however, that in considering disadvantaged minority students' applications to the M.D. program, the Admissions Committee may place a different emphasis on some of the information it is reviewing. "We tend in these cases to look more at the 'distance traveled'—the promise and potential of an individual—as opposed to tangible achievements."

This fall's entering class, he said, enrolled 65 percent of the minorities who had been accepted to the School; the figure for non-minorities was 53 percent. "I think this had to do perhaps with the fact that we made a large effort to recruit minorities," he said, adding that there are "few medical schools in the U.S. that do better than we do in meeting financial aid needs."

Still, "One major reason we lose many medical students who would otherwise come here is the cost of coming to Stanford, considering tuition and other living expenses," said Diane Winkle, director of the Office of Student Affairs.

The Medical School tuition for the 1981-82 year was $8,340. Currently it's $9,591, and the estimated tuition for the 1983-84 year is $10,932.

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More than 80 percent of Stanford's medical students receive at least some financial assistance. Proposed federal legislation may result in a 50 percent decrease in available low-interest funding for student loans, according to the School's financial aid administrators' predictions.

Students and administrators fear that the number of applicants to medical school—at Stanford and elsewhere—will decrease. Those who do apply will most likely be from a more homogeneous segment of society.

Steward noted that the current year's minority representation in the School's student body has dropped by one or two percentage points since 1981-82. "This is a national phenomenon right now, which we're hoping is not a trend," he said.

"Stanford traditionally has done very well in recruiting disadvantaged minority M.D. candidates. National figures for the 1980-81 year indicated that of the 117 medical schools in the U.S. (excluding three with predominantly minority student bodies), Stanford had the third highest percentage of minority students." Only three of the 117 schools had greater than 20 percent disadvantaged minority enrollment, Steward said, and Stanford was one of these.

He added, "Our financial aid programs are adequate for awhile, but we aren't sure what will happen after the next couple of years. But with the School's goal of producing academicians and researchers, who are among the lowest paid in medicine, we must provide aid to encourage students to pursue these areas."

The hiring of an assistant dean for student affairs to attract outstanding minority students headed for academic careers was recommended by the School's faculty senate last spring. While no formal search is yet under way, a committee headed by Dr. Roy Maffly, director of Admissions, is defining criteria for such a post.

For the 1981-82 year, the members of the Faculty Affirmative Action Committee were the following members of the School's tenured faculty: Margaret Billingham, M.B., associate professor of pathology; Byron Brown, Jr., Ph.D., professor of biostatistics; Gary Gray, M.D., professor of medicine; Michael Marmor, M.D., associate professor of surgery; Eric Shooter, Ph.D., professor and chairman of neurobiology; and Dr. Siegel.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

WOMEN SUBJECTS NEEDED FOR STUDY

STANFORD—

Female volunteers aged 40-80 are being sought by the division of clinical pharmacology to participate in an ongoing drug study at Stanford. Needed are healthy, Caucasian, non-smoking females, who are currently taking birth control pills or estrogen.

Entitled "Comparative Drug Metabolism: Effects of Aging in Man," the study examines age-related changes in liver clearance of drugs metabolized by different pathways. Principal investigator is Dr. Terrence Blaschke, chief of the division and associate professor of medicine and pharmacology.

The study began in January, 1981, and plans are to recruit 13 more subjects within the next four to six months.

Subjects will spend one week in the clinical research center at Stanford. Three relatively non-toxic drugs will be administered to the volunteers. (Side effects, if any, are minimal, according to research nurse Marni Brown.) Blood samples will be taken, with the purpose of observing how the different drugs are broken down in the liver.

Subjects are currently sought for the weeks of Jan. 17 and 24. Participants will receive compensation.

For further information, call Brown at 497-5266.

1-3-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

FIGHTING GONORRHEA: GENETIC ENGINEERING PROVIDES CLUES

STANFORD—

Stanford microbiologists are using genetic engineering techniques in an attempt to "pull the teeth" of the organism that triggers gonorrhea.

By manipulating the genes of gonococcus bacteria, the scientists have, for the first time, found a way to test an enzyme long suspected to be a weapon the bacteria use to produce the malady.

"If the enzyme turns out to be as important as we think it may be, it could be useful in constructing new ways to provide protection against gonorrhea," said Stanley Falkow, chairman of Stanford's department of medical microbiology.

Knowledge about the enzyme may lead to a vaccine or similar combatant against gonorrhea, Falkow said.

A major obstacle to creating a useful gonorrhea vaccine has been the gonococcus bacterium's ability to disguise itself, said Falkow.

Most bacteria wear a membrane coat that is studded with protein tags. Cells in the human immune system use these tags to identify the foreign bacteria, which they then destroy.

But the gonococcus can mutate and subtly change the configuration of its proteins, effectively camouflaging itself against the body's defenses.

"What you would like to do with an organism that can change its face like that is pull its teeth so that it can't cause an infection," Falkow said. "In other words, it could still multiply in the body, but not cause tissue damage."

The "tooth" in the case of gonorrhea may be an enzyme, called "IgA1 protease," that Falkow and a graduate student, J. Michael Koomey, have studied.

The bacterium uses the enzyme as a chemical cleaver that snips in two the normal antibodies a healthy person makes to fight off infection.

In response to an increasing number of invading bacteria, the human body produces more antibody. In turn, the bacteria produce more enzyme to destroy the antibody. The infected person loses the battle as he develops the genital sores and sometimes serious complications associated with gonorrhea.

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Koomey and Falkow have identified the gene that is responsible for "telling" the bacteria how and when to produce the enzyme. Through a series of steps, described in the December *Proceedings of the National Academy of Sciences*, the scientists have been able to eliminate that single gene from the bacteria, creating an organism that is like gonococcus in every way, except that it can't make the critical enzyme.

The "impotent" organism now serves as a research tool in understanding the role of the enzyme in causing disease.

Normally, the next step in research would be to compare the responses of laboratory animals injected with either gonococcus or the engineered bacteria. But the crucial enzyme destroys only one specific human antibody, which is not present in animals.

This specificity makes the usual testing of the virulence of the bacteria in rodents and primates impractical, Falkow said, and has slowed research.

"If we can prove that the enzyme plays a role in disease, there are research groups interested in carrying the work a step further, to determine whether or not the engineered bacteria could be useful in providing protection against disease," Falkow said.

Although penicillin and its derivatives can effectively stop most acute bouts of gonorrhea, the antibiotics are only a temporary solution to the sexually transmitted disease, he added. Already, virulent strains of the bacteria have evolved that are resistant to penicillin.

"Another important reason we're interested in this particular enzyme is that it is also found in several organisms that cause meningitis (a dangerous infection of the membranes that surround the brain and spinal chord)." In contrast to gonorrhea, meningitis is not easily treated with antibiotics and is often fatal.

"The three major forms of bacterial meningitis all probably have this enzymatic strategy," Falkow said. "So we aren't just addressing the problem of gonorrhea, but also the more general question of the strategies bacteria use to cause disease.

"From the 1940s through the '60s, it was usually felt that through the use of antibiotics, infectious diseases caused by bacteria would be conquered, that we'd simply be able to treat them," Falkow said. "But through the advent of resistance, it became apparent that this was not going to be possible in many cases.

"There's another fundamental flaw in antibiotics," he added. "You have to wait for someone to get ill, and the whole basis of medicine really should be preventative."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NEW COMPREHENSIVE CARE CLINIC FOR DIABETICS

STANFORD—

A new clinic to specifically address the health care needs of the diabetic patient will open Thursday, Jan. 6, at Stanford University Medical Center.

An idea that's been considered for some time in the Division of Endocrinology, the Diabetes and Metabolism Clinic is finally coming to fruition for a variety of reasons, according to Dr. Fredric Kraemer, the endocrinologist slated to head it.

"Until now we've treated diabetic patients in the Endocrinology Clinic, but we were unable to deliver as comprehensive care as we'd like to." This, he said, was because of complications associated with the disease, and because of the necessary patient education involved.

"But besides directly helping patients, the new clinic will help investigators to gather more of our own data by concentrating all diabetic patients within a single unit where their problems can be studied by the variety of specialists who have interests in them."

Until now, he said, "We would refer diabetic patients with neurological complications to the Neurology Clinic, renal complications to the Renal Clinic, and so forth. With the new clinic, we plan to include experts from a variety of specialties on the regular staff.

"We hope that communication among the various physicians will be improved," he added.

Some of the specialists participating in the clinic will be podiatrists, nutritionists, nephrologists, neurologists, and ophthalmologists. Drs. Gerald Reaven, professor of medicine and chief of the Gerontology Division, and Michael Greenfield, clinical assistant professor of medicine, will be the two other staff endocrinologists.

"Most of the major complications associated with diabetes," explained Kraemer, "affect a patient's renal function, peripheral nervous systems, or eyes. There can be peripheral vascular disease too, showing up symptomatically first as infections or sores on the feet, and sometimes leading to amputation."

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But if physicians can identify these problems early in treatment of the diabetic, he said, "we can try to prevent their progression, although success with this type of intervention remains to be proven for all of the symptoms."

Thus the major impact of the new clinic, as Kraemer sees it, will be in the aggressive metabolic control of glucose levels in hard-to-manage diabetic patients.

"Although we'll be seeing all diabetic patients, the uncomplicated ones will return to their primary physicians for follow-up care," he said.

The Diabetes and Metabolism Clinic is being set up as part of the Endocrinology Clinic. "Our division has recently been expanding," Kraemer explained, "and with the addition of new faculty we have increased clinical capabilities which allow us to undertake a project like this.

"It was decided that when new faculty members with interests in metabolism were added, we'd head the Endocrinology Clinic in this direction," said the newly appointed assistant professor of medicine, who for the past four and a half years has worked as a postdoctoral fellow at Stanford.

The new clinic will improve comprehensive care for diabetic patients, Kraemer predicts, since the care will be delivered in a focused, "rather than in a scattered fashion."

He is hoping, for example, to effectively involve the nursing staff in educational efforts, such as the teaching of home glucose monitoring.

The clinic will see adult patients with both insulin-dependent and non-insulin-dependent diabetes, said Kraemer. The former type, he explained, usually but not always begins in childhood, while the latter type is often "adult-onset."

"Insulin-dependent diabetics absolutely must have insulin for their entire lives," he said. "Non-insulin-dependent diabetics have increased blood glucose, and while they're sometimes treated with insulin, they can also often be treated with oral agents or diet."

The reasons for the two types of diabetes are different and their management is often different, Kraemer said, but they can lead to the same kinds of complications.

The clinic will also treat non-diabetic patients who have lipid abnormalities, such as elevations in cholesterol or tryglycerides, Kraemer said.

It is to be located at the Medical Specialties Clinic on the first floor of the Boswell Building. To make appointments, patients or referring physicians should call Ingrid Gallo, at (415) 497-5947.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

LOW CALORIE DIETS AND HEART ATTACKS: A WARNING

STANFORD—

Persons on diets of 800 kcals or less per day may be endangering their health even if under a doctor's supervision, say both a physician and a dietician at Stanford University Medical Center.

"It is certainly sound advice for persons to work with their physician when starting a diet. But extremely low calorie diets may cause a breakdown in structural protein, including heart tissue," said Peter Rudd, assistant professor of medicine.

"With a breakdown in heart tissue comes a risk of cardiac problems. These can occur suddenly and without warning. Even if a patient is hospitalized and constantly monitored, heart problems may still occur. Some are easily corrected, but others could be fatal," said Rudd, an internal medicine specialist.

Rudd and Stanford University Hospital (SUH) registered dietitian Jane Woeckener were interviewed separately in the wake of public interest triggered by the death of a Bay Area woman who reputedly adhered to a low calorie diet and by articles offering reassurances about various diet plans.

"There are no easy answers when it comes to dieting," said Woeckener, who serves as assistant director of dietetics at SUH. "But the safe and sensible way to lose weight involves eating a wide variety of low calorie foods from the basic four food groups (dairy, meat, fruits/vegetables, breads/cereals) and planning a slow, steady weight loss of about two pounds per week.

"Diets below 1,200 kcals for women and 1,500 kcals for men are generally not recommended because they almost always are lacking in important nutrients needed to meet minimum Recommended Dietary Allowances (RDAs) and to maintain health. (Kcal is short for kilocalorie and is the commonly accepted measurement of the energy value of food.)

"Behavior modification and changing the attitudes and habits which lead to being overweight in the first place are crucial components of weight loss. Crash diets with temporary results do not significantly lower the risks associated with obesity," Woeckener added.

Both Woeckener and Rudd cited recent studies suggesting that diets of fewer than 800 kcals per day are potentially dangerous. These studies, Rudd noted, examined several different nutritional regimens. The number of calories and variety of components appeared to be more important than the specific content of the diet, he said.

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Woeckener and Rudd said that an extremely low calorie diet may be desirable only when someone is so obese that the risk of sudden death is high unless weight loss begins quickly.

"In these circumstances, the patient frequently is already hospitalized. Close observation will not eliminate the risk of sudden death while rapidly losing weight but would at least permit health professionals to respond quickly to a cardiac arrest," Rudd said.

He added that the heart is especially vulnerable to damage on a low calorie diet, even if protein is its main component. The addition of modest amounts of carbohydrates may reduce breakdown of the body's structural protein and may help protect the heart.

"But there have been reports of lowered potassium, calcium and magnesium, which could make irregular heart rhythm more likely. These electrolytes (blood minerals) are necessary, and they are best provided within the context of a well balanced diet," he added.

Among the studies cited by Rudd and Woeckener was one published in the April 1981 edition of *The American Journal of Clinical Nutrition.* Authors included Harold E. Sours, M.D., formerly of the Bureau of Epidemiology of the Center for Disease Control in Atlanta, and Victor P. Frattali, deputy director of the division of nutrition of the Food and Drug Administration, which currently is examining low calorie diets.

The article studied 17 individuals who died of heart attacks suddenly after long periods on very low calorie diets, consisting entirely or primarily of protein.

"The deaths appeared to be independent of type of medical supervision received during the diet, daily dosage of potassium supplementation and biological quality of the protein product used," the authors said. The 17 individuals had been on diets of about 300 to 400 kcals per day.

"We conclude," the article stated, "that use of very low calorie weight reduction regimens should be curtailed until further studies determine what modifications if any can insure their safety."

Contacted in Washington, Frattali said the article represented the research of himself and colleagues and did not indicate an official agency endorsement or warning. Officially "we're trying to keep ourselves informed in regard to low calorie diets," he said.

On Dec. 30, the FDA issued a public statement that diets under 400 kcals per day "are physiologically unsound regardless of their overall nutrient composition.

"FDA believes their use should be considered experimental and patients should have full knowledge of the risks, and undertake the diet only with proper medical supervision."

Diets under 800 kcals per day should be used only under proper medical supervision, the FDA said.

(Editors: The Medical Center News Bureau has available for the news media a packet of recent articles, including the Sours/Frattali piece, which will be mailed on request.

Jan. 3, 1983 —30— mg2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

RECIPE BOOK BENEFITS NURSING GROUP

STANFORD—

Ever tasted Kay Zehr's persimmon pudding? Jeanne Kennedy's semi-truffled pate? Or Caroline Zlotnick's Mexican fiesta salad?

If these recipes sound especially tempting, they can be found in the newly-published *Favorite Recipes of the Friends of Nursing.* The cookbook is now for sale, for $10, in the Nursing Administration Office, the Hospital gift shop, and at both Stanford bookstores (on campus and at 135 University Ave., Palo Alto).

Favorite Recipes was compiled by Jane Binger, R.N., Ed.D., and Patricia Allen Sparacino, R.N., M.S., and features family-tested recipes from around the world. Contributors include more than 300 nurses in clinical, educational, and management roles at Stanford University Hospital, Clinics, and Cowell Student Health Center, and nurse alumnae of Stanford University.

Recipes range from simple, easy-to-prepare delights like mud pie and chicken-on-Sunday, to more sophisticated specialties such as almond pear supreme and eggplant parmigiana.

Binger is a relief staff nurse in orthopedics at Stanford and a lecturer in the master's program in community health administration, department of nursing, San Jose State University. Sparacino is a clinical nursing specialist in cardiovascular surgery, University of California, San Francisco. Both are charter members of Friends of Nursing and alumnae of Stanford University.

The book may be purchased at any of the locations listed above, or may be ordered by mail for $12 by sending name, address, and check or money order to Friends of Nursing, Nursing Administration, C020, Stanford University Hospital, Stanford, CA 94305.

All proceeds from the sale of the cookbook will go to Friends of Nursing, a newly-founded philanthropic organization dedicated to fostering excellence in nursing at Stanford. For information about joining the group, call (415) 497-5311.

2-28-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

PUBLIC INVITED TO HEAR GUEST SPEAKER ON MULTIPLE SCLEROSIS

STANFORD—

Dr. Byron Waksman, a noted investigator in neuroimmunology, will deliver the seventh annual George A. Zimmermann Lecture at Stanford University Medical School Friday, March 4.

His talk, "Is Research on Mutliple Sclerosis Getting Anywhere?" will begin at 4 p.m. in the Fairchild Auditorium. It is open to the public.

Waksman, an internationally recognized authority on immunology, has been director of research programs, National Multiple Sclerosis Society, since 1979. He has made numerous contributions to the understanding of immune disorders of the nervous system.

Waksman was appointed professor of microbiology at the Yale University School of Medicine in 1963, and in 1964 he became chairman of the department. Since 1979 Waksman has been an adjunct professor of pathology and biology at Yale University and adjunct professor of pathology at New York University. He served as president of the American Association of Immunologists in 1970-71.

Waksman has published more than 250 papers in the field of immunopathology, especially dealing with autoimmune reactions, reactions of "cellular" hypersensitivity, the role of the thymus, specific acquired tolerance, suppressor cells and their mediators, cyclic nucleotides in the regulation of immune responses, and cell cycle phenomena in lymphocyte function.

The Zimmermann Lectureship was established by the Department of Neurology in 1977, as part of a gift by the late George A. Zimmermann, a long-time San Francisco businessman, for multiple sclerosis research and treatment at Stanford.

Previous speakers have included Barry Arnason (1977), Richard Johnson (1978), Guy McKhann (1979), John Kurtzke (1980), Ian McDonald (1981), and Kenneth Johnson (1982).

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STANFORD—

A contract with the state to continue to provide care for Medi-Cal patients has been signed by Stanford University Hospital officials.

Stanford was among six hospitals on the Peninsula notified by telephone Feb. 4 by the Medi-Cal special negotiator that a contract would be sent for hospital review and signature. The contract, effective March 1, was negotiated under a law passed last year by the state Legislature in an effort to reduce Medi-Cal costs.

The effect on most hospital operations at Stanford will be minimal. In fact, "physicians, patients, and most of our staff will not notice any difference when the contract takes effect," said Sheldon S. King, executive vice president and director. "The same authorizations for treatment will be required, and there will be no change in the care patients receive."

The main change will be in the billing department, he said. The hospital will be reimbursed at a single daily rate for each patient, regardless of the severity of the illness or the extent of the treatment.

In the past, the state reimbursed hospitals for "reasonable" costs incurred for treatment of Medi-Cal patients. These costs differed according to the intensity of care and amount of services required by the individual's illness.

King said that if the current level of Medi-Cal patients at Stanford is sustained, the hospital will be able to manage with the current single reimbursement rate. If, however, it receives a heavy load of very ill patients requiring intensive and expensive care, the new rate might be difficult to accept for a prolonged period.

"I expect that the mix of cases of patients requiring major and minor levels of care will enable us to sustain the one-rate arrangement for the immediate future," he said.

The reimbursement rate will be renegotiated annually, and both the state and the hospital have the right to cancel the contract with 120 days' notice.

Specific conditions of the Medi-Cal contracts are not made public. Hospitals negotiated for contracts without knowledge of other hospitals' rate proposals.

The Medi-Cal changes are derived from the first of two new laws passed by the Legislature last year bringing fundamental changes in the way health care is paid for in the state. The second law allows private insurance companies to negotiate prices in advance for their subscribers with specific hospitals and doctors.

Insurance companies can write reduced rate packages for groups of patients receiving care from these providers, although patients might be required to pay more for coverage of high-priced services.

According to King, Stanford Hospital officials are in preliminary discussions with several insurance companies.

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FOR IMMEDIATE RELEASE

STANFORD GAYS PLAN NEW SCHOLARSHIP OFFER

STANFORD—

The Gay and Lesbian Alliance at Stanford (GLAS) plans to offer the University scholarship funds for a medical student who has shown a commitment to serving the gay community.

The funds would not be limited by sex or by the sexual orientation of the recipient.

The GLAS Steering Committee already has raised $550 toward such a scholarship and will seek additional funds for this purpose before April 15.

Meeting with University attorneys Russ Meyer and Iris Brest, GLAS representatives expressed hope the new scholarship would meet objections raised by the University to an anonymous gift offer of $500 toward a scholarship restricted to males who publicly identified themselves as gay.

Douglas Bernard of GLAS said the group would contact the anonymous donor, who had asked the University to inform the Gay People's Union at Stanford, the predecessor of GLAS, about the initial offer. GLAS hopes to enlist the prospective donor's support for their new proposal.

"Should the University refuse this (new) scholarship offer, the GLAS Steering Committee will attempt to negotiate modifications to the gift restrictions which are acceptable to the University and consistent with the spirit of the offer," according to a GLAS news release.

"GLAS believes it is important that the gay community demonstrate its willingness to work with the University administration, and that the University demonstrate its willingness to work with the gay community. . . .

"We hope the proposed scholarship will not only assist a medical student with a commitment to gay health care, but that the very existence of the scholarship, and its administration by a major university, will help make gay health care a more accepted and legitimate field of practice within the medical profession. . . .

"Besides the shortage of health care professionals with skills and commitment to serve the gay community. . .there has been little research directed at the health care needs of gay people."

Among the ways a commitment to serving the gay community might be shown, GLAS said, are 1) active involvement in an organization oriented toward serving the gay community, 2) pursuing a course of studies directed service to the gay community, or 3) doing research specifically directed toward developing health care techniques for gay men and lesbians.

Meyer noted that fairly wide consultation within the University would be needed before a decision would be reached on the prospective offer.

GLAS said that if an agreement could not be reached which was satisfactory to the Steering Committee, all funds collected would be returned to the original donors.

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TAINTED HEROIN PROMPTS NEW UNDERSTANDING OF PARKINSON'S DISEASE

STANFORD—

The freak accident in a drug dealer's laboratory that sent several young Bay Area heroin users to the hospital with symptoms of Parkinson's disease last summer may have opened a new door to understanding and treatment of the disease, according to research by Stanford University scientists.

A poison, probably made as an accidental byproduct when a kitchen chemist used too much heat or acid in preparing a homemade batch of a narcotic, has been found to selectively kill cells in the part of the brain most severely affected by Parkinson's. If the drug induces the same symptoms in laboratory animals— and preliminary research indicates that it does—the physicians may have uncovered an animal model for the disease.

"The six young people we have studied have symptoms that are virtually indistinguishable from Parkinson's," said J. William Langston, an assistant professor of neurology at Stanford who conducts clinical research at Santa Clara Valley Medical Center in San Jose.

"The rigidness of posture, slow movement, and tremors are classical Parkinson's symptoms. But Parkinson's is a disease of the elderly, and these are young people. We were stunned when they came in."

Langston and colleagues Philip Ballard, James Tetrud and Ian Irwin report their findings in the Feb. 25 issue of*Science* magazine.

The findings are significant for two reasons, Langston said. "First, if the drug has the same action in animals—and early indications from the National Institute of Mental Health indicates that it does—we'll have a new way of studying potential treatments for Parkinson's disease."

Scientists could use the drug to create a model of Parkinson's disease in rodents, he said. Until now, that goal has been blocked because no other substance tested is specific enough to selectively affect only those cells responsible for Parkinson's.

"The second implication is more theoretical, but potentially just as important," he said.

"No one knows why, but in some diseases, such as Parkinson's, only certain specific brain cells die. One theory says that as some people get older, waste products accumulate in these nerve cells—the cells can't take out the garbage.

"Now we have a drug that we're pretty sure is toxic to only these cells," he said. "As we learn more about the chemistry and function of this drug, we may get a clue to understanding what's happening in the natural disease."

The chemical culprit responsible for the artificial Parkinson's seems to be 1-methyl-4-phenyl-1,2,5,6-tetrahydropyridine, called MPTP for short. Used as a tool in synthesizing other chemicals, MPTP has had no known biological properties, and has been readily available from the Aldrich Chemical Company for years, Langston said. However, he added, the recent findings have prompted the Bureau of Narcotics to begin reclassifying the chemical as a "controlled substance."

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Langston theorizes that, while attempting to make a drug similar to the analgesic Demerol with "a little more kick," a drug dealing chemist mistakenly produced MPTP instead, and sold it on the street as heroin. Drug users from Salinas to Santa Clara county bought the contaminated drug, and at least six developed full blown, advanced stage Parkinson's symptoms.

While researching the bizarre occurrence of the disease in young people, Langston and his colleagues found a case reported in 1979 of a graduate student who developed the same symptoms after injecting homemade drugs.

"For four to six months he had been synthesizing MPPP (using a reaction which produces MPTP as a by-product) and injecting it intravenously without problems," the researchers write. (MPPP stands for 1-methyl-4-phenyl-4-propionoxy-piperidine, a chemical closely related to MPTP in structure). Apparently, after taking several "shortcuts" in synthesis and injecting the resulting product, he developed marked parkinsonism."

When the student died of a drug overdose two years later, an autopsy of his brain showed substantial, selective damage to his substantia nigra, an area half the width of a pencil and two inches long at the base of the brain, that is involved in coordinating movement. Damaged cells from that region looked "indistinguishable" from analagous cells in elderly patients with advanced Parkinson's disease, Langston said.

"This situation is both tragic and ironic," Langston said. "Usually scientists try a lot of substances in animals first, in their attempts to understand mechanisms and treatments of disease, long before they're tested in humans. It's very ironic to develop the animal model in humans first."

All six of the patients Langston has thus far studied injected multiple doses of the drug, ranging from five grams over four days to 20 grams over five to eight days.

"But we have some evidence that even one dose of this chemical may have permanent effects," said Langston, who urged anyone who thinks they may have used some of the contaminated drug to contact the Department of Neurology at the Santa Clara Valley Medical Center [(408) 279-2546] for confidential testing. "Heroin" contaminated with MPTP triggers a burning sensation during injection, and frequently causes hallucinations, said Langston. Precise laboratory tests can confirm or debunk a suspected case of MPTP poisoning.

"Though the people who have had only one or two doses may have no Parkinson's symptoms now, they may be at greater risk for developing symptoms at some point in the future," Langston said.

Though the exact mechanism of Parkinson's disease is unclear, one result of destruction of the brain cells is a reduction in the vital neurotransmitter dopamine. In current treatment for the disease, Parkinson's patients take daily oral doses of "L-dopa," a substance the brain can use to make more dopamine. Patients with the disease get progressively worse over a number of years, though the L-dopa treatments can permit them to return to normal lifestyles.

The patients Langston has studied who injected MPTP have responded just as well to L-dopa treatments, he said. However, side effects from L-dopa, such as movement disorders, which usually occur in Parkinson's patients only after years of treatment, already are appearing in some of the young patients.

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LIFE AND DEATH DECISIONS GETTING TOUGHER FOR DOCTORS, SAYS M.D.

STANFORD—

One night a depressed college sophomore raised a shotgun to her own neck and pulled the trigger. Instead of killing her, the blast destroyed her spinal column and crushed the bony vertabrae of her neck.

The extent of brain damage was unclear, but physicians were certain that her limbs were completely paralyzed and that she would never speak again. Artificial breathing machines, drugs to boost the pumping of her heart, and an artificial kidney machine were necessary to keep the young woman alive. Family members were adamant that the machines be turned off. The physicians were faced with a decision.

"The family said 'Take my daughter off life support.' What would you do?" Tom Raffin asked the 300 laypersons gathered at Stanford University Wednesday to hear him discuss the practical and moral issues faced each day in a hospital's intensive care unit.

"Turn the machines off," said several members of the audience, but Raffin, assistant professor and assistant chief of medicine and associate director of Stanford's 60 bed intensive care unit, cautioned them not to be hasty.

"She tried to commit suicide, that's true, but that's no reason to let her die," Raffin said. "If you are a physician, who are you responsible to, the family or the patient? Several hundred thousand patients a year try to commit suicide. The great majority of these take drug overdoses and must be placed on respirators. Many of these recover and then go on to live productive lives."

"You might say, 'but what about the idea that she faces such a miserable life?' Well, what about the soldiers in Vietnam who were shot in the neck and were forced to go on breathing machines? You can visit them at VA hospitals around the country....You can see how complicated this is," Raffin said. "These are not easy situations to deal with, but decisions have to be made."

The decisions may become tougher, Raffin said, as medical costs skyrocket. Currently, there are more than enough ICU beds in the 6,000 U.S. hospitals to care for all critically ill patients, at an average cost of $2,000 each day. But the number of beds available may soon drop.

"With the recent changes in health care legislation and the coming changes in benefits from private insurance, there will be a limit to the number of intensive care unit beds in the future," Raffin said.

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"The old days of triage decisions are going to come back," he predicted. ("Triage" refers to a method of prioritizing patients for treatment in a way that maximizes the number of survivors).

"When you have a seventy-year-old and a thirty-year-old who are equally critically ill and you have one bed, the thirty-year-old gets the bed," Raffin said. "The seventy-year-old who might be salvageable doesn't get the bed and has a greater chance to die. Those days will be coming back, and I believe the people who will first experience the brunt of those tough decisions are the underprivileged."

Eventually though, nearly everyone will be touched by the painful choices of the intensive care unit, either personally or through a family member or friend, said the physician. With even the best health insurance paying only 80 percent of an ICU bill, several weeks or months in an intensive care unit can render even financially stable families monetarily, as well as emotionally, bankrupt.

The high costs stem from expensive life support and monitoring equipment such as respirators, artificial kidney machines and heart and lung monitors that the critically ill patient needs to stay alive, as well as from the host of physicians, nurses and specialists who render round-the-clock health care.

If the patient can be healed and returned to a reasonable quality of life, the cost is well worth it, Raffin said. The tragedy comes for the significant percentage of all ICU patients who have essentially no quality of life and are suffering for weeks in ICUs on extraordinary life support systems.

"Cost is not the most important issue," Raffin said, "though it is important." More important is the reality that many ICU patients languish for weeks or months in a critically ill state with almost no chance to recover, while anguished families and health care teams try to guess what choices the patient would make if he could talk.

A "living will," which frees the family and physician to withdraw extraordinary means of life support once it has been determined that the patient has almost no chance of regaining "an acceptable quality of life," is an important document that everyone should sign, Raffin said.

Though "acceptable quality of life" could be different for each individual, the working definition in Stanford's four ICUs is the ability to leave the hospital, he said.

While such a will would not prevent, for example, an elderly patient from being put on a breathing machine in the emergency room, it could be used to help the family and health care team decide whether or not to withdraw artificial life support when a comatose patient is deteriorating after several weeks on a breathing machine.

Such wills can be obtained in the chaplain's office of most hospitals, said Raffin.

"I believe it's very important for people, young or old, to discuss with their family, friends, and physicians their ideas and viewpoints about being on life support equipment in an intensive care unit," Raffin said. "If there is 'almost no chance' for survival, do you want your family and friends to work with physicians in withdrawing you from external support?"

Raffin's was the first in a series of six weekly lectures at Stanford on the progress and ethical dilemmas of intensive care. Admission is free for all the "Progress in Medicine" lectures, which will begin at 7:30 pm on successive Wednesdays in the medical school's Sherman Fairchild Auditorium. Further information can be obtained by calling the Medical Center's office of public events at (415) 497-6389.

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City desks: Copies of Stanford M.D. magazine in which story is published available on request if not included.

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SUH CHIEF OF STAFF DECRIES PROPOSED REGISTRATION OF "HEALERS" AS HEALTH CARE PROVIDERS

STANFORD—

A proposed change in California's Medical Practice Act would ultimately decrease the quality of health care if passed, said Dr. James Silverman, chief of staff at Stanford University Hospital.

Silverman reviewed the reasons for, and the effects of the suggested revision that would allow a group of nonphysician practitioners to register with the state as health care providers, in the recent issue of *Stanford M.D.* The magazine is published by the Stanford Medical Alumni Association.

"The proposal would accept unorthodox and unproven therapies as having real value and classify them as health care services," said Silverman. "It would legalize quackery, and mock the present stringent controls of new drugs and new therapies."

Sponsored by the Board of Medical Quality Assurance (BMQA), the proposal calls for rewriting Section 2052 of the Medical Practice Act to allow alternative practitioners such as homeopaths, lay midwives, naturopaths, Indian shamans, and body workers to register with the state in order to treat patients. "They would be required to simply inform their clients of their training and background," Silverman explained.

The BMQA is California's regulatory agency charged with overseeing medical quality assurance, licensing, and allied health professions. It is made up of 12 physicians and seven nonphysicians.

The Medical Practice Act now states only physicians may diagnose and treat any mental or physical disorder. The change would register nonphysician practitioners, which would allow them to treat patients. "Even if they are only registering with the state, it still implies their acceptance as health care providers," Silverman commented.

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"Nonphysician practitioners do fulfill a perceived need of society. The question is whether their services fall under health care, are good for sick people, and whether they should be available to replace scientifically proven treatments," Silverman said. By condoning registration of this group of practitioners, he added, "the public may be mislead into thinking they are qualified to substitute for trained people (physicians) in caring for the sick."

The proposal has been a controversial issue since its inception, and legislative action on it has been delayed a number of times. Public hearings were held in January 1983 in San Francisco, and are scheduled for Feb. 19 in Los Angeles.

The controversy over the proposal has been presented as a battle between organized medicine and the "healers," Silverman said. Proponents feel some illnesses need not be treated by physicians, but rather nonphysicians can provide cheaper, faster care. They also feel alternative providers are necessary to make health care affordable by all segments of society.

Opponents feel physicians, because of their vast amounts of training and experience, are the only ones with the skills and confidence necessary to make diagnostic decisions.

"The belief that it is possible to have effective, less expensive, and successful health care services rendered by nonphysician practitioners seems to be based on the assumption that cheaper—albeit inferior—care is better than no care at all," Silverman said. "This assumes that nonphysicians know enough about medicine to do at least some good.

"Unfortunately," he concluded, "much alternative providers' knowledge is based on folklore, stylish fads, and other non-scientific sources. They have little, if any, knowledge of the human body or medicine."

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LIFE IN THE COSMOS COURSE FOR M.D.s

Science writers: On Saturday and Sunday, Feb. 26 and 27, Stanford University School of Medicine will offer a minicourse "Life in the Universe" for physicians attending a week-long continuing education program, "Basic Science for Clinicians." Even though "Life in the Universe" is a course for which there is tuition, members of the press are invited free of charge. The sessions will be in Fairchild Auditorium. Program copies available on request if not included with story—Andreopoulos.

STANFORD—

Physicians and biomedical scientists who attend Stanford University's annual course "Basic Science for Clinicians" will be in for a special treat Feb. 26 and 27 in Fairchild Auditorium.

After a week-long review of medical science on earth, the doctors will be exposed to a minicourse on "Life in the Universe," particularly the controversial search for extraterrestrial intelligence now sponsored by the National Aeronautics and Space Administration (NASA).

The special course has been organized by Dr. Edward Rubenstein, associate dean for postgraduate medical education, and Dr. John Billingham, chief of the Extraterrestrial Research Division at NASA's Ames Research Center in Mountain View, Calif. It is open to physicians and non-physicians, and tuition is charged.

Why should a course about life in the cosmos interest a group of medical specialists?

By any yardstick earth is but a minor planet of a below-average star in the galactic boondocks, goes the reasoning. As far as science goes, life is simply the end result of a batch of chemicals excited by a star's energy and mixed in a certain way. If life can exist on earth, it can occur elsewhere.

"A course for clinicians shouldn't necessarily restrict the discussion of recent scientific advances to those issues directly connected with medical science," said Rubenstein. "Physicians have strong interest in areas of research beyond medicine, especially when they have deep biological relevance."

The program Feb. 26 will begin at 9 a.m. and will cover these topics: "The Biogenic Elements of Compounds: From Stardust to Planets," " The Search for Other Planetary Systems," "Chemical Evolution and the Origin of Life," and "The Origin and Evolution of Molecular Asymmetry."

Speakers from NASA-Ames Research Center will include Billingham; Sherwood Chang, chief of Extraterrestrial Research Division; and James G. Lawless of the Chemical Evolution Laboratory. The Stanford speaker will be William A. Bonner, professor of chemistry. (*Editor's note: Prof. Ronald N. Bracewell of Stanford's department of electrical engineering and author of* The Galactic Club: Intelligent Life in Outer Space, *originally listed on the program, will not appear because of illness.)*

The program Feb. 27 will deal with "Precambrian Biology," "The Evolution of Complex Life," and "The Search for Extraterrestrial Intelligence."

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2-2-2 Speakers include Harold P. Klein, director of Life Sciences at NASA-Ames Research Center; Kevin Padian, assistant professor of paleontology at the University of California, Berkeley; and Bernard M. Oliver, retired vice president for research and development at Hewlett-Packard Corporation, Palo Alto.

Stanford is an especially appropriate locale for the course, Billingham said, "because of the many faculty links here."

It was Nobel Laureate Joshua Lederberg, now president of Rockefeller University, who back in the fifties coined the word *exobiology*, the search for extraterrestrial living organisms.

Lederberg's colleagues designed devices that would study chemical events on other planets, including possible life forms. They served as principal researchers on the Viking 1975 lander imaging team and the 1971 Mariner Mars mission. Some of the instruments they designed are now used in the fields of biology and medicine.

Prof Allen M. Peterson of Electrical Engineering at Stanford is currently involved with NASA's Search for Extraterrestrial Intelligence program (SETI), according to Billingham.

Peterson, he said, is building a special machine called a Multichannel Spectrum Analyzer to aid in the detection of radio signals that might be transmitted by other civilizations out in the galaxy.

"We don't know what frequencies to look for," Billingham said, "but we do know there's a region of the spectrum that's best to start in, called the Microwave Window."

This is a huge region with 10 billion channels, according to Billingham. There is no machine that can listen to so many separate channels all at once. To reduce the odds, a prototype 74,000 channel analyzer is being built in Peterson's laboratory. Using a sophisticated data processing system, the machine will aid SETI scientists in distinguishing radio signals which occur naturally in the galaxy from any that might be artificial.

After the prototype machine is tested, Billingham estimates that in five years six machines capable of distinguishing signals from 10 to 100 million channels will be built. They will be hooked up to radiotelescopes in California, Puerto Rico, Spain and Australia which are now tracking the Pioneer and Voyager missions that flew past Saturn and Jupiter.

The new SETI research, by conservative estimates, will be a million times more extensive than all other searches for space signals combined, he said.

Despite skeptics who doubt that extraterrestrial intelligence exists, Billingham asserts that the search is justified on its scientific merits. This is why the National Academy of Sciences and the International Astronomical Union support the project, including the Congress which has provided initial funding of about $1.5 to $2 million a year for the next five years.

"Part of the reason for this support is based on the realization that we now have the technology to carry out a search for extraterrestrial intelligence," Billingham said. "There has been an absolute revolution in microelectronics, particularly with advances in large-scale integrated circuits and custom chips.

"And there's the innate curiosity that I think all human beings have about their own existence, their origins."

Individuals interested in enrollment information should contact the Office of Postgraduate Medical Education at (415) 497-5594.

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HEMODIALYSIS AN ALTERNATIVE TO STEROIDS IN LUPUS PATIENTS WHOSE KIDNEYS FAIL

STANFORD—

Margie Sterner has nothing good to say about steroids.

"You bloat up like a fat pig when taking those drugs," said the slender, 35 year-old Foster City woman. "I never want.to go back to them."

But until 1978, Sterner was dependent on large doses of the steroid "prednisone" to control her lupus erythematosus, a disease of the immune system that can lead to severe joint pain, loss of hair, and damage to the heart, liver and kidneys. When the illness severely damaged her kidneys, traditional therapy suggested that her already high steroid dose be upped even further.

Instead, under the direction of her doctors at Stanford University Hospital, Sterner stopped taking prednisone and began hemodialysis, an unorthodox treatment for lupus patients. Within a few months, her kidney disease subsided without the use of steroids.

Simultaneously, most of Sterner's lupus symptoms disappeared, though Robert S. Swenson, associate professor of medicine at Stanford, emphasized that the onset of dialysis and remission in lupus were not causally related.

Sterner is one of 28 patients with lupus and severe kidney failure that Swenson, and Norman S. Coplon, a clinical faculty member, have studied in the last 13 years.

Results of the research, published in the Jan. 27 *New England Journal of Medicine* point to hemodialysis as an unforeseen option in dealing with the double curse of lupus and renal failure.

Although hemodialysis is a routine treatment for most patients whose kidneys fail, most physicians have spurned its use in lupus patients because of expense and an assumption that the physical and psychological burden of dialysis would do more harm than good to a patient already suffering from chronic disease, Swenson said.

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But the Stanford study showed that the lupus patients responded well to dialysis. Eight of the patients showed enough improvement in kidney function that they could be weaned from hemodialysis—some for long periods of time.

"What we're trying to do is to get physicians to stop giving prednisone to these patients once they reach a certain point in their renal failure," Swenson said.

"Previously, physicians were working so hard to beat renal disease with prednisone that the patients succumbed to severe infection."

Prednisone is a valuable tool when physicians seek to "turn off the immune system," said Swenson. Recipients of heart and kidney transplants, as well as patients whose diseases stem from an overzealous immune system, can benefit from the drug. But, by stripping away the immune defenses, high doses of prednisone leave patients dangerously vulnerable to infections and other side effects, such as brittle bones and fluid retention.

Like Sterner, 25 of 28 patients in the study lost their lupus symptoms subsequent to the blood cleansing.

"However, we are not in any way suggesting that dialysis be considered as a treatment for lupus," Swenson said. "Hemodialysis only removes waste products of renal failure. It doesn't remove lupus toxins."

Why the lupus symptoms vanished remains a mystery, Swenson said, though the mechanism probably relates more to a chemical by-product of severe kidney failure than to dialysis.

About 110,000 Americans suffer from lupus, which most often affects women in their 20s and 30s. Only a small fraction of those, Swenson said, experience severe kidney failure, and would be candidates for hemodialysis.

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Editors: Photos available upon request if not included with story.

WHY ARE THEY VOLUNTEERING?!

STANFORD—

In one clinical study at Stanford, volunteers are instructed to have a little more ice cream, cookies, and soda than they're used to for about three days before coming in.

"The high carbohydrate intake primes the pancreas for optimum response to our metabolic testing," explained Dr. Mark Rosenthal, associate investigator in gerontology.

"But some of our volunteers hesitate to comply, since they're very concerned with their weight and health." Rosenthal is studying the relationship between metabolism and physical conditioning in the elderly, by comparing the glucose tolerance of sedentary and athletic older men.

Why do these men, healthy and active with many other things to do, bother to join a study that requires them not only to eat foods they don't want, but spend two nights and two mornings in the clinical research center (CRC) at Stanford?

And what prompts participants in the Medical Center's many other clinical studies to make that first call to researchers in which they generously offer their time and energies?

The answers vary, say both researchers and volunteers, depending on the nature of the study, benefits to participants, and other factors.

"In our study," said Rosenthal, "the well-conditioned men seem to want to prove the benefits of their active lifestyles, while the sedentary ones are curious, and have altruistic reasons for participating in medical research."

Altruism—and the wish to do something important with their lives—is often a motivation, concurred investigators, especially with elderly and well-educated volunteers.

"I have a pacemaker, and I figure that somewhere along the line someone volunteered for research that made this possible," explained Eleanore Evans, a recent volunteer for the control group in a diabetes study. "Now if I volunteer, maybe someone else will benefit in the future."

Dr. George Liu and his associates conduct many studies on the various treatments of diabetes, under the direction of Dr. Gerald Reaven at the CRC. Many people who volunteer for control groups, Liu said, are Stanford-affiliated and, knowing first-hand the difficulties researchers face, "want to help us out."

Diabetic volunteers, he said, are often unhappy with treatments they've received thus far, and come to the study hoping to find something better. "They frequently become much more informed about their role in controlling the disease after joining us," Liu explained, thanks to the intensive teaching provided by researchers during testing.

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"And they keep coming back for other studies," he added.

The studies that compensate volunteers are generally those in which no other personal benefits are offered. Often, for example, a study will provide its volunteers with a whole battery of medical tests and evaluations free of charge—an incentive that plays a large role in recruitment.

Liu, a physician specialist in the Division of Endocrinology, said some of his volunteers are people who have very early diabetes or lipid metabolism disorders, and the early screening and detection provided by the studies attract them.

Evans said she suspected she might have hypoglycemia when she first volunteered for the diabetes study. "But I found out I was fine and the doctors told me what I could do for the symptoms."

The investigators, she said, were very good about discussing her concerns and spending time with her. She said she probably wouldn't hesitate to call them again if she had a medical problem.

"We do build friendships with many of our volunteers and their families," said Liu.

He said all the studies his group conducts ask variations on the question: how much and in what combination will certain specific therapies help in controlling diabetes? Every protocol has its own time frame, he said, at the end of which the researchers evaluate how much improvement was made and what the next step should be.

What about risks to the volunteers? Under guidelines set by Stanford's medical committee for the protection of human subjects in research, volunteers for clinical studies must give "informed consent" as a requirement for participation.

Kathy Turner-Tamiyasu, R.N., now nurse manager of the gynecology/obstetrics clinic, previously held a position as research nurse in the Division of Clinical Pharmacology, under the direction of division chief Dr. Terence Blaschke. Ongoing research there examines age-related changes in the liver clearance of drugs metabolized by different pathways.

"It's not a dangerous study," she said, "but there *are* some risks associated with the drugs administered to volunteers."

The study includes compensation for the week a volunteer must spend in the CRC. "I found the money was the most common motivation," Turner-Tamiyasu said, adding that this could interfere with the informed consent process.

"People would decide in their own minds that they wanted to participate. So sometimes I felt they weren't listening attentively when I'd explain the details."

She described a similar interference that would occur when volunteers—especially older ones—had a "blind trust" in the medical establishment.

Turner-Tamiyasu also met people who needed a change in routine for a week, or to get away from a difficult personal situation. Some volunteers, she remembers, went so far as to spend their vacation time participating in the study—out of curiosity, perhaps, or because they needed the money.

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"There's often an interplay of several motivations in the same individual," she said, adding that "clinical research is a very rough job. There's so much to go through with each person."

It starts with the initial screening, when potential volunteers first call the number they've probably read in a newspaper, heard on the radio, or obtained from a referring physician.

"We ask for a medical history," said Liu, "and look for certain criteria. Usually we get a far greater response than we need, and less than half the people who call end up in the study."

Turner-Tamiyasu said she never had too many phone inquiries, since "most we had to screen out right away. In the whole time I probably recruited 100 people, after talking to about 500."

After the phone call, if the volunteer sounds right, a meeting takes place for further explanation and physical examination.

At any point during screening or even during the study, Turner-Tamiyasu explained, volunteers are free to change their minds about participating. "Or sometimes during the physical exam something is found that disqualifies them that they didn't even know about."

But most volunteers who stick with clinical research end up feeling pretty good about it, whatever their initial motivations. They've helped others, and it's likely they've also helped themselves.

Ed Souza, photographer with the Stanford University News Service, was generally concerned about the state of his health when he volunteered for one of Liu's studies last summer. "I seemed to fit the criteria they were looking for since my father had had adult-onset diabetes," he recalled.

Souza thought he might have the disease, but instead he left the study reassured "that I still belonged in the control group." Meanwhile, he'd helped researchers gather data important to bettering treatments for those less lucky.

2-15-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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EDITORS: This announcement is being released simultaneously by Stanford University and the University of California, San Francisco.

CLINICAL SCHOLARS' FUNDING RENEWED

STANFORD—

A two-year fellowship that permits physicians to expand their skills in fields ranging from law and economics to ethics and education was recently granted more than $1.1 million in a three-year funding renewal by the Robert Wood Johnson Foundation of Princeton, New Jersey.

Stanford and the University of California, San Francisco share both funding and administrative responsibilities for the Clinical Scholars Training Program.

Studies of the ethics and economics of clinical decision making, and computer modeling as an aid to cancer diagnosis are two projects newly funded by the fellowship.

Since its inception in 1974, the program has trained 41 physicians who are committed to clinical medicine, but have sought broader training related to the organization of health services, improvement of medical practice, and public policy in health, according to Halsted Holman, professor of medicine and director of the Stanford portion of the program.

Participants in the program attend seminars in such subjects as information sciences, sociology, cost-benefit analysis, anthropology, and systems analysis to lay the groundwork for subsequent research with faculty advisors from the Stanford, UCSF and UC Berkeley campuses.

Currently, seven Clinical Scholars training programs are funded by the Foundation across the nation.

Former participants are involved in academic medicine, government, and in the practice of medicine, according to the Foundation.

"The purpose of the program is to allow young physicians to develop skills in non-biological disciplines pertinent to the improvement of health care," Holman said. "Introducing non-biological disciplines into medical thinking and practice will not by itself resolve the problems of health care. Nonetheless, these disciplines provide understanding and methods which are essential to the search for better solutions."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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A $20-MILLION PACKARD GIFT FOR NEW CHILDREN'S HOSPITAL

Editor's note: Story is released jointly by Children's Hospital at Stanford and Stanford University Medical Center.

STANFORD—

Gifts totalling $20-million for construction of the new Children's Hospital at Stanford have been pledged by David and Lucile Packard of Los Altos Hills, Stanford University President Donald Kennedy announced Monday (Feb. 7).

The gifts will be known as the David and Lucile Packard New Children's Hospital Fund and will be used by the board for the planning and construction of the new Children's Hospital. Under the terms of the pledge Stanford will provide an equal amount towards the project, primarily through additional fundraising.

"We want to help develop the finest Children's Hospital in the country and have it physically and intellectually connected to an outstanding university medical center such as Stanford," said Mr. and Mrs. Packard.

"The Packard commitment for this joint venture is the largest personal pledge either institution has received since their founding," Kennedy said. "It has given us a truly magnificent start for our comprehensive goal to consolidate all children's services in a new Children's Hospital."

The gifts, Kennedy added, will also complement the present efforts of the University to modernize Stanford Hospital and research facilities of the Medical School.

Packard, a Stanford alumnus and former trustee, is chairman of the board of Hewlett-Packard Corporation. Mrs. Packard, a Stanford alumna, is vice chairwoman of the current board of Children's Hospital at Stanford. Both have been known for their activities in support of education and community betterment.

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The new Children's Hospital will be a $40-million building physically attached to Stanford University Hospital. It is expected to be ready for occupancy by a target date of May 1987. An agreement between Stanford and Children's Hospital has created a new corporation to operate a consolidated children's medical center, and a joint board was named recently to begin planning for construction. Mrs. Packard is also the vice president of the new Board.

Kenneth Sayre, of Menlo Park, chairman of the original Children's Hospital board and treasurer of the new board, said:

"This most generous gift caps a 15-year commitment that Lucile Packard made as a member of the board. That commitment is to develop superlative care for severely ill and disabled children.

"The Packards' contribution assures a successful beginning for the new Children's Hospital at Stanford."

Stanford and Children's Hospital have been running their pediatric programs from separate locations for years under the direction of the department of pediatrics of Stanford University School of Medicine. About 2,500 patients yearly are shuttled one mile across a busy thoroughfare between the hospitals for specialized treatment at Stanford.

"The separateness results in inconvenience to patients, duplication of services, and higher costs," explained Dr. Lawrence G. Crowley, chairman of the new Children's Hospital joint board and a University vice president for medical affairs.

"The consolidation will alleviate these problems and allow the two institutions to mount a comprehensive approach to the care of children in the community and region."

The new hospital will consolidate the 60 beds of Children's Hospital and the 44 pediatric acute medical-surgical and pediatric intensive care beds of Stanford Hospital. It will also house the Stanford-Children's Ambulatory Care Center, which provides 27 separate clinic services, including such specialties as cardiology, birth defects, oncology and child psychiatry.

The new children's hospital will continue to provide inpatient services in the 15 specialties now offered by both hospitals.

The existing Children's Hospital at 520 Willow Road in Palo Alto will continue to operate until the new building is completed.

The consolidation must also undergo the review process of state and local agencies.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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PUBLIC LECTURES: ETHICAL ISSUES IN INTENSIVE CARE

STANFORD—

"Who Shall Live? Progress and Ethical Dilemmas of Intensive Care" will be the focus of the winter/spring 1983 Progress in Medicine lecture series, a community outreach program sponsored by the Stanford University Medical Center.

The season's presentations are:

- Feb. 16—"Intensive Life Support Systems: Present Practice and Moral Issues," featuring Dr. Thomas Raffin, assistant professor and assistant chief of medicine. His lecture will follow an introduction to the series by Dr. James Silverman, associate professor of radiology and chief of staff at Stanford University Hospital (SUH);
- Feb. 23—"Who is Saved?" with Dr. Myer Rosenthal, associate professor of anesthesia, medicine and surgery, and director of the intensive care units at SUH;
- Mar. 2—"Impact of the Intensive Care Unit on the Critically Ill Patient with Chronic Lung Disease," with Dr. Andrew Newman, clinical instructor of medicine at Stanford and director of the Bay Area Pulmonary Rehabilitation Program; and "Impact of the Intensive Care Unit on the Critically Ill Patient with Heart Disease," with Dr. Robert Sladen, assistant professor of anesthesia and associate director of the intensive care units at SUH;
- Mar. 9—"Newborn Intensive Care: Survival—What Price?" with Dr. David Stevenson, assistant professor of pediatrics and associate director of the Intensive Care Nursery;
- Mar. 16—"Who Suffers More—the Health Care Team or the Family?" with a panel including Silverman, Raffin, Jean Bronstein, R.N., assistant director of Nursing Service for the critical care region, and Aaron Smith, M.P.H., L.C.S.W., chief social worker in cardiology; and
- Mar. 23—"Ethical and Emotional Issues in the Care of the Dying Patient and Family," with Reverend Dr. Ernie Young, chaplain to the Medical Center and senior lecturer in medical ethics.

The Progress in Medicine lectures were initiated at Stanford in 1966 by Dr. Joshua Lederberg, then professor and chairman of the Department of Genetics, to provide an opportunity for leaders in academic medicine to share their insights and perspectives with the community.

Lederberg had observed: "The community has little opportunity to be informed of the exciting developments in medicine. Public understanding of these developments is of the utmost importance to social decisions."

All upcoming Wednesday evening presentations will take place in the Medical Center's Sherman Fairchild Auditorium, at 7:30 p.m. Admission is free, and seating is limited. There are no reserved seats, and no tickets will be issued. Early arrival is recommended to permit the best choice of parking and seats.

For further information, call the Medical Center's office of public events, at (415) 497-6389.

2-7-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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TREATMENT FOR BALDNESS BEING TESTED AT STANFORD; VOLUNTEERS SOUGHT

STANFORD—

A drug that stimulates hair growth will be studied for its safety and efficacy as a treatment for baldness by the department of dermatology at Stanford University Medical Center.

One of several sites in the country for conducting the study, the department announced its involvement to attract volunteers.

"This is not necessarily a cure for baldness. There are still a lot of unknowns," warned Dr. Elaine Orenberg, one of the coordinators of the study.

Specifically, the department is looking for up to 100 men in good health from age 18-49 with thinning hair or baldness to participate in testing Minoxidil, the active ingredient in Upjohn Company's antihypertensive drug, Loniten.

Stanford's study will last at least one year. Participants will be required to make monthly visits to the department for check-ups and evaluation. Preliminary physical testing will take place before individuals begin receiving the treatment, Orenberg said.

Investigators began considering the possibility of Minoxidil's effectiveness in treating baldness during clinical testing of Loniten, which was approved by the Food and Drug Administration (FDA) in 1979. One side-effect of the orally-administered drug is hair growth, as reported by about 80 percent of the patients taking the drug for hypertension. Once they stopped taking the drug, hair growth stopped. Investigators could not determine, however, who would experience hair growth, where they would experience it, or what type of hair would actually grow.

Investigators began to develop a topical ointment containing Minoxidil in 1977, to find out just how effective and how safe it is for use by balding men. With the FDA's approval, it is now being tested by applying it only to the bald areas. At Stanford, the study will be randomized and double-blind, with one group receiving the Minoxidil ointment and one group receiving a placebo ointment. The placebo will be replaced with the drug after four months.

Following completion of the studies—at Stanford and elsewhere—Upjohn Company will determine if FDA approval of the drug should be sought. Jan Auferdehide, spokeswoman for Upjohn Company, cautions men from hoping for a cure for baldness, however. "The FDA approval process takes 8-10 years on the average," she said.

Interested volunteers should call the department of dermatology at (415) 497-7964 between 1 p.m. and 4 p.m., Monday, Tuesday, and Friday.

2-7-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino (415) 497-6911 or 497-6645

Stanford Hospital Offered Medi-Cal Contract

STANFORD—

Stanford University Hospital officials were notified Friday (Feb. 4) that the hospital will be offered a contract to continue to provide care for Medi-Cal patients.

Stanford is among six hospitals on the Peninsula notified by telephone by the office of special negotiator William Guy that a contract will be sent for hospital review and signature. When signed by hospital officials, the contract will be effective March 1.

The specific conditions of Medi-Cal contracts are not made public.

In a joint statement issued today, Dr. Lawrence G. Crowley, president of the hospital; Sheldon S. King, executive vice president and director; and Dr. Donald Kennedy, chairman of the Board of Hospital Directors, said, "We are pleased that care can continue for Medi-Cal patients. We have long served patients who require the highly specialized services and treatment available at Stanford."

Hospital administrators had submitted a formal proposal for a Medi-Cal contract to the state negotiator last November. Under a law passed last year, the negotiator determines from the cost bids submitted which hospitals will be reimbursed for care of Medi-Cal patients.

Major services utilized by Medi-Cal patients at Stanford include high-risk obstetrical services, neonatal and pediatric intensive care, cardiovascular surgery and oncology/hematology and radiotherapy. In addition, SUH operates an emergency transport center for obstetrical patients, infants, and cardiac patients at risk.

About 15 percent of the hospital's total admissions are Medi-Cal patients. A high percentage are acutely ill referred from beyond the Peninsula area.

(Editor's note: Other Peninsula hospitals awarded contracts, according to the state negotiators office, are: Sequoia Hospital, Community Hospital of Los Gatos, O'Connor Hospital of San Jose, Santa Clara Valley Medical Center and Alexian Brothers Hospital in San Jose. Children's Hospital at Stanford is exempt from the Medi-Cal negotiations.)

2-4-83 —30— bb1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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CHEMICAL BOOSTER OF RADIATION THERAPY APPROVED FOR TESTS IN CANCER PATIENTS

STANFORD—

A drug developed by scientists at Stanford and SRI International which boosts the potency of radiation in shrinking cancerous tumors gained approval from the Food and Drug Administration this week for testing in cancer patients.

Called a "radiosensitizer" because it enhances the ability of radiation to kill tumor cells, the compound was first made and tested in 1978 by Martin Brown, associate professor of radiology, and William Lee of SRI International in Menlo Park, California.

Subsequent extensive testing proved the drug to be "highly effective" in eliminating certain tumors in laboratory animals without the usual toxic side effects of similar drugs, Brown said.

The FDA has now commissioned five U.S. medical centers to test the compound, named SR-2508, in human patients.

The drug works by mimicking oxygen, which plays a key role in radiation therapy, Brown said. In traditional therapy, beams of X-rays knife through cancerous tissue, tearing holes in DNA, the genetic material that enables the cell to live and reproduce. By locking onto the broken DNA, the oxygen, which is abundant in most cells, ensures that the damage will be permanent, and the tumor cells die.

But scientists realized 25 years ago that a kernel of cells that don't contain oxygen lurk within many, if not all, tumors, and these cells remain resistant to radiation.

"When you're dealing with cancer, killing 99 percent of the tumor isn't enough," Brown said. "You have to get it all."

To overcome the problem, some physicians have placed patients undergoing radiation therapy in chambers with pure oxygen at three times the normal atmospheric pressure, in hopes of coaxing more oxygen into the troublesome cells.

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Another method involves using a different kind of radiation (for example, neutron or pi-meson radiation) that doesn't rely on oxygen to kill cancerous cells. Both methods improve the tumor eradication rate, Brown said, but are too expensive and, in some cases, dangerous.

In 1974, British scientists developed a compound that seemed a potential solution. The drug, named Misonidazole, mimics the effects of oxygen in the tumor cells, sensitizing them to radiation without affecting normal tissue. But animal and human studies show that doses of the drug high enough to be effective poison brain and nerve cells. Painful tingling in the hands and feet, hearing loss and disorientation have been prohibitive side effects of the drug.

Brown and Lee found that they could reduce the toxic side effects by modifying Misonidazole so that it was almost completely insoluble in fat. The new compound is thus unable to cross the blood-brain barrier, the fatty tube that encases and protects the brain and nervous system.

Studies in animals and human tissue showed that the new drug is just as effective as Misonidazole in enhancing the death of tumor cells, but is five to 10 times less toxic to nervous tissue.

"This drug is effective as a radiosensitizer in animals, there's no question about that," said Norman Coleman, the assistant professor of radiology who will lead the clinical study at Stanford."But it's not easy to tell how predictive that will be in human patients."

Approximately 150 volunteer patients across the country will be studied in the first phase of clinical testing, Coleman said. The centers collaborating to study the drug are five members of the Radiation Therapy Oncology Group: Stanford; Washington University, St. Louis, Mo.; University of California, San Francisco; the National Cancer Institute, Bethesda, Md.; and the Cross Cancer Institute, Edmonton, Alberta.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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GETTING BACK TO WORK AFTER A HEART ATTACK

STANFORD—

Many mild heart attack patients are probably told by their doctors to stay home from work longer than is necessary, a Stanford University cardiologist believes.

"A good number of the lower-risk patients could likely hasten their return if they were given the confidence to do so," said Dr. Robert DeBusk, associate professor of clinical medicine and director of the Cardiac Rehabilitation Program.

Heart attack patients, he said, currently are advised to wait 80 to 90 days before returning to work. But his and colleagues' previous studies on more than 700 patients within three weeks of infarction have demonstrated that early exercise testing permits the distinction between high- and low-risk patients, said DeBusk.

His present study, funded by a new grant from the Robert Wood Johnson Foundation's Medical Practice Research and Development Program, builds upon those previous studies by carrying the question one step further: can the effective communication of information thus obtained through testing facilitate an earlier return to work for low-risk postinfarction patients?

The study will test a combined intervention—including both an occupational work evaluation and a behavior change program. "The intervention is designed to enhance patients' perceived health status," said DeBusk, explaining that this is a key factor in determining the patients' confidence and thus their return to work.

"Through the use of certain specific techniques, we hope to cut down to 30-50 days the amount of time the lower-risk patients need to stay home after heart attacks," he said.

The $150,000 grant will enable DeBusk and his colleagues to work with 600 male heart attack patients over the course of about two years. The researchers will attempt to detect changes in the time patients take to go back to work depending on such factors as age, state of employment, medical impediments, and mode of medical follow-up.

Moreover, DeBusk predicts that if doctors better identify high-risk patients from the start, they'll be able to more successfully intervene medically when necessary, while encouraging the lower-risk patients to get back on their feet sooner.

As the first step of his research protocol, a treadmill exercise test will be administered to patients three weeks after infarction. "This test serves a therapeutic as well as a diagnostic purpose," said DeBusk, "by demonstrating to patients their capacity for work."

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The test allows doctors to establish a prognosis for each patient on which to base decisions. (In the event that abnormalities are found, medications or bypass surgery may be indicated.) A private counseling session will follow the test.

The behavior change program will be carried out by patients at home, DeBusk explained. "Physical activity, inability to cope with job stress, and smoking are three major areas of concern to postinfarction patients." These issues will be addressed by a program tailored to each patient's needs, making use of audiovisuals, advice-filled workbooks, and individually prescribed exercise (walking and jogging) regimens.

"Patients will monitor their heart rates, send us progress reports, and talk with nurses on the phone periodically. We'll revise our instructions based on what the patients tell us, and then we'll see them at the end of six months," DeBusk said.

A key question of the research, he added, will be whether or not the findings can be expanded to apply to a greater number of people. "For example, we will use these techniques only with patients 60 or younger during the study. But perhaps, observing older patients, we'll find that the same principles hold true for some of them.

"So we'll try to determine the relevance of our intervention, as related to different segments of the population."

Patients will be enrolled as volunteer participants in the study from five Kaiser hospitals throughout the Bay Area, DeBusk said. The project may begin as early as April.

DeBusk's research is one of 21 projects being funded under the Foundation's Medical Practice Research and Development Program. The grants, totaling $3 million, are aimed at improving medicine's capacity to assist impaired, acutely or chronically ill individuals in regaining or maintaining their functional abilities.

The present grants were made under a second annual round of projects funded under the Program. A total of 254 applications were received and reviewed by an expert panel for selection.

DeBusk, who received both his B.A. in history and M.D. degree at Stanford Universiy, has been on the faculty here since 1973. He is a Fellow of both the American College of Cardiology and the American College of Physicians.

The Robert Wood Johnson Foundation, the nation's largest private health care philanthropy, is committed to improving the quality, affordability, and delivery of health care in the United States. In the past 10 years over $400 million in grants have been made to institutions in support of health care projects.

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD RATES HIGH IN NATIONAL ACADEMY OF SCIENCES ASSESSMENT

Stanford University's biological science graduate programs received high marks in a national study recently published by the National Academy of Sciences.

The study was not intended to rank the programs, but on a scale of 0 to 5, Stanford's biochemistry program scored 4.9, tied with Harvard and just behind Massachusetts Institute of Technology (MIT). The cellular/molecular biology and the microbiology programs scored 4.0.

"The study is extremely indicative of Stanford's present reputation in newly developing areas, and that the reputation will continue to grow," said Dr. Dominick P. Purpura, dean of the Medical School.

However, he noted that Stanford did not score among the top schools in physiology. "Establishing a strong physiology department is a target of the School's growth," he said. "It would be surprising if ten years from now Stanford was not included among the top ten physiology programs.

"It's nice to stand on laurels, but it's better to work towards meeting challenges," he added.

The study was sponsored by the American Council of Learned Societies, the American Council on Education, the National Research Council, and the Social Science Research Council. About 56 percent of the 1,848 academic biologists surveyed participated in the study. Many objected to the survey, which has been criticized in the past for "confusing prestige for quality".

Data collected by the study includes the number of faculty members in each program, the size of the university library, and the proportion of faculty receiving federal funds.

2-1-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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(Editors: a photo of Dr. Clusin in his laboratory is available if not included)

DRUGS OFFER HOPE AGAINST SUDDEN CARDIAC ARREST

STANFORD—

A scientist who has probed deeply into the molecular structure of human heart muscle believes that drugs could help prevent a sizeable proportion of the 500,000 yearly deaths caused by sudden cardiac arrest.

"In a sense," said Dr. William Clusin, "our research indicates that it is possible via medication available on the market today to make heart attacks 'safe.' At least we would be able to reduce sharply the occurrences of ventricular fibrillation (VF), which usually come without warning and often are nearly instantly fatal."

Clusin, a physician specialist in cardiology, has learned along with colleagues that drugs such as beta blockers and calcium blockers, can actually protect the heart from going into VF. This condition is characterized by uncontrolled spasms of the heart muscle and the subsequent failure of the organ to pump blood effectively.

Results of the Stanford scientists' research is scheduled to be published Feb. 5 in **Lancet**, a British medical/scientific journal.

"Beta blockers are administered routinely to relieve chest pains for persons suffering from heart disease. But our research has led us to believe that these drugs—or perhaps similar medication—should be given routinely to persons at risk of having a heart attack whether they have symptoms or not," Clusin said.

Past clinical studies have shown beta blockers—among the most widely prescribed drugs in the United States today—are effective at relieving the chest pain associated with a heart condition.

But what Clusin and his colleagues believe might be their most important potential was not known until very recently.

He said these drugs act to alter the movement of calcium within the cells to prevent the formation of abnormal electric currents which are the cause of VF. These injury currents have been known since the 19th century and can be recorded accurately on heart monitoring equipment.

For many years it was known that persons whose blood vessels became blocked by disease were prone to injury currents. But Clusin said it was not realized until recently that the injury currents may be triggered by abnormal accumulation of calcium within the heart muscle cells.

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More importantly, the scientist said, research has shown that beta blockers and probably other drugs alter the flow of the calcium, thus decreasing the likelihood that an injury current will be generated.

Clusin and his colleagues observed the movement of calcium and the patterns and effects of injury currents by monitoring beating clusters of electically coupled chick embryo heart cells in tissue cultures. Then they confirmed their findings using live animal models in the lab and by reviewing available statistics about the effects on human patients of beta blockers.

"We must keep in mind that these drugs do relatively little to change the underlying cause of common cardiac illness—blockages in the arteries which arise because of diet, genetic factors or other causes. But by controlling the calcium movements in the heart, we are lessening substantially the possibility that an injury current will occur, triggering VF."

Prophylactic doses of medication offer a more practical solution for many patients than dealing with blockages surgically.

The risks of surgery pose their own problems, and in any case it may not be practical to identify the precise location of blockage in every patient, Clusin explained.

"In the past, researchers believed incorrectly that the only way to prevent the consequences of coronary artery blockages was either to relieve the blockages or to reduce the amount of oxygen consumed by the heart.

"We now realize that when the calcium content of the heart muscle cells is reduced by a drug, the muscle may tolerate a reduced blood supply without producing the abnormal electric currents that precipitate cardiac arrest.

"Therefore, it might appear prudent to administer such drugs to persons who appear statistically at risk of having a heart attack, even though they have no active symptoms.

Beta blockers can have side effects, such as fatigue or shortness of breath.

"However, there is another category of drugs called calcium blockers, which might avoid the side effects for some patients," said Clusin, adding that more research is needed before calcium blockers are administered routinely.

"But I think we do have enough research now to offer the possibility that doctors might prescribe prophylactic doses of beta blockers to their patients who are at risk."

In addition to Clusin, the recent studies of injury currents at Stanford were conducted by Dr. Michael Bristow, a physician specialist, and by postdoctoral fellows Maurice Buchbinder, Avery Ellis and Hardwin Mead. Collaborating was Donald Harrison, professor and chief of the division of cardiology.

(Editors, news directors, reporters: Dr. Clusin may be reached at (415) 497-7394)

Feb. 1, 1983 —30— mg3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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KIDNEY TRANPLANT APPLICATION FILED BY STANFORD

STANFORD—

Renal (kidney) transplants could be resumed at Stanford University Hospital if an application filed Wednesday, March 30 is approved by the state Office of Statewide Health Planning and Development (OSHPD) in Sacramento.

The application must also be reviewed by the Santa Clara County Health Systems Agency (HSA) in San Jose.

Rex Jamison, professor of medicine and chief of the division of nephrology, said the program would provide the only renal transplant facility in Santa Clara County and would enhance and expand existing organ transplant research at Stanford.

Renal transplants were performed at SUH between 1965 and 1971, and then the specialized program became inactive.

"Recent developments in drugs to prevent rejection of organs and other research have increased survival of transplanted kidneys," Jamison explained. "This is an opportune time to revive the program."

In its application to reactivate the program, Stanford estimated that more than 80 persons under age 50 in Santa Clara County were waiting for new kidneys. Currently, these persons must seek transplantation at centers outside the area, often requiring burdensome travel or living expenses away from home, Jamison said.

Currently the two existing renal transplant centers in northern California—at University of California at San Francisco and Pacific Medical Center, San Francisco—are experiencing long waiting lists, according to Stanford's application to the HSA.

No additional hospital facilities would need to be built to accomodate the new program, since the hospital has the necessary specialized resources, said Patricia Stone, the health care planner responsible for processing the application. Jamison said a transplant surgeon and a transplant nephrologist would be recruited and that transplants could begin as early as January 1984 if the application is approved.

March 31, 1983

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Among issues to be reviewed by the state agency are that the facility is medically and financially sound, and most important, that the project fulfills a health care need in the region, which is indicated in the application to be about 25 to 30 transplants a year.

The project would be a joint venture between the Department of Surgery and the Department of Medicine's Nephrology Division.

Stanford currently operates transplantation programs in hearts, heart/lungs, corneas and within the next few years, bone marrow.

"All of these programs complement each other, and the addition of kidneys would add to the research and instructional capabilities of the institution as well as improve patient care," Jamison said.

Research programs currently underway include efforts to use radiation to retard rejection, the body's natural response to "attack" and eliminate foreign tissue. This study is directed by Samuel Strober, chief of the division of immunology.

The heart and heart/lung transplant program, pioneered by Norman E. Shumway, chairman of the Department of Cardiovascular Surgery, is currently working with improved medication to control rejection while allowing tissue to heal. Cyclosporine is being used on an experimental albeit so far highly successful basis to control rejection of transplanted hearts. The drug, a fungal derivative, is being used for kidney transplant patients at other centers.

Stanford's existing nephrology program includes a hemodialysis unit, where about 40 patients undergo regular maintenance dialysis.

Jamison said that such treatment offers the sole alternative for some patients, particularly the elderly, but that transplantation offers the opportunity for a less restricted and more active lifestyle, despite the possibility of rejection.

Hemodialysis patients must spend two or three hours several times weekly immobilized while a machine removes waste products from the patient's blood.

He said even with the threat of rejection, transplanted kidneys usually are more effective than the dialysis machine.

mg4

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino (415) 497-6911 or 497-6645

Certificate of Need Filed for Stanford Hospital Modernization

STANFORD—

Plans for the modernization of Stanford University Hospital have been filed with state and local agencies for their review during the next several months.

Certificate of Need (CON) applications were filed March 30 with the California Office of Statewide Health Planning and Development in Sacramento and with the Santa Clara County Health Systems Agency in San Jose.

The CON process is required of hospitals seeking to renovate or expand their facilities, to ensure that a community need exists for the project.

The 400-page document includes financial feasibility studies, space plans, and extensive documentation of need for all aspects of the renovation and construction. It was prepared by the hospital's Office of Health Services Planning, in conjunction with the Hospital Modernization Project office and The NBBJ Group, an architectural and planning firm in Seattle and Palo Alto.

Included in the documents are financial and economic analyses and forecasts prepared by Amherst Associates Inc. of Walnut Creek.

The cost of renovation, new construction, equipment and fees is estimated to be about $114 million. The total cost will depend on financing conditions, but it is expected to be about $125.5 million.

The goal of the modernization is to upgrade the physical facility to meet the needs of modern medical care. Earlier studies have cited serious functional deficiencies that compromise the efficiency of the hospital and its future ability to provide quality patient care.

Because of inadequate space, the hospital has been unable to utilize all of its 663 licensed bed capacity. Some multi-bed patient rooms will be replaced with private rooms in the new construction. This will enable the hospital to accommodate a wider range of patient needs without adding to its licensed capacity.

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The number of beds will be increased only in the 25-bed neonatal intensive care unit, which will be remodeled to accommodate 31 beds. State and regional studies have indicated that the need for care of critically ill infants is increasing in the region.

Project Director Elvia Garwood explained that the project is designed to take place in three stages.

The first stage calls for finishing the Phase I building, an expanison opened in 1978 but never completed.

In the second stage, a four-story, 349,000 square foot diagnostic and treatment wing and eight new nursing units will be constructed. These will be located north and west of the present building, with a connecting atrium to the present facility.

The new construction will increase the number of private rooms available, allow existing nursing units to be updated and remodeled, and provide space for moving about 90 beds from Hoover Pavilion to the Main Center.

A new surgical suite with new operating rooms will be built, and several hospital functions, such as clinical laboratories, will be consolidated in the new space.

In the third stage of the project, existing space in the original 1959 building will be remodeled as newly constructed space becomes available to relocate services.

When the project is approved at state and local levels, construction on the first step of the renovation could begin as early as next spring.

According to Ron Hill, director of Health Services Planning, the agencies will conduct an initial review of the CON documents to determine if they are complete. Detailed reviews are expected to last through the summer. Public hearings may be scheduled at local and state levels as part of the review process.

In addition to the CON, the hospital is preparing an Environmental Impact Report which will be filed with the City of Palo Alto later this year.

In the meantime, The NBBJ Group and the modernization project staff will be working with hospital departments, faculty and community physicians, to develop detailed plans and equipment needs.

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NEAR-DROWNING VICTIM OK FOLLOWING HEROIC RESCUE BY FRIENDS

STANFORD—

The victim of a near-drowning incident is listed in stable condition at Stanford University Hospital (SUH) after a heroic rescue that reads like both a movie adventure and an endorsement for cardiopulmonary resuscitation (CPR).

Brian Miller, 18, is "doing well," according to Dr. Linda Bosserman, thanks to the immediate reaction of his eight friends who began administering mouth-to-mouth resuscitation after pulling him out of a river in which he was submerged for more than three minutes.

Bosserman said the immediate administration of CPR not only saved his life but also prevented any apparent brain damage.

"All the care we gave Brian was possible because of the early CPR treatment he received," Bosserman said. "Without that early care it is highly unlikely that he would have survived no matter what physicians did later."

Brian was admitted to the intensive care unit March 29, flown here from King City by Stanford's Department of Critical Care Transport. He was originally listed in critical condition because of potential complications of the heart and kidney and susceptibility to pneumonia, Bosserman explained.

However, Bosserman, a resident in medicine, said Brian was expected to be out of bed and walking by Thursday afternoon.

What Brian and his friends—all students at King City Joint Union High School—experienced in the remote, canyon-like area called the Shutins near King City, however, could easily have had a tragic ending.

It promised to be a great camping trip, recalled Brian's twin brother, Bruce, who explained the incident:

School was out for the week of spring vacation, and the weather finally cleared, making conditions ideal for the five-mile trek in from the road where the boys left their truck Monday.

Brian, Mitch Anderson, and Rick Bender were exploring caves near their campsite. The river had more than the normal amount of water in it due to the recent excessive rainfall, so the boys tied a rope around their waists as a precaution.

Suddenly, Brian stumbled and fell off a rock into the river. Mitch jumped in to grab him, only to be swept off by the current.

Back at the campsite, the rest of the boys heard screams. They ran to the caves to see Rick pulling Mitch out of the water.

Brian, however, was pinned under a rock. His head was submerged under water.

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2-2-2 Bruce said he does not remember diving in the river with a knife to cut his brother loose. He managed to drag Brian's 6-foot-3-inch frame onto a rock. He was blue, Bruce recalled, and was not breathing. He had no detectable pulse, and was unconscious.

Peter Anderson, who works as a lifeguard during the summer, began shouting directions on how to start mouth-to-mouth resuscitation.

Together with Keith Knott and Gill Latham, they tried to breathe life into the still body.

Meanwhile, Doug Latham ran the five miles out to the truck, and began to drive into town. When the truck broke down, he ran the last 12 miles to the nearest farm. From there, he notified the fire department, sheriff, and military ambulance.

Brian began to throw up shortly after his friends began the CPR treatment. Not until 15 long minutes had passed, however, did he begin to breathe on his own again. Once he came to, he fought his friends violently, activity doctors said helped keep him alive.

Everyone Doug notified about the crisis set out immediately in rescue vehicles. Because of the location, however, none could make it to the cave site. Finally, two military medics hiked in. Navigating their way across the rocks, one fell in the river and hurt his back. The other reached Brian, and together with Peter's assistance, pulled him onto firm ground.

Darren Bryant had begun sending out smoke signals from the campsite to attract attention. A helicopter passed overhead after about an hour, but didn't land. It finally landed shortly thereafter.

Brian was lifted into the helicopter and taken to the Fort Hunter Liggett Dispensary. There he received oxygen and intravenous fluids, and was then transferred to George L. Mee Memorial Hospital in King City.

"Everyone in town rallied around Brian," said his mother of her friends in the small community. "They prayed for him all night."

Brian's physicians at Mee Hospital decided he should be transferred to a better-equipped hospital.

"He was brought to SUH because we are able to provide round-the-clock intensive care services under specialized physician and nurse supervision," explained Dr. Alvin Hackel, head of the transport service.

Brian's father accompanied him on the plane, while the rest of the family drove up to Stanford. And they don't plan to return to King City, his mother said, until Brian can go with them.

"When I saw Bruce he said, 'Mama, we did all we could. Did we do enough?' " she continued. He did indeed.

"We learned CPR during our sophomore year in high school," Bruce said. "At the time we thought it was just something to know. I never thought I'd have to use it. With Peter leading and all of our knowledge put together, we were able to save my brother."

"I'm thanking God every minute," added his mother.

And meanwhile, back at Stanford Medical Center, Dr. Myer Rosenthal, director of intensive care units, thanked CPR training in the schools.

"Some states routinely require this training in high schools. It might be a wise idea everywhere," he said.

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GRANT TO HOSPITAL NURSING DEPARTMENT

STANFORD—

A grant to develop a research training program for practicing nurses has been awarded to Stanford University Hospital Nursing Services.

The three-year $600,000 grant from the Division of Nursing of the Department of Health and Human Services is the first such research training grant to a hospital nursing service department. Until very recently nursing research training was focused almost exclusively within university schools of nursing.

The project director is Duane D. Walker, associate director of Stanford Hospital and director of Nursing Services.

"We believe that nursing research is a powerful tool nurses can use to bring about changes in the delivery of health care," said Walker, "and research findings contribute to the scientific basis of nursing practice."

The Stanford nursing research program is directed at integrating clinical research as a part of nursing practice.

The research training will be designed for nurses who are daily involved in the care of patients. "They are in the best position to identify the problems that need study. They are also in the best position to collect data with the least disruption of patient care and to propose and implement solutions," according to Dr. Lois Welches, associate director of Nursing Services. She and Dr. Marianne Zalar, assistant director of Nursing Research, will administer the project.

Goals of the project are to develop educational programs in research methods, provide consultation support to nurses throughout the research process, and provide facilities such as research sites, libraries and data processing mechanisms. Research courses and seminars will be conducted for beginning and intermediate level nurse researchers.

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The training will be offered to practicing nurses from a consortium of eight Bay Area hospitals and a visiting nurses association, all located within a 35-mile radius of Stanford.

The consortium was established in 1980 under Walker's leadership.

The nine agencies in the Research Consortium of Hospitals are: Stanford University Hospital, Children's Hospital in San Francisco, Mount Zion Hospital in San Francisco, El Camino Hospital in Mountain View, Mills Memorial Hospital in San Mateo, San Francisco Veterans Administration Hospital, Palo Alto Veterans Administration Hospital, Children's Hospital at Stanford, and the Santa Clara County Visiting Nurses Association.

Nurses from each of these institutions can join together to conduct studies over a far larger study base than would be possible alone.

A major problem encountered in clinical research, according to Welches, is obtaining an adequate study sample, since the patient's stay is so short. Data collection in all of the consortium agencies will yield a far greater sample as well as enable the researchers to generalize findings.

For example, a research proposal was developed at Stanford to compare two methods of treatment for decubitus ulcers, or bed sores. Nurses have the primary responsibility for the prevention and treatment of decubitus ulcers. Many methods of care are available, but no definitive treatment has been identified.

Stanford nurses collected data on two alternative treatments and made recommendations based on healing time, nursing time, and cost factors.

The Research Consortium has expanded this pilot study and data is currently being collected simultaneously in six of the consortium agencies. Results based on the larger study may lead to a change of treatment policy and greater impact on quality of patient care.

The Research Consortium is the only group of its kind in the country. "Hospitals throughout the country have asked to join," said Walker, "but more cannot be accommodated during the pilot phase of the project." He hopes, however, that the group will serve as a model for others.

Walker is committed to the need for nursing research within the hospital setting. "It is essential that we critically and systematically examine our practice if the optimal quality of care to patients is to be ensured," he said.

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NEW GROUP FORMED TO CHECK CHARGES OF RESEARCH FRAUD

STANFORD—

A new committee to evaluate allegations of research fraud has been established at Stanford University School of Medicine, Dean Dominick P. Purpura announced in a March 4 letter to faculty members.

Though instances of verifiable fraud have remained "vanishingly small" nationally, Purpura said, "even a rare instance of scientific fraud damages science as an intellectual enterprise, violates expectations of fundamental trust and diminishes all who take special pride in a commitment to the pursuit of truth and excellence."

"It is sufficient for these reasons that we undertake a program for dealing with allegations of academic fraud swiftly, fairly, and honorably," he said.

Both the American Association of Medical Colleges and the National Institutes of Health have, in recent months, urged medical schools nationwide to establish such committees in an effort to curb research fraud.

While a protocol for disciplining an errant researcher has long been established at Stanford, evaluating the legitimacy of allegations has been "tortuous" in the past, Purpura said. "We now have a framework within which we can examine and resolve allegations swiftly."

Anyone who believes an act of academic fraud has taken place at the medical school should promptly contact the dean, who will notify the provost and president of the university, and refer the matter to the "Committee on Ethical Scientific Performance" for preliminary study, Purpura said.

A summary of the charge and results of the committee's findings are to be forwarded to the provost within four weeks of the initial allegations. The president then will determine whether formal charges should be filed in accordance with the process set forth in Stanford's long-standing "Statement on Faculty Discipline."

Both the dean's and president's inquiries will be confidential, to be made public or disclosed to research sponsors at the discretion of the president.

Members of the Committee on Ethical Scientific Performance are: Jack Barchas, professor of psychiatry; Roland Ciaranello, associate professor of psychiatry and chairman of the school's faculty senate; John Collins, professor and chairman, department of surgery; Stanley Falkow, professor and chairman, department of medical microbiology; David Korn, professor and chairman of the department of pathology; and Kenneth Melmon, professor and chairman of the department of medicine.

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PATIENTS SHOULD PLAY A PRIMARY ROLE IN DECISION TO "PULL THE PLUG"

STANFORD—

Adult patients slipping toward death in hospital intensive care units need help, but they must be treated as adults, not children, cautions a hospital chaplain.

When the kidneys, heart, and lungs begin to fail and death is imminent, there is often a temptation to make decisions for the patient, wrenching from him the last shreds of autonomy, said Ernle Young, chaplain at Stanford University Hospital, and lecturer in medical ethics at the School of Medicine.

"The form of the relationship between care-givers and patient ought not to be 'parent-child' but 'adult-adult,' Young said in a public lecture Wednesday evening (March 23). "This means that paternalistic decisions on the part of caregivers ought to be the exception rather than the rule. And the exception always requires justification."

In the last in a series of community lectures on progress and ethical dilemmas of intensive care, Young focused on the dying patient, and the ethical and emotional issues that permeate his care.

"Even though the patient may not be able to speak or to articulate anything, one of the skills that has to be acquired in the intensive care setting is learning to communicate with people who can't verbalize what they want to say," Young said in a related interview.

"One of the things you do is focus on nonverbal forms of communication. Another thing you can do is intuitively understand what they are trying to say, and express it for them. You say, 'is that how it is?' and you get a signal—maybe a squeeze of the hand—that says 'yes, that's what I'm feeling.' When the person is conscious, all of these decisions about life and death really do need to be checked out with them."

In theory, permitting a conscious, competent patient to decide when artificial life support should be discontinued "sounds fantastic, but in practice is often very difficult," Young said.

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"Some of us here tonight were up in the adult ICU earlier today where a lady, who was still conscious and who was party to the decision that aggressive treatment should be withdrawn, is now dying.

"It is a very much more difficult thing for caregivers and family alike to (be with) such a person in her dying than it would be if she were unconscious and out of it altogether," he said. "She is staring death in the face with enormous courage and peace."

When the patient is an infant or unconscious, and can't be consulted, the thorny decision shifts to the family and health care team. Though the family should assume an important advisory role, the physician and other members of the critical care team, must take ultimate responsibility for deciding when to halt life support, Young said.

Such assertiveness on the physican's part might be considered paternalistic, Young admitted, but he added that the "irreversibility of disease is a uniquely medical decision."

But even the medical decisions are not always clear cut, he said, describing the case of a man hospitalized for internal bleeding, who underwent 16 operations during his 14 months in Stanford's intensive care unit, and acquired a bill of $750,000 before his death.

"How long do you keep on going before you decide, 'Okay, we've given it our best shot, the time has come to quit?' " Young asked. "In this case, the patient died before we quit—14 months and much suffering later."

Families who fear guilt feelings after assenting to termination of aggressive life support for a person who has no chance for recovery need to realize that "it's not the withdrawing of the support that kills a person, it's the underlying disease process," Young said.

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HOSPITAL AUXILIARY CELEBRATES LANDMARK

STANFORD—

The Auxiliary of Stanford University Hospital has passed the $1 million mark in contributions to the hospital since 1960. The record number of gifts was reached with this month's approval of a $28,000 project to fund *Lifeline*, a home emergency response program for the elderly and chronically ill.

Celebration of the landmark highlighted this year's Auxiliary reception, given Monday evening at the Faculty Club by the board of directors and administration of Stanford University Hospital (SUH).

"I think it's very special to have given $1 million," said Auxiliary president Dee Gaynor to her co-members on accepting a plaque from SUH director and executive vice president Sheldon King. "We'll hang this proudly," she said.

Most of the money the Auxiliary dispenses is raised at the hospital gift shop, and almost all of the gifts are for patient care, approved upon department request. Examples of gifts this past year were a fluorescent microscope for the Department of Pathology, Social Services' patient care emergency funds, and two fetal heart monitors.

"We've worked very hard to get the sorts of things we want for the hospital," Gaynor concluded. *Lifeline*, King noted, will help keep the elderly safer at home and out of nursing homes longer. Components of the community service system should arrive at SUH within a month.

Gaynor, who has served as Auxiliary president for 1982-83, also received the gift of an antique white brass cooking pot from Korea, called a "shinselo," in honor of "her quick wit, compassion, and ability to forge ahead enthusiastically," as was inscribed on the pot.

Gaynor praised the efforts and cooperation of all Auxiliary members, encouraging them to lend the same support to her successor, Donnie Ellington, for the coming year. The total number of volunteer hours as of March, 1983, was impressively tallied at more than 1.6 million.

Other speakers at the well-attended event—which included cocktails, hors d'oeuvres, and a background of live music by the Benji Austin Quartet—were Dr. Donald Kennedy, chairman of the SUH Board and president of Stanford University; and Dr. Lawrence Crowley, vice president for medical affairs and president of the hospital.

Kennedy remarked, "I am here to extend the university's deepest gratitude and my own to all of you for all you do for the hospital."

The March 21 event was arranged by the Department of Community Relations, under the direction of Jeanne Kennedy. Buttons and balloons commemorating "our Auxiliary—one in a million" were distributed. This was the third time a reception was held for the Auxiliary, the first having been in 1980.

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RODNEY MILLION NAMED CHARLES E. CULPEPER VISITING PROFESSOR

STANFORD—

New combinations of treatments for aggressive cancers of the head and neck will be highlighted in a lecture given March 31 by Rodney Million, the 1983 Charles E. Culpeper visiting professor at Stanford University School of Medicine.

Million, professor of radiology and director of the division of radiation therapy at the University of Florida College of Medicine in Gainesville, will speak on "The Results of High Dose Radiation Therapy and Surgical Salvage for Carcinoma of the Pyriform Sinus" at 5:15 p.m. in room M-112.

Although head and neck cancers are responsible for only seven percent of all cancers, they can be among the most vicious, said Malcolm Bagshaw, chairman of Stanford's department of radiology.

Surgery to eradicate the cancer can require cutting through the jawbone, or removing the larynx.

"Any supplemental treatment, such as radiation therapy, that can reduce the extent of the surgery is very useful," Bagshaw said. "Dr. Million is a distinguished researcher who has made great contributions in this area—demonstrating how radiation and surgery can work together to eliminate the cancer. He also has made important contributions in identifying some of the adverse effects of radiation, particularly on the eye."

Million will deliver three lectures, all open to the public, during his three-day visit to the Medical Center. "The Effects of Radiation on the Normal Eye and Optic Nerve" will be held on Wednesday, March 30 at 5 p.m. in room M-106, while "Experience with Preoperative Radiation in Rectal Carcinoma" will take place on April 1 at 8 a.m. in room S-092.

A 1954 graduate of Indiana University Medical School, Million has been a faculty member of the University of Florida College of Medicine since 1964, and has published more than 40 papers on cancers of the head and neck. In 1979 he was awarded the Grubbe Gold Medal award by the Chicago Radiological Society and, in 1982, garnered the Distinguished Alumnus Award from the M.D. Anderson Hospital and Tumor Institute in Texas.

This is the third year of a five-year rotating visiting professorship at Stanford sponsored by the Charles E. Culpeper Foundation of New York. The departments of surgery and medicine hosted the first two scholars.

The Foundation primarily supports health, education, science and technology programs, in addition to offering grants to support arts and letters, youth activities, administration of justice and Native American affairs.

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(Editors: The following is a joint release from Stanford University Medical Center and the Palo Alto Medical Research Foundation. Photos available if not included.)

PATIENT HEARTS STUDIED IMMEDIATELY AFTER SURGERY

STANFORD—

A blend of modern technology and cardiovascular research will be giving doctors a new look at the heart in much the same way that a dynamometer helps mechanics analyze engine function.

Dr. D. Craig Miller, associate professor of cardiovascular surgery at Stanford University School of Medicine, recently received a three-year, $491,334 federal grant to study the changes occurring in cardiac function immediately after open heart surgery.

The study is a collaborative effort with the Palo Alto Medical Research Foundation (PAMRF), where Dr. Neil B. Ingels Jr., Ph.D. and engineer George Daughters earlier developed the underlying technology for the research.

"It's difficult to believe, but we still are ignorant of certain changes in left ventricular function and bioenergetics which occur immediately following cardiac surgery," Miller said.

"We can partially compensate for the unknowns by extremely diligent monitoring. But better knowledge of these changes and responses to different drugs and interventions should translate eventually into better patient care," he added.

Specifically, Miller said, the study might answer questions about the optimum dose of many different drugs to be administered to patients in the crucial hours after surgery.

"We will be taking a precise look at the blood volume and pressure in the left ventricle," where blood is propelled from the heart out to the body, said Miller.

"Additionally, we will be measuring 'on line' coronary blood flow and the amount of oxygen used by the heart," he added.

Two "gadgets," actually serious technological advances both refined at PAMRF, are central to making the study possible, Miller said.

First is an X-ray machine which can be wheeled to the patient's bedside in the intensive care unit shortly after surgery. This device was modified specifically for the study to incorporate high resolution and high power in a large screen format, while simultaneously retaining sufficient portability and compactness to be used at the bedside.

Unlike traditional X-ray—which requires cumbersome equipment to record the picture on film—the technique employed in the current study permits a series of pictures to be recorded on a 10-inch video camera which is linked to a high quality video disk drive unit.

The data on the video disk, which includes blood pressure and other data as well as images, is later transferred to a permanent (dedicated) computer system.

A total of 1,200 frames, taken at the rate of 30 per second, can be recorded and eventually transferred to the main computer system for analysis.

Studies can be carried out every four to six hours after surgery for the first 36 hours and then again after the patient recovers.

"This enables us to track the beating of the heart muscle, since we will be able to see movement much like a television or motion picture," Miller explained.

But tracking the precise motion of soft tissue such as the inside of a heart is impossible without using a dye or other material injected directly into the left ventricle. So the researchers have developed a second technological aid. This involves a series of seven tiny, almost microscopic markers, which are placed in the wall of the heart during surgery.

Made of a rare metal called tantalum, these markers are visible in the x-ray pictures, and will not be felt by the patient, Miller said.

The pictures actually will be images of the markers moving, but by being placed strategically, they will offer an accurate blueprint of the changes in the left ventricle's size every 1/30 of a second, Miller said.

The markers have already been placed during the past eight years in heart transplant and other patients at Stanford, using bioengineering and computer techniques developed by Ingels and Daughters at PAMRF.

In the current tests, Miller said he hopes to record data from one patient per week undergoing either cardiac valve replacement or coronary bypass grafting. These patients will have been fully briefed about the study and will have signed a consent form agreeing to participate in the study.

"What we are learning may be analogous to the information which a mechanic receives from a dynamometer. We don't anticipate that these studies will ever become a routine clinical test, but as a research tool, it will enable us to gain physiological information never before possible in man immediately after surgery. This should improve care for open heart surgery patients everywhere in the future."

"In the past we have not been able to study precisely and instantaneously what is occurring in the left ventricle immediately after surgery. Such information could only be gained by invasive cardiac catheterization techniques which simply aren't feasible to perform on patients in the intensive care unit every few hours during the first two postoperative days," Miller explained.

The grant from the National Heart, Lung and Blood Institute includes a $75,972 per year subcontract to PAMRF for bioengineering support and mathematical analysis of the myocardial marker data.

Collaborators in the current study include Miller's colleagues in the Stanford Department of Cardiovascular Surgery, including Dr. Edward Stinson, Dr. Philip E. Oyer, and Dr. Edwin Alderman, a cardiologist.

Other researchers in addition to Ingels and Daughters are Geraldine Derby, research nurse; Carol W. Mead, senior research assistant at PAMRF; Anne Schwarzkopf, Stanford research assistant, and cardiology fellows Dr. Steve Oserle and Mike Fowler.

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(Editors: Please hold for release until March 24, 1983. Photos available.)

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STANFORD PROFESSOR WINS AWARD

STANFORD—

Dr. Saul A. Rosenberg, professor of medicine and radiology at Stanford University School of Medicine, is the first recipient of the Department of Medicine's Albion Walter Hewlett Award.

Dean Dominick P. Purpura announced the award at this morning's (March 24) medical grand rounds.

Rosenberg "has been recognized by his colleagues as the epitome of the academician dedicated to discovery in the biological sciences and to the sensitive and scientific application of such new knowledge in the effective treatment of human disease," states the award certificate.

The award was established last spring by the Department of Medicine to honor academic physicians who have advanced scientific knowledge and applied it to patient care. Dr. Albion Walter Hewlett was an internationally known professor of medicine and leader in clinical investigation at Stanford from 1916 until his death in 1925.

"There is no greater honor than to be recognized by your own," Rosenberg said. "Nothing is as important, appreciated, or difficult as being recognized by your own family, especially those who are not in your precise field. It gives me a special sense of satisfaction, as well as a special challenge to be the appropriate model for this award so the tradition can continue."

Rosenberg, a leading oncology expert, has received international acclaim for his research on Hodgkin's disease. He and Dr. Henry S. Kaplan, D'Ambrogio Professor of Radiology—both pioneers in the field—have made dramatic advances in the diagnoses and treatment of the disease, which have led to better than 80 percent survival at five years for all stages of the disease. Seventy-five percent of the patients are permanently cured, according to published figures.

Rosenberg was among those who spearheaded the development of oncology as a specialty of internal medicine. He is chief of the Division of Oncology at Stanford, which was established in 1965. He is also director of the Debbie Probst Oncology Day Care Center, a treatment center for cancer patients, which opened in 1978.

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Rosenberg has also received the Henry J. Kaiser Award for Excellence in Teaching, and was the first recipient of the Arthur Bloomfield Award for Excellence in Teaching in Clinical Medicine. Medical education is one of his primary concerns—he took a year-long sabbatical to study the problems of premedical students competing to get accepted to medical school.

A native of Ohio, Rosenberg received his undergraduate degree and medical degree at Western Reserve University.in 1953. The first time he applied to medical school he was rejected; the second time he was told he could come work in a laboratory for a year, after which his application would be reviewed. The laboratory was involved with radiobiology research, which spurred his interest in radiation as a treatment method for malignancy. He also enjoyed internal medicine during medical school. Upon graduation, he decided the way to combine his interests was to specialize in oncology. But first, he had to create the specialty.

He trained at various hospitals that offered radiation therapy and cancer programs, and came to Stanford in 1961 to work with Kaplan. Their mutual interests in radiation therapy and cancer led to their research in Hodgkin's disease. And the support of the Department of Medicine, Rosenberg said, led to the development of the oncology specialty.

"Perhaps an equal accomplishment to the research in Hodgkin's disease is that of establishing the field of medical oncology as a respectable, successful field in internal medicine. I have had a major role in that at Stanford and we have been one of the strongest programs in the country. On a national scene, I've probably helped more people by helping establish this field and training physicians in it," Rosenberg said.

The Hewlett Award consists of a certificate, a silver medallion depicting several figures from a sculpture symbolizing the award, and funds with which to buy books for the Hewlett Library.

The sculpture, housed in Stanford University Hospital's main lobby, was unveiled last spring. It depicts "man—his isolation intensified by disease—and the evolution of his integration with society through the intervention of the physician," according to Dr. Kenneth Melmon, chairman of the department of medicine.

All local members of Hewlett's family, including son William; daughter Louise Nixon; and grandchildren Walter, James, and William Hewlett took part in the day's ceremonies.

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WOMEN AND HEALTH: PUBLIC LECTURES

STANFORD—

A Friday noon lecture series on *Women and Health* will be presented this spring at the Stanford Medical School by the division of family medicine.

Open to the public free of charge, the scheduled lectures are:

- April 1: "Transforming Stress into Creativity," with Margaret Buck, John F. Kennedy University;
- April 8: "Living with Questions," with Alla Bozarth-Campbell, Episcopal priest, gestalt therapist, feminist poet;
- April 15: "Women's Health Movement," with Sheryl Ruzek, M.P.H., Ph.D., postdoctoral research fellow in epidemiology, U.C. Berkeley, and core faculty, Women's Roles in Health and Healing, U.C.S.F.;
- April 22: "Abusive Images of Women in Mass Media and Pornography," a presentation by WAVPM (Women Against Violence in Pornography and Media);
- April 29: "Women and Women's Health Care: Legal and Professional Barriers," with Rosemary Mann, C.N.M., teacher of women's health care and law student;
- May 6: "Maternal Alcoholism and Family Life," with Genevieve Ames, Ph.D., Fellow NIAAA, medical anthropologist, teacher and researcher, Alcohol Research Group, School of Public Health, U.C. Berkeley;
- May 13: "Barriers to Health Care for Older Women," with Donna Ambrogi, managing attorney, Bay Area Law Center on Long-Term Care, coordinator of Care Giver Task Force, Older Women's League;
- May 20: "Sex Role Development," with Julie Olsen Edwards, director, department of early childhood and family life education, Cabrillo Community College;
- May 27: "Women and the Nuclear Arms Race," with Dr. Deborah Gordon, family physician, co-president, Redwoods chapter, Physicians for Social Responsibility.

A discussion group with case presentations will be held for enrolled participants following each lecture, from 1:15 to 2 p.m., with the speaker, as well as research assistant Marita Grudzen, Jeanne DeJoseph, C.N.M., Ph.D., and Dr. Judith Martin from the Division of Family Medicine.

The lectures will be held from noon to 1 p.m. in room M114. For further information call (415) 497-7043 between 8 a.m. and noon, or (415) 497-6431 from 2 to 5 p.m. weekdays.

3-21-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

WEIGHT-LOSS CAMP FOR TEENS

STANFORD—

Stanford's behavioral medicine program this year is again offering a summer weight-loss day camp for teen-agers, ages 12-17, on the University campus.

Encouraging campers to take charge of their own weight management, the program will teach them to lose weight safely through eating and exercise patterns that promote permanent weight control.

Intended specifically for teen-agers, the camp will allow them to have fun and develop skills while slimming down. Included will be group seminars in behavioral change techniques and nutrition education; aerobic activity, tennis, swimming, and other recreational activities; group lunches on campus; and weekly seminars for parents.

(An important feature of the camp is consistent weight-loss management achieved through the intensive day program combined with parental support at home.)

Faculty will include members of the behavioral medicine program of the School of Medicine.

Two sessions will be offered, and a fee will be charged. The first session will run from June 20 through July 14; the second from July 18 through August 11. Both will take place Mondays through Thursdays, from 9 a.m. till 1 p.m. Campers may register for one or both sessions.

Early enrollment is recommended, as space is limited. For further information call Dr. Mary Southam, at (415) 497-5065.

3-21-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

HARVARD SCHOLAR TO DISCUSS DIZZINESS

STANFORD—

Understanding dizziness will be the topic of the seventh annual George S. Kiperash Lecture on Thursday, March 24, at Stanford University.

The lecture, "Labyrinthitis and Endolymphatic Hydrops, Cause and Effect," will be delivered by Dr. Harold Schuknecht, professor of otology and laryngology at Harvard Medical School.

Labyrinthitis, or infection in the middle ear, is among the leading causes of dizziness, explained Dr. Martin Hopp, assistant professor of otolaryngology/head and neck surgery at Stanford. Another leading cause, endolymphatic hydrops, or the enigmatic "Meniere's Disease," is characterized by severe recurrent dizziness, he said.

The public is welcome to attend the lecture, sponsored by the Division of Otolaryngology/Head and Neck Surgery, to begin 8 p.m. in the Forum Room, Meyer Library on campus. Continuing medical education credit is available.

Schuknecht is a well-known ear disease specialist who has been instrumental in developing new surgical treatments for dizziness disorders. These treatments, now available as well at Stanford University Medical Center, will also be discussed in his lecture.

A native of South Dakota where he received his bachelor's degree in 1938, Schuknecht had his medical training and residency at the University of Chicago, where he later served on the faculty. He served at the Henry Ford Hospital in Detroit from 1953-61 before joining the Massachusetts Eye and Ear Infirmary (Mass. General Hospital), where he is now chief of otolaryngology.

Schuknecht has been the president of four otolaryngology societies, served on the editorial boards of five professional journals, and published widely throughout his career.

The Kiperash Lecture was established to bring national and international figures to Stanford and to enhance continuing education and residency training. It is named after George Kiperash, Jr., a former Stanford patient and native of San Jose.

For further information regarding this year's lecture, call (415) 497-6891.

3-21-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911 or 497-7591

THE SOCIALIZATION OF MEDICAL STUDENTS

STANFORD—

The desire to be a good doctor—warm, sensitive, caring—is part of every medical student's dream. Yet students at Stanford University School of Medicine say most medical schools do not encourage the development of these very qualities. In fact, many students learn to suppress, and even eliminate them during their medical education.

Now, for the first time since the Abraham Flexner report on medical education in 1910, medical educators nationwide are questioning the process that leads to the denial of the emotional side of medicine by its practitioners.

The trend starts early on, according to Dr. Saul Rosenberg, professor of medicine. During a year-long sabbatical researching the effects of the "pre-med syndrome," he found that in their competitive quest to get accepted to medical school, high school and college students often sacrifice liberal arts courses for more science courses, and extra-curricular activities for more hospital or research laboratory work.

And it continues on into internships and residencies, says Dr. Harvey Weinstein, assistant clinical professor of psychiatry, a time when physicians-in-training—no longer students but not yet fully accepted as doctors by the medical community—have no group support but more than their share of responsibility for patient care. With strenuous work schedules, often forcing them to stay up for days on end and controlling their lives, studies show interns and residents are the most susceptible for impairment.

It's the time in between, however, he continues, the average of four years spent in medical school, that the qualities that will last through the students' medical careers are planted and developed. They come to medical school, considered the cream of the crop and used to excelling in all they take on, and suddenly find themselves at the bottom of medicine's hierarchical ladder. Faculty treat them as if they know nothing, and the relationship, many say, is like that of a parent and child.

"Medical school and training is regressive. It pushes people backwards in time in a sense, into a situation where they're constantly told they don't know enough and have to be taught," Weinstein says.

"There's a terrible fear of not being a good doctor. Everyone wants to be one but no one knows what it is exactly," says Nancy Harris, fourth-year student.

And so, to ensure their chances of being a "good doctor," students give up just about all extra-curricular activities, substantially limit relationships, delay having children, and submit themselves to the stresses of too much to do and learn in not enough time. Faculty encourage them to "eat, sleep, and breathe medicine."

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The academics, students agree, are the easier part of medical education. It's learning how to be a doctor—the socialization process—that makes medicine one of the most difficult careers.

"Medicine is taught as a left-brain, scientific, factual profession," says Dr. Peter Finkelstein, who completed his psychiatry training at Stanford. "The quality of individuals' outside lives, and their internal thinking doesn't hold much value. In medicine you get credit for knowing and doing everything, and not for feeling."

"Most physicians learn to shut down their feelings," says Michael McGee, fourth-year student. "Their emotions are in a little box in a corner of their minds, unavailable to them. They lead their lives mechanized, they know the techniques of their profession, they're consumed by the amount of time they spend at it. They haven't integrated the meaning of their profession with their work.

"Here we are, learning to deal intimately with peoples' lives. So, we should be humane, caring and sensitive. But when do you learn to start caring? From a few lectures in a course? You learn how to be sensitive and caring from the environment. Here you see very uncaring, status- and hierarchy-oriented doctors. It's the whole medical machismo syndrome of being the superhuman, all-knowing, tough doctor. If you're going to care for other people, the reasoning goes, you can't be weak. And feeling is considered weak."

Students begin to pick up on the machismo from day one.

"The first thing you do in medical school is walk into the anatomy lab," describes Sally Rubenstone, fourth-year student. "No one ever tells you there are going to be 40 dead bodies in there. It's shocking. But no one says that, so you think you can't show that it bothers you. Then you just start slicing these bodies open. Never once during the entire course does someone say anything. You learn from early on you're not supposed to react."

"Students pick up a lot of norms right away: a preoccupation to master cognitive material, cooperation, teamwork, good spirits," says Finkelstein, who has been observing students' responses for four years as part of a research project.

"Superficially, someone looking in on an anatomy laboratory may think things are okay. There's a lot of things going on they don't feel comfortable with, but they hesitate to express these feelings," he says. It may be that the process of medical training promotes 'psychic numbing,' so to speak."

This psychic numbing—not connecting what students see with what they feel—is propagated by not giving students the opportunity or the time to assimilate their experiences, Finkelstein adds.

"To truly produce a reflective, deep physician, the level of assimilation needs to be much greater. There is no opportunity to do that, he explains.

"The enemy of emotion is lack of time," says Bruce Bowman, a resident at Stanford University Hospital.

After two years of being overwhelmed with facts, students switch course and are thrust on the hospital's units where for the first time, they deal directly with patients. This, they say, is a whole new ball game.

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On one hand, many patients look up to the students as doctors, responsible for their care. But again, as prescribed by the hierarchy, the students are repeatedly told by the powers above they know nothing, Harris explains. They are grilled on facts in front of patients, other students, interns, residents, and attending physicians, often humiliated and intimidated if they do not know the answers to questions they're asked.

"Learning how to assume that doctor role—when to enter a room, where to stand, how to present a case—no one helps you at all," she says.

Adding to their dilemma is justifying patient care, when they may not agree with the prescribed treatment.

"The hardest thing was to deal with my emotions about moral and ethical issues," Harris says. For example, she recalls, she once helped care for a 94-year-old man with terminal pneumonia. "He came in at 5 p.m. one day and was dead by noon the next. The doctors decided to give him round-the-clock enemas to lower his potassium levels. I was the only doctor who stayed with him practically around the clock. He was moaning, wimpering, pleading with us to stop and let him die. Every time you touched him he shrieked in pain from the pneumonia. I had to get an IV in him. I was sickened by the whole thing."

"Is it right to have 15 people in white coats tear open a patient's curtain, tell him to undress and do all sorts of dehumanizing things?" Harris asks. "Is it right to tell someone he's dying of cancer, with everyone standing around taking notes? As a medical student you see things you don't necessarily like. Suddenly you don this white coat and you see the same things and you're caught in between. You don't know whether you should join the club and start treating patients this way—whether it's right or wrong. If you back away you're told you aren't being aggressive. To be aggressive—to be willing to try any and every procedure—is the ultimate compliment."

These types of emotional dilemmas may be verbally suppressed by most students, but they surface in many other ways, such as depression, insomnia, loss of appetite, and anxiety, Weinstein says.

"Feeling bad about some things is normal, but there's no provision throughout medical school to deal with those feelings. Students are expected to treat the remarkable in a casual way. It's okay to feel anxious about an exam, but not about illness or death," Finkelstein adds.

To work these emotions out, students say, they have to go to outside resources such as friends and family. Up to one-fourth of each class seeks professional help at some point during medical school, Weinstein says. Within the school, there is little help.

"I have been in a number of traumatic situations. I have told young people and old people they have a disease from which they'll probably die. I've gone through the grieving process with hundreds of people. Yet I can think of only two times in almost four years that someone has asked me how I feel," Rubenstone says.

"I've asked other students and doctors who I know have to go tell someone they're going to die, for example, how they are. They always reply they're just fine, when they're obviously not fine. But if you ever wince in any way, if you come out of a patient's room and say it was heavy, the response is that you'd better get used to it.

"I don't want to get used to it. I want to be able to deal with it effectively. If you shut down your feelings, that's it. But that is what is demanded in medicine. It's an occupational hazard. This profession promotes, sustains, and supports shutting down your feelings, and that leads to impairment," she concludes.

Some efforts are being made to help students deal with the emotional side of being a physician. On a national scale, the Association of American Medical Colleges is conducting a three-year study on medical education. Preliminary reports, and regional hearings and symposia held by medical educators in response to the study, have discussed ways that medical education could be humanized.

At Stanford, a Committee on Well-being for Medical Students and Housestaff (CWBMS) was established in 1978 to address some of the socioemotional aspects of medical education and training. The goal, Weinstein says, is to positively influence the learning climate.

To help students with the massive amount of resource information on medical school topics, such as clerkships, internships, and national boards, a room called Broca's Area was established. All such information is available there.

Students have formed support groups that meet once a month. The meetings are "intense," students say, giving them a chance to discuss their feelings about what they're experiencing. Unfortunately, only about 45 out of about 340 students particpate.

In response to a need established by the CWBMS, a course titled "The Human Costs of Medical Education" was offered for the first time in 1982. It was designed to let students know they are not the only ones experiencing rough times, it's all right to feel what they may be feeling, what they may go through farther along in their training, and ways to cope with potential problems, Weinstein describes. Despite overwhelming effort and enthusiasm from faculty and community physicians, the course was cancelled during 1983 because only a few students came.

Weinstein, who headed up the faculty for the course, speculated that it failed because many students may not admit the need to attend such a course. "You have to feel okay about not feeling okay to find a place to go for help," Rubenstone says. Others, Weinstein continues, may not have wanted to spend what may have been their only free afternoon in yet another course. Other faculty say the course simply "got the shaft" by the curriculum committee because of the time slot it gave for the course to be held.

"The faculty as a whole has just not committed itself to dealing with the emotional side of medical education," Weinstein says.

And while they sympathetically listen to concerns with which students find themselves struggling, their response often begins with "When I was in medical school. . .," followed by a fond recollection of what at the time was a horror situation.

This attitude may be due in part to the fact that many physicians view the socialization process as somewhat of a hazing. The underlying thought seems to be if they could get through it and survive, so can today's students.

But is this the best way to experience medical education? Should students be taught to deny their feelings and be "tough"? The mere fact that physicians are now publically vocalizing their doubts about the process, which has never happened before, is a big step forward, says Dr. John Steward, associate dean of student affairs.

"Figuring out what to do to change the situation is not nearly as difficult as understanding the problem completely,"Finkelstein adds.

"If you learn to deal with your emotions and take care of yourself," McGee sums up, " you have a lot more to give to your patients and other people. And that is what being a doctor is all about."

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STUDY ON EFFECTS OF SPACE TRAVEL SEEKS VOLUNTEERS

STANFORD—

Healthy men and women aged 30 to 50 are needed to participate in a study relating to space travel and blood pressure regulation in Stanford's department of endocrinology.

According to postdoctoral fellow Michael Ash, astronauts, upon returning to the earth's gravity after a period of weightlessness, may experience a fall in blood pressure when they stand upright.

"We are conducting studies in which volunteers sit in a warm pool, followed by a day of bed rest, to simulate the effect of weightlessness," he said. When participants arise, researchers will monitor pulse, blood pressure and blood chemistry, while testing ways to anticipate and prevent low blood pressure.

Volunteers will spend 48 hours in the study, conducted at Stanford University Hospital and affiliated facilities. They will receive, free of charge, a complete physical examination and laboratory test screenings.

Subjects are needed beginning March 21. For further information or to volunteer, call (415) 497-6675 between 8:30 a.m. and 5 p.m.

3-15-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

CULTURAL DIVERSITY: A MEDICAL WORKSHOP

STANFORD—

A multicultural health care workshop will be presented Saturday, March 26, by Stanford's division of family medicine and the South Bay Area Health Education Center (AHEC).

The workshop, developed by medical anthropologist and lecturer Elois Ann Berlin, Ph.D., is designed to enhance the skills of primary health care providers in the delivery of culturally sensitive health care.

The morning session will focus on the ways in which the health beliefs and practices of Southeast Asian refugees are relevant to health care delivery. The session will be followed by a catered Vietnamese luncheon.

In the afternoon, discussion will center around the influence of the Hispanic population's health behavior and belief systems on health care. The workshop, which will run from 8:30 a.m. till 5:30 p.m. in room 204, CERAS Hall, main campus, concludes with a Fiesta and live Latin music.

The workshop is an extension of the multicultural clinical teaching program initiated in the fall of 1982. It will accent an appreciation of the refugee and migrant experience, the transition to U.S. lifestyle, and the ways in which minorities are perceived.

Faculty include Dr. William Fowkes, Jr., chief and associate professor in family medicine; Dr. Thuan Duong, a resident at the San Jose Health Center; Virginia Fowkes, F.N.P., M.H.S., director of the Primary Care Associate Program; Berlin; Dr. Count Gibson, professor and chairman of the Department of Family, Community, and Preventive Medicine; Marita Grudzen, preceptorship coordinator in family medicine; Dr. Carlos Inocencio, a resident at the San Jose Health Center; and Dr. Gene Levitz, community physician.

Also Leona McGann, M.S.W., M.P.H., assistant professor in family medicine; Dr. John Radebaugh, clinical associate professor in family medicine; Dr. Eleanor Segal, lecturer in family medicine; Ruth Stark, F.N.P., M.H.S., director of the Women's Health Care Training Project; and Esperanza Garcia Walters, R.N., M.P.H., director of the South Bay AHEC. The musicians and caterers will also share their experiences.

The workshop is approved for continuing medical education credit through Stanford's office of postgraduate medical education. A registration fee includes educational materials and lunch.

Pre-registration is required. For information and to register, call (415) 497-7284.

3-14-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

COMMUNITY INVITED TO HEAR GUEST LECTURE AT MEDICAL SCHOOL

STANFORD—

Dr. Paul Leitman, director of the division of clinical pharmacology at Johns Hopkins University, will present the fifth Pfizer Lecture in Clinical Pharmacology Monday, March 21, at the School of Medicine.

In his lecture, entitled "Aminoglycoside Nephrotoxicity—Clinical and Biochemical Aspects," Leitman will summarize his research findings, which have both immediate and future implications in the use of aminoglycoside agents.

Leitman, who has both M.D. and Ph.D. degrees, holds the Burroughs Wellcome Chair in Clinical Pharmacology at Johns Hopkins. He is a leading authority in the area of aminoglycoside nephrotoxicity, a significant complication of therapy in many patients requiring these important antimicrobial agents.

Leitman and his colleagues have performed careful clinical studies examining the incidence of this complication and comparing the incidence with various aminoglycosides and combinations of antimicrobial agents. They have identified a number of clinical and laboratory variables which are useful in predicting the likelihood of aminoglycoside toxicity in the clinical setting.

At the biochemical level, Leitman and his colleagues have studied some of the biochemical changes induced in kidney cells by the aminoglycoside antibiotics which may be important in mediating their nephrotoxic effect.

The Pfizer Lectureship, started in 1978, is sponsored by Stanford's division of clinical pharmacology, and funded by Pfizer Pharmaceutical, Pfizer Inc. of New York City. Previous speakers have included Drs. Robert Lefkowitz, Ferid Murad, Daniel Nebert, and Peter Goldman.

This year's lecture, open to members of the medical community and the public, is jointly sponsored by the divisions of clinical pharmacology and nephrology. It will begin at 4:30 p.m. in room M114 of the Medical Center.

3-14-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
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NEONATAL NURSERIES PAVE THE ROAD TO NORMAL LIFE

STANFORD—

Dr. David Stevenson presented a picture of a healthy, smiling five-year-old in bobby socks and pig tails as a symbol of the major contribution of intensive care units to premature infants in the past 25 years.

"Our major contribution really is in the survival of normal people," said Stevenson, assistant professor of pediatrics and associate director of Stanford University Hospital's intensive care nursery.

Just as important as raising the survival rate of infants born too soon is raising the quality of life for those infants saved, the physician said in a public lecture at the Stanford Medical Center Wednesday evening.

"If we stopped intensive care (for premature infants) right now, there would be a lot of deaths," he said. "But there would also be a great increase in the number of people surviving who would be severely injured."

The pig-tailed child in the slide on the screen was "Jamie," one of Stevenson's tiny patients five years ago. Born three months prematurely to a teen-age mother, Jamie weighed only 1 1/2 pounds.

When physicians performed surgery a week after her birth to remove dead and dying portions of her intestine, Jamie's bloated abdomen was scarcely wider than three of the surgeon's fingers.

The surgery was risky. The infant girl faced a 60-70 percent chance of dying and, even with successful surgery, would need months of hospitalization, round-the-clock care, and intravenous feeding. Stunted growth and malnutrition were possible if the salvaged intestine was unable to absorb food adequately.

But after consulting with surgeons and other members of the health care team, Jamie's mother consented to the surgery. Five years and $100,000 later, Jamie shows no signs of illness, Stevenson said. The cost of care for her first months of life were shared by family, the hospital, and, indirectly, the public, through increased insurance premiums.

Most patients in the intensive care nursery stay only a few days or weeks, with a much lower hospital bill, but Jamie's case demonstrates an extreme example of both the costs and therapeutic capability of such a nursery, said Stevenson.

A child Jamie's size born today has an 80-85 percent chance of surviving, with the help of intensive care, he said. "These children are virtually all normal," he added.

Modern obstetrical advances are major contributors to the improved survival rate, said the physician. Such advances include the development of drugs that halt premature labor long enough for other drugs to be administered that speed the maturation of fetal lungs. But the modern techniques have limits.

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A critical time in the development of the fetus occurs around the fifth month after conception, when blood vessels develop close enough to the lungs' tiny air sacs to permit a healthy exchange of oxygen and carbon dioxide.

"If that has not happened (by the time the baby is born), the best of ventilators will be of no use," Stevenson said. "No matter how much gas you move in and out of someone's air saccules, no gas will be exchanged, and the child will die.

"Therefore, there are children who are born alive, who move spontaneously, who respond to stimulation, who cry out for help, who cry out for someone to attend to them, that you may not be able to avoid letting die."

In such dilemmas, "compassion wrestles with duty" in the intensive care nursery, Stevenson said. "We have a dual charge in medicine, not only to save lives, but to alleviate suffering."

"A physician should still act in concert with his oath, which is to avoid doing any harm—not to start technologies which are serseless in view of someone's developmental state, and to assist in any way possible to make sure that this person does not suffer."

Stevenson described a child whose intestine, somehow twisted and crushed while the child was in the uterus, is completely nonfunctional at birth. Although normal in every other way, that baby will die within two weeks, Stevenson said. Life-long intravenous feeding is not an option because it would result in infections and other complications that would also kill the child. "There is nothing anyone can do."

"If I can't save that baby's life, I'll do everthing in my power to make the baby as comfortable as possible for as long as that baby is alive," Stevenson said.

"We don't withdraw support, we simply shift the emphasis of support to something that is more appropriate for this person. That shift of emphasis would be to nurturance—to love, to warmth, to those things which any human being deserves to have."

Advances made in neonatal nurseries in the next decade will continue to improve the quality of life for survivors, Stevenson predicted. But the secret to preventing prematurity may come instead from improving education and nutrition of high risk mothers.

"There are other things which we may perfect as we work on drugs to stop labor and drugs to mature the baby's lungs functionally. But those drugs are not without risk."

"I would say that prevention (of prematurity) is going to come through other means beside pharmacological means, ultimaely," he said.

Stevenson spoke at the fourth in a series of "Progress in Medicine" lectures, held on subsequent Wednesday evenings this season to acquaint community members with the technical and ethical issues encountered in the intensive care unit.

The March 16 session will feature a panel discussion of health care professionals addressing the issue "Who suffers more—the health care team or the family?", while the last lecture on March 23 will be given by Ernie Young, the Medical Center chaplain, on "Ethical and Emotional Issues in the care of the dying patient and family."

Both lectures will begin at 7:30 p.m. in the Sherman Fairchild Auditorium at the Medical Center.

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(Editors, news directors: The following release is being issued jointly by Stanford University and the University of California. It moved Business Wire A.M. Thursday March 10).

ASSOCIATION PROPOSED TO LICENSE BIOTECHNOLOGICAL PATENTS

STANFORD—

Companies would be able to "one-stop-shop" for biotechnological patents at U.S. universities if a concept unveiled at an industry association meeting is adopted.

The proposal calls for creating a nonprofit corporation—tentatively called University Licensing Association for Biotechnology (ULAB)—which would market certain biotechnology tools patented by participating universities.

The institutions would share the licensing revenues based on the volume of their patents used by industrial customers.

The proposal, based on a preliminary feasibility study, was presented in San Diego March 3 at the meeting of the Industrial Biotechnology Association (IBA) by Roger Ditzel, director of patent, trademark and copyright matters for the University of California system, and Niels Reimers, director of Stanford's office of technology licensing.

IBA is a high technology industry group. Most of its approximately 25 members are among the 73 firms which have licensed Stanford and UC's basic gene cloning patent.

Stanford and UC's patent covering basic gene splicing techniques was issued in December 1980. The discoveries were made by Stanley N. Cohen, professor of genetics at Stanford; and Herbert W. Boyer, professor of biochemistry at UCSF.

"That patent, broadly covering gene cloning techniques, would not be affected by this potential association," said Reimers. "The technology handled by ULAB would be specific biological tools, rather than the entire gene cloning process.

A biotechnology tool is defined essentially as a technique used by a scientist in the making of genetically engineered microorganisms, which in turn make possible the production of industrial or consumer products.

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It has been estimated that 200 patent applications for biotechnology tools have been filed by U.S. universities which might be potential members of ULAB.

"We are at a unique stage in the transition from academic discovery to industrial application, characterized by a relatively rapid path from a scientific finding to commercial development," said Reimers.

"And large numbers of patent applications are being filed and granted for what amount to the basic tools used by the scientist.

"There is great potential for significant and possibly unnecessary transaction costs when license rights to these patents are negotiated."

Ditzel continued, "It is conceivable a company would need a dozen licenses from a dozen universities for any particular genetically engineered product. Many biotechnology tools might be used only once in making the microorganism needed in a process."

Reimers and Ditzel contacted colleagues at other universities and in industry who were similarly concerned. With gift support of $3,000 each from seven companies, a study of the concept was conducted by Mark Edwards, a student at the Stanford Graduate School of Business.

"To better focus the concept, it was prepared in a business plan format," Ditzel added.

Reimers said the ULAB concept currently has received the support of many researchers and administrators at universities but has not been officially endorsed by any institution, including UC and Stanford.

Under the proposal, potential users would be able either to license patents individually, or they could secure blanket rights to all patents in ULAB's portfolio.

Edwards' plan hypothesized a fee of $25,000 per year or 1 percent of net sales—whichever is greater—to enable a company to secure blanket rights to all patents offered by the association. Projections of the business plan indicate that if ULAB were chartered by 10-12 businesses and/or universities, each contributing about $50,000 in start up money, total gross revenues through ULAB during the next five years might amount to about $12 million, Edwards said.

However, Ditzel emphasized that while any eventual plan might have different terms or even a different structure, such an association appears to offer some substantial benefits to a rapidly growing industry.

In presenting the concep, Reimers wrote:

"In university laboratories there has been a growing concern that desire for proprietary knowhow or rights may stifle the open communication of scientists, particularly between scientists who have involvement with different companies.

"The (ULAB) concept would seek to reduce this secrecy and/or delay of publication and competition by making all biotechnology tools available to all scientists.

"Selection of a tool would be made by the industry scientist based on what was the best process rather than simply the single process which might have been selected by his company's management."

Reimers said the ULAB concept has been under study for about a year.

Income to universities would be expected to be used for research and education, and researchers and administrators at each university would have to endorse ULAB before their university could join the association, Reimers suggested.

ULAB could be set up as an independent nonprofit association. Alternatively, a high technology company or existing association could administer ULAB's business, Ditzel said.

Currently, revenues from the Cohen-Boyer patent have brought in more than $2 million in license fees, although so far insulin has been the sole product to be marketed in significant commercial quantities from bioengineering techniques based on the Stanford-UC patent.

"We are looking ahead about a decade to see the most significant end product developments from the patent," said Reimers. "That is why the next five to seven years is the period we would expect to see the most activity from ULAB as research is continued at universities and industrial uses expanded."

Stanford currently is responding to the tentative rejection last year by the U.S. Patent Office of a second Stanford-UC bioengineering patent.

Reimers said that Stanford membership in a future ULAB-type association would not hinge on the outcome of the current patent application, particularly since the university owns a variety of patents not related to the one currently pending.

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PERINATAL NURSING SYMPOSIUM

STANFORD—

"Advanced Perinatal Concepts: A Nursing Symposium" will be held March 23-25, in room 270, Tresidder Memorial Union, on the Stanford University campus.

Cosponsored by Nursing Educational Services and the Perinatal Nursing Region of Stanford University Hospital, this symposium is designed primarily for the perinatal nurse practicing in a tertiary level center. It is offered to broaden the nurse's understanding of high risk care.

Selected disease states, ethical and legislative issues will be discussed, as they pertain to maternal/fetal/neonatal management and outcomes. In addition, innovations in management and health team communications will be presented. Small group presentations in the afternoon will encourage in-depth examination of specific problems particular to each patient group.

Faculty will include many professionals from Stanford University Medical Center, as well as several guest participants.

For more specific information on the program, registration, fees, lodging (if necessary), educational objectives, continuing education credit, faculty, and specialty topics, call (415) 497-6366. Early registration is advised.

3-9-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

AGREEMENT ON HOSPITAL ACCESS AT LAST

STANFORD—

An extended policy governing access of community physicians to Stanford University Hospital's sophisticated equipment and specialty laboratories was approved Friday by the Board of Hospital Directors.

The policy establishes:

- a method of deciding how community physicians would be granted access to both present and future hospital specialty laboratories,
- a permanent hospital board committee to advise the directors on access issues, and to monitor the implementation of policies,
- a mechanism for appealing decisions, and
- representation of community and faculty physicians on access committees at the departmental and board levels.

The new policy was recommended by a committee headed by hospital board member Dean Morton after deliberations of 15 months. The committee was made up of board members, and included faculty and community physicians.

Morton termed the recommendations "a significant improvement" in the policies and procedures adopted by the hospital board in August 1981. The policies in question were the result of negotiations between the university and community physicians, which reversed an earlier hospital policy limiting future use of the specialty laboratories to full-time faculty only. That agreement set up a formula through which local doctors who then had access to the laboratories could be replaced by community specialists when they resigned or retired.

But access to other equipment, including future technologies, remained still an issue. In addition, community doctors applying for access to the specialty laboratories complained that some clinical service chiefs were not acting promptly on their applications.

In his report to the hospital board, Morton said all clinical services of the hospital now had functioning access committees in accordance with hospital policy.

"The Anesthesia access committee has acted to replace several physicians," Morton said. "Access to the Cardiac Catheterization and Angiographic Lab has been available and utilized by two community physicians for the past 11 months, and formal affiliation agreements were recently signed." In addition, the radiology service has granted access to two physicians.

Morton said access arrangements for community physicians were being discussed by the Radiology Service with respect to CT scanning and Ultrasound Laboratories.

Similarly, Morton added, a Neurology Service access committee was meeting to act on outstanding replacement positions for the Electromyography and Electroencephalography laboratories.

Lawrence G. Crowley, vice president for medical affairs, termed the agreement "a good compromise" that balances the desires of private practitioners against the needs of the Stanford Medical School to fulfill its role in patient care, teaching, and research.

3/7/83

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"The policy," he said, "guarantees an opportunity and process for community physicians to make their case on access issues all the way to the hospital board, if necessary.

"It also assures the full-time faculty that access to the laboratories will be limited and that academic program quality will be recognized as of great importance along with the provision of optimal patient care."

Crowley noted the agreement recognizes that technology, financing mechanisms, utilization rates and staffing needs constantly change.

"The hospital board," he said, "with the advice of its access committee, will continuously review these changing circumstances and adjust its policies from time to time."

He said the agreement "places the access issue with other important policy issues within the jurisdiction of the hospital board where it belongs."

"It's the board," he said, "that has the authority and responsibility for the successful operation of the hospital."

Committee members at the Friday board meeting gave qualified support for the committee recommendations.

"The important aspect is that for the first time we have a document for dealing with future issues equitably," said Dr. Walter Arons, a community physician.

"There are faculty physicians and local doctors who are not particularly happy with the concept of limited access developed by the board in 1981," said Dr. Ronald Castellino, associate professor of radiology.

"But we all felt it was essential for the good of this institution to come up with the best we could do."

The document, Castellino added, establishes procedures to implement the board's 1981 policy on limited access, and in that respect it represents a reasonable report.

Dr. R. Hewlett Lee of the Palo Alto Medical Foundation said very divergent philosophies had been thoroughly explored and after one and a half years of meetings a "consensus document" had been agreed upon by the community and faculty physicians and board members of the access committee.

Lee termed the new policy as "a foundation for solutions to the access problems."

"It's a consensus document," agreed Dr. Wilbur Mattison of the Menlo Medical Clinic. "It means there are still reservations and points of disagreement between the physicians on the committee. But we think it is a very reasonable and workable document that provides us with procedures to put into effect the 1981 board policy."

Last August the Palo Alto City Council became involved in the access issue when it gave conditional endorsement to Stanford University Hospital's modernization project. The Council reserved the right to rescind its endorsement if the Morton committee had not made what Council members deemed sufficient progress toward settling longstanding discussions about community physician access to the specialty laboratories.

Council endorsement is not required. However, the state and regional agencies which must approve all hospital construction projects, review local community support while assessing whether the requested improvements are needed in the local area.

The membership of the Morton committee included Drs. Ronald Castellino, Duncan Govan, Sharon Hunt, R. Hewlett Lee, Wilbur Mattison, Richard Popp; and Linda Meier and Geraldine Steinberg, with Dr. Walter Arons, Crowley, and Stanford University President Donald Kennedy serving as ex officio members.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

PERINATAL NURSING SYMPOSIUM

STANFORD—

"Advanced Perinatal Concepts: A Nursing Symposium" will be held March 23-25, in room 270, Tresidder Memorial Union, on the Stanford University campus.

Cosponsored by Nursing Educational Services and the Perinatal Nursing Region of Stanford University Hospital, this symposium is designed primarily for the perinatal nurse practicing in a tertiary level center. It is offered to broaden the nurse's understanding of high risk care.

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3-9-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Dr. Aaron Klug, winner of the 1982 Nobel Prize for Chemistry, will deliver two lectures at Stanford University School of Medicine Center March 14 and 16.

Klug, of the British Medical Research Council Laboratory of Molecular Biology in Chemistry, is the 38th invited speaker since the Course of Lane Medical Lectures was established in 1896.

The talks, now held every once every two years, were established to draw outstanding scientists from around the world to speak to members of the medical profession, students, teachers, and research workers in medicine and allied sciences.

The series was founded by Dr. Levi Cooper Lane, and held at Cooper Medical College in San Francisco until that institution became Stanford's medical school.

Klug, who received his Ph.D. from Cambridge University in England in 1952 after studying at the University of Cape Town in his native South Africa, was cited by the Nobel Prize committee primarily for his contributions toward understanding the structure and complexes of proteins and nucleic acids. He was also cited for his development of crystallographic electron microscopy.

In addition to his position at the molecular biology lab, Klug serves as joint head of the Division of Structural Studies at Cambridge. He is the author of numerous publications in his field.

On March 14, Klug's talk will be "Structural Analysis of Macromolecular Assemblies by Electron Microscopy and Image Reconstruction." On March 16, he will discuss "From Viruses to Chromatin." Both lectures are to be held from 5 to 6:15 p.m. in Sherman Fairchild Auditorium.

March 3, 1983 —30— mg4

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

STANFORD PHYSICIANS TELL PREMEDS THERE'S MORE TO LIFE THAN SCIENCE

STANFORD—

The common belief among aspiring physicians is that in order to be accepted to medical school they have to spend their entire premedical education taking science classes, doing research, and working in hospitals and laboratories.

That's not so, say many accomplished physicians. And that's the message they plan to relay to undergraduate students during a panel discussion, "Reflections on Medicine: Education, Lifestyle, and Diversity."

The panel, scheduled for 7 to 9 p.m., May 9, in Stanford University Medical School's Sherman Fairchild Auditorium, will discuss the pros and cons of choosing medicine as a career. Panel members are Dr. Harvey Weinstien, clinical assistant professor of psychiatry; Dr. Elizabeth Short, associate dean of student affairs; Dr. Sarah Donaldson, associate professor of radiology; Dr. Bruce Parker, associate professor of clinical radiology; and Drs. Roger Peeks and Tom Fiene, both in private practice. Medical School Dean Dominick Purpura will chair the panel.

Medical students and housestaff will be at a reception following the panel. Together with the panel members, they will be available to talk with students about the various routes they took before entering medical school.

"Students should choose a major that interests them," said Audrey Bernfield, coordinator of departmental student services for humanities and sciences. "They should worry about medical school when they get to it. They shouldn't gear their whole life around it."

Stanford's School of Humanties and Science, Academic Information Center, and Medical School are co-sponsoring the panel. It is a kick off for the Majors Event, May 10, in the Inner Quad, during which undergraduate students will have the opportunity to learn about all majors from faculty, graduate students, and alumni.

4-29-83

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD— **PSYCHIATRISTS TO STUDY NARCOLEPSY IN DOGS UNDER NIH GRANT**

A major study into the mechanisms and causes of narcolepsy has been launched by Stanford University psychiatrists under a grant from the National Institutes of Health.

Narcolepsy is a neurological condition that causes irresistible sleep attacks in its victims. Originally, the disease was thought to be rare, but research has shown it to be more widespread, now afflicting about 250,000 Americans.

The disorder is characterized by excessive daytime sleepiness, cataplexy (abrupt attacks of muscular weakness), and sudden attacks of or desire for sleep. REM (rapid eye movement) sleep, at uncontrollable intervals, results.

Under a $100,000 a year grant for the next three years, researchers headed by Dr. William Dement will study narcoleptic dogs that manifest the same symptoms as in the human condition. The research is expected to provide important clues to causes and treatments.

Dement, professor of psychiatry and behavioral sciences, is director of Stanford's Sleep Disorders Center and a recognized leader in the field.

"People have suffered from narcolepsy for hundreds, probably thousands of years," he said. "Only in the last few years has it become widely recognized as a distinct medical disorder, and the object of major research."

The study will include new technical advances such as development of a system which can take long-term neurophysiological recordings in unrestrained dogs.

With the only population of narcoleptic dogs in the world, investigators contend, Stanford is in a unique position to conduct comprehensive research on neurochemical, anatomical, and physiological aspects of the disorder.

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"Studies in humans are difficult, expensive, and necessarily limited in scope," said Dr. Theodore Baker, the research associate directing the new project.

According to Dement, none of the drugs thus far used to treat the symptoms of narcolepsy have offered a cure. They are often habit-forming, provide only temporary relief, and can be accompanied by detrimental side effects.

A severe, debilitating, chronic condition, narcolepsy often leads to visual and memory problems, poor driving, home and work problems, headaches, nightmares, and the risk of drowning or other fatal accidents.

"Constant suffering is the companion to those with narcolepsy," said Dement.

In previous studies with dogs, Dement and his colleagues found a strong genetic basis for narcolepsy, and uncovered a variety of scientific facts relating to the neurochemical imbalance which causes it. The present study aims to expand research already begun in Stanford laboratories.

"We hope that this canine research will lead to an understanding of the basic defect underlying narcolepsy. This could lead in turn to more effective treatments aimed at correcting the defect," Baker said.

Investigators, besides Dement and Baker, include Drs. Jack Barchas, professor of psychiatry and director of the Laboratory of Behavioral Neurochemistry; Roland Ciaranello, associate professor of psychiatry and director of the Laboratory of Developmental Neurochemistry; Craig Heller, associate professor of biological sciences; and James Meindl, professor of electrical engineering, and director of both Stanford Electronics Laboratories and the Center for Integrated Systems.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

(Advance for release Friday, April 29, 1983)

CONGRESS MUST SUPPORT BASIC TOOLS OF RESEARCH, SCIENTIST URGES

STANFORD—

Technological advances to improve the practice of medicine are significantly slowed by a lack of modern instrumentation facilities and to the detriment of the public that could benefit, a Stanford University scientist told a Congressional subcommittee Friday (April 29).

In testimony prepared for delivery before the Labor-HHS-Education appropriations subcommittee in Washington, D.C., Dr. Oleg Jardetzky urged Congress to increase funding by a recommended $20 million per year in the budget of the National Institutes of Health for instrumentation programs.

Presently, the principal programs for instrumentation funding are in the Division of Research Resources of the NIH, with budgets of $27.7 million for fiscal 1983.

Jardetzky, a professor of pharmacology, directs the Stanford Nuclear Magnetic Resonance Laboratory. He testified before the subcommittee as president of the Association for Advanced Technology, a group composed of directors of publicly-supported laboratories that are national or regional centers of research.

The recommendation was part of a 1982 NIH report which acknowledged that the quality, quantity and development of scientific instruments available for research in the United States had rapidly declined. This threatened to diminish the leading position of the United States in research, the report concluded.

The report called for increased funding of research equipment and instrumentation "to replenish and maintain the adequacy of the biomedical research community's needs" for the next five years.

Because sophisticated instrumentation such as million-volt electron microscopes, nuclear magnetic resonance, synchrotrons, and computers programmed for graphics and artificial intelligence, for example, are costly—often running in the six figures—the report urged that advanced instruments be used through shared facilities.

However, the Congress has increased the budget for this purpose only by $12.5 million for fiscal 1983.

"This sum is far below the estimated need," Jardetzky told the subcommittee. "It is not adequate to meet the new needs generated by recent technological developments."

Among examples, Jardetzky cited his own field, nuclear magnetic resonance (NMR). This is a technique that can provide a glimpse inside the human body without scalpel, needle or hazardous x-rays, and more complete than anything obtained with CT scans.

Today 14 instrument manufacturers are developing NMR imaging equipment, Jardetzky noted, but funding sources for such instruments in universities and hospitals remain ill-defined.

"The hope is that the costs of instrumentation—of the order of $2 million per unit—will be defrayed by income from patient care does not take into account that for the immediate future at least the technique must be used on an experimental basis and applications must be closely tied in with further development," he said.

The combination of NMR techniques has enormous potential as a tool for diagnosis and for evaluating therapy results in a number of diseases, Jardetzky said. Yet manufacturers are concentrating on simpler, more immediately marketable NMR imaging equipment while needed funding for more sophisticated developments cannot be identified.

Jardetzky argued that funding of shared facilities by the NIH since 1962 has demonstrated the validity of this concept.

"Ultrasophisticated instruments, the latest state-of-the-art methods, and expert support personnel in installations open to many users help life scientists in their efforts to decipher fundamental biological processes or combat human illness," he said.

Stanford has five national facilities: the Stanford Nuclear Magnetic Resonance Laboratory, Stanford University Medical Experimental Computer for Artificial Intelligence in Medicine (SUMEX-AIM), Stanford Synchrotron Research Laboratory, Mass Spectroscopy Laboratory, and Stanford Electronics Laboratory (SEL).

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

(Editors, news directors: The following moved Business Wire or telecopier transmisson to some points on April 26)

BONE MARROW TRANSPLANT DONOR IDENTIFICATION PROGRAM SOUGHT

STANFORD—

An effort to help identify potential bone marrow transplant donors was announced Tuesday by Stanford Medical School Blood Bank in the wake of an appeal by two Long Island businessmen to save a leukemia victim's life.

F. Carl Grumet, associate medical director of the blood center, said informational letters would be sent, within the next several weeks, to a select group of donors who have undergone extensive blood typing at Stanford and elsewhere.

Grumet spoke at a news conference with David Kolatch and David Welner, who came from New York to Stanford in search of a blood donor for a friend, whose only chance of survival from leukemia is a bone marrow transplant.

Edgar Frenkel, 34, a psychiatrist, has chronic mylogenous leukemia. His doctors estimate that he probably has only months to live without the transplant, Kolatch said.

A precise match of blood type is required to ensure a successful marrow transplant, and only about one person in a million in the general population would qualify, said Grumet.

Stanford is not unique but is one of only a few centers nationally where precise blood typing of characteristics called HLA antigens have been done on about 1,000 blood donors.

Grumet said a cursory check has not yet disclosed any donors where each of six potential factors match, but he will send letters informing all of his donors who have been typed of the need for Frenkel, and the potential to donate marrow for other leukemia sufferers.

Grumet said he ruled out attempting to identify and contact a specific donor for Frenkel from among his lists, "because it is unfair to ask people who have agreed to donate blood for purpose A to have their name added to a list for purpose B."

Stanford runs HLA tests on a group of volunteers who agree to donate blood platelets on a frequent basis for patients who need a tailor-made match of blood types.

"These donors are really special people who are already giving quite a bit. We do not want to put them under undo pressure," Grumet said.

April 27, 1983

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Ironically, Grumet said that the closest match he has found from a cursory screening is himself, with four out of six of the HLA factors matching. Two persons with five out of six factors matching have been found in other searches around the country, Kolatch said, but most transplant centers insist on a six out of six match before they will operate.

Until very recently, Grumet said, bone marrow transplants would not be performed on matches of donors from outside the patient's family. While only a few cases currently come to the attention of blood banks annually, Grumet said medical progress will increase the need for unrelated bone marrow donors in the future.

Grumet, as well as Kolatch and Welner, are hopeful that the current effort will initiate, in collaboration with other blood and transplantation centers, a national registry of potential volunteer bone marrow donors.

Obtaining marrow from the donor causes temporary discomfort but involves essentially no risk for the donor, he added.

"We're hopeful that as we pursue this, we will be able to find a donor (for Frenkel). But even if we can't, we hope that what we do will be of lasting use to society," said Kolatch.

Finding a suitable donor for a bone marrow transplant outside a patient's immediate family is always difficult, because of the complicated tissue matching that must be done.

But Frenkel has several rare factors that decrease the chance for finding a perfect match to about one in several hundred thousand among the people who have been HLA tested, Grumet said. (Although the odds in the world population are one in a million, Frenkel's rare traits occur slightly more frequently among Ashkenazic Jews—a group Frenkel's friends have targeted in New York in their publicity campaign to find HLA tested volunteers).

Frenkel's problem is compounded further by the fact that, while many people know whether they have A or B type blood, few have been tested for HLA type. The sophisticated typing procedure costs several hundred dollars per person, and is performed by only a few dozen laboratories around the country.

Because of the expense of the extended HLA typing procedure, the "Emergency Support Fund," set up by Frenkel's friends, has asked that only persons who have been previously HLA tissue typed contact them. Inquiries from potential donors can be addressed to Bone Marrow Transplant Search Center,P.O. Box 600, Cedarhurst, New York, 11516.

Kolatch said an offer of $25,000 made in New York earlier was still in effect for the donor.

HLA stands for "Human Leukocyte Antigens"—proteins that appear on the membrane of white blood cells. While every human being can be divided into the four familiar A, B, AB, and O blood groups according to their red cell type, the number of distinct HLA blood types possible runs into the thousands.

In addition to its use in research, HLA typing is most often performed to identify uniquely compatible donors who can provide custom-tailored blood products, such as platelets, for patients whose blood disease prevents them from being helped by blood transfusions from random donors.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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NEW NATIONAL ACADEMY OF SCIENCE MEMBERS

STANFORD—

Two members of the Stanford University School of Medicine faculty have been elected to the National Academy of Sciences (NAS), the academy announced Tuesday (April 26).

They are Ronald W. Davis, professor of biochemistry, and Dominick P. Purpura, a noted neuroscientist and dean of the School of Medicine.

Davis' research has dealt with gene manipulation, and he is a widely-recognized electron microscopist. While at the California Institute of Technology, he developed the electron microscope heteroduplex method of investigating the sequence of nucleic acids, and analysis which has had significant uses in mapping sequences of DNA molecules.

He came to Stanford in 1972 where his research has been on yeast genetics and gene manipulation.

Purpura became dean in 1982, coming from the Albert Einstein College of Medicine. He is the holder of the Carol and Elizabeth Naumann endowed chair as well as professor in the departments of Neurobiology and Neurology. He is noted for research in human cortical development using basic data and techniques of neuroscience.

He has been among the first to observe that the brains of children, who are mentally retarded with no known chromosomal aberrations, had structural abnormalities in their nerve cells.

Their election brings to 80 the number of Stanford faculty elected to the prestigious NAS membership. Sixteen of these are in the School of Medicine.

4-26-83 —30— SA2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD SYMPOSIUM TO EXPLORE PROMISE OF "NEW GENETICS"

Science writers: You are invited to attend a day-long meeting on "Perspectives in Molecular and Genetic Medicine," May 13. The meeting, one in a series, will explore the status of molecular medicine advances and their application to specific areas of genetics and human disease. Copies of the program are are available on request if not included with story.

STANFORD—

The promise of "new genetics" now shaking the very foundations of modern medicine will be the topic of a day-long symposium Friday, May 13 at Stanford University School of Medicine.

The symposium, which will begin at 8:15 a.m. in Sherman Fairchild Auditorium, is part of a series of meetings at Stanford on the subject of molecular and genetic medicine.

According to Dean Dominick P. Purpura, Stanford is now formalizing a broadly based program in molecular and genetic medicine involving faculty from both the basic and clinical sciences.

"The purpose of the academic program," Purpura said, "is to provide the scientific and intellectual framework necessary to speed the pace of anticipated research advances and their translation into revolutionary methods of diagnosis and therapy of human disease."

Collectively, the techniques of molecular genetics are known as genetic engineering—a term that captures the skill and precision with which human DNA can be inserted into the genetic machinery of bacterial and yeast cells and made to function.

Bacteria with human gene transplants can churn out vast quantities of man's own body chemicals expected to be used to treat disease. By peering into human genes, scientists can now predict with uncanny accuracy which individuals are likely to be afflicted with *what* diseases over the entire course of their lives. And attempts to cure patients of hereditary defects are contemplated in the not far-distant future.

"The excitement and promise of the 'new genetics' both as a research tool and as applied to the study and treatment of diseases, have deep roots at Stanford," Purpura noted.

Among the speakers will be leaders in molecular genetics from the Carnegie Institution in Washington, Columbia, Harvard, Stanford, University of California in San Francisco, and University of Texas.

Topics will include "Viruses, genes and cancer," "Oncogenes among antibody genes and implications for human cancer," "Transposable elements and their use as genetic tools," "Lipoprotein receptors: genetic defense against heart attacks," and "Steps toward a molecular grammar of learning."

The symposium is open to invited guests and faculty, students, fellows, interns, residents, and staff.

Copies of the program can be obtained from the Office of Public Events, Stanford University School of Medicine, 800 Welch Road, Suite 221, (415) 497-6389.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Stacie Newman (415) 497-6911

1983 SCHULTZ LECTURE ON HEPATITIS-B SET FOR MAY 9

STANFORD—

The sixth Edwin W. Schultz Memorial Lecture, given this year by Dr. Jesse Summers of the Philadelphia Institute for Cancer Research, will take place Monday, May 9, at Stanford Medical Center.

Summers, a senior member of the Institute, will discuss "Molecular Studies on the Replication and Pathogenesis of Hepatitis B-Like Viruses Using Animal Models" at 5:15 p.m., in Fairchild Auditorium. The public is invited, and there is no admission charge.

The noted virologist is researching viral replication and pathogenesis of hepatitis B and related animal viruses. His research offers a chance to study diseases in animals resembling those caused by the hepatitis B virus in humans, including liver infections and liver cancers.

Summers received his graduate training in microbiology at the University of Texas at Austin and later studied at the Salk Institute in San Diego, before joing the Institute for Cancer Research.

The Schultz lectureship honors Dr. Edwin W. Schultz who served as chairman of medical microbiology for 33 years. The memorial lectureship was established at his death in 1971 by his family and friends. The lecture is hosted by the department's graduate students.

For further information, call Shayne Frankel at (415) 497-9202.

4-25-83 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

EMERITUS FACULTY MEMBER RECEIVES HONOR

STANFORD—

Dr. Maurice Grossman, clinical professor emeritus of psychiatry and behavioral sciences, has received the Outstanding Achievement Award for 1983 of the Northern California Psychiatric Society (NCPS).

The award honors members of NCPS, a branch of the American Psychiatric Association (APA), in recognition of exceptional contributions to psychiatry and the greater community.

The presentation was made at an Asilomar ceremony earlier this month by Dr. Thomas Gonda, professor and chairman of Stanford's department of psychiatry, who commented, "In everything Dr. Grossman has done in medicine, he has held the interests of patients, both his and those of his colleagues, as coming first."

An internationally recognized authority on problems of confidentiality, Grossman played an increasingly important role throughout the 1960s in legislation related to psychiatry, beginning with his presidency of NCPS in 1960. He has continued this activity in various capacities in organized medicine.

Specifically, Grossman has worked with insurance industries, the California Medical Association, and the American Medical Association on issues of protection for patient confidentiality.

Earlier, he developed innovative occupational, hospital-wide treatment programs for the chronic psychiatric patients of Veterans Administration hospitals. These programs were adopted throughout the VA system over the course of 15 years.

An offshoot of this work was Grossman's recognition of the psychodynamics of chronicity, and the application of this knowledge in rehabilitation to problems of chronic illness in general. Grossman's activity on the federal and European scene began with this field of medicine.

Grossman received his M.D. in Philadelphia, the city of his birth, from the Jefferson School of Medicine in 1931.

Already trained in surgical pathology and experienced in general practice, he took psychiatric training at the VA Hospital in Palo Alto.

During the 1950s Grossman held simultaneous appointments on the clinical faculties of two medical schools: at the University of California, San Francisco, in psychiatry; and at Stanford in physical therapy. At that time he taught psychological medicine to physical therapy students.

In 1958 Grossman joined Stanford's department of psychiatry. He is a Life Fellow of the APA, and was one of the organizers and first moderator of what is now the California Psychiatric Association.

Listed in *Who's Who in the West*, Grossman is the author of numerous articles and is currently preparing a summation of trends in American psychiatry, at the request of his colleagues in France, that encompasses developments in the 1900s which explain the situation today.

4-25-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Stacie Newman (415) 497-6911

Heart Health Fair Set for May 20

STANFORD—

The first annual Heart Health Fair, sponsored by Stanford University Hospital (SUH), will take place Friday, May 20, at the Stanford Shopping Center from 11 a.m. to 7 p.m. The public is invited, and the event is free of charge.

The Fair, intended to promote community awareness of available resources for the prevention of cardiovascular disease, is coordinated by the cardiac patient teaching committee of the department of nursing service at SUH.

Registered nurses, dietitians, and other health professionals will staff approximately 10 booths, according to Maureen Kennedy, R.N., nursing educational coordinator. These people will offer information on topics including the anatomy and physiology of the heart, cardiac risk factors, and yoga and aerobic exercise. Blood pressure checks will be offered, and those wishing to donate blood will be able to make arrangements with representatives from the Stanford Blood Bank.

For further information, call Kennedy at (415) 497-6706.

4-21-83

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

MEDICAL ANTHROPOLOGIST TEACHES M.D.S HOW TO MORE EFFECTIVELY TREAT PATIENTS

STANFORD—

A young Vietnamese woman gives birth to a healthy baby. Her physician gives her post-delivery instructions, to which she smiles and nods in agreement. But the nurses note on her records that she resists all medication and baths.

The physician is concerned about her apparent noncompliance. But in reality, the mother, in accordance with her cultural beliefs, is simply trying to gain back the heat she lost during childbirth. She cannot understand why the nurses want her to take showers, which may chill her, and give her cold water with which to take her medication.

Cultural differences in health beliefs and practices such as these often interfere with the effectiveness of treatments, said Dr. Elois Ann Berlin, a medical anthropologist. This is especially important in areas in which large numbers of immigrants settle.

For example, she said, a federally-funded study of California's population growth during the past decade reports a total increase of 10 percent. While the white population increased only .7 percent, according to the *West Bay Area Health Systems Agency* report, the hispanic population increased 33.3 percent and the Asian population increased 41.1 percent.

Berlin, who is working through the South Bay Area Health Education Center at Stanford University School of Medicine, has developed a multi-cultural clinical teaching program for health care providers. With her guidelines, which she teaches to residents at the Family Practice Residency Program, Stanford medical students as a guest lecturer in internal medicine, pediatrics, and family medicine, and community physicians at special workshops, they can more effectively treat members of the various cultures that have settled in the Bay Area.

"The fundamental concept to teach physicians is attitude," Berlin said. "They have to be receptive to their patients, and must realize the patients do have an explanation of the illness they're experiencing and that it may not fit in the biomedical model."

The key to more effective treatment, she said, is to incorporate the patient's treatment according to cultural beliefs with biomedical treatments.

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Many cultures, including hispanic and Asian that are the Bay Area's most prevalent, derive their health beliefs from humoral pathology, an ancient theory that good health is the result of a balance of the body's four humors: blood, phlegm, yellow bile, and black bile.

There must also be a balance between hot and cold substances in the body, the theory prescribes. Chinese traditional medicine, Yin/yang, which specifically influences Asian health beliefs, prescribes the same concept. So in the case of the new mother, she was not resisting her physician's treatment, but merely trying to restore the balance that had been disrupted by childbirth.

Physicians should let patients say what they are experiencing, rather than asking them if they have specific symptoms, Berlin said. In many cultures it is considered impolite to disagree, she explained, so they would agree with every symptom their physician mentioned.

After listening to patients' perceptions of their ailment, physicians should try to explain the biomedical reasons for the ailment. This can be especially difficult, Berlin added, because many cultures have differing perceptions of anatomy or pathology.

After acknowledging the similarities and differences of the perceptions, physicians should recommend and negotiate treatment. The mother's physician, for example, may have agreed to allow her to take sponge baths, or perhaps have told the nurses to give the mother warm water with which to take her medication.

Berlin has also accumulated information about the various cultures for physicians, which includes many idiosyncrasies that may indirectly affect treatments. For example, in Asian cultures the soul resides in the head. The common practice of patting a child on the head could startle the soul and cause it to run away, Berlin explained. In order to avoid this, she said, physicians should always ask permission to touch patients' heads during a clinical examination.

Among hispanics, on the other hand, blood is considered to be in limited supply, and is equated with strength and virility. Patients may resist blood tests for this reason, Berlin explained, and physicians must quell their concerns.

Berlin is making video tapes of role play between physicians and patients to supplement the written material. She hopes to disseminate both as a package to medical schools throughout the country.

"The combination of medicine and anthropology in making treatment of culturally-diverse populations more effective is rare," she said. "Our goal is to give physicians an awareness of the types of differences they may encounter, how to elicit those differences, and alternative ways to deal with them without antagonizing the patients or hampering the effectiveness of the treatment."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Stacie Newman (415) 497-6911

Volunteers Needed for Herpes Research

STANFORD—

Men and women suffering from herpes are needed to participate in a study being conducted by the division of infectious diseases at Stanford University Medical Center.

Persons with either type of herpes (HSV-I or HSV-II) are eligible to participate, but volunteers must experience outbreaks on the arms, legs or trunk, and *not* around the eyes, lower face or genitals, said Dr. Tony Cunningham, an investigator in the study being conducted by Dr. Thomas Merigan, head of the division.

When the volunteer has a recurrence, researchers will take two tiny, painless tissue samples from the affected area to test for the presence of certain types of cells which fight off the virus. Cunningham said they hope the results of the study will help lead to the development of a treatment to prevent recurrences once the virus has been contracted.

Volunteers will be paid a fee for their participation.

For further information or to volunteer for the study, call Cunningham at (415) 497-5908 between 9 a.m. and 5 p.m.

—30—

Volunteers Needed for Sleep Research

The Sleep Disorders Research Center at Stanford University Medical Center is once again seeking volunteers to test the daytime alertness of persons taking sleep medication.

Sue Cohen, a research assistant, said about 25 volunteers are needed, and should be men or women aged 21 to 60 who are suffering from insomnia. They must be willing to take sleep medication during a 21-day period and spend 11 nights and six weekend days at the Sleep Center's lab in Palo Alto.

Three separate starting dates will be available through June, Cohen said.

Some volunteers will receive medication while others will get a placebo.

Participants will be electronically monitored in the lab at night and perform skill tests during the day to test alertness.

Volunteers will be paid $400. They will also receive two free medical exams and lab workups. Meals will be provided free during the live-in phase. Private rooms and amenities—including free movies—will be furnished.

For further information, contact Cohen at 325-4697.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911 or 497-7591

NEW ASSOCIATE DEAN NAMED

STANFORD—

Dr. Roy H. Maffly, Stanford University professor of medicine (nephrology), has been appointed associate dean of student affairs at the Medical School.

Maffly succeeds Dr. Elizabeth M. Short, who is leaving Stanford to join the Association of American Medical Colleges in Washington, D.C.

In his new position, Maffly will be involved with the clinical education of Stanford's medical students. His responsibilities will include assigning students to clerkships and writing letters to support their applications for internships.

"I look forward to working with the students in a closer capacity," Maffly said. "I hope to continue teaching, which I feel will make me more effective as associate dean."

Maffly came to Stanford in 1961 as assistant professor of medicine. He was promoted to full professor in 1970. He has co-headed the nephrology division since 1971, and was acting chairman of the department of medicine from 1977-78. He is a staff physician and chief of the renal service at the Veterans Administration Hospital in Palo Alto.

Maffly also directs StanMed, the School's computer system for medical education.

Maffly is actively involved with student affairs. He is a member of the National Board of Medical Examiners Part II Medicine Test Committee. He has chaired Stanford Medical School's Minority Admissions Committee, Faculty Senate, and Committee on Courses and Curriculum. He has been director of admissions since 1981.

A new director of admissions has yet to be named.

Maffly has been often honored for his teaching. He has received the Henry J. Kaiser Award for excellence in teaching three times, the Henry J. Kaiser Award for outstanding and innovative contributions to medical education, the Arthur L. Bloomfield Award for excellence in teaching, the Walter J. Gores faculty achievement award for excellence in teaching, and the Award for Outstanding Teaching by the Medical School class of 1971.

4-18-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911 or 497-7591

STANFORD MEDICAL SCHOOL FACULTY, STUDENTS PRESENT MUSICAL PLAY

STANFORD—

Stanford Medical School faculty and members of the class of 1983 will present a musical play, *The Hypocritic Oaf,* at 8:30 p.m., April 29, in Dinkelspiel Auditorium on Stanford University's campus.

Produced by the Medical Alumni Association and directed by students Laura Esserman and Joe Sachs, the musical features songs written, composed, and performed by students and faculty.

The two-act play follows a medical student through his education and training, according to Esserman. "In the beginning, God created the medical student, and indoctrinated him to the culture, and he matured, and he differentiated, and he reached the top!," reads the story line. It includes the scores: "I Hope I Can Get In," "A Day In The Life Of Dr. Paul Berg Nobelovitch," "This National Bored Test," "My Heart Belongs To Shumway," "Leukemia Rag," "Matchmaker," and "I've Grown Accustomed To This Place."

Tickets will be sold at the medical student lounge from noon to 1 p.m. April 22, and are available at the Medical Alumni Association Office, 800 Welch Rd., Suite 221. Commemorative t-shirts are available as well. A complimentary happy hour will be held before the show, from 6:30 to 8 p.m. at the Stanford Faculty Club. For more information, call 497-6389, or 497-5064.

4-18-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors, news directors: The following was sent Business Wire on Friday)

RESEARCH CENTERS OPPOSE ANIMAL BILL

STANFORD—

Proposed state legislation which would bar pound animals from medical research would be an enormous disservice to pet owners, the general public, as well as research, officials of two research-oriented California medical schools said Friday.

The protests against Senate Bill 883, scheduled for a hearing Tuesday by the Senate Judiciary Committee, came from Lawrence G. Crowley, vice president for medical affairs at Stanford University; Dominick Purpura, dean of the Stanford School of Medicine, and Julius Krevans, chancellor of the University of California, San Francisco.

The bill, sponsored by Senate Majority Leader David Roberti, R-Los Angeles, would prohibit the selling of unclaimed pound animals—which are routinely euthanized—to research institutions and would instead require that such organizations buy animals especially bred for research.

The bill would do nothing to improve the humane treatment of animals, "a concept we are genuinely committed to," said Purpura. However, he added, the measure would dramatically increase the cost of most biomedical research, eliminate some research, result in the death of thousands of additional dogs and cats annually, as well as make it more difficult in some cases for pet owners to reclaim their animals from pounds.

The legislation "would be damaging to our institution and to research and scientific progress generally," Purpura said in a letter dated Friday to Sen. Barry Keene, chairman of the judiciary committee.

"But it would be more realistic for you (committee members) to oppose this measure because of the very real disservice it does to all Californians . . ."

"If the bill is adopted, you would be faced with even stronger outcries from supporters of animal rights after they discover that the real dilemmas of humane treatment to animals have been exacerbated by well-intentioned but ill-conceived legislation," Purpura added.

Supporters of the measure have contended that the bill would prevent animals which had been kept as pets from being used in research.

"The legislation creates a great irony by increasing the number of animals which each year will be euthanized instead of being transferred to research facilities.

"Meanwhile, other dogs and cats will be bred specifically for use in the laboratory. Surely this is a grotesque misuse of resources, an abomination to conservationists," Purpura wrote.

Millions of dogs annually are euthanized at pounds because they are not adopted or reclaimed by their owners. For example, a report by a committee of the Santa Clara County Board of Supervisors said that one humane society alone— The Humane Society of Santa Clara Valley—euthanized nearly 75 percent of the 39,736 animals brought to the shelter in 1982.

Purpura said that legislation prohibiting the humane use of animals in research will swell already overcrowded shelters, increasing the likelihood that humane societies will have to put to death animals sooner.

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April 15, 1983

"We are disturbed that that the proposed legislation ignores the fact that less than 5 percent of animals which are impounded annually nationwide are used in research and teaching while more than 95 percent are disposed of with no benefit whatesoever to life," Crowley said.

Crowley, Purpura and Krevans said they supported a measure backed by Assemblyman William Filante, R-Marin, which would require stringent standards of humane care for research institutions seeking to use pound animals. The measure, which has not yet been introduced in the legislature, would also establish a statewide identification system which would help persons locate stray animals at pounds. The measure, titled the Pet Protection Identification Act, would also give the person turning in an animal the option of refusing to allow the pound to release the animal for research.

Crowley said if Stanford were required to purchase all of its dogs and cats from commercial suppliers, the cost of these animals would at least quadruple from current levels of about $65,000 per year to $260,000 annually. Such an increase, Purpura said, could jeopardize already tightly funded projects.

In addition, Crowley said breeders could not provide the institution with sufficient animals and those that were provided "could not meet the qualitative needs of the biomedical community as in fact much research necessitates a genetically-mixed animal model rather than a pure-bred strain."

Alternatives, such as tissue cultures and computer modeling, cannot substitute for all biomedical research, although modern methods have reduced the number of animals, particularly dogs and cats, which are needed each year in research, said James Dewson, director of the Division of Laboratory Animal Medicine at Stanford.

For example, 795 dogs were bought for research at Stanford in 1978, compared with 506 in 1982. The number of cats in the same period dropped from 206 in 1978 to a total of 109 last year.

Dewson said his division houses between 5,000 and 10,000 animals at any given time. In addition, between 15,000 and 70,000 mice are held in special colonies.

The officials of both research institutions reaffirmed that they were committed to the humane care of animals.

Stanford currently is completing a $10 to $12 million centralized animal research facility which Dewson said "will provide state of the art animal care" exceeding current standards which are nevertheless adequate or better.

"Our campus is extremely concerned about the humane use of all animals in our research program," Krevans said in an April 14 letter to Keene.

Krevans said SB 883 "would have the effect of terminating many important research projects because if it pased we would be unable to obtain an adequate supply of dogs—an essential model in many scientific investigations."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Stacie Newman (415) 497-6911

STANFORD—

Stanford University Hospital's department of clinical social work is sponsoring a conference April 29 entitled "Oncology Social Work and Clinical Research." The event is one in a series planned as part of the continuing 70th anniversary celebration of social work at Stanford. These events are free of charge, and the public is invited.

Licensed clinical social workers Isabel Walker, Patricia Fobair, Sherry Feld, Jill Lehman, and Susan Weisberg will take part in the day-long conference, which is geared primarily toward other professionals in social work or related fields. It will take place from 9 a.m. to 4 p.m. at Fairchild Auditorium in the Medical Center.

Among the topics to be addressed are "The Value of Clinical Research in a Medical Setting," "Studying the Silent Majority," and "Medical Ethics in Research Design." Part of the afternoon will be devoted to small group workshops addressing more specialized topics.

Other events planned by the department are:

- On April 27—Rose Grobstein, C.S.W., will lead a seminar entitled "Genetic Counseling and Prenatal Diagnosis," from 2:30 to 3:30 p.m. in Faber Auditorium at Children's Hospital at Stanford.
- On May 20—Elizabeth Garifalos, L.C.S.W., Dr. Alan Ringold, and Pam Simmons, R.N., will conduct a workshop on "Adaptation to Hemodialysis," from 10 a.m. to noon in the Nursing Cottage at Hoover Pavilion.
- And June 24—"Approaches to Psychotherapy With Borderline Patients" will be addressed by Sandra Bacon, L.C.S.W. and Dr. Richard Laude, from 1 to 3 p.m. in TE-110 of Stanford's Psychiatry Building.

Further information is available by calling (415) 497-5091.

4-13-83 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Stacie Newman (415) 497-6911

FARQUHAR HONORED BY AMERICAN COLLEGE OF PHYSICIANS

STANFORD—

Dr. John W. Farquhar, director of the Stanford Heart Disease Prevention Program (SHDPP), was honored by the American College of Physicians (ACP) Monday (April 11) for research linking changes in eating and smoking habits with decreased incidence of cardiovascular disease.

Farquhar, a professor of medicine in the Division of Family, Community and Preventive Medicine, received the 35th annual James D. Bruce Memorial Award, which recognizes outstanding contributions in the field of preventive medicine.

Former recipients include polio vaccine pioneers Jonas Salk and Albert Sabin.

"The Challenge for Physicians in Newer Forms of Preventive Medicine" was the title of Farquhar's Bruce Award speech at the San Francisco meeting.

Farquhar, who founded SHDPP in 1971, helped develop an interdisciplinary approach to prevent and control heart disease. One aspect of this is a public health project in several California cities intended to educate people, primarily via newspapers, radio and community classes, on the health benefits of eating better and smoking less.

The recipient graduated in 1952 from the University of California School of Medicine at San Francisco and then completed his training in internal medicine and cardiology at UCSF and the University of Minnesota.

Other Stanford participants at the annual meeting held in San Francisco included Drs. Edwin Alderman, associate professor of cardiology; William Hancock, professor of cardiology; and Jack Remington, professor of infectious diseases; Maurice Fox, clinical professor of medicine; Kate Lorig, R.N., Dr.P.H., Arthritis Center; Ronald Pearl, physician specialist in medicine; Eugene Robin, professor of medicine; and Howard Spiro of the Center for Advanced Study in Behavioral Sciences.

4-11-83 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

INTERNSHIP MATCHING PLEASES STUDENTS

STANFORD—

Internship match day at Stanford University Medical School was a happy occasion for 76 percent of the graduating students who were appointed to one of their top three hospital choices.

According to Dr. Elizabeth M. Short, associate dean of student affairs, this shows improvement over the last decade's average of 70 percent.

What's more, 53 percent of the students were appointed to their first hospital choice, compared with the last decade's average of 44 percent.

About 18 percent of the graduates will be staying at Stanford. About 64 percent will be interning at university hospitals.

Internal medicine is the number one specialty choice, with more than 55 percent opting for it. Other popular specialties include surgery and family practice.

"In a time when the number of medical school graduates exceeds the number of internship positions, our graduates did extremely well," Short said.

4-11-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

ASSOCIATE DEAN OF STUDENT AFFAIRS TO JOIN ASSOCIATION OF AMERICAN MEDICAL COLLEGES

STANFORD—

Dr. Elizabeth M. Short, associate dean of student affairs, announced she will be leaving Stanford University School of Medicine for the Association of American Medical Colleges (AAMC) in Washington, D.C.

A new associate dean of student affairs has yet to be named.

Her new position as director of the association's division of biomedical research and faculty development, and associate director of the department of academic affairs, will begin this summer.

In her new role, Short said she will deal with issues affecting the nation's academic medical centers, ranging from funding sources for biomedical research to faculty development and medical education.

"I think it's an exciting opportunity to obtain a national perspective on issues of concern to faculties and students," Short said. "It's a time when changes are occuring in public policy that will have major impact on academic medical centers."

Short will bring to her new position her experience in academics and administration at Stanford, and in shaping public policy on biomedical research as a member of the American Federation for Clinical Research (AFCR). She is on the AFCR executive and public policy commmittees, and is editor of its journal.

"Stanford is an exciting medical school, and I feel privileged to have worked with the students here. I will bring to the AAMC job perspectives gained at an excellent academic institution," she added.

Short has been associate dean of student affairs since 1978. "She has made substantial contributions to the clinical education of Stanford's medical students," said Dr. John P. Steward, associate dean of student affairs. "Two of her major responsibilities have been assigning students to clerkships and writing letters to support students' applications for internships. In both of these important and major roles she has been an extraordinarily valued member of the Office of Student Affairs, and will be missed."

Short has been an assistant professor of internal medicine, specializing in medical genetics. She came to Stanford in 1973 and served as chief resident in medicine the following year, after which she became a faculty member.

Short received her medical degree from Yale University School of Medicine. She completed her residency training in medicine and research fellowship in human genetics there also.

4-11-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

VA BEGINS REVIEW OF LAB ANIMAL ACCIDENT

(Editors, news directors: The following was sent on Business Wire Wednesday afternoon)

STANFORD—

An animal welfare panel at the Palo Alto Veteran's Administration Hospital will review an accident which resulted in injuries to a research dog, officials said Wednesday (April 6).

Barbara Gleason, administrative officer for research at the VA hospital, said a general investigation of VA animal care facilities was inappropriate, since the animal's condition appeared to have resulted from an isolated incident and did not indicate more generalized difficulties.

"We are researching this incident basically to reassure everyone that while the accident involving this dog was unfortunate it does not reflect negatively on the high quality laboratory animal care provided at the VA center," Gleason explained.

Carolyn Reed, veterinarian at both Stanford Medical Center and the Palo Alto VA, said the dog was attacked by another dog in an adjacent cage in late March. The dog was being properly treated when it was removed by a medical student from a cardiovascular research lab, Reed said.

It was later euthanized after the student, who worked in the lab, brought the dog to a private veterinarian who said he didn't think the dog would recover.

At an April 1 news conference, officials of the Santa Clara County Humane Society contended that proper treatment may not have been provided the animal. In a position statement the society contended that after investigating the incident, the organization planned to file charges with the Santa Clara County district attorney's office under a county ordinance covering animal abuse.

On Wednesday, Larry G. Kemp, the society's chief humane officer, said the incident "is still under investigation by the Santa Clara and Peninsula Humane societies."

Deputy Dist. Atty. Robert Harpainter, supervisor of the Santa Clara County DA's Palo Alto office, said in an interview that he had spoken with Kemp and at least one other humane society official earlier in the week.

"At this point, I don't plan on doing anything further," Harpainter said Wednesday. He said his office lacked jurisdiction because the county ordinance didn't apply in the Palo Alto city limits where the VA is located.

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A "fact sheet" issued at the humane society's news conference said the dog was found "in the Stanford Research Center."

However, Gleason said the VA's panel would investigate since the VA was responsible for the dog, which was owned by the VA and participating in a VA-sponsored study.

The internal review would be conducted by VA personnel, she said. Chairman of the panel would be Malcolm Anderson, a radiologist on the Stanford Medical Center faculty assigned to research and patient treatment at the VA. Anderson is chairman of the VA's Animal Care Subcommittee of the Research and Development Committee.

Peter Barran, the medical student who removed the dog, said he had worked in the VA lab for 10 months and had not seen any similar incidents.

Reed said the dog had been bandaged immediately after it was bitten about a week before it was brought home by the student. She said bandages were removed March 23, the day before the dog's removal from the VA, and that she determined the best treatment was to let the bite wounds drain.

Surgical incisions in the groin area had been sutured but may have opened after the March 23 exam, the veterinarian said last week.

Reed said the dog was bitten by a dog in an adjacent cage. Because of residual anesthesia, the injured animal was unaware of the biting and didn't shift positions, "a regrettable, but fortunately unusual occurrence," Reed said.

Barran said he contacted Reed the night he removed the animal and asked her to come to his apartment to treat it. Reed said she refused and requested instead that he return the animal to the lab where she could properly treat it.

The dog was participating in an an experiment intended to perfect techniques for repairing and replacing blood vessels.

The VA study was being conducted by faculty members and other researchers from the Stanford Medical School. Most VA physicians have dual appointments at the university.

James Dewson, director of laboratory animal medicine at Stanford, said no university probe was planned since the incident did not involve a Stanford research project.

"If a similar accident were to occur at Stanford, our Panel for Laboratory Animal Care would conduct an immediate and thorough review of the specific incident," Dewson said.

Stanford's participation in VA research stems from a contract with Stanford to faculty physicians for patient treatment and research at the VA.

Reed is chief veterinarian at the university and also works part time supervising veterinary care at the VA, where she reports to VA officials, Dewson said.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

LEARN TO LOVE EXERCISE!

STANFORD—

A structured workshop for people who want to start and maintain a regular physical exercise regimen will be offered at Stanford University on 10 consecutive Tuesday evenings beginning April 19.

Open to the public, the newly developed workshop will provide information, individual assessment, support, and both behavioral and cognitive strategies designed to get participants to the point where exercise provides its own self-sustaining incentive and reward.

No exercise will actually be engaged in during sessions, said leader-coordinator Dr. Fritz Bottjer of the Behavioral Medicine Program. Participants will undergo some testing, including before-and-after body mass, psychological, and cardiovascular functioning.

In addition to attending sessions, participants will be expected to read handouts, engage in exercises of their choice, and to complete assessment and other assignments.

According to Bottjer, success at maintaining regular exercise suitable to the individual has been linked to a variety of positive physiological and psychological outcomes. These include:

- improved cardiorespiratory functioning and resistance to disease;
- improved appearance, body image and self-confidence;
- enhanced strength, energy and sports performance;
- appetite and weight control;
- lowered incidence of depression;
- improved sleep;
- heightened sexual interest and appeal;
- improved management of stress;
- the general maintenance of a healthy, attractive and youthful body.

Sessions will run for two hours, and the required fee is due at the first session. For the program overview or further information, contact Bottjer at (415) 497-7340, or write to him at the Behavioral Medicine Program, TD 205, Stanford University School of Medicine, Stanford, CA 94305.

Prospective participants are requested to call or write by April 15.

4-4-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT. Lisa Ames (415) 497-6911

"I CAN COPE" COURSE FOR CANCER PATIENTS AND FAMILIES

STANFORD—

A useful, practical course of the American Cancer Society, for people dealing with the implications of living with cancer, will be offered at Stanford University Medical Center on eight consecutive Wednesday evenings beginning May 4.

Nutrition, body image, rehabilitation, and sexuality are among the topics covered by the course, which is intended for cancer patients and their families. "I Can Cope" seeks to help participants be more aware of their own strengths in coping with cancer, live within limits, and like themselves. It provides a setting where ideas and concerns may be shared and discussed.

The unique course deals with daily health problems as well as legal and work issues, and allows participants to express and resolve their feelings. Free of charge, it will be taught by a team of Stanford oncologists, nurses, dietitians, physical and occupational therapists, and social workers. Information about and access to appropriate community resources will be provided.

"Participants in this course are given an opportunity to realize they are not alone in their adjustments to everyday life," according to co-leader Sherry Feld, L.C.S.W. "Those with cancer and their loved ones need ways to cope with fears and anxieties as well as the disease."

Implemented nationally, she said, the patient education program is helping move people from asking, "What can I do?" to stating, "Here's what I can do!" The course supports the premise that increased knowledge about cancer decreases anxiety and increases a personal sense of participation on the part of the patient and his or her "significant others," with the medical system.

The course was developed by Judi Johnson, R.N., and Pat Norby, R.N., for the Minnesota Division of the American Cancer Society. The course content starts out with very concrete information about cancer, presented in an educational format.

Sessions will be held from 5:30 to 7:30 in room TF 122c of the Psychiatry Building. Susan Weisberg, L.C.S.W., will co-lead. Enrollment is limited. For further information and registration, call the Department of Clinical Social Work by April 27, at (415) 497-5091.

4-4-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Stacie Newman (415) 497-6911
Editor's note: Science/feature writers are invited to attend this conference free of charge.

PUBLIC CONFERENCE ON EATING DISORDERS TO BE HELD AT MEDICAL CENTER JUNE 25

STANFORD—

A conference on eating disorders, sponsored by Stanford's department of psychiatry and behavioral sciences, is scheduled for Saturday, June 25.

The behavioral medicine program is presenting the day-long conference in response to growing community concern about obesity, anorexia and bulimia, to broaden public understanding of such disorders and describe the most current treatments available, said Dr. Stewart Agras, director of the behavioral medicine program and one of the speakers at the conference.

Anorexia, a condition usually found in girls and women, is characterized by a distorted body image and resultant adherence to a rigid, extreme diet which leads to excessive weight loss. Bulimia, also primarily affecting women, tends instead to compel people to eat excessive amounts of food. Most binge and then purge themselves of the food by inducing vomiting, or taking laxatives or diuretics.

Ongoing research continues to question what connections exist between the two disorders, or if in fact they are different facets of one illness.

At the conference, Dr. Agras will give an overview of eating disorders and will specifically address obesity. Speaking on bulimia will be John Bachman, Ph.D., director of the behavioral medicine clinic. Dr. Barr Taylor, associate director of the program, will discuss anorexia nervosa. All three regularly see patients in the eating disorders clinic.

In addition, other faculty and staff from the eating disorders clinic will participate in afternoon small group discussions of each of the topics.

The conference, scheduled to last from 9:30 a.m. to 4 p.m., will be held in M104 of the medical school. Pre-registration is recommended, as space is limited. A fee is charged and will be payable at the door.

Lunch will be available for purchase at the medical center and on campus.

For further information or to register, call (415) 497-7871.

5-31-83 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

(Editors: Dr. Alvin Rosenfeld may be contacted directly at (415) 327-4800 ext. 302, or 497-7642)

CHILDREN CAN SEEK COMFORT IN PARENTS' BEDS, PSYCHIATRIST BELIEVES

STANFORD—

Many children apparently crawl into their parents' bed when scared or sick at night, and that's not necessarily a bad thing, a Stanford University researcher contends.

The opinion of Dr. Alvin A. Rosenfeld, assistant professor of psychiatry and behavioral science, follows a study of 576 children aged 2 to 10. The view differs from that of renowned pediatrician Benjamin Spock, who wrote the all-time best selling guide for parents.

"Better not to let the child in your bed," wrote Spock in the 1976 edition of *Baby and Child Care* "... always bring him promptly and firmly back to his own bed."

Rosenfeld believes that letting a feverish or frightened child stay in the parents' bed for a while can sometimes be helpful. Far too much attention, Rosenfeld said, has been paid to actions rather than the attitudes which motivate them.

"And Dr. Spock agrees," said Rosenfeld who has been corresponding with the noted baby doctor. In a recent handwritten letter, Spock told Rosenfeld:

"I agree entirely that the pathological effect of any parental procedure comes from the attitudes, not the procedure. But how do you explain that in a book for all parents?"

Explain for the public is what Rosenfeld now is trying to do.

"I believe my study is important, because we are just beginning to do real research on children's sexuality—on relationships and the foundations of intimacy. Most sexual research to date has really been animal research in the sense that it looks at biological or mechanical data, not at information about how people feel about each other or the needs and wishes that sexuality fulfills.

"Many psychiatrists can cite instances of patients who have behavior problems who slept with their parents when children. But no one before has studied how typical, non-pathological families behave in this context."

-more-

May 31, 1983

Rosenfeld's study, published in August 1982 in the Archives of General Psychiatry, was conducted at two daycare centers and a summer camp in an affluent community near San Francisco. It is one part of a much larger study of sexual and affectional life in normal families.

The study showed that 68 percent of the children came to their parents' bedroom when they awoke ill or frightened, and 92 percent of the parents let their children come into their bed.

None of the families reported serious behavior problems, Rosenfeld said. The vast majority of parents said they were able to return their children to their own beds during the night, after the youngsters were reassured.

"I'm not contradicting Dr. Spock, who must be respected for humanizing child care in America. I'm simply trying to state that responsible parents must be the judge of what is best for their own child, and I think this study is an indication that they do."

"People look to so-called experts for answers, and these authorities need data on which to base their answers.

He said that one misconception on the effects of co-sleeping or other childraising procedures stems from taking extreme cases where the child comes to psychiatric attention. These cases are then pointed to as examples of how a practice is supposed to be deterimental.

"I can recall a colleague who told of a patient who became a pornographic film maker after sleeping regularly in his parents' bed and watching them have sex about 1,800 times during a 15-year period.

"Of course that is harmful. Sex is much too confusing, exciting and stimulating for children to view. And taking your child into bed every night for 15 years is certainly highly pathological. It also shows no common sense, which is what we're really talking about. But parents shouldn't panic if their children stumble in on them when having sex; that's an isolated, undoubtedly unavoidable incident which need not be a cause for alarm. And if the parents do not overreact, there is no reason to believe their children will ultimately suffer.

"The basic rule of thumb should be that parents should do what is comfortable for them in a deep sense. If they truly feel comfortable having their children see them nude, for example, it might be appropriate behavior within the family. Finnish people are raised that way. But parents shouldn't walk around nude feeling uncomfortable just because intellectually they believe it would be a good idea and will somehow make their children free."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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CENTER PROPOSED TO EXPLORE NMR APPLICATIONS IN MEDICINE

STANFORD—

A new center to explore applications of nuclear magnetic resonance (NMR) in medical research and practice received unanimous approval Friday by the executive committee of the Stanford University School of Medicine.

"NMR, co-invented by Stanford's Nobel laureate Felix Bloch in the mid-forties, has evolved into one of the most extraordinary body-imaging tools of the future," said Dean Dominick P. Purpura. "It's therefore fitting for Stanford to establish a center dedicated to the continuing development of NMR."

The proposal for the new center, estimated to cost $3.3 million, will now move through the University administrative review process before it is submitted to the Stanford Board of Trustees for approval in the fall, said Purpura.

"I view the development of the NMR center as a component of a much broader based program in molecular and genetic medicine which is currently in the planning stages," Purpura said. "Clearly we are preparing for entry into the twenty-first century with an approach that would permit rapid transfer of basic science information to the clinical domain.

"NMR is but one aspect of molecular medicine and an important one. The proposed NMR Center will be the first of its kind anywhere, and Stanford should maintain this leadership as a tribute to Professor Bloch."

New to medicine, but long used by physicists and chemists, the analytic technique of NMR depends on the ability of chemical elements to respond to intense magnetic fields and bursts of radioenergy by emitting signals that indicate the structure of molecules or the state of health in human organs. NMR needs no hazardous X-rays, no injections, no drugs and no surgery to perform its detective work. In medical jargon terms, it is noninvasive, and therefore safe.

In 10 minutes or less, NMR can produce computer-generated images of cross sections of a patient's whole body, or of a single organ, more completely than CT and PET scanners can. Moreover, it can deliver chemical as well as physical information.

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"The technique has enormous potential as a tool for diagnosis and for evaluating biochemical changes in the body during treatment," Purpura said. "It will have a particularly dramatic impact on the analysis and treatment of a variety of neurological and psychiatric disorders because of its ability to image metabolism in different brain areas noninvasively."

NMR instruments use extraordinarily intense magnets cooled by liquid helium to temperatures of about 450 degrees below zero. The magnets generate fields more than 40,000 times as intense as the earth's magnetic field.

Stanford already has a strong program investigating biological applications of NMR under the direction of Dr. Oleg Jardetzky, professor of pharmacology. The program is already building one of the most powerful laboratory magnets in the world to generate magnetic fields nearly 300,000 times more intense than those of the earth. The powerful new NMR magnet will be used for biochemical studies, not for human patients.

But both this instrument and three additional NMR machines will be housed in the proposed center. The building will be shielded from outside radio waves, while a different type of shielding will prevent the scanners' magnetic fields from affecting electronic equipment in the immediate area.

Stanford researchers will use the clinical NMR machines for body-imaging studies, and metabolic studies, looking at how disease changes the body's use of energy. Metabolic changes in the body often occur before any change in anatomy that could be picked up by using X-rays, Purpura said.

The proposed NMR center, whose use will not be limited to biomedical researchers but will be available to all University departments, will be governed by a policy board, Purpura said. A three-member directorate with one member designated as the director will guide the day-to-day operations.

The directorate and governing board will represent the basic sciences, the radiology department and other clinical departments.

Funding for the proposed center will be sought from private sources and federal government, he added.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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PHYSIOLOGY PROFESSOR GEORGE FEIGEN DIES

STANFORD—

George A. Feigen, a Stanford University physiologist whose wide-ranging interests joined the fields of immunology and pharmacology in more than 44 years of teaching and research, died at Stanford University Hospital Sunday evening, after suffering a ruptured aorta. He was 66.

"He was an international leader in research who literally trained students from throughout the world," said Eugene Robin, acting chairman of the department of physiology. Head of the department's PhD. training program for the last ten years, Feigen was "a man of the highest standards, who insisted that the highest level of performance in hands-on training in the lab was critical to the education of excellent young scientists," said Robin.

Born in Rostov, Russia in 1916, Feigen came to the United States in 1930. Doctorate degrees in physiology and immunology from the California Institute of Technology in 1947, sparked a career that explored the effectiveness of various blood substitutes, examined the mechanisms of shock triggered by severe allergy, and investigated the effects of allergic reaction on the heart and blood vessels.

Anaphylactic shock—the most severe allergic response— was Feigen's special area of expertise. In 1967, scientists identified a special protein, called immunoglobulin E (IgE) which plays a key role in triggering an allergic reaction.

Through their study of guinea pigs, Feigen and his colleagues discovered the biochemical reactions that IgE uses to unleash histamine— a potent chemical, normally sequestered in certain cells of the body. Sudden release of histamine into the bloodstream can produce severe and sometimes fatal symptoms.

Feigen spent two decades seeking to understand why a defense system usually so powerful in protecting a person from infection, "goes overboard" under certain circumstances, producing poisons detrimental to the host.

One recent project explored theories that certain cases of female infertility may result from immunization to sperm. Feigen showed that human fallopian tubes are extremely sensitive to histamine, and that the the intensity of an anaphylactic response varies at different phases of the menstrual cycle.

Researchers in Feigen's laboratory are also currently studying the effects of vitamin C on the immune system.

Robin praised Feigen as an outstanding researcher and teacher of laboratory science.

"As a teacher he was feisty and demanding, but extremely loyal to his students," said Robin. "George Feigen radiated integrity."

Feigen joined the Stanford faculty in 1949, after several years of teaching at Cal Tech and the University of Southern California. He spent a year at the University of Oxford in 1956-57 as a traveling scholar of the American Heart Association, and returned to Oxford in 1963-64 as senior post-doctoral fellow, courtesy of the National Science Foundation.

A member of numerous scientific societies, including the American Physiological Society, Sigma Xi, and the New York Academy of Sciences, Feigen served often as guest teacher and lecturer to universities throughout the world.

He is survived by his wife of 35 years, Priscilla R. Feigen. Arrangements for a memorial service were pending at press time.

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STANFORD UNIVERSITY MEDICAL CENTER
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Editors: This story is being released simultaneously with the report of another Stanford researcher's newly published book on the topic of nutrition, Dr. Keith Taylor's *Clinical Nutrition.*

Dr. Wood can be reached directly at (415) 497-6254.

EAT AND PLAY YOUR WAY TO SLIMNESS!

STANFORD—

Encouraging people to ultimately eat more, not less, should be the goal of any worthwhile weight loss program, contends Dr. Peter Wood, deputy director of the Stanford Heart Disease Prevention Program (SHDPP).

What sounds like a unique twist to modern theories of weight control stems from Wood's scientific observation that slim people generally eat more—and do more exercising—than their overweight friends.

As Wood explains in his new book, *The California Diet and Exercise Program* (288 pages, Anderson World Books, Inc., $13.95), the problem with most popular diets is that they focus too heavily on the wrong side of the calorie equation.

"The idea that being overweight is due to, and sustained by, eating inordinately large amounts of food has been with us for many centuries, and dies hard: the gluttony model," the professor of medicine (research) said in an interview.

Actually all it takes, Wood said, is 14.4 calories too much each day for 30 years to store up 45 pounds of extra fat by age 50. This is about a fifth of a banana too much each day, hardly an amount fit to prohibit or prescribe.

"Since the early 1900s Americans have actually decreased their food intake, become more sedentary, and grown fatter. It's clear that the problem is not eating too much, but exercising too little," Wood observed.

In studies at the SHDPP, Wood and colleagues compared lean, middle-aged runners (40 miles per week) and tennis players (10 hours singles per week), of both sexes, with average, randomly selected men and women.

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"The case of the tennis playing women was particularly striking," said Wood. "They reported eating about 62 percent more than their sedentary counterparts." They have to eat a lot, he said, to remain very active.

Wood's book sets forth a systematic approach to weight control, intended for those who've been moderately overweight as adults. Extending over a full year, the program is purposely gradual. "People can be easily discouraged if pushed too fast to change, and that's why so many give up on other diets."

Also, he added, "Most experts agree that a true loss of one to two pounds of body fat per week is the fastest you should go."

The sort of exercise Wood advocates is "play"—that which is enjoyable. He urges people to vary their activities and exercise in company, increasing social contacts as well as physical benefits.

"Of course," he said, "the more vigorous activities burn fuel faster. Jogging, cycling and swimming are champion fat burners." The London born researcher has been an avid runner himself since the age of seven, and authored *Run to Health* in 1980.

"But remember that if you have the time, a mile walked slowly will use nearly as many calories as a mile run fast," he said.

In Wood's program, menu plans work side by side with play plans, the two intricately dependent on each other. Caloric intake is decreased somewhat at the beginning of the year, but gradually increases with level of play, until by the end of the program the individual is both playing more and eating more than before.

"Rewards are built in at intervals," Wood explained. "At the end of the year the body is in balance, neither gaining nor losing calories (or fat). This is the state we need to reach, one of equilibrium."

Wood believes that a full year on his program will accustom the individual to a new lifestyle, ensuring weight maintenance rather than the instant gains so commonly experienced after dieting.

He pointed out that an active lifestyle brings with it numerous health advantages besides weight loss. These include improved cholesterol pattern, decreased inclination to smoke, muscle build-up, benefits to bones and joints, improved heart function and respiratory function, lower resting pulse rate, less constipation, increased resting metabolic rate, improved sleep, and improved mental outlook.

Eating heartily also, Wood said, is what Nature intended for human beings. "There are many disadvantages and some dangers in the permanent low-calorie approach to weight control.

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"In my view, low-calorie diets should be used sparingly and therapeutically to achieve loss of accumulated fat; *not* prescribed as a permanent, desirable, modern, with-it, and thoroughly admirable way of life," he said. "Life—especially Californian life—requires food!"

And, he added, "When your body gets a lot of food and exercise, the natural mechanism for balancing the two works very well." As an example, Wood said he has to be careful that his own weight doesn't go too low.

Advantages of hearty eating include a higher resting metabolic rate, improved nutrition (provided that foods are chosen wisely), less constipation, and more enjoyment.

Also, "Several long-term scientific studies now agree that people who go on to suffer heart attacks are more likely to have been eating *less*, years earlier, than similar people who remained well," said Wood.

"What the data are probably telling us is that the people in the studies who were eating more were also more active and leaner; and these two attributes accounted for their reduced heart disease rates."

Wood designed his weight loss program with safety and efficacy in mind, as well as a special concern for the older person. His plans provide ample amounts of nutrients (protein, vitamins, minerals) and other components to maintain good health (like fiber), and are low in items that should be low (salt, cholesterol, saturated fat).

"Many natural foods are beneficial to health, and may help, along with good exercise, to ward off the major chronic diseases of the age, heart disease and cancer." While dieting, Wood said, many people may inadvertently increase their risks of future disease by omitting some basic food essentials.

This is where most popular and self-designed diets go wrong, he added. "But unfortunately, people ask more of car salesmen than they do about new diets. Some of the fads that have been promoted are outrageous—but you name it, they sell it."

Besides becoming well-informed oneself, it's a good idea, Wood said, to inform one's doctor when embarking on a considerable change in lifestyle. "Those more than 80 pounds above their ideal maximum, or having known major health problems, should certainly consult with their medical advisors before beginning any weight loss or exercise plans."

STANFORD UNIVERSITY MEDICAL CENTER
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Editors: This story is being released simultaneously with a story on Stanford researcher Dr. Peter Wood's new book on excercise and diet.

STANFORD PHYSICIAN SPEAKS OUT ON NUTRITION

STANFORD—

"Low calorie diets put people in a semi-starvation state," warns a Stanford University scientist in a newly published book.

"They affect the metabolism, including brain activity," said Dr. Keith Taylor, professor of medicine. "In the extreme, they cause people to become dehydrated, go into stupor, or even become comatose."

Safe diets, he continued, are those in which none of the essential nutrients is left out, and in which people lose weight at a slower, steady pace. Increased physical exercise, he stressed, can help a lot.

The new book, *Clinical Nutrition*, (631 pages, McGraw-Hill Book Company, $21.95), was co-authored by Taylor and Dr. Luean Anthony of the University of Texas Health Science Center.

"We wrote *Clinical Nutrition* to be a reference book, but also to relay the message that physicians need to think about patients' nutritional status whether they're sick or well," Taylor said in an interview. "Like a medical textbook, each chapter treats a different body system and includes the basic medical information about each one. The difference is that we emphasize nutritional matters in relation to each system."

Nutrition is a major factor contributing to health and disease, but unfortunately, physicians tend to overlook its importance, Taylor observed.

His book, he said, may be the first all-inclusive medical textbook focusing on the importance of what people eat.

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"Our goal is to provide physicians, medical students, nurses, and all health care providers the information they need to be able to discuss eating habits and educate their patients," Taylor said. When a patient asks about a diet, for example, the physician has got to know about it, he added.

"You've got to know why that specific diet is good or bad," Taylor said. "If you've never heard of it, you lose your credibility with the patient. Then even if you give good advice, the patient most likely won't listen."

Taylor extensively evaluates all the popular diets. "Diets on which people eat as few as 300 calories a day, such as the liquid protein diets, are dangerous," he said. "Many deaths have been reported, especially among young women, probably due to cardiac complications.

On a more general note, Taylor and Anthony speculate that some of the diseases of western civilization may in part be due to a move away from the bushman's diet. In the past 10,000 years, agriculture and cattle herding have led humans to adopt diets possibly including too much animal food. Early man's diet, he said, consisted mostly of vegetables with some animal food. By comparison, modern man's diet is probably much more restricted.

While Taylor said all essential nutrients are probably known, the ideal balance of these nutrients, and the effects of an imbalance on the human body still remains a mystery. "In this area," Taylor concluded, "we've still got a long way to go."

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STANFORD MEDICAL GROUP GETS BETTER WITH AGE

STANFORD—

With more than a year of successful operation behind it, the Stanford Medical Group is looking at ways to expand and improve its services, according to co-founder Dr. Michael Jacobs, clinical associate professor of medicine.

Established by Stanford University Medical School's Department of Medicine in 1981, the clinic provides members of the Stanford and surrounding communities the opportunity to receive high quality medical care by faculty physicians without being part of the teaching format.

Two more physicians—Dr. Susan Kritzik, currently a staff physician at Palo Alto Veterans Administration Medical Center, and Dr. Terrigal Burn, currently a clinical instructor in the division of general and internal medicine, and department of mental health and community nursing at University of California, San Francisco—are scheduled to join Jacobs and Dr. Scott Wood in the university-based group practice this fall. Co-founder Dr. Armand Gelpi, clinical professor of medicine, will be leaving the clinic.

The new physicians will enable the clinic to expand its consultation service, which currently serves all clinical departments at the Medical School and Northern California physicians, as well as its medical-psychiatric inpatient service, Jacobs said.

"We also need to address the question of what a service-oriented practice group is doing in what is primarily an academic center," he continued. "We have to integrate our practice with the academic goals of the medical center without risking the quality of care."

The way to accomplish this, Jacobs explained, is to assign select senior residents to work with patients in the clinic. This will be done initially with the inpatient consultation service, followed by "establishing an outpatient rotation for carefully screened senior medical residents especially interested in the practice of primary care internal medicine.

"This would be a natural step for someone who plans to go into private practice within the next few months," he said.

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Jacobs added that he hopes the group physicians will be able to start documenting original clinical observations they experience. This too, he said, will contribute to the "scholarly credibility" of the service-oriented group.

The idea for the group practice evolved in response to individuals' expressed desire to have a full-time faculty member as their personal physician. SMG is based on similar programs in existence at about half the nation's medical schools. Jacobs and Gelpi formed the original core of physicians, aided by about 12 affiliates from the department of medicine. The group, which also includes a full-time nurse, offers patients complete outpatient and inpatient care on a 24-hour basis.

The faculty member chosen to be the personal physician is fully responsible for their patient's care, Jacobs explained. The physician arranges consultation with other medical specialists if needed, and is available for outpatient visits in the clinic during regular weekday office hours. If hospitalization is necessary, the physician admits the patient to Stanford University Hospital, and assumes the attending, or teaching function on one of the teaching services.

During its first year of operation, the group received more than 3,200 outpatient visits, Jacobs said. About 40 percent of the referrals came from Medical Center physicians, while about 60 percent came from outside physicians.

"The group achieved a balanced budget in its first year, which is a distinctly unusual occurrence in comparable programs," he added.

In 1982, Wood joined the group as the third physician. He cares for Stanford University Hospital employees' job-related illnesses, and performs all intake examinations on Hospital personnel.

"Attaining this contract between the SMG and the Hospital was important because it justified adding a third full-time physician after only a year of operation. Also, Wood is in an ideal position to attract new patients to the group," Jacobs observed.

The group, which is administratively and financially independent, is also planning to move into new office space, as part of the Boswell Building renovation plan. The $6.5 million construction, equipment, and remodeling program will upgrade the physical facilities of the Stanford University Clinics. The clinics serve as offices for the Medical School faculty. They receive about 135,000 visits per year.

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(Editors: The following item was sent **Business Wire** *on Wednesday, May 18)*

DONOR SHORTAGE REDUCES HEART-LUNG TRANSPLANTATION

STANFORD—

Scarcity of donors has restricted Stanford's heart-lung transplant effort, the program's principal investigator said Wednesday (May 18) after the first such operation in more than four months.

"We have been hoping to perform about 12 such transplants a year, but today (Wednesday) was the first time we have found a suitable donor since January," making it only the second heart-lung transplant this year, said Stuart Jamieson, assistant professor of cardiovascular surgery and head of the heart/lung program.

"Three of the 10 persons waiting for new hearts and lungs have died since last January, and we can expect to lose more unless potential donors are brought to our attention."

The physician said only about 20 percent of potential heart transplant donors are suitable for the double transplant operation, which has been performed 12 times at Stanford since March 9, 1981. Eight of the patients, including the four most recent before Wednesday, have returned to their hometowns and are doing well, Jamieson said.

The difficulty, Jamieson said, is that the lungs often become damaged before they are removed and can be used in surgery. Pneumonia is the most common condition which afflicts brain dead donors while mechanical equipment keeps their hearts beating and their lungs ventilated until the organs are transplanted into a recipient, Jamieson explained.

When the lungs are found unsuitable, the heart often can be used for a heart-only transplant. Eight such operations have been performed since the last heart-lung operation was performed, bringing the heart-only total at Stanford to 263 since January 1968.

Heart-lung transplantation is newer and was made possible by recent improvements in medication intended to prevent patients' bodies from rejecting their new organs. A new drug, cyclosporine, permits healing of the windpipe.

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"Heart-lung transplantation has been proven to be helpful to a small number of patients who otherwise would face certain death without the procedure," said Jamieson. "But our ability to perform the operation is limited because of our difficulty in having potential donors brought to our attention."

Donors, he said, must be brain dead but free of other disease. Their families must give permission to donate their organs after death.

"Our whole problem," Jamieson said, "depends on public awareness of the need for this precious resource."

The most recent heart-lung patient was identified as Fernando Flores, 32, of Mercedes, Texas, who was reported in critical but stable condition after the five-hour operation. On Thursday morning he was awake and breathing unassisted.

"He still has a long way to go, but he is doing well," Jamieson said.

Flores, who had worked as a career counselor, suffered from a ventricular septal defect. A hole present from birth allowed blood to flow between the chambers of heart, causing a volume overload of blood which eventually damages the lungs. The condition ultimately is fatal unless both the heart and the lungs are replaced.

A 38-year-old Visalia, Calif., man, Dennis Vinyard, was the last heart-lung transplant recipient at Stanford. He has returned home after hospitalization and treatment following up his Jan. 10 operation, Jamieson said.

Stanford's first heart-lung transplant, Mary Gohlke, now 47, has returned to her Mesa, Ariz., home. She has worked as a newspaper advertising executive and has been working on a book recounting her experiences.

"We'd like to be able to perform more of these operations," said Jamieson. "The critical factor is donors."

The physician stressed that hospital personnel can play a critical role in identifying potential recipients and explaining during a very stressful time to families how the brain dead patient's organ can be used to save someone else's life.

Medical personnel or families who may have a potential donor may call Stanford's Department of Cardiovascular Surgery, (415) 497-5771, 24 hours a day.

"We are able to accept donors from throughout the United States or Canada," Jamieson said.

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SYMPOSIUM HERALDS MOLECULAR ANSWERS TO QUESTIONS OF DISEASE

STANFORD—

Genes that can trigger cancer, the biology of learning and memory, and cell receptors that help the body fight heart disease all played a part in what Stanford Medical School Dean Dominick Purpura called an "academic festival" held at the medical center Friday (May 13).

Six scientific sleuths from around the country, prominent in the search for molecular answers to questions of health and disease, profiled their research for an overflow crowd in Fairchild auditorium in a day-long symposium entitled "Perspectives in Molecular and Genetic Medicine."

Just as the invention of the microscope opened a window on a world too small for the naked eye, the new biochemical tools of geneticists are permitting scientists to go several steps further and explore the interactions of molecules in both healthy and diseased tissue. Researchers in a variety of fields are now snipping molecular strands of genetic material into component parts, and recombining them in ways that offer a new, deeper level of understanding.

"We are, to a large part, what we are because of what we've learned. But only in the last decade has learning become something that we can study on a cellular level," said Eric Kandel, a neuroscientist from Columbia University whose work with James Schwartz has revealed fundamental mechanisms of learning in sea slugs.

The celebration of recent advances in genetics, biochemistry and medicine was prompted, Purpura said, by the university's recent commitment to a "Center for Molecular Genetics," an interdisciplinary program planned for development at Stanford within the next several years.

"It is critical to be far-sighted," President Donald Kennedy later told a gathering of alumni, "if we are to lead phase two of the wave of breakthroughs in biochemical research in the same way that we have led phase one."

"Phase two" of the revolution will involve further exploration of basic science, Purpura said, coupled with applications of that knowledge in ameliorating disease.

A century-old search for a genetic basis for cancer may have found its first fruits in the recent discovery of "oncogenes," genes found in certain animal tumors, and thought also to exist in some human cancer cells, that by their very presence convert a healthy cell to a cancerous one.

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"Tumor viruses have revealed to us a set of genes whose activities may lie at the heart of every cancer, no matter what its cause," said J. Michael Bishop, a microbiologist from the University of California, San Francisco. "We view these genes as the keyboard on which many different carcinogens can play, whether they be chemicals, X-rays, the ravages of aging, even viruses themselves. An enemy has been found—it is part of us—and we have begun to understand its lines of attack."

Bishop uses viruses as experimental tools "to ferret out the universal processes that may cause a cell to run amok". Michael S. Brown, a geneticist at the University of Texas Health Science Center at Dallas, spoke of using similar genetic tools to get an inside look at arteriosclerosis—an often fatal clogging of the arteries.

"Mike Bishop mentioned that one out of four people in the United States die from cancer. Twice as many die from hardening of the arteries," said Brown. "It's an insidious disease that begins in the teenage years, but usually causes no symptoms until middle age, when heart attacks and strokes begin to occur."

To understand why the disease starts and how it progresses, Brown and colleagues looked to the metabolism of cholesterol and found answers. Most cholesterol is made in the liver and travels through the blood in tiny protein packages called "low density lippoproteins," or LDLs. Receptors inside each cell retrieve the LDLs from the cell surface and carry them inside to be broken down in a several-step process.

About one in 500 people in the world have a genetic defect that makes those receptors faulty, Brown said, and permits too much cholesterol to build up in the bloodstream. "Hypercholesterolemia," an illness that leads to arteriosclerosis, is one of the most common genetic diseases in the world, he said. During the past eight years, Brown and his team have defined gene mutations that deform the LDL receptor in persons who have the disease, have located the receptor within the cell, and are now trying to clone the genes in an effort to better understand and find new ways to treat arteriosclerosis.

The new tools of molecular and genetic medicine have found a niche in the study of normal processes as well as in the research of disease. Eric Kandel told the audience how his work with "aplysia," a variety of sea slug, is shedding light on the mechanisms of memory and learning.

"Some of us feel that the ultimate challenge facing biology is the neurobiology of mentation," Kandel said. "Can the complexity of behavior be explained by a simple grammar of biological rules?"

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The sea slug has relatively few neurons that are large and much easier to study than the interlocking maze of cells that make up man's brain. The slug's behavioral repertoire is also quite simple, but the primitive behaviors, and ability to learn and remember are probably governed by the same molecular mechanisms as the more complicated processes seen in higher organisms, Kandel said.

Even remembering the name of an acquaintence probably causes semi-permanent changes in the junctions between nerve cells in the brain, he suggests.

Channels in the membrane of nerve cells open and close to permit electrically charged molecules to flow back and forth at the bid of an electrical signal initiated in the brain. Changes in the number of channels that open determine how much neurotransmitter—the chemical messenger between nerve cells—will be released.

Kandel and his associates have studied the sea slug's "gill withdrawal reflex," the tiny creature's response to being disturbed. In calm tidepools, a sudden change in water pressure signals that a predator may be nearby, and prompts the gill withdrawal reflex as a first step towards escape.

But when repeated stimulation with the same stimulus signals no ill effects, the sea slug grows accustomed, or "habituates" to the stimulus. Through experiments, Kandel has linked the habituation to a change in the number of specific ion channels open in the cell membrane. If the sea slug is then exposed to a new stimulus—such as a mild pinch—the configuration of open channels changes again, more transmitter is released, and the creature quickly withdraws his gill.

Neurobiologists see habituation and its sister phenomenon "sensitization" as building blocks of learning.

Other speakers at the symposium included Philip Leder, Harvard Medical School; Gerald Ruben, Carnegie Institution of Washington; and Leon Rosenberg, Yale University School of Medicine.

Paul Berg, Stanford's Nobel prize winning geneticist, called Friday's symposium a "treasure trove of scientific discovery." The conference will be held annually, Purpura said, to "memorialize life through the study of science" and to foster the translation of research advances in molecular and genetic medicine into revolutionary methods of disease diagnosis and treatment.

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STANFORD UNIVERSITY MEDICAL CENTER
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HEMATOLOGY SUPPORT GROUP FORMED

STANFORD—

How would you feel if your doctor told you you had leukemia? Or hemophilia? Whom would you talk to? How many of your friends and relatives understand what problems such diseases present?

These are just some of the reasons that a new patient support group has been formed at the Medical Center for patients treated in the hematology clinic with relatively rare diseases such as leukemia, multiple myeloma, polycythemia, or hemophilia.

The group enables patients with the same types of medical problems to share the feelings, frustrations, coping strategies and other concerns peculiar to this type of health problem. The support group meets each Wednesday from 10:30 a.m. until noon.

The group is run by Dr. John Ruark, a resident in psychiatry, and Phyllis Burton, R.N., B.S.N., a staff nurse in the hematology clinic. Also frequently present are Juanita Smith, M.S.W., and Kathleen O'Brien, M.S.W., both from the department of social services.

Patients are welcome to bring family members or friends to the support group, which meets in TF-122c of the Psychiatry Building at the medical center. Other health care staff are also encouraged to attend at any time.

For further information, call the hematology clinic at (415) 497-6961.

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LIVING AND COPING AFTER MASTECTOMY

STANFORD—

To heal her scars is the goal of a mastectomy patient on the road to recovery.

Often overlooked, however, is the fact that these scars are more than skin-deep. The emotional recovery of a woman who's undergone a mastectomy is frequently harder to reach—and longer in coming—than her physical recovery.

"Women who've had mastectomies as long as 20 years ago still experience the same emotional stresses as those new to the situation," said Regina Kriss, Ph.D., and project director of postmastectomy group therapy in the department of psychiatry at Stanford. "It's clear that, contrary to what many women have traditionally been told, time alone will not help."

It was largely these considerations that led Kriss, a family therapist, to undertake a study of the role of therapy in helping women deal with their psychological reactions to breast loss.

Specifically, Kriss collaborated with Dr. Helena Kraemer, associate professor of pschiatry, to research the effects of group therapy on the sexual adjustment and self-image problems of postmastectomy women.

A panel of postmastectomy women, joining Kriss in a public lecture at the Medical Center last week, confirmed that the group setting had been particularly helpful. It provided the chance for each woman to hear her own emotions expressed and validated by others, and as one woman said, "to feel that she was probably not the worst off."

Sixty-two women entered Kriss' study groups, which began in 1979. Compared to women who had not had mastectomies, these women were less self-accepting, less sexually active, more dependent, and more self-sacrificing, she said. Both married and single women had experienced profound changes in their sexual interactions.

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As demonstrated in "No Less a Woman," a dramatized documentary film made by Kriss and Marvin Silverman, professor of education at San Francisco State University, married women often found their husbands withdrawn and cold, unable to offer comfort or to express their own sorrow and fear; many single women, terrified of rejection, shrank away from establishing any relationships with men.

Kriss, who has herself had two mastectomies, explained, "Breasts are a symbol of femininity, of desirability. Without them, it seems that everything you can offer a man is gone. It isn't vanity—it's the loss of an essential part of your core of existence as a woman."

Says one woman in the film, "I feel like a fraud. On the outside I look fine, but I'm not a real woman on the inside. I can't stand even looking at myself in the mirror; how can I show anyone else?"

Kriss said that because of these feelings, and possibly also because of the anger they feel about what's happened to them, some postmastectomy women end up feeling asexual. Ironically, at the same time, they may feel a greater need for sex and a sexual relationship than ever before.

"Some women find it harder to make a sexual adjustment toward their husbands than toward other men, since with their husbands there's more a sense of sadness about their loss," said Kriss.

But one man in the audience commented, "Being a WWII veteran myself I've seen many people have to cope with physical mutilation. Twenty years ago it would have been harder I think, but now I just know I'd rather have my wife here than not. So I can look at those pictures of mastectomy scars, though it's hard, and I can tell my wife here in public that I hope to God it never happens to her, but it won't make a damn difference to me if it does."

Because the issue is so complicated, Kriss soon realized in her research that she had to include men. So she held separate and then couples group sessions. She also did this with the women's daughters, most of whom were frightened, realizing they were at higher risk for cancer.

"In both cases, I found that everyone was protecting everyone and not telling how they felt. Through the groups they were all able to open up more." She added, "This is a time for close communication within a family, and all family members, even sons, are affected."

(In the next step of her studies, Kriss plans a pilot study on family work through groups of mothers and daughters, in collaboration with Dr. Alice Lee, a psychiatrist in private practice and a clinical instructor in the department of psychiatry.)

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During the study, the importance of early therapeutic intervention after mastectomy became increasingly obvious, said Kriss. Few doctors realize the trauma of the surgery, she said, or prepare their patients for its psychologic impact.

"Doctors don't know because their patients don't tell them. To be 'good' patients, women after mastectomy deny perfectly normal feelings. They have to take the responsibility for communicating their problems, and doctors have to listen."

One woman in the audience added, "If any doctor says, 'Never mind that, just trust me,' run away so fast that you can't see straight."

Kriss attested that the medical community is now becoming more aware and attuned to the special problems of mastectomy patients. In Hoover Pavilion at SUH, she said, women and their husbands are interviewed carefully on attitudes towards breasts and the possibility of breast loss.

One exercise of her therapy groups was for the women to go home and really look at their scars. At another session, the women decided to compare their scars. "That was so therapeutic," said one. "You could say to yourself, 'hey, it doesn't look so bad when you look at someone else.' "

Emotional recovery after mastectomy, said Kriss, is tied intrinsically to the medical experience of surgery followed by chemotherapy or radiation. "The whole thing is so traumatic because of its suddenness," she said. "One day you're OK, the next you're not. You're not prepared for it, it's not gradual like the aging process or the progression of chronic disease."

The question women later ask is, "My cancer's now cured, but what next? When do I start to feel like me again?"

Some women opt for reconstructive surgery as part of the recovery process or to make them more comfortable in their active, outdoor lifestyles. For others, going "under the knife" again is too frightening, or unnecessary.

But even those who've had successful reconstruction say it doesn't change the fear, or the knowledge that they've had cancer. It doesn't erase anything.

Neither does group therapy solve all the problems. But the most important thing every mastectomy patient must do, said Kriss, is admit to herself if she needs help coping and seek out a group that can help.

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REAVEN AND PRINCE NAMED TO NEW ENDOWED CHAIRS

STANFORD—

Two new endowed professorships at Stanford University Medical School will sponsor faculty members conducting research in neurological sciences and in the mechanisms and treatment of diabetes, the University Board of Trustees announced Monday (May 9).

Gerald M. Reaven, a professor of medicine/gerontology and a leader in understanding the role insulin plays in diabetes, has been named the Nora Eccles Harrison Professor in Diabetes Research.

David A. Prince, professor and chairman of the department of neurology, has been named the Edward F. and Irene Thiele Pimley Professor in Neurology and the Neurological Sciences.

Reaven, 54, has focused his research on the physiology, biochemistry and mechanism of action of insulin in the human body. He helped verify that it is certain cells' insensitivity to insulin, rather than a lack of insulin, that is the source of the most common form of diabetes. Tracking the problem to a cellular level, the physician has actively pursued new treatments aimed at improving tissue sensitivity to insulin, and thus improving control of the disease.

The Harrison Professorship is the first in the diabetes field at Stanford, and was established to honor Nora Eccles Harrison, a noted artist in ceramics, and founder of the Nora Eccles Treadwell Foundation, which sponsors advances in medical research in the areas of cardiovascular diseases, arthritis, and diabetes in California and Utah.

The chair is the second professorship at Stanford endowed by a member of the Eccles family. In 1973, the Marriner S. Eccles Professorship was established in the Graduate School of Business in the name of Nora Eccles' eldest brother, an internationally known banker, business executive and former chairman of the board of governors of the Federal Reserve System.

Prince, 50, holder of the Pimley chair, studies the intricate communication between cells in the brain. He has made important contributions to understanding the development of electrical signals and abnormal discharges in nerve cells, as well as the ways transmitters—chemical messengers of the nervous system—affect nerve cell behavior.

Prince and his colleagues were the first to record from inside neurons of the human brain, and have pioneered techniques for keeping brain tissue alive in an artificial environment to study the cellular abnormalities that can underlie neurological disorders.

Irene Thiele Pimley, a long time San Francisco resident and patron of oriental art, was ill for many years with Parkinson's disease before her death in 1982. Her bequest to Stanford of more than $3 million for basic research into the causes and cures of Parkinson's and related neurological disorders reflected the interest she developed in the scientific background of the disease, her family said.

Pimley lived in China for many years with her husband, Edward, as a result of his business interests there. He was one of the founders of the American International Group, a marine and business insurance fund that operates internationally.

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5/11/83

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CHAS PROJECT DIRECTOR NAMED

STANFORD—

Mr. Langston G. Trigg, Jr. has been named project director for the New Children's Hospital at Stanford (CHAS), announced Dr. Lawrence G. Crowley, chairman of the Board of Directors.

Trigg has been assistant director of facilities/projects of Stanford University Medical Center since 1980. He will assume his new position on June 6, 1983.

As project director, Trigg will be responsible for overseeing the organization of planning and construction of the new children's hospital at the Medical Center. He will report directly to the chairman of the Board.

The boards of directors of Stanford University Hosptial (SUH) and CHAS agreed last summer to consolidate the pediatric facilities of both institutions. The new hospital— to be built at an estimated cost of $40 million—will be physically attached to SUH. It will consolidate the 60 beds at CHAS and the 44 pediatric acute medical-surgical and pediatric intensive care beds at SUH. It will also house the Stanford-Children's Ambulatory Care Center, which provides 27 separate clinic services. It will continue to provide inpatient services in the 15 specialties now offered by both hospitals.

Prior to coming to SUH, Trigg was facilities planner and project manager at Children's Hospital Medical Center in Oakland, where he headed up a $36 million new building project.

He received his master's degree in architecture from University of California, Berkeley, in 1975.

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DIGITAL RADIOGRAPHY: 'THE WAVE OF THE FUTURE'

STANFORD—

An extension of a standard angiogram may provide more diagnostic information—while being less expensive, quicker, and more comfortable for patients—by incorporating modern computer technology, according to researchers at Stanford University Medical Center.

"Digital radiography is the wave of the future," said Dr. Diana Guthaner, assistant professor of radiology, who is researching its clinical applications. Still not widely available, the procedure works by digitizing the information—converting it to computer language. In many situations, this allows physicians to get a better image than with a standard angiogram, which gives a picture of the body's vascular system by using X-rays.

More specifically, digital fluoroscopy is being used instead of more invasive angiograms to screen various diseases of the blood vessels, and determine heart function and blood flow. It is also being used to supplement angiograms in order to get the most out of the information obtained.

With standard angiograms, a catheter—a long tube thinner than a drinking straw—is threaded into the blood vessel physicians want to observe. An iodine contrast substance is injected through the catheter. The contrast blocks the X-rays from going through the vessel onto the film. Thus, the vessel appears white on the film, while everything else not blocked by the contrast appears black.

Piercing the skin with the catheter in order to thread it to the specific vessel is painful for the patients, Guthaner said. The iodine can be irritating, she added, which also causes pain. Many patients with heart or kidney failure cannot handle the large amounts of iodine necessary in routine angiograms. The substance makes the body retain water, she explained, which such patients cannot tolerate.

Digital fluoroscopy, on the other hand, is "virtually non-invasive and non-traumatic," Guthaner said. As a screening method, the iodine is injected into the veins rather than the arteries. It dissolves in the body's blood quicker. Therefore, its concentration in a specific vessel is lessened, which decreases the pain.

The procedure is quicker as well, she added. Following routine angiograms, the patient is required to stay in the hospital for at least six hours, which usually ends up being overnight. Digital fluoroscopy, however, is done on an outpatient basis, thereby cutting costs.

Rather than looking at an X-ray, physicians call up an image on the computer screen. This image can be enhanced by subtraction techniques, through which everything but the vessel in question is eliminated from the screen.

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There are limitations to the procedure, however. Often the image is not quite clear, Guthaner said, because it can be obscured by any patient motion. And if the vessels overlap each other, she continued, the procedure is not effective.

But, she added, many patients who would forgo an angiogram because of its invasiveness will agree to digital fluoroscopy screening. This gives physicians the chance to diagnose disorders of the vascular system early on.

Digital fluoroscopy can be incorporated in standard angiograms, Guthaner said, providing more information without using more contrast.

Potential clinical applications, she continued, include determining what type of therapeutic intervention to use, aortic disease, patency of coronary bypass grafts, cardiac function, and as a follow-up for vascular surgery.

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LECTURESHIP NAMED FOR PROFESSOR EMERITUS

STANFORD—

The establishment of the David Glick Lecture, to be given at the Congresses of the International Federation of Societies for Histochemistry and Cytochemistry, has been announced by Dr. Sidney Goldfischer, president of The Histochemical Society.

Glick is a Stanford professor of pathology emeritus, now active in the department of radiology's Cancer Biology Research Laboratory. He was one of the founders of The Histochemical Society and served twice as its president. He was president from 1972-76 of the International Committee for Histochemistry and Cytochemistry, now the International Federation named above.

Among his distinctions Glick has an honorary LL.D. degree from the University of Glasgow, Scotland. He is an honorary member of The Histochemical Society (U.S.), Finnish Histochemical Society, and the Royal Danish Academy of Sciences.

He was given the Van Slyke Medal and Award (1977) and the Ames Award (1980) by the American Association of Clinical Chemistry, for his basic research applicable to this field.

Glick earned his B.S. in chemistry at the University of Pittsburgh in 1929, and his Ph.D. in biochemistry there in 1932. After an already extensive and varied professional career, he joined the Stanford Medical School faculty in 1961.

He has served on several scientific journal editorial boards, and has published widely.

The David Glick Lecture is to be given every four years by an outstanding histochemist or cytochemist selected by the officers of the International Federation. Glick has been invited to give the first Lecture at the next Congress in Helsinki, August 5-11, 1984.

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UPCOMING LECTURE: SEXUAL AND EMOTIONAL PROBLEMS POST-MASTECTOMY

STANFORD—

The film "No Less a Woman," on self-image and sexuality after mastectomy, will be the focus of the next public lecture in a series sponsored by the Friends of Psychiatry and Behavioral Sciences at Stanford.

Before the film, speaker Regina Kriss, Ph.D., family therapist and project director of post-mastectomy group therapy in the department of psychiatry, will describe her research on the effects of group therapy on breast loss and sexual adjustment of post-mastectomy women.

The lecture will take place 8 p.m., Thursday, May 12 in the Sherman Fairchild Auditorium, and will include a panel of women who have participated in post-mastectomy group therapy. They will discuss and answer questions about their experiences.

In 23 minutes, the dramatized documentary "No Less a Woman" will reveal how group therapy helps women deal with the emotional problems so common after mastectomy.

The outgrowth of a collaboration between Kriss and Marvin Silverman, professor of filmmaking at San Francisco State University, the film is based on the experiences of the women in Kriss' study.

"The film has tremendous power," said Kriss. "It leads viewers to experience for themselves what is happening in these women's lives. Because it communicates problems that are hard to describe, it has turned out to be a valuable teaching tool."

The film treats the reactions of both married and unmarried post-mastectomy women, both groups of whom experience profound changes in their sexual interactions, said Kriss, who has herself had two mastectomies.

Admission to the evening presentation is free, and there are no reserved seats. Dr. Thomas Gonda, professor and chairman of psychiatry and behavioral sciences, will serve as moderator.

For further information or to get on the Friends of Psychiatry and Behavioral Sciences mailing list, contact Karen Sortino at (415) 497-6376.

5-3-83 —30— LA3

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COMPANY LICENSES GENE CLONE PATENT

STANFORD—

Creative BioMolecules Inc., of Brisbane, Calif., has licensed rights to the DNA cloning patent held by Stanford University and the University of California at San Francisco, Stanford announced Monday (May 2).

John Callahan, president of the 1-1/2-year-old biotechnology company, said the patent was needed to perform quality control functions on chemically synthesized genes, including a product which offers the eventual possibility of helping persons with growth deficiencies.

The patent issued Dec. 2, 1980 covers the basic techniques of DNA cloning—often called gene splicing—which were developed by Stanley W. Cohen, professor of genetics at Stanford; and Herbert W. Boyer, professor of biochemistry at UCSF.

Seventy-four companies have taken out licenses, and current license holders total 68, said Katharine Ku, who administers the DNA cloning license for Stanford's Office of Technology Licensing.

Ku said several companies have dropped the license because they were no longer planning to use the technology, while other companies dropped out when they were acquired by other firms already holding a license.

The patent grants nonexclusive rights to this patent and a pending U.S. patent application which covers "products"of the technique. Ku said Stanford has not been actively soliciting new licensees actively until the outcome of the pending application is known.

Net proceeds from the licensing are split evenly between Stanford and UC and used to support research and education. To date, more than $2 million has been derived in licensing fees, Ku said.

One consumer health product, insulin, has been made and marketed from bioengineeering techniques based on the Stanford-UC patent. Other products are being made and sold in research, said Ku.

Creative BioMolecules, which has laboratories in the Boston and San Francisco areas, recently announced the availability of one such research product, its chemically synthesized gene for human growth hormone-releasing factor (hpGRF).

Callahan said the hpGRF gene will be offered for sale on a nonexclusive basis to any university or industrial group interested in the study or production of hpGRF.

The gene is a tool which a company eventually might use to manufacture medication which will trigger the release of a patient's natural growth hormone. Callahan estimated several years would elapse before any product could be available for widespread clinical use.

Creative BioMolecules specializes in nucleic acid and protein chemistries and their applications to the field of biotechnology.

May 2, 1983 —30— mg4

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AIDS: ANSWERS TO COMMON QUESTIONS

STANFORD—

Reporters/editors:

Acquired immunodeficiency syndrome (AIDS) has gained widespread, and often alarming publicity recently. Dr. Thomas Merigan, chairman of the department of infectious disease, and Carol Oakes, R.N., assistant director of care review/risk management for the Stanford University Hospital, helped to prepare the following column to help the public separate fact from fiction on current understanding of the syndrome and how it is spread. You should feel free to use it as background, reprint it, or excerpt any portion in your ongoing coverage of AIDS.

What is AIDS?

Acquired immunodeficiency syndrome strikes the immune system, zeroing in on two types of T-lymphocytes (T-cells), a class of white blood cells crucial to the human body's ability to battle infection. Helper T-cells, the generals of the immune system that regulate the army of cells that mobilize each time a foreign substance or organism enters the body, usually are found twice as frequently as suppressor T-cells in a healthy person. But in a patient with AIDS, suppressor cells, which normally keep the immune system from running amok, outnumber helper cells. In addition, the overall number of T-cells is reduced. As a result, the AIDS patient's immune system is stripped, leaving him vulnerable to infections that a healthy person can easily thwart. Incubation time between the exposure to AIDS and the onset of symptoms has been between six and 18 months in some cases.

What are some of the diseases affecting AIDS patients?

About 90 percent of the cases studied have had one or both of two rare diseases: a usually rare type of cancer known as Kaposi's sarcoma, and *Pneumocytosis carinii*, a parasitic infection of the lungs. Other infections that have afflicted AIDS patients include yeast infections, cytomegalovirus (CMV), herpes, and toxoplasmosis.

How serious is AIDS?

AIDS has a high mortality rate, ranging from 20 to 70 percent, depending on the specific infection. Patients don't die from AIDS; they die from the serious infections that develop because AIDS has stripped away most of their natural immunity to disease. The Centers for Disease Control report that, as yet, they know of no AIDS patients who have regained immunity, so that even if a specific bout of illness can be curbed, repeat infections are likely.

Is AIDS a new disease?

Yes, apparently so. Careful studies show no clear evidence of AIDS before 1979. The origins of the disease are still unclear, although many scientists now believe that AIDS is caused by an unidentified virus that specifically attacks lymphocytes. Such a virus might be a mutated form of a more common human or animal virus, and probably interacts with a number of other factors to cause disease.

Are there any symptoms characteristic of AIDS?

There are no clear cut symptoms to indicate a loss of immunity, but many patients with AIDS complain of fever, a loss of appetite, sudden weight loss, extreme fatigue and enlargement of the lymph glands. These symptoms often develop over a period of several months before becoming severe enough to be markers for specific diseases. Early symptoms of Kaposi's sarcoma include brown or blue-violet spots that can appear anywhere on the skin or in the mouth. As the disease progresses, the spots grow larger and may become open sores. Pneumocystis pneumonia triggers symptoms similar to any other form of severe pneumonia, highlighted by fever and difficulty in breathing.

Is there a laboratory test for AIDS?

There is no specific laboratory test that can diagnose AIDS patients. However, 95 percent of AIDS patients show an identifiable change in the numbers of different types of cells in their immune system. This difference is currently being used at the Stanford Medical School Blood Bank as an indicator of donated blood that might inadvertantly have come from a person with AIDS. The blood screening method is not perfect. Sometimes a harmless viral infection can initiate the same change in the blood cells, and some healthy people contain the unusual characteristic naturally in their blood. But physicians at Stanford's blood bank feel that the very small amount of blood lost because it was mistakenly thought to have come from a person with AIDS is worth the extra protection it affords blood recipients. Researchers around the world are currently seeking a less expensive, more effective method of screening blood for AIDS.

Who is at risk of contracting AIDS?

Currently, the people known to be at highest risk for infection are homosexual men with many partners (75 percent of the cases), intravenous drug abusers, hemophiliacs and Haitians. The link between the first three groups appears to be exposure to blood or blood products. Whatever spreads the disease seems to be present in blood and semen, and perhaps mucus and saliva. Airborn spread, through a cough or a sneeze, and spread through casual contact with a person with AIDS do not seem likely means of disease transmission.

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Needles shared by drug users provide an obvious route of transmission. Hemophiliacs who lack a vital clotting factor in their blood often receive a transfused concentrate of the factor to stop their bleeding. Such a factor, which occurs naturally in minute quantities in blood plasma, may be pooled from hundreds of donors for one transfusion. The mode of transfer of disease among homosexuals is unknown, although the small amount of bleeding from the lining of the anus that can occur during anal intercourse has been suggested as a likely possibility. The Haitian victims, as yet, do not fit the blood-transmission pattern.

A few people who don't fall into the identified high risk groups have contracted the disease, but nearly all seem to have had some close connection to one of these groups. The detection of AIDS in a few women and babies, for example, does not mean that all mothers and babies are at risk. The women who developed the syndrome had sexual partners who had AIDS. Except for the few children who have acquired the illness through blood transfusion, babies who contracted the disease were born to women who probably had AIDS themselves and may have transmitted the illness during pregnancy or while giving birth.

Are hospital employees at risk for contracting AIDS?

To date, no cases of AIDS have been reported among those caring for the slightly more than 1500 AIDS patients around the world. Researchers studying the disease recommend that hospital personnel take the same precautions when caring for AIDS patients as those used for patients infected with hepatitis B virus, which seems to follow the same pattern of transmission as AIDS.

Guidelines from the Centers for Disease Control in Atlanta, Georgia, suggest that "patient-care and laboratory personnel should take precautions to avoid direct contact of skin and mucous membranes with blood, blood products, excretions, secretions, and tissues of persons judged likely to have AIDS."

A private room, disposable dishes, careful bagging of linen and trash as well as the use of gowns, gloves and sometimes masks (depending upon the specific infection) are standard procedure in caring for these patients at Stanford. Members of the health care team are advised to use special care while drawing blood and disposing of needles to avoid pricking themselves. Any specimens of blood or body secretions sent from AIDS patients to the hospital laboratories are labeled as having come from patients in isolation. Laboratory workers should avoid getting such specimens on skin, or mucus membranes.

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STANFORD ONCOLOGIST NAMED AMERICAN CANCER SOCIETY PROFESSOR

STANFORD—

Dr. Saul A. Rosenberg, professor of medicine and radiology at Stanford University School of Medicine, has been awarded a Professorship in Clinical Oncology by the California Division of the American Cancer Society.

Rosenberg is the second scientist in California to receive the professorship. The Society is funding only 17 others in the country.

The professorship was established in 1971 to allow receipients to improve and expand cancer teaching programs and cancer patient care at their institutions.

"It is an honor to be selected from among the candidates throughout the state," Rosenberg said. "It reflects not only on my work, but on the excellence of the institution."

Rosenberg will receive $125,000 over the next five years. The funding, he said, will facilitate the department of medicine's and Medical School's search for another cancer investigator, which will allow Rosenberg more time to become more involved with cancer-related activities at the Medical Center and within the region.

"We hope to be able to collaborate further in our multidisciplinary approach to cancer teaching, research, and patient care," Rosenberg said.

Rosenberg has recieved international acclaim for his research on Hodgkin's disease. He and Dr. Henry S. Kaplan, D'Ambrogio Professor of Radiology, have made dramatic advances in the diagnoses and treatment of the disease, which have led to better than 80 percent survival at five years for all stages of the disease. Seventy-five percent of the patients are permanently cured, according to published figures.

Rosenberg is chief of the Division of Oncology at Stanford, having been among those who spearheaded the development of oncology as a specialty of internal medicine. He is also director of the Debbie Probst Oncology Day Care Center, a treatment center for cancer patients.

He has received the Henry J. Kaiser Award for excellence in Teaching, and was the first recipient of the Arthur Bloomfield Award for Excellence in Teaching in Clinical Medicine.

6-27-83 —30— sk4

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NEW STANFORD MEDICAL ALUMNI ASSOCIATION OFFICERS

STANFORD—

Dr. Donald Prolo, a San Jose neurosurgeon, is the new president of the Stanford Medical Alumni Association, and Dr. James Gordon Holmes, a Berkeley surgeon, is the president-elect for the 1983-84 year.

Holmes' election was announced at the recent alumni reunion held at the Medical School, which coincides with the organization's annual meeting.

Prolo, '61, has served on the association's board of governors, and is regional chairman for the south peninsula chapter of the Medical Fund, which provides financial aid for medical students.

He succeeds Roy Cohn, '33, emeritus professor of surgery at Stanford.

Holmes, '47, has been the association representative to the Medical School faculty senate. He has been on the board of governors, as well as other association committees. He also is a professor in health sciences and medical education at University of California, Berkeley.

6-27-83 —30— sk4

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BASIC RESEARCH IN BLOOD CLOTTING SPAWNS NEW CLINICAL APPLICATIONS

STANFORD—

A potent anti-clotting factor discovered in recent years in the cells that line blood vessel walls is already showing important clinical use in open heart surgery, hemodialysis and in stroke victims, a British Nobel laureate told an international conference at Stanford University Medical Center on Wednesday (June 22).

"Prostacyclin," a hormone-like substance discovered almost by accident in 1976, is an excellent example of how often basic research bears clinical fruit, said John Vane, the pharmacologist from Wellcome Laboratory, Kent, England who shared the 1982 Nobel prize in medicine.

"The medicines of tomorrow will be based on the discoveries made right now," Vane told a meeting of 150 pharmacologists, chemists and biologists gathered at the second annual symposium on the biochemical basis of drug action.

Vane won the 1982 prize for his role in deciphering the mode of action of aspirin and similar drugs as they inhibit a family of chemical messengers called "prostaglandins."

Originally thought, 50 years ago, to be manufactured only by the prostate gland, prostaglandins are now known to be produced by nearly every type of cell in the human body and to play a regulatory role in activities as far flung as protection against ulcers, the contraction of the uterus during labor and the dilation of blood vessels.

Vane's current work focuses on prostacyclin, a highly unstable derivative of the prostaglandins, that is produced primarily by cells that line the walls of blood vessels, and is a potent inhibitor of blood clotting. Vane and colleagues have used the substance to unravel the mystery of how platelets—bandaids of the blood vessel network—"know" when to begin formation of a blood clot and when to sail through the vessels without clinging to vessel walls.

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"For years, people said that the reason platelets didn't stick to the walls of healthy arteries was because of the smooth, slippery nature of the blood vessels," said Vane. "But we now believe that it's the production of prostacyclin that helps keep the platelets from sticking."

While cells of the blood vessel produce prostacyclin, platelets themselves produce "thromboxane," a chemical similar in structure to prostacyclin but opposite in function. Together the two chemicals help maintain a delicate balance, in ways still not understood, to make sure blood clots only when necessary.

Now, more and more physicians are taking advantage of this balance to fine tune the control of unwanted bleeding, said Vane.

During procedures such as open heart surgery or hemodialysis, when blood is circulated outside the body through synthetic tubing, the risk of clotting would be great, Vane said, were it not for anti-clotting additives. Most often heparin, another anti-coagulant, is trickled into the blood, but can lead to unstoppable bleeding in some patients. In contrast, prostacyclin only prevents clots temporarily, he said, and is a superior alternative for patients, such as hemodialysis patients with bleeding ulcers, for whom heparin poses a risk.

Still fairly difficult to store because of its instability, prostacyclin will probably not replace heparin, said Vane, but could be used supplementally to reduce the doses of heparin needed.

Physicians in the United States and Europe are currently exploring other uses for prostacyclin, Vane said, including limiting the damage done by strokes, and in helping prevent and dissolve blood clots in patients with peripheral vascular disease.

"We only know about a tenth as much now about the fundamental processes as we shall know in a year's time," said Vane. "There are plenty of ideas and plenty of things left to discover. The trick is in finding the path from one to the other."

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HYPNOSIS EXPLORED AS CURE FOR ULCERS

STANFORD—

A gastroenterologist and a psychiatrist at Stanford University Medical Center are looking for volunteers to learn whether ulcers eventually may be hypnotized away.

"We're a long way from having any definite answers, but we have at least an indication that hypnosis might lower stomach acidity for some people," said Kenneth Klein, clinical instructor of medicine and a specialist in diseases of the stomach and intestines.

"Since lowering stomach acidity has been shown to aid in ulcer healing, there is a possibility that hypnosis exercises might someday be a useful substitute in some cases for medication in the treatment of ulcers," he added.

Klein is working with David Spiegel, associate professor of psychiatry, who has studied the medical uses of hypnosis.

Klein cautioned that his study is intended only to give an indication—not proof—of whether hypnosis might be useful as an ulcer treatment. If the technique is eventually found to heal ulcers, it would only be helpful for the 25 to 50 percent of the population who are good hypnotic subjects, Klein said.

Volunteers for the current study should be healthy adults who will be tested to determine whether they are hypnotizable. (Former ulcer patients are acceptable if they are showing no current symptoms, Klein said). Their stomach acidity will be analyzed using a tube inserted into the stomach through their nose after a local anesthetic is applied. Then a hormone, pentagastrin, will be administered to stimulate acid production, and stomach acidity will be compared with the first test.

A week later, the volunteers will return to the Medical Center and their stomach acidity will be reanalyzed. But this time, half the volunteers—about five persons—will be hypnotized and given coaching and suggestions intended to lower their stomach acidity. About five other volunteers will repeat, again without hypnosis, the test taken earlier to serve as controls.

So far, one volunteer has completed the procedure, and his stomach acidity declined markedly under hypnosis, Klein said.

"Hypnotism has been viewed with some skepticism by the medical community, but after 10 years of experience with it, I am quite convinced of its ability to dramatically effect many physiological processes. I'm most anxious to study its potential effects in my own specialty, gastroenterology.

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The physician added that the current study could begin to offer some scientific answers about what mechanisms trigger gastric acid production.

Klein explained:

"If a person can control acid production through the mental concentration or trancelike state which hypnosis brings, we might be able to learn more about how acid production is triggered. We don't know, for example, the relative importance of the central nervous system, the vagus nerve and various hormones in causing gastric acid secretion. If we can prove that hypnosis—which presumably acts primarily through the central nervous system—can moderate acid production, we can begin to explore the intervening pathways."

Klein said the medication most often prescribed to relieve ulcers works by lowering stomach acidity, even though acidity might not be the only cause of ulcers.

If hypnosis is effective, some patients might be able to avoid taking any medication for their ulcers, Klein said.

Patients, he said, could be taught to self-induce a hypnotic trance several times daily at key times when controlling acid production is crucial. This would eventually be less expensive than drugs and would bypass the potential side effects which are always present when drugs are given.

Klein explained that hypnosis was a state of intense concentration, not relaxation, so that techniques of relaxation cannot be used as substitutes for hypnosis. He aaded that the ability to be hypnotized appears to be innate and cannot be acquired.

"Easily hypnotizable people don't appear to show any consistently common qualities, except perhaps that they have the ability to concentrate intensely and have long attention spans, They are often the kinds of people who become so engrossed in reading material that they become totally unaware of what is happening around them.

"We will be giving our volunteers a test which will indicate their ability to be hypnotized. The test involves answering some questions, and measuring how they respond to a brief hypnotic session," the researcher said.

Persons interested in participating in the study may telephone Klein at (415) 497-5488.

Persons who complete the study will be paid $40. Each of two sessions will take about 2 1/2 hours, he said.

Klein said there were no risks from hypnosis. The gastric tube may be uncomfortable for some participants and cause a minor sore throat, or gagging as the tube is inserted.

The hormone to stimulate acid production may cause brief nausea or flushing and rapid heart rate, while a very rare subject might suffer an allergic reaction, Klein said.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

VOLUNTEERS NEEDED FOR BLOOD PRESSURE AND ALCOHOL STUDY

STANFORD—

Volunteers are needed to participate in a study aiming to clarify the relationship between blood pressure and moderate alcohol intake.

Researchers based in the Stanford Heart Disease Prevention Program (SHDPP) are seeking 40 to 60 healthy, non-smoking men, over 30 years old, who drink one to four alcoholic beverages per day. The study will run from July 7 through the end of August.

Participants will be asked to abstain from drinking for a three-week period, and to record their alcohol intake throughout the rest of the study period. They will make short weekly visits to the SHDPP's clinical facility on Welch Road, Palo Alto, to have their blood pressure, weight and height measured. Volunteers are expected to gain a better awareness of their own health status.

Principal investigator for this new study is Dr. Stephen Fortmann, physician specialist at the SHDPP. For further information or to volunteer, call (415) 497-5046, from 1 to 5 p.m. weekdays.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

HIGH-RISK BABIES AND MOMS: NUTRITIONAL CONSIDERATIONS

Editors, City Desks: Members of the news media are invited to attend and/or cover any portions of this three-day conference. **Note underlined correction.**

STANFORD—

A conference on the nutritional care of high-risk obstetrical patients and high-risk infants will be held in Fairchild Auditorium and some M classrooms of Stanford Medical Center Wednesday through Friday, June 15—17.

The conference is oriented to nutritionists, nurses, obstetricians, pharmacists, neonatologists and other physicians who are involved in the care of these patients.

It is intended to increase the knowledge of health care personnel of the nutritional needs of these women during pregnancy and lactation as well as of the immature and ill newborn, and the difficulties encountered in attempting to provide adequate caloric and fluid intake for these infants.

Both theoretical and practical points will be raised through the use of lectures, round tables, and workshops.

Sponsored by the departments of pediatrics, obstetrics and gynecology, and dietetics, the program will include such topics as "New and Future Issues in Perinatal Nutrition," "Severe Preeclampsia: The Highest Risk Pregnancy," "Specific Nutritional Deficiencies and Excesses; Impact on Pregnancy Course and Outcome," "Exercise During Pregnancy," "Ethical Dilemmas in Perinatology," and many more.

The faculty includes many Stanford physicians and other professionals involved with these issues, as well as several knowledgeable guest speakers from around the country. The program directors are Dr. Philip Sunshine, professor of pediatrics and director of newborn nurseries at SUH; and Dr. John Kerner, Jr., director of pediatric gastroenterology.

A fee is charged (*except to members of the news media*), and continuing education credit is available. For further details on the conference and enrollment information, call (415) 497-5711.

6-14-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NIH GRANT TO HELP STEER YOUNG DOCTORS TOWARD ACADEMIA

STANFORD—

A training grant renewal from the National Institutes of Health for approximately $900,000 over five years has been awarded to Dr. Eugene Robin, professor of medicine and physiology at Stanford University School of Medicine.

The grant, by encompassing some new features, will allow an expansion of the pulmonary training program. Designed by Robin, who has overseen the program for several years, the new approach is hoped to attract more aspiring and fledgling M.D.s to the research labs.

"Many fewer young physicians are entering academia and biomedical research today than as recently as five years ago," Robin said, adding that this is observed particularly in clinical areas, and even more specifically in certain high-technology areas where there is now a substantial oversupply of clinicians.

The reasons for this phenomenon and how to overcome it have become the focus of much of Robin's attention.

"The progressive decline of M.D. academicians is a widely recognized, national problem," he said. "But it is particularly pertinent at a place like Stanford, which—with remarkable academic resources—is equipped to be in the forefront of research and teaching."

Moreover, he added, there is little need for Stanford to train pulmonary clinical specialists, of whom there is an abundance, and who are now needed "probably only on a replacement basis."

Until about five years ago, Robin said, 80 to 90 percent of young physicians trained in the pulmonary division under the now 21-year-old NIH grant went on to pursue careers in research. But of the latest group of trainees, only 30 percent went that route.

"The reasons are varied," he remarked. "There are changing values which view the independence of a clinician's life as happier than the stresses of an academic life. A career in research is very demanding. Economic factors probably play a role too."

The program revisions involve a two-pronged approach which recognizes that medical education must be flexible enough to meet new challenges as they arise.

First, the program will offer a new form of training to medical students—a marriage of their clinical and basic science preparation. "Under the conventional method, bench research is divorced from the student's clinical training," explained Robin. "We want to connect the two, to show the connections more clearly.

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"Our students will be trained under the same circumstances in which they'll work in clinical departments," he added. The hope here, he said, is to make an impact on students while they're still at an early, formative stage in their training, before they become M.D.s.

"I'm not saying Stanford shouldn't emphasize the teaching of clinical medicine," said Robin. "However, we should be turning out students who are trained to think critically and know how to apply the best in medical science to patient care."

Two medical students, Mark Morin and Jesse Dodd, have already taken part in a trial of this approach, he said. The time spent in the training program is not a part of the regular studies leading to an M.D. degree, and is not eligible for credit towards the degree. However, these students have the opportunity to take a graduate degree, either M.S. or Ph.D., in physiology.

The second feature of Robin's plan involves young physicians who have finished their clinical training as pulmonary specialists, and who will be offered two years of further academic pursuit. "We've seen some people become interested at this stage, when they see that a purely clinical life is not enough to satisfy them," he said.

"The goal is to have 100 percent of the trainees under this program wind up in academic life. Of course with the medical students, this may not and need not be in the pulmonary field."

Robin said for the upcoming year there is still room for two medical students and three M.D.s under the new program.

The grant renewal, which takes effect July 1, also includes conventional training of pre- and postdoctoral Ph.D. candidates, and postdoctoral M.D.s without prior pulmonary training. The latter group will now also be offered research experience following clinical training in the pulmonary field.

"Hopefully, the more trainees we expose to the rewards of academia, the more will choose it as the base for their careers," Robin said.

Robin is acting chairman of the physiology department. The research basis of the training program involves the cellular pathophysiology of respiratory failure, and lung structure and function. Training is offered in molecular genetics and in heart-lung transplantation physiology, as well.

The intent is to meet the needs of trainees from many different backgrounds, by including contributions from Stanford faculty cellular physiologists, biochemists, pathologists, cardiovascular surgeons, clinical pharmacologists, infectious disease specialists, psychiatrists, and pulmonary disease specialists.

The training faculty, besides Robin, includes Drs. Lawrence Simon, James Theodore, Kay Ptashne, and Antonius Van Kessel.

"The idea is to use our new training program as a model for responding to a national problem," Robin concluded. "It may represent the type of innovative role that academic medical centers can assume in training the scientists of the future."

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FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

NIH GRANTS AWARDED FOR BIOMEDICAL RESEARCH

Details follow asterisks.

STANFORD—

The genetics of immune diseases, oxygen boosters for the blood, and the ways certain chemicals are linked to cancer of the larynx are among the newly funded research topics to be explored by five young scientists at the Stanford University School of Medicine.

Each researcher was awarded a $5,000 allocation in May from the Biomedical Research Support Grant, provided twice each year by the National Institutes of Health, and administered by a Stanford faculty committee.

The grant is designed to help young scientists establish research programs in areas of basic and clinical research.

The five assistant professors awarded one-year grants are: Mark Davis (medical microbiology), Martin Hopp (otolaryngology/surgery), Susan Perrine (pediatrics), J.H. Pate Skene (neurobiology), and Michael Weinrich (neurology).

* * * * *

Davis will use his grant to explore the ways certain severe immune diseases present from birth may arise from a specific deletion in the genetic code of a developing embryo. Scientists know that human illnesses such as severe combined immunodeficiency disease or Wiskott-Aldrich syndrome have a genetic component, but until now, no one has been able to determine exactly which genes are responsible for the illnesses, Davis said.

Hemoglobin F, a special variety of the oxygen carrying component of blood, is the research focus of Perrine. Normally, Hemoglobin F is produced primarily before birth, to be replaced by Hemoglobin A in the growing child and adult. Many diseases of the red blood cell, such as sickle cell anemia, might be ameliorated if Hemoglobin F production could be "switched on" again after birth, Perrine said. She is investigating the way 5-Azacytidine, a drug used to fight cancer, coincidentally activates some genes that are normally suppressed, and leads to a boost in Hemoglobin F.

Hopp is using chemical tools to probe cells of the larynx in his efforts to better understand how a cancer-causing agent is activated inside the cell. Though larynx cancer is strongly correlated with heavy smoking and drinking habits and occupational exposure to certain hazards, the chemicals themselves are not carcinogenic, said Hopp, but must be broken down by enzymes in the cell to trigger cancer.

Susceptibility to larynx cancer in some individuals may be linked to elevated levels of such enzymes, said Hopp.

Weinrich is studying vestibulospinal reflexes in primates—the network of neurons that enable animals (and humans) to use information from the outside world to maintain posture and balance in a moving world.

Skene is investigating the genes that seem to regulate the growth and regeneration of some nerve cells.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

GOODKIND PROMOTED TO NEWS DIRECTOR

STANFORD—

Mike Goodkind has been appointed news director in the Medical Center's office of communications effective June 1, announced Spyros Andreopoulos, director.

In his new capacity, Goodkind is responsible for the day-to-day news activities of the medical center. He coordinates news assignments, and acts as the spokesperson for SUMC.

The delegation of this responsibility was necessitated, Andreopoulos said, by his own recently expanded role as director of the Office of Communications.

With Stanford since May 1981, Goodkind will continue to edit the *Medical Staff Update*, and assist Andreopoulos in development of the SUMC publications program.

His professional experiences include work for newspapers in Vermont, Arizona, and California, and as a reporter for the Associated Press in Los Angeles from 1971 to 1979.

A graduate of Dartmouth, Goodkind has served in Africa with the Peace Corps, and with the Army in Vietnam.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911 or Robert Sanders at the University of California, San Francisco (415) 666-2557. The following is a joint release from Stanford University Medical Center and UCSF.

INTERNATIONAL MEETING ON BIOCHEMICAL BASIS OF DRUG ACTION AT STANFORD JUNE 20-24

Science writers/editors:

John Vane, the British pharmacologist who shared the 1982 Nobel prize in medicine, will highlight his most recent work in the study of prostaglandins during a week-long international symposium to be held June 20-24 at Stanford University School of Medicine.

Reporters are invited to attend any and all sessions of the "Second International Symposium on the Biochemical Basis of Drug Action."

Prostaglandins and their sister compounds leukotrienes are hormone-like substances found to play a powerful role in maladies as wide ranging as ulcers, rheumatoid arthritis and high blood pressure.

In addition to Vane's work which explores the mode of action of aspirin and other anti-inflammatory drugs, topics will include research on opiate receptors in the brain, new methods of disarming parasites through molecular engineering, and current research to track the paths of environmental carcinogens as they make their way into cells and lead to cancer by fouling-up genetic machinery.

Copies of the program can be obtained by calling the Medical Center News Bureau at (415) 497-6911. Reporters interested in attending any part of the meeting are urged to notify the News Bureau as soon as possible to aid in the scheduling of a press briefing.

Conferees will be charged a registration fee, but reporters are invited to attend all sessions free of charge.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind or Lisa Ames (415) 497-6911 at Stanford; or Jay Thorwaldson at Palo Alto Medical Foundation (415) 321-4121, ext. 401. The following is a joint release from Stanford University Medical Center and the Palo Alto Medical Foundation.
Editors, reporters: Drs. Jack Remington and Benjamin Luft may be contacted directly at (415)326-8120.

TOXOPLASMOSIS BECOMES LETHAL IN AIDS VICTIMS

STANFORD—

A common parasite that lingers harmlessly in humans has joined a list of maladies which turn deadly in persons suffering from Acquired Immune Deficiency Syndrome (AIDS), scientists say.

About 60 cases of acute toxoplasmic encephalitis, a potentially fatal brain disease, have been found to be caused by the parasite Toxoplasma gondii since July 1981, "and our research shows that this occurred in patients suffering from AIDS," said Benjamin J. Luft, a medical instructor at Stanford and a research scientist at the Research Institute at the Palo Alto Medical Foundation (PAMF).

Luft and two colleagues—Jack S. Remington, professor of infectious diseases at Stanford and director of the department of immunology and infectious diseases at PAMF; and Frances Conley, professor of neurosurgery at Stanford—published findings linking toxoplasmosis and AIDS in the April 9, 1983 *Lancet*, a British medical publication.

The article details 10 of the 60 cases of central nervous system toxoplasmosis (encephalitis) that have occurred throughout the United States and Western Europe. It focuses mainly on the linkage of toxoplasmosis to encephalitis and an "epidemic" increase in toxplasmic encephalitis in the past two years. Acquired immunodeficiency contributed to to the difficulty in making the toxoplasmosis diagnoses, the authors said.

Luft said in an interview this month that "there is extremely strong evidence that all of these patients suffered from AIDS."

About 1,500 cases of AIDS, which destroys the body's immune system, have been reported since the condition was identified in 1979. There is no known cure and about 75 percent of its victims have died within two years. Nine of the 10 patients cited in the *Lancet* article have died, Luft said.

Common AIDS killers include a form of pneumonia and rare cancers such as Kaposi's Sarcoma, in addition to other conditions such as the toxoplasmic encephalitis documented in the *Lancet* article.

AIDS has become widely known as an affliction of homosexuals and drug abusers, but it also is found among heterosexual, non-drug-user Haitians, hemophiliacs, and it has occurred among heterosexual Americans. Many authorities on infectious disease fear that AIDS could spread to the general population. Epidemiologists report that the number of cases is doubling about every six months.

Remington said the study of AIDS could help "lead us to an understanding of infectious agents that can cause cancer. The immune system is the key."

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Most researchers now believe that AIDS is caused by some type of infection that causes the body's immune system to fail by drastically reducing the number of protective T-cells or lymphocytes in the blood. Then a second infection can move in with devastating results, Remington and Luft explained.

They believe that toxoplasmosis is one of those secondary infections. Laboratory studies and analysis of human blood tests have demonstrated that certain infections can disrupt the body's immune system, but no single infection has yet been identified as the trigger of AIDS.

Toxoplasmosis is present in about 50 percent of the U.S. population, Remington said, but the immune system keeps it dormant and under control in most healthy persons. It is spread through undercooked meats, unwashed vegetables, soil and cat feces. Symptoms are usually totally absent or are similar to a mild case of flu, he said.

The ailment usually becomes dangerous only when a woman becomes infected during pregnancy, risking transmission of the disease—and the likelihood of birth defects—on to the unborn child. Toxoplasmosis also becomes dangerous when immunosuppressive drugs are given to persons, such as organ transplant or selected cancer patients.

Luft said the experience at Stanford and Palo Alto Medical Research Foundation has led to the following indications regarding the AIDS-toxoplasmosis link:

- Central nervous system toxoplasmosis can frequently be cured if it is pinpointed and proper drug treatment (with antibiotics) is conducted early. "This is tricky," said Remington, "because cortisone, often used for encephalitis treatment, is not effective and is even harmful when the condition is caused by toxoplasmosis. With the nationwide outbreak of AIDS, it is imperative that physicians be alert to this potential link and the appropriate treatment."

In addition, the symptoms can be quite varied, including such problems as chronic headaches, confusion or seizures. This variability underscores the need for physician alertness and the use of laboratory tests in diagnosis, Remington said.

- Luft said that before the most recent outbreaks, only about 10 cases of toxoplasmic encephalitis in adults had been reported in the past 40 years. (Those cases did not include medically immunosuppressed patients, he said.)

- The 60 patients represent a wide variety of lifestyles, indicating that the AIDS epidemic is not confined to select groups or caused by specific behavior patterns. Among the 10 persons reported in the *Lancet* article, only two had homosexual histories.

"This does *not* mean that the disease has already spread to the general population," said Remington. "What it does mean is that AIDS has the potential to affect a wide variety of persons."

Nevertheless, the link to the homosexual, Haitian, and drug-abuse communities appears valid. One patient described in the article, for example, was not identified with any of the three risk groups but had received a blood transfusion in Haiti following a motor vehicle accident.

- Evidence repeatedly points to the Haitian population as a center of the disease. "It appears," said Luft, "that the disease is endemic in that Caribbean nation. I'm not sure what the significance is except that it is an appropriate area to study the disease and look perhaps for causes—and this is being done."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind or Lisa Ames (415) 497-6911

BAGSHAW NAMED FIRST RECIPIENT OF AVERY CHAIR

STANFORD—

Dr. Malcolm Bagshaw, chairman of the department of radiology and leading authority on the use of radiation therapy for prostatic cancer, has been named the first holder of the Catharine and Howard Avery Professorship.

The Stanford University Board of Trustees approved the new endowed professorship and named Bagshaw the first recipient at its regular meeting Friday (June 10).

Bagshaw, who has served on the Stanford faculty since 1956, has played a key role in developing clinical uses of the medical linear accelerator, which has had worldwide impact on the treatment of cancer. More recently, he has directed clinical studies of hyperthermia, the use of heat to destroy cancerous tumors.

He was also a pioneer in the treatment of localized human cancers with combinations of drugs and radiation, a now common procedure which was experimental only two decades ago.

He has authored or co-authored nearly 150 publications covering broad areas of cancer research and therapy.

Bagshaw has served as director of radiation therapy at Stanford since 1960 and was appointed chairman of the academic department in 1972. A 1950 graduate of Yale University School of Medicine, Bagshaw completed his radiology residency at the University of Michigan School of Medicine in Ann Arbor.

The Catharine and Howard Avery Professorship has been earmarked for a faculty member researching the causes, treatment and cure of cancer, an ailment Mrs. Avery had battled. In 1975 she established a fund for cancer research, which was augmented after her 1981 death to make the establishment of the professorship possible.

Mrs. Avery attended Mills College in Oakland and was a graduate of the University of Washington, Seattle.

Her husband, a resident of Mill Valley, is a 1932 graduate of Stanford.

As a Navy captain during World War II, Avery received several honors, including the Navy Cross, the Legion of Merit, and the Distingusihed Flying Cross. Later he held various command positions, including four years in the NATO headquarters in Paris as representative of the Supreme Allied Cammander-Atlantic.

In 1977, Avery established at Stanford the Douglas P. Avery Band Scholarship in memory of his son, who was killed in an aircraft accident in Munich while attending the University of Maryland, Munich Branch.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911
City desk editors: Copies of the Annual Report are available on request if not enclosed with the story.

CHANGE, IMPROVEMENTS HIGHLIGHTED IN MEDICAL CENTER ANNUAL REPORT

STANFORD—

New construction to modernize Stanford Hospital, a new comprehensive children's medical center, improved clinic services, and a major program in molecular and genetic medicine are part of the "Building for the Future" theme of Stanford University Medical Center's 1983 Annual Report.

"The school, hospital, and clinics are all engaged in new, well-articulated programs," writes vice president for medical affairs Lawrence G. Crowley.

But building for the future is not limited to brick and mortar, he adds. It includes stronger relations with the community, new ties with Children's Hospital, and academic and service-related programs as well as mechanisms for change.

Such mechanisms are essential at a time when external factors are affecting the way academic medical centers will be shaped, organized and managed.

How Stanford Hospital, the faculty practice and the medical school will balance their efforts and the direction they will take are the subject of study by a long-range planning group, Crowley notes. The issues are how to attract and retain the necessary patient populations in the hospital and clinics, "how to maintain our position as a major research center in the basic and clinical sciences, and how to best educate tomorrow's leaders in medicine."

Stanford is completing a $14 million Cardiovascular Research Building, and a $6.5 million modernization program of its outpatient clinics, the base of the faculty's medical practice. It will begin a $125 million modernization of its hospital to serve the needs of patients and their physicians more effectively. The project will be done in phases and construction will begin as soon as state and local agencies approve the plans. They include a new diagnostic and treatment wing, surgical suites and eight new nursing units. Eventually space in the present hospital will be modernized as functions move to the new building.

In addition, the School of Medicine contemplates the development of a major program and building for molecular and genetic medicine, and a center for nuclear magnetic resonance to explore the analytic and diagnostic potential of the technique.

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"Building for the future, however, does not necessarily mean becoming bigger," Crowley cautions. "We hope that our building program will make us more effective, better consolidated, economical to manage. If we can become a more compact, efficient unit I'm convinced that the Center will also become more stimulating intellectually and better positioned to provide medical and scientific leadership for many decades ahead."

The report includes interviews with Dr. Dominick P. Purpura, dean of the school of medicine; Sheldon S. King, executive vice president and director of the hospital; and Donald Tower, executive director of the university clinics and faculty practice program.

All three, according to Crowley, are strong academically-oriented executives who have been here long enough to get a feel of the place and to make plans for their own areas of responsibility.

According to the report, both hospital and Stanford clinics have made major improvements in billing procedures, traditionally problem areas for patients.

The problem wasn't as simple as it seems, however. In the clinics alone, the report notes, it involves 40,000 patient accounts, with 250,000 insurance forms, 300,000 bills to patients, and 2,000,000 individual charges processed annually.

The clinics have also instituted a patient relations program, decentralized and simpler patient registration system and procedures to analyze operating and administrative costs.

The goal, concludes the report, is "making the Stanford clinics competitive with other group practices in terms of service."

Copies of the Annual Report are available from the Office of Medical Development, Stanford University Medical Center, 780 Welch Road, Palo Alto, CA 94304, telephone (415) 497-7305.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

HIGH-RISK BABIES AND MOMS: NUTRITIONAL CONSIDERATIONS

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It is intended to increase the knowledge of health care personnel of the nutritional needs of these women during pregnancy and lactation as well as of the immature and ill newborn, and the difficulties encountered in attempting to provide adequate caloric and fluid intake for these infants.

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FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

EXPERTS CHIDE SOCIETY FOR FAILURE TO NURTURE CREATIVITY IN CHILDREN

STANFORD—

Imbued with the music of a hundred rehearsals, a concert pianist approaches the stage. He has memorized hundreds of thousands of notes, *felt* them at the deepest level of understanding and is ready to touch the soul of the listener with passion, whimsy or pathos. As he touches the keys, the audience and the concert hall disappear from his consciousness. He becomes the music, and the music plays itself, pulsing, undulating to a rhythm that swells from within.

Then the block comes.

"The performer makes some type of mistake, often undetectable, sometimes inaudible," said Lorin Hollander. "At times he can take it in stride and go on as though nothing has happened. But other times, panic sets in." The critical judge, the mythical listener who is all knowing and all powerful, arises from the performer's powerful imagination, blocking any further creativity.

Such blocks to creativity can arise and be just as destructive to "performers" in any field, said Hollander, who suffered his first block of stagefright at age eleven, when he played his first concert at Carnegie Hall. At a meeting of Stanford Medical School alumni Saturday (June 4), Hollander shared the stage with Nobel laureates David H. Hubel and Joshua Lederberg as the three peeled apart the anatomy of creativity.

Though their fields are disparate—Hubel a neurobiologist, Lederberg a geneticist, and Hollander a concert pianist—all are teachers, eager to identify the roots of creativity so that they can nurture it in their students.

"We have a problem," Hollander said. "We are not nurturing creativity in children. Indeed, it seems that in our educational system, the creative process of children is being destroyed."

"I think boredom is important," Hubel said. "Giving students a chance to get bored enough to think up problems may be critical. If there's one thing important to creativity, it's being saturated in a problem most of the time, most of the day," said Hubel. He pleaded for letting creative people immerse themselves in uninterrupted time to think. Creativity needn't decline as one gets older, Hubel suggested, "but it takes a certain amount of stubbornness against the outside world."

In the years since his Nobel award winning work deciphering the genetic tricks of bacteria, Lederberg, who left Stanford in 1977 to become president of Rockefeller University, has spent part of his time researching the biographies of scientific discoveries and the people who make them.

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The work has been "interesting, but not enlightening," Lederberg said. Even keeping detailed lab notebooks of his own group's work, in hopes of chronicling the leaps of creative insight that marked a major reversal in a theory or dogma, proved unfruitful.

"In a few moments of discourse, the whole frame of discussion changed so much that we couldn't write it down five minutes later," he said.

Lederberg cited a question taken from a college entrance exam as the kind of trap that trips up the creative student. Though the test givers were seeking a single "obvious" definition for the word "nucleotide," any student who looked a layer deeper into the definition could have realized that all of the options given might be considered correct.

"I suggest that we have a world full of special traps like this for the special and creative student," Lederberg said. "There's a penalty for thinking."

Instead, Lederberg cited his own experience as a 22 year-old graduate student as an ideal form of learning.

After two years of medical school, Lederberg did graduate work at Yale University that challenged the age-old dogma that bacteria have a very limited genetic make-up, and reproduce simply by dividing—without the help of a mate.

By mixing two different colored strains of bacteria together and growing the hybrids in a culture], Lederberg made a radical discovery.

Months later, he found himself at a gathering of expert geneticists, where he could meet each criticism and challenge to his theory head on, without waiting for the delays of debate in the medical literature.

"Imagine a 22 year-old coming up and saying, 'look you guys, you haven't been noticing all these years—bacteria do have sex!' "

Such a willingness to challenge dogma, though necessary to creative solutions, is easily squelched in today's elite universities, he said.

"Our institutions today probably do a very good job as filters, making sure that we get the best and the brightest students. But I'm not so sure that we do a very good job as nurturers."

Hollander cited a Moslem mystic who wrote, "Look not for the devil in the desert, but in the over-critical teacher." Early criticism is often internalized and projected back much bigger than life, he said. Like a snail in its shell, a child withdraws at early criticism and the scars can remain into adulthood.

Far from eliminating grades and criticism, Hubel and Lederberg—who admitted to earning "poor C's" in some graduate courses—agreed that criticism should be fair and tempered with praise.

"We don't want to eliminate the game, but let the child see what the game is," said Hollander. "Life gives grades, but let's let the kids learn the relative importance of grades."

An education in the arts can permit the freedom of expression, said Hollander, that can help an adult or child face down the critic within himself, to permit creativity to bud and flower.

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GLOOMY PREDICTIONS FOR ACADEMIC MEDICAL CENTERS

STANFORD—

Academic medical centers are going to get smaller and their hospitals less socially relevant in terms of the poor and inner-city needs, Dr. David E. Rogers, president of the Robert Wood Johnson Foundation, predicted here Saturday.

University hospitals, in an effort to survive, will examine services that produce deficits and try to eliminate them, and expand those services that pay well, Rogers predicted.

He cited a recent Urban Institute analysis suggesting that the first to get the ax will be services for the poor—among them home care, family planning, rehabilitation and social services. Next on the hit list would be burn care units, neonatal intensive care units, and outpatient departments with community orientation.

Such cutbacks would affect the poor severely, he added, because although academic medical centers and their hospitals make up only 5.6 percent of the nation's hospitals, they deliver a disproportionate share of 47.2 percent of charity care.

Rogers discussed the gloomy future as well as the challenges facing academic medical centers at the annual meeting of the Stanford Medical Alumni Association. The Princeton, New Jersey based Robert Wood Johnson Foundation is one of the largest in the nation, interested in improving health care in the United States.

"We will see progressive shrinkage in the size of basic science departments and top heavy clinical faculties," Rogers said. Faculty clinicians will be recruited largely for their abilities to attract patients with problems which result in high fees and good hospital reimbursement rather than teaching or research skills.

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While 20 to 30 major academic medical centers, including Stanford, will be able to continue—even expand—their biomedical research capabilities, Rogers said, most others will shrink progressively. The latter will become increasingly training institutions for doctors, more reminiscent of pre-Flexnerian days, with less and less resemblance to other university graduate programs, and more tenuous university ties.

"It seems to me clearly evident that the nation is at present unwilling to pay the full costs of all the research," he said.

In addition, because of the oversupply of physicians and the high costs of care created in part by high technology and overspecialization—government at all levels, and the public, will demonstrate a progressive unwillingness to pay all of the costs to sustain those features which distinguish the academic medical center like medical education, residency training, research and scholarly pursuits.

"In an effort to stay afloat, many academic medical centers will begin to expand all high technology areas—open heart surgery units, pathology laboratories, intensive care units, CT scanners and radiotherapy units," he said. "These generate respectable revenues.

"They will create or spin off or unbundle potential profit-making enterprises, or establish satellite clinics or affiliations with smaller hospitals and HMOs and other health delivery plans to ensure an adequate flow of patients. They may get involved in the construction of facilities for fee-for-service ambulatory care, preventive health services, or health spas.

"Faculty and hospital board meetings will increasingly resemble the annual stockholder meetings of multi-national corporations."

Rogers said "it would be a dreadful mistake if academic medical centers became just another profit-making institution."

"The most compelling long-term justification for their existence lies in their championing of certain values," he said. "Like the churches, they have been at their best when they have served as important, powerful spokesmen for good science and the humanistic values which characterize a caring responsible society."

Until happier days return, Rogers suggested that academic medical centers should turn the spotlight on their unique social purpose—the training of young men and women to be the doctors of tomorrow.

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"In the rush for bigness, medical students have almost been forgotten," he said. "More attention to the care and feeding of medical students should be given, more rewards to faculty for paying attention to them, more concern for their attitudes toward science, for the values they acquire, and the ways they approach the care of the sick.

"Despite the costs, academic centers should stoutly maintain their traditional mission of caring for the less fortunate. Over time this will compel public support.

"If academic centers abandon this mission, I'm afraid they will become simply another indistinguishable part of our profit oriented society and the medical profession, the doctors we turn out, and society, will be the poorer for it."

"Reestablish the commitment to make the health professions in general mirror the social, racial and cultural makeup of our society," Rogers admonished. "We made a good start but we are faltering."

Rogers said academic centers should also seriously address the problem of the oversupply of tertiary care oriented superspecialists.

These young, elegantly-trained superspecialists are populating well-financed suburban hospitals and taking paying patients away, he said. Academic centers are now far less referral institutions than in times past.

"It is killing you," he told the audience. "The crying need is for more generalist physicians."

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STANFORD UNIVERSITY BLOOD CENTER TO SCREEN ALL DONATIONS FOR AIDS

STANFORD—

All blood donated to the Stanford University Blood Center will be screened starting July 1 for an abnormality frequently associated with AIDS, the center's medical director said Friday (June 3).

AIDS, short for Acquired Immune Deficiency Syndrome, is a deadly family of immune disorders whose elimination was billed last week as the "No. 1 priority" of the U.S. Public Health Service.

Edgar Engleman, assistant professor of pathology and medicine and medical director of the Blood Center, said the screening test was made possible by equipment and high technology already used in research at the center, and will raise the cost of each blood product by only $6 to a total of up to $64.50.

Based on a pilot study of 200 patients, Engleman estimates that between 1 and 2 percent of Stanford's 18,000 blood donors will be excluded on the basis of the screening. Not all the donors thus excluded have AIDS, Engleman emphasized. In fact,the majority may be completely healthy, because the screening method is not perfect. "But it's the best method available," he said.

Although several methods of screening blood have been discussed nationally, none—so far—have been selective enough to screen out only those donors with AIDS.

"Most of the proposed screening methods would eliminate between 15 and 50 percent of the donors, and only a tiny fraction of those actually have AIDS," Engleman said. "Blood is such a precious resource that we need to be fairly certain that our screening process is highly selective to make screening worthwhile."

Engleman said the testing was begun as a precaution, not because there have been any known cases of AIDS in Stanford blood recipients. The Blood Center already has begun other precautions, such as asking potential donors from groups at high risk for contracting AIDS not to donate blood. Such high risk groups include homosexual men who are active with multiple partners, intravenous drug abusers and Haitian immigrants.

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The test Stanford will use examines infection-fighting white blood cells called "T-cells" that drop to abnormally low concentrations in the blood of about 95 percent of all AIDS victims. Such patients also experience a dramatic change in the ratio of two subgroups of the cells called "helper T-cells" and "suppressor T-cells." Healthy donors have more helper T-cells than suppressor cells but, for an unknown reason, that ratio is reversed in AIDS patients, Engleman said.

Using monoclonal antibodies—specially manufactured proteins— and a space-age research tool called a fluorescence activated cell sorter (FACS), Engleman and his colleagues can detect the subtle clues in the blood of donors who may have contracted AIDS without realizing it.

The technique has been used in the past to confirm AIDS diagnosis, but its cost of between $150 and $200 per test made it impractical as a screening tool. By simplifying the test and increasing the volume of tests in each batch, Stanford can reduce the cost to the $6 level, he said.

Although the technology is available to other blood banks, few have the equipment or expertise to make their own monoclonal antibodies, said Engleman, who sees Stanford's upcoming screening program as an interim tool to be used until researchers can develop a simpler and cheaper test that is just as effective.

"As soon as a better test comes along, we'll be willing to use it," he said. "In the meantime we're using existing technology to try to prevent the spread of AIDS."

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SHUMWAY, KREVANS AND HEART PATIENTS STRESS IMPORTANCE OF ANIMAL RESEARCH

STANFORD—

Patients who have benefited from animal research called on California lawmakers Monday to defeat proposed legislation that would bar scientists from using abandoned animals sold to laboratories by shelters and pounds.

The bill, SB 883, pushed in Sacramento by an increasingly powerful lobby, has been passed by the senate, and is scheduled for a hearing before the Assembly Committee on Government Operations August 17.

The patients were joined by scientists and officials from Stanford and the University of California Medical Center in San Francisco at a press conference held on the UCSF campus.

"Senate Bill 883 must be opposed," said Stanford heart transplant patient Bill Boxberger.

Boxberger, 39, of Madera, California, has suffered from a lifelong heart condition. "My whole life is like a history of research." said Boxberger. He pointed to a young patient seated nearby who received his latest heart surgery last Wednesday.

"When I was that age, these procedures just didn't exist," said Boxberger, referring to Albert Lamb, 12, Modesto, California, who sat in a wheelchair beside his father, Albert Sr.

Julius R. Krevans, M.D., chancellor of UC—San Francisco, said the purpose of the joint conference was "to share with you some of our understanding of why this (animal research) is important, and why some of the legislative issues which are underway at the present time are, potentially, extraordinarily disruptive."

Krevans sat beside Norman E. Shumway, M.D., chairman of Stanford's cardiovascular surgery department, who emphasized that SB 883 would seriously impede medical research in California. The proposed law would prohibit the use of pound animals in California, and the importation of pound animals from other states after 1986. The bill is sponsored by Senate President Pro Tem David Roberti, (D—Hollywood).

"For reasons that are difficult to understand, it (SB 883) has gained momentum," Shumway said. He attributed the bill's apparent momentum to the "pleas of Hollywood persons who know nothing about research." Shumway said that the acquisition of vast amounts of knowledge will continue to require the use of pound animals. He pointed specifically to the search for new and improved heart valves, and better anti-rejection drugs for use by transplant patients.

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"There are so many avenues ahead of us, it is ridiculous to say that we have researched to some level of perfection and now we can just stop," Shumway said. In Britain and other European countries, where animal legislation is much tougher than in California, there have been "no significant advances," in research in cardiovascular surgery in these otherwise highly sophisticated nations, he said.

Krevans noted that all public and private health science schools in California spend a total of about $900,000 a year on the dogs and cats used in medical research. He estimated this figure could rise as high as $20 million for the University of California system alone if only specially bred dogs were used.

In addition, Joseph S. Spinelli, a veterinarian and director of UCSF's animal facility, said that specially bred animals are sometimes inadequate because they do not contain the genetic diversity important in some types of research. Spinelli also emphasized that research institutions and researchers are anxious to work with the public to help identify pets and their owners and to help insure that only stray dogs become involved in research.

Krevans said that issues of inhumane treatment of animals or the use of animals for capricious research obscured the issues behind the pending legislation. "If the concern is that animals are used capriciously," concern should hone in on those specific cases rather than advancing support that would suppress legitimate biomedical research.

Saul J. Robinson, clinical professor emeritus of pediatrics at UC—San Francisco, referred to the continuing treatment required by young Lamb, and said, "there is no doubt in my mind, with all sincerity, that these things would have been hindered and probably would not have been possible without animal research." Robinson has been Lamb's cardiologist for nine years.

Also opposing the legislation, and pointing to their own survival as a testament to the value of animal research, were heart transplant recipient Cynthia Jelkman, 26, of Los Angeles, and Charles Walker, 32, of Mountain View, who was Stanford's second heart—lung transplant patient.

"I see the entire bill as an atrocious mistake," Jelkman said. She referred to what she called the wastefulness of breeding dogs specifically for the laboratory, while nationally, 15 million unwanted dogs and cats are killed annually in pounds.

Emphasizing that research is an ongoing, constantly evolving activity, Walker said, "they could not do anything for me until I was 13 years old." He noted that research has now made treatment possible at a much earlier age for many people born with heart defects.

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STANFORD NEUROLOGISTS TURN OFF IMMUNE DISEASE AT THE SOURCE

STANFORD—

Researchers at Stanford have moved one step closer toward their goal of turning immune diseases off at the source by learning to genetically control the symptoms of a chronic disease of the nervous system.

Although his work has focused on a disease in mice that mimics myasthenia gravis, Lawrence Steinman, assistant professor of neurology, said that other diseases linked to the immune system—such as multiple sclerosis, juvenile diabetes, and rheumatoid arthritis—might be treatable in the same way.

Graduate student Matthew K. Waldor, Subramaniam Sriram, research associate, and Hugh O. McDevitt, professor of medicine/immunology, collaborated with Steinman on the study published in the May *Proceedings of the National Academy of Sciences*.

The fatigue and weakness in muscles of the eye, face and throat that are symptoms of myasthenia gravis, are thought to arise from an overactive immune system. In healthy patients, nerve cells relaying messages from the brain to muscles use several chemicals to transmit the message between cells. The protein on the muscle that recognizes and "receives" one of these chemical messengers, called acetylcholine receptor, or AChR for short, plays a central role in myasthenia gravis.

Because of a defect in their genes, the 8,000 Americans who have myasthenia gravis produce antibodies that destroy the terminals that receive acetylcholine in the muscles, short—circuiting the body's electrical system and triggering disease.

Conventional treatments for the illness act by increasing the number of receptors available, or by slowing their breakdown. But Steinman and his team have found the gene in mice that "tells" cells in the immune system to produce the offending antibodies. Going one step further, they have developed tailor-made proteins, called monoclonal antibodies, that latch onto such genes and turn them off, much like turning off a faucet.

In the mice studied, once the "faucet" was turned off, normal cell communication returned, and the symptoms of myasthenia gravis disappeared.

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The next step is to attempt the same sort of disease regulation in non-human primates, Steinman said, before any testing in humans might be done. Even after studying the mice for up to a year after the experimental treatment, no negative side effects have been detected, Steinman said, though toxicity will continue to be closely followed in further research. Primate studies are scheduled to begin in Europe and the United States within the year he said, perhaps prompting studies in human patients within three to five years.

Prednizone, a steroid that induces a blanket suppression of the immune system is one of the current popular treatments for myasthenia gravis, that "work quite well," Steinman said, though side effects such as high blood pressure, weight gain, and increased vulnerability to infection make the drug less than ideal.

But another disease linked to an immune defect, multiple sclerosis, has no effective treatment at all, and might be the first target illness to be treated by the new therapy, if animal studies confirm early promise, he said.

In patients with multiple sclerosis, the fatty sheath that provides insulation for nerve cells is slowly eaten away by misguided antibodies.

For twenty years, scientists have searched without success for the mysterious antigens involved in m.s.—protein molecules that send up the alarm in the human body and bring the full power of the immune system to bear against the nerve cells.

"That may be telling us something," said Steinman. "There may not be a specific m.s. antigen, but instead a variety of antigens that trigger the disease. We've taken a different tack and decided that if we're not going to get anywhere looking for the antigen, let's take the next available clue and try to devise a therapy for the disease based on that clue."

The "clue" Steinman speaks of is the gene that scientists have identified that serves as a blueprint for the offending antigen. Identifying and "turning off" the gene would permit physicians to focus on the specific, defective part of the immune system that instigates disease, rather than suppressing all aspects of the body's ability to fight infection.

"It's a new and different type of immune regulation," said Steinman. "There's no certainty that it will work in humans, but it could be a major change from the fairly brutal types of immunosuppression that have been done in the past—hit the immune system with a crude chemical sledgehammer and hope for the best."

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A BIOTECH RACE TO BUILD A BETTER BUG

STANFORD—

Forty years ago, harnessing tiny organisms to produce needed chemicals meant grinding up bread mold and extracting a crude rendition of penicillin, the miracle antibiotic of the 1940s. Last week, 300 scientists from 17 countries gathered at Stanford University Medical Center to discuss their increasing ability to reach inside the genetic machinery of live bacteria, where they can manipulate a few chemical "gears" to produce precisely the product they want for use in medicine, industry and agriculture.

Though commercial production of such chemicals has been relatively slow, the scientists who came to compare their growing list of biochemical tools predicted that a new bacterial friend, *Bacillus subtilis*, may speed the process considerably, perhaps producing its first commercial products within the year.

Long used in the fermentation industry in production of food and detergents, *B. subtilis* and other members of the *Bacillus* family are now giving *Escherichia coli* a run for its money as the favorite slave of genetic engineers.

"These soil bacteria are amazing creatures compared to *E.coli*, especially when one looks at the diversity among the *Bacillus* bugs," said A. T. Ganesan, the Stanford professor of genetics who organized the second international conference on the genetics and biotechnology of *Bacilli* together with James A. Hoch of Scripps Clinic in La Jolla.

"We have not even touched the surface in terms of exploiting the useful characters of these organisms in the fermentation industry, in breaking down proteins and other compounds in the soil, and in the production of antibiotics," said Ganesan, who has studied the genetics of the bacteria for 25 years. "The bugs will also have an important role to play in the production of safe insecticides and in improving cereal crop production," he said.

"It's important for any company that wants to stay on top in this field to place part of its bet on *B. subtilis*," said Tom Parmeter, the president of Syntro Corporation, the La Jolla biotechnology firm that co-sponsored the conference.

Potential advantages of *B. subtilis* over *E. coli* are four fold:

- *B. subtilis* normally secretes the proteins it makes, whereas *E. coli* keeps most of its product inside the cell. Currently, even if they can force *E. coli* to produce a desired product, scientists must burst (and hence kill) the cells to get it out after a fairly complicated filtering process, whereas the protein products of *B. subtilis* can be harvested without disturbing the bacterial colony.
- Unlike *E. coli*, *B. subtilis* grows best in soil and moldy hay, and can't survive in the human body. Hence, even the remote risk that a runaway bug might trigger human illness is extremely small.
- The membrane coat of *E.coli* is studded with chemicals that can be toxic to humans, and must be carefully removed in productions of any medicines. *B. subtilis* does not carry such toxins.
- Several strains of *B. subtilis* lack cell walls, and therefore might provide a good source of digestible protein for human or animal consumption if they were produced in large quantities.

That's the good news. The bad news is that, up until very recently, researchers have had a tough time coaxing *B. subtilis* to incorporate foreign genes into its DNA. Enticing the organism to "overproduce" proteins that it was born to make has already been accomplished, but prompting it to produce desirable foreign proteins, such as insulin or interferon, has proved a much greater problem. In addition, *B. subtilis* produces enzymes that can "chew up" the desired protein before it can be extracted from solution. Several speakers at the conference reported encouraging progress along these lines in the race to build a better bug

Vasantha Nagarajan, a researcher for Genex, a firm based in Gaithersburg, Maryland, reported her firm's ability to identify, clone and transplant into *B. subtilis* a gene that codes for "subtilisin," an enzyme used in the detergent industry to break apart unwanted proteins.

By stuffing multiple copies of the gene into each bacterium, the Genex researchers were able to increase the organism's production of the enzyme by 200 fold. "I'm sure we can increase the yield even more as we optimize conditions," Nagarajan said. "This was just a preliminary test to see if the procedure worked."

"Our method is very powerful," she said. "We were surprised and delighted that it worked."

Using a different procedure, which was also recently patented, James Wells of Genentech, a South San Francisco biotechnology firm, produced similar results. Industrial researchers are not as excited by the method as a new way to make subtilisin (plenty of the enzyme can already be made cheaply by conventional means) as they are about its potential as a model for producing scarcer proteins, said Wells.

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The key to both the Genex and Genentech findings, was the identification of a "promoter" and "signal sequence" that regulate production of the gene, he said. A promoter is a segment of DNA that controls the amount of protein each gene produces, while the signal sequence is an adjoining bit of DNA that allows the protein to escape the confines of the cell. Researchers around the world are racing to identify and clone a good promoter and signal sequence from closely related bacteria that can be spliced to foreign genes and interpreted within *B. subtilis*. This task is difficult because, unlike *E. coli, B. subtilis* is a very sensitive detector of alien DNA. Like a tourist who can't speak the native language, foreign DNA is left without an interpreter within the host cell. And if the message is not interpreted, no new protein can be made.

Mervi Sibakov, from the University of Helsinki, described similar efforts to construct an all-purpose bit of DNA that could prompt production of a wide variety of proteins. The Finnish group was successful in coaxing *B. subtilis* to produce three compounds valuable in the production of antibiotics, though the yield of each compound was very low. Nonetheless, their data fed the flames of enthusiasm over the potential use of the organism in industry.

Shing Chang, a scientist at Cetus corporation whose interest in *B. subtilis* centers on the production of human growth hormone and other compounds for medical use, is optimistic about the organism's potential value.

None of the hurdles discussed at the meeting are insurmountable, said Chang, who predicts that commercially viable compounds, produced by inserting mammalian DNA into the bacteria, may be possible within one year.

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(Editors: Photos are available if not included.)

VOLUNTEERS HELP CREATE POSITIVE EXPERIENCE FOR CHILDREN IN HOSPITAL

STANFORD—

Sue Emerson works four days a week as a programmer analyst at NASA-AMES. The fifth day, she volunteers at Stanford University Hospital (SUH), spending the morning playing with the children in the pediatrics playroom.

Seventy-one-year-old Evelyn Parsons has been coming to the playroom one morning each week for the last 10 of her 21 years of volunteer work at SUH. She's often told herself it's time to retire, but, she said, she just can't seem to tear herself away from the children.

Like most Silicon Valley engineers, Gary Elston's work week is rarely limited to 40 hours. Yet one evening each week, he too volunteers at the playroom.

Self-sacrificing? Perhaps. But these are just three of more than 60 hospital auxilary members, Stanford students, and candy stripers who donate their time to work in the pediatrics playroom, the most opular volunteer service at the Hospital. It's more than the natural appeal of children that accounts for their willingness to work there. Something special happens in the playroom, many volunteers say—something they'd be reluctant to miss out on.

"Most of the kids are pretty unhappy because they're in the hospital," said Jennifer Gray, a recent graduate of Palo Alto High School who's worked at the playroom for about a year. "Your goal is simply to make them laugh. If you can let down your guard, and act like kids, it really helps. If you can just make them smile, you're flying high."

"As many as 44 children, from birth to age 18, are on the unit at any time," said Collette Case, the recreational therapist who supervises the playroom and the play therapy program that includes it, as well as community education, inservice training for other health professionals, training for recreational therapy students, and networking with other health care agencies. "Their illnesses are usually pretty acute. The goal is to make their stay in the hospital a positive, growing experience."

In addition to the volunteers, Case is aided in achieving this goal by two other recreational therapists, Ellen VanderWilt, and Betty Lovelace, who developed the program nearly 10 years ago.

"We try to give a feeling for the sights and sounds of the hosptial, and introduce the different people children are likely to meet," Lovelace explained.

It starts on Sunday afternoons, when the therapists show children scheduled to enter the hosptal slide show that takes them from admission to discharge. They also take the children on a walking tour of the hospital. And with a miniature hospital, puppets, and medical equipment, the therapists encourage the children to play out their experiences so they can grow more comfortable with them.

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During the children's stay in the hospital, the playroom is the one "safe" place for them, Case explained. "The children can relax here. They know no procedures will be done here, so they feel they can talk about their fears and concerns. Often, children will do things in here, such as walk, or use an injured arm, that they won't do elsewhere. The playroom is therapeutic for them."

It's not just therapeutic, the playroom is a child's dream. Toys—most of which are donated by parents and community groups—are piled along the walls. Video games are available for the asking. A pool table occupies a large area, and an outdoor courtyard bears murals of forests filled with animals. The volunteers answer to nearly any whim, and the children are encouraged to play with one another as well.

"We try to concentrate on the wellness of the children, and make the most of what they can do rather than focus on their limitations," Case said. It's often necessary to point out the wellness to the parents also, she added.

The children derive a lot of support and encouragement from one another. "We once had a boy who was an amputee," Case recalled. "He had a hard time dealing with it. Now he comes back often to visit other children and encourage them."

Much of the interaction with the children is on a one-to-one basis, Case said, in order to maximize their socialization and growth development considering their individual health status. Organized group activities are often held to help out individuals as well. "We have lots of parties in addition to regular holiday and birthday parties," Case explained. "If someone isn't eating well, for example, we'll have a cooking party."

Despite the appearance of just fun, there's a lot of subtle therapy that goes on in the playroom, Case pointed out. And this makes the selection and training of volunteers especially important.

Many applicants initially request the playroom because of their love for children, Case said. But once they get through the two interviews and orientation sessions, they realize they may not be able to handle dealing with sick children. Even the ones who do end up working with the children, Case continued, are susceptible to "burnout."

"I was a bit hesitant at first because the children are so sick," Parsons recalled. "But you get attached to so many, and when you see them getting better, it makes it worthwhile."

Elston's commitment includes bringing a box of toys with him since the playroom's toys are locked up in the evenings when he comes. Even with his dedication, however, or perhaps because of it, he finds working with the children difficult at times.

"I had to stop coming for about three weeks once, because it just got too intense," he admitted.

But Elston and the other volunteers stay on at the playroom in spite of any problems the work may create.

"When I was young I had to spend some time in the hospital," Emerson recalled. "I know how much it helped to have people to talk with, to play with, and to pay attention to me. I'd like to do the same for these children."

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VOLUNTEERS NEEDED FOR CLINICAL TRIALS

STANFORD—

Volunteers from the community are being actively sought by Stanford University Medical Center to participate in the clinical studies of three separate research efforts.

The studies pose questions ranging from the effects of different level exercise on sedentary men, to the effectiveness of various blood pressure drugs, to the results of hormone replacement therapy in postmenopausal women.

Details regarding each research project and the types of volunteers they need follow.

Healthy, sedentary men between 40 and 60 years of age are needed to volunteer in a three-month study designed to compare the health benefits of low and high level exercise.

"Especially in sedentary people, low level exercise will produce the same training effects as high level exercise—it just takes a little longer," believes Dr. Robert DeBusk, director of the Stanford Cardiac Rehabilitation Program.

To confirm this, the three-month study will examine how slower paced activity like brisk walking compares to rigorous exertion such as running or swimming in contributing to cardiac health.

The study will involve three randomly-assigned groups of volunteers. One group will carry out their usual activities (control group); another will carry out low level exercise training such as brisk walking; and the third group will perform high level exercise training such as jogging.

Portable heart rate monitors will be used to help volunteers maintain the appropriate intensity of exercise, and individualized instruction will be given concerning the amount and duration of exercise training.

After initial telephone screening, volunteers will undergo a preliminary evaluation including medical history, physical examination, treadmill exercise test and measurement of blood fats. Participants will repeat the treadmill test at six and 12 weeks and will be asked to record their food intake and physical activity. They will also wear a heart-rate recorder at specified times during the study.

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One potential benefit of participation in the project is thorough screening for latent (unrecognized) cardiovascular disease. Jeff Martin, a recent participant in a related pilot study for this project, said he was motivated to take part after a close relative died suddenly of heart failure. "My goal was really to find out if my heart was strong. I feel more comfortable now knowing that there's probably nothing to worry about."

On completing the study, which is funded by the Pepsico Foundation, participants will be given an individualized "prescription" for ideal long-term exercise conditioning.

Participants must be free of cardiovascular disease and cannot have participated in any sort of regular exercise program for at least three months prior to the study.

Those interested should call the cardiac rehabilitation program at (415) 497-6461 during regular business hours and ask for the "coordinator of the high/low study."

* * * * * *

Volunteers between the ages of 20 and 70 are needed to participate in studies to confirm the effectiveness of three different anti-hypertensive medications.

The drugs, which have already been through animal trials and clinical testing in Europe, offer potentially promising ways to treat high blood pressure, according to principal investigator Dr. Peter Rudd, assistant professor of medicine at Stanford.

Each study preparation will be compared to either a placebo or a similar medication already on the market. The three separate studies are based at the Veterans Administration Medical Center in Palo Alto.

Volunteers are needed who have mild to moderate high blood pressure, and are willing to come in as often as weekly for blood pressure monitoring. Two of the studies last three months, and the third lasts a year.

Participants will be offered free comprehensive medical evaluations at the beginning and end of the studies. Screening and follow-up laboratory tests will include urine, blood, electrocardiogram, and chest X-ray. Volunteers will also receive reimbursement for travel and any worktime missed.

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Rudd said he and co-investigator Dr. Keith Marton, assistant professor of medicine, expect to demonstrate that the new medications are more effective with fewer side effects than those standardly used to control high blood pressure.

Anyone interested in volunteering or obtaining further information should call Valerie Vierra, R.N., at (415) 493-5000, ext. 5918, weekdays from 8 a.m. to 5 p.m.

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Volunteers are being sought for a study to evaluate the effectiveness of hormone replacement therapy for postmenopausal women.

The researchers, headed up by Dr. Leroy Heinrichs, chairman of the department of obstetrics and gynecology, are recruiting women who are at least 47 years old, and are at least one year postmenopausal. The women should not have received hormone replacement therapy in the past six months. Women who have had hysterectomies, or who have their uterus intact are eligible.

Specifically, the investigators plan to study the effects of estrogen, estrogen with progesterone, and estrogen with testosterone on psychological factors such as mood changes. They plan to study the effects on physiological variables as well.

Participants will receive laboratory tests and medication free of charge, and those who complete the one-year study will be paid a stipend.

For further information, contact Dr. Jean Dixen at (415) 497-2432.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Stacie Newman (415) 497-6911

VOLUNTEERS NEEDED FOR STUDY ON DIABETES AND SEXUALITY

STANFORD-

Female volunteers are needed for a study investigating whether diabetes affects sexual response, said Dr. Diane Morrissette, a visiting scholar in Stanford University School of Medicine's department of physiology.

The study will involve insulin-dependent diabetic women, between 21 and 43 years of age, in four one-hour sessions which can be arranged to fit the individual's schedule.

Volunteers will be provided with results of laboratory tests measuring hormonal levels in the blood.

For more information, contact Morrissette at (415) 497-2432.

8-26-83 -30- swn3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

COMMITTEE ON WELL-BEING PLANNED IN DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

STANFORD-

The chairman of the Stanford University department of gynecology and obstetrics has agreed to participate in a faculty-resident-staff committee being formed to deal with internal difficulties highlighted by a controversial memorandum.

Toni McCain, a resident in the department, said Friday that she and two colleagues had agreed to help form the committee at the suggestion of university officials, including Dominick Purpura, dean of the Medical School. The three omen physicians had sought support from the president and dean after one of them, chief resident Zena Levine, was the recipient of a July 21 memo from department chairman LeRoy Heinrichs.

The memo, copies of which were sent to department faculty, chief residents and several administrators, noted that Levine was pregnant and requested that she postpone a planned vacation for scheduling reasons.

The memo, rescinded by Heinrichs and the university, contained material which Heinrichs in an Aug. 6 apology noted was "offensive to many."

The original memo stated in part:

"Pregnancy can also ultimately affect patients who must bear the frustrations of your colleagues who must work with you or those who remain in your absence. Some faculty members express the modern view that responsible career women do not risk incurring the age-old criticism of women as unreliable professional colleagues, and some advise me, for that reason, to appoint no more women as residents in this program."

Purpura called the memo, which was released by an unidentified person to

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members of the news media, as "highly inappropriate, offensive, insensitive, and most importantly, unusable."

Heinrichs has apologized to the resident and her colleagues, and both he and Purpura have reaffirmed the school's desire to uphold Stanford's policy of affirmative action in the hiring of women.

Heinrichs noted that under his leadership, half of the department's 18 residents are women, consistent with current national trends.

He said the intent of requesting the change in vacation schedule was prompted by a desire to ensure that adequate medical staff was available and avoid placing a burden on residents already busy, a problem endemic to residency programs.

McCain, Levine, and a former chief resident now in private practice, Barbara Peters, had asked both Purpura and university President Donald Kennedy to take action.

Purpura asked that the residents initiate a committee to help deal with departmental tensions.

Departmental committees on well-being have become common at Stanford Medical School in recent years. McCain has prepared an invitation to residents, faculty and staff to participate in the proposed committee. Heinrichs has said he would sign and distribute the letter.

"This is an invitation to participate in a new approach to intradepartmental communication and problem-solving," says the proposal drafted by McCain. Committees "are intended to be frank and open sessions where pertinent facts on particular issues are presented and suggestions are made which lead to real solutions."

"This (the committee) certainly has the potential to be useful," Levine said Thursday.

Peters, who has a clinical faculty appointment pending, said "open discussion through a committee is a powerful antidote to potential misunderstandings."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Barbara Battino (415) 497-6911

WEIGHT CONTROL PROGRAM BEGINS NEXT MONTH AT STANFORD HOSPITAL

A weight control program, to be conducted by registered dietitians from the department of dietetics at Stanford University Hospital, will be held Sept. 27 through Nov. 29.

The course is open to the public and will take place Tuesday evenings at the Hoover Nursing Cottage.

Highlights of the program include a personalized weight loss plan, low calorie cooking demonstrations and snacks, menu planning, behavior modification techniques, and a dining out experience.

Kristine Birge and Patricia Kearney, registered dietitians at the hospital, will conduct the classes. Guest speakers will include Dr. Mary Southam of the Behavioral Medicine Program at Stanford, and Elad Levinson of hospital Human Resources Development.

"We want to show that there are safe and healthy ways to achieve weight control," said Birge, "while making the experience an enjoyable one with group discussions and active participation."

Many of the instructional materials developed for use in the course will be used by the dietitians in patient care programs as well, she said.

Enrollment in the "Enlightening Experience" program is limited to 20 participants. Early registration is advised. For more information, call Birge at (415) 497-5440.

8-23-83 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

DIOXIN USED TO TEASE APART CANCER CAUSES

STANFORD—

While U.S. lawmakers and physicians debate the human health risks of dioxin, James P. Whitlock Jr., a pharmacologist at Stanford University Medical Center, is using the chemical to explore, on a genetic level, how some people are able to disarm the same toxic compounds that cause cancer in others.

Dioxin, also called TCDD, has been controversial around the world, as a contaminant in "Agent Orange," an herbicide used as a defoliant during the Vietnam war. Industrial accidents and improper disposal of the compound in communities in Missouri and Italy have frightened citizens into fleeing their homes.

The chemical can be potently lethal, but there is great variation among animal species in their susceptibility to toxicity. Despite recent public concern about possible long term effects of exposure, the only consistent and well-documented symptom in humans accidentally exposed to dioxin has been a temporary, severe form of acne, Whitlock said. Scientists still have only a murky understanding of how the chemical causes changes inside humans and animals.

At a recent meeting of the International Union of Biochemistry held at Stanford, Whitlock, an associate professor of pharmacology, described the ways dioxin affects an enzyme system commonly used by most animals and man to process large molecules that might otherwise get caught and cause harm within the body.

Usually, such enzymes are useful in helping the cell eliminate potentially dangerous compounds. But occasionally the enzymes are more hindrance than help.

Whitlock studies "benzopyrene," a common environmental carcinogen found in auto exhaust, industrial emissions and cigarette smoke, as it moves into cells and is broken apart and recombined into cancer-causing components.

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"Many compounds, like benzopyrene, aren't themselves carcinogenic," Whitlock said, "but during their metabolism within the cell they may be activated to metabolites that are active carcinogens. We're interested in those enzymes and in how the cell deals with foreign compounds."

Whitlock and his colleagues have used biochemical tools and genetic tricks to track the chemical's movement inside the cell. Chief among their tools is dioxin, which induces an increased production of the enzymes that process benzopyrene into both harmless metabolites and harmful cancer causing compounds.

By isolating several mutant strains of cells that don't respond to dioxin, and comparing them with cells that do, Whitlock has begun to understand how genes regulate the production of the enzymes. His studies have revealed a nuclear protein which "recognizes" dioxin and acts as a "switch" to turn the enzyme gene on and speed production of both beneficial and harmful enzymes. Currently Whitlock is trying to pin down exactly how this "dioxin receptor" controls production of each type of enzyme.

Although Whitlock's studies have been conducted with liver cells from mice, the enzyme systems also play an active role in humans and may serve as a good model for the way chemicals may act in concert to cause human cancers, he said.

"It's not at all clear what the effects of dioxin are on humans," he said. "There has been a lot of hysteria, but what we need to do is to find out exactly what's going on inside the cell."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FORMER PREEMIES TO REUNITE!

Editors note: Members of the news media are invited to attend and cover this weekend event. Please call the news bureau at the above number if you plan to come.

STANFORD—

Former patients of the Intensive Care Nursery at Stanford University Hospital will be reunited at a party, from 1-4 p.m., Sunday, Sept. 11, in the hospital's garden patio.

Children who were hospitalized in the ICN as premature or critically ill infants—as far back as 1978—and their immediate family members are invited to attend the afternoon event. Food, games and entertainment (including clowns) are planned.

The reunion, intended as the first of an annual event, is sponsored by the Stanford University Hospital Auxiliary. Families planning to attend should respond as soon as possible at (415) 497-7200, an answering service. Please leave a message as to the name and number of family members coming.

For further information about the reunion party, call (415) 497-5480.

8-22-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

STANFORD—

Stanford University Medical Center has been given state approval to resume a renal (kidney) transplant program.

Dr. Rex Jamison, professor of medicine and chief of the division of nephrology, said kidney transplants—initially about 25 to 30 annually—could begin here in about a year. A renal surgeon and transplant nephrologist will be recruited, he said.

SUMC was notified earlier this month by the Office of Statewide Health Planning and Development that a Certificate of Need (CON) had been granted for the project.

To receive a CON to begin or resume certain medical services, institutions must prove that they are medically and financially sound, and fundamentally, that the project fulfills an area health care need.

Patricia Stone, a Stanford health care planner, noted Friday (Aug. 19) that the Santa Clara County Health Systems Agency had waived its review of the application, filed March 30, enabling the state to reach a decision quickly and without public hearings.

Cost of the project is about $18,000 for therapeutic equipment, and no construction is planned, Stone said.

SUH had a renal transplant program between 1965 and 1971, and then the specialized program became inactive.

Jamison noted that recent developments in immunosuppressive drugs—needed to prevent the body from rejecting the foreign organ—have increased survival of transplanted kidneys.

In its CON application, Stanford noted that currently no renal transplant program exists in Santa Clara County, where more than 80 persons under age 50 were waiting for new kidneys. Currently these persons must seek transplantation at centers outside the area, Jamison said. In northern California, the only existing renal transplant facilities are at the University of California at San Francisco and Pacific Medical Center, San Francisco. Both of these institutions are experiencing long waiting lists, Stanford said in its CON application.

The transplant program will be a joint venture between Stanford University's department of surgery and the department of medicine's nephrology division.

Stanford's existing nephrology program includes a hemodialysis unit, where about 40 patients undergo regular maintenance dialysis.

Other Stanford transplant programs include hearts, heart/lungs, corneas, and within a few years, bone marrow.

Aug. 19, 1983

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

MONOCLONAL ANTIBODIES AND CANCER TREATMENT: AN OVERVIEW

STANFORD—

In 1980, a 67 year-old man agreed to undergo a new experimental treatment for a rare lymphatic cancer that was killing him.

Previous treatments with conventional and experimental drug therapy couldn't halt the disease that was slowly ravaging his liver, spleen and lymph nodes. But after a four-week regimen of "monoclonal antibodies," specially created protein "bullets," the cancer began to recede.

Today, more than two years after treatment, the man remains completely free of the disease.

The early success triggered hope in scientific circles and the general public that monoclonal antibodies, already valuable as tools to diagnose disease and detect cell differences too tiny to be seen any other way, might have a new use in eradicating cancer. Two years and several patients later, Ronald Levy, the Stanford oncologist who pioneered the new treatment, describes his results as "encouraging," though he cautions that it is still too soon to tell precisely what role the specialized antibodies will play in thwarting which types of cancer.

Monoclonal antibodies were first developed by researchers George Kohler and Cesar Milstein in Cambridge, England in 1975, as a variation of the normal antibodies that every mammal produces to attack any foreign substance—virus, bacteria, or cell—that invades the body.

Each antibody is designed to precisely match a specific site on the invader's surface and to latch onto it like a key in a lock. Once the antibody and foreign substance are joined together, other cells of the immune system are alerted to join the battle and kill the invader.

A wide variety of slightly different antibodies may be produced in response to a typical infection, but Kohler and Milstein developed a method of screening the mixture to select and harvest only the specific type of antibody they desired and produce it in large amounts.

Levy and other researchers have capitalized on the specificity of the monoclonals to develop a potentially powerful treatment for some types of cancer.

To produce the antibodies they use in treatment, Levy and his colleagues first inject mice with cancer cells filtered from a blood sample of the patient to be treated. A few days later, they remove the mouse's spleen, which now contains large numbers of white cells, the blood-borne factories where infection fighting antibodies are produced. Some of these white cells have been become sensitized to the injected cancer cells, and will produce antibodies that can specifically seek out and destroy cancerous cells in the patient's body without harming healthy tissue.

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The scientists then fuse the white cells in a laboratory dish with cells from a mouse tumor, creating a new, immortal cell line or "factory" that can produce large quantities of the desired antibodies.

Currently, it takes Levy's team an average of six months to produce enough antibody to treat a single patient, at a cost of approximately $50,000. If and when the experimental procedure is proven effective within the next couple of years, private companies could take over the production of the proteins on a large scale, and greatly reduce the treatment cost, Levy said.

All 26 patients that Levy has thus far treated with monoclonal antibodies have suffered from one of several specific types of lymphoma and leukemia. He said the reasons for limiting the treatment to lymphoma and leukemia are primarily two-fold: as cancers that float through the bloodstream, lymphomas and leukemias are relatively easy targets for the special treatment, in comparison to solid tumors.

In addition, because leukemias and lymphomas are cancers of the immune system, they have been well studied. "We know a lot about these tumors because we know a lot about the immune system and the cells that make antibody," Levy said. "So it made sense that lymphomas and leukemias would be the first thing to start working on."

Other universities and research institutes across the United States have begun to explore the use of monoclonals on "virtually every kind of cancer," Levy said, though none of the programs have yet developed to the point of accepting patients.

"We really don't know what the final role of monoclonal antibodies will be in the total treatment of a person with cancer," Levy said. "I don't think that they will ever replace the current therapies that really do work, but I do think that they will be useful, probably in an adjunctive role."

While Levy has used the antibodies alone in treatment, other researchers are investigating the possibility of tagging the proteins with a radioactive isotope or chemical poison which they could aim exclusively at the cancer cells, sparing the healthy tissue that is inadvertently killed through conventional cancer treatments.

"Eventually we hope to add monoclonal antibodies to the other modalities of treatment we have," Levy said, "to be used in different combinations, depending on the needs of each individual patient."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

ARMAND HAMMER DEDICATES $500,000 CANCER LAB

STANFORD—

A $500,000 gift from industrialist Armand Hammer will help expand and finetune the promising new use of specialized protein "bullets" that harness the human immune system to battle several types of cancer, said Ronald Levy, Stanford cancer researcher, at a news conference at Stanford Medical Center Thursday (Aug. 18).

Hammer joined Levy at the conference, called to dedicate the expanded laboratory funded by the Hammer gift.

"We've had some preliminary results that are very promising, and Dr. Hammer's gift will help us expand our laboratory facilities and move a lot faster to test the possibility of making this into a therapy that we hope eventuallly can be made available to large numbers of patients," Levy said.

In 1981, Levy, an associate professor of medicine/oncology, used the special proteins, called "monoclonal antibodies," to treat a 67-year-old man dying from a rare form of lymphatic cancer. Today, more than two years after completion of treatment, the man is completely cancer free.

Encouraged by the early results, Levy's team turned their attention to developing antibodies against similar cancers in other patients. Four more patients have completed the treatment, and the scientists have begun the six-month-long process of manufacturing the custom-tailored antibodies for eight more patients. The results have been "encouraging" Levy said, though it is still too soon to tell exactly how successful and how generalizable the results will be.

"We're finding that the more sharply the antibody can distinguish between normal cells and tumor cells, the better effect we can get," Levy said. "And the best distinction between tumor cells and normal cells is attained by making a different antibody for each patient. That's a long and laborious process."

The new laboratory space will permit an expansion of staff who can seek ways to streamline the production of antibody, to build on the current knowledge and treat more patients more effectively, Levy said.

The focus of his research now is in identifying the "target" that the antibody bullet uses to home in on cancer cells and lead to their destruction, he said. Currently, such targets have been identified for only a few specific types of lymphomas and leukemias, but researchers around the country are seeking such targets for other types of cancers, he said. "When people understand what those other targets are, then we'll know how to make antibodies against them."

"I know that the work done in this laboratory will fully justify my faith in Dr. Levy and his colleagues and measure up to the finest standards of the Stanford Medical Center," said Hammer. "Much fine work has been done at Stanford in the past, and I know the future will continue in that great tradition."

"This is only one step in the work that has to be done in the path to finding a cure for all cancers," said Hammer, who recently established a $2 million fund to support research towards a cancer cure. "But I think it is an important step."

8-18-83 —30— df3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Deborah Franklin (415) 497-6911

To: Reporters and City Desk Editors

NEWS CONFERENCE CALLED TO DEDICATE NEW CANCER LAB

STANFORD—

Armand Hammer, chairman of Occidental Petroleum and head of the President's Cancer Panel, will join Stanford cancer researcher Ronald Levy at an Aug. 18 press conference to dedicate a new $500,000 laboratory.

The informal press conference, to be held at 10 a.m. August 18 in Room TE 110 at Stanford University Medical Center, will be followed by a press tour of the facility which was funded by the Armand Hammer Foundation of Los Angeles.

Levy and his colleagues are expanding their study of "monoclonal antibodies," special proteins of the immune system that can seek and destroy cancer cells in the body without damaging healthy tissue.

"The research is promising," said Levy, "and the rate limiting step has been lab space. Both Dr. Hammer and I have been anxious to expand the work."

Earlier this year, Levy was named the first beneficiary of an annual $100,000 prize established by the Hammer Foundation to reward "the first person or persons deemed to have made the greatest contribution to the cure for cancer."

Levy shared the prize with British researcher George Telford Stevenson, for their experimental adaptation of antibodies—infection-fighting proteins of the immune system—to devise a new, experimental treatment of cancers of the blood and lymph glands.

First developed in England in 1975, monoclonal antibodies are proteins made by biological factories that the scientists construct by fusing cells of the human immune system with a cell from a mouse tumor. Inheriting characteristics from both parent cells, the new "factories" can produce large quantities of identical antibodies that can be injected into the bloodstream to specifically kill the cancer cells.

Early results on the effectiveness of the treatment in fighting some leukemias and lymphomas have been "encouraging," Levy said, but it is still too soon to tell precisely what role monoclonal antibodies, already valuable in research, will eventually play in cancer treatment. The news conference is designed to permit an informal question and answer session on Levy' ongoing research. No new, unpublished data is expected to be reported.

Room TE 110 is on the first floor of the Psychiatry and Behavioral Sciences Building, located at the northwest edge of the medical center.

8-11-83 —30— df6

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

OPERATING BUDGET APPROVED FOR STANFORD UNIVERSITY HOSPITAL

STANFORD—

The Stanford University Board of Hospital Directors approved Wednesday (Aug. 10) a 1983-84 net operating budget of $174.4 million for Stanford University Hospital (SUH).

The board also approved a capital budget of $5.3 million. Major projects earmarked for the fiscal year beginning Sept. 1 are a renovated intensive care unit, $500,000; relocation and modernization of the tissue typing lab, $250,000; and modernization of the radio page system, $250,000.

The budget is based on projected net revenues of $182.9 million, which reflect an average price increase of 8.4 percent, said Sheldon King, SUH director and executive vice president. The revenue figures include $3.3 million for contingencies and future capital improvements.

Less than 1 per cent of the increase has been earmarked for the hospital modernization program, the project expected to bring the hospital up to modern standards in coming decades, King said.

Ancillary services, which account for 60 percent of the hospital's revenue and include all services (such as X-ray, operating room, drugs) except the basic room rate and professional fees, will increase an average of 7.5 percent effective Sept. 1.

Room rates, one of the largest single items for which hospitals must charge, will rise an average of 9.7 percent. Typical daily increases are from $205 to $225 per day for a well newborn baby; from $350 to $384 for a semi-private room for most medical/surgical patients receiving the services of housestaff. The highest rates—for a handful of patients receiving the maximum level of intensive care—will rise from $1825 to $1995 per day. (Forty separate rates are in effect).

Last year, SUH raised room rates 5.9 percent on May 15 and 13 percent on Sept. 1.

King said that while room rates are increasing, there is a mitigating tendency for the rooming portion of a patient's bill to decrease, because the average length of hospital stay is declining gradually.

"In past decades, when hospital care tended to be custodial, we charged patients for the room and hoped they got better," King said.

"Every year we are able to offer more specific services, which, realistically, result in higher costs.

"Hospitals are more vulnerable to inflation and rising costs than other segments of the economy," King said. "We cannot forego a new development or innovation simply because it is expensive. We must constantly keep pace, and our costs escalate even if the consumer price index remains relatively stable."

Despite economic pressures, King pointed to an ongoing cost reduction program which is expected to save the hospital $5.2 million in the next fiscal year. Areas targeted for savings include conservation of materials, inventory control, and selected cutbacks through attrition of personnel in areas now functioning with greater efficiency.

8-10-83 —30— swn3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

NEW FELLOWSHIP FOR KIDNEY RESEARCH HONORS LONGTIME CONTRIBUTOR

Editors: Photos of Dr. Shemesh at work, as well as last week's ceremony, are available upon request.

STANFORD—

An Israeli citizen from Iraq has been named first recipient of the Delano Large Fellowship in Nephrology at Stanford, at ceremonies last week honoring a man who contributed widely to kidney disease research after his son battled renal failure for nine years.

This year's fellowship recipient, effective July 1, 1983, is Dr. Ovadia Shemesh, who received his M.D. at Hadassah Medical School in 1973, and later did research on leukemic tissue culture at the Weitzman Institute in Israel.

As a fellow at Stanford, Shemesh has dealt with many diabetic patients. Now he plans, with Dr. Bryan Myers, associate professor of medicine and director of clinical nephrology, to study patients with either of two types of kidney disease, trying to characterize in a quantitative way how the normal kidney functions and what precisely can go wrong.

The researchers hope, through mathematical analysis of data, to be able to distinguish and thus predict deterioration of the filtration process that characterizes kidney failure. This should help physicians determine early on the potential for thwarting the condition, through appropriate therapies. It should also help them judge the potential role of various new treatments.

Experimental methods involve infusing substances of known molecular size into the patient's bloodstream and, with unique analytic equipment, determining the kidney's ability to clear them from the patient's blood into the urine. The infused substances are meant to simulate proteins—to which diseased kidneys are abnormally permeable, allowing them to leak through into the urine while toxic materials remain clogged behind, causing protein depletion and kidney failure.

"Now that we can recognize the different phases of kidney disease," Myers said at the ceremony, "we will look at the early stages, with an eye towards prevention of renal failure. At least we might be able to prolong an ailing kidney's ability to function.

"This will all take a few years," he added. "But the first two will be the most critical, and with the help of this fellowship, Dr. Shemesh will be able to make important contributions to the research."

Upon completion of his work here, Shemesh plans to return to Israel for a career in academic medicine.

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"The new fellowship serves two purposes," said Dr. Rex Jamison, professor of medicine and chief of nephrology at Stanford. "One is to honor Delano Large's memory; the other is to enable us to continue to train people to try to discover causes and treatments for the disease that felled his son Jeff."

Jamison and Dr. Norman Coplon, clinical associate professor of nephrology, hosted the August 1 event at the Faculty Club.

Large, who graduated from Stanford in 1937 and later received his M.B.A. at the Graduate School of Business, died of cancer on his 69th birthday June 16, 1983, at Stanford University Hospital. He and his wife Jean had become actively involved in fighting kidney disease when their son Jeffrey developed end-stage renal disease at the age of 24 in 1964.

Jeffrey became only the second Californian patient to undergo dialysis treatments at home, after being trained for the procedure by Dr. Belding Scribner, a Stanford alumnus, in Seattle. At that time there were few dialysis centers, Jean Large recalls, and none in this state.

Jeffrey also underwent four kidney transplants, only one of which succeeded—and that one lasted only six months. He spent eight years on hemodialysis, until his death in 1973.

A native of Monterey and longtime resident of Palo Alto, Delano Large helped found a Northern California affiliate office of the National Kidney Foundation, and in 1966 started the Mid-Peninsula Chapter, which is still active.

The new annual fellowship in his name is being sponsored by Satellite Dialysis Centers Inc. of San Jose, a non-profit organization which Large helped found With Coplon in 1973. Initial funding of the fellowship is for 10 years.

Large owned a construction contracting firm which he operated for nearly 40 years. He was helpful in the building phases of Stanford's hemodialysis unit, Jamison recalls.

"Delano Large was a warm, unassuming person, who listened carefully and gave sage advice," said Jamison. "He was a generous man with a fine sense of humor."

Jean Large was active in the Stanford University Hospital Auxiliary for about 20 years, up until this spring.

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LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

VOLUNTEERS NEEDED FOR ACNE STUDY

STANFORD—

About 20 volunteers, ages 16 to 30 with moderate to severe facial acne, are needed to participate in a study to test the effectiveness of a new topical treatment.

The three-month, double-blind study will compare a topical preparation of Acutane with another vitamin A derivative which has been used effectively for years in treating acne.

Dr. David Elbaum, a resident in dermatology and principal investigator for the study, said the topical preparation of Acutane is hoped to prove as effective as its recently approved oral form, while avoiding the side effects encountered.

Volunteers must be off any acne medications for at least two weeks prior to joining the study, and then for the duration of the study. They will come in for observation bi-weekly the first month, and monthly thereafter.

Those interested in further information or in volunteering should call Nicole, weekdays at (415) 497-6319.

8-2-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

FOR IMMEDIATE RELEASE

GROUP PSYCHOTHERAPY IN HOSPITALS NEEDS IMPROVEMENT

STANFORD—

Group psychotherapy in many of the nation's general hospitals is a perfunctory function because the technique has failed to keep pace and adapt to the circumstances of the inpatient ward, says Dr. Irvin Yalom, a Stanford University psychiatrist.

This, he adds, has occurred in spite of the demonstrable effectiveness of group psychotherapy in other settings.

"Group psychotherapy makes efficient and effective use of the patients' time and of hospital and staff resources," Yalom maintains. Staff members actively participating in a group therapeutic program feel valued, constructively challenged, and likely to contribute effectively to all aspects of the therapeutic program.

But specialized skills are required for effective leadership, he explains, and not enough professionals are properly trained to function in inpatient psychiatric wards.

"The acute inpatient ward constitutes a radically different clinical setting," Yalom says. "It requires a radical modification of group therapy technique.

Yalom expresses his views in a new book *Inpatient Group Psychotherapy*, 350 pp. Basic Books, New York 1983. The book presents a modified approach and talks about the different ways in which therapists can structure sessions, the kinds of support that should be offered, and the emphasis on the here-and-now—all of which are essential to effective group therapy in hospitals.

For his book, Yalom visited many hospitals. In their psychiatric wards he found groups led without formal sanction. In one ward the medical director, a psychopharmacologist, told him that he had tried to use groups for three months shortly after he had taken over. Having concluded that therapy groups were ineffective in an acute setting, he had dismantled the group program.

"When I interviewed members of his staff," Yalom reveals, "I was informed that the evening nursing staff conducted daily therapy groups concealed under the title 'rap groups.' "

9-30-83 -more-

Unlike outpatient clinics in which one finds group therapy programs to be broadly consistent, in hospital psychiatric wards "there is no coherent body of inpatient group therapy principle and corresponding strategies that are consistent from unit to unit," Yalom reports.

This lack creates a catch-22 situation. "It plays havoc in the education of young psychotherapists," Yalom says, "and encourages a dangerously speculative 'every man for himself/every woman for herself' approach which can be pernicious to the field and to patients' best interests." Moreover, even some university hospitals with the most prestigious psychiatric training programs in the country generally do not offer group therapy training suited to inpatient settings.

Yalom's book describes a group therapy approach which is specifically tailored to the needs of a short-term acute psychiatric ward. His approach involves these key steps:

There must be a realization that goal setting is crucial to the proper functioning of a small therapy group.

Goals must be realistic because if they are overly ambitious they might impair the effectiveness of the group.

The goals of the small group are not the same as the goals of short-term hospitalization.

Some realistic goals for the small therapy group are to engage patients in the therapy process, to help them learn that talking helps, to spot problems, and to alleviate patients' anxiety associated with hospitalization.

"When patients are helped this way, they are motivated to continue to work out their problems in posthospital psychotherapy," Yalom adds.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

LASERS IN CARDIOLOGY: DOCTORS ARE HOPEFUL

Editors: Photos available soon upon request, if not included.

STANFORD—

Cardiologists at Stanford University Medical Center are investigating a dramatic new use of lasers for the treatment of vascular disease.

Their initial results from clinical trials of laser angioplasty, as it's called, on patients with blocked blood vessels in the leg, look promising.

"We've been able to re-open clogged vessels in the legs of two patients over the last few months," said Dr. Robert Ginsburg, a clinical assistant professor of medicine in cardiology. "To our knowledge this is the first successful use of laser angioplasty as a treatment for vascular disease.

"Once we feel more comfortable with this technique in diseased legs," he added, "we'll move on to our ultimate goal of attempting the procedure on coronary arteries."

In a report awaiting publication, Ginsburg and co-authors describe the case of a 62-year-old man for whom surgical interventions had failed to correct the problem of severely decreased blood flow in the left leg caused by cholesterol blockages.

The patient had been informed that no further surgery could be attempted, and that amputation was the sole recourse. "This is the only category of patients we're presently performing laser angioplasty on," said Ginsburg, "because they are so severely disabled by leg cramping and pain that we can offer the possibility of some benefit without the chance of doing harm."

Heavy smoking, as well as diabetes, are just two potential causes of the ischemic condition, he added.

Referred to Stanford for consultation, the patient gave his informed consent for the experimental treatment. The laser successfully re-established arterial blood flow, Ginsburg reports, and the patient was discharged the next day on aspirin alone.

"At the time of follow-up the patient continues to do well, with only leg 'fatigue' after walking two to three blocks, and no nocturnal or rest pain."

He added that much more basic and clinical data are needed before the procedure can become generally available.

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The clinical trials at Stanford, ongoing since March, come after several years of experiments with animals, human cadavers, and cooperative research in optical physics.

Ginsburg's co-investigators include Drs. Diana Guthaner, R. Scott Mitchell, and Norman Shumway.

Recently, Ginsburg noted, balloon angioplasty has gained wide acceptance as a treatment for vascular disease. The procedure uses a catheter with an inflatable balloon within to flatten or re-shape atherosclerotic plaque obstructing the vessel. The laser, by contrast, vaporizes the offending plaque.

Ginsburg hopes the laser will find its place as a complementary tool to already established techniques such as balloon angioplasty and coronary bypass surgery, in which the obstruction is skirted by grafting a peripheral vein from the aorta to the connecting vessel.

"Laser angioplasty is not meant as a replacement procedure," he said, "but if used in conjunction with others, the resulting back-up effect will hopefully raise the odds of success." This is why cardiovascular surgeons led by department chairman Norman Shumway are looking at potential applications of the laser in the operating room.

These and other heart specialists' concerns will be the focus of an international symposium at Stanford planned for this November on "Innovations in the Treatment of Cardiovascular Disease." The conference, geared towards the medical community, is meant to provide the latest information on new treatments and research areas, including lasers.

Ginsburg is program director of the symposium, which is being sponsored through an educational grant from Cooper Medical Corporation in Mountain View.

Already come into its own in fields like ophthalmology, gastroenterology, otolaryngology, dermatology, gynecology, neurosurgery, and even oncology, the laser's potential as a heart specialist's tool has only recently been explored by research teams using various approaches around the country.

"Laser energy has two primary uses in the cardiovascular system," explained Ginsburg. One use, he said, is for the removal of blood clots and atherosclerotic plaque obstructing coronary or peripheral vessels. The other use is to coagulate blood or arrest bleeding, for example to stop hemorrhage from leaking blood vessels.

Einstein first predicted in 1916 that electrons could be stimulated to emit photons of light energy of a certain wavelength. The acronym "laser" stands for "light amplification by stimulated emission of radiation."

Electrical energy is sent through a tube of conducting material. The atoms of the laser medium are excited, and as they return to their normal state, monochromatic, in-phase light waves are emitted in a focused beam. This is where the laser derives its tremendous energy.

What kind of laserwhat energy level, wavelength, and conducting substanceto use is determined by the needs of the application in question.

The powerful argon laser, because of the substance's ready absorption by red pigment such as hemoglobin, its easy transmission through tiny glass fibers, and its commercial availability, became the cardiologists' laser of choice.

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Vascular work by laser, Ginsburg said, requires the use of fibers to serve as a delivery system. Sneaking the fibers through a catheter to the point of obstruction, the Stanford physicians use X-ray visualization for monitoring their work. This they consider preferable to developing and utilizing new technologies as some research teams have done.

The procedure, requiring only overnight hospitalization, can be accomplished in the catheterization laboratory.

Among the advantages of the laser envisioned by medical scientists are the ability to control precisely the amount and direction of energy utilized in a procedure, to avoid invasive surgery, and to reach fairly inaccessible recesses of the human body. It is relatively simple to learn to use, and the laser beam generates heat which prevents infection at the site of contact.

Once they'd chosen their laser and delivery system, however, Ginsburg's team still faced the question of safety. Risks to the patient are small but real, he said. There are the general risks of angiography itself, but also the possibility of perforation of the blood vessel wall.

In their clinical trials so far the Stanford physicians have used a balloon guiding catheter as a precaution against inadvertent perforation. "In case of perforation," Ginsburg explained, "the catheter could have been advanced to the site of injury and inflated to prevent hemorrhage."

Other routine precautions are taken whenever lasers are used, to protect the operator as well as the patient.

There are still other problems to be resolved, Ginsburg said. Absolutely accurate direction of the laser beam hasn't been attained, the present system presents very low energy efficiency, and much is still unknown about the long-term effects of laser radiation on the vessel wall and atherosclerotic lesions. Moreover, the ideal delivery system has yet to be developed, particularly for small or tortuous arterial vessels.

Once the problems have been dealt with, other potential applications of the laser in cardiology include correcting certain heart defects in infants as well as heart beat irregularities in adults, Ginsburg said.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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STANFORD—

STANFORD SCIENTISTS DISCUSS CANCER RESEARCH

"The Genetics of Cancer," a look at potential underlying causes and cures of the killer malady, will feature lectures by three Stanford University Medical Center researchers.

The free public lecture, a community outreach forum to increase public awreness of cancer research, is scheduled at 8 p.m., Wednesday, Oct. 5 in the Sherman Fairchild Auditorium. The program is co-sponsored by Stanford and the American Cancer Society Santa Clara County Unit.

Speakers and their topics are Jeffrey L. Sklar, assistant professor of pathology, "Cancer Genes and Cancer Diagnosis"; Robert T. Schimke, professor of biology, "Cancer Cells' Response to Chemotherapy; and Irving L. Weissman, professor of pathology, "Cancer Genes Expressed at the Cell Surface."

In recent years, cancer research has focused increasingly on genetic engineering and how normal, healthy human genes change to become cancerous.

Sklar, who came to Stanford as a pathology intern in 1977 after receiving an M.D. and advanced training at Yale University, currently is studying the molecular genetics of malignant white blood cells and basic mechanisms of gene expression in mammalian cells.

In addition to a general introduction on the genetics of cancer, Sklar will be talking about a new diagnostic test for B-cell lymphoma.

Weissman, a Stanford Medical School graduate who became a full professor in 1981, has been studying immune cells of the bone marrow, particularly as they involve the mechanisms by which they are directed to other sites in the body. This potentially could offer insights into the causes and mechanisms of various blood cancers.

Schimke has been studying gene amplification, which includes the process by which increasing concentrations of anti-cancer drugs cause the targeted cells to become drug resistant. By determining thresholds of resistance, chemotherapy could become more effective. Schimke received both his undergraduate degree and M.D. from Stanford.

The three speakers are among 11 Stanford researchers receiving $655,575 in ACS funding this year.

Moderator for the forum is Richard A. Bohannon, a San Francisco physician who serves as chairman of the professional education committee of the California Division, American Cancer Society.

September, 15, 1983 —30— mg1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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YOUNGSTERS REUNITE AFTER ROCKY START IN LIFE

Editors: Photos available upon request if not included.

STANFORD—

Once they were tiny, too small in an earlier era to survive.

But on Sunday, Sept. 11, about 200 playful youngsters munched cookies, giggled with Big Bird, Ronald McDonald and the Cookie Monster, and watched puppets—as several of their Stanford University Medical Center physicians were dumped good-naturedly into tanks of water.

The celebration was a reunion for former patients of Stanford's intensive care nursery, and one story after another illustrated that not only are premature and critically ill infants surviving in greater numbers than ever before, but many are growing to lead normal lives—albeit sometimes with minimal lingering handicaps.

Family members, often veterans themselves of scores of nervous hours in a waiting room, came to the hospital's garden patio too for the occasion. And some of the happiest partygoers were members of the health care team responsible, along with constantly advancing technologies, for the positive outcomes experienced by families in the past few years.

"We've always been concerned about how our babies do after leaving the nursery," said Dr. Philip Sunshine, professor of pediatrics and director of the ICN, addressing the crowd. "So this day is like a Godsend for us. We hope it will be an annual event."

"These babies have been through such hard times, and to see them come back with such spirit is great," said Barb Magee, an ICN nurse who helped arrange the affair, to which all ICN graduates since 1978 were invited. "First you recognize the parents; then the pieces begin to fall in place and you remember the baby," Magee explained as she watched assorted groups arriving.

Featured fun at the auxiliary-sponsored party included "Dunk the Doc," a jumping jack air pillow, clown visits, puppet shows, face painting, balloons and refreshments.

"I think I've had a guardian angel looking over me," exclaimed a single mother, Mary Ann Mitchell of Sunnyvale. Mitchell's baby Christy, now nine-and-a-half months old, was born nine weeks premature and spent seven weeks in the ICN. "But other than being very small, she really hasn't had any problems," said her mom.

9-13-83

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Mitchell's hospital roommate, Jenny Paulsen of Cupertino, delivered baby Brittney one day after Christy was born. The two women had been given the same due date, they recall. "Our babies became roommates too."

Paulsen and her husband Brad said that Brittney, who was actually 11 weeks premature and also very small, suffered from apneas, or breathing difficulties, and some lung problems as well.

"It was especially hard for us," said Brad, "because it was around the holidays that all this was happening. Brittney was born the day before Thanksgiving. She spent a month in Stanford's ICN, and then a month at El Camino Hospital."

The Paulsens received emotional support from their family as well as the hospital staff. Charlene Canger, the ICN's social worker, said that a parent support network is now forming, to match up ICN graduate parents with families of babies presently in the nursery. The primary focus will be telephone support calls or visits.

Currently, the network is meeting once a month. Members also plan to use these or other sesions as supportive meetings for themselves to discuss issues of parenting *after* the ICN experience.

"The first year is especially difficult," Canger explained, "even in trying to get a babysitter to stay with your child, for example."

Jenny Paulsen added, "Sometimes it's *harder* when you take the baby home. I wasn't prepared for all the screaming 24 hours a day, for one thing. I was expecting Brittney to be like any other newborn when we brought her home, but she wasn't."

With Brittney progress is slow but sure, and her parents said she's fine now. "She is our first, and no, I don't want anymore," said her mother.

"Oh, I want ten more," Mitchell chimed in, just to illustrate the wide range of reactions to what always starts out a crisis situation. Mitchell's coming home though, she admitted, was less turbulent than the Paulsens'. The two women have become good friends.

What would they advise parents plunged, without warning, into the ICN experience? "You just have to take things a day at a time," Paulsen said, "and don't expect too much at the start."

Among those attending the reunion were a set of ICN graduate twins, a group of quadruplets, and a little boy born quite prematurely to two deaf parents.

At one point Dr. David Smith, a former fellow in the ICN now attending in pediatrics, showed another side to his talents by performing on the guitar, lyrics he'd composed about the ICN—this time from a baby's point of view.

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FOR IMMEDIATE RELEASE

VOLUNTEERS SOUGHT FOR WEIGHT LOSS STUDY

STANFORD—

Exercise or diet: which is the best route to weight loss?

The Stanford Heart Disease Prevention Program (SHDPP) is attempting to answer that question, and volunteers are being sought.

Specifically, the SHDPP is looking for moderately overweight and sedentary but otherwise healthy males, aged 30-59, living and-or working close to Stanford.

The men will be divided randomly into three groups. One group will participate in a one-year weight loss plan while remaining sedentary. The second group will join a one-year exercise program while continuing to eat about the same number of calories as before.

Members of a third group will change neither their diet nor their exercise habits and thus serve as a reference group for a year, after which they will be offered the best available weight loss program.

Besides weight loss, SHDPP personnel will take other medical and nutritional measurements (such as cholesterol and blood pressure) which may affect cardiac risk.

The diet and exercise groups will be compared to determine which lifestyle change might be more beneficial to overall health.

All participants will receive general nutritional counseling before being assigned to a group. After the first year, participants will receive followup exams during a second year to determine which of the two lifestyle changes is easier to adhere to.

For further information, call (415) 497-9646 between 11 a.m. and 2 p.m., Monday through Friday. Participants must fall within predetermined weight ranges. For example, 5-foot-10 men must weigh between 180 and 222 pounds with indoor clothes and without shoes.

Principal investigator for the project is Peter D. Wood, professor of medicine (research), and deputy director of SHDPP.

9-7-83 —30— nr-3a

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

DIABETIC VOLUNTEERS NEEDED

STANFORD—

Do people with diabetes metabolize blood glucose inefficiently?

Diabetic volunteers are needed to help answer this question by participating in research conducted by Dr. Gerald Reaven and associates at the clinical research center at Stanford University Hospital.

To be eligible for this study, volunteers must have adult onset diabetes; be between 20 and 80 years of age, male or female; and be in good general health.

Participants will be offered the following free of charge: evaluation of blood sugar and insulin; routine health evaluation including liver and kidney function test, cardiogram, physical exam, and dietary evaluation.

Anyone interested or wishing further information should call Dr. Chris Donner or Dr. Clarie Hollenbeck, at (415) 497-6973 between 9 a.m. and noon; or Ann Coulston, R.D., at (415) 497-5430 between 1 and 5 p.m.

9-6-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

ARTHRITIS CLASSES: EXPANDING OBJECTIVES

Note: Photos available upon request if not included.

STANFORD—

The thumb-walk, the elbow chop and the heel-toe dance are just a few of the exercises taught in Stanford's arthritis self-help classes, a new series of which is scheduled to begin in October.

The classes, which have been cosponsored by Stanford and the Arthritis Foundation for the past four years, aim to drive home the fact that there are numerous things arthritis sufferers can do to help themselves.

And now, in addition to looking at the efficiency of patient education, researchers plan to expand the project to look at the psychological outcomes of teaching people to manage their own arthritic pain. "We'll conduct a two-year study to look at the effectiveness of long-term reinforcement as well," said research associate Dr. Kate Lorig.

The courses are open to anyone with arthritis. They provide information about arthritis, how best to use arthritis medication, how to design an appropriate exercise program, how to deal with emotional and physical problems created by the condition, and how to work more closely with one's physician.

Participants practice exercises and relaxation techniques and discuss nutritional concerns. They complete questionnaires at several intervals during the course and are continually compared to a control group of future participants.

The fall series will last six weeks. Each class is taught by two community leaders who have been trained by Lorig. Many leaders have arthritis themselves or in their families, some are retired health care professionals, and others are simply people interested in helping others.

Morning, afternoon and evening sessions will be held at 14 locations in the Bay Area including Palo Alto, Cupertino, Sunnyvale, Santa Clara, San Jose, Redwood City, San Mateo, San Francisco and South San Francisco. Classes meet for two hours weekly.

Pre-registration is necessary and enrollment is limited. A small fee will be charged, and scholarships are available. For information or applications to the arthritis self-management course, call (415) 497-7935.

9-6-83 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER

News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

STANFORD—

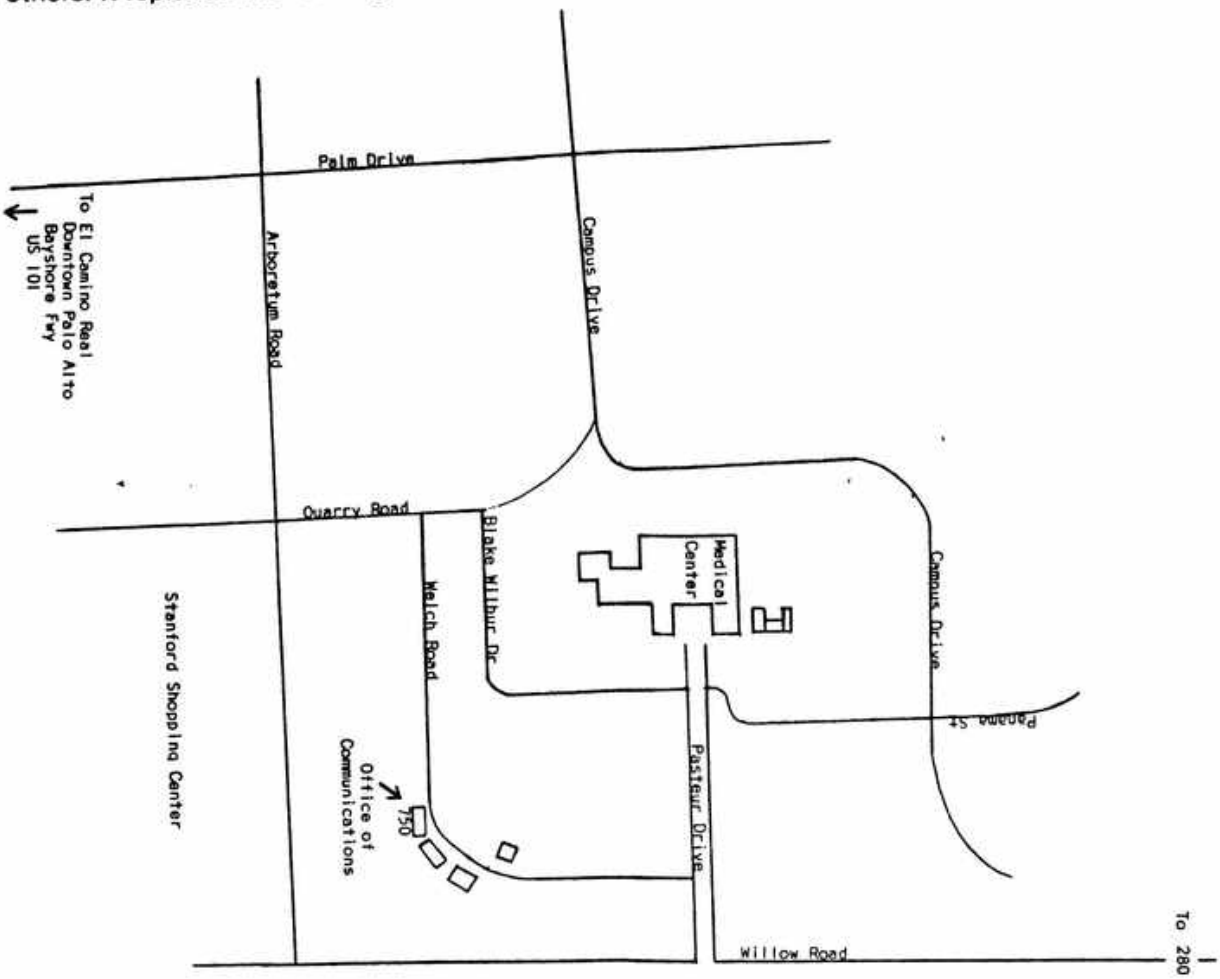
Stanford University Medical Center's Office of Communications, which includes the News Bureau, has a new location effective today, Sept.2.

The new office is at 750 Welch Rd., Suite 301, Palo Alto, Calif. 94304. The phone number remains 497-6911.

The move was necessitated by the consolidation of the Medical Center's Public Events Office with the Office of Communications, and the Department of Medicine's need for more academic space. The Office of Communications is adopting a typesetting computer system that will interface with the University's News and Publications Service, allowing a more efficient service, said Communications Director Spyros Andreopoulos.

The Communications Office prepares the *Medical Center Memo* section of the *Campus Report*, sends out news releases about the Medical Center to media, and provides a number of other communications services. It also publishes *Stanford Medicine*, the new Medical Center-wide magazine scheduled to debut this fall.

The magazine, to be of higher quality and more consumer-oriented than previous publications, will be distributed to faculty, staff, patients, referring physicians, donors, foundations and medical alumni, among others. It replaces *The Healing Arts* and *Stanford M.D.*.



9-2-83 —30— sk

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames, (415) 497-6911
FOR IMMEDIATE RELEASE

PROMINENT SPEAKER TO HIGHLIGHT SOCIAL WORK CELEBRATION

STANFORD—

The 70th anniversary celebration banquet for the Department of Clinical Social Work at Stanford University Hospital will feature Virginia Satir, internationally renowned therapist and author, speaking on "Families in the '80s."

The banquet will be held Thursday, Sept. 15, at the Faculty Club on campus. No host cocktails will begin 5:30 p.m., with dinner served at 6:30. A fee will be charged.

Satir, who has shared her work all over the world, is frequently thought of as *the* innovator of the approach that brings the entire family into the therapist's office. Considered unorthodox 30 years ago, her approach has now been widely adopted.

Satir applies her beliefs to business, institutional practices, and other human systems.

She was one of the founders of California's Mental Research Institute. In 1976, she created the AVANTA Network, of people who have studied with her and who present workshops around the world. She was a director at the Esalen Institute in California.

The awards and recognition banquet is the culmination of a year-long celebration as social services at Stanford attains its 70th year of evolution, involving issues which keep changing as rapidly as science pushes the state of medical technology forward.

Stanford's was one of the first departments of clinical social work to be established in a hospital in this country, said Wilbur Wright, director. "It was certainly the first on the west coast, started about two years after the first one began at Massachusetts General Hospital in Boston."

The Hospital Auxiliary was responsible for the department's funding support through 1940, Wright said.

The banquet will also include an awards ceremony and a presentation of the department history to both the University and Hospital archives.

Those wishing to attend should respond by Sept. 6 to (415) 497-5615. Further information can also be obtained at this number.

(Members of the news media should make arrangements with the News Bureau at 497-6911.)

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LA3

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

RESEARCHER SAYS PHYSICIANS SHOULD HEED HEART STUDY

STANFORD—

Results of a decade-long federally sponsored heart disease study conducted partly at Stanford Medical Center will have impact only if practicing physicians carefully heed the findings, says the cardiologist who directed Stanford's component of the research.

Results of the Coronary Artery Surgery Study (CASS) were released by the National Heart, Lung and Blood Institute Wednesday in Washington.

Edwin Alderman, associate professor of medicine (cardiology) at Stanford, said the research shows "there is no difference in lifespan for those heart patients who suffer from minimal or absent symptoms. He said this group represents about 15 percent of potential coronary surgery candidates, and emphasized that the remaining 85 percent of candidiates clearly need surgery for relief of symptoms.

"Many of the 15 percent of patients who don't need surgery now, Alderman said in an interview Thursday after returning to Stanford, "will eventually need surgery as their symptoms worsen.

"However, what is important to the patient and the physician is that there appears to be no benefit for a select group of patients to undergo surgery before symptoms appear.

"Some physicians have recommended surgery for patients with absent or mild symptoms heart conditions on the theory that it would help prevent a major heart attack or death. What this study shows decisively is that medical therapy alone produces the same results" for these patients.

Alderman said he is hopeful that physicians will pay close attention to the study and perhaps be even more cautious than before in recommending surgery for the 15 percent of asymptomatic patients.

"The theory that preventive (prophylactic) surgery will usually reduce mortality appears not to be valid," Alderman said. "However, the study did snow that even mild symptoms were substantially helped by surgery."

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The study followed 780 patients at 11 institutions with mild ischemic heart disease. Fifty of the patients were at Stanford.

At the Washington news conference, Dr. Thomas Killip, chairman of the department of medicine at Henry Ford Hospital in Detroit and chairman of the CASS steering committee, said "there is no significant difference in survival between medically or surgically assigned patients overall. At six years, 90 percent of the medically assigned and 92 percent of the surgically assigned patients are alive."

Killip added that the surgical patients enjoyed greater relief from angina (heart pain) and were able to exercise longer and take fewer drugs.

"Surgery can provide a better life for patients with coronary artery disease," Alderman said. "But what we see more clearly from this study, is that physicians can recommend that surgery be deferred for many patients until symptoms appear."

Alderman cautioned that certain patients, specifically those with obstructions in the left main coronary artery or those who have previously had a heart attack, may continue to require surgery whether or not they have symptoms.

The CASS study disclosed that more than 1 million persons have undergone coronary artery bypass surgery since it was introduced in 1968.

10-27-83 —30— mg1

(Editors: Dr. Alderman may be reached at (415) 497-6008, or via hospital page, (415) 497-6661). The above story moved Business Wire 10/27.

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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

ANDERS DELIVERS CHILD PSYCHIATRY LECTURE

STANFORD—

Dr. Thomas F. Anders, professor of psychiatry and director of the division of child psychiatry and child development, will speak to the general public on "Body Clocks and Body Rhythms in Child Psychiatry" at 8 p.m., Thursday, Nov. 3 in Fairchild Auditorium of Stanford University Medical School.

Anders said the talk will focus on some of the latest theories, techniques and research in child psychiatry, including how physical time cycles influence behavior of young people. Dr. Thomas A. Gonda, chairman of the department of psychiatry and behavioral sciences, will serve as moderator.

No reservations are needed for the free lecture, which is sponsored by the Friends of Psychiatry and Behavioral Sciences, a non-profit group comprised primarily of community volunteers who are interested in promoting education in behaviorial sciences and supporting psychiatric activities at Stanford.

For further information, call (415) 497-6376.

10/24/83 —30— mg1

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

BLOOD PRESSURE, DRUG STUDIES STILL SEEK VOLUNTEERS

STANFORD—

Volunteers between the ages of 20 and 70 are still needed to participate in studies to confirm the effectiveness of various anti-hypertensive medications.

The studies, which compare test preparations with placebos as well as medications already on the market, are based at the Veterans Administration Medical Center in Palo Alto; principal investigator is Dr. Peter Rudd, assistant professor of medicine at Stanford.

Volunteers are needed who have mild to moderate high blood pressure. Participants are offered free comprehensive medical evaluations at the beginning and end of the studies. This also includes screening and lab tests. Travel reimbursement is offered, and scheduling may be worked around participants' job responsibilities.

Anyone interested should call Valerie Vierra, R.N., at (415) 497-5000, ext. 5918, weekdays from 10 a.m. to 2 p.m.

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Healthy, Caucasian, non-smoking females, aged 60 to 80 and currently taking Premarin or estrogen, are still needed to participate in an ongoing drug study at Stanford.

The study, which examines age-related changes in liver clearance of drugs metabolized by different pathways, currently seeks subjects for the weeks of Nov. 14 and 28. Volunteers will receive compensation.

Participants spend one week in the clinical research center at Stanford. Three relatively non-toxic drugs are administered. (Side effects, if any, are minimal, said research nurse Marni Brown.) Blood and urine samples are taken.

Principal investigator is Dr. Terrence Blaschke, chief of clinical pharmacology. Anyone interested should call Marni Brown at (415) 497-5266.

10-24-83 —30— LA2

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

FOR IMMEDIATE RELEASE

EDITORS: This story is based on the lead article of the fall issue of *Stanford Medicine*, a new magazine published by the Stanford University Medical Center. Copies are available on request if not included with story.

HEART TRANSPLANTS REWRITING THE BOOK ON HEART DISEASE

STANFORD—

Spinoffs from heart transplant surgery are turning out to be as important as the operation itself, says Dr. Donald C. Harrison, Stanford's chief of cardiology.

"Every major clinical advance—even if you don't know how it works—eventually forces people to return to basics, to understand the science," he says.

The spinoffs were made possible, in part, by the availability of fresh tissue from the discarded hearts of patients who had transplants, explains Dr. Edward Stinson, the cardiovascular surgery professor who directs Stanford's heart transplantation program.

The study of this tissue, as well as clinical observations on patients, have produced important new knowledge about coronary artery disease, the chemical pathways in the heart, and the effects of heart drugs, Stinson adds. This couldn't have been learned from animal studies alone.

A dramatic example is the development of the heart biopsy technique made possible by the perfection of a Japanese invention, the bioptome. This instrument—essentially a piece of wire with a clipper at the end—is inserted into the patient's jugular vein and threaded down into the heart, where it snips a small sample of heart tissue.

By permitting direct tissue study of graft rejection early, this instrument has extended patient survivals, according to pathologist Dr. Margaret Billingham. But it has also permitted physicians to diagnose and treat heart disease in a broader context and is changing cardiology practice all over the world.

Doctors, for instance, had no information about why a patient had cardiomyopathy, a chronic heart muscle disease that involves permanent damage to the heart. They only knew what heart tissue looked like after the patient had died and an autopsy was performed. "Now we are learning if the disease is potentially reversible," Billingham says.

Billingham, Harrison and Stinson are among several Stanford faculty members interviewed by the editors of *Stanford Medicine*, the magazine of the Stanford University Medical Center. The editors wanted to know what had been learned from the 15-year-old heart transplantation program besides its obvious benefits to carefully selected patients.

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"It has put Stanford in a unique position to pursue research," the magazine quotes Dr. Thomas C. Merigan, chief of infectious diseases, as saying. The collaborative studies spawned by heart transplants have involved experts in cardiology, lung physiology, virology, hematology, and cancer research.

Merigan, for example, is applying his experience developed from treating infections in heart transplant patients to patients with acquired immunodeficiency syndrome (AIDS).

"Both types of patients," he explains, "tend to develop cytomegalovirus infections, which lead to complications with infectious microorganisms. One problem is a disease, *pneumocystis carinii*, a leading cause of death in AIDS victims. The same infection affected many of the early heart transplant patients until better antirejection drugs lessened the intensity of this complication."

Merigan speculates there is more than one factor in AIDS patients interacting to produce "opportunistic" infections. "Our experience in dealing with these problems may help unravel this mystery," he adds.

The magazine lists several scientific spinoffs made possible by Stanford's heart transplant experience. They are:

* better understanding of accelerated atherosclerosis in heart transplant recipients and methods for its prevention.

* improvements in early diagnosis of graft rejection through the validation of the accuracy of space-age tools. These include echocardiography (sonar techniques), phonocardiography (recordings of heart sounds), and EKG recordings from the inner surface of the heart.

* development of more effective antirejection drugs.

* better scientific understanding of the mechanisms that trigger coronary artery spasm, a source of pain and often a cause of injury to the heart.

* the finding that severely failing human hearts have a common biochemical abnormality—a marked reduction in beta drug receptors. These are molecules on the surface of heart cells that mediate heart response to adrenaline-like compounds. Loss of beta-receptors means hormones can no longer stimulate the heart, leading to the patient's demise.

* improvements in tissue matching techniques.

The most important spinoff of heart transplantation, the article concludes, has been the revival of Dr. Norman Shumway's lifelong dream. The pioneer of heart transplants had long believed that for some patients replacing only the heart was not sufficient. Their lungs are often damaged due to high blood pressure. Patients with damaged lungs, from either a failing heart or diseased lungs, are a poor risk for just a heart transplant. The only recourse is to replace both.

After extensive tests on a new antirejection drug, cyclosporine, in monkeys, the moment arrived.

To date, 15 patients have received combined heart-lung transplants with 10 patients now living.

Some of these people had never been able to do anything physically demanding in their lives. Now they run, swim, play football or ride bikes, says Dr. Stuart Jamieson who directs the heart-lung transplant program.

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FOR IMMEDIATE RELEASE

NATIONWIDE STUDY TO CHART DEVELOPMENT OF PREMATURE INFANTS

STANFORD—

A Stanford professor of pediatrics has been named to direct an $11 million nationwide study of the ways health and educational supplements can boost premature infants in their first years of life.

The Robert Wood Johnson Foundation of Princeton, New Jersey recently named Dr. Ruth T. Gross to lead its "Infant Health and Development Program," a study which will chronicle the development of more than 500 children at six U.S. medical centers over the next four years.

Two decades of advances in technology and in the understanding of the special needs of infants born seven or eight weeks early, have greatly increased the infant survival rate, Gross said. Three pound newborns are fairly common in today's intensive care nurseries, and even two pound babies often thrive.

But a growing number of follow-up studies on recent graduates of these nurseries have shown that very low birthweight infants are four times more likely than larger newborns to require rehospitalization in their first year. Other studies have hinted that the 240,000 U.S. children who are born prematurely each year are more likely to show delayed language development, disabling behavioral problems, and lower academic achievement than children of normal birth weight.

Programs that provide supplemental health care, and social and educational support to these children and their families seem to boost the children in their later preschool development, said Gross but, until now, no one has defined the scope of the problem or identified which parts of these supplemental programs are most useful.

The goal of the current study, she said, is to see which treatments are most effective for these babies, and which problems can be prevented.

Each child in the upcoming study will be randomly assigned into one of two groups, she said. Both groups will receive ongoing medical care. In addition, infants in one of the groups will be involved in a supplementary educational program, first in the home and later in preschool classes. Much of the program will focus on parents and the family, said Gross, teaching those closest to the infant to respond to the child's special needs.

The six sites slated to conduct the collaborative study will be announced in June of next year, she said. In addition to Gross, Stanford faculty members Helena C. Kraemer, associate professor of biostatistics in the department of psychiatry and behavioral sciences, and Lee Cronbach, professor emeritus of education, will collaborate in coordinating the study. Donna K. Spiker will serve as deputy director of the project.

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Widespread medicinal leeching produced a scientific bonus as leading scientists of the day delved into the behavior and anatomy of a creature that might otherwise have been overlooked. As a result, the 400 or so neurons that make up the creature's brain and nervous system have become as familiar and recognizable to today's neuroscientists as a hometown roadmap.

Each movement, hesitation, mating, feeding and sensation can be traced to an interaction of electrical signals that pulse along the relatively simple nerve network. Nicholls is particularly interested in communication between cells.

"We're interested in the question of how nerve cells become connected to each other," he said, "because they have to connect correctly. You can't make a television set by jumbling up a whole lot of components and hope they'll connect up right. Everything has to go to the right place, and there's very little existing information about how cells make these choices."

Teasing apart the physiological and biochemical influences that determine these "correct connections" is difficult in an intact animal, but Nicholls and his team capitalize on a valuable characteristic of leech nerve cells—their ability to regenerate—to solve the problem.

Unlike cells in a human central nervous system, which won't reconnect once severed, damaged leech cells "reconnect with tremendous accuracy," Nicholls said.

"This enables us to simplify the system," he said. We take cells out of the brain of the leech and put them in a dish in culture." Nicholls and his colleagues Pierre Drapeau and Robin Davis found that, instead of randomly sprouting connective cables to any nearby cell, the isolated neurons in an experimental dish "recognized" and sought specific connections with the same type of cell they had been connected to in the leech body.

The groundwork is now laid for a finely tuned understanding of the chemical and structural cues that regenerating neurons use to zero in on their proper targets, Nicholls said, a first step toward understanding similar cellular communication in higher animals.

"We wrote the book," the scientist said, " to try to communicate the intellectual excitement of trying to solve the circuitry and logic of a finite, well-organized nervous system one cell at a time."

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FOR IMMEDIATE RELEASE

PHYSICIANS FEAR NEW MEDICARE PAYMENT PLAN MAY ADVERSELY AFFECT HEALTH CARE

STANFORD—

Medicare's new method of paying hospitals has administrators worried that they will be forced to cut back on patient services, and physicians fearful that they will have to change the way they treat their patients.

The stated intent of the prospective payment system (PPS), which Congress approved last April, is to cap spiraling health care costs. It involves all hospitals except those specializing in children's, long-term, rehabilitation, and psychiatric care. The problem is the public may not realize or like the way it will affect the care they receive, said Dr. James Silverman, chief of staff at Stanford University Hospital.

"The goal of the PPS is to take money out of the hospital industry. With less money, fewer services can be offered to patients. Yet patient expectations will remain the same," he explained.

"The new payment method will have the greatest impact on the health care industry since Medicare was implemented in the 1960s," Silverman added.

"Everyone favors cutting health care costs, but few would favor less medical care for themselves or members of their family," said Joyce Miller, associate director of nursing. "Health professionals are saying that with the new payment method, they can't do everthing for everyone. There's going to be some rationing of health care. It's the start of a two-tier health system."

"A nail is being pounded into the health care coffin," said David Sakai, director of finance.

The new payment plan is based on a diagnosis related groups (DRGs) classification system. In brief, the federal government will pay hospitals a set rate for patient services. That rate is determined by the DRG: "a scheme that categorizes patients who are medically related in terms of diagnoses and treatment, and statistically similar in lengths of stay," according to Marion O'Brien, director of medical records.

If the amount paid by Medicare is greater than the hospital's cost of the services, the hospital may profit. If the amount is less than the cost, the hospital must absorb the loss.

It wouldn't be so bad, Silverman explained, if this type of payment plan only involved those covered by Medicare, who account for about 25 percent of Stanford's patients. But the PPS follows on the heels of a similar state program for the elderly and poor, which covers about 13 percent of Stanford's patients. And other insurance carriers will be quick to follow, he predicted.

Thus, the incentive is there for physicians to examine the way they practice, Miller said. They'll have to consider if everything they order, such as tests or supplemental services, is absolutely essential for their patients' care.

Admittedly one of a small minority, Dr. Kenneth Melmon, chairman of the department of medicine, said he thinks the new plan may be of some benefit. "We'll be able to provide the same quality of care at lower cost."

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Most physicians, already leery of cutting corners because of the constant threat of malpractice suits, are alarmed that the public may interpret the decrease in quantity of procedures and services as a decrease in quality of care, Silverman said.

From its inception, Medicare, which primarily covers health care for the elderly, has paid hospitals for patient services on a daily rate basis. Ancillary services, those provided by non-physician personnel such as dietitians, were paid separately.

PPS has changed all of that. Like an outline, the system has major diagnostic categories based on the body's organ systems. Each has subcategories, for a grand total of 468 different diagnostic classifications. They are based on an international classification of diseases listing that converts any diagnosis into numerical terms, thus making them universally understandable.

After a patient is discharged, specially trained personnel in the medical records department process the necessary forms for payment. They assign a DRG based on the chart information that was recorded by the physician during the patient's hospital stay.

Key to survival under PPS, O'Brien said, is complete and accurate information from the physician. For instance, the DRG—and the amount of payment—differs if a physician writes that a patient has alcoholism with cirrhosis, or cirrhosis with alcoholism. If this sounds complex, it's only the beginning.

Consider, for example, a car accident victim brought to the emergency room with a broken hip, a concussion, and a damaged liver. Each could be considered the principle diagnosis, defined as the reason the patient has to be admitted to the hospital. Each also falls under a different DRG, with varying amounts of payment.

Regardless of the total charges accumulated in treating all the injuries, the hospital can only bill Medicare for one DRG. The payment is in full, and non-negotiable. The patient cannot be billed to help make up the difference.

No problem, one may think. The hospital could simply admit the patient again for treatment for each injury. Medicare's think tank has already accounted for that possibility. Private review organizations (PROs), contracted by the federal government on a one-per-state basis, will monitor hospitals' activities. They'll watch for adverse admission and discharge, and coding patterns in each hospital, and will compare patterns between hospitals to make sure no institution is "taking advantage" of the system, O'Brien explained.

"The PROs will be like big brother watching," she said.

PROs succeed professional standard review organizations, which lost federal funding in 1982. Their function, which PROs will take on, was to serve as an internal method of monitoring quality of care and cost containment for Medicare patients.

Not every hospital will receive the same rate of pay. The plan is scheduled to be phased in over a three year period, beginning with each hospital's fiscal year after Oct. 1, 1983. Stanford's fiscal year starts Sept. 1, for example. The new payment method, then, will not begin until Sept. 1, 1984.

During the first phasing-in year, hospitals' payment rates will consist of 25 percent the DRG rate, and 75 percent the rate at which they've billed Medicare in the past. The second year, this will go to a 50/50 split; by the fourth year, Medicare payments to hospitals will be based completely on DRG rates.

Medicare's think tank acknowledged that service costs vary throughout the country, based on local economies, salaries, and other factors. For now, the government has established nine geographical regions, each with a different rate. For example, nursing salaries in the East are significantly lower than in the West, thereby lowering the total cost of health care. The government also established a national rate, based on the average of these nine regional rates. Initially, the DRG rate will be comprised of 25 percent the national rate, and 75 percent the regional rate. Eventually this difference will also be eliminated, and one national rate will prevail As such, hospitals in regions with lower costs will ultimately be relatively better off than those in regions with higher costs, O'Brien observed.

The PPS also takes into account extra costs incurred by teaching hospitals such as Stanford, at least for now, Silverman said. Because training tomorrow's physicians is costly in terms of demonstrating and comparing diagnostic tests and medical procedures, teaching hospitals' payments are greater than hospitals without the responsibility.

"I don't know how long this allowance will last, but my sense is that we shouldn't count on it," Silverman said. "There's the opinion that the government will always look out for institutions like Stanford. My experience is that it doesn't treat teaching hospitals any different at all."

However, Finance Director Sakai feels differently. "As long as society believes there is a need for physicians, the allowance will continue."

This brings up another issue that has many teaching physicians worried. Under the PPS, will money exist to buy new equipment, or to develop new procedures? For example, consider Stanford's tissue typing laboratory, explained Dr. David Korn, pathology department chairman. "By itself, it operates at a loss. Yet, it has been instrumental in the success of organ transplant procedures, such as heart transplants, that have advanced medicine.

"Under the PPS, the laboratory would probably be eliminated. This type of attitude is more exaggerated in a teaching hospital, where the mission is the pursuit of new knowledge."

"The PPS could, if this type of thinking results, have a stagnating effect on medicine," Korn concluded.

"The new system discourages new technology and procedures unless they will be able to perform less expensively," Sakai confirmed.

Not only will it affect advances in medicine, O'Brien said, it will affect the freedom with which physicians make decisions about patient care. "The PPS doesn't allow for any individuality or innovation," she said "If five different physicians are using five different types of pacemakers for their patients, it may be decided for them on a cost-containment basis which one would be the overall best. Physicians are not going to be afforded the luxury of choosing their techniques as much as in the past."

Another aspect the PPS does not accomodate for is the severity of sickness of a hospital's patients. National studies have shown that Stanford's patients, for example, are sicker than all but four other institutions' patients. This implies that it takes more time, more care, and consequently more money, to treat these patients Medicare's plan includes a concept called outliers that is supposed to address this type of situation.

One factor determining DRG rates is the patient's length of stay in the hospital for a specific diagnosis. Medicare, O'Brien explained, will pay extra if a patient is hospitalized longer than the DRG specifies. However, there is a lapse between the length of stay the DRG allows—and includes in its payment rate—and the point at which outlier payments start. Once they do begin, they pay only 60 percent of the total extra cost. The hospital must absorb the difference.

"Any attempt to lump individual diverse patients under one heading is dangerous," warned Korn. "One patient may be relatively all right, while another may be much sicker. To imply by DRG classification that they require the same amount of treatment just won't work."

In addition to the extra data collection and medical record processing required by Medicare's new payment plan, an extensive education process must take place, Silverman said. Stanford's nursing service is sponsoring a symposium, "Health Care Financing: Effect of Prospective Reimbursement on Patient Services," on Oct. 20-21. Stanford administrators and physicians are attending formal sessions at the hospital to learn about the system. Even more, Silverman explained, physicians, and hospital administrators will have to change their way of thinking in order to survive.

"The hospital industry is like the airline industry," he continued. "The airlines started offering discount seats reasoning that it was better to get some money rather than let the seat stay empty and get no money at all. When they started discounting all their seats, however, they found they couldn't survive.

"Hospitals can absorb the loss if some patients pay less than the cost of their treatment. Hospitals cannot operate if the policy expands to all patients," Silverman concluded.

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EXPERT EXPLAINS WHY HOSPITAL COST CONTAINMENT WORKS IN CANADA

STANFORD—

Regulatory strategies to contain rising hospital costs can work effectively, a Canadian study shows, even though it is unclear how they affect the quality of care.

The study compared the effectiveness of regulation in the Canadian province of Ontario with similar U.S. experience from 1968 to 1981. It showed that expenditures in Ontario increased by only 16 percent compared with an increase of 101 percent in the United States.

"We conclude that regulation can contain the growth of expenditures in the hospital sector even in the face of an incentive structure that does not promote cost consciousness on the part of patients and physicians," said Dr. Allan Detsky of the department of health administration at the University of Toronto.

Detsky spoke Monday (Oct.10) at a seminar sponsored by the Health Services Research Consortium at Stanford University School of Medicine. The study on which his talk was based was recently published in the New England Journal of Medicine.

"Data from U.S. studies," Detsky said, "have shown that 75 percent of all increases over and above inflation in the hospital sector could be accounted for by increases in the quality of care as measured by what economists term 'real inputs' employed per patient day."

These, he explained, involve physical things—more R.N.s, more hospital employees, supplies and sophisticated equipment.

Similar increases in the number of professional and other hospital employees occurred in Toronto's hospitals until 1968 when budgets were negotiated between individual hospital administrators and the Ontario Ministry of Health on a nonformula basis

Canada has had government-financed insurance for hospital services since 1961. The insurance plans are administered separately by each province, with costs shared by the federal and provincial governments

After Ontario introduced measures to control hospital costs in 1969, Detsky said, "real inputs per patient day grew at an average annual rate of 0.68 percent compared with 5.19 percent in the United States for the period from 1968 to 1980."

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In Ontario only 13.9 percent of these increases beyond general inflation were accounted for by real inputs—labor costs, supplies and equipment, he said. This contrasts sharply with the U.S experience where 81 percent of the increases in costs per patient day were directly attributable to an increase in the quality of care and the price (wages) to pay for it.

"Ontario hospitals had been locked into an incentive structure that mimics the worst features of the U.S. system—that is a complete separation of physicians and patients from hospital costs," Detsky said. "However, the regulatory mechanism in Ontario has cornered hospitals in three ways.

This includes use of global budgets increased annually according to a formula, closing of unnecessary hospital beds, and limiting the number of labor hours.

Since 1969, Detsky said, similar regulatory strategies have been tried in the U.S. to curb rising hospital costs. These included the Economic Stabilization Program (wage and price controls) employed during the Nixon years and the voluntary cost-containment efforts encouraged by the Carter administration. In addition, prospective reimbursement experiments for hospitals have been tried by some states succesfully.

But these have led to a rash of law suits, appeals and court actions. "In terms of political turmoil, the costs have been high," Detsky said, "leading some to suggest that in the U.S. a painless regulatory system that effectively controls cost is certainly out of reach."

With few exceptions, in Ontario these consequences have been politically acceptable thus far, Detsky said.

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Editors: Photo available on request.

RESEARCHERS STUDY WATER BEDS FOR PREEMIES

STANFORD—

Should premature infants sleep on continuously rocking water beds or on ones that move only at intervals? Does it matter if the motions are in any particular rhythm?

Questions like these still need answers, according to a Stanford researcher, especially as more hospital nurseries use water beds.

Dr. Anneliese F. Korner, professor of Psychiatry and Behavioral Sciences (research) at Stanford, and her colleagues are conducting a major three-year study to compare the effects of plain water beds, water beds with continuous oscillations, and others that move intermittently. The study is funded by the National Institute of Mental Health.

Korner's research during the last ten years has shown that gently moving water beds can significantly reduce apnea, or periodic stops in breathing, and bradycardia, slowing of the heart rate.

These findings are probably limited to apneic premature infants who are otherwise fairly healthy. The water beds do not seem to reduce apneic spells in highly unstable infants or in babies who are receiving drugs to reduce their apnea, Korner said.

Still to be determined is whether water bed use can improve the behavioral development of premature infants.

A pilot sudy conducted by Korner and her colleagues suggested that premature infants who were on water beds for long periods of time showed more mature spontaneous motor patterns, were more alert and less irritable than infants in the control group.

The water beds used in Korner's studies are programmed to move in the pattern of maternal biological rhythms which the infants would have been exposed to it they had not been born prematurely. She and other investigators believe that lack of exposure to such rhythms may be one of the factors responsible for the disorganized sleep and movements frequently seen in premature babies.

The continuous water bed movements are based on the maternal respiration rhythm—about 12 to 13 oscillations per minute. The intermittent oscillations are based on the basic rest-activity cycle. According to sleep researchers, adults experience a cycle of alternative quiet and activity about every 90 minutes throughout the day and night.

"Judging from the use of 'bump beds' which are air mattresses providing sudden jerks, and other types of water beds, it has been widely assumed that it is the oscillations that reduce the apnea," said Korner. That assumption, though, is not proved, she said.

"It is still unclear whether it is the oscillations, the maternal rhythms or the water bed itself that produces these effects," she said.

Two recent studies by Korner showed that babies had longer periods of quiet sleep and were less irritable and restless on waterbeds that moved either continuously or at intervals.

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BRAIN WAVES OF PREMATURE INFANTS SERVE AS WINDOW ON LATER DEVELOPMENT

STANFORD—

The brain waves of a premature infant in the first weeks of life may be a sensitive indicator of the child's later neurological health, a Stanford researcher reports.

In addition to its predictive value, the electroencephalogram or "EEG" can give physicians a vivid view of ongoing activity in the tiny brain, said Dr. Barry Tharp, associate professor of neurology.

Although the EEG has been used for over 40 years as a tool to chart the activity of the adult brain, Tharp is one of the first to recognize its diagnostic value in infants born too soon.

In a study soon to be published in the medical journal *Neurology*, Tharp and his research associate, Robert R. Clancy, identified 44 infants who had been born seven or eight weeks prematurely and had suffered a brain hemorrhage. Noting that some of the children were normal at age two, while others showed signs of cerebral palsy, Tharp scoured the children's neurological records in search of early hints that could have helped doctors predict such differences in the children's development.

Among the myriad tests performed on the infants during their first weeks of life, only the EEG proved to be "a great predictor of outcome," said Tharp.

"Nine of twelve infants who had all normal or mildly abnormal EEGs had favorable outcomes," the scientists reported. "The nine infants whose worst EEGs were moderately abnormal experienced mixed outcomes ranging from normal survivors to death. All 23 infants with one or more markedly abnormal EEGs suffered unfavorable outcomes." Twenty of these died, and the other three suffered brain damage.

Usually, EEGs are performed only on patients suspected of having a neurological problem, and are not a part of the intensive care nursery's routine monitoring, he said. All the children in his study underwent the test because they suffered from postnatal bleeding in the brain, a malady that strikes about half of the smallest premature infants.

The hemorrhage, which can be caused by a sudden fluctuation in blood pressure, a lack of oxygen, or any of a variety of stresses on delicate blood vessels, may or may not cause permanent brain damage.

The electrical signals produced by brain tissue damaged by a hemorrhage or other insult are different from those produced by healthy tissue, Tharp found.

The next step was to gather as much information as possible about the brain waves of "healthy" premature infants, by monitoring many children at regular intervals in the first months after birth.

Tharp has completed such a study of 70 premature infants, and has just begun to analyze the data.

"In this study we have a big population ranging from really good looking infants who you would never know had anything wrong, to kids in deep coma and children who die," said Tharp.

Up until now, normal brain function in these infants has not been well studied, he said. "The whole field of neonatal neurology is fairly new," he said, "mainly because, until fairly recently, most of the really small preemies (those who weighed less than two pounds) didn't live. Now about 60 percent of the tiny ones survive.

" As more medical centers are getting into this field, and more and more neurologists are being asked to assess these children, the more important it is that they know what it is they're looking at," said Tharp, adding that eventually, round the clock EEG monitoring might be included in neonatal intensive care units.

"Currently, when a baby is born and transferred to the neonatal ICU, nearly everything is monitored—breathing, oxygen in the blood, pulse, blood pressure and kidney function, but not brain function." This is surprising, Tharp said, because "really, the bottom line you want to know is, is the brain okay?"

The main obstacles to continuous monitoring are technical, Tharp said, such as developing adequate equipment to store the large volumes of data recorded; and more importantly, knowing how to analyze this data once you have obtained it.

"Only as we have gained a better understanding of what constitutes normal and abnormal has monitoring become feasible," he said. For example, physicians know that a sudden drop in blood pressure alters the preemie EEG, but no one is certain how long-lasting the change is, and whether it indicates permanent or transient brain dysfunction, he said.

"How low can the oxygen content of a child's blood get before we should start worrying?" Tharp asked. "If the blood pressure is below a certain level for 25 minutes, does that affect the EEG? All these are things that we don't know yet, because no one has monitored kids in that way."

Tharp is especially interested in seizures—the scrambled bursts of electrical activity that occur more commonly in brain injured infants, or in those with a metabolic disorder than in healthy babies.

"It's probably only a problem when they occur in a repetitive fashion," he said. "Many people with epilepsy live perfectly normal lives with no damage resulting from their seizures. But we wonder, in young infants whose brains are very vulnerable to any kind of stress, whether perhaps the fact that these kids are having literally hundreds of seizures over three or four days might be doing permanent damage."

One goal of continuous EEG monitoring of babies at risk, Tharp said, is to amass a bank of data such as these, that will enable doctors "to predict seizures so that in the future we can treat kids prophylactically."

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FUND RAISING AT MED CENTER HITS RECORD HIGH

STANFORD—

Fundraising results for the Stanford University Medical Center have reached a new high of $25.9 million in fiscal 1982-83, the Office of Medical Development reports.

The total money raised has exceeded the previous year by $6.2 million or 31.3 percent.

"This is an exceedingly fine record," said Dr. Lawrence G. Crowley, vice president for medical affairs. "It speaks well to the attractiveness of our programs, the quality of our faculty and the dedication and professionalism of our able medical development staff.

The fundraising results, Crowley commented, "bode well for the future and particularly for our very ambitious special fundraising agenda."

Currently, the medical center has construction plans which include a major modernization of its hospital, new construction for a consolidated new children's hospital at Stanford, and for programs in nuclear magnetic resonance imaging, and molecular and genetic medicine.

The specifics of the fundraising agenda for the medical center are under review, and will be going for approval to the university board of trustees sometime in the near future.

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PROGRESS IN MEDICINE LECTURE SERIES SCHEDULED

STANFORD—

Advances in technology have enabled the medical field to take giant steps forward in the diagnosis and treatment of disease. The results of some of these will be described at Stanford University Medical Center's Fall Progress in Medicine Lecture Series.

"The Impact of Technology on Health and Disease" will feature three lectures on consecutive Wednesday evenings beginning Oct. 26. Following introductory remarks by Medical School Dean Dominick Purpura, Dr. Helen Blau, assistant professor of pharmacology, will describe how she and her colleagues plan to use genetic engineering techniques to help isolate the gene that causes muscular dystrophy. Blau's recent finding of an abnormality in the muscle cells from individuals with the disease has provided the necessary information to begin the search for the defective gene.

Development of an artificial ear is the topic of the second lecture in the series on Nov. 2. Dr. Blair Simmons, professor of surgery and otolaryngology, will discuss his techniques of electrically stimulating the auditory nerve, which he developed in conjunction with experts from the School of Engineering. Simmons is developing implantable devices that may restore hearing ability to the deaf.

The final lecture, to take place Nov. 9, will feature a new diagnostic tool that can provide more information for soft tissue than any now commonly used. Dr. Stuart Young, associate professor of radiology, will describe how nuclear magnetic resonance can improve diagnosis of disease. Young's new book, *NMR Imaging: Basic Principles*, is scheduled for publishing in early November.

The lectures are scheduled to begin at 7:30 p.m. in Sherman Fairchild Auditorium. They are free of charge and open to the public. Seating is limited. For information, call (415) 497-6389.

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(Editors: Photos available on request.)

GLAUCOMA DETECTION UP TO TWO YEARS EARLIER WITH NEW DIAGNOSTIC TECHNIQUE

STANFORD—

Stanford ophthalmologist and a photographer have pooled their expertise to improve a new diagnostic technique that may detect glaucoma up to two years earlier than standard methods.

Glaucoma, a genetic abnormality of the eye affecting 2-3 percent of the population more than 40 years old, is characterized by loss of peripheral vision and eventual blindness if not treated.

With current diagnostic methods, the disease cannot be undoubtedly detected until individuals have started to lose their peripheral vision, said Dr. Louis Roloff, clinical assistant professor at the Medical School.

He's working on the technique with Jim Taskett, manager of Stanford's photographic services. By photographing the optic nerve fibers, one million hair-like strands lining the back of the eye that are responsible for vision, Roloff may be able to detect as little as a ten percent loss of fibers. This information is enough to begin treatment for glaucoma, arresting the disease years before the patient's visual field is impaired.

Current diagnostic methods include measuring the amount of pressure in the eye, the loss of visual field, and the increase of the optic cup size due to loss of optic nerve fibers.

Glaucoma is caused by "faulty plumbing." The eye makes its own nutrient liquid, Roloff explained. When an individual has the disease, the liquid cannot be eliminated as fast as it's manufactured. The condition is not curable. However, it can be controlled by administering eye drops that either open up the eye's drainage system, so the liquid can drain out faster, or slow up the manufacturing process.

Roloff and Taskett, who have been experimenting by photographing the nerve fibers for about nine months, perfected their technique using a special fundus camera to photograph the back of the eye through a dilated pupil, a special filter that produces red-free light to increase contrast, and a technical film with a high resolution and a low grain. The key, they felt, was to get as high a contrast as possible, in order to be able to detect the tiny nerve fibers as well as possible.

"Many others have tried to achieve this quality of photograph, but no one has been able to get consistently as good a picture as we have," Roloff said.

"I read the research on this type of photography," Taskett added, "and found that other researchers were using film, developing and printing methods that were giving them grainy, low contrast photographs."

Perfecting the technique is only the beginning, Roloff cautioned. His next goal is to provide proof to his fellow ophthalmologists. The ideal, he said, would be to follow patients he suspects may be developing glaucoma over time, photographing their nerve fiber loss and comparing it with the current diagnostic measurements. One problem, he explains, is an ethical one.

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"I have one patient whose pressure was barely above normal, the cupping of his optic nerve was suspicious, and visual fields were normal. But the photographs showed he had already lost an estimated 20-30 percent of his nerve fibers," Roloff explained. "I would have liked to withold any treatment, and follow his progression over time. But ethically I can't do that. I've started treating him for glaucoma."

"It'll take up to three years to prove," he said. "But the photographs are impressive. They allow us to see even a small percentage of nerve fiber loss, whereas until now, the only test available were the patients' visual field and eye pressure.'

Other problems exist. "You just can't get a good picture of all patients," Roloff lamented. "Either they won't sit still, or their pupil won't dilate enough, or a cateract prevents enough light from getting in." Yet he estimates the technique will work for up to 75 percent of the patients who should undergo the test.

Despite the difficulty of obtaining research data to prove his technique, Roloff is encouraged by the enthusiasm of his colleagues. The photographs received a prize from the Ophthalmic Photographers Society, and will be included in a scientific exhibit at the American Academy of Ophthalmology's annual conference in November.

And, Stanford's ophthalmology clinic plans to begin using the diagnostic technique for its patients by the end of the year.

While he's still working towards large-scale acceptance of the basic idea, Roloff is looking towards future improvements of the technique. "Visual interpretation of the photographs may be too subjective," he explained. "If we could computerize the information, and quantitate the changes that would occur over a period of time, the loss of nerve fibers could be standardized so all ophthalmologists could understand exactly what it represented."

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NEW DIAGNOSTIC METHOD REDUCES NEED FOR BLADDER CATHETERS

STANFORD—

Thousands of Americans may be freed from a painful dependence on catheters because of a new ultrasound technique which is unlocking secrets about anatomy of the bladder, Stanford researchers report in the October issue of *Seminars in Roentgenology*.

The research offers help to victims of spinal cord injury accidents, as well as hope for elderly patients now confined to nursing homes because of incontinence, said Gerald Friedland, professor of radiology at Stanford.

Friedland and Inder Perkash, who is the Paralyzed Veterans of America Professor of Spinal Cord Injury, have used ultrasound to achieve longer, more detailed looks at the human bladder and the surrounding areas of the abdomen. Friedland said this has accomplished two goals heretofore unobtainable with X-ray scans:

First, the researchers have learned some new generalities about human anatomy which should apply to many of the 25 million Americans suffering from previously untreatable bladder problems. Secondly, the accuracy of ultrasound allows safer and more detailed diagnosis of individual patients, so that drug treatments and surgery can be tailored more specifically.

"This diagnostic method is of immense value to any patient with a bladder defect caused by a breakdown in communication between the nerves and muscles which control the organ's function," said Perkash. Such patients include about half the diabetics older than 50, all patients with multiple sclerosis, and many elderly patients who suffer from a variety of vascular diseases. "In the last year, ultrasound diagnosis has already saved more than 200 spinal cord injury patients here from the pain and discomfort of catheterization," he said.

The catheter, a one-foot-long tube threaded up through the urethra to drain the bladder, is necessary initially for persons whose bladder goes into shock and fails after a spinal cord injury. After several weeks, some patients are able to empty their bladders by pressing firmly against the abdomen with their hands.

But often the technique didn't work for unexplained reasons, and patients became slaves to catherization.

The new ultrasound method, which involves a rectal probe and high frequency sound waves, provides a high degree of diagnostic accuracy never before obtainable, said Perkash. Through ultrasound scans, he and Friedland found that because of the way the bladder is positioned in the body, continuous pressure actually closes the urethra, trapping the urine. The solution? Patients were taught to tap rather than press their abdomen, relaxing the muscles around the urethra so that urine could pass easily.

In other patients, catheters inexplicably stopped working after several weeks of intermittent use. Through ultrasound scans, Perkash found a ledge-like flap of tissue that developed because the catheter irritated the bladder wall. This flap, which does not show up in conventional X-rays, can easily be removed via surgery once identified by ultrasound. Another application for the technique will be found in diagnosing congenital bladder problems in children, Perkash said. Many such problems, which can lead to kidney failure and death, are probably caused by abnormal flaps of tissue, undetectable in X-ray, but present in the infant urethra at birth.

Friedland and Perkash first noticed the value of the ultrasound scans when examining patients at the Spinal Cord Injury Service which Perkash directs at the Palo Alto Veterans Administration Medical Center. Modern physicians try to minimize the use of catheters in these patients because of the relatively high risk of infection, Friedland said.

"A recent study suggests that as many as 56,000 people die in the United States each year as a result of (an infection stemming from) catheterization," he said. For the 10,000 people each year who sever their spinal cords in accidents, an alternative to catheterization is of inestimable value, Friedland said.

Perhaps most important to these accident victims, who tend to be young men, the new ultrasound scanning method provides as much or more diagnostic information as conventional X-rays without the exposure to radiation. Recent studies by Perkash indicate that about 80 percent of all paraplegic and quadraplegic men are potentially capable of fathering children, and should not be exposed to radiation doses that can genetically damage sperm.

"So that no one gets too much radiation, we normally only run the conventional X-rays for about 30 seconds," said Friedland. "But with this (ultrasound) machine, if we really want to study some patients thoroughly and learn a lot about their condition, we can run it a long time with no ill effects at all."

Speed and low cost are two other advantages of the new scanning method over conventional X-rays in diagnosing and monitoring bladder problems, said Friedland.

"The conventional X-ray machine cost $350,000, but the new (ultrasound) machine is only $50,000. Most of the imaging devices being developed now are ever more expensive," he said. "This is the first time, to my knowledge, that we've developed a new diagnostic exam that is a lot cheaper."

"There are plenty of these specialized ultrasound machines available in the United States now," said Perkash. "But people have only been using it to look at the prostate. We are the first to use it for this purpose, and we're trying to get the word out to other spinal cord injury centers, and to any patient who has bladder dysfunction due to a neurologic disorder."

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FOR IMMEDIATE RELEASE

INNOVATIONS IN TREATING HEART DISEASE: A CONFERENCE

Editors note: Science writers who wish to cover this event should arrange to attend as guests by calling the medical center news bureau, at the number noted above.

STANFORD—

A two-day international symposium on such wide-ranging approaches to treating heart disease as heart and heart-lung transplantation, the artificial heart, and lasers, will be held at Stanford University Medical Center (SUMC) Nov. 18 and 19, 1983, in the Fairchild Auditorium.

Geared towards physicians, "Innovations in the Treatment of Cardiovascular Disease: 1984" will feature such Stanford and guest faculty speakers as Dr. William DeVries, artificial heart pioneer from the University of Utah; Dr. Donald Harrison, chairman of cardiology at SUMC and symposium co-director; and Dr. Norman Shumway, U.S. transplant pioneer and chairman of cardiovascular surgery at SUMC.

Program director is Dr. Robert Ginsburg, a clinical assistant professor of medicine in cardiology at Stanford, who recently reported initial success in clinical laser trials for the treatment of vascular disease.

Designed to provide a comprehensive update of recent research and treatments, the conference will also cover such topics as streptokinase for heart attacks, percutaneous transluminal balloon angioplasty (a widely accepted treatment), and other therapeutic modalities.

The symposium is sponsored through an educational grant by Cooper Medical Corporation of Mountain View. Advance registration is required, enrollment is limited to 300 participants, and a fee will be charged.

For enrollment applications or further information, call (415) 497-7587.

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FOR IMMEDIATE RELEASE

HEWLETT FOUNDATION FUNDS UNIQUE HOUSING PROJECT

STANFORD—

The William and Flora Hewlett Foundation of Menlo Park has given a $3,725,000 grant to the Assistance League of Santa Clara County to finance construction of a 42-unit building on Stanford lands near the University Medical Center for short-term lodging of out-of-town patients and their families.

The building will be named after Flora Lamson Hewlett, the late wife of William R. Hewlett and one of the founders of the foundation.

The building will provide short-term accommodations at low cost for families of hospitalized patients, cancer outpatients, potential heart transplant recipients, as well as other out-of-town patients—or family members accompanying them—who come to Stanford Medical Center for treatment periods of weeks or months.

The building will be owned and managed by the Assistance League, a national non-profit volunteer service organization, in a unique cooperative partnership between Stanford University and the League.

Stanford will provide the land and will finance design and planning for the building. The Assistance League, through the Hewlett Foundation grant, will cover costs of building construction.

Current plans are to build the structure on a five-acre site at the corner of Welch Road and Pasteur Drive.

Under an agreement worked out between Stanford and the Assistance League, the grant funds for building the short-term housing complex will be turned over to Stanford, which will supervise construction.

Stanford University President Donald Kennedy said, "This arrangement is unique in Stanford's history...It is the first time that a community organization has joined with the University for the common goal of easing the financial and emotional needs of people in affliction. The magnificent gift from the Hewlett Foundation will go far toward alleviating one of the most grievous problems facing those who come to Stanford Medical Center for treatment, or who accompany those in need of care."

Roger Heyns, President of the Hewlett Foundation, said, in announcing the grant, that "the Foundation is pleased to be able to support this very worthy project. The building will be a fitting memorial to Mrs. Hewlett's memory."

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November 29, 1983

In acknowledging the grant, one of the largest ever given to an Assistance League chapter, Kay Clair, chairwoman of the League's HOME (Housing of Medical Emergencies) project said, "All our members who have worked so hard to make this happen are delighted. It is a dream about to become a reality."

The Assistance League will own the building, and will also furnish, oversee, maintain and manage the units. A full-time manager employed by the League will occupy one of the units.

Screening and selection of potential occupants will be carried out according to need by social workers in Stanford Medical Center's division of social services. Occupancy of the units will be reserved for those coming from outside a 50-mile radius of the medical center, and stays will be limited to nine weeks, usually at the rate of $10 per day.

Cancer outpatients who must undergo a course of radiation therapy over a period of weeks, and potential heart transplant recipients awaiting donor organs represent two large groups of patients likely to be helped. Out-of-town families of hospitalized patients in neurology, oncology, pediatrics and other medical specialties also will make use of the inexpensive housing.

Stanford planners and members of the Assistance League worked together on design for the building, explained Jeanne Kennedy, director of community relations for Stanford University Hospital. Kennedy has worked with the League for several years in planning the project and continues to serve as project liaison between Stanford and the League.

Clair describes how the Assistance League's HOME project got its origins. "Many of our members had personal experiences with family and friends with cancer. Being at the hospital day after day, seeing relatives in the waiting rooms, we became aware of the desperate need for patient and family housing near the hospital."

The patients' plight spurred HOME project volunteers to undertake a study of housing needs for Stanford patients and their families in 1976. They discovered that competing demands from diverse groups in need of housing—students, Silicon valley, retired people—have made short-term rentals in the Peninsula area extremely scarce and expensive.

Some motels offer weekly rates but few conveniences, noted Clair. Even then, she added, "the cost of staying in a motel for weeks on end, renting a car to go back and forth to the hospital for daily treatments, and eating out several times each day can be astronomical."

Local apartments tend to be unavailable or have leasing requirements that are infeasible, she explained. And finding rooms in private homes has not been successful, Clair reported, because "even the most generous people are unable to cope with serious illness in their home for any length of time."

After many months of investigation, in 1979 the HOME volunteers leased two one-bedroom apartments in the Oak Creek apartment complex near Stanford Hospital, and began offering nine-week rentals to families and patients at the $10 per day rate. Soon, they acquired two more Oak Creek units for their program.

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All four units have since experienced 100 percent occupancy, with many families on the waiting list, Clair said. In the four years since the program began, more than 150 families have been helped by the subsidized housing, she added. But this is "just a drop in the bucket compared to the need," Clair noted, predicting that the new building would easily achieve 100 percent occupancy as well.

Current plans envision a 4-story building at the proposed 1100 Welch Road site. Each of the 42 units will consist of a bedroom, living room, kitchen, and bath, averaging 570 to 600 square feet, with furnishings to accommodate two people. Two units will be equipped to handle physically disabled individuals, and other units could be similarly adapted, if necessary, Jeanne Kennedy said. Communal lounges and laundry facilities will also be provided in the complex.

The 1100 Welch Road site is one of two parcels that made up the proposed Stanford West housing project. Stanford West was postponed indefinitely in September after the Palo Alto City Council attached conditions to its approval that were unacceptable to the University.

Frank Morrow, Stanford's director of real estate, said that the University has decided to proceed with the units at 1100 Welch Road as a separate project. It will include the structure for short-term lodging, and 100 to 150 apartments or limited equity coop units for nurses, interns, resident physicians and other staff at the Medical Center. Both buildings were part of the original Stanford West proposal.

Construction of the buildings could begin in 1984, Morrow said, and would require 16 to 18 months to complete. The remainder of the original Stanford West project—housing on a 46-acre site across Willow Road—has been delayed pending additional design studies and discussions with Palo Alto about the conditions it has required, Morrow said.

The twenty or so members of the Santa Clara County chapter of the Assistance League who have worked on the HOME project are thrilled by the Hewlett Foundation grant, said Clair. Most of the chapter's regular funds are raised through its Los Altos-based Costume Bank. Chapter members come from all over the county, including Saratoga, Los Altos, Cupertino, Sunnyvale, Mountain View, San Jose and Los Gatos, Clair said.

But to no one will the grant have greater meaning than to the patients and their families, Clair remarked, citing a poignant letter recently addressed to the Assistance League by a relative who had used one of the Oak Creek apartments.

The letter said, in part, "I want to express to you, however inadequately, how very much it meant to us to have the use of this lovely apartment during the last weeks of my husband's life. He died Wednesday without receiving the heart transplant for which he had come. To go to the hospital in the middle of the night or to return from a late night vigil was eased because of love on your part, and we thank you for it."

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FOR IMMEDIATE RELEASE

FUTURE DIRECTIONS IN TREATING HEART DISEASE

STANFORD—

EDITORS: The following story covers some highlights of a recent conference on future directions in the treatment of cardiovascular disease. The release is intended to provide you with some background or with story ideas. For further information, or for copies of selected reprints that provide further detail, contact the News Bureau at (415) 497-6911.

In the future doctors will use lasers to vaporize cholesterol buildups in the arteries, implantable pumps to boost ailing hearts, and drugs that dissolve blood vessel clots in the fight against cardiovascular disease, leading heart specialists predicted November 18 and 19 at a Stanford University School of Medicine cardiology conference.

Balloons that squash cholesterol blockages in blood vessels, implantable devices that can halt life-threatening heart rhythm disturbances, and better drugs for controlling chest pain are also on the cardiology horizon. These are among the exciting new approaches to heart disease outlined to over 350 participants—including doctors, nurses and representatives of biomedical industries—who attended the educational conference, "Innovations in the treatment of cardiovascular disease: 1984."

New methods for treating heart disease owe much to developments in more basic sciences such as physics, chemistry, and engineering, said Dr. Donald Harrison, chief of the division of cardiology at Stanford and a co-director of the conference. Although the new advances "must be brought into clinical practice rapidly," he said, their safety, efficacy and cost-effectiveness first must be thoroughly studied and documented in carefully designed clinical trials.

Most of the therapies discussed at the symposium are still in these experimental stages and therefore are only available under special clinical programs at research medical centers.

The most avant-garde technique described at the conference is the use of lasers to vaporize plaques that obstruct blood flow in arteries leading to the heart and legs. Most of the Saturday sessions were devoted to discussions of this very preliminary work in applying laser energy to problems in cardiology. The laser procedure, called laser angioplasty, has thus far been performed on only ten patients worldwide.

The technique employs an argon laser whose highly focused light beam emerges from the tip of a catheter. (A catheter is a long, flexible tube that can be threaded through the patient's blood vessels.) A catheter is inserted into the patient's circulatory system through a puncture in the groin or arm and eased through the blood vessel to the site of blockage. Once in place, short bursts of the intense laser light burn the obstruction away, restoring blood flow.

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Dr. Robert Ginsburg, clinical assistant professor in cardiology at Stanford, and also the symposium coordinator, reported on Stanford's experience treating five patients with severe arterial blockages in the legs. Dr. Daniel Choy of Lenox Hill Hospital in New York, described his treatment of five patients with coronary artery blockages.

The greatest risk of using laser light in blood vessels is that the intense heat could perforate an artery wall, Ginsburg explained. In none of the patients undergoing the procedure did this occur, demonstrating that the technique can be applied safely, he said. However, the treatment was not effective in all ten patients in whom it was tested, the laser researchers reported.

Laser therapy for blocked arteries is attractive because it could offer an alternative to surgical approaches such as coronary bypass or limb amputation, the doctors said. But it is also so new that its usefulness is far from certain, they stressed. "It will take several years of testing in patients, as well as improvement in the laser delivery systems before we will know the true efficacy of this technique," Ginsburg said.

Balloon dilatation catheters, which have been undergoing clinical testing since 1978 in the U.S., are more versatile and less expensive than laser treatment, said their inventor, Dr. Andreas Gruntzig of Emory University in Atlanta.

A balloon catheter has a small sac of compressed rubber at its tip that can be inflated with air at the site of a blood vessel blockage. Inflation of the balloon compresses the plaque of cholesterol and reopens the arterial channel. The balloon is then deflated and withdrawn.

Initially after its introduction five years ago, the procedure was tested only in peripheral blood vessels in the legs and in the largest coronary arteries. But as doctors gained more experience in its use and as more sophisticated devices became available, some research centers began testing the balloon dilatation procedure in smaller coronary arteries, with considerable success.

Dr. Geoffrey Hartzler of the Mid-America Heart Institute in Kansas City, reported results of clinical trials in which the balloons were able to reopen multiple coronary vessels in 92 percent of patients who underwent the procedure, with 86 percent of those followed for 10 months remaining asymptomatic.

"There is a tremendous explosion of technology in this area," Hartzler said. "Advances are made weekly."

Around the country, as many as 8,000 patients may have undergone balloon dilatation therapy since its introduction in 1978, said Dr. Edwin Alderman, associate professor in cardiology at Stanford. Although it is still an experimental procedure, it is becoming an accepted alternative to coronary bypass in certain types of patients, particularly those with one major narrowing. Among the advantages of balloon dilatation (also called "percutaneous transluminal coronary angioplasty," or PTCA) over surgery are reductions in expense, hospitalization time, and risk.

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During a heart attack, blood flow to the heart may stop because clots form in vessels obstructed by cholesterol buildup. An enzyme called streptokinase was introduced in the late 1970s that can dissolve the life-threatening clots and help save heart tissue from irreparable damage.

A major study carried out in Washington state in 14 hospitals over a period of almost two years suggests that streptokinase may improve patients' chances of longterm survival following a heart attack. Dr. J. Ward Kennedy of the University of Washington, reported that a higher percentage of the patients treated during heart attack with streptokinase were alive six months following their attack than were similar heart attack victims who did not receive streptokinase.

However, use of the anticoagulant drug does involve risks, most notably the danger of uncontrollable bleeding. Several conference speakers debated the safest and most effective way of administering streptokinase: directly to the site of a clot in the heart by means of catheter, or intravenously by an injection.

Dr. Peter Rentrop of New York's Mount Sinai School of Medicine advocated direct delivery of streptokinase to the heart vessels, which must often be followed by balloon dilatation or another procedure that then removes the cholesterol plaque. The risk of severe bleeding in other parts of the body is much higher if the drug is given intravenously, he said. "Both methods of intervention are still investigational," he stressed.

Conference participants also heard about Stanford's heart transplantation program which has placed new hearts in 312 patients in 16 years. Dr. Edward Stinson, director of the transplant program, noted that while approximately three patients each month receive new hearts at Stanford, the demand for donor hearts is far greater and many potentially transplantable patients die due to donor organ scarcity.

Thanks largely to the introduction about two years ago of a new anti-rejection drug called cyclosporine, one-year survival rates have improved for heart transplant patients, Stinson observed. Whereas about 60 percent of patients survived one year after transplant using the older immunosuppressive drugs, 81 percent receiving cyclosporine achieve post-transplant survival of at least one year.

Cyclosporine also made possible for the first time successful transplantation of the heart and lungs together in one operation. Since March, 1981, doctors at Stanford have performed 16 such operations, reported Dr. Stuart Jamieson, assistant professor of cardiovascular surgery. Eleven of those patients remain alive and nearly a dozen patients are waiting to undergo the procedure, he said. However, lack of donor organs means that "we lose someone who is waiting about once every month," Jamieson noted. "The main problem in heart-lung transplantation is donor procurement," he rued.

Because donor organs for transplantation are so scarce, there is considerable interest in developing artificial devices that could boost, or even replace, ailing hearts, said Dr. Philip Oyer, associate professor of cardiovascular surgery at Stanford. Oyer reported on implantation of left ventricualr assist devices (LVADs) in calves, with survival rates of approximately six months.

The LVAD under development by Oyer and colleagues is about the size of a person's palm. It will be inserted in the patient's abdomen without external connections because electric power to drive the device will be transmitted through the skin using induction coils. The pump is designed to supplement the patient's own heart until a permanent donor organ is available. This could help as many as 5,000 patients with endstage heart disease every year in the U.S., Oyer said.

Although the device has operated successfully in animals, clinical trials in humans are still several years away, according to Oyer. "Although a workable device now exists, substantial problems remain before use in humans is advisable," he said.

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Dr. Lyle Joyce, a member of the team that implanted an artificial heart in a patient last year at the University of Utah, reviewed that clinical experiment which drew worldwide attention. Dr. Barney Clark, the 61-year old patient who received the artifical device, survived 112 days while the world watched, Joyce recalled.

"Unfortunately, most of the world thought Dr. Clark was being kept alive by the pump and that he was existing in a vegetative state. That wasn't the case," Joyce stated. Although his postoperative course was rough, requiring the intervention of doctors from 21 different areas of medicine, "Dr. Clark walked through the hospital and enjoyed another Christmas, New Year's, birthday and anniversary with his family that wouldn't have been possible otherwise," Joyce claimed.

If Clark's medical condition prior to the implant had been more favorable, the device could have been expected to keep him alive for over a year, Joyce said. Joyce reported that the Utah artificial device is constantly undergoing improvement. He predicted that further experimental implants will be done on humans, and that eventually thousands of patients with endstage heart disease who can't get transplants would be the beneficiaries. "We believe the artificial heart is here to stay," he concluded.

Patients who have abnormal heart rhythms may be helped by another experimental implantable device discussed at the conference. The automatic internal defibrillator can sense certain undesirable rhythm disturbances and deliver a strong electrical jolt that shocks the heart back into a normal beating pattern, reported Dr. Roger Winkle, associate professor in cardiology at Stanford.

The device, which is a little larger than a pack of cigarettes, is implanted in the abdomen and its electrical leads rise to the heart.

Winkle said that it is being tested in patients who are at high risk of sudden death from arrhythmia and who are not helped by more conventional therapies. However, it will probably only be a backup therapy and never completely replace other treatment modes, Winkle added. At Stanford, about 50 patients have been fitted with the defibrillators and are being monitored to determine the efficacy of the device, he said.

Other topics discussed at the conference included the promising anti-arrhythmic drugs called calcium blockers. Also noted were improvements in another class of cardiac drugs, the beta blockers, commonly prescribed to alleviate pain from coronary artery disease. The beta blockers also show promise in reducing risks of second heart attacks in patients with cardiovascular disease.

The conference was sponsored by the division of cardiology at Stanford University School of Medicine, with an initial educational grant from Cooper LaserSonics, Inc.

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FOR IMMEDIATE RELEASE

(Editors: the following moved Business Wire Nov. 18)

IMMUNOSUPPRESSED PATIENTS SHIFTED TO AID INFECTION CONTROL

STANFORD—

Future heart and heart/lung transplant patients at Stanford will temporarily be diverted from the cardiac post-surgical intensive care unit because of the potential risk of Legionella infection.

James F. Silverman, Stanford University Hospital (SUH) chief of staff announced the new patient placement policy on Friday, because of several recent cases identified among patients transplanted since February 1982. No deaths have been attributed to Legionnaire's Disease, he said.

"It is a given that transplant patients, because of the antirejection drugs they take, have extremely vulnerable immune systems and are susceptible to a wide variety of ailments which don't affect the general public. However, when we believe that we have a potential way to reduce even one of those risks, we feel we ought to take it," Silverman said.

He said no cases of the disease, easily treatable with an antibiotic, have been reported among staff or non-transplant patients in the unit, since their immune systems are intact.

Silverman said the decision, which does not affect non-transplant cardiac patients or transplant patients currently on the unit, followed recommendations at a Friday meeting by a Task Force on Care Review/Risk Management, comprised of physicians, nursing personnel and administrators.

Dr. Lucy Tompkins, director of the Diagnostic Microbiology Lab, said Legionella has been detected in a sampling of the water heater supplying the affected unit where transplant patients are taken immediately after surgery. On Oct. 29, the water temperature was increased to a level expected to kill the Legionella bacteria. However, subsequent samplings have indicated small quantities of bacteria, she said.

Infection control personnel have speculated that the disease is transmitted to vulnerable patients from water vapor escaping from hot water faucets, or transmitted from equipment or hands which have been washed in the contaminated water and then placed near an airway or other opening on the patient.

Legionnaire's Disease is a type of pneumonia caused by a newly discovered bacterium. It accounts for a certain percentage of pneumonia cases which previously were ascribed to other bacteria and viruses, Tompkins said.

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Although the exact number of cases which have affected Stanford transplant patients may not be known, in recent weeks tallies were completed confirming nine cases among patients transplanted since February 1982, said Tompkins. She said undetected cases may have been occurring since the transplant program began in 1968, but the sophisticated and newly developed test procedures needed to detect the malady were not available at SUH until last June. Some of the diagnoses were made retroactively from serum kept in research laboratories, she said.

"We want to make it absolutely clear that we are not talking about an epidemic or possibly even an increased number of cases," Silverman said. "Quite basically, our increased ability to detect this condition has given us a better handle on ways to control infection in the hospital," the chief of staff added.

The diversion of patients would continue until the source of the bacteria could be definitely determined and corrective action completed, Silverman said.

Laurie Gunderson, clinical nursing coordinator in the cardiac intensive care unit, said up to four rooms in two other intensive care units in the hospital would be specially equipped to handle future transplant patients. The transplant nursing team would be available to care for the patients, who normally remain from five days to three weeks in intensive care after surgery.

Two transplant patients currently undergoing treatment in the cardiac surgical intensive care unit will remain until they are ready for discharge to a less acute area. Neither patient has shown any sign of Legionnaire's disease, Tompkins said.

In a memo to the cardiac intensive care staff, Gunderson and Care Review Coordinator Betsy Collins said, "The risk for Legionella is only to immunocompromised patients. Medical or nursing staff are not at risk for Legionella pneumonia."

Legionnaire's disease was first identified in the mid-70s following several mysterious deaths among American Legion conventionieers in Pittsburgh whose immune systems appeared to have been compromised by alcohol and tobacco.

Several other hospitals around the country have moved patients or temporarily closed down while the source of infectious agents are identified and action is taken.

Silverman said the Care Review/Risk Management Task Force currently is studying a variety of bacterial and fungal agents, common to the environment, which are particularly harmful to immunosuppressed patients.

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FOR IMMEDIATE RELEASE

AREA'S FIRST PEDIATRICIAN HONORED

STANFORD—

Dr. Esther Clark, life-long Palo Altan and pediatrician credited with founding the Children's Health Council, received the Stanford Medical Alumni Association first annual J.E. Wallace Sterling Distinguished Award Nov. 18.

Clark, who received her M.D. from Stanford Medical School in 1925, was honored at the alumni association's annual fall reunion. She was presented with the award by Sterling, a former Stanford University president.

"I was astonished and felt a sense of humility when I learned of the honor, Clark said. "I don't begin to deserve this, but I love it anyway."

Clark started practicing medicine in 1927, the first and only pediatrician between San Mateo and San Jose. Her practice changed with evolution of children's medicine. Clark experienced the revolutionary development of immunizations and antibiotics. She responded to and changed with the challenges of modern medicine and the pediatrician's attention to children's mental and emotional states as well as physical conditions.

This evolution was not without Clark's influence. A few of her "babies" included the Children's Health Council (CHC), which just recently celebrated its 30th anniversary, and the Child Accident Prevention Committee, established by the American Academy of Pediatrics upon her suggestion.

Even as a young girl growing up in Palo Alto, Clark knew she wanted to be a physician. After completing her education at Stanford, she interned at San Francisco General Hospital. She then completed her pediatrics residency under the famed Dr. Harold K. Faber at Stanford. At 27, she returned to Palo Alto to join an internist and two surgeons to pioneer not only the practice of pediatrics but also the concept of group practice.

In a recent interview, Clark reminisced about the early years of practice. Because there was rarely a specific cure for most of the diseases she saw, she said, "we simply had to let the patients get well with the best advice and medications we could give them." She helped campaign for immunization against smallpox, diphtheria, whooping cough, and tetanus. By 1937 the city's infant death rate had dropped significantly, and newspaper articles credited Clark with making Palo Alto "the safest place in the world for a baby to be born."

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This was perhaps just one of the contributions that prompted the Palo Alto Chamber of Commerce in 1981 to honor Clark with the Distinguished Citizen Award "in recognition of exemplary leadership and significant professional contributions of lasting benefit to the Palo Alto-Stanford community."

By the war years the group practice had expanded to form the nucleus of what is today the Palo Alto Medical Clinic. The area's population boomed, and Clark remembered seeing up to 80 patients in the office, and up to another 20 on house calls.

The pediatrician's role boomed as well. Once children were brought to a physician only because they were ill or hurt, she recalled. "Now we have wholesome family and widespread commitments to prevention of many of the diseases of young children. With the development of specific and preventive treatments for most acute illnesses, we have become aware of the needs for the overall functioning of the child," Clark said.

It was this belief that led to the establishment of the CHC. What started as a center for rehabilitation of retarded children became known as the only facility of its kind working to "habilitate" and rehabilitate children on an outpatient basis. CHC today is a diagnostic and treatment facility for children with learning and emotional disabilities.

"We provide children's services that aren't met anywhere else in the area," she explained.

By the 1950s Clark recognized another need that seemed to be going unmet: that the leading cause of childhood deaths was, and continues to be, accidents. This led to the Child Accident Prevention Committee, and Clark spent four years serving on its initial committee.

Clark said she enjoyed her long practice in one area, which gave her a chance to treat generations of families. In addition to her private practice, she served as a clinical faculty member at Stanford Medical School since the early 1930s.

Since retiring from practice at the age of 72, Clark has focused on a variety of other interests. Her two rambling houses, one above the Stanford campus and one in Mendocino County, reflect her love of spacious and graceful architecture. A photographer since childhood, her walls are covered with her own photographs from her travels to Africa, the Galapagos Islands, the Orient, India, the South Pacific, New Guinea, Australia and Iran. Earlier this year, she took a cruise for the first time in her life, traveling through the Inside Passage to Glacier Bay.

"I started practicing medicine in the dawn of immunization," she said. "I've experienced more changes in the last 50 years in the medical field than ever before. Many diseases have been wiped out, and people are living longer and better."

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FOR IMMEDIATE RELEASE

(Editors: The following story was transmitted to several Bay Area wire services and publications on 11/17

SIX HOSPITAL EMPLOYEES ARRESTED ON DRUG CHARGES

STANFORD—

Six Stanford University Hospital employees were arrested Thursday (Nov. 17) on drug related charges following a five-month investigation in which the hospital cooperated.

Palo Alto Police Sgt. Ron Schindler said the employees were arrested in various Peninsula locations after warrants were issued earlier in the week by a Palo Alto Municipal Court judge.

The detective said the six persons arrested appeared to have operated independently.

Sheldon King, director and executive vice president of the hospital, said none of the arrested persons was directly involved in patient care.

Booked for investigation of selling cocaine were Rommel Day, 27, Palo Alto, a food service worker; Craig Julien, 21, East Palo Alto, linen assistant; and Randy Creamier, a 22-year old operating room orderly from Mountain View.

Officers said they arrested Day at his home, and that Creamier and Julien were arrested en route from the hospital in Palo Alto.

Kirk Williams, 21, Redwood City, was booked for investigation of selling an undisclosed quantity of controlled substances. Officers said Williams was arrested in a hospital corridor.

Police Lieutenant Lynne Johnson said Williams was also booked for investigation of posessing stolen hospital property, including an over-the-counter analgesic.

David Cannon, 34, was booked for investigation of offering to sell a controlled substance from the pharmacy. Detectives said the substances included codeine, Talwin and Valium. Officers said Cannon was arrested as he drove into his carport.

Donald Utt, SUH associate administrator, said Cannon and Williams were technicians in the pharmacy with duties involving procurement of materials, not dispensing of medication to patients.

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Mike Robinson, 26, of San Carlos, a mail room clerk, was arrested and booked for investigation of selling a controlled substance, methamphetamine or "crank." In addition, police booked Robinson for investigation of possessing controlled substances, believed to be marijuana and methamphetamine, found at his residence at the time of his arrest.

Schindler said the investigation began last summer following information provided by hospital officials that isolated drug sales were being made to employees and visitors.

During the summer, he said, undercover agents from the Allied Agency Narcotic Enforcement Team of Santa Clara County bought or attempted to buy drugs and medications from the six arrested individuals both on and off the premises at SUH.

Johnson said Day "was one of the first people we were looking at in conjunction with this investigation. He was the jumping-off point for the entire probe."

All six persons were taken to Santa Clara North County Jail in Palo Alto, with bail ranging from $5,000 to $15,000 each.

Investigators would place no total value on quantity of materials taken from the hospital pharmacy.

Utt said the theft of controlled substances from the pharmacy would be reported to appropriate state and federal officials. The volume of material taken was being inventoried, Utt said. A representative of the State Board of Pharmacy has cooperated with Palo Alto police.

Carole Price, associate director, said the six employees would be suspended pending the hospital's investigation of the matter "from an employment context."

In a statement following the arrests, King said, "I'd like to emphasize that this investigation leading to six arrests was conducted with the full knowledge of Stanford University Hospital. We regret the situation, but I feel confident that patient care, our most important concern, was not compromised. While I believe that this situation was isolated, the thorough action of local law enforcement officials and hospital personnel should serve as a reminder that activities of this sort will be dealt with unambiguously."

Johnson emphasized that "the hospital cooperated fully in the investigation."

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FOR IMMEDIATE RELEASE

NUCLEAR MAGNETIC RESONANCE IMAGING PROVIDES PHYSICIANS WITH SUPERIOR DIAGNOSTIC TECHNIQUE

STANFORD—

Stanford physicians will soon be using a new imaging technique that provides more diagnostic information than ever before while being harmless and non-invasive, according to a Medical Center radiologist.

A temporary facility that will house one nuclear magnetic resonance (NMR) imaging system should be operational by Spring 1984, said Dr. Stuart Young during a public lecture Wednesday (Nov. 9) evening in Sherman Fairchild Auditorium.

Plans are also underway for a permanent center to serve as a base for the medical center's clinical and research programs involving NMR, the imaging method that allows physicians to see the soft tissue of the body more clearly and completely than any others, such as X-ray and CT—computer tomographic—scans.

NMR imaging has already been shown to be superior in diagnosing diseases such as multiple sclerosis, a degenerative central nervous system disease, Young said. It also allows physicians to see bone marrow for the first time ever.

"This is the one of the greatest medical developments of all time," he said.

NMR is based on the fact that nuclei, the core of atoms, carry electrical charges that respond to magnetism. Like tiny bar magnets, these nuclei vibrate when trapped inside a magnetic field.

The technique is based on the Nobel prize-winning discovery of Physicist Felix Bloch at Stanford in 1945. He found simultaneously with Harvard researchers a way to detect "resonance" in nuclei. The potential applications of this finding went unrealized for years by chemists and biologists. It wasn't until 1974 that Paul Lauterbur, professor of chemistry at the State University of New York, published the first image based on NMR, which he called zeugmatography.

To understand exactly how NMR works, Young explained, consider one of the body's most common substances. Like soldiers at ease, positively-charged hydrogen protons, particles in nuclei, spin around at random. By exposing them to a magnetic field, in NMR's case a giant doughnut-shaped magnet up to 40,000 times the strength of the earth's magnetic field, the protons snap to attention and align themselves with the magnet's charge. The alert protons can be tipped by zapping them with a specific radio frequency, providing energy absorbed by the protons. They hold onto the energy for varying amounts of time, depending on the type of tissue they make up. When they release the energy, righting themselves in the process, signals are emitted and picked up by the computers.

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It's possible to tell which part of the body the signals are coming from, Young continued, because of the varying amounts of time the energy is held by the protons in the tissue. This lapse is known as the relaxation time. Fatty tissue, for example, has a short relaxation time, while cancerous tissue, physicians have found, has a long one. For imaging purposes, the computer assigns each a different hue, thus creating a picture of the inside of the body.

In addition to its other advantages, NMR imaging can present an image of any angle of the body, unlike CT scans that can only show a cross sectional slice, Young said.

The brain, for example, is much more visible than ever before because NMR penetrates through the bone at the base of the skull and the junction of the spine. Thus, NMR reveals brain tumors, tissue-killing blockages, and any infectious process.

Atherosclerosis is more easily diagnosed because NMR can detect fatty tissue building up to occlude the heart's blood vessels. The technique can detect cancerous lymph nodes in the lung area, not possible with more conventional techniques that fail to distinguish large blood vessels from enlarged lymph nodes. Physicians can also determine different types of cancer in the same area, Young explained, thus allowing more tailored—and subsequently more effective—treatment.

It's even easier to diagnose bone fractures, Young said, because the images show where blood has seeped into the bone area.

The temporary facility, to be located near the medical center, will allow physicians to begin using NMR imaging, Young said, until the $5.5 million NMR center, which is scheduled to house four magnets, is completed. And the Stanford University Hospital Modernization Project includes plans for a NMR unit that will house one magnet.

Because of the strength of the magnets, Young continued, a number of safety precautions have to be considered in constructing the NMR buildings. The magnets themselves must be inside rooms with specially built, shielded walls. THe buildings must provide a parameter of about 68 feet around the magnets. This has been established as the zone outside of which people will not be affected by the magnetic field.

To guard against any mishaps, the entrances to the buildings will be monitored by sensitive metal detectors, Young said. Anyone with any type of metal device, such as a pacemaker or even a screw holding a joint together, cannot come inside the 68 foot parameter.

Young acknowledged the $2 million price tag on the NMR imaging systems, but said he does not think this will lessen the demand for the magnets. "NMR can give so much more information than conventional imaging methods," he said. "Patients will seek out this harmless, no-risk technology that will give more information to allow earlier diagnosis and treatment of disease."

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FOR IMMEDIATE RELEASE

TOO SOON TO CHANGE DIABETIC—OR NORMAL—MENUS

STANFORD—

Recent research in diabetes and metabolism has raised many interesting questions, but is still too preliminary to apply to meal planning or alteration, contend investigators at Stanford University's clinical research center.

The team led by Dr. Gerald Reaven, professor of medicine and gerontology, is concerned that the diabetic public may be getting mixed messages from news accounts about what they should and should not continue to eat.

In recent decades diabetics have been taught about two classes of carbohydrates—the simple sugars and the complex starches. It was generally accepted that only refined sugars, such as those found in sweets, were off limits to certain groups of diabetics, since they were believed to cause large swings in blood glucose.

But now data collection has indicated a wide range of metabolic response to both categories of carbohydrates, making the standard distinctions seem obsolete and almost arbitrary, and leading to the introduction of a "glycemic index" to measure the body's glucose response to any given food.

According to the index, ice cream elicits almost no shift in blood glucose level, whereas a potato increases it drastically. Bread and rice also are found to raise blood sugar more than such foods as pasta and beans.

The problem with the measuring stick, Reaven said, is that although limited in scope, it is now being heralded by some as a major key to the planning of diabetic menus. He and colleagues Ann Coulston, M.S., R.D., and Clarie Hollenbeck, Ph.D., express their concerns in a letter to appear in the January 1984 issue of the *American Journal of Clinical Nutrition*.

The three have set guidelines for future studies in the field, so that factors such as nutritional balance, effects on plasma lipids, and insulin response, as well as glucose response, are taken into account.

Their letter is to appear simultaneously with one by Dr. David Jenkins of the University of Toronto, who has spearheaded much of the work leading to the new measuring tool.

"What's needed is to look at the overall metabolic response to a food, eaten in the context of a normally varied meal," said Coulston, who performed such a study recently at Stanford. "We found that the differences between carbohydrates, in terms of glucose response, are not as great when measured as part of a meal instead of in isolation."

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"Going by the index alone," Hollenbeck added, "one would think diabetics should avoid certain groups of foods—foods which, in reality, may be beneficial."

Thus, another misconception the Stanford researchers want to dispel is that adult-onset diabetes may be caused by eating certain of the "wrong" kinds of carbohydrates, or that it may be cured by dropping them from one's diet.

Whether the glycemic index offers any potential therapeutic utility has not yet been established. Relying too much on it, they warn, may lead to short-sighted management of glucose response alone, ignoring insulin response entirely—despite the fact that the latter may be of more clinical significance, particularly in the non-diabetic population.

"Increased insulin levels have been shown to increase risk factors for the development of heart disease," Hollenbeck said.

Some of the initial studies leading to use of the index were conducted at Stanford. Reaven collaborated in 1977 with then CRC dietitian Phyllis Crapo and postdoctoral fellow Jerrold Olefsky, both now at the University of California School of Medicine in San Diego.

The three conducted preliminary trials which were valid, Reaven said, as far as they went, but which have since been improved and expanded upon as new data results came in. "Unfortunately, the initial findings were prematurely presented and misinterpreted in a *Science* magazine article."

"In a similar way," said Coulston, "the press has recently suggested that some simple carbohydrates and refined sugars, such as sucrose, may *not* need to be avoided in the diabetic's diet. But this assumption was based on one-meal studies.

"We are just now beginning to examine more long-term effects," she concluded, "and it's becoming clear that even very small changes in dietary sucrose may, without increasing glucose response, still lead to significant elevations in insulin and lipid concentrations.

"In light of this, it seems obvious that we need to learn more about this before advising patients with metabolic disorders that sucrose intake is irrelevant to their health."

Many of these issues, the researchers point out, are significant not only for diabetics, but also for the public at large, since a better understanding of metabolic response to different foods should lead to better dietary advice for all.

But it is still too soon to know just how many of the findings in normal and mildly diabetic subjects can be applied to the severely diabetic population, and vice versa.

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FOR IMMEDIATE RELEASE

CARDIAC TRANSPLANT GRANT RENEWED FOR FIVE YEARS

STANFORD—

Stanford University Medical Center has received $7.85 million in research funds from the National Heart Lung and Blood Institute (NHLBI) for continued research and clinical trials of heart and heart/lung transplantation during the next five years.

The NHLBI has supported the program since shortly after the first heart transplant was performed at Stanford in January 1968. The most recent grant, announced officially in October, is retroactive to May and will extend for five years until April 30, 1988, said Dr. Edward Stinson, head of the cardiac transplant program at Stanford.

Stinson said researchers hope to concentrate their efforts on developing the combined heart/lung operation, which has been performed 15 times since March 9, 1981, and on better methods of preventing the body from rejecting someone else's heart. Included in the latter research is an effort to understand and perhaps alleviate the side effects caused by antirejection drugs.

During the current funding period, Stinson said he hopes that heart-only transplantation, already demonstrated to be lifesaving and therapeutic for some patients, will be routinely paid for by insurance companies.

"By the end of the next five years," Stinson said during a recent interview, "I hope that it is universally accepted within the health industry of this country that isolated heart transplantation is a reasonable, efficacious and therapeutic procedure deserving of full reimbursement from all types of third-party carriers."

The transplant procedure currently is in state of reimbursement uncertainty without industry-wide standards, said Stinson, a professor of cardiovascular surgery. Medicare's parent agency--the Health Care Financing Administration--has not yet determined that heart transplants are suitable for reimbursement.

Limited money from the federal grant had been available to pay some patient costs not covered by insurance. But even this money is being phased out during the current five-year budget, Stinson said, leaving insurance companies and other third-party payers with an even more important role than ever in paying patient costs.

Current survival rates, Stinson noted, are 81 percent for one year and 71 percent for two years among the more than 80 patients transplanted since a new anti-rejection drug, cyclosporine, began to be used on all patients after December 1980. Cyclosporine appears to control rejection of transplanted organs more effectively than anything used before, and unlike its predecessors, cyclosporine leaves intact much of the body's immune system or ability to fight off infection.

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Cyclosporine recently was granted tentative approval by the Food and Drug Administration. Consequently, Stinson believes that many hospitals with open heart surgery capabilities will begin performing transplants in the next few years. For these centers, Stinson offered some caution:

"I hope that only centers that have the necessary expertise and seriousness about performing heart transplantation become involved. In other words, there is a great temptation on the part of many people to become involved in heart transplantation on a superficial level for geopolitical and other types of reasons, and that is to be deplored."

Widespread transplantation occurred soon after the first human heart transplants were performed. Most patients died very quickly, and by the early 1970s, only Stanford and one or two other medical centers continued the operation.

"The success of Stanford's past record," Stinson said, "resulted in large part from a tremendously extensive laboratory experience. That in turn prepared us for many of the complexities involved in the field and led directly to the ability to perservere."

h the passing of years, it is apparent to Stinson that cardiac transplantation is ready to move from a handful of research centers such as Stanford into widespread clinical use.

"Now it's a different ballgame," said Stinson, and expansion is possible because much of the procedure is standardized and removed from the realm of the experimental. Stanford physicians have published details of the surgical procedure, and the techniques follow an established procedure, he said.

Perhaps revealing about the direction of transplantation is what is not going to be emphasized during the next five years.

"There's little physiology in terms of isolated heart replacement," Stinson explained. "The operation is standardized, early post-op care is standardized.

" . . . I think that centers contemplating a serious effort in this direction should at the minimum take advantage in one way or another of the knowledge that has been gained."

Stinson noted that the Stanford program has been visited continually by surgeons, researchers, nurses, administrators and others involved in starting up new programs.

"They've come here and learned details of the program, as well as obtaining a sense of the necessity for an orderly programattic approach to the enterprise," Stinson said, adding that he believes it is an unwritten obligation under the grant to help other medical centers set up transplant programs.

Dr. Norman Shumway and a colleague--Dr. Richard Lower now at the Medical College of Virginia--pioneered heart transplant research on animals starting in the 1950. After nearly two decades of research, Shumway performed the first adult human cardiac transplant in the United States. Shumway, who serves as chairman of the Department of Cardiovascular Surgery, remains active as a surgeon and researcher. His current interests include open heart surgery on infants, including premature infants. He is one of four faculty surgeons who regularly performs transplants. Stinson, who has been with the cardiac surgery team since Shumway's first transplant, now serves as principal investigator of the grant, provided by the National, Heart, Lung and Blood Institute of the NIH.

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Many questions remain, including those related to immunosuppression, which "is not standardized insofar as it's based on this new agent (cyclosporine), and this new agent has toxicities such as impairment of kidney function mainly," Stinson said.

Even though cyclosporine has been successful at improving survival, little is known about how the fungal derivative works on the system. Extensive research, called pharmacokinetics, into the properties of the drug will continue, he said.

One of cyclosporine's difficulties is directly related to one of its strongest advantages. When rejection does occur--as it does at some time or another in 70 percent of all transplant patients--symptoms are usually not present. When other drugs were used, Stinson said, physical symptoms often served as a warning that rejection was underway.

The absence of such symptoms as fever or irregular heart beat means that more sophisticated monitoring techniques are needed to identify rejection. The most important tool, Stinson explained, is the biopsy. A thin wire is inserted into arterial tissue and a tiny clipper snips off a small bit of heart tissue which is sent to the laboratory and analyzed. The procedure, says Stinson, is safe but time consuming because of the necessity for frequent sampling. During the next five years, researchers will attempt to develop simpler procedures to monitor rejection, he said.

Also scheduled for extensive research in the lab, operating room and at bedside is the heart/lung transplant procedure. Eleven of 15 patients transplanted since March 1981 remain alive, and most have returned to busy productive lives, Stinson said. Three attempts at heart/lung transplantation a little more than a decade ago at other centers ended with failure, and Stinson credits the recent successful revival primarily to cyclosporine, which unlike other immunosuppresives permits rapid healing of the windpipe.

During the next five years, Stinson hopes to see about 30 isolated heart transplants annually. A major limiting factor, of course, is the scarcity of human donors, who must be brain dead but with beating hearts, whose family is willing to make their dead relative's heart available to help save someone else's life.

"There's never an end to trying to promote public education and cooperation in terms of organ donation for the forseeable future," said Stinson.

Stinson believes that while improvements will be made in all cardiovascular surgery, he strongly disagrees with those who would say that improved medications and lifestyles might eventually make heart transplantation obsolete.

"I don't think so," Stinson said, "unless you believe that immortality is to be achieved. People die because their organs fail."

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FOR IMMEDIATE RELEASE

HOSPITAL GIVES SECOND COMMUNITY SERVICE AWARD

STANFORD—

Kathryn E. Clair, Los Altos, was presented Stanford University Hospital's community service award for "perseverance and leadership" in developing a program providing housing for out-of-town patients and families.

Clair was cited in Dec. 21 ceremonies for "devotion to patients and families" in her efforts to lead the housing program of the Assistance League of Santa Clara County.

Conceived more than six years ago, the program first offered nearby rental apartments for patients and their families. Recently the university announced a $3.7 million grant to the Assistance League from the Hewlett Foundation for a 42-unit building providing low cost patient and family accommodations.

Clair is the second recipient of the hospital's community service award. The first, presented last year, recognized Charles and Rose Jones, whose East Palo mortuary has consistently provided free burials for premature infants who die at the hospital.

A brass plaque, which hangs prominently in the hospital, lists award recipients.

At the reception given by the Board of Directors and Administration of Stanford University Hospital, Stanford President Donald Kennedy praised the "unique partnership of two institutions (Stanford and the League) which have joined in the common goal of easing the needs of patients coming to the Medical Center for treatment. It is a partnership Stanford takes great pride in, and we are happy to be aligned with it."

Kennedy commended the "third partner in the venture," the William and Flora Hewlett Foundation of Menlo Park, which will finance construction of the new lodging for patients with their grant to the Assistance League, and cited the role of Roger Heyns, president of the Hewlett Foundation.

Sheldon King, executive vice president and director of the hospital, presented the award.

Clair and other Assistance League members had seen the need of out-of-town families for low-cost housing. "Many of us had personal experiences with family and friends with cancer. Being at the hospital day after day, we could see the desperate need they had to be the close to the hospital," she said.

Clair spearheaded the volunteers who undertook a study of housing needs for patients. In 1979, after extensive investigation, they leased two one-bedroom apartments in the Oak Creek complex near Stanford University Hospital. The league began offering nine-week rentals to families and patients at the rate of $10 a day and have since acquired five units for their program.

The units have been 100 percent occupied with a long waiting list. Lawrence G. Crowley, the university's vice president for medical affairs, called the league's operation extremely successful.

Clair calls the new building, to be located at the corner of Welch Road and Pasteur Drive, "a dream about to become a reality."

She joined the Assistance League, a national non-profit volunteer organization, in 1964 and is the chapter's only life member. She twice served as the organization's president and has been chairman of the League's HOME (Housing of Medical Emergencies) project since its beginning.

At the award ceremony, Clair announced that the League has made Jeanne Kennedy, Stanford University Hospital director of community relations, an honorary member of the organization, recognizing her work with the League for several years in planning the housing project and serving as liaison between Stanford and the League.

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FOR IMMEDIATE RELEASE

NEW HOSPITAL BOARD MEMBERS NAMED

STANFORD—

Three new members of the Stanford University Hospital Board of Directors were appointed by the general members of the Hospital corporation at their meeting Tuesday, Dec. 13.

The new board members are John Freidenrich, W. James Ware and Jack R. Wheatley. Each will serve a three-year term, beginning January 1, 1984.

Freidenrich is an attorney with the law firm of Ware, Fletcher and Freidenrich in Palo Alto. He received his undergraduate and law degrees from Stanford University (AB '59, LLB '63). He is a trustee of the Clumeck Foundation and a director of the Children's Health Council.

Ware, a graduate of Stanford University Law School (JD '72), is an attorney and partner in the law firm of Blase, Valentine and Klein in Palo Alto. He has been a member of the Stanford University Board of Trustees since February 1983.

Wheatley is chairman of the board of Wheatley Associates, a general contracting firm in Palo Alto. He is a graduate of the U.S. Military Academy at West Point. Wheatley was Palo Alto city councilman from 1967-71 and mayor of Palo Alto from 1970-71.

Members whose terms of office expire this year are William Ayer, Stanford University trustee, and David J. Stone of Palo Alto.

Reappointed to three-year terms are Geraldine F. Steinberg of Los Altos Hills and Dominick P. Purpura, M.D., dean of the Stanford University School of Medicine.

New on the board is David Korn, M.D., professor and chairman of pathology at Stanford, who replaces Dr. Kenneth L. Melmon as representative of the Faculty Practice Program.

Bylaws specify that 12 board members must be elected by the general members of the Hospital corporation. (The Hospital is a separate, University-owned subsidiary corporation in which the University trustees are also the general members of the Hospital corporation.)

Also, the board must include two general members of the Hospital corporation and seven other citizens who are not employees of Stanford University or the Hospital, of whom three must be Palo Alto residents and one a practicing community physician.

Members serve three-year terms. The board meets once every two months, and board committees meet at least quarterly.

Board members whose appointments continue are Walter L. Arons, M.D., Peter S. Bing, M.D., Lawrence G. Crowley, M.D., Conrad F. Gullixson, Donald Kennedy, Ph.D. (chair of the board), Sheldon S. King, William F. Massy, Ph.D., Linda Meier, Dean Morton, Nancy Munger and Frank H. Roberts.

12-14-83 —30— bb1

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FOP IMMEDIATE RELEASE

Editors: Photo available if not included.

STANFORD HOSPITAL OFFERS LIFELINE TO ELDERLY AND PHYSICALLY LIMITED PERSONS

STANFORD—

When Winifred Forse of Palo Alto was out during a recent wind storm, she fell and bruised her head. Luckily, she was with a friend who helped her to her feet again. But when she is at home, Forse needs a way to get in touch with a neighbor or friend in case a similar situation should arise.

That's where Lifeline, the new emergency response system based at Stanford University Hospital (SUH), comes in. Through the Palo Alto Senior Center, Forse got in touch with Lifeline chairman and Stanford University Medical Center Auxiliary member Joan Naber, who helped her become a subscriber to the system.

"Lifeline allows elderly and physically limited persoet the telephone unit.

SUH Emergency Department staff, on duty 24 hours a day, are available to respond to the signal sent by a home transmitter and will immediately call to determine what help is needed. If they are unable to make contact by telephone, they will call a neighbor or relative, who has agreed in advance to respond to emergency calls.

Though Forse says she didn't subscribe to the system because of any specific medical condition, she does suffer from emphysema, asthma and bronchitis, and her knees tend to give out on her. Having Lifeline gives her a way to contact help if any of these should become a problem.

"When I'm out, I'm always with people. It's just when I'm alone," Forse explains, that she feels the need for Lifeline. "It makes you feel like somebody's taking care of you."

Naber and other SUH volunteers began installing Lifeline units in the homes of elderly and physically limited persons late last month. Jeanne Kennedy, director of the SUH Department of Community Relations, initiated the project two years ago, and her office will coordinate the joint efforts of the SUMC Auxiliary, Little House in Menlo Park, the Senior Coordinating Council of Palo Alto (which operates the Palo Alto Senior Center), and the SUH Department of Emergency Services. The Palo Alto Medical Foundation and American Red Cross are also actively involved in the project.

The Auxiliary provided initial funding of $70,000 for the base communications system and the first 100 home telephone units. Approximately 30 units have already been assigned through the assistance of local senior community organizations. More units will become available during the next several months, Naber says.

Participants pay a small monthly fee for the service.

Although more home units are not expected to be available until after the first of the year, persons interested in the service may contact Naber at (415) 497-6906 for more information.

Community groups interested in helping fund the purchase of additional home units are encouraged to contact Sharon Beckham, Coordinator of Volunteer Services, at (415) 497-7424.

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FOR IMMEDIATE RELEASE

UNIVERSITY TRUSTEES APPROVE TWO NEW MAJOR RESEARCH PROGRAMS

STANFORD—

Stanford University Medical Center was given the go-ahead December 13 by the University's Board of Trustees to develop two new major programs in areas of basic and clinical research that promise dramatic changes for medicine in the future.

The two programs authorized for development by the trustees will focus on molecular and genetic medicine—to understand how the basic molecules of living things contribute to health and disease—and nuclear magnetic resonance—a technique whose potentially broad applications in medicine have only recently begun to be explored.

The trustees' action took the form of authorizing medical center officials to proceed with plans for buildings to house research in both these areas. Planning for both programs was initiated by Dr. Dominick Purpura, dean of the school of medicine, shortly after his arrival at Stanford in April, 1982.

The proposed Center for Molecular and Genetic Medicine would be a multistory building southwest of the main medical center, comprising 75,000 net square feet of laboratory and support space. The building is needed to accommodate up to 35 current and newly recruited faculty members involved in molecular and genetic research.

Construction of a 24,000 net square foot research animal facility is also included in the trustee-approved plans for developing the CMGM. (This proposed animal facility is distinct from a facility currently under construction at the medical center. The additional space is needed in order to complete replacement of existing animal facilities and to accommodate new demand that would be generated by CMGM programs, according to medical center officials.)

The estimated cost of the project is $45 to $56 million, with $29 to $36 million required for construction of the CMGM building, $13 to $17 million needed to build the animal facility, and approximately $3 million required for moving existing temporary buildings from the site and constructing new space to house those programs currently located on the site.

Medical center officials project that $45 million could be raised from public and private sources to support costs of the CMGM building, but that some costs of the animal facility might be handled through debt financing.

According to a tentative schedule for the project, design could be completed and construction started in the fall of 1985, with construction completed by the fall of 1987.

According to Purpura, the new center and the academic program it represents, are of the highest priority for Stanford Medical Center. "The purpose of an academic program in molecular and genetic medicine is to provide the scientific and intellectual framework necessary to speed the pace of anticipated research advances and their translation into revolutionary methods of diagnosis and therapy of human disease," Purpura said.

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Stanford medical center faculty members have played a major role in developing the "new genetics" that has emerged in the last 20 years, according to Purpura. During the coming 20 years, molecular and genetic studies will continue to form a major thrust of medical school research, he said.

The CMGM program builds on excellence in the departments of biochemistry, genetics and medicine, as well as helping to rebuild the department of physiology, Purpura noted. The new building will provide laboratory space for 15 to 20 new faculty members who will be recruited, as well as helping alleviate the severe shortage of research space available to current faculty members at the medical center.

Research will include efforts to understand structure and function of the genetic material at the molecular level, as well as basic investigations in areas of immunology, developmental and cellular biology. A special emphasis will be placed on using molecular, biochemical and cellular genetics approaches to studying a variety of diseases and disorders, including cancer.

A committee of eight faculty members conducted the initial planning for the molecular and genetic medicine program and center, according to Purpura. The CMGM is currently administered by four faculty members appointed by the dean of Stanford's school of medicine.

The Nuclear Magnetic Resonance Center is to provide 11,000 net square feet of space for basic and clinical research activities devoted to NMR. The building may also be located southwest of the medical center, and will house up to five NMR instruments, as well as facilities for patient-related research, and other laboratory and office space.

The building will consolidate space for several Stanford faculty members already committed to NMR research but currently working in various departments throughout the medical center and the rest of the university.

The NMR research facility should take approximately one year to design and one year to construct, according to medical center officials. The cost for building construction and purchase of three new NMR instruments is estimated at approximately $9.5 million. The money will be provided by a combination of private gifts, federal grants and debt financing.

Medical School Dean Purpura identified the NMR Center as complementary to the Molecular and Genetic Medicine Center and also of highest priority to the school's academic and research programs.

Although the NMR phenomenon has been understood for almost 40 years, he said, its revolutionary potential in medicine has only become clear in the last decade. "Establishment of the NMR Center would ensure Stanford's continuing leadership in the rapidly expanding field of basic and clinical applications of NMR," Purpura said.

Nuclear magnetic resonance refers to a general phenomenon in which different types of atoms and molecules can be distinguished from one another after exposure to a strong magnetic field. In clinical use, this phenomenon can be exploited to give information about body chemistry and physiology.

NMR imaging—making pictures of the body using the technique—is thought to be one of the most important diagnostic discoveries since the x-ray was introduced. Research applications of NMR imaging are likely to be vast. Other uses of NMR in medicine have equally great potential. "Many of the most significant developments will require the invention and development of new applications, methods and instrumentation. A Center pooling the institution's intellectual and technical resources to provide a critical mass of expertise is the most likely environment to foster creative development," Purpura said.

The NMR Center would be directed by three faculty members appointed by the medical school dean.

Funding for both programs approved by the trustees will be sought as part of a major fundraising program, currently in the planning stages, in behalf of the Medical Center.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

YALE RADIOTHERAPIST JOINS STANFORD FACULTY

STANFORD—

Dr. Daniel Kapp, a Yale radiotherapist, has been appointed to the faculty of Stanford University School of Medicine, effective Jan. 1, 1984.

Kapp will serve as associate professor of radiology, a tenured appointment in the division of radiation therapy, where he will co-direct clinical activities of the hyperthermia program.

This treatment technique, most commonly used as an adjunct to radiation and/or drugs in cancer therapy, involves inducing moderate temperature elevations in malignant tissues in order to sensitize tumors to standard forms of therapy. Heating may be accomplished by employing microwave, ultrasound, or radiofrequency devices.

Dr. Malcolm Bagshaw, professor and chairman of radiology and director of radiation therapy, said Kapp's appointment reflects Stanford's long-term commitment to investigating hyperthermia for the treatment of those types of tumors which are suitable targets.

At Yale, Kapp has been chief of the gynecologic radiation therapy service, and in addition to other clinical duties has focused his laboratory research on both *in vivo* and *in vitro* studies of interactions of hyperthermia, radiation therapy, and a variety of either radio- or thermal-sensitizing drugs.

Kapp is expected to continue these studies at Stanford, as well as participate in gynecologic and other clinical coverage. He will share teaching responsibilities in the division's programs offered to both medical students and housestaff, and be responsible for integrating hyperthermia subject matter into the program.

A native of New York, Kapp received both his Ph.D. and his M.D. at Stanford University. He has served since 1976 on the therapeutic radiology faculty at Yale University School of Medicine.

Kapp's new appointment was approved by the Stanford University Board of Trustees last June.

12-13-83 —30— LA3

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FOR IMMEDIATE RELEASE

NEW CLINIC OPENS FOR BACK PAIN SUFFERERS

STANFORD—

A new spinal disease and trauma clinic is scheduled to open at Stanford University Medical Center Jan. 1, 1984.

The clinic, said Dr. Vicki Kalen, assistant professor of surgery (orthopedics), will for the first time focus the division's energies on back patients—"something we haven't previously done."

Kalen, who joined the Stanford faculty in July 1983 and who will serve as chief of the new service, explained that the orthopedics clinics so far have dealt primarily with problems of the extremities.

She now expects to see patients with a whole gamut of spinal diseases and injuries, including minor to major back injuries, disc problems, aging problems affecting the spine, fractures, congenital spinal deformities, and spinal infections.

"About 75 percent of the population experience back problems at some time," she said, "and certainly the first consultation should be with the family physician, not us." The clinic, she said, will be equipped to handle more serious problems that require further consultation.

Treatments offered will vary widely according to patient need, but may include surgical approaches as well as the use of chymopapain, an enzyme used successfully in many patients to dissolve slipped discs and avoid surgery.

The new clinic will be located in the Edwards Building, orthopedics division. Other physicians are Dr. Donald Nagel, professor of surgery (orthopedics), and Dr. Moylon Kehoe, clinical instructor of orthopedics. A member of the physical therapy department will also join the group.

The phone number of the clinic will be (415) 497-5341.

12-12-83 —30— LA3

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FOR IMMEDIATE RELEASE

HOSPITAL COMPLETES EMPLOYEE INVESTIGATION

STANFORD—

Stanford University Hospital (SUH) announced completion Monday (Dec. 12) of an internal investigation stemming from the arrest of six employeees on various drug related charges.

Carole Price, associate administrator, said four employees have been discharged, another worker was suspended for 10 days, while the sixth employee was reinstated with back pay. The workers were informed of the personnel action in registered letters sent by SUH on Tuesday (Dec. 6), Price said.

All six employees had been suspended Nov. 18—the day of their arrests by Palo Alto Police—pending the hospital's investigation of the matter "from an employment context," Price said.

Reinstated was Randy Creamier, 22, Mountain View, an operating room orderly. "Based on the information supplied in conjunction with the Palo Alto Police Department's five month investigation prior to the arrests, it was determined there was insufficient evidence to warrant discipline of Mr. Creamier by the hospital," Price said.

David Cannon, 34, a pharmacy technician, was reinstated to his job after a 10-day suspension without pay, Price said.

Those terminated were another pharmacy technician, Kirk Williams, 31, Redwood City; Rommel Day, 27, Palo Alto, a food service worker; Craig Julien, 21, a linen assistant, East Palo Alto; and Mike Robinson, 26, a mail room clerk, San Carlos.

Court charges against Creamier, Day, Julien and Robinson involved the alleged sale or alleged offer for sale of cocaine. Charges against Williams and Cannon involved the alleged sale of controlled substances (including codeine, Talwin and Valium) from the hospital pharmacy.

Charges following the arrest of the six employees were pending in Palo Alto Municipal or Santa Clara County Superior courts.

Meanwhile, the hospital, at the request of the pharmacy department has initiated an internal audit of controlled substance procedures and is conducting further review in cooperation with regulatory agencies, said Donald Utt. associate administrator.

Dec. 12, 1983

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FOR IMMEDIATE RELEASE

MALAYSIAN FOUNDATION GIVES TO CANCER RESEARCH

STANFORD—

The Kwok Foundation of Malaysia has given $1 million to Stanford's division of oncology, to support cancer research and training programs at the School of Medicine.

Foundation chairman Philip Kwok said the gift, presented to President Donald Kennedy Dec. 5, was intended to facilitate the training of Malaysian physicians in cancer research here, and to encourage the development of a new center for cancer research and patient care at Stanford.

A previous Kwok Foundation gift has helped support the training of Malaysian doctors in other divisions of the department of medicine. The Foundation's seven-member board decided to extend the most recent gift to show gratitude for treatment received here by a Kwok family member who had suffered from terminal cancer.

"Primarily we plan to use the money to strengthen our program for postdoctoral trainees, which often involves an extended training period," said Dr. Saul Rosenberg, professor of medicine and radiology, and chief of oncology.

"We will of course welcome any qualified Malaysian physician to the program," he added, noting that already the gift has helped to initiate discussion towards further professional exchange between the two countries.

Also representing the Foundation last Monday was Dr. S.M.A. Alhady, a member of the board.

The Kwok Foundation has supported advanced training in the arts and humanities in both Oxford and Cambridge, England. Stanford is the first recipient of Kwok donations to the biomedical community, Rosenberg said.

12-12-83 —30— LA3

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
(415) 497-2558

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FOR IMMEDIATE RELEASE

COMPUTER LAB AT STANFORD

STANFORD—

An interactive computer course for first-time users with no computer background will be held on the Stanford campus for seven consecutive Wednesday evenings, beginning on Jan. 11, 1984. Sponsored by the Continuing Education program of the Stanford Alumni Association, the course will be held from 8-11 p.m.

The course will emphasize "hands-on" experience using the spreadsheet/database application for the IBM Personal Computer, LOTUS 1-2-3. Six sessions will present an overview of this computer model's capabilities and features such as the spreadsheet, graphics, and database usage. The seventh session will examine the state-of-the-art hardware and software display at Forsythe Hall's computer center.

PC LAB is limited to 16 participants. Tuition for the course is $300.

For course registration information call Paqui Nelson, associate director for Continuing Education, Bowman Alumni House, Stanford University, 497-2021.

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FOR INFORMATION CONTACT: Barbara Battino (415) 497-6911
FOR IMMEDIATE RELEASE

ROBINSON NAMED PERSONNEL DIRECTOR

STANFORD—

Daniel J. Robinson has been named director of personnel management at Stanford University Hospital.

Robinson has been acting director of the department since March. His appointment, effective Dec. 7, was announced by Carole Price, associate director of the hospital, after a formal search process.

"Dan is highly respected within the organization and has long been an active proponent of strong fiscal management and the recognition of staff contributions," said Price. He was selected following a formal search process.

Robinson joined the employee relations section of the hospital in March 1979. He became manager of employee/labor relations, and then in 1981 assistant director.

Previously he was labor relations administrator with the Matson Navigation Company and also with the Pacific Maritime Association, both in San Francisco. He received a bachelor's degree from the University of San Francisco in industrial psychology.

Robinson has overall responsibility for planning and budgeting the personnel management department which includes employee relations, labor relations, employment/recruitment, wage and salary administration, pension and benefits, and personnel health services.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

STANFORD OPENS ANIMAL FACILITIES TO LIMITED PUBLIC VISITS

STANFORD—

Limited public visits to Stanford University's laboratory animal facilities are being offered under a new public access policy, Associate Dean for Administration David Mendelow announced Monday (Dec. 12).

"In recognition of the university's continuing and increasing obligation to inform the public about the important role animals play in biomedical research, and to reinforce its commitment to openeness and public accountability, representatives of recognized groups in animal welfare and accredited representatives of news organizations may arrange to visit the facilities," Mendelow said in a statement.

Occasional public visits to various campus locations where animals are housed had been available in the past and animal facilities have always been open to government agencies regulating animal welfare and to academic accrediting groups.

Mendelow said the essential change in policies involves the adoption of specific guidelines, "and a renewed commitment that visits—when they can be arranged without interference to ongoing research or the welfare of indvidual animals—are an important obligation to the public which feels a genuine concern that animals being housed for important scientific research are being cared for appropriately and humanely," Mendelow said.

Under the guidelines, "representatives of recognized groups involved in animal welfare" may request in writing that a visit be scheduled. In order to protect animals from communicable disease and the agitation caused by the presence of strangers, no more than two groups may be scheduled each month, and group size will be limited to eight persons, said Carolyn Reed, acting director of the Department of Laboratory Animal Medicine (DLAM).

The restrictions, Reed said, are also intended "to protect the public from potential hazards and the potential spread of disease from room to room. Staff who care for the animals must be continuously monitored for the state of their personal health."

Mendelow said he believes "there is no question that the topic of animal research is one currently generating a great deal of public concern. We feel it is important for an institution involved in this lifesaving research to maintain openness and to become involved in the issues.

12-9-83 -more-

"We are proud of our research and the role played by animals in extending important human knowledge," he added. Dean Dominick Purpura has said that more than 90 percent of all medical knowledge in the last century has been directly dependent on studies involving laboratory animals.

Mendelow said the public would be able to see various animals currently housed in a variety of facilities at the medical center and other locations on campus. Next fall, visits are expected to focus on Stanford's state-of-the-art $12 million Research Animal Facility, which will enable most laboratory animals to be moved into the single housing complex.

Between 15 and 25 species of animals are used in research at any given time, depending on needs. About 95 percent of the animal population are rats and mice, but DLAM facilities are equipped to handle most animals, including a farm area for larger primates, and several kennel areas for dogs, which are used primarily in heart research.

Ordinarily, said Mendelow, visits could not include entry to sterile research areas, because of the potential of disease transmission. All visits would be subject to the final approval of the DLAM director, he said.

Members of animal welfare groups wishing to visit the facilities should contact the Director, Division of Laboratory Animal Medicine, Quad 7 Building 960T, Stanford University, Stanford, CA 94305.

News media representatives wishing tours should contact the Medical Center News Bureau, Suite 301, 750 Welch Road, Palo Alto, CA 94304, (415) 497-6911.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED TO COMPARE BENEFITS OF HIGH AND LOW LEVEL EXERCISE

STANFORD—

Currently sedentary 40- to 60-year-old male volunteers are being recruited to begin the New Year—with or without a resolution—by participating in a Stanford University Medical Center study comparing the health benefits of low and high level exercise.

"Especially in sedentary people, low level exercise will produce the same training effects as high level exercise—it just takes a little longer," said Dr. Robert DeBusk, director of the Stanford Cardiac Rehabilitation Program.

To confirm this belief, DeBusk and his researchers will involve three randomly assigned groups of volunteers in the three-month study, which begins Jan. 16. One group will carry out their usual activities (control group); another will carry out low level exercise training such as brisk walking; and the third group will perform high level exercise training such as jogging.

Portable heart rate monitors will be used to help volunteers maintain the appropriate intensity of exercise, and individualized instruction will be given concerning the amount and duration of exercise training.

After initial telephone screening, volunteers will undergo a preliminary evaluation including medical history, physical examination, treadmill exercise test and measurement of blood fats. Participants will repeat the treadmill test at six and 12 weeks and will be asked to record their food intake and physical activity. They will also wear a heart-rate recorder at specified times during the study.

Participants must be free of cardiovascular disease and cannot have participated in any sort of regular exercise program for at least three months prior to the study.

DeBusk said one potential benefit of participation in the project is thorough screening for latent (unrecognized) cardiovascular disease. In addition, participants will have the opportunity to potentially increase their cardiovascular fitness.

On completing the study, which is funded by the Pepsico Foundation, participants will be given an individualized "prescription" for ideal long-term exercise conditioning.

For more information, call the cardiac rehabilitation program at 497-6461 during regular business hours and ask for the "coordinator of the high/low study."

12-6-83 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

EDITORS: This story is based on an article that appeared in the fall issue of *Stanford Medicine*, a new magazine published by Stanford University Medical Center. Copies are available.

STANFORD'S NURSING SERVICE ENCOURAGES AUTONOMY, EDUCATION, RESEARCH, AND CLINICAL EXCELLENCE

STANFORD—

Walking through the corridors at Stanford University Medical Center, it's sometimes difficult to distinguish the nurses from the rest of the staff. The traditional white caps, matronly dresses, support hose, and orthopedic shoes that used to make up the stereotypical image of a nurse are long gone. No longer are they thought of as "old maids," tyrannical in their spinsterhood, or young "sexpots" waiting for their catch from the medical pool.

They may be discernible only by their name tags, but Stanford's nurses stand out—known among the health care community as assertive, confident men and women skilled in their profession and dedicated to service for the sick.

And Stanford stands out among the nation's hospitals—known as the ideal place for nursing. Nurses here are encouraged to be involved with education, research, and global professional issues. They're given responsibility, autonomy, flexibility, and a significant say in patient care. They're among the highest paid nurses in the country. They're staffed according to the patients' needs, dependent on the severity of the illness. Rather than rely on temporary nurses from agencies to fill in for staff nurses, they have a pool of relief nurses familiar with the hospital, the staff, and many patients. They have a professional union that represents only them. In everything they do, nurses say, the goal is to improve patient care.

"The main focus of nursing has always been bedside care of the patient," says Ellie Hedenkamp, a cardiology nurse specialist on the pediatrics unit. "But the peripheral issues—the education, the technology, the research—are what's changing nursing."

"Nursing here sets a precedent for all nursing in the country," observes Lois Welches, an associate director of nursing. "We have a group of overachievers like I've never seen before. There's a major commitment to quality health care. Because of that, the nurses can't stand to keep things at the status quo. They're constantly coming up with intelligent, innovative, and creative ideas to improve patient care."

It's no accident that the 1,200 nurses here stand out from the nationwide force of nearly one-and-one-half million. Shortly after he became director of the nursing service nearly six years ago, Duane Walker stepped up recruitment of nurses with diverse education and experience. Nearly half the nurses here have bachelor's degrees in nursing, while about 15 percent have master's or higher degrees.

2-2-2 It seems once they experience working at Stanford, they're reluctant to leave. Even at the height of the nursing shortage just a few years ago, when many nurses were switching jobs like musical chairs depending on which institution played a better tune, the turnover rate here was a comparative nationwide low of 37 percent. Now, it's less than one percent, with as many as 100 names on the waiting list at times.

"As recently as five years ago, I would ask each group of new nurses why they came to Stanford. At least 80 percent said they came because of a specific doctor's work," says Walker. "Now when I ask the same question, about 70 percent say they came because they've heard about the nursing service here."

One unique aspect at Stanford is the nursing research program, so successful that it recently was awarded a $600,000 grant by the Department of Health and Human Services, the first ever given to a hospital-based nursing department.

"Nurses look at research as problem solving," Walker explains. "When you get into that mode of thinking, you increase the quality of care."

Established in 1979, the research program's objective is to "help meet public and professional demands for quality cost-effective patient care by developing the research skills of nurse-clinicians and encouraging the integration of nursing research activities as a part of nursing practice."

Research projects range from specific clinical problems, such as one that determined the most effective and least costly treatment for bed sores, or one that determined which method of collecting breast milk for hospitalized infants remained the most free of bacteria and viral infections, to broader topics, such as the patient satisfaction study, or the survey of dietary problems as perceived by nurses and dietitians. There's no reward system for participation in research, Walker notes, just a lot of encouragement and individual ambition.

"Nurses at medical centers usually have the advantage of being connected with a nursing school where they have access to faculty and research-oriented facilities," Welches, who heads up the research program, points out. "The amazing thing about Stanford is that even with no nursing school, the nurses have been able to do as much and more than the others."

Another component is education—of nurses and patients by nurses. The entire profession is pushing for a higher educational entry level into nursing, specifically a minimum of a bachelor's degree. The reason, Welches explains, is that with more education, nurses are able to be more critical of their work, thus improving it. "Education is the key to upgrading the image of nursing," Walker adds.

Stanford nurses have developed teaching programs among themselves as well. Many, such as the graduate program in cardiology and the proposed operating room management program, are nationally one-of-a-kind.

"Five years ago, doctors' classes attracted nurses. Now, nurses want to be taught by nurses," Hedenkamp says.

Possibly completely unacceptable in many institutions, nurses also participate in the education of physicians. Aside from the classes nurses teach in the medical school, nurses help train new interns and residents as part of the young physicians' education. Nurses and physicians can volunteer to spend a 24-hour work period with one another in order to gain an understanding and appreciation of what each encounters during a typical day's work. This new program is an extension of physician/nurse committees that exist on just about every unit, giving members a forum to discuss patient care problems and come up with solutions.

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"When they were first established nearly two years ago there was a lot of venting of frustrations," alker says. "But eventually they got tired of talking about problems and started planning. That was what we were gearing towards."

Perhaps the most important part of education, however, is that of patients and community members. For many patients, the nurse is the only constant, explains Patty Tharp, who works in the cardiology intensive care unit. "Many times the physician only comes in to check the patient's condition for a few minutes each day," she says. "The nurse is the one who provides the round-the-clock care." Often the patient advocate, the nurse is the one to answer questions about procedures, medications, and operations.

In addition to education nurses provide to patients within the hospital, they participate in community programs geared for education, such as health fairs.

"This is all part of making nursing more visible and improving its image," Walker says.

"Medicine is disease-oriented, and doctors are disease treaters, whereas nurses are health care-oriented," Hedenkamp notes. "Nurses look at patients in their total health care status. We do that in a much wider scope now, with outreach education programs, health maintenance, and disease prevention programs.

"The nurse's goal is not to cure—that's unrealistic—but rather to put patients in the best possible physical condition and help them and their families deal with that condition," she continues. "If you feel you've made it easier for them to handle whatever their specific situation is, you feel you've accomplished omething."

As such, nurses feel they are invaluable, yet disparate, members of the health care team. "Nurses have been struggling so long for identity," Walker says. "We've been accused of trying to take over the medical domain, but I don't see that as our goal at all. Nurses are simply saying to physicians that we want you to recognize that we are vital members of the health care team. We want to be considered not as the handmaidens, but respected for the knowledge base we have."

And for the most part, nurses feel the physicians here do just that. "There are two schools of thought. Some of the old-time physicians really think the nurse is a handmaiden, that she doesn't need to know anything except what the physician tells her," Hedenkamp says. "In general, though, the relationship between physicians and nurses is excellent. Nurses are being asked to make increasingly more complex decisions, and to be more responsible for their judgment and management of patient care. Most physicians act very collegial and respect nurses for the skills and knowledge they contribute.

"Stanford is an excellent place to work," she continues. "Patients get a combination of first-rate technical care and a lot of caring. It's a very human-oriented place."

"The nurses here don't look at their job as just a job," Tharp adds. "They put in the extra time and effort, whether it's staying after the shift is over to write a nursing care plan, or consulting with others abut the patients' care. Nurses here are intereted in their jobs, they're dedicated, and they genuinely want to provide the best possible care to their patients."

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(Editors: The following story moved Business Wire Dec. 1

FOR IMMEDIATE RELEASE

TRANSPLANT SURGEON CALLS FOR MORE FLEXIBLE DONOR RELEASE POLICY

A Santa Clara County Coroner's policy which prohibits harvesting of donor organs from homicide victims should be changed to provide body parts to desperately ill recipients when they are not clearly needed as medical evidence, a Stanford Medical Center cardiovascular surgeon said Thursday (Dec. 1).

Philip E. Oyer, associate professor of cardiovascular surgery and a senior member of Stanford's heart transplant team, said he believed a decision this week by the Santa Clara County Coroner's Office refusing transplantation of a heart and both kidneys from a man who had been fatally shot in the head was unnecessary.

"We have one of our own heart patients and two kidney patients from other hospitals who will now have to wait longer for the organs they need for survival," Oyer said. "If there had been anything physically wrong with the heart related to the patient's injuries we couldn't have used it for transplantation in any case," Oyer said.

John Fait, administrative officer with the chief medical examiner of Santa Clara County, said he had denied Stanford's heart transplant team permission to harvest the heart from Orlando Taylor, 18, who was declared brain dead at Stanford University Hospital. Menlo Park Police said he had been shot in the head while driving his car through East Palo Alto last weekend.

Oyer said the coroner's office had declined to allow the heart to be transplanted by Stanford and the kidneys by the UC San Francisco Medical Center after the family had given permission and after several requests for the coroner to reconsider his decision. By Tuesday night, life support systems were withdrawn from Taylor and his body was released to the coroner for autopsy.

Fait said Thursday that a gunshot wound to the head was determined as the cause of death.

Fait said his office routinely refuses organ donations homicide victims in order to "protect the physical evidence to the best of our ability."

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Fait said the homicide refusal policy was based on a meeting between Stanford physicians, administrators and the coroners office in 1969. Oyer said he understood there was such a meeting, "but that was before the concept of brain death had been fully established. The policy is clearly outdated and needs to be changed."

Oyer said the transplant team has worked effectively with medical examiners in many jurisdictions, including Los Angeles County, where bodies are released immediately to the coroner after the organs are harvested and full reports regarding the physical condition of the organs taken for transplant are supplied promptly to the coroner's office.

"This most recent case is particularly illustrative of the need for a change of policy," Oyer said, "because it was apparent that the heart and kidneys were healthy and had not been injured in the trauma which resulted in death."

Current state law gives county coroners wide latitude in allowing transplantation following death through its authority to demand bodies for autopsy. Oyer said he believes that a more enlightened policy "based on current medical knowledge and concepts of brain death" is needed. He said he is unsure whether the law should be changed to facilitate transplants.

Fait said his office has been cooperative with Stanford in the past and has authorized seven bodies for transplantation, none homicides, in the past 13 weeks.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR STUDY OF ANOREXIA, AN UNUSUAL DIETARY DISORDER

STANFORD—

Stanford University Medical Center researchers are looking for 40 volunteers to participate in a study of anorexia nervosa, a disorder in which young women diet obsessively, sometimes to the point of starvation.

The researchers plan to study the relationship between anorexia nervosa and body levels of zinc, an essential mineral.

"There are many similarities between the clinical picture of zinc deficiency and anorexia nervosa," explained Dr. Rebecca Katz, who is conducting the study. "Both conditions are characterized by weight loss, growth retardation, loss of appetite, decreased taste acuity, lack of menstrual periods in females, delayed sexual development, mood changes, and hair and skin abnormalities."

Volunteers must be anorexic individuals under 21, said Katz. Those accepted into the study will undergo a medical history and physical examination, which includes taking blood and urine samples. Volunteers will also be asked to keep a record of everything they eat for three days, Katz added.

The study is being conducted at Children's Hospital at Stanford through Stanford medical school's division of adolescent medicine. Individuals who would like to volunteer may call Dr. Katz at (415) 327-4800, extension 538, weekdays between 8 am and 5 pm.

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News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

VETERANS' GROUP ENDOWS PERMANENT SPINAL INJURY PROFESSORSHIP

STANFORD—

A permanent professorship focusing on spinal cord injuries is scheduled to be inaugurated at Stanford University Medical Center at a ceremony on Friday (Jan. 27).

Paul Cheremeta, president of the Paralyzed Veterans of America (PVA), is scheduled to present a check for $150,000 to Stanford to initiate the endowed chair, approved by the university Board of Trustees last September. The money is the first installment on a pledge expected to bring a PVA endowment total to $1 million within this decade.

The significance of the Paralyzed Veterans of America Professorship of Spinal Cord Injury Medicine, said Ed Jasper, PVA national treasurer, "is our organization's hope that the American Medical Association will recognize spinal cord injury medicine as a specialty."

Spinal cord injury research and treatment, Jasper said, is too often scattered among other specialities, including orthopedics, surgery and neurology.

In 1980, PVA contributed $260,000 to fund a term professorship which will run until August 1985.

Jasper said Stanford "had foresight in establishing it as a term chair until the organization was able to endow it permanently." The term chair was and remains the only temporary chair at Stanford.

Lawrence G. Crowley, vice president for medical affairs, said:

"The Paralyzed Veterans of America were extremely generous four years ago when they established a term professorship. The most recent pledge will perpetuate and enhance the effort we are making in research on behalf of the 10,000 persons each year who sever their spinal cords."

The term chair is held by Inder Perkash, associate professor of sugery and chief of the Spinal Cord Injury Service at the Palo Alto Veterans Administration Medical Center.

Crowley said the principal and some of the earnings from the term chair will be used to fund the permanent professorship. Other portions of the earnings have been used to support the teaching, research and clinical activities of the chair holder.

Endowed chairs are intended to honor both the recipient and the award's donor or namesake. Sometimes the money is used to supplement or provide salaries for eminent faculty members, while other times the money is used to support research activities of these faculty members.

The PVA is one of 14 veteran's organizations chartered by Congress. The national group claims a total of 11,000 members.

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FOR IMMEDIATE RELEASE

NURSE'S UNION AND HOSPITAL BEGIN CONTRACT TALKS

STANFORD—

Representatives of Stanford University Hospital and the union representing the institution's 1,250 registered nurses have announced that collective bargaining began this month this month for a new agreement.

In a statement issued last Wednesday (Jan. 25), the hospital and the union, The Committee for the Recognition of Nursing Achievement (CRONA), said the teams "have agreed to issue joint press statements as necessary during the negotiatons."

The present two-year contract expires Feb. 28.

The CRONA team is composed of chief negotiator and former CRONA President, Hedy Dumpel; the current CRONA president, Myra Lang; and other registered nurses, Sue Elders, Alice Serbein, Joanne Muir, and Jean Krsnak.

The hospital's chief negotiator is Priscilla Wheeler, staff counsel and the university's chief labor attorney. Other members of the team include Daniel Robinson, SUH director of personnel management; Joyce Miller, associate director of nursing; Judy Lanigan, assistant director of nursing; Laurie Gunderson, clinical nursing coordinator; and Susan deJongh-Kearl, university associate staff counsel.

Jan. 27, 1984 —30— mg3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

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PHYSICIAN AWARD TO HONOR PATIENT CARE ESTABLISHED

STANFORD—

An award to recognize the importance of good patient care by physicians at Stanford University Hospital (SUH) has been established in memory of Dr. Alwin C. Rambar, a long-time Chicago pediatrician.

The Alwin C. Rambar Award for Excellence, was announced Thursday (Jan. 25) by Lawrence G. Crowley, vice president for medical affairs.

The award is to be presented annually at medical school commencement to a physician on the SUH staff, Crowley said. The first recipient is expected to be announced this June.

Criteria include compassion in dealing with patients and families, effectiveness in working with non-physician members of the health care team on behalf of patients, and excellence in treatment. Recipients are to be selected by an advisory group to the vice president for medical affairs, representing the medical faculty, voluntary faculty (community physicians), house staff, nursing staff and patient relations staff.

A permanent plaque bearing the names of award holders will be displayed in the hospital. A cash award is also to be given.

The award was established at Stanford by members of the Rambar family, including several living in the mid-Peninsula area.

Jan. 27, 1984 —30— mg3

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

Editors: Photos available upon request.

NEW ASSISTANT DEAN TO FOCUS ON MINORITY AFFAIRS

STANFORD—

Dr. Roger Peeks, a former medical student, intern and resident at the Stanford University School of Medicine, has been appointed assistant dean for student affairs, announced Dr. John Steward, associate dean.

Peeks, who is in private practice in Oakland, will work here one day each week, dividing time between the office of admissions and the office of student affairs. Along with general counseling responsibilities, his duties will include:

* recruiting and counseling black applicants, including visits to undergraduate campuses and programs, interviewing applicants, and serving in an advisory capacity to the director of admissions;

* serving as a liaison between the medical school and various offices and organizations, both local and national, particularly in relation to minority affairs;

* assisting in the planning and acquiring of funds for special programs to enrich the experiences of Stanford's minority medical students;

* and helping with academic advising and personal counseling of medical students.

Peeks will concurrently hold the title of clinical assistant professor of medicine, a position he held formerly at Stanford.

Peeks served as acting assistant dean while he was a physician specialist in Stanford's department of medicine during the 1981-82 year. In addition, he was the assistant director of admissions at the medical school. During that time his clinical responsibilities were based at the Palo Alto Veterans Administration Hospital, where he also taught and supervised medical residents, interns, medical students and nurse practitioners. He was a freshman premedical advisor at Stanford from 1979-82.

After Peeks left, Dr. Fernando Mendoza was appointed assistant dean. Now, the two will work together to expand activities providing special support for minority students.

Steward emphasized Peeks' age—he received his M.D. in 1978. "His own medical student experience is recent enough for him to identify closely with our students, and they with him."

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News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

NEW INTERFERON DRUG UNDER STUDY TO TREAT HEPATITIS B

STANFORD—

Stanford University Medical Center scientists are ready to begin treating chronic hepatitis B patients with a new genetically engineered interferon drug that they think may be more effective than other medication in controlling the disease.

The drug, called beta-ser fibroblast interferon, is one of only a few interferons manufactured by recombinant DNA techniques to be used in treating the incurable liver ailment.

The research team, led by infectious disease specialist Dr. Thomas Merigan, believes the drug may be given in large doses to decrease the amount of the hepatitis B virus in the bloodstream on a long-term basis. Previously tested interferons did lower the amount of virus in the bloodstream, but only during the time period in which the patient was being administered the drug, Merigan said. Genetic engineering has made the new drug more stable, he continued, which hopefully will lead to long-lasting loss of the virus.

Hepatitis B is a unique virus that causes infection of the liver, Merigan said. There is no cure for the disease, which afflicts more than 100 million people worldwide. The virus can be found in all of the body's secretions and fluids, and can be spread by intimate contact or by contaminated medical or dental instruments. Population groups considered at high risk include hemodialysis patients, medical or dental workers, gay males, and users of illicit intravenously-administered drugs.

Various therapies for the disease have been undergoing clinical testing at Stanford for about 10 years. Interferon, a protein the body produces naturally in minute amounts that increases the defense system against malignant cells and viruses, was first incorporated in hepatitis B treatments in 1974. Initially hailed as the "cure-all wonder drug" by scientists in 1978, only with the development of recombinant DNA techniques in 1980 did interferon become available in quantities large enough to be considered practical and affordable.

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Patients interested in volunteering to participate in the clinical testing of the new drug must be between 21 and 65 years of age. They must be carriers of the virus for at least 12 months. All participants must have a liver biopsy that must show chronic hepatitis B.

Those accepted into the study will receive daily intravenous injections of different doses of interferon for one week of each month for four months.

The researchers are also seeking hepatitis B patients to participate in an ongoing clinical trial of a drug called adenine arabinoside monophosphate (Ara-AMP). Scientists have been testing this drug since 1981 to see how effectively it causes a permanent decrease of the virus in the bloodstream, improves the liver disease, and lessens the ability of patients to infect others, according to Dr. Gabriel Garcia of the gastroenterology division.

To qualify to participate in the trial, patients must be between 21 and 60 years old. They must be carriers of the hepatitis B virus for at least 12 months, and a liver biopsy must show existence of the virus. Scientists must also be able to determine how much virus is in the bloodstream through blood tests.

Because both drugs under study are experimental, some side effects may be encountered, Garcia said. These may range from nausea and vomiting to pain in the feet and lower legs, rarely accompanied by weakness of muscles. All side effects, Garcia pointed out, tend to disappear after treatment is stopped.

Participants are requested to commit themselves to the study for two years. They will receive treatment for five months, and will be under observation for the remaining 19 months.

To inquire about either study, call Stanford's hepatitis research clinic at 415-497-6231.

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FOR IMMEDIATE RELEASE

BLOOD DONATIONS SHOW A SLIGHT FALL, DUE TO UNREALISTIC FEAR ABOUT AIDS

STANFORD—

The AIDS epidemic has claimed another victim: blood donations are down nationwide. Stanford University's Blood Center is no exception, with a 3 to 4 percent decrease in donations over the past six months.

One problem may be that people have the mistaken impression that *giving* blood can expose them to AIDS, said Rhoda Burns, recruitment supervisor at Stanford University Blood Center. It's an error that Burns is eager to help clear up.

"There is absolutely no AIDS risk associated with donating blood," Burns contended. "Not only is all equipment sterilized, but each syringe is used only once and then discarded," she added.

The barrage of publicity given to AIDS (acquired immune deficiency syndrome) has distorted the public's idea about blood donations, according to Burns. Only a small number of the thousands of reported AIDS cases nationwide are suspected of being caused by blood transfusions. Yet both blood transfusion and blood donation have taken a bad rap, said Burns.

"It's guilt by association," she observed. "When Mustangs got recalled, overall Ford sales went down. Now that people are worried about a very small hazard associated with receiving blood, the fear has spread, unjustifiably, to blood donation as well."

AIDS fears have had an impact on the Blood Center in other ways, noted Burns. One of these is an increase in "autologous donation." This is a previously little-used donation program in which people who are planning to have an operation may, through their physician, arrange to give their own blood in advance to be used at the time of surgery if necessary.

A second program called "directed donation" is receiving more attention, Burns said. Stanford Blood Center is one of only a few blood banks in the country with such a program.

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In directed donation, a patient may ask specific individuals—usually family members or friends—to donate blood in their behalf. The blood is then earmarked for that patient, as long as it is compatible with the patient's blood type.

Directed donation was initiated at the blood center in April, Burns said, in response to "the public concern about transmission of AIDS." About 2.3 percent of the center's blood collection now comes through the directed donation program, she said. (The Stanford Blood Center receives approximately 18,000 blood donations annually.)

Nationwide, there is controversy among blood bankers about such directed donation programs, largely because of the administrative expense and difficulty involved in keeping track of directed blood, and because there is fear that people will withhold giving unless they are specifically requested to do so.

Because the Stanford center's blood products go through only one transfusion service—supplying Stanford University Hospital and Children's Hospital at Stanford—directed donation poses much less difficulty here than it would for blood banks supplying many different facilities, Burns said.

The risk of transmitting AIDS through blood transfusion has been addressed in other ways at Stanford Blood Center. Last summer, the center began a unique program of T-cell screening all blood donations.

The screening method—which involves measuring the levels of certain white blood cells, called T-cells—is not selective enough to screen out only those donors with AIDS, according to Blood Center medical director Dr. Edgar Engleman. Therefore, some blood from healthy individuals is excluded from use. But Engleman estimated that the percentage of donors excluded is very low, between 1 and 2 percent. Most of these people do not have AIDS, he stressed.

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FOR IMMEDIATE RELEASE

HOSPITAL BOARD OF DIRECTORS APPROVES MODERNIZATION PROJECT COST

STANFORD—

A $110 million total project cost for the Stanford University Hospital modernization was approved by the board of hospital directors at a special meeting Wednesday (Jan. 18).

The board's approval, which includes borrowing plans, is only a recommendation to the general members of the hospital corporation, the university board of trustees. They will consider the proposal in February.

The hospital directors also recommended authorization to obtain construction bids for the project.

The directors approved borrowing up to $81.6 million through the California Health Facilities Authority for financing a portion of the project, with the remaining funds to come from private gifts and hospital reserves.

Initial borrowing for the project's first phase will be done on a short term basis until a guaranteed maximum price for the project has been obtained. The hospital direcTos and the general members of the corporation will then evaluate and approve the final form of borrowing.

First stage of the modernization project will begin late this spring with completion of an unfinished addition at the north end of the hospital. Then a new four-story building will be constructed to provide patient rooms, surgeries and other services. Existing areas in the hospital will be upgraded in a later stage.

Elvia Garwood, project director, reported that construction documents are now about 50 percent completed, and bids for construction work will be received between June and September.

Several options have been identified for the contract package, she said, in order to provide the most flexibility and allow the hospital to consider prevailing economic conditions, interest rates and other issues before awarding final contracts.

Options that would be considered if the project were reduced include shelling instead of completing certain portions of the new construction or deferring other portions.

The options would not affect plans for construction of new patient care units.

"Our primary goal is patient care," said Dr. Lawrence G. Crowley, vice president for medical affairs, "and our aim is to maintain in the project all of the new patient beds planned."

Hospital Board members also reviewed in detail financial feasibility and financing plans and a patient demand study.

Sheldon S. King, executive vice president and director of the hospital, presented strategies for more efficient hospital utilization, such as planned programs in renal transplantation, bone marrow transplantation, helicopter and trauma transport and preferred provider arrangements.

Dr. Dominick Purpura, dean of the School of Medicine, expressed the faculty's support for the project, and emphasized the importance off faculty involvement throughout the process of the modernization as it impacts academic programs.

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STANFORD RESEARCHERS HARNESS HIGH TECHNOLOGY TO FIGHT PARASITIC WORMS

STANFORD—

Stanford University researchers are mobilizing some of the most advanced tools of medical research in the fight against a formidable, primitive, and often deadly foe—the worm.

It's not the garden variety of worm that concerns pharmacologist Dr. Tag Mansour and his colleagues, but its far more destructive cousins, the parasitic flat worms known as *Trematodes* that infect millions of people worldwide.

Worm infections—a scourge confined primarily to underdeveloped areas of the globe—have been consistently overlooked by Western medical science because the diseases are not a major problem in developed nations where most advanced medical research takes place, explains Mansour, who is chairman of Stanford's department of pharmacology.

Yet, the World Health Organization estimates that over 1.5 billion people suffer from infections caused by various parasitic worms. Approximately 220 million people have schistosomiasis, caused by the blood fluke *Schistosoma*; 650 million are infected with gut round worms called *Ascaris*; 450 million are afflicted with *Ancylostoma*, a type of hook worm; 250 million with the tissue round worms known as *Filaria*; and 20 million with *Onchocerca*, a parasite that causes the illness known as "river blindness."

No vaccines exist against any of the major parasitic worm infections, and once worm parasites enter the body it is very difficult to get rid of them. Symptoms of the various *Trematode* infections range from mild gastrointestinal discomfort to severe organ damage and death. Current drug treatments for worm-infested patients are inadequate because they follow the sledge-hammer approach: they harm the human host as they damage the worms.

In an attempt to develop new and effective drug strategies against worm invasions, Mansour and his coworkers are putting to work some of the newest and most sophisticated biological research techniques available: nuclear magnetic resonance (NMR), electron paramagnetic resonance spectroscopy (EPR), gene cloning by recombinant DNA methods, and monoclonal antibodies.

The long-term aim of this high-tech onslaught against worms, he explains, is to find drugs, or other agents such as monoclonal antibodies, that can kill the parasites while leaving humans unscathed.

The key is to find a specific characteristic of worm biology against which drugs or other agents could be aimed. Mansour's approach is to find differences between worm and human biochemistry. Once such differences are known, researchers can look for drugs or antibodies that selectively interrupt the biochemical machinery distinctive to the worms, leaving the human tissue undamaged.

The introduction of nuclear magnetic resonance (NMR) studies may help speed up the search for selective drugs against worm infections, Mansour reports. For the first time, using NMR, researchers will be able to "see" what is happening inside a living worm when it is exposed to various drugs. Up to now, drug effects on worm metabolism could only be measured indirectly by grinding up the worm and analyzing the extracted contents. But the extraction process itself masks researchers' ability to assess exactly the drug effects. With NMR, however, the scientists can measure drug effects on metabolism in an intact worm.

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Mansour's research has shown that many enzymes (proteins that speed up chemical reactions in the body) essential for energy production in the parasites are different from those in the host. "These enzymes are good targets for prospective chemotherapeutic agents," he says.

He and his collaborators have also been using NMR to study these crucial enzymes in the live parasites and to observe their differences from the human host. In addition, NMR has helped the researchers identify phosphorus compounds in the intact parasites that were not recognized before. "These new chemicals give us hints about important reactions that are unique to the parasite and that can be manipulated pharmacologically," Mansour says.

In the search for biochemical differences between worm and human, the most promising target for drug or monoclonal antibody action that Mansour and his associates have so far found involves a molecule called serotonin. In humans, serotonin is a chemical messenger that shuttles between certain nerve cells in the brain. In worms, serotonin is a regulator of carbohydrate metabolism; it controls the worm's ability to break down substances that provide the energy necessary for growth and development, and it stimulates motility.

Serotonin plays its role, in both worms and humans, when it combines, lock-and-key fashion, with another molecule known as a "serotonin receptor." Mansour and his colleagues have discovered that the serotonin receptor found in the human brain is different from the worm's serotonin receptor. Thus, Mansour points out, it may be possible to find a drug to inactivate worm serotonin receptors selectively. This would shut down worm growth without harming the human host.

In the continuing drug search, Mansour's laboratory is also gearing up to use gene cloning techniques. Their aim is to generate large quantities of serotonin receptor protein. If large quantities of the serotonin receptor protein can be manufactured and studied, there is a better chance of finding just the right drug to inhibit it, Mansour says.

The first step toward accomplishing this is to isolate from worm DNA the gene that codes for its serotonin receptors, Mansour explains. Once this gene is found, it can be inserted into bacterial "factories" using recombinant DNA methods. These factories can then produce the large amounts of protein for study.

Once sufficient quantities of worm serotonin receptor become available, the protein could also be used to develop monoclonal antibodies to fight parasitic disease, Mansour suggests.

Antibodies are the body's roving agents that recognize foreign proteins and latch onto them, marking them for destruction by the immune system. Parasitic worms have devised clever ways to foil this natural immune response, Mansour explains. They camouflage themselves by coating their surfaces with protein from their human hosts or by changing their surface proteins periodically. Thus, the human's immune system never realizes the parasitic invaders are present. But treatment might be possible, says Mansour, if large doses of targeted monoclonal antibody were available to overcome the worm's defense system, particularly in its early developmental stages.

Mansour stresses that such treatments are, for the moment, hypothetical. Much more research and development remains. He has been studying worm infections for nearly 25 years, and bemoans the slow rate of progress against these diseases. But Mansour is also adamant about the need to vitalize and bring into the modern age of medical research a long-neglected major world health problem. His is one of only a handful of laboratories in the country using advanced research techniques to study parasitic worms.

Mansour's laboratory receives funding from the National Institutes of Health, and from the Edna McConnell Clark Foundation.

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FOR IMMEDIATE RELEASE

EDUCATION AND SCIENTIFIC BENEFITS FROM CLEARCUT CARDIAC STUDY

STANFORD—

Clearcut evidence that lowering cholesterol levels substantially reduces the risk of heart disease is important educationally and scientifically, said the Stanford scientist who has been involved in lipid research for more than 20 years.

Dr. John W. Farquhar, director of the Stanford Heart Disease Prevention Program, said results announced Thursday from the national Coronary Primary Prevention Trial "emphasize the wisdom and the scientific validity for people to lower their cholesterol.

The 10-year study disclosed that lowering cholesterol can reduce the risk of heart disease by as much as 49 percent.

The results, involving 12 research centers including Stanford, were announced Thursday (Jan. 12) at a National Institutes for Health news conference in Bethesda, Md.

Farquhar, who with colleagues talked to the news media at a Stanford news conference, said these most recent results represent the culmination of his own lipid studies, which began 20 years ago at Rockefeller Institute in New York.

"Clearcut results such as have been achieved represent a medical milestone. I think the information we have learned during the past decade in this study will produce direct benefits in saving lives from coronary disease," Farquhar said.

"We have been telling people based on substantial evidence that it is never too early but never too late to reduce one's cholesterol level to reduce the risk of heart disease," he continued.

"It is highly appropriate that Stanford as a scientific leader played a role in this first major study to show conclusively that men at risk of suffering a heart attack will reduce that risk substantially by lowering their cholesterol levels."

Earlier research has shown that persons with a high level of cholesterol in their blood suffer more heart attacks than persons with lower levels. Other evidence has shown that it is possible to lower cholesterol levels.

But the evidence was unclear about whether persons whose level was high could benefit by having their levels lowered.

"This study should be excellent news for middle aged persons whose cholesterol levels are high," said Dr. Peter Wood, deputy director of the SHDPP. "The 10 years of research has shown that reducing the cholesterol level is clearly and irrefutably beneficial," said Wood, who like Farquhar began his cholesterol research two decades ago.

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The current study was begun in 1972. Nearly 500,000 men were screened, and 3,806 men between the ages of 35 and 59 were selected as participants at 12 centers around the country. At Stanford, 356 volunteers participated in the study.

The volunteers, who all had high levels of cholesterol not lowered significantly by brief dietary treatment, were given either a drug, cholestyramine, to lower their cholesterol, or a powder which looked and tasted like the medication.

Neither the researchers nor the participants knew who was taking the drug and who was taking the placebo.

After seven years, the results showed that the risk of heart disease dropped in direct proportion to the amount of cholesterol lowering which occurred.

Farquhar said the statistical validity of the national study should convince scientists that large scale studies can be conducted effectively, producing results meeting the highest scientific standards.

The study cost $150 million. "But that compares with several billion dollars a year Americans spend on direct medical costs involving heart disease. If we can lower this by only a small fraction, we can more than pay the costs of this research," Farquhar said.

The NIH said that more than one million Americans suffer heart attacks each year, and more than 00,000 die as a consequence.

Farquhar noted that the lessons learned in the present study will be applied immediately in other SHDPP research, including a coronary risk education program currently underway in Monterey County.

Farquhar reminisced briefly about the years leading up to Thursday's announcement.

"I can recall the late evenings 13 years ago when Peter Wood and I sat down and started to write up the grant which culminated in this study," Farquhar said. "Since that time, the Stanford involvement has been enormous.

"For example, Dr. Wood's efforts at developing accurate methods of measuring cholesterol and his work at developing precise treadmill testing have had an important effect on this project as well as enormous spinoff potential in research and clinical applications. Dr. Stewart Agras of the psychiatry department worked very closely with us to develop counseling techniques to ensure that our dedicated volunteers would continue to comply with a very rigorous and longstanding program.

"The volunteers, whom we call 'partners in research' are really the great unsung heroes of projects such as these," Farquhar said.

Farquhar noted that trial director Dr. Dan Feldman, and trial coordinator Judith Halloran, "provided crucial leadership in making Stanford's record one of the most effective for volunteer compliance among the 12 centers.

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FOR IMMEDIATE RELEASE

WEIGHT CONTROL PROGRAM COMPARES DIET TO EXERCISE

STANFORD—

Dr. Peter Wood is looking for some good, but perhaps a bit flabby, men to help investigate what his own body has been telling him for nearly five decades—namely, that exercise is a better road to weight control than dieting alone.

Wood, a 54-year-old marathon runner and professor of medicine (research), is directing a study to test whether weight loss by dieting alone produces different effects on the body than weight loss by increasing exercise, not reducing food intake.

He suspects that people who try as a permanent way of life to adhere to strict diets without becoming more active are engaged in a painful campaign of placing the cart before the horse. And, he added, it's probably more difficult to measure and rigidly ration food intake—particularly on a long-term basis—than it is ultimately to adhere to an exercise program.

That opinion is based on extensive preliminary data, and Wood's own personal experience with regular exercise and as a runner for 47 of his 54 years.

"I eat more relative to my weight than the average sedentary person, and I burn off the calories.

"But review of the scientific literature indicates that the hypothesis has not been adequately investigated. When people ask for weight loss recommendations, we are unable to say that our strongly held views have been tested rigorously and scientifically," said Wood, who serves as deputy director of the Stanford Heart Disease Prevention Program (SHDPP).

About 80 moderately overweight and sedentary but otherwise healthy males, aged 30-59, in the Stanford area are already participating in the Stanford Weight Control Project, which is being conducted under a grant from the National Institutes of Health. Wood and his SHDPP colleagues are hoping to attract about 60 more participants to start the program as soon as possible.

"January, in the wake of New Year's resolutions and holiday partying, is a traditional time for beginning personal improvement programs. We're offering an organized, carefully monitored group environment," Wood said.

"We are not having major difficulty attracting volunteers," Wood said, "because many men are concerned about their weight. But many men have already started jogging, playing racquetball, or participating in other forms of play leading to weight loss. However, I'm certain there are many sedentary and overweight men in the area who have just now made up their mind to take action and are searching for a structured, supportive approach."

Wood said unique features of the program, which began signing up volunteers last September, are the intensity of professional assistance and monitoring offered to participants.

The program follows earlier studies at Stanford which showed that lean, middle-aged runners and tennis players ate considerably more than sedentary and often overweight men and women. The more active people burned off extra calories, and their appetites, while large, appeared much better synchronized with their physical needs than was true for sedentary persons.

"Americans since the early 1900s have actually decreased their food intake as they became more sedentary and more overweight. It's probable that the predominant problem for the majority of overweight people is exercising too little, not eating too much," said Wood.

In fact, Wood, who explains his theories in a book entitled *The California Diet and Exercise Program*, believes that it is more difficult on a long-term basis to control weight through diet alone, since a sedentary person in calorie balance needs to add only 14.4 extra calories a day to gain 45 pounds between ages 20 and 50.

"That's about a fifth of a banana too much each day, an amount the average person could hardly control one way or the other," Wood said.

"But exercise can clearly be controlled. And the average middle aged man can achieve reasonably quickly an exercise level—a 'play' level, really—affording him the opportunity to enjoy hearty meals with little fear that they will lead to excess pounds."

Wood believes the current study has the potential to do more than offer the scientific community and public possible evidence validating his theories. It can, he said, help determine whether persons who exercise to lose weight become generally healthier than those who diet without increasing exercise.

Also, the study will attempt to show whether persons who exercise regularly tend to adhere to their regimen more readily over a long period of time than persons who are placed on a diet-only weight control program.

Wood said that when volunteers join the program, they are given an extensive medical and physiological examination, including hydrostatic (underwater) weighing and treadmill fitness testing. These, he said, results in a detailed health profile. Next, general nutritional couseling is provided, and then participants are assigned randomly to one of three groups.

Group one embarks on a regular progressive exercise program without changing dietary intake.

"The activities are based initially on walking and slow jogging," Wood explained. "We're finding great variety in interest among the 80 volunteers who have joined so far. We shall organize running and cycling groups for these volunteers. We also encourage this group to 'play' frequently, either alone or with friends, outside the program."

A second group of volunteers is placed on a moderate diet program and asked not to alter existing exercise habits. A third group changes neither diet nor exercise habits, and thus serves as a reference group. After one year, each participant in this group will be offered what we believe at that time to be the best available weight loss program, Wood said.

In the second year of the program, contact between the program staff and volunteers in both the diet and exercise groups will be reduced. However, monitoring will continue periodically to determine which group adheres better to the educational program of the previous year, Wood explained.

For further information, call (415) 497-9646 between 2 and 5 p.m., Monday through Friday. Participants must be non-smoking males aged 30-59 who are now sedentary. Volunteers must fall within predetermined weight ranges. For example, 5-foot-10 men must weigh between 180 and 222 pounds with indoor clothes and without shoes. Potential volunteers should be willing to participate in any one of the three programs, and live or work reasonably near Stanford to ensure that visits of up to several times per week can be made conveniently during a one-year period.

The project is codirected by Dr. William Haskell, clinical associate professor of medicine, and coordinated by Susan Garay, R.D., M.S.-M.P.H.

Wood or Garay may be contacted directly by reporters at (415) 497-6254.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

FOR IMMEDIATE RELEASE

RENOWNED CARDIOLOGIST WILL DELIVER JOHN KENT LEWIS LECTURE

STANFORD—

Dr. Jay Cohn, professor of medicine at the University of Minnesota Medical School, will present the 17th annual John Kent Lewis Lecture Monday, January 23 at Stanford University School of Medicine.

The title of his talk, which begins at 5 p.m. in Stanford Medical Center's Fairchild Auditorium, is "New concepts in the pathophysiology and treatment of congestive heart failure." The lecture is open to the public.

Cohn, who is also head of the cardiovascular division at the Minnesota medical school—one of the country's outstanding centers for cardiac research—is widely known for his pioneering work in diagnosis and treatment of patients undergoing heart attack and heart failure. Cohn is an active researcher with over 200 scientific publications to his credit, and also serves on many national advisory committees and other professional organizations.

The John Kent Lewis Lectureship, first presented in 1964, honors the memory of Lewis, a cardiologist who obtained both his B.A. and M.D. degrees from Stanford. He went on to become a professor of medicine at Stanford Medical School, and devoted most of his professional life to medicine at Stanford, making important contributions to the study of heart sounds and cardiac arrhythmias. Lewis died in 1961.

Continuing medical education credit is available to physicians who attend the lecture.

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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

GYN-OB CHAIRMAN RESIGNS POST TO CONCENTRATE ON RESEARCH

STANFORD—

Dr. W. LeRoy Heinrichs has resigned after seven years as chairman of the Stanford University Department of gynecology and obstetrics to devote fulltime to research, teaching, and patient care at the medical center.

"There comes a time for any scientist who has been temporarily immersed in administrative detail to return to more satisfying academic pursuits," said Heinrichs, 52, whose resignation, submitted Dec. 26, was accepted Thursday (Jan. 4) by Medical School Dean Dominick Purpura.

Dr. Kent Ueland, professor of gynecology and obstetrics will continue to serve in the post of acting chairman he has held since Heinrichs, who continues as a full professor, began a one-year sabbatical Oct. 1, said Purpura.

"We will be conducting a search for someone to lead the excellent department which LeRoy Heinrichs has built through careful, intelligent effort during his seven years as chairman," said Purpura. "I expect Dr. Heinrichs to serve as an active, vigorous participant in this search, while he continues the research already begun on his well-earned sabbatical," the dean added in a statement.

Purpura said he hopes to identify a new chairman before the next school year begins in October.

Since last October, Heinrichs said he has begun developing a reproductive biology research program within the department. The program investigates application of nuclear magnetic resonance (NMR) as a safe diagnostic tool for pregnant women. These studies have been conducted in laboratory aniamls with colleagues at the University of California, San Francisco while Stanford's NMR imaging facility is being developed.

"NMR offers the promise of diagnosing fetal health in new and possibly superior ways without the risk of radiation," Heinrichs said.

Heinrichs came to Stanford as full professor and chairman in September 1976 from the University of Washington School of Medicine, where he gained international prominence as leader of a research group working on the physiology, biochemistry and metabolism of the sex hormones related to reproduction. During his tenure here, Heinrichs served for two years as chairman of the National Institutes of Health's section on Human Embryology and Development.

Purpura pointed to the solid growth of the department's clinical activities and its return from a deficit to fiscal integrity under Heinrichs. The department's residency training program based at Stanford University Hospital (SUH) and at Santa Clara Valley Medical Center (SCVMC) was recently accorded a five-year certification—the longest duration granted by the certifying agency—under Heinrichs' leadership.

Educational innovations included several clerkship electives added to the curriculum for teaching medical students about the newer subspecialties within the discipline, and post-residency fellowships were developed for endocrinology-infertility, maternal-fetal medicine, and gynecologic oncology.

"Significantly," Purpura said, "we saw a small department with only modest clinical aspirations grow to become a significant force in the Medical Center and in regional and national medicine. The service which Dr. Heinrichs has headed for seven years has beocme a magnet, a quality care program as evidenced by the 400-500 mothers transferred in 1983 from Northern California and beyond to the two tertiary perinatal units served by the department's professional staff.

"Another major service that has been developed during Heinrichs' tenure as chairman is the gynecologic oncology program which attracts more than 400 new cases of cancer to the institution annually.

"The obstetrics and gynecology service has become an outstanding patient care and teaching component of our overall program. Heinrichs has not only developed the service but is recognized for superior clinical work, primarily in infertility and in gynecologic surgery," the dean added.

"While size is not in and of itself a measure of quality, I still believe it is worth noting that the Gyn-Ob department has grown from four to 16 fulltime faculty members and clinical staff during the seven years of Dr. Heinrichs' progressive leadership," Purpura added.

"One of this institution's strongest links with any affiliated hospital is the tie forged by Heinrichs between our gyn-ob department and the perinatal service at (Santa Clara) Valley Medical Center, where Stanford faculty, resident and students serve," Purpura added.

At Stanford University Hospital, the largest clinical facility served by the department, 3,000 newborn deliveries were performed in 1983 by the fulltime and clinical (community) faculty.

Heinrichs conceded that the department had been a focus of some controversy last summer following a personnel memo—later rescinded—in which Heinrichs had questioned a pregnant resident's request for scheduling personal time off. Purpura, who was then critical of Heinrichs' action, this month praised Heinrichs' "ability to face administrative problems by constructively appointing a faculty-resident committee to deal with stresses that are inherent in growing departments."

Purpura emphasized that Heinrichs had discussed with him his desire to concentrate on research prior to the memorandum incident.

The dean particularly praised Heinrichs' success at recruiting eminent senior faculty members as section leaders. These include Ueland, who is a nationally recognized expert on cardiovascular disease among pregnant women, and Samuel Ballon, an authority on reproductive cancers in women.

"And now Dr. Heinrichs will have his own opportunity to return to research agendas which have rested in the 'hold' bin for too long," Purpura said.

"In the coming years, we should have the possibility of diagnosing and then correcting a wide variety of maladies which afflict fetuses," Heinrichs said. "We anticipate the possibility of surgical or medicinal intervention of the fetus in the womb, thus increasing the odds of preventing or correcting problems before long term or potentially fatal injury has occurred.

"I feel confident that we have achieved the major goals I accepted with my wife's encouragement when I came to Stanford," Heinrichs said. "Now it is time to move on to the new challenge of strengthening the research programs in the strong clinical department that I have fostered."

In resigning the chairmanship, Heinrichs expressed appreciation "to the many, many persons in the department, the school, the clinics, the hospitals, and clinical faculty who aided in making my achievements possible."

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FOR IMMEDIATE RELEASE

CONFERENCE TO HIGHLIGHT CONCERNS AT BIRTH

Editors: Members of the news media are invited to cover this meeting, and should make arrangements by calling (415) 497-5763.

STANFORD—

"Perinatal Dilemmas: Mother and Infant in Focus" is the topic of the fourth annual meeting of the Mid-Coastal California Perinatal Outreach Program, sponsored jointly by Stanford's and Santa Clara Valley Medical Center's departments of gynecology and obstetrics, to be held Jan. 19 and 20 at the Doubletree Inn in Monterey, Calif.

The program is designed to provide physicians, nurses and other perinatal health care providers with current information on frequently encountered problems in the care of mothers and infants.

Topics include "Obstetric Analgesia Without an Anesthesiologist," "Cervical Priming and Induction of Labor," "Neonatal Asphyxia: Walk Through a Crisis," "Supporting Breastfeeding in the High-Risk Infant," "The Physical Consequences of Neonatal Intensive Care," and "Medical-Legal Dilemmas: Suits I Have Known," among others.

Faculty from Stanford include Dr. George Albright, director of obstetric anesthesia; Charlene Canger, clinical social worker; Dr. Philip Sunshine, director of newborn nurseries; Rose Grobstein, chief pediatric social worker; Dr. Paul Hensleigh, chief of the perinatal consultation service at Santa Clara Valley; Barbara Petree, clinical nursing coordinator in labor and delivery; and Dr. Kent Ueland, chief of maternal-fetal medicine.

Joining the Stanford group will be Dr. Robert Burnett, president of the California Medical Association, as well as specialists from Santa Clara Valley, other hospitals, and private practice.

The Perinatal Outreach Program (MCCPOP) has developed educational programs throughout an eight-county region (San Mateo, Santa Clara, San Benito, San Luis Obispo, Monterey, Santa Cruz, Stanislaus and Alameda). It disseminates information and services to achieve quality care for all pregnant women and newborns, optimum utilization of highly trained personnel and intensive care facilities, assurance of cost effectiveness, and higher standards in regional perinatal centers.

MCCPOP includes a perinatal resource center, a genetic counseling center, and a birth defects center, as well as providing emergency consultation and transport, perinatal nursing preceptorships, and intensive care nursery preceptorships.

A registration fee will be charged participants of the upcoming conference, which has been approved for continuing education credit. For further information and registration materials, call Kim Leadon at (415) 497-5763.

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FOR IMMEDIATE RELEASE

NATIONAL CHOLESTEROL STUDY RESULTS DISCUSSED LOCALLY

STANFORD—

(Editors: The Stanford Heart Disease Prevention Program (SHDPP), which sponsored the Coronary Primary Prevention Trial at Stanford, will hold a news conference at 11 a.m. Thursday, Jan. 12, at the SHDPP labs and offices, 730 Welch Road, Palo Alto, CA 94304. Researchers, other staff members, and several of the 356 volunteers who participated locally in the study will be available to discuss the national results, as well as the local program. Results of the study will be made available at a national news conference at the National Institutes of Health, Bethesda, Md. at 8 a.m. PST. Local researchers and participants will NOT have results prior to the national announcement but tape recorded proceedings of the national news conference will be available for playback at the SHDPP following the local news conference.)

Researchers may be one step closer to solving the mystery behind the leading cause of death in the United States when results of a federally-sponsored cholesterol study are released next Thursday (Jan. 12), said Dr. John W. Farquhar, who directed the Stanford component of the research.

The study closely followed thousands of volunteers deemed likely candidates for heart attacks for at least seven years to test the relationship between high blood cholesterol and coronary heart disease (CHD). Strong evidence has led many physicians and researchers to believe that high blood cholesterol contributes significantly to heart disease. But earlier, shorter studies have not given researchers the definitive evidence considered necessary to show whether lowering high cholesterol levels will reduce the risk of heart disease, said Dr. Dan Feldman, the trial director for the Stanford component.

Even this week, as results of the Coronary Primary Prevention Trial (CPPT) were being readied by the National Heart, Lung and Blood Institute in preparation for the Jan. 12 Washington, D.C.-area news conference, researchers were cautious about whether the current $150 million federal study will offer a definitive answer on the issue of cholesterol.

"Realistically, we're hoping that this study will bring us closer to an answer," said Feldman.

He will learn the results of the study shortly before he appears with colleagues and some of the 356 Stanford volunteers at a news conference scheduled at 11 a.m. next Thursday (Jan. 12), shortly after the national results are to be announced in Washington.

Nearly 500,000 men were screened after the study was devised in Washington in 1972. Twelve medical centers in the United States and Canada selected 3,810 men between the ages of 35 and 59 who were found to have high levels of cholesterol which were not lowered significantly by brief dietary treatment. These were men considered at high risk of suffering a heart attack or contracting coronary heart disease.

Half of the men were given daily doses of a drug called cholestyramine, which has been shown to lower serum cholesterol levels. The other volunteers were given a placebo, a dummy powder which has no effect on cholesterol levels.

Neither the participants nor the researchers knew who was receiving the drug and who was taking the placebo to ensure that results would be objective. Participants will be told in personal interviews during the next three months whether they received the drug or the placebo.

Before taking part in the research, the men had all been instructed on how to maintain a healthy diet, Feldman explained, but otherwise they were told to continue their lives as before. Periodically, blood samples were sent to researchers for analysis.

All of the volunteers were male, because statistics have shown that they are far more likely than women to develop heart disease.

The men's physical health was monitored, and the incidences of heart disease in the cholestyramine and placebo groups were compared to see if lowering cholesterol lowered the incidence of heart disease.

"All the evidence we have been accumulating for several decades indicates that a longer, heart disease-free life is much more likely if one is able to control serum cholesterol level," said Farquhar. "But since heart disease develops over a period of many years, it is very difficult to prove conclusively that decreasing one's cholesterol level will reduce the risk of heart disease. Hopefully, this study will contribute to such evidence."

Farquhar believes that many heart attacks could be prevented by lifestyle changes and/or administering anti-cholesterol drugs prior to middle age. He said he is confident that with additional evidence, people will be better motivated to make changes.

Cholesterol is a vital component of the cell walls, and a component of other body chemicals. However, in excess quantities it can clog blood vessels and interfere with the efficient flow of blood as well as the effective pumping of the heart.

The cholesterol level of many men can be lowered effectively by avoiding foods rich in animal fats. But to conduct a study based on diet would have been prohibitively expensive and time consuming, said Feldman.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

ARCHITECT SELECTED FOR CHILDREN'S HOSPITAL

STANFORD—

The San Francisco firm of Anshen and Allen has been selected as architect for the New Children's Hospital at Stanford, announced Langston G. Trigg, Jr., project director.

The firm was recommended by a selection committee to the New CHAS Board of Directors after an intensive nationwide search. The selection was also approved Feb. 15 by the Stanford University Hospital Board of Directors and by the Children's Hospital Board on Feb. 28.

Selection of the architectural firm is a major step in the planning to consolidate the pediatric facilities of both institutions, said Dr. Lawrence G. Crowley, chairman of the New CHAS Board. The new hospital will be built at an estimated $40 million project cost and will be located adjacent to new construction planned at Stanford University Hospital (SUH).

The New Children's Hospital will consolidate the 60 beds at Children's and the 44 pediatric acute medical-surgical and pediatric intensive care beds at SUH. It will also house the Stanford-Children's Ambulatory Care Center, which provides 27 separate clinic services. It will continue to provide inpatient services in the specialties now offered by both hospitals.

Anshen and Allen, based in San Francisco for more than 40 years, have designed the Lawrence Hall of Science in Berkeley and the Lawrence Livermore National Laboratory, the Coronado Bridge in San Diego, John Muir Hospital in Walnut Creek, the International Building and the Bank of California Headquarters in San Francisco.

Approximately half of the firm's projects are in the health care field. Medical clients include Alta Bates Hospital in Berkeley, Children's Hospital in San Francisco, University of California Medical Center in San Francisco, Sacramento Medical Center, and Community Hospital of the Monterey Peninsula.

Derek Parker, senior principal and president of the firm, will head a proposed architectural team that includes a health planner, architectural programmer and a former pediatrics nurse.

The selection committee was "unanimous and enthusiastic in their recommendation," said Trigg. "We feel Anshen and Allen can provide the professionalism and creativity necessary to assist in our goal to create a world class institution."

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FOR IMMEDIATE RELEASE

PEDIATRICIAN STRESSES SAFE RIDING

Editors: Photos available upon request if not included.

STANFORD—

Pediatrician James Flippen recalls the terrible car accident which one of his patients, a 5-year-old child, survived without a scratch, having been buckled safely by a seat belt in the back seat.

"That car turned over several times and went down an embankment," said Flippen, a clinical associate professor at Stanford Medical Center. "The mother had a seat belt on and was only injured a bit. The father wasn't buckled in, though. He went right through the windshield and was seriously injured."

The story is one of endless accounts which illustrate the importance of seat belts, as well as car seats for the very young. In fact infancy is the best time, Flippen contends, to impress upon parents the importance of automobile safety for their children.

"At that stage, parents are very aware of the delicacy and susceptibility to injury of their newborn. So it's the best time to sensitize them to using safety devices for now and the future."

After the first few months of life, car accidents account for the greatest number of fatalities among all ages, and cause the deaths of more children than the next five killers—diseases and accidents—combined, Flippen said.

California law since about a year ago requires families to use car seats for infants and children up to 40 pounds and four years of age. (Almost all states now have similar laws.) A state survey conducted earlier showed that only one out of 10 children was being properly restrained in the car, with the rates at 20 percent below age one, 9.8 percent from one to four, and 3.6 percent from five to 14 years old.

"It became clear that a law was necessary," said Flippen, who chairs the Accident Prevention Committee of the American Academy of Pediatrics (AAP) for Northern California. "First Ride, Safe Ride" became the slogan for the AAP's drive to educate the public to the need for infant car seats.

In the state of Washington, Flippen said, there was not one death for an entire year among all properly restrained children under five.

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"In general, 90 percent of deaths and 80 percent of serious injuries associated with auto accidents in children under five can be prevented by the use of car seats and seat belts." Flippen explained that most injuries occur because of contact within the car or because passengers are thrown out. Safety devices can prevent both by stabilizing the position of the passenger.

At Stanford University Hospital, a committee exploring the car safety issue organized and approved a car seat loaner program, which is now administered by the Community Association for the Retarded in Palo Alto. The program helps families that can't afford to buy infant car seats, by loaning them out on deposit, with most of the sum refundable upon return. Privately funded, the program has almost 100 seats available, fitting babies up to six or nine months old.

For families that can buy their own seats, the hospital has an arrangement with Norneys at the Stanford Shopping Center, Flippen said, whereby the store will deliver a seat upon request from the maternity unit. Otherwise, parents can pick up the seats at most toy or department stores, he noted.

Last week the well-baby nursery at SUH sponsored Infant Car Seat Safety Week as a consciousness-raising effort. "I think the hospital has a moral responsibility to encourage the use of these seats upon discharge," said Candy McKinley-Cole, clinical nursing coordinator of the unit.

Flippen said that the California law requiring car seats is enforced similarly to defective equipment laws. If a car is stopped for another reason and found to contain an unrestrained child, a citation is issued. The fine is then cancelled if the parents show evidence that a seat has been obtained and put to use.

At some point the AAP may push for stricter enforcement, he said, if evaluation of the law's success demonstrates a need. "Probably there will soon be some impact on insurance claims with regard to recovery for injuries," he noted.

"We'd like to see a law like this for all ages, such as some countries have," Flippen added, "but it's very difficult to get through the legislature." A recent push to impose a curfew on teen driving between 1 and 5 a.m. failed, he noted, even though in other states with such laws the auto accident rate for 16- and 17-year-olds has been cut by 60 percent.

But safety awareness and legislative efforts will continue, Flippen said, as emphasized by the AAP's latest theme: "Make Every Ride a Safe Ride."

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FOR IMMEDIATE RELEASE

MATCHMAKING BOOSTS STANFORD HOSPITAL'S VOLUNTEER RECRUITMENT

STANFORD—

Voluntarism has been on the decline in recent years, but Stanford University Hospital is meeting the challenge of recruitment by reviving an old idea—matchmaking.

"The idea," explained Sharon Beckham, coordinator of volunteer services, "is to find people who haven't been in the mainstream of voluntarism and carefully match their interests with those of the hospital.

"Volunteers want to feel their talents being put to good use. And they want to receive satisfaction from what they give.

"For us this means knowing what the hospital's volunteer needs really are, and converting them into tasks that will attract people of different skills and interests."

Beckham, who came to Stanford from the University of California in San Francisco, is the first to hold the volunteer coordinator's post in the Community Relations Office directed by Jeanne Kennedy. Beckham is a professional with more than 15 years in volunteer management work.

For the past six months she has been evaluating hospital volunteer needs, developing new procedures, and familiarizing the staff with them.

"Because of tough economic conditions in recent years," Beckham acknowledged, "many women have joined the work force to maintain a certain level of family income. Since volunteers have been traditionally women this trend has reduced their availability.

"But what hospitals are now finding out is that many other types of individuals, including more men, would be willing to serve if one knows what motivates them and acts on that information."

A clear need for a hospital is flexible scheduling to avoid excluding potential volunteers, Beckham said. Some people are free during evenings, others on weekends and holidays. And there are students, professional people and senior citizens whose time commitments and special interests must be taken into account.

For example, a man came to the hospital recently to see Beckham. He was highly trained in the computer field. He was interested in volunteer work, he told her, because in his spare time he needed to be involved in an activity with a humanistic touch.

"Another visitor was a registered nurse who is an administrator in home care," Beckham said. "What she had missed most in her job was hands-on nursing experience. She wanted volunteer work to retain contact with hospitalized patients."

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Feb. 23, 1984

Stanford University Hospital has had a long tradition in voluntarism provided in part by the Stanford Medical Center Auxiliary. Since 1959 this organization of nearly 336 active and 224 former members is credited for providing 1,642,000 service hours to the hospital and its patients.

Beyond the needs of patients, Beckham said, the auxiliary has generously donated funds to meet emergency needs of patients and their families, scholarships and loans to young doctors in training, physical therapy students and junior volunteers. And it has given the hospital $1,191,000 in gifts for special programs and purchase of equipment.

But in recent years the auxiliary, like its sister organizations at other hospitals, had noted a drop-off in membership. When Jeanne Kennedy became director of community relations at the hospital in 1980, she assisted the auxiliary in its recruitment of new members.

In 1982 a special committee of the board of hospital directors conducted an analysis of volunteer needs at the hospital. The committee recommended the hiring of a full-time professional to coordinate activities of volunteer groups, to determine departmental needs where volunteers are needed, and to assist in recruitment efforts.

To date, this approach has not only attracted new types of volunteers, but has augmented auxiliary efforts and participation in new programs, Beckham said. One of these is the innovative "Lifeline," a personal emergency response program which connects frail elderly and handicapped people with their neighbors and the hospital in emergencies.

Lifeline is a joint project of the auxiliary and community relations based in the hospital's emergency department. The auxiliary provides staffing and it gave funds to get the project started.

Among volunteer groups now at the hospital are the Patient Relations Associates who assist people when they are admitted to the hospital and also serve as patient advocates. There is the Junior League of Palo Alto, Inc., whose members work with the hospital's emergency department to provide cardiopulmonary resuscitation training both in the hospital and specified community locations. There is the Volunteer Translators Bank with more than 80 members to help doctors and Stanford's patients from other lands communicate, and the Chaplaincy Office Volunteers who give spiritual support to patients and families.

Taking a different form are the volunteers of the Palo Alto Art Club whose art exhibits help enhance the hospital environment as well as pre-meds and other students who volunteer in order to get exposure to the health care field.

Besides her continuing recruitment efforts, Beckham said, she will work actively to enhance the volunteers' image and to improve understanding of their increasing importance to the institution.

"Volunteers are unique individuals," she said."They provide a needed human dimension, especially in a hospital with a very busy staff trying to get the job done."

If you are interested in volunteer opportunities at Stanford hospital, Beckham is ready to help. Her phone is (415) 497-7424.

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FOR IMMEDIATE RELEASE

RED CROSS PRESIDENT DISCUSSES TRANSPLANT ROLE

STANFORD—

The president of the American Red Cross said Wednesday (Feb. 22) that his organization may have an educational role in helping to create a national climate making organ transplantation the norm.

Richard F. Schubert, currently on a national tour of some of the 3,000 American Red Cross chapters, participated in a luncheon meeting with Stanford University Hospital administrators, surgeons and staff members of the heart and heart/lung transplant team, as well as faculty involved with a planned kidney transplant effort. Also attending the meeting were leaders of the Red Cross' Palo Alto Area Chapter.

"As I travel around the country," Schubert said in an interview following the meeting, "the issue of 'can't some part of John or Mary's body be used' is raised constantly.

"If you create a climate in which this (organ donation) is as acceptable as giving blood, it would make an enormous difference, because it would become a routine question rather than an exceptional question," Schubert said.

Specifically, he said, education would make it easier for physicians and others to broach the subject of organ transplantation to family members of potential donors.

In some cases, he said, the grief of donors' families can be somewhat mitigated by the knowledge that a part of their loved one lives on and could be used to extend life for someone else.

"I think there is an enormous amount of emotional appeal. in saving a life from a life that has been lost," said Schubert. "It is a very appealing concept."

Dr. Stuart Jamieson, assistant professor of cardiovascular surgery and head of Stanford's heart/lung program, said after the meeting that "since we're critically short of donors, any help at all that we can get in making people aware of this need will be most helpful."

Jamieson and surgical colleagues have said a shortage of donors is the most critical obstable to making transplantation available to more people who face certain death within a short time without the procedure.

Schubert said the Red Cross currently is directly involved in bolstering university hospital transplant programs in St. Louis and Minneapolis. Bone and skin are stored at blood banks, and the local Red Cross chapters are directly involved in helping to match donors and recipients.

A potential program Schubert said he discussed briefly with Stanford administrators was the possiblity of the Red Cross' involvement in distributing or facilitating donor cards for employees.

But he told the Stanford gathering that the national organization, which claims 1.5 million volunteers nationwide must be careful to proceed cautiously with transplant involvement, since a new program "does divert resources from other potential benefits to the community unless you enlarge the cadre (of volunteers and donors) to pick up this new responsibility."

In a later interview, Schubert added that "I like to believe that there are people out there who would support this (organ transplantation) who might not support something else." But he said that it is an unaswered question which must be researched.

Schubert, who has served as Red Cross president since January 1983, is a former steel industry executive. He has served in government, including three years as solicitor of the Department of Labor.

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FOR IMMEDIATE RELEASE

REID TO GIVE CREASY PHARMACOLOGY LECTURES

STANFORD—

Dr. John Reid, the William N. Creasy Visiting Professor of Clinical Pharmacology, will present a series of lectures at the medical center Feb. 27 through March 1.

Reid, regius professor of materia medica at the University of Glasgow, Scotland, is internationally recognized for his research in hypertension and the pharmacology of the adrenergic receptor system. He will give the following lectures:

- Feb. 27—"Alpha Adrenoreceptors: Classification and Regulation," noon in R358;
- Feb. 29—"Catecholamines, Potassium and Arrhythmias," 4 p.m. in M112;
- March 1—the Creasy lecture, "Hypertension and Pregnancy: Mechanisms and Management," 8:30 a.m. in Fairchild Auditorium.

The lectures are free, and the public is invited.

Reid is the author of over 200 articles related to his own research interests and co-author of books on clinical pharmacology and hypertension. He is also editor of *Clinical Science*.

The Creasy professorship is awarded yearly to several host medical schools and visiting professors nationwide. It honors the late William N. Creasy, former president and chairman of the Burroughs Wellcome Fund, which sponsors the professorships.

For more information on the lectures, call the clinical pharmacology office at (415) 497-7801.

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Feb. 23, 1984

STANFORD UNIVERSITY MEDICAL CENTER
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STANFORD EMBARKS ON CANCER RESEARCH PROJECT WITH CHINESE PROVINCE

STANFORD—

U.S. university scientists and researchers in a Chinese province will be searching jointly for the causes of colon and rectal cancer.

By comparing a group of genetically similar individuals, in this case ethnic Chinese, in two contrasting cultures—North America and the People's Republic of China—researchers are hoping to discover whether diet or lifestyle affect the risk of contracting colon and rectal cancer.

To accomplish the task, thousands of ethnic Chinese will be interviewed in both countries about their diet and exercise patterns to learn if these factors have any influence on the cancer rate.

Alice S. Whittemore, a professor (research) in the Stanford department of family, community and preventive medicine, said Chinese-American residents—including about 400 colon/rectal cancer sufferers and approximately 1,000 controls—will be interviewed in San Francisco, Los Angeles, and possibly Vancouver, British Columbia.

Whittemore said several hypotheses will be tested, including the possibility that increasing the intake of dietary fiber and cruciferous vegetables—including cabbage and mustard plant—protects against colon/rectal cancer, while alcohol and low intake of vitamins A, C and E increase risk. Also to be studied is the possible benefit of exercise in lowering the risk.

In China, both cancer sufferers and their neighbors who are free of the disease will be interviewed in Zhejiang Province, a tea and silk producing region near Shanghai, where the rate of colon/rectal cancer is high by Chinese standards.

The four-year study undertaken by Stanford University and the University of Southern California was approved recently for $958,000 funding by the National Cancer Institute. In China, research is being conducted by the Zhejiang Medical University with funding provided by the Zhejiang Provincial Bureau of Public Health, said Tom Fingar, director of the Northeast Asia-United States Forum on International Policy at Stanford, the group which helped organize the venture.

"This program is unusual," said Fingar, "because it involves an agreement between U.S. universities and regional health officials and their scientific colleagues in China. Neither national government was involved in the negotiations. Researchers in both countries were eager to insulate the study from the vicissitudes of international politics."

The provincial Chinese government involved will pay local costs. "We wanted a project where the potential gains would be so important that China would be willing to commit precious foreign exchange funds," Fingar said.

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"An interesting phenomenon," Whittemore said, "is that the colon/rectal cancer rate is lower in China than here. But the Chinese who emigrate to this country get this form of cancer as often or perhaps a bit more often than other Americans. We are attempting to find out why."

While differences in data collection make it difficult to compare cancer rates in the United States with China, figures show the incidence of colon cancer to be more than five times greater for ethnic Chinese men in San Francisco (36 cases annually per 100,000 population) than for Chinese in Shanghai (seven cases yearly per 100,000).

Chinese figures show that rectal cancer is the fifth and colon cancer the sixth most prevalent cause of cancer (stomach cancer is the greatest) among Shanghai Chinese. Among Chinese males in San Francisco, colon cancer is second only to lung cancer in prevalence.

Among all Americans, colon cancer is the third most prevalent form of cancer, accounting for 87,000 cases in 1983, according to the American Cancer Society. A total of 39,000 new rectal cancers were reported in the United States in 1983.

Whittemore said length of time in the United States or the number of generations a person has been in this country will be studied to learn if the risk of cancer changes.

"We're hoping for important scientific results," said Fingar, "but even if we come up with no answers, the project is still a marvelous opportunity to gain insight into life, administration and local politics in China." A feature of the study, said Fingar, is that all raw data will be available to researchers from both countries.

Already, the two years of intricate and successful negotiations to develop the joint project have done much to undermine the "pretty widely held perception that you can't work with the Chinese." When it is apparent that the project has compelling mutual benefits, negotiations proceed efficiently and cordially, Fingar said.

Chinese and U.S. scientists will travel to each other's countries, Fingar said. For example, a Chinese pathologist will be coming to Stanford to work with American counterparts to synchronize medical data.

"We want to be absolutely certain that we mean the same thing as our Chinese colleagues when we describe the site or specific nature of a cancer," Whittemore explained. "We want to make sure we are comparing the same things."

Nutritionists from both countries have been working together to develop dietary questionnaires which are compatible.

Fingar said the project was born in 1981 when Stanford cancer expert Henry S. Kaplan, noting increasing cooperation and contact between the two superpowers, expressed the desire to launch a joint cancer research project. (Kaplan died Feb. 4 knowing the project had been approved.)

The Louise and Y.T. Lum Foundation of Honolulu, Fingar said, provided a grant to help launch negotiations, and a series of meetings were held among Fingar; his co-director, John Lewis; and Li Bing, deputy director of the institute of oncology in Beijing.

Ultimately, said Whittemore, colon/rectal cancer study was selected by scientists and officials in both nations for scientific and administrative reasons.

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Epidemiologically, colon/rectal cancer offered a good study model because while prevalent in both nations, its rate in the United States was much higher.

"We had thought of several other forms of cancer common in the United States," Whittemore said, "but when we reviewed statistics, we found that they were almost nonexistent in China, making it impossible to find suitable subjects. We needed a difference between the two countries in the prevalence so that we could operate on the premise that environmental factors were involved, but we also needed enough cases to make a study possible."

A bureaucratic and procedural advantage, Fingar said, was that primary responsibility for studying colon/rectal cancer had been assigned to provincial officials.

"Several forms of cancer assigned to the central government for study would have made it more difficult to work directly with local health professionals."

Working with Whittemore at Stanford are Marion Wu, a research associate and coordinator of the project; Ralph S. Paffenbarger Jr., an epidemiologist and professor of family, community and preventive medicine; and Michael Hendrickson, associate professor of pathology.

At the University of Southern California, primary researchers are Brian Henderson, professor and chairman of the preventive medicine department, and Anna Wu, an assistant professor in the same department.

"The project was both conceived and implemented," Fingar said, "because Stanford has a unique combination of a very strong medical school program and the Northeast Asia-United States Forum on International Policy, which exists to bring together expertise from other parts of the university and appropriate counterparts in Asia."

Editors: Fingar may be contacted at (415) 497-9742, Whittemore at (415) 497-5460.

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FOR IMMEDIATE RELEASE

BULIMICS NEEDED FOR PSYCHIATRY STUDY

STANFORD—

Women 18 and over with bulimia, the binge/purge eating disorder, are needed to participate in a Stanford study to compare the efficacy of two medications in treating the syndrome.

There is evidence that a particular anti-depressant as well as a specific appetite suppressant, administered under close supervision, may be helpful in treating bulimia, said Betty Kirkley, who is coordinating the study in the behavioral medicine clinic.

The researchers need 36 participants, who will be assigned randomly into three groups for 16 weeks, one group receiving a placebo. After initial screening, volunteers will come to Stanford once a week for four weeks, then every other week for 12 weeks, for about 20 minutes each time, so that progress can be monitored by the prescribing psychiatrist.

Volunteers accepted into the study will be required, at their expense, to undergo a physical examination by their physician. All other aspects of the treatment will be provided free of charge.

If any group has done better than the others at the end of the study, Kirkley said, the more effective treatment will be offered remaining participants through another clinical trial.

Women who are pregnant, planning pregnancy during the study period, or nursing should not enter the study. Nor should women join who have hyperthyroidism, seizure disorders, alcoholism, glaucoma, or history of heart disease.

The principal investigator is Dr. Stewart Agras, professor of psychiatry. For further information contact Kirkley, at (415) 497-5869.

2-22-84 —30— LA2

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ADVANCE FOR RELEASE A.M. THURSDAY FEB. 23 TO COINCIDE WITH PUBLICATION IN *NEW ENGLAND JOURNAL OF MEDICINE*

STANFORD RESEARCHERS REPORT FINDING ON LYMPHATIC DISEASE IN HEART TRANSPLANT PATIENTS

STANFORD—

A new finding that sheds light on the nature of cancers developed by organ transplant patients was reported by Stanford University School of Medicine researchers Thursday Feb. 23.

The discovery could lead to new information about lymphomas—cancers of the immune system—and also help guide treatment strategies for transplant patients who develop lymphatic disease, said Dr. Jeffrey Sklar, assistant professor of pathology at Stanford University School of Medicine.

What the researchers discovered is that, in a group of ten heart transplant patients who developed an abnormal lymphatic condition, all ten had a cancerous form of the disease.

The research was conducted in Sklar's laboratory by Dr. Michael Cleary, a postdoctoral fellow. Dr. Roger Warnke, associate professor of pathology at Stanford, also collaborated in several phases of the study. Their results were reported in the February 23 issue of *The New England Journal of Medicine*.

Development of lymphatic disease is a known complication of organ transplantation, explained Sklar. Patients receiving immunosuppressive drugs to halt the body's rejection of the foreign organ following surgery are 40 to 50 times more likely than the general population to develop such diseases, he said.

Among heart transplant patients from Stanford, approximately 7 percent of those receiving conventional anti-rejection drugs have developed a form of lymphatic disease characterized by abnormal and sometimes fatal proliferation of lymphocytes, the immune system's antibody-producing cells.

The incidence of lymphatic disease has been almost twice as high, or 13 percent, among heart transplant patients receiving cyclosporine, a powerful and effective anti-rejection drug, Sklar said.

But lymphocyte proliferation could be caused by a viral infection or a cancerous process, and so there has been considerable debate among medical researchers concerning the nature of these "lymphoproliferative lesions," Sklar explained.

Some researchers have argued that the disease is a malignant lymphoma, or cancer. Others believe that the lymphocyte proliferation is a viral disease, something like a "runaway" case of infectious viral mononucleosis. "For a variety of reasons, this controversy has been difficult to settle," Sklar said.

There is no disputing, however, that these lesions are severe and progress rapidly, he observed.

In order to select the best treatment for patients who develop the disease, physicians need to know whether the disease is cancerous or an infection. If it is cancerous, then anti-cancer radiotherapy and chemotherapy are appropriate, Sklar noted; if the disease is infectious, then anti-viral drugs may be important.

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What Sklar, Cleary and Warnke succeeded in doing was to use a "fingerprinting" method that can distinguish between malignant and infectious disease of the lymphocytes. With the method they showed that ten out of ten heart transplant patients had a malignant form of lymphoproliferative disease.

"This has important implications for treatment of transplant patients," Sklar and his colleagues reported. They suggested that transplant patients who acquire a lymphoproliferative disease should undergo the "fingerprint" test. If their disease is found to be malignant lymphoma, then anti-cancer therapy such as radiation treatment or chemotherapy should be "instituted at the earliest possible time, perhaps in combination with reduced immunosuppression," the researchers continued.

The researchers stressed that their findings should not discourage potential transplant recipients from pursuing treatment. "Although the high frequency of lymphoma in organ transplantation is an important problem, new approaches to therapy are being tried, and ways of reducing the risk of lymphoma may be found. Organ transplantation remains a very important form of therapy for certain patients with endstage diseases."

In addition to the immediate clinical benefit in being able to demonstrate that lymphoproliferative disease in transplant patients is malignant, the discovery could help in basic research attempts to understand the underlying biology of cancer, Sklar emphasized.

"These tumors can help us learn more about how lymphomas develop, and how the immune system normally acts to suppress malignancies," he said."Often, studying rare tumors leads to new insights into more common forms of cancer."

The research method used—originally developed by Cleary and Sklar—is called immunogenotyping. It relies on the fact that different lymphocytes in the body have slightly different arrangements of their genetic material, DNA. The scientists have found a way to detect each lymphocyte's special DNA arrangement, which is much like a "fingerprint."

The method also takes advantage of a fundamental difference between cell proliferation caused by a viral infection and cell proliferation associated with cancer.

A cancer, or malignancy, develops when something goes awry in a single cell, Sklar explained. That cell divides, giving rise to identical daughter cells, which again divide, and so on. The result is a "clone," or a proliferation of many cells all of which came from the original deviant cell. "Thus, cancer is a monoclonal disease," Sklar explained.

A viral infection, on the other hand, is "polyclonal," Sklar said. The virus may stimulate cell duplication, and at the same time, the viruses can spread from cell to cell. Thus, the disease arises separately in many different cells.

The researchers took lymphatic tissue from ten heart transplant patients who had developed lymphoproliferative disease. They examined the DNA "fingerprints" from the patients' diseased lymphocytes. In each case, they found the patient's proliferating cells had identical "fingerprints." This meant that each patient's disease was monoclonal, and therefore malignant.

The research was supported by grants from the American Cancer Society, the National Institutes of Health, the Jane Coffin Childs Memorial Fund for Medical Research, and the John A. Hartford Foundation.

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FOR IMMEDIATE RELEASE

UNIVERSITY TO NEGOTIATE RESEARCH SPACE LEASE AND AFFILIATION WITH HOWARD HUGHES MEDICAL INSTITUTE

STANFORD—

A recommendation authorizing Stanford University's vice president for business and finance to negotiate leasing medical research space to the Howard Hughes Medical Research Institute has been approved by the board of trustees.

The leased space of up to 30,000 net square feet will be part of the now planned $45-million Center for Molecular and Genetic Medicine (CMGM), according to the recommendation of the Committee on Academic Affairs and Development. The building will be located on land adjacent to the medical school, with construction expected to begin sometime in 1984.

CMGM, which will contain 70,000 net square feet, will house the laboratories of a new major academic program in molecular and genetic medicine--a broad-based effort to understand how the basic molecules of living things contribute to health and disease, said Dean Dominick P. Purpura of the School of Medicine.

The 40-year lease arrangement will provide advance rent payments from the Miami-based Hughes Medical Institute to begin construction of a portion of the CMGM building this year while other fundraising efforts for the structure are under way.

In addition, Purpura said, an affiliation agreement will be signed between the medical school and the Hughes Medical Institute covering such issues as faculty autonomy and other academic concerns. Hughes investigators will be employed by the institute, but their faculty status will be determined by Stanford medical school criteria. Only individuals meeting the criteria of both institutions will be appointed.

"In this respect," Purpura explained, "arrangements will be similar to those in place between Stanford and its affiliated Palo Alto Veterans Administration Medical Center in which Stanford faculty have employment status."

Stanford, as other major research universities, has had a long relationship with the institute founded by the late Howard M. Hughes to advance human knowledge in the field of the basic sciences (principally the field of medical research and medical education).

Under the program four senior Stanford faculty members were supported by the Institute as Hughes Fellows for eight years. The program came to an end two years ago because of lack of laboratory space.

In recent years, Purpura said, the Hughes Medical Institute has begun to establish long-term relationships with a number of distinguished universities, including Harvard, Yale, Columbia, Duke, and the University of California in San Francisco.

"Like the proposed arrangement now explored by Stanford, agreements between the institute and universities involve long-term leases of laboratories and placement of faculty in them to conduct medical research," Purpura said.

The CMGM building is expected to house the research of about 35 faculty members.

If agreements with the institute are signed as expected, up to eight of the faculty members will be Hughes institute investigators.

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FOR IMMEDIATE RELEASE

INFANT CAR SEATS A MUST

STANFORD—

Infant Car Seat Safety Week will be held at Stanford University Hospital Feb. 21-24, as a consciousness-raising effort to promote the use of the seats among new parents.

A display each day from 11 a.m. to 1 p.m. near the main center cafeteria will include bumper stickers, actual car seats for demonstration, and information about buying and renting infant car seats.

Auto accidents account for the highest number of fatalities among babies under one year old. In California, it is the family's legal responsibility to use a car seat for any child up to four years old or 40 pounds.

"I think the hospital has a moral responsibility to encourage the use of these seats upon discharge," said Candy McKinley-Cole, clinical nursing coordinator of the well-baby nursery, which is sponsoring the week's activities.

For further information, call McKinley-Cole at (415) 497-6776.

2-15-84 —30— LA1

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FOR IMMEDIATE RELEASE

NEW STUDY TO TEST INTERFERON'S ABILITY TO PREVENT CANCER RELAPSE

STANFORD—

Interferon, the protein that was initially—and prematurely—hailed as a "miracle cure" for everything from cancer to the common cold, may find an important niche in preventing cancer rather than curing it.

Stanford researchers are beginning a study of the substance's ability to prevent relapses in patients whose cancers have been controlled by conventional anti-cancer drugs.

The study, to be conducted in patients who have cancer of the lymphatic system, will take advantage of interferon's anti-growth properties and effects on the immune system which may prevent malignant growth, said study leader Dr. Sandra Horning, assistant professor of medicine at Stanford University School of Medicine.

Traditional anti-cancer drugs are more effective than interferon in treating lymphoma, but because they kill non-cancer cells as well as malignant ones they are too potent to be used on a longterm basis for prevention of cancer relapse, Horning explained.

Interferon wields more of an anti-growth effect rather than a "killer" effect, with the ability to slow growth in tissues where cells are dividing, she said.

Interferon also seems to play a "watchdog" role in the body's immune system, constantly on the look-out for abnormal cells. Thus, its natural role might enable it to zero in on and halt growth in small pockets of cancer cells at an early stage of relapse, Horning suggested.

Horning's colleagues on the study are Stanford professors of medicine, Drs. Saul Rosenberg and Thomas Merigan. Rosenberg is head of Stanford's oncology division and Merigan is head of the division of infectious diseases.

"This is the first study in the world to examine what may turn out to be a very important use of interferon," Rosenberg said.

The form of lymphoma to be focused on—low-grade non-Hodgkin's lymphoma—accounts for approximately 10,000 new cancers in the United States each year, Horning estimated.

Conventional chemotherapy initially can control this form of lymphoma in 75 to 80 percent of patients treated, Horning said. However, none of these patients is likely to be cured and approximately half will experience a relapse of lymphoma by three to four years following the chemotherapy, she added.

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Interferon has shown moderate anti-cancer activity when used alone in patients with this form of lymphoma, Horning explained. But it is less effective than conventional anti-cancer drugs, such as cyclophosphamide, vincristine and prednisone, she said.

Patients accepted into the program will receive conventional chemotherapy—or may already be undergoing such treatment—to bring their cancer under control, Horning explained.

Once the cancer recedes, the patients will be divided randomly into two groups, one of which receives interferon and the other a control group receiving none of the experimental drug. The interferon patients will receive daily injections of the substance for one month, followed by a three-month rest period. Then they repeat the one-month on, three-months off cycle three more times.

All patients will be followed and the rate of relapse compared in the interferon and control groups, she said.

Patients need not stay in the Stanford area during the study, Horning said, because interferon treatments may be administered near home by a physician, nurse, family member, or even by patients themselves. However, during each of the four on-interferon months, patients will have to return four times to Stanford so that various tests may be performed.

Possible side effects of interferon include fatigue, appetite loss, chills and fever, Horning said. Usually, these can be eliminated or controlled with simple over-the-counter remedies, she noted.

The study will last several years; about 50 patients per year will be accepted in the trials, Horning said. It is best if interested patients are referred to the study by their physicians, Horning said. Inquiries should be directed to research nurse Pat Gilman at (415) 497-5877 or 497-5777.

Several different kinds of interferon are known, all with potentially different benefits and applications, according to Horning. The type to be used in this study, she explained, is known as "alpha-interferon;" in the body, alpha-interferon is produced naturally by white blood cells.

However, because naturally produced human interferon is extremely difficult—and expensive—to purify, the researchers plan to use pure, genetically engineered interferon instead.

Genetically engineered interferon is produced by inserting a human gene coding for alpha-interferon into bacteria, which can grow rapidly and spew out large quantities of the protein, Horning explained. The interferon has been manufactured by the drug company Hoffmann-LaRoche, Inc., she said.

The study is funded by a grant from the National Cancer Institute.

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(Editors: photos available upon request.)

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MATHEMATICIANS/PSYCHIATRIST EXPLORES BEHAVIOR FROM A UNIQUE PERSPECTIVE

STANFORD—

Roy King never thought he'd end up a physician. He was studying in the Harvard University library one summer, doing research for the doctorate in mathematics he received from Cornell University. The librarian whom he'd often seen working approached him one day and said: "You don't seem to have the personality of a mathematician. You seem much more sociable."

That observation stuck in King's mind, he recalled. "I mulled over it for a few months and decided to try medicine."

At Stanford University Medical School, King never thought he'd end up a psychiatrist. It was during his rotations that he "fell in love with psychiatry. My mind works by putting a lot of facts together and synthesizing ideas," he analyzed. "Psychiatry is very liberating in that you have to consider many different aspects of a person—psychological, social, biochemical, pharmacological—and put them all together in order to make a diagnosis."

After getting his M.D. in 1979, King did a psychiatry residency at Stanford, which he finished in 1983. For the past two years as a post doctoral fellow and, starting in September as an assistant professor, King has been researching human behavior in a way that only a few are capable of. By combining his expertise in math and psychiatry, King has made himself, and his research, unique in the medical field.

Others are quickly becoming aware of his special qualities. His work on the measurement of external potentials of cell membranes was patented by General Electric. The young physician has already published more than 20 articles in professional and technical journals, including one coming out this month in the prestigious *Proceedings of the National Academy of Sciences (PNAS)*. Most recently, King received a two-year, $120,000 grant from the Robert Wood Johnson Foundation's Minority Medical Faculty Development Program to support his work.

King's research has focused on understanding the functions and effects of neurotransmitters, chemicals released in varying amounts by the brain that are known to affect behavior. In the current PNAS article, King, and coauthors Drs. Jack Barchas and Bernard Huberman describe the mathematical equations they've developed as a model to illustrate the erratic behavior in schizophrenic patients.

Existing models, King said, show that schizophrenic patients suffer from either too much or too little of any neurotransmitter. When King began observing patients' behavior, which often changed from calmness to violence within minutes, he quickly realized that a permanent defect in neurotransmitter levels did not adequately account for the conditions.

"What occurred to me was that their behavior, if anything, showed more variability, more fluctuation than normal behavior. It wasn't a matter of too much or too little of a chemical," King explained in his animated way.

Using nonlinear models mathematicians have created during the last 10 or so years, the scientists developed equations that provide a model of the unstable behavior that schizophrenic patients exhibit.

In other projects, King has been looking at specific neurotransmitters: dopamine, norepinephrine and serotonin. After measuring these chemicals in up to 100 individuals, King believes there may be a seasonal variance in their levels. For example, he explained, dopamine and norepinephrine levels seem to be higher in the winter than in the spring. This may account, he continued, for the more anxious and introverted feelings many individuals experience during the winter.

"What we don't know is if people are more active in the spring and that leads to changes in neurotransmitter levels, or if the seasons can predict behavior," King said.

The coming school year will see King treating patients in the clinic and teaching psychiatry residents as well as doing research. Hectic as the three activities may seem, they fit together well in King's mind. "In seeing patients and doing research I use similar tactics," he explained. "I have to gather all the information I can, get some type of global impression, and then start to pick apart all the facts."

And how does teaching fit in? "That's easy," King replied laughing. "I just like to talk a lot."

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Editors: Photo available upon request if not included.

SCHEMING OF HUMAN BRAIN HELPS OVERCOME LANGUAGE IMPAIRMENT

STANFORD—

Speech and language disorders that follow strokes or other brain injuries can be treated with more success than previously thought possible, contends Dr. Jon Eisenson, a Stanford professor emeritus of hearing and speech science.

To treat aphasia, a pathological disorder suffered by at least 50 percent of stroke patients, Eisenson in the course of his counseling has developed several approaches based on ideas set forth in his revised book *Adult Aphasia*, second edition (Prentice-Hall, 1984).

Aphasia is characterized by some loss of speech, reduced comprehension of language, and problems in reading and writing. Not limited to stroke victims, it can be caused by any insult to the brain, including brain tumors, hemorrhages, embolisms, head penetrating wounds, or—in the case of some children—congenital disorders.

Eisenson's treatment approach is based on the knowledge that the human brain is divided into right and left hemispheres, the left appearing to be involved with details and analytical functions, and the right hemisphere being more "intuitive," dealing with totalities.

Eisenson, a neuropsychologist and psycholinguist, illustrates his ideas with this example:

Think of a song you know very well. Try reciting the words silently to yourself, without the melody in mind, and stop when you first stumble. Now try it with the melody—you should get further.

The significance of this exercise goes way beyond its seeming simplicity, Eisenson said. Music and melody fall under the right hemisphere's jurisdiction. His treatment approaches for aphasia victims take into account the potential scheming of the human mind, which, in the case above, has elicited help from its right hemisphere to achieve a usually left hemisphere function: language.

"Even the most severely impaired aphasic's recovery can be enhanced if the significant role of the brain's right hemisphere is recognized," Eisenson said in a recent interview.

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"Speech intonation and inflection are melodic functions," he explained, "so perhaps language produced with exaggerated intonation might improve the aphasic's linguistic functioning. Since as far as we know brain tissue that is destroyed does not regenerate, recovery probably involves a reorganization of the brain so that healthy tissue takes over the function of destroyed and unhealthy tissue."

His approach supports the observation that left-handed and ambidextrous persons have bilateral control of language, and are thus less likely to incur aphasia unless there is damage to both hemispheres of the brain. Even when they do incur linguistic impairment, their outlook is in general better than right-handed individuals, more than 95 percent of whom control language in the left hemisphere, Eisenson said.

Left-handed individuals comprise 10-11 percent of the population; the ambidextrous only 1-2 percent.

One method Eisenson developed, to be published soon in a series *Reading for Meaning (A Syntactic-Semantic Approach)* (Modern Education Corp., 1984), involves teaching the aphasic to read without requiring the detailed segments of syllables, words and grammar. Instead it uses complete phrases, series of images and other visual illustrations. "These are based on grammatical constructions normal children acquire as they learn to speak," he noted.

He utilizes any method that will maximize the patient's potential while helping him to achieve communication on a level with his new capabilities. "Rather than insist on returning to the former level of ability, a good therapist can help the patient be as effective a communicator as possible under the circumstances."

This attitude can lead to better retrieval of language, whereas insisting on full conventional speech at the outset often leads to frustration. Future research, he said, should emphasize ways to approach the most severe aphasics with non-oral communication—signing, pointing, pictures—at the onset of language disruption. "We err when we use as a last resort that which should probably be used first."

"No patient should be given up on, no matter what," added Eisenson. "It's important to improve assessment criteria so that therapists can better anticipate prognosis and approach of choice. Each patient unto himself—that's the rule."

More likely to affect older persons, aphasia can be misdiagnosed, mistaken for senility or other afflictions of old age, such as loss of memory for names of events, things, people and places, Eisenson said.

Aphasia tends to affect more men than women. "This is in part related to factors like hypertension, hazardous working conditions, sports, and the fact that in general, males are more prone to neurological impairments than females," he added.

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The recovery rate for females is better too. The right and left hemispheres of female brains are believed to be not quite as differentiated in function as are those of males. Unless there is bilateral damage, the healthy hemisphere can more easily take over the functions of the injured one.

But the question of who will recover, when, how well, and how remains a very individual matter. Can doctors, lawyers, writers who have suffered from aphasia expect ever to go back to their lives as before?

"With many the answer is yes indeed," Eisenson said. "There is, however, a wide range of recovery, related to a person's age (the younger the better), sex, amount of damage incurred, and onset of treatment."

The earlier treatment is begun the better, he said. Recovery—which can take from six months to the rest of one's life—usually includes some degree of spontaneous language retrieval during the first three months after onset.

This will occur even in the absence of direct treatment, Eisenson said, and probably relates to a recovery of the brain cells surrounding those that were damaged. There are drugs that can accelerate this improvement, he noted.

Oral apraxia, a separate but related disorder, often accompanies aphasia. This, Eisenson said, is an inability to articulate, or to program the brain to produce the sequence of sounds the individual has in mind. "It's like a young child saying 'pasketti' for 'spaghetti,' but exaggerated because the patient makes error after error."

Those suffering from severe aphasia, apraxia or both should never be spoken to in an infantile way, Eisenson emphasized.

Therapy must take into account the patient's personality traits—both previous and those resulting from the impairment—as important factors. Eisenson also stresses group and family counseling for aphasic patients.

"Aphasia is really a family problem," he said. "If properly counseled family members can help a lot, whereas well-intentioned but unguided, they can do harm." This stems in large part from the emotional, financial, and other adjustments they all must make when faced with the new situation.

Eisenson is former director of the now defunct Scottish Rite Institute for Childhood Aphasia at Stanford. A prolific writer, he has also recently authored *Aphasia and Related Disorders in Children* (Prentice-Hall, 1984).

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FOR IMMEDIATE RELEASE

MEDICAL SCHOOL SPONSORS SCIENTIFIC SYMPOSIUM FEATURING STUDENT RESEARCH

STANFORD—

Organelles slither across cellular cytoplasm; tiny beads coated with a muscle protein rocket down long cables only a few molecules wide.

You can see it all take place on videotapes by Ronald Vale, a Stanford University medical student.

This microscopic look at the way muscle proteins work will be just one of the features at the first annual Stanford Medical Student Research Symposium Friday February 17 in Fairchild Auditorium at Stanford University School of Medicine.

The symposium was organized to give students engaged in original scientific research an opportunity to report on, and discuss, their results with other students, faculty, and interested members of the community, explained Dr. Robert Cutler, professor of neurology and associate dean for medical education.

The pursuit of research is an important component of medical education at Stanford, Cutler explained. The faculty senate of the medical school declared in 1980 that the school intends to develop students' capacities for leadership in the clinical practice of scientific medicine, and to provide opportunites for students to prepare for careers in research and teaching in the various branches of basic, clinical, and social medicine.

Approximately 75 percent of medical students at Stanford engage in research, Cutler noted.

"Stanford provides a unique environment compared to most other medical schools," explained Donald Hangen, a second-year medical student. "Every effort is made here to encourage student research."

Hangen, who is giving a poster presentation on his research project, helped organize the symposium along with John Stevens, also a second-year student. "We felt it would be a good way to help medical students share their research experiences," Hangen explained.

"We hope that the symposium will give the Stanford community exposure to the quality of research done by Stanford medical students," added Cutler.

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The program begins at 8:50 a.m. and ends at 4 p.m. followed by a reception in the auditorium lobby. To encourage attendance at the event, which is sponsored by the medical school dean's office, all medical school classes have been cancelled for the day, Cutler said.

The symposium, modeled after a professional scientific meeting, will consist of 12 oral presentations and 15 poster displays covering a full spectrum of medical research, he added. Selected faculty members will participate with brief discussions following each student presentation.

The program is divided into two morning and two afternoon sessions. Molecular genetics and regulation of the immune response will be the focus of the first morning session, followed by a period for looking at poster displays in the auditorium lobby. Neurobiology will be covered in the early afternoon, followed by a session on research advances in clinical medicine.

Cutler noted that for some students, the symposium would provide a first opportunity to publicly present research results. For other students more advanced in their careers, scientific meetings are familiar haunts. By the time they graduate, many Stanford medical students have already published articles in prestigious journals and participated in international scientific meetings.

All medical students were invited to submit summaries of their research last fall. A committee of faculty and students then selected the symposium participants, taking into account factors such as students' seniority and achieving a balanced blend of research topics.

Much of the student research conducted at the medical school is supported by scholarship funds from the Stanford Medical Alumni Scholars program, Cutler noted.

Cutler thinks that this symposium will be the first in an annual tradition. Although he is highly pleased with the quality and number of presentations this year, he hopes to see a greater representation next year from students conducting research in the areas of health care delivery and clinical medicine.

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FOR IMMEDIATE RELEASE

HENRY KAPLAN, CANCER RESEARCH PIONEER, DIES

STANFORD—

Henry S. Kaplan, an internationally renowned radiologist and cancer research pioneer at the Stanford University School of Medicine, died at his home Saturday, Feb. 4, after a five-month bout with cancer.

Death came peacefully at 10 p.m., according to his family.

The 65-year-old professor of radiology, who was a non-smoker, had undergone surgery in October for removal of a lung tumor. He had made a satisfactory recovery from the surgery, but he continued radiotherapy treatments for alleviation of pain.

Ironically, unlike other cancers for which Kaplan had developed effective treatments, lung cancer remains a big killer, he explained in an interview before his death.

"The best thing one can report about it is 12 percent survival. The problem is metastasis," he said. "We know very little about how this cancer spreads in the body, except for general distribution patterns."

In the last 40 years, he said, cure rates for lung and cancers of the pancreas and esophagus have remained equally unchanged at one and two percent respectively.

"Even before I got sick," Kaplan said, "I looked at this picture as dispassionately as I could. Overall I came down somewhat on the pessimistic side."

The grim statistics, Kaplan added, provide a measure of the scientific challenge that still exists.

Kaplan, who lived on the Stanford campus, is survived by his wife, Leah, who is a psychiatric social worker and director of the Stanford Help Center, a counseling center for university employees. They have two grown children, Ann and Paul.

Memorial services will be held from 3 to 4 p.m., Sunday, February 12 at Fairchild Auditorium of the Stanford School of Medicine.

Last December, in recognition of his major contributions to the university and to society, the Stanford University Board of Trustees approved a resolution creating the Henry S. Kaplan Professorship in Cancer Biology.

The resolution recognized Kaplan as an "exemplary teacher, a world-renowned scientist, and a distinguished caring physician."

The establishment of the endowed chair, the resolution added, will permit the medical school to attract a senior scientist to carry on Dr. Kaplan's work and to head his Cancer Biology Research Laboratory.

Kaplan is best known for his contributions to clinical medicine, and as the co-inventor of the first medical linear accelerator in the Western hemisphere.

Judging correctly that the effectiveness of radiation treatment was limited by the crude and low-powered x-ray machines then available, Kaplan in the early 1950s suggested that the linear accelerator, an experimental tool used by atomic physicists, might be adapted for cancer therapy.

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The linear accelerator shoots particles down a tube to a target. When the beam of particles collides with the atomic target, a burst of energy that includes x-rays and other forms of radiation is produced. These x-rays could be harnessed and aimed to deliver controlled bursts of radiation to areas of tumor growth in the body.

He talked to former Stanford professor and now trustee Edward Ginzton and others at a luncheon in San Francisco.

"It sounded miraculous," Kaplan recalled, "and not only had I convinced myself, but at the end of the luncheon I had convinced all of them. I told them this would become the radiotherapy machine of the future."

Along with Stanford physicists led by Ginzton (now board chairman of Varian Corporation), Kaplan helped design the cumbersome machine into a useful apparatus and performed the first experiments.

But building the machine wasn't easy.

"Unlike the young researchers we recruit today, who are handed everything on a silver platter," Kaplan said, "it took us two years in the richest country on earth to raise $150,000."

The six-million-volt machine was eventually constructed on campus and moved to San Francisco, where the medical school was then located. Then a new problem came up.

"Before we could assemble it," Kaplan said, "it was clear we had to have protection from its beam."

J. Wallace Sterling, then president of Stanford, went to the Irvine Foundation for help. A meeting was arranged in San Francisco.

At the time it was publicly known that Stanford was preparing to move its medical school from San Francisco to Palo Alto in four years. Kaplan told the foundation people that if they helped him to install the machine in the city, a great deal could be learned in the interim.

"This is like a rifle," Kaplan told them. "The past machines have been like shotguns. We're going to have to learn our profession all over again. We're going to have to work out technical procedures that have never been done before. The opportunity to have four years to do that is crucial."

With a $75,000 foundation gift, Kaplan built a tiny concrete box into a hillside in what is now the Pacific Medical Center. It was well protected and had a hatch on top because he knew that someday he would have to bring a crane along to pick the machine right up through the ceiling and bring it to Palo Alto.

In 1955 the machine was installed. A team of physicists calibrated it. And the great day came when Kaplan was ready to turn on his machine on a patient.

"The true story is stranger than anything I could have made up," he said. "We had had bull sessions about what kind of cancer patient would be our first referral. The first was a child with retinoblastoma in the only remaining eye. Surgeons had already removed his other eye for the same type of cancer.

"I don't think I will ever forget the puzzled look on the face of the garage owner down on Fillmore Street when I asked him to borrow a heavy duty automobile jack, and then explained that it was to carry a huge block of lead with a pinhole in it, to enable us to position that pinhole daily for six weeks directly opposite the tumor in the baby's eye while missing the lens and cornea. The boy is now in his twenties and doing well, with his vision in the treated eye intact."

Today, medical linear accelerators are the cornerstone of radiation therapy. The machines are found in cancer treatment centers and hospitals worldwide. Kaplan's pioneering work in radiation therapy has led to notable gains in treating a wide variety of cancers, from tumors of the prostate to those of the urinary bladder, nasopharynx, testicles, ovaries, and childhood retinoblastomas.

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But in no malignancy have the gains been more dramatic than in Hodgkin's disease, a cancer of the lymphatic system. In association with Dr. Saul Rosenberg and other colleagues, Kaplan devised an aggressive diagnosis and treatment protocol combining radiation, chemotherapy and surgery.

This multi-pronged treatment program has turned Hodgkin's disease around from a hopeless illness to a more than 80 percent curable disease. Today at Stanford, more than 85 percent of Hodgkin's patients survive seven years after diagnosis, and 75 percent are permanently cured. In children, survival rates soar to 96 percent alive 11 years past diagnosis, and 93 percent of treated children never experience a relapse.

In addition to lifesaving clinical gains, Kaplan has made important discoveries in cancer biology. His most important are studies of mice exposed to x-rays and chemicals. Kaplan found that the leukemias and lymphomas the mice developed were caused by a latent virus activated when the radiation or chemical agents suppressed the body's normal immune system function.

Demonstrating that viruses cause lymphoma in animals gave hope to researchers that a viral cause of cancer may be found in humans as well.

Kaplan contributed to another important area—monoclonal antibodies, originally produced from mouse cells by Cesar Milstein and Georges Kohler in England in 1975. These are proteins from the immune system capable of recognizing highly specific target cells in the body and marking them for destruction by the immune system. The idea has excited scientists who see their potential as "magic" bullets for locating and destroying cancer cells in patients. In 1980, Kaplan's group reported it had produced a similar pure antibody protein from cultured human cells. This achievement was considered an important milestone since the human protein might be more desirable than a mouse product for actual cancer treatment.

Throughout his career, Kaplan earned a reputation as a cogent critic of the medical school and university administration. Among his many battles was to get the university to recruit outstanding faculty leaders for the Stanford medical school after its 1959 relocation from San Francisco. Among them were Arthur Kornberg and Joshua Lederberg. The two received Nobel prizes, "and because of that," Kaplan said, "Stanford was catapulted literally from a second or third-rate medical school into some kind of mysterious but very exciting place that students thought of in the context of Harvard." Because of a greater emphasis on research, Stanford soon joined the ranks of a dozen or so medical schools generally regarded as setting the pace in American medical education.

Kaplan was born April 24, 1918, in Chicago. His lifelong commitment to combatting cancer began when he was only 15 and suffered the loss of his 45-year-old father to lung cancer. Then a high school senior, the young Kaplan soon went on to the University of Chicago, earning his undergraduate degree at age 20 in 1938. He obtained his M.D. from Rush Medical College in 1940 and went on to complete internship and residency training at Michael Reese Hospital by 1943, as well as acquiring an M.S. in radiology from the University of Minnesota in 1944.

Kaplan subsequently held positions at Yale University and the National Cancer Institute in Bethesda before joining Stanford University School of Medicine as professor and chairman of the department of radiology in 1948, a position he relinquished in 1972. While holding the post, Kaplan brought innovation and acclaim to the department, not only through his clinical and scientific work but in teaching practices as well.

In recent years Kaplan held the Maureen Lyles D'Ambrogio professorship and directed the Louis B. Mayer Cancer Biology Laboratory, continuing biological research. Some new, important work in this connection will be published in the coming months.

As a clinician, Kaplan saw many patients regularly, developing unusually close relationships with many of them. In 1982, more than 400 of Kaplan's former Hodgkin's disease patients and their families attended a reunion at Stanford to mark 20 years of successful clinical trials against the disease.

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Among Kaplan's many awards several stand out. In 1969, he received the Atoms for Peace Prize, the only physician to be so honored. In the same year he also received the Shahbanou Award from the Lila Motley Cancer Foundation, the Order of Merit from Italy, and he became a Chevalier in the French Legion of Honor. In 1971, Kaplan received the L.L. Villiers Award from the Leukemia Society of America, and in 1972 he was given the American Cancer Society's Annual National Award as well as becoming the first radiologist to be elected to the National Academy of Sciences. In l975, he was elected an Honorary Fellow of the Royal College of Radiologists, United Kingdom. In 1978, he received the Lila Gruber Cancer Research Award, and in 1979 he became the first recipient of the prestigious Charles F. Kettering Prize from the General Motors Cancer Research Foundation.

In the political sphere, Kaplan has been a vocal proponent of human rights. In 1978, he and other prominent cancer researchers led a boycott of an International Cancer Congress held in Buenos Aires, and staged "a counter congress" in Paris to protest repression of human rights in Argentina.

When asked what he would like to be remembered for, Kaplan replied, "My accomplishments that stand the test of time such as the work on Hodgkin's disease and malignant lymphomas. That is an area where there will be continued further improvement, but I think we contributed a foundation stone which today is leading to cure worldwide of hundreds of thousands of patients.

"It's hard for me to know whether my work on mouse virus or radiation-induced lymphomas will be remembered or not. I happen to think it's very interesting, but I have the feeling people tend to gloss over it.

"I'd like to be remembered as the co-developer of the medical linear accelerator for cancer treatment, which today is a standard of excellence throughout the world. And not just for developing the machine, but the standards for its use. They are part and parcel of that development.

"I'd like to be remembered for my service on the National Cancer Advisory Board in 1960 at a time when the number of radiotherapists in the United States was about 120, and the number of physicians in radiotherapy training was only 18. Today, as a result of these efforts, there are close to 2,000 board-certified radiation therapists.

"Those are the accomplishments. As for the rest, I'd like to be remembered as somebody who has been basically kind and deeply concerned about his patients, and very humane in dealing with them.

"At the same time I'd like to be remembered as somebody who was tough enough to be willing to fight the battles with a number of deans—battles needed to create and maintain high standards, not just for our department but for the Stanford medical school. I fought more battles that had nothing to do with radiology than almost anybody in the school.

"So viewed from one side, I think I was a kindly physician, a role model. Viewed from another, I was perhaps a malignant son-of-a-bitch who drove deans to despair and was known as a dean killer. These two kinds of things were sort of hard to reconcile. But I must confess, I never enjoyed fighting with deans, I never enjoyed it for a minute. It took an awful lot out of me. Yet if I believed I was right, I didn't care how hard I fought.

"I'd also like to be remembered as somebody with a reasonably good sense of humor, with a love of art and music and literature, and hopefully as a good husband, a good father, and a loyal friend."

The family would prefer memorial contributions to be made to the Henry Seymour Kaplan Professorship in Cancer Biology or to the Henry S. Kaplan Commemorative Sculpture that will be sited on the medical center campus as a tribute to his contributions to science and medicine. Checks can be sent to the Development Office of the School of Medicine, 780 Welch Road, Room 106, Palo Alto, California 94304.

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FOR IMMEDIATE RELEASE

STANFORD—

CITY DESKS: In an interview before his death Henry S. Kaplan, Stanford's cancer research pioneer, discussed his views on the future of cancer research, national cancer policy, and the philosophy which guided his work.--Ed.

Throughout his 35-year career at Stanford, Henry S. Kaplan, who died of cancer Saturday, Feb. 4, remained an influential force in the policy counsels of the Stanford medical school.

An astute and tough-minded clinician-scientist, he reigned supreme as chairman of the department of radiology from 1948 through 1972, as one of the engineers of the medical school's consolidation on the Stanford campus in 1959, and more recently as director of the Louis B. Mayer Cancer Biology Laboratory.

Nationally, Kaplan exerted an equally important influence as a member of a group of top-flight academic scientists, foundation officers, and government officials who have dominated the directions of national cancer research policy during the past 20 years.

In a rare interview before his death, Kaplan discussed these years and some of his views, with the characteristic candor that has distinguished him all his life.

On the future directions of cancer research:

"Many of the newer radiobiological approaches have been tried. One approach that hasn't been tried well is the use of radiosensitizers, chemicals that may render tumors more amenable to radiation therapy. They may not pan out out as an effective treatment. But we need studies to prove this point, and our people are doing this work now.

"The second area of future development is hyperthermia interacting with radiation. Its underlying mechanisms are not well understood. This approach could be an enormous success, but we don't know that yet. The use of new machines that permit heat to be directed more deeply within the body might provide answers.

"A third approach depends on external beam radiation combined with interstitial radiation. It's an approach that does less overall damage to the tissues while affording a good probability of eradicating the tumor.

"The technique is used with the greatest effect in early breast cancer. This I think is a big development. The method makes it unnecessary to remove all the breast. All that needs to be removed is the small lump. It's a most appropriate treatment for women with small lumps. Many women will refuse to go to their doctor until the lump is too big and their chances of saving the breast have been seriously reduced. If they knew they did not have to lose a breast by a procedure that offers the same long-term survival, they would come forward early. I see this development pushing radical surgery for breast cancer into a much more restricted frame.

"I don't foresee any other major thrusts in radiotherapy, just as I don't see any in chemotherapy, except with the advent of new drugs that are really effective and not too toxic. The last really good drug was cis-platinum, introduced 12 or 15 years ago. That says to me that it isn't easy to find new drugs that really have a different mode of action and are free of toxic effects.

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"Beyond that, there's excitement in oncogenes or cancer genes. It may be that some brilliant molecular biologist will be smart enough to figure a way to 'neutralize' the effects of their abnormal expression and 'put the cancer to sleep' so to speak. That's a possibility, but it's obviously a very speculative one.

"We may also make progress in understanding cancer due to viruses where we have a potential handle on the disease. The identification of a human T-cell leukemia-lymphoma virus by Robert Gallo at the National Institutes of Health is an important step. This virus occurs in a selected group of T-cell leukemias and lymphomas in Southern Japan, the Caribbean basin, and adjacent shores of North and South America. That's fascinating and important, but it accounts for a very tiny amount of the total problem.

"And we have monoclonal antibodies to cancer-related antigens. This is an important development that could have promise in cancer therapy. If I were well, our program would be oriented in a strong way toward trying to develop such antibodies. I realize this is exceedingly difficult. But antigens capable of stimulating human white cells do exist in many cancers, and that would be the direction I'd like to see followed.

"With these exceptions, I cannot really see any major new directions from which big increments in the results of cancer therapy are going to come. I looked at this as dispassionately as I could before I got sick, not just now that I could take an unduly pessimistic view."

On national cancer research policy:

"The biggest problem I see is the politicization of the boards called upon to make decisions at the federal level. Today, the National Cancer Advisory Board is a heavily politicized body with relatively little scientific competence. That was not true 15 or 20 years ago. Each president in recent years has carried this one step further, and Mr. Reagan has really done it much more than before. Now, we have Republican businessmen and Republican writers and conservative right-wing thinkers, all pronouncing judgments on how funds for cancer research should be allocated, while a tiny, handful of very frustrated, competent scientists on the board cannot get their opinions through.

"An example of this in recent years was the political influence of people who argued we must identify every mutagen in the environment. Today, we know that most mutagens are not cancer-inducing so that a lot of that thrust was false and unwarranted. Structural rearrangements of chromosomes are meaningful in cancer and what brings them about is an important area of future research, but it's outside the general meaning of the term, mutation.

"This politicization has not yet happened at the lower echelons of the National Cancer Institute. The boards of scientific counselors of the different branches are still made up entirely of scientists and physicians, and they function well. How long it will last is unclear."

On what makes a great academic clinical department:

"When I became chairman of radiology at Stanford in 1948 there was not a single radiology department in the world in which there was scientific research. The only thing called research for radiologists was to sit on their butts in front of a viewing box and look at film and perhaps collect one or two cases of some rare malformation. I felt it was very important for diagnostic and therapeutic radiology to have an experimental as well as a clinical base. I insisted on having a laboratory from the start. I felt intuitively that it was no good having a department chairman make big speeches about how important research is and himself do no research whatever. I insisted on doing research myself and demanded the same of everybody. But it was a given that the quality of patient care in the department had to be absolutely first class."

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FOR IMMEDIATE RELEASE

SUPPORT GROUPS: GETTING BY WITH A LITTLE HELP FROM FRIENDS

STANFORD—

When Sue Peterson left Stanford University Hospital after giving birth about seven years ago, her twins weighing less than three pounds each stayed behind.

"The emotional impact of having to leave our babies in the hospital for nine weeks because of complications due to their premature births was devastating," she recalled recently. The boys, Benjamin and Bradley are healthy now but then, "my husband and I felt like we were the only ones in the world that who were experiencing this. There was no one else to talk to, no one whom we felt really understood."

So about a year ago, Peterson, with the help of one of the hospital's social workers, formed a support group for parents of preemies and infants in the intensive care nursery. "Our main purpose is to provide an opportunity for parents in similar situations to share their feelings, lend support, and learn to feel comfortable about their infants' conditions," she said.

The preemie parent support group is just one of many groups available for patients and their families in nearly every hospital department. Groups exist for hematology patients, different types of cancer patients, and heart and heart-lung transplant and cardiology patients. There are groups for eating disorder patients, dermatology patients, spina-bifida patients, and for parents of pediatric patients and of children who have died. Regardless of the focus of the group however, the basic purpose is the same.

"We try to provide a way for people to hook up together to provide support for each other," said Steve Katz, a clinical psychologist who helps guide a head and neck surgery support group. "The individuals themselves are the helpers," he continued, recalling one girl who had lost the ability to speak due to surgery. Inspired by those in the support group who had learned to compensate, she eventually did learn to talk again. "We just provide the settings," Katz said.

When Katz and co-founders began to organize the head and neck surgery support group nearly two years ago, they held meetings in the community to identify the specific needs of its potential members. "Patients and their families felt they needed weekly meetings during which they could talk to others in similar situations, a network for members to talk to each other on the telephone or visit each other in their homes, and periodic education on topics, such as relaxation and dealing with pain, unique to their medical condition."

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"Even after my boys came home," Peterson recalled, "they didn't develop along the same timeline as do full-term babies." Just knowing that slower development is normal, and that other parents are seeing the same delays and experiencing the same anxieties is comforting, she said.

The preemie parent group, which has about 50 members, also offers overnight housing, food, transportation, and child care to families in which the mother is giving birth. "Parents are so receptive and so grateful," Peterson said. "We don't give any medical advice, or offer any sweeping statements about what the future holds for an infant. All we want to do is let others know they're not alone."

That feeling of not being alone is key to all support groups, Katz said. Howard Larson had his larynx, tongue, pharnyx, and jaw portion removed to rid his body of cancer. His recovery was quick, he said, thanks to the full support of his family and many colleagues at work. Larson goes through myriad note pads to communicate with others, and uses a computerized voice synthesizer that enables him to "talk" on the telephone in his position as a NASA consultant.

Considered somewhat of a model to other members of the group, Larson comes to the weekly meetings, at which there are as many as 20 others, even four years after his surgery. He's always ready to share an experience or offer advice to others who may be going through what he did.

"Helping others," he wrote at a recent meeting, "is good medicine."

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FOR IMMEDIATE RELEASE

NOTED RADIOLOGIST RETURNS TO STANFORD

STANFORD—

Dr. Herbert L. Abrams, noted diagnostic radiologist and cardiovascular system specialist, is scheduled to join the faculty as a professor of radiology at Stanford University Medical School Sept. 1, announced Dean Dominick Purpura.

His appointment marks a return to Stanford, where Abrams held positions as director of the diagnostic radiology division from 1960-67, and instructor and professor from 1951-67. In 1967 he moved to Boston, where he is currently Philip H. Cook Professor of Radiology at Harvard Medical School, chairman of the radiology department at Brigham and Women's Hospital, and chief radiologist at the Sidney Farber Cancer Institute.

Abrams served as a visiting professor of radiology at Stanford in 1980-81, during which time he was also a Henry J. Kaiser Senior Fellow at the Center for Advanced Study in the Behaviorial Sciences, Palo Alto.

He is involved in many professional associations, including fellowships in the American Colleges of Cardiology and Radiology. Abrams has also held many editorial positions, and is currently editor-in-chief of *Cardiovascular and Interventional Radiology* and *Postgraduate Radiology*, and is on the editorial executive committee of *Investigative Radiology*.

Abrams received his M.D. in 1946 from State University of New York, Downstate Medical Center, and an honorary A.M. degree in 1968 from Harvard University. He has authored and edited a number of books, including *Angiocardiographic Interpretation in Congenital Heart Disease* (1956), *Congenital Heart Disease: An Illustrated Diagnostic Approach* (1964), *Abrams Angiography* (1983), and *Coronary Arteriography: A Practical Approach* (1983). He has also published more than 170 articles on angiography, cardiovascular physiology and disease, cardiac radiology, computed tomography, pharmacoradiology and technology assessment.

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FOR IMMEDIATE RELEASE

DO YOUR CREATIVE WRITING ELSEWHERE, MEDICAL CENTER OFFICIAL SAYS

STANFORD—

Stanford University Medical Center has a $28,000 graffiti problem.

That's what it cost the center to clean up its restroom walls last year, said Karl J. Hickethier, executive housekeeper.

His department, Hickethier estimates, spends an average of seven minutes a day cleaning X-rated prose and other creations of the mind in each of the center's 70 public restrooms.

Black felt pencil marks are the toughest to remove, he said. They require use of abrasive pads and hard detergents which cause damage and require a lot of wall painting.

The biggest graffiti problem seems to be in the building where some of the medical school's most creative minds work--the clinical sciences research building.

Patient rooms in the Stanford University Hospital have no graffiti problem, he said.

It used to cost more to clean up restroom graffiti in the past, Hickethier pointed out. Cleaning substances were only 50 percent effective. Now housekeepers use "Goodbye Graffiti," a cleaning product which is 90 percent effective.

Hickethier's point: this expense could be eliminated if people restrained their impulses to write on bathroom walls.

Feb. 3, 1984

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FOR IMMEDIATE RELEASE

TRANSPLANT PROGRAM PRAISES INSURERS' POLICY

(Editors, news directors: The following story was sent Thursday on Business Wire to California points)

STANFORD—

A decision by Blue Shield of California to pay for heart and heart/thlung transplant operations at Stanford Medical Center was hailed Thursday (Feb. 2) as "an extremely positive step toward making the procedure more available to the public," said Lois Takaoka, the program's administrative services manager.

The action, said Takaoka, represents the first time a major insurance company has stated as a matter of policy that it would pay for heart transplants and the newer combined heart/lung procedure.

Dr. Edward Stinson, professor of cardiovascular surgeon and head of Stanford's cardiac transplant program, said he was "gratified by the company's (Blue Shield's) recognition that cardiac transplantation at Stanford is a therapeutic procedure which should be made available to the public through normal insurance channels."

Takaoka said she believed that Blue Shield's action set a precedent which other insurance companies and public funders of medical care such as Medi-Cal might hope to follow.

Takaoka noted that a majority of insurance companies currently pay for all or part of the cost of heart transplantation without stating their intentions as a matter of policy. "This should relieve some of the ambiguity and uncertainty from patients whose survival depends on a transplant operation."

Blue Shield's action, announced at a Bay Area news conference, applies only to transplants at Stanford, where Dr. Norman E. Shumway performed the first adult heart transplant operation in the United States in 1968. Since then, 291 transplants have been performed.

Stinson has stated that new programs should be initiated with caution. Both he and Shumway, now chairman of the department of cardiovascular surgery, have credited the current 75 percent two-year survival rate to exhaustive laboratory research and meticulous followup care by a large team of health care professionals.

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Members of the Stanford team have expressed concern that a proliferation of transplant centers will cause competition for the already scarce supply of donors. Stinson has said that the shortage of donors is the single greatest barrier to an expansion of cardiac transplantation.

Public attention has focused on patient care costs in recent years as the operation has moved further from the experimental arena. Each year, Takaoka said, federal grant money pays a decreasing proportion of the patient costs of transplantation.

By 1987, she said, all patient care funds for transplantation will be phased out for heart-only transplants, making insurance coverage vital. The transplant program is currently funded for $7.8 million for five years through 1987 by the National Heart, Lung and Blood Institute. The money is largely earmarked for cardiac transplant research with only a small portion for cover hospitalization.

Stanford now requires a $125,000 guarantee from patients to cover the cost of the operation, as well as pre- and post-transplant care. The operation costs about $10,000, which is only slightly more than the average cost of open heart surgery. Most of the costs, physicians in the progam have explained, involve cardiac care while the search for a donor is underway, as well as medications and hospitalization after surgery.

Stanford University Hospital's patient admitting service has estimated that insurance companies have provided substantial coverage for 80 percent of heart transplant patients. The federal Health Care Finance Administration currently is conducting a study to determine the feasibility of providing cardiac transplantation under the Medicare program, which recently has only paid for selected transplants in conjunction with the study.

Stanford's figures disclose that Blue Shield has denied coverage for three patients since 1981. Patients covered under a combination of Blue Shield and Blue Cross were approved 22 times and denied four other times.

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FOR IMMEDIATE RELEASE

CONFERENCE WILL CHART FUTURE DIRECTIONS IN RESEARCH ON MENTAL ILLNESS

STANFORD—

Some of the country's leading researchers in behavior and basic neurobiology will meet Friday and Saturday (February 3 and 4) near Stanford University Medical Center to discuss future directions for research in mental illness.

The meeting is an attempt to meld widely differing approaches to the study of brain and behavior, according to Dr. Jack Barchas, Nancy Pritzker professor of psychiatry and behavioral sciences at Stanford University School of Medicine. Barchas and Dr. John Madden, senior research associate in psychiatry and behavioral sciences, organized the meeting.

The experts assembled range from neurobiologists studying nerve pathways of learning in sea slugs to cognitive psychologists examining behavioral patterns in primates. By gathering together scientists studying different levels of the nervous system and behavior, Barchas and Madden hope to stimulate new research approaches to the problems of human mental illness.

Participants include Stanford psychology professors Albert Bandura, Richard Thompson, Gordon Bower and Jeffrey Wine, as well as biology professor Richard Scheller and neurobiology professor Carla Shatz, among others.

A keynote speech will be delivered by Dr. Steven Matthysse of Harvard Medical School, and closing addresses will be given by Dr. Seymour Kety of the National Institutes of Health, and Dr. Floyd Bloom from the Scripps Institute in La Jolla

Science and medical writers are welcome to attend the conference.

Friday sessions, beginning at 8:45 a.m., will take place at the Center for Advanced Study in the Behavioral Sciences at 202 Junipero Serra Boulevard on the Stanford campus. Saturday's sessions, beginning at 9 a.m., will be held at the Hyatt-Palo Alto Hotel at 4290 El Camino Real.

The meeting is sponsored by the Center for Advanced Study in the Behavioral Sciences, the MacArthur Foundation, the Foundations Fund for Research in Psychiatry, and by the department of psychiatry and behavioral sciences at Stanford University School of Medicine.

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EDITORS: Advance for release to coincide with presentation at 12:30 p.m. (Central Standard Time) Tuesday, April 3 at Annual Meeting of the Federation of American Societies for Experimental Biology in St. Louis, MO.

RESEARCHERS FIND CLUE TO ACTION OF COMMON ANTI-EPILEPSY DRUG

STANFORD—

Stanford University scientists reported Tuesday April 3 an advance toward understanding how a commonly prescribed anti-epileptic drug may act in the brain to control seizures.

Dr. Dora Goldstein, professor of pharmacology at Stanford University School of Medicine, and graduate student Barry J. Perlman found that sodium valproate, a widely used anticonvulsant, seems to achieve its antiepileptic effect by disrupting the highly organized structure of brain cell membranes.

In addition to providing new information about the biochemical action of a commonly used drug, the finding could be used to help develop better medications for controlling epilepsy, a condition that affects approximately one million individuals in the U.S., the researchers said.

Goldstein and Perlman reported on their work April 3 at the annual meeting of the Federation of American Societies for Experimental Biology in St. Louis, MO. The research was carried out with funds from the National Institutes of Health.

The researchers studied in mice the activity of sodium valproate and a group of sedative chemicals closely related to it. They found a strong correlation between the chemicals' abilities to alter cell membranes and their anticonvulsant effects: the chemicals most disruptive to the brain cell membranes were also the most powerful in controlling seizures.

"These results provide strong evidence suggesting that sodium valproate and other short chain fatty acids might exert some of their anticonvulsant effects by disordering brain cell membranes," the researchers said.

Sodium valproate is a molecule in a family of lipid chemicals known as short chain fatty acids. These drugs have been shown to have anesthetic effects in animals, although how they produce their actions has been an unknown.

Used in Europe since the early 1970s, sodium valproate was approved in the U.S. as an anti-epileptic in 1978, and is quite effective against different forms of epilepsy, Goldstein and Perlman noted. However, like all other anti-epileptic medications, it does not work for every patient and it has some side effects such as liver toxicity in in rare cases, they said.

Drug companies and medical researchers would like to design drugs that can help more people while producing fewer side effects, the researchers noted. However, in order to design more effective drugs it is helpful to understand at the biochemical level how available medications produce their desired effects in the body.

Goldstein and Perlman administered several different short chain fatty acids to mice that had been given a seizure-inducing drug—a standard method used in testing strength of anticonvulsant agents. They compared the relative anticonvulsant potency of these different lipids and determined the actual brain levels of drug achieved at the time of seizure protection. All the fatty acids displayed anticonvulsant ability of differing strengths, the scientists reported.

The chemicals' anticonvulsant potencies were then correlated with their actions in disordering cell membranes. Just as a hard cube of butter can soften when warmed, these chemicals cause cell membranes to fluidize and become less rigid.

To find the degree to which each chemical disordered cell membranes, the researchers used a technique called fluorescence polarization. In this method, dye molecules were inserted into the membranes of brain cells taken from the drug-treated mice.

Analysis of fluorescent light emitted from the dye molecules in the membranes gave a measure of their freedom to rotate. Stiff, tightly ordered membranes held the dye molecules in place, whereas the dye molecules could twist in the fluid, disordered membranes.

Since the most powerful anticonvulsants were also the most effective membrane-disordering agents, the researchers suggested that the membrane-jumbling effects of the short chain fatty acids may be the key to how these chemicals protect against seizures. But a further question to be answered, they added, is how disordering of brain cell membranes can prevent epileptic seizures from occurring.

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END ADVANCE FOR RELEASE

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FOR IMMEDIATE RELEASE

PHYSICIANS PREDICT OUTLOOK FOR PATIENT SERVICES

STANFORD—

Four prominent physicians agreed Tuesday night (March 27) that health services are being reduced by economic pressures but that the quality of care for patients need not necessarily decline.

"Things that you are used to getting are going to change," said Dr. James F. Silverman, chief of staff at Stanford University Hospital (SUH). "Services will become more spartan."

Silverman moderated the first of three public Progress in Medicine Lectures on "Health Care in Crisis," sponsored by the Stanford Medical Center. He was joined in the panel discussion by Dr. Melvin C. Britton, an internal medicine physician at Palo Alto Medical Foundation; Dr. Halsted R. Holman, professor of medicine at Stanford; and Dr. Michael Jacobs, director of the Stanford Medical Group, a group practice operating within the university's Faculty Practice Program.

Entitled "Cost Controls: What Does it Mean to You and Your Doctor," the first of the three Tuesday lectures focused on how rising health care costs have resulted in a variety of cost containment measures which are affecting patient services.

"We all try to ration care without losing quality," said Silverman, a diagnostic radiologist. "That's where you see the system is right now."

However, David Sakai, SUH's director of finance and one of about 150 audience members, said during a question and answer period Tuesday that he perceives many of the changes noted by the panelists as temporary.

"We're talking about a cycle." Access to care, he said, may be somewhat restricted, but he predicted it constraints may ease. Sakai pointed to market pressures which could be driven by a consumer demand for more choice than prospective payment plans allow.

Examples of such plans are health maintenance organizations (HMOs), such as Kaiser or TakeCare, and prospective payment plans, such as Blue Cross' new Prudent Buyer plan. In the public sector, MediCal is now offering services on a contract basis, paying less than full cost for the patients it supports.

Since they will not be fully reimbursed or have a financial incentive to increase services, health care organizations might feel pressured to cut back on services, which Holman said can sometimes be a blessing in disguise for patients.

"Elimination of redundant or unnecessary practices means that the doctor has to begin to think about the usefulness of the tests and treatments we use. Do they really provide benefits to the doctor in the decision-making or the patient in the outcome.

"Many of the practices which we consider good in professional terms, which we teach and which we use, can be shown to be redundant or unneccessary," added Holman, who co-founded Mid-Peninsula Health Services, Inc., a prototype patient-involved, health care delivery system intended to reduce costs."

As an example, Britton, who directs the TakeCare health maintenance organization at Palo Alto Clinic, said some recent studies have shown "the actual outcomes for patients with pulmonary edema in intensive care units are not better than in general hospital wards or other units." He said physicians and the public will need to question intuitive notions that high technology treatments are automatically better.

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"Those intuitive notions may absolutely be proven false. (We must) answer the question of tertiary care (high technology care for extremely sick individuals) by asking, 'who really needs it?' "

Jacobs said cost-saving payment plans, such as HMOs, may run counter to patient expectations.

"Often patients will come to Stanford expecting that they're going to get a very, very, thorough comprehensive evaluation without a whole lot of sense of being rushed through the system. But that's just not going to be financially feasible once we start feeling the impact of an HMO" where a predetermined amount has been paid.

"We cannot," Jacobs continued, "take an hour or two hours to do a lot of expensive tests. I have a feeling that patient expectations are going to have to adjust to this.

"Secondly, will there be a price paid in terms of misdiagnosis because we are moving faster and we are not using the available resources that exist here at Stanford.

"...Time will tell us. In the meantime, I feel we really have very formidable challenges ahead of us. I think these challenges are quite exciting."

On the other hand, both Jacobs and Britton agreed that some procedures are performed because the patient expects certain things, which may not be necessary.

"Ask your doctor," said Britton, "'Why are you taking that X-ray?'" Britton said when he's asked that, he will stop and think whether he's ordering the test because it is truly necessary or because patients simply expect to have a wide variety of tests performed.

"It never hurts to ask," he added.

"I think a lot of what we do with taking care of patients is responding to what we perceive the patient's expectations are," said Jacobs. "And I think in many instances I'm quite aware of a lot of hocus pocus that I do with an ophthalmoscope looking in somebody's eyes, and a stethescope on sombedoy's chest that I listened to a year ago. If the person had no symptoms" it's not likely to change that quickly.

Holman called for what he called "appropriate technology assessment.

"Potentially we could develop the means of more wise use of our resources," he said.

"It isn't beyond our capabilities to design systems that will begin to address these escalating costs and provide alternate forms of health care that in one way or another can be judged either superior to or equal to or more satisfying than the conventional" approaches.

Silverman noted that more than 10 percent of our gross national product is spent on health care, $322 billion in 1982. In recent years the majority of the increase can be attributed to rising prices of goods and services, he said.

The free public lecture series continues at 7:30 p.m. on the next two Tuesdays in Sherman Fairchild Auditorium at the Medical Center. On April 3, the topic is "The Practice of Medicine: Does Competition Compromise Quality?" moderated by Dr. Michael Eliastam, director of emergency services at SUH. On April 10, Dr. Thomas A. Gonda, chairman of the Department of Psychiatry, will moderate a physician panel discussion on "Medical Decision Making: Is It Being Taken Away From You and Your Doctor?"

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FOR IMMEDIATE RELEASE

RESEARCHERS USE NEW DEVICE TO STUDY BEDWETTING IN CHILDREN

STANFORD—

Researchers at Stanford University School of Medicine are investigating new ways to diagnose and treat bedwetting, a problem that dampens the lives of adults as well as children.

The new techniques determine whether bedwetting flows primarily from a physiological problem or an emotional one. Physicians can then institute the most appropriate therapy, said Dr. Christos Constantinou, associate professor of surgery.

Bedwetters can be broadly divided into two types, depending on whether their bladders are "stable" or "unstable," Constantinou explained. A person with a stable bladder has the capacity to control the contractions that cause urination to occur, but may not exercise that control for emotional reasons, he said.

In contrast, an unstable bladder's contractions cannot be voluntarily controlled. A bedwetter with this type of bladder has a physiological problem, Constantinou noted.

With a special diagnostic system that measures bladder pressure and muscle contraction, Stanford researchers can now perform simple tests to determine whether a bedwetter's bladder is stable or unstable, Constantinou said.

The diagnostic tests are performed with a microcomputer-based device called the Endotek Uroflow System. The unit was donated to Stanford by Endotek president Michael Ditmore, a Stanford business school alumnus, Constantinou said. Endotek, a Santa Barbara-based company, designed the equipment in collaboration with the urology division at Stanford, he added.

The new equipment is currently being used to diagnose bladder problems in children with bedwetting problems, Constantinou said.

Enuresis, or bedwetting, may affect as many as 10 to 15 percent of children over five years of age; half of these children will lose their bedwetting tendencies by the age of 12, Constantinou said.

In a study based at Children's Hospital at Stanford, Constantinou and Dr. Gregory Fritz, assistant professor of psychiatry, are examining the effectiveness of a drug called imipramine in reducing bedwetting behavior. The drug treatment is being tested in children hospitalized for a variety of behavioral problems, Constantinou said.

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Bedwetting in children with emotional problems is a complex condition to treat, Constantinou explained. Even if the bladder is stable, or normal, a child may have a psychological barrier against learning more appropriate behavior, he said.

One form of therapy for enuretic children depends on a special mattress that is activated to ring bells and flash lights when the sleeping child urinates, Constantinou explained. But drug therapy might be more humane, he suggested, if it is quicker, more effective, and less disturbing for the child.

In addition, for children whose bedwetting is caused by an unstable bladder, a drug would be the most appropriate form of treatment, he said.

Imipramine, sometimes used as an anti-depressant medication, acts by blocking acetylcholine, a chemical signal used by nerve cells. It seems to increase the bladder's resistance to contraction, Constantinou said.

The Uroflow device measures bladder pressure—a sign of urination—and contraction of muscles around the anus—a measure of the person's attempt to hold back urine flow. A person with a stable bladder is relaxed during urination whereas a person with an unstable bladder exhibits muscular contraction whenever urination occurs, Constantinou explained.

The device can also be used to prevent minor urination problems from worsening, Constantinou observed. "Some people empty their bladders by starting and stopping many times. This can produce obstructions and other problems in urination," he said.

To aid this type of problem, the unit incorporates a biofeedback system that can train an individual to urinate in a continuous stream, Constantinou explained. The computer couples a musical tone to urine flow, and by listening for the feedback tone, a person with a normal bladder can learn to empty it with a single gradual flow, he explained.

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FOR IMMEDIATE RELEASE

MIS PROGRAM ATTRACTS SUPPORT FROM DIVERSE SOURCES

Editors: Photos of Shortliffe available on request.

STANFORD—

Members of the corporate world have found an interest in common with traditional sources of support, such as government and philanthropy, in Stanford University's new interdepartmental graduate degree program in Medical Information Sciences (MIS).

The program, directed by Dr. Edward Shortliffe, an assistant professor of medicine and computer science, was approved by the university's faculty senate in 1982 to provide a structured curriculum which combines medical and computer science training.

Students may be physicians who wish to enhance their knowledge of computer science or of formal medical decision making. Others may be computer science majors with a background in biology or a related field who wish to make a commitment to MIS.

The melding has already led to such innovations as helping doctors diagnose patients' ills by using computers to analyze their symptoms and medical history.

Groups that have pledged support to the program over the past few months, totaling about $516,000 for its first official year (1983-84), are: Hewlett-Packard (HP); the Josiah Macy, Jr. Foundation; The Educational Foundation of America (EFA); Corning Glass; and the National Library of Medicine (NLM) of the National Institutes of Health.

Dean Morton, executive vice president of HP, explained: "With constantly improving performance and reductions in computer costs, it's now possible to view the eventual use of economic desk-top systems as feasible throughout the medical community. Ultimately, of course, HP would like to provide such systems." Morton also serves as a hospital board member at Stanford.

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HP has supported the training program with a large equipment grant totaling more than $300,000, as well as a cash gift.

Corning, meanwhile, has pledged support for three years to the research aspects of Shortliffe's work. "Corning is interested in the use of computer techniques for the management of clinical laboratory data," he said.

The two philanthropic foundations, EFA and Macy, have always been interested in supporting innovative approaches in medical education at Stanford and elsewhere, Shortliffe noted.

NLM selected five out of a pool of American programs to support with five-year grants for postdoctoral trainees in MIS. The federal grant to Stanford was approved by the Board of Regents, and is likely to be funded starting July 1, 1984.

"These recent grants break new ground in recognizing the importance of this dual discipline which is still in its infancy," said Shortliffe, who is also co-director of SUMEX-AIM (a Stanford-based, nationally shared resource for artificial intelligence research in medicine and biology).

"Our MIS program is somewhat unique in that there are a core curriculum and degree requirements," Shortliffe added. "Also, it is oriented toward persons interested in research and an academic environment."

Ph.D. and two-year M.S. routes are joined by a limited one year master's program, intended as supplemental training for established researchers.

The past pattern, Shortliffe said, was for M.D.s interested in MIS to get a Ph.D. in computer science. But this resulted in a "highly theoretical" computer orientation often failing to relate effectively to the clinical environment.

Also, "Without the specialized degrees which this program offers, students who combined the two disciplines on an informal basis often were enticed into other areas of the rapidly expanding computer science field," Shortliffe said.

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***HOLD FOR RELEASE. The following embargoed for release for AMs publications, Thursday, March 29 to coincide with publication in the** New England Journal of Medicine*

ALCOHOL'S ROLE IN HEART ATTACK PREVENTION QUESTIONED

STANFORD—

If moderate alcohol consumption lowers the risk of heart attack, it isn't because it raises the level of good cholesterol in the blood, according to a Stanford researcher.

Several recent studies have indicated that alcohol consumption can increase the level of so-called "good" cholesterol, the high-density lipoproteins (HDL). But Dr. William Haskell, clinical associate professor of medicine, said that the results are deceiving.

"If alcohol is helpful at reducing the risk of heart attack—and we have evidence from other studies that it might be—it probably is not because it increases HDL levels," said Haskell, who published results of a study Thursday (March 29) in the ***New England Journal of Medicine***.

Haskell's study has shown that alcohol affects two separate components of HDL differently.

Other recent studies have shown that one of these components, less dense HDL2, appears to be the substance which when found in quantity reduces heart attack risk. HDL2 particles, Haskell said, act as scavengers, constantly bombarding artery walls, removing dangerous fat particles and transporting them to the liver where they are removed from the body.

The level of denser HDL3, the other component, appears to have no effect on heart attack risk.

What the work of Haskell and his colleagues has shown is that moderate drinking raises the level of the inert HDL3, but leaves the more important HDL2 levels unchanged.

"Most lab tests don't differentiate between these two types of HDL. So it is a natural assumption that when a patient finds his overall level is rising, he might believe his heart attack risk is going down. Our study shows that this—much to the dismay of moderate drinkers like myself—is untrue," he explained.

Haskell said his study appears to refute simple correlations, such as one study which appeared to show that three beers a day would have the same HDL cholesterol-raising effect as endurance exercise.

Haskell is quick to point out that moderate alcohol may be beneficial at reducing heart attack risk, "but if so, it isn't because it raises HDL2. We just don't know enough yet to be able to say why alcohol in moderate quantities might be beneficial, although it is becoming clear from other studies that moderate drinkers tend to have fewer heart attacks than non-drinkers."

(HDL is sometimes confused with low-density lipoproteins (LDL), the "bad" cholesterol which increases heart attack risk by causing the blood vessels to clog up. High HDL is good, while high LDL is considered potentially dangerous.)

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The recent study, besides offering useful health information, is important because of the insight it offers into the differing response to alcohol of the two forms. However, it is still not known how alcohol affects HDL levels in the blood, Haskell said.

"What we discovered," said Haskell, "are wheels within wheels. We once believed that all cholesterol was the same. Later we found the distinction between HDL and LDL, and then we learned that there are at least two types of HDL. In this study we learned about the relationship between alcohol and these two types of HDL."

Haskell's study involved 24 healthy men aged 30 to 60 who were divided equally between treatment and control groups. The treatment group abstained from alcohol for six weeks. During the next five weeks, that group returned to what had been their normal level of moderate alcohol use.

The reserchers found that HDL2 appeared not to be lowered or raised whether the patient quit or resumed drinking.

Other studies, said Haskell, indicate that vigorous exercise, such as running, significantly increased HDL2 while decreasing HDL3.

The NEJM article, "The Effect of Cessation and Resumption of Moderate Alcohol Intake on Serum High-Density Lipoprotein Subfractions," was also written by Carlos Camargo Jr., a former Stanford student; Paul T. Williams, a biostatistician with the Stanford Heart Disease Program (SHDPP); Karen M. Vranizan, SHDPP programer; Ronald M. Krauss, staff medical scientist, and Frank T. Lindgren, biophysicist, both from the Donner Laboratory of Medical Physics at the University of California-Berkeley; and Peter D. Wood, deputy director of the SHDPP.

The study ended with a caution that "alcohol may supplement exercise undertaken to promote cardiovascular health but should not be considered as an alternative.

"Clearly, the detrimental effects of even moderate alcohol (liver disease, traffic accidents, etc.) over extended periods must be weighed against any 'protective' effects against coronary heart disease."

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FOR IMMEDIATE RELEASE

PUBLIC LECTURES ON WOMEN AND HEALTH

STANFORD—

A Friday noon lecture series on women and health will be presented this spring by the division of family of medicine at Stanford Medical School.

Open to the public free of charge, the scheduled lectures are:

- April 6: "Turning Around," a film about sexism in medical school by Maureen Longworth, UCSF medical student;
- April 13: "Women, Leadership, and Madness," with Barbara Stephens, Ph.D., psychologist and medical educator, director of the Institute for Education in Health Sciences;
- April 20: "DES: The Lifeboat that Sank," with Pat Cody, M.S., health educator, economist, one of the founders of DES Action;
- April 27: "Rethinking the Knowledge Base for Health Education and Promotion Programs for Women: a Critique," with Sheryl Rusek, M.P.H., Ph.D., adjunct associate professor of sociology, UCSF, and co-director of the Women, Health and Healing Project;
- May 4: "Sexism and Health Care Policy," Donna Ambrogi, managing attorney, Bay Area Law Center on Long Term Care and coordinator, Care Giver Task Force;
- May 11: "Gender, Language and Medicine," with Candace West, Ph.D., assistant professor of sociology, UCSC, teacher of Sexual Politics of Medicine, author of *Routine Complications: Trouble with Talk Between Doctors and Patients*;
- May 18: "Mixed Messages for Women: Smoking and Cigarette Advertising," with Virginia Ernster, Ph.D., associate professor of epidemiology, UCSF;
- May 25: "Women, Science and Society: Issues in Reproduction and Contraception in Early Twentieth Century," with Adele Clarke, M.A., doctoral candidate in sociology, UCSF, faculty member at Sonoma State University;
- June 1: "Legal Implications of Sexism in Medical Employment," with Mary Dunlap, civil rights attorney and law teacher.

A discussion group with case presentations will be held for enrolled participants following each lecture from 1:15 to 2 p.m. with the speaker. Also participating will be Marita Grudzen, program manager of the SUMC Women's Health Care Project; Jeanne DeJoseph, C.N.M., Ph.D.; and Judith Martin, M.D. from the Division of Family Medicine.

The lectures will be held from noon to 1 p.m. in Room M114 of the medical school. For further information, call (415) 497-7066 weekdays.

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FOR IMMEDIATE RELEASE

COMMITTEE INVESTIGATES MISCONDUCT CHARGES INVOLVING PROFESSOR

STANFORD—

A committee of the Stanford University School of Medicine is investigating allegations of academic misconduct involving a faculty member, a University official confirmed Thursday (March 22).

The internal review of charges is being conducted by the Medical School's Committee on Ethical Scientific Performance in accordance with procedures established to deal with such allegations, said Dean Dominick P. Purpura, committee chairman.

He made the statement in response to a press report in Thursday's edition of the *San Jose Mercury News*. The report said the faculty member under investigation was Dr. Kenneth Melmon, professor and chairman of the Department of Medicine.

Earlier Purpura had declined to name the faculty member involved or comment on the allegations and merits of the case "because committee inquiries are confidential, according to university policy," he said.

But in a statement issued late Wednesday in response to Mercury inquiries, Melmon's attorney and Stanford law professor Jack H. Friedenthal discussed the allegations against Melmon and stressed "there is no justification for any university sanctions against him whatsoever."

Melmon in an interview quoted in the Mercury, said he had committed an honest mistake and he had submitted evidence to the medical school's ethics committee in hopes of proving his innocence.

The committee's investigation was begun in mid-February when an editor of a medical text, Goodman and Gilman's *The Pharmacological Basis of Therapeutics* published by MacMillan Publishing Co., complained that Melmon had incorporated material without permission into a chapter he had authored for another text, according to Friedenthal. The book in which Melmon's chapter appears is the *Textbook of Endocrinology*, Sixth Ed., edited by the late Robert H. Williams and published by W. B. Saunders. Melmon also has served as an associate editor of the Goodman and Gilman textbook.

Friedenthal in his statement confirmed "the materials taken were incorporated nearly verbatim with some minor editing for style." But he added, "Dr. Melmon has been able to locate files that show he always intended to use the Goodman and Gilman materials with permission and attribution."

In response to questions, Friedenthal said unfortunately, Melmon may not have been as clear as he thought. Somewhere in the process there was a failure on the publishing side to do what he intended.

Friedenthal said Melmon is sorry for what has occurred. "He has sent a letter to the aggrieved people involved with the Goodman and Gilman book and has offered to do whatever he can to avoid future harm," he said.

The charges, Purpura said, were being investigated under the university policy set in a January 31, 1983 memorandum by Albert H. Hastorf, vice president and provost, outlining procedures for handling allegations of academic misconduct.

It is the purpose of the policy, Purpura said, to make timely responses to allegations involving faculty misconduct to protect the interests of all concerned.

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The committee will forward its confidential findings to Stanford University President Donald Kennedy within a few weeks, he said. The president will then determine whether there is a basis for bringing charges in accordance with the procedures detailed in Stanford's long-standing "Statement on Faculty Discipline."

Melmon, a clinical pharmacologist, is a Stanford undergraduate, with a medical degree from the University of California in San Francisco. He came to Stanford seven years ago from the University of California in San Francisco where he was professor of medicine. The 49-year-old professor holds the Bloomfield endowed chair in the department of medicine and a joint appointment in the Department of Pharmacology. In addition he is physician-in-chief of the medical service at Stanford University Hospital.

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Following is the text of Friedenthal's statement released to the press:

1. Some four years ago, Dr. Kenneth Melmon, chairman of the Department of Medicine at the Stanford School of Medicine, incorporated some materials from the manuscript of a then forthcoming Sixth Edition of a medical text, Goodman and Gilman on Pharmacology, into a chapter that Dr. Melmon was preparing for the Sixth Edition of the text, Williams on Endocrinology.

2. The materials taken were incorporated nearly verbatim with some minor editing for style because Dr. Melmon intended that anyone reading the materials would be fully aware that they came from Goodman and Gilman.

3. Dr. Melmon incorporated the materials at the urging of the editor of the Williams book, and refused to do so until he (Dr. Melmon) was informed by the editor that permission to do so had ben received from those in charge of Goodman and Gilman.

4. Dr. Melmon also made notations on his original manuscript regarding the need for attribution to Gilman and Goodman at points where materials from the latter were incorporated.

5. Four years later, after both books had long since been published, Dr. Melmon was stunned when he was informed by an editor of Goodman and Gilman that permission had never, in fact, been sought or given, and that the actual attributions were insufficient.

6. Despite the passage of time, Dr. Melmon has been able to locate files of materials that show that he always intended to use Goodman and Gilman materials only with permission and attribution. Unfortunately, the editor of the Williams book has died and Dr. Melmon has been informed that his files regarding the book have been discarded.

7. Although the matter is unfortunate, it really isn't all that important for the following reasons:

a. This was not the appropriation of someone's original research or the falsification of data that would enhance Dr. Melmon's career or prestige. Dr. Melmon had absolutely nothing to gain by the improper use of the materials from the Goodman and Gilman book. His was only one chapter of many in the Williams book. The book is basically for the use of students and practicing physicians and provides no academic credit for chapter authors.

b. The two books do not compete with one another. It is hard to think of how anyone suffered because ten or fifteen pages from one were used in the other. It took years for the matter even to come to light.

c. Dr. Melmon's intentions were proper. Without a showing that Dr. Melmon intended to commit fraud, there is no justification for any university sanctions against him whatsoever.

8. The matter is now in the hands of a standing investigative committee. Ultimately, the question of whether to go any further will be made by President Kennedy.

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FOR IMMEDIATE RELEASE

SCIENTISTS IDENTIFY FIRST DNA SEQUENCE

CONTROLLING GENE EXPRESSION IN ORGANELLE DNA

STANFORD—

Scientists at Stanford University have identified a DNA segment in the cell's miniature power plant—the mitochondrion—which plays a key role in regulating energy production inside cells.

Mitochondria, the energy-suppliers in all animal cells, contain their own strands of DNA—the genetic material of living things—and can duplicate themselves inside cells.

The segment of genetic material found by the Stanford researchers lies in the mitochondrion's own DNA molecule. It probably helps control the production of cellular machinery required to generate energy and also the mitochondrion's ability to replicate itself, the researchers said.

This is the first information on DNA sequences that control expression of genetic material in any organelle from cells of higher organisms, said Dr. David Clayton, professor of pathology at Stanford University School of Medicine.

Organelles are the specialized compartments that carry out vital functions inside the cells of plants and animals.

Clayton and David Chang, a Stanford medical student, carried out the research, published in the March issue of the journal *Cell*.

The sequence of DNA found by Clayton and Chang is called a promoter. Enzymes in the cell must attach to a promoter in order to decode DNA's message, just as a zipper tag needs to fit into a zipper latch in order to draw the fastener closed.

Promoters are the key to understanding how DNA's message is decoded inside cells, Clayton explained. They are the master stretches of DNA that control whether or not particular genes are expressed. Clayton hopes that identification of the mitochondrial DNA control sequences will shed light on the workings of these miniscule organelles.

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Understanding how mitochondria work is important because the fuel they provide enables cells to carry out the body's activities. Scientists are also beginning to learn that some diseases—such as Reye's syndrome—may be caused by malfunctioning mitochondria, Clayton said.

"All animals have mitochondria," he explained. "They convert what we eat into ATP, the cell's molecular fuel packet. We couldn't make use of the food we eat without these organelles," he added. "Our cells would starve to death."

Knowing how mitochondria work also could provide insight into certain types of cancers, Clayton noted. In leukemia, the mitochondrial DNA forms a double loop called a dimer, he said. The significance of this twin DNA molecule is not known, he said, adding that "the only way to find out is to first learn more about the normal mitochondrial DNA molecule."

The numbers of mitochondria vary in cells, depending on the cells' energy needs. Just as an interstate truck needs a big engine while a compact car uses only a small motor, the hard-working cells of heart muscle are packed with energy-generating mitochondria, while relatively lazy skin cells contain only a few of the organelles.

The mitochondrial population inside each cell is thought to be controlled jointly by the nucleus, where most of the cell's DNA resides, and by the mitochondrial DNA, Clayton explained. Although mitochondria can proliferate independently inside their host cells, duplication probably begins only when an OK signal comes from the cell nucleus, he suggested.

The segment of mitochondrial DNA that Clayton and Chang found is probably part of the site at which signal molecules from the nucleus deliver their message, Clayton said.

Now that the DNA segment has been isolated, genetic engineering techniques will enable the researchers to study just how signals from the cell nucleus interact with the mitochondrial DNA to tell it when to reproduce itself, he predicted.

Studies of the mitochondrial DNA promoter should also reveal how the organelle and nucleus interact to control synthesis of the proteins involved in making energy-rich ATP, Clayton said.

The researchers already have made an interesting discovery, Clayton reported. They found that the promoter sequence on mitochondrial DNA varies more than analogous sites that control expression of DNA in the nucleus. Although nuclear DNA promoters are similar in species as diverse as human and fruit flies, the control sequences on mitochondrial DNA vary even among mammalian species.

The research was funded by grants from the National Institutes of Health and from the American Cancer Society.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

FOR IMMEDIATE RELEASE

STUDIES OF CELL SHAPE MAY PROVIDE CLUES TO CANCEROUS GROWTH

STANFORD—

Abnormalities of the protein structure that controls cell shape may contribute to malignant disease, say researchers at Stanford University School of Medicine.

Dr. Larry Kedes, professor of medicine, and his colleagues are studying a protein called actin, one of the building blocks of the miniature cables and beams that make up the cell's scaffolding, called the "cytoskeleton."

"There is a school of thought suggesting that cell shape controls normal cell growth," explained Kedes. It holds that a disturbance in cell shape—in the natural ruffles and projections formed by the cytoskeleton—shuts down some sort of cell-to-cell communication normally operating to keep cell growth in check, Kedes said. Recently, certain types of cancerous cells have been discovered with abnormal actin molecules in their cytoskeletons, he added.

Kedes and his coworkers have developed a way to test whether the abnormal actin protein in malignant cells is a factor in causing the cells to turn cancerous.

Kedes' system for examining actin in mouse cells in tissue culture was described in the March issue of the journal *Cell*.

His colleagues at the Palo Alto Veterans Administration Medical Center are Drs. Peter Gunning and Phyllis Ponte. Other collaborators are Dr. John Leavitt at the Linus Pauling Institute in Palo Alto, and Drs. Robert Hickey and Arthur Skoultchi of the Albert Einstein College of Medicine.

Using recombinant DNA techniques, the scientists succeeded in placing the gene coding for a human type of actin into mouse cells. The mouse cells absorbed the human gene, adding it to their DNA, and began producing the human actin. The mouse cells then incorporated the human protein into their cytoskeletons right along with the normal mouse cytoskeletal actin protein.

-more-

The type of actin they produced in the mouse cells was of a form normally found predominantly in human heart muscle cells, not actin found in cytoskeleton, Kedes said. Yet the mouse cells did not seem to notice the difference. They built their skeletons using the unusual actin molecules, and the cytoskeletons seemed normal.

"By introducing the cardiac actin gene into mouse cells, we were able to remodel the cell architecture, and look at the results," Kedes said.

Now, the researchers will make changes in the human actin gene, and insert it into the mouse cells, which will then produce abnormal actin. They can then monitor what happens to mouse cells that build their cytoskeletons using the altered actin molecule. In particular, they can watch for changes in cell shape and growth pattern that could signal that the abnormal actin has transformed the cells to the malignant state.

Malignant cells have unusual shapes and behave differently from normal cells in tissue culture, Kedes explained. Normal cells have ruffles and projections on their surfaces. When these extensions touch one another, neighboring cells stop growing, forming a neat layer one cell thick.

In contrast, malignant cells lose the finger-like projections, rounding up into balls that grow all over each other in a dense mass.

It's not yet known what goes awry in such cancerous growth, said Kedes, although one suggestion is that some form of communication shuts down. Normal communication might depend on a signal generated at the cell surface when the projections of neighboring cells touch, he said. In normal cells, this signal might curb DNA synthesis and cell division. But in malignancy, this control of DNA replication might not be triggered by cell surface touching, Kedes suggested.

Studying the human actin gene inserted into mouse cells may allow the researchers to investigate other basic questions such as how cells control which genes are expressed in their DNA. It also could help reveal how cells control the assembly of internal structures from available protein parts, Kedes said.

The form of actin used in the research is normally produced in muscle cells, and it is an important component of the contracting filaments in muscle, Kedes said. For this reason, he expects that the genetically engineered mouse cells may also help shed light on regulation of genes in muscle cells. This could be of clinical significance in understanding diseases such as muscular dystrophy, Kedes noted.

The research is supported by grants from the National Institutes of Health, the Veterans Administration, and the Muscular Dystrophy Association.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Stacie Newman

FOR IMMEDIATE RELEASE

RAINE TO GIVE LECTURE ON MULTIPLE SCLEROSIS

STANFORD—

Dr. Cedric Raine, professor of neuropathology at the Albert Einstein College of Medicine, will give the eighth annual George A. Zimmermann Lecture at Stanford University Medical Center Friday, March 30.

His public talk, "What's Special About Multiple Sclerosis," is scheduled for 5 p.m. in Room M106 of the medical school.

Raine's research has focused on diseases caused by breakdown of the outer layer of a nerve cell, called the myelin sheath. He was one of the first to carry out studies in the central nervous system of this breakdown, when caused by immune disorders. One disease caused by such "demyelination" is multiple sclerosis (MS).

Raine received his Ph.D. at the University of Newcastle Upon Tyne, England, and worked at the Medical Research Council Research Unit in Newcastle until 1968, when he joined the Albert Einstein College of Medicine. He is chief editor of the *Journal of Immunology* and associate editor of the *Journal of Neurocytology* and *Journal of Neurological Sciences*.

The Zimmermann Lectureship was established by the Department of Neurology in 1977. It was part of a gift for research and treatment of MS at Stanford, from the late George A. Zimmermann, a long-time San Francisco businessman.

3-14-84 —30— swn1b

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

LECTURE SERIES SLATED AT STANFORD UNIVERISTY MEDICAL CENTER

STANFORD—

"Health Care in Crisis: Questions of Costs and Quality" is the topic of Stanford University Medical Center's spring Progress in Medicine lecture series scheduled for March 27, April 3, and April 10, 1984.

The lectures, open and free to the community, will be held in Sherman Fairchild Auditorium beginning at 7:30 p.m.

"Pressures to control rising health costs have brought about changes that affect the public, physicians and hospitals. The practice of medicine is dramatically changing. The focus of the lectures is to provide information and enhance the public debate about these issues," the program states.

The first lecture of the series on March 27 will focus on "Cost Controls: What Does It Mean to You and Your Doctor?" Moderating the panel discussion will be Dr. James Silverman, chief of staff at Stanford University Hospital (SUH). Panelists include Dr. Melvin Britton, clinical associate professor in the department of medicine and director of TAKECARE, a health maintenance organization offered at the Palo Alto Medical Foundation, and Dr. Halsted Holman, professor in the department of medicine and co-founder of Mid Peninsula Health Services, Inc.

"The Practice of Medicine: Does Competition Compromise Quality?" is the focus of the second lecture of the series on April 3. Dr. Michael Eliastam, assistant professor in the department of surgery and medicine and director of SUH's emergency services, will moderate the panel, which will include Sheldon King, executive director of SUH, John Aryd, president of San Jose Health Center, and Art Young, corporate benefits manager at Hewlett-Packard.

The last of the series on April 10 will address "Medical Decision Making: Is It Being Taken Away From You and Your Doctor?" Dr. Thomas Gonda, chairman of the department of psychiatry and of the medical center ethics committee will moderate the discussion. Panelists include Dr. Keith marton, assistant professor in the department of medicine, and Dr. Thomas Raffin, assistant professor and assistant chief in the department of medicine.

Seating is limited for the lectures. For information and registration, call the Office of Public Events, (415) 497-6389.

3-13-84 —30— sk2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

FOR IMMEDIATE RELEASE

SUBSTANCE SHOWS PROMISE FOR TESTING IN AIDS PATIENTS

STANFORD—

A genetically engineered form of a natural protein can boost the disease-fighting capacity of cells from patients with acquired immunodeficiency syndrome (AIDS), report scientists at Stanford University School of Medicine and Cetus Corporation.

In a study to be published in an upcoming issue of the medical journal *Lancet*, a substance called interleukin-2 (IL-2) reversed some deficiencies of immune system cells taken from the blood of AIDS patients.

However, the researchers stressed that their *in vitro* (test tube) study does not mean that IL-2 will cure AIDS, a devastating syndrome in which the immune system fails to defend the body against infection and certain cancers.

"We cannot predict what will happen when this substance is tested in human beings," cautioned Dr. Edgar Engleman, assistant professor of pathology and medicine at Stanford, who led the study. "There is no guarantee that interleukin-2 will be effective in treating AIDS," he said. "We are encouraged, but must await results of clinical trials before we can determine its usefulness in patients."

Engleman said that researchers at the University of California in San Francisco are currently planning clinical trials to assess the protein's ability to help restore immune function in patients with AIDS.

The study was performed by Dr. Jeffrey Lifson and Claudia Benike in Engleman's laboratory at Stanford. The genetically engineered IL-2 was produced by a team of scientists led by David Mark and Kirston Koths at Cetus in Emeryville, California. Engleman has a consulting relationship with the company.

The researchers studied IL-2 because it is known to be involved in activating the immune system, the body's defense network against infection and cancers.

The immune system of patients with AIDS is so weak that their bodies cannot fight off infections and cancers that are routinely squelched in healthy individuals.

No one knows precisely what causes the immune system to close down in AIDS, Engleman said, although many researchers suspect a virus may be involved.

IL-2 probably will not prevent or reverse that initial shutdown, Engleman said. But it may help bolster the immune system by compensating for functions lost as a result of that shutdown.

3-13-84 -more-

If IL-2 proves useful in treating AIDS, it would be a positive step toward dealing with the disease, Engleman said, although it is possible that patients would have to be placed on a longterm treatment program, like diabetic patients who require insulin, he noted.

IL-2 is a signal molecule used by cells of the immune system called lymphocytes. Lymphocytes come in two main types: B-cells and T-cells.

B-cells produce antibodies, protein molecules that fight disease. T-cells regulate the actions of B-cells and they can also directly destroy foreign or abnormal cells in the body.

One type of T-cell, called a helper, turns on the immune system when it detects infected or cancerous cells. Another T-cell, called a suppressor, turns the immune system off. A balance between helpers and suppressors keeps the immune system finely tuned, Engleman explained.

Helper and suppressor cells use signal molecules like IL-2 to keep the immune system running smoothly. IL-2, produced by helpers, stimulates T-cells to grow, divide and assault infected or cancerous cells in the body, Engleman said.

In patients with AIDS, the population of helper T-cells is profoundly reduced, and the few residual helper T-cells don't work well.

The researchers took lymphocytes from 16 patients with AIDS and from 10 normal individuals. In the laboratory, they added IL-2 and monitored the growth and activity of the immune system cells in their samples.

The most dramatic result they found was in the activity of natural killer cells, which destroy foreign cells and also kill the body's own cancerous or infected cells. Without IL-2, cells from the patients displayed very low natural killer cell activity compared to the healthy controls. But when IL-2 was added, the AIDS samples showed as much killer cell activity as the controls, the researchers reported.

The researchers found that IL-2 also stimulated growth and division of T-cells from some of the AIDS patients (6 out of 8 patients tested in one assay, and 4 out of 8 patients using a different test of growth). However, T-cell proliferation did not reach levels of growth seen in normal individuals' cells, they noted.

The surprising finding was that IL-2 did not merely promote *growth* of sick T-cells from AIDS patients. It also caused the sick T-cells to regain their ability to attack abnormal and foreign cells.

Engleman noted that it is not yet known how IL-2 increases natural killer cell activity of lymphocytes from patients with AIDS, although experiments are currently under way to answer this question.

AIDS is not the only condition IL-2 may improve, Engleman said. At other institutions, IL-2 has been tested as an anti-tumor agent in animals, with promising results. Because the substance has not yet reached clinical trials, its potential side effects in humans are unknown. However, he noted that in animals no side effects have been detected, an inducement to human tests.

The research was supported in part by grants from the National Institutes of Health and the Veterans Administration. Lifson is a recipient of a fellowship from the Damon Runyon-Walter Winchell Cancer Fund.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

NEW KIDNEY TEST NEEDS VOLUNTEERS FOR TESTING

STANFORD—

Researchers are looking for healthy volunteers to help evaluate a new test which might make earlier detection of kidney disease possible.

Dr. Mark Moran of the Stanford Medical Center's nephrology division, said the volunteers will help calibrate the new testing procedure which is believed to be a more accurate and sensitive test of kidney function.

The technique involves new chemical analysis of blood and urine to provide a very precise measure of whether the kidney is doing its job of serving as a filtration plant, removing waste materials from the blood.

Moran said the newly developed chemical analysis involves studying the molecular structure of the kidney pores as measured by the appearance in the urine of, albumin, a protein, and a sugar known as dextran after both have been filtered from the bloodf by the kidney. The albumin and dextran are injected gradually into the blood for purposes of the test, he said. Previous tests involved measuring native bodily substances in the blood, which Moran said sometimes had proven to be inadequate.

The new technique, Moran said, may enable physicians to diagnose kidney disease at a much earlier stage than before.

"It is hoped that early detection of kidney disease by allowing timely treatment, may prevent the progression to kidney failure," Moran said.

"Ultimately," he continued, "the number of patients requiring dialysis (artifical kidney) treatment and transplants may be decreased if dysfunction can be discovered in time to begin treatment."

The test, he said, is of scientific value because it "will help researchers understand the way in which kidney function changes from normal when kidney disease develops," Moran added.

So far, Stanford doctors have tested the technique in more than 500 patients suffering from kidney disease. But now, he said, researchers need more healthy volunters to determine precisely the normal level of kidney function as defined by this test.

Volunteers should be free of known kidney disease and have normal blood pressure. The six hour test involves the collection of urine and sampling of blood. Some of the needed 20 volunteers will be asked to return for a followup study, Moran said.

Benefits to volunteers, Moran said, include an inside look—and personal experience—in how scientific research is conducted, individual health insight, and $50 in compensation.

For further information and/or to schedule an appointment, call the division of nephrology from 9 a.m. to 5 p.m, Monday through Friday at (415) 497-5984.

MARCH 9, 1984 —30— MG3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

FOR IMMEDIATE RELEASE

CLINIC HOLDS OPEN HOUSE

STANFORD—

Come see the newly renovated Stanford University Clinic! After months of dust, debris and "do not enter" signs, the first phase of the $6.5 million facelift is ready for your perusal at an open house March 16 from 4-6 p.m.

"Everyone from the medical center and the community is invited to come see our new facilities," said Vera Waechter, clinic assistant director.

The clinics included in the completed portion of the renovation are.surgery, urology, cardiovascular surgery, internal medicine, nephrology, immunology, hemotology, allergy, gastroenterology, and endocrinology.

Patients will be seen in the clinics' old facilities on March 16, and in the new facilities on March 19. Staff will complete the move to the new facilities over the weekend so as not to interrupt patient visits, Waechter said.

The clinic renovation will provide newly designed patient rooms; examination rooms offering privacy and enough room for family members and staff; convenience-designed patietn registration and waiting areas; conveniently located service for handicapped patients; outpatient pharmacy and specimen collection area located near the main entrance; more conveniently located conference rooms; and a better overall atmosphere.

The renovation of the clinic is scheduled for completion in late 1985.

3-9-84 —30— sk1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

RESEARCHERS STUDYING RELATIONSHIP BETWEEN EXERCISE AND COMMON DRUG

STANFORD—

Researchers at Stanford are studying whether exercise and beta blockers together more effectively control high blood pressure than using those drugs without a fitness program.

The study could be significant, because earlier studies conducted elsewhere have suggested that beta blockers—administered to millions of hypertensive patients worldwide—limit the cardiovascular system's ability to benefit from exercise, said Michael Savin, Ph.D., a research associate in the Medical Center's division of cardiology.

"This is a dilemma," said Savin, "because many patients on these drugs could potentially derive a great deal of benefit from exercise. So we are encouraged that preliminary results of another recent study conducted here are indicating that healthy men can benefit from exercise while taking beta blockers."

Savin said he expects to present preliminary results of that study of 39 healthy volunteers to the National Scientific Meeting of the American College of Cardiology in Dallas later this month.

The next step, said Savin, is to learn if men given beta blockers to treat high blood pressure will also benefit from regular exercise. The study will also be taking a close look at the ability of exercise to lower blood pressure with or without medication.

The current study is being conducted in conjunction with physicians at Duke University, Durham, N.C.

The Stanford group is looking for 45 male volunteers between about 25 and 55 years of age who have untreated high blood pressure but are otherwise healthy. Participants should not have participated in regular endurance exercise during the past six months.

Before beginning an intensive eight-week exercise program, volunteers will be divided into three groups. One group will receive the drug atenolol, another group will receive propranolol, and a third group will take a placebo (an inert powder which resembles a drug but has no pharmacologic effect).

Atenolol and propranolol are two of the most common forms of beta blockers, which are the most widely prescribed category of cardiovascular drugs, accounting for about $400 million sales annually in the United States, said Savin. By attaching themselves to receptors at nerve endings in the body, these drugs act as barriers to halt incoming chemical messengers which otherwise would tell the heart to speed up.

Simultaneously, these drugs also lower blood pressure, but the precise reasons why are not fully understood, Savin said.

The current study offers volunteers a thorough physical exam, the potential for a regimen which will control blood pressure, and the likelihood that each volunteer will leave the program in better shape, said Dr. H. Robert Superko, medical director of the project.

Potential applicants are invited to call Savin or Craig Hoover, cardiology research assistant, at 497-9646 between 2 and 4:30 p.m. Monday through Friday for more information.

Other Stanford researchers involved in the project include Dr. William Haskell, clinical associate professor of cardiology; and Dr. Donald C. Harrison, chief of the cardiology division.

(Members of the news media are may contact Savin directly at (415) 497-6254).

3-7-84

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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EDITORS: This story was first mailed Jan. 31. Because not enough volunteers were recruited, it is being released again.

FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR STUDY OF ANOREXIA, AN UNUSUAL DIETARY DISORDER

STANFORD—

Stanford University Medical Center researchers are looking for 40 volunteers to participate in a study of anorexia nervosa, a disorder in which young women diet obsessively, sometimes to the point of starvation.

The researchers plan to study the relationship between anorexia nervosa and body levels of zinc, an essential mineral.

"There are many similarities between the clinical picture of zinc deficiency and anorexia nervosa," explained Dr. Rebecca Katz, who is conducting the study. "Both conditions are characterized by weight loss, growth retardation, loss of appetite, decreased taste acuity, lack of menstrual periods in females, delayed sexual development, mood changes, and hair and skin abnormalities."

Volunteers must be anorexic individuals under 21, said Katz. Those accepted into the study will undergo a medical history and physical examination, which includes taking blood and urine samples. Volunteers will also be asked to keep a record of everything they eat for three days, Katz added.

The study is being conducted at Children's Hospital at Stanford through Stanford medical school's division of adolescent medicine. Individuals who would like to volunteer may call Dr. Katz at (415) 327-4800, extension 538, weekdays between 8 am and 5 pm.

3-7-84 —30— LH1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos

FOR IMMEDIATE RELEASE

STANFORD PHYSICIAN EXPOSES HYPOGLYCEMIC MYTH

STANFORD—

Science and medical writers: Copies of **Stanford Medicine** on which this article is based are available on request if not included with story.

Hypoglycemia, not enough sugar in the blood, is often a misdiagnosed disease prompting patients to undergo major, expensive and unnecessary changes in their lifestyles, says a Stanford University endocrinologist.

Writing in the winter issue of **Stanford Medicine**, Dr. Carlos Camargo, clinical associate professor of medicine, attributes the wrong diagnosis to an "unwarranted reliance by physicians and patients on the results of a glucose tolerance test."

Camargo calls it "one of the most misused and misinterpreted tests in medicine."

Despite a new warning by the American Diabetes Association on the false diagnosis of hypoglycemia, Camargo points out, "physicians and patients still grab onto it just to have a medical diagnosis for what are often ill-defined symptoms."

"At the Stanford Endocrine Clinic we continue to see many patients diagnosed as having hypoglycemia," Camargo says. "Frustrated with their altered lifestyle, they seek a second opinion or different therapy."

Camargo describes a hypothetical typical patient, Mr. Jones, who consulted his physician because of a lack of energy, weakness, palpitations, fatigue, dizziness, headaches, emotional instability, and irritability. Jones first suspected hypoglycemia. A relative had informed him of the possibility.

Mr. Jones' doctor did a routine physical which showed no signs of the disease. Then to be sure, the doctor ordered a glucose tolerance test. After fasting overnight Mr. Jones reported to the laboratory, where the technician asked him to drink a syrupy concoction containing 75 to 100 grams of sugar.

"In reality, no one would ever ingest this much pure sugar at any one time," writes Camargo. But the technician sent the results to Mr. Jones' physician who, like others, made his first mistake in diagnosing hypoglycemia.

-more-

March 6, 1984

All too often, according to Camargo, physicians and patients are unaware that perfectly normal people may have blood sugar levels as low as 30 milligrams (mgs) during the five-hour test. The normal fasting levels range from 70 to 110 mgs at some point during the test. And according to a recent study, 10 percent of 650 patients without evidence of diabetes or carbohydrate intolerance had blood sugar levels less than 50 mgs at some point during the test. None had hypoglycemic symptoms.

Fasting affects blood sugar levels, a fact that's often misunderstood, Camargo says. The original "normal" levels were established by testing adult males. Not until many years later did doctors realize that age and gender significantly influence those levels. And there are differences in blood sugar levels between men and women.

"True hypoglycemia is a serious medical problem," Camargo writes. "It's not a disease, but rather an indication of an underlying disorder. It may be caused by a excess insulin, pituitary and adrenal failure, hepatic disease, malignant tumors, or even ingestion of drugs or alcohol. It can also be reactive, surfacing after meals in patients who have had surgery on their stomach or upper bowel."

Dramatically effective therapy is often available for hypoglycemia, Camargo says. But patients like Mr. Jones who are wrongly diagnosed are often unnecessarily placed on unusual diets, such as those emphasizing high protein foods. Mr. Jones gained 45 pounds before seeking a second opinion.

"Support" groups, such as hypoglycemic foundations and magavitamin hypoglycemic centers, add to the problem, Camargo believes.

"They offer patients bizarre therapies such as 'spleen detoxification' with carrot juice, or injections. These organizations' publications also expound the hypoglycemic myth."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

(Reporters, editors: photos available on request if not included)

SHUMWAY, HARRISON POINT TO RESEARCH DIRECTIONS IN NEW BUILDING

STANFORD—

Stanford scientists will soon begin using laboratories in the newly completed Dr. Ralph and Marian Falk Cardiovascular Research Center to learn more about how sick hearts may be rejuvenated, mended, replaced, or even prevented.

Dedication ceremonies were slated Tuesday, March 6, for the 52,000-square-foot, $14 million building, which houses the academic and research activities of the department of cardiovascular surgery, under Dr. Norman E. Shumway, and the division of cardiology, headed by Dr. Donald E. Harrison.

In interviews prior to dedication ceremonies, both Harrison and Shumway discussed the research their teams are planning in coming years.

For Harrison, approaches range from the very large—preventive studies involving patients and society—to microscopic relationships between cells where heart attacks begin. In cardiovascular surgery, Shumway sees improvement in heart/lung transplantation and development of a mechanical assist device for the patient's own heart.

The left ventricular assist device (LVAD), already being tested in calves under the direction of Dr. Philip E. Oyer, can aid the left ventricle or pumping chamber of the heart, where most heart disease tends to be found. Unlike a total artifical heart, Shumway says the LVAD is reversible since the device can be removed after the heart heals.

But the LVAD could one day serve as a permanently implanted assist, Shumway believes, powered by a rechargeable battery.

"This is what Oyer (an associate professor of cardiovascular surgery) and our colleagues have on the drawing board—a power source for the LVAD that could be transmitted through the skin from an electrical transformer belt worn around the waist. The belt would drive its power either from rechargeable batteries or conventional 110-volt sources," Shumway said.

The present LVAD model includes electric wires, which while intrusive, are preferable for patients to the air hoses found in totally impltantable hearts.

"I don't think there's a real future for any artificial device that requires some kind of tethering or wires or air hoses protruding through the patient's skin unless its used only on a temporary basis," Shumway said.

The first LVAD implants are tentatively scheduled for this year, Oyer has said.

While research for mechanical assist devices continue, Shumway says he and his team will be continuing to find ways to preserve lung tissue outside the body to enable more heart/lung operations to be performed. Since March 1981, 17 such combined transplant have been performed. The procedure is limited, partly because many potential donors become unusable because lung tissue has been damaged, he said.

2-2-2 Harrison and his cardiology colleagues are turning to specially designed computer programs which will measure changes in blood vessels caused by atherosclerosis, the major cause of heart attacks and strokes. As part of the research, patients with various degrees of narrowing of their blood vessels will be examined.

Later, the patients will be reexamined after they have changed their diets or lifestyle, exercised or taken appropriate drugs. Physicians will see if these potentially risk reducing changes have altered the extent of atherosclerosis and the incidence of heart disease, Harrison explained.

Abnormal heart rhythms, called arrhythmias, are being studied at their genesis in cardiac cells grown in tissue culture. This research, says Harrision, should help scientists develop improved medications, or perhaps even surgical interventions, to help patients whose hearts beat irregularly.

Harrison says cardiology researchers swill also be looking to the nervous system as a partner in heart function. Messages moving from or to the brain can influence heart function, particularly for persons whose bodies must compensate for damaged heart muscle. Various drugs offer the promise of influencing the signals which can help the heart compensate for damaged muscle.

The dedication ceremony included afternoon public lectures by Dr. Peter L. Frommer, deputy director of the National Heart Lung and Blood Institute, who was to discuss the partnership between government and academic institutions in pursuit of science. One of the nation's most eminent cardiologists, Dr. Eugene Braunwald of Harvard Medical School, was to talk about three decades of progress in cardiology, including drug interventions and research leading to risk reduction.

A third speaker, Dr. C. Walton Lillehei, emeritus professor of surgery and cardiovascular surgery at the University of Minnesota, described the past 30 years in his field, including development of heart transplantation under Shumway's direction at Stanford.

The lectures were to be followed by a formal dedication at the new research center. William R. Kimball, president of the Stanford University Board of Trustees is to preside.

Harrison, past president of the American Heart Association, said the new center should facilitate heart research by making possible closer interaction between surgeons and cardiologists.

"This facility is bringing together in close proximity both the medical and surgical cardiologic groups," Harrison said. "That will allow us to have integration of our programs in a much more organized way."

The research building is adjacent to the hospital and clinics, where patient care will continue. Laboratory space fills the two lower floors, while the top floor houses faculty and staff offices, conference rooms and other facilities in support of the academic program.

The building is named for Ralph and Marian Falk of Chicago. Mrs. Falk, the largest individual donor on the project, had selected Stanford as the site to memorialize her husband, a surgeon and co-founder of Baxter Laboratories, developers of prepackaged intravenous units.

The amount of Mrs. Falk's donation has been withheld at her request.

Other major donors include a $4 million grant in 1979 from the Max C. Fleischmann Foundation of Nevada. A final institutional grant of $400,000 came from the Conrad Hilton Foundation. Individual donors totaled more than 100 persons.

Hellmuth, Obata and Kassabaum, Inc. of San Francisco designed the building, and Dillingham Corp. of San Jose was the general contractor. The project was begun in February 1982.

STANFORD UNIVERSITY MEDICAL CENTER
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ADVANCE FOR RELEASE A.M. WEDNESDAY MARCH 7

SCIENTISTS FIND KEY IMMUNE SYSTEM GENE

STANFORD—

In research with profound implications for immunology, a team of scientists—led by a medical microbiologist from Stanford University—has isolated the elusive gene believed to regulate the body's response to tissue transplants and to infectious agents.

The effort was led by Dr. Mark Davis, assistant professor of medical microbiology at Stanford University School of Medicine.

His collaborators in the work, published simultaneously in two articles in the March 8 issue of Nature, are Dr. Stephen Hedrick of the UR ersity of California in San Diego, Ellen Nielsen of the National Institute of Allergy and Infectious Disease, and Dr. David Cohen and Joshua Kavaler in Davis' laboratory at Stanford.

The newly isolated gene had been sought unsuccessfully for at least a decade by researchers around the world, according to Davis.

The gene—a very small portion of the hereditary material, DNA—contains a blueprint for a substance produced by "T-cells," one of two major cell types responsible for the body's immune responses. The gene, which has been cloned by the researchers, codes for a substance called the T-cell receptor.

Davis' research team found the T-cell receptor gene from mice; it is known to be nearly identical to the human gene, he said. Another research group from Canada reported in the same issue of Nature32 finding a gene from humans with similar properties, he added.

To work properly, the immune system depends on two major types of cells, called B-cells and T-cells, Davis explained.

B-cells produce antibodies, molecules that participate in the body's fight against bacterial and viral disease.

T-cells play a wider variety of roles in the immune system, Davis said, including regulation of the actions of B-cells. They also control the body's response to tissue transplants, and can directly kill viruses and certain types of tumor cells, he explained.

Both B-cells and T-cells must recognize foreign substances in the body in order to carry out their jobs. They do so by means of specialized receptor molecules located in their membranes or on their surfaces.

In recent years, a lot has been learned about how B-cells perform this task by means of their antibody receptors, Davis said.

But so little has been understood about how T-cells detect invading agents that the search for the elusive T-cell receptor and its encoding gene had become a challenge to many researchers in the field, he said.

With the T-cell receptor gene finally "in hand," scientists can now begin to answer many questions about the immune system that have baffled immunologists, Davis said.

Foremost, it is now possible to learn how T-cells work—how they recognize both foreign substances and self. This should lead to a better understanding of the immune system in general and of transplant rejection and viral infection, Davis predicted.

Also, it should now be possible to figure out how many types of T-cells there are and how they differentiate, what the roles of the different T-cell types might be, how they regulate the immune response, and how they combine with B-cells to destroy disease-causing agents, Davis said.

Discovery of the T-cell receptor gene may provide more immediate clinical benefits in addition to clarifying basic unanswered questions about immune system function, said Davis. These would include the ability to identify different classes of T-cell tumors, and the potential for developing specific T-cell tumor identification markers that could aid in cancer therapy.

Davis and his colleagues used a novel, indirect method to find the T-cell receptor gene. They capitalized on their knowledge about the genes that code for B-cell antibodies in developing the approach. They also made use of the fact that B-cells do not produce any T-cell receptor.

B-cells produce antibodies, molecules that sit on the surfaces of B-cells and also rove through the body's tissues on the lookout to bind and mark for destruction invading material. Different varieties of B-cells are highly specialized to make specific antibody molecules that can latch onto a particular foreign substance, called an antigen.

Although all B-cells start out with identical antibody-coding genes, segments of these genes can be "mixed and matched" as B-cells mature. This rearrangement of DNA enables each type of B-cell to develop a "tailormade" response to a particular foreign antigen, Davis explained.

Davis and his colleagues reasoned that T-cells would also have to undergo rearrangement of their DNA in order to produce enough receptor variety to be able to specifically recognize the many different substances that can enter the body.

They also reasoned that T-cells and B-cells were actively expressing different portions of their DNA.

The researchers then searched for those parts of the DNA that were active in T-cells but inactive in B-cells. In this DNA, they found a gene that seemed to be completely rearranged in the different lines of T-cells they examined.

Davis and his colleagues determined the sequence of nucleotides in this purported T-cell receptor gene and found that it coded for a molecule with characteristics very similar to antibody.

Thus, T-cells seem to do their job of specifically recognizing foreign substances in the body with a molecule very similar to the B-cell antibody.

The scientists began the project as researchers at the National Institute of Allergy and Infectious Diseases (NIAID), a division of the National Institutes of Health in Bethesda, Maryland.

The research was funded by grants from the National Institutes of Health and fellowship support from the Leukemia Society of America.

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LH1

EDITORS: Photos available on request.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR DIABETES RESEARCH

STANFORD—

Stanford University researchers are looking for volunteers to participate in a study into the effects of aging on the ability of the pancreas to secrete insulin.

Volunteers with noninsulin treated diabetes are needed for this as well as other ongoing research at the clinical research center of Stanford Medical Center.

People without diabetes are also needed to participate in control groups.

Participants will be offered various medical and health evaluations free of charge, including blood sugar, insulin, liver and kidney function tests, cholesterol, hemoglobin, and cardiogram. They must be between 20 and 80 years old, male or female; and be in good general health.

For further information call Dr. Chris Donner or Dr. Elizabeth Fraze, at (415) 497-6973; or Ann Coulston, R.D., at (415) 497-5430.

3-5-84 —30— LA2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

SCIENTISTS HELP OPEN HEART RESEARCH FACILITY

STANFORD—

(Science reporters, city desks news directors: a news conference marking the opening of the building is scheduled at 10 a.m. in the foyer of the building. Dr. Donald Harrison, head of the cardiology division; and possibly Dr. Norman Shumway, chairman of the department of cardiovascular surgery, will be available for comment and questions. It is not known now whether the guest speakers will be at the news conference. Parking is available in the parking lot adjacent to the building. Tours of the building may be arranged immediately after the conference.)

(This release transmitted to certain West Coast Points via Business Wire 3/1.)

A 52,000 square-foot facility intended to bring together two of Stanford University Medical Center's most widely known programs will be dedicated Tuesday March 6.

The Dr. Ralph and Marian Falk Cardiovascular Research Center houses the academic programs and laboratories of the department of cardiovascular surgery under Dr. Norman Shumway, and the division of cardiology headed by Dr. Donald Harrision.

At a public lecture, Dr. Peter L. Frommer, deputy director of the National Heart Lung and Blood Institute, will discuss the partnership between government and academic institutions in pursuit of science. One of the nation's most eminent cardiologists, Dr. Eugene Braunwald of Harvard Medical School, will discuss three decades of progress in cardiology, including drug interventions and research leading to risk reduction.

A third speaker, Dr. C. Walton Lillehei, emeritus professor of surgery and cardiovascular surgery at the University of Minnesota, will talk about the past 30 years in his field, including development of heart transplantation under Shumway's direction at Stanford.

March 1, 1984 -more-

The lectures begin at 2 p.m. at Sherman Fairchild Auditorium at the Medical Center.

A formal dedication at the new research center is slated for 4:30. William R. Kimball, president of the Stanford University Board of Trustees is to preside.

Harrison, past president of the American Heart Association, said the new center should facilitate heart research by making possible closer interaction between surgeons and cardiologists.

"This facility is bringing together in close proximity both the medical and surgical cardiologic groups," Harrison said. "That will allow us to have integration of our programs in a much more organized way."

The $14 million facility is adjacent to the hospital and clinics, where patient care will continue. The two lower floors of the new building provide lab space, while the top floor houses faculty and staff offices, conference rooms and other facilities in support of the academic program.

Mrs. Falk, the largest individual donor on the project, had selected Stanford as the site to memorialize her husband. a Chicago surgeon and co-founder of Baxter Laboratories, developers of prepackaged intravenous units. She had said she admired the work of Shumway.

The amount of Mrs. Falk's donation has been withheld at her request.

Other major donors include a $4 million grant in 1979 from the Max C. Fleischmann Foundation of Nevada, which allowed for planning. A final institutional grant of $400,000 came from the Conrad Hilton Foundation. In addition, there were more than 100 indvidual donors to the building.

The building was designed by Hellmuth, Obata and Kassabaum, Inc. of San Francisco. Dillingham Corp. of San Jose was the general contractor. Site clearance for the project began in February 1982.

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mg2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

ADVANCE FOR RELEASE AFTER 10 A.M. EASTERN TIME MONDAY, MAY 7, 1984

FIRST NATIONAL STUDY OF DRUGS FOR HEAD AND NECK CANCER TREATMENT GIVES MIXED RESULTS

STANFORD—

Anti-cancer drugs do not significantly improve survival rates for patients with head and neck tumors, compared to standard surgery and radiation treatments, a national study concludes.

But the drugs tested promoted tumor shrinkage in one out of three patients who received them, according to results of the study, which was the first major national trial of chemotherapy in head and neck cancer patients.

Therefore, new and more powerful drug regimens with greater effectiveness should be tested as a supplement to standard head and neck cancer therapy, said Dr. Charlotte Jacobs, assistant professor of medicine at Stanford University School of Medicine, one of the researchers on the study.

Jacobs reported the findings Monday morning May 7 at the annual meeting of the American Society for Clinical Oncology in Toronto, Canada.

The study, by the Head and Neck Contracts Program, followed 443 patients between 1978 and 1982. The investigation was a collaborative effort funded by the National Cancer Institute involving 13 medical institutions nationwide. Jacobs spoke on behalf of the joint effort.

Although head and neck tumors are relatively rare, accounting for approximately 6 percent of all malignancies, they are among the most debilitating cancers, Jacobs said.

The patients in the study all had advanced cancers located in the tongue, floor of the mouth, tonsils, or vocal cord regions, Jacobs said.

With standard head and neck cancer therapy, consisting of surgical removal of the tumor and postoperative radiation treatments to obliterate lingering disease, about 50 percent of patients with advanced cancers would be expected to survive five years, she explained.

The patients were randomly assigned to three groups. All received the standard treatment program of surgery and radiation therapy.

One group of patients also received a dose of anti-cancer drugs—cisplatin and bleomycin—prior to surgery. A second group of patients received the chemotherapy dose prior to surgery, followed up by six months of treatment with cisplatin following postoperative radiation therapy. The control group of patients underwent only the surgery/radiation combination.

Two-year survival rates in all three groups were approximately 60 percent, Jacobs reported, which is consistent with the survival expected for surgery/radiation alone.

Even though the study showed no increase in survival when the drugs were added to established therapy programs, there were some positive results, Jacobs said. Preoperative chemotherapy shrank tumors to smaller than one-half the original size in one third of the patients tested.

Furthermore, the study revealed that patients tolerated the drugs well, with few adverse side effects. "These positive findings suggest that current, more efficacious drug regimens should be tested for their potential in improving survival for head and neck cancer patients," Jacobs said.

The study was also significant, Jacobs added, because it was one of the first multi-institutional efforts to focus on treatment of head and neck tumors. Because it is a rare form of cancer, only by pooling results from patients all over the country can researchers study the problem, she noted.

Institutions involved in the study, in addition to Stanford University, were Boston University and Boston Veterans Administration Hospital, Memorial Sloan-Kettering, Thomas Jefferson University, University of California (Davis), University of California (San Francisco), University of Cincinnati, University of Maryland, University of Michigan, University of Pennsylvania, University of Pittsburgh, University of South Florida, and University of Texas.

—30— LH3

END ADVANCE FOR RELEASE AFTER 10 A.M. EASTERN TIME MONDAY, MAY 7, 1984

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415)497-6911

FOR IMMEDIATE RELEASE

(Editors, news directors: Copies of the conference schedule is available if not included with this release by calling Kaaren Peterschmidt at (415) 497-7677. Sessions are open to reporters with advance arrangement.)

ADVISORY—CONFERENCE MAY 9-11 FOCUSES ON EMERGENCY TRANSPORT

STANFORD—

Aviation lingo may be almost as common as medical terminology will be held May 9-11 by Stanford University Hospital's Department of Critical Care Transport.

Instructors and participants from around the nation and several foreign countries are scheduled to discuss the most effective ways of getting critically ill or injured patients to the hospital, announced Kaaren Peterschmidt, a nursing education coordinator and an organizer of the conference.

Topics range from "Carrier Selection: The Latest in Jets and Rotorcrafts," scheduled at 10:35 a.m. Friday, to a panel debate at 11 a.m. that day on whether physicians should be included in the transport team.

Two European authorities on critical care transport, Dr. Miguel Martinez-Almoyna of the Urgent medical Aid Service of Paris, and Peter Dangel, head of anesthesia and intensive care at Zurich, Switzerland's children's hospital, will talk about the role of critical care transport in their countries. One of Dangel's lectures is entitled "Mountain Rescue in Switzerland: Physiologic and Technical Problems."

Equipment displays are scheduled on Friday afternoon, and on Saturday morning, a variety of fixed-wing and helicopter aircraft used in transport will be on display at San Jose Airport.

Other specialized topics include lectures on the transportation of infants and expectant mothers, how to administer medication while in motion, and financial and governmental issues related to transport.

The conference, open to pre-registered health professionals, will be held at Hyatt Rickeys Hotel in Palo Alto.

April 27, 1984 —30— mg3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

FOR IMMEDIATE RELEASE

MARKEY TRUST FUNDS PREDOCTORAL STUDENTS AT STANFORD MEDICAL SCHOOL

STANFORD—

The Lucille P. Markey Charitable Trust of Miami has given a $360,000 five-year grant to Stanford University School of Medicine for fellowship support of predoctoral students in basic medical sciences.

Stanford is one of 15 institutions with strong biomedical research programs—including twelve medical schools and three universities—to receive a grant in the fellowship program, the Trust announced.

Each institution will receive $360,000 over a five-year period for partial support of three consecutive classes of students beginning in September 1984, said Louis J. Hector, chairman of the Markey Trust.

Support could be extended at each institution to a five-year term for each class, contingent on satisfactory review at the end of each class' second year, according to the Trust. This would extend the grant period and funding allotted each institution to seven years and $600,000.

"The generous grant from the Markey Trust will be used to support outstanding predoctoral students in our departments of biochemistry and structural biology," said Stanford Medical School dean Dominick P. Purpura. "This support is particularly welcome and appreciated since it comes at a time when student fellowship resources are dwindling."

In announcing the funding program, William P. Sutter, president and chairman of the Trust's fellowship committee said: "In recent years as the need for medical research fellowship funding has steadily increased, the amount of funding available has not kept pace, and this is particularly true for those just starting on their research career as predoctoral graduate students.

"It is our hope that these grants from the Trust will enable outstanding students to pursue their studies more effectively by virtue of lessened financial burdens," he added.

The Lucille P. Markey Charitable Trust was established in 1983, following the death in 1982 of Lucille P. Markey, owner of Calumet Farm, the world-famous Kentucky thoroughbred breeding and racing stable. Under the provisions of Mrs. Markey's will, the Trust's assets are used exclusively for support of basic medical research.

Other institutions receiving funds through the fellowship program are California Institute of Technology, University of California-Los Angeles, University of California-San Francisco, University of Chicago, Harvard University, Johns Hopkins University, University of Kentucky, Massachusetts Institute of Technology, University of Miami, Northwestern University, Rockefeller University, Washington University, University of Wisconsin, and Yale University.

4-25-84 —30— LH2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD HOSPITAL'S NURSE WEEK (MAY 6-12)

HIGHLIGHTS ADVANCES IN NURSING PROFESSION

STANFORD—

Stanford Nurse Week, a celebration of nursing achievements in patient care, research, teaching and management, will take place May 6-12 at Stanford University Hospital (SUH).

A highlight of the week's activities will be a public lecture on the rising professional image of nursing by noted University of Michigan professors of nursing, Drs. Beatrice and Philip Kalisch. The festival also will feature tours and displays open to the public.

The weeklong event—an expansion of National Nurse Day on May 9—is a tribute to the growing influence of nursing in medicine, according to Gaye Bruce, R.N., chairperson of the Nurse Week organizing committee.

"Nurses are finally gaining the professional recognition they deserve," said Bruce. "Stanford Nurse Week provides an opportunity to let the community learn about the many ways in which nurses contribute to health care."

In honor of the event, Palo Alto Mayor Larry Klein has proclaimed May 6-12 Mid-Peninsula Nurse Week, Bruce added.

Major events open to the public include:

- Tues., May 8—Health Fair near the SUH main center cafeteria, from 9 a.m. to 4 p.m.. Exhibits, demonstrations and presentations explaining the role of nurses in patient care, education, and research.

Tours led by nurse docents will depart from the Health Fair area to visit hospital nursing units, intensive care facilities, operating rooms, emergency services, and the new medical rescue helicopter.

4-24-84

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• Wed., May 9—Lecture on "Nursing Images: A New Challenge," featuring nationally known speakers Beatrice J. Kalisch and Philip A. Kalisch, from the University of Michigan. The lecture will take place in Fairchild Auditorium from 9 to 11 a.m., and will be repeated in the afternoon from 3:30 to 5:30 p.m.. A reception will be held in the Fairchild Auditorium lobby between presentations, from 2:30 to 3:30 p.m..

• Thurs., May 10—Health Fair and tours of SUH Hoover Pavilion nursing units, including special presentations on nursing's role in sports medicine, psychiatry, dermatology, and plastic surgery. Tours take place at 10 a.m., 2 p.m., and 3:45 p.m.. Shuttle vans to Hoover will depart from the Main Center entrance 15 minutes prior to tour departure times.

The weeklong tribute to nursing may be the first event of its kind, Bruce said, as nursing changes to encompass much more than bedside care.

"At Stanford Hospital, nurses are encouraged to get into other professional activities, such as education and research," she explained. "These opportunities for professional advancement have helped Stanford Hospital achieve notable success at nurse recruitment and retention," added Bruce, who is the SUH nursing department's coordinator for marketing and recruitment.

The program was conceived following a survey at Stanford Hospital which revealed that professional recognition is important to nurses who work in the institution, Bruce said. "This event pays tribute not only to the nurses at Stanford but to nurses everywhere," Bruce noted, adding "we are getting calls from nurses all over the country who have heard about the event."

Stanford Nurse Week "was the brainchild of Stanford nurses themselves who have been actively supported in the effort by SUH director of nursing Duane Walker, R.N.," Bruce said. More than 1,000 people are expected to participate in the event which has been in planning for over nine months, she added.

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LH3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

(CITY DESKS: Photographers and television crews are welcome to cover this event.)

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

FOR IMMEDIATE RELEASE

CHILDREN CAN LEARN ABOUT GOOD HEALTH AT FAIRE

STANFORD—

Children—and their families—will have the opportunity to learn about good health at the Children's Health Faire scheduled for Saturday, May 5, at Stanford Shopping Center.

Sponsored by Children's Hospital at Stanford and Stanford University Hospital, the event will feature more than 35 booths that will line the mall. All will offer hands-on experiences, exhibits and demonstrations aimed at teaching children about health related topics such as sports injuries, good nutrition, first aid and paramedic rescue, communicable diseases, and poison control.

Children will also be able to learn what to expect if they are admitted to the hospital, or require ambulatory surgery.

The Palo Alto Fire Department and Sheriff's Department, the Palo Alto Paramedics, Touchstone, and the Ronald McDonald House are just some of the community groups that will have booths at the faire.

The booths will be open to the public at no charge from 10 a.m. to 4 p.m. For more information call the Community Affairs Office at Children's Hospital at Stanford, 327-4800, ext. 363, or Stanford University Hospital's pediatrics department at 497-5351 or -5135.

4-23-84 —30— sk2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
FOR IMMEDIATE RELEASE

STRUCTURES OF BIOLOGICAL MOLECULES REVEALED WITH NEW ELECTRON MICROSCOPE TECHNIQUES

STANFORD—

Scientists at Stanford University School of Medicine are using dramatic new techniques to study biological molecules in the electron microscope.

The new techniques, part of a multi-laboratory effort, are helping researchers explore the miniscule molecules responsible for processes basic to life, ranging from proteins that control communication between cells to the disease-fighting scouts of the immune system, known as antibodies.

Although looking at structures may seem easy, with objects as tiny as biological molecules, it is an enormous technological feat. The new techniques, being developed in the laboratories of two professors in Stanford's department of structural biology—Drs. Roger Kornberg and Nigel Unwin—overcome some major limitations of electron microscopy.

Because they are so tiny, the structures of most biological molecules can only be analyzed under the electron microscope if many copies of the molecule are aligned in orderly arrays, like trees in an orchard. Then, by combining information from all the assembled molecules, a picture of the "average" molecule can be calculated.

Kornberg and his colleagues have developed a way of making biological molecules line up, or crystallize, in a thin sheet.

Unwin's laboratory has found a way of freezing molecules, plunging them into liquid nitrogen at minus 160 degrees centigrade. Using the freeze technique with a low dose electron beam enables researchers to do away with stains that obscure detail in molecules being viewed. Eliminating stain also allows researchers to look at molecules in their natural aqueous solution, simulating conditions inside the living body.

(Both techniques build upon work by David DeRosier and Aaron Klug from the Medical Research Council Laboratory in England. The British team established a way of making three-dimensional pictures by tilting crystalline specimens in the electron microscope, then using sophisticated mathematics to transform the information into a picture of a single molecule.)

By opening this new window on the world of biological structures, the Stanford scientists expect to learn much more than molecular "anatomy"—they hope to use that knowledge to deduce how molecules perform many of the tasks basic to life.

"Our understanding hinges on having precise pictures of molecules so that we can think in specific terms rather than in cartoons," Kornberg explained.

Kornberg's approach to making molecular crystals could be compared to inviting people to a movie with limited seating and giving them comfortable swivel chairs to sit in. Initially, as people fill the swivel chairs they face in different directions. But when the movie begins, everyone turns to face the screen, thus creating a one-person-thick "crystalline" array.

In the molecular process, the swivel chairs are special fat molecules, called lipids, layered onto the surface of an electron microscope's examination grid. The molecules under study attach to the lipid "chairs" because the lipids have been modified to contain a binding site with special affinity for the molecule. As the molecules "sit down" on the lipids, at first they face in random directions. But in time the molecules swivel around to face the "movie screen" as chemical interactions occur, holding the molecules together in formation.

In a pilot study using antibody molecules, published last year in *Nature*, Kornberg and a colleague, Ed Uzgiris, established that this lipid binding technique produces two-dimensional crystals thin enough to be examined under the electron microscope. The electron microscope image of the disease-fighting antibody molecules revealed a flexible joint not previously known to exist.

The new approach has created excitement in the scientific community. Researchers have come to Stanford to learn and apply the technique, and the university is seeking a patent to cover commercial applications of the process.

Kornberg expects the crystallization approach to help provide new information on cellular complexes containing many proteins, such as those involved in the vital functions of DNA replication and protein synthesis.

"Just as you need to know the arrangement of components and parts to know how a machine works, you have to know how molecules are arranged in the complex systems and assemblies of the cell," Kornberg said.

Martha Fedor and Hans Ribi, investigators in his laboratory, already have made lipids linked to nucleotides and to DNA. These will be used to examine a host of molecules that interact with the hereditary material. An example under study in Kornberg's laboratory is RNA polymerase, an enzyme that helps determine what proteins each cell makes.

The other new technique, developed in Unwin's laboratory, has been used to study tiny tunnels between cells, called "gap junctions." Some of the work carried out by Unwin is described in articles in the February issue of *Scientific American* and in the February 18 issue of *Nature*.

These tunnels—made of a protein called connexon—open and close, controlling communication between neighboring cells. Although the tunnels play a crucial role in coordinating tissue growth and metabolism throughout the body, until recently how they opened and closed was one of biology's mysteries.

Unwin and his colleagues have learned that the connexons twist open and shut because of subtle structural alterations caused by changes in calcium levels inside cells.

"Understanding how connexons work is important because they facilitate communication between cells, enabling them to work in a coordinated way, to grow and function together," explained Unwin. "If these channels are defective or closed, then cells can't communicate well. The result could be haphazard growth, perhaps even malignancy. We are studying the connexon protein to find out how it regulates cell-to-cell communication."

The connexon is a protein made of six identical subunits—like columns standing on end—arranged in a circle, enclosing the tunnel. It operates much like a diaphragm controls the opening in the lens of a camera, Unwin noted. As the columns tilt slightly against each other, the tunnel opens; as they straighten up, the tunnel disappears.

"This gating effect is crucial to the life of tissues," Unwin said. "Among other things, it seals off cells that die, preventing the loss of vital nutrients from adjacent healthy cells."

Unwin stressed the importance of other studies in his laboratory such as the work of two postdoctoral researchers, Ed Gogol and Santosh Sikerwar, who are looking at aduitional structural properties of gap junctions between cells.

Visiting researcher Alain Brisson and a graduate student named Peter Ennis are looking at molecules involved in nervous system function. In particular they are studying a protein in cell membranes that specifically binds to acetylcholine, a chemical messenger released by nerve cells.

Graduate student Ron Milligan is studying ribosomes, the cellular structures where most protein synthesis takes place, Unwin said.

The structural approach to biological systems has been given insufficient attention in recent years, Kornberg believes, because the technology has been difficult and laborious to work with.

Kornberg summed up the "technology barrier" the new techniques help overcome.

Although x-ray diffraction and electron microscopy are useful for determining the structures of molecules that form crystalline substances, not many biological substances readily crystallize, he said.

Even when a biological substance can be obtained in crystalline form—as with the connexon protein—x-ray diffraction is so difficult and tedious that it can take years to solve the molecule's structure, Kornberg added.

Electron microscopy is speedier but it can reveal detail only in a very thin "slice" of crystal; large three-dimensional crystals are too thick for the electron beam to cleanly penetrate.

The powerful electron beam can destroy thin specimens unless they are encased in a special stain. With the protective coat of stain, however, only contours are visible while the insides of the specimen are obscured from view.

The techniques under development by the Stanford researchers in the department of structural biology—crystallizing biological molecules in a thin, two-dimensional sheet, and viewing the molecules in the "nude" without stain—have begun to crumble these technology barriers.

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LH2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

PALO ALTO PLANNING COMMISSION REVIEWS MODERNIZATION PLAN

STANFORD—

Two Palo Alto City Planning Commission members said Wednesday that Stanford University should provide an alternative housing site if a parking lot on housing-designated land is permitted next to the hospital's modernization project.

City planning staff members had recommended that zoning and city comprehensive plan changes be permitted to allow parking at the 3.06-acre heliport site, tentatively earmarked by the commission for housing.

"But I am loathe to give up the housing designation on that site without another," commission chairman Helene Wheeler told a preliminary hearing reviewing the environmental impact report for Stanford's $110 million hospital modernization project.

Concurring with Wheeler, Commissioner Mark Chandler added, "I am concerned that if another site is designated for housing, it is done so in a way that there are assurances that the housing will actually be built there."

Wheeler said potential sites for housing include vacant land near the proposed project on Welch Road. She said the commission should make no decisions on the matter at Wednesday's session and invited Stanford to recommend potential housing sites on university-owned land in the Palo Alto city limits.

The university has proposed building at 1100 Welch Road a 42-unit facility for patients and family undergoing longterm care at the hospital, as well as 108 apartment units primarily for medical center related employees. Plans for the 1,100 unit Stanford West housing project on a 46-acre site across Willow Road from the medical center were shelved last summer when the university and the city could not agree on conditions of approval set by the Palo Alto City Council.

The Planning Commission has scheduled a May 2 public hearing at which it can recommend action to the City Council on Stanford's request.

Lawrence G. Crowley, vice president for medical affairs and president of the hospital board, told the planning commission the project, under development for more than three years, is needed "to allow us to be much more efficient and to provide the most modern" patient care facility possible.

Stanford has proposed that 218 parking spaces be located adjacent to the heliport, between Welch Road and Blake Wilbur Drive. In 1987, when the heliport is expected to be relocated to the roof of the modernized hospital, Stanford has proposed converting the helipad to an additional 191 parking spaces.

The site is currently designated in the city's comprehensive plan as Multiple Family Residential, although the city has postponed rezoning the property from Office Research (which permits the heliport and parking) at Stanford's request pending completion of a medical center parking plan. That plan was recently finished and presented to city officials.

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4/19/84

Ken Schreiber, city planning director, recommended that zoning be changed at the heliport site to Major Institution/Special Facilities. While he noted that the loss of potential housing "is a serious concern," he added that the new designation would give the hospital maximum flexibility to provide an economical parking solution while giving the city maximum control over the site, since the recommended zoning designation would severely limit alternative uses there.

In his opening remarks to the commission, Schreiber said "Stanford University Hospital is not a typical non-residential development. They are not proposing office and other commercial development that can be located in another part of the Santa Clara Valley" or elsewhere.

"The hospital has provided a very highly valued community service and the high quality health services of the hospital is a very important community objective."

He added, in response to some community concerns about the potential for greatly increased traffic and need for parking, that he believes that economic pressures and the limit on the increase in beds at the hospital will keep employment growth—hence increased traffic in the area—at a modest level.

Wednesday's hearing was authorized to review environmental and land use concerns. Architectural and health care needs are considered by other reviewing bodies. Plans for the buildings themselves will be scrutinized by the city's architectural review board May 3.

Other requests have already been granted, including approval by the state to issue up to $85 million in tax exempt bonds to finance portions of the project.

When completed in several years, the modernization will provide new, more modern nursing units and other facilities, including a new surgical suite. A four-story building with 190 new patient rooms will replace current outmoded facilities.

—30— mg3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Pat Forsythe (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD HOSPITAL EXPERIENCES BABY BOOM

STANFORD—

Stanford University Hospital is having a baby-boom.

According to Marilyn Swarts, assistant clinical nursing coordinator for labor and delivery rooms, 312 babies—the largest monthly tally in more than 20 years—were born during March at Stanford. Births last exceeded 300 in August, 1961, with 314.

Swarts said deliveries then declined, probably in part because El Camino Hospital opened that year. After hitting a low of 141 in January, 1972, births averaged around 220 a month until last year.

"We definitely have seen a steady increase," Swarts said, adding that she hoped Stanford's reputation catalyzed the trend.

"We like to feel part of it," she said. Swarts added that she thought the upswing also reflected an increasing birthrate in the community.

Private physicians on the hospital's gynecology and obstetrics service are all seeing an increase, she said.

"What we're seeing more of is the older person who has had a career and is having a baby."

Two other local hospitals reported no increases last month. El Camino Hospital listed 221 births and Sequoia Hospital had 70, about average for those hospitals, spokeswomen said. The Birth Place, a local birth center, reported that an unusually large number—five of an expected six—of its March deliveries were transferred to Stanford for medical reasons, such as an anticipated cesarean section or breech birth.

Both The Birth Place and El Camino reported a gradual increase in births over the last couple of years. If the trend continues at Stanford, its old record—360 babies born in May, 1961—might be broken.

4-16-84 —30— swn1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

(Editors, News Directors: The following is a shortened version of a release mailed March 7, 1984. It is being rereleased because of the continued need for volunteers).

VOLUNTEERS NEEDED FOR HIGH BLOOD PRESSURE STUDY

STANFORD—

Stanford researchers were continuing to seek volunteers for a study of whether an exercise program and medication are more effective against high blood pressure than drugs alone. The study also is g a close look at the ability of exercise to lower blood pressure without medication, said Dr. H. Robert Superko, medical director of the project.

Volunteers should be men between about 25 and 55 years of age who have untreated high blood pressure but are otherwise healthy. They should not have participated in regular endurance exercise during the past six months.

The study offers volunteers a thorough physical exam, the potential for a regimen which will control blood pressure, and the likelihood that each volunteer will leave the program in better shape.

The medications being tested are beta blockers, among the most commonly prescribed drugs in this country.

Potential participants are invited to call Craig Hoover, cardiology research assistant, at 497-9646 between 2 and 4:30 p.m., Monday through Friday, for more information.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
FOR IMMEDIATE RELEASE

STUDY LOOKS AT PSYCHOSOCIAL CONCERNS OF RECOVERED CANCER PATIENTS

STANFORD—

A majority of patients treated for the cancer known as Hodgkin's disease resume normal daily lives despite the emotional stress of experiencing malignant illness, Stanford University Medical School researchers have found.

But the researchers also found that the social and psychological challenges facing recovered cancer patients can mar successful re-entry to society for some.

In the first longterm follow-up study to investigate quality of life among patients treated for Hodgkin's disease, researchers found that most former patients were able to obtain full or part time work, and many who wanted to do so were successful in having children.

The researchers also learned that depression was a serious aftermath of cancer in about one of five patients, and difficulties on the job and lack of energy were experienced by approximately two out of five former Hodgkin's patients.

"The study indicates that 60 percent of treated Hodgkin's disease patients are doing very well, while approximately 40 percent are experiencing some psychosocial problems," said Patricia Fobair, clinical social worker who coordinated the study at Stanford University Medical Center.

"Although we do not know whether or not these figures would differ in a cross-section of the population at large, the results suggest that vocational rehabilitation and psychological counseling could be important components in an overall treatment program for Hodgkin's disease," Fobair added.

The cross-sectional study was based on interviews with 401 Hodgkin's disease patients treated at Stanford during the last 21 years. Fobair stressed the preliminary nature of the data and lack of a control group of non-cancer patients for comparison purposes.

Fobair was scheduled to present the preliminary, as yet unpublished, findings Thursday April 12 at an American Cancer Society meeting in San Mateo, CA.

Dr. Richard Hoppe, assistant professor of radiology at Stanford University School of Medicine, headed the investigation. Other members of the research team include Dr. Joan Bloom from the School of Public Health at the University of California in Berkeley, and Dr. David Spiegel, assistant professor in Stanford Medical School's department of psychiatry and behavioral sciences.

The study was funded by a grant from the Robert Wood Johnson Foundation of Princeton, New Jersey.

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Hodgkin's disease, a cancer of the lymphatic system, strikes young adults, most frequently individuals in their teens, 20s or early 30s. With about 9,000 new cases reported each year in the United States, Hodgkin's disease has one of the highest cure rates of any malignancy. Due to improvements in treatment, which generally includes radiation therapy, drug therapy, or a combination of the two, nearly 80 percent of patients who receive proper therapy can expect near-normal lifespans.

Because such a large fraction of patients fully recover from the disease and face a full lifetime ahead, how to help foster the social and psychological rehabilitation of Hodgkin's disease patients is a paramount concern for health professionals, Fobair explained. The study was intended to fill in some of the unknowns about problems Hodgkin's patients face and to seek some solutions toward preventing the problems from developing.

A further study, funded by the American Cancer Society (California division), is now under way in collaboration with researchers at the University of California in Los Angeles, Fobair said, that should provide more detailed information.

The average age of the patients interviewed was 36, and their average elapsed time since treatment for the disease was nine years. Fifty-five percent of the subjects were male, and 45 percent were female.

At the time of their interviews, 82 percent of the patients were completely free of disease, 16 percent were free of disease but had recovered from a relapse, and two percent were undergoing relapse.

One measure of readjustment to society was employment status, the researchers noted. Finding work appeared to be less of a problem for men than for women, Fobair said. While 82 percent of the men were employed in full or part time jobs, 58 percent of the women were at work.

Overall, 71 percent of the patients interviewed found full or part time work. Of the unemployed individuals, only 5 percent were actively seeking jobs, she noted.

Most patients remained interested in the jobs they pursued. Eighty-one percent of patients reported continued motivation and ambition with respect to careers, the researchers found.

However, problems on the job were frequently reported by the recovered patients. Forty-two percent perceived discrimination or difficulties at work, the researchers learned. Major complaints included lack of promotions and job offers, conflicts with coworkers, and denial of insurance.

However, Fobair cautioned that because the study did not compare pre- and post-cancer employment patterns and because it did not include a comparision group of non-cancer patients in similar positions, it was difficult to evaluate whether or not the frequency of employment and of job-related problems was significantly different from normal.

Lack of energy was a problem for 90 percent of the patients while they were undergoing treatment. However, 60 percent had regained normal energy level one year beyond therapy. Younger patients experienced swifter recovery of energy than did older patients, Fobair noted.

Fobair identified depression as one of the most serious obstacles to full rehabiliation of the cured cancer patients. The researchers used a National Institute of Mental Health scale for rating severity of depression.

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Although the pooled average score of all patients was within the normal range, 20 percent of patients had scores reflecting clinical depression. The mood disorder was more common in those 20-35 years of age than in younger patients. Depression was more frequent among patients recently diagnosed and treated and less frequent among those whose duration of follow-up was longer, Fobair reported.

Issues that may contribute to depression, Fobair said, include fear about loss of life, impaired body image, and fear of a recurrence of the cancer.

The researchers found a significant overlap among patients reporting depression and those who reported low energy level and low levels of sexual interest and activity, Fobair said.

Over two-thirds of the patients felt their general health was fair to excellent, while the rest felt their overall health was poor. Approximately three-quarters of the patients interviewed retained a positive body image while one-fourth felt the cancer and its treatment had impaired their body image, the researchers found. Body image decline reflected a sense of loss of general well-being, Fobair said, often associated with the patient's feeling that "my body let me down."

Nearly half of the patients who had been married at the time of their cancer diagnosis reported having divorced or separated since then. This divorce rate is comparable to the national average of failed marriages, which is about one out of two, Fobair said. Eight percent of all the divorced or separated individuals attributed their dissolution to problems connected with the illness, Fobair said.

Diminished sexual interest and activity was reported at approximately the same rate by women and men, and was a more frequent problem in individuals more than thirty years of age, the study showed. While fewer than 10 percent of men under 30 reported decreased sexuality, about one in four men over 30 reported a sexual decline. Approximately 10 percent of women under 30 experienced such sexual problems compared to one in four women over 30, Fobair said.

Family planning results parallelled findings from a previous Stanford study of fertility in Hodgkin's disease patients, which demonstrated that approximately 20 percent of women treated for the disease went on to bear children. In the current study, of those patients with children, approximately 25 percent had had them following their recovery from illness. Among those without children, one out of four reported they were unable to conceive.

Families and friends were by far the most frequent sources of emotional support for patients: 67 percent sought help from family and 48 percent turned to friends as well. Religion and the health profession also provided support for some.

Fobair said that as a result of the study, the psychosocial services program at Stanford is enlarging its scope through increased referrals for vocational help and psychotherapy. In addition, she said that a newsletter and a discussion group for Hodgkin's patients were recently initiated.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

RESIDENTIAL THERAPEUTIC COMMUNITIES SUPERIOR FOR TREATMENT OF HEROIN ADDICTS, STUDY SHOWS

STANFORD—

Therapeutic residential communities are superior for treating heroin addicts than methadone treatment or outpatient psychotherapy, a Stanford University Medical Center study has found.

The authors of the study, published in the February 1984 *Archives of General Psychiatry*, are encouraging members of the medical profession to recognize the effectiveness of longterm inpatient treatment, and overcome their pessimism and reluctance to refer addicts to inpatient treatment facilities.

The number of addicts, the authors point out, has dramatically increased to constitute up to 2 percent of the U.S. population.

In their study, the researchers found that participants did change their drug use habits after longterm inpatient treatment. And, they went through a rehabilitation process that helped them enter the mainstream of society. Many were employed or enrolled in some type of educational program, and participants had far fewer arrests and convictions for crimes than before treatment.

Drs. Richard Bale and Vincent Zarcone of the department of psychiatry and behavioral sciences headed up the study comparing three types of inpatient treatment communities at the Veterans Administration Medical Center in Palo Alto and Menlo Park. The communities differed in their organizational structures, staff qualifications, and rules patients were obligated to follow.

In a two-year follow-up of the 363 addicts who participated in the study, the researchers were able to contact an unprecedented 96 percent. This compares with a 40-60 percent follow-up range of most previous similar studies.

The researchers measured the success of the programs by comparing—before and after treatment—the amount of heroin or other illicit drug use by the participants and the control group, the number of addicts either working or going to school, and the number of their arrests and convictions.

As many as 60 percent of participants in one of the three groups reported no heroin use for the three months preceeding the follow-up, as compared with about 33 percent of those from the control group who underwent only a five-day narcotic addiction withdrawal program. Nearly 57 percent of participants from one of the groups reported no other illegal drug use for the preceeding three months as well, compared with about 39 percent from the withdrawal group.

Nearly 68 percent of participants in one of the groups had no convictions since they began treatment, compared with only 31 percent of those from the withdrawal group. And almost 59 percent of one of the groups reported they were working or attending school, compared with 34 percent of those from the withdrawal group.

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"What this tells us is that the treatment of heroin is like that of alcohol. You don't get total abstinence more than about 25 percent of the time, but you do get substantial control up to about 70 percent of the time," Zarcone said.

But, he added, the participants did show much improvement in two "socially important variables. We had a high percentage of guys who were paying taxes and not committing crimes."

With funding from the National Institute on Drug Abuse, the researchers focused on three types of communities, established in the early 1970s following a federal mandate that all veterans returning from Vietnam with drug problems be treated.

The Family was a peer confrontation program, derived from the well-known Synanon. It was run by professionals and former patients, and its participants had very little contact outside the community. No drugs or alcohol were allowed for patients or staff. "The community strikes the visitor as very clean, organized, and regimented," the researchers wrote in the journal.

Quadrants, the second type of community, used a variety of therapeutic techniques, and was staffed by professionals and former patients. Participants had more contact with outsiders than those in The Family, and some drug and alcohol use was allowed. "The community strikes the visitor as quite loosely organized, with a good deal of freedom in personal appearance and expression," the report stated.

The final community, Satori, had more professionals and fewer patients on its staff. More emphasis was placed on individual therapy, and treatment included a comprehensive written program. Patients were allowed limited alcohol use off of hospital grounds, and had to undergo weekly urine tests to detect drug use. "The impression given by the program is that of a college dormitory during finals: busy, serious, and subdued," the researchers observed. Although all three groups have been extensively revised to be more effective-- they're much stricter now -- Satori was the more successful of the three groups, Zarcone concluded.

Participants were recruited for the study from 710 patients who entered the five-day inpatient narcotic addiction withdrawal program. The patients who wanted to get into a longer-term rehabilitation were allowed to choose any of the three communities. Those who underwent only the five-day withdrawal program served as a control group for the study.

"We may have compromised the study by not randomly assigning patients to nontreatment groups or to specific treatment groups," Zarcone explained. "We had to give the patients the choice however. Trying to do it any other way would be unethical."

"You cannot force or deny treatment for anybody," Bale added. "Not only is it unethical, but the patients' participation was voluntary. If they didn't get the treatment they wanted from us, they were free to leave and obtain it elsewhere."

And leaving, the scientists said, would amount to no treatment at all. Methadone maintenance, in which addicts are given the substance as a substitute to heroin in hopes of weaning them of their dependency, has been shown not to be effective, Bale said. Outpatient therapy, he continued, is not effective either.

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"Many addicts' problems stem from their relationships with others," he explained. "These problems can't be addressed in therapy that takes place one hour each week because patients have powerful defenses they employ. Addicts also rarely are able to establish good rapport with authority figures. They respond much better to peers. The only way to address these problems is in a community where they can't hide or run away from their problems."

"We have patients who are coming back now five and ten years after their initial treatment who are raising families, employed, and doing great," Zarcone said. "These are people who were criminals when they came to the programs, completely strung out on heroin, not thinking about anything except where their next fix was going to come from. The effect of this type of change in lifestyle is important across generations."

"The concept of a therapeutic community is a very different kind of thinking than that of most medical professionals and medical consumers," Bale observed. "Physicians think they need to be able to handle anything on an outpatient basis, but in no way can they handle something like heroin addiction."

"Even with the great increase in the number of addicts, there is still an aura of not quite knowing what to do about treating them and not quite placing treatment in the mainstream of medicine," Zarcone added. "There's a lot of pessimism about the effectiveness of treatments. Physicians and medical students think there is not enough to learn about addicts and treatment, and what is known doesn't make any difference. Thus, lots of patients are going untreated.

"This study shows with some conviction that therapeutic communities can be effective," he said.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

NEW LAW EMPOWERS INDIVIDUALS TO MAKE MEDICAL LIFE OR DEATH DECISIONS

STANFORD—

A new California law, the first of its kind, allows terminally-ill patients to designate another individual to make life or death decisions in the event the patient is unable to do so, said a Stanford University Medical Center physician.

The legislation, called the Durable Power of Attorney for Health Care, became effective Jan. 1, 1984. The agreement conveys the authority to consent, refuse, or withdraw consent "to any care, treatment, service or procedure to maintain, diagnose, or treat a physical or mental condition."

"This represents a dramatic step forward in this inherently difficult and highly emotional area of law and medicine. It also provides long overdue protections to health care providers who must implement these decisions," said Dr. Thomas Raffin, respiratory medicine specialist and assistant chief of medicine at Stanford Unversity Medical Center, and Michael Gilfix, former director of Senior Adults Legal Assistance of Palo Alto and San Jose. Gilfix has prepared a model of the document in accordance with the law that patients may sign.

The need for such legislation has surfaced in response to an increasing number of cases, such as the famous Karen Quinlan case, in which the court has become involved after decisions by family members to withdraw life support systems from patients who are terminally ill and often in a vegetative state.

"Many members of the legal and medical communities are of the view that the courts should have no role in so personal a decision-making process," Raffin said. "So serious is the problem that the mere filing of suit in any court of the country at any point in time has too often had a retarding and chilling effect on good judgment. Open discussion and common sense fall costly victim to this fear of controversy and litigation."

One of the most recent examples illustrating the need for the legislation involved two physicians in Southern California who withdrew life support systems from a comatose, terminal patient with permission from the spouse. Despite this, suit was filed against the physicians. "A legal roller coaster followed . . . . stressing the lack of reliable standards and decision-making methodologies that would eliminate the need for court involvement," Raffin said.

The legislation, introduced in the state senate about one year ago by Senator Barry Keene (Dem.-District 2), provides for a written document that can be signed by a competent adult naming another person "attorney in fact." This designated person then has the authority to make "virtually all medical care decisions for the adult if and when he lacks the capacity to make his own medical care decisions," Raffin explained.

The adult signing the agreement can "hand-tailor" it by specifying any types of treatment or placements he would not desire. The designated person is limited by the agreement only in that he "cannot consent to placement in a mental health treatment facility, to convulsive treatment, to psychosurgery, sterilization, or abortion," according to Raffin and Gilfix.

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The agreement is good for seven years, or until the patient regains the capacity to make decisions for him or herself.

In conjunction with the new legislation, the California Civil Code has been revised to state that health care providers are not subject to "criminal prosecution, civil liability, or professional disciplinary action . . . . if they rely on a health care decision and both of the following requirements are satisfied." The requirements then listed refer to ensuring that the attorney in fact's decision was made in good faith, and that "the health care provider believes in good."

The new legislation is the third document available to medical care consumers in California that attempts to deal with the question of who has the authority to make life and death decisions. The Living Will is a document in which an individual can express his desire that extraordinary medical procedures not be used if he is terminally ill. It is distributed by Concern for Dying, a New York City-based organization. Having failed to hold up in Florida courts, "the living will remains a document of dubious legal reliability," Raffin said.

A "directive" of the California Natural Death Act, is the other document, providing "in essence" that in certain circumstances "life-sustaining procedures" may be withheld or withdrawn if a person is terminally ill. A number of requirements must be met to employ this legislation, but a physician can choose to ignore it without fear of being held liable. Because of this, the directive is not a binding document either, according to Raffin and Gilfix.

"The new legislation is a logical extension of the well-established principle that any competent adult has the right to refuse medical treatment," Raffin said. "It also eliminates cumbersome, costly and typically inappropriate intervention by the court system when difficult medical care decisions are to be made."

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FOR IMMEDIATE RELEASE

MEDICAL DECISIONS: WHO MAKES THEM?

STANFORD—

Medical decisions are becoming more complex and difficult to make in light of new legal, financial, technical, and ethical considerations present in today's health care delivery system, said Stanford physicians during a public lecture Tuesday (April 10) evening.

The lecture, called "Medical decision making: is it being taken away from you and your doctor?" was the last of a three-part series sponsored by Stanford University Medical Center for the community.

Today's physician/patient relationship attempts to involve the patient much more in the decision making process than in the past, according to Dr. Thomas Gonda, Stanford psychiatry department chairman, who described how such relationships have changed over time. But it is not always fair to expect the patient to be able to make health care decisions for themselves, said Dr. Robert Stebbins, a community internist.

New laws and court decisions setting precedents that require physicians to make patients equal partners in decision making present problems, Stebbins explained. "There is the difficulty of the patient having adequate medical knowledge and assessment ability to be able to make the best decision." And, he continued, many patients prefer to leave the decision making to the physician.

Insurance carriers and other 'nonmedical' parties have also become increasingly involved in decision making, Stebbins said, often limiting a physician's choices and possibly, the quality of care he is able to offer a patient.

This new trend has made physicians defensive in their medical practices, he added, and "nervous about our ability to satisfy our patients, where our primary responsibility lies, and the courts, where in times of trouble our patients will turn."

The courts' -- and government's -- involvement is especially evident in situations involving patients on life support systems in intensive care units, said respiratory specialist Dr. Thomas Raffin, assistant chief of medicine at Stanford. In recent years a number of cases in which physicians and/or families of patients who had "almost no chance to regain good quality of life" wanted to withdraw them from extraordinary life support have resulted in a judge deciding the patient's fate.

This trend is destructive, Raffin explained, and to avoid it people should make their opinions about how they'd like to be treated known before they happen to end up in intensive care.

While documents called The Living Will and the California Natural Death Act Directive are two ways in which a patient can make his desires known, neither have held up in court as legally binding for the patient or protective of the physician's liability, Raffin said. New California legislation, however, called the Durable Power of Attorney For Health Care, does provide for the first time legally binding documentation of a patient's desires for treatment or nontreatment.

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Dr. Keith Marton of Stanford's department of medicine agreed that some of the ability to make decisions is being lost by physicians, but that's not necessarily bad, he said.

"We're now seeing medical decisions being made by people like administrators, insurance payers, legislators, judges and lawyers, as well as patients and providers," Marton said. "This is happening because the number of medical decisions being made today is so far greater than 20 years ago. This has to do with the increasing complexity of medicine, and the increasing number of alternatives made possible by advances in research and technology."

But because of the influence of nonmedical people now involved in decision making, physicians are being forced to look more closely at the care they're giving, Marton explained.

Physicians are paying more attention to the benefits of medical care, and to what their patients really want to gain from it, he said. They're tailoring technology usage to those patients who will have the most benefit. Physicians are looking at the process of decision making, he continued, and rather than focusing their efforts on gathering a magnitude of facts, they're focusing on what to do with those facts.

"We're seeing a new trend in medicine where we're beginning to understand our technology and to manage it to our own ends rather than allowing it to manage us," Marton concluded. "The overall quality of medical care can be made better without increasing the cost. There are still plenty of arguments to be had, especially in the ethical arena where there is no right or wrong answer. In the meantime, I'm looking forward to how the practice of medicine will change in the coming years."

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LIFE FLIGHT

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Stanford University Hospital
Santa Clara Valley Medical Center

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FOR IMMEDIATE RELEASE

"LIFE FLIGHT" EMERGENCY HELICOPTER BEGINS SERVICE MAY 1

STANFORD—

(Editors, news directors, reporters: Members of the media are welcome to attend the briefing and demonstration at the helipad at Santa Clara Valley Medical Center, 731 Bascom Ave., San Jose at 10 a.m., Friday, April 13. Safety procedures will be demonstrated to emergency department personnel, and Dr. Michael Eliastam, local Life Flight program director and chief of emergency services at Stanford, and medical staff from SCVMC, will discuss the new program. Life Flight crew members will be available on request for interviews and photo opportunities with the helicopter and on-board emergency equipment.)

A helicopter emergency transport system capable of dramatically slashing response times to the scene of emergencies will begin service May 1 under the auspices of two key Peninsula/south Bay medical centers.

A demonstration of the "Life Flight" program, sponsored jointly by Stanford University Hospital (SUH) and Santa Clara Valley Medical Center (SCVMC), has been scheduled for emergency department personnel, Friday, April 13 at 10 a.m. at the SCVMC helipad.

"Getting seriously injured or ill patients to the proper medical facility in optimum time is the goal of Life Flight," which will serve a 150-mile radius around both SCVMC and Stanford, said Michael Eliastam, local Life Flight program director and chief of emergency services at SUH. Life Flight is a trademark used by approximately 21 hospital-based emergency helicopter transport services nationwide.

"This is the first time that Bay Area residents will have a hospital-based helicopter emergency trauma service system," said Robert Sillen, executive director of SCVMC.

"The helicopter will be airborne within five minutes of a request.

"Once the patient is on board, the crew—including an emergency care physician and a flight rse—will be able to provide care equal to that available in an emergency room while the patient is heading to the hospital at 140 miles an hour," Eliastam said.

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2-2-2 Sillen said rescue time for patients in some isolated communities or remote sites in Santa Clara and neighboring counties can be reduced from more than two hours by ground ambulance to 30 minutes or less by helicopter.

"And the time is even faster if you consider that physician-led health care begins as soon as the helicopter touches down," Sillen said.

He cited Pacheco Pass, where serious accidents often occur on a dangerous stretch of Highway 152 southeast of San Jose, as an example of a location where the helicopter could provide far more rapid response than ground ambulance. In certain remote mountain or coastal areas, the helicopter can land in areas completely inaccessible to ground ambulances, he said.

Eliastam said recent academic studies have shown that the speed provided by air ambulance service clearly can result in saving lives and avoiding permanent damage.

Life Flight, based alternately at SCVMC's and SUH's helipads, will be available to fly patients from emergency scenes to any hospital with a licensed helipad in Northern California where appropriate care may be provided.

The service will also transport patients on request from emergency rooms throughout the area to specialized care, such as a spinal cord injury or burn center available at SCVMC, and other advanced care at Stanford, Eliastam said.

In addition to its ambulance service, Life Flight medical personnel will be able to respond to quickly to major disasters such as earthquakes to set up a field emergency hospital.

"Life Flight service may be especially crucial after disasters where road access to the scene may have been impaired or where the emergency is so widespread that health care in a local area may have been put out of service, Eliastam said.

Both Eliastam and Sillen emphasized that Life Flight is intended to supplement, not replace, existing ambulance and paramedic services.

The initial helicopter will be a French Allouette III, but this unit will be replaced within three months by a German-built MBB BK-105 CBS. The equipment is being leased by Rocky Mountain Helicopter Services Inc. of Provo, Utah.

The chief flight nurse is Marcia Katz, a five-year veteran in the helicopter emergency transport field. Two fulltime pilots and a fulltime mechanic have been employed.

Life Flight is linked to the inter-agency Emergency Medical System and may be summoned by any physician, hospital, police or fire department staff, industrial safety officer or authorized government or emergency agency personnel.

"Both Santa Clara Valley Medical Center and Stanford offer advanced trauma care for acutely ill patients," Sillen said. "Together, Stanford and SCVMC can draw upon their longstanding affiliation (including SCVMC's use of Stanford faculty physicians and housestaff) to present a solid partnership and strong base from which patients within and outside the county will benefit."

Before service formally begins May 1, the crew is conducting training flights throughout the Bay Area.

STANFORD UNIVERSITY MEDICAL CENTER
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EDITORS AND SCIENCE WRITERS: You are invited to attend a daylong scientific symposium on molecular and genetic medicine at Stanford Medical School's Fairchild Auditorium Friday May 4. Sessions run from 8:45 a.m. to 12:30 p.m., and from 2 p.m. to 5:30 p.m. Copies of the symposium program are available on request. Please call the news bureau at (415) 497-6911 if you plan to attend.

FOR IMMEDIATE RELEASE

SYMPOSIUM SLATED ON MOLECULAR AND GENETIC MEDICINE FRIDAY MAY 4

STANFORD—

Genes that play a role in cancer (oncogenes) and proteins involved in the brain's electrical activity will be among the topics discussed at an all-day scientific symposium Friday, May 4 at Stanford University School of Medicine.

The symposium, "Perspectives in Molecular and Genetic Medicine," will begin at 8:45 a.m. in Fairchild Auditorium.

It is he second of a series of annual meetings at Stanford linked to the medical school's new program in molecular and genetic medicine, according to dean Dominick P. Purpura.

The program in molecular and genetic medicine, involving faculty from both the basic and clinical sciences, provides a scientific and intellectual framework to help rapidly translate research advances into new methods of diagnosis and therapy of human disease, Purpura said.

The symposium features presentations by prominent scientists from around the country, with introductions by Purpura, Stanford University president Donald Kennedy, and medical school faculty members.

A sample of speakers and their topics includes:

- Dr. Charles Stevens of Yale, on "Properties of Proteins Responsible for the Brain's Electrical Activity"
- Dr. Thomas Maniatis of Harvard, on "Molecular Genetics of Human Globin Gene Expression"
- Dr. Mariano Barbacid of the Frederick Cancer Research Center, on "Oncogenes in Humans and Experimentally Induced Tumors"

Other speakers come from the University of Washington, Rockefeller University, and the Carnegie Institution of Washington.

The symposium is open to invited guests and faculty, students, fellows, interns, residents, and staff.

Copies of the program can be obtained from the Office of Public Events, Stanford University School of Medicine, 750 Welch Road, Suite 300, (415) 497-6389.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

HOW PARENTS COPED WITH DAUGHTER'S MYSTERIOUS DISEASE

STANFORD—

Only last month, Evelyn and Gene Rose feared that their daughter, Jessica, might die. But today they marvel that she looks so healthy.

The rare illness one-month-old Jessica contracted is called infant botulism. Though it caused extensive paralysis, Jessica is steadily regaining movement throughout her body, and doctors say she should have no long-term effects from the disease.

Infant botulism affects only a tiny number of babies, almost always under one year of age. But recently, for unknown reasons, its incidence in California has risen to five times its normal rate. Twenty cases have been reported so far in 1984, according to the California Department of Health Services.

The disease is caused by a bacterium, *Clostridium botulinum*, which in a few cases grows in the intestine and produces a paralyzing poison. At its worst the disease can cause extreme breathing difficulties and inability to swallow, but it seldom leads to death. Scientists don't yet understand the disease completely, and its only treatment is with supportive measures and careful monitoring. Because it is so rare, doctors often aren't familiar enough with infant botulism to recognize it.

Ironically, the first symptom of Jessica's illness seemed minor, her mother Evelyn recalls. "About two weeks before it actually set in, she was constipated. But, being a new mother, I wasn't even sure it was constipation," she says. Absence or infrequency of bowel movements is often the first sign of the disease's paralyzing effect, explains Dr. Barry Tharp, the Stanford pediatric neurologist who diagnosed Jessica's illness.

The bacterial spores are commonly found in soil. Older children, adults, and even some young infants ingest the ubiquitous bacteria with no ill effects. Only in a small number of infant cases does the bacteria cause disease, excreting the same dangerous toxin that, in a jar of badly canned vegetables, can cause botulism and even death in an older person.

Why botulism bacteria thrive and produce toxin only in a few babies is still in question, Tharp says. But its effect on these infants is profound, he says. It interferes with the normal release of the chemical messenger acetylcholine at the junction of nerve and muscle, causing paralysis.

For Jessica, as with most children who get infant botulism, constipation only hinted at what was to come. Gradually, says her mother, "she started having trouble eating. In 24 hours, I couldn't get two ounces of formula down her. She got so she was sleeping 'round the clock. She was limp, and she couldn't move her head."

4-9-84

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Evelyn told Jessica's doctor about the changes in her daughter. "He said if she didn't eat through the night, we'd have to take her to the hospital."

The following morning, Jessica became critically ill, choking, gagging, and unable to swallow. By the time she entered the local community hospital later that morning, she was pale and having trouble breathing.

Doctors could not pinpoint the cause of Jessica's symptoms, her father, Gene, recalls, but tested her for meningitis, an inflammation of the lining of the brain.

When antibiotic treatment failed to help, doctors suggested that infant botulism might be the culprit. Because she might need specialized care, the local doctors decided to send her to Stanford Hospital's pediatric intensive care unit. Most infants with the disease must be placed on respirators to aid breathing. Though Jessica was lucky enough to have a milder case, she still required tube feeding to prevent fluid from entering her lungs, a potential cause of pneumonia.

The difficulty with infant botulism, says Tharp, is that there is no known drug therapy for it. The only course of action for the disease is to constantly monitor and support vital functions until the baby recuperates.

Honey has been suggested as a common source of the bacterial spores. Avoiding giving honey to infants is prudent, Tharp says, but the connection is established only in a few cases. Jessica was not given honey, and doctors don't know exactly how she ingested the bacteria. But botulism spores can easily travel airborne into a baby's environment for ingestion.

Now that Jessica is recovering, her parents say that looking back, the hardest day was when their doctor had Jessica transferred by ambulance to the pediatric intensive care unit at Stanford University Hospital.

"The first day was terrifying. You see nurses rushing around, putting things in her. You don't know what's going on, and you see all the other babies in there who look as bad as she did, and you think—that's a room for the dying," says Evelyn.

Gradually, though, Jessica began to improve and was moved to the regular pediatric unit. She began to regain some arm and leg movement, as well as her skin color and ability to cry. As her swallowing ability returned, her mother began to give her regular bottle feedings, each time increasing the amount of formula.

Just a few days ago, Jessica went home well again.

swn1

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

WEIGHT CONTROL PROGRAM BEGINS NEXT MONTH AT STANFORD HOSPITAL

STANFORD—

An eight-week course on weight control, to be conducted by registered dietitians at Stanford University Hospital, will take place May 8 to June 26.

Titled "An Enlightening Experience," the course is open to the public and will be held Tuesday evenings at the Hoover Nursing Cottage, located in a hospital annex across from Stanford Shopping Center.

Highlights of the program include a personalized weight loss plan, low calorie cooking demonstrations and recipes, menu planning, and tips on dining out wisely. Guest speakers will discuss stress reduction, behavior modification techniques, and exercise.

Kristine Birge and Patricia Kearney, dietitians from the hospital's department of dietetics, will conduct the classes.

Enrollment is limited to 20 participants. The deadline to register is April 24, and early registration is advised. A fee is charged. Future series are planned for September and January.

For more information, call Birge at (415) 497-5440.

4-9-84 —30— swn1b

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FOR IMMEDIATE RELEASE

COMPETITION: A NEW INGREDIENT IN MEDICAL CARE

STANFORD—

Rapidly rising costs have injected competition—the American way—into the U.S. health care system, two hospital administrators and the benefits manager of a major corporation acknowledged Tuesday (April 3) during a public lecture at Stanford University Medical Center.

While there are both pros and cons to the newly competitive atmosphere among health care providers, mostly there are great adjustments to make. "Unlike other industries where usually the customer reigns supreme, we are accustomed to defining our own quality," said Dr. Rod Aymond, chief executive officer at O'Connor Hospital, San Jose.

"But now doctors and hospitals are being told by insurers, government and large buyers of health care packages, 'You will receive X dollars, and we wish you to provide all the care needed for the people we cover'," added Sheldon King, director of Stanford University Hospital.

"This requires some very tough decisions," he said. "For one thing, our love affair with technology must come to a close. We'll have to introduce new technologies more slowly. The health care industry must get smaller."

One important measure hospitals will take, King said, is to end too much overlapping of services. "There must be a recognition that certain procedures can best be performed in one center over another.

"Competition will lead to not all hospitals doing the same things, and a common knowledge about where to go for what," he said.

"Patients are becoming much more aggressive about determining their own treatment," said Aymond. "We have to respond to that. Patients are no longer a captive group; they *can* walk. Many know more today about their bodies and their health needs, and government and corporate measures have aimed to shift the financial risks from the payor to the payee."

An example of such a system, he said, are Diagnostic-Related Groups, or DRGs, which insist that payments be determined prospectively for reimbursement purposes.

Art Young, corporate benefits manager at Hewlett-Packard (HP), stressed that his company emphasizes health promotion and awareness among employees, so that people begin to take more responsibility for their own health.

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HP spends about $1,300 per worker per year for health care currently, he said. That means employees may not get certain other benefits such as child care or profit sharing. With health care costs rising faster than most companies' profits, "there's a lot of scrambling, cutting of benefits, and requiring higher copayments and deductibles in the corporate world now," Young said.

HP developed a strategy to face the financial crunch, Young said, first by determining exactly where the health care dollar was going. "We found several interesting trends. For example, the average length of hospital stay was shorter under health maintenance organization (HMO) coverage than under private insurance. Also, certain procedures were being covered more generously and expensively in the hospital than on an outpatient basis.

"Some people with working spouses were being over-reimbursed. We're now trying to coordinate benefits better, so that each spouse's insurance pays for part, not all, of the costs."

HP is also piloting a pre-paid drug payment plan for retirees, Young said, in which generic forms of medications are predominantly used. "We have to look very carefully at how we can best cover retirees, as well as whether to cover such things as home health care or hospice care," he added.

"We have observed one fundamental change: we're beginning to act like buyers of health care, instead of like payers. That's true of HP specifically, and I'd say of companies in general," Young noted.

One questioner in the audience wanted to know if it's true that the patients—the consumers—are still the ones left out in the cold, with power simply shifting from the hospitals and doctors to the corporations, insurance companies, and government.

"At this point we offer options to our employees, including some HMO plans," Young said. "We're shifting our emphasis to coverage for catastrophic care, generally." HP recently signed a contract with El Camino Hospital for employee care.

How hospitals deal with escalating costs will depend to a large extent on better communication between administrators and doctors, all three speakers agreed.

"We're moving toward a more conservative form of medical practice with a reduced amount of ordering for expensive tests and technology," King said. "We must get away from defensive medicine."

Other sources of possible cost reduction in hospitals include cutting non-patient areas first, as well as certain rarely used services, maintaining staffing flexibility, using volunteers more efficiently, standardizing equipment, and seeking better ways to report data.

"But in regard to reducing the aggregate cost of health care, we're really part of a giant social movement that we're not in control of," Aymond said.

"We live in a time of limited resources," King agreed, "just as we know we'll run out of oil eventually."

Teaching hospitals face unique concerns, he said, because they are more likely to focus on tertiary care—that of the sickest referral patients—while having to work with medical schools to remain on "the cutting edge of medicine." Also, care of the indigent tends to become the responsibility of teaching hospitals.

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"Then, we in a sense create our own competition," King said, "when we export—though not inappropriately—our expertise to other hospitals."

King said referrals to Stanford Hospital had been dropping off recently, "probably because patient census has gone down everywhere and hospitals are retaining patients they would have referred to Stanford in the past."

Entrepreneurs have entered the health care scene, Aymond noted, taking up issues traditionally handled by hospitals. "Clinics and centers, for this and that, are popping up wherever there's profit in sight," he said.

"Hospitals are doing this too, in the form of satellite programs and outreach programs in the community. That's necessary, both because it's less expensive outside hospital walls, and because you want people to think of your hospital when they seek care. Without outreach, the highest costs become concentrated inside the hospital."

Hospitals today are using their profitable services and even outside ventures to boost their other operations. Another important step would be to improve criteria for moving patients effectively out of the most intensive care facilities and into general units.

"If we can reduce the average length of stay by half a day," Aymond said, "that will be quite a huge savings compared with reducing labor costs."

Aymond and King predicted that many hospitals will have to close in the next few years, and that that will save the entire health care industry a lot of money.

"There seems to be a social consensus that costs are too high now and must go down," Aymond said, "and that's much of what prompted the new competition.

"But there are still important questions to be dealt with, like what will happen to the disadvantaged or the terminally ill, and what will happen when equipment ages and there's not enough capital to replace it. People underestimate how much unreimbursed care hospitals deliver."

The big question society must answer, the speakers agreed, is what are the essentials of health care.

The evening's program was moderated by Dr. Michael Eliastam, assistant professor of surgery and medicine, and director of emergency services at Stanford Hospital.

Next Tuesday's public lecture, the last of the Progress in Medicine series on Health Care in Crisis: Questions of Cost and Quality, will be held 7:30 p.m. April 10, in the Fairchild Auditorium of the medical center. Moderated by Dr. Thomas Gonda, professor and chairman of psychiatry, it is entitled "Medical Decision Making: Is it being Taken Away from You and Your Doctor?"

—30—

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FOR IMMEDIATE RELEASE

CANCER RESEARCH MOVES AHEAD WTIH GRANT SUPPORT

Photos of Rosenberg available upon request.

STANFORD—

Research scientists at Stanford University School of Medicine are testing some of the newest diagnostic techniques and treatments for cancers of the lymphatic system under a $1.3 million grant from the National Cancer Institute (NCI).

The three-year grant was renewed for its second year effective April 1.

Techniques being tested include the use of anticancer drugs and radiotherapy, genetically engineered monoclonal antibodies, the natural antiviral substance, interferon, and bone marrow transplantation.

Headed by Dr. Saul Rosenberg, professor of medicine and radiology and chief of the division of oncology, the project brings together both clinical trials and laboratory studies in an effort to improve the treatment of patients with all types of human malignant lymphomas.

"Previously, for about 20 years under the direction of the late Henry S. Kaplan, we'd been conducting clinical trials directed toward many types of cancer," Rosenberg explained. "But it became clear that we were focused on Hodgkin's and non-Hodgkin's lymphomas, whose treatments have been improved dramatically."

The current project carries on the interdisciplinary nature of the research, Rosenberg said, and brings it even further into the basic science lab.

A team of oncologists, pathologists, immunologists, statisticians, radiologists, nurses, pediatricians, dermatologists, and others intend to study the biology of human lymphoma cells, improve the cure rate while decreasing the toxicity of current therapy for lymphoma, and develop new modalities of treatment.

All experimental treatment protocols, Rosenberg stressed, are designed to be at least as good as the best established treatment available.

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Lymphomas are tumors of the lymphoid tissue which contains lymphocytes, the white blood cells of the body's immune system. Some types of lymphocytes make antibodies. One offspring of the current project has been carried out by Dr. Roger Warnke, associate professor of pathology, who has determined how to classify types of lymphomas by using different types of antibodies as immunologic markers.

Meanwhile, Dr. Jeffrey Sklar, assistant professor of pathology, has studied the specific genes that are responsible for the antibodies produced. Thus, lymphomas can be classified by looking at DNA arrangements (like fingerprints), as well as by searching for the protein product or antibody.

The work of Dr. Ronald Levy, associate professor of medicine, with genetically engineered monoclonal antibodies—special proteins that can seek and destroy cancer cells in the body without damaging healthy tissue—facilitates investigation of their potential therapeutic value, Rosenberg said.

Trials of interferon supported by a companion NCI grant, and conducted primarily by Dr. Sandra Horning, assistant professor of medicine, suggest it's a protein with anti-growth and cancer "watchdog" properties which might help prevent relapse in patients who've been treated successfully with conventional methods.

Limited trials of bone marrow transplantation, performed through a cooperative arrangement with the University of Washington, are at this point aimed only at patients who are not able to be helped or cured in other ways, Rosenberg said.

Rosenberg emphasized that all collaborators on the project serve as both resources and as independent investigators. And the patients, certainly, play a vital role, supplying biopsy specimens of tissue and other samples to academic labs while participating in large numbers, with informed consent and at minimal cost, in the clinical trials.

"The results of our ongoing clinical trials are used to design new protocols, mostly testing various combinations of radiotherapy and chemotherapy," Rosenberg explained. "Outcome data are accumulated and analyzed in terms of response rate and cure, with special attention to the long-term morbidity of treatment."

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FOR IMMEDIATE RELEASE

STANFORD--

DOCTORS REVEAL RISKS OF ANESTHETIC AND SEDATIVE DRUG

An effective new anesthetic and sedative drug has potentially hazardous side effects, Stanford physicians warned in an article in the May 31 issue of the *New England Journal of Medicine*.

The drug, called etomidate, can block the adrenal gland's production of cortisol and other important steroid hormones, possibly leading to temporary adrenal gland failure, the doctors said.

This may cause abnormal salt and water balance, lowered blood pressure, and ultimately shock, the researchers added.

But if patients are given doses of the suppressed steroid hormones along with the drug, they may be protected from these potentially harmful side effects, the researchers suggested.

The study of etomidate was conducted by Drs. R. Lee Wagner, Paul F. White, Patricia Kan, Myer Rosenthal, and David Feldman from the departments of anesthesia and medicine at Stanford University School of Medicine. The research was supported in part by grants from the National Institutes of Health, and from the anesthesia department at Stanford.

"Until the clinical implications of these findings are clarified, we think that physicians should be aware of this side effect of the drug and be prepared to treat postoperative or critically ill patients with corticosteroid supplementation," the researchers wrote.

Etomidate has been in widespread use in the United States only since 1983 although it was introduced in Europe 10 years earlier. It has gained wide acceptance as an anesthetic in cardiovascular surgery and is also effective for sedating patients receiving breathing support, White said.

Last year several publications from England reported a higher than average death rate among intensive care patients sedated with the drug on a long-term basis, Feldman said.

The patients who died were found to have low levels of cortisol, a steroid hormone produced by the adrenal gland to help the body overcome stress. Without enough of this hormone a person's blood pressure can fall to dangerous levels, White explained.

"In retrospect, the use of etomidate on a long-term basis may have contributed to this problem," White added.

Patients who receive etomidate as an anesthetic in the operating room probably have less risk of harm, White said, because enough hormone is present in the body to last through the few hours required for surgery. Probably, patients would only be at risk if subjected to unexpected stress, such as infection or bleeding, during the early postoperative period, White added.

In contrast, in intensive care patients on prolonged sedative therapy the hormones could be depleted, leading to potentially greater risk of complication, he suggested.

Feldman, White, and their colleagues studied five patients who received etomidate, four during cardiovascular surgery and one in intensive care. Cortisol levels fell in all five patients, with a more lasting effect in the intensive care patient who received the drug for 20 hours. All five patients also had depressed levels of aldosterone, an adrenal steroid hormone that helps maintain normal balances of water, various salts, and blood pressure in the body.

The researchers also found, at the molecular level, how the drug inhibits the body's production of the adrenal steroid hormones, Feldman said. In rats, they found that etomidate inactivates two enzymes that catalyze production of a group of steroids, including cortisol, aldosterone, and various sex hormones.

"Although dire consequences are rare during routine operations, we feel the medical community should be alerted to their possibility," the researchers said.

"Further studies are necessary to ascertain whether the risks of adrenal suppression outweigh the benefits of this otherwise useful anesthetic agent," they concluded.

Several additional studies are currently under way, White noted. —30— LH3

5-31-84

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FOR IMMEDIATE RELEASE

SPEAKER TO HIGHLIGHT MEDICINE IN ECUADOR

STANFORD—

Tom Brown, M.D., a Salesian priest, will give a public lecture on "Medical Practice in the Upper Amazon Valley" at 11 a.m., Monday, June 4, in Schultz Auditorium at Stanford.

Brown will focus on the medical and management problems—as well as the philosophy and ethics—of running the hospital he founded in Taisha, Ecuador, to serve the Shuar and Achuar American Indians.

Brown was raised and educated in the United States. Although trained as a pediatrician, he treats all ages at his Taisha hospital.

The talk is sponsored by Stanford's division of family medicine of the department of family, community and preventive medicine. For more information, call Penny Thorpe at 497-7063.

The auditorium is located in the Health, Research and Policy Building (behind the museum) at Stanford University.

5-31-84 —30— pf1

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

FOR IMMEDIATE RELEASE

SYMPOSIUM TO FOCUS ON ISSUES INVOLVED IN CRITICAL ILLNESS

STANFORD—

Morris Abram, vice chairman of the United States Commission on Civil Rights, the Rev. Benedic Ashley, moral theology professor and author, and Victor Fuchs, noted health care economist will be featured at a symposium entitled "The Doctor's Dilemma Revisited: How Much Care and at What Moral Cost?" at Stanford University Medical Center June 9, 1984.

The symposium, sponsored by the Stanford University School of Medicine and the Stanford Medical Alumni Association as part of an annual alumni event, is open to the public.

Other speakers will be Dr. Thomas Raffin, assistant professor and assistant chief of medicine, and Michael Gilfix, Palo Alto attorney specializing in medical legal issues and "elder law."

Topics will include medical decision making in withdrawing life support for terminal patients, the rationing of medical care, ethical decision making in critical care, and the legal side of preparing for critical illness. Abram's keynote address is entitled "Critical Illness: Where Science, Morality, Theology, and the Law Intersect".

The symposium will be followed by the alumni association's annual business meeting. Reunion dinners are planned for the classes of '34,'39, '44, '49, '54, '59, '64, and '69.

The symposium will take place in Sherman Fairchild Auditorium at the medical center, starting at 8:15 a.m. For more information call (415)-497-5064.

5-31-84 —30— sk1

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

NEW ASSOCIATE HOSPITAL DIRECTOR APPOINTED

STANFORD—

Gerald R. Moller has been appointed an associate director of Stanford University Hospital (SUH) with primary responsibility for the Hospital Modernization Project, Facilities and Operations, and Maintenance divisions of the hospital.

Sheldon S. King, director and executive vice president of SUH, said Tuesday (May 29) that the appointment to the newly created associate directorship represents the first in a series of top level organizational changes.

This "is a major assignment and should go far towards coordinating the activities of the Medical Center," King said in a appointment letter. For the first time, King said, the hospital's major engineering and construction management functions are consolidated under the leadership of a single associate director.

King said additional senior management and related organizational changes would be announced as soon as they are finalized in the near future. Currently, including the new appointee, there are five associate and one senior associate director reporting to King.

Moller, 58, served since October 1982 as deputy director of the modernization plan, a five-year, $110 million project intended to consolidate and improve SUH facilities and facilitate moving Children's Hospital at Stanford from its current Willow Road site to a new building adjacent to SUH.

The new associate director came to Stanford from a position as associate administrator at Children's Hospital of San Francisco, where his varied duties included responsibility for building projects. He had served at that facility in various capacities since 1949.

Moller holds a B.S. in engineering from the U.S. Merchant Marine Academy.

5-30-84 —30— mg3

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FOR IMMEDIATE RELEASE

FRIENDS OF NURSING FAIR SCHEDULED AT SHOPPING CENTER

STANFORD—

The public may ask a nurse (or dietitian) for advice on cancer detection, back and neck care, reconstructive surgery, skin care, nutrition and six other general topics at a health fair scheduled Saturday June 2 from 10 a.m. to 4 p.m. at Stanford Shopping Center Pavilion.

Among free services available to the public will be free blood pressure checks, head and feet massages, and a variety of educational literature. Several booths feature teaching videos.

"It is in the best self-interest of the public to take control and charge of their own health care, especially now as such costs are escalating," said Leona Hansen-Nealey, president of Friends of Nursing, the organization sponsoring the event.

"Nurses are offering their time through Friends of Nursing to provide one-on-one demonstrations and answer individual questions," she said.

Additional topics include information and safety guidance on commonly used medications and safety, stress and mental health, the Visiting Nurses Association and home health care, addictive substances, and sex and sexually transmitted disease awareness.

Another booth will provide information on Friends of Nursing, a Stanford Medical Center-sponsored group of nursing and community volunteers who support nursing activities and provide information on the modern role of nurses.

Chairman of the event is Patricia Tharp, staff nurse in Stanford University Hospital's cardiac surgery intensive care unit.

5-25-84 —30— mg3

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FOR IMMEDIATE RELEASE

COMMUNITY INVITED TO HEAR GUEST LECTURE AT MEDICAL SCHOOL

STANFORD—

Dr. Christopher S. Wilcox, assistant professor of medicine at Harvard Medical School, will present the sixth Pfizer Lecture in Clinical Pharmacology at 5:15 p.m. Thursday, May 31, in room M110 at the School of Medicine. The public is invited.

In his lecture, titled 'Tubular-Vascular Integration in the Kidney: Roles of Angiotensin and Prostaglandins,' Wilcox will summarize his research findings on how these substances affect renal function.

Educated in England, Wilcox holds both medical and Ph.D. degrees. He is a leading authority on the role of kidney physiology in the cause and treatment of high blood pressure and is noted for research on a number of related subjects, including the effect of diuretics and sodium balance on hypertension and the effect of antihypertension drugs on angiotensin.

The Pfizer Lectureship, started in 1978, is sponsored by Stanford's division of clinical pharmacology and funded by Pfizer Pharmaceutical, Pfizer Inc. of New York.

5-25-84 —30— pf1

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ALCOHOLICS NEED TO UNDERSTAND SOME PROBLEMS ARE BIOLOGICAL, PSYCHIATRIST SAYS

STANFORD—

Alcoholics can recover more easily if counselors reassure them that some of their post-drinking problems are biological, not social, a psychiatrist says.

Dr. Robert Landeen, medical director of the inpatient psychiatric unit at Stanford University Hospital, said at a public lecture Thursday (May 24) that certain problems—such as impotency, weight gain or even sensitivity to light—may be common to alcoholics who have been sober for periods of a few months to a year.

"There are specific factors that a fair number of people have during the recovery process that are largely independent of psychological and social factors," Landeen said in the third of four lectures sponsored by the clinic.

For example, Landeen said a survey he and colleagues conducted several years ago among 53 recovering alcoholics showed that 31 percent of the males suffered impotency, 25 percent of the sample suffered lower rib area aches, and 63 percent showed an increase in weight and appetite.

While some of these and other conditions included in the survey are more health threatening than others, Landeen said it is helpful and reassuring to the recovering alcoholic to recognize that a variety of conditions may be normal.

"It's important to recognize these signs so we can impart a great deal of confidence in the recovering alcoholic. (We need to do more than) just say, 'you're going to feel better and things are going to get better.'

"For example, the first one or two weeks of recovery, sleep is a horrendous problem." Landeen said some persons slip back into drinking at this time just to go to sleep, while others seek sleeping medication, thus developing a new dependency.

But by recognizing that the sleeplessness is normal, patients can be counseled to survive through the difficult few weeks, Landeen explained.

The psychiatrist said he finds it "clinically useful, for example, to point out to a recovering male alcoholic who is impotency, that 'fine, that's expected.' A fair amount of recovering male alcohoics have that, so don't worry about it right now.'" If the problem persists beyond about six months, it can be discuseed later.

In many cases, Landeen said, patients can be reassured "to hang in there" if a counselor can document that the condition is ordinarily temporary.

". . . I know it's a passing phase and I can impart that to him."

The recovering alcoholics surveyed by Landeen and colleagues came from a variety of treatment programs. All of those surveyed had been free alcohol for periods of several weeks to one year.

A few other common biological conditions reported by the survey group included motion dizziness, 19 percent; sensitive to night lights (such as an oncoming car's headlights), 30 percent; and a craving for sugar, 43 percent.

When similar questions were posed to non-alcoholics, the percentage of persons reporting the same conditions was radically different, Landeen explained. His findings have been presented at a meeting of the National Council on Alcoholism.

Robin Press, a psychologist with the Stanford Alcohol Clinic, will discuss "Cocaine, The New High," the final free lecture in the series, Thursday, May 31, at 7:30 p.m., room M104 of the Stanford Medical School.

5-25-84 —30— MG3

Editors: Landeen can be reached at (415) 497-6682

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FOR IMMEDIATE RELEASE

STANFORD LEGACY RECEIVES AWARD

STANFORD—

Of all he's done since he first entered Stanford University as an undergraduate in 1926, Dr. David Rytand notes two achievements he considers his greatest. "I taught students, and I listened to patients," he says.

Colleagues describe Rytand's 58-year-long association with Stanford a bit more glowingly. Stanford Medical School ombudsman Dr. Allen Barbour says Rytand has "achieved 'legend-in-his-own-time' status." That legend has now been enhanced even more: Rytand is the recipient of the 1984 Albion Walter Hewlett Award.

"The criteria to receive the Hewlett Award are to have acted like I think a doctor should act," Rytand says. "And over the years, that's what I've tried to do."

The award, established in 1983 by Stanford University Medical School's department of medicine, honors academic physicians who excel in their scientific knowledge and application of it to patient care. It is in memory of Hewlett, an internationally known professor of medicine and leader in clinical investigation at Stanford until his death in 1925.

Rytand is scheduled to be presented with the award, which includes a certificate, specially designed bookplates, and a silver medallion depicting figures from the metal sculpture representing the award, at the department's grand rounds Thursday (May 31) at 8:30 a.m. in Fairchild Auditorium.

In return, Rytand plans to present the medical school with his newly published book, "Medicine and the Stanford University School of Medicine circa 1932: The Way It Was." "It's a vignette—a picture of a spot in time," he explains. "I just wanted to tell what Stanford and the medical profession was like when I went through medical school and was on housestaff."

Indeed, Rytand fondly recalls the days he spent in San Francisco at "the old school." Sitting at the huge antique oak desk in the office that he, in his current position as director of medical school alumni relations, shares with the medical school ombudsman, his eyes sparkle as he puffs on his ever-present, aromatic pipe and talks about "the good old days," and his medical career.

Stanford was a "fun" place, Rytand says. In his book he tells about the expected dress of slacks, tie and coat, the all male classes, about the professors' sternness, the lack of almost any social life, the limited base of medical knowledge and clinical techniques, and the total committment essential to learn to be a doctor.

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In the midst of it all, Rytand apparently thrived."Rytand was in the top of his class," recalls former classmate and colleague Dr. Roy Cohn.

After receiving his medical degree in 1933, he stayed on at Stanford and moved up the professorial ranks, and served as chairman of the department of medicine from 1954 to 1960, during which time the medical school moved down to the Stanford campus. "Those were difficult years," he recalls, "when all the decisions were being made. Everyone got 'committeed out'. One day I went into a room and sat down for a committee meeting. I must have been there about 30 minutes before it dawned on me that that wasn't where I was supposed to be."

In 1958 Rytand became the first Arthur L. Bloomfield Professor of Medicine, the first endowed chair in the department of medicine. He has received numerous awards throughout the years for his contributions to medicine and to medical education. In fact, as chief of cardiology at Santa Clara Valley Medical Center since 1975, Rytand was honored by having the electrocardiographic laboratory named after him.

Although teaching and seeing patients were always his foremost objective, he says, Rytand delved into research as well. When he started out, he says, "research was more of a hobby which we did at almost no expenditure of money on evenings and weekends for fun. Research was like a game. If you had the time you went ahead and played at it."

Rytand "played at it," and came up with some interesting findings. The "most practical" finding, he says, came about in the early 1950s when he discovered that vitamin K, found in high quantities in food supplement, neutralized the effect of anticoagulant medications, given to heart attack patients. Today, he proudly points out, the level of vitamin K in food supplements has been reduced to almost nil.

In 1946 Rytand described a unique late diastolic murmur associated with heart block, which he had observed in some of his patients. And his work with atrial flutter, which he says he still has to finish up, has given credibility to the once-doubted circus movement theory, which explains why the heart beats irregularly in certain heart disorders.

Rytand got involved with the medical alumni association "by accident" in 1964, and has played an integral role since. As director of alumni relations, to which he was appointed in 1981, he is a "trouble shooter" between alumni and the medical school.

"The alumni think highly of him, as did his students and patients," Cohn says.

"He has had a profound influence on a full half century of medical students, residents, colleagues, refering physicians, and most important of all, patients," Barbour adds.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

CITY COUNCIL APPROVES STANFORD HOSPITAL MODERNIZATION

STANFORD—

The Palo Alto City Council on Monday (May 21) gave Stanford University Hospital the land use and environmental clearances needed to proceed with its $110 million modernization project.

The council unanimously declared that the project would have no significant environmental impact. Also approved without opposition was a motion recommending that the city zoning administrator approve a use permit for the project.

Meanwhile, project director Elvia Garwood said after the meeting that the first construction work, remodeling of space in the existing hospital, is scheduled to begin in mid-June.

Terming the hospital "a national and worldwide resource," council member Mike Cobb expressed his "hope that Stanford's project will be a success."

The council settled several weeks of controversy by approving a request for a change in zoning and in the city comprehensive land use plan for two parcels currently used for parking and a heliport along Welch Road.

The action taken by the council followed recommendations by the city's planning staff.

"We can now continue to do prudent planning for both Stanford University Hospital and Children's Hospital at Stanford," Garwood said after the meeting.

Council members Emily Renzel and Ellen Fletcher cast the only votes against changing the zoning on the land from office research to public facilities.

Lawrence G. Crowley, vice president for medical affairs at Stanford, told the council that without the zoning and land use changes, "it would be extremely difficult for us to proceed with the design of the new children's hospital until we know what site is available."

The city planning commission on May 2 had refused to follow a city staff recommendation and grant the zoning and a related city comprehensive land use plan change, saying it wanted more time to review the request and more information on the plans for children's hospital and the future uses of the existing children's hospital across Willow Road.

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Plans are underway to move the children's facility to a an as-yet undetermined site adjacent to SUH.

Among issues was that the city comprehensive plan earmarked the heliport site as multiple family residential, although the zoning has remained office research. In past meetings, members of the plannning commission had said they were reluctant to give up the housing designation without an alternate site being selected.

In a letter to Mayor Lawrence A. Klein and the City Council, physician and former city council member William H. Clark said he felt it "would be irresponsible to place housing so close to a very busy tertiary care medical facility." Several council members referred to the Clark letter during Monday night's hearing.

In its action Monday night, the council declared that the project is consistent with the city's comprehensive plan, as long as specified parking utility, drainage, street right-of-way and related matters are met.

The next official approval, a use permit hearing before the city zoning administrator, was scheduled for 3 p.m. Thursday. Garwood said Monday's clarification of land use and zoning by the council should ease that and future discussions on land use or building design.

The modernization project is intended to provide remodeling needed to increase efficiency and comfort for patients. Uncompleted space in the existing hospital will be finished, and a four-story building with 190 new patient rooms will replace present inadequate and outmoded facilities. Adult intensive care will be consolidated and private rooms will be increased from 11 percent to 33 percent of the 663 licensed beds.

A 20-room surgery suite will be completed, intended to bring the operating room up to high technological standards and relieve delays and much off-hour scheduling for patients and physicians.

A total of 350,000 gross square feet of new construction is planned, and many of the facilities at the aging Hoover Pavilion annex—along with all pediatric facilities—will be consolidated at the Pasteur Road site.

Garwood said the first remodeling, scheduled next month, will be of the cardiovascular angiography area. Current plans call for excavation and new construction to begin in September.

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FOR IMMEDIATE RELEASE

FACULTY GROUP FINDS COMMON GROUND FOR MEDICINE, HUMANITIES

STANFORD—

A group of Stanford University faculty members from the medical school and other departments have joined to explore areas of common interest and develop future interdisciplinary course offerings.

The Committee on Medicine and the Humanities was formed under the auspices of the associate dean of humanities and sciences for undergraduate programs, Carolyn Lougee, and the dean of the school of medicine, Dr. Dominick Purpura, in hopes of establishing formal academic programs oriented toward the interaction of medicine with history, philosophy, ethics, economics, and social sciences.

"We find at the medical school that there's a great deal of emphasis on research and new technologies, and not enough on the more human aspects of medicine," said Dr. Carlos Camargo, associate professor of medicine.

In some cases, similar courses are being taught at the medical school and main campus.

For example, Camargo and Dr. Bruce Parker, professor of radiology and chairman of the Committee, have taught a class for about 10 years on the history of medicine. "Meanwhile, several nonmedical faculty members have been teaching courses with similar and overlapping content in their departments," Camargo said.

These various courses "may not be known to interested students because they are sponsored by so many different departments and schools."

Thus, the Committee is in the process of compiling and collating existing courses in which interactions between medicine and the humanities play a prominent role.

Another activity the Committee plans is to provide advisors, and possibly research opportunities, for interested undergraduates and medical students, in the schools of engineering, business, and law, as well as the school of medicine and the school of humanities and sciences, Parker said.

"Our hope is that we can generate sufficient interest among the faculty that a series of faculty seminars can be planned for the 1984-85 academic year."

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"We believe that these proposed activities would prove advantageous in the recruitment of highly qualified prospective medical students," the Committee, formed about six months ago, stated. "There is an erroneous perception of the (medical) school, that all too often influences some of our most desirable applicants, that we emphasize basic research at the expense of concern for the more humanistic and humanitarian aspects of medicine."

Purpura noted that "the Committee on Medicine and the Humanities provides a forum for reemphasizing the role of ethical, moral, philosophical, and artistic attributes of human interactions in the universe of medicine."

The Committee already has sponsored two faculty colloquia dealing with the general theme of human values in medicine.

The first, held April 18, featured Dr. Albert Jonsen, professor of medical ethics at the University of California, San Francisco. The May 16 speaker was Michael Moore, professor of law at the University of Southern California, who discussed differing views of persons in law and psychiatry.

Present Committee members include Parker, Camargo, Dr. Raymond Clayton, professor of biochemistry and director of medical school admissions, Dr. Wilbur Knorr, associate professor of the history of science, Dr. David Stevenson, assistant professor of pediatrics, Dr. Peter Galison, assistant professor of the history of science, and Dr. Arnold Davidson, assistant professor of philosophy.

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FOR IMMEDIATE RELEASE

ALCOHOLISM AFFECTED BY WOMEN'S NEW ROLES, PSYCHOLOGIST SAYS

STANFORD—

A Stanford psychologist says alcoholism is becoming equal-opportunity in America.

"In the past, choices were a lot easier for women than they are today," said Cynthia Soyster, a psychologist at the Stanford Alcohol Clinic, speaking Thursday (May 17) at the second of four public lectures at Stanford University Medical Center. "There were very clear limits set on how much, where, with whom and when women could drink. Now women are winning the right to compete with men in every area of life, including the neighborhood bar.

"Alcohol promises to calm the conflict and anxiety of a woman's struggle for her rights."

Alcoholism in women is on the rise or coming out of the closet or both, Soyster said. "All the evidence we have points in that direction."

Soyster, a clinician who regularly treats alcoholic patients, said female membership in Alcoholics Anonymous (AA) has risen from 22 to 39 percent in a single decade. The number of women who use any alcohol increased 21 percent between 1939 and 1978, three times the 7 percent increase for men.

But it is very difficult to estimate the number of women with alcohol-related problems or who are alcoholic, for several reasons, she said.

First, the long-standing stigma of female drunkenness has evolved a conspiracy of silence. The problem drinker tends to hide her drinking, and family members assist her by "weaving a protective circle of silence around her to protect both her and themselves from the shame," Soyster said.

"Women collude in this denial," Soyster said. One study, she said, found that 86 percent of a group of alcoholic women seeking their physician's help failed to mention their alcohol problem, instead complaining of other physical or emotional problems. Misdiagnosing alcoholism as "nerves" or depression, doctors often prescribe tranquilizers that result in a second addiction, she said.

Although alcoholic men often are arrested for public drunkenness or driving while intoxicated, women are underrepresented in arrest statistics, Soyster said.

"The police are much more apt to scold her, give her a lecture, and send her home in a cab," she said.

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In addition, questionnaires eliciting information on alcohol consumption are biased to exclude women. They ask such questions as "Have you ever had financial trouble (or had touble with the boss or the law) as a result of alcohol use?" Alcoholic men are much more likely to answer "yes," Soyster said.

Women alcoholics very often have their financial problems straightened out by men, are less likely to be employed, and seldom run afoul of the law, she said.

Soyster said one study found no difference in drinking patterns of single and married women under the age of 35. However, divorced or separated women under that age have the highest rate of problem drinking of any group of women.

"The legal and financial impact of divorce may be easier now than 15 years ago," Soyster said, "but there isn't much change in how much emotional pain goes along with all that."

Although a single event—like a change in an important relationship—often precipitates a woman's drinking problem, the event can be a positive one, she said.

"Stress and the use of alcohol to relieve that stress very often occur in people that have too much too fast, as well as when they have something wrong." she said.

While the benefits of light or moderate drinking for either sex are debated, researchers are uncovering physical differences between men and women in the way their bodies deal with alcohol.

Women become more intoxicated than men on the same amount of alcohol adjusted for body weight, Soyster said, and metabolize it faster.

She said this effect is exaggerated in a premenstrual woman. Oral contraceptives slow alcohol metabolism, Soyster said. "So women who use them stay drunk longer."

In addition, women are more vulnerable to cirrhosis or other liver problems after drinking less alcohol for a shorter time, she said.

Evidence is mounting that fetal alcohol syndrome is one of the leading causes of birth defects, Soyster said, and the risk of first-trimester spontaneous abortion is increased by drinking even moderately during pregnancy.

"It's important that women evaluate the potential risk they take during pregnancy in using alcohol at all," she concluded.

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FOR IMMEDIATE RELEASE

PATIENT OWES LIFE, AND NOSE, TO RECONSTRUCTIVE SURGERY

STANFORD—

This is the story of a man who lost his nose—and consequently his sense of self—to cancer, and recovered both thanks to the special techniques of reconstructive surgery.

Ethiopian Haile Habte-Miriam is finally ready to go back home after his three year ordeal. His quest for a nose that worked, and looked presentable, brought him from his native country to Kenya and finally to United States. He found what he was looking for at Stanford University Medical Center.

The young bank manager first left his wife and seven children when, nearly three years ago, his local clinic diagnosed a fast-growing lump on his nose as cancerous. He went to a hospital in Kenya, the closest institution that had radiation facilities. The radiation was effective in eradicating the cancer. Unfortunately, it also eradicated his nose.

The Kenyan physicians then proceeded, through a series of surgeries, to reconstruct his nose. "What the doctors did was just awful," said Haile's sister Addis, a nurse who lives in Berkeley. "They took a big flap of skin from Haile's forehead to rebuild his nose, but didn't put in any cartilage to form it. They didn't create any nostrils. The nose was very deformed. It was frightening."

The physicians then replaced the skin from Haile's forehead with skin from his thigh, which was a completely different color and texture. When it was time for him to go back to Ethiopia, he didn't even call his family to say he was coming home.

"I was so depressed ," Haile recalled. "When I walked in my house my children didn't recognize me. When I walked down the street no one recognized me either because of my nose."

Addis was devastated to learn of Haile's fate. "I knew Stanford was the best hospital," she said. "The first thing that came into my mind was 'I have to call Stanford to see what can be done.' "

Days later, ear, nose, and throat specialist Dr. Richard Goode examined the medical records and photographs of Haile that Addis had brought. He finally looked up at Addis. "Your brother's nose is a challenge," Addis recalled him saying. "I can help him. Tell him he should come to Stanford."

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Haile arrived shortly thereafter, having obtained permission to come to the U.S. from the Ethiopian government, taken a leave of absence from his job, and sold his house and other personal belongings to help finance his treatment. The planning of Haile's new nose began.

"Noses are difficult to work on because they're so obvious, and they change as they heal," Goode explained. "They usually change for the worse. That's why there are so few physicians who work on them, and even fewer that do them well.

"I'm sure there are quite a few people, like Haile, with noses that don't work or look good that have been told there's nothing that can be done," he added. "But that's not necessarily true."

In the first of four surgeries, Goode inserted cartilage to shape Haile's nose. At the same time, he inserted something called a Radovan expander under the skin on his forehead.

The expander, originally developed by a southern California physician to use in breast implants, is a small silicone bag. Injecting it with saline solution causes it, and the skin covering it, to slowly stretch much like a pregnant woman's belly. In addition to building up the nose during ensuing surgeries—folding cheek skin over to form nostrils, revising some of the scars, and more—Goode was able to pull the stretched skin almost completely across Haile's forehead. Thus, he was able to get rid of the grafted skin from Haile's thigh.

"Dr. Goode is amazing," Addis exclaimed. "When he showed us by folding his tie how he was going to fold Haile's cheek skin to make the nose, we didn't believe him. But it worked!"

"Haile's appearance is much improved," Goode said. "He can breathe through his nose, which he couldn't do before, and he's happy with the way he looks."

Haile has one more touch-up procedure to undergo, and then it's back home to Ethiopia to resume his life that was so suddenly interrupted. He's worried about paying his bills— which came to about $20,000—in addition to reestablishing his family's lifestyle. Regardless of any hardships he may confront, Haile said the experience was well worth it.

"Dr. Goode created me," he said. "Because of him, I'm a new man."

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FOR IMMEDIATE RELEASE

SCIENTISTS MEASURE HOW CELLS IN THE EYE

RESPOND TO LIGHT'S RAINBOW OF COLORS

STANFORD—

Stanford University scientists have successfully measured how single cells from the retina of the eye respond to light of different wavelengths, with a technique much more sensitive than any used before.

The research marks the first time that direct electrical recordings have been obtained from the color vision cells of primates' eyes.

"The measurements provide new and basic information needed for understanding color vision," said Dr. Denis Baylor, professor of neurobiology at Stanford University School of Medicine.

The report was published in the May 17 issue of the British journal *Nature* by Baylor and two postdoctoral colleagues, Dr. Brian Nunn, now at Cambridge University, and Dr. Julie Schnapf. The research was supported by grants from the National Eye Institute.

Color vision begins when light is absorbed by pigments in "cones," specialized light-detecting cells about six million of which are found in each eye. The cones are highly packed at the retina's center and dotted more sparsely around its periphery.

Three "flavors" of cone cells contain pigment molecules that preferentially absorb light in the red, green and blue regions of the color spectrum.

When a cone absorbs light it generates electrical signals which are transmitted over a chain of nerve cells to the brain.

"It is well known that hue is determined by how strongly light excites the red-, green-, and blue-sensitive cones," Baylor said.

What has not been known with much precision, he added, is the exact sensitivity of each type of cone to wavelengths of light through the visible spectrum.

To find this out, Baylor and his colleagues used an extremely precise method for determining exactly how strongly various wavelengths of light excite each type of cone cell.

The research provides a beginning toward understanding how the visual system encodes color information, Baylor said. Next, scientists will have to figure out how the central nervous system detects the strength of electrical signals from each of the three types of cones, Baylor added, a task that involves sorting out the neural wiring connecting eye and brain.

In commentary accompanying the report, Dr. John Mollon of Cambridge University noted that the "pioneering" research provides "the first direct electrical recordings from primate cones." The work makes it "technically possible" to find solutions to a host of unanswered questions about how color vision works, he added.

The Stanford researchers measured electrical signals generated by single red- and green- sensitive cones from the retinas of macaque monkeys, thought to have cone pigments and color vision very similar to those of humans. They plan to perform similar work on blue cones and also on cells from human retinas, Baylor said.

They used a special technique developed by Baylor's laboratory in 1977 for examining retinal cells one at a time. The technique is more sensitive than previous methods because it measures the amplified electrical signals that the cell generates when it absorbs light rather than simply measuring whether or not light is absorbed by the cell.

The method employs a tiny glass tube into which a portion of a single cell can be drawn with mild suction. The tube's outside diameter is about one-third the thickness of a human hair. The inside of the tube is hooked up to amplifying equipment for measuring electrical current from the cell.

After drawing a single cell into the tube, the researchers shone light of different wavelengths on it. Using this method, they were able to measure sensitivity to all the wavelengths in the visible part of the spectrum, Baylor explained.

"This kind of measurement gives the probability that each type of pigment molecule will absorb light of any particular wavelength," he said.

In addition to providing a step toward understanding color vision, the research Baylor and his colleagues are doing is also aimed at explaining how light is converted into an electrical signal inside cone cells.

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COMPUTERS MEASURE CORONARY ARTERY BLOCKAGE MORE PRECISELY THAN EVER BEFORE

STANFORD—

Stanford University Medical Center researchers are using computers that measure blocked coronary arteries in heart patients more precisely than ever before in a study funded by a $1.5 million grant from the National Heart, Lung and Blood Institute.

The study, which began Jan. 1, 1984, will determine whether modifying known risk factors for coronary artery disease affects the rate at which the arteries become blocked.

The new computerized technique gives physicians a better tool with which to determine just what percentage of the arteries are functioning without having to rely on subjective judgments or interpretations, said Dr. Edwin Alderman, associate professor of medicine.

The study, called the Stanford Coronary Risk Intervention Project (SCRIP) will involve as many as 300 patients with coronary artery disease at Stanford, the Palo Alto Veterans Administration Medical Center, and Sequoia Hospital during the next three years, Alderman said.

Patients in the study are randomly assigned to two groups. Members of one group get aggressive treatment to lower known risk factors, including cigarette smoking, physical activity, stress, blood pressure levels and diet. Members of the second group follow the regular care of their physicians. By using computers to compare patients' X-ray pictures of their coronary arteries, scientists will measure the exact percentage of change that occurs over the three years.

"Determining the rate of narrowing in the artery has always been subjective," Alderman said. "One person may say there's a 50 percent narrowing, while another person may say there's a 70 percent narrowing."

With the generally accepted conclusion that an artery blockage of 70 percent or more necessitates surgery, a more precise measurement may be important to a patient, Alderman said. But where it's essential, he added, is in research on the effectiveness of therapies for coronary artery disease, and more.

The new technique, developed by Alderman, William Sanders, a cardiology research associate specializing in computers, and Dr. Donald Harrison, cardiology chief, takes the standard angiogram, or X-ray picture of the heart, and converts it to digital units via a specialized projector. This enables a computer to analyze it. The computer operator can instruct the computer to outline the walls of the arteries in question, and then by analyzing the various hues of black, grey, and white that the artery is projected in, to compute the percentage of blockage for any designated segment.

The technique is "highly reproducable" Alderman said, thus enabling physicians to analyze the same artery segment at different times to compare, or simply to double check their findings.

"The general idea is to try and reduce the variability that is involved in physician interpretation of angiograms," Alderman said.

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FOR IMMEDIATE RELEASE

REAGAN APPOINTS STANFORD PATHOLOGY DEPT. CHAIRMAN TO NATIONAL CANCER ADVISORY BOARD

STANFORD—

Dr. David Korn, professor and chairman of the department of pathology at Stanford University School of Medicine has been appointed a member of the National Cancer Advisory Board (NCAB), the White House announced Tuesday May 15.

Korn, 51, is one of five new members appointed by President Ronald Reagan to six-year terms on the NCAB, effective May 17, 1984 and expiring March 9, 1990. The five new appointees succeed NCAB members whose terms expired last March, according to an official at the National Cancer Institute (NCI).

The National Cancer Advisory Board, created by the National Cancer Act in 1971, is a 29-member group that advises and assists the NCI director with respect to activities of the National Cancer Program, the United States' comprehensive effort aimed at combatting cancer. One of its major responsibilities is the approval of research grants awarded by the NCI, which in 1983 amounted to nearly $600 million.

Eighteen of the NCAB's members are scientists, physicians, and members of the general public appointed by the President. The scientists and physicians appointed to the NCAB are among "leading scientists or medical authorities outstanding in the study, diagnosis, or treatment of cancer, or related fields," the NCI said.

The NCAB also has 11 non-voting *ex officio* members from a variety of governmental agencies, including the Secretary of Health and Human Services, the director of the National Institutes of Health, the Food and Drug Administration commissioner, and the administrator of the Environmental Protection Agency.

The NCAB meets at the behest of the director of the National Cancer Institute at least four times each year.

Korn, who received both his undergraduate and medical degrees from Harvard University, has been on the Stanford Medical School faculty since 1968.

His research focuses on enzymes involved in controlling DNA replication inside cells of higher organisms. These enzymes, called DNA polymerases, are thought to play an important role in regulating cell division, a process that goes awry when cells become cancerous.

He has written numerous articles and is a member of the editorial boards of the *American Journal of Pathology* and *Human Pathology*. He is also a member of the board of directors of the California Society of Pathologists and serves on several other professional boards and councils.

Korn has also previously served as an advisor on cancer to the federal government. He was a member of the Board of Scientific Counselors, Division of Cancer Biology and Diagnosis, National Cancer Institute, from 1977 to 1982, serving as chairman from 1980 to 1982.

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FOR IMMEDIATE RELEASE

STANFORD OPERATES RADIATION THERAPY PROGRAM IN FREMONT

STANFORD—

Stanford radiologists are expected to begin treating East Bay cancer patients starting July 1 at an outpatient facility in Fremont owned by Washington Hospital.

Dr. C. Norman Coleman, associate professor of radiology, said Dr. Francine Halberg, who is joining the Stanford faculty in July, will be assigned fulltime to the new facility "which will enable patients in the Fremont area to find the outstanding care and expertise they have been accustomed to at Stanford in a community facility nearer home." Stanford is about 20 miles or a 25 minute drive from the new facility.

In addition to at least one fulltime faculty member assigned to the center, other physicians in Stanford's Department of Radiology would be available on a consulting basis, along with residents assigned to the Stanford program, he said. About 150 to 200 patients annually are expected to be treated in Fremont, Coleman added.

The new 3,600-square-foot cancer radiation facility has a linear accelerator and other state-of-the-art equipment housed in a lead lined building across the street from Washington Hospital, which until now had no radiation therapy services, Coleman explained. Professional physician services will be under the auspices of the Faculty Practice Program, the clinical practice arm of Stanford's medical faculty.

Donald Tower, FPP executive director, said this is the only current satellite program of the FPP.

"Many of these Fremont-area cancer patients had to drive or be driven to Stanford for regular therapy treatments," Coleman explained. "We are extremely pleased that we will be able to continue to offer them the same level of service at a location which they can reach more quickly and more conveniently," Coleman added.

"This is a joint venture and partnership, and we are very pleased to be able to move the physicians and the talent of Stanford instead of moving the patients" across the bay, said Dick Warren, administrator of Washington.

Coleman said the project evolved following discussions with community physicians in the Fremont area. For several years, Coleman said, he had been holding monthly sessions to discuss cancer cases with East Bay physicians. The monthly meetings were organized in Fremont by Dr. David Cheng, a local oncologist.

"We hope to be a valuable resource to the physicians in the community," Coleman added.

The new center was built by a private businessman who sold it to the hospital for a price of between $1.5 and $2 million, said Warren.

Radiation therapy is one of the most common forms of treatment for many types of cancer. It is often administered in conjunction with drug therapy and requires daily visits for five to six weeks, Coleman said.

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FOR IMMEDIATE RELEASE

HEALTH FAIR HELPER PARLAYS HEART ATTACK TO NEW ART CAREER

(Editors: Photos of Chesnut and artwork available on request)

STANFORD—

Merritt E. (Gene) Chesnut was "the kind of guy who never goes to see a doctor" when he became ill during a camping trip in 1973.

Now the Palo Alto artist is an amateur expert on America's number-one killer—cardiovascular disease.

"For a layman, I know about as much about the heart as there is to know," he said, laughing.

Chesnut has designed the poster logo—a cartoon jogger—for the second annual Heart Health Fair, scheduled Saturday, May 19 at the Stanford Shopping Center from 10 a.m. to 4 p.m. Sponsored by Stanford University Hospital's nursing service, the fair offers visitors information on the prevention, diagnosis, and treatment of heart disease.

"The more information people have, the better they can take care of their own bodies," said Joan Caldwell, chairperson of the adult cardiac patient education committee. "People can make changes in their lives to prevent heart disease and can recognize the early symptoms."

Now 65, Chesnut discovered that his camping-trip illness was a heart attack only after he was hospitalized that night at Stanford. The next day, he underwent double coronary-bypass surgery, and his education in heart disease began.

After another heart attack in 1981, Chesnut again was hospitalized at Stanford. This time he had his art supplies and soon felt well enough to sketch the scene around him. His hospital-life cartoons rapidly won fans.

Now the retired U.S. Marine Corps officer and bank executive has a new career. The heart-fair logo is the latest of many illustrations he has done—free of charge—for Stanford nursing service publications. Most are for booklets that explain diseases and hospital procedures to patients.

"It's something to do, and I get a lot of pleasure out of it," he said.

Chesnut and other visitors at the Heart Health Fair will find nineteen booths located around the mall. Some highlights include:

- For $10, visitors can have blood drawn for a panel of tests--like blood cholesterol and triglyceride (fat) levels--that will help them assess their risk of developing heart disease. These tests usually cost about $40. If possible, participants should eat nothing for four hours before their blood is drawn.
- Free blood pressure checks will be available at many booths.
- Visitors can get a free EKG tracing of their heart rhythm.
- Operating room nurses from Stanford will display pacemakers, artificial heart valves, surgical instruments used in heart operations, and photos of heart surgery.
- Visitors can learn how heart-lung transplants are done and how donor organs are obtained.
- Palo Alto Fire Department paramedics, trained by Stanford Hospital, will have their ambulance open for display and will demonstrate some of their equipment.

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FOR IMMEDIATE RELEASE

CHILDREN OF ALCOHOLICS FACE BURDENS IN ADULTHOOD

STANFORD—

Unresolved feelings of abandonment and insecurity comprise the emotional baggage many children of alcoholics carry with them into adulthood, said Dr. Susan Beletsis, clinical psychologist at the Stanford Alcohol Clinic, speaking at the first of four public lectures Thursday evening (May 10) at Stanford University Medical Center.

"There were two rules these people grew up with," Beletsis said. "One was, 'There's nothing wrong here,' and the other was, 'Don't tell anyone.' " Under these conditions, it becomes very easy for a child to feel somehow responsible or guilty, and to want to fix the family's problems.

"A simple command like, 'Don't spill your milk, you'll upset your father' takes on an added dimension in an alcoholic household. It means you have the power to make your father drink or not," Beletsis said. "Even when these people later realize it's not true, it never quite erases that early belief."

That's why many of these adults, who may have lived away from their parents for years, still feel their purpose in life is to solve their original family's problems, and many return home, even leaving a new marriage, "just to try one more time."

In an emotional sense maybe they do need to go home, Beletsis suggested, in the sense of allowing themselves to come to grips with childhood feelings.

A beneficial way to do this, she noted, is through group therapy with others who've been there. More than 200 adult children of alcoholics, mostly women, are seen at the Stanford Alcohol Clinic every year, Beletsis said, mainly in small groups but sometimes individually.

Participating in a group may bring a sense of betraying the family, Beletsis said, which is why many don't tell their families they're doing it at first.

But soon the group becomes a sort of replacement family.

Common problems members discuss are high self-expectations, pervasive feelings of failure, depression, and difficulties in interpersonal relationships, Beletsis said. Conscious wishes are in conflict with deep-seated emotions.

Lack of a healthy role model in the family can make self-identity difficult. Ironically, the alcoholic parent may be more loving, while the other parent is often depressed and angry. The child wants to be a non-alcoholic, but still identifies strongly with the alcoholic parent.

Separation from the family has also been traumatic, Beletsis said. Many children end up abusing alcohol or drugs themselves.

As adults they've often chosen, as their life partner, another very dependent—even alcoholic—person to be with. It's hard for them to relax at all; if someone is five minutes late it can be a source of great anxiety.

Many therapy groups last for two to three years, Beletsis said, and people leave at different times. Therapists ask for long-term commitments, since they feel the groups should be stable.

The issue of separation from the group almost always brings forth some feelings of abandonment, Beletsis noted.

"But in general people ready to leave have experienced changes in their interpersonal relationships. Often they'll go back to visit their parents with a new perspective," Beletsis said.

"The going home—whether real or symbolic—represents an acceptance and recognition in a person's own mind—'This did happen, but I'm not responsible.' The memories probably don't change, but the meanings attached to them do," she concluded.

The next talk in the series, "Women and Alcohol," will be presented 7:30 p.m., May 17, in room M104 of the medical school. The speaker is Dr. Cynthia Soyster, psychologist at the Stanford Alcohol Clinic. For further information call Diana Kennedy at (415) 497-6682.

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FOR IMMEDIATE RELEASE

SCIENTISTS STUDY ACTION OF DIOXIN

AT THE MOLECULAR LEVEL IN MAMMALIAN CELLS

STANFORD—

Dioxin—a chemical contaminant of herbicide manufacturing—can act to "turn up the volume" of certain genes in the DNA of mammalian cells, Stanford University researchers have found.

Dioxin's ability to modulate the way in which cells express their genetic material could help explain some of its toxic effects in animals as well as provide a clue about the substance's alleged harmful effects in humans.

It also provides researchers with a powerful tool for studying how cells regulate expression of their genes, the pieces of hereditary material that encode all the instructions for cells to properly function, said Dr. James Whitlock, associate professor of pharmacology at Stanford University School of Medicine.

Whitlock and graduate student David Israel are studying TCDD, the most powerful member of the dioxin family of chemicals that achieved notoriety as contaminants of the Vietnam war defoliant Agent Orange.

The problem of sorting out dioxin's effects on health is not a simple one, Whitlock noted, because the substance displays different levels of activity in different animals. For example, it takes 5,000 times as much of the chemical to kill guinea pigs as to kill hamsters.

In humans, the effects of dioxin exposure have not been rigorously studied, Whitlock said. Its only established medical hazard is production of chloracne, an acne-like proliferation of skin cells, he added.

One way to study dioxin's health effects is to look at how the chemical acts on DNA at the molecular level. "We are finding that at the molecular level, dioxin plays a complex role," Whitlock said.

In an article published in the May 10 issue of the *Journal of Biological Chemistry*, the scientists report that dioxin induces mouse cells to "read out" the information contained in a specific gene at up to 20 times the normal rate.

The gene codes for an enzyme that helps rid mammalian cells of potentially harmful compounds. Called cytochrome P-450, the enzyme initiates chemical processing of potentially harmful substances that might otherwise accumulate to toxic levels inside cells.

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In the detoxification process, the toxic chemicals go through transient "activated" stages, when they are highly reactive. If these transient molecules come in contact with DNA, their reactivity can be deleterious, Whitlock stated. But it is too early to speculate on what this might mean in terms of human effects, Whitlock cautioned.

Genetic strains of mice that are more resistant to dioxin have been developed by other researchers, Whitlock said. There could be genetic differences among humans too, he added, causing certain individuals to be more susceptible to dioxin. "But we do not yet know enough to say whether this is true, or to identify individuals with higher or lower susceptibility," Whitlock said.

Again, molecular level studies should help toward this goal by explaining how dioxin acts to alter expression of the genetic material, Whitlock said.

Dioxin seems to act on DNA in a two-step process, the researchers reported. First the dioxin molecule binds—perhaps in matched lock and key fashion—to a receptor protein inside the cell. Next, the dioxin-receptor complex accumulates within the cell nucleus where it attaches to the DNA.

Attachment of the dioxin complex to a specific site on the DNA causes the cell's machinery to transcribe, or "read," the cytochrome P-450 gene more frequently than before, ultimately causing the cell to produce greater quantities of the cytochrome P-450 enzyme, Whitlock said.

This mode of action of dioxin has given Whitlock and Israel a biochemical explanation for mice that are more resistant to dioxin. In these mice, the dioxin receptor protein is abnormal. Unable to bind with the defective receptor molecule, dioxin cannot attach to the DNA to boost expression of the cytochrome P-450 gene.

The dioxin research may also lead to more general insights about how cells regulate their genes, Whitlock said.

Many genes are thought to be controlled by "inducer" molecules that boost their expression, Whitlock said. But the chemical identity of only a few inducers has been discovered, he said.

"In this case we have identified dioxin as one of the inducer molecules that increases expression of a gene, giving us a powerful system for studying gene regulation," he said.

The research is supported by grants from the National Institutes of Health, the American Cancer Society and the Pharmaceutical Manufacturers Association Foundation.

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FOR IMMEDIATE RELEASE

ASSOCIATE DEAN GIVES MONEY FOR KIDNEY STUDIES

STANFORD—

A $50,000 gift to help Stanford University Medical Center students pursue research projects related to the kidney and its disorders has been provided by Satellite Dialysis Centers Inc., of Menlo Park (Calif.).

The gift, announced Friday (May 6), honors Robert L. Maffly, son of Roy H. and Marilyn Maffly, who died suddenly last year at age 28. A graduate of Whitman College and recipient of an M.S. in chemistry from the University of California at San Diego, the younger Maffly was employed at SRI International as an industrial economist.

His father is professor of medicine (nephrology) and associate dean for student affairs at Stanford Medical School.

The Robert L. Maffly Fund grew from Satellite's interest in kidney research and Dr. Maffly's conviction that "research experience is an essential part of medical education."

Dr. Norman S. Coplon, president of Satellite was a clinical and research fellow under Maffly in the Division of Nephrology from 1967 to 1969. When he completed his fellowship, Coplon helped establish Stanford's kidney dialysis unit, becoming its first director.

When Coplon left Stanford in 1974 to establish Satellite Dialysis Centers, a group of nonprofit freestanding dialysis facilities in San Jose, Modesto and Palo Alto, Maffly became a member of the corporation's board of directors, on which he still serves.

The fund, which will remain open to future donations, will be administered through the Stanford Medical Alumni Scholars' Fund, which provides research stipends and tuition credits for Stanford medical students.

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FOR IMMEDIATE RELEASE

MASS MEDIA PROVIDE NEGATIVE IMAGE OF NURSING, TWO RESEARCHERS SAY

STANFORD—

The professional image of nurses has reached an all-time low in the popular entertainment media, two University of Michigan professors told an audience of Stanford University Hospital (SUH) nurses Wed., May 9.

Despite the fact that today's nurses have greater health care responsibilities than ever before, they are being portrayed as less intelligent, less nurturing, and less empathetic in novels, film, and television than at any time in the last 80 years, said Drs. Beatrice and Philip Kalisch, both professors of nursing at the University of Michigan.

Since the mid-1960s, the dominant stereotype of the nurse in the mass media has been as a sex object, the professors said.

This negative image of nursing, if left uncorrected, will lead to problems in nurse recruitment, funding, and the future role of nurses in the health care field, the Kalisches predicted.

"A public constantly fed a demeaning image of nursing will not perceive the profession as a desirable or prestigious one," Philip Kalisch pointed out.

The Kalisches were the featured speakers during Stanford Hospital's nursing department's first annual "Stanford Nursing Week."

The husband-and-wife team is conducting a study of how the nursing profession is portrayed in the mass media.

Although the public sees nurses as "nice people," the nursing profession is given little prestige in the public eye, the Kalisches said.

In the future, nurses should attempt to foster an image of themselves as dedicated "careerists" and encourage the nursing profession to be recognized as a vital industry offering discrete services, the professors added.

In their research, the Kalisches looked at news and entertainment depictions of nurses in the mass media. To evaluate news coverage, they said they examined 10,000 newspaper articles, 5,000 photographs, 350 television newscasts, and 15 magazine articles. In the entertainment media, they looked at the image of nurses as conveyed through 216 novels, 212 films, and 351 television episodes.

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Overall, during the past 80 years there has been a decline in positive portrayals of nurses, the researchers said, with brief interludes of more favorable coverage of the profession during the two world wars.

Newspaper coverage of nursing presents the most positive, realistic image of the nursing profession, the Kalisches said, but the quantity of coverage is small and thus not very influential in shaping the public's view of the nurse.

Television presents the least favorable coverage, depicting nurses as harming patients twice as often as it shows them helping patients, the Kalisches reported.

Novels—except those written by physicians—frequently present a positive image of nursing, but since television is "the most exposed of the media, the negative nurse image is more strongly reinforced in the public mind," the researchers said.

One of the major dangers of a negative public image is that it will adversely affect the number and quality of people who choose nursing as a profession, the Kalisches said.

This is a particular problem in terms of recruiting men into the profession, the Kalisches said. As women—who have traditionally comprised over 95 percent of the profession—begin to migrate into other fields, men have no role models that would entice them to consider a nursing career.

"We need a new TV series called "Joe Smith, R.N." starring Tom Selleck, a macho but sensitive man who chooses to become a nurse" Philip Kalisch suggested. "Such a positive presentation would induce 50,000 male adolescents to think about nursing as a career."

The Kalisches concluded by telling the audience that nurses must reshape the negative public image of their profession by more active participation in conveying what it is that nurses really do.

"Write letters to local newspapers, write novels about nurses, develop good relationships with local reporters, establish the nurse's role as an authority in certain aspects of health care," Philip Kalisch suggested. "You may get misquoted occasionally, but invisibility in the media is the highest price any group can pay."

In addition to the lecture by the Kalisches, Stanford Nurse Week, May 6-12, features exhibits and tours of nursing activities at Stanford University Hospital's main center and Hoover Pavilion.

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FOR IMMEDIATE RELEASE

MICROBIOLOGIST RECEIVES FELLOWSHIP AWARD IN MOLECULAR PARASITOLOGY

STANFORD—

Dr. John Boothroyd, assistant professor of medical microbiology at Stanford University School of Medicine, has been granted a special fellowship award in molecular parasitology from the Burroughs Wellcome Fund of North Carolina.

The $40,000 two-year fellowship was recommended by the advisory committee of the Burroughs Wellcome Fund in special recognition of Boothroyd's research accomplishments and potential, said Martha Peck, the Fund's executive director.

Boothroyd, 29, studies the molecular biology of *Trypanosoma brucei*, the single-celled parasite that causes African sleeping sickness.

This organism, which accounts for thousands of deaths annually on the African continent, has an unusual ability to elude the protective forces of its host's immune system. Like a criminal with a repertoire of "aliases" the parasite repeatedly switches the make-up of its protein coat, assuming a new disguise to stay one step ahead of the host's immune response.

Learning more about the genetic basis for this ability could have broad implications for understanding infectious disease at the molecular level, said Dr. Stanley Falkow, chairman of medical microbiology at Stanford.

Boothroyd, who joined the Stanford faculty in 1982, did his undergraduate studies at McGill University in Canada and received his Ph.D. in molecular biology from Edinburgh University in Scotland in 1979.

The Burroughs Wellcome Fund, based in the Research Triangle Park area of North Carolina, has a longstanding interest in funding research related to tropical medicine.

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GONDA RECEIVES ACHIEVEMENT AWARD FROM PSYCHIATRIC SOCIETY

STANFORD—

Dr. Thomas A. Gonda, professor and chairman of the department of psychiatry and behavioral sciences at Stanford, is co-recipient of the 1984 Outstanding Achievement Award of the Northern California Psychiatric Society (NCPS).

The award, presented April 28, honors NCPS members who have made outstanding contributions to psychiatry and earned the respect of their colleagues and the community.

Gonda was honored for his "multitudinous achievements," said Dr. Lorrin Koran, co-chairman of the awards committee. Gonda has written more than 50 professional papers and is co-author of a recent book, *Dying Dignified: The Health Professional's Guide to Care.*

The second award was presented posthumously to Dr. Victor Calef, who was a San Francisco psychoanalyst.

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FOR IMMEDIATE RELEASE

SCIENTISTS TELLS CONGRESS OF NEED FOR NEW FEDERAL HELP

STANFORD—

The government should take a wider role in the distribution of biotechnology, and the federal agency responsible for medical hardware advancement should be better funded, a Stanford scientist told a Congressional subcommittee Monday.

Dr. Oleg Jardetzky, professor of pharmacology and chairman of the directorate of the Stanford Nuclear Magnetic Resonance Center, said the federal Biotechnology Resources Program should have its role expanded to facilitate the distribution for public use of expensive biomedical innovations.

Jardetzky has said in the past that multimillion dollar equipment needed for medical research and treatment will need to be shared among several institutions, and its introduction to practical applications must come from public funding sources.

Speaking on behalf of a panel of 15 scientists, Jardetzky was scheduled to testify before a subcommittee—chaired by Rep. William H. Natcher, D-Ky.—of the House Committee on Appropriations.

"Over the past decade it has become increasingly clear that complex and sophisticated technology—high speed computers, high resolution Nuclear Magnetic Resonace (NMR) instruments, synchrotron radiation facilities, million electron volt electron microscopes and others—will have an enormous impact on the future course of medical science and clinical practice," Jardetzky said in remarks prepared for delivery to the Subcommittee on the Departments of Labor, Health and Human Services, Education and Related Agencies.

But he said the cost of new lifesaving biotechnology devices can range from $1.5 million to $2.5 million, with construction costs for facilities supporting the new equipment ranging up to about $10 million.

"The categorical institutes of the NIH (National Institutes for Health) have no instrumentation programs capable of handling proposals requiring a capital outlay of this order of magnitude," he said.

Jardetzky noted that the NIH's Division of Research Resources-The Biotechnology Resources Program has been funded inadequately for $32.5 million in fiscal 1984, with an increase only to $34.4 million next year. Funding should be increased at least $5 million next year that funding in the range of $64 million should be the goal in the next five years.

The scientist said the NIH could facilitate distribution of needed new technology by encouraging commercialization whenever possible, replicating prototype instruments, and funding or providing such equipment "where commercialization is not feasible for reasons of either very high costs or of a limited market."

He said the BRP should change its name to "Biotechnology Research and Resource Program" and should also become involved in interdisciplinary training programs where traditional degrees cannot meet quickly changing and innovative needs.

Jardetzky said the panel's recommendation "represent the minimum steps necessary to establish a program with the NIH that will adequately meet the needs of U.S. medical scientsts for a new sophisticated technology and provide an opportunity for U.S. leadership in the introduction of modern technology into medical research and clinical practice."

Other Stanford scientists on the panel who endorsed Jardetzky's testimony were Arthur I. Bienenstock, professor of materials science engineering and applied physics and director of the Stanford Synchrotron Radiation Lab; Edward A. Feigenbaum, professor of computer sciences; and Edward H. Shortliffe, assistant professor of medicine.

MAY 7, 1984 —30— MG3

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ADVANCE FOR A.M. RELEASE THURSDAY, MAY 10, 1984

TRADEOFFS BETWEEN PROLONGING LIFE AND COSTS POINTED OUT IN STUDY

STANFORD—

Patients treated by faculty physicians in a university hospital had higher costs and lower inhospital mortality than patients with the same diagnoses treated in the same hospital by private practice physicians, according to a study reported Thursday by the National Bureau of Economic Research (NBER) and Stanford University School of Medicine.

The differences in cost and mortality between the two services were especially large for the most seriously ill patients. But although the inhospital death rate was twice as high for patients of private physicians, followup revealed that the survival rates were low and equal for the two services nine months after discharge.

The researchers studied records of 2,025 patients admitted in 1981 to Stanford University Hospital by the two categories of physicians. The researchers measured differences in types of cases, costs and mortality in the hospital as well as whether higher costs were associated with differences in short and long-term utcomes.

The latter is important, the researchers said, because if academic medical centers are to continue to provide the same level of care to patients they have admitted in the past, the proposed payment system must have adjustments to allow for the care of those high-risk patients.

Patients in the study were assigned to four risk categories based on their predicted probability of death. The study found that for low-risk patients the cost differences between faculty and community services as well as mortality in the hospital were small and statistically insignificant.

But the costs of caring for high-risk patients were 70 percent higher on the faculty service than on the community service, and they were due to aggressive treatment and diagnostic tests. The faculty patients had significantly fewer inhospital deaths.

More strikingly, a followup of a matched sample of patients from the high-risk category revealed that only 16 percent of the patients of either group survived nine months after discharge.

The study co-authored by Drs. Alan M. Garber, Victor R. Fuchs and James F. Silverman was published in the May 10 issue of *The New England Journal of Medicine*. Supported by a grant from The Robert Wood Johnson Foundation to NBER, the study was done to gain insight into the consequences of prospective payment for university hospitals which have higher costs because of the mix of high-risk patients they care for. Prospective payment based on diagnosis is perceived to threaten the financial stability of teaching hospitals.

This system of payment, to be phased in a four-year period, has been mandated by Congress to hold down Medicare costs. Hospitals are to be paid according to fee schedules determined in advance for 467 Diagnosis Related Groups (DRGs) of illnesses. The DRG system, some experts predict, would not be limited to Medicare payments, but eventually could determine the bills of all patients.

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2-2-2 The differential in costs on the faculty service probably reflects in part the hospital's role as a training institution and referral center, according to the study. "House staff (interns and residents) and medical students who learn by doing procedures and interpreting diagnostic tests, may order studies more readily because of their educational value.

"Physician attitudes toward death may also have contributed to the more aggressive care on the faculty service. Private physicians, who knew their patients better, may have been more aware of the patients' own wishes concerning continued life support. In many cases, the patients' preferences may not have been known to the faculty physicians, who would have treated aggressively when in doubt."

According to the study, the more extensive use of diagnostic procedures and intensive care provided on the faculty service may have reduced mortality while generating higher costs. But because the patients of the two groups of doctors may have differed, the results do not prove that faculty physicians actually reduced mortality through more care.

"Community physicians may also have waited longer to admit their patients to the hospital than did the faculty," the researchers said. "By substituting outpatient for inpatient services, the community physicians may have increased the proportion of their patients who were in the final stages of illness, while reducing costs."

The study of only one university hospital, the researchers acknowledge, is not sufficient to make their observations applicable to all hospitals. But "the differences we observed between the faculty and community services in the same hospital are likely to understate the differences between separate teaching and community hospitals." At Stanford, they said, community and faculty physicians interact more closely than faculty and community physicians in separate hospitals.

In an accompanying editorial in the same issue of the journal, Editor Dr. Arnold S. Relman commented:

"This report from Stanford deserves careful consideration. It tells us that an important part of the added costs of teaching hospitals is probably due to the increased intensity of workup and treatment of very sick patients, and that this increased care appears to produce measurably greater inhospital survival.

"The message here seems to be that the relatively high costs of teaching hospitals will need to be weighed against the medical results achieved in such centers, as well as their educational and research outputs."

"The study," Fuchs stressed in an interview, "says there may very well be a tradeoff between prolonging life and costs, and that is something we as a society have to face.

"It shows also that patients and physicians have differences of opinion on how they deal with death and dying. Some physicians accept it as a fact of life, others want to do all they can to prevent it. Some patients also do cling to life and want to have everything possible done.

"But when the government sets the rules, it becomes a controversial issue. Institutions that continue to practice high cost medicine that is typical of the faculty service will incur financial penalties. Less aggressive services will become more common, and we may see hospital mortality rise.

"An important consequence of prospective payment will be overlooked if government policy makers do not monitor hospital mortality."

END ADVANCE FOR A.M. RELEASE THURSDAY, MAY 10, 1984

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MOLECULAR AND GENETIC BASIS OF DISEASE DISCUSSED AT STANFORD SYMPOSIUM

STANFORD—

Gene transfer into mammals is still a crude procedure and inappropriate to apply in humans at the current state of knowledge, a University of Washington scientist said at Stanford University School of Medicine Friday, May 4.

"Correcting genetic defects isn't easy," said Dr. Richard Palmiter, a biochemistry professor from the University of Washington. "We don't yet know enough to insert the gene into the proper location in the chromosome, and we don't know enough about gene products to predict all of their effects."

Ever since the "new genetics" burst onto the scene in the 1970s, people have speculated that diseases might one day be treated by transferring healthy genes into patients with defective ones.

But Palmiter made it clear that although rapid progress is being made, that day is not yet here.

Along with with five other prominent biological scientists who described how they are using the tools of the new genetics to probe the molecular basis of disease, Palmiter spoke at a daylong symposium at Stanford University School of Medicine.

Six featured speakers, all invited guests from around the country, detailed how new biochemical techniques are leading to a better understanding of diseases ranging from cancer to sleeping sickness.

The event was the Medical School's second annual symposium associated with the Program in Molecular and Genetic Medicine, a new school-wide research effort initiated by Medical School dean Dominick Purpura and involving faculty from both basic and clinical sciences. One goal of the research program is rapid translation of scientific advances into new medical methods of disease diagnosis and therapy.

The new techniques, that have ushered in a "biological revolution," permit scientists to dissect DNA, the genetic material, into pieces as small as individual genes. These pieces can be modified or reassembled into new molecules that can be used to probe the biochemical and genetic makeup of healthy and diseased cells.

Palmiter, with his colleague Ralph Brinster of the University of Pennsylvania, has been injecting human genetic material into mouse egg cells. The scientists have been studying in animals the gene transfer technique's potential for correcting genetic disease. In one series of experiments they observed a human gene's ability to overcome a genetic defect in mice. But where they corrected one problem, they created another, Palmiter reported.

The researchers used a special type of mouse with an inherited defect that causes the animals to grow to only half normal size. These mice have low levels of growth hormone, a body chemical that stimulates normal growth.

The scientists injected the gene for human growth hormone into mouse egg cells and found the animals that developed from these eggs grew to normal weight, or even exceeded the norm. However, all the females with the human gene were infertile, probably due to some unknown effect of human growth hormone on the mouse reproductive system.

Palmiter and his colleagues are also using the gene transfer technique to study how tumors develop in animals. They have found that insertion of a specific foreign genetic molecule into mouse eggs causes a brain tumor to develop in animals that grow from the genetically altered eggs. Using this gene transfer method to create cancer in animals may help identify the genetic elements that cause malignancy, Palmiter suggested.

Some genes that cause cancer have already been discovered. Most of the time they are normal segments of the genetic material, probably coding for proteins that play important roles in the cells and tissues in which they reside. But when acted upon by viruses, chemicals, irradiation, or other carcinogenic agents, these genes seem capable of turning a normal cell into a cancerous one.

The so-called "oncogenes" are feverishly under study by research groups around the country. About 20 such cancer genes are known, a handful of which are thought to be involved in human malignancy.

Dr. Mariano Barbacid of the Frederick Cancer Research Center spoke about one such oncogene called *ras*, which has been found in cells from some human tumors. Little is yet known about what protein the *ras* gene codes for and what might be its normal function, Barbacid said.

Although the *ras* oncogene has been found in human tumor cells, this is not proof that it causes human malignancy, Barbacid said. He and his colleagues are studying whether the gene is a causative agent associated with certain cancers in mice.

Analysis of oncogenes and their harmless counterparts has revealed precise biochemical differences between the two. The DNA double helix is made of chemicals called nucleotides strung together along two strands. Barbacid reported that a single change of nucleotides at a precise point in the gene is the only difference between the harmless form found in normal cells and the gene's almost identical twin found in cancerous cells.

Cancer is a major health concern worldwide. The study of parasitic diseases, prevalent in many of the world's undeveloped countries, has also been revitalized by the introduction of the new molecular and genetic techniques.

Dr. George Cross of Rockefeller University spoke about *Trypanosomes*, single-celled blood parasites that cause African sleeping sickness. The ribbon-like organisms, transmitted to humans through the bite of a tse-tse fly, have an unusual ability to biochemically "outwit" their host's immune attack. Like a criminal with a repertoire of "aliases" the parasite repeatedly switches the makeup of its protein coat, assuming a new disguise to stay one step ahead of the human's immune response.

Cross, who was the first to identify the group of proteins *Trypanosome* uses to cloak itself, said that scientists are beginning to seek answers at the molecular level to explain how the organism switches disguises. In some way, it shuffles hundreds of genes coding for coat proteins in its chromosome so that at any one time only one of the genes is active. This enables the organism to produce its repertoire of coat proteins in a highly regulated way.

Another blood disease is thalassemia, caused by a genetic defect in the oxygen-carrying molecule called hemoglobin, found in red blood cells. Dr. Thomas Maniatis of Harvard University and his colleagues are studying the molecular basis for this disease.

The hemoglobin molecule is composed of two types of protein chains, coded for by separate genes in the DNA. Single changes in the nucleotide sequence of the hemoglobin genes can cause thalassemia. Maniatis and his colleagues have found that many of these gene alterations affect the process by which the DNA is decoded in order to make protein.

In protein synthesis, the cell's machinery decodes genes by producing a template molecule called a messenger, made of ribonucleic acid (RNA). In order to work properly, the messenger RNA must be snipped apart and respliced at precise locations. Maniatis described how some genetic defects in thalassemia patients prevent hemoglobin messenger RNA from going through its correct splicing sequence.

Other symposium speakers discussed how the techniques of gene manipulation are opening up studies of the nervous system and development, the process by which multicellular organisms grow and develop specialized tissues for performing many different physiological tasks.

Dr. Charles Stevens of Yale University School of Medicine is studying certain protein molecules responsible for electrical activity in the brain. These proteins, embedded in the membranes of nerve cells, control the flow of electrically charged particles in and out of nerve cells. This flow of ions is the basis for neural impulses, the electrical signals that transmit information throughout the nervous system. Stevens said that the new biochemical techniques are enabling researchers to probe the molecular structure of these proteins.

Dr. Donald Brown discussed how genes can be turned on and off during different stages of the life cycle in multicellular organisms. He reported that he and his and colleagues at the Carnegie Institution of Washington have identified protein complexes that seem to mask and unmask portions of the DNA in developing frogs. When masked, specific genes are effectively hidden from the machinery that seeks to decode the genetic material into the proteins that carry out biological activities.

"We are entering a second revolution in molecular and cellular biology," Stanford University president Donald Kennedy declared in the opening remarks to the full house in Fairchild Auditorium.

"This country has a good basic science apparatus but the lag time for transfer to the bedside is long," Kennedy stated. In the second revolution, basic science advances must be translated into clinical progress, he said.

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FOR IMMEDIATE RELEASE

TWO REMAINING TALKS IN LECTURE SERIES

STANFORD—

"Inner World of the Bereaved Patient" is the topic of a lecture at 4:30 p.m., May 11, by Dr. Irvin Yalom, professor of psychiatry at Stanford University Medical Center.

The public lecture in the medical school's Fairchild Auditorium will be followed by a reception. All interested members of the community are invited to attend.

The lecture series—"Stanford Medical and Scientific Highlights," or S * M * A * S * H—is cosponsored by the medical school's Faculty Senate and the Stanford Medical Students Association.

The spring 1984 series will conclude June 1 with a talk entitled "Life in the Fast Lane: Cell Organelle Motility," by Dr. James Spudich, professor and chairman of structural biology, and Ronald Vale, a student in the Medical Scientist Training Program. Time and location remain the same throughout the series.

The Friday talks are intended to inform anyone with basic scientific understanding of significant medical research and developments at Stanford.

5-3-84 —30— LA2

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FOR IMMEDIATE RELEASE

PLANNING COMMISSION APPROVES MODERNIZATION BUT NOT ZONING CHANGES

STANFORD—

The Palo Alto City Planning Commission unanimously recommended approval Wednesday for Stanford University Hospital's $110 million modernization project, but the commissioners declined to recommend zoning and land use changes which would facilitate parking and construction of a relocated Children's Hospital at Stanford.

The commission's action said the project as proposed by Stanford to modernize the hospital and replace outmoded facilities would have no significant impact on the environment. The City Council is scheduled to review the application for a land use permit on May 21.

In a parallel action, the city's Architectural Review Board, unanimously approved the design of the project Thursday and sent its recommendation to the city zoning administration, which will be granting the use permit for the project. The ARB has reviewed the building design several times previously.

During much of Wednesday night's three-hour public hearing, members of the Planning Commission questioned Stanford officials about a requested change in the city's comprehensive land use plan and zoning on two parcels along Welch Road. Stanford had wanted an existing parking lot parcel and a 3.06-acre site now partially used as a heliport changed from office research and housing to public facilities.

Elvia Garwood, director of the modernization project, has said that the change would facilitate moving parking spaces to the helipad site when construction displaces parking spaces.

"In a larger sense," Garwood said, "the changes would allow for logical future plans for Stanford hospital and intelligent planning for the area."

In addition, the changes would be consistent with the zoning and land use needed to relocate Children's Hospital at Stanford attached to the modernization project as currently planned.

"We're not turning down the merger or the potential move of Children's Hospital. We just feel in terms of the environmental document (that) we need more information to be able to make the finding," said commission chairman Helene Wheeler.

5-3-84

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Wheeler said the commission would reconsider Stanford's request for a change in both the zoning and underlying land use plan if the institution would present additional evidence that such a change was needed to facilitate the project and would not harm the environment. But Robert Freelen, vice president for public affairs, said the university would not agree to a continuance of the matter, which would delay council review.

Freelen said after the meeting that while the commission's refusal to recommend a change in the zoning would not preclude relocating Children's Hospital, "it makes planning that much more difficult, since you are never assured during the planning process that the site you have selected will be approved."

Current plans call for moving the children's facility from its site across Willow Road to a location—as yet not precisely determined—adjacent to Stanford hospital's modernization project. Such a move would allow Children's Hospital patients to receive all services of the Medical Center without being moved by bus or ambulance from a distant facility.

The commission also recommended that council approval be granted on the condition that Stanford restrict parking near the hospital to Medical Center employees. Wheeler noted that Stanford would need to develop new parking regulations, since currently, the university makes no distinction between Medical Center and other Stanford employees when assigning parking permits.

It was a concern over housing that triggered much of the discussion at an April 18 commission meeting. The city's comprehensive plan earmarks the heliport site as multiple family residential, although the zoning has never been changed from office research. Wheeler and other commissioners had said that they would be reluctant to give up the housing designation there without assurances that Stanford would earmark another site for housing.

The state of California has already approved $85 million in tax exempt bonds to finance portions of the hospital's modernization project, which will provide more modern nursing units and other facilities, including a new surgical suite.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

NEUROBIOLOGIST PATE SKENE NAMED SEARLE SCHOLAR

STANFORD—

Dr. Pate Skene, assistant professor of neurobiology at Stanford University School of Medicine, has been named a Searle Scholar by The Chicago Community Trust, a community foundation that administers the Searle Scholars Program.

One of 20 biomedical researchers to receive the Searle award in 1984, Skene will use the three-year $157,500 scholarship to support his research on the growth of nerve cells during brain development and nerve regeneration.

Skene, 29, did his undergraduate work at Vanderbilt University and received two doctoral degrees—in molecular biology and in neural sciences—from Washington University in 1980. Following postdoctoral positions at Stanford and Vanderbilt, Skene returned to the Stanford Medical School in 1983 as a faculty member.

Skene's research focuses on how the hereditary material, DNA, controls growth of axons, the long nerve cell fibers that conduct electrical signals through the peripheral and central nervous systems of animals. He is particularly interested in the regulation of a group of genes encoding proteins involved in axon growth during development and following injury.

The 1984 Searle scholars were selected from over 130 applicants—sponsored by 78 universities in the United States—who might be expected to make significant contributions to their chosen profession over an extended period of time, the Trust announced.

The Searle Scholars Program was established following the death in 1978 of Mr. John G. Searle, president of G. D. Searle and Co. an Illinois-based research and pharmaceutical company.

Since the program began in 1980, 67 awards totaling over $10,000,000 have been made in support of research in medicine, chemistry, and biological science.

5/2/84 —30— LH2

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News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

WEIGHT-LOSS CAMP OPEN TO YOUNGSTERS

STANFORD—

Children ages 8-11 will be included for the first time in Stanford's summer weight-loss day camp, announced Dr. Mary Southam, the psychologist who runs the program.

The session for children is being added to the already established camp for teenagers on the university campus. The campers' aim is to have fun while slimming down through peer and parent support, and behavior modification in eating and exercise, Southam said.

The children's session will run from 1 to 4:30 p.m., four days per week, from June 25 through July 19. Lunch is not included. Swimming and active games, with the exception of tennis, will be emphasized.

Faculty will include members of the behavioral medicine program of the school of medicine. A fee is charged.

Early enrollment is recommended, as space is limited. For further information, call Southam at (415) 497-5065.

5-2-84 —30— LA2

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FOR IMMEDIATE RELEASE

NURSES STRIVE FOR BETTER PAIN CONTROL

Editors: Photos available upon request if not included.

STANFORD—

A new system of helping patients with cancer and other illnesses control their pain is being tested by nurses at Stanford University Hospital.

The system, implemented this month in the hospital's general medical oncology unit, involves the traditional pain medications—analgesics—combined with hot and cold packs, massage, biofeedback, and relaxation techniques.

The approach is individualized to meet the needs of each patient and involves the patient more in decision making, said Leslie Jasper, a registered nurse participating in the program.

One innovative approach uses individually-tailored tapes produced by occupational therapists. A patient named Jane might hear a soothing voice tell her, "Close your eyes, Jane. Start counting backwards from 100, and at every 10th number wiggle your toes."

Ruth Miller, a leukemia patient, said she started using tapes while being given a medication that "gave me the shakes." She said, "I tried to concentrate on the tape rather than what was going on with my treatment, and it really helped a lot."

"What we're hoping to do is install a 'round-the-clock method of pain relief, while lowering patients' anxiety by giving them more control," Jasper noted.

She explained that several staff nurses became tired of repeatedly finding their patients in pain, and having little to offer in the way of satisfactory, sustained relief.

The new system of pain assessment developed by the nurses gives some responsibility for their own care to the patients. The idea is to determine the effectiveness of the various methods of pain control through the use of specially designed patient evaluation forms, as well as graphs for hospitalized patients' use.

Patients will use flow charts to plot out times of pain in relation to drug administration, radiation therapy, physical therapy, or other therapeutic activities.

With this formalized feedback, doctors, nurses and physical therapists should be better equipped to help each patient according to his or her own needs, Jasper said.

The pilot program to test the new pain assessment tools will be reevaluated after use with 40 patients, said Lily Mahony, the registered nurse who chaired the committee that worked for about two years to develop the new pain control standard. "Nothing is carved in stone," she said, indicating that the project, sponsored by the nursing department, may turn into a research study later on.

"By making independent judgments concerning patients' pain, nurses serve as vital members of the health care team not only in delivering patient care but also in educating and advising the physician members of the team concerning the development of better treatments," noted Dr. Thomas Raffin, assistant chief of medicine.

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FOR IMMEDIATE RELEASE

ROSENBERG TO RECEIVE 1984 KARNOFSKY AWARD FROM ONCOLOGY SOCIETY

STANFORD—

Dr. Saul A. Rosenberg will receive the 15th annual David A. Karnofsky Award from the American Society of Clinical Oncology (ASCO) at its annual meeting in Toronto, May 6-8.

Rosenberg, 56, is professor of medicine and radiology, and chief of the division of oncology at Stanford University School of Medicine.

The Karnofsky Award is the major annual award given by ASCO to a leading innovator in the field of oncology "who best exemplifies advances made in clinical oncology during recent years," the society announced.

At the Toronto meeting, Rosenberg will receive a a medal and present the Karnofsky Memorial Lecture, on the subject of new challenges and opportunities in understanding and treating low-grade lymphomas, cancers of the lymphatic system.

Rosenberg, who heads a major research program at Stanford Medical School focusing on the basic biology and clinical treatment of all types of malignant lymphoma, is best known for his pioneering work on one type of lymphoma called Hodgkin's disease.

In collaboration with the late Henry S. Kaplan of Stanford and other colleagues, Rosenberg helped develop an effective treatment strategy combining drugs, radiation and surgery, that has dramatically improved survival rates for Hodgkin's disease patients. Nearly 80 percent of these cancer patients, when properly treated, can now be cured of the disease.

Rosenberg, who has been on the Stanford faculty since 1961 and has led the medical school's oncology division since 1965, received his undergraduate and medical degrees from Western Reserve University. He is the recipient of numerous awards for teaching and research activities. Most recently, he was named an American Cancer Society Professor of Clinical Oncology.

The ASCO award is named in honor of David A. Karnofsky, a Stanford Medical School alumnus who died in 1969. Karnofsky, working at the Memorial Sloan-Kettering Institute in New York, was one of the leading researchers in the discovery and development of drugs for the treatment of cancer.

5/2/84 —30— LH2

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FOR IMMEDIATE RELEASE

TWO MEDICAL SCHOOL FACULTY MEMBERS ELECTED TO NATIONAL ACADEMY OF SCIENCES

STANFORD—

Two faculty members at Stanford University School of Medicine are among 60 new members elected to the National Academy of Sciences (NAS), the academy announced Tuesday, May 1.

The two scientists are Dr. Stanley Falkow, professor and chairman of the department of medical microbiology, and Dr. Lubert Stryer, professor of structural biology.

Falkow, 50, is known for his work on the molecular biology of infectious diseases. He has done important research on genetic mechanisms underlying development of antibiotic resistance in microorganisms and has been instrumental in attempts to develop new vacccines against a wide variety of pathogenic agents.

Falkow became chairman of medical microbiology on his arrival at Stanford Medical School in 1981. Previously, he was on the medical faculty of the University of Washington. Falkow received his Ph.D. from Brown University in 1961.

Stryer, 46, is noted for his work on the chemistry of biological proteins. He has made original discoveries concerning the structure and dynamics of antibody molecules and certain pigments involved in vision. He has also pioneered new methods for investigating the rapid shape changes and motions of biological molecules.

Stryer, who was chairman of the department of structural biology from 1976 to 1979, came to Stanford Medical School in 1976 from Yale University. He received his M.D. degree from Harvard in 1961.

Election of the two Stanford scientists brings the total Stanford University faculty NAS membership to 78, of whom 17 are in the school of medicine.

5-1-84 —30— LH3

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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

ALCOHOL CLINIC PRESENTS LECTURE SERIES

STANFORD—

"Adult Children of Alcoholics" is the first of four public lectures to be presented by the Stanford Alcohol Clinic Thursday evenings this month.

The first talk, scheduled for May 10, will be given by psychologist Sharon Cushman of the clinic.

Other lectures of the spring series are:

- May 17—"Women and Alcohol," with psychologist Cynthia Soyster of the clinic;
- May 24—"The First Year of Recovery—Medical and Psychological Aspects," with Dr. Robert Landeen, assistant professor of psychiatry and medical director of the inpatient psychiatric unit;
- May 31—"Cocaine the New High," with psychologist Robin Press of the clinic.

The free lectures will take place 7:30 p.m. in room M104 of the medical school.

The alcohol clinic is part of the department of psychiatry and behavioral sciences at Stanford University School of Medicine.

For further information call (415) 497-6682, and ask for Diana Kennedy.

5-1-84 —30— LA2

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FOR IMMEDIATE RELEASE

CROWLEY APPOINTS DEAN'S SEARCH COMMITTEE

STANFORD—

A faculty search committee to develop recommendations for the appointment of the next dean of the Stanford University School of Medicine was appointed Friday, June 22, by Vice President for Medical Affairs Lawrence G. Crowley.

The committee whose job is to find a successor to Dean Dominick P. Purpura will have its first meeting June 25.

"Because of the importance of this major effort I will chair the committee," Crowley wrote to the members. "It is my plan to put the search process on a fast track aiming at the appointment of a dean by September 1."

Purpura, a professor of neurobiology and neurology, will step down from the dean's post August 31 to return to teaching and research. However, he will continue to serve as an associate vice president for research at Stanford University Medical Center working on implementation of new research programs he helped develop.

The committee membership consists of Drs. Malcolm A. Bagshaw; professor of radiology; Helen M. Blau, assistant professor of pharmacology; Roland D. Ciaranello, associate professor of psychiatry; David A. Clayton, professor of pathology; Stanley Falkow, professor of medical microbiology; Willard E. Fee, Jr., associate professor of surgery; Thomas W. Feeley, associate professor of anesthesia (clinical); Rex L. Jamison, professor of medicine; A. Dale Kaiser, professor of biochemistry; James W. Raitt, clinical professor of medicine; and David K. Stevenson, assistant professor of pediatrics.

A medical student yet to be named will also serve on the committee, Crowley said.

Five individuals have been appointed as consultants to the search committee. They are Drs. Jack D. Barchas, professor of psychiatry and chairman of a former Dean's search committee; Albert Hastorf, vice president and provost; James Rosse, vice president and provost designate; Henry Riggs, vice president for development; and Gordon Holmes, president of the Stanford Medical Alumni Association.

6-22-84 —30— SA2

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FOR IMMEDIATE RELEASE

(Editors, reporters: Sessions, which begin daily at 8 a.m., are open to members of the news media. The conference site, Fairchild Auditorium, is located in the southwest corner of the medical center. Parking is available at a pay lot adjacent to Stanford University Hospital or closer to the auditorium by advanced request.)

THREE-DAY ANGIOPLASTY COURSE SLATED AT STANFORD

STANFORD—

Physicians will have an opportunity to attend an intensive three-day course to learn a technique which offers the possibility of replacing coronary artery surgery for many patients.

Multivessel angioplasty and advances in angioplasty equipment will be among topics covered June 25-27 at the Stanford Medical Center.

"Angioplasty is rapidly eclipsing coronary artery surgery for coronary artery disease," said Dr. Stephen Oesterle, director of the Unit for Coronary Interventions at Stanford and a course organizer.

In angioplasty, catheters inserted in a leg artery are threaded up to the heart. A "balloon catheter" is then inflated in a coronary artery narrowed by atherosclerotic deposits, flattening the deposits and opening the clogged vessel without surgery. The course, "Guide Wires in Coronary Angioplasty: Basic and Advanced Techniques," will feature lectures and live television and audio transmission of angioplasty cases.

Wednesday, June 27, Dr. Geoffrey O. Hartzler, consulting cardioloist of the Mid-America Heart Institute in Kansas City, will speak at 8:30 a.m. on "Multivessel Percutaneous Transluminal Coronary Angioplasty."

Other faculty include Oesterle, Dr. Donald C. Harrison, chief of the division of cardiology at Stanford, Dr. John B. Simpson of Sequoia Hospital in Redwood City, Dr. David Faxon, associate professor of medicine and director of the cardiac catheterization laboratory at Boston University Medical Center, and others.

6-22-84 —30— pf2

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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

COMMUNITY FUNDRAISERS TURN OVER MONEY TO HELP CHILDREN

STANFORD—

Francis Hinson didn't use all the money friends raised to help him pay off his medical bills, so the surplus has been turned over to Stanford University Hospital (SUH) to buy amenities for pediatric patients and their families.

At a brief ceremony June 15 in the children's playroom, Harry Simanek and Susan Rapp of the "Friends of Fran" organization presented Community Relations Director Jeanne Kennedy with a check for $10,000.

"Fran was an enigma," said Simanek. "He was very particular about how any money be raised . . . He had always insisted that he be allowed to pay us all back."

Friday's ceremony, Simanek said, was a symbolic opportunity for Hinson to pay back the friends and neighbors who had contributed the money Hinson had always regarded as a loan.

Hinson, a lifelong Palo Alto resident who was also widely known locally through the downtown smoke shop he operated for several decades, became heavily in debt in 1982 following lengthy hospitalization for a cardiac condition.

Simanek, vice president of the Boston Company, Inc., and his associate Susan Rapp, formed the "Friends of Fran" organization to raise money and serve as trustee to help Hinson pay off his medical bills. About $25,000 was raised through sale at $100 each of signed prints by local artist Marguerite Fletcher depicting Hinson outside his smoke shop.

In addition both SUH and the Palo Alto Medical Foundation agreed to reduce portions of the bill. The total amount was not made public.

The surplus was achieved after Medicare agreed to provide coverage for much of Hinson's bills retroactively.

Hinson was aware before his death at SUH May 12 that his debts were liquidated by Medicare, Social Security, and the fund, Simanek said.

Simanek said he asked Hinson, "'when this is all cleared up and your's debt free, how do you want the money to be used.'

"He told us, 'I would like it to go to people who had heart problems, particularly children.' He wanted to be a contributor himself."

Dr. Irving Schulman, chairman of the department of pediatrics, said the money would be used to buy such amenities as new chairs and games for the playroom, and furniture to increase the comfort of parents who must spend long hours waiting with their often desperately ill children.

6-20-84 —30— mg3

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FOR IMMEDIATE RELEASE

SCULPTURE HONORING CANCER PIONEER PLACED IN FRONT OF HOSPITAL

Editors: Photos of the sculpture, alone or being installed by workmen, available on request if not included.

STANFORD—

A sculpture by renowned Cubist Jacques Lipchitz has been placed in front of Stanford University Hospital as a memorial to Dr. Henry Kaplan, internationally renowned radiologist and cancer research pioneer, who died Feb. 4.

The aluminum cast of the 17-foot sculpture, "Song of the Vowels," was positioned in the grassy area in front of the hospital on June 12 at an angle intended to optimize the effect of sunlight on the work. A fundraising effort has been underway to meet the $350,000 cost of the sculpture.

"As an artist, Lipchitz is world class and so is "Song of the Vowels," said Albert Elsen, professor of art history, and a member of the committee which selected the work to honor Kaplan.

"Dr. Henry Kaplan, this university's greatest cancer specialist, deeply admires and identifies with Lipchitz's "Song of the Vowels" which would make its presence on this campus near the hospital all the more valuable and appropriate to honor him," Elsen wrote in January, shortly after Kaplan learned he was dying of cancer.

Lipchitz, who died in 1973 at age 82 said he had decided to create "Song of the Vowels in 1932, because "'I had decided to attempt a monument suggesting the power of man over nature,' " Elsen wrote.

" 'I had read somewhere about a papyrus discovered in Egypt having to do with a prayer called the 'Song of the Vowels,' a prayer that was a song composed only of vowels and designed to subdue the forces of nature," ' Elsen quotes Lipchitz in a January letter recommending purchase of the sculpture.

Kaplan, co-inventor of the first medical linear accelearator in the Western hemisphere, said shortly before his death that he thought one of his greatest accomplishments was helping to develop a treatment program which turned Hodgkin's disease, a cancer of the lymphatic system, from an almost universally fatal to a usually survivable malignancy.

Elsen sees parallels between both Lipchitz's and Kaplan's desire to triumph over forces of nature. The sculpture, Elsen said, celebrates (Lipchitz's) optimism about humanity's power to triumph over adversities encountered in nature." He said both the artist and Kaplan shared "awesome intellects employed for compassionate purposes."

The cast now on display was made by Lipchitz for his own home in Italy, where it remained for many years. It had originally been commissioned in 1931 by a wealthy French woman who wanted a large work for her garden. Other casts are on display in front of the Pompidou Center in Paris, and in the sculpture gardens of Princeton and UCLA.

Graphically, the sculpture depicts the theme of twin harpists, another interest of Lipchitz, who said he had been inspired by a performance in a French concert hall.

In the tradition of Cubism, the work attempts to conjoin inanimate objects and humans "to create a healing or more humane art that evoked life's unities and to invest sculpture with a fresh poetic power that made it more responsive to intuitive experience," Elsen said.

A formal dedication of the sculpture will be scheduled in the Fall.

6-20-84 —30— mg3

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FOR IMMEDIATE RELEASE

HOSPITAL LAUNCHES HOME CARE PROGRAM

STANFORD—

A home care program to help Stanford patients after release from the hospital will be submitted to the state for final certification after having been approved by the board of hospital directors Wednesday, June 13.

Sheldon King, director and executive vice president of the hospital, said he hopes the program can begin serving the first patients in San Mateo and Santa Clara counties by the end of the year.

Conceived as a department within the hospital, the program will be comprised of teams of registered nurses, home care aides, physical and occupational therapists, social workers, volunteers, and a dietary consultant. A coordinating group will plan patient care based on referring physicians' orders, and those staff members needed will visit patients' homes after discharge from the hospital.

"Our motivation is to provide continuity of care for our patients," said Dr. Lois Welches, R.N., associate director of nursing, who directed the feasibility study for the program. "We've noticed over the past couple of years that patients' length of stay in the hospital is shortening, while the overall level of acuity is rising. Patients go home with many physiological, social and emotional needs."

At the same time, Medicare's new system of DRG (diagnostic related groups) classification for prospective reimbursement, as well as other trends in third-party payment for health care, have made it necessary to look for alternatives to expensive inhospital treatment whenever possible, without sacrificing quality of care, Welches said.

"Insurance companies are becoming increasingly interested and willing to pay for home care," she noted. Medicare will also pay for some services, although coverage is limited to specific types and numbers of visits.

King said a survey indicated that about one-third of local patients would benefit from home care services and that many of these patients were not referred to existing home care agencies "for a variety of reasons."

He added that physicians and patients will retain all options to use the home care program of their choice.

"We'll continue to refer patients to outside agencies as appropriate," Welches said, especially since the Stanford program will "start small."

6-19-84

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King noted that some patients, such as pediatric and transplant patients, have specialized needs for which most existing agencies do not provide services. The new program, which will provide 24-hour on-call service, is tailored to the needs of all Stanford patients, said Welches.

"Some special services will help patients who need TPN (total parenteral nutrition), respiratory therapy, or IV therapy at home, or cancer patients undergoing chemotherapy who need help with nutrition, avoidance of complications, mobility, adjustment to the disease as well as to being at home, and employment. We'll be assisting the families as well," she said.

The majority of Stanford Hospital patients needing home care fall into the diagnostic categories of perinatal, circulatory system disorders, carcinomas, and musculo-skeletal system disorders, Welches said, though diagnosis is not a major criterion for assessing potential home care patients.

A hospice service, allowing the terminally ill patient to die comfortably at home, will be offered as part of the program, she noted.

First-time mothers, as well as parents of infants who've been in the intensive care nursery, are prime candidates for the program, to help them make the transition from hospital to home more smoothly.

The home care program will be staffed on rotation, Welches said, from among a pool of relief staff already employed by the hospital as well as by some permanent personnel, all to be trained in the special techniques of home care—which includes both direct help and teaching and/or monitoring.

"This will have multiple benefits," she said, "by allowing a better use of our nursing staff, whose census has been low, as well as providing staff with a greater sensitivity to patients' needs when they return to work inside the hospital."

Also, she pointed out that expert nurses in specialized fields will be available to the home care program as needed "on very short notice."

A medical director and a medical advisory committee composed of faculty and community physicians will provide medical direction, and a search is under way for an assistant director of nursing to head the department, Welches said.

The medical director will collaborate with the department of family, community, and preventive medicine and the department of medicine, in the development and implementation of a teaching program for residents and students who elect to rotate through the department of home care.

STANFORD UNIVERSITY MEDICAL CENTER
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(EDITORS: This release, an updated version of a January 24, 1984 story, is being sent out in response to the continuing need for volunteers to participate in hepatitis B studies. Dr. Merigan is available for interviews at (415) 497-5715.)

FOR IMMEDIATE RELEASE

FDA APPROVES HEPATITIS B STUDY PROTOCOL USING NEW INTERFERON DRUG

STANFORD—

Stanford University Medical Center scientists are ready to begin treating chronic hepatitis B patients, following approval by the Food and Drug Administration, with a new genetically engineered interferon drug that they think may be more effective than other medication in controlling the disease.

The drug, called beta-ser fibroblast interferon, is one of only a few interferons manufactured by recombinant DNA techniques to be used in treating the incurable liver ailment.

The research team, led by infectious disease specialist Dr. Thomas Merigan, believes the drug may be given in large doses to decrease the amount of the hepatitis B virus in the bloodstream on a long-term basis. Previously tested interferons did lower the amount of virus in the bloodstream, but only during the time period in which the patient was being administered the drug, Merigan said. Genetic engineering has made the new drug more stable, he continued, which hopefully will lead to long-lasting loss of the virus.

Hepatitis B is a unique virus that causes infection of the liver, Merigan said. There is no cure for the disease, which afflicts more than 100 million people worldwide. The virus can be found in all of the body's secretions and fluids, and can be spread by intimate contact or by contaminated medical or dental instruments. Population groups considered at high risk include hemodialysis patients, medical or dental workers, gay males, and users of illicit intravenously-administered drugs.

6-18-84

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Various therapies for the disease have been undergoing clinical testing at Stanford for about 10 years. Interferon, a protein the body produces naturally in minute amounts that increases the defense system against malignant cells and viruses, was first incorporated in hepatitis B treatments in 1974. Initially hailed as the "cure-all wonder drug" by scientists in 1978, only with the development of recombinant DNA techniques in 1980 did interferon become available in quantities large enough to be considered practical and affordable. Cetus Corporation and Triton Bioscience Inc. are contributing the new interferon drug for these studies.

Patients interested in volunteering to participate in the clinical testing of the new drug must be between 21 and 65 years of age. They must be carriers of the virus for at least 12 months. All participants must have a liver biopsy that must show chronic hepatitis B.

Those accepted into the study will receive daily intravenous injections of different doses of interferon for one week of each month for four months.

The researchers are also seeking hepatitis B patients to participate in an ongoing clinical trial of a drug called adenine arabinoside monophosphate (Ara-AMP). Scientists have been testing this drug since 1981 to see how effectively it causes a permanent decrease of the virus in the bloodstream, improves the liver disease, and lessens the ability of patients to infect others, according to Dr. Gabriel Garcia of the gastroenterology division.

To qualify to participate in the trial, patients must be between 21 and 60 years old. They must be carriers of the hepatitis B virus for at least 12 months, and a liver biopsy must show existence of the virus. Scientists must also be able to determine how much virus is in the bloodstream through blood tests.

Because both drugs under study are experimental, some side effects may be encountered, Garcia said. These may range from nausea and vomiting to pain in the feet and lower legs, rarely accompanied by weakness of muscles. All side effects, Garcia pointed out, tend to disappear after treatment is stopped.

Participants are requested to commit themselves to the study for two years. They will receive treatment for five months, and will be under observation for the remaining 19 months.

To inquire about either study, call Stanford's hepatitis research clinic at 415-497-6231.

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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

ASSOCIATE DIRECTOR UTT RETIRES FROM SECOND CAREER AT SUH

STANFORD—

Don Utt, whose Stanford University Hospital management career has spanned nearly two decades, is scheduled to retire June 29 as associate director.

On June 13, the hospital board passed a special resolution honoring and thanking Utt, 57, for his 18 years of "excellent service to the hospital."

"Don Utt has done more than any other individual to provide continuity of leadership at Stanford University Hospital," said hospital director Sheldon S. King. "Don has provided an invaluable thread of consistency during multiple transition periods and has served as a model of integrity, earnest efficiency and loyalty to Stanford. He will be missed," King continued.

Civilian hospital administration was Utt's second career. When he arrived at SUH in 1966 he had just retired after 23 years in the military where he started as an enlisted medical corpsman.

His first job at SUH was as department manager in charge of linen, mail, transport and related functions. Now he is the administrator with responsibility for many of the ancillary support functions, including the cluster of departments he once ran.

Utt served in 1981 as acting hospital director before the arrival of King.

Utt said he and his wife, Donna, plan to travel for several months. Then they plan to spend time between their Cupertino home and their second home in the Sierra.

June 18, 1984 —30— mg3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

MEDICAL SCHOOL GRADUATES TOLD PHYSICIAN ROLES ARE CHANGING

STANFORD—

Stanford Medical School graduates were told Sunday they are becoming doctors in a pivotal era when physicians are losing their preeminence to those who control health care finance.

"This generation, thus, is reared between the period of physician (as) royalty and the period in which physicians will be regulated, organized and third-party controlled," said Dr. Robert A. Chase, professor of surgery. He gave the Medical School's commencement address to a smaller-than-usual crop of new Stanford M.D.s, other health and science professionals, and families.

"Because of a concern for cost, coupled with new attitudes toward physicians, it's clear that the physician control of medical practice is waning," he said.

Chase, contending that "the cost of health care is medicine's hottest problem," said physicians are often held solely responsible for exploding health care costs. He said these costs have risen from an expenditure of $43 billion in 1965 to an estimated $438 billion in 1985.

But "physicians alone are not responsible for escalating costs. Blame should be shared with third parties, lawyers, and the patients.

"Patients become indifferent to cost—a patient whose costs are covered by a third party is likely to choose the most elaborate not the most conservative provider," Chase said. "Therefore, the physician gains no patient because of conservative and efficient ways."

Chase said many changes have occurred during his career:

"At the time I graduated (from medical school at Yale in 1947) , I considered the last reigning monarch, except for the captain of an ocean-going liner, to be the chief of medicine or chief of surgery in the medical center.

"Those crowns of power now sit on the heads of hospital administration, director of third-party payers, and government officials," he added.

The new physicians will be faced with "a new stressful choice of giving or denying care based solely on the financial consequences of what action is taken.

The 66 new physicians, who picked up their diplomas clad in traditional cap and gowns, represented the smallest number of M.D. graduates in at least 10 years, said Charlotte Crucean, medical school registrar.

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She said that while medical school classes have remained fairly constant, a larger number of students have recently been encouraged to stay an additional year to pursue research or to take a year off during their studies for practical clerkships. The 1985 class, Crucean said, is expected to return to normal levels when the students who would have graduated this year will do so. In 1983, 91 new M.D.s were graduated, in 1982, there were 81.

In addition to M.D. degrees, 22 students received Ph.D degrees in nine separate fields, ranging from biochemistry to hearing and speech sciences. Thirty-eight students received master of arts degrees in physical therapy, three students received master of science degrees, and 10 students were given bachelor of science or bachelor of arts degrees in basic medical sciences and medical microbiology.

A total of 102 graduates personally picked up their diplomas, Crucean said.

A new award, the Alwin C. Rambar Award for Excellence in Patient Care was presented posthumously to cancer pioneer Dr. Henry S. Kaplan, professor of radiology. Kaplan's widow, Leah, accepted the award from Dr. Lawrence G. Crowley, vice president for medical affairs.

Twelve faculty members were honored Sunday for teaching excellence.

Receiving the Henry J. Kaiser Family Foundation Award for Outstanding and Innovative Contributions to Medicine were Stanley Falkow Ph.D, professor and chairman of the Department of Medical Microbiology and Dr. Halsted R. Holman, professor of medicine (immunology). This was the first time that the award, decided by a vote of the faculty, was given to two faculty members.

Other faculty awards, all chosen by a vote of medical students, included the Henry J. Kaiser Foundation Award for Excellence in Teaching. For preclinical education, students in the basic sciences voted awards for Dr. Carlos Camargo, associate professor of medicine (clinical); Dr. Lawrence H. Mathers, lecturer in surgery-structural biology; Carla Shatz Ph.D., assistant professor of neurobiology; and Dr. Lubert Stryer, professor of cell biology.

The Kaiser awards for clincal teaching went to Dr. Norman Blank, professor of radiology; Dr. Lawrence Crapo, assistant professor of medicine; Dr. Michael D. Amylon, assistant professor of pediatrics; Dr. Bertil E. Glader, associate professor of pediatrics; and Dr. Thomas A. Raffin, assistant professor of medicine (respiratory medicine).

Dr. Keith I. Marton, assistant professor of medicine (general internal medicine), received the Arthur L. Bloomfield Awrd in Recognition of Excellence in the Teaching of Clinical Medicine.

The Lucille Daniels Recongition Award for Outstanding Contribution to Physical Therapy at Stanford was given to Ann Hallum, senior instructor.

(Editors: pictures available on request)

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FOR IMMEDIATE RELEASE

HEART/LUNG TRANSPLANT PATIENTS RECEIVES SECOND SET OF ORGANS

STANFORD—

Transplant recipient Charles Walker was given a second set of heart and lungs at Stanford Medical Center Sunday after the lungs he received more than three years ago became damaged beyond repair by rejection.

The operation was the first time a heart and lung has been replaced for the second time in the same patient, said Dr. Stuart Jamieson, head of Stanford's heart/lung transplant program.

Retransplants for patients who have received only hearts have been performed on 22 of the 304 patients transplanted since January 1968 at Stanford. Two heart-only transplant patients have been retransplanted twice.

Walker, 33, originally from Binghamton, N.Y., was reported in critical but stable condition Monday following an eight hour operation which began about 1 p.m. Sunday. The surgical team was headed by Jamieson, an assistant professor of cardiovascular surgery.

Walker, who on May 1, 1981 became the second person to receive a heart and lung combined transplant at Stanford, had been in intensive care since April 20. His lungs had been so badly damaged by rejection, Jamieson said, that they were incapable of supporting life. During the latest hospitalization, Walker was capable of breathing only with the help of a respirator.

Jamieson said the retransplant offered Walker his only prospect of returning to a life without a respirator. The operation was complicated by scar tissue from his previous surgery, which potentially could have increased the amount of bleeding, the surgeon explained.

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Although doctors were encouraged, Jamieson cautioned that "Mr. Walker is at increased risk from the surgery because the medication he took to prevent rejection will make him more susceptible to infection in the first few weeks after surgery."

Walker's heart was undamaged, disproving an earlier theory that rejection in the heart and lungs would always occur in tandem, Jamieson said. "Work in the laboratory using animals had indicated that this pattern of rejection could occur, and that enabled us to diagnose Mr. Walker's condition," Jamieson said.

Nineteen patients have received new hearts and lungs at Stanford since March 9, 1981. Thirteen of the patients are alive, including the first. Three heart/lung transplants were performed between 1968 and 1971 at other institutions, but no patient lived longer than 23 days.

The advent of more sophisticated immunosuppresives—which allow healing of the windpipe—encouraged Stanford to revive the procedure three years ago. Since then about a half dozen institutions worldwide have begun performing heart/lung transplants.

Walker had suffered from a congenital heart defect. His physical ability was limited throughout his life, and eventually his poorly pumping heart caused lung damage as well. By the time he received his first heart and lungs, doctors had given him less than a year to live.

After his first operation and until his recent illness, Walker, trained as a mortician, had been extremely active, working as a counselor for a funeral parlor and as a cashier in a liquor store.

He had decided to move to California during his post-operative recovery period. He frequently counseled potential heart and heart/lung transplant patients and their families.

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FOR IMMEDIATE RELEASE

REAGAN APPOINTS KORN CHAIRMAN OF NATIONAL CANCER ADVISORY BOARD

STANFORD—

Dr. David Korn has been named chairman of the National Cancer Advisory Board (NCAB), a 29-member advisory panel to the director of the National Cancer Institute (NCI), The White House announced Friday (June 15).

Korn, professor and chairman of the department of pathology at Stanford University School of Medicine, had been named in May by President Ronald Reagan to a six-year term on the NCAB.

Friday's NCAB chairmanship appointment is for a two-year term, effective immediately through March 9, 1986, the White House announcement said.

The National Cancer Advisory Board, which meets at least four times a year, assists the NCI director with activities of the National Cancer Program, the United States' comprehensive effort aimed at combating cancer.

One of the Board's major responsibilities is approval of research grants awarded by the National Cancer Institute, which in 1983 totaled nearly $600 million.

As NCAB chairman, Korn succeeds Dr. Tim Lee Carter, a physician from Kentucky, the NCI said.

Korn, who received both his undergraduate and medical degrees from Harvard University, has been on the Stanford Medical School faculty since 1968.

A researcher noted for his work on the enzymatic control of DNA replication, Korn has written numerous articles and is editorial board member of the *American Journal of Pathology* and *Human Pathology*. He is also a member of the board of directors of the California Society of Pathologists and serves on several other professional boards and councils.

Korn has previously served as an advisor on cancer to the federal government. He was a member of the Board of Scientific Counselors, Division of Cancer Biology and Diagnosis, National Cancer Institute, from 1977 to 1982, serving as chairman from 1980 to 1982.

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FOR IMMEDIATE RELEASE

Editors: Photo available on request if not included with story

HOW AN ORTHOPEDIC SURGEON EVALUATES HIS PROFESSION

STANFORD—

When orthopedic surgeon David Schurman arrived at Stanford from UCLA eleven years ago medical technology was undergoing a major breakthrough.

"Total hip and other joint replacements had just been introduced," he recalls. "By the time I had entered academic medicine full time, more than 100,000 operations had been performed in the United States alone. The artificial joints often broke, wore out, loosened or caused infections. The technology was badly in need of scientific assessment which was not being done."

He decided to look into it and today, thanks to his efforts, orthopedic surgeons at Stanford and elsewhere have a sophisticated computerized system for auditing results and sharing data to make joint replacements safer, less costly and more effective.

"Translated in patient care terms," Schurman adds, "this means longer, trouble-free existence for arthritis victims who have had replacement surgery for worn-out, painful joints.

Schurman specializes in joint replacement surgery of elbows, shoulders, hands, hips, knees and feet.

His computer data bank, called the Standard Orthopedic Arthritis Record, or SOAR for short, was developed in conjunction with Stanford computer scientists to provide a common "language" or rating system that all orthopedic surgeons can use.

The system can audit results within an institution, ranging from the effectiveness of the surgery itself to the devices used and differences in outcome among the patients of individual surgeons. The system has been adopted by the Hip Society, made up of the country's leading orthopedic surgeons, and implemented at the Brigham and Women's Hospital and Massachusetts General Hospital, Boston; the University of California, Los Angeles; and Mayo Clinic, Rochester, Minnesota.

"The system allows patients to rate themselves," says Schurman. "It's better to have the patients fill out the questionnaires than their physicians who may or may not remember a lot of personal details."

The forms are completed when the patients are examined prior to surgery. The questions asked include how much pain the arthritis is causing, how far the patients can walk, whether they use canes or crutches or how often they go out of the house. Three and six months as well as a year after the operation the patients are evaluated again. Comparisons are made of their X-rays, health status and personal impressions as to how they have benefitted from artificial joints by age, sex and type of disease.

The information is useful to orthopedic surgeons in selecting patients for future operations.

Schurman explains:

"We know, for example, that people with severe rheumatoid arthritis who have had total hip or knee replacement almost never require repeat surgery. Because they are in poor health they seem to make fewer demands on their joints than active or overweight patients who have a higher failure rate.

2-2-2 "Pain-relief obtained by the procedure is identical across all ages with different forms of arthritis. These would have been reasonable assumptions, but they had never been demonstrated before."

The system gathers information on the strengths or weaknesses of the artificial joints themselves so that technical improvements can be recommended to manufacturers.

"To require any kind of joint replacement," Schurman notes, "the patient must have significant cartilage damage. Since the ligaments are usually intact, one approach for repairing the knee joint is to resurface the worn out ends of the two connecting bones with artificial materials. Another approach is connecting them with a balky piece of apparatus that resembles a door hinge somewhat similar to the crude kind used in the movie about Dr. Frankenstein's monster.

"The resurfacing technique failed initially. The hinged joints faired better. But as more hinge-knee operations were done during the 1970s, their infection rate was discovered to be unacceptably high. What followed was an all-out effort to develop better resurfacing prostheses. The new types use durable alloys——titanium or vitalium——and their failure rate is below one percent."

Loosening up of artificial hip prostheses has been another failure. This problem is also being solved by improved design and materials, including a new bone cement.

But the field of hip replacement, as Schurman sees it, is in a state of transition. People are exploring alternative systems, one of them being the use of porous ingrowth materials whose surfaces allow bone to grow into them resulting in biologic fixation.

"This is the most exciting area today because it's different,' he says. "but it's also unproven and requires carefully designed clinical trials such as those now being conducted at the University of California in San Francisco.

Schurman, who received his medical degree from Columbia and his undergraduate education at Yale, says he was attracted to his specialty because his cousin was an orthopedist and looked happy with his work.

"All the things he told me about orthopedic surgery were true," says Schurman, "and one of them was that the patients you deal with always get better.

"Most of my patients have arthritis of multiple joints. It's a progressive disease, but in my dealing with them they get better. They get excited when they find out how surgery can make their joints work again as well as they did before they became incapacitated."

In addition to evaluating surgery, Schurman has been working with associate professor Dennis Carter and professor Robert Piziali in Stanford's department of mechanical engineering to design better artificial joints.

Schurman and his colleague R. Lane Smith, a molecular biologist, are also looking into the biochemistry of cartilage destruction.

"Once cartilage is damaged it never grows back," Schurman explains. "The ultimate treatment for cartilage-worn joints would be to give the patient something that would help the cartilage repair itself. Salamanders and newts will regenerate an entire limb if you cut it off.

"There is every reason to think that vertebrate animals also are capable of regenerating cartilage. There are potential answers in the far distant future which can be provided by basic research."

It was also basic research in Schurman's laboratory several years ago that demonstrated in animals the therapeutic potential of total lymphoid irradiation for patients with rheumatoid arthritis.

Schurman's work is supported by grants from the National Institutes of Health partly in conjunction with the Stanford Arthritis Center, one of 18 federally funded multi-purpose arthritis centers across the country. The centers emphasize public education as well as research into the causes and treatment of arthritis.

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FOR IMMEDIATE RELEASE

CONFERENCE COVERS NUTRITION FOR EXPECTANT MOTHERS

(Editors, news directors: Although the nutrition conference described here is intended for health professionals, reporters are welcome to attend sessions and to schedule interviews with speakers. Conference organizer Jo Ann Hattner, a Stanford University Medical Center nutritionist, may be reached for information or to request interviews at (415) 497-7309.

STANFORD—

"Nutritional Care of High-Risk Obstetrical Patients and High-Risk Infants" is the topic of a three-day conference beginning Wednesday (June 20) in Fairchild Auditorium at Stanford University Medical Center.

Visiting speakers Wednesday morning include Michael A. Simmons, professor and chairman, department of pediatrics at the University of Utah School of Medicine, who will present an "Update on Fetal Nutrition."

Janet C. King, professor of nutrition, department of nutritional sciences at the University of California at Berkeley, will give an "Update on Maternal Nutrition," while Bonnie Worthington-Roberts, professor of nutritional sciences and chief nutritionist at the Child Development Center of the University of Washington at Seattle will discuss "Cravings and Aversions During Pregnancy."

Additional speakers and workshops will continue through Wednesday afternoon.

The program, presented by the departments of pediatrics, gynecology/obstetrics, and dietetics, is intended to teach health care professional's about the nutritional needs of women during high risk pregnancy and during their new baby's infancy. The conference is also expected to inform about the nutritional needs of the immature and ill newborn, according to the program brochure.

For further information call, (415) 497-5711.

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STANFORD MEDICAL SCHOOL DEAN RESIGNS

STANFORD—

Dr. Dominick P. Purpura, 57, has asked to be relieved of his administrative responsibilities as dean of the Stanford University School of Medicine, effective August 31.

In his letter to Vice President for Medical Affairs Lawrence G. Crowley, Purpura cited "a desire to return to neuroscience research and educational programs in basic neurology."

Purpura is a professor of neurobiology and neurology at Stanford. He said "he sees the development of research on fundamental mechanisms of brain function as a major challenge for his future academic activity."

In accepting Purpura's resignation, Crowley announced that the noted brain researcher will also remain as associate vice president for research at the Stanford University Medical Center.

In a joint statement, Stanford University President Donald Kennedy, Vice President and Provost Albert H. Hastorf, and Crowley said they were very pleased that "Dr. Purpura would continue to provide leadership in the development and implementation of new research programs in the Medical School, an area in which he has been outstanding."

Crowley said he would announce the appointment of a dean's search committee soon.

Purpura is credited for several accomplishments during his 26-month deanship. According to Crowley, he is responsible for the concepts of the proposed Center for Molecular and Genetic Medicine and the Nuclear Magnetic Resonance Center, projects which are of high priority for the future academic programs of the Medical School.

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Purpura created a new Office of Education under associate Dean Robert Cutler to monitor and evaluate the School's education program. He attracted the Kaiser Foundation Chair in Health Policy Research as a mechanism for insuring a central role of health policy and planning in the Medical School, and he has been responsible for the construction of the first $12-million phase of a new animal facility and program in animal laboratory medicine.

During his administrative tenure, Dean Purpura participated actively in neurobiology teaching at the Medical School and Stanford's Human Biology Program.

"He has invigorated the teaching program by his own excellent teaching and has stimulated a similar thrust and interest in teaching among the medical faculty," Crowley said.

Among his accomplishments, Purpura also singled out "the new spirit of student-faculty-alumni and staff cooperation, alumni programs, and the formulation of the medical center's fund-raising agenda."

Purpura became dean at Stanford in 1981, coming from the Albert Einstein College of Medicine in New York where he chaired the Department of Neuroscience, and directed the Rose F. Kennedy Center for Research in Mental Retardation.

He has continued to serve as editor-in-chief of *Brain Research, Developmental Brain Research,* and *Brain Research Reviews,* and has contributed to reports for the Congressional Office of Technology Assessment and the U.S. Senate on future opportunities in neuroscience.

In 1983, Purpura was elected to membership in the National Academy of Sciences for his research related to abnormal nerve cell development in mental retardation. He also served as president of the Society of Neuroscience and is the current chairman of the International Congress Committee of the International Brain Research Organization of the World Federation of Neuroscientists.

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FOR IMMEDIATE RELEASE

HOSPITAL NAMES PATIENT RELATIONS COORDINATOR

STANFORD—

Donna Pronko has been named patient relations coordinator of Stanford University Hospital effective June 4, announced Jeanne Kennedy, director of community relations.

Pronko comes to Stanford from a position as training manager for Benham Capital Management Group, a money market fund. She has worked at the hospital before, as an education and development specialist in the human resources development department, from 1979-82.

The patient relations program of the department of community relations has been operating since June of 1980. The new position was created in response to a need for a full-time liaison—particularly on the nursing units—between hospital staff and inpatients, said Kennedy.

One of Pronko's goals is to switch from reacting to problems as they occur, to anticipating and preventing them. She hopes to work across departmental lines to find solutions, she said. She will be working closely with the 16 patient relations associates, who make up the volunteer arm of the program.

"Donna will be well positioned to detect patterns of problems as well as specific problems," Kennedy said.

Pronko, originally trained as a medical technologist, has a B.S. in chemistry from the University of Alberta, and an M.P.H. degree in health education from San Jose State University.

She can be reached at (415) 497-7167 or 497-7168.

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FOR IMMEDIATE RELEASE

SMOKERS CHEW THEIR WAY TO QUITTING, THROUGH THERAPY

STANFORD—

A combination of a newly available nicotine chewing gum and behavior therapy is the most effective way currently known to help smokers quit, says a Stanford psychologist who tested the dual method and now intends to offer it to patients on a regular basis.

In a recent study comparing nicotine gum and behavior therapy, alone and in combination in a sample of 60 smokers, the combination was proved superior to either method alone, and to other methods which normally result in about 75 percent relapse rate, said Dr. John Bachman, director of the behavioral medicine clinic at Stanford University Medical Center.

Immediately after six weeks of treatment, Bachman said, 86 percent of those receiving the combination had stopped smoking. Only 64 percent of those using the gum and 55 percent receiving behavior therapy had stopped.

One year after treatment, 50 percent who had received the combination versus 23 percent who'd received the gum, and 30 percent who'd received behavior therapy remained nonsmokers, he said.

The research, to be published in *Behavior Therapy*, was funded by Merrell Dow, the pharmaceutical company that markets "Nicorette," the nicotine gum. It was the doctoral dissertation of Joel Killen, now a research associate with the Stanford Heart Disease Prevention Program, with coauthors Drs. C. Barr Taylor, assistant professor of psychiatry, and Nathan Maccoby, emeritus professor of international communication.

Based on the results, Stanford's behavioral medicine clinic is expanding its stop-smoking program to include the multifaceted approach, said Bachman, a clinical instructor of psychiatry.

Both at Stanford and several other institutions including University of California at San Francisco, the combination approach has been shown to work, said Killen, "probably because smoking involves not only psychological but also pharmacological dependency, and one must address both variables in order to help smokers quit and *stay quit*—that's the hard part."

Nicorette, available only by prescription, was approved by the FDA in early 1984 as an aid to weaning smokers from their cigarette habit.

The gum offers a different route of administration for nicotine, the addictive ingredient in cigarettes though not the most harmful agent, scientists say. Patients are instructed to chew the gum only when they experience a distinct craving for a cigarette; thus right away, many "superfluous" smoking times are cut out.

Then, Bachman explained, as the dose tapers off the body gradually adjusts to nicotine's absence, as it would for any addictive drug.

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Devised by Dr. Claes Lundgren, professor of physiology at the State University of New York at Buffalo, and a Swedish company, nicotine gum has been shown to especially help heavily addicted smokers quit, said Bachman. "For lighter smokers, the behavioral techniques will be more relevant."

The behavior modification techniques help people overcome social and psychological reasons for smoking, while Nicorette fights the physical addiction, Bachman explained.

A group of about 10 smokers will meet for eight 90-minute therapy sessions, spaced over a month in declining frequency, he said. The therapy includes rapid smoking, relaxation training, and assertiveness training.

In the rapid smoking technique, Bachman said, patients are instructed to rapidly smoke three cigarettes of the brand they normally choose. They puff to the beat of a tape recorder voice that says, "Smoke. . .smoke. . .smoke," one command every 10 seconds.

"The natural way people smoke is usually one inhalation every 35 or 40 seconds," Bachman noted. "Rapid smoking is an unpleasant experience."

The rapid smoking is videotaped, with close-up views of uncomfortable smokers, and the tape is replayed for the group. "Later, people can recall the scene to combat their urge for a cigarette," Bachman explained.

It should be mentioned, Bachman said, that rapid smoking and nicotine gum are not safe for people with certain specific medical conditions. Also, women who are or may become pregnant, or who are nursing, should not use these techniques (nor should they smoke, he noted).

Their physicians are required to review participants' medical records before they may enroll in the program. A behavioral medicine clinic physician will prescribe the gum for all enrolled patients.

After the first four sessions, Bachman said, relapse prevention skills are taught. Relaxation training gives people an alternative outlet for feelings of stress, boredom, anger, and anxiety—the major causes of relapse.

Assertiveness training helps smoke quitters deal with indirect social pressures to smoke. "Participants practice socially appropriate assertive responses such as, 'No, thank you. I choose not to smoke now.' "

Bachman pointed out that recent social and legislative changes have made it most often socially appropriate *not* to smoke, and that this will "undoubtedly reduce the relapse rate even more."

He said patients who relapse within six months after completing the program will be offered a renewed prescription for Nicorette and then, if necessary, repeat participation.

"By the end of the four-week program," Bachman said, "we expect most patients will have stopped smoking and possibly even chewing the gum," the use of which should steadily decline, an upper limit being 30 pieces a day.

Also, he added that "the type of person who wants someone else to do the work for him won't succeed in this program." Who will benefit are those who want help to help themselves.

He conceded the approach is still a "secondary attempt, a treatment technique versus a primary prevention technique on a national level, which would be the ideal."

Bachman will supervise the new program, and therapy sessions will be conducted by psychologist Fritz Bottjer. There is a fee. For information call (415) 497-5869.

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FOR IMMEDIATE RELEASE

SHORT-ACTING SLEEPING PILLS ARE ANTIDOTE TO JET-LAG, STANFORD RESEARCHERS SAY

STANFORD—

Judicious use of short-acting sleeping pills is an effective treatment for jet-lag, but taking long-acting sleep drugs can make jet-lag symptoms worse, report sleep researchers from Stanford University School of Medicine and Henry Ford Hospital in Detroit.

A new study published in the June 15 issue of *Science* magazine shows that short-acting sleeping pills can completely reverse nighttime insomnia and daytime sluggishness associated with jet-lag or other sudden and major disruptions of the sleep-wake schedule.

In contrast, long-acting sleeping pills that continue to act after the night is over, increase the daytime drowsiness that typically follows a sudden sleep cycle disruption, the scientists reported.

The research demonstrates that a full eight-hour period of sleep is capable of overriding the body's natural sleep-wake cycle, and can restore alertness in a person forced to be awake when he would normally be in bed, the scientists said.

The researchers also found that, if untreated, sleep patterns and daytime function can be disturbed for at least three days following a 12-hour shift in bedtime, the researchers said.

The findings could be significant for thousands of travelers who cross multiple time zones, and for thousands of employees who work on rotating shifts, said Wesley Seidel, a researcher in the Stanford Sleep Research Center and an author of the report.

"For people who know they must adapt to a change in sleep-wake schedule—such as a businessman who flies to Japan and must be awake the next day during an important meeting—careful use of certain sleeping medications could be a solution," said Seidel.

He cautioned that only short-acting drugs would be recommended for use in these circumstances. "A short-acting sleeping drug wears off within eight hours," he noted, "while the effects of long-acting medications continue well into the waking period of the next day, actually increasing daytime drowsiness and impairing performance in certain mental tasks."

Seidel carried out the research with Dr. William Dement, professor of psychiatry and behavioral sciences, and director of the Sleep Research Center at Stanford Medical School. Their colleagues at the Sleep Disorders and Research Center at Henry Ford Hospital in Detroit are Thomas Roth, Timothy Roehrs and Frank Zorick.

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The work was supported by grants from the National Institutes of Mental Health and by the Upjohn Company, which also provided the medications.

The study was performed on 24 young, healthy volunteers with normal sleep patterns. After two nights of going to sleep at midnight and waking at 8 a.m., the volunteers were allowed to sleep from midnight only to 2 a.m. and then shifted to a noon bedtime for the next three days.

Before retiring at the new bedtime, eight subjects were given triazolam, a short-acting sleeping medication, eight received flurazepam, a long-acting sleeping agent, and the remaining volunteers were given an inert placebo pill.

Length and depth of sleep were monitored, and the volunteers' waking alertness and mental function were measured—with visual-tracking, card-sorting, and copying tasks—during the waking periods after each eight-hour repose.

Those volunteers given the short-acting sleeping pill slept longer during the night than the others. They also were more alert and performed better when awake than those who took no medication and those who took the long-acting sleeping drug, Seidel said.

Although volunteers who took the long-acting flurazepam were able to sleep while in bed, they were also the most severely impaired in their daytime activities, Seidel said.

Those who took the placebo slept fitfully but functioned better while awake than flurazepam subjects, Seidel said. However, their alertness still did not reach the levels of those who had received the short-acting triazolam drug.

"The behavior of the placebo group confirms that sleep and subsequent alertness are significantly impaired for at least three days after a sudden 12-hour shift of the sleep-wake schedule," the researchers wrote.

"In terms of waking alertness and performance, triazolam is preferable to flurazepam in the treatment of transient insomnia associated with a sudden sleep schedule changes such as occurs in trans-meridian travel and shift-work rotation," they concluded.

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FOR IMMEDIATE RELEASE

STANFORD DEPARTMENT CHAIRMAN RESIGNS AFTER ACADEMIC INVESTIGATION

STANFORD—

Dr. Kenneth L. Melmon, 49, has voluntarily resigned as chairman of the Department of Medicine, effective July 31, after a committee of the Stanford University School of Medicine said he was guilty of "grossly negligent scholarship," the University announced Thursday, June 7.

But the committee said that no fraud had been committed and Melmon had no conscious intent to deceive. Melmon will retain his faculty post. He has received a letter of censure from Stanford University President Donald Kennedy.

The faculty committee investigated charges that Melmon had used unattributed copyrighted material from Goodman and Gilman's, *The Pharmacological Basis of Therapeutics*, a book he helped edit, into a chapter he wrote for Williams' *Textbook of Endocrinology*. Both books are considered standard biomedical texts.

Kennedy wrote Melmon June 6:

"I agree with the findings and conclude that academic fraud has not been committed. I also agree with the committee that your unpermitted, unacknowledged and extensive use of material (about 24 percent of your chapter) from the Goodman and Gilman textbook in Chapter 10 of the *Textbook of Endocrinology* represents professional misconduct, in the sense of grossly negligent scholarship, for which you must be held accountable. By this letter, I am censuring you for your conduct."

In the letter, Kennedy also stated, "In light of your resignation (as chairman), I do not believe any action beyond this letter of censure is appropriate.

"I know that you recognize your conduct was a serious departure from the high standards of scholarship required by the university—standards to which you personally have always been committed."

Melmon said he was resigning because "the mistake was a serious one for me to have made. Given my commitment to high standards of scholarship at the university, and the public perceptions that might result from my continuing to serve as chairman, I ask that you accept this decision.

"The vast majority of my colleagues at Stanford and elsewhere, who have spoken out, deeply feel the ultimate result of my resignation as chairman in addition to a censure has been more than sufficient response to my mistake."

In a joint statement Kennedy, Vice President for Medical Affairs Lawrence Crowley, and Medical School Dean Dominick Purpura said: "We have accepted his voluntary resignation with thanks for his past service as chairman, and for his sensitivity and devotion to the university's interest."

In his censure letter Kennedy wrote:

"The borrowing for publication from the work of others is a matter of considerable significance.

"(Your action) represents a degree of carelessness in dealing with the intellectual property of others that violates the fundamental norms of the academic profession."

However, Kennedy's letter also acknowledged mitigating circumstances cited by the committee, including Melmon's move from the University of California at San Francisco to Stanford at the time he was working on both textbooks, his heavy departmental responsibilities and pressures and his reliance on assurances of editors that the matter of permissions "had been taken care of."

A clinical pharmacologist, Melmon holds the Bloomfield endowed chair in the Department of Medicine and has a joint appointment in the Department of Pharmacology.

The Medical School's Committee on Ethical Scientific Performance, which investigated Melmon and submitted its unanimous recommendations to Kennedy, concluded:

"It is manifest, and undisputed, that Chapter 10 (Melmon's) as it appears in print is seriously out of conformity with professional standards in the unpermitted and unacknowledged use of the work of others.

"Dr. Melmon had no conscious intent to deceive," but his efforts regarding both permission and attribution "were grossly inadequate."

Melmon was an associate editor of the sixth edition of the Goodman and Gilman book, published by Macmillan in 1980, and he wrote a chapter in the sixth edition of the Williams' text which was published in 1981 by W. B. Saunders. The latter book includes contributions of 49 authors and Melmon had written chapters for earlier editions of the same work, all of which contained appropriate attributions.

Passages taken from nine chapters of Goodman and Gilman, written by four different authors, were incorporated into Melmon's 73-page chapter of the Williams' book. But according to the committee, Melmon's chapter "as it appeared does not contain any acknowledgment of the extensive use of the Goodman and Gilman material, nor are the excerpts identified by quotation marks, indentation, or other means."

Last March in public statements while the investigation was in progress, Melmon freely acknowledged through his attorney, Stanford Law Professor Jack Friedenthal, that he had used materials from Goodman and Gilman "nearly verbatim with some minor editing for style." But he insisted he had always intended to use them only with permission and attribution.

Melmon, according to this reconstruction of events, had been asked by Williams to include more pharmacological details to the chapter from the rough-typed manuscripts of the forthcoming sixth edition of the Goodman and Gilman book.

Melmon had told Williams he was not interested in doing this, but Williams insisted. Melmon then agreed to incorporate the material only if Williams himself obtained permission from Goodman and Gilman.

Williams died while the editing of the Textbook of Endocrinology was in progress. And four years later, after both books had since been published, Melmon was informed by an editor of Goodman and Gilman that permission had never been sought or given.

"The basic facts are not in dispute," the committee said. "The committee's subsequent investigations and deliberations have gone to the questions of whether Dr. Melmon in fact intended that the chapter appear as it does, with neither permission nor acknowledgment, and if not, whether the steps he took to see that permission and acknowledgment were made were reasonable."

The committee could find no direct confirmation of the arrangement with Dr. Williams to secure permission. Dr. Melmon's communications with him were oral . . . Dr. Williams' papers have been destroyed since his death."

According to the committee, Melmon had said that because he was overcommitted he had not reviewed the final galleys or the published chapter in the Williams' text except for a cursory review of the first set. This has been disputed by an editor at Saunders.

However, the committee said there was no evidence that these exchanges constituted "an intent to cover-up the facts of the matter. Nonetheless, the material is troubling and suggests the possibility of a higher degree of recklessness in dealing with the intellectual property of others," the committee said.

"Dr. Melmon, as an editor of Goodman and Gilman, had privileged access to the unpublished Goodman and Gilman manuscripts and therefore a special responsibility to the authors.

"Dr. Melmon was responsible for assuring that permission for use of the Goodman and Gilman material was obtained.

"Dr. Melmon was responsible for assuring that proper attribution was incorporated into Chapter 10.

"Dr. Melmon's failure to carry out his responsibilities resulted in the unpermitted and unacknowledged use of a very substantial amount of material from Goodman and Gilman."

A graduate of Stanford and the University of Calfifornia Medical School in San Francisco, Melmon is a member of the Institute of Medicine of the National Academy of Science.

Committee members included Dean Purpura, chairman, and Prof. Jack D. Barchas, and Roland D. Ciaranello, psychiatry and behavioral sciences; John A. Collins, surgery; Stanley Falkow, medical microbiology, and David Korn, pathology. Prof. Ernest R. Hilgard, psychology; and James P. Collman, chemistry, were added to the medical school's standing Committee on Ethical Scientific Performance.

—30— mg3

Following is a June 6 statement of Melmon.

The period during the investigation has been a most difficult one for me. Although there have been numerous hearings, investigations and inquiries, the ultimate findings of the investigating committee and the university president confirm the facts as I stated them from the outset: I made an error, albeit a serious one, but an unintended error.

The ultimate result of the inquiry was inevitable from the outset. The process was directed toward a committee report that could only find what I had admitted—a serious error. Having so stated, the committee, which had worked so hard and met so often, could not simply stop with a single paragraph. It therefore gave in detail whatever evidence it had available to confirm what it found. Thus the report, in its factual section, was unbalanced—providing no details of evidence favorable to me although, from time to time, admitting such evidence exists. Much of the report was prepared by univerity attorneys who not only advised the committee but the president as well.

Although the report was, as I was led to believe, not to be a formal recommendation but an informal analysis, it has by the university president's own terms, formed the major basis for his conclusions and is now being circulated despite the fact that it was not prepared to be a comprehensive or balanced document but an in-house working paper.

As a result of the crushing pressures of the process, I realized that I had to resign as department chairman rather than allow the affair to blow up into a giant confrontation among my friends and colleagues that would inevitable weaken or destroy the work that I have done over the past five years.

I and the vast majority of my colleagues, both at Stanford and elsewhere who have spoken out, deeply feel that the ultimate result of my resignation as chairman in addition to a censure has been more than sufficient response to my mistake. No evil precedent was set by my action for there was no fraud or intention.

6-7-84 —30—

Following is a June 3 letter from Dr. Kenneth L. Melmon, professor and chairman of the Stanford Department of Medicine, to President Donald Kennedy.

The purpose of this letter is to tender my resignation as chairman of the Department of Medicine.

While you and the committee concur that my error in not assuring adequate editorial control of some of the material I published in Williams' textbook does not reflect fraud or fraudulent intent, I feel, nevertheless, that the mistake is a serious one for me to have made.

Given my commitment to high standards of scholarship at the University, and the public perceptions that might result from my continuing to serve as chairman, I ask that you accept this decision.

I would like to discuss with you at our meeting on June 4 the steps that might be taken to minimize any adverse effects of this resignation on the department and on the School of Medicine and to accomplish an orderly transition of leadership for the department.

6-7-84 —30— Rep. 6a Melmon1

Following is a June 6 letter to Melmon from Kennedy ruling on the report of the Committee on Ethical Scientific Performance.

I have read carefully the report of the Committee on Ethical Scientific Performance on the matter involving you and attentively considered the memoranda submitted in your behalf as well as your own statements. On the basis of its thorough analysis of the circumstances, the committee found that fraudulent intent was not established and that you had no conscious intent to deceive; I agree with these findings and conclude that academic fraud has not been committed.

On the other hand, I also agree with the committee that your unpermitted, unacknowledged and extensive use of material (about 24 percent of your chapter) from the Goodman and Gilman textbook in Chapter 10 of the *Textbook of Endocrinology* represents professional misconduct, in the sense of grossly negligent scholarship, for which you must be held accountable. By this letter, I am censuring you for your conduct.

The committee considered mitigating circumstances, including your move from UC-San Francisco to Stanford, your heavy departmental responsibilities, and other pressures. I am sympathetic with these circumstances. Indeed, the entire system of academic clinical medicine in this country may have evolved to a point at which extraordinary pressure is producing extraordinary behaviors at much too high a rate.

Professors and chairmen of medicine, like other clinical academicians, are expected to run large research programs and to produce large numbers of scientific papers each year—and also to maintain a full set of clinical, administrative, and teaching responsibilities. Nevertheless, the existence of such pressures—however exigent they may be—cannot become an excuse for personal failure to fulfill the responsibilities of the scholar. The borrowing for publication from the work of others is a matter of considerable significance. Your inadequate effort to assure appropriate acknowledgment of other authors' work (taking the telephone assurances of Dr. Williams that the matter "had been taken care of" as guarantee of the permission), your intermittent efforts to have others confirm it during the editorial process, and your failure to examine the galleys carefully enough to ascertain whether your use had been acknowledged, represents a degree of carelessness in dealing with the intellectual property of others that violates the fundamental norms of the academic profession.

From our conversations, from your statements throughout the investigation, and from your letter of resignation as chairman of the Department of Medicine, I know that your recognize that your conduct was a serious departure from the high standards of scholarship required by the University—standards to which you personally have always been committed.

I want you to know that I appreciate your service and achievements as chairman and the devotion to the University's interests that led you to resign that office; and in light of your resignation, I do not believe any action beyond this letter of censure is appropriate.

6-7-84 —30— Rep. 6a Melmon2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415)497-6911

FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR DIABETES-RELATED STUDIES

STANFORD—

Volunteers are needed to participate in new and ongoing studies at the clinical research center (CRC) of Stanford University Medical Center.

The studies, under the direction of Dr. Gerald Reaven, professor of medicine, are designed to increase understanding of how the body absorbs and uses glucose, insulin and dietary fats.

New projects focus on such factors as carbohydrate intake, weight loss, and cholesterol.

Volunteers should be free of major illnesses other than diabetes. Non-diabetic volunteers are also sought.

All studies are conducted at the CRC. They vary in duration from two days to a month. Depending on the project, procedures may include blood sampling, overnight hospitalization, and meals aimed to test dietary effects.

Volunteers also receive complete physical examinations, including laboratory evaluation, free of charge.

Interested volunteers should call (415) 497-5430 between 9 a.m. and 4:30 p.m. weekdays, for further information. Ask for Ann Coulston or Clarie Hollenbeck.

6-6-84 —30— LA2

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News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

NEW SHARED FACILITY HELPS SCIENTISTS SCREEN CELLS

STANFORD—

A new high technology research facility at Stanford University School of Medicine is helping scientists get a closer look at many different cell types in the body.

The new facility, shared by a variety of users, contains ultramodern cell-sorting equipment capable of scanning 5,000 cells per second and singling out one specific cell from a sea of millions.

Diagnosing leukemias, figuring out how the immune system works, learning how drug resistance develops, revealing the genetic basis for muscular dystrophy, and understanding how genes are regulated, are just a sampling of areas where cell-sorting is providing new insights.

An outgrowth of the laboratory of Dr. Leonard Herzenberg, genetics professor, the shared facility was recently established with a grant from the National Institutes of Health and gifts from Becton-Dickinson, Inc.. Space has been allotted for the facility by medical school dean Dominick P. Purpura, in the medical center's third floor science wing.

The facility consists of two fluorescence-activated cell sorters (FACS), one FACS analyzer, and a computer specially programmed to collect, store, retrieve, and analyze data from the FACS equipment.

Dr. David Parks, research associate in the department of genetics, directs the facility. Dr. Patricia Jones, associate professor of biological sciences, chairs the facility's users committee.

Although the FACS machine is not new—it was developed by Herzenberg and colleagues in the late 1960s and early 1970s and is now manufactured and sold by Becton-Dickinson—the expense of the machines has limited their widespread use. The new shared facility makes the equipment available to a wide spectrum of users at Stanford, Herzenberg said.

"It is similar to any other large, expensive research facility such as an NMR (nuclear magnetic resonance) center or a linear accelerator," Herzenberg pointed out. The resource can be shared by many groups working on diverse projects.

6-6-84

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In addition to his own laboratory which focuses on understanding the different types of lymphocytes involved in the immune system, research groups from the biology department as well as other medical school departments are currently makimg frequent use of the machines, said Herzenberg.

These include the labs of Robert Schimke, who is studying how cells develop resistance to drugs, Irving Weissman, Patricia Jones, Gary Fathman, and Eugene Butcher, who are studying the immune system, and Helen Blau whose focus is muscular dystrophy, Herzenberg said.

"The potential applications of the cell sorting technique range over virtually all biology and medicine," Herzenberg explained.

The machine identifies and isolates cells by means of the specific molecules that coat cell surfaces.

For example, suppose a researcher wants to separate out for study a specific type of cell from the immune system. A fluorescent-tagged monoclonal antibody is produced that attaches only to the molecules coating that cell type's surface. This fluorescent "flag," added to a mixture of cells, binds to and identifies the cells of interest. The FACS machine then physically removes the flagged cells from the mixture found in the biological sample.

Liquid containing the cells flows through a laser beam, and then breaks into droplets usually containing a single cell. The dye-flagged cells fluoresce when hit by the laser light, and this fluorescence, when sensed, triggers an electrical charge to be applied to the droplet stream. The electric field flicks charged droplets containing fluorescing cells out of the main stream into separate collecting dishes.

This tool is extremely powerful in its ability to sift through and sort cells, Herzenberg said. It can screen up to 5,000 cells per second and it can sort one fluorescing cell in millions of unmarked ones. In addition, new dyes and new models of the cell sorter incorporating more than one laser, make it possible to identify subsets of cells marked by two or more different fluorescent tags.

Another major improvement for those working at the shared FACS facility is a new piece of software, developed by Wayne Moore in Herzenberg's lab for a dedicated Digital Equipment Corporation VAX computer.

The "Electric Desk" program automates the process of collecting, storing, and analyzing data during runs on the machine. The software will be copyrighted through the university, Herzenberg said, and made available to other FACS laboratories around the world.

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LH3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter 497-6911

FOR IMMEDIATE RELEASE

STANFORD SCIENTISTS STUDY PROTEINS INVOLVED IN CELL MOVEMENT

STANFORD—

A Stanford scientist and his colleagues have viewed for the first time the repetitive interactions of the protein cogs and gears that help living things move.

The work focuses on proteins responsible for movement in living things throughout the biological world.

Like cogs pushing against gears, these protein molecules move against each other. Their mechanical interaction is the basis for muscle contraction, cell migration, cell shape changes, and flow of cytoplasm and structures called organelles inside living cells.

The work was described Friday (June 1) by Dr. James Spudich, professor and chairman of Stanford Medical School's department of cell biology, and medical student Ronald Vale in the final presentation of the spring SMASH lecture series at Stanford University School of Medicine.

For over a decade, Spudich had searched for a test-tube mixture in which he could determine the essential molecular ingredients of locomotion.

Finally last year, Spudich and visiting University of Connecticut professor Dr. Michael Sheetz developed an elegant and simple solution for viewing the interaction of actin and myosin molecules, two important motility proteins.

Inside cells, actin molecules are strung together in long ropes. Movement occurs as myosin molecules ratchet their way along these ropes.

No one had actually observed myosin molecules pulling themselves along actin cables prior to Spudich's and Sheetz's achievement, because the tiny protein particles were too small to see through a light microscope.

The two scientists accomplished their feat by coating microscopic beads with thousands of myosin molecules spread in a thin layer. Under the microscope the myosin-coated beads could be viewed as they climbed the actin ropes by means of thousands of tiny grasping myosin "hands."

In their research, the scientists used actin cables which line the inner surface of cylindrical cells from a freshwater alga called *Nitella*. In a delicate operation, the researchers cut the cells lengthwise and laid them flat, exposing rows of many parallel three-centimeter-long actin tracks.

After placing a solution of myosin-coated beads on the cables, they looked in the microscope and saw the beads moving across the cell surface at exactly the rate predicted from studies of rates of contraction of intact muscles. When the scientists measured the velocity of spheres coated with a different type of myosin protein—found in a species of amoeba—the spheres moved at the amoeba's characteristic speed.

Cathy Berlot, a third-year medical student, and postdoctoral fellow Linda Griffith have shown that a specific chemical alteration of the myosin molecule that occurs naturally in amoeba cells also acts as an on-off switch for movement in the new test-tube system, Spudich said.

In another study, the researchers added an antibody that latched on to one end of the myosin molecule. The antibody stopped the spheres in their tracks, demonstrating that the antibody-bound end of the myosin molecule is essential for normal locomotion. This end of the molecule, said Spudich, probably grabs hold of actin, like a rope-climber's hand.

Now, Spudich and his associates plan to use genetic engineering techniques to find precisely which portions of the myosin molecule are crucial to the protein's function.

Arturo DeLozanne, a graduate student, is isolating from DNA the genes that code for the myosin protein. The researchers can then make specific changes in a gene to produce an altered myosin molecule, Spudich explained.

If the beads coated with the genetically tampered myosin move at a different rate from the norm, the scientists will suspect that they altered an important portion of the myosin molecule. This is a fine-tuned method for finding out how the myosin molecule works, Spudich explained.

In the last month, Spudich and first-year medical student Stephen Kron refined the technique further when they succeeded in laying down tracks of actin cables without resorting to *Nitella* cells. They spread a surface with chemical "hooks" engineered to latch onto actin cables and hold them in orderly arrays for the myosin-coated balls to roll along. This bed of actin provides a pure uncontaminated system for study, Spudich explained.

Vale is investigating the movement of organelles inside axons, the long impulse-carrying fibers of nerve cells. In collaboration with Sheetz and researchers at the Woods Hole Oceanographic Institute in Massachusetts, Vale hopes to determine the essential proteins involved in organelle movement inside giant axons from squid.

Some organelles found in squid axons ferry essential components to the tip of the axon from the main cell body, Vale explained. Using video-enhanced microscopy, Vale observes these tiny cellular structures attaching to and gliding along a network of filaments. Preliminary evidence suggests that the filaments are microtubules composed of a protein called "tubulin," he said. He has not yet identified the "filament-binding proteins" from the surface of the organelles.

There are as yet no clinical applications from this work, Spudich said, but the research could shed light on the molecular basis of certain muscular and neurological diseases, as well as abnormalities in the immune system where directed cell movement is critical. The research also might reveal new information about cell shape and division abnormalities seen in cancer, Spudich suggested.

The research was supported by the National Institutes of Health and by the American Heart Association.

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Laura

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FOR IMMEDIATE RELEASE

DAY CARE OFFERS COMPROMISE FOR PSORIASIS PATIENTS

STANFORD—

Janet Schultze said she couldn't have entered the hospital the last time her psoriasis flared up even if she'd wanted to.

"That's because I have a special little person at home who needs me, my son Daniel," explained the 27-year-old who's experienced bouts with the skin disease for the past 10 years.

So last February Schultze spent 12 days at Stanford University Medical Center's psoriasis day care center (DCC), a 7:30 a.m.-3:30 p.m. program geared specifically for psoriasis patients with similarly vying obligations.

"Most day care patients would ideally be admitted to the hospital for at least some time," said Dr. Eugene Farber, professor and chairman of dermatology. But psoriasis, which affects up to six million Americans, poses a dilemma. Although it is a chronic disease requiring intensive therapy, it rarely confines one to bed, so patients find themselves with practical choices to make regarding their treatment.

The DCC evolved about 15 years ago as a compromise solution, Farber said. Located in the Hoover Pavilion at Stanford Hospital, it serves about 10-15 patients at a time.

Referred by the Stanford dermatology clinic and private physicians, patients are examined and put on individual regimens, usually consisting of anthralin (a hard paste applied to the lesions), tar baths, oil shampoos, and ultraviolet light treatments. Also, free time for relaxing and socializing is an important element of the program, Farber said.

At the end of the day medications are removed, allowing for another bath and sometimes an additional lamp treatment. Then patients are instructed to use topical treatments at home overnight. The condition may take from a few days to a month to clear up, Farber added.

"We can't cure psoriasis, but we can effectively treat it," said Dr. Elizabeth Abel, assistant professor of dermatology who runs the DCC and phototherapy unit. "In most cases it will come back, within months to a year." She added that fortunately, most health insurance companies do now cover costs of treatment in the day care program.

6-4-84

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The basic cause of psoriasis is unknown, though doctors have pinpointed various triggering factors that may set off the disease in people genetically predisposed to it. These include injury to the skin, streptococcal infections (especially in children), sun sensitivity reactions, prolonged low humidity, certain medications, steroid withdrawal, or extreme stress.

Known to be a sort of cellular hyperproduction, psoriasis is a worldwide problem that comes in many forms and can begin at any age, hitting both sexes equally and often associated with arthritis.

The most common form of psoriasis is characterized by thick, red, scaling plaques over different parts of the body, sometimes including the scalp and the nails. Some patients suffer terribly from itching, Farber said.

But psoriasis is a very unpredictable disease, Abel noted. It may go away on its own and not reappear for years. Dispelling a common misconception, she added that psoriasis is not contagious.

This is an important point since, besides the obvious physical handicaps, psoriasis almost always presents psychosocial problems. "When something's wrong on your skin people always ask, 'What do you have? Can I catch it?' " explained Dr. Kira Flanzraich, dermatology resident.

One woman, Flanzraich recalled, had been told repeatedly that she wasn't the only one with the disease. "But she never believed it and always felt depressed. Now, at day care, she sees many other people with psoriasis, and this gives her a better perspective."

Every Wednesday for an hour DCC patients meet in group therapy with Dr. John Glathe, clinical associate professor of psychiatry. The groups are voluntary and free, said Farber.

"For me," said Schultze, "just being with other patients was very helpful. Most of them were considerably older, and this showed me that life goes on, and other things are more important—such as having a husband who understands and lends support.

"The nurses," she added, "were extremely informative, but easy going as well. There was no guilt trip of the type I'd encountered previously," with doctors who'd implied that she must have done something wrong for the condition to return.

"Our major aim is to educate patients so they're better able to manage their own psoriasis when they leave here," said Abel, adding that she hopes to include occupational therapy in the day care regimen in the near future.

In addition to the DCC, clinic, and hospital offerings, a weekly self-help group for psoriasis patients and family members has recently started at Stanford. "We're the first anywhere to offer this type of meeting as a supplement to regular clinical programs," Farber said.

Schultze, who attended the first four-week series, said that though she'd always thought she was "well-versed in psoriasis" before, now her knowledge had definitely been expanded.

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FOR IMMEDIATE RELEASE

OR DIRECTOR NAMED EMPLOYEE OF THE YEAR

Photos available on request.

STANFORD—

A nursing manager who had never even worked in an operating room before being chosen to lead it was named Stanford University Hospital's employee of the year at a banquet Wednesday night.

Claire Mailhot, who was appointed two years ago to the OR directorship for her management expertise, conceded after the 26th annual employee service awards banquet that even though "I didn't even know the language" when she was appointed, now "you name it, I've learned it."

The Thomas A. Gonda Employee of the Year Award, established in 1976, is named for the former hospital director who has been associated with Stanford Medical Center for 30 years, currently serving as professor and chairman of the department of psychiatry.

Mailhot, ninth recipient of the award, was introduced as having been a "great motivating force and role model" on all the units she's served since coming to Stanford Hospital as a staff nurse in 1972.

During that time Mailhot took over as clinical nursing coordinator of the acute gastrointestinal unit, of the recovery room, and then as OR director.

"A good part of my management style," she explained in an interview, "is based on the fact that some of my own learning experiences were very painful. I don't believe in the sink-or-swim attitude. How can you be a caring professional and a good patient advocate if you're constantly whipped around and no one cares about you?"

More than 230 of 475 persons eligible for five, 10, 15, 20, 25 and 30 year awards for service showed up for the banquet at Hyatt Rickeys of Palo Alto to receive pins and accessories. Also honored for their contributions were all employees and retirees with 20 or more years of service.

Besides the Gonda Award for dedicated and exemplary service for Mailhot, an assistant director of nursing services, special awards went to five surprised "outstanding employees." They are: Elizabeth Griffith, telecommunications; JoAnn Hattner, dietetics; Randall Reeve, neonatal nursery; Heliodoro Villegas, housekeeping; and Mary Thompson, coagulation lab.

Donald Utt, associate director of the hospital, was given a special recognition award for 17 years of dedicated service. Utt plans to retire from his hospital position this summer.

Dr. Lawrence Crowley, vice president for medical affairs and president of the hospital, was among those presented with 20-year pins. In remarks to the crowd he noted that the banquet was "one of the biggest communication events of the year" in relaying gratitude to all the staff for functioning so well individually and as a team.

Daniel Robinson, director of personnel management and master of ceremonies for the event, noted that the high number of eligible five-year employees—more than 200 and close to double last year's group—reflects a low rate of staff turnover at the hospital.

6-1-84 —30— LA2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

COCAINE ABUSE REACHES EPIDEMIC PROPORTIONS, STANFORD PSYCHOLOGIST CONTENDS

STANFORD—

The Bay Area is in the midst of a severe cocaine epidemic, a Stanford psychologist contends.

Between 1980 and 1983, deaths related to cocaine use doubled, said Dr. Robin Press, a psychologist with the Stanford Alcohol Clinic.

"The mortality rate for cocaine may even exceed the mortality rate for heroin." Press said. "But these are 'soft' data" that are difficult to confirm because of multiple drug use, she added.

Nationally, 22 million people, or one out of 10 individuals report having used cocaine at least once, Press said. Every day 5,000 people try the substance for the first time, and one million individuals are dependent on the drug.

Press discussed use and abuse of cocaine Thursday May 31 at Stanford University Medical Center, in the last of four public lectures sponsored by the Alcohol Clinic.

Cocaine is a highly addictive drug, Press contended, although users' symptoms do not fit the traditional profile for addiction.

"The classical definition of addiction may have to be revamped," Press suggested, to include compulsion, loss of control, and continued use of a substance despite adverse consequences.

Although habitual cocaine users do not display physical dependency and physical withdrawal symptoms, the traditional hallmarks of addictive drug use, these individuals may seek out the drug while their lives fall in ruin about them, Press said.

Career, personal relationships, and finances of a cocaine addict may all be destroyed while the person pursues the habit, Press said. "Their lives focus solely on the drug. That takes precedence over everything else," she said.

Press cited several examples, including one young man who used up an entire $400,000 inheritance in one year to support his cocaine habit, while his sister spent an inheritance worth $120,000.

"That shows the sort of compulsion and disregard for other things" that characterizes cocaine addicts, Press said.

Studies of animals show the power of cocaine. Monkeys will self-administer doses of the substance at a rate of up to 60 doses per minute, Press said. They will choose it over food, water or sex, even to starvation, exhaustion, or death, she added.

Some animals will press a bar over 12,000 times to receive a single dose, and they choose high doses of cocaine administered simultaneously with an electric shock rather than lower doses of the drug, she said.

But despite an initial pleasurable rush from cocaine, "it is a mystery why people continue to use the drug even when unpleasant effects begin to take over," Press noted. People and animals will go back to the drug even after they have experienced convulsions from its use, she said.

6-1-84

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In addition to convulsions or seizures, anxiety, depression, insomnia, loss of appetite, loss of sexual drive, hallucinations, paranoia, psychotic behavior and even suicidal tendencies replace the initial high as cocaine use continues over a period of time, Press added.

Other long-term effects include tremors, weight loss, chest pains, blurred vision, nausea, and mucous membrane damage at the site of application.

Cocaine acts at two sites in the body, Press said. It is a local anesthetic that acts peripherally at the site of administration, and it is a central nervous system stimulant that depresses the action of inhibitory pathways in the brain.

There is no direct evidence demonstrating that cocaine use causes brain damage, Press said, although certain behavioral abilities decline with continued use.

Press has studied cocaine users' abilities to perform tasks involving memory and attention. Memory deficits are most striking in those who "freebase" or smoke cocaine. They are not so clear-cut in those who "snort" the drug, she said.

But "I wouldn't rule it out," Press added. It may take several years of frequent use for such problems to show up, she suggested.

Out of every 100 people who try cocaine, 30 will abuse it at some time, Press said. But there is no typical personality profile of a likely cocaine abuser, she noted. "The picture of the affluent, powerful, successful, energetic, entrepreneurial type may be more due to the economics involved than anything else," she said.

But cocaine is no longer solely a drug of the rich, Press said, although there is a joke going around in the substance-abuse community that says "cocaine is God's way of telling you when you have too much money."

Cocaine addiction and abuse must be treated similarly to alcoholism, said Press, who has run cocaine user group therapy sessions. Often a short hospital stay is required followed by continued outpatient therapy. There are organizations available to help, including Cocaine Anonymous and a cocaine hotline (800-COCAINE), she observed.

The first step in kicking the habit is admitting that there is a problem. Once drug-free, the major difficulty is in maintaining the "clean" lifestyle, Press said.

"The drug will always be available," she noted, so recovered cocaine addicts must develop internal controls and ways of coping that enable them to refuse the temptation.

Every recovered addict would like to hear that, once the habit is kicked, they can safely go back to using cocaine occasionally once a week, Press said.

"But the sad news is that there is no possibility of a return to controlled usage once addiction develops," she concluded.

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LH3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
FOR IMMEDIATE RELEASE (2 STORIES)

BLOOD CENTER SCHEDULED OPEN HOUSE AUG. 3

STANFORD—

The Stanford University Blood Center is holding an open house from 3 to 6 p.m. Friday Aug. 3 to acquaint the public with its new facilities.

The Blood Center, which provides an estimated 18,000 units of blood to the community annually, was relocated to expanded facilities in the same building, 800 Welch Road, where it has been for three years.

Maureen Roskoph, supervisor of volunteers, said the open house will include refreshments and tours of the expanded facility, including laboratories where blood is processed after collection.

Roskoph said the expansion, which enables more persons to give blood simultaneously, should reduce or eliminate potential waiting or delays by donors. Additional laboratories have been installed in the building to increase research efforts involving blood, she said.

Roskoph said no blood will be drawn during the three hour reception. However, she added the center will be open to donors from 8:30 a.m. to 3 p.m. on Aug. 3.

July 26, 1984 —30— mg1

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
FOR IMMEDIATE RELEASE

DONOR CRISIS AVERTED, BLOOD CENTER SAYS

STANFORD—

Public response to a a blood recruitment drive have returned supplies at Stanford Blood Center to normal, annnouced Dr. Edgar Engleman, medical director.

"We had a super response," Engleman said this week. A week earlier he had warned a critical shortage of blood could have resulted in patients doing without needed transfusions.

Rhoda Burns, supervisor of blood donor recruitment, said 418 persons had given blood during the week ending July 21, about twice the 200 donations expected on a typical week during the summer.

"We just want to thank everyone who responded. Some people really ended up waiting a long time, and they deserve a special thanks for their patience," Burns said.

She added that supplies by July 23 were above the 240 unit reserve needed to be on hand to protect against emergencies.

While the crisis has been resolved, Burns emphasized the need for continued participation by the public to avoid a recurrence of last week's critical shortage.

Engleman, an associate professor of pathology and medicine, said the shortage affected California and perhaps the entire nation and was due to a number of causes, including a normal summer lull and economic factors increasing elective surgeries.

JULY 26, 1984 —30— MG1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

(Eds: Photos available on request if not included)

IMPLANTED DEVICE ASSAULTS COMMON FORM OF DEAFNESS

STANFORD—

Stanford researchers have begun clinical trials with multichannel cochlear implants—medicine's latest assault on a kind of deafness that afflicts an estimated 200,000 Americans.

Dr. F. Blair Simmons, professor of otolaryngology, has implanted two of the eight-channel devices, and a third patient will receive one this fall.

Though single-channel cochlear implants were first used in the 1960s, the technology has steadily improved. Stanford is one of three U.S. centers approved for testing of multiple-electrode implants.

The Stanford model—designed by Simmons and associates in the medical center and department of electrical engineering—consists of a cable of eight electrodes, which is threaded into the cochlea (an inner-ear structure vital to hearing) and connected to a receiver passing through skin and bone behind the ear. Sounds picked up by a microphone resembling a tie clip are converted to electrical pulses by a processor the size of a cigarette box, worn in a pocket or under clothing. The pulses travel up a wire to the receiver, which is connected to one of the cochlear electrodes. In turn, the electrode transmits pulses to the brain via the auditory nerves. The result: hearing.

"All I can say is it's the difference between hearing and not hearing," said Amy Sullivan, 68, one of Stanford's multichannel implant patients. Deaf for more than 40 years, Sullivan has rejoined the world of a grandchild's voice, a honking truck, a waiter reciting specials of the day.

Pending Food and Drug Administration approval of multiple electrode use, only one of the eight electrodes is hooked to Sullivan's processor (made by a Princeton, N.J. company, Biostim, and dubbed "Bioear"). Simmons has four patients wearing single-electrode implants.

Simmons cautioned that wearers cannot hear normally, but the implant helps in several ways.

"First, some deaf people can't modulate their own voices and end up speaking too loud or soft and maybe atonal, flat," he said. "This is a definite help for them.

"Second, it's nice to know the car behind you is honking or a semi truck is about to pass you or the dog wants out," he said. "Also, it's more fun to be in a sound environment."

Finally, for most deaf people, the implant aids lip reading.

"This is the big one," Simmons said. "For one thing they're aware people are talking at them and turn to face them. And the ability to lip read improves, especially with strangers."

The implants are medicine's attempt to substitute wire for the 30,000 hair cells—each sensitive to a different range of sound—that normally line the snail-shaped cochlea and convert sound transmitted from the middle ear to electrical pulses, passing them on to the auditory nerves and brain. When the cochlea fails—from infection, drug toxicity, or other causes—"sensorineural" deafness results.

In true "neural" deafness, Simmons explained, the auditory nerves fail and the crucial link to the brain is cut. Even a cochlear implant is useless. The implant also is of no use to people with "conductive" deafness, whose damaged outer or middle ears prevent sound waves from reaching the cochleas. Conventional hearing aids often are helpful.

The greatest challenge facing researchers, Simmons said, is how to process the many frequencies of sound to yield something like normal hearing. There are several theories.

"One is dump it all in and let the brain worry about it," he said. "That's the one-electrode approach. It works amazingly well, but it's not perfect.

"Then there's the pre-processing-necessary school of thought. That's us. You're not going to be able to duplicate the normal ear. You can't put 30,000 wires in." But sound can be chopped—or coded—into frequency segments, each of which will be carried by a different electrode, he said.

So far, no sound heard by wearers—even in laboratory tests using all eight electrodes—is exactly what it would be to a normal ear.

Simmons said low-frequency sounds, like a dog's bark or a knock at the door, are relatively easy to code. High frequency sounds, like human voices, are another story. Sullivan noted that sounds like running water or her car starting are much like she remembers them. An airplane-like sound turned out to be the lawn mower. But voices sound electronic.

"You have to get used to it," she said. "It's a metallic sound. It doesn't sound like a voice, but the words come through."

"It's like somebody talking under water," said Linda Jansen, the other Stanford wearer of the multichannel device.

Jansen, 36, lost her hearing two years ago. After receiving her implant, she wore the Bioear on her first day back at work as a computer operator at Signetics Corporation in Sunnyvale.

"The phone ringing sounded like somebody talking," she said. "When I went home that night and was deep-frying shrimp, my shrimp talked!"

Jansen, who seldom wears her microphone and Bioear, said she is more frustrated than helped by sound from the single channel.

"Everything sounds the same," she said.

Before the implant is in place, the range a given person will hear cannot be predicted, Simmons said, and laboratory tests show that hearing improves as a patient gains experience with the implant.

Sometimes background noise irritates. One wearer, a Montana rancher, complained of too much rustling and squeaking from his clothes and saddle. His Bioear was adjusted. Other patients, like a bulldozer operator who unplugs his hearing while working, appreciate the option of silence.

Despite possible benefits, volunteers for implants are rare, Simmons said.

"Deaf pride is an incredible obstacle," he said. "People who have been deaf a long time have made adjustments. The people we see here have chosen to stay in the hearing world."

Or they hope knowledge gained through their participation will help others. Jansen's two-year-old neighbor, Karen, also is deaf.

"If this can help her and kids like her, it's worth doing," Jansen said.

As in any surgical procedure, complications can arise. Sullivan has partial facial paralysis resulting when a nerve was injured during the operation. As the nerve heals, the paralysis is improving, she said.

Sullivan doesn't hesitate to recommend the implant to others with sensorineural deafness.

"It's wonderful to be able to hear again after not hearing so many years," she said. "For conversation, oh boy, there's no comparison. I was tense all the time, and in a group I was helpless. Now I don't miss much."

Jansen is less enthusiastic about the current state of the art but said she has high hopes for the multichannel approach.

"This may not help me, but it may benefit your grandchildren or mine," she said.

—30—

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Editors: Simmons may be contacted directly after Aug. 1 at (415) 497-5134.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

(Editors: Photos available upon request if not included.)

CLINICAL SCHOLAR DEVISES DIABETES COMPUTER GAME

STANFORD—

Dr. Bettina McAdoo, a Stanford participant in the Clinical Scholars Training Program, hopes her new computer game will prove useful in helping diabetic children gain knowledge and confidence in managing their illness.

McAdoo, through participation in the program, developed "Diabetes Adventure," the game she's now testing as a possible supplementary therapy to traditional medical treatment for diabetic children ages 9-14.

"Studies have shown that children have many psychosocial challenges and problems when faced with chronic disease. To help them adjust to the demands of the illness, health education should focus on practical, everyday concerns as well as physiological factors," McAdoo, a pediatrician, believes.

Her comments reflect a concern addressed by the Clinical Scholars Training Program, a two-year fellowship program funded by the Robert Wood Johnson Foundation of Princeton, N.J., which permits young physicians like McAdoo to develop skills in non-biological disciplines pertinent to the improvement of health care.

Since 1974, the program has trained about 50 clinical physicians seeking broader training related to the organization of health services, improvement of medical practice, and public policy in health, said Dr. Halsted Holman, professor of medicine and director of the Stanford portion of the program. (The program here is run jointly by Stanford, UCSF, and UC Berkeley. Currently, seven Clinical Scholars training programs are funded by the Foundation across the nation.)

"Introducing non-biological disciplines into medical thinking and practice will not by itself resolve the problems of health care," Holman said. "Nonetheless, these disciplines provide understanding and methods which are essential to the search for better solutions."

In the colorful, graphic computerized game McAdoo brainstormed, the player is cast under a spell. In order to break the spell he or she must retrieve a golden balance which has been stolen from the wizard and taken to a castle. While hunting down the castle, the player encounters—Wizard of Oz-style—a variety of barriers to overcome.

There may be a moat to cross, for example, and the knowledge that such vigorous exercise in a diabetic would awaken the "hypoglycemia witch." Multiple choices provide optional solutions: ride an alligator; take insulin; eat a sugar cube; cry.

A child sitting alone at a computer terminal, confronted with wizards, castles and obstacles, McAdoo reasons, can learn to make practical decisions while having fun, building a sense of independence, and remaining in control.

In pilot testing with diabetic and non-diabetic children, McAdoo found they'd learned a lot from their mistakes. They also learned that all situations were remediable.

"Playing the game has helped my daughter a lot," said Susan Holt of San Jose. "It kind of turns something that has a lot of negatives into something with a few positives," she added. Her daughter Melissa, 10, an outpatient at Children's Hospital at Stanford, was diagnosed with diabetes at the age of 6 and has since been featured in a movie on the topic as well as familiarizing herself with computer terminals.

"Diabetic kids are always being asked to join programs or attend groups related to their condition," explained Beth Bower, one of McAdoo's three research assistants, and a recent graduate of Stanford University's human biology department. "When one mother told her son about this project, his first reaction was: 'Oh, no, not another diabetic kids' thing.' But when he heard it involved computers, his eyes lit up."

Apparently McAdoo has capitalized on a modern type of child's play which is especially attractive these days, Bower suggested. And she's put into action the theory that children can and do learn while they may think—or look like—they're "just" playing.

McAdoo is now completing a more advanced level program for children who've mastered the first.

She sees the computer teaching tool as something a child might profit from while waiting to see the doctor, for instance, and as a system that would be fairly simple to distribute for wide usage.

"It's such an isolating and awful feeling when you find out your child is diabetic," said Holt. "It was the first time in Melissa's life that I felt, as her mother, I couldn't fix something. But the supportive medical care we've received, including things like this computer game, has helped enormously."

McAdoo's project has been supported by private foundations and industry. Johnson and Johnson Baby Products is funding the study effective July 1984 for one year, renewable upon review, she said.

McAdoo conceived her idea, she said, when she started in the Clinical Scholars Training Program at Stanford University Medical Center. A Stanford medical alumna ('78) who also has a master's degree from Stanford's School of Education, she worked with Picodyne, an educational computer software company, to develop the game.

"I didn't have extensive training in computers, and I wanted to learn," McAdoo said. Participating in the Clinical Scholars Training Program afforded her flexibility to pursue her new interests while broadening her medical education.

Postdoctoral fellows in the program attend seminars in such subjects as information sciences, health economics and policy, ethics, law, epidemiology, sociology, cost-benefit analysis, anthropology, and systems analysis to lay the groundwork for research with faculty advisors.

Projects have included such topics as: the character of health information in popular media; the relationship of mental testing results to daily living performance by the institutionalized elderly; sources of childhood accidents and parental responses to prevention programs; and psychological responses to chronic arthritis.

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ADVANCE FOR RELEASE IN MORNING NEWSPAPERS WEDNESDAY, JULY 25

PURPURA APPOINTED DEAN OF ALBERT EINSTEIN COLLEGE OF MEDICINE

STANFORD—

Dr. Dominick P. Purpura has been appointed Dean of Albert Einstein College of Medicine, effective September 1, President Norman Lamm of Yeshiva University announced in New York Wednesday, July 25.

In assuming the deanship at Albert Einstein College of Medicine, the noted neuroscientist and currently dean at Stanford University School of Medicine returns to the institution he previously served from 1967 to 1981 in key academic research and administrative posts.

Last June Purpura, 57, had announced he would resign as dean of the Stanford University School of Medicine effective August 31, citing his desire to return to research and teaching. Purpura, however, would have continued to direct the development of new academic programs of the Stanford Medical School as an associate vice president for research.

In explaining his decision to accept the Einstein job, Purpura said he had served as a consultant to the search committee at Einstein for several months assisting it in the recruitment of a new dean.

A Yeshiva University press release announcing the appointment quoted President Lamm as saying that the search committee for a dean was "electrified" when it learned that Purpura had stepped down as dean at Stanford and was available. "They know him as a brilliant scientist, a skillful administrator and a charismatic educator whose talents enriched Einstein for 15 years," Lamm added.

Stanford University President Donald Kennedy said, "Dom Purpura's scientific accomplishments and scientific judgment should make him an outstanding dean at Albert Einstein College of Medicine."

Purpura said his new job at Einstein matches his stated academic and scientific objectives. He said he sees as priorities the further enhancement of the biomedical and behavioral sciences, and the patient care and research programs at the Bronx Municipal Hospital Center and Montefiore Medical Center, with which the medical school is closely allied.

Prior to coming to Stanford, Purpura, a Harvard Medical School graduate, had served as director of the Rose F. Kennedy Center for Research and Mental Retardation and Human Development at Einstein. He was also the first chairman of the department of neuroscience.

7-24-84 —30— SA1

END ADVANCE FOR RELEASE IN MORNING NEWSPAPERS WEDNESDAY, JULY 25

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

FOR IMMEDIATE RELEASE

NEW TREATMENT REGIMEN MAY ELIMINATE OFTEN-LETHAL ABNORMAL FORMATIONS IN BRAIN

STANFORD—

Physicians at Stanford University Medical Center and University of California, Berkeley have developed an experimental three-pronged treatment regimen aimed at obliterating often-lethal abnormal blood vessel formations in the brain.

The abnormalities, called arteriovenous malformations (AVMs), are often lodged deep in the brain, rendering them inoperable—and untreatable—for fear of damaging the vital surrounding brain area. Up to 2,000 people nationwide each year, usually under the age of 30, suffer from the congenital condition that, left untreated, kills up to 25 percent of its victims, said Dr. Gerald Silverberg, associate professor of neurosurgery at Stanford.

Now, he and his colleagues are optimistic about the combined effects of surgery and two techniques developed in the last decade that have never been used together on these inaccessible malformations before. By shooting minuscule pellets up to block off the abnormal vessels, operating on the accessible vessels, and then irradiating the residual portions of the malformation, Silverberg said they may finally have a method of treating a condition for which, until now, therapy options were limited.

"The radiation, done at UC Berkeley with the only synchrocyclotron accelerator in the western world specially adapted for medical use, is the definitive treatment," said Dr. Jacob Fabrikant, professor of radiology at UC Berkeley and University of California, San Francisco. The special accelerator has been adapted to send out helium ion beams that can be directed within one-tenth of a millimeter. "No other type of radiation is this precise. We can irradiate exactly the area we want, and not one millimeter more," Fabrikant said.

Because radiation is most effective on as small a mass as possible, the other two steps are geared at decreasing the size of the malformations, he explained.

Resembling a mass of tangled red spaghetti, AVMs consist of abnormal blood vessels that disrupt the normal blood flow through the brain, stealing the essential blood supply that feeds the brain. The malformations can go unnoticed, Silverberg said, or they can cause symptoms including hemorrhage, seizures, severe migraine-like headaches, or deterioration of brain functions such as speech or motor control.

The new experimental three-pronged regimen has been used to treat eight patients since January, Silverberg said. All are doing well, he added, but more follow-up time and more patient cases are needed to reach definitive conclusions before the procedure can be made more generally available.

The first of the three steps is a procedure done by only a few because of its tediousness, difficulty and danger to the patient, said Dr. William Marshall, professor of radiology (clinical) at Stanford. Called embolization, it works on the basis that the body's arterial system is all connected; once something gets in the blood stream it can travel anywhere in the body.

The radiologist inserts a catheter—a thin, hollow tube—into the artery in the leg and guides it up towards the malformation. Through it the radiologist may send an inflatable balloon or another smaller catheter that rests against the normal blood vessels to form a protective shield for the normal circulation.

The radiologist then shoots up tiny pellets, Marshall continued, ranging from half a millimeter to 1.5 millimeters in size. The pellets, made of plastic, lodge in the abnormal blood vessels, blocking the blood from flowing through the abnormal vessels and forcing it to flow the normal route.

"We can use anywhere from 20 to several hundred pellets," Marshall said. "You can't see where they're going as you're shooting them in, so you take sets of X-rays after you inject every 10 or so beads."

The procedure can also be used to block off the blood supply that feeds tumors, he added, and in rare cases, to circumvent nosebleeds.

Next, the neurosurgeon surgically removes any part of the malformation that has not been blocked off and is accessible. The last step involves the radiation treatment, which essentially kills the remaining abnormal blood vessels by clotting and eventually stopping the blood from flowing through them. By decreasing the blood flow, Fabrikant said, it's possible to decrease the size of the malformation until it completely disappears.

"If we can reduce the size of the AVM with embolization and surgery as preparation for radiation, we have a better chance of obliterating it," he explained.

In an article just published in *The British Journal of Radiology* Fabrikant and colleagues reported the first clinical results of using only radiation to treat the malformations. It "...appears to be a safe, reliable, and potentially efficient alternative," he concluded.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

ALCOHOL STUDY SEEKS FEMALE VOLUNTEERS

STANFORD—

About 10 more volunteers are needed by the end of next week to participate in a study designed to examine the effects of alcohol on blood pressure and cholesterol levels.

Researchers, headed by Dr. Peter Wood, deputy director of the Stanford Heart Disease Prevention Program, are seeking non-smoking females ages 25-40, in general good health, with normal menstrual cycles (not on oral contraceptives), who are light to moderate drinkers.

Volunteers will receive free blood pressure screening, cholesterol evaluations, and diet composition analysis, said Dr. Marcia Stefanick, a postdoctoral fellow involved in the study. She explained that previous studies on the effects of alcohol intake on blood pressure and cholesterol levels have focused primarily on men.

Participants will be asked to consume no fewer than one and no more than three drinks a day for a month, Stefanick said—a drink meaning one beer, one 4 oz. glass of wine, or one ounce of hard liquor. Then, the women will be randomly divided into two groups: one to stop drinking for a month, the other to continue the regimen.

The project requires several clinic visits for blood drawing, and two days of ambulatory blood pressure monitoring (through a device participants can wear and carry with them), Stefanick said.

Social drinkers concerned about maintaining good health while contributing to science should call (415) 497-7820, 10 a.m.-12 noon or 2-4 p.m. weekdays, for further information.

7-18-84 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

DEPRESSION AMONG ELDERLY TOPIC OF STUDY

STANFORD—

Stanford University Medical Center researchers are trying to determine if psychotherapy is effective treatment for depression among the elderly and if so, whether certain traits make individuals respond better to one type of therapy compared with another.

"Depression is the most common mental health problem among the elderly, yet there has never been a large study to determine effective treatment for it," said Dr. Julia Steinmetz, coordinator of the project.

In a four-year study funded by the National Institute of Mental Health, principal investigators Drs. Larry Thompson and Delores Gallagher of the Palo Alto Veterans Administration Medical Center plan to treat as many as 150 people between 60 and 80 years old for depression with three different types of psychotherapy.

Many older people aren't aware of what depression is, nor that they may be suffering from it, Steinmetz explained. "We do a lot of education in the community to let people know what depression is, that it isn't uncommon, that it can be treated, and they aren't considered crazy if they are depressed."

Participants in the study must be analyzed as having depression as their main problem, and not as the result of another problem, Steinmetz said. The condition often stems from a loss of mate or job, or change in financial status, and can be characterized by feeling down or apathetic. Symptoms of depression, she elaborated, can include guilt, sleep problems, appetite problems, fatigue, thoughts of death or suicide, indecisiveness, lack of concentration, or loss of interest or pleasure.

Those who qualify for the study are individually treated with one of three different types of therapies for four months. During the first month, they see the therapist two times each week, and for the remaining three months, once a week.

"One of the things we're looking at is if these therapies provide a good alternative to drug therapy," Steinmetz continued. Many elderly people hesitate to take drugs, she explained, because their bodies can't handle the side effects or simply because they don't like them. "Many people we're treating have tried drugs and didn't like the way they worked," she said.

The therapies used are cognitive therapy, which states that people are depressed because of the way they think, Steinmetz explained. Behaviorial therapy is based on the assumption that people are depressed because of the quality and kinds of activity in their lives. With both types of therapies patients learn skills to modify their ways of thinking and doing different things, Steinmetz said.

Psychodynamic therapy, the third type of therapy offered, is a more traditional type in which patients and therapists discuss the patient's past and try to reach an understanding about it. "It's not as perscriptive a therapy because the therapist isn't giving the patient a new skill," Steinmetz said.

The study, which began in 1982 and continues until 1986, is based at the Center for the Study of Psychotherapy and Aging at the Menlo Park division of the Palo Alto Veterans Administration Medical Center. For more information call (415) 858-3989.

7-17-84 —30— sk2

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

BLOOD SUPPLIES SERIOUSLY LOW, STANFORD BLOOD CENTER REPORTS

STANFORD—

Stanford University Blood Center is extending its hours for donations this week because of a critical shortage of blood which could result in patients doing without needed transfusions, medical director Dr. Edgar Engleman announced Monday (July 16).

"We are in a situation today where a major accident or serious surgery could completely deplete our reserves of certain types of blood," Engleman said.

Engleman, an associate professor of pathology and medicine, said reserves are frequently lower in the summer when regular donors are away from the area on vacation and emergencies requiring transfusions tend to make usage high.

But the current shortage, Engleman explained, is worse because blood banks nationwide have tended to cut back on recruitment efforts during the past year in response to a general decline in the need for blood. He speculated that the temporary drop in usage may have resulted from persons postponing elective surgery for economic reasons.

The mistaken concern that giving blood can expose donors to acquired immune deficiency syndrome (AIDS) has resulted in a 2 to 3 percent drop in donors during the past 12 months, "but this has been a relatively minor factor in the current shortage," Engleman said. (Blood transfusions can sometimes expose recipients to AIDS, but Stanford has intiated a screening test for that ailment.)

"Ordinarily, we can simply make a phone call to a nearby center to get needed blood," Engleman said, "but we're finding that these centers are equally low. We just simply don't have the reserves anywhere in the area. Without some help soon, it is indeed possible that a desperately ill patient might have a transfusion delayed because of the area-wide shortage."

"Four times during the past two weeks we have been in situations where we have had to really scramble to find adequate amounts of blood while a surgical procedure was actually underway," Engleman said.

The blood center normally keeps a reserve of 240 units of blood of various types. The inventory, said Rhoda Burns, supervisor of blood donor recruitment, is down to 36 units.

To replenish supplies, the blood center at 800 Welch road in Palo Alto will remain open every evening this week through Friday, July 20, from 8:30 a.m. until 7:30 p.m., an extension of evening hours.

Although normally closed on Saturday, the center will be open from 10 a.m. to 2 p.m. Saturday, Burns added.

Appointments are not necessary, Burns said, but persons wishing further information may call the blood center at (415) 497-7831.

(Editors, reporters: Engleman may be contacted directly at (415) 497-7960.)

July 16, 1984 —30— mg1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

GRATEFUL FATHER WALKS FOR INTENSIVE CARE NURSERY

Photos available upon request if not included.

STANFORD—

A one-man walkathon over the weekend raised almost $2,500 for the intensive care nursery (ICN) at Stanford University Hospital, said Thomas Eastin, the walker who completed his 75-mile trek up from Salinas Sunday evening.

The father of a baby boy, Jeffrey, whose life was in danger at birth last spring, Eastin had vowed to undertake the personal walkathon if his son lived. He "felt he had to do something" for the ICN, said his wife, Cindi.

Walkathon donations included pledges from family and friends, as well as a few $5 and $10 cash gifts spontaneously handed to Eastin, who wore a T-shirt emblazoned "Stanford or Bust" en route. Also, a $500 check was presented by registered nurse Nancy Abel, on behalf of a grateful family whose own child is on the unit.

The walkathon was "the hardest thing I ever did in my life," said a weary Eastin as he was greeted at the hospital by welcome signs and balloons, champagne, a waiting room full of family and friends, nursery staff, and two soothing basins of water for his aching feet.

Dr. Philip Sunshine, professor of pediatrics and director of newborn nurseries, said the money raised will be used to help parents from outside the Stanford area who otherwise couldn't afford to visit their desperately ill babies in the ICN. The money, he said, might also be used to help pay to bring back babies after their release from the hospital for follow-up research studies which might improve patient care for future patients.

Paul Edwards, associate director of medical development at Stanford, said he plans to meet with Cindi Eastin Tuesday, July 17, to accept gifts and pledges garnered by her husband.

7-16-84 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

TEEN'S WEIGHT-LOSS CAMP STARTING SOON

STANFORD—

The second session of Stanford's summer weight-loss day camp is scheduled from July 23-August 16, announced Dr. Mary Southam, the psychologist who runs the camp.

The session for teens ages 12-17 is being offered again in response to the popularity of the first session earlier this summer. The campers' aim is to have fun while slimming down through peer and parent support, as well as behavior modification in eating and exercise, Southam said.

The children's session will run from 9 a.m. to 1 p.m., four days per week. Lunch is included. Swimming, tennis, and active games will be emphasized.

Faculty includes members of the behavioral medicine program of the school of medicine. A fee is charged.

Early enrollment is recommended, as space is limited. For further information, call Southam at 415-497-5065.

7-16-84 —30— sk1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

(Editors, News Directors: Eastin plans to arrive at the Neonatal Intensive Care Unit at Stanford University Hospital at 6 p.m., Sunday, July 15, where the staff—many of whom knew the Eastins during Jeffrey's long hospitalization—plans a brief and informal welcoming ceremony. Photographers and reporters are welcome. Charlene Canger, clinical social worker on the unit, will be available for media questions on Sunday, at (415) 497-7200. A member of the Medical Center news bureau staff may also be contacted during the weekend through (415) 497-6661. Ask for the news bureau representative on duty.)

SALINAS MAN PLANS WALKATHON TO FULFILL VOW FOR ILL SON

STANFORD—

Thomas Eastin plans to walk 75 miles from Salinas by Sunday to visit the intensive care unit at Stanford Medical Center where physicians last May had predicted the death of his newborn son, Jeffrey.

Eastin, 30, a juke box and electronic game vendor, said Thursday (July 12) he had raised about $500 in pledges from friends and families for the personal walkathon he'd vowed to undertake if his son recovered.

"I know it sounds corny," said Eastin, but after the doctor told him his son would probably die, "I started praying and stuff. I asked God, 'If you do this for me, I'll do this (the walkathon) for You.' "

A few hours after the boy was delivered at Salinas Valley Hospital on April 12, he was airlifted to Stanford University Hospital, where he stayed until May 29.

Jeffrey suffers from kidney failure caused by an obstruction and cysts, said Dr. Michael Trautman, a Stanford physician who took care of the boy during the most critical first weeks of life. When Jeffrey was admitted to the hospital, Trautman said the baby suffered from persistent fetal circulation, a heart and lung disease. High blood pressure from the right side of the heart backs up into the lungs. This condition, known generally as pulmonary hypertension, is caused by the infant's inability to switch over from fetal circulation to the normal blood flow of a newborn baby.

Trautman, who had told Eastin his son would likely die, said the boy's heart and lung problems now appear to have been corrected but a kidney transplant or dialysis will probably be needed within a few years to compensate for permanent damage to that organ.

July 12, 1984

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Now back in the care of both Dr. Bruce Tune, a Stanford kidney specialist, and Salinas pediatrician Dr. Donald King, Jeffrey is "alert, sociable and goos and looks quite normal" despite his long-term problems, said his mother, Cindi, who is painfully aware her son "is not out of the woods yet."

Eastin, who said he jogs about three to five miles a day after work, said he got the idea for the walkathon from a movie which depicted a similar event. He said he will accept pledges per mile of any amount and will turn any proceeds over to the neonatal intensive care unit's general fund. He said he hopes to raise about $1,000.

Dr. Philip Sunshine, director of newborn nurseries, said the money will be used to help parents from outside the Stanford area who otherwise couldn't afford to visit their desperately ill babies in the intensive care nursery. The money, he said, might also be used to help pay to bring back babies after their release from the hospital for followup research studies which might improve patient care for future patients.

Cindi Eastin, 29, said her husband decided to go ahead with the walkathon because he "felt he had to do something for the (intensive care) unit."

Eastin said Thursday he plans to put on a pair of old jogging shorts and a new T-shirt emblazoned with "Walk for Stanford," and start walking Friday night down Reservation Road, U.S. 101, and Monterey Road to San Jose, where he will trek The Alameda to El Camino Real for the final leg of his journey up the peninsula to Palo Alto and Stanford by Sunday afternoon.

He said his older son, Thomas Jr., 5, may accompany him on the last leg. Cindi, and perhaps Jeffrey and the couple's daughter Kelly, 2, might drive up for a brief and informal reunion Sunday at the intensive care nursery.

Cindi Eastin said persons wishing to pledge a contribution for the walkathon may call her at (408) 449-8073 or (408) 422-0079. All proceeds would be turned over to the Stanford University Medical Center for use in the neonatal intensive care unit.

Paul Edwards, associate director of medical deveolopment at Stanford, said he plans to meet with Mrs. Eastin on Tuesday (July 17) to accept gifts and pledges.

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mg1

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FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD RADIATION BIOLOGIST WINS DANISH AWARD

STANFORD—

Dr. Kendric C. Smith, professor of radiology at Stanford University School of Medicine, was awarded the Finsen Prize in June at the Ninth International Congress on Photobiology in Philadelphia.

The award, for outstanding contributions to the science of photobiology, is presented every four years by the Assocation Internationale de Photobiologie on behalf of Denmark's Neils Finsen Foundation.

The Finsen Foundation was established in honor of the Danish scientist Neils Finsen, who received the Nobel Prize in medicine in 1903 for his work on the healing and damaging effects of sunlight on skin, Smith said.

Smith, who has been a Stanford faculty member since 1962, conducts research on the genetic control and biochemical basis of repair to the hereditary material, DNA, in cells damaged by ultraviolet radiation and by x-rays. He also studies the role of DNA repair in spontaneous and radiation-induced mutagenesis—chemical modification of DNA.

Smith was the founding president of the American Society for Photobiology, and has written or edited several books and journals on photobiology. He is also the immediate past president of the 6,000-member American Institute of Biological Sciences.

7-11-84 —30— LH3

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FOR IMMEDIATE RELEASE

YOUNGSTER'S WEIGHT-LOSS CAMP TO START SOON

STANFORD—

The second session of Stanford's summer weight-loss day camp is scheduled from July 23-August 16, announced Dr. Mary Southam, the psychologist who runs the camp.

The session for children ages 8-11 is being offered again in response to the popularity of the first session earlier this summer. It is an addition to the already established camp for teenagers on the university campus. The campers' aim is to have fun while slimming down through peer and parent support, as well as behavior modification in eating and exercise, Southam said.

The children's session will run from 1 to 4:30 p.m., four days per week. Lunch is not included. Swimming and active games, with the exception of tennis, will be emphasized.

Faculty includes members of the behavioral medicine program of the school of medicine. A fee is charged.

Early enrollemtn is recommended, as space is limited. For further information, call Southam at 415-497-5065.

7-6-84 —30— sk1

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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR HUMAN SEXUALITY STUDY

STANFORD—

Stanford University Medical Center is looking for volunteers to participate in studies aimed at explaining the role of biologic factors in human sexual behavior.

Dr. Julian Davidson, professor of physiology, is conducting three studies looking at the role of hormones, aging, and neurotransmitters in the brain.

For the first study, he is seeking about 20 adult men of all ages. Participants will be asked to attend three sessions, during which they will have blood samples taken for hormone analysis. They will also be assessed, by questionnaires and observation, for their physiological responses to visual erotic stimuli and other tests.

Participants in the second study will be testing the effects of a drug that may be therapeutic for men suffering from sexual dysfunction, Davidson said. He is looking for about 40 men of all ages who are impotent or have inhibited sexual desire. Participation is required for about two months, during which the men will receive the drug and a placebo. Measurements of the medication's effectiveness will be similar to the methods of the first study.

Davidson is seeking about 40 women to volunteer for the third study, which will be investigating the effects of hormone replacement therapy in postmenopausal women. Participants should be at least one year past menopause, and should not have taken any hormone treatments with the last three months. They should be in good health.

The study will last for about four months, and participants will be asked to make about nine visits to the laboratory. They will receive either one hormone or a combination of hormones, or a placebo. Effectiveness of the hormones will be assessed by questionnaires and observation of their physiological responses to visual erotic stimuli.

For information about these studies, call Davidson at 415-497-2432 or 415-497-9156.

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ADVANCE FOR RELEASE JULY 4 AFTER 3:30 P.M. PACIFIC DAYLIGHT TIME

SCIENTISTS DISCOVER THAT A CANCER MAY BE COMPOSED OF TWO TYPES OF CELLS

STANFORD—

Treatment of one form of cancer with certain drugs or monoclonal antibodies tailormade to recognize and destroy malignant cells is likely to be more complex than previously thought, Stanford University School of Medicine scientists reported July 5 in the *New England Journal of Medicine*.

The scientists reported that cancers may be composed of two types of cells, challenging the longstanding assumption that all cells in a tumor are genetically identical because they descended from one original cell that went awry, said Dr. Jeffrey Sklar, assistant professor of pathology at Stanford University School of Medicine.

The implication for future therapy is that physicians will now have to be alert to look for more than one cell clone in biopsies of cancerous tissue, Sklar said. And new therapies where drugs are specifically selected or other agents are tailor-designed to recognize and destroy a single malignant cell clone may instead require more than one drug or antibody to recognize all the tumor's different cell clones, he added.

The discovery was made in patients with B-cell lymphoma, a cancerous growth of the immune system's antibody-producing cells. The scientists found that 20 percent of a group of B-cell lymphoma patients possessed a "biclonal" tumor, composed of two genetically distinct cell clones.

The research was reported in the July 5 issue of the *New England Journal of Medicine* by postdoctoral scholars Dr. Michael Cleary and Dr. Kristiaan Thielemans, research assistant Julie Gralow, associate professor of pathology Dr. Roger Warnke, Dr. Ronald Levy, associate professor of medicine, and Sklar.

The work was supported by grants from the American Cancer Society and the National Institutes of Health, and by fellowships from the John A. Hartford Foundation and the Jane Coffin Childs Memorial Fund for Medical Research.

The finding came about, in part, as an attempt to study tumors using monoclonal antibodies tailored to attack individual patients' lymphomas. In an experimental program run by Levy at Stanford, twenty lymphoma patients are currently being treated with or evaluated for anti-lymphoma monoclonal antibody therapy.

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In light of the new finding, the researchers now have uncovered a group of lymphoma patients for whom single antibody therapy could potentially be inadequate. Because the treatments are designed to recognize only one type of cell, a second group of cancerous cells in a biclonal tumor could continue to multiply, unaffected by therapy, Sklar explained.

The discovery of biclonal tumors also makes diagnosing some cases of B-cell lymphoma more complex, Sklar said. In hard-to-diagnose cases, physicians can no longer rule out cancer on finding more than one clone in a biopsy sample, he explained.

While the finding makes tailormade cancer therapies more complex, new strategies may be developed to circumvent these problems, Sklar predicted. But it will be necessary to take more biopsy samples from several sites in the patient's body to make sure that all clones in a patient's tumor have been detected. Then, one or more drugs or antibodies recognizing all the tumor's different cell clones could possibly be used for therapy, Sklar said.

B-cells participate in the body's disease fighting immune response by producing antibodies, proteins that specifically recognize foreign material, including microbes such as bacteria.

All B-cells start out genetically identical. But as they mature, rearrangements occur among the pieces of the hereditary material—DNA—encoding instructions for making antibodies.

This gives every B-cell its own distinctive DNA "fingerprint," Sklar explained. If one of these cells becomes cancerous and starts dividing to create a B-cell lymphoma, all its descendants that form a tumor would also have the same DNA fingerprint, scientists believe.

But by using monoclonal antibodies in sophisticated cell sorting techniques and then looking at the DNA rearrangements in sorted tumor cells, the Stanford group found that not all of an individual's cancerous cells possessed the same DNA fingerprints. In four out of 20 cancers examined, the scientists found biclonal tumors, composed of two distinctive cell types.

The finding may help researchers understand more about how B-cells develop, and how B-cell tumors arise, Sklar said. In one of the patients studied, there is evidence that the two cancerous clones are related, and may both have descended from a B-cell precursor that had turned malignant.

In the other three patients, the scientists cannot yet say whether the two clones became cancerous independently or share a common cancerous precursor.

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FOR IMMEDIATE RELEASE

NEW RH-FACTOR ANTIBODY DEVELOPED FOR PREGNANT WOMEN

STANFORD—

Stanford researchers have developed a new monoclonal antibody that could protect thousands of unborn infants from attack by their mothers' immune systems.

Injections of the genetically engineered antibody could prevent destruction of a fetus' red blood cells due to Rhesus (Rh) factor blood type incompatibility between mother and child.

Rh-factor incompatibility in pregnant women has been controlled in recent years by giving an expectant Rh-negative mother blood serum that neutralizes the immune attack against an Rh-positive baby's blood.

Although effective, this serum is becoming increasingly scarce, said Dr. Nelson Teng, assistant professor of gynecology and obstetrics at Stanford University School of Medicine. Also, when using blood products there is always a small chance of accidental contamination with blood-borne diseases such as hepatitis, cytomegalovirus, or possibly AIDS, he noted.

"This new way of generating pure Rh-factor antibodies in the laboratory is promising and would circumvent the potential contamination problem as well as the production problems involved in getting Rh-antibodies from blood," Teng said. It would be a more widely available, simpler, and safer procedure for the 15 percent of the female population that is Rh-negative, Teng predicted.

The antibody is currently being tested in the laboratory for efficacy, said Teng. Clinical trials in humans are planned in the near future, he said.

Creation of a cell line that steadily produces the antibody was reported in a recent issue of the scientific journal, *Proceedings of the National Academy of Sciences*. Teng's colleagues in the research are postdoctoral scholar Dominique Bron from Belgium, medical student Mark Feinberg, and the late Henry Kaplan, who was a world-renowned Stanford University cancer specialist.

When a woman with Rh-negative blood marries a man with Rh-positive blood, there is a high probability that their children will be Rh-positive. This can lead to hemolytic disease of the newborn, a condition in which the mother's immune system attacks the fetus' red blood cells during pregnancy, Teng explained. Jaundice, developmental problems, mental retardation, and even death of the infant may be the result.

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During an Rh-negative woman's first pregnancy, an Rh-positive baby is usually safe because its mother's immune system has not yet been sensitized to Rh-positive blood, Teng explained. But when the baby is delivered, some of its Rh-positive blood cells can leak into the mother's bloodstream. These Rh-positive cells, foreign to the mother's immune system, cause her to generate anti-Rh antibodies.

In subsequent pregnancies with Rh-positive babies, the mother's antibodies can move across the placenta into the fetal circulation, destroying the baby's red blood cells, Teng explained.

To prevent this from happening, the mother is injected with serum containing anti-Rh antibodies shortly after delivery of her first child. These antibodies destroy the foreign red blood cells before the mother's immune system can build defenses against them.

The serum is obtained from untreated Rh-negative women who have borne Rh-positive children, or from Rh-negative volunteers who have been exposed to Rh-positive blood. "Since most Rh-negative women currently receive prophylaxis against the Rh factor, there are fewer available to provide serum," Teng explained.

The new pure monoclonal antibody is made in cells called hybridomas. The hybridoma cell line was created by Teng and his colleagues, who fused a human lymphoid cell that produces anti-Rh antibody with a tumor cell able to divide continuously. The fused hybrid cell is a source of continuous, pure human antibody, Teng explained.

Because human tumor cells do not easily fuse, the researchers used a cell that was itself a hybrid, obtained by fusing a mouse cell with a human cell. This technique is being used to generate other medically useful monoclonal antibodies, Teng said.

In addition to its potential clinical use, the pure anti-Rh antibody will be useful for blood group typing, and for biochemical and genetic studies of the human Rh system, whose functions are poorly understood, Teng said.

Funding for the research came from the National Cancer Institute and the Robert L. Seidner Research Fund. Postdoctoral support came from the Rose et Jean Hoguet Foundation of France, and the North Atlantic Treaty Organization.

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FOR IMMEDIATE RELEASE

KNOWLEDGE ABOUT MEDICAL AFTERMATH COULD HELP PREVENT NUCLEAR WAR, PHYSICIANS SAY

STANFORD—

The more knowledgeable people are about nuclear war's medical consequences, the more likely they are to oppose nuclear war, a group of anti-war physicians has discovered.

The finding is based on a questionnaire survey testing peoples' knowledge and opinions about nuclear war, conducted by Physicians for Social Responsibility (PSR), a group devoted to educating people about the medical aftermath of nuclear conflict.

People who scored highest on nine factual items in the survey questionnaire were least likely to agree with the statement, "there are causes worth fighting a nuclear war for," reported Dr. Perrin French, a PSR official, in an article in the September issue of *Psychology Today*.

The questionnaire was administered at 57 educational forums sponsored by PSR in the San Francisco Bay Area between February 1981 and October 1982, said French, a clinical assistant professor of psychiatry and behavioral sciences at Stanford University School of Medicine.

A total of 1,355 people completed the "Nuclear War Attitude Survey" before and after a film or slide show and discussion of the effects of a nuclear exchange, French said.

Before the presentation, "approximately 10 percent of those questioned said they could countenance nuclear war," French noted, and "the greatest proportion of acceptors of nuclear war were people with the fewest correct answers on the factual portion of the test."

Following an informational slide or film presentation, nearly 50 percent of the people who originally felt there might be a cause worth waging a nuclear war for changed their opinion, French said. Two percent of those originally opposed to any nuclear conflict shifted their view to favor nuclear war in some situations, he added.

PSR, whose members number almost 24,000, undertook the study to test the validity of its assumption that "increased knowledge about the nature and effects of nuclear weapons will produce a worldwide climate of restraint conducive to avoiding nuclear war," French explained in the article, and to evaluate how effective the group's efforts actually were.

"Since opinion on these matters changed readily in one direction, it is possible that it could change back as readily in the other direction," French wrote.

"But our survey did show an initial change, and it is the hope of a rapidly growing number of scientists that efforts to increase knowledge about nuclear weapons and their medical effects will lead to enduring attitude change, reducing both the acceptability and likelihood of nuclear weapons use," he concluded.

The Stanford chapter of PSR was formed in 1981 by French and three medical students. It now has over 800 members, several hundred of whom are non-physicians, French said. Those interested in the organization should call Sylvia Rogers at (415) 497-9060.

8-31-84 —30— LH3

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FOR IMMEDIATE RELEASE

RADIATION TREATMENTS HELP KIDNEY TRANSPLANT PATIENTS SURVIVE WITH FEWER DRUGS

STANFORD—

Total lymphoid irradiation (TLI), a form of radiation therapy originally developed to treat cancer, is now helping kidney transplant patients survive with minimal drug therapy, transplantation researchers reported Aug. 29 and Aug. 31 at the International Congress of the Transplantation Society in Minneapolis.

The therapy helps control rejection, the body's tendency to attack and destroy foreign tissue, without the usual powerful doses of anti-rejection drugs, said the researchers from Stanford University School of Medicine and Pacific Medical Center in San Francisco.

The technique involves a form of radiation developed in the 1950s by Henry Kaplan and other Stanford researchers, to treat Hodgkin's disease, a cancer of the lymphatic system. TLI limits the body's ability to reject foreign tissue because it suppresses the immune system.

Almost all kidney transplant patients given conventional treatment develop an immune attack, called a rejection episode, on the foreign organ within the first year following surgery, explained Dr. Samuel Strober, professor of medicine at Stanford. If the rejection episode is severe enough then the new kidney will be lost, he added.

But so far, nearly three-fourths of the patients receiving the experimental treatment have completed the first year after surgery without a rejection episode, he said.

Furthermore, these patients take only low doses of a single anti-rejection drug, Strober said. In contrast, kidney transplant patients with conventional treatment programs take several drugs at high doses, often with debilitating side effects, he explained.

The new treatment combines radiation prior to transplant surgery and drugs following the operation. Because the anti-rejection effects of TLI are long-lasting, only a low dose of the drug prednisone is needed to prevent rejection after surgery, Strober explained.

"This is a highly promising technique for controlling rejection in kidney transplant patients," Strober said. "Its greatest advantage is that it eliminates dependence on the major anti-rejection drugs, many of which have undesirable side effects when used continuously."

Strober and his colleague Dr. Barry Levin, a nephrologist from Pacific Medical Center, reported preliminary results on 19 patients in two presentations Aug. 29 and 31 at the International Congress of the Transplantation Society in Minneapolis.

Strober noted that continuing trials are needed to determine the long term effectiveness and safety of the new therapy.

8-31-84 -more-

Their other colleagues in the research were the late Dr. Derek Sampson, who had been a transplant surgeon at Pacific Medical Center, Dr. Richard Hoppe, radiotherapist at Stanford, Dr. Charles Bieber, formerly in the Stanford cardiovascular surgery department, Elizabeth Miller and Dr. Marc Waer, both from Strober's lab at Stanford, the late Dr. Henry Kaplan, radiologist at Stanford, and Dr. Geoffrey Collins, transplant surgeon at Pacific Medical Center.

Nearly 80 percent of kidney transplant patients who receive the anti-rejection drug cyclosporine, introduced in recent years, maintain a functioning kidney at least one year, Strober said. The new experimental protocol has achieved as high a survival rate for the transplanted kidney without using cyclosporine, he noted.

"Because cyclosporine's potential side effects include kidney damage, high blood pressure, and lymphoma, a cancer of the lymphatic system, we would like to avoid using it on a continuous basis if possible," Strober said.

In addition to eliminating the need for cyclosporine, the new treatment does not depend on the use of azathioprine (Imuran), another traditional anti-rejection drug with adverse side effects, Strober said.

The only drug taken by kidney transplant patients on the new protocol is prednisone, a synthetic drug that mimics the action of a natural body hormone called cortisone, Strober explained. The prednisone dose patients take is so low that it is close to natural cortisone levels in the body, he added.

The new results are particularly promising, Strober mentioned, because several diabetics are among the 17 patients doing well on the protocol. Normally, diabetics have low survival rates following kidney transplantation, because high doses of prednisone complicate their disease, he explained.

For several months prior to transplant surgery, patients receive a series of TLI treatments, totaling 2,000 rads, in which low doses of x-rays are beamed at the body's major lymph tisses in the neck, chest, abdomen, thymus and spleen.

The irradiation suppresses the immune system, which is responsible for tissue rejection, without seriously compromising the patient's ability to fight infections, Strober explained.

Following surgery, the patients are given a single large dose of a potent anti-rejection preparation called rabbit antithymocyte globulin. Thereafter, unless rejection sets in, prednisone is the only drug patients receive.

The side effects during TLI therapy are modest and temporary, Strober said, usually limited to nausea, fatigue and and depletion of certain blood components.

The most frequently observed complication after transplantation was infection by herpes virus, but these infections can be rapidly controlled with antiviral therapy, Strober reported. The only fatality of the study was one patient with a herpes infection who died while simultaneously undergoing rejection, Strober said.

Funding for the studies comes from grants from the National Institutes of Health.

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LH3

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FOR IMMEDIATE RELEASE

"COHEN-BOYER" GENETIC ENGINEERING PRODUCTS PATENT ISSUES

STANFORD—

A patent sought by Stanford University, covering genetically engineered molecules that can be used to develop and generate biological products in bacteria, was issued today (Aug. 28) by the United States Patent and Trademark Office, university officials said.

The patent, based on an application filed 10 years ago, is the companion to a broad patent issued in 1980 covering the basic gene cloning process.

The 1980 "process" patent covers the basic method of splicing and recombining genes to create a recombinant DNA molecule with a foreign gene it doesn't normally contain. The new "products" patent covers these recombinant DNA molecules and their uses in bacteria.

Both patents are based on work carried out in 1973 by Stanley N. Cohen, professor of genetics at Stanford University School of Medicine, and Herbert W. Boyer, professor of biochemistry at the University of California (UC) in San Francisco.

The two patents give Stanford a proprietary position—until 1997—over the basic methodology and tools currently used throughout the biotechnology industry, said Niels Reimers, director of Stanford's office of technology licensing.

Industries use the lab-constructed molecules containing DNA from two different species of living things, in bacterial "factories," to develop and produce large quantities of previously scarce but valuable substances including vaccines, drugs, and hormones.

The spliced DNA molecules also permit scientists to conduct vital research revealing the molecular structure and organization of genes themselves.

The new patent is significant because the Patent Office has confirmed basic rights granted in the original gene cloning methods patent, said Reimers.

"We believe that virtually all genetic engineering companies are using this patented technology in their research and development," said technology licensing associate director Katharine Ku, who is responsible for recombinant DNA technology licensing at Stanford.

"Although as of early August, 66 companies had licenses, we now expect that all other companies doing commercial research will also take licenses," Ku added.

To date, many scientific research products derived using the patented invention have become commercially available, although only one pharmaceutical product is out for sale to the public, Ku said. It is a bacterially produced form of human insulin, called "Humulin," developed by Genentech and marketed by Eli Lilly. Several other products are nearing commercial availability, including a hepatitis B vaccine, human interferon, human growth hormone, and a drug for treating emphysema, she added.

-more-

Stanford and UC share revenues accrued through licensing of these patents. So far, they have received slightly less than $3 million, Reimers noted. He added that the two universities do not expect significant earned royalties from the patents until later in this decade.

Royalties are used for educational and research purposes at the two universities, Reimers said. Both Cohen and Boyer have waived rights to personal royalties.

"This is an extraordinarily basic patent," said Reimers. "The patent office thoroughly reviewed a number of outside objections lodged against the application, and clearly found them wanting."

The patent application for both the gene cloning process and its products was filed originally in 1974 by Stanford on its own behalf and that of UC. Bertram Rowland is the patent attorney who is handling the case for Stnaford.

In 1978, the claims were separated so that the process application could be granted in Dec., 1980. Issuance of the products patent had been expected in 1982, but the Patent Office instead temporarily rejected the application, Ku noted, in order to consider some issues more fully.

These questions centered on the breadth of the claims, co-inventorship, "obviousness" of the invention, whether the application as filed enabled others to make use of the invention, and whether Stanford and Rowland fully disclosed all pertinent information.

"We are pleased that all these issues have been resolved during the application process," Reimers commented. "It has brought about a much stronger patent in the end."

To allow the present patent to issue as rapidly as possible, Stanford withdrew claims covering use of the spliced DNA molecules in "eukaryotes," complex unicellular organisms such as yeast, Ku said. These claims, which would give Stanford even broader coverage, are currently being pursued in a separate application, she added. The new patent gives Stanford coverage for the use of DNA molecules containing foreign genes, in simple single-celled "prokaryotic" organisms such as bacteria.

The issue considered most recently before the patent was granted concerned "duty of disclosure," based on section 1.56 of the patent and trademark part of the Code of Federal Regulations. In March, the Patent Office ruled that, although Rowland and Stanford should have advised them of certain pieces of information concerning coinventorship claims and inaccuracies in the original application, the omission was not an act of bad faith or gross negligence.

A major question about the patent application concerned whether or not it was "enabling"—accurate and detailed enough to enable other researchers to produce the genetically engineered DNA molecules described, Ku said.

The original application included a description of how a particular plasmid—a circular piece of DNA—was made. A later scientific report by Cohen revised his interpretation of how the plasmid molecule had been formed. The Patent Office's concern was that Rowland and Stanford had not told them about the article, and others who wished to make and use the plasmid might not be able to, due to the inaccurate interpretation contained in the application.

However, the Patent Office decided that the mistaken interpretation did not present grounds for rejection. Rowland and Stanford had argued that the plasmid had been given out freely by Cohen and Boyer to scientists who requested it, and that the basic genetic engineering process described in the patent application had been proven to work in creating other functional plasmids in laboratories around the world. .

"The Patent Office accepted our arguments that the application was enabling despite some question about the origin of one particular plasmid used in the first successful experiments," Reimers said.

"The Patent Office also ruled that recombined DNA molecules from different species are not 'products of nature,' an issue that was raised," Reimers added.

Another issue involved a collaborator in the original gene cloning experiments, Robert B. Helling, who at one time believed himself to be a coinventor.

Although Helling declined to sign a disclaimer of inventorship, he provided no evidence to support his assertion that he helped conceive of the gene rearrangement experiments, said Reimers.

Although the Patent Office said that Rowland and Stanford should have reported Helling's allegation to them, after investigating the evidence submitted by Rowland and by Helling himself, the Patent Office concurred that only Cohen and Boyer were the coinventors.

Other issues centered on a talk given by Boyer and whether or not the work of other researchers made the Cohen/Boyer work obvious.

According to patent law, an application must be filed within a year of public disclosure of an invention. One year and two months prior to the patent application filing date, an article appeared in the *New Scientist* magazine describing a private scientific conference in which Boyer participated. But the Patent Office decided that Boyer's talk and the article were not sufficiently detailed to cause forfeiture of the patent rights, Ku said.

The Patent Office also considered the work of other researchers who had proposed possible ways of making spliced DNA molecules prior to the Cohen/Boyer research. But the Patent Office ruled that these proposals did not contain the ingredients for successful gene cloning. "In issuing the patent, the Patent Office reconfirmed that Cohen and Boyer were the first to invent and successfully produce a biologically functional recombinant plasmid," Reimers said.

Normally patent prosecution is confidential. In the case of the Cohen/Boyer patents, Stanford asked for an open process that would allow public scrutiny and ensure that all potential objections might be raised, Reimers noted.

"These were groundbreaking patents," he explained, "and we preferred handling any potential challenges to them during the patent prosecution process rather than later on through legal channels."

However, in December 1982 Stanford asked the Patent Office to close the file. "We felt the open process was receiving undue attention in the media," Reimers recalled.

"Now that the patent has issued, the prosecution file history is available to the public and we encourage all interested parties to examine it," Reimers said.

The file will remain closed on the continuing application for gene spliced plasmids in eukaryotic organisms, he added.

8-28-84 —30— LH3

EDITORS: Reimers and Ku can be contacted at (415) 497-0651.

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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED IN DIABETES STUDIES

STANFORD—

The clinical research center at Stanford University Medical Center needs volunteers to participate in studies concerning the importance of nutrition in relation to health, specifically in people with diabetes.

Researchers, under the direction of Dr. Gerald Reaven, professor of medicine, are studying the effects of carbohydrate variations on the nutritional management of diabetes. To complete the study they need volunteers who have diabetes and are being treated with oral medication or by diet, but not with insulin injections.

All meals will be provided for volunteers during the one-month study. Participants will also receive a complete physical examination including laboratory tests, and a complete evaluation of their blood lipids including cholesterol, triglyceride, and high-density lipoprotein (HDL) cholesterol information.

Those interested in volunteering should call (415) 497-5430 between 9 a.m. and 4:30 p.m. for further information.

8-28-84 —30— LA3

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FOR IMMEDIATE RELEASE

FIRST SCIENTIFIC STUDY TO SHOW THAT A FOLK APHRODISIAC STIMULATES SEXUAL ACTIVITY IN ANIMALS

STANFORD—

Stanford University Medical School researchers have reported the first scientific study showing that a folk medicine called yohimbine may stimulate sexual desire.

Along with substances such as bees' wings, camel's hump fat and rhinoceros horn, yohimbine has a long history as an aphrodisiac in folk medicine but a reputation as a "quack" love potion in the established medical profession.

The Stanford study, reported in the August 24 issue of *Science* magazine, shows for the first time that the drug strongly increases sexual drive in male rats.

This is an interesting observation because rats provide a good model for certain biological aspects of human sexual behavior, including libido or sex drive, explained Dr. Julian Davidson, professor of physiology.

However, Davidson cautioned that it is too soon to say whether the scientific evidence will prove that yohimbine is an effective aphrodisiac in humans. The drug's physiological effects in people may be different from those seen in rats, he explained. In addition, human sexual behavior is complicated by the influence of emotions and other factors, he added.

Davidson, whose research focuses on the biology of human sexual behavior, carried out the study with Dr. Erla Smith, acting associate professor of physiology, and Dr. Jack Clark, now doing postgraduate work at the University of Florida College of Medicine.

In a series of experiments, sexually active male rats injected with yohimbine mounted females about twice as frequently as did males given an inert substance, the researchers reported. In addition, yohimbine stimulated mounting behavior in both sexually inexperienced and sexually inactive male rats.

"The data suggest that yohimbine may be a true aphrodisiac," the researchers said. They added that "further research could lead to developments in pharmacologic treatment of sexual dysfunction."

"In our experience, this is the most powerful drug yet tested for stimulating sexual behavior in male rats," said Davidson. He noted that he and his colleagues are now studying the drug's effects in human volunteers. (No more volunteers are currently needed for the study, however.)

Although yohimbine originally was obtained from bark of the tropical tree *Corynanthe yohimbe*, it is now a synthetically manufactured prescription drug. In addition to its informal use as an aphrodisiac, yohimbine is also sometimes used for some heart problems, Davidson said.

It is thought to increase the activity of norepinephrine, a natural chemical that certain nerve cells use to communicate with each other in the brain, Davidson said.

Norepinephrine and related chemicals, called monoamine neurotransmitters, may be involved with controlling sex drive, Davidson suggested.

The work was supported by a grant from the National Institutes of Health.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

JOHNSON APPOINTED MEDICAL CENTER ATTORNEY

STANFORD—

Rodney Johnson has been appointed Stanford University's managing attorney for medical affairs, replacing Ross Campbell, who is leaving to pursue a private law practice.

Johnson's appointment, effective Aug. 13, was made by John Schwartz, vice president for legal affairs, and announced jointly with Lawrence G. Crowley, vice president for medical affairs.

Since August 1980, Johnson has served as associate staff counsel in Stanford's legal office. He has represented the university in a variety of areas, including zoning and planning matters.

He served as counsel for Stanford's request to build the $117 million hospital modernization project in the Palo Alto city limits, and for the university's request to extend Willow Road eastward. In another area, he has represented the university on a variety of technology licensing matters.

Before coming to Stanford, Johnson practiced law in San Francisco. In 1981 he served as a member of the California North Central Coast (regional) Coastal Commission, a gubernatorial appointment to administer planning and other mandates of state coastal law.

Johnson is a 1973 graduate of the Columbia University School of Law and a 1970 honors graduate of Emory University.

Campbell, who was appointed to the medical center legal post in 1981, said he plans to open a Bay Area office for the Los Angeles-based law firm of Musick, Peeler and Garrett, which specializes in health care law.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

OVERSEAS TRAVELERS NEEDED AS JET LAG STUDY VOLUNTEEERS

STANFORD—

Researchers are hopeful they can find enough volunteers meeting some unusual criteria to help cure one of mankind's newest medical problems—jet lag.

Wesley Seidel, a research assistant in the Stanford Sleep Disorders Center, said each of the 100 or so volunteers needed for the study must be healthy and willing to take one of several commonly dispensed perscription sleeping pills for three nights.

The catch, said Seidel, is that researchers are really picky about where volunteers take those sleeping pills. Volunteers are limited to persons who will be flying from the Pacific time zone to Tokyo or London within the next eight or 10 months.

The Sleep Center won't pay for the flight, said Seidel, but participants will be reimbursed $200 for their participation, including time and effort spent filling out a succession of forms documenting mood.

Seidel said the participants, who must meet specific criteria, will be randomly divided into groups taking several different sleeping medications in several doses to determine which combinations—if any—are most effective. To better ensure accurate results, one group of participants will be taking a placebo, a sugar pill designed to look like a drug but which produces no effect.

Jet lag is the daytime drowsiness and nighttime insomnia caused by a major disruption in the sleep-wake cycle, such as occurs when flying across many time zones.

An antidote for this condition would be extremely important to such persons as government officials or businessmen who must conduct critical business or negotiations soon after arriving in a distant time zone, or to pilots or other airline personnel who must react quickly and function effectively despite major sleep-wake pattern disruptions.

The current research follows up results published in the June 15 of Science magazine which said that judicious use of short-acting sleeping pills works as an effective treatment for jet lag.

Seidel said that study, conducted jointly with Henry Ford Hospital in Detroit, demonstrated that a full eight-hour sleep period is capable of overriding the body's natural sleep-wake cycle, and can restore alertness in a person forced to be awake when normally asleep.

That same study also showed that long-acting sleeping medications—those which continue to act after the night is over—actually increased the daytime drowsiness).

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But the earlier study was conducted in a laboratory and only simulated jet lag by temporarily altering the volunteer's sleep cycle. Now, the researchers want to actually test what they've learned in a "real life" situation by studying volunteers who have traveled half way round the world.

Seidel said volunteers must be between 21 and 59 years old. They must have no problem sleeping well at home and must not have done shift work affecting their sleep cycle less than three months before the flight

All participants must have spent the last 21 days in the Pacific time zone. Starting 14 days before departure, volunteers will begin filling out forms describing their mood twice each day. This, said Seidel, will help researchers compare the volunteers' condition with what they encounter after the flight. The volunteers will also visit a physician at the Stanford Sleep Disorders Clinic for an interview.

Travel plans must meet certain criteria. Flights to either Tokyo (or its time zone) or London must have no more than five hours layover at an intermediate airport.

Participants, said Seidel, must spend at least three days after arrival overseas in either London or Tokyo (or those cities' time zone) and be willing to take the pills for three days and continue to document their moods in writing during this period.

Volunteers must agree to pass on the coffee, tea or alcoholic beverages offered on the flight. Abstention from alcohol and caffeinated beverages runs from the day of departure through 12 hours after the last pill is taken, Seidel said.

Participants will be given a suggested sleep schedule for the first three 24-hour periods after arrival overseas.

Seidel said potential volunteers might include vacationers traveling on a limited budget who might benefit from the money, as well as persons intellectually curious about participating in an experiment.

"We are also hoping that people will be willing to help with an experiment which might help us find an antidote to jet lag," Seidel said. "Anyone who has ever had to travel through multiple time zones and then function effectively on subsequent days would, I think, appreciate the benefits of treatment for the drowsiness and disorientation which often accompany jet lag," he added.

For further information about participating, contact Sue Cohen at the Sleep Disorders Center, (415) 325-4697.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

CHAPLAIN TRAINEES SERVE PATIENTS' SPIRITUAL NEEDS

STANFORD—

In the often science-dominated world of high technology medicine, Bethann McIntosh, Cindi Donald Burklo and Sara Armin have a different mission—to bring hope even to situations where the three chaplain trainees know there are no simple answers.

"It always seems so lacking in purpose when a child dies," said McIntosh, who will soon wind up a year's internship in Stanford University Medical Center's trainee program. Helping patients and their families at affiliated Children's Hospital at Stanford (CHAS) connect with whatever restores their faith in life can be a real challenge for someone like herself, who sees children dying from such illnesses as cystic fibrosis or leukemia.

To salvage meaning, McIntosh, a Congregational minister and graduate of the Pacific School of Religion in Berkeley, tries to tune into and build upon whatever belief system the parents and children themselves share.

"Part of being a chaplain means talking to God. I call that prayer," McIntosh recently wrote in a CHAS newsletter. "But, it also means talking to *people*, and listening and sharing and caring and praying with people—people who are feeling hurt and angry and afraid and confused; people who are having doubts and wondering if there really is a God; people who are feeling separated from God and abandoned."

Burklo, working mostly with dying cancer patients, said she's found in them an attitude, trust, and appreciation in life that she wishes more people could discover before being faced with death.

The Congregational minister (of the United Church of Christ) chose to work with cancer patients at the medical center because, she said, "There's lots of fear surrounding cancer, and so many different reactions to it. I felt it was important to help people explore it and gather their resources."

The "very special people" Burklo meets are exemplified by one patient who's had cancer for 15 years, is terminally ill, and who "really trusts herself." Burklo said this woman felt like living alone for awhile, so she camped out in a tent under a tree for an entire season.

Armin, based at the pediatrics unit of Stanford Hospital, believes her presence and spiritual attention to families in pain can be a source of healing, although some want simply to know the church's stand on an ethical issue such as terminating life support. The Methodist minister who is also trained in psychology told the mother of a 17-year-old terminal patient who wanted to be allowed to die that the church would not condemn her for ending his suffering.

One long-term encounter was with a young dying boy's parents who told Armin, "Even if we've only had Eric 21 months it's been worth it for all the love he's brought us."

"I think crises like these can be spiritual turning points for people," Armin said. "The eternal question of 'Why me?' can lead to greater faith or, by contrast, a loss of faith. I saw Eric's parents transform their entire attitude toward life—they became able to see clearly the triviality of most material and other things they used to care about."

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McIntosh, Burklo and Armin have served as Stanford University Hospital's first chaplain trainees in a national program certified by the American Association for Clinical Pastoral Education. The program makes it possible for qualified individuals to learn about the chaplaincy's role in a hospital setting, said the Rev. Francis Geer, who, as one of three full-time chaplains at Stanford Hospital, served as supervisor to the trainees. (Geer recently left Stanford for a position in Boston. During the transition period until a successor is found, the Rev. Sharon Thornton is serving as trainee supervisor.)

"This program exists at many hospitals all over the country, many of which are religious or community run," noted the Rev. Ernie Young (currently on sabbatical), a Methodist and director of the chaplaincy service at Stanford Hospital. "The nice thing about having it at a teaching hospital such as Stanford is that there are enormous learning resources, as well as the presence of many housestaff at roughly similar stages in their careers as our trainees—this provides a companionship, zeal, and mutual understanding that wouldn't otherwise exist."

At various stages of ordination and representing different denominations, trainees should realistically reflect the diversity of belief systems found among hospital patients and families, said Young.

"Unlike other ministers, hospital chaplains must be able to respond to people of all denominations," although rabbis and other religious leaders not currently represented in the program are available on-call in the community, Young said.

The first year's trainees were accepted into the program because, among other criteria, "these people have been through things in their personal lives which equip them to better help others," Young said. He added that the trainees have interacted not only with hospital staff, but also with medical students, "for the mutual learning and enrichment of both." For example, Young teaches a course at the medical school on medical ethics, which the trainees attended in addition to their other classes.

Hospital chaplains may perform such services as weddings, baptisms, sacrament of the sick, and the reading of scripture.

However, as Young explained: "This program allows us to place someone on a particular unit for an extended period, which eventually leads to his or her becoming an integral member of the health care team. This is something our permanent staff can never do," he said, "because most of our work involves running around from crisis to crisis."

"Sara found she spent much initial time just getting to know the many different staff and professional people on the unit, and letting them get to know her, so they could develop a well-organized team approach to patient care," Geer added.

Funding for the training program came from a variety of sources, including a gift from the Charis Fund of Portola Valley; an anonymous donor; and a gift from Children's Hospital at Stanford. Trainees pay tuition to the program.

Stipends are $8,000 a year per trainee, Young said. "While many institutions don't give their trainees stipends," he said, "we are accepting donations for this purpose, since Stanford is in a high-cost area."

A special fund was set up for chaplaincy training program donations, which can be sent to: Chaplaincy Service, Room C112A, Stanford University Hospital, Stanford, CA 94305.

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FOR IMMEDIATE RELEASE

PARAMEDIC TRAINEES EARN CREDIT FROM FOOTHILL COLLEGE

STANFORD—

Students enrolled in Stanford University Hospital's Paramedic Education program may now earn credit from Foothill College, SUH and the Los Altos Hills-based community college have announced.

Under the recently established cooperative arrangement with Foothill College, graduates will be eligible to receive credit leading to an Associate Degree and all benefits and privileges of students registered at the community college. Graduates are also prepared to enter the county certification process required for employement.

The Pre-hospital Care Program is currently the only Emergency Medical Technician-Paramedic program operating in the Bay Area. In more than 1,000 hours of instruction and practical on-the-job training, students in the 10-year-old program have learned to make the the rapid, lifesaving decisions needed to care for trauma and emergency victims enroute to a hospital, said Dr. Michael Eliastam, SUH director of emergency services and acting chief of staff.

Eliastam said the new arrangement allowing community college credit, "puts the student on a career track offering maximum options and flexibility. Paramedic work is demanding and exciting. Now these challenges and experiences can be banked toward future academic and career enhancement if the student chooses."

Program Coordinator Sandra Rehmar, R.N., M.S., said the program has a fulltime six-month course or a parttime one-year course. Students wishing an associate degree must attend college the equivalent of two years full time, including the paramedic portion of training.

Certified paramedics communicate by radio with hospital-based physicians and nurses to provide a sophisticated level of care to emergency patients before they reach the hospital. In addition to first aid procedures performed by emergency personnel with less training, paramedics may administer emergency drugs and perform such invasive procedures as inserting a breathing tube into the trachea under the radio-directed supervison of a physician or specially trained nurse.

Classes are held at Foothill College's new Middlefield Road Campus in Palo Alto. Clinical training takes place at SUH and other Bay Area hospitals.

Program details and prerequisite information is available through the Middlefield Campus, 4000 Middlefield Road, room B-7, Palo Alto, CA 94301. For further information, phone (415) 497-6017.

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FOR IMMEDIATE RELEASE

SUH BUDGET RETAINS CURRENT RATES FOR COMMON SERVICES

STANFORD—

Stanford University Hospital's 1984-85 budget will hold the line on daily care rates for nearly half of the approximately 20,000 patients admitted annually, the Board of Hospital Directors has decided.

However, patients requiring the highest levels of nursing and technical care will be paying more for the time they require these services after Sept. 1, bringing the average daily care rate increase to 8.9 per cent. Related patient services—such as laboratory fees—will increase an average of 7.9 percent, said David Sakai, director of finance.

The selected increases for certain categories of patients have been structured to create a more accurate "cost for service" pricing structure, said Sakai.

The board approved Thursday (Aug. 9) an operating budget of $184.9 million, an 8.3 percent increase above the 1983-84 expense of $170.7 million, said Sheldon S. King, SUH director and executive vice president.

He said the rise is based in part on expenses associated with a projected 5.6 percent increase in the number of patient days—which will also bring in additional revenues when the new budget takes effect Sept. 1.

King said patient days (calculated by multiplying the number of patients by the days they stayed in the hospital) are expected to rise to a more normal level after two years of decline for a variety of economic factors.

King said the remainder of the rate increase, required to meet the demands of general inflation and other increased costs, was "smaller than it might have been otherwise, because the hospital has been able to reduce $4.8 million from the current budget through a variety of cost containment measures."

Daily care rates which will stay at current levels include obstetric services, and the daily rates for a category of surgical and medical patients requiring less than six hours daily of nursing care. Those patients requiring intern and resident care will pay the present rate of $384 per day after Sept. 1 for a semi-private room.

No rate increase is being put into effect for comparable patients in a ward, $362 per day, or in a private room, $438 daily.

The major change in rate structures includes addition of a new rate category—$548 per day—for medical/surgical patients who receive 6-8 hours of nursing care per day. Currently, these patients are charged the same rate as patients requiring six hours or less of nursing.

Another typical room rate is $245 per day—up from $225—for the care of healthy newborn infants.

Intensive care room rates will be increased 8.9 percent, with the most commonly charged rate going from $1,338 to $1,457. Psychiatry inpatient charges will rise from $426 to $464 daily.

A total of $6.1 million has been earmarked for equipment additions and other capital improvements. Projects include radiographic/fluoroscopic equipment, $488,000; linear accelerator construction, $350,000; nuclear magnetic resonance construction, $350,000; renovation for trauma center and X-ray room, $288,000; and a computerized Medicare Prospective Payment System, $250,000.

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FOR IMMEDIATE RELEASE

PERINATAL RISK: CONFERENCE SCHEDULED

STANFORD—

"Care of the Perinatal Patient at Risk: Conception to Infancy" is the topic of the sixth annual education program of the Mid-Coastal California Perinatal Outreach Program (MCCPOP), sponsored jointly by Stanford's and Santa Clara Valley Medical Center's departments of gynecology and obstetrics and pediatrics.

The program, beginning Sept. 5 in Faber Auditorium of Children's Hospital at Stanford, will take five consecutive Wednesdays to focus respectively on conception, antepartum (before childbirth), intrapartum (during childbirth), neonate at risk, and infancy and beyond.

The series has been designed to provide a theoretical and practical basis for physicians, nurses, and other health care professionals who care for high-risk perinatal patients, said registered nurse Cecele Quaintance, program director of MCCPOP.

Topics include "Infertility," "Cost of Perinatal Care," "Amniocentesis and Genetic Counseling," "Diabetes and Pregnancy: The New Insulins and Glucagon," "The Process of Maternal Referral and Transport," "The Use of Intrapartum Ultrasound," "Early Care of the Infant with Cardiac Anomalies," "Infants at Risk for S.I.D.S.," and "Decision Making and the Defective Newborn," among others.

Faculty from Stanford will be joined by nutritionists, administrators, and specialists from Santa Clara Valley, other hospitals, and private practice.

MCCPOP has developed educational programs throughout an eight-county region (San Mateo, Santa Clara, San Benito, San Luis Obispo, Monterey, Santa Cruz, Stanislaus and Alameda). The program includes a perinatal resource center, a genetic counseling center, and a birth defects center, as well as providing emergency consultation and transport, perinatal nursing internships, and intensive care nursery internships.

A registration fee will be charged participants of the upcoming conference, for one day, several days, or the entire program, with a lower charge for those registering by Aug. 20. The conference has been approved for continuing education credit. For further information and registration materials, call Kim Leadon at (415) 497-5763.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

JAMISON NAMED ACTING CHAIRMAN OF MEDICINE

STANFORD—

Dr. Rex Jamison, professor of medicine and physiology and chief of the division of nephrology at Stanford University Medical Center, has been appointed acting chairman of the department of medicine, announced Dr. Lawrence Crowley, vice president for medical affairs.

Jamison was also named acting chief of the medical service of Stanford University Hospital. Both appointments were effective Aug. 1.

He replaces Dr. Kenneth Melmon, professor of medicine, who in June resigned both administrative positions effective July 31.

Jamison has published extensively, best known for his research in the area of renal physiology. He's played a key role in the creation and operation of the hemodialysis center at Stanford. More recently, he announced reactivation of the medical center's kidney transplantation program.

A graduate of Harvard Medical School, Jamison, 51, was a Rhodes Scholar, a Markle Scholar, and a Guggenheim Fellow, among other honors. He joined the Stanford faculty in 1971, after holding posts at the Washington University School of Medicine, The Jewish Hospital of St. Louis, and the National Institutes of Health.

At Stanford, he has been an undergraduate advisor, chairman of the hospital's Dialysis and Transplant Committee, member of the medical school's Basic Sciences Curriculum Committee, member of the university's Senate of the Academic Council, and active faculty participant in other capacities within the university and department of medicine.

Jamison belongs to the American Physiological Society, the American Society for Clinical Investigation, the California Academy of Medicine, and the Western Association of Physicians, among other professional organizations. This year he serves as chairman of the program committee of the American Society of Nephrology. He has served on numerous editorial and advisory boards.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

NEW DIRECTOR FOR STANFORD'S LAB ANIMAL MEDICINE DIVISION

STANFORD—

Dr. Thomas Hamm has been appointed director of the division of laboratory animal medicine at Stanford University Medical School, announced David Mendelow, associate dean.

Hamm, whose post became effective July 23, came to Stanford from North Carolina, where he headed the department of general and biochemical toxicology at the Chemical Industry Institute of Toxcology in Research Triangle Park. His appointment marks the first time a veterinarian will head the division.

Hamm succeeds Dr. James Dewson, who is planning to leave Stanford University to pursue other career interests.

In his new position, Hamm will be in charge of the medical school's animal laboratories, which will be moving to a new facility — currently being built underground adjacent to the medical center — in January 1985. About 75 percent of the medical school's principal investigators make use of laboratory animals in their research studies. On the average, about 8,000 animals from about 30 different species are accomodated within the division's facilities.

Under the direction of Hamm, Mendelow said, the division will increase its support of the needs of medical school researchers by, among other activities, recruiting veterinarians with specific areas of expertise. Longer range plans, he added, include establishing a post-graduate training program for research veterinarians.

Hamm received a doctorate degree of veterinary medicine from Colorado State University and a Ph.D. in comparative pathology from Bowman Gray Medical School in North Carolina.

Prior to his four year stint at the toxicology institute, Hamm served as an expert consultant and acting chief of the toxicology branch of the carcinogenesis testing program at the National Cancer Institute from 1978-80, and as assistant professor in the pathology department at University of Colorado Medical Center from 1975-78. Hamm has trained in the use of animal models for atherosclerosis research in addition to his training in toxicology.

Hamm can be reached at 497-3876.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

WEIGHT CONTROL PROGRAM STARTS NEXT MONTH AT STANFORD HOSPITAL

STANFORD—

An eight-week course on weight control is scheduled Sept. 18 to Nov. 6 at Stanford University Hospital.

The course, which is open to the public, will be held Tuesday evenings in the north cafeteria of the hospital.

Highlights of the program, entitled "An Enlightening Experience," include a personalized weight-loss plan, low-calorie cooking demonstrations and recipes, menu planning, and tips on dining out wisely. Guest speakers will discuss stress reduction, behavior modification techniques, and exercise.

Kristine Birge and Patricia Kearney, registered dietitians from the hospital's department of dietetics, will conduct classes. The fee is $300, with a $50 refund if a weight goal is met.

The registration deadline is Sept. 4, and early registration is advised. Enrollment is limited to 20. Another session is planned for Jan 8.

For more information, call Birge at (415) 497-5440.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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EDITORS: Photo of Oyer and diagram of device available on request if not included.

FOR IMMEDIATE RELEASE

HEART ASSIST DEVICE APPROVED FOR CLINICAL TRIALS

STANFORD—

A fist-sized electronically controlled device that can temporarily help a failing heart pump blood through the body is ready to be implanted on an emergency basis in patients at Stanford University Medical Center.

The Food and Drug Administration (FDA) last month granted approval for human testing of the device, which has been under development for more than a decade by Stanford physicians and scientists at Novacor Medical Research Corporation of Oakland.

Last week, an operating room rehearsal prepared physicians, nurses and other personnel for the first patient.

The operation will be the first implantation of a heart assist device performed at Stanford, although nationwide during the last few years more than 200 patients have been outfitted with various temporary devices that supplement the heart's pumping action.

The Novacor device, to be implanted in patients on a temporary basis, is a forerunner to a totally implantable pump with a portable power supply that could bolster a patient's own heart on a longterm basis, said Dr. Philip Oyer, associate professor of cardiovascular surgery.

Oyer added that although development of the longterm implant is still under way, more than 10 years of laboratory and animal testing paved the way for the FDA's recent approval of the temporary device for human trials.

Stanford and Novacor have permission to place the device in up to 20 patients.

Patients who take a sudden turn for the worse while waiting for a heart transplant, or those whose hearts unexpectedly fail during open-heart surgery but are thought to have a good chance of recovering if their own hearts are given several weeks of rest, are among the potential candidates for implantation, Oyer said. The device has not been approved for patients who are in the process of having a heart attack, he added.

The temporary device will be left in place for up to two weeks, Oyer said, until the patient's own heart is strong enough to work on its own again.

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The device is hooked to the failing heart and sits below it in the abdominal region. It draws blood from the patient's own weakened organ and pumps the blood around the body, taking most of the burden off the sick heart muscle and giving it a rest.

"This current device is a major step toward a totally implantable assist system that could supplement a patient's own heart for several years," Oyer said. "However this totally implantable system is still under development and remains several years away from clinical use," Oyer added.

The implantation of this first generation mechanical device by Stanford cardiovascular surgeons known worldwide for their pioneering heart transplantation program, will not represent a shift in focus from transplantation, Oyer said.

"They are complementary technologies. There are some patients who cannot receive transplants for a variety of reasons. For these patients, the longterm device under development might be useful," Oyer said. But, "for the foreseeable future, heart transplantation remains the best option for patients with endstage heart disease."

Shumway, cardiovascular surgery department chairman, added, "When there is a chance that a damaged heart can recover with time, a temporary assist device would be preferable to transplantation."

The device—technically known as a left ventricular assist device (LVAD)—takes over for the left ventricle, the muscular workhorse heart chamber that pumps blood into the body's 60,000-mile network of blood vessels.

The plastic pump encased in a metal housing will be installed in the patient's abdominal region. Blood is shunted to the pump through a dacron conduit from the left ventricle. The pump ejects blood back into the circulatory system through another dacron tube leading to the aorta.

The LVAD is linked by a cable passing through the patient's abdominal wall to a bedside control console that provides power. The console also holds computerized equipment that monitors the heart's beating pattern and directs the pump to beat in synchrony with the patient's natural cardiac rhythm.

The new pump has been under development since 1972 by Stanford and Novacor researchers. Dr. Peer Portner, chief executive officer of Novacor, has directed engineering research and development of the device, which is called the Pulsemaker Heart Assist System by its manufacturer. Portner is also consulting associate professor of cardiovascular surgery at Stanford.

The Novacor device incorporates several design improvements over previous LVADs, Oyer said. The most important of these is that unlike the prevalent pneumatic systems—whose mechanical action depends on bursts of compressed air fired through a tube that enters the patient's body—this pump is electronically controlled and activated.

In the future system currently under development and probably available in about three years, the power/monitor computer will be miniaturized to a size that can be completely implanted inside the body. A belt worn around the waist will be capable of transmitting power through the intact skin to the implanted components of the permanent LVAD.

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The belt transformer will do away with the need for wires that pierce the skin, which are a potential source of infection, Oyer said.

Like an artificial heart, an LVAD is installed at the present time only in patients for whom more conventional therapy has been ineffective and who would die without the mechanical aid, Oyer explained. Current LVADs are primarily for patients who need to be tided over a critical period of heart failure, he added, and only for patients whose own diseased hearts are likely to recover during the few days or weeks the device remains in place.

This includes patients having recent heart surgery who are in cardiogenic shock and whose own hearts cannot provide the blood pressure needed to maintain circulation, and open-heart surgery patients who cannot be weaned from the heart-lung bypass machine immediately following an operation.

An LVAD might also bridge the gap for a potential heart transplant patient whose own heart cannot hold out during the wait for a suitable donor organ, Oyer said.

Oyer estimated that Stanford may perform between five and 10 implantations in the next year. Clinical trials could expand to other medical centers within a year or two, he added, if the device proves effective.

In a study for Novacor, the consulting firm SRI International estimates that more than 100,000 patients today could potentially benefit from a permanently implantable version of the LVAD.

According to Oyer, survival rates were poor with LVADs tested in the 1970s; fewer than 25 percent of patients survived long enough to be weaned from the pump and discharged from the hospital. More recently, survival rates for patients with temporary LVADs have increased to nearly 50 percent, he noted.

Other centers that have tested LVADs include Pennsylvania State University in Hershey, Washington University in St. Louis, Boston Children's Hospital, the Cleveland Clinic, Presbyterian Medical Center in San Francisco, and the Texas Heart Institute, Oyer said.

The Stanford/Novacor device enters clinical testing after more than a decade of laboratory experimentation. It has been tested in more than 100 calves, some of which lived with the device for as long as six months, Oyer reported. Further development and animal testing is necessary before the fully implantable LVAD can be considered in humans, Oyer said, to prove that the pump and its components can work continuously for a duration of several years. These studies on the longterm LVAD will be carried out over the next three years, he said.

Although the patient will be tethered by cords to the external console with the present temporary device, the limited mobility is no different from being dependent on a respirator or other life-sustaining device for a few weeks, Oyer said.

The totally implantable device, once it becomes available, will include a small rechargeable battery pack allowing the patient to become untethered. But the patient will still need to be near an external electrical power source such as a wall outlet or battery, Oyer said. An implanted battery will be designed into the system to provide up to an hour or two of device operation free of any external electrical power.

"It is primarily because of this dependency on an external power source for all patients with mechanical cardiac support devices of any kind, that we believe cardiac transplantation, which allows complete freedom and mobility, will offer the better quality of life for the foreseeable future," Oyer said.

The pump itself is straightforward. Two pusher plates that form the device's opposite sides move together to squeeze blood out of the chamber. As blood refills the internal sac, the plates pivot apart.

The pump's rhythm is controlled by a microprocessor that tells it when to beat, and how forcefully. In most cases, it is programmed to beat in synchrony with the patient's own rhythm, Oyer said, although it also has the capacity to beat at a steady predetermined rate, irrespective of the patient's own heart rate. It can adjust automatically for increased exertion and can beat up to 180 times per minute, a pulse rate achieved during strenuous exercise by an active young adult, he added.

The surgical implantation procedure is relatively simple, Oyer said. The pump and supporting components are installed in the abdominal region below the heart.

While blood is detoured around the heart through a heart-lung bypass machine, incisions are made in the heart and the aorta, the major artery leading from it. Through a small puncture made at the bottom of the left ventricle, a tube is placed so that blood can flow into the pump. Another tube leads from the pump to the aorta, returning blood to the circulatory system. These tubes are plugged but left in place when the LVAD is removed.

Animal tests have revealed some medical complications that could develop with LVAD use, Oyer said. In short-term use, there is a small possibility that blood clots could form within the device and travel to other parts of the body, such as the brain, causing stroke. There is also a small risk that blood components could become damaged, causing bleeding problems, he added. And there is a slight chance of mechanical or electrical failure in the LVAD itself, he said.

Long term studies in animals point to added potential complications including a buildup of calcium deposits on the device's valves, and blockage of the dacron tubes due to layering and growth of cells on the inner surfaces. These complications may not occur in adult humans, Oyer said, but might be unique to the young, growing animals tested, whose metabolism is different from adults. Further testing in adult animals—particularly in sheep whose hearts are closer in size to humans—is ongoing, he added.

Some other drawbacks may crop up for patients on the LVAD, Oyer added. Some individuals could be disturbed by the pump's vibration and noise generated by the pump as it empties and fills, he said. But although mobility is limited by the external console in the current device, freedom of movement will become much greater when the belt model becomes available, he observed.

—30— LH3

Editors: Tom Loarie, president of Novacor, may be contacted at (415) 568-8338 in Oakland.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911
FOR IMMEDIATE RELEASE

HOME GLUCOSE MONITORING ON DISPLAY\c

STANFORD --

The diabetes and metabolism clinic at Stanford University Medical Center is presenting educational sessions Thursday, Oct. 4, to inform the public of methods and equipment used in home glucose monitoring.

The agenda will include visits by sales representatives, and question and answer periods following the lectures, said Dr. Fredric Kraemer, assistant professor of medicine and director of the clinic.

The 30-minute class, to be held at 10 and again at 11 a.m. in room A160, is open free to the public. To reserve a seat, call Ingrid Gallo, at (415) 497-5947.

9-28-84 --30-- LA3

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

VOLUNTEERS SOUGHT FOR SMOKING CESSATION STUDY

STANFORD --

Researchers at Stanford University Medical Center are seeking about 100 volunters to participate in a study investigating how the effects of nicotine chewing gum might help people to quit smoking.

Smokers who wish to quit with the aid of Nicorette, a nicotine chewing gum available by prescription, can receive up to a three month supply of gum in exchange for being in the research program. Participants will attend four weekly meetings at Stanford where they will fill out questionnaires and discuss the project, said Andrew Gottlieb, a graduate student conducting the research under the auspices of the behavioral medicine clinic.

Nicorette is designed to help smokers kick their dependence on cigarettes without suffering from withdrawal symptoms, such as irritability, hunger, anxiety, depression or boredom, the researcher said. Each piece of gum contains about the same amount of nicotine as one cigarette but is absorbed more slowly. Smokers who have quit chew between eight to 15 pieces of gum a day whenever they experience a craving for a cigarette.

``We are attempting to measure the physical -- through the participants own reports -- and psychological symptoms of persons during the critical first few weeks of quitting smoking,'' Gottlieb said. Some of the participants will be receiving a placebo initially but will be given the gum if they choose after several weeks, he added.

``A number of studies have suggested that using Nicorette gum can double the quit rate,'' said Gottlieb. ``Other studies show that Nicorette reduces the severity of withdrawal symptoms.''

The study is being funded by Merrill Dow Pharmaceuticals Inc., manufacturer of Nicorette.

For information on how to participate, call only after 5 p.m., Oct. 1 through 5, (415) 497-5867.

Sept. 28, 1984 _30_ mg4

EDITORS: Gottlieb may be contacted during business hours and weekends at (415) 324-2666

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FOR IMMEDIATE RELEASE

ANNIVERSARY AT MEDICAL CENTER BEGINS WITH OCT. 12 CELEBRATION

STANFORD--

Opening ceremonies for Stanford University Medical Center's 25th anniversary celebration have been scheduled for Oct. 12 in Sherman Fairchild Auditorium.

Guest speakers for the all-day public event include Paul G. Rogers, former chairman of the congressional House Subcommittee on Health and the Environment, who will discuss "The Academic Medical Center as a National Resource." Rogers, a Florida Democrat, currently practices law in Washington, D.C.

Lawrence G. Crowley, vice president for medical affairs, said the object of the anniversary celebration is to rededicate the institution to the principles established at the time the medical school was brought to the Stanford campus in 1959 after 51 years in San Francisco. The principles link medical education and patient treatment with the total resources of the university and the surrounding communities.

Throughout the coming year, a variety of educational events will be scheduled in honor of the consolidation.

The morning program, starting at 10 a.m., includes welcoming speeches by Lawrence G. Crowley, vice president for medical affairs and Donald Kennedy, president of the university. "There's No Hope for the Satisfied Man" is the topic of a speech by Robert H. Alway, professor of pediatrics, emeritus, and dean of the Medical School from 1957 to 1964.

Also speaking will be Hugh O. McDevitt, professor of medicine and microbiology, and a slide program depicting the Medical Center will be shown.

"Song of the Vowels," a Jacques Lipchitz sculpture honoring the memory of Stanford cancer pioneer Henry S. Kaplan, will be formally dedicated in midday ceremonies. Kaplan, a professor of radiology, died earlier this year.

Afternoon lectures will begin with Rogers at 2 p.m. and will also feature "The Heart of the Matter" by heart transplant pioneer Norman E. Shumway, professor and chairman of the department of cardiovascular surgery; and "Responding to New Challenges: The Future of Stanford University Medical Center," by Victor Fuchs, professor of economics and of family, community and preventive medicine.

Since 1959, the goals of the medical center, summarized in a statement by Crowley, have included bringing together under one roof a full-time faculty in the basic and clinical sciences to advance medical knowledge.

Other goals include access to academic resources on the rest of the campus, the opportunity to apply basic research findings in a nearby clinical setting, and to "provide exemplary patient care in a teaching hospital environment both to the citizens of Palo Alto and nearby communities and to those patients referred for specialized care."

9-27-84 —30— MG1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

SMASHING LECTURES PLANNED AT MEDICAL CENTER

STANFORD—

Next week marks the opening of the fall 1984 S * M * A * S * H lecture lineup at the Stanford University School of Medicine.

The lecture series — whose full name is "Stanford Medical and Scientific Highlights" — was initiated in 1980 by the medical school's Faculty Senate, which now cosponsors it with the Stanford Medical Students Association.

The season's lectures are as follows:

- Oct. 5: "AIDS, Toxoplasma, and Tumors," with Dr. Frances Conley, associate professor of neurosurgery;
- Oct. 19: "Muscle Building and Muscle Bound: Activation and Expression of Muscle Genes," with Dr. Helen Blau, assistant professor of pharmacology;
- Nov. 2: "Transvection, Amplification, and Cloning of Genes," with Dr. Leonard Herzenberg, professor of genetics;
- Nov. 16: "DNA Polymorphisms in Humans," with Dr. Luigi Cavalli-Sforza, professor of genetics;
- Nov. 30: "How Genes Control Development," with Dr. David Hogness, professor of biochemistry.

The SMASH organizing committee hopes to encourage a wide exchange of ideas, and to provide a forum by which the community may be informed of significant medical research and developments at Stanford. The Friday talks are geared toward all those with basic scientific understanding.

The season's presentations will take place in the Fairchild Auditorium. Lectures will start at 4:30 p.m. and be followed by TGIF gatherings.

9-27-84 —30— LA3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

COLD SORE SUFFERERS SOUGHT BY RESEARCHERS

STANFORD—

Persons suffering from cold sores, known medically as recurrent herpes, are being sought by Stanford researchers for an experiment which could lead to a vaccine against this common malady.

Dr. John Torseth of the division of infectious diseases, said about 30 to 40 volunteers will be asked to make two visits to Stanford Medical Center for blood drawing and a brief examination. Participants will be paid $10 per visit and will have priority for receiving the vaccine when it is developed to the point of human tests, Torseth said.

The vaccine has been produced using recombinant DNA techniques, a method of altering natural biological substances to new forms. Earlier attempts to produce a vaccine using more conventional means were risky because impurities in the process could potentially contaminate recipients, Torseth said.

Torseth said only persons with herpes on the face or lips are eligible to participate in the study. Virus cultures will be obtained to verify what type of virus each patient has.

For further information or to volunteer, call Torseth at (415) 497-5715 from 9 a.m. to 5 p.m. If no answer, call (415) 497-5909.

Sept. 27, 1984 —30— mg1

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

VOLUNTEERS SOUGHT FOR STUDY ON WEIGHTLESSNESS AND THE KIDNEY

STANFORD—

Healthy male volunteers aged 20 to 55 and heart transplant recipients are helping researchers learn how and possibly why weightlessness enountered in space flight changes kidney function.

Dr. Stephen Tomlanovich, a fellow in nephrology at Stanford University Medical Center, said the study is a joint project with NASA-Ames Research Center of Mountain View, where scientists had noticed that astronauts encountering weightlessness tended to eliminate fluids more readily than normal.

To simulate space flight for the current experiment, about six men will be immersed in warm water for about three hours. Several blood samples will be drawn to measure how kidney function has changed in response to the simulated weightlessness encountered in the tub.

Weightlessness or immersion causes more blood to flow into the heart, resulting in temporary enlargement of that organ. When this occurs, nerve and hormonal signals tell the kidneys to help reduce the pressure caused by the swelling in the body. The kidneys respond by triggering urination.

The heart transplant patients offer a unique study opportunity, Tomlanovich said, because they have no nerves connected to their implanted hearts. Therefore, their response to water immersion should be quite different from other people. This, he said, should offer insight about the role of the nervous system in kidney function.

The information, he said, could ultimately be useful to the space program if methods of counteracting the effect of weightlessness on the kidneys could be developed. The excess urination is potentially hazardous, Tomlanovich said, because it removes needed body fluids.

The normal, or control, volunteeers, will be paid $50 for spending about three hours in the tub and about three hours more undergoing tests, the researcher said.

Persons interested in volunteering should contact Tomlanovich or Dr. Bryan Myers, associate professor of medicine (nephrology) and the principal investigator, at (415) 497-6248, weekdays between 8 a.m. and 5 p.m.

Sept. 24, 1984 —30— mg4

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

DRUG BLOCKS PARKINSONISM IN ANIMAL TESTS

STANFORD—

A drug that shows promise in slowing the course of Parkinson's disease has been successfully tested in animals by a Stanford University neurologist and his research team.

In the Sept. 28 issue of *Science* magazine, the scientists reported that the drug, pargyline, prevented Parkinson's disease symptoms from developing in monkeys that had been given a chemical that causes a severe form of the disorder.

"We have shown that pargyline blocks experimentally induced parkinsonism in animals," said Dr. J. William Langston, assistant professor of neurology at Stanford Univeristy School of Medicine who carried out the research at Santa Clara Valley Medical Center and the Institute for Medical Research in San Jose.

"The exciting possibility—and it's still only a possibility—is that this drug might also block progression of Parkinson's disease in humans," Langston said in an interview. The drug currently is in use as a treatment for high blood pressure.

"Actually blocking or slowing Parkinson's disease, rather than controlling its symptoms, would be a whole new concept in treatment of progressive neurodegenerative diseases," Langston said.

Parkinson's disease is a neuromuscular disorder characterized by stooped posture, rigid movements, shuffling gait, involuntary tremors and loss of facial expression. It is estimated to afflict approximately half a million people in the U.S., including one person in 40 older than 70, Langston said.

It is caused by death of cells in the part of the brain called the substantia nigra. These cells produce a vital brain chemical called dopamine, thought to be important in control of movement.

Treatment with the drug L-dopa, which the brain can use to make dopamine, controls symptoms so that most patients can lead fairly normal lives, Langston said. But L-dopa has undesirable side effects and eventually loses its effectiveness enabling the disease to progressively worsen, he explained.

Langston said that his team's studies, along with other work in the field, provide enough evidence of pargyline's effectiveness to begin testing similar drugs in people with Parkinson's disease.

Langston's colleagues in the research are Ian Irwin, a research chemist at the Institute for Medical Research (IMR), Dr. Elizabeth Langston, research associate at IMR, and Dr. Lysia Forno, Stanford professor of clinical neuropathology at the Palo Alto Veterans Administration Medical Center.

Pargyline is one of a class of prescription drugs called monoamine oxidase (MAO) inhibitors, Langston said. Another MAO inhibitor, called depranyl, has been used for several years in Europe to supplement L-dopa treatment of Parkinson's disease patients, he noted. A recent review of those patients' disease histories suggests that depranyl not only helped relieve symptoms but may have helped slow the course of the disease.

Langston and his colleagues plan to begin controlled studies of an MAO inhibitor in Parkinson's disease patients in the near future, he said.

Langston said that if MAO inhibitors prove to work in people as they have in monkeys, the drugs could slow or possibly prevent brain cell damage from becoming severe. "Parkinson's disease worsens very slowly," he explained, "so we can catch the disease early when the patient could go on to lead a fairly normal life."

Rapid progress in understanding Parkinson's disease followed a 1983 discovery by Langston and colleagues that a contaminant of synthetic heroin, known as MPTP, can cause permanent Parkinson-like symptoms in people (or monkeys) who consume the chemical. This discovery opened up new ways of studying the brain disease in animals, and new clues to the possible causes of the condition.

Research now suggests that pargyline may block MPTP from inducing parkinsonism by halting a chemical reaction that converts MPTP into more harmful substances in the brain. It is one of these more harmful substances that might actually kill the brain cells of the substantia nigra, Langston explained.

It is clear that MPTP itself is not toxic, Langston reported, because large quantities of this chemical were found in brain cells of the pargyline-treated monkeys, all of whom remained healthy and free of parkinsonism.

Langston's research on Parkinson's disease has been funded by The Retirement Research Foundation of Illinois, the Institute for Medical Research, Santa Clara Valley Medical Center, and the Veterans Administration Medical Research Program.

—30— LH4

EDITORS: Langston can be reached at (408) 299-5246.

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FOR IMMEDIATE RELEASE

PATIENT ON CARDIAC ASSIST DEVICE RECEIVES TRANSPLANT

STANFORD—

The implantable cardiac assist device which sustained a critically ill patient for more than a week was removed Thursday night (Sept. 13) in an operation which also gave the patient the new heart he needed for longer term survival, doctors said.

Dr. Philip E. Oyer, associate professor of cardiovascular surgery at Stanford University, said Robert St. Laurent, 51, was reported in critical but stable condition Friday morning at Stanford University Hospital after the six-hour operation which replaced both the left ventricular assist device (LVAD) and the patient's own ailing heart with a healthy new heart.

The operation—which Oyer said went smoothly—marked the first time at Stanford that an LVAD was used to support a patient until a biologic donor heart could be located and implanted. It was also the first time that the Pulsemaker Heart Assist System was implanted into a human patient.

Although about 200 patients have been outfitted with various temporary LVADs, Oyer told a news conference last week that the experimental Pulsemaker seemed to offer the best hope of serving as the nucleus of a future totally implantable portable system, since it was electronically—not pneumaticallly—driven and because it had specifically been engineered for portable use.

The system, unlike most others, minimizes the risk of infection, since the pump is completely implanted except for a single electrical support line into the body, Oyer said.

"We are confident that without the implanted device Mr. St. Laurent would not likely have survived until a suitable donor heart could be located," said Oyer, who headed the team which performed the surgery.

"This first use of the device seems to have been successful because of the effective functioning of a device which may someday offer seriously ill cardiac patients a mobile quality of life," Oyer added.

The surgeon explained that doctors decided to implant the fist-sized LVAD on Sept. 5 after the Ft. Lauderdale, Fla., resident's condition became grave. Efforts had been made earlier to keep St. Laurent alive using an intraaortic ballon pump, an inflatable device inserted into a major artery which by increasing and decreasing air pressure can augment cardiac function about 10 percent. The balloon pump initially improved his condition substantially, but later St. Laurent began to deteriorate and the LVAD was then implanted, Oyer explained.

The LVAD, which took over 100 percent of the workload of the heart's left ventricle (the main pumping chamber), functioned effectively and without complication during the entire eight days, even though the patient remained seriously ill from his longstanding illness, the surgeon said.

In July, the Food and Drug Administration after 14 years of testing in an engineering lab and on animals, approved human testing of the LVAD, manufactured by Novacor Medical Corp. of Oakland.

The pump, encased in plastic, takes over for the left ventricle, the muscular workhorse heart chamber that pumps blood into the body's 60,000-mile network of blood vessels. The device is connected to the failing heart, positioned below it in the abdominal region.

While he was sustained by the implant, St. Laurent had been able to get out of his bed and sit in a chair in the intensive care unit. His assist device was connected by a 14-foot cable to a bedside console which provided power and also contained monitoring equipment.

Within about three years, the functions provided by the monitor should be miniaturized to a size that can be completely implanted inside the body with no external wires piercing the skin, said Peer M. Portner, chief executive officer of Novacor and a consulting associate professor of cardiovascular surgery at Stanford.

St. Laurent had been accepted into Stanford's transplant program on July 6. For at least four years, he had been so ill from hardening of the arteries that he had been unable to work at his job as general manager of a recycling plant. Previous double bypass surgery had failed to correct St. Laurent's problem, and Oyer said that without a transplant the patient had no more than a few months to live.

St. Laurent was Stanford's 313th heart transplant patient since the program began in January 1968.

—30— mg4

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

Dr. Bryan Myers and possibly other researchers will meet with reporters at 10:15 a.m., Thursday, Sept.13 in the conference room library of the Cardiovascular Research Building, which is at the intersection of Quarry Road and Blake Wilbur Drive.

STUDY SHOWS LINK BETWEEN TRANSPLANT DRUG AND KIDNEY DAMAGE

STANFORD—

Scientists at Stanford University Medical Center have reported that permanent kidney damage can result from continuous use of a drug credited with dramatically increasing survival rates of organ transplant patients.

The study, published Thursday (Sept. 13) in the *New England Journal of Medicine*, warns that the potential benefits of the drug cyclosporine may be offset in transplant patients by the medication's ability to cause irreversible kidney damage.

But the benefits of cyclosporine might be retained while minimizing the risks to the kidney by modifying its chemical structure or by lowering the dose and shortening the duration of its use after transplantation, said Bryan D. Myers, associate professor of medicine (nephrology), and principal author of the study.

Stanford's own heart transplant program has already modified use of cyclosporine based partly on clinical data leading to the current article, said Dr. Philip E. Oyer, associate professor of cardiovascular surgery and a member of the Stanford transplant team.

Myers said that transplant teams around the nation had suspected cyclosporine might cause damage to the kidneys since about 1978, two years after the drug was first introduced experimentally.

However, he added that studies of the drug's use in kidney transplant patients had not resolved whether kidney damage was being caused by the drug or by the patient's rejection of the donor organ.

In the current study, 79 heart transplant patients whose kidneys were normal at the time of transplant were examined for kidney function during a one-year period following the surgery.

The 32 patients who received cyclosporine to control rejection of the new heart were found to have less effective kidney function several months after transplant than a comparable group of 47 patients who received other anti-rejection drugs.

The extent of adverse symptoms varied among the heart transplant patients on cyclosporine, Myers reported. While some suffered no obvious symptoms of major kidney damage, two of the cyclosporine patients contracted end stage renal disease and had to undergo kidney dialysis.

Myers said the current study shows that some loss of kidney function, observed in 100 percent of the patients studied, could be attributed directly to the cyclosporine, a fungal derivative. He said damage typically took the form of scarring of kidney tissue.

The findings suggest "that any benefit derived from reduced rejection of renal allografts (kidney transplants) may be more than offset over the long term by chronic nephropathy (kidney damage) induced by the cyclosprine therapy itself," the article's authors said.

9-12-84

-more-

However, they noted that use of the drug in low doses and on a short term basis may not lead to irreversible kidney problems.

"It is to be hoped," the authors continued, "that measures will be developed that will widen the margin of safety between the dose of cyclosporine required to achieve effective immunosuppression and the dose likely to cause renal damage."

Co-authors of the article include Jon Ross, acting assistant professor of pathology; Lynn Newton, R.N.; John Luetscher, emeritus professor of endocrinology; and Mark Perlroth, clinical professor of cardiology.

Oyer said that steps have already been taken to reduce the potential danger of kidney damage while retaining high survival rates for heart transplant patients at Stanford.

The current survival rate for heart transplant patients at Stanford is 81 percent for one year, and 73 percent for two years. Before cyclosporine began to be used on all heart transplant patients at Stanford in December 1980, the survival rate was 63 percent for one year, and 56 percent for two years, according to the transplantation program's statistics.

A total of 311 heart transplants have been performed at Stanford since the program began in January 1968, including 200 before cyclosporine became available.

Oyer said dosages of cyclosporine have been reduced in the most recent group of patients, who are receiving the drug in conjunction with azathioprine (Imuran), an older immunosuppressive. Also, a modified version of cyclosporine, offering the possibility of reduced kidney toxicity, is currently being tested in the laboratory, he said.

One patient who suffered serious kidney damage after his transplant about two years ago has been taken off cyclosporine and is reported doing well on azathioprine, while another patient was reported doing well after his cyclosporine was substantially reduced.

Oyer noted that the two patients placed on dialysis subsequently died, although in both cases causes in addition to renal failure were involved, Myers said. Oyer said both of these patients were unusual because unlike other pre-cyclosporine patients who remained on their original immunosuppressive protocol, these two patients were transferred to cyclosporine because the drugs they had taken failed to protect them adequately.

In an editorial appearing in the same *New England Journal* issue, Terry B. Strom and Rolf Loertscher, physicians at Beth Israel Hospital in Boston, said they were "optimistic that a clinical trial can aid in selecting safe protocols that will preserve the dramatic improvements in transplant success."

Strom and Loertscher noted that smaller doses of cyclosporine and/or newer drugs or treatment methods might be used. Both doctors noted the use of lymph node irradiation, which has been reported by Stanford physicians as a promising adjunct to medication in the prevention of rejection in kidney transplant patients.

Cyclosporine, marketed as Sandimmune by Sandoz Chemical Co. of Basel, Switzerland, had been heralded as a major improvement in the treatment of transplant patients. The precise mechanism by which the drug works is uncertain, but it appears to inhibit the action of T-cells, cells of the body's defense system responsible for rejecting foreign tissue.

Researchers have said that cyclosporine's principal advantage over more conventional anti-rejection drugs such as prednisone and azathioprine was its ability to prevent rejection while allowing the body to retain some of its natural ability to fight off infection.

Cyclosporine also made possible combined heart-lung transplantation, because unlike other immunosuppressives which retard the healing process, it allowed healing of the windpipe following surgery.

Cyclosporine is a metabolite of the fungus Trichoderma polysporum and is composed of 11 amino acids hooked together to form a ring.

Funding for the study came from grants from the National Institutes for Health.

—30—

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

FORMER PREMATURE INFANTS GATHER AT HOSPITAL REUNION

STANFORD—

About 500 youngsters who began life struggling for survival in Stanford University Hospital's neonatal intensive care unit are expected to gulp juice, munch food, pet animals and shake hands with clowns at the 2nd Annual Preemie Grad party.

Barb Magee, a registered nurse in the unit and coordinator of this year's reunion, said all youngsters who underwent sustained treatment in the unit have been invited with their parents to the event, scheduled Sept. 16 from 1 to 4 p.m. in the lawn in front of the medical center's Fairchild Auditorium.

Kathleen Palange, clinical nursing coordinator in the unit, said many of the families whose children were treated in the unit developed a closeness with the staff, as well as with other parents in the same situation. The reunion, she said, gives the adults a chance to renew old acquaintances and learn of support group activities.

"Even though as majority of the children are perfectly normal, for the parents it takes a long time to get over the trauma of having a child—in this case a newborn infant—in a critical care situation," she said. Some parents may also have practical difficulties to deal with in caring for a youngster who may come home with continuing medical problems.

Representatives of parent support groups throughout Northern California will be at the reunion to offer advice and the opportunity for membership, Palange said.

In addition to refreshments, clowns, balloons, games and music, entertainment will include a visit by several small animals from Marine World Africa U.S.A, said Palange, who added that the event isn't entirely for children and their families.

She said staff members get a big morale boost in seeing the tiny or sick, struggling events grown into healthy, playful children.

For further information, call (415) 497-5480.

9-10-84 —30— mg4

STANFORD UNIVERSITY MEDICAL CENTER
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Photo of Oyer and diagram of device available on request if not included.
FOR IMMEDIATE RELEASE

HEART ASSIST DEVICE IMPLANTED IN AILING PATIENT

STANFORD—

A 51-year-old patient was reported in serious but stable condition Thursday (Sept. 6), one day after being implanted with a device that can temporarily help a failing heart pump blood through the body.

Dr. Philip E. Oyer, who headed the team performing Wednesday's six hour operation, told a news conference that the fist-sized implant was functioning "as good as, or better than, we could have hoped."

Surgeons and cardiologists had decided Tuesday that the experimental Pulsemaker Heart Assist System offered patient Robert St. Laurent, 51, Ft. Lauderdale, Fla., the best hope of survival until a heart transplant donor could be found, said Oyer, a Stanford associate professor of cardiovascular surgery and pioneer in the device's development.

The operation was the first implantation of a heart assist device performed at Stanford, although nationwide during the last few years more than 200 patients have been outfitted with various temporary devices that supplement the heart's pumping action.

However, Oyer told reporters that the device implanted Wednesday offered the best of hope of serving as the nucleus of a future, totally implantable portable system. He said it was the first left ventricular assist device (LVAD) based on an electronically driven—rather than pneumatically driven—pumping action to be implanted in a human patient.

The new LVAD will be refined during the next two to three years into a system which could potentially support a patient without requiring him to be connected to a large, nonportable console.

He added, however, that "transplantation rather than a mechanical assist device remains the first choice for those patients who qualify" because a natural heart which does not require an external power supply, offers better quality of life.

Oyer said the LVAD might prove useful for patients who were too old or otherwise medically unsuitable for a transplant, and as in the present case, as an interim device to be implanted until a suitable donor organ becomes available.

He said the LVAD and heart transplantation were complementary technologies.

Norman Shumway, cardiovascular surgery department chairman, added, "When there is a chance that a damaged heart can recover with time, a temporary assist device would be preferable to transplantation."

The present device, which takes over 80 percent of the heart's workload, will remain implanted in the patient temporarily, allowing his own heart to rest. If all goes well, the pump will be removed within two weeks as soon as the patient's heart is strong enough to take over temporarily until a donor is found, doctors said.

The average wait faced by transplant candidates is approximately six to eight weeks, Oyer said, but an intensive search is currently under way to find a suitable donor while the temporary implant is in place.

Oyer said St. Laurent was accepted for the transplant program on July 6. For at least four years, St. Laurent had been so ill from coronary atherosclerosis (hardening of the arteries), that he had been unable to work at his job as general manager of a recycling plant.

Oyer said St. Laurent had undergone previous double bypass surgery but that doctors had determined that without a transplant he had no more than a few months to live.

On Aug. 24, his condition had deteriorated and he was fitted with an intraaortic balloon pump, a balloon-like device inserted into a major artery which through expanding and decreasing air pressure can augment cardiac function about 10 percent, Oyer said. But chest pains continued and his condition deteriorated to the point where more aggressive temporary action was needed to keep the patient alive until a suitable donor could be found.

Cynthia St. Laurent, the patient's wife, said, "I am very grateful to Dr. Oyer and the other doctors for giving my husband a chance to buy some time until a suitable donor heart is available."

The new device, manufactured by Novacor Medical Research Corp. of Oakland, takes over for the left ventricle, the muscular workhorse heart chamber that pumps blood into the body's 60,000-mile network of blood vessels.

The Food and Drug Administration (FDA) in July granted approval for human testing of the LVAD, which has been under development for more than a decade by Stanford physicians and scientists at Novacor.

Oyer added that although development of the long term implant is still under way, more than 10 years of laboratory and animal testing paved the way for the FDA's recent approval of the temporary device for human trials.

Stanford and Novacor have permission to place the device in up to 20 patients.

Patients who take a sudden turn for the worse while waiting for a heart transplant, or those whose hearts unexpectedly fail during open-heart surgery but are thought to have a good chance of recovering if their own hearts are given several weeks of rest, are among the potential candidates for implantation, Oyer said. The device has not been approved for patients who are in the process of having a heart attack, he added.

The device is hooked to the failing heart and sits below it in the abdominal region. It draws blood from the patient's own weakened organ and pumps the blood around the body, taking most of the burden off the sick heart muscle and giving it a rest.

The implantation of this first generation mechanical device by Stanford cardiovascular surgeons known worldwide for their pioneering heart transplantation program, will not represent a shift in focus from transplantation, Oyer said.

The plastic pump encased in a metal housing was installed between tissue layers in the patient's abdominal wall. Blood is shunted to the pump through a dacron conduit from the left ventricle. The pump ejects blood back into the circulatory system through another dacron tube leading to the aorta.

The LVAD is linked by a cable passing through the patient's abdominal wall to a bedside control console that provides power. The console also holds computerized equipment that monitors the heart's beating pattern and directs the pump to beat in synchrony with the patient's natural cardiac rhythm.

The new pump has been under development since 1972 by Stanford and Novacor researchers. Peer Portner, chief executive officer of Novacor, has directed engineering research and development of the device in collaboration with Oyer who, over the years, has received options for Novacor stock. Portner is also consulting associate professor of cardiovascular surgery at Stanford.

The Novacor device incorporates several design improvements over previous LVADs, Oyer said. The most important of these is that unlike the prevalent pneumatic systems—whose mechanical action depends on bursts of compressed air fired through a tube that enters the patient's body—this pump is electronically controlled and activated.

In the future system currently under development and probably available in about three years, the power/monitor computer will be miniaturized to a size that can be completely implanted inside the body. A belt worn around the waist will be capable of transmitting power through the intact skin to the implanted components of the permanent LVAD.

The belt transformer will do away with the need for wires that pierce the skin, which are a potential source of infection, Oyer said.

Like an artificial heart, an LVAD is installed at the present time only in patients for whom more conventional therapy has been ineffective and who would die without the mechanical aid, Oyer explained. Current LVADs are primarily for patients who need to be tided over a critical period of heart failure, he added, and only for patients whose own diseased hearts are likely to recover during the few days or weeks the device remains in place.

In addition to potential heart transplant patients having difficulty surviving until a donor is found, such as the current patient, other candidates include patients having recent heart surgery who are in cardiogenic shock and whose own hearts cannot provide the blood pressure needed to maintain circulation, and open-heart surgery patients who cannot be weaned from the heart-lung bypass machine immediately following an operation.

Oyer estimated that Stanford may perform between five and 10 implantations in the next year. Clinical trials could expand to other medical centers within a year or two, he added, if the device proves effective.

In a study for Novacor, the consulting firm SRI International estimates that more than 100,000 patients today could potentially benefit from a permanently implantable version of the LVAD.

According to Oyer, survival rates were poor with LVADs tested in the 1970s; fewer than 25 percent of patients survived long enough to be weaned from the pump and discharged from the hospital. More recently, survival rates for patients with temporary LVADs have increased to nearly 50 percent, he noted.

Other centers that have tested LVADs include Pennsylvania State University in Hershey, Washington University in St. Louis, Boston Children's Hospital, the Cleveland Clinic, Presbyterian Medical Center in San Francisco, and the Texas Heart Institute, Oyer said.

The Stanford/Novacor device has been tested in approximately 150 calves and sheep, some of which lived with the device for as long as six months, Oyer reported. Further development and animal testing is necessary before the fully implantable LVAD can be considered in humans, Oyer said, to prove that the pump and its components can work continuously for a duration of several years. These studies on the long term LVAD will be carried out over the next three years, he said.

Although the patient will be tethered by cords to the external console with the present temporary device, the limited mobility is no different from being dependent on other types of life-sustaining devices for a few weeks, Oyer said.

The totally implantable LVAD, once it becomes available, will include a small rechargeable battery pack allowing the patient to become untethered. An implanted battery will be designed into the system to provide up to an hour or two of device operation free of any external electrical power.

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"It is primarily because of this dependency on an external power source for all patients with mechanical cardiac support devices of any kind, that we believe cardiac transplantation, which allows complete freedom and mobility, will offer the better quality of life for the foreseeable future," Oyer said in an interview before the operation.

The pump itself is straightforward. Two pusher plates that form the device's opposite sides move together to squeeze blood out of the chamber. As blood refills the internal sac, the plates pivot apart.

The pump's rhythm is controlled by a microprocessor that tells it when to beat, and how forcefully. In most cases, it is programmed to beat in synchrony with the patient's own rhythm, Oyer said, although it also has the capacity to beat at a steady predetermined rate, irrespective of the patient's own heart rate. It can adjust automatically for increased exertion and can beat up to 180 times per minute, a pulse rate achieved during strenuous exercise by an active young adult, he added.

The surgical implantation procedure is relatively simple, Oyer said. The pump and supporting components are installed in the abdominal region below the heart.

While blood is detoured around the heart through a heart-lung bypass machine, incisions are made in the heart and the aorta, the major artery leading from it. Through a small puncture made at the bottom of the left ventricle, a tube is placed so that blood can flow into the pump. Another tube leads from the pump to the aorta, returning blood to the circulatory system. These tubes are plugged but left in place when the LVAD is removed.

Animal tests have revealed some medical complications that could develop with LVAD use, Oyer said. In short-term use, there is a small possibility that blood clots could form within the device and travel to other parts of the body, such as the brain, causing stroke. There is also a small risk that blood components could become damaged, causing bleeding problems, he added. And there is a slight chance of mechanical or electrical failure in the LVAD itself, he said.

Long term studies in animals point to added potential complications when the device is implanted for more than a few months, including a buildup of calcium deposits on the device's valves, and blockage of the dacron tubes due to layering and growth of cells on the inner surfaces. These complications may not occur in adult humans, Oyer said, but might be unique to the young, growing animals tested, whose metabolism is different from adults. Further testing in adult animals—particularly in sheep whose hearts are closer in size to humans—is ongoing, he added.

Some other drawbacks may crop up for patients on the LVAD, Oyer added. Some individuals could be disturbed by the pump's vibration and noise generated by the pump as it empties and fills, he said. But although mobility is limited by the external console in the current device, freedom of movement will become much greater when the belt model becomes available, he observed.

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Editors: Peer Portner, chief executive officer of Novacor, may be contacted at (415) 568-8338 in Oakland.

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FOR IMMEDIATE RELEASE

GLICK HONORED BY PROFESSIONAL GROUP

STANFORD—

Dr. David Glick, Stanford professor emeritus of pathology recalled to active duty in the department of radiology's Cancer Biology Research Laboratory, was unanimously elected an honorary associate of the Congresses of the International Federation of Societies for Histochemistry and Cytochemistry, at the group's meeting held last month in Helsinki, Finland.

Currently there are only two honorary associates, Glick being the second member named. The position is confined to persons eminent in the field of histochemistry and cytochemistry who have also given distinguished services to the Federation.

Glick also delivered the first lecture in his name at the meeting. The David Glick Lecture was established in 1983 by The American Histochemical Society. Glick's topic was, "Fifty Years with Histochemistry and Cytochemistry."

9/5/84 —30— LA3

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FOR IMMEDIATE RELEASE

STANFORD HOSTS NIH/FDA CONFERENCE

STANFORD—

"The Protection of Human Subjects in Research: Ethical and Practical Issues" is the topic of a regional workshop sponsored by the National Institutes of Health (NIH) and the Food and Drug Administration (FDA), to be held at Stanford University Sept. 13 and 14.

Keynote speaker at the conference will be NIH's deputy director, Dr. Thomas Malone. Representatives of NIH and FDA will be present to discuss current aspects of federal regulations and to respond to questions.

General sessions will focus on the history and current status of NIH/FDA human research subjects regulations, implementation of the regulations in the research environment, and ethics: theory and practice.

Topics of individual workshops may include overseas research, privacy and confidentiality, deception and hypnosis as research tools, vulnerable subjects (children, mentally incompetent, prisoners, others), balancing risks and benefits, innovative treatment and research in the emergency room, ethical issues in drug research, the consent process, and others.

The conference is open to everyone with an interest in research, and should be of special interest to: members of institutional review boards; investigators whose research involves human subjects, whether biomedical, social or behavioral science; administrators and staff responsible for implementing federal regulations and institutional policy regarding the use of human subjects; researchers whose projects involve investigational drugs or devices; individuals interested in ethical issues in research; and research sponsors.

A registration fee will cover workshop sessions, dinner Sept. 13, and lunch Sept. 14. Enrollment is limited, so early registration is advised. A detailed program including workshop faculty, accommodation and other information is being mailed to registrants.

For further information and registration, call Phyllis Hall of the sponsored projects office at (415) 497-3638.

9-4-84 —30— LA3

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FOR IMMEDIATE RELEASE

MEDICAL CENTER OPPOSES BALLOT PROPOSITION'S IMPACT ON BALLOT

STANFORD—

The public, especially children, will be the real losers if Proposition 41 passes next Tuesday, Nov. 6, said Stanford University's vice president for medical affairs, Dr. Lawrence Crowley.

The measure would limit California per capita expenditures for MediCal and Aid to Families with Dependent Children (AFDC) to 110 percent of the average per capita expenditure in the other 49 states.

In an Oct. 26 letter to the approximately 10,000 faculty and staff of the university and Stanford Hospital, Crowley said, "I hope you will consider the devastating impact on health care if this legislation passes.

"I, therefore, strongly urge you to vote NO on Proposition 41 and to share this information with your family, friends and colleagues."

The vice president, affirming that the university and hospital as institutions "have taken a position against this legislation," said the victims of the measure would "be aged, blind and disabled Californians and children, those least able to fend for themselves."

Children, said Ronald Hill, a Stanford University Hospital administrator, would be especially hard hit, since 30 percent of the newborn infants requiring intensive care and 21 percent of all newborn infants delivered at Stanford were provided care under the state MediCal program. Excluding newborns, 10 percent of the more than 20,000 patients discharged annually were subsidized by MediCal last year.

Crowley said that if Proposition 41 passes Nov. 6, the hospital and clinics "will be asked to absorb substantial additional reductions in reimbursement. We will then be forced to make difficult choices which may adversely affect our patients."

Also opposing the ballot measure was the hospital's medical board, representing all of the more than 1,000 faculty and community physicians who practice medicine at the hospital.

"Proposition 41 is not 'welfare reform' but an attack on those in our society who are most needy," read the resolution adopted unanimously by the board Oct. 25. In urging a no vote, the board said the measure "would cause great harm to some of our neediest and least protected citizens."

The board estimated that under the measure "more than 1,200,000 children may be deprived of basic health services."

In an interview, Crowley said it was impossible to predict precisely where statewide cutbacks in health care would have to be made, since the initiative does not earmark specific programs for cutbacks.

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Currently Stanford has contracted with MediCal for payment on a flat-fee daily basis for patients. David Sakai, director of finance for Stanford Hospital, said the amount (which by law remains confidential) is so low that any cuts would mean that Stanford would have to reassess whether it could remain a MediCal provider without negatively impacting care to other patients.

But he added that the most debilitating cuts affecting patients could involve reimbursements for special services, including medications, eyeglasses, hearing aids or transportation from other facilities.

The state, said Sakai, has a number of ways to meet the spending limits which would be imposed by Proposition 41. Eligibility could be limited, lower rates could be paid to hospitals and other health care providers, services could be centralized at a few facilities, such as county hospitals, and/or the range and scope of services could be reduced.

"It is likely that the state would have to look at all or most of these alternatives if Proposition 41 passes," said Sakai.

Since the cost of living in California is significantly higher than in other states such as Arkansas or Mississippi, expenditures for affected welfare programs have been higher and would be cut from the current levels of about $6 billion to $3.1 billion. If cutbacks were made proportionate to present funding, AFDC would be cut 60 percent, while MediCal would be reduced 36 percent, according to the state legislative analyst.

Sakai said "the most insidious aspect of Proposition 41 is that it not only makes massive, debilitating cuts, but because reimbursement is tied to average expenditures in other states, it makes those cuts unpredictable, always based on costs of a previous year."

While the precise effects of the measure remain uncertain, Crowley and faculty physicians responsible for treating patients have said they are convinced that programs would be harmed if the measure passes.

For example, many of the more than 900 newborn babies treated each year in the neonatal intensive care unit are transferred shortly after birth from hospitals as far south as San Luis Obispo.

"If Proposition 41 passes, most likely medical transportation will be cut from MediCal reimbursments," said Dr. David Stevenson, assistant professor of pediatrics and associate director of newborn nurseries.

"Other hospitals just don't have the facilities or if they do, they don't take MediCal patients," he said.

Sakai and Stevenson both noted that the proposition threatened to create a vicious circle which would increase overall health costs for the needy by denying all but the most urgent care.

Stevenson said that women who could no longer receive prenatal care would stand an increased chance of having babies with developmental problems ultimately requiring more expensive care than if the problems had been prevented early.

"The proposition will backfire if its intent is to cut costs," said Stevenson. Since so-called optional services, including preventive care, would probably be the first to be cut, health care would be deferred until a more expensive emergency occurred.

Other Northern California hospitals have publicly opposed Proposition 41. Children's Hospital at Stanford, a separate but educationally affiliated facility with Stanford Hospital, has said that Proposition 41 would mean a cut of about $2.5 million in an overall budget of $21 million.

The University of California at San Francisco, which manages five medical centers, has said that "If passed, this measure could make ineligible many patients who now receive health care at the University of California, San Francisco."

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FOR IMMEDIATE RELEASE

MEDIA ADVISORY

Editors, Reporters:

Stanford University Hospital's department of dietetics is sponsoring its third annual conference on Recent Advances in Nutritional Care, starting 9 a.m. Thursday, Nov. 1, in the M building of the medical center.

Although the conference is intended for health professionals, some speakers will be available for interviews. Reporters are invited to attend sessions. They should check in at the registration desk.

After lunch the program will move to Fairchild Auditorium, located in the southwest corner of the medical center. Limited parking is available in employee parking lots.

Conference topics will include "Osteoporosis: Causes, Treatment, Prevention," with Dr. Robert Marcus, associate professor of medicine (clinical), and research dietitian Ann Coulston; "Progress and Possibilities in Achieving Regression of Atherosclerosis," with Dr. John Farquhar, professor of medicine; and "The Calcium and Blood Pressure Hypothesis: A New Direction for Hypertension Research," with Dr. Cynthia Morris, an epidemiologist from The Oregon Health Sciences University. Other Stanford and guest speakers will also be featured.

"The Prospects are Extraordinary," a multi-image slide show presentation on academic medicine at Stanford, will be shown.

For further information call (415) 497-6904.

10-29-84 —30— *LA3*

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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR PANIC ATTACK STUDY

STANFORD—

Volunteers are needed for a study to determine the effects of different anti-anxiety medicines in patients with panic disorders or panic attacks—sudden periods of intense fear or discomfort usually reaching a peak within 10 minutes, and occurring in other than life-threatening circumstances.

Researchers in Stanford's department of psychiatry are interested in investigating the physiological (including cardiovascular) changes that may accompany some promising new pharmacological treatments for reducing the frequency and intensity of panic attacks, which can be precipitated spontaneously or by an external situation.

Participants will receive in-depth physical and psychological assessments at the beginning and end of treatment. There is no charge for the eight-week treatment program, which includes extensive monitoring.

To qualify for participation in the study, a person must experience a minimum of one panic attack per week, be willing to take oral medication, and be able to attend clinic appointments over approximately a 13-week period. Persons already on medication may still qualify.

For further information or to volunteer, call Dr. Mary Southam at (415) 497-5065.

10-29-84 —30— LA3

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ADVANCE FOR RELEASE AM PAPERS THURSDAY, NOV. 1, 1984

Editors: Embargo date of this story based on the publication of the Nov. 1 issue of *Nature*.

SCIENTISTS REPORT FUNDAMENTAL DISCOVERY ABOUT IMMUNITY

STANFORD—

Scientists at Stanford University School of Medicine and Massachusetts Institute of Technology have announced the isolation from mouse cells of a new type of gene believed to regulate the recognition signals of the immune system.

At the same time, scientists at the National Jewish Hospital and Research Center in Denver, Colo., reported they had sequenced the chemical building blocks of the protein corresponding to this gene from human cells.

The work is considered important because defense cells depend on signals to tell friend from foe, including the self, invading viruses and bacteria, and organ transplants. Failure in this recognition can lead to infection, cancer and autoimmune diseases such as some allergies and rheumatoid arthritis in which the body perceives its own tissues as foreign and attacks them.

The newly discovered gene, made up of a small fraction of the hereditary material DNA, contains a blueprint of amino acids, chemical building blocks, for the alpha chain of the T-cell receptor.

Receptors are chemical configurations on cell surfaces which act as keys in a lock-and-key recognition system. The T cell receptor consists of two linked chains of amino acids. They are known as the alpha and beta chains and are considered important in understanding of the T cell. The chemistry and genetics of the beta chain in both mouse and human cells had been identified by the same Stanford group that did the recent work and Canadian researchers under Dr. Tak Mak at the University of Toronto earlier this year.

To work properly, the immune system depends on two major types of cells, called B cells and T cells. The identity of B cell receptors has been known to scientists for a long time, but the mysterious nature of the T cell only began to be unraveled about two years ago through use of sophisticated biochemical techniques.

If the surface of a parasite or virus, for instance, fits the receptor on the surface of the B cell, the cell simply produces antibodies against the invaders.

T cells, however, play a variety of roles in the immune system, including regulation of the actions of B cells. They also control the body's immune response to organ transplants, and can kill viruses directly and certain types of tumor cells.

The new discoveries were reported independently by the Stanford, MIT, and Denver groups in the Nov. 1 issue of the prestigious scientific journal *Nature*.

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The Stanford effort was led by Dr. Mark Davis, assistant professor of medical microbiology. His collaborators were Dr. Yueh-hsiu Chien, a senior research associate; Daniel M. Becker, a medical student; Dr. Tullia Lindsten, a postdoctoral fellow; Maki Okamura, an undergraduate student; and Dr. David Cohen who is currently with the Laboratory of Immunology of the National Institute of Allergy and Infectious Diseases at the National Institutes of Health, Bethesda, Md.

The leaders in this research at MIT are Dr. Susumu Tonegawa and Dr. Haruo Saito. The MIT group last summer reported in *Nature* the isolation of a gene which appeared to be the alpha chain, but subsequent biochemistry indicated it is a third T cell receptor-like gene of unknown function.

The group at Denver's National Jewish Hospital and Research Center was headed by Dr. John Kappler and Dr. Phillipa Marrack.

"We now have defined the chemistry and genetics of the two complete chains that make up the T cell receptor," Davis said. "A problem, however, yet to be determined is what the third gene isolated by the MIT group does."

T cell receptors must recognize "foreign" invaders so that they can mount a defense against them, he said. They must also deal with the recognition of "self" so that they can be prevented from generating antibodies against their own tissues. This recognition is determined by molecules in a region of the body's defense system known as the major histocompatibility complex (MHC).

MHC molecules, Davis explained, are polymorphic. They are of different types scattered throughout the population. And because their function is to scan cell surfaces for abnormalities they create havoc among transplant patients whose new organs they view as abnormal.

"One needs both the beta and alpha chains to understand more fully the function of the T cell receptor," Davis said. "The more we know about T cell immunity and how cells recognize abnormalities, the more we will be able to do something about augmenting T cell responses to diseases. The major job of putting down cancerous cells, for example, seems to involve T cell defenses."

By the same reasoning one could reduce T cell responses in organ transplants such as kidney and hearts where rejection is a major problem and must be suppressed by powerful but dangerous drugs. New insights on T cells and their role in the regulation of the immune system could lead to new methods of dealing with transplant rejection.

In a commentary on the discoveries, *Nature*'s lifesciences editor Miranda Robertson said that "with all the relevant genes now isolated" it should be possible for scientists to design experiments that will answer many fundamental questions concerning the immune system's mechanism of dual recognition.

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FOR IMMEDIATE RELEASE

BLACK ENROLLMENT FALLS AT STANFORD MEDICAL SCHOOL

STANFORD—

For the first time in 15 years, Stanford Medical School has failed to enroll as many black students in its fall entering class as it has in the past.

Of ten black students—nine males and one female— offered places in the school this year, eight chose to go elsewhere and two deferred their enrollment for a year, director of admissions Dr. Raymond Clayton said Tuesday, Oct. 23.

The number of minority students in the entering class of 86 this year is 11 or 13 percent, contrasting sharply with 18 students or 21 percent last year, Clayton said. Of the 11 minority students enrolled, three are native Americans and six are Chicano. Two admissions are blacks, but they are deferrals from last year.

The problem is a source of deep concern to the medical school's faculty senate, which Friday (Oct. 19) passed a unanimous resolution reaffirming its commitment to "identify, select, and matriculate highly qualified minority students."

The resolution, which must be approved by the faculty electorate, notes the senate's disappointment that only two black students have enrolled this year in contrast to Chicanos and native Americans, who are well represented.

"We reaffirm the commitment undertaken by several previous senates to maintain a vigorous affirmative action program," the senate said. "The social justification for such a program has not diminished.

"The senate does not consider a quantitative nor proportional quota of matriculated minority students desirable nor acceptable. The senate reaffirms, however, its goal for Stanford University School of Medicine to be a leader among comparable medical schools in matriculating highly qualified minority students."

Dr. Fernando Mendoza, assistant dean for student affairs, said multiple factors are undoubtedly behind the problem, and until they are analyzed and addressed, "we will continue to see a drop in minority student enrollment."

"We are puzzled by the result," Clayton said. "We are studying the characteristics of this year's applicant pool compared to the last to determine if they were different."

Stanford's higher tuition costs and tougher competition for minority applicants from other Ivy League medical schools and the University of California may have been in part responsible for the problem, he said.

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Since 1969 when Stanford began its affirmative action program, there has been an increase of minorities in the student body averaging 20 percent in recent years. Minorities have included black, Chicano, mainland Puerto Rican and native American students, associate dean for student affairs John Steward explained.

"We we have been a leader in this field and consistently ahead of the national average which has been about 8 to 9 percent," he added. "We have matriculated 252 minority students and the attrition rate for academic reasons has been 10 students."

A 1981 report from the Office of Statewide Planning in Sacramento had singled out Stanford's medical school as "the model" of how to attract and enroll minority medical students. Stanford's minority enrollment of 26.7 percent that year was the top in the state, the report said. It urged the University of California system to step up its affirmative action programs to meet goals similar to Stanford's.

Since then, Steward said, UC and other medical schools have increased their minority recruitment, which in part may explain the lower number of students enrolling to Stanford.

Students offered places at Stanford a year ago, but instead chose UC medical schools, were surveyed by the admissions office. The students said they chose UC because it provided a comparable education and good clinical training at a fraction of the cost. (Stanford medical school's 1984 tuition is $3,808 per quarter compared to UC's $463 tuition and education fee charged to California residents and $1,651 to nonresidents.)

But costs may account only partly for the lower enrollment, said Dr. Roger Peeks, assistant dean for student affairs. Peeks, a Stanford alumnus in practice in Oakland, co-chairs with Mendoza the minority advisory panel which reviews applicants and makes recommendations to the admissions committee.

"It's true," he said, "students choose cheaper medical schools, but this doesn't explain the sudden drop in enrollment. The cost issue was with us last year, too, but we were successful in maintaining our affirmative action record. I don't think it's a valid argument.

"Stanford really has been the gold standard for minority recruitment," Peeks said. "There is no reason why it can't continue to be. One way to compete better with other schools is to address a widespread misperception about the school's clinical programs, which some say do not have the clinical emphasis that they should.

"Personally, having gone through training here, I believe Stanford is an excellent place clinically. But as long as this myth exists many students will go elsewhere. The school and faculty must take steps to set the record straight."

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FOR IMMEDIATE RELEASE

FAMILY OFFERS $5 MILLION FOR MENTAL ILLNESS RESEARCH

STANFORD—

The Pritzker family of Chicago has presented a $5 million challenge gift to the Stanford University School of Medicine to support resarch on the biochemistry of mental illness, the medical center announced Wednesday (Oct. 23).

The gift is the first given to Stanford to endow a research laboratory, said Dr. Jack Barchas, professor of psychiatry and behavioral sciences.

The funds will support the research program of the Nancy Pritzker Laboratory of Behavioral Neurochemistry, headed by Barchas. The gift will also seed a Medical School drive to raise an added $15 million to support other programs and capital projects in the psychiatry department.

Funds raised from the $15 million drive may support professorships for faculty and fellowships for predoctoral and postdoctoral trainees, new quarters for the department, and expansion of the department's mental health clinical research centers for children and adults. Barchas said funds might also be used to support various other programs, such as Stanford psychiatry laboratories dealing with developmental neurochemistry and sleep disorders.

In addition, funds will be applied toward construction of a planned magnetic resonance center, which Barchas described as a promising new tool for psychiatry research, and toward acquisition of an inpatient psychiatric facility.

"Our gift should enable Stanford to encourage other donors to participate in improving the financial stability necessary for effective teaching and research in the department of psychiatry at Stanford, already known worldwide for its excellence," said Jay Pritzker, who announced the gift recently for his family.

"This splendid endowment helps a crucial area of mental health research, and gives other donors a powerful incentive to support a psychiatry department that is outstanding in its commitment to studies of biological and psychosocial factors in severe mental illness of adults and children," said Stanford President Donald Kennedy in acknowledging the gift.

The Pritzker laboratory focuses on the biochemical basis for mental health and disease. Its work centers on molecular messengers in the brain called neurotransmitters.

In recent years, researchers in Barchas' lab have studied how abnormalities in control of these chemical links between nerve cells may be important in forms of severe mental illnesses, such as depression, schizophrenia, and some addictive states, Barchas said.

"There has been an explosion of knowledge that needs to be explored," said Barchas, "yet researchers in the field of psychiatry have less money available in real dollars today than in 1969."

Half the beds in U.S. hospitals are devoted to patients with some form of psychiatric illness at a cost of more than $185 billion per year in lost productivity and medical expenses, Barchas said. However, the researcher said that annual spending for mental illness research is only $5 per patient, compared with about $20 and $160 per patient, respectively, for heart disease and cancer.

The Pritzker family and the Pritzker Foundation have supported mental health research at Stanford Medical School since 1976, when the Nancy Pritzker laboratory and Nancy Friend Pritzker Professorship were established in memory of Stanford student Nancy Friend Pritzker, daughter of Mr. and Mrs. Jay Pritzker.

10-23-84 —30— mg4

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FOR IMMEDIATE RELEASE

PHYSICAL THERAPY STARTS SCHOOL FOR BACK SUFFERERS

STANFORD—

Physical therapists at Stanford are hopeful that patients may learn to help control their own low back pain by attending a school equipped with mops, brooms, garden tools and a kitchen.

The Stanford Back School, sponsored by the Department of Physical and Occupational Therapy, begins classes this month.

"Unlike more passive traditional treatment, the school helps patients take charge of their own health care through an understanding of their condition and through implementation of very practical physical, nutritional and even psychological tools designed to alleviate suffering, said Terry Nordstrom, the physical therapist who directs the school.

Nordstrom said the curriculum is an based on programs started in Sweden in 1970 and adapted to current medical knowledge and technology.

"This school is consistent with the idea that American patients in the mid-1980s want to understand and manage their own health care as much as possible. Back pain control is extremely conducive for this sort of intervention," said Nordstrom, "because many of the things which will help people alleviate their pain are things which they need to learn to do in their everyday lives. Once they learn a few relatively simple techniques, many sufferers will be able to lead more active lives."

The everyday objects, including mops and brooms and a model flower bed, will enable patients to practice using the proper techniques to accomplish everyday tasks with a minimum of discomfort and potential for injury, Nordstrom said.

Patients will first be put through an obstacle course, consisting of typical work tasks. Physical therapists will monitor and photograph the lifting, sitting, or stretching movements to suggest ways of improvement, Nordstrom said. Exercises and resting postures intended to relieve pain will be demonstrated and practiced, and lectures on basic anatomy will be given, Nordstrom said.

Classes consist of four once-weekly evening sessions, he said. Instructors include physical therapists, occupational therapists and registered dieticians.

Nordstrom said the program is geared toward a variety of chronic, mechanical back problems. Persons suffering from back pain caused by an underlying illness probably will not be eligible, and patients should wait for severe acute pain to lessen before starting the program.

Patients must be referred by a physician, undergo a physical exam and complete a written questionnaire before admission. Cost of the program is $20 per session, plus the cost of the initial screening.

For further information, call (415) 497-6701.

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RESEARCHERS DESCRIBE UNUSUAL HEART PAUSES

STANFORD—

A small number of people whose hearts periodically stop for more than two or three seconds during sleep, and who complain of symptoms such as lightheadedness or fainting, may be helped by artificial pacemakers, reported Stanford scientists Thursday (Oct. 18) in *The New England Journal of Medicine*.

Their findings are based on case reports of four young, otherwise healthy adults, whose 24-hour electrocardiogram (ECG) recordings nevertheless disclosed up to 20 lapses in heart beat (asystole) of up to nine seconds each during rapid eye movement (REM) sleep.

"Although we're describing what probably amounts to a very unusual occurrence, we do know that a small number of patients die suddenly from bradycardia (slowed heart rate), or asystole—though usually there's an underlying disease," said Dr. Anne Gillis, a research fellow in cardiology and co-author of the study.

"During sleep, the heart rate normally slows in everyone," said Gillis. The researchers speculate that in their patients, there is an imbalance causing a greater-than-usual dominance during sleep of the parasympathetic tone, the component of the autonomic nervous system which is responsible for that slowdown.

Two drugs tested on the patients, atropine sulfate and protriptyline, found effective but discontinued because of adverse side effects, both work by inhibiting the action of the parasympathetic tone, Gillis said.

Three of the four patients had experienced symptoms believed to be related to the underlying rhythm disturbance, she said. These included feelings of faintness or actual loss of consciousness. But results of extensive evaluations, polygraphic sleep recordings, and electrophysiologic studies were normal, outruling sleep apnea or other disorders.

"REM sleep-related sinus arrests (as the heart pauses are referred to) . . . which may occur in apparently healthy subjects but are undetected, may explain some cases of sudden, unexpected death during sleep," the researchers headed by Dr. Christian Guilleminault, associate director of the Stanford Sleep Disorders Center, suggested.

What was found distinctly abnormal in their patients, Gillis explained, was the absence of heart beat for more than two or three seconds—the maximum duration considered normal.

"If a short lapse occurs it is because the heart's normal pacemaker, the sinus node, fails and the heart stops beating for a moment. But usually, other subsidiary tissues in the heart serve as back-up pacemakers (or escape rhythms) and start the muscles contracting again," Gillis said.

The three symptomatic patients were given artificial pacemakers to provide those back-up services usually occuring naturally in the heart, and two "have been asymptomatic for four and seven years, respectively, with this therapy, although 24-hour electrocardiographic monitoring continues to reveal the underlying problem," the researchers wrote.

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If patients are asymptomatic to begin with, she said, no therapeutic intervention is needed.

Guilleminault and Gillis' co-authors are Dr. Peter Pool of the North County Cardiology Research Laboratory in Encinitas, Calif., and Dr. Jorge Motta, a former Stanford research fellow in cardiology who is now practicing in Panama City. Their work was supported by a grant from the American Heart Association, California chapter.

The patients sometimes experienced sinus arrest during waking hours as well, while engaged in bodily functions such as urination, defacation, sexual intercourse, or exercise, that are also characterized by a dominance of the parasympathetic tone, Gillis said.

While the phenomenon of sinus arrest occurring during sleep has been observed before, she said, this is the first study to specifically delineate the stage of sleep in which it was observed to occur.

But therapy should probably be the same regardless of whether sinus arrest occurs during wake or sleep, Gillis said, stressing that therapy is only needed when symptoms are present.

Although the patients experienced vague symptoms, the researchers said, it is possible their conditions would have remained unexplored and undetected had they not been medical personnel themselves and recruited for the studies.

The possibility of nighttime lapses in heart beat should be considered and evaluated in patients such as those described, the researchers urged. They suggest at least 24-hour ECG monitoring and, "for a more thorough evaluation, polygraphic monitoring during sleep."

ECG evaluation "might also be considered for patients with vague symptoms," if a routine study reveals no abnormalities.

Gillis said it was not known whether the brief heart stoppages could insidiously injure a patient's functioning, and this question should be further studied, the researchers concluded.

In an editorial appearing in the same issue of *The NEJM*, Dr. Leonard Cobb of Harborview Medical Center in Seattle said that asynchronous or quivering contractions known as ventricular fibrillation, usually caused by a structural degeneration of the heart muscle, is more often the mechanism involved in the hundreds of cases of unexpected cardiac arrest occurring each day in the United States.

Gillis, agreeing, added that ventricular fibrillation occurs mostly in patients with underlying vascular disease, such as blockage of the cardiac arteries.

"At present," Cobb wrote, "the four cases reported by Guilleminault et al. appear to be medical curiosities, and it seems unlikely that these observations have immediate relevance to the huge number of persons at risk of sudden cardiac death. Nevertheless, as Guilleminault et al. suggest, prolonged sinus pauses could conceivably be implicated in some instances of nocturnal cardiac arrest. Even so, it appears to be premature to propose that pacemakers be implanted solely on the basis of asymptomatic nocturnal bradycardia."

Guilleminault and Gillis plan to extend their research to the question of why some individuals appear to experience extra heart beats during sleep, and why the rare cases such as those described experience fewer.

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WAR ON PARASITES REVIVED BY $20 MILLION NATIONAL GRANT

STANFORD—

For pharmacologist Tag E. Mansour, a $20 million, five year study starting Dec. 1 means the resumption of a war on parasitic disease—which afflicts an estimated 1.5 billion people worldwide—after two decades of international neglect.

Mansour, who had his first grim look at parasitic diseases during his boyhood more than 50 years ago in Egypt, said Tuesday (Oct. 16) that he and six Stanford colleagues will join researchers from 11 other institutions in the study financed by the John D. and Catherine T. MacArthur Foundation, a Chicago-based philanthropic group.

"In a way, this consortium is a renaissance of the study of parasites which had almost died off when the developed nations withdrew from their colonies in the tropics during the 1960s," said Mansour, chairman of the Department of Pharmacology at Stanford.

"Most of the developing countries just stopped supporting research in this vital area when their own people were no longer affected. It has taken the initiative of a foundation to revive interest in finding treatment, cures, or prevention for one of the world's most serious health problems," the scientist said.

Mansour added that lack of support by developed countries may have been shortsighted even in their own interests, since international travelers are consistently exposed to parasites, offering the possibility of spreading the often-debilitating conditions here. Each year more than 300 U.S. travelers contract a single parasitic infection, malaria.

Each of the 12 participating centers in the United States, Australia, Israel and Mexico will study a particular aspect of parasitology, which includes such maladies as malaria, tapeworm, dysentery and schistosomiasis, African sleeping sickness. The MacArthur Foundation has estimated that more than half of the world's population is afflicted with at least one parasite.

Stanford received $1.5 million to apply the techniques of molecular biology and biochemistry to the study of parasite development and survival, potency and reproduction.

Other Stanford researchers include Paul F. Basch, professor of family, community and preventive medicine; John C. Boothroyd, assistant professor of medical microbiology; Ronald Davis, professor of biochemistry; Gordon Ringold, associate professor of pharmacology; Jack Remington, professor of medicine (infectious diseases); and Robert Schimke, professor of biological sciences.

Parasites are defined as small organisms that inhabit—and thus feed from—another organism, Mansour explained. They are similar to their smaller and less complex cousins, viruses and bacteria, but they have proven more difficult throughout the ages to control as a health threat to man.

"Because they are complex, it is harder to find a substance that will poison the parasite without harming the human or animal host they have invaded," Mansour said. Because of their ability to adapt, they often elude the body's own immune system, Mansour added.

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What Mansour and his colleagues hope to do at Stanford is to understand the biochemistry, genetics and molecular structure of several of these organisms in hopes of finding ways of killing them without harming the human host. Another possible solution is to break the chain of the parasite's lifecycle, thus preventing their reproduction.

"What we basically are doing," said Mansour, "is searching for differences. If we can find a way of causing harm to a particular parasite without causing any ill effects to humans, we have achieved our goal."

Among specific organisms to be studied are toxoplasmosis, spread by unwashed vegetables, soil and cat feces. Unlike most parasites which are found in tropical or other underdeveloped nations, toxoplasmosis is present in about 50 percent of the U.S. population.

It usually remains dormant, says Remington who has specialized in this parasite for many years, but can become dangerous for unborn babies when their mother's contract it, or for acquired immune deficiency syndrome sufferers who do not have natural immunity.

Boothroyd plans to study the unusual way in which trypanosomes (cause of sleeping sickness in Africa) change their body surface to evade the immune system of the host.

Mansour is studying the metabolism of schistosomes, found in stagnant water throughout the tropics, which causes irreversible damage to the liver and kidneys. Mansour said about 200 million persons worldwide suffer from schistosomiasis. Currently the only treatment is long-term drug therapy with powerful agents which produce toxic side effects.

Basch will study the reproductive hormones in schistosomes with the hope of interfering with their egg production in the host.

Davis will produce new techniques for the isolation of genes from these parasites. Ringold and Mansour will use these techniques to study the genes of schistosomes so that they can isolate critical proteins that are used by the parasite to defend itself against the human immune system.

Schimke will study the mechanism of gene amplification, the parasite's ability to protect itself against medication,.

Mansour said research on individual parasites should produce useful information about other parasites.

He said prevention or at least cures for parasites are crucial to development of the third world. Some of the funding during recent lean years for parasitology has come from the World Bank "which has recognized that overcoming parasites is crucial to development in the third world. Development and productivity is impossible when a majority of the population in a country is too sick to work," Mansour said.

Although research efforts have declined in recent decades, Mansour noted that parasitology once had a high priority and early gains were important. In 1902, the second Nobel Prize ever given went to Ronald Ross, for his work in discovering the parasitic source of malaria.

Other centers in the MacArthur-backed consortium are Case-Western Reserve University, Cleveland; Columbia University, New York; Walter and Eliza Hall Institute of Medical Research, Australia; Harvard University and Massachusetts General Hospital, Cambridge, Mass.; Johns Hopkins University, Baltimore; National Polytechnical Institute, Mexico City; New York University Medical Center, New York; the University of California-Berkeley; The Weizmann Institute of Science, Israel; and Yale University, New Haven, Conn.

Jonas Salk, polio vaccine pioneer, is chairman of the health committee of the MacArthur Foundation's board of directors. The MacArthur Foundation was established by John D. MacArthur, sole owner of the nation's largest privately-held insurance company, and his wife Catherine. When MacArthur died in 1978, the foundation was endowed with the bulk of MacArthur's fortune.

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BERG TO HEAD NEW MOLECULAR AND GENETIC MEDICINE CENTER

STANFORD—

Nobel Prize winning biochemist Paul Berg has been appointed director of Stanford University School of Medicine's proposed Center for Molecular and Genetic Medicine (CMGM).

Vice President for Medical Affairs Lawrence G. Crowley said Berg will oversee the futher development of CMGM's academic program, and the design and fund raising efforts for the building that will house the faculty research.

The field of molecular and genetic medicine promises dramatic changes for medicine in the future, Crowley predicted.

He said he and Stanford University President Donald Kennedy believe that "a strong program with emphasis on the continued discovery of new biomedical knowledge and its transfer into clinical applications and the amelioration of human misery is critically important for the future of Stanford Medical School."

Stanford trustees authorized planning for construction of the CMGM building in December 1983. Former Dean Dominick Purpura, who has since left for Albert Einstein College of Medicine, directed the initial planning with the assistance of a faculty committee.

The proposed Center for Molecular and Genetic Medicine will be a $45-million multistory building southwest of the Medical Center, with 90,000 square feet of laboratory and support space. Approximately 20,000 square feet will be leased to the Howard Hughes Medical Institute. It will house the laboratories of up to eight faculty members in the unit of molecular and genetic medicine whose research will be supported by the institute under an affiliation agreement with the Medical School.

The building will also house approximately 32 faculty members including a proposed new department of molecular and developmental biology, a department of molecular and cell physiology, and the department of biochemistry now located in the main center. The structure will also house a program in cancer biology and a small instrumentation development group, Crowley said.

The tentative schedule for the project calls for beginning of construction in 1985 and completion by the fall of 1987. The department of psychiatry building and other temporary structures now on the site will be relocated.

As CMGM director, Berg will report to the dean of the Medical School. Berg's chief objectives will be to develop and maintain a unified program involving several scientific disciplines, Crowley said.

He will be assisted by an executive committee composed of three faculty members who are eminent in their fields, Crowley said. They are Ronald Levy, oncology; Hugh McDevitt, medical microbiology; and Irving Weissman, pathology. Committee members will serve for specific terms. Newly appointed Medical School Dean David Korn will be an ex-officio member, Crowley said.

The center will include faculty who combine skills in clinical medicine with strong basic science training and research experience.

The 58-year-old Berg received the 1980 Nobel Prize in chemistry for his "fundamental studies of the biochemistry of nucleic acids, with particular regard to recombinant DNA." Berg was also responsible for shaping a policy for dealing with the possible risks of recombinant DNA research.

He has been on the Stanford faculty since 1950. Berg is a holder of the Jack, Lulu and Sam Willson endowed professorship in biochemistry. —30—

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ACADEMIC MEDICAL CENTERS MUST FACE THE CHALLENGE OF A "CHANGING FRONTIER" OF MEDICINE, EXPERTS SAY

STANFORD—

Stanford University Medical Center may call upon its record of excellence created during its first 25 years, but it must tailor its emphasis to meet upcoming challenges in the field of medicine in order to survive the next 25 years, agreed speakers at Stanford University Medical Center Oct. 12.

The challenge facing academic medical centers, said Dr. Victor Fuchs, noted health care economist and professor of economics at Stanford, is to develop an understanding of and way to evaluate the consequences of medical intervention.

The "frontier" of medicine is changing, he said. Whereas at one time it was sufficient to discover that treatment "B" was better than treatment "A", now it's necessary to know how much better in order to determine its usefulness.

Fuchs was just one of the speakers at the medical center's 25th Anniversary celebration symposium—the first of a year-long series of events marking the move of the the medical center from San Francisco to the Stanford Campus.

The challenge medical centers face entails a change in the approach to medical education, Fuchs said. "For the established members of the faculty there is an understandable temptation to say 'we went to medical school. We went through housestaff training. We were successful. We know what is needed. Be like us. Do like us.' But in a dynamic environment that is a prescription for disaster."

"We continue to use primarily fact-filled lectures, examinations that measure recall almost exclusively, and oral confrontations on clinical rounds which see to reward the student who can either memorize the most facts or recall the most esoteric one. Factual knowledge is not enough," said Dr. Lawrence Crowley, vice president for medical affairs and president of Stanford University Hospital. "We must return the emphasis to teaching our students the basic concepts of normal and abnormal human biology, how to identify a problem and organize a logical approach to its solution and how to synthesize relevant facts and basic concepts with experience that will lead them to wise courses of action."

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This change in educational methods and understanding of the effects of medicine is essential, Fuchs said, in light of the "economic squeeze" from the federal government and from the private sector on health care. While the economy as a whole has grown very slowly since the early 1970's, health care expenditures have kept going at a "boom rate", he explained. This has created an ever-increasing gap between the growth rates of the gross national product and health care expenditures.

Contributing to health care expenditures, he continued, is a tendency for individuals to use more health care services because, due to third party payment, they are not directly paying for them. Thus, they fail to measure the true benefits of those services.

"The health care system is like an 80,000-ton ocean liner going full speed ahead. It can't be turned around on a dime, but sooner or later it must reflect the underlying economic reality," Fuchs said.

"As a great center of research and education, Stanford must provide the analyses and understanding that will enable not only this hospital and this faculty practice plan, but health professionals and health institutions throughout the country to live with economic constraints while maximizing the health of the patients they serve," he added.

The tool to help achieve this, Crowley said, is the microcomputer. "It carries the potential of releasing the human brain from many of its more routine, time-consuming tasks, allowing more time for concentration on problem-solving and creative thinking."

Using computers, Fuchs added, will allow physicians to develop a quantitative picture of what happens to patients as they move through the health care system. With computers physicians can study the history of treated disease, "and evaluate quality of care as reflected in patient outcomes rather than simply inferring it from process or by the amount of money spent."

Medicine's future will be greatly influenced by the expanding knowledge of genetic engineering, Crowley said. With the knowledge of "perhaps being able to alter human evolution itself comes an awesome responsibility. The ultimate value of this new knowledge will lie in its application. We must not only educate our students and postdoctoral trainees thoroughly, but the public as well."

"We have at hand a chance to extend and deepen the results of the revolution in biomedical research," said Dr. Donald Kennedy, president of Stanford University. "At the same time we have the opportunity to lead a second biomedical revolution—one that will take the fruits of the first from the laboratory to the bedside." To do so successfully, Fuchs added, "will take the same qualities that were acted upon 25 years ago: vision, courage, a willingness to work together, and an eagerness to change."

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FORMER CONGRESSMAN CALLS FOR "CITIZEN'S COMMISSION"

TO PROTECT ACADEMIC HEALTH CENTERS

STANFORD—

A federally-appointed "citizen's commission" should be created to ensure the continued viability of the nation's academic health centers, said former Congressman Paul Rogers Friday (Oct. 12).

Rogers spoke at Stanford University Medical Center's 25th Anniversary celebration symposium, the first of a year-long series of events marking the move of the medical school from San Francisco to the Stanford campus and the establishment of the medical center.

Rogers, D.—Fla., chaired the sub-committee on health and the environment in the House of Representatives until 1978, when he returned to private law practice in Washington, D.C.

"It will be necessary to make clear to the American people and to the Congress that academic health centers are truly a national resource," Rogers said. "Without the constant exploring in biomedical research, the excellence of clinical training and the delivery of quality health care, this nation's health care will deteriorate rather than advance."

Either the president or Congress should appoint the commission, Rcgers elaborated, which should include physicians, health professionals, educational leaders, and labor and industry leaders from throughout the country. Federal efforts to control health care costs by reducing government support of biomedical and behavioral research and medical education, and cutting back on reimbursement to hospitals are threatening the "vitality" of academic medical centers, Rogers said. "A record of extraordinary achievement is balanced against a future of unprecented uncertainty."

Because of the continuing interaction of basic scientist with clinicians, and of both with scholars from the humanities, academic medical centers are fertile ground for scientific discovery, the transfer of those discoveries into practical applications, and a forum to discuss and resolve social, ethical and public policy issues that accompany those discoveries, Rogers said.

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Academic medical centers have also provided the nation with an ample supply of well trained physicians and other health care personnel, Rogers added. In 1959, the year the medical school relocated to the Stanford campus, the nation faced a serious shortage of physicians, he said. Today, he continued, people living in major cities and rural areas alike are served by specialists and primary care physicians, and a national network of tertiary care hospitals makes even the most acute care readily available.

In addition, academic medical centers serve as "critical way stations in the diffusion of new medical technologies from the clinical research laboratory to the community," Rogers said. "They serve to define and maintain standards of care through informal contacts with community physicians and through formal continuing education programs."

To ensure the continued productivity of academic medical centers, Rogers said, there must be a mutual understanding of what society expects from academic medicine and what medical schools need from society such as the following:

- The public wants medical schools to continue to develop better means of treatment. To do so, biomedical research must receive funding.
- The public wants to stop the rapid escalation of health care costs. Reimbursement methods must be reformed, and medical schools must place new importance on research designed to help control costs by training physicians to more selectively use costly modalities.
- The public wants a continued supply of well-trained physicians. Teaching hospitals must be fully reimbursed for their unique costs incurred because of their teaching function in order to allow them to compete with other physicians.

Academic medical centers are "organic units of teaching, patient care and research that cannot be dynamic if one of their limbs are wounded," Rogers said. "If our nation expects continued biomedical innovation, if we look to academic physicians to develop efficient modes of care, if we demand that new physician be well trained, and that established physicians be kept up-to-date, then academic medical centers and teaching hospitals must remain financially healthy and intellectually vital."

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POSTMASTECTOMY GROUP THERAPY OFFERED

STANFORD—

Group therapy for women who have had a mastectomy and wish to deal with problems of self-image and sexuality will be offered by the department of psychiatry and behavioral sciences at Stanford University Medical Center.

To begin in late October and run for six months, the group will meet weekly for 90 minutes Mondays from 12 to 1:30 p.m. in the psychiatry building. It will be limited to 12 women.

"Women often regard themselves as they think the male sees them after a mastectomy (namely, as damaged goods), and they show this feeling by giving nonverbal signals which adversely affect intimate relationships," said Dr. Regina Kriss, a clinical instructor who will co-lead the sessions with Sandy Bacon, social worker.

The program is intended to provide new insights and opportunities for making better adjustments in self growth, marriage, and sexual relationships, Kriss said.

There is a fee which may be covered partially by medical insurance. For further information or registration, call Kriss at (415) 857-0857.

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STANFORD CENTER FOR RESEARCH IN DISEASE PREVENTION FORMED

STANFORD—

The Stanford Center for Research in Disease Prevention has been formed to reflect the expanded activities of the Stanford Heart Disease Prevention Program (SHDPP), announced Dr. John W. Farquhar.

Farquhar, who has directed the SHDPP since its inception 13 years ago, said the move was prompted by an evolution of the group's activities, including an increasing public recognition and new scientific evidence that many of the risk factors for heart disease affect other conditions as well.

"While the majority of our research still concerns cardiovascular disease primarily, much of what we do is applicable to cancer, alcoholism and accidents," Farquhar said in a Sept. 17 memo to colleagues. The SHDPP will retain its name and activities as a component of the new expanded center, he said.

The group comprises of more than 20 faculty and staff from the fields of medicine, statistics, basic science, social science and communication research. Nearly 200 staff, including field personnel in several California cities, are employed on a full or part-time basis.

The diverse research activities have attracted more than $42 million in government and private grants since the program began in 1971 with the classic Three Community Study of health education.

Farquhar, a professor of medicine and family, community and preventive medicine, said he is confident that the broader, more complete name will encourage funding from agencies and potential donors outside the cardiovascular area.

One of the most recently funded programs, sponsored by a nearly $2 million grant from the National Cancer Institute, will study various long-term, self-help smoking cessation and maintenance methods, including nicotine gum and psychological aids.

The study, headed by Dr. Stephen P. Fortmann, assistant professor of medicine, will explore the premise that many people who wish to quit smoking prefer self-administered approaches. These programs need more study and evaluation, Farquhar said.

Other projects centering on non-cardiac health issues include an effort studying the relationship between the way the body burns food and calorie reduction. Principal investigators include Peter D. Wood, a professor of medicine; and William L. Haskell, clinical associate professor of medicine.

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Fortmann, Wood and Haskell are associate directors of the center. The fourth associate director is Nathan Maccoby, professor of communication (emeritus).

The largest project currently underway is the Five City Project, a nine-year $24 million research effort involving 350,000 persons in five California cities. The program, an outgrowth of the original Three Community Study, is testing the idea that community health education programs can produce valuable decreases in heart disease.

The effort includes development and testing of such diverse educational methods as courses for health professionals, television public service announcements, brochures, and organized quit smoking contests.

Another current project is intended to develop a health education curriculum that teaches adolescents the skills needed to take charge of their health. Collaborative studies with the division of cardiology are examining ways to prevent atherosclerosis (hardening and clogging of the arteries), as well as cardiac rehabilitation.

The center's Lipid Research Clinic earlier this year reported results of a multicenter study in the United States and Canada which showed that reducing blood cholesterol levels can produce a distinct reduction in heart attacks.

Current funding for the fiscal year ending June 30, 1985 is $4.9 million, said Lillian O'Toole, administrator of the Stanford Center for Research in Disease Prevention.

Farquhar noted that in addition to ongoing research projects, faculty members under the center's auspices teach a cardiovascular disease prevention course for undergraduates in human biology and assist in the teaching of a human nutrition course in the medical school.

Farquhar teaches a medical school course in personal health; June Flora, education director of the Five City Project, teaches a "health communication" course for graduate students in communications; and Dr. C. Barr Taylor, a center associate and associate professor of psychiatry, teaches an undergraduate course on behavioral medicine.

The Health Improvement Program, created three years ago for the faculty, staff and families of the Stanford community, is a service, teaching and research component of the center.

The center is part of the university's Health Research and Policy Consortium.

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BLAU'S SMASH LECTURE POSTPONED

STANFORD—

The SMASH lecture originally scheduled for Oct. 19 at the medical center will be postponed to a later date.

Dr. Helen Blau, assistant professor of pharmacology, will discuss "Muscle Building and Muscle Bound: Activation and Expression of Muscle Genes," at a date to be announced in future listings.

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TOXOPLASMOSIS WIDESPREAD BUT TREATABLE IN AIDS PATIENTS

STANFORD—

At least one common and potentially lethal disease afflicting patients with Acquired Immune Deficiency Syndrome (AIDS) is controllable with medication while researchers hunt down clues to the underlying ailment, a neurosurgeon said Friday.

Dr. Frances Conley, associate professor of neurosurgery at Stanford University, said that central nervous system toxoplasmosis is reaching epidemic proportions among AIDS patients. She presented the first of this fall's SMASH lectures Oct. 5. for the public.

"This disease, which used to be very rare, is now being diagnosed in my lab about twice a week, and the vast majority of cases are AIDS patients," she said.

"But if it's caught, it is very treatable with certain antibacterial drugs. If the index of suspicion of toxoplasmosis is as high as it now should be in doctors' minds, many AIDS patients suffering from it will be successfully treated while researchers continue to look for ways to reverse the basic immunity defect," she said.

"In the years between 1975 and 1981," Conley said, "Dr. Remington's lab knew of only six cases of central nervous system toxoplasmosis. From 1981 until the present, our two labs have diagnosed more than 100 cases of the disease." (Dr. Jack Remington, a professor of infectious diseases at Stanford and director of the department of immunology and infectious diseases at the Palo Alto Medical Foundation, is a world-recognized authority on toxoplasmosis. He spearheaded most of the work Conley described, she said.)

The double-sandwich staining technique Conley uses in her lab to diagnose the disease, using layers of antibodies and antigens aimed at delineating the infectious form of toxoplasmosis, was adapted for this particular use and has "really revolutionized our ability to look at what's happening in the brain," she said.

"It's an example of how a very basic science research project--which no one at first thought would have much future application—can, with a little serendipity, turn out to have tremendous clinical importance," she noted.

The technique was first used by Conley to examine the brains of immunologically healthy mice after they were injected with infectious toxoplasmosis. "We were working on the question of whether a chronic infection with toxoplasmosis would allow the brain to resist cancer, as it had been shown to do for the rest of the body," she said, "and we found that infectious toxoplasmosis actually prevents the development of brain tumors in mice with healthy immune systems," she said.

"Ultimately, we hope our studies will provide part of the background for the development of new therapeutic methods for people who have cancer or are at high risk," she noted.

Central nervous system toxoplasmosis, which causes quite varied symptoms including such problems as chronic headaches, confusion, lethargy, fever, and sometimes seizures and paralysis, will progress to coma and death if left unrecognized and untreated, said Conley, who is also chief of neurosurgery at the Palo Alto Veterans Administration Medical Center.

The tricky part about pinpointing the disease in people with AIDS, Conley said, is that this group's blood test results show up differently from those of non-AIDS patients who are infected. This is one reason physicians have often overlooked the possibility of the parasitic infection in their AIDS patients suffering symptoms of encephalitis. Since lab tests won't disclose the condition, Conley said, samples of actual brain tissue must be examined.

Conley and Remington published their observations in the Aug. 17 issue of the *Journal of the American Medical Association*. They suggest that physicians treating AIDS patients who are showing signs of central nervous system problems order CT scans to check for abnormalities, take biopsies on affected tissue, and run blood tests anticipating the type of skewed results they describe.

The drugs available for use upon diagnosis cause a wide range of side effects and must be used on a long-term basis. But they are effective, Conley said. Meanwhile, Remington and other researchers are testing alternative antibiotic medications every day. (Cortisone, often used for encephalitis treatment, is not effective and is even harmful when the condition is caused by toxoplasmosis, Conley said.)

A ubiquitous parasite that lingers harmlessly in about 50 percent of the U.S. population, Toxoplasma gondii can trigger deadly disease in people who are immunosuppressed, Conley explained. These may include cancer patients, organ transplant recipients taking immunosuppressive drugs, and AIDS patients, in whom the basic defect lies with the body's immune system.

The healthy immune system keeps toxoplasmosis dormant and under control in most healthy persons. It is spread through undercooked meats, unwashed vegetables, soil and cat feces. Symptoms are usually totally absent or are similar to a mild case of flu, Conley said.

But if the immune system is later impaired, the heretofore latent disease can become highly infectious. The ailment also becomes dangerous when a woman becomes infected during the first trimester of pregnancy, risking transmission of the disease—and the likelihood of major birth defects or stillbirth.

"We don't know exactly why," Conley said, "but the brain, the heart, and the retina seem to be the three most susceptible target organs for toxoplasmosis." This may be because none of them have large colonies of immunologic cells. "In fact, the brain is very tolerant to foreign substances," she said.

Groups at high risk for AIDS include homosexuals, Haitians, intravenous drug abusers, hemophiliacs and other blood transfusion recipients, Conley said. Common AIDS killers include a form of pneumonia and rare cancers such as Kaposi's Sarcoma, in addition to other conditions such as the central nervous system toxoplasmosis first documented in the British medical publication, *Lancet*, April 9, 1983 by Conley, Remington, and Dr. Benjamin Luft, then a medical instructor at Stanford and research scientist at the Palo Alto Medical Foundation.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

FOR IMMEDIATE RELEASE

SCIENTIST/ADMINISTRATOR APPOINTED DEAN OF THE SCHOOL OF MEDICINE

STANFORD—

Dr. David Korn, 51, chairman of the department of pathology since 1968 and current chairman of the National Cancer Board, has been appointed dean of the Stanford University School of Medicine.

The appointment announced Tuesday, Oct. 9, by Stanford University Provost James N. Rosse and Vice President for Medical Affairs Lawrence G. Crowley will be effective immediately.

Korn will succeed Dr. Dominick P. Purpura who resigned in June to become dean of Albert Einstein College of Medicine. Crowley headed the faculty search committee for the new dean.

Stanford University President Donald Kennedy and Crowley praised Korn "as an outstanding biomedical scientist, teacher and administrator who understands what makes a world-class institution and who promises to bring a new kind of leadership to the Medical School."

They said such leadership "is needed to meet the present rapid rate of change in the clinical and basic sciences while preserving and extending Stanford's unique strengths."

Korn's appointment coincides with the celebration next week of the Stanford University Medical Center's 25th anniversary and move of the medical school from San Francisco to the Stanford campus.

"Those years have been truly years of achievement in science, clinical medicine and medical education," said Crowley. "But Stanford medical school, like all schools that are part of large academic medical centers, faces new challenges brought about by pressures on society.

"Some of the issues include the increasing scarcity of funds available to support medical education and research, government regulation, and trends revising the way medical services are delivered to the public and paid for."

Korn was named by President Ronald Reagan last summer to serve a six-year term as a member of the National Cancer Advisory Board and a two-year term as board chairman.

He is chairman of the Faculty Practice Program and was the first chairman of the medical school's faculty budget review committee. In 1983-84, he also chaired the committee on research of the University's academic council.

Under Korn, Stanford's department of pathology has achieved distinction for its double-pronged approach: the study of disease and processes involved at the basic level. Korn, who came to Stanford from the National Institutes of Health, recruited top talent in clinical services, and he appointed a cadre of young basic scientists to work in cutting-edge areas of research with strong cellular and molecular emphasis, who have themselves won national recognition for their scientific accomplishments.

Korn's own research is on enzymes that synthesize DNA and are involved in DNA replication of higher organisms.

He completed his internship and residency training in pathology at Massachusetts General Hospital after graduating with honors from Harvard Medical School in 1959.

Korn and his wife Phoebe have three children and live on the Stanford campus.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

VOLUNTEERS SOUGHT FOR DRUG STUDY

STANFORD—

Male volunteers ages 18 to 40 are needed for a new drug metabolism study being conducted by the division of clinical pharmacology at Stanford University.

Researchers seek healthy, non-smoking men who are currently taking no medications.

Entitled "The Effects of Acute and Chronic Administration of Ketoconazole on the Hepatic Metabolism of Antipyrine and Caffeine," the study examines the effect of a commonly used antifungal drug, ketoconazole, on the removal of other drugs from the body by the liver. Dr. Terrence Blaschke, division chief and associate professor of medicine and pharmacology, is principal investigator.

Subjects are currently sought for the end of October. They will receive physical examinations and several laboratory tests free of charge. They will also be compensated for their participation.

Volunteers will be studied on five separate occasions (for 48 hours) in the clinical research center at Stanford. Each subject will receive a daily oral dose of ketoconazole, a drug in use since 1977, for four weeks. The study will take place over a five- to six-week period of time. Blood, urine and saliva will be taken at each visit.

For further information or to volunteer, call Marni Brown at (415) 497-5266.

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News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

GROUP SUPPORTS RESEARCH TO PREVENT SIDS

Photos available upon request.

STANFORD—

A Milpitas couple who lost their second son 22 years ago to sudden infant death syndrome (SIDS) spearheaded a fund raiser bowling drive which resulted last week in a gift of $5,100 to Stanford, in support of SIDS research.

Howard and Sura Weiner have been donating to the SIDS program at Stanford for about a decade, said Stuart Rawlings, administrator of the Stanford Sleep Disorders Center. They founded the International Guild for Infant Survival of California, Inc., as a parent support group and vehicle for ongoing support to SIDS education and research, he added.

"When we lost our son at the age of two months, there was no information, no research, no education, nothing," said Sura Weiner, an assemblyworker in electronics. Since then, the Weiners and others have been working to increase awareness and research into the problem, and to comfort bereaved families, she explained.

"This was our biggest fund raiser so far, and the credit goes to the many SIDS families and friends who brought in pledges and got involved."

Rawlings said that each year more than 7,000 American infants die suddenly from SIDS, which is believed to be related to infant apnea, in which infants stop breathing for dangerously long periods.

"Every parent's fear is to wake up and find the baby has died," Rawlings said.

Physicians at Stanford recommend that some "near-miss" babies they examine be placed on home monitors, to alert the parents if they should stop breathing while asleep.

For more information about the Stanford SIDS program, contact Rawlings at (415) 497-6601, or write to the Stanford Sleep Disorders Center, Stanford Medical School, Stanford, CA 94305.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

FOR IMMEDIATE RELEASE

ONE—YEAR—OLD LIFELINE GIVES SUBSCRIBERS A SECURE FEELING

STANFORD—

Irma Garden, prone to mild seizures following two operations to remove brain tumors, knows she simply has to push the Lifeline button on her neck chain should she suddenly become ill or incapacitated. By doing so she sets off a network of neighbors and Stanford University Hospital's emergency personnel who will rush to her aid.

Garden is one of about 100 area subscribers to Lifeline, Stanford hospital's emergency response system geared towards geriatric, chronically ill and cardiac patients. Anyone in the Stanford area can subscribe to the system, which is coordinated by the hospital's emergency department, community relations office and auxiliary, the Senior Coordinating Council of Palo Alto and Little House of Menlo Park.

When subscribers push the button, which they can wear on a neck chain or like a wrist watch, they activate a transmitter unit attached to their telephone. This alerts personnel in the emergency department to notify predetermined neighbors. Within seconds, help is on the way.

The system was celebrated for its first anniversary Friday (Nov. 30) with a reception for volunteers, hospital workers and subscribers. It's been a great success, with 28 emergency calls so far, said Joan Naber, a hospital volunteer who is the prime mover behind Lifeline. "It's an outreach into the community to show that Stanford Hospital is made up of individuals who really care about people in the community.

"It brings security to senior citizens who want to live in their homes with their pets and be independent. This way they and their children don't have to worry about them living alone," she explained.

The first 100 units were purchased with a $70,000 gift from the hospital's auxiliary, Naber said. There are always people on the subscriber's waiting list, and Naber hopes to be able to raise funds from the community to purchase more units, each of which costs $500.

"Lifeline is indespensible for anyone living alone," said Helen Donaghey, another subscriber. She successfully used her Lifeline button twice, and needed it a third time. "I had taken it off to go for a walk," she said, "and before I had a chance to put it back on when I came home, I fell." Unable to reach it, she lay on the floor all night until concerned neighbors came looking for her the next morning. Donaghey is staying at Lytton Gardens Health Care Center until she recovers from the fractured femur she received from the fall.

"Lifeline makes you feel like somebody's taking care of you," said Winifred Forse, who also uses Lifeline. "When I'm out, I'm always with people," she continued. "It's just when I'm alone that I need it."

For further information on Lifeline, call Naber at 497-6906 or Sharon Beckham, coordinator of volunteer services, at 497-7424.

11-30-84 —30— sk3

Editors: Photos available on request.

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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

HOME CARE DIRECTOR NAMED

Photos available on request if not included.

STANFORD—

Registered nurse Kathryn Janz, 35, has been appointed director of the newly created department of home care at Stanford University Hospital, announced associate director of nursing Lois Welches.

The home care program to help Stanford patients after release from the hospital was approved by the board of directors in June. Janz, also an assistant director of nursing, said she hopes the program can begin serving patients by the beginning of February.

The program will be comprised of teams of registered nurses, home care aides, physical and occupational therapists, social workers, volunteers, and a dietary consultant. Patient care will be based on referring physicians' orders. The program is intended to provide the follow-up help patients and their families need at home in an era of shorter hospital stays, Welches said.

First-time mothers, and parents of infants who have been in the intensive care nursery, are prime candidates for home care, as are many other hospital patients, Welches noted. A hospice service will also be offered as part of the program.

Janz comes to Stanford from consulting positions at the St. Francis Memorial Hospital, San Francisco, and at Self Help for the Elderly, a Chinese community agency in San Francisco, where she helped develop and implement home care programs.

Earlier Janz set up and managed a home care and hospice program at Seton Medical Center in Daly City.

Janz received her bachelor's degree at D'Youville College in Buffalo, N.Y., and her master's in nursing at New York University.

Janz, who noted that this week, Nov. 26 to 30, was National Home Care Week, can be reached at (415) 497-5708.

11-30-84 —30— LA5

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FOR IMMEDIATE RELEASE

(ADVANCE) FOR RELEASE AM PAPERS, THURSDAY, NOV. 29, 1984

END OF MORATORIUM ON HEART TRANSPLANTS PREDICTED

STANFORD—

An end of the moratorium on heart transplants in a number of the nation's hospitals was predicted by two physicians writing in the Thursday, Nov. 29 issue of *The New England Journal of Medicine.*

The prediction comes from Drs. Gerald Austen and A. Benedict Cosimi of the Massachusetts General Hospital (MGH), who now believe the procedure can be done in more hospitals because of "important progress in the field."

It was four years ago when MGH trustees, in a well-publicized action, decided against a heart transplant program in the prestigious Harvard-affiliated hospital. "It's clear that cardiac transplantation has now been generally accepted as a therapeutic intervention of proved value," wrote the physicians who are members of the Harvard Medical School faculty.

Most heart transplants up to now have been done at Stanford University Hospital and about half-a-dozen institutions by staffs backed by extensive laboratory research and clinical experience in the field. Stanford surgeons, headed by Dr. Norman Shumway, have performed more than 320 heart transplants, more than any other group in the world.

The authors of the article said their views changed because of "the dramatic success in larger numbers of patients achieved at Stanford University."

This work represented "important progress in the field," they said.

The advances cited include better definition of patient selection criteria, monitoring techniques for rejection and use of new anti-rejection drugs such as cyclosporine.

"The improved results have been striking," Austen and Cosimi wrote.

"The Stanford group," they said, "now projects survival to be 75 percent at two years with cyclosporine immunosuppresion, as compared with 58 percent after conventional immunosuppresion."

But in response to the article, Shumway said, "We know there's tremendous improvement in one-year survival, but we don't know yet what the five-year survival will be. We'll wait and see what are the long-term effects of this medication.

11-28-84 -more-

"Because of the still unknown effects of cyclosporine, not every medical center should jump into the cardiac transplantation field."

Austen had reviewed the status of heart transplantation in cautious terms in a 1978 report in the same journal.

He wrote:

Heart transplantation under certain conditions could be "considered rational and acceptable therapy for a limited number of patients."

But Austen had questioned its widespread use in view of a then anticipated five-year survival rate of 35 to 40 percent.

"The massive allocation of medical resources required to attain this end remained difficult to justify on a widespread basis," he wrote.

This complex issue was later highlighted by the decision of the MGH trustees to declare a moratorium on heart transplants in their institution.

"Currently, there are at least 10 American medical centers with active heart-transplantation programs, and perhaps 15 more, including our own institution (Massachussets General Hospital), are either establishing programs or seriously considering them," Austen and Cosimi said.

Although use of cyclosporine has caused lymphomas and kidney damage in some patients and it should be carefully watched, the drug has been "unusually effective," they said.

Hospital costs for the procedure also have decreased from a mean of over $100,000 to $67,000 per patient, they indicated. The direct economic cost for a nationwide program should be somewhere under $200 million if about 2,000 heart transplants are performed annually. This estimate is far lower than the several billion dollars suggested by previous studies.

"Consequently, an end to the moratorium imposed on heart transplantation at a number of institutions can now be anticipated," they predicted.

The number of heart donors potentially available "appear to be about appropriate," Austen and Cosimi estimated.

But if indications for heart transplants are considerably expanded in the future, there would be a major shortage of donor hearts.

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FOR IMMEDIATE RELEASE

GUIDE INTO 'THE MINDS AND HEARTS' OF THOSE FACED WITH THE DYING

STANFORD—

A book, designed to break the communications barrier between medical professionals and patients on matters of death and dying has been written by Drs. Thomas A. Gonda and John E. Ruark of the Stanford University School of Medicine.

The Journal of the American Medical Association (JAMA) calls it "a major contribution, a guide into the minds and hearts of those faced with the dying." The magazine, *Nursing '84*, picked it as the outstanding book for nurses, and the American Journal of Nursing as its "Book of the Year."

JAMA's reviewer added, "There are even circumstances in which I would recommend it to family members requesting material to understand their situation better."

The book, *Dying Dignified: the Health Professional's Guide to Care*, (Addison-Wesley, Menlo Park, CA., 1984, $28 Cloth $11.95 paper), challenges readers to feel and think their way through the complex interactions which evolve from the moment of a fatal diagnosis to the patient's death and its aftermath.

Gonda is professor and chairman of the Department of Psychiatry and Behavioral Sciences, and Ruark is a Stanford medical alumnus now receiving specialty training in psychiatry at Stanford University Hospital.

"We know that many of our colleagues feel ill-prepared to deal with this difficult area," they wrote. "If our outline of some sensible ways of thinking about death can lessen the uneasiness, our goals will have been met."

Communication problems, Gonda said, start when the doctor breaks the news of a life-threatening illness and the patient responds with a strong expression of emotions.

What to say and how to say it is often a problem, he said, and can be vitally important to an effective caring relationship.

"Earthshaking news, for example, should rarely, if ever, be broken over the telephone," Gonda said. "It should be done in private with all parties seated. The number of relatives invited can be determined on a case-by-case basis, but the presence of at least one family member is useful."

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Telling a patient that he has a fatal illness can cause shock or even amnesia for much of what is said after the opening announcement, he said.

The book makes these suggestions:

- Bad medical news should be presented in a straightforward manner with carefully chosen, simple words. If cancer, for example, is involved, the doctor should use "cancer" instead of euphemisms such as "growth," "tumor," or "neoplasm" and "malignancy."
- Breaking the bad news should be followed by silence to allow time for reactions.
- Questions from patients and families should be solicited early and directly, and clinicians should routinely ask if their responses were clearly understood.
- It is not necessary to communicate "everything" during the initial session. Specific details can be given as the relationship progresses and as patients and their families request them.

The authors are critical of doctors who are less than candid. "Withholding vital information concerning the shape of the remaining days of someone's life is difficult to defend."

Communicating with patients effectively prevents mistrust, powerlessness and resentment, Gonda said. Patients with terminal illness face three great fears—the fear of the process of dying, the fear of nonexistence, and the fear of what comes after death.

"Feelings of abandonment are among the most difficult emotions confronting them," he said.

The book presents case histories, some contributed by patients and family members, to illuminate the various points. It explores the psychosocial, cultural, and demographic factors that come into play when people must cope with the reality of death. Other topics cover children's reactions to death, the problem of suicide, and the ethically complex decisions arising in the course of terminal care.

Gonda also heads the Stanford University Medical Center's ethics committee. The group is concerned with such issues as the right of patients to refuse prolongation of life, the allocation of costly treatment resources, ethical issues related to experimentation, and the incorporation of ethics into the medical school curriculum.

Ruark teaches a seminar on problems surrounding death and is the psychiatric consultant to the Compromised Host Unit at Stanford hospital.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

STANFORD FACULTY PHYSICIAN WILLIAM WATSON DIES OF CANCER

STANFORD—

William Watson, professor of clinical dermatology, died of cancer Sunday (Nov. 25) at O'Connor Hospital in San Jose. He was 45.

An expert in the field of psoriasis, Watson developed and implemented a day-care program for serious psoriasis sufferers at Stanford University Hospital. He was also an advocate of using large-scale screening programs for detection of skin cancer.

Watson was active in community affairs, including service as a volunteer physician in the Palo Alto Our Health Center and Senior Center. Watson, had lived in Palo Alto until his recent illness, when he moved to his parents' San Jose home.

Except for a one-year appointment at the Downstate Medical Center in Brooklyn, N.Y., Watson had been on the Stanford University Medical School faculty since 1970. During the past year, he continued to maintain his office in the dermatology department.

A native of Glasgow, Scotland, Watson moved to Detroit when he was 10 years old. He received his M.D. from the University of Michigan in 1964 and then interned at Highland-Alameda County Hospital in Oakland before entering a dermatology residency program at Stanford. He served as an Army medical officer with Vietnam service between 1965 and 1967.

"As a physician he was known for his warmth and compassion in caring for patients. As a teacher he was concerned that his students learn to reach out and support patients and their families in periods of crisis," said Eugene M. Farber, chairman of the department of dermatology.

Watson was a Fellow of the American Academy of Dermatology. Among university honors, he received the Henry J. Kaiser Award in 1976 and the Arthur Bloomfield Award in 1982 for excellence in teaching.

Watson is survived by his parents, Willie and Jessie Watson of San Jose; and sisters Mary McNally of Santa Clara and Margaret Bazner of Cupertino.

A memorial service will be held at Stanford Memorial Church at 3 p.m. on Saturday, Dec. 8. Funeral services were private.

In lieu of flowers, the family requests contributions to be made to the William Watson Dermatology Audio/Visual Laboratory for Medical Students, Department of Dermatology, Stanford University School of Medicine, Stanford, CA 94305.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

WEIGHT CONTROL COURSE OFFERED

STANFORD—

An eight-week course on weight control is being offered by registered dietitians Kristine Berge and Patricia Kearney at Stanford University Hospital.

"An Enlightening Experience" includes a personalized weight loss plan, low calorie cooking demonstrations and recipes, menu planning, and tips on dining out wisely. Guest speakers will discuss stress reduction, behavior modification techniques, and exercise.

Participants can register for either afternoon or evening sessions, to be held in the north cafeteria dining room. The evening class will meet Tuesdays, Jan. 8 through Feb. 26. The afternoon class will meet Thursdays, Jan. 10 through Feb. 28.

Enrollment for each class is limited to 20 participants. The fee is $300, with a $50 refund if weight goal is achieved.

The registration deadline is Dec. 18.

For further information call (415) 497-5440.

11-20-84 —30— LA5

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR DIABETES STUDY

STANFORD—

Volunteers ages 30 to 75 are needed to participate in studies at Stanford University Medical Center examining the link between diabetes mellitus and premature atherosclerosis as well as other abnormalities of fat metabolism.

Non-diabetics are needed, as well as diabetics treated with oral medications or diet, but not with insulin injections. They will be compared, using both standardized meals and glucose infusions to assess responses in blood sugar, insulin, and fatty acid levels.

The study requires that subjects spend two to three days in the clinical research center (CRC) at Stanford, scheduled at their convenience.

Participants will receive, at no charge, a complete physical examination and screening laboratory evaluation, including a glucose tolerance test. "This is particularly of value since occasionally we find an asymptomatic diabetic who was diagnosed by participating in our study," said Dr. Arthur Swislocki, an endocrine research fellow with the CRC.

The studies are conducted under the direction of Dr. Gerald Reaven, professor of medicine.

Interested volunteers should call Swislocki at (415) 497-6973, between 9 a.m. and 5 p.m., for further information.

11-20-84 —30— LA5

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FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

FOR IMMEDIATE RELEASE

BOOK CHARGES THAT MEDICINE HARMS PATIENTS: RECOMMENDS REFORM

STANFORD—

A new book published by the Stanford Alumni Association for the general public claims that doctors cause diseases because of systematic errors incorporated into medical practice. The application of these errors to masses of patients results in harm or death to large numbers.

The book is likely to be controversial because it smashes some familiar idols—doctors, hospitals and the medical education system. It challenges medicine's inflated estimate of its achievements, and makes a compelling case for the re-evaluation of many long-established practices.

"I do challenge the validity of much of the substance of current medical practice," its author Dr. Eugene D. Robin of the Stanford University School of Medicine said in an interview. "I realize I am not going to be popular with the medical community.

"But a frank admission of the deficiencies of medicine is timely. It could create a sense of humility for future doctors. We in medicine have a lot to be humble about."

The book, he said, grew out of teaching exercises for medical students and young doctors who support his ideas more than older doctors who tend to be negative. One even went so far as to accuse him of selling out to the enemy—lawyers—because the book might encourage malpractice suits.

"They read into my criticisms a challenge of the validity of what they 'know' to be true," Robin said.

Matters of Life and Death: Risks vs. Benefits in Medical Care (pp. 204, The Portable Stanford and W.H. Freeman, New York, 1984, $11.95 paper; $21.95 cloth), claims that many treatments and diagnostic tests of dubious value are introduced into medicine without proof of risk and benefit. Many studies routinely performed on patients are risky and irrelevant or unnecessary. And this happens not because doctors are acting irresponsibly, but because their training is deficient and has not taught them analytic skills for judging what they do or what they read in the medical literature.

"If General Motors introduces a new car, it must be reasonably sure that the new engine in the car doesn't burst into flames," Robin said. "If it does, the company is held liable. Medicine isn't held to this constraint at all. Almost anything—even the wildest ideas—can be introduced. And they can be tried out on large numbers of patients without any requirement for proving they are safe or helpful."

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These facts are not known to the public, to medical students or even to most doctors, Robin noted. Many of these flaws can be corrected. But while waiting for medicine to address them, "I felt patients themselves could take steps to minimize the harmful impact of medicine."

Robin said patients could:

- learn to view doctors as fellow human beings who are not gods.
- know something about the specifics of medical knowledge and the limitations of medicine and diagnostic tests.
- realize that hospitals can be dangerous and should be avoided unless the illness is serious enough and the hospital has facilities for the needed treatment.
- become active participants in their own care. Patients and doctors are partners in an enterprise in which the patient has the largest stake. Passivity can be bad for the outcome of their disease.
- Get an ombudsdoctor to act as advocate, especially in serious illness or life and death questions.
- limit their doctor visits to that which is necessary.

Robin, a widely respected professor of physiology and medicine, insists his book is not heretical or anti-science.

"I believe the purpose of medicine is to help patients directly," he said. "We need more, not less science in medicine, but it has to be better science and more closely linked to the needs of patients."

That medicine can do harm and good is nothing new, Robin said. What is new is that this potential has increased with the progress of science and technology.

"New technologies have economic benefits for industry, doctors, hospitals and medical schools," he said. "The procedures doctors do have multiplied enormously and this growth has occurred without corresponding changes in the processes by which innovations are introduced and doctors are trained."

Radical mastectomy (removal of the breast) for cancer, for example, was introduced into medicine in the early 1900s. Over the years mastectomies were performed in large numbers of women without being put to any kind of test. In 1955 a Scottish surgeon studied two groups of women with breast cancer in which radical mastectomy and simple removal of the lump followed by radiation treatment were compared. Both groups of patients did well, and the surgeon published his results. But no one acted on his findings until the late seventies when carefully designed clinical trials proved he was correct.

"Meanwhile, millions of women were given a psychologically and physically mutilating form of surgery without alternative," Robin said.

Another example is a test using the Swan-Ganz catheter, a tube "floated' into the blood vessels of the lung to make various measurements. "This test is helpful in a very small group of critically ill patients, " Robin said. "But in most others this test leads to no definable improvement. Despite studies showing the test's benefits to be dubious and complications high, it's used extensively in patients it shouldn't be used."

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"In one study of 46 clinically tested innovations introduced into surgery and anesthesia, 23 were found to be harmful and 23 to be beneficial," Robin said. "If that ratio is typical, the amount of harm medicine potentially produces is truly staggering.

"But if you ask students or doctors about these problems, most of them have never heard of them. We have no system for exposing our mistakes or using them as teaching examples and learning from them."

Medicine's problem of dealing with the flood of technologies cannot be solved by a cutback in new developments, Robin said. "This would be impractical and medicine would remain in its present unsatisfactory state. We must change the way we introduce new procedures by the extensive use of carefully designed clinical trials."

Risk-benefit analysis of new procedures, Robin said, is not a widely used tool because clinical trials are costly and are not regarded as a glamour area of medicine. A center for stimulating and organizing clinical trials could be established under the umbrella of the National Institutes of Health.

Robin said reform must come from medical schools.

"Medical training should lead to the conviction that the primary goal for every doctor is to achieve an improved outcome for patients; that diagnosis and scientific investigation are secondary to the well-being of the patient."

Robin said he didn't write the book with Stanford Mecical School in mind, but his observations and prescriptions are applicable.

"If medical schools are to thrive," he said, "they must come up with creative, unusual contributions and changes in the way they teach clinical medicine. These could be as dramatic as the developments of the past 20 years that made Stanford and other schools leaders in the basic medical sciences."

Medical students, he said, must be taught:

- how to evaluate new technologies to avoid mistakes implicit in the too rapid introduction of untried methods.
- to be alert to diseases caused by doctors and medical procedures.
- to recognize that medical knowledge is not fixed but constantly changing.
- a critical but respectful approach to sciences. They should understand the models used by basic science are often not relevant to patients.
- above all, how to listen to patients and to respect both their wishes and opinions.

"We at Stanford should redefine our clinical mission as one which places us in the vanguard of medical schools trying to improve the training of the next generation of doctors," Robin said. "Unless we do that, the next generation of doctors will repeat the errors of previous generations."

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FOR IMMEDIATE RELEASE

BAGSHAW WINS AMERICAN CANCER SOCIETY MEDAL OF HONOR

STANFORD—

Dr. Malcolm A. Bagshaw, chairman of the department of radiology at Stanford University School of Medicine, was named one of three recipients of the American Cancer Society's 1984 Medal of Honor at the Society's annual dinner in New York Friday (Nov. 9).

Bagshaw received the award, the Society's most prestigious honor, for his clinical contributions to the use of radiation in the treatment of cancer. The other Medal recipients are Dr. Robert Weinberg, a cancer researcher at the Massachusetts Institute of Technology, and Mrs. Forrest Mars of Washington, D.C., a national volunteer leader in the fight against cancer.

As this year's physician recipient, Bagshaw was honored by the Society for his "pioneering studies and distinguished leadership in radiation oncology and particularly for new approaches in the management of prostate cancer."

Bagshaw is an international authority on the use of the linear accelerator against a variety of cancers, including prostate tumors, retinoblastoma (an eye tumor) in infants, ovarian cancer, and mycosis fungoides, a cancer of the skin.

He and the late Dr. Henry Kaplan pioneered in developing techniques to use high energy radiation from the linear accelerator in cancer therapy. Since 1956 when their work began, more than 20,000 cancer patients have received such treatments at Stanford.

Bagshaw has been particularly interested in treating prostate cancer, the second most common cancer in American males, accounting for 60,000 new patients each year and 30,000 deaths. In clinical trials directed by Bagshaw since he joined the Stanford faculty in 1956, more than 900 patients with prostate cancer have been treated, with a 75 percent five-year survival rate, forming the largest group of such patients in the world to have been treated at a single medical center with the linear accelerator.

Bagshaw also has been a leader in studying techniques for enhancing the effectiveness of radiation therapy and in the search for new forms of anti-cancer radiation. He was an early proponent of the use of chemical agents to augment the radiation response, and he led in the early efforts to develop negative pi-meson radiation treatments for deep-seated tumors.

More recently, Bagshaw has directed a hyperthermia clinical research program testing heat in combination with x-rays to destroy tumors.

Since 1960 Bagshaw has directed the division of radiation therapy at Stanford Medical School. He became chairman of the radiology department in 1972, and currently holds the Catharine and Howard Avery Professorship in the medical school. Bagshaw did his undergraduate studies at Wesleyan University and obtained his M.D. degree at Yale University in 1950.

The American Cancer Society Medal of Honor is presented each year "to three outstanding individuals in the field of cancer control: a clinician, a research scientist and a lay person," according to the Society. Previous Stanford recipients include Dr. Henry Kaplan, who received the award in 1972.

11-9-84 —30— LH6

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

HOME TRAINING EQUALS GROUP REHABILITATION FOR MANY HEART ATTACK PATIENTS

STANFORD—

Many heart attack victims hoping to exercise themselves back to health can do so as safely and effectively at home as in group training programs, says a Stanford Medical Center researcher.

"Our research shows that selected patients can achieve the same increase in exercise capacity from training at home as in a group setting," said cardiologist Dr. Robert DeBusk in an interview Wednesday (Nov. 7).

DeBusk cautioned, however, that the key to home or gym exercise is careful screening and supervision of patients to ensure that the program is safe for them, said DeBusk, an associate professor of medicine who directs Stanford Cardiac Rehabilitation Program.

"Our results suggest that of the 600,000 Americans who survive a myocardial infarction (heart attack) each year, as many as 47 percent, or 280,000, may be capable of safely completing three months of home training—nearly five times the number of postinfarction (heart attack) patients currently undergoing group training," said the study which appeared in the October issue of **Circulation**, a journal of the American Heart Association.

Authors besides DeBusk, include primary author Nancy H. Miller, nurse coordinator of the Stanford Cardiac Rehabilitation Program; William L. Haskell, Ph.D., exercise physiologist and clinical professor of family, community and preventive medicine; and Kathy Berra, nurse coodinator of the YMCArdiac Therapy Program in Palo Alto.

The study suggests that with proper encouragement patients are just as likely to stick with a good home program as with a good group program, said DeBusk. In the current study, patients exercising at home had regular telephone contact with the nurse coodinator, and electrocardiographic data obtained during exercise training were transmitted periodically to the research center.

"Some patients find a group setting helpful, but others find it more convenient to do their exercising at home," said DeBusk. "The key to home or gym exercise is careful screening and supervision of patients to ensure that the program is safe for them."

Patients exercised at home on stationary bicycles, while the gym patients walked or jogged, DeBusk explained. In each case patients were encouraged to train for 100 minutes per week within a heart rate range which was shown to be safe during the treadmill exercise testing three weeks after the heart attack, he said.

Earlier studies by these researchers have shown that group training significantly increases exercise capacity between three and 11 weeks after uncomplicated heart attack.

In the most recent study, none of the 66 patients who trained at home or the 61 patients who trained in the group program had exercise-related cardiac incidents, although 15 percent experienced angina (cardiac related chest pain) during their training sessions.

"The safety of training in these patients appears to reflect the success of initial screening and continued surveillance of patients," DeBusk said.

Of 378 persons originally screened for the study, 151 were excluded because of complications, including congestive heart failure, stroke, or obesity.

A total of 198 persons ultimately participated in the study, including 37 control patients who were not evaluated until 26 weeks after heart attack and 34 "no-training" patients who underwent exercise testing three weeks after heart attack but did not participate in formal exercise training.

DeBusk said there were no significant differences in the improvement of cardiac function between the home and gym groups. Also, DeBusk said there appeared to be little further increase in exercise capacity in patients who trained for 23 weeks, compared with those who trained for eight weeks. This was true for patients who trained in either home or gym.

Patients in the no-training group showed less improvement in exercise capacity than those in either exercise training group and the control patients showed the least improvement of all, DeBusk said.

Participants appeared to stick with programs in about equal ratios. For example the home training participants completed an average of 89 percent of their prescribed training sessions while gym participants finished 84 percent of prescribed sessions.

"Despite the support and encouragement provided by fellow participants and medical supervisory staff, nearly half of patients drop out of group exercise training programs within six months after infarction (heart attack). In the present study the support and encouragement provided by telephone contact with the nurse appeared to be as effective as that provided by nurses in a group program in maintaining high-level patient compliance with exercise training.

"The reassurance provided by the use of heart rate and ECG-transmitting monitors may also have contributed to the high level of compliance with the home training protocol," the study said.

The research project was conducted with the collaboration of the medical departments of Kaiser Permanente hospitals in Redwood City and Santa Clara, who referred patients. Group training was carried out in YMCArdiac Therapy programs in Palo Alto and San Jose.

—30— mg4

EDITORS: DeBusk may be contacted directly at (415) 497-6461

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

HAYES NAMED ASSISTANT DIRECTOR OF HOSPITAL

Photos available on request if not included.

STANFORD—

Manfred Hayes has been appointed assistant director for Stanford University Hospital effective Nov. 5, announced director Sheldon King.

Hayes will assume administrative responsibility for the departments of dietetics, housekeeping, materials management, security, and telecommunications.

He comes to Stanford from the University of California, Irvine Medical Center, where since 1981 he served as associate director of hospital and clinics with principal responsibility for support services.

Hayes graduated with a degree in business administration from the Boston University School of Management in 1973. He then received an M.B.A. from Wharton Graduate School, University of Pennsylvania, in 1975.

Hayes "brings extensive knowledge and experience in all areas of hospital support services to his new position," said associate director Gerald Moller, to whom he will report.

11-6-84 —30— LA5

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FOR IMMEDIATE RELEASE

AUTHORSHIP CLAIMS POSE PROBLEMS FOR JUNIOR RESEARCHERS, OMBUDSPERSON SAYS

STANFORD—

Stanford should develop a mechanism to deal with senior faculty members who insist on claiming authorship inappropriately for research projects, says the medical school's outgoing ombudsperson.

"We believe this problem to be of sufficient complexity and magnitude to merit review by the Ethics Committee of the Medical School or the University office of Graduate Studies and Research," Dr. Allen B. Barbour, associate university ombudsperson for the medical school, said in the report released this week.

The comment was included in a 12-page document detailing his three years as the medical school's pioneer ombudsperson. Between the office's inception under his leadership in September 1981, and his retirement Sept. 1 this year, Barbour noted that his office worked with 236 grievances. The complaints arose from 89 students, 46 residents, 20 post-doctoral fellows, 29 faculty and 52 staff members.

In 1984, Stanford Medical Center had 384 medical students, 421 residents, 432 post-doctoral fellows, 567 faculty members and 1,747 staff members.

Serious problems facing the faculty, who filed 11 grievances in the most recent fiscal year, include disagreements about reappointment, promotion and tenure, as well as disputes about authorship of scientific papers.

Barbour noted several complaints from junior researchers who felt that their principal investigator unfairly claimed credit for projects or published articles.

In an interview he explained that he has talked with about five junior faculty or staff who felt a principal investigator had unfairly claimed authorship for their work.

"But in the ombudsperson's role, we are always seeing only the tip of the iceberg," Barbour added.

Significantly, he said none of the junior researchers agreed to pursue a grievance "nor even allow me to talk with the (appropriate) principal investigator."

In the report he noted complaints were not pursued "mostly because the complainant feared reprisal from the very faculty (member) most likely to insist, sometimes openly, sometimes covertly, on co-authorship which the complainant regards as spurious."

Barbour said, "We do not refer here to the appropriate co-authorship of a principal investigator clearly responsible for the integrity of research done under his or her jurisdiction even though the principal investigator did not conceive the project, do the work, or provide much, if any, supervision."

A neutral investigative body in the medical school might be useful but the problems of having a committee review literally hundreds of papers for appropriate authorship would be difficult, he said.

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In at least one case, Barbour said a junior researcher who conceived and then performed most of the work was eliminated entirely from authorship until the omission was called to his attention. In at least one case, the researcher insisting on co-authorship had played no role in securing funding or supervising the research.

While solving specific grievances was important, Barbour concluded that identifying and then attempting to resolve larger issues remained a crucial priority.

"Our capacity to investigate and seek strategic resolution of general problems, in addition to tactical resoluton of individual problems, is an important function of our office," he said in the document.

For example, Barbour pointed to the steady decline in formal grievances from medical students, from 36 in 1981-82, to 25 last year to 14 in the fiscal year which ended in September.

"We believe this to be due to general improvement, stabilization, and student understanding of certain vital forces in student life," including the protocol for choosing and changing clerkships (clinical exposure for students) or financial aid, he said.

Intern and resident complaints had steadily increased from eight the first year to 21 this year.

"Generally speaking, interns and resident are more reluctant than any other group to express concerns, for fear of reprisal," Barbour said.

Improved conditions, including reestablishment of the Committee on House Staff Well-Being, has helped address concerns among interns and residents and may ultimately help reduce the number of complaints.

Barbour noted that new regulations from some government reimbursement patients require faculty members to personally perform procedures rather than working with residents as before. This change, he said, "has encroached on our basic teaching function in some situations. It is hoped that the authorities (government and institutional) can work out a satisfactory resolution of this problem while continuing the same quality care for all that has always characterized Stanford services."

Staff grievances increased from nine the first year to 23 this year, and resolution of complaints by non-academic personnel have been made in close coordination with the Human Resources Group.

Postdoctoral fellows have seen an improvement in their ambiguous status—neither employee nor student—since they have been given institutional recognition under the aegis of Dr. Robert Cutler, associate dean for education. Many of the 20 formal grievances filed in the past three years from this group have involved contract ambiguities and uncertainties arising from this group's unclear status.

Parking complaints have "vanished with the completion of the new hospital parking lots," while recently adopted smoking regulations have produced some questions and complaints which could be referred to the Human Resources Group, Barbour said.

Barbour, a professor of clinical medicine (emeritus), was succeeded Sept. 1 in the associate university ombudsperson for the medical school post by Dr. Kenneth L. Vosti, professor of medicine.

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mg4

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

CALDICOTT TO SPEAK ON SURVIVAL

STANFORD—

Dr. Helen Caldicott, an internationally known activist in the nuclear disarmament movement, is to deliver the 12th annual Katharine D. McCormick Distinguished Lecture, 5 p.m. Monday, Nov. 12, in the Fairchild Auditorium at Stanford University Medical Center.

The lecture, entitled "The Politics of Survival," is open and free to the public.

A pediatrician, Caldicott has served at Children's Hospital Medical Center in Boston and on the faculty of Harvard Medical School. In 1981 she was the commencement speaker at Stanford Medical School.

Australian born and educated, Caldicott has been an environmental activist since 1971. She has been credited with encouraging the Australian public to protest—and bring to a halt—French atmospheric testing in the South Pacific. She later worked to inform Australia's labor unions about the medical and military dangers associated with the mining and sale of Australian uranium on the international market.

Caldicott has published two books on the physical and psychological consequences of the nuclear arms race: *Nuclear Madness: What Can You Do?* and *Missile Envy: The Arms Race and Nuclear War*. She was the founder of Women's Action for Nuclear Disarmament (WAND) and has served as president of Physicians for Social Responsibility (PSR).

A reception in the Fairchild lobby will follow her presentation.

The McCormick Lectureship honors Katharine Dexter McCormick, who in 1969 donated $5 million to Stanford Medical School with the expressed wish that it be used "for the encouragement and assistance of women pursuing the study of medicine, in teaching medicine and in engaging in medical research."

McCormick was a co-founder of the League of Women Voters and a vigorous champion of women's rights.

Caldicott will participate in various other events on the Stanford campus Tuesday, Nov. 13, being planned and coordinated by the local chapter of PSR. For further information on these call (415) 497-9060.

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FOR IMMEDIATE RELEASE

JAVITS RESEARCH AWARD GOES TO SIMMONS

STANFORD—

Dr. F. Blair Simmons, professor of surgery/otolaryngology, has received a special research award of almost $1.8 million from the National Institutes of Health (NIH), in honor of Jacob Javits, former New York senator.

The Javits Neuroscience Investigator Awards are designated, at the request of the U.S. Congress, for investigators submitting regular research grant applications for competitive review, who have a distinguished record of substantial contributions in some field of neurological or communicative sciences. They are committed for seven years of support, longer than the typical grant period.

Simmons' grant will support ongoing research with Dr. Robert White, professor and chairman of electrical engineering at Stanford, on the development of cochlear implants to improve the hearing of some deaf patients.

The electronic device is science's attempt to substitute wire for the 30,000 hair cells—each sensitive to a different range of sound—that normally line the snail-shaped cochlea (an inner ear structure) and convert sound transmitted from the middle ear to electrical pulses. Engineers under the direction of White have been working for more than a decade to develop a multichannel model which is hoped to outperform its simpler predecessor in patients with "sensorineural" deafness. Simmons can surgically implant the device to test its effectiveness.

Javits, who now suffers from a neurological disorder called amyotrophic lateral sclerosis, or "Lou Gehrig's Disease," has a record of actively supporting biomedical research, Simmons said.

The awards are given with advice from the National Advisory Neurological and Communicative Disorders and Stroke Council. Simmons was informed of his grant last month by Dr. John Dalton, director, Extramural Activities Program, National Institute of Neurological and Communicative Disorders and Stroke, NIH.

11-5-84 —30— LA5

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305
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FOR IMMEDIATE RELEASE

MIKLOS HETENYI, STANFORD ENGINEERING PROFESSOR, DIES AT 77

STANFORD—

Prof. Emeritus Miklos Hetenyi of the Stanford Departments of Civil and Mechanical Engineering was found dead at his campus home Wednesday morning, Oct. 31, apparently of natural causes. He was 77.

Neighbors called police after noticing accumulated mail. Hetenyi lived alone and had apparently been dead about two days.

A native of Hungary, Hetenyi was widely known as an expert in engineering stress analysis. He came to Stanford in 1962 after teaching at Northwestern University for 16 years.

A professor of applied mechanics and structural engineering, he was chairman of the Applied Mechanics Department at Stanford from 1965 to 1969. He retired in 1972.

Hetenyi received his diploma in civil engineering from the University of Technical Sciences in Budapest in 1931, then did graduate work at the University of Illinois before receiving his Ph.D. at the University of Michigan in 1936.

He was a research engineer with Westinghouse for nine years before joining the Northwestern faculty.

Early in his career, he was a bridge designer and group leader on the Danube bridges and worked as a bridge engineer for the Hungarian state railways.

Survivors include his son, John Gilchrist, of Arizona, and daughter, Nancy Jean Palmer, who lives in the Washington, D.C., area. His wife, Jeanie, died in 1973.

Further arrangements pending the survivors' arrival on campus Tuesday.

11-2-84 —30— RWB-22a Hetenyi

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

MEMORIAL SERVICES SCHEDULED FOR DR. ANNE YEAGER

STANFORD—

A memorial service for prominent pediatric researcher Dr. Anne Yeager have been scheduled at 12:30 p.m. Wednesday (Nov. 7) in Fairchild Auditorium at Stanford University Medical Center.

The brief memorial is being planned by the Department of Pediatrics in which Yeager served as a faculty member for the past 10 years.

Yeager, an associate professor of pediatrics, died Wednesday (Oct. 31) of a pulmonary embolism while enroute to the Stanford University Hospital emergency department from her Palo Alto home. She was 45.

Best known nationally for her research leading to avoidance of herpes in newborn youngsters, Yeager was a native of Baltimore, where her parents, Dr. and Mrs. George Yeager, currently reside. She is also survived by a brother and sister.

Private funeral arrangements have been made.

Nov. 2, 1984 —30— mg1

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FOR IMMEDIATE RELEASE

SCIENTIST ANNE YEAGER DIES OF LUNG CONDITION

STANFORD—

Dr. Anne Yeager, a prominent pediatric researcher and Stanford University Medical School faculty member for the past 10 years, died suddenly Wednesday (Oct. 31) of a blood clot in the lungs. She was 45.

Dr. Norman Rizk, her physician, said Yeager stopped breathing in a paramedic ambulance enroute to Stanford University Hospital from her Palo Alto home. She was declared dead in the emergency department at 7:45 p.m.

An autopsy to disclose the underlying cause of death was performed Thursday and results were not immediately available. But Rizk said pulmonary embolism, or a blood clot entering the lungs, is usually caused by phlebitis or a tumor and is responsible for about 100,000 deaths annually. Although she had complained of shortness of breath as early as Monday, an examination disclosed no apparent cause and she continued to work and was ambulatory up to the time she left for the hospital, her doctor said.

Dr. Irving Schulman, her department chairman, said Yeager was perhaps best known nationally for her research leading to avoidance of herpes in newborn infants. She also is credited with colleagues for important work on cytomegalovirus, a viral infection that once felled about 7.5 percent of the nation's premature infants. Improved blood donor screening was initiated to conquer this ailment based on her work.

Other research, centering on infectious diseases, included a 1976 study which reported that giving measles vaccines to infants was less effective than waiting until they were toddlers. Because of her work, the recommended age for measles immunization was raised from 12 to 15 months in the United States and other countries.

A native of Baltimore, Yeager graduated from Cornell University Medical College in 1965. She joined the Stanford faculty as an assistant professor in 1974 after four years in a similar position at the University of Colorado Medical Center. She was promoted to associate professor in 1977.

The author of numerous scientific papers, Yeager has lectured widely to both lay and scientific audiences.

She is survived by her parents, Dr. and Mrs. George Yeager of Baltimore, as well as a brother and sister.

Schulman said plans for a memorial service were pending.

11-1-84 —30— MG4

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

Editors: California Medical Assistance Commission Hearing is scheduled 9:30 a.m. to 1 p.m., San Mateo County Board of Supervisors Chambers, Hall of Justice and Records, 401 Marshall, Redwood City.

SAN MATEO COUNTY MEDI-CAL MAY BE RESTRICTED TO IN-COUNTY PROVIDERS

STANFORD—

Requiring Medi-Cal patients in San Mateo County to receive medical treatment only in their home county would interrupt longstanding patterns of care for many people, says a Stanford faculty physician.

Dr. James Silverman, chief of staff at Stanford University Hospital (SUH) and professor of radiology, said the pilot proposal by the San Mateo (County) Health Commission "would break up longstanding relationships between patients and their doctors. It would interefere with traditional patterns of care and referral and contribute to a two-tier health system."

Silverman was scheduled to testify Friday (Dec. 21) at 10 a.m. in Redwood City at a California Medical Assistance Commission hearing. The state group is seeking testimony on San Mateo County's request for waivers to administer care for the county's approximately 27,000 Medi-Cal patients.

The county has proposed setting up a public insuring organization to pay for inpatient health care at the five hospitals in the county. Physicians in the county will be eligible to receive subcontracts to care for individual patients.

"Patients who have relied on Stanford or other hospitals in the area for their care—in some cases for decades—will now have to shift to new health care providers and new hospitals," Silverman said. Stanford University Medical Center (SUMC) is adjacent to San Mateo County on the Santa Clara County line.

"We're not saying they won't get the same quality of care with their new doctors and new hospitals. But we do want to point out that a large number of patients will be required by a government agency to change doctors and use a hospital other than the one they have had an ongoing relationship with."

Silverman said about 1,400, or 21 percent, of the Medi-Cal patients in San Mateo County receive inpatient treatment at SUMC.

These figures include about 190 children who receive their inpatient care at SUH or Children's Hospital at Stanford (CHAS).

"We believe it would be traumatic for many of these children to have their care shifted suddenly to new doctors and new hospitals," said Dr. Irving Schulman, a professor and chief of pediatrics at SUH and CHAS.

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"The majority of our Medi-Cal pediatric patients suffer from severe chronic illnesses where continuity of treatment is important. For children, returning to a familiar place to find familiar doctors and nurses is an even more important psychological boost than for adults," said Schulman, who was also slated to testify at Friday's hearing in the San Mateo County Board of Supervisors chambers.

The San Mateo Health Commission has estimated that Medi-Cal costs would be reduced $1.4 million out of a total of $43.9 million in 1985 by switching to the new payment system. In its proposal, the commission said the system is expected to "reduce costs by utilizing a combination of spending caps, fiscal incentives and effective management."

The primary cost reduction technique is a burgeoning device called prospective payment, which is being used increasingly in a variety of public and private insurance plans. If costs are less than a preset fee, the hospital or physician keeps the difference. If costs are greater, the hospital or physician must absorb the cost.

Silverman said a majority of the San Mateo County Medi-Cal patients served at SUH come from East Palo Alto, Menlo Park and Redwood City.

"Stanford University Medical Center is located on the San Mateo County line and has long been a significant part of that county's health care community," said Silverman, who is currently studying health care financing during a one-year sabbatical. "Indeed, large tracts of land owned by Stanford University are in San Mateo county. It seems unfortunate for patients in these close-by communities to lose the freedom of choice to use Stanford University Hospital," he added.

The same group of patients, Silverman said, would no longer be able to select physicians outside San Mateo County, including Stanford faculty doctors, independent physicians in Palo Alto and surrounding communities or group providers such as Palo Alto Medical Clinic. These have been longtime sources of care for Medi-Cal patients, Silverman said.

Silverman noted that the San Mateo County plan permits referrals outside the county when local facilities are not available. "This is helpful for patients with highly specialized needs, but it does not address the issue facing the vast majority of patients who may have chronic conditions requiring treatment which may not be urgent but which can be enhanced by the continuity of care of the patient's long-time physician.

San Mateo county has said that the proposed system encourages an ongoing relationship with a physician, since a primary care doctor must authorize in advance all non-emergency care sought by the patient "to dissuade inappropriate self-referrals and to improve quality of provided services since only needed health care will be available to beneficiaries."

The Organized Health System, as the proposed delivery system is called, must be approved by the state Medical Assistance Commission in the form of waivers to the statewide Medi-Cal program. It would take effect six months after approval.

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FOR IMMEDIATE RELEASE

HOSPITAL TEAMS WITH RED CROSS TO OFFER HOME CARE COURSE

Photos available on request if not included.

STANFORD—

A class in home care, focusing on the skills needed to care for a person with a chronic illness, will be offered 9 a.m. to 3 p.m. Saturday, Jan. 12, by two Stanford nurses and a social worker at the Palo Alto Chapter of the American Red Cross.

Initiated at Stanford University Hospital, the course has been offered several times a year since 1980, said Stanford oncology social worker Isabel Walker.

Many participants are friends and relatives of patients with cancer or other illnesses, who want to be prepared to care for the patient at home after release from the hospital, she said.

Others may be nurses or other health care professionals seeking basic training and experience in home care, she added.

Walker and nurses Nicola Eisen and Nadine Nakazawa volunteer their time to teach the class.

Among topics covered are: personal care of the patient, proper body mechanics, recognizing symptoms of illness, supervising medications, comfort measures for patients, and social and emotional aspects of illness.

With the increasingly high cost of health care in hospitals, home health care is viewed as an attractive alternative whenever possible, Walker noted. Moreover, professional home care services are being developed through Stanford Hospital's newly created department of home care.

Family referrals to participate in the Red Cross class may be coordinated by Walker and the nursing staff of the Oncology Day Care Center at Stanford. The endeavor is an attempt to "extend services to the home using existing community resources," said Walker.

"What's most important is that we can reduce the feeling of helplessness," Walker said. "Cancer is a family affair. People cannot have cancer and be left alone."

In 1980, Joan McVicker's daughter Lori, then 18, was treated at Stanford for a form of cancer called lymphoblastic lymphoma. Just before Lori went home, her mother took the Red Cross course. She was trained to give Lori her medications, to take her temperature and blood pressure, to give her bed baths, to monitor her nutrition and to do all the things a home nurse would do.

"Lori had problems swallowing her medications," Mrs. McVicker said. "Every time I gave her a pill, she would choke." The Red Cross taught her how to take two spoons, crush the pill between them, and cover it with apple sauce. Then it slid down easily.

"When I took the course," recalls Mrs. McVicker, of Fremont, Calif., "I felt I was the only person facing a loved one with cancer. I discovered a lot of other people were there for the same reason and that we had a special bond."

The fee for this outreach program is $5 per person or family, and it includes the American Red Cross manual, *Family Health and Home Nursing*. Pre-registration is required through the Red Cross, 400 Mitchell Lane, Palo Alto. Phone (415) 322-2143.

STANFORD UNIVERSITY MEDICAL CENTER
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(EDITORS: this story appeared in the Winter 1984 issue of **Stanford Medicine**. Photos are available.

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FOR IMMEDIATE RELEASE

THE MOLECULAR BASIS OF VISION

STANFORD—

Aside from the usual complaints about not being able to see as well as we'd like to, most people probably don't spend much time thinking about vision. Yet the mystery of how we see has long puzzled scientists. They know that light comes in the eye and is transformed into signals that proceed back to the brain. But they don't know exactly how this is done. They know that it's with the brain that we "see," but they know very little about how it converts light to the visual images called sight. And they don't know much about how and when the system that allows sight to happen is set up.

Stanford scientists and colleagues all over the world are seeking the pieces to solve the puzzle of vision. They are working in a submicroscopic world, dissecting vision at the molecular level, studying cells and their minuscule components that make up the system. They want to know exactly how the vision system is set up and when in the development process it happens. They want to know exactly how messages about light travel back to the brain and what changes they undergo on the way. And once the messages reach the brain, they want to know exactly how the message of sight is relayed. They don't have all the answers yet. But their findings to date have brought them, and science, much closer to understanding how we see.

Understanding vision would make it easier to study its diseases and congenital defects, such as cataracts and lazy eyes, and to develop improved therapies to overcome them. And it would help scientists understand other similar types of systems as well.

Imagine a television set with one million loose wires. To make it work, it's necessary to figure out how to hook up each wire to precisely the right connection. Substitute the eye for the television and you're faced with the problem Stanford neurobiologist Carla Shatz is working to solve. The young scientist becomes animated as she describes nearly six years' work studying prenatal development of the vision system. She is studying how, during development, all the wires—called nerve fibers in the eye—make the precise, orderly connections that exist in the adult.

"It's sort of a miracle to me that somehow nerve cells can grow along the right pathway, get to the right target in the brain, and then make absolutely precise connections that allow the whole processing of information about sight to take place," she marvels.

She does her research with cats, whose vision system is similar to humans. By raising cats specifically for her work, Shatz can record their development from conception to birth. She looks at the fetuses at specific times during gestation, performing the surgeries in her laboratory's mini-operating room complete with scrub basin, sterile surgical kits and anesthetic devices.

12-18-84

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Early in development, Shatz explains, nerve cells that actually carry the informational messages back to the optic nerve extend themselves by long, narrow shoots called axons to a midway point between the eye and the brain. Once the axons reach this point, known as the lateral geniculate nucleus, they sprout branches like wildly growing trees. The branches in both geniculates are initially from axons from both eyes. Those that don't make what will be the axons' final adult-like connection from the retina to the geniculate disappear. Axons from each eye become separated from each other and persevere only in specific portions of each geniculate.

It's how the nervous system knows which branches to drop and which to keep, resulting in a highly organized and precise system, that has Shatz and other scientists puzzled.

"If we knew this we could also understand why the system does not develop properly sometimes," she says. "We'd be able to explain how the experience of sight affects the pattern of connections in the system. We'd also be able to understand more about how the brain works."

Shatz' work has presented some interesting clues. By injecting eyes with a tracer element, she is able to follow the path of the axons. It seems, she says, that those from the part of the retina closest to the nose always reach the opposite geniculate sooner. Thus, they have time to strengthen their connections and become permanent. Axons from the outer portion of the retina from the other eye arrive about three days later and lose out wherever they encounter the axons that arrived earlier.

What's more, this portion of the vision system between the eye and the geniculate is set up before birth, Shatz has found. It's even capable of working, waiting only for the stimulation of light. Knowing this, Shatz says, it could be possible to alter the system prenatally. Once the system is completely sorted out and working with the stimulus of light, however, no altering is possible.

The portion of the system from the geniculate back to the brain develops in the same way, Shatz explains. The major difference is that the connections are not completely set up at birth. Thus, they can be altered by light. For example, consider a child born with one normal eye and a cataract in the other. If the cataract is not removed as soon as possible, too many of the connecting branches from that eye will disappear, leaving the good eye with more than its fair share. Then, even if the cataract is removed, the affected eye will gain little, if any, vision. This is because the child's vision system and all the connections, including those from the eye with the cataract, have already become permanent. But, if a child is born with two normal eyes, and later on in life develops a cataract and undergoes surgery to correct the mechanics of the system, his sight will improve. This is because all the initial connections were in fact normal.

While Shatz is studying the development of the vision system, Dr. Denis Baylor is focusing on one specific part: the retina. He wants to know exactly how the retina works to transform light, which travels in packets called photons, into electrical signals that proceed back to the brain. The soft-spoken neurobiologist has spent the last 15 years of his career involved with this tiny bit of the eye.

The retina is the light-sensitive layer that lines the back of the eye. It is filled with a sodium solution that bathes about 100 million rods, which are responsible for black-and-white vision, and five million cones, which are responsible for color vision. Both types of cells are long cylindrical structures, except for one side of the cones' outer membrane that folds into many layers. Each rod contains about 1,000 disks stacked like dimes. On these disks and on the cones' folded membrane sit about 100,000 light-absorbing rhodopsin molecules—like the molecules found in brine bacteria that cause the salt ponds of San Francisco Bay to turn red seasonally.

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When light hits the rhodopsin molecules, they instantaneously undergoes a transformation that triggers a series of domino-like steps. Somehow the sodium is blocked from entering the rods or cones, and that blockage generates an electrical signal that can be released to other cells in the retina.

Baylor and his colleagues want to know exactly what these domino-like steps are. Even more, they'd like to learn how the sodium is prevented from passing into the cells. They're working on these questions with probes as small as one five-hundredth the diameter of a human hair. These tools enable the scientists to look at one single cell, or a part of one cell, at a time.

Most likely, they have found, sodium travels into the cells via special molecules that act like ferry boats. Sodium hooks onto molecules outside the cell, and when these molecules pass through the membrane, the sodium pops off. So why, when the light hits the rhodopsin molecules, does the ferry service suddenly come to a halt?

"There's only one way it can work," Baylor explains. "Something is diffusing through the cell, causing the sodium channels to close. There is an internal transmitter substance that relays the excitation from the rhodopsin molecules in the disks to the cell's surface membrane."

In a laboratory just downstairs from Baylor's, structural biologist Lubert Stryer has found a clue to what that transmitter is. The enthusiastic scientist's work has provided a piece of the vision puzzle by finding what may trigger the transmitter that cuts off the sodium flow. Stryer has discovered a protein in the retina that helps explain the first of that series of domino steps.

The change that light-hit rhodopsin molecules undergo must happen to hundreds of molecules to create an interference large enough to actually stop the sodium flow into the cells. This amplification process involves a complex, intricate, biochemical machine, Stryer says. It works not only in vision, but in hormone-triggered cells in other parts of the nervous system as well.

Inside dark rods and cones are low concentrations of calcium and high concentrations of a substance called cyclic GMP (guanosine monophosphate). When light hits the cells, the GMP concentration immediately decreases because an enzyme, activated at the same time, eats it up. As it turns out, the rhodopsin molecule does not directly activate the enzyme. Rather, Styer's protein, called transducin, does the job.

Transducin proteins constantly test rhodopsin molecules by knocking into them like bumper cars at a carnival. As soon as a rhodopsin molecule changes, a transducin protein latches onto it. The protein becomes activated and hurries over to activate the enzyme.

"We have what we think is likely to be the first stage of amplification in vision," Stryer says. "We don't know how the drop in cyclic GMP affects the flow of sodium, although it and calcium are fundamental players. But we now know a lot about rhodopsin, transducin, and the enzyme."

With the knowledge and the highly specialized tools the scientists have, such as a laser about one million times as intense as the sun that experts at Stanford's engineering school developed for Stryer's work, "we have a lot of ideas up our sleeves," Baylor says. "We can now change the internal composition of functioning cells and see how it affects the way the cells work." He and other scientists are also studying the encoding process: how the electrical signals actually represent the information sent to the brain. "This is what we need to learn to really understand how the whole process of vision works.

"There are many interesting years of research coming," he predicts. "There will be fascinating things to work on for a long time." Just as it's difficult to improve the way televisions work without understanding the technology, Baylor stresses that it's difficult to change or improve upon how well we see until science understands exactly how we see.

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STANFORD—

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FOR IMMEDIATE RELEASE

DR. ROBERT CHASE: "THE STATESMAN OF PLASTIC AND RECONSTRUCTIVE SURGERY"

STANFORD—

Cecil Upshaw, relief pitcher for the Atlanta Braves, was walking back to his hotel with two teammates back in April of 1970. In high spirits, having pitched his team to victory over the San Diego Padres that day, the six-foot-six-inch tall-Upshaw jumped up to touch a roof. Suddenly, a surge of pain tore through his outstretched arm. Back on the ground, he looked at his pitching hand to see his ring finger torn almost completely off.

Upshaw's teammates rushed him to the nearest hospital. When physicians looked at his finger, he recalls, they just grimaced. "I went halfway bananas," Upshaw says. "I thought my baseball career was finished."

Upshaw's managers sought expert advice. All fingers pointed to Stanford University Medical Center, where a hand surgeon named Robert Chase chaired the surgery department. If anything could be done to fix Upshaw's finger, the Braves managers were told, Chase would be the one to do it.

That same night, a chartered jet flew Upshaw from San Diego to Stanford, where Chase was waiting. Five surgeries and 68 days later, Upshaw left Stanford, finger and hand intact. And in the first game of the following season, Upshaw pitched four scoreless innings to beat the Cinncinati Reds. After the game, Upshaw sent Chase a telegram.

"I got the victory," it read, "but you deserve the save."

Chase does deserves a save—and a victory as well—in a much larger ballpark. He has played a key position in the field of reconstructive hand surgery, nurturing its development from infancy stages in the 1940s to its present state as a unique specialty and fine-tuned science that includes only about 1,200 surgeons in the United States.

"The importance of the human hand to man's overall function is intriguing," Chase reflects. "It's the hands' anatomical capabilities under the control of a very complex brain that make man unique and different. The idea that it's possible to enhance the quality of one's life by correcting the highly complex, biomechanical device known as the hand through reconstructive measures is especially appealing."

Today hand surgeons can improve, if not correct, any hand deformity, Chase says. Microsurgery—techniques with which surgeons can cut and splice vessels, nerves, muscle, tendons and more with minuscule tools they maneuver while peering through a microscope—and the ability to move entire units including skin with their own blood supply, allow surgeons to transfer, modify and replace just about any part of the hand. Toes become thumbs, thigh muscles move up to the hand, leg skin covers up a palm.

These techniques were not available when Upshaw sought Chase's expert skills. In repairing his finger Chase had to use something called the "island pedical flap technique," in which he rerouted skin with blood vessels and nerves from another finger by tunneling through the palm of Upshaw's hand. Today surgeons would be able simply to sew the vessels and nerves back together without involving another finger. This allows the transfer of parts from distances as great as from the foot to the hand.

"The possibilities have become virtually endless," Chase explains. "Using microsurgery techniques we can cope with any of the deformities that occur within a hand whether they result from injury, birth defect, loss of part due to infection or treatment of tumors, or degenerative disease."

Chase is working towards doing this better and more easily. His latest research project is bringing hand surgery into an era that could easily be mistaken for the stuff science fiction is made of. Chase is digitizing—assigning numerical values—to cross sections of each part of the hand. He's entering all this information, obtained by photographing millimeter-thick slivers one at a time, into a computer. He is then able to call up a three-dimensional, movable image of the hand parts on the computer screen. He can move the parts of the hand, isolate them, or make them larger in order to study them in new ways.

"By animating the hand we can study the relationship of one part to another, and the biomechanics of its function," he predicts. "We'll be able to learn exactly what parts can be substituted for others for surgical repairs. We'll also have the data that will allow us to construct artificial parts that are closer akin to human parts. If we better understand how the hand works, we're better able to duplicate it or substitute for it using robotic devices."

The next big advance, Chase predicts, will be the transplantation of limbs, just as with an organ such as a heart or a kidney. The technology is here, he says, but rejection by the body of the new limb is still a problem.

"Cyclosporine, a drug used to keep the body from rejecting a newly transplanted organ, has brought us closer. But a limb transplant would still be an inappropriate operation to do because it isn't vital to life and the risk of the drugs is too high," Chase explains.

"Although hand surgery isn't life saving," he continues, "it is living saving. We have an aging population. Many people will have disabilities amenable to reconstructive surgery. It really has a lot to do with the quality of the continuing survival of patients. Consider the rheumatoid arthritis patient, for example, who is so severely crippled that he is unable to function well, and then he undergoes surgical reconstruction and subsequently can be more independent. This means a great deal to the patients and to society."

Chase has helped pave the way for many of the advances reconstructive hand surgery has undergone. The need for the specialty surfaced during WWII. Military people with hand injuries were spread around various wards in army hospitals—in neurosurgery, plastic surgery, orthopedics and other units—with the various specialists interested in only one aspect of the injury. It was during this time that the surgeon general, on recommendation of J. William Littler, one of Chase's mentors, established special hand centers. Stanford surgery professor Sterling Bunnell, whom Chase considers the "father" of hand surgery, was chosen as the national consultant to the seven centers for hand surgery across the country.

It was the Korean War that brought Chase into the hand surgery picture. After training in general surgery at Yale's New Haven Hospital, Chase was stationed at Valley Forge Army Hospital in Pennsylvania. The hospital was one of only two hand centers in the country during the war, and Chase went on to become chief of its hand surgery section.

He came to Stanford in 1963 and immediately began building up a reconstructive and plastic surgery specialty section within the surgery department he chaired. He pulled a coup in inviting Dr. Harry Buncke, who is credited as being primarily responsible for developing microsurgery techniques, down from San Francisco to use Stanford's laboratories for his research.

"I was doing my experimental surgery in an old wholesale monkey warehouse and in my garage," Buncke recalls. At Stanford, he says, he had access to the facilities while Chase was able to use his expertise to help establish a microsurgery laboratory.

"I brought down the only diploscope, a two-sided microscope used for microsurgery, in the whole Western United States," Buncke says.

Chase quickly won notice as an exceptional educator as well as clinician at Stanford. "I'm devoted to seeing to it that medical students get a proper opportunity to learn human anatomy, surgery, and skills in overall practice of medicine," says the first holder of the Emile Holman Professorship of Surgery. "I pushed hard for the development of plastic and reconstructive surgery, and I urged a lot of my students to go into the field."

His students responded to the man who has won numerous awards for his teaching skills while at Yale and Stanford, and who counts among his former students several leaders now heading departments of reconstructive surgery at top medical schools in the country.

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"There isn't anybody I know who doesn't like Bob Chase," says Dr. Berish Strauch, chairman of the plastic and reconstructive surgery department at Albert Einstein School of Medicine in New York.

Strauch met Chase at a meeting in 1963. "After listening to him speak for only one-half an hour he impressed me so much I asked him to let me know if he ever started a plastic surgery training program. He called me up two years later out of the blue and said 'come to Stanford.'"

Chase teaches by example, recalls Dr. David Dibbell, chairman of the plastic surgery department at University of Wisconsin. "He nurtured our growth as individuals as well as physicians."

As an individual as well as a hand surgeon, Chase is thought to be quite remarkable. His secretary of 21 years, Grace Lee, knows him very well, she says. "He's one of the kindest and most honest individuals I know. But don't let his easy-going attitude fool you—it's just a front. He's really a persnickity perfectionist," Lee admits.

Chase is at work at "the crack of dawn," Lee reveals. And still, she says she doesn't know how he manages to do as much as he does and have time to spend with his family, which has grown to include three children and six grandchildren. He treats them with the products of one of his hobbies, woodworking. "He made them a Noah's Ark that was just incredible," Lee recalls.

His wife, Ann, Chase holds in special esteem. Without her, he says, none of what he's accomplished would have been possible. "She has been an effective partner in my efforts and has made my career successful."

In addition to his clinical and teaching responsibilities at Stanford, Chase is constantly publishing articles and books about clinical aspects of medicine, as well as about issues within the medical profession. His Atlas of Hand Surgery, the second volume of which was published just this year, is considered the "how-to" recipe book of hand surgery. "Chase is the statesman of plastic and reconstructive surgery," Buncke says.

Chase, involved with numerous national and international professional organizations, has just completed a term as president of the prestigious American Society for Surgery of the Hand.

"I hate it when he goes to meetings," Lee laments, "because he always comes back elected to some position and that means more work."

Chase is involved in education on a much broader scale than that of surgery, or medicine. He serves on university-wide committees, such as one that oversees all faculty appointments and promotions. In 1974, he temporarily left Stanford for a stint as president and director of the National Board of Medical Examiners, which is responsible for testing physicians' qualifications for professional practice.

Lee and Chase have the easy working relationship that is bound to develop after working together for so many years. They yell back and forth at each other in their spacious office suite with an obvious underlying respect for each other.

"His father once told me he never thought he'd amount to much," Lee says. "Maybe that's what drove him. He's a father figure and a role model for his students and colleagues. And his patients, especially children, refuse to have anyone else see them."

It was one such child that Chase treated who marked the beginning of a nonprofit organization, Interplast, through which medical professionals volunteer their time and services to treat Latin America's poor. At 13, Antonio Victorio had already dropped out of school, having been mercilessly teased all his life about the gaping hole in his upper lip. Raised by his grandmother in a small Mexican village, he was convinced there was no hope. Word about his plight eventually reached Chase, who volunteered to correct Antonio's cleft lip and palate. Since Antonio, physicians led by Chase's third resident, Dr. Donald Laub, have followed Chase's example and have performed more than 10,000 corrective operations upon Interplast patients.

Fourteen years after being treated by Chase, Upshaw, now a sales manager for a medical products company in Georgia, remembers the experience in detail. "He was just an absolutely wonderful physician," he concludes. All who know Chase—patients, students, and colleagues—seem to agree.

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FOR IMMEDIATE RELEASE

CPR EVENT COMING UP; VOLUNTEERS SOUGHT

STANFORD—

Stanford University Medical Center is scheduled to be one of seven county sites for "Super CPR Weekend," Jan 12-13, 1985.

Program and registration information will be presented during a 30-minute program on KNTV-Channel 11 at 7:30 p.m., Jan. 2, 1985.

Sponsored by KNTV and the Santa Clara County chapters of the American Heart Association and the American Red Cross, the event is expected to draw about 6,000 participants. All will receive free instruction and certification in adult one-rescuer CPR, cardiopulmonary resuscitation, and instruction in the rescue of choking victims.

The sponsors are seeking volunteers to help with the Super CPR Weekend. Volunteers should call the American Heart Association at (408) 247-8555, or Sharon Beckham, medical center coordinator of volunteer services at 497-7424.

12-17-84 —30— sk3

FOR INFORMATION CONTACT: Shirley Kraus (415)497-6911

FOR IMMEDIATE RELEASE

STANFORD PHYSICIAN RECEIVES AWARD FROM VENEZUELAN PRESIDENT

STANFORD—

Dr. Eugene Farber, professor and chairman of dermatology department at Stanford University School of Medicine, has been awarded one of the highest honors given by the president of Venezuela.

Farber received the Order of Andres Bello, First Class, from President Jaime Lusinchi during a Dec. 5 ceremony at the Hall of the Americas, Washington, D.C.

The honor was bestowed on Farber "in recognition of his valiant service during the past two decades in the development of human services in Venezuela, primarily in the field of medicine."

His two most notable achievements, Farber said, related to the development of the curriculum for the newly-established Vargas Medical School at the Universidad Central de Venezuela, and the creation and development of the Institute of Dermatology at the Vargas Medical School.

12-17-84 —30— sk3

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FOR IMMEDIATE RELEASE

TEENS OFFERED WEIGHT CONTROL COURSE

STANFORD—

A 12-week course on weight control for teens will be offered, beginning Jan. 24, by the department of dietetics at Stanford University Hospital.

The "Shapedown Program" is taught by registered dietitians, and combines diet, exercise, and behavioral techniques for successful weight control. Sessions are designed to assist teens in taking charge of their own weight management, said registered dietitian Kristine Berge.

Classes will run 4 to 5 p.m. Thursdays, Jan. 24 through April 11. Two parent participation sessions, to help them reinforce their children's efforts, are scheduled for 7 p.m. Feb. 7 and March 14.

Total charge for the program including materials is $150. Registration deadline is Jan. 10.

For further information call (415) 497-5440.

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FOR IMMEDIATE RELEASE

HEAD AND NECK CANCER: NEW TREATMENTS FOR A DEBILITATING MALIGNANCY

EDITORS: This article first appeared in the Fall 1984 issue of *Stanford Medicine* magazine.

STANFORD—

When Edwin "Red" Monroe started losing his voice in 1978, he had a "sneaking suspicion" that something more than laryngitis was wrong, but he delayed seeing a doctor. A year later at Stanford Medical Center, Red's suspicions were confirmed when he learned he had cancer in his larynx. "I accepted it," the crusty 62-year-old tool and die maker recalls, "and decided it had to be mind over matter from then on."

Red was fortunate to reach Stanford, which has a nationally recognized program for treatment of head and neck cancers. The diagnosis launched him on a treatment course that included modern medicine's best proven anti-cancer weapons—chemotherapy, radiation, and surgery. Today, Red has been free of cancer for five years. But not all head and neck cancer patients, even those that get care at Stanford, are as lucky as Red.

Although head and neck tumors comprise only five or six percent of all cancers, they are among the most debilitating of malignancies, says Dr. Willard Fee, professor of surgery and head of the division of otolaryngology—ear, nose, and throat medicine—at Stanford University School of Medicine.

The overall cure rate for head and neck cancer is approximately 55 percent. When detected in later stages of disease, survival rates fall to somewhere between 10 and 40 percent, Fee explains. In those who survive, the tumors affect highly visible and functional parts of the body. "No other cancer leaves such a lasting impact on a patient's appearance and activities," Fee declares.

Not to be confused with brain tumors, head and neck cancers grow in the mouth, throat, face, or neck region, including tongue, cheeks, tonsils, palate, and larynx. The growths and their surgical removal can alter a patient's facial appearance and even more drastically hinder vital functions such as breathing, speaking, tasting, chewing, and swallowing.

The key to effective treatment is early detection, Fee says. But because symptoms include such commonplace complaints as sore throat and hoarseness, many people—like Red—put off going to the doctor. In addition, such cancers are rare enough that they may go undetected, even in the hands of an otherwise skilled family practitioner, Fee adds.

"The average family physician may see one head and neck cancer patient in four or five years, and even an ear, nose, and throat specialist will only see about five cases per year," Fee estimates.

Stanford doctors see about five to 10 new patients each week, all of whom enter treatment through a unique cooperative effort known as the Stanford Head and Neck Tumor Board.

The tumor board, which has been meeting once every week since it began in 1976, permits oncologists, radiologists, surgeons and dentists to work together in developing the best treatment strategy for each prospective patient.

"The success of our tumor board is due to the individuals in it," says Fee. "We are committed to what's best for the patient from start to finish, not what's best for the doctor."

This type of collaborative effort among physicians is important for optimal patient care, adds Dr. Charlotte Jacobs, assistant professor of medicine and director of Stanford's Oncology Day Care Center. At some institutions, the first doctor a patient sees will initiate treatment in his own area of expertise, Jacobs observes, even though consultation might lead to a more comprehensive program of care.

"People become entrenched and think that their way is the only way to treat the disease," Fee adds. Compounding this problem, there are no clear-cut, definitive answers available to guide physicians on head and neck tumor treatment. At Stanford's tumor board meetings, physicians discuss whether to use surgery, radiation therapy or drugs—individually or in combination—on a case-by-case basis.

A new approach is a three-pronged attack against head and neck cancers. Chemotherapy is administered first to help shrink the tumor. Surgery may follow, to remove the growth, and radiation treatments kill lingering pockets of disease.

Red Monroe's therapy followed this formula. Within a few months his cancer was under control. But an unavoidable side effect of the surgery to remove his diseased larynx was the separation of his esophagus and windpipe. This left Red voiceless. Because his mouth and esophagus then led only to his stomach, he had to begin breathing directly through a tracheostomy—a hole carved in his windpipe.

More than half of Stanford's head and neck cancer patients undergo surgery at some time for their disease, Fee estimates. "The secret to good treatment lies not only in removing the cancer completely, but also in reconstructing the damaged area so that the person can reenter society without looking mutilated," he explains. "This takes careful consideration about how to do surgery in such a manner that it will not compromise cure while preserving as much structure and function as is compatible with a decent quality of life."

In addition to prosthodontic work performed by specialty dentists who can fashion new head and neck body parts, Fee and his colleagues also employ ingenious methods for cutting and reconstructing with minimal scarring. They use muscle and skin from the chest to rebuild excised jaw and mouth structures. And as much as possible, they make incisions along the shadowed areas of a person's face or throat.

"Even though our surgeons are excellent," Jacobs says, "some operations can have devastating results. We would like to find an effective way of avoiding surgery whenever possible."

To this end, Jacobs, radiologist Dr. Don Goffinet, and Fee have spearheaded an experimental study testing a drugs-and-radiation-only regimen for certain patients. The pilot study is innovative because all of its patients have advanced tumors that normally would be treated by surgical excision.

Those entering the study receive nine weeks of treatment with two anti-cancer drugs, cisplatin and 5-fluorouracil. Biopsies show that most patients still have signs of cancer after this treatment, and so then must undergo surgery, Jacobs explains. But about one-third of the patients appear disease-free after chemotherapy. These patients forego surgery to undergo state-of-the-art radiation therapy under the direction of Goffinet, Jacobs explains. So far, 20 patients have entered the experimental program. Seven have been able to forego surgery, Jacobs says, and only one of these patients has had a recurrence of cancer.

Jacobs is cautiously encouraged. A conclusive study, however, requires pooled results from hundreds of patients. Because head and neck tumors are relatively rare, however, this can only be accomplished in a multi-center clinical trial by physicians around the country, Jacobs explains. To make this possible, she has been instrumental in establishing a national organization, the Head and Neck Intergroup. "We now have several hundred surgeons, radiation therapists, and oncologists eager to cooperate," says Jacobs, who has been elected the group's chairperson.

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Although treating normally operable tumors with chemotherapy and radiation is a tantalizing experimental program, radiation therapy is not new in the management of head and neck cancers. At Stanford, however, radiation therapy is being molded in new ways. One new method involves implanting tiny radioactive seeds at the tumor site. X-ray bombardment from a linear accelerator alone cannot always control a tumor or kill the tiny pockets of cancer that may be left behind after surgery, explains Goffinet, who is an associate professor of radiology. But placing minuscule packets of radioactive material directly in the cancerous tissue—called "interstitial implantation"—is dramatically boosting cure rates.

In a Stanford study of 28 patients with cancer at the base of the tongue, 14 had surgery followed by X-ray treatment from the linear accelerator. The other 14 were irradiated by the accelerator, then implanted with seeds made from radioactive iridium-192. "Ten of 14 patients with implants are free of disease nearly three years after treatment," Goffinet reports, "while nine of the patients in the non-implant group have had recurrence of cancer." There were fewer complications in the patients with seeds, he adds.

"The fact that we have seen no recurrence of base tongue cancer in patients followed as long as three years is a great advance," says Goffinet. Usually this type of cancer recurs within 24 months after more conventional treatment, he notes.

"The key to this success is in the way the seeds are implanted," Goffinet reveals. In the operating room, the doctors thread thin, hollow tubes through the chin and sides of the neck, penetrating the tongue. The seeds are inserted through these tubes and left in place 40 to 60 hours while the isolated patient rests in a lead-shielded hospital room.

Permanent radioactive seeds of iodine-125 offer another implant approach, he continues. The iodine isotope is safe enough to leave inside the patient, providing a long-term source of low-dose X-rays against the tumor. Iodine seeds have been implanted in more than 100 patients, he says, encapsulated within sutures that eventually dissolve, leaving the radiation sources behind.

These strides in treatment are encouraging to head and neck cancer patients and specialists. But all agree that the biggest advance would be disease prevention by minimizing risk factors and better monitoring of high-risk individuals. "If we could predict those at greatest risk, prevention would become a realistic goal," suggests Dr. Martin Hopp, assistant professor of surgery. Hopp's research is aimed at identifying people in the high-risk category through simple testing.

It is already known that head and neck cancer is more common in smokers and drinkers, particularly those over 50, he explains. Approximately 50 to 60 percent of Stanford patients drink heavily, he says, and 90 percent have smoked heavily at some time.

Carcinogens, chemicals that cause cancer, are thought to play a major role in triggering head and neck tumors. Hopp is focusing on benzopyrene, one of these chemical culprits found in cigarette smoke. Although benzopyrene itself doesn't cause cancer, he says, it is converted inside the body to more harmful substances.

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People have differing levels of one of the enzymes responsible for converting benzopyrene to its carcinogenic cousins, Hopp explains. For each individual, this enzyme's level is under genetic control; head and neck cancer patients are thought to have the highest levels, he says.

"We have developed a test in animals that can detect this enzyme's level, and we are now evaluating the test's effectiveness in humans," he says. "This could enable us to quantify one of the risk factors for head and neck cancer in each individual. Those at high risk would obviously be urged to stop smoking," he comments.

Hopp also points out that some head and neck cancer patients get two or three additional tumors. "High-risk patients could be followed carefully to catch any problems before they progress too far," he says.

"When we treat a patient," Fee says, "we look not only at the person's disease, but consider psychological needs, occupation, finances and family situation."

"All of the treatments are hard, and patients need a lot of personal attention and care," agrees Jacobs. One of the first people they encounter is oncology research nurse Linda Rich Goffinet, who makes herself available and supportive to patients from the moment they arrive at Stanford.

Help in coping with the emotional pains of cancer is also available through a weekly support group led by clinical psychologist Dr. Steven Katz. "This is the cancer you can't hide," stresses Katz. "Patients and families need emotional support in adjusting to changes in body image and personal appearance, eating habits and communication."

Former patients often provide the best help, notes Katz, in demonstrating that a productive, active life is still possible. Red, who has returned to work and still enjoys his favorite hobbies, including hunting, exemplifies those patients who have made successful readjustments.

For Red, the most disturbing aftermath of surgery was the loss of his voice. Although for a while he tried to use a speaking device, Red soon decided that he wanted to talk in a more natural way. So he chose to learn "esophageal speech," a task that took two years of hard work and practice under the tutelage of speech therapists.

In order to use his mouth cavity's resonance to voice words—because he no longer gets an outflow of air from the lungs—Red pushes air into his stomach and then releases it as he talks. His speech, punctuated by unobtrusive burps, is surprisingly normal, though "guttural," he puns with a grin.

A self-professed optimist, Red doesn't regret one moment of the work it took to perfect his new voice. "I never think about it," he says in his distinctive gravelly tone. "I never let this cancer get me down. Oh, right after the operation I felt depressed. But that went away as soon as I could talk to my daughter in Pennsylvania over the phone."

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FOR IMMEDIATE RELEASE

HEAT-RADIATION COMBINATION SHOWS PROMISE IN NEW CANCER TREATMENT METHOD

STANFORD—

Stanford University physicians are testing a new cancer treatment that combines radiation and heat in a unique way.

Eight patients with tumors of the head and neck or colon/rectal cancer have been treated with the experimental technique in the past 15 months at Stanford Medical Center, with some "impressive" results, said Dr. Don Goffinet, associate professor of radiology.

"The early results are encouraging," Goffinet said. However, he cautioned that the combination therapy, called interstitial hyperthermia, needs further testing.

The treatment combines two techniques relatively new to cancer therapy: interstitial implants and hyperthermia.

Interstitial implants are small pieces of radioactive material embedded directly in cancerous tissue. Hyperthermia is the application of heat to tumors.

In the new combination approach, both the implants and the heat are delivered by means of slender, hollow tubes temporarily implanted into a patient's tumor.

Gamma rays emanate from tiny nuggets of radioactive iridium-192 that are placed inside the tubes. Heat is produced by radiofrequency waves pulsed through a metallic grid which coats the outside of the tubes. An insulating sheath coating most of the grid permits researchers to heat only the targeted cancer, sparing healthy tissue.

Side effects have been limited to some localized pain during the heating periods, Goffinet said.

A key element in the procedure is the sophisticated heat monitoring and delivery system developed by research associate Stavros Prionas. Sensors in the tumor relay temperature information to a computer that controls radiofrequency pulses generated down each tube. The computer is set to keep the tissue evenly heated at the selected temperature, Goffinet explained.

The procedure has thus far been tested at Stanford Medical Center in a pilot study of its effectiveness. "We have seen excellent responses in some—but not all—of the patients," Goffinet reported.

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"We still need to determine whether the heat really adds a benefit above and beyond the radiation from the implant," he said.

This should be done, he added, through a controlled trial in which some patients are given heat with implants while others receive no heat. Goffinet said Stanford could be involved in such a clinical trial.

The still-experimental therapy is used in combination with more traditional treatments such as chemotherapy, radiation therapy from the linear accelerator, and surgery, Goffinet said. It is limited to solid tumors that are not too deeply seated in the body for tube placement, he added.

Goffinet conceived the notion of pairing implants and heat in the mid 1970s when hyperthermia began to be applied with promising results against certain types of cancers.

He has developed the techniques with colleagues in Stanford's department of radiology, including chairman Dr. Malcolm Bagshaw, associate professor Dr. Daniel Kapp, radiobiologist Dr. George Hahn, and research associate Dr. Stavros Prionas. Radiological physicists Peter Fessenden and Thaddeus Samulski, electronics engineer Eric Lee, and hyperthermia technologist Allan Lohrback have also been involved.

The tubes used in the procedure were developed in collaboration with Oximetrix Corporation, a Mountain View biomedical instruments company.

Interstitial implants have been used in combination with surgery since the mid 1970s to treat breast cancer and tumors of the throat and tongue at Stanford, Goffinet said. By implanting radioactive seeds directly into a tumor, a dose of lethal radiation can be delivered directly to cancerous cells with less harm to surrounding normal tissue, he explained.

Goffinet wanted to team hyperthermia with implants because heat treatment seems most effective when used in combination with other anticancer therapies. Research shows that heat seems to make cancer cells more susceptible to chemotherapy or radiation, he said.

In the new procedure, patients undergo surgery with general anesthesia to install the nylon-coated tubes in the tumor. Following the operation, the tumor is heated to a temperature of 42 to 43 degrees centigrade (about 108 to 110 degrees fahrenheit) for 45 minutes. Then, the radioactive material is threaded down the hollow tubes to the tumor site. The radiation source is left in place for several days, then taken out. The tumor is then heated once more, and the tubes are removed.

The special hollow conducting tubes, or catheters, used in the procedure are crucial elements, Goffinet said. Now that the technique has been shown to work, Oximetrix Corporation will request approval from the Food and Drug Administration to carry out further testing, Goffinet added.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

STANFORD HOSPITAL HAS HOLIDAY PLANS

Editors: The following is a partial list of holiday activities planned at Stanford University Hospital. Please call the news bureau, (415) 497-6911, if you wish to send photographers or reporters to any of the events.

- **Dec. 18:** The Stanford University Medical Center Auxiliary will decorate all Christmas trees in the main medical center and Hoover Pavilion.
- **Dec. 19:** Santa Claus and a magician will attend the pediatrics Christmas party. That same evening, representatives from Hewlett-Packard will visit the pediatrics unit dressed as Santa, Mrs. Claus, and elves.
- **Dec. 21:** Beginning at 9 a.m., Auxiliary members will distribute poinsettias to patients remaining in the hospital through Christmas. This is the group's annual gift to patients.

A local group of Camp Fire Girls will come caroling in the hospital, 5:45 p.m.

For the third year, Don Chudzinski, a Stanford Hospital employee, will play his accordian and lead employees, students and other caroling volunteers distributing 200 red and green balloons (courtesy Looney Ballooney of Redwood City) throughout the hospital. The group, which will include Santa and some elves, will start in pediatrics.

- **Dec. 22:** Jim Rawles and the San Jose State University Choraleers dressed in Dickens costumes will visit the hospital, 7:45 p.m.

Members of the Holiday Project, a San Francisco-based group, will bring gifts to pediatrics patients, both for that day and for Dec. 25. This group has been bringing gifts for several years at Christmas time.

In addition to activities listed above, the hospital personnel department has sponsored several events, including a door decorating contest (decorations go up Dec. 17 and are judged Dec. 19) and holiday caroling by employees Dec. 17 through 21.

Also, retired Teamster Don Hoffman of San Mateo continues to deliver loads of new toys to the children in the pediatrics unit, as well as Children's Hospital at Stanford. A Stanford outpatient recovering from illness himself, Hoffman, 73, took the project on for the firefighters at San Mateo's DeAnza station, "so I could do something nice for other patients." The toys, he says, are donated by the firefighters as well as police personnel, union members, local businesses and San Mateo residents.

"We save the toys Mr. Hoffman brings and give them out to the children on Christmas Day," says Colette Case, recreation therapist. "They're wonderful."

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FOR IMMEDIATE RELEASE

CHROMOSOME BREAKPOINTS LINKED TO ONE

FORM OF CANCER OFFER NEW RESEARCH INROADS

STANFORD—

A chromosome abnormality linked to one form of immune system cancer may provide new clues about how and why such cancers arise, report scientists at Stanford University and the Southwest Biomedical Research Institute in Tempe, Arizona.

Studies of the chromosome abnormality also might someday lead to new treatment strategies for this form of cancer which accounts for four percent of childhood tumors and one percent of adult cancers, the researchers said.

However, the scientists emphasized that the research is preliminary and does not yet offer clinical benefits.

The work, reported in the Dec. 21 issue of *Science* magazine, involves T-cell cancers, malignancies of one kind of immune system cell that helps protect the body against disease.

The scientists studied chromosomes—units of hereditary material found in all cells—from three patients with T-cell cancers. In all three, they found that one region of a particular chromosome—chromosome 14—had broken off and reattached in abnormal configurations.

The finding that chromosome breakage occurred at the same site in the genetic material from different patients suggests that disrupting that chromosomal region is one way of triggering T-cells to become cancerous, said Dr. Stephen D. Smith, associate professor of pediatrics at Stanford University School of Medicine.

"The exciting thing is that we can now study these cancer cells in the laboratory in hopes of precisely pinning down what happens when the chromosome breaks occur," said Smith, who is a pediatric oncologist based at Children's Hospital at Stanford.

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The laboratory studies have just become possible, he explained, because the researchers found a way to grow cancer cells from the patients in the laboratory.

Smith published the report with colleagues Dr. Frederick Hecht, Rodman Morgan, and Dr. Barbara Kaiser-McCaw Hecht of the Southwest Biomedical Research Institute.

Smith said that in studying the chromosome breakpoints the researchers will follow up on some current ideas about how cancers develop.

Recent research suggests that all cancerous cells contain chromsomal abnormalities, which are often associated with "fragile" spots in the DNA. Smith and his colleagues plan to study how the breakpoints they have found relate to fragile points that have already been identified in human chromosomes, he said.

They also plan to study just what goes awry when the chromosome 14 DNA breaks and reattaches in T-cell cancer patients. The chromosome rearrangement might allow T-cells to start producing a protein that stimulates them to boundlessly grow and divide, Smith suggested.

This possibility would mesh with a current hypothesis that has gained favor among cancer researchers. It proposes that overproduction of naturally occuring growth-promoting proteins may be one of several events that lead to cancer. (Uncontrolled cell multiplication is the hallmark of cancer, Smith explained.)

If a growth protein is the cause of some T-cell cancers, then blocking the protein in its misguided growth-promoting mission would provide a potentially new form of treatment, Smith said. This could potentially be acomplished with monoclonal antibodies, the "magic bullets" that can home in on highly specific protein targets in the body.

The research was funded by grants from the National Cancer Institute, the American Cancer Society, and the Leukemia Society of America.

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FOR IMMEDIATE RELEASE

ROBOTS MAY SOON AID THE DISABLED AND THE ELDERLY

EDITORS: This article first appeared in the Spring 1984 issue of *Stanford Medicine*. A photo is available on request.

STANFORD—

You are in a hospital bed, recuperating from surgery. Your mouth is parched, and it is painful to move. Water on the bedside table is beyond reach, so you ring the buzzer for help. A few moments later, a soft whirr announces the arrival of the nurse's aide, and a metal hand politely offers you cool refreshment. Suddenly you realize that your helper is a robot. Before you can summon a "thank you," the efficient aide asks if there is anything else you would like, and then moves away to respond to another patient's call.

It's a science fiction scene . . . for now. But in the not-too-distant future, robots will be found rolling down hospital corridors delivering some forms of routine patient care, freeing nurses and other health professionals for more skilled medical tasks, predicts Dr. Larry Leifer, a Stanford professor of mechanical engineering.

Robots may one day participate in flexing stiff joints of patients in physical therapy, bathing elderly people in nursing homes, assisting surgeons in the operating room, and processing samples in medical laboratories, according to Leifer's scenario.

Leifer is head of one of the country's few research centers attempting to integrate robotics technology with patient care. At the Palo Alto Veterans Administration Medical Center (VAMC), he heads a team of medical and engineering researchers who are developing robotic devices to aid the disabled.

The focus of Leifer's Rehabilitation Research and Development (RR&D) team's effort is a microcomputer-directed mechanical arm that manipulates objects in response to voice commands and small physical movements of its operator. The robotic arm project is a unique venture that illustrates, even at this early stage of its development, the potential for robots to help people.

The arm is freestanding and equipped with a two-fingered hand. It extends as far as 18 inches with six degrees of freedom—up, down, left, right, forward and back, with rotations about each of these axes. It has a 58-word vocabulary to which it can respond on command, a special "joystick" that can be used to control its movement, or it can be preprogrammed to carry out a planned sequence of movements.

Its inventors stress that the robotic arm is a tool for replacing lost function; it is not a prosthetic device designed to replace anatomy. But its dexterity could nonetheless help loosen the shackles of paralysis for an estimated 40,000 quadriplegics in the U.S. and assist another 200,000 individuals with severe physical limitations, Leifer estimates.

Rehabilitation devices represent only the front lines of a platoon of robots that could march into medicine in the future. The Japanese already have built and clinically demonstrated a two-armed robot manipulator that can transfer patients between gurney and bed. Some hospitals in the U.S. have launched experimental mobile robot carts that follow preset paths to deliver meals and linen.

"Robots have a potentially rich and complex future in medicine," says Leifer, a serious, soft-spoken man whose sense of humor occasionally flashes through his earnest demeanor. When he talks about his hopes for turning robots into useful tools in medicine, his fantasies can turn an uninitiated listener into a believer.

Leifer envisions robot physical therapists able to help patients build back strength and dexterity. He predicts robot companions that could tirelessly support patients who need help walking. As surgical assistants, robots could apply clamps, fetch materials, or hold and pass instruments for the surgeon. And robot aids could participate in routine tasks such as rearranging pillows, replacing bedpans, checking sensors, and helping patients roll over or get in and out of bed.

Surprisingly, much of the technology needed for such automated medical helpers is already available, Leifer says. The robotic arm his group is using, for example, is a standard model used for light assembly work in industry. The challenge lies in molding these off-the-shelf manipulators into semi-autonomous partners that can sensitively and effectively respond to their human users' needs.

"Our first priority is to improve the link between the human and the robot," Leifer says. "Industrial robots of great complexity are now being designed, but the ability for humans to communicate with them is not being built in. You cannot go up to these robots and simply say 'stop'. You have to be a trained programmer to get them to understand you. I don't want the human user to be enslaved to the robot," stresses Leifer. "The reverse should be true."

In order to shape an effective interaction between the robotic arm and the people it's designed to help, Leifer has collaborated with Dr. Inder Perkash, chief of the spinal cord injury center at the Palo Alto Veterans Administration Medical Center.

"You can't just decide that you want to develop a product for patients without understanding their needs," says Perkash. "That is why the engineers go on patient rounds with us every week."

Leifer adds, "Most companies don't test their products with people until they are already designed and built, partly because it is tricky to introduce new technology so early in its evolution. You have to let people know the experience they are getting is like a shadow of the real thing. But we must know how they respond to the shadow if we are to achieve an excellent end result."

Early models of the robotic arm already have been successfully tested by about two dozen spinal cord injury patients in the VA unit, says K.G. Engelhardt, a technology transfer specialist in the RR&D program.

Because the ultimate aim of the robotic aid project is to help restore independence for quadriplegics—people who are completely paralyzed from the neck down—the device's abilities must be broad-ranging and versatile. Basically, says Engelhardt, there are three types of tasks for the arm to perform: those in daily living, such as brushing teeth or preparing a meal; recreational activities like drawing a picture or playing a board game; and vocational tasks such as turning the pages of a book or opening a drawer.

"But when first presented with the arm, if you ask most paralyzed patients what they want it to do, they say they want a drink of water," Engelhardt comments. And with only about 45 minutes of training, someone can direct the robot limb to accomplish the task, she adds.

First, a voice recognition unit is primed to listen for particular inflections of the user's voice. Then, issuing commands like "up, left, right, open" the user directs the arm's motions in space. The voice recognition unit Leifer's group uses understands commands about 90 percent of the time under real working circumstances. To avoid acting on any misunderstandings, the unit echoes most directives with a voice synthesizer before executing its mission.

Getting close to the glass of water is relatively simple. But coaching the "hand" to close in and grasp the cup without tipping it or permitting it to slip through its fingers is another problem entirely, says Leifer—a problem of autonomous sensory capability and control of force.

"I can get the arm from here to there with relatively little information," Leifer explains, "but the fine motions involved in getting from there to grasping the cup at the right spot with the right amount of pressure may involve 10 to 100 times as much information." Currently, his group is working on perfecting the arm's sensory system and its ability to grip automatically once in the general locale of the object to be retrieved, he explains.

At present, the arm is fitted with optical sensors in its simple two-fingered hand. "This sensory ability is similar to touch, but does not require physical contact," Leifer explains. When approaching an object, the sensors send out a beam of light and gauge distance by measuring the intensity of the light returned after bouncing off the object. It's a workable system, but not good enough, he says. For instance, the gripper would be blinded trying to retrieve an object fallen into a bowl of soup. To improve sensory capacity, future models may incorporate "whisker" sensors that could lightly brush object surfaces, enabling the hand to scan contours in a nearly tactile fashion, Leifer says.

Another problem is mobility. The current model is bolted to a table. "It's good if you want to pick up a book from the table, but not if you need a book from the shelf in the next room," says Brodie Lockard, a Stanford engineering master's student. Lockard, paralyzed from the neck down following a gymnastics accident, is an RR&D staffer improving existing programs and creating new vocational programming functions for the arm.

This spring, the first generation of mobile arms is being assembled using a "reinvention of the wheel" by William La, a member of the RR&D center. The arm sprouts from a cabinet perched atop three of the specially designed roller-wheels. Dubbed "omnidirectional" by the Leifer group, the wheels endow the mobile arm with the agility to negotiate tight indoor spaces. It can move sideways and can turn on a dime; and the unit's 22-inch-diameter figure is small enough to permit it to squeeze through the tightest doorway.

Remote steering of the unit can be achieved through ultrasonic sensors mounted on the back of a person's wheelchair. These sensors respond to a tilt of the head, and users will be able to drive either their own wheelchairs or the robotic aid. In time, the robotic aid will be able to navigate freely in a known environment, Leifer says. The wheelchair user and the robotic aid will also be able to travel along together. Leifer's research group currently is seeking funding to have six of the mobile systems built for advanced evaluation in spinal cord injury—and other—centers throughout the country.

The ultimate goal is to make "smart" robots, says Leifer, controlled by computers that could acquire, store and subsequently use on their own, information from the environment. "When the user says 'get me Shakespeare's *A Midsummer Night's Dream*,' I would like the arm to know where the book is and how to get it without further instruction," Leifer says. A smart machine would also have a more "forgiving" nature, he adds. When unsure of a command, for instance, it would not blindly execute a mistake. Lockard explains the concept simply: "I want the arm to do what I *mean* and not what I say." But such brainy computers—the goal of artificial intelligence researchers around the world—do not yet exist. "Right now, we are barely making robots clever, let alone thoughtful," Leifer says.

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Disabled individuals who currently rely on other people for around-the-clock attendance could gain partial independence emotionally and financially, through the use of robotic aids, says Leifer. "Disabled individuals live at a level of intimacy with a caretaker that most people very rarely choose on their own. They swallow their pride and do it—they have to—but they would prefer to take care of themselves," Leifer says. Robots, at an estimated $6 per hour, could reduce the cost of attendant care which now has a net cost of as much as $15 per hour, Leifer points out.

With the help of robots, elderly people could also maintain more independence and gain more control over their lives, points out Dr. Paul Haber, regional director of programs for the elderly at the Palo Alto VAMC and a strong advocate of the use of technology to aid the elderly.

"We don't want to depersonalize nursing homes. But many nursing home tasks are boring, difficult, unpleasant and demeaning for both patient and caretaker," Haber says. A robot could do things such as toileting, bathing, feeding, transferring, and grooming patients. "And a robot isn't going to come in hung over, or grumpy and abusive because it's quarrelled with its wife," Haber adds.

In other areas of medicine where costs are skyrocketing, robots also could be an economic boon. "Robots will eventually end up costing no more than automobiles," Leifer predicts. "They actually use simpler technology and it requires less material to make a robot than to manufacture a car," he explains.

But no matter how capable and money-saving robots might be, unless they are accepted by those who could make use of them, they are valueless. Because the mechanical arm is the firstborn in this new generation of robots designed to aid patients, Leifer and his group are devoting great time and thought to the process of acquainting potential users with the device. Engelhardt spent over a year devising training methods, and thus far nearly 100 people have been trained, ranging in age from 5 to 72.

"We have to be ingenious in how we introduce robots," notes Haber. "The barriers are formidable, but we know from Larry Leifer's experiments that older people can work with the devices. We must choose and train our initial patients carefully. But we feel confident that the natural advantages of robots will endear them to the hearts of older people, as well as to the disabled," says Haber.

The greatest obstacle blocking introduction of robots into medicine, however, is not lack of enthusiasm but lack of funding, according to Leifer. "It is expensive to carry out the research and development required to turn these ideas and technology into a viable product. The robots may be coming, yet even in industry only a few thousand exist today," he observes.

But Leifer and his group of dedicated colleagues continue to move forward to bring this new melding of medicine and technology to fruition. "While I have stressed the potential for robots in medicine," concludes Leifer, "this is not a panacea. We have asked many questions and certainly don't have the answer for everything here, but at least it's a start."

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FOR IMMEDIATE RELEASE

(Eds: Mugshots available if not included)

SURGEON CHASE ELECTED TO HOSPITAL BOARD

STANFORD—

Dr. Robert Chase, professor of surgery and of anatomy, was elected Tuesday (Dec. 11) to the 17-member Stanford University Hospital Board of Hospital Directors.

Chase was elected by the general members of Stanford University Hospital, comprised of university trustees. Stanford University President Donald Kennedy said Chase was appointed to fill a vacancy reserved for a faculty member. He replaces Dr. David Korn, professor and chairman of pathology, who was appointed dean of the School of Medicine on Oct.8. Korn, as dean, remains on the hospital board as an ex officio member.

The Board of Hospital Directors is comprised of community, medical and lay leaders, as well as university faculty and administration to set policy for the hospital under the direction of the general members.

Chase came to Stanford from Yale University in 1963. He served as chairman of the surgery department for 11 years until 1974, when he left Stanford for three years to become president and director of the National Board of Medical Examiners in Philiadelphia. He has won numerous teaching awards, and since 1972 has held the Emile Holman endowed chair in surgery.

Recently Chase was appointed to co-chair the faculty steering committee shepherding Stanford Medical Center's $145 million fundraising effort, announced Monday (Dec. 10).

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FOR IMMEDIATE RELEASE

HEALTH ECONOMIST SAYS RATIONING OF HEALTH CARE CHANGING

STANFORD—

Health care has always been rationed, but new systems of paynment are dramatically changing how medical care gets allocated, a Stanford University health economist says.

In an opinion piece in the Dec. 13 ***New England Journal of Medicine***, Victor R. Fuchs, professor of economics and of family, community and preventive medicine, said "no nation is wealthy enough to supply all the care that is technically feasible and desirable," So society by conscious policy choice should first identify and make available the best modes of treatment. Today, "no one can be certain just which care should be cut," he said.

Fuchs said new modes of payment are placing a larger share of the decision-making burden on individual physicians. New forms of payment, such as Medicare's prospective payment system, are providing lump sums based on diagnosis, not costs incurred.

"The pressure to be more economical in the provision of care will force physicians to make decisions that are contrary to the best interests of individual patients, even though these decisions may make a great deal of sense from the viewpoint of society as a whole," Fuchs said.

He said in the future there must be "more systematic analyses regarding the location of facilities, investment in equipment, training of specialists, and designing of screening programs and treatment protocols" to ensure that finite health care dollars are expended most effectively.

"To the extent that these decisions set the constraints within which individual practitioners function, however, there will be less need for them to ration care to their patients explicitly," Fuchs said in the article. "The commitment of the individual physician to the individual patient is one of the most valuable features of American medical care. . . . For physicians to have to face these (difficult financial) tradeoffs every day is to assign to them an unreasonable and undesirable burden," Fuchs wrote.

Fuchs said rationing of health care is not new. The United States, he said, has always rationed health care, usually based on a patient's ability to pay.

For example, in 1963, the surgery rate for below-average income elderly urban whites was 66 per 1,000 but 86 per 1,000 for those with above-average income persons. By 1970, below-average income persons with assured payment from Medicare received more surgery than their more affluent counterparts.

"Physicians have always practiced within constraints, but as long as the 'rationing' is implicit, it is tolerable," Fuchs said.

Dec. 12, 1984 —30— mg4

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FOR IMMEDIATE RELEASE

NEW TOOL MAY SPEED RESEARCH ON PROSTATE CANCER

STANFORD—

Researchers at Stanford University have developed a laboratory tool that may help in the search for causes and treatments of prostate cancer, the second most deadly malignancy in adult American men.

The tool, a method of growing prostate tissue in cell culture, is not an end in itself but opens the way to learning what factors may cause normal prostate cells to turn cancerous, said Dr. Thomas Stamey, head of the division of urology at Stanford University School of Medicine.

Stamey and his colleague Dr. Donna Peehl reported on the advance in an article in the December issue of the scientific journal *In Vitro*.

The prostate, a walnut-sized gland that produces the fluid components of semen, is the cause of cancer in nearly 30 percent of men older than 50, Peehl and Stamey noted. Because it is a cancer associated with advancing age, it is becoming more prevalent as people are living longer, they added.

Research into the causes of prostate cancer has been hindered by the inability of scientists to grow human prostate cells in the laboratory.

Now, Peehl and Stamey report that they have found a way of growing both normal and malignant prostate cells in the laboratory. "This new ability to culture prostate cells allows us for the first time to look for causes of prostatic cancer at the cellular level," said Peehl.

"Researchers now may be able to find precise differences between normal and malignant cells. Knowing what these differences are may permit us to introduce the powerful new methods of molecular medicine into diagnosis and therapy of this disease," Peehl added.

Surgery and radiation are currently the most widely used forms of treatment for prostate cancer, Stamey said. They are effective, particularly when the cancer is caught at an early stage, he noted. Finding a way to detect the early signs of prostate cancer is one possible benefit of their work, the researchers predicted.

Other potential benefits might include new drugs or other agents that could selectively get rid of the cancer cells while leaving healthy tissue alone, they said.

Cholera toxin is the crucial ingredient that enabled the researchers to get prostate cells to grow in culture, Peehl reported. The toxin stimulates production inside the cells of a substance with an important role in regulating cell growth, she said.

The research was carried out with funding from the Richard M. Lucas Cancer Foundation based in Menlo Park, California.

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FOR IMMEDIATE RELEASE

SURGEON USES NEW TECHNIQUE FOR BLADDER CANCER

STANFORD—

A Stanford surgeon has adopted what has been a relatively unknown procedure in the United States to help male bladder cancer sufferers avoid a urine storage bag and often retain their potency after surgery.

Fuad Freiha, associate professor of surgery/urology, said the surgical procedure he has now performed on three patients at Stanford allows the patient to relieve himself normally through the penis, instead of into a bag mounted externally over the abdomen. During both operations, the patient's malignant bladder is removed.

Freiha said Stanford was the first center in the western United States to perform the procedure.

The operation, which has evolved during the 17 years since it was first performed in France, is appropriate for about 50 percent of male patients suffering from bladder cancer, Freiha said. He estimated about 80 per cent of those receiving the operation are not only freed from the need for an external bladder pouch but retain sexual function as well.

In standard bladder cancer surgery, patients often lose sexual function, because the operation severs the pelvic nerve plexus, which enables males to have erections.

"Traditionally, bladder cancer patients have paid a tremendous price for survival by undergoing urostomies (the operation installing the the bag), which require the constant physical inconvenience of living with an external urine bag, as well as the loss of potency. For selected patients, we believe that the opportunity for survival will be equal but that the quality of life will be far superior," Freiha said in a recent interview.

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In recent years, about 50 or 60 persons each year have received urostomies at Stanford University Hospital, Freiha said. Fewer women get bladder cancer than men, and those who are afflicted usually do not require urostomies, he said.

Bladder cancer traditionally is treated with a combination of surgery, radiation therapy and chemotherapy. Until about 10 years ago, treatment protocols produced survival rates of less than 30 percent. Currently, Freiha said, 60 percent of patients whose bladder cancer is detected early enough survive.

The Camey procedure, as the operation is called, was first reported in French-language journals in 1967 by Dr. Maurice Camey of the Central Urological Hospital in Suresnes, France, near Paris.

Few physicians in the United States read French. Freiha, a native of Lebanon, said his knowledge of French helped direct him to the procedure and then study the techniques as Camey developed them.

"With literally thousands of journal articles appearing annually, it is nearly impossible for physicians to keep up with all work directly related to their field," said Freiha.

Freiha said he waited until he believed the operation had been fully developed and then performed his first Camey procedure in September on a 52-year-old man. Two more operations were performed in October and November on men aged 66 and 62, and all three were reported doing well.

Essentially, after the bladder is removed the ileal conduit is sewn back onto the urethra, allowing urine to exit through the penis. In the standard procedure, the conduit is rerouted to an opening in the skin, where it is connected to the external bladder bag which must be removed and emptied regularly.

Freiha said the new procedure offers the slight risk that some patients might be incontinent, unable to control the release of urine.

Bladder cancer primarily affects men older than 40, many of whom "would rather not have a urostomy and are still anxious to continue an active sex life," Freiha said.

Eds: Dr. Freiha may be reached directly at (415) 497-5836.

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FOR IMMEDIATE RELEASE

SCIENCE LAUNCHING MULTI-PRONGED ATTACK ON AIDS, EXPERT SAYS

STANFORD—

The battle against AIDS—acquired immune deficiency syndrome—is no longer a blind attack but involves a predictable series of problem solving efforts, a Stanford University infectious disease expert contends.

The first major advance will be a diagnostic test that can detect the AIDS causative agent in blood, "allowing us to gain control over the nation's blood supply within the next year or two," said Dr. Thomas Merigan, professor of medicine at Stanford University School of Medicine.

Also in the next year or two, enough will be learned about the disease and its natural history to recommend more effective personal and public health measures to prevent spread of the disease, said Merigan, George E. and Lucy Becker Professor of Medicine.

Next, researchers may discover ways of interrupting the disease's course, saving some infected individuals from developing the full-blown disease, Merigan predicted.

For example, during the next few years, testing of antiviral agents and experimental vaccines should be under way in people who have AIDS and in high risk groups, he said.

It was the recent discovery of a virus believed to cause AIDS, accomplished by U.S. and French research teams, that has transformed the AIDS epidemic from an open-ended enigma to a well defined medical problem, Merigan said. Medical science has made good strides in understanding other viral diseases and that knowledge can now be put to work on AIDS, Merigan explained. He made his comments in a recent interview and made similar observations in an invited editorial in the Nov. 15 issue of the *New England Journal of Medicine*.

"The rapid association of HTLV-3 virus infection with AIDS soon after the disease was first described is a triumph of today's biologic science," Merigan wrote.

"Unpredictability in the timing of advances of biologic and medical investigation was characteristic of the past," he added. But today, society has the knowledge and scientists to solve scientific medical problems "in the way that we have come to expect of engineers in space exploration and computer scientists in automation," Merigan said.

HTLV-3 virus will soon be proved to cause the deadly illness either when a vaccine against the virus is shown to eradicate the disease, or when the virus is shown to produce the disease in animals, Merigan predicted.

The disease will probably have to be fought on several fronts, Merigan said, rather than through a single treatment or vaccine program. Sensitive diagnostic tests, one or more vaccines, education and public health measures, antiviral therapy, and immune-enhancing drugs will probably all play important roles, he said.

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A diagnostic test capable of detecting the virus' presence will soon be developed that could identify carriers, those who are infected but have no apparent symptoms or complications, Merigan said. Such a test is crucial for preventing transmission of the disease, particularly through contaminated blood or blood products, he pointed out.

As researchers study the natural history of the disease, they may discover why some individuals with HTLV-3 in their blood haven't developed full-blown AIDS. The HTLV-3 virus alone may not be fully responsible, Merigan said. It may be that additional factors—such as other viruses or infectious agents—are required for the full-blown disease to develop, he suggested. If so, fighting these "cofactors" could provide another way of intervening to prevent an infected individual from becoming an AIDS victim.

The first potential vaccines will probably consist of viral coat proteins manufactured through the new techniques of recombinant DNA, Merigan said, rather than from the more risky approach of using a weakened strain of the whole virus itself.

But it is not a certainty that such a vaccination would be protective, he cautioned. A new strain of the virus might be able to get around the vaccination barrier, for example. "Experienced investigators know that the fact that vaccines can be produced does not mean that the whole problem can be dealt with quickly," Merigan wrote. "Don't expect a yes or no answer immediately," he added.

Antivirals used with some success to treat viral diseases such as hepatitis-B are showing some promise, noted Merigan, who is an expert on interferon, a natural antiviral substance produced by the body. "We know that interferon shows some inhibitory action against HTLV-3 in the laboratory," said Merigan. But large placebo-controlled trials in patients are required to test antiviral drugs before any conclusions can be drawn, he stressed.

In addition to interferon, other antiviral drugs are being studied in the laboratory, including nucleoside inhibitors, he added.

Because the HTLV-3 virus is thought to destroy certain cells that make the immune system work, bolstering the body's immune response provides another treatment approach, Merigan said. An "immune-enhancement" drug called interleukin-2, one of the body's own proteins, is being tested in pilot studies of patients with AIDS. It might even be possible someday to resupply the lost immune system cells through transplant procedures, he said.

"Since the government has led in development of vaccines and antiviral agents in the past, it is likely that it will have a critical role in bringing together appropriate investigators and resources from both the academic community and industry," Merigan wrote. "An apparatus capable of attacking this problem rationally is currently in place."

But "the ultimate test of our understanding will be whether we can control this agent in human beings," Merigan observed. "Undoubtedly, the benefits will not come soon enough for all," he noted. "Previous experience with persistent viral infections suggests that there is much work ahead."

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FOR IMMEDIATE RELEASE

ACTING CHIEF OF STAFF INAUGURATES SPEAKERS PROGRAM

STANFORD—

Dr. Michael Eliastam, acting chief of staff at Stanford University Hospital (SUH), told a service club audience Monday (Dec. 10) that the public should begin to reevaluate health care decisions based on new reimbursement systems.

"I want you to understand, that your physicians are under tremendous pressure (from some government or private insurance plans) to get you out of the hospital," Eliastam said in a noontime speech kicking off a new Stanford University Medical Center Speakers Program.

"I want to explain to you how your next health care decision is going to be a little different than it has always been," he said.

Eliastam outlined to about 50 members of the Peninsula Kiwanis Club that many third party payers, including Medicare, are starting to reimburse hospitals and even individual doctors with lump sum payments based on the patient's diagnosis. This contrasts with the traditional practice of reimbursement for treatment provided. In order to survive, hospitals and physicians are under increasing pressure to change traditional patterns of treatment, he said.

For example, Eliastam noted that many Peninsula hospitals, including SUH, are being asked to perform half or more of surgical procedures on a same-day basis, avoiding the cost of an overnight stay. While shorter stays in the hospital may be convenient and the best choice for some patients, Eliastam said that for other patients the shorter stay may be inconvenient and lead to discomfort.

He said it is the responsibility of voters and consumers who might become patients to make their views known to insurance companies and employers buying health plans about what levels of coverage are acceptable to them.

Michael Cowan, the Medical Center's director of public events and organizer of the newly formed Speakers Program, said about 85 nurses, physicians and administrators are available to speak "for the purpose of sharing current information on medical topics with interested groups."

Interested service organizations, clubs, businesses and churches may contact the Office of Public Events, (415) 497-6389.

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FOR IMMEDIATE RELEASE

TRUSTEES OKAY $145 MILLION MEDICAL FUND-RAISING PROGRAM

STANFORD—

A $145 million fund-raising program to support capital projects and endowment for the Stanford University Medical Center was approved Monday, Dec. 10, by the Stanford University Board of Trustees.

Stanford University President Donald Kennedy described the three-year effort to be of a scope similar to the bold move that built the original medical center in the late 1950s.

"It's the largest single resource commitment in the University's history," he said.

Kennedy said $52 million has already been committed toward the goal by private donors, corporations, and foundations.

The University also announced that Dr. Robert J. Glaser of Atherton, chairman; John A. Young of Portola Valley, co-chairman; and Dean Morton of Los Altos Hills, chairman of the volunteer leadership committee, would spearhead the effort.

"Stanford is fortunate to have their powerful leadership," Kennedy said.

Capital projects to be funded by the $145 million effort include a Center for Molecular and Genetic Medicine, $50 million; the New Children's Hospital at Stanford, $40 million; the Magnetic Resonance Center, $5 million; and renovation of the Stanford University Clinic, $2 million.

The program includes also $15 million to be raised toward the $112 million modernization of Stanford University Hospital, now under way. The hospital project is principally financed by a combination of state-guaranteed low-interest bonds, hospital reserves, and private gifts.

Other fund-raising goals include support for professorships, $10 million; junior faculty positions, $10 million; postdoctoral fellowships, $2 million; graduate student fellowships (M.D., Ph.D., and M.D./Ph.D.), $7 million; and medical school programs, $4 million.

The medical center will continue present efforts to raise an additional $20 million a year in gifts to support ongoing activities. Gift support for the medical center in 1983-84 totalled $30 million, Kennedy said.

Glaser is director of medical science of the Lucille P. Markey Charitable Trust. He is former president of the Henry J. Kaiser Family Foundation and has served as Stanford vice president for medical affairs and dean as well as acting university president. Young, a University trustee, is president of the Palo Alto-based Hewlett-Packard Co., one of the nation's largest computer makers. Morton, executive vice president and chief operating officer of Hewlett-Packard, serves on the Stanford University Hospital board of directors.

"We face major commitments and we have developed solid proposals for these ventures," Kennedy said. "They are exciting, but they are also expensive, and hardly free of risk.

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"We have drawn on people we know and respect to help shape our future. But in the end it is this faculty that must convert magnificent opportunity into reality and define the future — by its energy and convictions — and its willingness to accommodate gracefully differences in views."

"The plan is to raise the money in new gifts and pledges by 1987," explained Vice President for Medical Affairs Lawrence G. Crowley.

"The goal is to encourage, indeed catalyze, further basic biomedical discoveries and to transfer this rapidly increasing knowledge into new methods of prevention, diagnosis, and treatment of human disease. It is our responsibility, not only to Stanford and our supporters but to society, to live up to our potential."

Another objective is to consolidate patient care programs (for adults and children) at the main center.

"Centralization will improve the quality of care, prevent duplication of costly technology and talents, and stimulate efficiency and cost containment," Crowley said.

Children's Hospital at Stanford, staffed by faculty physicians, is located a quarter mile away from the main center. Its location has posed serious inconvenience for patients and staff alike. In addition, transporting acutely ill patients by ambulance back and forth from the center adds to costs.

Stanford University Hospital, which operates the 150-bed Hoover Pavilion near El Camino Real, faces similar problems because of the distance separating the two. While there are no immediate plans to close Hoover, modernization of the hospital is essential before Hoover beds can be moved to the main center.

* * * *

Details on the fund-raising organization and volunteers follow:

In addition to the community leaders, the fundraising governing committee includes Kennedy, Crowley, Stanford Hospital Executive Director Sheldon S. King, Stanford Medical School Dean David Korn, and Henry Riggs, university vice president for development.

Other committee members are Robert Chase, professor of surgery and anatomy, and Eric Shooter, professor and chairman of the department of neurobiology, who will co-chair the faculty steering committee. Alfred P. Spivack, a Palo Alto physician and clinical professor of medicine, will head the 10-member steering committee of the community physicians fundraising task force. As members of the clinical faculty and medical staff, community physicians have pledged to play an active role in fundraising for the hospital modernization.

University staff on the governing committee are Bruce Hinchliffe, university director of development, and John Ford, director of medical development.

Faculty members who will head efforts for specific program components are:

James Mark and Saul Rosenberg, hospital modernization; Bruce Parker and Philip Sunshine, New Children's Hospital at Stanford; Korn, Paul Berg, Ronald Levy, Hugh McDevitt, and Irving Weissman, Center for Molecular and Genetic Medicine; and David Clayton and Thomas Merigan, endowment.

An advisory committee, headed by David Prince, has been appointed to review and recommend programs for the Magnetic Resonance Center.

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ADOLESCENCE: BOYS AND GIRLS GROWING

This story first appeared in *Stanford Medicine* magazine, Spring 1984 issue. Photos available on request if not included.

STANFORD—

They're injured and killed by automobile accidents. They suffer increasingly from eating disorders. They're often depressed and suicidal. And the females are smoking more cigarettes than ever.

"They" are teenagers. Despite a longstanding belief that youth is the healthiest time of life, teens are no more or less healthy than other segments of the population, says Dr. Iris Litt, director of adolescent medicine at Stanford University Medical Center and Children's Hospital at Stanford (CHAS).

The first real opportunity for health assessment of teens came in the late '60s and early '70s when drug abuse, venereal disease, and unwanted pregnancies reached alarming proportions prompting governmental, parental, and medical attention.

Since then, intrigued professionals have uncovered health issues that affect teens, and they have attempted to define ways in which the health care community can better respond to their needs.

"One of the major findings," Litt says, "is that many problems of teenagers are not reported." That's because ongoing, regular medical care for teens is not viewed as necessary by many parents, physicians, or by teens themselves.

When they do come for a medical visit, most healthy teenagers and their parents are concerned to know if they're "normal." Boys question their height; girls wonder about menstruation.

Puberty can be bewildering for boys and girls who don't understand what is happening to their bodies. To ease the transition into adulthood, Litt's colleague Dr. Paula Duke (who has since left Stanford) offered pre-puberty education classes through the Palo Alto Unified School District and CHAS to boys and girls ages 10-12 and their parents.

"Children need information about changes that are going to happen before they happen. What we need to stress is that there is a very wide range of normalcy," says Duke, who participated with other medical and nonmedical specialists at Stanford's Center for Youth Study. The group pools informational resources to research the interaction between the biological and social development of teenagers.

"Everyone turns out fine in the end. Our research is aimed at finding ways to intervene that might lessen the pain and scars along the way," Duke says.

Topics such as masturbation, weight gain by girls, and breast tissue development by boys are often very much on the minds of young teens, even as they hesitate to ask questions, she points out. "There are lots of misconceptions and myths to dispel."

If parents and kids can talk about emerging sexuality early on, Duke says, they're more likely to be able to discuss interactive sex when the time comes. Studies show teenage sexual activity is a very gradual process, Litt says. Sexual intercourse, if it happens between teens, is "very far down the line."

Adolescents suffering from physical deformities or even paralysis need special attention paid to their often unvoiced questions about sexuality. Paraplegics, for example, need to understand that sexual gratification is possible without intercourse.

Because teens often assume the doctor can tell all through medical examination, confidentiality as well as adequate communication become important issues. "Teens want to protect their parents from upsetting information," says Litt, "and from information that might get them into trouble." Still, getting both perspectives about a problem is often revealing and necessary, she adds.

At the same time, teenagers think that if there's anything of concern, the doctor will automatically find out and say so. Thus, girls may seek birth control because they fear they're pregnant and figure if the doctor says nothing it must not be so. Or they fear they're sterile and seek the same silence, which they interpret as reassurance.

Physicians must be aware of these patterns and take the initiative, Litt says. "We can raise issues in nonthreatening ways by pointing out that other kids sometimes have certain questions, or by describing the various services available."

One of the doctor's prime jobs, she explains, is to educate teens about their bodies and prepare them to become wise consumers of health care. This means not only examining them, but teaching girls to examine their own breasts and boys to examine their scrotums for early detection of malignancy. "We should also get them thinking about what they expect from the doctor and how to choose one. And we must encourage them, above all, to ask questions."

With a problem as pervasive as automobile accidents, Litt says, it is incumbent on physicians to get involved. "We can do problem-solving with our patients, by asking them what they'd do if they knew they shouldn't drive home from a late party, whether they'd ever consider calling their parents or a friend, and under what circumstances."

She encourages pediatricians to see patients throughout their teen years. "All of our training has been developmental in approach, we've seen the kids grow up, and it surely helps us to understand their behavior. The best doctor for any teenager however, is the one the teen feels most comfortable with."

Other major medical problems of teens include sports injuries; alcohol and drug abuse; infectious diseases such as mononucleosis, Rubella or German Measles, gonorrhea and other sexually transmitted diseases, tuberculosis and toxic shock syndrome; malignancies such as Hodgkin's disease and testicular cancer; and among lower socioeconomic groups, violence and homicide.

Some adult health problems can have their origins during adolescence as well. These include hypertension, high cholesterol, and cancer of the cervix. Epilepsy can show up in the teen years, as can lupus. Whereas most congenital disorders are diagnosed earlier in life, some abnormalities such as scoliosis and reproductive tract problems don't show up until puberty.

"We're also seeing more teens who wouldn't have survived past childhood without modern medical treatments," says Litt. These patients have undergone treatments such as cancer chemotherapy, kidney transplantation, and open-heart surgery. In treating them, physicians must consider important teenagers' issues: achieving separation from parents, building a capacity for intimacy, and developing a positive self-image.

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Sometimes, Litt points out, perspectives get confused. "We've seen teens with serious diseases care most about getting rid of acne." But child psychiatrist Gregory Fritz, who's been studying how young people readjust to daily life after conquering cancer, feels that many teenagers who have battled death know more about life than their peers.

"They still worry about football games and get shy at dances. But when you talk to them seriously, they seem philosophically closer to adults and more mature than other kids."

Fritz is one of a growing number of professionals eager to expand research into problems of adolescence—research for which funding is scarce.

Meanwhile Litt points out that adolescent medicine is not and should not be a clinical specialty. "In this country there are about 40 million people between 10 and 21, and about 700 teen specialists. Their proper role is to educate other professionals and to serve as leaders of the field in academic settings."

Special services for special people

Stanford Medical Center and CHAS offer a variety of programs tailored to teens.

While treatment is preferred on an outpatient basis, special facilities at both institutions house inpatient children and adolescents. CHAS and Stanford University Hospital's pediatrics unit are in the process of being consolidated into the New CHAS at a cost of $40 million.

"The new facility will allow all our hospitalized teens to be together. We feel it's important for teens to share the hospital experience with others their own age," says Litt, an associate professor of pediatrics.

Issues important to adolescents and those who care for them underlie the services offered. These issues include:

- Eating Disorders—The eating disorders clinic at CHAS offers a unique interdisciplinary approach specifically designed to treat both underweight and overweight teenagers through a team effort by nutritionists, child psychiatrists, and adolescent medicine specialists.

The clinic sees obese teens as well as patients with anorexia nervosa, a disorder in which victims are obssessed with thinness to the point of starving themselves, and bulimia, the binge/purge syndrome. Stanford's behavioral medicine clinic is also available to such patients 18 and over, offering inpatient and outpatient psychotherapy, physical therapy, behavior modification, and nutritional guidance.

Obesity in the teen years has far-reaching implications because it impacts the teen's sense of worth. It is also a risk factor for hypertension and obesity in later life. In addition to the CHAS clinic, a summer weight-loss day camp for overweight teens is offered at Stanford by psychologist Mary Southam. "We introduce the kids to healthy eating and exercise habits, and encourage them to take charge of their own weight management," she says.

- Stress—Psychiatrist Hans Steiner runs the psychosomatic inpatient service at CHAS. He is convinced that in teens stress influences both the onset and the course of illness, such as with diabetic episodes and bronchial asthma attacks. He has developed a test to help predict adverse symptoms that he hopes may be used to help prevent anorexia nervosa.

- Family relationships—"Our society has characterized adolescence as such a worrisome time that parents enter this phase with lots of fears. They tend to focus on the negatives," Litt observes. "Kids haven't heard the positives enough from their parents. Physicians can play the role of facilitators by asking about the good qualities. We can also reassure parents by pointing out the reasons for a teenager's rebellion, reminding them it doesn't last forever, and helping them maintain their self-respect."

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Litt says adolescence provides an opportunity for parents to witness that their basic values have been passed on. "Excessive monitoring of behavior can be misconstrued as mistrust." Excessive hovering, she says, may stunt personality growth in areas of self-confidence and independence.

- Pregnancy—The media image of the pregnant teenager craving a living teddy bear is inaccurate, says sociologist Nancy Moss, who researched perinatal risk behavior in San Jose adolescents with Dr. Paul Hensleigh of Stanford's gynecology and obstetrics department.

"These girls are trying to take steps to make things work in the face of really big problems," Moss says. Most tend to focus on practical and educational plans, having come from turbulent, low-socioeconomic family backgrounds.

There are increased medical risks in teen pregnancies. Thus, one of the biggest concerns is delay in prenatal care. Health care professionals, Moss says, need to provide pregnant teens with information about adoption and abortion options and be more active in supporting their various needs, for the sake of the babies as well as the mothers. Infants born to teenagers are more likely than others to become victims of child abuse, Litt says.

Smoking and drug and alcohol abuse are commonly found among pregnant teens, but may be modifiable behaviors, Moss says. Many teens view pregnancy as an opportunity to "start fresh" and build stability into their lives. Social support and continued school attendance appear to make a difference. The fathers need guidance, too.

One pregnant teen in Moss's survey commented: "If I had a teenage daughter . . . I'd ask the principal if we could have a class for girls to explain to them the things you can do instead of going through all the hurt and pain, giving the baby up or stuff like that . . . You have to teach the girls about birth control if they want it, how to take care of themselves, and how to talk to their parents."

- Medical care compliance—While working in juvenile detention facilities, Litt noticed that some teens indiscriminately abuse drugs, yet others won't take medications prescribed for them. She realized that both behaviors were a form of rebellion. "Compliance seems to correlate with autonomy: making one's own appointment, accepting one's own prescription, paying one's own bill," she says. "A good self-image leads to better compliance.

"Unfortunately, the stereotype of the noncompliant teen can influence medical treatment," Litt says. Whereas an adult may receive medication, a teen will often undergo surgery simply because the doctor fears noncompliance. "Yet teens are no different from adults in this respect. About half comply and half don't."

"Teenagers trust doctors more who accept them as adults than as little kids," observes a 15-year-old patient. "Teenagers should be treated more like adults in order to act like them. If they're treated like little kids, then that's how they'll respond."

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FOR IMMEDIATE RELEASE

GRANTS SUPPORT DIABETES RESEARCH

STANFORD—

The American Diabetes Association (ADA) in 1984 granted research funding support to two faculty physicians at Stanford University Medical Center.

Dr. Merton Bernfield, professor of pediatrics, received a two-year national research award of almost $25,000 for his study of birth defects in diabetic mothers' offspring.

Dr. Fredric Kraemer, assistant professor of medicine, received a $25,000 national research award for his study on the high incidence of heart disease among diabetics.

Bernfield is investigating causes of the increased incidence of severe birth defects, particularly lower spine abnormalities, in children of diabetic mothers—with an eye towards possible prevention. He and his colleagues hypothesize that the causes lie in abnormalities of diabetes in a particular group of molecules.

Kraemer hopes to find reasons for the frequent development of atherosclerosis in diabetics, which is responsible for their leading causes of death: heart attacks and strokes. His goals include determining whether the process leading to atherosclerosis can be corrected with improved glucose control. Ultimately he hopes to help in the development of improved therapeutic approaches to the treatment and prevention of atherosclerotic complications in patients with diabetes.

In 1984-85, the ADA said it plans to spend about $2.8 million on national research grants.

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NEW DIVISION FOCUSES BIOTECHNOLOGY ON DISEASES OF THE THIRD WORLD

STANFORD—

A new "geographic medicine" division at Stanford University Medical School is aiming the most up-to-date biotechnology at diseases of the Third World.

Formed this fall, the new division is one of only a few in the United States to apply advanced molecular and genetic techniques to health problems of developing countries, said Dr. Gary Schoolnik, the division's chief.

"By committing new resources and technology toward finding solutions for medical problems largely ignored by Western medicine, we have the potential for bringing new aid to a large portion of the world's people," said Schoolnik, an assistant professor of medicine and of medical microbiology.

Although rarely seen in the United States, diseases such as malaria, schistosomiasis, and sleeping sickness maim and kill millions of people, he explained.

Even diseases considered mild in developed countries often turn deadly in developing nations, such as diarrhea which is estimated to kill five to 15 million malnourished children each year in the Third World, Schoolnik added.

Researchers in the division will use the new techniques of molecular and genetic medicine to study the viruses, bacteria and parasites responsible for some of the most serious infections found in developing countries.

By finding the genes and molecules these organisms use to make people sick, the researchers can then develop vaccines, drugs or other agents such as monoclonal antibodies, that should be useful in prevention, diagnosis and treatment of the diseases, Schoolnik said.

Faculty members of the new division are already conducting molecular and genetic studies of the organisms that cause the deadly liver disease schistosomiasis, African sleeping sickness, diarrhea, cholera, gonorrhea, and fungal diseases endemic to South America, he noted.

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Collaboration with researchers in the Third World will result in "on location" testing of potential drug or vaccine products, Schoolnik explained. Affiliations with health workers in South America, Bangladesh, and Kenya are under consideration, he added.

Medical training and clinical care will also be important activities of the new division, Schoolnik said.

The overseas affiliations could permit students and researchers to study and train abroad as well as allow foreign researchers to train at Stanford, Schoolnik said.

The division's clinical programs will center on two clinics to be established within the next few years, Schoolnik said. One clinic to be located at Stanford's affiliated hospital, Santa Clara Valley Medical Center, will treat Third World diseases which are showing up in the U.S. among refugees and immigrants from such areas as Southeast Asia, Mexico and Central America.

A traveler's clinic will be established in the next two or three years at Stanford Medical Center, where travelers to Third World countries could receive pre-travel information and preventive care as well as treatment on return. "A traveler's clinic would serve the needs of this area, which includes a lot of business travel generated by Silicon Valley," Schoolnik observed.

The new division is affiliated with the departments of medicine and medical microbiology at the medical school, Schoolnik said.

Current faculty members in addition to Schoolnik include Dr. Paul Basch, professor of family, community and preventive medicine and of medical microbiology, whose research centers on schistosomiasis; Dr. John Boothroyd, assistant professor of medical microbiology, who studies the parasite that causes African sleeping sickness; Dr. Stanley Falkow, professor and chairman of medical microbiology, who studies bacterial diseases such as diarrhea and venereal diseases; Dr. Harry Greenberg, associate professor of medicine, whose research focuses on the viruses responsible for most childhood diarrhea deaths; and Dr. David Stevens, associate professor of medicine and chief of infectious diseases at Santa Clara Valley Medical Center, who studies fungal diseases.

The new division is distinct from a $1.5 million parasitic disease research program in Stanford's department of pharmacology, recently funded by the MacArthur Foundation, Schoolnik noted.

First priorities of the new division are to seek new sources of research funding and training grant support, Schoolnik said.

Other medical schools with basic research programs on diseases of the Third World include Johns Hopkins University, Western Reserve University, Tufts University, and the Universities of Virginia and Washington, Schoolnik said.

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FOR IMMEDIATE RELEASE

CHILD SEXUAL ABUSE: PREVENTION THROUGH EDUCATION

STANFORD—

Physicians can play a vital role in preventing and stopping child sexual abuse, which is increasingly affecting younger children and is more often than before occurring within a family setting, a specialist told pediatricians and other professionals at Stanford University Medical Center Friday (Dec. 7).

Current statistics show approximately one out of four girls and one out of six boys are abused sexually before the age of 18, said Evelyn Schreck, training coordinator with the Child Advocacy Council of San Mateo and Santa Clara Counties. The onset of abuse is commonly between the ages of 6 and 8, though many children are abused before they reach 5, she said.

Schreck said responsible adults, including physicians, should be on the lookout for major indicators of abuse. These include knowledge about sexual activity that is inappropriate to the child's age, or an acting out of certain sexual behaviors at too young an age. Most young children cannot describe or act out behaviors they have not experienced, she explained.

Schreck spoke at the department of pediatrics grand rounds, a weekly seminar for physicians.

"Children need to know that there is no way we will allow an adult to continue hurting them after they tell us," Schreck said. They also need to know that being abused is never their fault, and that if the abuser is someone they love, he or she can probably be helped rather than punished forever.

Besides the physical signs of abuse familiar to physicians, there are often sleep disturbances including nightmares and bedwetting, new or strange fears, changes in ways the child relates to teachers and other adults, irritability, and sexual promiscuity possibly leading to prostitution in the case of older victims.

At least 80 percent of offenders are known to their child victims, Schreck said.

"We can't just warn kids about strangers, like in the past." Now they must be warned about inappropriate or "bad" touching (versus "good" touching such as a parent's hug goodnight) by any adult, including people in their own home or neighborhood.

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The closer the tie, Schreck said, the more power an adult has to abuse a relationship with a child.

Schreck provides in-service training to law enforcement and medical professionals required by law to report suspected abuse cases.

Physicians are often asked to determine the validity of accusations between parents in bitter divorce and custody cases. In such situations, it would be wise first to simply talk with the child alone, Schreck said, out of "coaching" range of either parent, and to observe the child's manipulation of "anatomically correct" dolls—which are commercially available.

She predicted future legislation to make it criminal for an adult to accuse falsely of sexual abuse.

Giving information to children helps prevent sexual abuse, Schreck said. The rules seem simple: If someone wants something that seems strange to you, say "no," get away, and tell someone. Also tell someone if you think another child is in danger.

Parents should play the "what if" game with children, Schreck said. Children should be given examples of lies and tricks abusers may use. They should be told never to go anywhere without permission. They should be told that "bad touching" usually involves taking off clothes for no good reason and keeping a secret.

Pediatricians have an opportunity to initiate this type of conversation during the routine medical exam, which is a "good reason" to take off one's clothes. They might also encourage children to speak up if something they do during the exam causes discomfort, Schreck said.

She added it's important for children to be taught the proper names for body parts and, so they are clearly understood when communicating abuse. "Parents and doctors should tell children, 'If you fell I'd see the scrape, but if you're hurt inside you have to tell me, and then I can help.' "

Doctors, she said, can suggest books on the topic of sexual abuse to families (a list is available from the Council), and can suggest extra precautions for homes where both parents work and children take care of themselves.

Sexual abuse varies, Schreck pointed out, ranging from voyeurism or verbal stimulation, to touching, intercourse, or forced prostitution and child pornography. "However, there is little agreement among the public as to what's abusive," she noted, adding that some attitudes can be especially detrimental to boy victims who elicit less sympathy.

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FOR IMMEDIATE RELEASE

HEART IMPLANT, TRANSPLANT PATIENT RIDES HOME WITH SANTA

(Editors, News Directors: Photos of St. Laurent with autographed photo and presenters available on request if not included. The Weibles may be contacted directly at (415) 365-0404. St. Laurent is expected to be available briefly for a photo or interview opportunity at the Stanford University Hospital front entrance on Pasteur Drive at the time of his release, 10 a.m. Saturday, Dec. 8. This is the only interview or photo opportunity we expect with St. Laurent at Stanford.

STANFORD—

Robert St. Laurent, kept alive before a heart transplant on an artificial cardiac pump, was to drive away from the hospital Saturday (Dec. 8) in a limousine with his wife, Santa Claus, and an autographed picture of actress Linda Evans.

"It's a secret," St. Laurent's wife, Cynthia, said Friday morning. "After 113 days in the hospital we wanted to do something special to surprise him."

On Sept. 5 he became the first—and so far only—person ever to receive an innovative cardiac pump, the Pulsemaker Heart Assist System, which kept him alive until a human donor heart was implanted Sept. 13. His stay at Stanford University Hospital was complicated with further surgery for an inflamed colon.

Santa Claus is Wally Weible, St. Laurent's Redwood City apartment manager, who arranged the luxury transport from a friend who runs a limousine service, said Weible's wife, Pat.

"My husband plays Santa every year anyway. We wanted to do this for Bob and Cynthia (St. Laurent) because we are really happy he is able to come home," said Pat Weible.

If all goes as planned, the ride will be the second surprise of a week of recuperation. On Wednesday, St. Laurent's primary nurse, Patti Tharp, and five advanced nursing students presented the recovering patient with the autographed picture of Linda Evans, a star in the television series, "Dynasty."

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Julie Shinn, education coordinator for the postgraduate cardiovascular nursing program, said the students contacted officials of the popular television series and explained their patient's interest in the show—and Miss Evans.

"The nurses knew that after surgery the only program I wanted to watch was 'Dynasty,'" St. Laurent said."

The St. Laurents will remain in the area for several months of followup treatment before returning to Florida, Cynthia St. Laurent said.

The couple arrived at the Weible's apartment complex in July when St. Laurent, who suffered from hardening of the arteries, was accepted for the transplant program. For four years he had not been able to work in his job as manager of a recycling plant because of his heart condition. On Aug. 24, his condition had deteriorated substantially, and he was admitted to the hospital.

Doctors feared that without a transplant he was in immediate danger of death, so Dr. Philip E. Oyer, associate professor of cardiovascular surgery, decided with colleagues to implant the experimental Pulsemaker left ventricular assist device (LVAD) as a temporary measure. On Sept. 13, a suitable donor was located, and the device was removed as St. Laurent became Stanford's 313th heart transplant recipient.

The first Pulsemaker implant came about two months after the Food and Drug Administration had approved trials of the device at Stanford. The Pulsemaker offers the hope of becoming a totally implantable, portable heart support system in a few years, Oyer said. He has said it is the first LVAD based on an electronically driven—rather than pneumatically powered—pumping action to be implanted in a human patient.

The FDA has approved a total of 20 implants of the device, and doctors have said it will be used again when suitable patients are identified.

The Pulsemaker LVAD has been developed by Oyer and Peer M.Portner, Ph.D., consulting associate professor of cardiovascular surgery at Stanford. Portner is chief executive officer of the Novacor Medical Corp. of Oakland, which is manufacturing the device.

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FOR IMMEDIATE RELEASE

MEDICAL CENTER WINS ENERGY CONSERVATION AWARD

STANFORD—

Stanford University Medical Center has won the 1984 Energy Management Award for a nonprofit institution from the 300-member San Francisco Bay Area Chapter of the Association of Energy Engineers (AEE).

"We are in the business of trying to reduce the cost of health care," said Sean Mooney, manager of utility services, who accepted the award on behalf of the medical center at the AEE's award banquet in El Cerrito, Wednesday, Dec. 5.

Stanford was selected from among a field of 20 entries, including Pan American World Airways, which won the top prize for energy conservation in the private sector.

Mooney said that energy consumption at the medical center declined 11.7 percent between the start of the conservation program in September 1980 and August 1984.

The decline occurred despite an increase in square footage of 5.8 per cent, Mooney explained.

The reductions resulted in an avoided cost of more than $1 million since the program began, Mooney said.

Many of the changes were technical, Mooney explained, including the relocation of thermostats to provide more accurate responses to avoid overheating work areas. Some changes, he said were relatively simple, such as always cleaning light fixtures every time a bulb is changed to ensure that a maximum of light is utilized.

"And a significant part of the effort involves things as simple as remembering to turn off the lights when you leave work," Mooney said.

Mooney noted that utility costs, which average about $9,000 per day, are higher for medical centers than for most business because of the high concentration of sophisticated equipment required for patient care.

Ann M. Anderson, San Francsico AEE chapter president, and Mooney both noted that Stanford actively sought and received energy research grants and utility company rebates to further minimize utilities expenses.

The AEE is a nonprofit, scientific and educational organization with more than 5,000 members in 21 countries, including architects, engineers, consultants and buildings managers.

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ADVANCE FOR RELEASE AM PAPERS, THURSDAY, DEC. 6, 1984

DELAYED TREATMENT OKAY FOR SOME TYPES OF CANCERS, RESEARCHERS REPORT

STANFORD—

Delaying treatment for certain types of cancer patients does not compromise their chances for survival, reported Stanford University Medical Center scientists in Thursday's (Dec. 6) issue of *The New England Journal of Medicine*.

However, cautioned Drs. Sandra Horning and Saul Rosenberg, the decision not to treat this select group of patients requires careful, frequent evaluation and sound clinical judgement to begin treatment at the appropriate time.

Horning, assistant oncology professor and Rosenberg, oncology professor and division chairman, studied 83 patients with low-grade non-Hodgkin's lymphomas. These types of cancers are characterized by relatively long survival periods. They found that after five years 82 percent of the patients were alive, and after 10 years 73 percent were alive. They also found that 23 percent of the patients experienced spontaneous regressions, a decrease of the disease. And, progression to higher-risk cancers seemed not to be affected by whether or not the patients underwent treatment.

"We have found that it is acceptable to wait and watch these select lymphoma patients and treat them when it's indicated rather than when the cancer is diagnosed," Horning said in an interview.

Withholding treatment, the scientists reported, has several advantages. Patients can avoid the unpleasant side effects of some cancer therapies. It also allows for spontaneous regression of the disease. And, some treatments have been known to actually contribute to the increasing severity of these types of cancers.

However, Horning said, she hopes these findings do not discourage patients and physicians to continue to work towards improving treatments in these lymphomas.

Today's report follows a similar, controversial one published in 1979, in which scientists first reported that treatment could be delayed based on a study of 44 patients. The current study expanded on the earlier one and shed more light on the natural history of select patients with non-Hodgkins lymphomas, Horning said.

The types of cancers that lend themselves to delayed treatment are called lymphocytic; follicular, small cleaved-cell; and follicular, mixed small cleaved-cell and large cell. There are no known cures to these cancers, the scientists reported, and "early intensive therapies have not increased survival."

The patients began receiving treatment at a median average of three years following diagnosis. Treatment should be started, Horning said, when symptoms begin to show or interfere with other organ functions.

The study was funded in part by grants from the National Institutes of Health.

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Editors: photos available if not included.

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FOR IMMEDIATE RELEASE

THE OTHER SIDE OF A FORTY-NINER LINEBACKER

STANFORD—

While most NFL football players look to the end of the season as the time of the year during which they can relax, San Francisco 49er Milt McColl knows it signals the start of long hours of hard work. The defensive linebacker spends the off-season studying at Stanford University School of Medicine, where he's laying the groundwork for a career in surgery.

"He's got his strategy all worked out," says his medical school advisor, Dr. Stephen Shochat. "He's an extremely bright guy."

"He's a great ball player, and he'll be a great doctor," agrees his coach, Norb Hecker.

McColl, who primarily plays on special teams for the 49ers, has been switching between football and medical school since 1981. He finished his medical classroom work last spring and overcame another obstacle during the summer by passing the National Boards—required for all medical students. This January he's a starter on medicine's field—the hospital wards. During his clinical rotations he'll come face-to-face with patients for the first time, considered by many to be the true beginning of a doctor's training.

Until then however, the 6-6, 230 pound "Doc," as he's called by his teammates, is focusing on football. With a 13-1 season to date, the 49ers have a slot in the playoffs and more likely than not in January's Super Bowl. Coincidentally, the game is scheduled to take place at Stanford Stadium.

"I make it a point to concentrate on what I'm doing," McColl says. "During football I concentrate on the game. When I'm in school I concentrate on medicine."

Going back and forth between the two may seem jarring, but McColl "welcomes the change. I've been able to pretty much avoid the burnout many medical students experience because I change what I'm doing every six months."

But being able to take on both careers successfully requires careful planning and, Shochat feels, a special type of person. "Here's a guy who has played football in the Super Bowl, and is going to one of the top medical schools in the country," he says. "He could be prancing around and acting like a prima donna, as if he deserved special treatment. But he's able to put it in perspective and is not terribly impressed with either activity. Milt is a solid, together guy."

"When I'm playing football," says McColl in his soft-spoken, thoughtful manner, "I feel I'm with the elite among athletes in the country. When I'm at school, I feel I'm with the best medical minds in the country. I'm proud, and lucky, to be associated with them."

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McColl was attending his first week of medical school classes at University of California, Los Angeles, four years ago when he found out he'd be playing 49er football. A free agent, he had trained with the team during the summer but didn't have much hope of any season play.

"I was really suprised to hear from the 49ers," he recalls. UCLA didn't want him to divide his time between school and football, so he packed up and moved to Stanford, which had accepted him as well.

"Stanford is the only place I could be doing this," McColl says. "Because of the research orientation of the school, the curriculum is flexible enough to allow me to take half of each year off for football and still get all the necessary coursework done. Stanford encourages students to do other things such as research while they're in school. Football is my research."

The 49ers were in the Super Bowl McColl's first year, so he didn't actually start medical school until late January. "I was a bit worried about coming a month late," he recalls. "My classmates had been following the team though, and they had a little party for me when I came back to school."

Despite such perks, McColl comes back each year prepared for hard work. "Medical school is a serious commitment. You have to really want it," he tells rookie tight end John Frank, a teammate also considering medical school. "Just like football, medical school is rigorous, intense and mentally draining."

But, he says, each profession helps prepare him for the other. "Football teaches you to think and react fast; in medicine you need to be able to make quick decisions. In football you learn how to work with people and cooperate, how to be part of a team effort. Medicine teaches you about your body, how training and diet help you develop it into a finely tuned machine. It also gives me a greater appreciation for what I should do, and should not do but do anyway," he adds with a chuckle.

The strongest tie between the two, McColl points out, is stress. "Football is really a stressful game, and medicine is stressful too. I'm learning how to work well under the pressures of each."

Both football and medical school have another similarity, McColl says. They take time away from his personal life and wife of nearly two years, Cindy, a civil engineer. "We never get to see each other as much as we would like, but I made the decision long ago that family comes first. If there's ever a choice between football, medical school and Cindy, my wife wins out every time," he says. "But that doesn't mean they can't work side by side."

McColl says he has always wanted to be a doctor. He follows in the footsteps of his father, an orthopedic surgeon who played for the Chicago Bears while he was in medical school. The contact with people, and the fact that his father liked his work was appealing, McColl explains.

"It's really important to realize that football is short-term—the average football career is only about four years long. I 'm glad I'll have something to do when I'm done," he says. "A lot of players don't have a goal for after football. That's why some tend to hang on to the game. Sometimes they hang on too long for their own good."

It'll take another three years for McColl to complete his medical education—two or three years longer than it takes most medical students. But, he says, that's fine. "I've got my whole life to be a doctor, and only a short amount of time to play football.

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FOR IMMEDIATE RELEASE

CARDIAC TRANSPLANT CONFERENCE SCHEDULED FOR HEALTH CARE PROVIDERS

STANFORD—

(City and assignment editors and medical/science writers: You are invited to attend a news briefing in conjunction with a three-day conference on "Cardiac Transplantation at Stanford. The briefing scheduled at 12:30 p.m., Wednesday, Feb. 6, in the Cypress Ballroom, Holiday Inn of Palo Alto, 625 El Camino Real, has been organized by the Stanford Medical Center News Bureau for reporters. Individual interviews may be arranged at that time. Technical sessions are limited to preregistered participants from institutions which are considering setting up a cardiac transplant program. Expected to attend the news conference are Dr. John Schroeder, associate professor of medicine and chairman of the screening process for prospective heart transplant patients; Dr. Edward Stinson, professor of cardiovascular surgery and director of the heart transplantation program at Stanford; Dr. Sharon Hunt, clinical assistant professor of medicine and a physician specialist cardiologist in charge of Stanford cardiac transplant patients' followup care; and Mary Lough, a registered nurse who reported a study on life satisfaction reported by heart transplant patients. Also tentatively scheduled to attend are Dr. Norman Shumway, chairman of the department of cardiovascular surgery, as well as heart transplant recipients.

More than 17 years after its first human heart transplant operation, Stanford University Medical Center is offering formal coaching and advice to other medical centers planning similar programs.

A three-day "Cardiac Transplantation at Stanford" conference scheduled Feb. 6-8 has attracted registration from 250 physicians, nurses, social workers and other medical personnel from 38 states and six foreign countries, said Dr. John Schroeder, associate professor of medicine (cardiology), and an organizer of the conference.

He said in a recent interview that a variety of increased scientific knowledge and management skills has enabled research institutions such as Stanford to assist other centers set up programs which will make cardiac transplantation available to a wider public.

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"In our own program we have started within the past year to accept both younger and older patients who in the past would not have been considered. A combination of improved medications—including the understanding of proper dosage and maintenance—along with an increased understanding of the social and medical needs of our patients has allowed us, on a case-by-case basis, to accept children as young as 2 1/2 and adults as old as 55."

Between 1970 and 1983, Stanford had limited transplants to persons under the age of 50. No patient younger than 12 had been accepted, although since last September, a 9-year-old and a 2 1/2-year-old patient were accepted and are reported doing well, Schroeder said.

Schroeder credited the modestly expanded criteria to improved drug programs which help prevent the body from rejecting the donor organ while simultaneously allowing the body to fight off infection. A common side effect of the drugs needed to stem rejection is that they compromise the immune system, "but with improved medications such as cyclosporine and with increasing knowledge about dosage, we are able to provide a higher quality of life for our patients."

For younger patients increasing survival statistics have made the operation more feasible and more justifiable socially, Schroeder said. The decision to transplant pediatric patients was made last year after documentation from Stanford and other centers disclosed that the transplanted heart would grow along with patients, said Dr. Norman Shumway, chairman of the department of cardiovascular surgery.

Stanford has done more than 325 heart transplants since Shumway performed the nation's first adult heart transplant procedure on Jan. 6, 1968, less than one month after the first human heart transplant was performed in Cape Town, South Africa. At the time of Stanford's first transplant, patients had a 20 percent life expectancy of a year. Currently, more than 80 percent of the most recent patients are alive a year after transplant and 67 percent are alive after three years, according to the program's statistics. In addition 14 of 20 recipients of combined heart and lung transplantations are alive since Stanford began that dual procedure in March 1981.

Shumway has attributed the increasing survival statistics to the continuous laboratory research program which began with his own experiments—many involving laboratory animals—in the 1950s.

"We constantly receive inquiries from around the world about how a new program may be set up. We regularly have visitors here asking about our program in hopes that some of our experiences may be translated into programs they wish to start," Schroeder said.

"We thought it would be good to try and bring many of these people here at one time for a concentrated conference on the nuts and bolts of running a transplant program," he added.

Schroeder said the number of new programs contemplated or started has increased dramatically within the past two years, and in 1984 an estimated 340 heart transplants were performed worldwide. About 100 hospitals worldwide performed the procedure in the late 1960s but then abruptly halted their programs after experiencing disappointing survival rates.

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But by the early 1970s Stanford, which had based its program on decades of research, stood virtually alone. Since the late 1970s, about a dozen programs nationwide have been active, and in recent years, the number of insitutions regularly performing the procedure has increased to about 25, Schroeder said.

He credited the recent upsurge to both pharmacologic advances, including cyclosporine, as well as an increased willingness by insurance companies and public providers to pay for heart transplants as a therapeutic—rather than experimental—procedure.

In February 1984, Blue Shield of California said it would pay for heart and heart/lung transplants at Stanford, representing the first time a major insurance carrier had stated as a matter of policy it would pay for the procedure. Since then, other insurance companies have offered transplantation as a part of their coverage, encouraging new centers around the country to make the procedure available.

Schroeder said the most significant barrier to transplantation is a lack of sufficient donors.

"If more people were aware of the need for donors and made their intentions known before the potential for donorship arose, we would be able to increase dramatically the number of persons who each year could be transplanted," Schroeder said.

Marguerite Brown, Stanford's donor coordinator, estimated that about 20,000 persons die each year under circumstances which would allow for organ donation of all types, but of that number, only about 2,300 organ donors have actually been available in recent years. Brown said a recent study estimated that at least 1,000 viable candidates each year require a transplanted heart.

The three-day conference is sponsored by Stanford's division of cardiology and departments of cardiovascular surgery and nursing. The course is intended to help physicians, nurses, social workers and other medical personnel understand the needs of a new transplantation program, Schroeder said.

Topics include techniques of evaluating potential recipients from both a medical and psychosocial perspective, physiology, rehabilitation, biopsy techniques and potential risks from immunosuppressive drugs.

Instructors include Stanford physicians, nurses and social workers involved in the Stanford program. Guest faculty include Dr. David Winter, medical director of Sandoz Inc., East Hanover, N.J., manufacturer of cyclosporine.

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FOR IMMEDIATE RELEASE

MEDICAL AFFAIRS VICE PRESIDENT TO STEP DOWN DEC. 1985

STANFORD—

Dr. Lawrence G. Crowley, vice president for medical affairs at Stanford University Medical Center, will relinquish his administrative responsibilities at the end of the year to return to other academic duties, he announced Wednesday, Jan. 30.

In a letter to Stanford University President Donald Kennedy, the 65-year-old vice president said, "I request to be relieved of my administrative appointment effective December 31, 1985. The request, I believe, reflects our understanding of some duration, about my tenure in this office.

"I will continue to provide active leadership of the medical center for the remaining months and I will work closely with you in assuring a smooth transition to new leadership and possible organizational change."

Kennedy said he accepts Crowley's request "with a sense of real regret."

He praised Crowley for his "extraordinary capacity for leadership, exceptional administrative and financial skills, and wisdom and patience to develop consensus even about the most trying issues.

"During the seven years in which you will have served in this role," Kennedy wrote,"you have given unstintingly of yourself in the highest interest of the university and the medical center.

"The improvement of the financial position of all elements of the center, our present opportunity to undertake major facilities renewal in the basic sciences and in the hospital, and the new Children's Hospital venture are all vital accomplishments for which we must thank your foresight and your determination."

Crowley also will relinquish his post of president of the Stanford University Hospital, a university-owned subsidiary.

Kennedy said Crowley will continue to participate in important projects he has begun. These include medical center efforts to raise $145 million for capital projects and endowment, the further planning and development of the New Children's Hospital and the study of the future and organization of the medical center to be supported by the Henry J. Kaiser Family Foundation.

Kennedy announced the appointment of a special committee, headed by Vice President and Provost James Rosse to study Stanford Medical Center's administrative structure.

Whether the deanship of the medical school and the vice presidency should remain separated or be combined in a single person in the future is one of the principal questions the committee will examine.

Crowley joined the Stanford faculty in 1964. He became dean of the University of Wisconsin in Madison in 1973, but he returned to Stanford in 1977. He headed the medical center on an acting basis from 1979 until 1980 when he was appointed vice president, with both the dean and hospital director reporting to him.

"The special needs of (Stanford) Hospital and the significantly increased role of the Hospital Board of Directors," Kennedy said, "require that the (hospital) director function as chief executive officer...with a clear reporting line to the board."

Kennedy expressed hope the committee would make recommendations on the appropriate administrative structure to him by the end of February.

"Resolution of this organizational question is fundamental to the design of a search and appointment strategy suitable for our situation that will win widespread support," he said.

Besides Rosse, the committee includes Dean David Korn of the School of Medicine; Hospital Executive Vice President and Director Sheldon S. King; Hospital Board member Dean Morton; University Board of Trustees member James F. Gaither; Vice President for Business and Finance William F. Massy; Vice President and General Counsel John J. Schwartz; and Professors Thomas A. Gonda, psychiatry; Frances Conley, surgery; and Stanley Falkow, medical microbiology.

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FOR IMMEDIATE RELEASE

STANFORD RESEARCHERS REPORT POTENTIAL VACCINE AGAINST GONORRHEA

STANFORD—

Stanford University Medical School researchers have developed a potential vaccine against gonorrhea, a contagious venereal disease that is estimated to afflict more than one million people annually in the United States.

The vaccine candidate consists of a bioengineered protein fragment that appears to produce a protective immune barrier against a broad range of gonorrhea-causing bacteria.

The potential vaccine has successfully blocked gonococcal bacteria from infecting human cells in laboratory studies. It will begin to be tested in human volunteers for safety and effectiveness within the coming year, the scientists said.

The research was led by Dr. Gary Schoolnik, assistant professor of medicine and medical microbiology at Stanford University School of Medicine. Schoolnik's colleagues are Dr. Jonathan Rothbard, research associate; Dr. Rosemary Fernandez, research assistant; Lena Wang, Stanford senior; and Dr. Nelson Teng, assistant professor of gynecology and obstetrics.

Their report will appear in the February issue of the *Proceedings of the National Academy of Sciences*.

In the United States, gonorrhea is the most common communicable disease for which records are kept and in some parts of the Third World, the disease is epidemic. Although usually not fatal, it is a major public health problem because the disease is easily spread through sexual contact and can produce severe complications, including infertility in women, Schoolnik said.

The disease can be treated with antibiotics. However, in some parts of the world, strains of the gonococcal bacterium have become resistant to most drugs.

In addition, people often delay seeking medical help because they don't know they are sick (70 percent of women are initially asymptomatic), because of social stigma, or due to lack of education or access to medical care, Schoolnik said. The result is rapid and unchecked passage of the disease among sexual partners.

To help curb its spread, researchers have long sought a vaccine that could protect against gonorrhea, Schoolnik explained. What has made vaccine development so difficult is that the microorganism that causes gonorrhea has ingenious methods for eluding the body's immune weapons, he said. Schoolnik and his colleagues think they have now made a vaccine that can overcome this problem.

It appears to work by preventing gonococcal bacteria from using pili—specialized tiny hair-like appendages—to latch onto cells lining the urogenital tract. The pili, made of a protein called pilin, enable the bacteria to adhere to cells, the first step in infection.

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The potential vaccine stimulates the immune system to seek out and inactivate the pili, thus preventing the bacteria from adhering.

Past attempts at making vaccines have failed because gonococcal bacteria can continually change the configuration of the pilin protein, thereby always winning a hide-and-seek game with the immune system. The key to the new vaccine's preliminary success is that it stimulates immunity to a portion of the pilin protein whose configuration remains constant and unvaried, even in different gonococcal strains, Schoolnik said.

The researchers made the vaccine candidate by synthesizing pieces of the pilin protein and looking for pieces that didn't vary from one bacterial strain to another.

In laboratory testing, these bioengineered protein fragments were injected into rabbits whose immune systems reacted by making antibody. Blood serum containing the antibodies was taken from the rabbits.

The sera were then tested to find the one that most effectively blocked a variety of gonococcal bacteria from latching onto human cells in tissue culture.

Because animals are not subject to gonorrhea or similar diseases, the next step following laboratory studies is to test the vaccine candidate in humans, Schoolnik said.

First, it will be administered to healthy volunteers to establish its safety, Schoolnik said. The next stage would be a clinical trial in volunteers who are vaccinated and then exposed to gonococcal bacteria, he said.

The new finding is complementary to another potential component of a gonorrhea vaccine developed by Dr. Stanley Falkow, professor and chairman in the department of medical microbiology at Stanford, Schoolnik said.

Falkow and his colleagues have cloned a gene that codes for a protein the microorganisms use to defend themselves from the body's immune system during infection. The cloned gene may help researchers find a way to inactivate this gonococcal defense protein.

One reason a gonorrhea vaccine would be so valuable is because of the disease's side effects, which are most severe in women, Schoolnik said. The major complication of gonorrhea is pelvic inflammatory disease (PID), which can cause chronic pain, ectopic pregnancy (the embryo starts to develop in the fallopian tube rather than in the uterus), and infertility.

With each episode of PID, a woman's chance of becoming infertile rises, explained Schoolnik, beginning at a 17 percent likelihood of infertility after one episode and increasing to a 69 percent chance after three bouts of PID.

"There is an epidemic of infertility caused by gonorrhea in Southeast Asia and Western Africa," Schoolnik said. "In affected parts of Africa, one-quarter of the women are infertile by age 25," he added.

Other complications of gonorrhea include meningitis and arthritis. Children born to mothers with gonorrhea also risk developing serious eye infections, Schoolnik said.

Stanford University is applying for a patent on the protein fragment that forms the basis for the vaccine, Schoolnik said. If the patent is approved, the university plans to grant a license to a French biologicals company, the Institut Merieux in Lyons, which has funded Schoolnik's work on the vaccine's development.

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NEW EXPERIMENTAL TREATMENT FOR A COMMON SEXUALLY TRANSMITTED DISEASE

STANFORD—

Stanford University Medical Center researchers are testing an experimental treatment for a sexually transmitted disease that may be associated with one type of cancer and is thought to afflict more than one million people in the United States.

The researchers want to find out if the condition, known as venereal warts, can be effectively controlled with interferon, a powerful virus-fighting protein made by the body.

If successful, the researchers believe that the new treatment, which is in the form of an ointment, could be more effective and less painful than current therapies for the disease.

The venereal wart condition, also called condylomata acuminata, is rapidly becoming one of the most common sexually transmitted diseases in the U.S., said Dr. Nelson Teng, who is heading the research program with interferon expert Dr. Thomas Merigan.

Teng is an assistant professor of gynecology and obstetrics and Merigan is professor of medicine and head of infectious diseases at Stanford University School of Medicine.

The disease, caused by the human papilloma virus, consists of wart-like lesions in the genital and anal regions of both men and women. It is easily spread, difficult to cure, and the human papilloma virus has been associated with cervical cancer, Teng said.

The disease is of growing concern because it has become "nearly epidemic in some populations, such as among gay men and also among heterosexuals in some areas, particularly some small college towns," said Barbara Story, a physician assistant and researcher on the project.

"Interferon looks very promising as a potential treatment for venereal warts because it enhances the body's own defense system against viruses and malignant cells," Story said.

Traditional treatments for the warts—chemicals, burning, freezing, or surgical removal—are painful and frequently ineffective, Story explained.

But recent positive results from studies overseas using interferon injections to treat venereal warts have encouraged the Stanford scientists to test applications of the protein in a gel form, Teng said.

A special chemical in the gel will carry the interferon through the skin to reach the sites of viral infection, Story said. A gel will be tested rather than injections because its painlessness and convenience should increase patients' compliance and eliminate side effects, she added.

The researchers will conduct initial studies of the gel on 90 women with venereal warts, Story said. Volunteers must be 18 or older, have had no treatment for the warts within the past four weeks, and must not be pregnant or nursing.

The study will last six months. Participants will be required to apply the gel three times a day for four weeks, make weekly visits to Stanford for the first month, and less frequent visits thereafter.

"We anticipate no adverse side effects from the treatment," Teng said.

To inquire about the study, women should call Stanford's department of gynecology and obstetrics at (415) 497-8585.

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(Editors: photos available on request.)

FOR IMMEDIATE RELEASE

KIDNAPPED FOR SPEAKING OUT AGAINST HIS COUNTRY'S HEALTH CARE POLICIES—ONE EL SALVADOREAN PHYSICIAN'S STORY

STANFORD—

Dr. Rafael Ruiz Izaguirre is fighting in El Salvador.

Not with guns and bombs hiding out in the hills, but with words and facts, he said, in newspapers, from podiums, anywhere he can speak out against the government's health care system.

His battle has ostracized him from some social and political circles, he claimed. It has kept him out of professional positions to which he might have been appointed.

He was once kidnapped and interrogated for his outspoken and controversial views. But that hasn't stopped him.

Ruiz is fighting to save the lives of the children of El Salvador, he said.

A neonatology fellow at Stanford University Medical Center from 1969-70, Ruiz, currently head professor of the neonatology division at the National University of El Salvador's School of Medicine, has returned to the United States for the first time as a Fulbright professor at Stanford.

His visit also marks the first time he's been willing to discuss not only his activities in El Salvador, but his kidnapping nearly four years ago by "a heavily armed squad" posing as leftist rebels.

Fighting for better medical care in his country isn't easy, Ruiz said in a recent interview. As he tells it, he was walking through his clinic parking lot towards his car on July 16, 1981. Suddenly, he was surrounded by four strange men. One held a rifle to his forehead.

Ruiz was searched, blindfolded, handcuffed and stuffed into a small van. He was not mistreated, he said, but nobody spoke during the drive that brought him to a cold, bare room in a building at an unknown destination. About two hours after his arrival, a man walked into the room.

After many personal questions, to all of which the interrogator already knew the answers, the key question, Ruiz felt, was asked. "You are a prisoner of the Farabundo Marti National Liberation Front (FMLN). Why have you betrayed us?"

"You are wrong, I do not belong to FMLN," Ruiz said. "I have not betrayed you or any other political group. I do not belong to any.

"My work is not political, it is medical," he continued, spilling out his frustration and anger towards "the ineptitude and the arrogance" that he had seen so frequently in members of El Salvador's health ministry.

"No matter who is in the government," the interrogator finally asked, "will you insist in protesting when you consider that things are not done correctly?"

"Yes," Ruiz replied.

Ruiz was again blindfolded and driven to within walking distance of his home. He had survived.

The kidnappers were not guerrillas, Ruiz is convinced, because of small but revealing mistakes they made that the FMLN, or any rebel group, would not have made. Also, the respect with which they treated him made him think they appreciated his work. Nonetheless, they were trying to find out if he was a member of the leftist group, and if so, to intimidate him. He was never treated roughly or with any violence, he pointed out, and the interrogator was at no time disrespectful.

He was intimidated—outright paranoid, he admitted—for a few weeks following his ordeal, but gradually returned to his outspoken criticism of the government.

Public health care in El Salvador is abysmal at best, Ruiz said. Those wealthier citizens who can afford to pay for private physicians *can* get good medical care. But for 75 percent of the country's population that makes up the lower and poverty classes, many diseases that are easily preventable can lead to a major disability or death.

The major health problems among children in El Salvador, Ruiz said, include malnutrition, affecting an estimated 75 percent of those children who fall into the lower end of the socioeconomic scale; gastrointestinal problems, many of which result from parasitic infestation caused by bad environmental hygiene; communicable diseases, the result of lack of immunization; and others due to mere negligence by health authorities, he charged.

"I'm not advocating anything unusual," he said. "I'm talking about the ABC's of medicine. It's not my idea to vaccinate against polio, to provide proper nutrition—it's all written in medical literature.

"Many doctors working as government officials in El Salvador suffer from 'incurable O.K.ism'. They refuse to see or hear anything. Malnutrition, for example, is not just a medical problem, it's a social problem as well. If they accepted the responsibilty for poor people's care, they'd have to make drastic changes. It's much easier to ignore the problems."

So, Ruiz continued, the attitude becomes one of denial. "They sayth'We don't have polio. Why make changes if there is no problem?' "

It was in medical school during the early 1960s that Ruiz's anger towards the health care system started to build. Helpless to do anything while in school, he vowed to spend his medical career teaching and working to improve public health care. It was that same sense of responsibilty that most other doctors avoided that led him to his decision.

"I got scholarships for my education, and the money for those scholarships came from the people paying taxes," Ruiz said. "I realized from the beginning that there was something deeply wrong that I could not tolerate. When I went back to El Salvador in 1971 after all my training I wanted to do the best for the people who had paid for my education. The people who could pay for medical care didn't need me."

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Ruiz clashed with government officials on many occasions. While he was working at a small country hospital, for example, the head of the anti-malaric division declared there was no malaria in the region. Ruiz countered, saying he saw at least two cases each day.

In another small village, Ruiz was refused permission to study deadly insects invading citizens' adobe huts because of personal grudges, he believed, between those who needed to approve it.

In a maternity hospital in the capital of San Salvador, Ruiz was removed from the premature infant unit after his patients, whom he fed as well as possible, started doing better than those of the unit's head doctor, who fed the preemies tea. He later coined the term 'hospital-dematernititis' to describe the mixture of negligence and apathy that he felt abounded.

He continued his campaign, pointing out wrongdoings to medical students he taught, publishing articles in newpapers—some considered leftist and radical, and some more mainstream. No one would join his protest, Ruiz said, because they feared repercussions to their professional and social status.

"Some may say I am stupid to speak out," Ruiz said. "I've exposed my life, my well-being, my family and the social prestige awarded doctors in El Salvador.

"But I don't feel I have the right to remain silent."

His efforts, he said, seem to be paying off.

He and some associates have founded the Association of Perinatal Medicine. Through this group, Ruiz plans to open a model clinic in San Salvador by August that would employ the services of paramedics and other health care professionals. The goal of the clinic, which is being funded jointly by his university and a group similar to this country's Kiwanis Club, is to offer good medical care at a fraction of the cost of a private doctor.

"We'll be creating a new health team," he said. "This is something I've been proposing since 1977, but the government has been deaf, blind and just not interested."

Ruiz also is encouraged by the choice of the country's new secretary of health, whom he thinks may improve the situation. Maternal and child health care as a governmental policy is finally beginning to take shape, Ruiz said. He, in turn, will start pressing more for family planning, maternal and child health care and preventive medicine.

With professional acquaintances of many American doctors, Ruiz knows it would have been relatively easy to move to the United States and practice medicine here. But, he said, he will never leave El Salvador unless it becomes dangerous for his wife and two sons.

"My country is like my family," he said. "We Salvadoreans are very stubborn people. I'm taking risks by being an open dissenter, but I'm at peace with myself."

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FOR IMMEDIATE RELEASE

FOUNDATION STUDY TO EXAMINE FUTURE DIRECTIONS OF ACADEMIC MEDICAL CENTERS

STANFORD—

A major study of the future of the academic medical center will be conducted in the next three years under the direction of Dr. Lawrence G. Crowley, professor of surgery and vice president for medical affairs at Stanford University Medical Center.

The study, made possible by a $650,000 grant from the Henry J. Kaiser Family Foundation to the university, "will examine how academic medical centers can adapt to a competitive medical practice environment," according to Dr. Alvin R. Tarlov, president of the Menlo Park, California-based foundation.

"Stanford Medical Center," he said, "is now functioning in a competitive environment that may become the norm throughout the country in a few years.

"The choices Stanford makes will be influential in shaping the future organization of academic medicine in the U.S."

Planned as a cooperative effort of the university, the medical school, and the university hospital, the research will be guided by an internal steering committee, augmented by an advisory board representing business leaders, the medical community, the public sector and other academic health centers.

Smaller task groups will be convened to study and make recommendations on specific trends that affect the missions of the medical center in patient care, research and education.

Tarlov said policy makers are presently hampered by a shortage of information from which to propose changes for the future direction of academic medical centers.

"We believe the study will address this issue," he said.

"Academic medical centers play a key role in the American health-care enterprise," explained Crowley. "They educate physicians and other health care professionals.

"The centers generate new technologies and the most advanced medical knowledge. Their staffs operate the major high-technology, high-cost hospitals that provide advanced forms of diagnosis and medical treatment.

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"The complex social role of academic medical centers brings them into a daily contact with the public, the body politic and the federal government which provides a major portion of their funding.

"The increasing competition in the health care market has created enormous stresses on the academic medical centers. These must be dealt with effectively if their missions of academic medicine are to be preserved."

The study will go beyond the traditional questions of excellence and quality, Crowley said.

Among the questions are which activities, for example, are essential to the center's mission? How should it be organized to manage risks and be cost-competitive in terms of attracting patients? How should it be governed? How should patient care relate to education and research? How compatible are academic policies and university governance with the service obligations of the faculty physician, the center, and the community? And who should pay for the costs of medical education?

"There is a shift in the types of patients who come to the academic medical center," Crowley said. "The elderly represent a growing proportion of patients who have unique and highly expensive medical needs.

"The center draws a sicker and more complicated mix of patients requiring large, specialized staffs and the most advanced medical technology. Government efforts to cut costs in the face of this puts the academic medical center in a predicament."

Another trend is that more patients formerly treated in hospitals are now seen in outpatient clinics. And new institutional arrangements and hospital-physician joint ventures are emerging.

"The new environment," Crowley said, "has led to an erosion of the revenue base that has traditionally supported the patient care role of academic medical centers. And society has yet to provide alternatives commensurate with their contributions to society."

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FOR IMMEDIATE RELEASE

STANFORD SCIENTISTS CRITICIZE PROPOSED CUTS IN N.I.H. FUNDING

STANFORD—

Stanford University scientists are voicing strong criticism of a Reagan administration proposal to reduce federal support for biomedical research this year below the levels authorized by Congress.

"President Reagan is betting on the wrong war," Dr. Paul Berg, a Nobel Prize winner and professor of biochemistry, said Tuesday, Jan. 22.

"He is increasing defense budget spending at the expense of the war on disease. I think the reduction in proposed grant support is outrageous and it will prove extraordinarily costly in the long run."

"It is a very calamitous decision," said Dr. Arthur Kornberg, also a Nobel Prize winning biochemist known for his work on the genetic code.

Kornberg said the cuts would have "profound and harmful" effects for research, with serious consequences for the nation's efforts to improve the diagnosis, treatment and prevention of disease.

"The proposed cuts are drastic," Kornberg said. "They would affect the activities of some 25 percent of the nation's most productive biomedical scientists, young and old, as well as the entire spectrum of research on diseases and basic science.

"The cuts would not only destroy a large segment of our scientific talent, but they would send a message to our younger scientists that they cannot be assured of support even if they have done distinguished work and spent years in specialized training."

The Reagan administration has proposed to reduce the number of competitive grants awarded by the National Institutes this year by 23 percent: from 6,500 to 5,000. The cutbacks will affect the full range of research, including the studies of cancer, heart disease, arthritis, immunology, cell biology, molecular genetics, neurological disorders and stroke.

Administration officials, quoted in news articles, have said the cuts will save $280 million in the current fiscal year and at least that amount in each of the next two years. Congress has appropriated $5.1 billion for the NIH in fiscal 1985.

But medical school administrators throughout the country have criticized the impounding of funds already authorized by Congress as arbitrary.

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Dr. David Korn, dean of the Stanford University School of Medicine, said the decision by the Congress to increase the NIH budget at levels substantially higher than those requested by the administration reflected two important facts:

"One was the current state of progress in biomedical research," Korn said, "and second the recognition that research funding had failed to keep pace with developments coming from some of our best biomedical research institutions," he said.

The 6,500 research grants earmarked for 1985, the dean explained, represented a highly desirable step to redress this serious imbalance.

The decision of the Office of Management and Budget to "manipulate funding already authorized represents a contravention of the will of Congress," Korn said. "It freezes biomedical research and contract support at a level already shown to be grossly inadequate."

"I am particulary concerned about the effect of the cuts on young scientists who will essentially be without funds," said Robert Lehman, profesor of biochemistry.

He said the cuts were coming at the wrong time.

"All these years basic scientists had to defend what appeared to be basic research of seemingly little practical value," Lehman said. "The wisdom of this approach, however, has been shown to be correct."

Lehman said recent discoveries by various researchers concerning oncogenes (cancer genes), the identification of the chemical structure of a virus, which may prove to be the causing agent in Acquired Immunodeficiency Syndrome (AIDS), for example, were accomplished in a short time.

"But that was not by accident," Lehman said. "It was because of two decades of fundamental research that provided the knowledge and tools to isolate the virus, identify it, and learn about its structure. So it makes no sense to reduce support at a time research is paying off."

Dr. Stanley Cohen, chairman and professor of the Department of Genetics, termed the Reagan administration proposal "sad."

"It comes at a time when increasingly major strides have been made in biomedical research and the opportunities to benefit the public by even greater strides now exist," Cohen said.

It's distressing, he said, that the administration has chosen to use what is apparently a legal technicality to thwart the intent of Congress.

Kornberg criticized what he termed "the arbitrary process by which the Reagan administration has dealt with cuts.

"It's detrimental to the kind of flexibility that has insured the success of the NIH," he said.

"And it sets a precedent for future arbitrary action that could seriously damage the uniquely successful American effort in biomedical research."

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FOR IMMEDIATE RELEASE

NEUROLOGIST WARNS EPILEPTICS OF WATER-INDUCED WEIGHT LOSS PLAN

STANFORD—

A diet program which advocates drinking large quantities of water to promote weight loss may trigger seizures in epileptic patients, says a Stanford neurologist.

Dr. James C. White, who serves on the voluntary teaching faculty at Stanford Medical Center, said during a recent five-month period, he observed grand mal seizures in three patients who were following a diet advocating the drinking of eight to 12, 8-ounce glasses of water per day.

White did not identify the weight loss plan.

He said that hydration, or drinking unusually large quantities of water, "is one of the oldest mechanisms known to induce seizures, and patients with seizures have been thought to be especially vulnerable to its effects." He said medical science is unsure why drinking water induces seizures in patients whose epilepsy had been controlled.

White emphasized that non-epileptic patients did not appear at risk of having seizures as a result of drinking moderately large quantitities of water.

One of the patients cited by the neurologist, a 34-year-old woman, had never suffered a major seizure until beginning the large water intake program. Another patient, 33, suffered from genetically determined epilepsy but had no major seizures for three years until the diet. The third patient, 21, had suffered seizures as a child as a result of a fever but had been symptom free for five years until the diet began.

"In view of the widespread use of this diet system and the fact that patients with well-controlled seizures have often resumed such activities as driving an automobile and swimming, physicians should be aware of possible danger to these patients," White wrote in a letter published in the Jan. 24 issue of the ***New England Journal of Medicine***.

"Should other reports of loss of previously attained seizure control in patients on this diet plan be forthcoming, the wisdom of allowing such patients to follow its recommendations (involving water intake) should be questioned," he said. He emphasiuzed in an interview that the observation of three patients "doesn't prove anything, but we do have to ask the question, 'is it advisable to use that much of a fluid intake in patients who have epilepsy?'"

White is in private practice as a neurologist in Los Gatos, Calif., in addition to his voluntary teaching duties as a clinical professor of neurology at Stanford.

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FOR IMMEDIATE RELEASE

NEW MICROSURGERY LAB FOR STANFORD'S PLASTIC AND RECONSTRUCTIVE SURGERY

STANFORD—

Stanford's plastic and reconstructive surgery division has been able to update and expand its microsurgery laboratory thanks to the generosity of a former patient, said division head Dr. Lars Vistnes.

The new lab, equipped with about $75,000 raised through the efforts of Beverley Hills resident Bernice Gershon, was dedicated during a small ceremony Jan. 17.

"We now have the most modern microsurgery laboratory available," Vistnes said.

The advent of microsurgery—techniques with which surgeons can cut and splice vessels, nerves, muscle, tendons and more with minuscule tools they maneuver while peering through a microscope—is considered one of the most dramatic in years, Vistnes said. It has allowed surgeons to transfer parts of the body—a toe to the hand, for example—and to reattach severed parts that in the past would have been lost.

The funding enabled the division to purchase a new operating microscope that allows two surgeons to participate in the operation. An attached video camera records the procedure and a viewing screen allows others to observe without interfering. The procedures can be played back at other times for critiquing as well as for teaching purposes.

Stanford's division includes seven fulltime faculty members and 18 residents training to be plastic and reconstructive surgeons in the six-year-long program.

With the funds the division also purchased sets of microsurgery tools—forceps, scissors and clamps with tips thinner than one strand of human hair—to lend to physicians-in-training and to use in the lab.

Gershon was referred to Vistnes about two years ago for reconstructive surgery following a bout with cancer. Upon her recovery, Vistnes said, she told him she'd like to help him financially. He suggested the need for updated equipment for his lab.

"She's a human dynamo," Vistnes said of Gershon. She formed a non-profit organization, Friends of Reconstructive Surgery Research, and sponsored a series of fund-raising events. Her organization teamed up with the Eddie Cantor Charitable Foundation, and the proceeds—about $50,000—from their 1984 annual benefit dinner also went to Vistnes' lab.

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FOR IMMEDIATE RELEASE

BERGER HOLDS FIRST NORRIS PROFESSORSHIP

Editors: Photo of Berger available on request.

STANFORD—

The Kenneth T. and Eileen L. Norris Foundation of Long Beach, Calif., has pledged $3 million to Stanford University for a research endowment, facilities improvement, and endowed professorship for the director of the Stanford Mental Health Clinical Research Center.

Dr. Philip Berger was appointed the first Kenneth T. Norris, Jr. Professor of Psychiatry and Behavioral Sciences at the school of medicine, by the university board of trustees at its Dec. 11 meeting.

Berger, a professor of psychiatry, is noted for his work in the field of psychobiology, the study of interactions between mind and body. He has identified contributing biological causes to mental illnesses such as schizophrenia and depression, and pharmacological treatments for such disorders.

He received a B.A. in 1965 from Dartmouth College and his M.D. from Harvard Medical School in 1969. He has published extensively in journals and textbooks, while distinguishing himself as a researcher, teacher and clinician.

Berger has served as director of the Stanford Mental Health Clinical Research Center at the Palo Alto Veterans Administration Medical Center since the NIMH-funded center was established in 1977. Used by researchers worldwide to test biological aspects of psychiatric disorders, the center provides a setting in which advances in basic sciences may be applied to improve the evaluation and treatment of severe mental disorders.

The Norris Foundation was founded by the late Kenneth T. Norris and his wife Eileen L. Norris, of the Los Angeles area, in September 1963. Kenneth T. Norris, Jr. was a founder and is currently chairman of the five-member board of trustees. He succeeded his father as chairman of the board of Norris Industries, a manufacturing conglomerate, and then he retired to devote more time to philanthropic, cultural and civic activities.

The Norris Foundation provides support for a wide variety of philanthropic activities, but its principal thrust is in the area of medical education and research.

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SPANISH INTERPRETERS: BUILDING A PROFESSIONAL NETWORK

Photos available on request if not included.

STANFORD—

Of all the people hovering about, dispensing medications, taking lab tests and performing surgery, Josefina Fayard brings light in the tunnel to a confused Spanish-speaking patient at Stanford University Hospital.

Fayard is one of four Spanish interpreter/translators on staff at the hospital, and as such serves to bridge the linguistic gap between Stanford doctors and health professionals, and the majority of their non-English speaking patients—some of whom become very attached to the one person they can speak with.

"The service we provide is important," said Eva Wasmer, "because in a medical setting both technical terminology and cultural attitudes must be clearly understood by both sides." Three interpreters on duty at any one time each receive a minimum of 10 requests per day, and usually more.

What adds to both the challenge and rewards of their job, say the four, is that they not only learn about new medical procedures daily, but get to work closely with people from all socioeconomic backgrounds.

Although hospitals, under mandates of federal legislation, are required to protect the rights of non-English speaking people by providing interpretation and translation services, the four from Stanford found that very few hospitals have formal programs in place. Most, they say, use bilingual employees or volunteers who have no medical background, to fill in as needed.

To ensure that those providing language services are properly qualified for the job, whether salaried or not, they started in December 1983 a project which they hope will offer a model for other hospitals to follow. This project, the American Medical Language Services Network, currently has about 70 members representing 40 or more health agencies, hospitals and community organizations.

The network, the four say, will be instrumental in developing a certification process to ascertain the language proficiency of those being used as interpreter/translators. It will institute a Medical Interpreter/Translator Code of Ethics, develop materials for the training of hospital volunteer interpreter/translators, and educate the public in general as to the functions of the medical interpreter/translator.

"Interpretation in a medical setting is not always literal. It is very different from court interpretation, which is simultaneous and verbatim," Fayard said. "The hospital setting encourages us to sensitize the health professional to the patient's background and cultural perspective, which can affect the way something is said or understood."

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One of their main objectives this past year has been to discourage the practice of using non-English speaking family members—in particular children—as conveyers of medical information. Often the relative fails to inform the patient of impending treatments or bad news for fear of upsetting the patient, they said.

Some physicians and health professionals make the mistake, John Chavez said, of assuming that patients who understand a bit of English will completely understand instructions. Possible problems can be avoided if an interpreter/translator is called upon to clearly explain the diagnosis, proposed treatment, or medication instructions.

Maternity patients present special challenges. Often, because of heightened embarassment characteristic throughout the Hispanic world, the wife does not want her husband present at a birth, Fayard said. "Doctors may not understand how these women, many of whom already have several children, can be so embarassed even during a pelvic exam." Sometimes the husbands themselves feel out of place, and also object to others (like medical students) watching the delivery.

The issue of terminal illness is especially tricky also, said Pyka. Some Hispanic families insist on withholding the truth from the patient when it comes to impending death. The interpreter can explain the family's wishes to the doctor, who may or may not then insist that it is the patient's right to know. Although the interpreters always comply with the physician's decision, their role is not without influence, they agreed.

"We four are from different countries and backgrounds," Wasmer said, "and we're always trying to learn from one another."

Fayard is from Mexico, Pyka from Chile, Chavez from El Salvador, and Wasmer of Nicaraguan descent. Pyka is presently in the Ph.D. program in physiology at Stanford, Chavez is a Ph.D. candidate in early childhood education at U.C. Berkeley, and Wasmer has a degree in German. Fayard has many years of experience as an interpreter/translator combined with an education both in the U.S. and Mexico.

The four have begun to work with volunteers in Stanford Hospital's translator bank, which represents many different languages. Volunteers are classified according to both language proficiency and familiarity with medical terminology. "Someone may be perfectly able to interpret 'bladder' but at a loss to interpret 'gall bladder,' " Chavez explained. The level of proficiency determines which volunteers can handle which patient situations.

The four stress that translation (of the written word) is different from interpretation (of the spoken word). "Some people can do one but not the other," Chavez said.

Besides direct medical interpretation, their job includes translating medical histories, data, consent forms and other necessary documents, fielding patients' calls from both near and afar, translating physicians' articles and lectures, training volunteer interpreters, and talking to professional groups.

One fact the four understand well is that both doctors and patients sometimes get impatient when relying on an interpreter/translator. "At a teaching hospital like Stanford," Pyka said, "a lot of people enter the patient's room. Many patients feel lucky to be at such a world renowned hospital, but at the same time they rely on us to help them maintain dignity and to keep them fully informed of what's going on."

Although the four often feel spread a bit thin, there is no extra charge for their services. They are regular hospital employees, reporting to Wilbur Wright, director of the department of clinical social work. Olga Guerra, now a Stanford Hospital social worker, became the hospital's first interpreter/translator 13 years ago and ran the service alone for six years.

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FOR IMMEDIATE RELEASE

HOSPITAL MAKES SUPER BOWL PLANS FOR EMERGENCY ROOM

STANFORD—

Barbara Behrens will be spending most of Super Bowl Sunday at Stanford Stadium, monitoring the emergency medical needs of a mid-size city temporarily plunked down on the mid-peninsula for a day.

Behrens, assistant director of emergency services at Stanford University Hospital (SUH),and Ellen Pilling, Cowell Student Health Center Nurse Practioner, will coordinate five ambulances, three aid stations with the SUH emergency department, which is located about a mile from the stadium.

Unless there is a brief break, most of the emergency medical crews (which include four emergency physicians, four registered Mobile Intensive Care nurses and eight emergency medical technicians) won't get to see the game.

But two crews will get to watch the game as long as they don't have to leave their posts inside the stadium to carry a patient to the hospital emergency department.

Being the nearest full service hospital to a phenomenon such as the Super Bowl is about equivalent to suddenly creating a new city of about 150,000 persons, she said. Besides 85,000 spectators, officials have estimated the Super Bowl will bring tens of thousands of additional persons who want to celebrate the event nearby.

"We will have plenty of help in our effort to provide emergency care," said Behrens. "Three physicians, six registered nurses and six other assistants are being provided by the Cowell (Stanford student) Health Center, and a local company (St. Claire Ambulance) is providing four ambulances with two emergency medical technicians aboard each.

"But unlike a community, a high percentage of these people are away from home and their family doctors. With the large numbers of people, we'll have to anticipate that a certain percentage of them will require medical care and that they will turn to us."

Communications is a particular concern, and a radio network linking medical services with ambulances, the stadium, local law enforcement and public safety agencies has been established for the day. "We've been working closely with all relevant public agencies, including the city of Palo Alto, Santa Clara County and the state," she said.

Public agencies have provided additional police personnel and altered nearby routes to facilitate traffic and help emergency personnel, including physicians enroute to the hospital, reach their destinations.

On site medical care for players is being provided by the teams and the National Football League, "but we have had discussions with the league and teams about the logistics of providing hospital care if needed," Behrens said.

"We are fortunate at Stanford to have tertiary care facilities to respond to the usual and unusual emergencies if needed. At any given time we have a variety of specialists on duty.

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(Editors: Photos available if not included.)
FOR IMMEDIATE RELEASE

ANNIVERSARY PROMPTS NURSES TO RECALL 1ST HEART TRANSPLANT

STANFORD—

It was late on a wintery evening in January of 1968 when nurse Betsy Fowler received the call at home. "Come into work," said the voice on the telephone from her fellow nursing instructor at Stanford University Hospital's intensive care unit (ICU). "The first heart transplant is going on right now. The patient will be here soon."

Seventeen years and more than 320 heart transplants later, the surgical procedure is considered by many to be routine. Yet the nurses who helped care for that first patient remember the experience in detail.

The event for which the ICU nurses had been preparing for months was finally happening. They had long ago picked the room in front of the nurses station in which the patient would stay; housekeepers had spent hours scrubbing every last inch to make it sterile. They were called in for a final cleaning before the patient arrived.

The nurses had decided between themselves that the instructors--Fowler and Donna Pronko--would care for the patient first. The others stayed on past the end of their shifts to watch the historic event. They had followed the progression of Dr. Norman Shumway's heart transplant research, and had felt upstaged when South Africa's Dr. Christiaan Bernard performed the first one just a few weeks before using the techniques Shumway had perfected. But this one, they felt as they waited for the patient to arrive in the ICU, would be different. The third heart transplant in the world--the first adult in the United States--would be a success.

It wasn't a success, but it wasn't a complete failure either, recalled Fowler and Kathy McDonald, who cared for heart recipient 54-year-old Mike Kasperak for two weeks until he died. "His body didn't reject the heart," Fowler said in a recent interview, "rather his heart rejected his body." "Too many of his other organs were too weak to survive," McDonald explained. "But the new heart worked perfectly until the end."

Still working at Stanford, the two nurses have their memories. McDonald's woodgrained scrapbook is filled with yellowed newspaper clippings to recall the event that literally put Stanford hospital and its cardiovascular service on the map. And their participation in caring for Kasperak showed the world just how important key nurses are to patient care.

Kasperak was wheeled into the ICU about 11 that night. Two nurses at a time were assigned around the clock to care only for him. A respiratory therapist and a physician also shared the small room and kept a night-long vigil. "The procedures we had to do for Kasperak were basically the same as for open heart surgery patients, but it was the excitement and responsibility we felt that made it different," Fowler said.

Kasperak went back to surgery to stop internal bleeding that first night, Fowler recalled, "and I went to the john and threw up." There was just too much going on, she explained. "It was an exciting disaster," McDonald agreed.

Not only did the nurses have Kasperak to contend with, but a full unit of very sick patients and a shortage of nurses to work as well, McDonald remembered. "Physicians and other medical people came in throngs to see Kasperak, and we had to keep them out. And then there were all the reporters! One climbed up on the hospital roof and tried to lower himself by rope to the window so he could photograph Kasperak. They were all looking for a new and different angle," she said.

As the days went on, Kasperak's condition worsened. He had a tracheostomy tube inserted in his throat to help him breathe, he went on dialysis after his kidneys failed and he suffered from more internal bleeding. The nurses, many of whom worked 24 hours at a time, grew weary, as did the physicians, who sat in Kasperak's room all night and carried on their normal operating and patient schedules during the day.

One day Dr. Edward Stinson, who heads up the transplant team today, laid down to take a nap, Fowler and McDonald recalled, and "fell into a coma" for more than a day. "We were all just catnapping whenever there was time," Fowler said. "I was in a fog the whole time."

Fourteen days after the historic transplant, Kasperak died of what Shumway then termed "a galaxy of complications." But the groundwork was laid. After 17 years and 326 heart transplants, and 23 heart-lung transplants, the survival rate is forever improving. Today heart transplant patients have an 81 percent possibility of surviving one year, and a 67 percent chance of surviving three years. Surgical techniques and equipment are more advanced; new antirejection medications are more effective. Instead of caring for transplant patients on a general ICU, nurses today guard their charges on a new unit specially designed for the special needs of the patients.

Now working in the comparable calm of the recovery room, Fowler and McDonald admit they would not be able to care for transplant patients today because of all the medical advances and even more, because of the emotional drain of getting involved with the patients. Pronko has also moved on; today she serves as patient relations coordinator. Yet they look back on their experience in helping care for Kasperak as one of the highlights of their careers. Would they have missed a moment of it had they had a choice? "No way," they agreed.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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EDITORS: ADVANCE FOR RELEASE FRIDAY, JAN. 18, 1985.

MONOCLONAL ANTIBODY TO BE TESTED IN MULTIPLE SCLEROSIS PATIENTS

STANFORD—

A genetically engineered protein that reverses an experimental form of multiple sclerosis in mice will be tested for the first time as a potential treatment for patients with multiple sclerosis, according to scientists at Stanford University School of Medicine, Columbia University, and Becton Dickinson Monoclonal Center, Inc. in Mountain View.

The protein is a monoclonal antibody, one of the so-called "magic bullets" that can zero in on individual body components and help destroy abnormal cells or invading disease-causing agents.

Clinical tests of the antibody molecule should begin within the coming year in multiple sclerosis patients, said Dr. Larry Steinman, assistant professor of neurology at Stanford University School of Medicine.

Steinman and his colleagues published a report in the January 25 issue of *Science* magazine demonstrating that injections of the antibody were able to halt development of a multiple sclerosis-like disease in mice.

But anticipating that humans might reject the mouse antibody, the scientists may use a new type of genetically engineered monoclonal antibody molecule that is part-mouse and part-human, developed by a team of researchers from Columbia University, Becton Dickinson Monoclonal Center, and Stanford.

The rejection problem has up to now marred tests of monoclonal antibodies in humans, since most of the proteins available for testing in patients are mouse proteins, said Dr. Leonard Herzenberg, professor of genetics at Stanford, and a co-author of the *Science* report.

Because the new mouse-human molecules are mostly human they should be accepted by the patient's body and therefore should be more effective and safer than mouse antibodies, the researchers believe.

Because the new antibodies are partly mouse, scientists can easily produce them in the laboratory by modifying the mouse antibodies that are already available.

The new mouse-human monoclonal antibodies are not limited to multiple sclerosis in their possible uses, Herzenberg said. They could be more effective than the currently available all-mouse antibodies against other ailments such as some cancers and autoimmune diseases, and potentially in bone marrow transplantation, he said.

Co-authors of the multiple sclerosis report are Matthew K. Waldor, a neurology graduate student; Dr. Subramanian Sriram, formerly a neurology research associate and now on the faculty of the University of Vermont; Dr. Richard Hardy, genetics postdoctoral researcher; Dr. Leonore Herzenberg, genetics senior research associate; Mae Lim, neurology research associate; and Dr. Lewis Lanier of Becton Dickinson's Monoclonal Center.

Development of the mouse-human "chimeric" monoclonal antibody was described in an article in the November issue of the *Proceedings of the National Academy of Sciences* by Dr. Vernon T. Oi of Becton Dickinson, Dr. Sherie L. Morrison, professor of microbiology from Columbia University, Herzenberg, and Dr. M. Jacqueline Johnson, former graduate student in Stanford's department of genetics.

Multiple sclerosis (MS), a chronic neurological disease, affects as many as 250,000 people in the United States. It is thought to be an autoimmune condition, a self-destructive attack by the body's defense network against the very tissues it is meant to protect from disease.

In patients with MS, the target of immune attack is an insulating sheath that surrounds nerve cells. Destruction of the sheath leads to neurological damage and MS's characteristic symptoms, which may include weakness, paralysis, tremors, and disturbances of speech and vision.

Multiple sclerosis usually strikes in young adulthood and lasts for the remainder of the person's life, often as long as 20 to 30 years. There is no effective treatment, although many patients go through long periods of spontaneous improvement between bouts of the disease and many can lead relatively normal lives.

In mice, an MS-like disease called experimental allergic encephalitis can be brought on by injecting animals with ground-up nerve tissue. In an overreaction to the injected foreign material, the animals' immune systems begin to attack their own nerve tissues, Steinman explained. Within days, the mice become weak and develop hind limb paralysis, sometimes leading to complete paralysis and death.

The researchers reported that the monoclonal antibody they have developed reacts with certain cells of the immune system to prevent allergic encephalitis.

Symptoms of encephalitis failed to develop in all mice that were given the monoclonal antibody prior to the nerve tissue injections. In contrast, the disease developed in 90 percent of control mice that were not given the experimental antibody.

When the antibody was administered to mice after the injection had induced early signs of encephalitis, the disease's progress was halted in 90 percent of the animals, they said. Marked improvement was obtained even if the antibody was given to mice in the paralytic stages of the disease.

The monoclonal antibody against allergic encephalitis represents not only a potential treatment for MS but it also may help researchers understand more about the disease's causes, Steinman said.

The antibody binds to a set of immune cells known as helper T-cells. Normally, the immune system operates through a delicate balance of two types of T-cells, the helpers and the suppressors. But in multiple sclerosis some helper T-cells begin to attack the body's own nerve sheaths.

The new monoclonal antibody homes in on these harmful helper T-cells by recognizing a special protein, named L3T4, coating the cells' outer surfaces.

While all-human monoclonal antibodies are more desirable for medical purposes, they have been difficult to make in the laboratory and their production seems to be unstable, Herzenberg said.

In contrast, mouse monoclonal antibodies, easily made in immunized mice or in tissue culture, can be modified into the new type of mouse-human antibodies which have a good chance of getting around the patient's immune barrier, Oi said.

The researchers made the new mouse-human antibody by splicing together mouse and human genes coding for different portions of the antibody molecule.

The mouse portion of the hybrid molecule is the part of the antibody that targets and binds specific proteins on the surface of the cancer cell or autoimmune cell. The human portion is the part of the antibody that tells the patient's own immune system how to destroy the undesirable cell or substance that it binds, Herzenberg explained.

The chimeric antibody research was supported by the National Institutes of Health, the American Cancer Society, and Becton Dickinson Monoclonal Center.

The multiple sclerosis research was supported by grants from the National Institutes of Health, the Multiple Sclerosis Society, and the Kroc Foundation.

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FOR IMMEDIATE RELEASE

ARTHRITIS: TAMING THE GREAT CRIPPLER

It's been more than 10 years since the National Arthritis Act was passed by the U.S. Congress to place arthritis high on the list of the nation's medical priorities. Under the act a network of arthritis centers was created nationwide for the purpose of expediting the application of research results to doctors and their patients. This story describes the work of one such center. Photos available on request. **Editor.**

STANFORD—

The statistics of arthritis tell only part of the story. They give no measure of the monumental toll of human suffering, of bedridden invalids, of painfully bent spines and of disfigured bones. But even the bare figures are enough to indicate why arthritis is the nation's number one crippler.

This year alone about one million Americans will become new victims of arthritis. Another 25 million will suffer from arthritis severe enough to cause symptoms. The impact of arthritis to the U.S. economy is $14 billion a year in medical costs and lost wages. Arthritis afflicts not only the elderly but a quarter million children as well. Its most serious form, rheumatoid arthritis, often starts imperceptibly as early as 20. The most common form, osteoarthritis, is the inevitable result of age—of normal wear and tear on bones and joints.

What have we been doing about all this? As a nation we have done very little. Until recently the approach to arthritis was fragmented and controversial.

Ironically, Stanford Arthritis Center experts like James Fries believe osteoarthritis to be the most preventable.

"We are learning," he explains, "that lifestyle is important. Weight control, exercise, protection against injuries are measures one can take against predisposing factors."

As for the most severe form of arthritis, Fries puts it this way: "If you asked what happened to a patient after 20 years of rheumatoid arthritis, the typical answer would involve heredity and severity of the disease complicated by the decisions of 20 physicians who had employed 30 odd medications in some ill-defined sequence."

Complicating this further, Fries adds, have been the many tangled threads—the amount of support from the patient's family, the boss' attitude, the medical system and its high costs, and the attitudes of the patient himself.

But this is changing. During the past 10 years more study has been devoted to arthritis than in any previous time in this century. Part of this progress can be attributed to the National Arthritis Act, passed in 1974 to place arthritis high on the list of the nation's medical priorities.

Under the act, a network of 18 federally funded multi-purpose arthritis centers was established. Their purpose: to develop community programs for bringing results of arthritis research to physicians and their patients, to do new research, and to develop education programs for health professionals and patients about arthritis.

"The Stanford Arthritis Center, established as part of that network, emphasizes public education and community-based programs," says its director Dr. Halsted Holman. "We view it as a complement to the very highly developed research into the causes and treatment of arthritis at Stanford."

Holman, an immunologist and former chairman of medicine, gave up bench research several years ago. "It became clear to me," he explains, "that biomedical research alone didn't help the practice of medicine—it didn't make it more efficient, it sometimes made it more wasteful. Alternatives appeared necessary and because we were dealing with a chronic disease the participation of patients in new approaches was essential.

"We are interested in how patients in the community respond to a particular intervention—medical as well as educational—and how events in their lives influence the course of their disease."

With few exceptions, academia has been generally skeptical about the value of community health education, regarding it as a myth, Holman notes.

But now findings from a center study of several hundred osteoarthritis patients and controls explode that myth. Designed by health educator Kate Lorig, the study shows patients trained in a self-care methods course to do as well as those on common aspirin-like drugs. The training decreased their pain measurably, increased mobility, and tended to reduce use of medical services for months.

"The results are surprising," Holman explains, "but they have to be interpreted with caution until more studies are done."

Holman and Lorig suspect multiple factors to account for the improvement. "When we asked the patients what they thought was happening, they said they felt more confident and in control of their situation," Holman explains. Attitudes are crucial to healing.

To understand what helps patients cope with their disease, the center will soon begin testing a new approach with patients in the Palo Alto community. Stanford psychology professor Albert Bandura developed this approach to help people conquer their fear of snakes. His method is based on the notion of "self-efficacy," the perception that one can learn to cope with a problem that was previously unmanageable.

The Arthritis Foundation has adopted Stanford's special education program to disseminate to millions nationwide.

But Holman worries that it may be diffused too soon before it can be evaluated. "We don't know if the approach developed in a largely suburban middle-class area like Palo Alto will work on East coast urban environments where climate, transportation and other factors affect mobility and lifestyles. This must be tested," he says.

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Closely linked to the arthritis center is the American Rheumatism Association Medical Information System (ARAMIS), also federally funded and based at Stanford. Directed by Fries, ARAMIS is the most comprehensive national data bank system on arthritis and related diseases ever devised.

Data on all medical and social aspects of arthritis pour in daily into the computer-based system from a 17-city network of 40 medical specialists who have monitored 22,000 patients for the past 15 years.

"The data describe enough patients and sufficient variables so that we can sort out the relative contributions of treatments applied by different doctors and systems of medical care," explains Fries.

ARAMIS work includes:

Classifying studies to define arthritis-related diseases, and development of a database for rheumatic disease with 422 variables—demography, symptoms, signs, laboratory values, diagnoses and therapies—as a uniform terminology. It has also identified patients who may benefit from treatments deemed effective, and studied toxic effects and cost-benefits of both steroidal and anti-inflammatory drugs used in arthritis treatment.

"Having a source for finding out which treatments work best," Fries says, "not only benefits patients, but helps contain medical costs."

One of the most important ARAMIS findings has been that rheumatoid arthritis accelerates mortality. Men die of the disease four years sooner than they should, and on the average women die 10 years earlier.

This knowledge is expected to influence future therapy, especially when effective drugs with dangerous side effects are the only course. "Until recently such drugs have been used conservatively," Fries says. "Now decisions to use them may depend on trading off disability versus mortality."

While the network of centers like Stanford's and ARAMIS are transforming understanding of clinical aspects of arthritis, its causes remain obscure. The Great Breakthrough against arthritis is not imminent either. Yet the sober realist who observes the current scene is justified in cautious optimism by varied developments on the research and therapeutic fronts.

On the basic level are the studies of immunologists Hugh McDevitt, Edgar Engleman, Garrison Fathman and Samuel Strober. They are generally trying to understand the regulation of immunity, and use that knowledge to modify the body's immune response. This is important because in the inflammatory forms of the disease, like rheumatoid arthritis, something has gone awry with the immune system.

Defender cells that are supposed to protect the body from infections caused by foreign microorganisms suddenly turn against "self" cells, those of the cartilage membrane lining the inside of joints. Potent antibodies damage the membrane, causing inflammation.

Two main approaches are being considered. One is the use of tailor-made monoclonal antibodies directed against regulatory molecules on the cell surface to block the undesirable immune response. The second is total lymphoid irradiation pioneered by the late Henry S. Kaplan at Stanford. Radiation is believed to work because it suppresses the immune system activity that causes the inflammation.

In tests Strober conducted at Stanford University Hospital, 11 patients with rheumatoid arthritis were given a relatively low dose of radiation over five weeks. The patients were people regarded by their doctors as

having failed all conventional treatments and were candidates for drastic therapy with toxic drugs. Nine of the patients showed "marked improvement" including a reduction in morning stiffness, pain, tenderness and swelling, and greater ease in moving about. There was a general slowdown of the disease, which persisted throughout a 13-28 month followup. Only one patient suffered a relapse after a year.

The radiation technique is now being expanded to treatment of patients with lupus, another arthritis-related condition.

While radiation treatment is still limited to the most difficult cases, Strober says his views may change because of the latest findings which show rheumatoid arthritis to be more lethal than previously recognized. "We may have to reassess how vigorously we want to use radiation in the future," he adds.

Meanwhile, according to Fries, a new form of gold, an effective drug used in rheumatoid arthritis treatment, has been synthesized and will soon become available. "The new gold can be taken orally," he explains. "It's expected to avoid the side effects on the skin and kidney associated with gold administered by injection."

Many effective drugs like gold and penicillamine as well as steroids will continue to be used for arthritis treatment, Fries explains, but in the future, through information available from ARAMIS, doctors will be better able to match toxicity to the susceptibilities of the particular patient.

Through the center, increased attention has also been concentrated on surgical treatment for arthritis—total joint replacement. The work has been directed by orthopedic surgeon Dr. David Schurman who keeps track of over 1,200 total joint replacements performed at Stanford since 1971.

Like ARAMIS, Schurman has developed a similar computer-based system for evaluating the methods, costs, tools and results of joint replacement surgery. His system called SOAR (Standard Orthopedic Arthritis Record) has now been been adopted by the Hip Society involving about 40 of the nation's leading orthopedic surgeons and by hospitals at Harvard, UCLA, and Minnesota.

"It's a language that all surgeons in this field can use," Schurman says of the system. "As a practically oriented specialty of medicine, it's natural for orthopedic surgery to take the lead in technology assessment."

The center is also working with Dr. John Miller of the department of pediatrics and director of the rheumatology unit at Children's Hospital at Stanford. Research into juvenile rheumatoid arthritis is complicated by the appearance of the disease in children, and a lack of a positive test for rheumatoid factor applicable to children.

Studies to identify the differences between adult and juvenile rheumatoid arthritis are under way.

More recently, the arthritis center in collaboration with the Stanford Heart Disease Program, is beginning a five-year federally funded study of factors which help or hinder the development of arthritis. Among factors to be scrutinized are family history, exercise, diet and injury.

"This is a project of great importance to the health of all people as they grow older," say its directors William L. Haskell and Fries.

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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR CHOLESTEROL-LOWERING STUDY

STANFORD—

Guar gum, a dietary fiber offering the potential to reduce heart disease by lowering blood cholesterol, is being tested at Stanford University Medical Center.

"The potential benefits of this supplement are enormous, because it offers the promise of helping people to lower their heart disease risk simply by using a dietary additive that is a natural product," said Dr. Robert Superko, medical director of the Stanford Center for Research in Disease Prevention's Lipid Research Clinic, which is conducting the investigation.

An eight-year study completed at Stanford and eight other North American research centers concluded in January 1984 that lowering blood cholesterol levels significantly reduces the risk of heart attack or other coronary disease.

Superko said he is looking for healthy men, not more than 20 percent overweight and aged 25 to 70, who will receive a blood test. Those men found to have moderately elevated levels of blood cholesterol will be eligible to take the supplement.

Forty-eight participants will take liquid and wafer supplements for four weeks each. Half of the men will receive guar gum, while the other half will receive a placebo resembling the potentially beneficial fiber.

At the end of the study, researchers will compare the volunteers' cholesterol levels to learn if the guar gum is effective, and if so, whether the wafer or the liquid works and/or tastes better. Blood tests will be run at four week intervals to monitor progress, Superko said.

Participants will also receive information about cholesterol lowering through dietary changes, and volunteers will periodically monitor their eating habits during the study with a computerized assessment program, he said.

Jan. 15, 1985

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Unknown, said Superko, is the precise way in which guar gum helps lower cholesterol, fatty deposits in the blood which tend to clog or damage blood vessels. One theory is that the fibers coat the intestines and retard absorption of the fats, he said.

Volunteers must be healthy, have stable eating habits (at least two meals per day) and intend to keep doing the same amount of exercise during the study. Blood cholesterol requirements vary for age and weight, "but we're generally looking for people with moderate levels—not high enough to administer medication but high enough so that reduction might significantly reduce their risk of coronary disease," Superko said.

Benefits for the patient include education about lowering cholesterol, blood tests and information on the role of diet in reducing the chances of heart attack.

Potential side effects include minor stomach or gastrointestinal upset, Superko said. Guar gum has been tested previously in human volunteers and extensively in rats, he added.

Patients will be asked to make six visits to Stanford for an organizational meeting, blood tests and collection of diet questionnaires.

For further information, call Lisa Sawrey-Kubicek, Wednesday through Friday between 2 and 4 p.m., (415) 497-6254, or leave a message at the same number during business hours.

The study is funded by the Shaklee Corp. of San Francisco, which manufacturers guar gum as a diet supplement.

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FOR IMMEDIATE RELEASE

SMASH LECTURES AT STANFORD

STANFORD—

The winter 1985 S * M * A * S * H lecture series at the Stanford University School of Medicine begins Jan 11.

The series — whose full name is "Stanford Medical and Scientific Highlights"—is open to the public and will be held in the Fairchild Auditorium, at 4:30 p.m., followed by refreshments.

The season's lectures are:

- Jan. 11: "Growth and Growth Factors," Dr. Raymond Hintz, professor of pediatrics;
- Jan. 25: "Sex and Drugs: Physiology and Behavior," Dr. Julian Davidson, professor of physiology;
- Feb. 8: "Muscle Building and Muscle Bound: Activation and Expression of Muscle Genes," Dr. Helen Blau, assistant professor of pharmacology;
- Mar. 8: "Yeast Chromosomes: Centromeres, Spindle, Segregation, Meiosis, Recombination, Rearrangements and Isolation," Dr. Ronald Davis, professor of biochemistry.

The SMASH organizing committee intends to encourage an exchange of ideas and provide a forum to inform the community about significant medical research and developments at Stanford. The Friday talks are geared toward all those with basic scientific understanding.

The lectures started in 1980 by the medical school's Faculty Senate, which now cosponsors it with the Stanford Medical Students Association.

1-9-85 —30— SWN3

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

PALO ALTANS OPEN HOMES TO STANFORD PATIENTS, FAMILIES

STANFORD—

When Kay Hardwick came from Alabama to Stanford University Medical Center to become it's 318th heart transplant patient, she wanted her mother, husband and two sons with her.

Thanks to the hospitality of Palo Altan Alice Green, Hardwick's family was able to be with her throughout her ordeal.

Green is one of a handful of local residents who, for almost no reimbursement, welcomes into her home patients coming to Stanford from out-of-town for long term treatment. Their families often accompany them and like Hardwick's boys, who are attending local schools, carry on their lives as normally as possible.

It's like having a big, extended family, Green said of the estimated 150 house guests she's had in her home over the past seven and one-half years. A Brazilian medical student who came here for cancer treatment, for example, "is my South American daughter," she explained. "Everyone is real interesting, and they make good use of my home. And the need is there."

It certainly is, agreed Susan Weisberg, clinical social worker at Stanford University Hospital. She and her colleagues receive as many as four requests each week from people who have to be in the area for outpatient treatment—primarily for cancer—but can't afford to stay in hotels.

"Being able to stay in someone's home adds another dimension to patients' treatment," Weisberg said. Green and the four other citizens who house the patients "really help the patients get through it. The results are extremely positive," she added.

It was at church that Green told Margaret Weiderholt about the need for homes for patients. Five years ago, after Weiderholt's mother moved to a nursing home, she decided to give it a try. Now, she said, she has someone with her all the time. She even finished the top floor of her small Palo Alto home to make space for another patient or two.

"It's rewarding. I get a great deal of pleasure out of helping people," Weiderholt said. "You become a mother figure or a sister figure to the people who stay with you," she explained. "People tend to lean on me, but I can lean back too.

"When my guests come I say, 'while you're here your job is to make me happy. The way to do that is to feel at home, to be at home and to make the whole house your home. If there's something you're not comfortable about, tell me."

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But, she quickly pointed out, she does have her limits. Protective of her recently-refinished dining room table, she tells her guests: " 'There was a lady here who had a broken leg. I told her if she put anything hot on this table to ruin the finish I'd break her other leg.' They don't forget that, and I've never had a problem," she said chuckling slyly.

Her guests love to help her out, especially when they realize she is sometimes limited because of arthritis, Weiderholt continued. An Oregon lumberman who stayed with her, for example, cut down some trees in her yard for her. The garbage always gets taken out, and the paper brought in, by her guests. And on the mornings her arthritis causes difficulty in making the bed, a guest is usually there to help.

"The people are really wonderful,"Weiderholt said. "They've renewed my faith in the human spirit and its resilience and capacity for using available resources. And, I'm convinced that people who have some kind of faith in something beyond themselves are better able to cope.

"The manner in which they seem to be able to handle their disease is impressing," she continued. "Some of them keep on going and affirm life. They keep up with activities and postive pursuits.

"The Oregon lumberman, for example, was told by his doctor that he had cancer and two months to live. His wife said he just cried and cried—he thought it was the end of the world. That was five years ago. Being at a place like Stanford, where everyone is highly encouraging and not defeatist, makes all the difference."

"I had a young couple here last summer," Green added, "and the man had a rare form of cancer. He was a skier and owned a resort. He had been told he wouldn't be able to go back to any of that. Well, I just had a note from him the other day, and he's jogging and skiing and doing great."

"They're all special," Weiderholt reminisced. She fondly remembers two ladies who stayed with her at the same time. At odds when they first met, she said, the three of them quickly became "cronies.

"We cooked together, we went shopping together, we laughed until our sides were sore," Weiderholt said. She still hears from one of the ladies; the other died about a year ago.

"Alice (Green) asked me one time how many people I had lost," she continued. "That means that when one of our house guests dies, it's a personal loss for us. The best way to deal with death is just to be a good listener, and to convey to the patients and their relatives that you are feeling for them."

About a year ago, for example, a patient's wife and son were staying with Green. "I was up and waiting for them when they came home after the man died," she recalled. "You just have to be able to give a lot of support, comfort and let them cry."

Most of the stories about their guests, however, have happier endings. Green and the Hardwick family were out to lunch when Kay realized she had left home the beeper that all heart transplant candidates must carry so the hospital can notify them the moment a heart is available. Sure enough, when they got home the beeper was sounding, and everyone piled back into the car to take her to the hospital.

"She saved our lives," Hardwick, who is nearly ready to return to Alabama after a successful heart transplant, said about Green. "Without her, my family wouldn't have been able to be with me. And that's made all the difference."

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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED IN DIABETES DRUG STUDY

STANFORD—

Researchers at Stanford University Medical Center are seeking volunteers to help learn if an oral medication will help control diabetes.

Men and women ages 25 to 75, who have adult onset diabetes and are taking insulin, are needed. They should be in good health and not taking other medications.

The study, conducted under the direction of Dr. Gerald Reaven, professor of medicine, will add glipizide to the insulin treatment. Glipizide (or Glucotrol) is an oral hypoglycemic only recently released in the United States for the treatment of adult onset diabetes, said Dr. Elizabeth Fraze of Stanford's clinical research center (CRC).

Researchers hope that diabetic patients who have not previously succeeded on oral medications may eventually be controlled with this pill, Fraze said, alone or in combination with insulin.

Participants in the study will receive free physical examinations with complete medical history, electrocardiogram, urinalysis, and blood tests to evaluate kidney and liver function, cholesterol, and blood sugar.

Volunteers accepted into the program will initially spend about three days in the CRC, followed by approximately weekly visits for the duration of the study.

For information, call Fraze or Dr. Arthur Swislocki at (415) 497-6973.

1-8-85 —30— LA5

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

FASTING RATS' ABILITY TO DIGEST PROTEIN COULD HAVE IMPLICATIONS FOR STARVATION IN HUMANS

STANFORD—

Contrary to popular wisdom, a slow return to eating following starvation or prolonged fasting may not be medically necessary, says a Stanford University Medical School scientist.

New laboratory studies in rats have shown that one portion of the digestive system that is suppressed during fasting responds almost immediately to the presence of food, said Dr. Gary Gray.

"Our studies suggest that the standard practice of gradually phasing starving individuals back to a normal diet may needlessly prolong malnourishment," said Gray, a professor of medicine and chief of gastroenterology at Stanford University School of Medicine.

Potentially, the work could lead to further research with implications for physicians dealing with severely malnourished populations, such as in Ethiopia, Gray suggested.

Gray reported his findings about rats in an article in the January 4 issue of *Science* magazine with colleague Dr. Ann M. Reisenauer, a postdoctoral researcher now on the faculty of the University of California at Davis.

However, he cautioned that although the rat digestive system provides a good model for human digestion, more research is needed to determine precisely how the human system responds to food following starvation and which foods are best tolerated.

"This is an area in which not enough research has been done," Gray commented. The practice of gradually reintroducing food is based on observations that starving people sometimes cannot readily tolerate food.

The researchers studied an intestinal enzyme called amino-oligopeptidase (AOP), involved in the digestion of proteins. AOP acts on protein fragments from food that has been broken down by enzymes higher in the digestive tract. It breaks these fragments into smaller peptides and amino acids, nutrients that can be absorbed by the body.

In food-deprived rats, levels of this enzyme fall very low. But what Gray and Reisenauer found is that the enzyme begins returning to normal levels much more quickly than previously thought—within 20 minutes after protein fragments reach the intestine.

"The evidence indicates that at least one enzyme involved in digesting peptide nutrients is dormant and ready to be synthesized as needed once food becomes available," Gray said.

Because AOP acts only on protein that is already partially digested, the findings also suggest that food preparations containing partially digested protein may be a good food source for starving people, said Gray.

Whole protein may not be assimilated well, Gray said, unless enzymes higher in the digestive tract are also quickly recruited into action in the presence of food.

For this reason, it might be worth studying commercial preparations of partially hydrolyzed, or digested, protein as a first food source under starvation conditions.

The research was carried out with grants from the National Institutes of Health.

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FOR IMMEDIATE RELEASE

BASIC SCIENCE RESEARCH LECTURES PLANNED

Editors, writers: While these talks are intended for medical and technical professionals, and not the general public, science and medical writers are welcome to attend for background or coverage.

STANFORD—

The 1985 winter-spring basic science research colloquia at Stanford University Medical Center are:

- Jan. 16: "Actin and myosin; molecular approaches to the study of cell motility," Dr. James Spudich, professor of cell biology;
- Jan. 30: "Reconstitution of intracellular protein transport," Dr. James Rothman, professor of biochemistry;
- April 17: "Molecular strategies of microbial pathogenicity," Dr. Stanley Falkow, professor and chairman of medical microbiology;
- May 22: "Transduction in rods and cones," Dr. Denis Baylor, professor of neurobiology.

The Wednesday talks are all to be held 4:15 p.m. in Fairchild Auditorium at the medical center. A reception will follow each lecture.

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FOR IMMEDIATE RELEASE

MODERNIZATION CONSTRUCTION INCREASES AT STANFORD UNIVERSITY HOSPITAL

STANFORD—

About 4,000 truckloads of dirt will be moving away from Stanford University Medical Center during the next three months as part of the hospital modernization program, said the HMP's Elvia Garwood.

The dirt will be replaced with a structure housing a center for nuclear magnetic resonance, a state-of-the-art form of X-ray which provides detailed diagnostic pictures without radiation. Also to be located in the lower level where dirt now sits will be 52 patient beds, a pharmacy, and a variety of support facilities, said Garwood.

But before construction can begin on the new Stanford University Hospital (SUH) addition, about 80,000 cubic yards of dirt must be removed from the site, wedged between the current hospital and Blake Wilbur Drive.

Garwood said that 25,000 cubic yards of dirt will be stored on 12 acres of land along Quarry Road near the present hospital parking lot, while the rest will be hauled away as fill in various locations.

Each truck will carry about 20 cubic yards, said Garwood, mostly betwen 7 a.m. and 3 p.m. She said traffic on streets near the medical center could be affected during the morning "but conditions should be completely clear by the afternoon commute."

During January, construction activities of the $112 million renovation include:

- A waiting area used by families of surgery patients is being relocated to a new site above the emergency room adjacent to room P2000. Families of patients will be directed to the area.
- A construction fence has been set up around the work area, causing some detours for pedestrians entering or exiting the hospital enroute to several parking lots, the cardiovascular research building, the administrative services annex or Welch Road offices. Alternative parking lot entrances have also been designated for several lots along Blake Wilbur Drive. A new 191-space C parking lot, with an entrance on Welch Road and direct pedestrian access to the hospital, was opened in December.
- The community relations office, including patient relations, will be moving from room P3018 to P2020D, and the medical staff office, including the chief of staff's office, will be moving temporarily in January from P3016 to P1060. Phone numbers will remain the same, and signs will redirect persons to the new previously unoccupied locations. "These two offices have been carved into what originally was intended as a corridor. The construction will turn the area back into a hallway leading from the existing hospital to the new building," Garwood said. Both offices will be relocated to new space when construction is completed.
- Construction activities in several units may produce noise which patients may hear, particularly in the west wings of the hospital. "We'll even give earplugs to patients and their families if they need them," said Garwood.
- Emergency fire exits serving the east end of the "P" building will be temporarily relocated. Garwood said signs will be posted. The move is not expected to affect patients, since the stairway—formerly used for routine traffic—did not serve patient areas.

The project, intended in part to ensure that newly developing technology can be implemented at SUH, is expected to be completed by December 1987.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

FREE COURSE TEACHES CANCER PATIENTS TO COPE

STANFORD—

A course developed by the American Cancer Society to help people deal with cancer will be offered at Stanford University Medical Center on eight consecutive Wednesday afternoons, starting Jan. 16.

Nutrition, body image, rehabilitation, and sexuality are among the topics covered by the course, called "I Can Cope," which is intended for cancer patients and their families, says co-leader Beverly Zenk Wheat, R.N.

The course deals with daily health problems as well as legal and work issues. Free of charge, it will be taught by a team of Stanford oncologists, nurses, dietitians, physical and occupational therapists, social workers, and other guest speakers. Information about and access to appropriate community resources will be provided.

"Participants in this course are given an opportunity to realize they are not alone in their adjustments to everyday life," according to Zenk Wheat. "Those with cancer and their loved ones need ways to cope with fears and anxieties as well as the disease."

Implemented nationally, she said, the patient education program is helping move people from asking, "What can I do?" to stating, "Here's what I can do!" The course supports the premise that increased knowledge about cancer decreases anxiety and increases a personal sense of participation on the part of the patient and his or her "significant others," with the medical system.

The course was developed by Judi Johnson, R.N., and Pat Norby, R.N., for the Minnesota Division of the American Cancer Society.

Sessions will be held from 3:30 to 5:30 in the Darwin Library, room C122 in the medical center. Susan Weisberg, L.C.S.W., Miriam Beinin, L.C.S.W., and Zenk Wheat, will co-lead.

For information and registration, call the department of clinical social work by Jan. 14, at (415) 497-5091, or Beverly Zenk Wheat at (415) 497-5397.

1-3-85 —30— SWN2

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FOR IMMEDIATE RELEASE

PROGRAM FOCUSES ON CARE OF MOTHERS AND INFANTS

STANFORD—

"Perinatal Potpourri: Reaching Out and Looking Forward" is the title of the fifth annual meeting of the Mid-Coastal California Perinatal Outreach Program (MCCPOP).

The meeting, sponsored jointly by Stanford's and Santa Clara Valley Medical Center's (SCVMC) departments of gynecology and obstetrics and pediatrics, will be held on Jan. 10 and 11 in Monterey at the Doubletree Inn. It is open to the public.

Lectures include "Levels of Perinatal Care: Maximizing Utilization and Outcome," "Clinical Management of Post Term Pregnancy," "Current Research: Fathers and Childbearing," and "Nutrition for the High-Risk Mother."

Stanford faculty will be joined by nutritionists, administrators, and specialists from SCVMC, other hospitals, and private practice.

The program has been designed to provide physicians, nurses, and other perinatal health care providers with the most current information on frequently encountered problems in the care of mothers and infants, says Kim Leadon, administrative assistant.

MCCPOP has developed educational programs throughout an eight-county region (San Mateo, Santa Clara, San Benito, San Luis Obispo, Monterey, Santa Cruz, Stanislaus and Alameda). The program includes a perinatal resource center, a genetic counseling center, and a birth defects center, as well as providing emergency consultation and transport, perinatal nursing internships, and intensive care nursery internships.

For the upcoming program there is a registration fee which will include all conference materials, instruction, refreshment breaks, reception and Friday's breakfast and luncheon. A block of rooms has been reserved at the Doubletree Inn.

The program has been approved for continuing education.

For further information call Kim Leadon at (415) 497-5763.

1-3-85 —30— SWN2

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

SELF-HELP COURSE/CLINIC OFFERED FOR PSORIASIS

STANFORD—

A free self-help clinic designed to help persons with psoriasis learn how to cope better with their lifelong problem has been scheduled at Stanford University Medical Center starting Jan. 10.

Psoriasis, a skin ailment often characterized by thick, red scaling plaques, poses treatment dilemmas because there is no known cure for the itching discomfort and treatment is often prolonged, said Dr. Lexie Nall, senior research associate and director of the course.

Four two-hour classes, intended for patients and their families, will be held on consecutive Thursdays in the Edwards Building, room R136, in the Medical Center. Physicians or other professionals who work with psoriasis patients are also invited.

The clinic, which includes lectures on genetics, preventive measures and treatment, as well as discussion groups and written information, is being supported at no cost to the patient by the Psoriasis Research Institute of Palo Alto.

Psoriasis is caused by some form of cellular hyperproduction, although treatment is frustated because the mechanism of the disease is poorly understood, the researcher said. The course of the disease is unpredictable, and recurring flareups can be particularly stressful for patients, she said.

Psoriasis is a worldwide problem which can be triggered in genetically predisposed persons by a variety of factors, such as injury to the skin, sun, prolonged low humidity or medications. It is not contagious, she added.

The clinic includes information about the cause and course of psoriasis, treatment, preventive measures, myths, and research. It is taught by Nall and Brigid O'Connell, research fellow, who may be contacted for further information or registration at (415) 497-7967.

Jan 2, 1985 —30— mg3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

HEWLETT-PACKARD OFFERS CORPORATE

CHALLENGE GRANT TO STANFORD HOSPITAL MODERNIZATION

STANFORD—

Hewlett-Packard Co. (HP) has offered a $250,000 challenge grant to area corporations to support Stanford University Hospital's $112 million modernization project (HMP), the hospital and the Palo Alto-based company announced Wednesday (Jan. 2).

John Young, HP president and a Stanford trustee, said his company would contribute $1 for every $4 raised from other corporations. If the $1 million goal from other corporations is met, HP will make its maximum commitment of $250,000, bringing the total to $1.25 million.

The challenge grant was announced at the same time Stanford President Donald Kennedy said a fundraising committee of prominent corporate executives had been established to raise a minimum of $1 million toward the project's $15 million fundraising goal.

Appointed by Stanford to head the hospital modernization fundraising effort was Richard G. Rogers, president and chief operating officer of Syntex Corp. of Palo Alto.

Kennedy said Rogers will be assisted by three division chairmen, Albert Eisenstat, vice president and general counsel of Apple Computer, Cupertino; Jack Black, Central California vice president for Pacific Bell in San Jose; and James W. Morrell, executive vice president, Saga Corp., Menlo Park-based national food supplier.

Rogers said Eisenstat will work most closely with the electronics industry, Morrell with the industrial sector, while Black will work predominantly with service businesses such as his own.

Kennedy, who also serves as chair of the hospital's board of directors, said the hospital modernization is intended to upgrade and consolidate patient care and will be financed by a public sale of bonds, as well as contributions.

"This is the first time that Stanford University Hospital has turned to our business neighbors in an active way to seek support for facilities we need to continue our role of providing outstanding medical care to our neighbors," Kennedy said.

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Jan 2, 1985

The corporate committee is one of two external groups established recently to help lead the fundraising effort. The other group is 10-member steering committee representing the 1,200 community physicians who admit patients to Stanford University Hospital and play an integral role in the patient treatment and academic missions of the hospital, Kennedy said. That committee is headed by Palo Alto physician Alfred P. Spivack.

Another Hewlett-Packard executive, Dean Morton, executive vice president and chief operating officer, was appointed last month as chairman of a volunteer leadership committee for the $145 million fund-raising program to support medical center capital projects and endowment, including the hospital modernization. Morton is a member of hospital's board.

"Stanford University Hospital is a special hospital, a unique asset to the nation and most particularly to those of us who live and work in the area," said Young. "We feel so strongly that the academic medical resources of Stanford need and deserve corporate support, that for the first time we are providing a substantial cash commitment in the form of this challenge."

Rogers said, "For many years I have worked actively with several medical institutions in our community to help them find the resources they must have to deliver needed health care to our neighbors. Each of these institutions has a vital role, but I approach this assignment with particular pleasure because of Stanford Hospital's incomparable service to this community—and indeed the entire nation."

Rogers cited SUH statistics showing that about 70 percent of the hospital's patients live in San Mateo or Santa Clara County, while more than 80 percent live in the Bay Area.

"The new life-saving knowledge being generated at Stanford to conquer disease and prolong healthy lives is often applied first in our community through the services of Stanford University Hospital," he continued.

"Put simply, this hospital exists to provide a level of care that other community hospitals can not," Rogers added.

Kennedy said the modernization project, currently underway and scheduled for completion in 1987, will provide 20 new operating rooms, and two new four-story wings of patient beds. While no beds are being added to the current total of 663, the project will allow an increase in the average square foot per bed from 891 to 1,387, near the average for teaching hospitals throughout the country.

"Flexible new intensive care units will permit sophisticated observation of individual patients by nurses at central monitoring stations," Kennedy added.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

GOVERNMENT REPORT URGES SUPPORT OF MENTAL HEALTH RESEARCH

STANFORD—

Mental health research funding in the United States should be doubled within five years, since current funding has fallen short of the needs and potential of this promising field, concluded a recent report of the Institute of Medicine (IOM).

The IOM's Board on Mental Health and Behavioral Medicine, chaired by Dr. Jack Barchas of Stanford University, said behavioral problems account for 50 percent of the mortality from the top 10 causes of death. The panel said the total cost to society of mental illness and addiction—not counting the emotional toll—amounts to $185 billion a year.

"Mental disorders, alcoholism, and drug addictions profoundly disrupt the lives of 30 to 45 million people in the United States each year, with conservative estimates of annual expenditures for direct health care at $20 billion," the report stated.

Barchas, in a recent interview, said biological and neurochemical findings over the past decade, as well as advances in the psychosocial sciences, give hope of rapid strides in the prevention and treatment of mental illness—given adequate research funding. Continued basic and applied research related to mental and addictive disorders is crucial, using the full range of tools available in the biological, social, and psychological sciences, the report said.

The report recommended a doubling, at least, of federal funding of the institutes in the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA). This would amount to a budget of $500 million in 1983 dollars, by 1989. ADAMHA's research budget in 1984 was $273 million.

Barchas, the Nancy Pritzker Professor of Psychiatry and Behavioral Sciences, said this is the first time an IOM report has recommended a specific target expenditure within a set number of years.

"Many feel our recommended figure is still quite conservative, that it should be a billion dollars," he said. Institutes in the National Institutes of Health (NIH) have grown more rapidly over past decades, while ADAMHA "has fallen behind by 50 percent compared with 20 years ago in terms of real spending power, even as research opportunities and the number of qualified scientists have grown," he said.

"Severe depression, anxiety, schizophrenia—these are real diseases with lots of pain and discomfort," Barchas continued. "You can't just tell people to shape up and get ahold of themselves. I've seen people about to commit suicide who had been told such things."

But the tremendous stigma against both patients and researchers in mental health results in a lack of the type of broad political support that there is for cancer or heart disease research, he explained.

"So these families suffer in silence."

Research has already pointed to the important role of psychiatric disturbances in many physical illnesses, Barchas said. Still, for every person with cancer, nearly $200 is spent annually on research. For each person with a severe mental or addictive disorder, the figure is less than $10.

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The committee found widespread childhood mental disease, as a "crime within a crime," Barchas noted. "There are as many children with autism as there are with leukemia," he said, "but you don't hear about it. Nor is enough research being done on hyperactivity, childhood depression, or other illnesses."

There are at least 3 million teen-age alcoholics in this country, added to 10 million adults, Barchas said. For every alcoholic however, only $2 is spent in research each year. Drug abuse commands a similar expenditure.

"We like to think of ourselves as a child-oriented society. In some ways it's true, but in other ways it's nothing but a myth," Barchas said.

The report said that some illnesses "typically have a costly, chronic course, so even relatively small advances can result in enormous direct and indirect savings for society."

"We (the committee) were asked specifically about research," said Dr. Glen Elliott, a Stanford research physician who co-chaired the IOM committee. "The other issue is the need for improved treatment facilities. The recommended research funding is a mere pittance compared to the money such research can save in the future as a result of more effective treatments," he added.

Statistics have shown that during any six-month period, 19 percent of the U.S. population suffer from some psychiatric disorders. Yet only 20 percent of the affected group seek treatment, for a variety of reasons.

Another recommendation of the report was that more academic medical centers should be developing clinical research centers in mental health, Barchas said. (*Stanford has one of the few such existing centers—Editor.*)

"We need to assemble, nationwide, a critical mass of faculty backed by adequate resources and high technology equipment," Barchas said. In addition, the report calls for an increase in the training of M.D.-Ph.D. physician researchers.

Also co-chairing the IOM committee from Stanford were Dr. Philip Berger, the Kenneth T. Norris Jr. Professor of Psychiatry and Behavioral Sciences, and Dr. Patricia Barchas, assistant professor of sociology. Dr. Ruth Gross, professor of pediatrics, and Dr. Roland Ciaranello, head of the division of child psychiatry, also participated on the preparation panel.

The board consisted of representatives from many different institutions throughout the country and from many intellectual disciplines, Barchas said. More than 300 scientists in the psychological, social, and biological sciences contributed to the report.

Barchas said that no one administration is entirely to blame for the research underfunding, which "has occurred over the years without being challenged."

So far, Barchas and Elliott said, response to the report has been very positive. The *American Journal of Psychiatry* plans to publish it as a supplement. The two physicians have been asked to brief Congressional staffers, and possibly to testify before the U.S. Senate.

The committee members said they hope the report will serve to create greater awareness of research opportunities for both the short and long term.

"There seems to be an emerging consensus of broad need," Barchas said. "The exact timing for increased spending will probably be the real question," he said, with concern over the federal deficit causing the Office of Management and Budget to cut NIH spending and to consider reorganization in many fields.

"It was marvelous to us that the report was requested at all, by top people in the federal government," Barchas noted. "It's clearly an issue that goes beyond party politics. It has to do with a personal concern for humanity."

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FOR IMMEDIATE RELEASE

STUDY NEEDS MALE RUNNERS

STANFORD—

Healthy male runners, ages 20 to 50, are needed to participate in Stanford University Medical Center studies examining the relationship between physical training and glucose (blood sugar) utilization.

Volunteers must be capable of running 10 kilometers in less than 40 minutes, said Ken Rodnick, graduate research assistant.

Participants will be required to spend three to four half days in the Clinical Research Center at Stanford and will receive a free complete physical examination, including an oral glucose tolerance test, measurement of VO2max (maximal aerobic capacity), measurement of percent body fat, metabolic studies looking at glucose utilization, and a fat tissue biopsy.

The studies are being conducted under the direction of Dr. Gerald Reaven, professor of medicine.

For more information contact Rodnick, weekdays between 8 a.m. and 5 p.m., at (415) 497-6973.

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2-27-85

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

CORONARY BYPASS OPERATIONS OFTEN UNNECESSARY, STANFORD STUDY SHOWS

STANFORD—

Coronary bypass operations are only "temporary solutions" that could be avoided in many patients who undergo the procedure to relieve chest pain and prolong life, according to a Stanford University Medical School researcher.

These findings, based on the results of a recent study on the benefits of bypass surgery, are just beginning to affect the annual number of coronary bypass operations. The surgical procedure is still the most often performed, costing about $3.5 billion each year, according to the American Heart Association.

The number of bypass operations declined by 7 percent in 1982, after increases of 16 percent in 1981 and 20 percent in 1980, the association reported.

"There are quite a few unnecessary bypass operations taking place," said Dr. Herbert Hultgren, Stanford professor of medicine and medical co-director of the 11-year-long Veterans Administration study, which included patients at the Palo Alto Veterans Administration Medical Center and 12 other VA hospitals throughout the country.

The study showed that only 20 percent of angina patients who fell into specific high-risk categories had improved survival from coronary bypass operations, Hultgren said. The majority of patients fell into low-risk categories and did best when treated medically with drugs for as long as possible.

The coronary bypass procedure was developed in 1967 as a way to surgically bypass coronary arteries blocked by the accumulation of fatty material, a disease known as atherosclerosis. The blocked arteries reduce the flow of blood that carries oxygen to the heart, which causes chest pain.

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Based on the study, when a patient complains of chest pain, Hultgren explained, he should be evaluated by simple non-invasive methods to see if he does in fact fall into one of the high-risk categories, which includes patients suffering from left main coronary-artery disease, three-vessel disease with impaired heart function and who have a history of hypertension, heart attack or abnormal electrocardiograms. If he does not fall into these high risk groups, he should not undergo a bypass operation unless medical treatment fails, Hultgren said.

The reason, he continued, is that the study showed that as soon as 10 years following the first operation, the grafts bypassing the occluded arteries start to close up. This usually necessitates a second operation.

"Most bypass operations are done to improve the patient's quality of life and relieve chest pain," Hultgren said. "But the study shows this can often be done with medication. This means that physicians must now ask themselves not only if they should operate but when.

"Physicians should not recommend surgery in low-risk patients if the patients can be controlled with medication for as long as possible."

The study, reported in a recent issue of *The New England Journal of Medicine* showed that for 686 patients treatment did not affect survival rates after 11 years. About 57 percent of those treated medically survived, compared with 58 percent of those treated surgically.

"Those patients with a high risk of dying benefit from surgical treatment, but beyond seven years the survival benefit gradually diminishes," concluded Hultgren and colleagues in the report.

The researchers plan to follow the patients for a total of 15 years, Hultgren said.

The study is similar to two others conducted by the National Heart, Lung and Blood Institute and a European group, but has the longest follow-up results. All three studies, however, reach essentially the same conclusions, Hultgren said.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

STANFORD MEDICAL SCHOOL RESEARCHER WINS PASSANO YOUNG SCIENTIST AWARD

STANFORD—

Dr. Mark M. Davis, assistant professor of medical microbiology at Stanford University School of Medicine, has been selected to receive the 1985 Passano Foundation Young Scientist Award.

Davis, 32, is being recognized for his "central contributions to the understanding of the most fundamental aspects of the immune process," the Foundation announced.

He will receive the award and a $10,000 honorarium at the Passano Foundation's award presentation dinner in Baltimore on April 1.

Davis' research is helping to explain how the immune system fights cancers, viruses, and bacteria, and how it controls tissue rejection.

His present work focuses on T-lymphocytes, cells that help regulate the body's overall immune response and are themselves involved in combating viral infections, cancers, and in rejecting transplanted tissue.

In particular, Davis and his colleagues have isolated genes that direct production of the T-cell receptor, a protein that helps the immune system recognize abnormal or foreign cells.

His work recently enabled researchers from the Wistar Institute in Philadelphia to find a connection between a human T-cell receptor gene and a chromosome region linked to certain cancers. This could lead to information about how T-cell cancers develop, Davis said.

Davis obtained his bachelor's degree from the Johns Hopkins University in Baltimore in 1974 and received his Ph.D. from the California Institute of Technology in 1981.

Before joining the Stanford Medical School faculty in 1983, he was a fellow in the Laboratory of Immunology at the National Institutes of Health in Bethesda.

Beginning in 1945, the Passano Foundation has presented an award each year to a person or persons who have made an outstanding contribution to the advancement of medical sciences and whose work was done in the United States. The Foundation's directors give prime consideration to work that has immediate clinical value or gives promise of practical application in the near future, the Foundation said.

Founded by the late Edward Boteler Passano, then chairman of the board of the medical publisher, The Williams and Wilkins Co., the Foundation has honored more than 50 scientists.

The 1985 Passano Foundation Senior Laureate is Dr. Howard Green of Harvard University, who is being honored for his contributions to cell biology, including the development of methods for cultivation of human skin and its successful use in severely burned patients, the Foundation said.

Previous Stanford Medical School recipients of Passano awards are Drs. Hugh McDevitt and Roger Kornberg.

2-27-85 —30— LH6

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

VACCINE TO PREVENT SEVERE URINARY TRACT INFECTIONS UNDER DEVELOPMENT AT STANFORD

STANFORD—

A potential vaccine to protect women against serious complications of the most common type of urinary tract infection has been developed by Stanford University Medical School researchers.

The vaccine blocks bacteria that cause urinary tract infections from spreading to the kidneys where they can cause more severe disease, the researchers said.

The vaccine, a purified protein produced through recombinant DNA techniques, has so far been proven effective in mice with experimentally induced urinary tract infections.

It will be tested in people, probably within the coming year, said Dr. Gary Schoolnik, assistant professor of medicine and medical microbiology at Stanford University School of Medicine.

The work was carried out in Schoolnik's lab by Dr. Peter O'Hanley, chief resident in the department of medicine, and Dr. David Lark, a urologist working toward a doctoral degree in medical microbiology, in collaboration with the laboratory of Dr. Stanley Falkow, professor and chairman of medical microbiology at Stanford. Schoolnik is also chief of infectious diseases at the Palo Alto Veterans Administration Medical Center.

If shown effective in humans, the vaccine would be most beneficial to women who are prone to recurrent urinary tract infections and thus identifiable as being at highest risk for complications, Schoolnik said.

But it is potentially of benefit to every woman who experiences a urinary tract infection at some time in her life, an estimated 15 percent of all women, he said.

The new vaccine is unusual in that it consists of a highly purified protein made through recombinant DNA techniques, Schoolnik said. The scientists know the exact structure of the pure protein in the vaccine as well as the structure of the gene that codes for the protein, Schoolnik said.

Schoolnik—whose laboratory just last month announced development of a potential vaccine against gonorrhea—and his colleagues reported on the new vaccine in an article published in the February issue of the *Journal of Clinical Investigation*.

Funding for development of the vaccine has been from the National Institutes of Health and from Cetus Corporation of Emeryville, Schoolnik said.

Urinary tract infections are among the most common medical problems of female outpatients, Schoolnik said, and although usually not serious, they can be a major cause of discomfort and loss of work time.

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When a urinary tract infection is confined to the bladder, it is called cystitis, he explained. In a small percentage of women with cystitis, the kidneys also become infected, causing a condition known as pyelonephritis which may require hospitalized care and can lead to sepsis, an infection of the blood. In some patients, it can also lead to kidney failure and hypertension, Schoolnik said.

Antibiotics are an effective treatment. But in women who experience frequent urinary tract infections, a vaccine to halt recurrences would spare considerable illness while being cost-effective, he said.

The potential vaccine was tested in mice infected with a virulent strain of E. coli bacteria taken from a patient with pyelonephritis. The vaccine was effective in preventing urinary infections from spreading to the kidneys and causing pyelonephritis in 19 out of 22 mice, Schoolnik said.

Since urinary tract infections in mice provide a good model for the condition in people, Schoolnik is optimistic that the vaccine will be able to prevent pyelonephritis in patients, and perhaps cystitis as well.

In addition to sparing the patient considerable discomfort, a vaccine would be less expensive than repeated doctors' appointments and it would minimize the use of antibiotics, to which growing numbers of bacteria are becoming resistant, he added.

The vaccine works by preventing E. coli bacteria from attaching to tissues lining the insides of the bladder and kidneys. If the bacteria cannot adhere, they cannot infect the organs, Schoolnik explained.

The bacteria use tiny appendages called pili to attach to the tissues. The vaccine induces production of antibodies that block the pili from performing this attachment function, Schoolnik said.

Scientists in Falkow's lab isolated the gene that directs production of the pilus protein from a highly virulent strain of E. coli, Schoolnik explained. When that gene was transferred into a normally mild strain of E. coli, it gave the recipient bacteria the ability to attach to the kidney lining, he said.

The bacteria that received the pilus protein gene made numerous copies of it, turning themselves into tiny "factories" that produced large quantities of the pilus protein, Schoolnik said. It was from these bacterial factories that Schoolnik's laboratory purified the protein and tested it as a vaccine in mice.

Stanford University has applied for a patent on the protein that comprises the potential vaccine, Schoolnik said.

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LH6

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

HEART, HEART-LUNG DONORS: "THE NEED IS ALWAYS THERE"

STANFORD—

Stanford University Medical Center's heart transplant program is in desparate need of donors with twice the average number of candidates waiting for the life-saving operation, said Marguerite Brown, donor coordinator.

"We have 12 patients waiting for heart transplants," Brown said. "A few have been waiting for nearly a year."

Some have been waiting for a period longer than their physicians predicted "safe," she added.

An important factor for heart transplants is to find a donor with a blood type and heart size that matches as closely as possible that of the recipient. Donors aare typically accident victims who have suffered brain death.

The last heart transplant was performed at Stanford on Feb. 9, 1985, bringing the total to 330 since 1968 with 145 survivors. In recent years physicians at Stanford have performed an average of more than three heart transplants each month.

"We're not sure why we're experiencing a lull in donors," Brown said. "Either there are no donors or people aren't aware that we need them.

"The need is always there," she added.

Stanford's heart-lung transplant program is also suffering a lack of donors, Brown continued. The number of candidates waiting for the double transplant operation has reached 21, some of whom have been waiting for nearly 2 years.

"Donors for heart-lung transplants are harder to find because we have to consider other factors such as size and weight of both donor and recipient," Brown explained. Delicate lung tissue must be healthy, she added, eliminating some donors with healthy hearts from the heart-lung program.

The last heart-lung transplant operation was performed at Stanford on Jan. 7, 1985, bringing the total to 23 since 1981 with 14 survivors.

2-26-85 —30— sk3

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

ZIMMERMANN LECTURER DISCUSSES NERVE TRANSPLANTATION

STANFORD—

"Neural Transplantation into the Mammalian Brain" is the topic of the ninth annual George A. Zimmermann Lecture at Stanford Medical School, to be presented by Dr. Albert Aguayo, professor of neurology at McGill University, Montreal, Canada.

The event, sponsored by the neurology department, will be held at 5 p.m., Feb. 28, in room M106. The discussion is to focus on the transplantation of nerves, rather than the entire organ.

Aguayo received his M.D. at the University of Cordoba, Argentina, in 1959. He has been on the faculty of McGill since 1967. He is also head of the neurosciences unit at Montreal General Hospital. He has published widely, served in many professional societies, and received several awards. The most recent honor in 1984 named him a Fellow of the Royal Society of Canada.

Aguayo is most widely known for his experimental studies on regeneration and regrowth in the central nervous system, said Dr. Leslie Dorfman, associate professor of neurology and director of the multiple sclerosis clinic.

The Zimmermann Lectureship was established by Stanford's department of neurology in 1977. It was part of a gift for research and treatment of multiple sclerosis at Stanford, from the late George A. Zimmermann, a long-time San Francisco businessman.

2-25-85 —30— LA5

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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(Editors: photos are available.)
FOR IMMEDIATE RELEASE

MAGNETIC RESONANCE PROVIDES A NEW LOOK INTO HUMAN BODIES

STANFORD—

Stanford University Medical Center's magnetic resonance imaging (MRI) facility is scheduled to begin operation by the end of February, said Dr. Dieter Enzmann, diagnostic imaging center director.

MRI produces X-ray-like pictures that give more information about the human body than other methods. The technique does not use radiation however, making it one of the safest imaging technologies available, Enzmann said.

The new system, operated under the auspices of the Stanford's Faculty Practice Plan, is temporarily housed near the medical center at 2606 E. Bayshore, Mountain View. Only one other machine like it is available in the Bay Area, Enzmann said. Stanford University Hospital's modernization project includes plans for an MRI system to be housed within the hospital.

Until then, outpatients can go directly to the facility to have images taken, while inpatients of Stanford University Hospital will be transported there by ambulance. Appointments can be set up through the radiology department.

The 7,000-square-foot facility was modified with specially shielded walls and adequate perimeters to accomodate the MRI system, which includes a large doughnut-shaped magnet up to 140,000 times the strength of the earth's magnetic field. Without proper safety precautions, the powerful magnet could skew the mechanism of a passerby's pacemaker, or wipe out the magnetic strip on a bankteller card.

MRI is based on Stanford physicist Felix Bloch's theory of nuclear magnetic resonance, for which he received the 1952 Nobel prize. The concept behind magnetic resonance is that the body's nuclei contain magnetically charged particles that can be manipulated to give off signals that are picked up and interpreted by computers. The differences in the signals tell physicians precisely which organ in the body they are coming from, what the organ is made of and information about the organ's structure and function.

MRI tracks the body's various substances, such as its most common one, hydrogen. By doing so, physicians can see soft tissue, obscured by bone in more conventional imaging techniques, in minute detail. While CT—computer tomography—scans are limited to showing cross-sectional slices of the body, magnetic resonance imaging can be performed at any desired angle. These differences have already proved the technique a superior diagnostic method for a number of diseases, such as brain tumors, blood vessel blockages, and infectious processes, Enzmann said.

Multiple sclerosis, a central nervous system disease, is diagnosed relatively easily because of MRI's high sensitivity that distinguishes diseased tissue from normal tissue.

MRI is not limited to imaging hydrogen. Sodium, for example, provides information about the fluid in and around the brain. "It may also be useful in diagnosing strokes and tumors," Enzmann said.

The technique can better diagnose atherosclerosis, he continued, because it can detect fatty tissue building up to occlude the heart's blood vessels. It can detect cancerous lymph nodes in the central lung area, not possible with more conventional techniques that fail to distinguish large blood vessels from enlarged lymph nodes.

"It appears to be superior to other diagnostic tests in a number of other anatomic areas as well," Enzmann said. "There is reason to believe that blood vessels throughout the body can be accurately studied with MRI, thus potentially eliminating the need for some types of angiograms."

MRI also allows physicians to study the bone marrow to a degree not possible with other imaging techniques. In short, Enzmann concluded, the new technique reveals differences between normal healthy organs and any abnormal structures in the body more easily and completely than any other single imaging method.

Even more information is available through magnetic resonance spectroscopy, which provides physicians with information about the continuous chemical and physical processes of the body, Enzmann explained. Instead of pictures, graphs of jagged lines can be interpreted to explain precisely what happens to the metabolic substance in question. This type of information, never available before, is enabling physicians to look at the body and disease in a brand new way, he said.

For example, with spectroscopy scientists can assess organs' acidity, known to increase when the supply of oxygen, carried by the blood, is reduced. By measuring the acidity, physicians can tell if a patient's blood is flowing through the body normally and exactly how well each organ is functioning.

With phosphate, it's possible to measure the level of energy concentrations in the body's organs. Again, this reveals how well the organs are functioning. Stanford's cardiovascular surgery department has already used this information to improve its transplant program.

"Even more exciting is the prospect of imaging spectroscopy where this important chemical information is displayed as an image rather than as a line," Enzmann said. "This would allow better understanding of the organ and disease process as a whole."

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FOR IMMEDIATE RELEASE

NEW BOOK INCLUDES MODEL OF THE HEART

STANFORD—

A new book designed to teach physicians and others about how to look at arteriograms and interpret them has been published by a widely recognized Stanford specialist and teacher of the subject.

Coronary Angiography: An Introduction to Interpretation and Technique, by Dr. James F. Silverman (126 pages, Addison-Wesley Publishing Company, Menlo Park, $19.95), comes complete with a plastic model of the heart, representing a simple way to interpret distribution of the various vessels.

The model can be put together almost like a doll cutout, giving a very rough approximation of the heart with the major vessels drawn in their common positions.

Stanford cardiologist Donald Harrison, who wrote the introduction, explains the model permits the student to visualize vessel motion in three dimensions instead of the two-dimensional mode in which vessels are normally viewed on a movie projector.

"It enhances understanding of angled views needed for optimal vessel evaluation," he adds.

Coronary angiography is an X-ray examination of the heart by means of introducing a thin plastic tube (catheter) into the left and right coronary arteries and following the course of an opaque fluid which has been injected into the bloodstream.

A high speed 35-millimeter movie will show the coronary arteries clearly, and study of the films in slow motion enables doctors to evaluate the condition of the heart.

Dr. Lewis Wexler, a colleague of Silverman and co-director of the Cardiac Catheterization Laboratory at Stanford University Hospital, calls the book "simple, straightforward . . . and written in a style that recognizes the needs of the novice, but with sufficient subtlety to benefit the experienced angiographer and residents and fellows preparing for board examinations."

Silverman, an associate profesor of clinical radiology and associate dean for clinical affairs at the School of Medicine, serves also as chief of staff at Stanford University Hospital.

"Heart disease is the number one killer in the United States, and coronary artery disease is the major perpetrator," said Silverman in explaining why he wrote the book. "Anyone caring for cardiovascular patients will be involved with coronary artery disease, and inherent in that situation is the need to understand vascular studies necessary for diagnoses."

2-20-85 —30— LA

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FOR IMMEDIATE RELEASE

SCIENTISTS UNRAVEL MYSTERIES OF SLEEP

Editors: This story first appeared in the *Stanford Medicine* magazine, winter 1985 issue. Photos and the magazine are available on request.

STANFORD—

Stanford University's 13-year-old Sleep Disorders Center has been writing the book on sleep disturbances from A to Zzzz!

But it has not been easy.

The possible causes—both medical and psychiatric—that come to mind upon hearing a person complain, "I can't sleep," constitute a veritable encyclopedia, says Dr. William Dement, director of the center. For many patients with insomnia or other sleep disorders, treatment is just not simple.

Researchers still don't know why people need sleep, Dement says, but they know we can't live without it. Sleep is as basic as food and water. People who have problems with it are apt to feel downright miserable.

James Dagdigian, a former patient, wakes up these mornings "bright-eyed and bushy-tailed," but it wasn't always so. Although he didn't realize it for many years, Dagdigian suffered from a sleep disorder that deprived him of sleeping well by night and functioning well by day.

Dagdigian's wife started wearing earplugs at night as soon as they married. Loud snoring wasn't his only problem. Dagdigian's professional and private life during his long navy career as a jet pilot was colored by chronic exhaustion, morning headaches and marred social relations. Then in 1977 his wife read an article about sleep disorders and Dagdigian came to Stanford for help.

Physicians diagnosed sleep apnea, a condition in which patients stop breathing for periods of about 30 seconds or more several hundred times a night and must awaken themselves to resume breathing, though they often don't remember doing so. The condition may occur when the brain's respiratory center, which regulates breathing impulses, malfunctions. It can also be triggered by muscle weakness that causes the upper airway to collapse. This prevents oxygen from reaching the lungs, explains Dr. Christian Guilleminault of the sleep center.

Dagdigian complained of daytime sleepiness, typical of about 60 percent of sleep center patients. Most of these are diagnosed as having sleep apnea. He underwent many tests, including 24-hour monitoring of physiological activity to identify sleep problems as they occurred. The process of diagnosis and treatment is tailored to each individual, Dement says, and is becoming increasingly complex. It's not unusual for a person to have more than one sleep disorder.

Factors to consider in each case include anatomical features, medications, weight, and other illnesses. All of these must be considered when deciding how severe the patient's condition is, what the appropriate treatment is, whether that treatment works or if something else should be tried.

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Weight reduction—to relieve pressure placed on the airways by fatty tissue—may be all that's needed for some apnea patients. For others, a new treatment called continuous positive airway pressure is proving helpful, says Dr. German Nino-Murcia, a psychiatrist who runs the sleep clinic. A device supplying air at a certain pressure to the upper airway is used to provide the treatment to the sleeping patient. Several other treatments are available as well.

Unlike less severe apnea patients, Dagdigian needed surgery. A surgeon made a small hole in his windpipe below the voice box in his neck, which allowed oxygen to bypass the obstructed airway and pass into his system while asleep. He protects the opening, called a tracheostomy, with an implanted valve that he can open at night and close during the day.

As many as 50 percent of Americans over 60 years old may have serious sleep apnea whether they know it or not, says psychologist Dr. Donald Bliwise. Intellectual impairment in aging, he found, may reflect sleep apnea as well as more widely recognized ailments such as Alzheimer's Disease.

Sleep apnea probably contributes to the progression of heart disease—particularly arrhythmias—Dement says, and also may account for many "peaceful" deaths due to heart attacks at night.

"I was just cruising along as an accident waiting to happen," says Dagdigian, now 52. His father—who had many of the same symptoms—died at 51 of a massive heart attack, he recalls. Dement confirms that sleep disorders are increasingly found to run in families.

Established in 1972 as the first of its kind in the world, Stanford's sleep center offers the nation's only sleep disorders training program. In a young field tremendously in flux, Stanford clinicians and researchers are taking the lead to develop new and sometimes controversial treatments.

"Until about 1970 there was no notion of sleep disorders medicine," notes Dement, who is also president of the Association of Sleep Disorders Centers. "We're a sleep deprived society, yet only the waking patient had attracted medical attention." It's only by evaluating patients during sleep that doctors can pinpoint all the various factors underlying sleep disturbances, he adds.

Stanford's sleep center divides its efforts among pharmacological studies, animal studies, clinical research, and patient care. Besides sleep apnea, insomnia, and narcolepsy—the most common disorders encountered—physicians diagnose others such as sleep walking, sleep talking, infant apnea, periodic leg movements and impotence.

Having bred the world's only colony of narcoleptic dogs that mimic the human condition, Stanford sleep researchers are attempting to uncover the neurochemical imbalances involved in narcolepsy as well as solid clues to normal sleep mechanisms: what puts us to sleep, why we stay asleep, and what the sleeping brain does to allow us to be alert in the daytime.

Afflicting about 250,000 Americans, narcolepsy causes irresistible sleep attacks in its victims. The disorder is characterized by excessive daytime sleepiness, abrupt attacks of muscular weakness called cataplexy, hallucinations, and sudden attacks of rapid eye movement (REM) sleep.

"A person with narcolepsy who has slept through the night is still as sleepy during the day as you would be if I kept you awake for 48 hours," Dement says.

Until researchers find causes and a cure, only the symptoms of the disorder can be treated. According to Dement, the available drugs have their limitations.

Marilyn Wilder, a 59-year-old divorced mother of three who has had the disorder since the age of 15, knows just how important support from family and friends is. She makes herself available to fellow narcolepsy patients in need of a sympathetic ear. "I've talked to people on the edge of suicide," she says.

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Education about narcolepsy is crucial for those in positions to offer employment or grant public assistance, adds therapist Sandra Foster-Rawlings. Obtaining adequate medical insurance coverage for all sleep disorders patients is yet another hurdle Dement's team hopes to jump.

Meanwhile, to help pry apart enigmas of the sleeping brain and to reduce costs, sleep center researchers are collaborating with engineers to develop home monitors that will enable patients to record their sleep at home. They are also devising new types of inexpensive tests for use at the clinic.

Home monitors are already used as life-savers for a category of patients considered at high risk during sleep, "near-miss" babies with infant apnea. These babies, like Jeremy Carney, may stop breathing in their sleep. Often already blue in the face, they are awakened by their parents and brought in for treatment.

"We don't know if these babies would die or eventually arouse themselves," Guilleminault says. A number of infants do die each year of sudden infant death syndrome (SIDS), but no one yet knows why. A higher incidence in certain countries and ethnic groups indicates the probability that socioeconomic factors, prenatal health care and nutrition play a role, he explains.

Jeremy's older brother suffered similar attacks during his sleep when he was an infant, "but the doctors just thought I was being overprotective," says their mother. Thanks to the medical establishment's growing awareness of the syndrome, Jeremy is being carefully watched and the Carneys can finally relax.

Increasing awareness about many sleep disorders has allowed Stanford's sleep programs to expand, Dement gladly reports. This winter the center is acquiring additional space at the Hoover Pavilion just down the road from the medical center. The new facility will include a comprehensive treatment program for insomnia.

Insomnia is treated through psychotherapy, behavioral techniques such as better sleep hygiene, relaxation and biofeedback. A promising new method called sleep restriction therapy, in which sleep is consolidated—first reduced, then slowly increased—into specific time schedules under a therapist's supervision, is also gaining popularity.

Some patients have trouble sleeping because their sleep-wake cycle is out of sync with normal body clock rhythms, Dement says. These patients may complain of not falling asleep until 4 in the morning though they have to get up at 7.

An innovative approach to combat this problem literally rewinds the body clock. Called chronotherapy, it requires patients to go to sleep a few hours later each day until they reach the desired bedtime.

A discrepancy often exists between what a patient really perceives and actually does, Dement says. "Based on evidence from patients, the odds are about 50-50 that you have insomnia if you think you do. Our first job is to find out if you do."

Sleeping pills, though highly effective for treating certain short-term forms of insomnia, Dement says, can cause or exacerbate sleep problems and lead to tolerance if used inappropriately. This is especially true for the elderly. Sleeping pills can be dangerous in sleep apnea patients because they interfere with their ability to resume breathing. "Most of these medications are respiratory depressants and may even induce sleep apnea," Dement says.

There is appropriate movement, he explains, toward a judicious, rational use of sleeping pills prescribed by trained professionals for certain cases of short-term or transient insomnia.

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For most people, how much sleep is enough? The number of hours varies, Guilleminault says, but most normal adults feel they need between seven and eight hours of sleep to function well. "The main thing to look for is whether or not a person is complaining. A sleep complaint of any type is a good indicator that something is wrong. If you feel fine, then you probably have what your body requires," he explains.

Away from the main center near Lake Lagunita at the "Stanford Sleep Camp," researchers look into the special sleep problems of teenagers and other groups. The summer camp is staffed by Stanford students under the tutelage of Dr. Mary Carskadon, who has conducted studies on why teens seem to get sleepy so often.

Sleepiness, while not always felt or reported, can be measured with the multiple sleep latency test developed at the center. The test measures how fast a person falls asleep. "We consider five minutes or less the twilight zone," Dement says.

With the same amount of sleep, pre-pubertal volunteers were alert during the day, while those past puberty were sleepy, Carskadon found. This leads researchers to believe that as they grow older children need more, not fewer, hours of sleep.

Carskadon is looking at hormonal changes as well as circadian rhythms—the regular ups and downs of heart rate, brain waves, core body temperature and other rhythms of the body clock—to see if changes in these patterns during adolescence might cause increased sleepiness.

Meanwhile, societal pressures and possibly physiological changes lead teenagers to stay up relatively late. "Imagine the implications for school performance alone," Dement exclaims.

Stanford sleep researchers are looking into other challenging questions as well, such as what the sleeping brain does, what chemical changes underly the daily alternation of sleep and wakefulness, why some insomniacs don't feel sleepy during the day while others do, the effects of short-acting sleeping pills on jet lag and similar disruptions, solutions to the adverse effects of work shift rotation, and why some people experience long heart beat lapses during sleep.

"The riddles yet to be answered are as compelling as the breakthroughs," Dement says.

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FOR IMMEDIATE RELEASE

STANFORD RESEARCHERS SEEK NEW WAYS TO MINIMIZE EFFECTS OF ALZHEIMER'S DISEASE

STANFORD—

Anticipating a doubling in the number of Alzheimer's disease patients by the end of this century, a new research program is seeking to improve the quality of life for patients and help relatives better cope with caring for them.

The research program, which has received $150,000 funding for its first two years, differs from many other assaults against Alzheimer's by focusing on ways to minimize the psychosocial impact of the disease rather than on finding an underlying biological cause and a cure for it.

The Alzheimer's disease research is part of a clinical research center for the study of senile dementia, headed by Stanford University Medical School researchers and based at the Palo Alto Veterans Administration Medical Center. The center is funded by the National Institute of Mental Health.

"We're in the dark about what causes Alzheimer's disease," said Dr. Jerome Yesavage, Stanford assistant professor of psychiatry who heads the project. "The only thing we know for sure is that the disease will be with us in large quantities for the next 20 to 30 years."

For that reason, Yesavage said, it is important to ease the problems that often aggravate the disease and make coping more difficult both for patients and caregivers.

"We feel that we can minimize many of the medical, psychological and social complications of Alzheimer's even though a biological basis for the disease has not yet been discovered," Yesavage said.

He stressed that an additional goal of the research program is to encourage a variety of medical researchers to study problems of aging. "There are scientists with backgrounds in biochemistry and pathology who might have a lot to contribute to the study of Alzheimer's disease," he said.

More than 20 percent of the over-75 population is afflicted with Alzheimer's and related disorders, and the number of elderly people at high risk is expected to double by the year 2000, Yesavage said.

The increase is due to the growing numbers of the "old old," those over 75, who are most likely to be afflicted with Alzheimer's or similar forms of senile dementia that cause a gradual loss of intellectual functions and a variety of physical problems, Yesavage said.

In addition to the incalculable emotional costs for Alzheimer's patients and those close to them, the disease is a tremendous economic drain to the individuals involved as well as to society, he added.

"Each patient lives for an average of six to eight years after diagnosis with an annual medical and nursing cost of approximately $20,000 to $25,000," Yesavage estimated.

Common difficulties associated with Alzheimer's disease include memory loss, incontinence, movement disorders, as well as depression and sleep disturbances both in patients and in family or friends caring for a patient.

Many of these "excess disabilities" are treatable, Yesavage believes.

For example, Alzheimer's patients often have disrupted sleep patterns so that they can't go to sleep at night, but instead doze through the day. "It is quite likely that this is something we can learn to control pharmacologically or behaviorally," Yesavage suggested. "We may not need to understand exactly why a sleep problem arises before we can treat it," he said.

Sleep researchers Christian Guilleminault, Donald Bliwise, and Vincent Zarcone are among those involved in investigating Alzheimer's-related sleep disturbances, Yesavage noted.

Researchers will also try to determine what causes incontinence and whether it is preventable or treatable. Although it is not clear why some Alzheimer's patients lose control of urinary and bowel functions, incontinence is a major Alzheimer's-related problem and the most likely complication to cause depression in a caregiver, Yesavage said.

Drs. Carol Winograd and Inder Perkash will be pursuing possible treatments for incontinence, he added.

Biochemical changes in spinal fluid will be examined in an effort to find markers that might predict who is at risk for developing Alzheimer's disease and for distinguishing the disease from other syndromes such as severe depression, Yesavage said. Biochemical studies could also lead to clues about causes and possible treatments for the disease, he added.

Among those looking at the biochemistry of Alzheimer's patients are professors Jack Barchas, Philip Berger, and Larry Eng, Yesavage said.

Ways of reducing or coping with depression in caregivers is another phase of the study that will benefit not only the caregiver but the patient as well, Yesavage said. If the caregiver becomes depressed enough, then the patient may suffer too, from lack of care, Yesavage explained.

Electrophysiological measurements of brain activity and computerized brain scan techniques will also be explored by Dr. Adolf Pfefferbaum, as diagnostic tools to spot early signs of dementia, Yesavage said.

"We're working from the premise that this disease will become increasingly common in the next few decades," Yesavage said. "The question is, how are we going to deal with it and how are families and caretakers of Alzheimer's patients going to get maximum benefit for the patient from the fixed resources available? The answer is that we have to find and concentrate on the aspects of the disease that are remediable," he added.

Some other institutions with major research centers for the study of Alzheimer's disease are the University of California, San Diego, the University of Southern California, and the Bronx Veterans Administration Hospital, he said.

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FOR IMMEDIATE RELEASE

DIABETES STUDIES NEED VOLUNTEERS

STANFORD—

Volunteers are needed for two studies being conducted in Stanford Medical Center's clinical research center (CRC) under the direction of Dr. Gerald Reaven, professor of medicine.

One study will examine the link between diabetes mellitus and fat metabolism by comparing diabetics being treated with oral medications, or diet —but not insulin— to non-diabetics. The study will use standard meals and infusions of glucose and insulin, to assess responses in blood sugar, insulin, and fatty acid levels.

The other study will examine the link between diabetes mellitus and atherosclerosis (hardening of the arteries). It will analyze blood samples of non-diabetic people with a family history of diabetes— or a personal history of "borderline" diabetes —for glucose, insulin, and cholesterol levels.

Volunteers for both studies must be between 40 and 75 years old and able to spend two to three mornings in the CRC.

Participants will receive a free physical examination, including a glucose tolerance test, and dietary consultation.

For more information call Dr. Arthur Swislocki, between 9 a.m. and 5 p.m., at (415) 497-6973.

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FOR IMMEDIATE RELEASE

STUDY NEEDS MALE VOLUNTEERS

STANFORD—

Male volunteers 21-30 years old, or above the age of 70, are needed to participate in a study comparing the relationship between hormones and sexual functioning in the two age groups.

Volunteers should be in good physical and mental health. They will be asked to contribute two to six hours of their time. The results of all laboratory tests, procedures, and analyses will be made available to them at the end of their participation, said Dr. Julian Davidson, professor of physiology, who is conducting the study with associates as part of a larger, ongoing research effort.

Tests include monitoring sexual arousal under various conditions, and taking blood tests to determine hormone levels.

For further information call Dr. David Rowland, at (415) 497-2432, between 9 a.m. and 5 p.m.

2-14-85 —30— LA5

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FOR IMMEDIATE RELEASE

FEDERAL JUDGE DISMISSES LAWSUIT INVOLVING VA DOG

STANFORD—

A federal judge has dismissed a lawsuit stemming from the removal and subsequent death of a research dog from the Palo Alto Veteran's Administration Medical Center (PAVAMC).

Stanford University had been named as one of five defendants in the suit dismissed Feb. 5 by U.S. District Court Judge Stanley Weigel. Three humane societies brought suit April 12, 1984, asking the court to stop all research involving dogs and cats until federal regulations for research animals were met to the satisfaction of the plaintiffs.

A VA panel concluded in May 1983 that while no violations had occurred, several changes in cage design—since adopted—could help ensure that accidents would not occur in the future.

The dog, which was part of a study intended to perfect techniques for repairing and replacing blood vessels, was taken from the VA late at night on March 24, 1983, nine days after surgery, by a medical student.

The veterinarian responsible for the dog's care said the student refused her request that the dog be returned to the hospital for treatment.

The animal subsequently was put to death by a Palo Alto veterinarian who told a news conference called by the Santa Clara Valley Humane Society that he believed the dog was suffering and could not recover.

The VA panel concluded that the dog, while still anesthesized after surgery, had been bitten several times by a dog in an adjacent cage. Since the incident, the VA has installed special postsurgical recovery cages and has posted emergency phone numbers of personnel in animal areas.

Humane society spokesmen have been critical of the VA panel's report, but a followup investigation by the United States Department of Agriculture (USDA) found the incident was isolated and that the subsequent changes by the VA corrected the situation, said Rodney Johnson, managing attorney for medical affairs.

"We are gratified that the court has clarified a potential misconception about Stanford's standards of animal care," said David Mendelow, associate dean for administration at Stanford Medical Center.

"The case never did involve the issues of animal care at Stanford, and we now feel vindicated because the continuing efforts to provide both quality research and quality care can continue without the confusion in the public mind that this suit has brought."

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"We're disappointed, but that's the way things go," said Warren Brodrick, executive director of the Humane Society of Santa Clara Valley, a plaintiff.

Weigel's brief dismissal order said the court "has concluded that plaintiffs lack standing to prosecute this action, and further that, in any case, the matter is moot, and that plaintiffs have failed to state a claim upon which relief can be granted." Besides Brodrick's group, plaintiffs included the San Mateo-based Peninsula Humane Society and the Palo Alto Humane Society.

Defendants, in addition to Stanford, were national VA Administrator Harry N. Walters; James DeNiro, director of the PAVAMC; the secretary of agriculture; and Dr. Craig Miller, associate professor of cardiovascular surgery at Stanford, who was conducting VA-sponsored research involving the dog.

Johnson said the university should not have been included in the first place, since all research involving the dog had occurred at the VA. Stanford had asked the judge to drop the university from the suit if it had continued.

Dr. Malcolm Anderson, assistant professor of radiology at Stanford and assistant chief of radiology at the VA, headed the VA panel which criticized the student "for delaying treatment of the dog by several hours" by removing it.

Brodrick called that report "a massive whitewash by the committee (VA panel)." He said that his attorneys have received copies of the USDA's followup report but that he has not read it and cannot comment on the document.

Both Mendelow and Brodrick, in separate interviews, agreed that the legislature, not a court of law, was the appropriate place to make rules involving the care of animals.

"Our elected lawmakers are the appropriate persons to provide the underlying guidelines to balance the needs of lifesaving research with the very genuine concern for the humane care of laboratory animals," said Mendelow. "Litigation is not the appropriate forum for policy. The case of an individual research dog was investigated with appropriate action taken by our Veterans Administration colleagues."

Brodrick said the current case "does point out that there probably is a need for a change in the state law" which currently exempts research animals from the cruelty provisions of the law.

Currently, USDA regulations, not state law, govern the standards of care for research animals.

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PHYSICIAN SAYS MEDICAL CUTBACKS HURT FUTURE DOCTORS

STANFORD—

Federal cutbacks for health care would affect not only low income patients, but would also interfere with Stanford's ability to train future doctors from all income backgrounds, a faculty physician testified Wednesday (Feb. 13).

"The President's 1986 budget request proposes cutbacks in expenditures which will adversely affect the ability of Stanford University Hospital and Medical School to provide health care services to the poor, aged and chronically ill, and to fulfill its goal of training physicians from all levels of society to become the future leaders in medicine," said Dr. Lewis Wexler, a cardiac radiologist.

Wexler's statement was prepared for delivery in testimony Wednesday at a public budget hearing held in Millbrae by Rep. Tom Lantos, D-Calif.

Medical students from low and lower-middle income families "would be disporportionately affected" by proposed cuts in federally supported loan programs, Wexler said, adding about 75 percent of Stanford's 400 medical students currently participate in federal loan programs. In 1984, the average medical student had a debt of $28,000, he said.

"The proposed ceiling of $4,000 per year in support from all federal sources would create an average unmet need of $2,500 per year, and for our neediest students, their unment financial burden would be closer to $6,500 per year," Wexler said.

"Significantly, our ability to attract students of low income families will be impaired which may seriously affect our affirmative action minority recruitment efforts," Wexler said.

He predicted in 1985, Stanford University Hospital would be required to forgo $3.5 million in medical education payments, a reimbursement provided to university hospitals in recognition of their higher costs.

The administration has proposed cutting this indirect medical education payment provided teaching hospitals from 11.59 percent to 5.79 percent of payments.

"This payment (indirect education costs) is predicated on the fact that sicker patients are referred for treatment in teaching hospitals and that there is an added cost incurred in educating young physicians, for example, for classrooms, teaching materials, added time and personnel," Wexler said in remarks prepared for delivery.

SUH statistics show that 33.2 percent of the institution's patients are Medicare supported, while 11.8 percent are Medi-Cal. The hospital admits approximately 23,000 patients annually.

In an earlier statement, Arthur Kornberg, a Nobel Prize winning Stanford biochemist, called proposed cuts for medical research "a very calamitous decision.

"The cuts would not only destroy a large segment of our scieintific talent, but they would send a message to our younger scientists that they cannot be assured of support even if they have done distinguished work and spent years in specialized training," Kornberg said.

The Reagan administration has proposed reducing the number of National Institutes of Health grants by 23 per cent, from 6,500 last year to 5,000. Administration officials have said the cuts will save $280 million from the $5.1 already appropriated by Congress for the NIH this year.

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NEW COMMITTEE LOOKS AT ETHICAL ISSUES OF LIFE, DEATH AND MEDICAL CARE

STANFORD—

Patients and physicians at Stanford University Medical Center now have a resource when they have questions about making life and death decisions and other ethical issues—a special ethics committee.

Withdrawing life support, 'do not resuscitate' codes, informed consent, animals in research, severely impaired newborns and economics are just some of the issues being analyzed by the medical center's committee, which includes physicians from all specialties, nurses, medical students, chaplains, economists, lawyers, social workers, sociologists and philosophers.

The emergence of ethics committees has been necessitated by a technological revolution in medicine, forcing physicians and patients to face issues, such as cost and quality of life, that never before have been considered.

Patients and community members can now get legally binding documents in which individuals can express whether or not they desire extraordinary life support systems withdrawn or withheld in the event of terminal illness at Stanford. These documents include a Living Will, a California Natural Death Act Directive and a form to assign a Durable Power of Attorney for Health Care in California. They are available in Stanford University Hospital's community relations office (415-497-7167). The information has also been included in the revised patient information brochure distributed to all patients admitted to the hospital.

"We have established ourselves as a resource for the entire community for these documents," said Dr. Thomas Raffin, assistant chief of medicine and committee member.

The committee has developed an eight-hour long ethics section to be incorporated beginning this spring in a basic clinical medicine course that all medical students are required to take before they begin seeing patients.

The committee has started sending a series of mailings in which they will advise all physicians, nursing and patient support staff at Stanford University Hospital of the various issues in question and alternatives to dealing with them.

"We are more than willing to look at individual cases retrospectively," Raffin said.

The hospital has also established an ethics committee that physicians and health care personnel can seek out for advice on ongoing cases.

The center-wide committee was established in September 1983 by vice president for medical affairs Dr. Lawrence Crowley.

Chaired by Dr. Thomas Gonda, who heads the psychiatry and behavioral sciences department, the committee was charged with helping to identify the medical center's ethical issues; broadening the awareness and understanding of these issues; suggesting policies and practices aimed to assure sound decision-making in ethically difficult situations and helping to develop ethics courses to add to the center's educational programs.

2-11-85 —30— sk3

STANFORD UNIVERSITY MEDICAL CENTER
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(Editors: this story appeared in the Winter 1985 issue of Stanford Medicine. *Photos and the magazine are available.*

FOR IMMEDIATE RELEASE

THE HEALING POWER OF LASERS

STANFORD—

Mention laser and people conjure up images of Luke Skywalker zapping Darth Vader in *Star Wars*. Mention laser to physicians, and the word takes on new meaning. Since scientists began harnessing this unique form of light energy for medical use, lasers have been heralded as miraculous by physicians who jumped on the laser bandwagon. Today, more than 20 years later, enthusiasm for lasers has not significantly diminished. But physicians now realize that treatment with lasers must be thoroughly studied and tested in order to get the greatest therapeutic value from these weapons against disease.

"Lasers have found a niche in medicine. More and more specialties are using them for routine procedures," says Dr. David Apfelberg, a medical staff member at Stanford University Hospital and director of Palo Alto Medical Foundation's laser center.

"A lot of the initial flurry has been because lasers are the new kids on the block," adds Dr. Robert Ginsburg, Stanford cardiologist. "Everybody has been using them, but they haven't yet done anything that cannot be done with other available technology."

But that doesn't mean Ginsburg and other physicians aren't interested. "We're pursuing lasers because the physics is so complex and so interesting that lurking in all the light wavelengths has got to be the right one that will do what everyone has envisioned lasers will do. With enough research, we'll find the answers."

A laser, the acronym for Light Amplification by Stimulated Emission of Radiation, involves either a gas, liquid or solid. The gas laser—the most commonly used in medicine at this point—is basically a glass tube with mirrors at each end. The tube emits coherent precisely directed, powerful beams of light consisting of one or more colors. In contrast, ordinary light spreads its energy in a halo shape and consists of a diffuse spectrum of colors. The type of gas or other substance in the laser tube determines the color emitted, which determines what what type of tissue will absorb the light as well as how penetrating that light will be. Depending on the type of laser, the beam either vaporizes the tissue with heat or explodes it with concentrated energy.

"Lasers have really turned the tide for many patients who would have gone blind in the past," says Dr. Michael Gaynon, a retina specialist in Stanford's ophthalmology department.

Ophthalmologists, he continues, are one group of physicians who are convinced of the superiority of lasers in treating a number of eye diseases.

Many diabetics develop eye diseases that cause either hemorrhage or detachment of the retina, the light-sensitive tissue lining the back of the eye. Even those diabetics who are not as severely affected often develop leakage from abnormal capillaries, sometimes suffering severe loss of vision. By using the argon laser, which emits a blue-green beam of light, ophthalmologists can cauterize the leaky vessels or weld the retina back onto the eye. At the very least, Gaynon says, this often allows them to stabilize their patients' vision; sometimes they can even improve it.

The elderly often lose reading vision because of little blood vessels that grow abnormally and bleed underneath the retina. The laser can cauterize these errant vessels and preserve patients' vision. And in patients who have retinal tears—about two out of every 100 among those who have had cataracts removed—the laser can weld the tear to keep the retina from detaching.

Ophthalmologists are using lasers more and more to treat glaucoma. This is a disease that can cause blindness, especially in people over 40 years old. The condition is caused by blockage of normal fluid seepage out of the eye, which prompts the pressure to increase until it damages the entire eye. By using lasers, physicians "irrigate" the eye by making minuscule holes in the iris. This irrigation restores the pressure back to the normal range. Until now, this could only be done surgically.

Another type of laser, called the neodymium YAG laser, emits an invisible infrared light. It creates microexplosions that literally blow up the tissue, Gaynon explains. Though still considered experimental by the Food and Drug Administration, the YAG laser is now used along with surgery on many of the 500,000 cataracts removed each year.

Gaynon is especially excited by his department's acquisition of a rare type of laser called the yellow Krypton laser. One of only about four in the world, he says, the yellow Krypton was purchased along with other lasers with a gift from the Televideo Corporation, Sunnyvale. Unlike the blue-green light produced by the argon laser, which is more easily absorbed by the central reading portion of the retina, the red and yellow light produced by the yellow Krypton laser is not, Gaynon explains. Thus, because of less chance of damaging healthy tissue, it may be preferable, he says, to use alone or with the argon laser when treating a section of the retina called the *macula lutea*, which is responsible for sharp focusing.

"The yellow Krypton laser will set us apart from other laser centers," Gaynon predicts.

It was two Stanford ophthalmologists who used one of the first crude lasers made with a red ruby crystal to treat a patient. The laser's development came just four years after Stanford physicist and Nobel laureate Dr. Arthur Schawlow and his brother-in-law, Berkeley physicist and Nobel laureate Dr. Charles Townes, conceived of the idea for a monochromatic and extremely intense beam of light. The ophthalmologists, Drs. Christian Zweng and Milton Flocks, treated their first patient in 1963, spot welding his retina back onto his eye.

"Everyone knew the laser was great, but nobody knew what to use it for," Flocks recalls. "We had seen it used for nonmedical purposes, and realized it would work for our needs as well."

Further exploration of lasers, and development of the argon laser was carried out at Stanford Research Institute by scientists including Zweng, Flocks, and Dr. Hunter Little.

Laser light beams are produced when an external energy source stimulates the atoms of the gas inside the glass tube. This causes the atoms to release photons, tiny packets of light. A mirror at one end of the tube reflects the photons, while a mirror at the other end is specially made to allow some of the light packets to escape in form of a beam. As the photons speed back and forth between the two mirrors they create a chain reaction that makes a powerful beam of focused, one-color light.

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Ophthalmologists may have been the first to use lasers as a treatment, but they weren't alone for long. "Two years ago you couldn't have found a podiatrist with a laser. Now they're all using them," Apfelberg says. "Every modern neurosurgeon is trained with lasers, whereas 10 years ago, no way. They're used in plastic surgery, otolaryngology (ear, nose and throat), gastroenterology and urology, just to name a few areas. Five years ago you could hardly find any obstetrics and gynecology doctgrs using lasers. Now it's very common."

The laser beam is so precise it doesn't destroy surrounding tissue, explains Dr. Olive Soriero, an assistant professor in the gynecologic oncology section of Stanford's gynecology and obstetrics department. It's less invasive than other techniques and it's often more comfortable for the patients.

"We use lasers for benign conditions, such as warts, on the female genital tract," she says. "We also use them to eliminate abnormal cell areas to prevent the development of invasive cancer. Lasers are much easier and more effective when we use them together with a colpiscope, which magnifies areas in the vagina, cervix and on the vulva that in the past were harder to detect."

Soriero says the carbon dioxide laser is preferable in ob/gyn because it vaporizes surface tissue. The heat cauterizes the surrounding tissue to prevent most bleeding, and other than a little ash left on the surface, nothing remains. "It really is like *Star Wars*," she marvels.

Lasers are just now beginning to be used in surgery on the fallopian tubes to reverse infertility, she adds. With other types of treatment, healing time can be as long as 10 uncomfortable weeks or even longer. With lasers, Soriero says, healing time is as short as four weeks, with less scarring and discomfort to boot.

Lasers first became popular among dermatologists when they found the light beams could bleach port wine stains, unsightly purplish blotches that can cover large areas of the face. Composed of tiny blood vessels, the stains absorb the laser light and are destroyed. "These stains were never before treatable," Apfelberg says. "Even if you can lighten a stain 60 percent, and the person can just use regular makeup to camouflage it, you've made their quality of life that much better."

Dermatologists use lasers to treat warts, some moles, scar tissue and to remove tattoos. They cut down on scarring and are useful in surgery because the cauterizing effect creates an almost bloodless field, says Dr. Robert Roth, who teaches dermatology at Stanford and has a private practice in Fremont. But he's not sure these advantages are "real" yet. "Some people have said that in dermatology lasers are an instrument in search of a disease. Nobody knows if they're better," he notes.

It's true that just about everything lasers do can be done with another treatment, Apfelberg agrees. "But there are some conditions for which there just is no other treatment except lasers." And even for those conditions with other treatments available, he adds, "lasers are usually a gentler way of doing it."

This is not to say lasers are perfect, however. Apfelberg cautions that lasers can be dangerous to the user: they can start fires and the high voltage machines can even electrocute. The beam can harm unprotected eyes if reflected into them, and if it unintentionally hits someone's teeth, for example, it'll chip them. And, if the beam comes in contact with a gas in the patient's body—in the trachea, for example—it could blow it up. While these potential hazards need to be considered, Apfelberg says, research shows that laser energy, unlike some other forms of radiation, does not affect future cell generations.

And then there's the issue of cost. Lasers are expensive, starting at about $45,000 for an argon laser. To make them cost effective, they've got to be used and shared among departments as much as possible, Roth says. Yet Soriero feels that high cost may be one way of limiting use of the machines to those who are best trained.

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"It's just as well that not everyone can afford to buy one because not everyone should be using lasers," she explains. "Lasers are not machines every doctor's office should have. They should be used by doctors who are specially trained and who use them a lot, as would doctors in a laser center. If it's a choice of a doctor having one and not knowing how to use it well, and not having one at all, the latter is preferable."

Yet for physicians who do have access to lasers, the intrigue to press on to discover their full potential is there. Cardiologist Ginsburg made medical history in 1983 when he used a laser to vaporize atherosclerotic plaque from the arteries in a patient's leg. Lasers have also been used in cardiology to create openings in babies born without the proper vascular connections and to eliminate abnormal tissue thickenings that interfere with performance. Although Ginsburg still uses lasers for these procedures, he's back in his laboratory.

"We took a backward approach," Ginsburg explains. "We went straight to the clinical end, investigated one small area of this interesting form of energy, focused in on it, learned a lot about it, and now we're going back into the lab. We're studying the effects of lasers and trying to find the proper wavelength to enhance the ability of the laser to do everything we want it to do."

Ultraviolet lasers seem to be the most promising for use in cardiology, Ginsburg feels, because they damage the tissue less than other types of lasers. They initiate a photochemical process that helps destroy tissue. "The ultraviolet laser would break up the tissue rather than boil it," he explains.

Ginsburg is also investigating how to get the laser energy to the plaque area in the least invasive, most efficient way. "Working out the mechanics of using lasers to get rid of atherosclerotic plaque is one thing," he says. "Understanding the biology of plaque to make lasers better than techniques currently available is another challenge altogether."

What would enhance the laser, he says, would be to find the right chemicals to inject in the atherosclerotic plaque to make it more sensitive to laser light than normal tissue. He knows it's possible, because this technique is being used in other areas, such as cancer treatment.

Twelve centers in the United States currently have the protocol to use a tunable dye laser and a chemical, hematoporphryn derivative (HPD), to kill cancerous cells. Apfelberg hopes his laser center at the Palo Alto Medical Foundation will be the next to receive the protocol. Physicians inject HPD, which is selectively absorbed by cancerous cells but not healthy cells. The laser light can then destroy the HPD-enhanced cancer cells; the healthy cells remain unharmed. Preliminary results show this method to be successful in combating bladder, lung, and skin cancer.

"It's not a miracle and it's not a cure-all," Apfelberg is quick to point out. However, he adds, used with other treatments such as radiation and chemotherapy, it could help overcome some common cancers.

"The answers are out there," Ginsburg says. "It's just a matter of getting enough support and working hard enough and long enough to find them. If we can find the answers, then yes, lasers will be better than many treatments we have available now."

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FOR IMMEDIATE RELEASE

CORPORATION EXECUTIVES TOLD OF HOSPITAL MODERNIZATION BENEFITS

STANFORD—

How to fit modern, high quality patient care into the physical and financial confines imposed by buildings that lag behind the times is the fundamental problem that plagues not only Stanford University Hospital, but most other U.S. hospitals, Peninsula corporation executives were told last week.

Technological advances have long outpaced the building's capacity to provide care efficiently, said Sheldon King, executive vice president and hospital director.

King spoke at two fund-raising breakfast meetings held Thursday and Friday at the Saga Corporation and attended by 25 executives of Peninsula corporations.

These and other deficiencies will be corrected when the two-phase $112 million hospital modernization project under way is completed in 1987, King said.

When intensive care units were being established in the early 1960s, he explained, Stanford hospital became an innovator.

But despite the architectural beauty of the buildings, one intensive care unit (ICU) had to be established along a straight corridor, instead of the more desirable circular pattern around a nursing station. As a result the ICU has to maintain a ratio of one nurse per patient--an inefficiency that adds to high costs.

Similar problems plague the outdated operating rooms. They are too small and two few to accomodate some of today's sophisticated surgery, and needs of the medical staff.

"It's often necessary for the hospital to schedule procedures late into the night," King said. "While this may appear to be an efficient use of operating rooms, it isn't desirable when the surgeons involved have been seeing patients all day."

Even storage space has been inadequate because of the mountains of disposables the hospital now uses. He said improvements made last year in materials management alone have resulted in $1 million savings.

The goal of the modernization, he explained, is not simply to correct code deficiencies for which the hospital was cited in the past, but to provide a modern environment to allow the hospital to carry out its missions of patient care, teaching and research, and to reduce operating costs.

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The modernization includes construction of new operating rooms, modern intensive care units, consolidation of many clinical laboratories now scattered throughout the hospital and medical center, new isolation and recovery rooms, anesthesia space, facilities for magnetic resonance imaging, and a surgicenter for outpatient procedures.

The project will also permit the closing of Hoover Pavilion which poses inconvenience to patients, and is uneconomical to run because of the distance from the hospital.

Other speakers included Dr. Robert J. Glaser, director of medical science for the Markey Charitable Trust, Menlo Park, and heart transplant pioneer Dr. Norman E. Shumway.

Glaser, who co-chairs the governing committee for the overall fund-raising agenda of the medical center, said that some of 20th century's most important medical advances originated in the hospital.

"Because of the hospital and the medical school many outstanding physicians have been attracted to this area which enjoys some of the best medical care in the world," he said.

"The hospital is both a community and a national asset and it must be supported to continue making its contributions to the community and to society."

The meetings were organized by Richard G. Rogers, president and chief operating officer of Syntex Corporation of Palo Alto. He heads the hospital modernization fundraising effort, assisted by Albert Eisenstat, vice president and general counsel of Apple Computer, Cupertino; Jack Black, Central California vice president for Pacific Bell in San Jose; and James W. Morrell, executive vice president, Saga Corp., Menlo Park-based national food supplier.

The committee plans to raise a minimum of $1 million toward the project's $15 million goal.

Hewlett-Packard Co. (HP) has offered a $250,000 challenge grant to area corporations to support the hospital's modernization project which will be funded by a combination of gifts, bonds and hospital reserves.

John Young, HP president and Stanford trustee, said his company would contribute $1 for every $4 raised from other corporations.

Morrell announced at the meeting that his company, Saga Corporation, has pledged $100,000 toward the hospital project over a five-year period. Similar pledges have also been made by PG&E, Varian Associates and the Lane Publishing Company. Total contributions from corporations todate equal almost $500,000, not including HP's matching contribution.

King pointed out that 68.8 percent of the patients served by Stanford University Hospital come from Santa Clara County, the remaining from other parts of California and the west. A total of 33.2 percent are Medicare patients and 11.8 percent are Medi-Cal.

"From among some 400 teaching hospitals in the country, national polls have consistently rated Stanford hospital among the 10 best," King said.

"This has occured because of the work of outstanding individuals like Shumway," he added.

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ADVANCE FOR RELEASE 6:30 P.M. EASTERN TIME WEDNESDAY, FEB. 6

SCIENTISTS REPORT NEW FINDING ABOUT BLOOD DEVELOPMENT IN BABIES

STANFORD—

Blood composition in infants born to diabetic mothers is slightly different from that of babies of non-diabetic mothers, Stanford University and Harvard University scientists reported in the Feb. 7 issue of *The New England Journal of Medicine*.

The finding poses no danger to infants of diabetic mothers, the scientists stressed. The difference is in one portion of the oxygen-carrying protein, hemoglobin, and both forms of hemoglobin are effective in carrying oxygen through the bloodstream, the scientists said.

But the finding is of interest, they added, because it could provide new information about how hemoglobin genes are controlled during fetal development.

The study was conducted by Dr. Susan Perrine, assistant professor of pediatrics at Stanford University School of Medicine and Drs. Michael Greene and Douglas Faller of Harvard Medical School.

A similar finding was independently discovered by Dr. Harry Bard of the St. Justine Hospital in Montreal, Canada, Perrine said.

Normally, a baby developing in the womb produces one form of hemoglobin, known as the fetal form, until the last month or so before it is born, when it switches to the adult form of hemoglobin.

The switch occurs when a gene coding for one portion of the hemoglobin molecule is turned off and another gene is turned on. The genes code for protein subunits of which hemoglobin is made.

Fetal hemoglobin contains a protein subunit called the gamma chain, which in adult hemoglobin is replaced by a protein subunit called the beta chain.

The scientists found that in nine out of ten developing babies of diabetic mothers, the switch from fetal hemoglobin to adult hemoglobin did not occur. These infants continued to produce the gamma protein subunit rather than beta, and thus were still producing predominantly fetal hemoglobin at the time they were born.

This suggests that some factor present in developing babies of diabetic mothers can alter the normal gamma-to-beta gene switch process, Perrine said.

The scientists do not yet know what that factor might be. One guess is insulin, which these infants produce in higher than normal amounts in response to the high blood sugar levels of their diabetic mothers.

Recent reports by other researchers have indicated that insulin can affect the activation of genes, Perrine said, and further studies are under way to learn if insulin is responsible for keeping the gamma gene switched on.

Perrine stressed that it is too early to predict clinical implications at this stage in the research.

But it is important to continue studying how the genes coding for hemoglobin's constituent protein chains may be controlled during development, Perrine said, because some prevalent types of blood diseases arise from abnormalities in these chains.

The research was supported by grants from the National Institutes of Health, the Cooley's Anemia Foundation, the Charles H. Hood Foundation, the Anna Fuller Fund, and the American Cancer Society.

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FOR IMMEDIATE RELEASE

STANFORD HEART TRANSPLANT RECIPIENTS RATE LIFE SATISFACTION HIGH

STANFORD—

Life satisfaction is high among patients who have received heart transplants at Stanford University Medical Center despite some post-transplant difficulties, a new patient survey shows.

In a questionnaire completed by 75 heart transplant recipients, just under 90 percent reported that their quality of life was good to excellent and 82 percent said they were highly satisfied with their current quality of life.

It is the first study to examine heart transplant patients' own assessments of their post-transplant quality of life, said Mary Lough, a Stanford cardiovascular nurse educator who conducted the survey while earning her masters degree at the University of California, San Francisco.

She was to present a summary of the study's findings Friday, Feb. 8 at a closed symposium on cardiac transplantation sponsored by Stanford Medical School's division of cardiology and department of cardiovascular surgery, and by Stanford University Hospital's department of nursing.

Lough was also scheduled to appear at a news conference Wednesday, Feb. 6 associated with the symposium.

Lough said that the study was done because heart transplant operations are no longer considered experimental procedures but are becoming increasingly accepted as an important form of therapy for some patients with end stage heart disease.

The one-year survival rate for Stanford patients is now 83 percent, with 45 to 50 percent of patients surviving five years, according to the transplant program's statistics.

"This means that survival is no longer the only issue for heart transplant recipients," Lough said. "Quality of life has become important."

Lough said a striking finding was that most patients in the survey were highly satisfied with their lives following the transplant operation even though many reported some medical problems and financial difficulties following the operation.

"We cannot yet draw any conclusions about this finding," she noted, "except that a person's subjective feeling about quality of life can be good despite objective problems."

For example, Lough noted that most patients reported side effects from the anti-rejection drugs they must take on a continuing basis. The side effects ranged from minor symptoms such as tremors and bruises to major complications such as lymphoma, a cancer of the lymphatic system.

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"Yet most patients considered the risk that they might contract major complications to be insignificant in determining current quality of life," Lough said.

The questionnaire focused on change experienced by the patients in the areas of family life, social life, work, vocational rehabilitation, emotional and physical well-being, and future outlook, Lough said.

The change experienced by the largest number of patients—32 percent—was in occupation, Lough said. If heart transplant recipients were employed they reported a higher quality of life and less financial strain than recipients who were homemakers, students, retired, or on medical disability. Employment, though, had no effect on life satisfaction, Lough said.

After transplantion most patients also reported a change for the better in health status, future outlook, relationships with children, feelings about self, social support and sense of achievement.

Change for the worse was reported by many patients in physical appearance and financial situation.

Yet more than 95 percent of those in the survey said that having gone through a heart transplant procedure and knowing what they now know, they would do it all over again, Lough reported.

Most patients reported little change in their family situations, including relationships with spouse and other relatives. For most, their family was the most important factor in contributing to a good quality of life, Lough added.

Lough mailed the questionnaires to 100 Stanford heart transplant patients. The group consisted of all surviving English-speaking recipients over the age of 18 who were at least six months post-transplant, she said.

Seventy-five answered the questionnaire, a very high response rate, Lough said.

Those responding ranged in age from 19 to 60, and in time since transplantation from seven months to 14 years, Lough said.

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FOR IMMEDIATE RELEASE

KORN APPOINTS TASK FORCES TO EXAMINE KEY MEDICAL PROGRAMS

STANFORD—

Three task forces to examine the scope and direction of new academic programs of the Stanford University School of Medicine have been appointed by Dean David Korn.

The groups will review and make recommendations to the dean about:

- expanded programs in organ transplantation medicine—specifically kidney and bone marrow.
- nuclear magnetic resonance (NMR), and
- primary care.

The task force recommendations will be important for the academic directions of the medical school, stressed Korn who assumed the deanship earlier this year. The new programs had been under development for some time.

Korn said he put the plans temporarily on hold, "because we now have the opportunity to determine whether they provide for optimum development of transplantation medicine, the future directions of NMR, and primary care at Stanford."

The task force on transplantation is co-chaired by Korn and Stanley Schrier, professor of medicine. David Prince, professor and department of neurology chairman, will head the committee on NMR, and Duncan Govan, professor of surgery, will chair the primary care task force.

A subcommittee of the latter group, headed by Halsted Holman, professor of medicine, will examine how the faculty medical practice should be organized to strengthen its regional role as a provider of medical services.

"The school has desired for some time to initiate clinical and research activity in kidney and bone marrow transplantation to complement the distinguished pioneer program in cardiac and heart-lung transplantation," Korn explained.

This, however, raises questions of academic emphasis, cost, space and staffing as well as impact on the various components of the medical center. The task force will examine:

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- whether the new programs should include liver and other more experimental forms of transplantation, perhaps under the concept of a comprehensive center.
- the laboratory space and numbers of surgeons, and other specialists required, and
- the nature and extent of research and teaching efforts devoted to immunobiology, immunotherapy and fields related to transplantation medicine.

"I have asked the group," Korn said, "to be realistic with respect to available resources and be perceptive at the same time of future trends and opportunities in this field."

The NMR committee, Korn said, will examine the academic plan, review the rationale and recommend an appropriate governance for the proposed NMR Center.

Magnetic resonance provides physicians with a new diagnostic tool from which they can obtain anatomic and metabolic information. The medical school has been planning a center designed to enhance the uses of NMR in imaging, spectroscopy, and fundamental chemical and molecular biology research.

A separate magnetic resonance imaging (MRI) facility for patient diagnosis is planned by the hospital. Meanwhile, an MRI facility under the auspices of the Faculty Practice Plan will open shortly in rented space in Mountain View, where outpatients will go to have images taken.

The primary care task force will examine the advantages to the medical school of embarking on a program which would increase the type of medical care services provided by general physicians as opposed to specialists.

Such services are now provided by the Stanford Medical Group in the Stanford University Clinic.

Some faculty and administrators believe that enlarging primary care services would improve Stanford's position as a provider of comprehensive health services now demanded of medical institutions by insurance plans as well as business organizations for their employees.

"The move might also help the school retain its patient base for teaching and the highly specialized care which Stanford is uniquely able to offer," Korn said.

The task force will consider "how decisions to expand medical care programs and develop novel patterns and sources of patient referral might impact the organization of the medical school, the full-time and part-time faculty as well as community physician participation and interaction."

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(Editors: Photos available on request.)

FOR IMMEDIATE RELEASE

NEW ART SHOW FEATURE PHYSICIAN'S AND HIS GRANDCHILDREN'S WORKS

STANFORD—

A new show at the Stanford University Faculty Club features paintings of Dr. Joseph Kriss, Stanford University Medical Center professor—and those of his grandchildren.

Kriss, who directs Stanford's nuclear medicine division, has been painting since his college days and is an accomplished painter with many one-man shows to his credit.

But his grandchildren, two- and three-year-old Aaron and Jesse, have yet to learn how to write their names.

Yet they tried out some of his paints and brushes during their last visit, Kriss said, and taught him a thing or two about painting and creativity.

The paintings in the show, which opened Feb. 2 and is scheduled to run the entire month, are free-form and abstract. In many, the brightly colored swishes across the paper are pleasing to the viewer. Grandfather's and grandsons' paintings are undiscernible.

Kriss said he gave the boys "no direction, made no suggestions and asked no questions. I made a conscious choice to give them free rein in the studio. They could choose any medium, any color or combination of colors, any brush, any size and type of surface to work on.

"Both boys painted with complete assurance, even with a sense of total mastery," Kriss observed. "Their arm and body movements were free. I failed many times before succeeding even to approximate the feeling that they had achieved so effortlessly."

From the experience Kriss said he has learned a freedom in execution and to focus on free expression and the fun of painting. Impressed as would be any grandfather with his grandchildren, Kriss nonetheless realizes his children are not necessarily future Picassos. Instead, he said, there is a more important lesson.

"This talent is not unique to my grandchildren," Kriss said. "But as children get older, they are encouraged to copy and to put labels on everything. This particular aspect of creativity is inhibited."

Kriss's other works are also abstract, but much more geometric and self-admittedly much more restrained than those in the Faculty Club show. Kriss is scheduled to have another show at Los Robles Art Gallery in Palo Alto in late February.

2-4-85 —30— sk3

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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR STOP SMOKING STUDY

STANFORD—

About 100 volunteers are being sought for a Stanford University Medical Center study of a new relapse prevention training program to help smokers stop smoking and stay quit.

"This program is designed for smokers who find themselves in a vicious quitting, relapsing cycle," said Robert Hill, who is directing the study under the auspices of the Stanford Center for Research in Disease Prevention. "In fact, smokers who have repeatedly tried to quit, but resumed smoking are expected to benefit the most," he added.

Researchers have found that of those smokers who initially quit, 70 to 90 percent will resume smoking before their first smoke free week, Hill said.

Participants will attend an intensive four week program designed to produce immediate cessation of smoking. They will then be divided into three groups to complete the study.

One group will use a system of self-administered positive rewards, such as personal praise and monetary incentives. Another will focus on negative imagery rehearsal which involves mentally recreating a negative relapse experience. The other will use a rapid smoking relapse prevention technique, said Hill.

Volunteers must be 18 or older, in general good health, and smoke at least a pack of cigarettes a day.

Meetings will be scheduled weeknights from 7:30 to 9, at Stanford, beginning Feb 21.

There will be a fee of $60 to cover costs of materials and fees of two psychologists who will be involved with the study. Pre-registration is required.

For information on how to participate, call Robert Hill, by Feb. 16, at (415) 497-2113.

2-4-85 —30— swn3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

TEACHING THROUGH PLAY LESSENS FEAR FOR HOSPITALIZED CHILDREN

Photos available on request if not included with story.

STANFORD—

Kristian Olson, almost 2, has a cabbage patch doll named Ollie to confide in whenever the doctor or nurse approaches with a needle. Ollie can understand because he, too, is a "patient" hooked up to an intravenous tube.

Kristian—who couldn't yet walk or talk eight months ago when he was first hospitalized—now tells Ollie what's happening to him in the course of his treatment for inflammatory bowel disease.

His mother and father have been constantly present. But besides their attention, Sam Olson believes much of his son's developmental progress is owed to Stanford University Hospital's recreation therapy program.

For parents the value of the playroom is basic, Olson said. "It gives the children a place to be. You can't just sit in your room. Kristian is active from morning till night.

"The atmosphere in hospital rooms is intense," he said. "The playroom is not so intense."

To achieve this, the recreation therapy staff, headed by supervisor Colette Case, concentrates above all on what hospitalized children can do, rather than what they cannot do. "We work with doctors, nurses and other professional staff as a team, to provide the most rounded-out and normal environment as possible for the child," Case explained. This helps parents too, as well as contributing to overall health care.

The hospital staff is often forced to look mostly at the pathology of a child's disease. While recreation therapists have some knowledge of anatomy, physiology, and medical terminology, "we look at the wellness of the child," Case said.

"We teach children about the hospital by having them play with miniature equipment, dolls and puppets—whatever they respond to, depending on their attention span and level of development," Case said. Using slides, photo albums and even a play hospital, "we direct the child's play to correct misconceptions."

Children play out what is to come, as well as what has already happened to them. In fact they play at being doctors as well as patients.

Alex Joshi, 4, placed a cast on a doll before undergoing his own leg surgery. When he recovers, he will remove the doll's cast, Case said. "It gives the child some control, and relieves anxiety and pain, to do to something what's being done to him." Also, she said, children rely on the sense of touch more than visually-oriented adults. Medical play allows them to touch and feel all the various gauzes, bandages, and other materials encountered in the hospital.

Olson said he is gratified that his son, who has had one operation and needs two more, is not afraid of people in the hospital and is doing well developmentally for his age. Kristian is hard to catch up with in the playroom, especially when clad in his Superman cape.

Olson, a carpenter, and his wife, a pediatrics nurse, choose to stay with Kristian all the time, taking 24-hour shifts. While many parents sleep in cots in the playroom, Olson said, "We sleep in a chair next to his bed—because he's so young and we're so protective."

Olson said he and his wife feel it is important to tell Kristian everything that is going to happen before it does. This has made a difference, he said, during the time that Kristian has been both at Stanford Hospital and Children's Hospital at Stanford.

Case adds, "If a bedridden child has IV tubing in both hands, parents often think there's nothing for them to do. Not true. The child can still listen to music or a story, or carry on a conversation.

"Basically, we try to provide psychological and social support to the child's care, while providing information to the staff about how the child is progressing developmentally," she said.

After five years in the Stanford Hospital program, Case is expecting her own first child in September.

"I plan to take a leave of absence and then come back," she said. "I couldn't be gone from this place for too long. You build up relationships with certain families who come back regularly over a period of time."

The program was started by Betty Lovelace, recreation therapist and a pioneer in the field, 16 years ago, Case said. Today Case, Lovelace, and two other certified recreation therapists handle the program, spreading themselves out over seven days and three evenings a week.

With many projects up their sleeves, the staff works continuously to improve their program. They are developing policies and rules to assure quality, which Case calls necessary to give the program a stable base.

In addition to chairing the patient teaching committee, which includes pediatric nurses, Case hopes someday to extend her special kind of insight to medical students—at least in the form of an orientation program.

"I'd love also to have a parents program, and a siblings program," she said. But those are long-term ideas.

Case visits area schools and teaches students about hospitals. "We go out about twice a month, often to special schools—for the orthopedically handicapped, for example—and if these children end up in the hospital, we know we've made a contact and it won't be as scary for them."

Case and her staff have visited various parents' groups as well, for families of children with special needs. This week being international Children and Hospitals Week, they join other staff in offering the community information vital to children's well-being.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos

FOR IMMEDIATE RELEASE

PHOBIAS: HOW BEHAVIORAL MEDICINE TACKLES ONE OF MAN'S DARKEST TRAITS

STANFORD—

Fears and anxieties grip us all at one time or another. Snakes, heights, storms, doctors, sickness, injury and death—these are the seven most commonly reported fears.

Most of us learn to overcome our fears. They make sense because they protect us from danger. Fear leads to fast action and to flight. Fear instills caution in exploring new situations.

But for about 15 million Americans, fears can interfere with functioning. About one million—the same number as schizophrenics—are so disabled they cannot work outside the home or manage common tasks.

"Their fears become phobias," explains psychiatrist W. Stewart Agras of Stanford University Medical School. "A common event such as driving over a bridge, a picture of an accident or the sound of a police siren can trigger a severe panic attack."

Yet today a better understanding of phobias is within medicine's grasp, Agras says. With correct treatment in specialized clinics, more than 85 percent of patients with simple phobias can be cured after just a few visits. In some cases medications are used to help block panic attacks.

Phobias are nothing new. Throughout the centuries, fears have fascinated philosophers and writers because they provide an insight in one of man's darkest, most mysterious qualities. Doctors, however, gradually realized that the more intense of these disturbances were disabilities worth studying.

The term phobia, derived from the Greek god Phobos, who provoked fear and panic in enemies, was introduced in the 19th century. "And since that time," Agras adds, "it has been a field day for classifiers, who placed long and ponderous labels on each aversion."

Thus, we have the familiar claustrophobia or fear of enclosed spaces, and acrophobia or fear of heights, and the less familiar mysophobia or fear of dirt.

A 1969 study conducted by Agras in Burlington, Vt., showed that the most common fears begin in childhood, some in infancy. Women are more fearful than men in every category except the fear of injury, he said, perhaps because as children they are taught that it's acceptable for them to seek help and protection, whereas boys are taught "not to be sissies."

Agras, however, found that nearly one of 12 persons suffers from a mild to a moderate phobia, that more than two per 1,000 persons of the population is affected by a severe, incapacitating phobia, and that the phenomenon runs in families.

By far the most severe form is *agoraphobia*, which causes victims to have panic attacks and cling to a safe place. The condition has been called the "housebound housewife" syndrome, even though as many men as women suffer from it.

Jane (not her real name) was incapable of leaving home shortly after her marriage. Just a few yards away from her house she would become terrified, imagining that she might faint, choke, or even die if she did not return home at once.

"Jane's phobia," Agras explains, "could be traced to her childhood. Her sister had died after a brief illness, and her mother, fearful of losing her second daughter, constantly hovered over the child. As she grew up, Jane found her mother's attention comforting, even though it meant an overrestricted life.

"When Jane was 11, her mother was hospitalized for thyroid surgery after complaining of a choking sensation. The incident made a deep impression on Jane, who became fearful of choking and stopped eating solid foods. Jane's close identification with her mother—to the point of anticipating the choking symptom—and her fear of separation from her brought on her phobia, which she was unable to overcome in later years."

Agoraphobia is not very common in the general population, Agras says, "but it's the most common phobia we encounter in the Stanford University Clinic. Half the cases we see are agoraphobia victims suffering from intense panic attacks coming out of the blue."

Agras uses heart monitors, which his patients wear, to document their panic attacks as they experience them at home or elsewhere.

A panic attack, as he describes it, can be very frightening and resemble physical illness. "The victim gets a feeling of marked apprehension, the heart rate jumps from 90 to 150 beats per minute, breathing is difficult, and there's some chest pain or ache in the stomach. The attack lasts about 20 minutes and leaves the person shaken."

A common scenario afterward, Agras explains, is that the victim visits a doctor, who finds nothing physically wrong. It may take many attacks before they are recognized as a panic syndrome and treatment is arranged.

Failure to diagnose the phobia is not without consequences, he notes. "The longer the phobia persists the more difficult it is to break. Over time some phobics resort to compulsive rituals to ward off panic. The measures not only prevent the patient from coming to grips with the feared object, but they can be as debilitating as the panic itself."

Another problem hampering early diagnosis is the phobics' tendency to hide their fears because "in our society they are considered a sign of cowardice," the psychiatrist says. Fortunately, he adds, articles in the popular press have helped create a better understanding of the problem.

For many years, psychiatrists attempted to treat phobias based on Sigmund Freud's theories. The idea was that through classical psychotherapies a patient could uncover the underlying conflict and the phobia would vanish. Unfortunately, this approach has not worked well and for years phobias have been frustrating disorders to untangle.

The new treatments for phobias do not bother with analysis or psychotherapy. Instead, they concentrate on changing behavior through gradual exposure to the feared situation or object. "The reward," Agras explains, "is the therapist's continuous feedback and praise and the patient's own feeling of accomplishment at conquering his phobia."

These so-called behavior modification techniques are based on psychologists' observations over the past 15 years that behavior is often controlled by events in the environment.

"Suppose we are dealing with someone who has fear of heights," Agras explains. "We find a building several stories high with an outside fire escape. We arrange a field trip for the patient and therapist. The therapist asks the patient to walk up as far as he can without undue fear. Next the therapist asks him to look over the edge, expose himself to the downward view, then walk up another few steps. As he makes progress the patient is praised. If not the therapist is silent.

"The patient's exposure to a gradually scarier situation allows his anxiety to dissipate. Eventually, he walks alone with self-confidence and a sense of independence."

Sometimes a therapist works with small groups of patients. In more serious phobias, Agras involves the patient's spouse in the therapy process. "We provide a manual which teaches the spouse to be a therapist," he explains.

Treatment may involve both exposure therapy and medications such as the antidepressant, Imipramine, which wards off panic attacks. In some instances, hypnosis and muscle relaxation are used.

Agras and Drs. Michael Telch, C. Barr Taylor, Walton Roth and Christopher Gallen of the Laboratory for the Study of Behavioral Medicine recently tested combined exposure and drug therapy in 37 severely disabled agoraphobics. The patients were divided into three groups. One group received Imipramine but no exposure therapy, another received the drug and therapy, and the third group was given a placebo plus exposure. At 26 weeks the combined treatment had obtained superior responses in patients than either of the other methods.

In the future, Agras predicts, more and better antipanic agents will be developed. "Meanwhile, the differences between various treatment approaches simply boil down to the way in which the patient is induced to go out and actively confront the phobic situation."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Jamie Kunimoto 497-6911

FOR IMMEDIATE RELEASE

LECTURES ON WOMEN'S HEALTH CARE ISSUES

STANFORD—

The Spring 1985 Women and Health Friday Noon Lecture Series at the Stanford University School of Medicine begins April 5.

The series, sponsored by the Division of Family, Community and Preventive Medicine, is open to the public, free of charge, and will be held in room M114, from 12:00 to 1:00 p.m.

The lectures will provide an interdisciplinary forum on women's health care addressing some of the topics which are not usually covered in medical education and research, said Marita Grudzen, the division's program manager.

"Lectures were chosen in response to requests from people who previously attended the Women and Health Series and were interested in topics such as minority women, health issues related to lifestyle, and other controversial issues," Grudzen said.

The lectures are:

- April 5, "Women and AIDS," Pat Norman, coordinator, Lesbian-Gay Health Services, City and County of San Francisco.
- April 12, "Southeast Asian Refugee Women," Dr. Evelyn Lee, assistant clinical professor of psychiatry, University of California at San Francisco (UCSF).
- April 19, "Different Strokes for Different Folks: Conception versus Contraception for Minority Adolescent Women," Elizabeth Ynzaga, practicing nurse midwife, Freestanding Birth Center.
- April 26, "Seventeen Years of Health Activism," Pat Cody, economist; one of the founders of DES Action.
- May 3, "Everyday Labor: Mothers, Work and Money," Julie Olsen Edwards, director, department of early childhood and family life education, Cabrillo Community College.
- May 10, "The Pre-menstrual Syndromes: What Are They and What Can Be Done About Them?" Dr. Carol Jessop, assistant professor of medicine, UCSF.
- May 17, "Lesbian Health Care Needs: The Forgotten Women," Dr. Carol Jessop, medical director, Lyon-Martin Clinic.
- May 24, "Double Stigma: Lesbians with Chronic Disease," Dr. Susan Browne, nurse consultant in private practice.
- May 31, "The Health of Hispanic Women — A Non-Hispanic Woman Physician's Perspective," Dr. Paula Braveman, assistant clinical professor of family and community medicine, UCSF.

A discussion group with case presentations will be held for enrolled students following each lecture, from 1:15 to 2:00 p.m., with the speaker, and Grudzen, Dr. Jeanne DeJoseph, assistant director of nursing at Stanford University Hospital, and Dr. Judith Martin of the Division of Family, Community and Preventive Medicine.

For further information call Grudzen at 497-7066.

March 26, 1984 —30— jtk1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

COLD SORE, HERPES SUFFERERS SOUGHT AS RESEARCH VOLUNTEERS

STANFORD—

Persons suffering from recurrent cold sores, fever blisters or herpes sores of the lips, mouth, face, arms, legs or body (not genitals) are being sought for a Stanford Medical Center study.

Dr. John W. Torseth of the Division of Infectious Diseases, said about 50 volunteers were being recruited for the project, which is aimed at determining why these maladies recur so that ultimately a vaccine might be developed to prevent them.

About 40 percent of the population has evidence of exposure to herpes, while about 8 percent of the population has recurring sores or symptoms, Torseth said.

The volunteers will be asked to visit the Medical Center either once or twice for the drawing of a small amount of blood and a brief physical examination, Torseth said.

For further information contact Torseth at (415) 497-5909 or 497-5715 between 8:30 a.m. and noon on weekdays.

The study is being sponsored by a grant from the National Institutes for Health.

March 25, 1985 —30— mg2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR IMMEDIATE RELEASE

BOOKLET PROVIDES FACTS ON STANFORD MEDICAL CENTER

STANFORD—

Did you know that more than 70 people a day come to Stanford University Hospital for emergency care?

Or did you know that the combined budget of the Stanford University Medical Center (School of Medicine, Clinic and Hospital) in fiscal 1984 was more than $357 million?

Were you aware that in 1960 the average length of hospitalization at Stanford was 13.3 days, but by 1984 it had dropped to 6.9 days?

If you are interested in life-saving cardiopulmonary resuscitation techniques, did you know that the hospital's Life Support Training Center could train you free of charge?

These items and other pertinent information appear in the 1985 edition of *Facts*, a 32-page booklet published by the Office of Communications of the Stanford University Medical Center.

The booklet describes the programs of the medical center and provides a glimpse of its history, accomplishments, highlights of patient services, educational programs and ongoing research.

The booklet also provides useful telephone numbers ranging from clinic registration information to patient relations services.

If you wish to obtain a copy, contact the Office of Communications at 415: 497-6911.

3-21-85 —30— LH6

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos

FOR IMMEDIATE RELEASE

DEAN APPOINTS SEARCH COMMITTEE TO FILL MEDICINE CHAIRMANSHIP

STANFORD—

Dr. Hugh O. McDevitt, professor of microbiology and medicine, will head the search committee for a new chairman of the Department of Medicine.

The 14-member committee, which will include one student yet to be named, was announced Tuesday, March 19, by Dr. David Korn, dean of the Stanford University School of Medicine.

The committee, Korn explained, is expected to conduct a comprehensive and far-reaching search to identify three or four outstanding candidates and recommend them to him for consideration.

The Department of Medicine with 13 academic divisions and extensive clinic and hospital-based practice, is one of the largest medical school departments. It is responsible for the teaching of a large proportion of medical courses, ranging from physiology to subspecialty clinical clerkships. It also provides postgraduate training for resident physicians and fellows in specialties and subspecialties of medicine both at Stanford University Hospital and its affiliated institutions.

The department is internationally recognized for its research in the areas of cancer, clinical pharmacology, immunogenetics, lipids and lipoproteins, metabolism, blood disorders, respiratory medicine, kidney physiology and cardiology.

The department has been without a permanent leader since Dr. Kenneth Melmon, its chairman since 1978, resigned last July. In the interim, the department has been headed by acting chairman Rex Jamison, professor of medicine and head of the Division of Nephrology.

In a letter, Korn urged committee members to seek opinions on potential candidates from colleagues both inside and outside Stanford.

"The important attributes to seek are a suberb record of scholarship, demonstrated commitment to the education and training of medical students, housestaff, fellows and faculty in all areas traditionally subsumed under medicine, excellence in clinical care and broad knowledge of changes in the direction and governance of clinical care."

Candidates for the post must demonstrate skills in providing administrative leadership for a large heterogeneous department, Korn stressed.

In addition to McDevitt, committee members include Ann Arvin, pediatrics; Thomas Fiene, medicine; Robert J. Glaser, medicine; Dora Goldstein, pharmacology; Dale Kaiser, biochemistry; Richard Kempson, pathology; Sheldon King, Stanford University Hospital; William Northway, diagnostic radiology; Harry Oberhelman, surgery; Lawrence Steinman, neurology; Donald Stanski, anesthesia; and Lubert Stryer, cell biology.

March 19, 1985 —30— SA6

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
FOR IMMEDIATE RELEASE

SERIOUS INFECTION MAY BE TREATABLE WITH NEW HUMAN MONOCLONAL ANTIBODY

STANFORD—

Scientists at Stanford University School of Medicine and the University of California, San Diego (UCSD) have developed a potential treatment for a bacterial illness that is a leading cause of death from infection in the hospital, estimated to kill 75,000 Americans annually.

The illness is a bacterial bloodstream infection called gram-negative sepsis. The potential new treatment consists of a protein that neutralizes endotoxin, a poisonous substance released by the bacteria that cause the infection.

The protein, a human monoclonal antibody, is highly effective in protecting animals from bacterial endotoxin-induced sickness and death.

It is thought to be the first human monoclonal antibody demonstrated to have therapeutic promise and biological effectiveness, the scientists said. It will be tested in humans sometime within the coming year, they added.

Production of the antibody was reported in the March issue of the scientific journal *Proceedings of the National Academy of Sciences*.

The scientists involved were Dr. Nelson Teng and Dr. Henry Kaplan of Stanford University School of Medicine, and Dr. Abraham Braude of the UCSD School of Medicine. Drs. Kaplan and Braude died before the research was published.

Other researchers include Joan Hebert, and Cynthia Moore of Stanford, and Herndon Douglas and Annette Wunderlich of UCSD.

Funding for the research was provided in part by the Robert L. Seidner Research Fund, the National Institutes of Health, and the National Cancer Institute.

A monoclonal antibody is a protein capable of targeting for destruction specific substances in the body. The human monoclonal antibody molecule developed by Teng and his colleagues is made in the laboratory by special cells called heteromyelomas. The monoclonal antibody specifically binds to and inactivates bacterial endotoxin molecules.

Endotoxin is a substance found on the surface of certain bacteria such as Escherichia coli, an organism that lives in the human digestive tract. In healthy people, these bacteria are harmless because they are kept under control by the body's immune system.

But disease, surgery or other conditions that weaken the immune system sometimes permit the bacteria to break through a patient's defenses. This can lead to bloodstream-borne infections called bacteremia and endotoxemia that sicken an estimated 200,000 people and kill 75,000 each year in the U.S. alone, said Teng, an assistant professor of gynecologic oncology.

2-2-2 Endotoxin produced by the invading bacteria causes fever, relaxation of the blood vessels, lowered blood pressure, and leakage of serum fluid into the lungs. Eventually this can cause severe or fatal shock and respiratory distress or circulatory collapse, Teng explained.

In the laboratory, the newly engineered monoclonal antibody was effective in preventing death in animals injected with a wide variety of unrelated gram-negative bacteria that produce endotoxin, the researchers reported. (Gram-negative refers to a class of microorganisms that do not absorb a special stain.)

Although different gram-negative bacteria may produce slightly differing forms of endotoxin, the new antibody is thought to be capable of neutralizing them all because it recognizes a portion of the molecule that is common to all.

Because of this versatility, the researchers hope that it will be of broad clinical use.

Although gram-negative bacteria can be killed by antibiotics, the drugs cannot fight the endotoxin poison released by the bacteria. This means that antibiotics are not effective against severe bacteremia and endotoxemia, Teng said. Antibiotics may even make matters worse because dying bacteria can release vast quantities of endotoxin into the patient's bloodstream, Teng said.

Several years ago, Braude, Dr. Elizabeth Ziegler and their UCSD colleagues reported that human blood serum containing antibodies against endotoxin could cut the death rate in half among hospitalized patients with gram-negative bacterial sepsis, Teng said.

But using blood products opens up the potential for transmitting diseases such as hepatitis, cytomegalovirus and AIDS, because the serum is obtained from vaccinated volunteers, he added.

The new antibody, on the other hand, could be produced in pure form and in the large amounts needed for clinical use without the inconveniences, expense, and risks of human vaccination and antiserum collection, Teng said.

Clinical tests of the antibody will probably begin in hospitalized patients who acquire gram-negative bacterial infections, Teng said.

Underlying diseases or conditions that may make patients more vulnerable to endotoxin include diabetes, cirrhosis, cancers such as leukemia and lymphoma, transplantation surgery, and infections of the urinary or gastrointestinal tract, Teng said. Premature infants with immature immune systems are also at risk, he added.

Teng said the researchers expect very few side effects from administration of the antibody.

In laboratory studies the new antibody was tested for its ability to neutralize endotoxin. In rabbits injected with endotoxin, the scientists observed that a specific type of skin damage caused by the substance was prevented in nearly all the animals that were also given injections of the monoclonal antibody.

In another lab study, the antibody was tested for its ability to protect mice infected with gram-negative bacteria. Two groups of mice were infected with gram-negative microorganisms. One group was given the monoclonal antibodies against endotoxin while the control group received mock antibody, Teng said.

Up to 150 times more bacteria were required to kill half the mice given the monoclonal antibody than were needed to kill half of the animals given the mock antibody, the researchers observed.

"This human monoclonal antibody has broad reactivity to all gram-negative bacteria tested without exception and has been demonstrated to provide potent protection of lethal bacteremia," they wrote.

"Such a monoclonal antibody should hold great promise in both analysis and treatment of gram-negative bacteremia and endotoxemia," the researchers concluded.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

(Editors: Photos of Fairley available if not included)

FAIRLEY APPOINTED ANESTHESIA HEAD

STANFORD—

H. Barrie Fairley, a British-born physician who has researched techniques to support hospitalized critically ill patients, has been appointed chairman of the Anesthesia Department at Stanford University Medical School effective April 1.

Fairley comes from the University of California at San Francisco, where he has served as vice chairman of anesthesia since 1972. His Stanford appointment as tenured professor was approved by the Board of Trustees on Tuesday (March 12). His simultaneous appointment as chairman was announced by Dean David Korn.

The Department of Anesthesia is comprised of 39 faculty physicians who provide anesthesia services at Stanford University Hospital, Palo Alto Veterans Administration Hospital and Santa Clara Valley Medical Center. Fairley said he will seek to continue the department's substantial commitment to clinical anesthesia service while expanding the existing research effort, which is underway at all three facilities.

Fairley replaces C. Philip Larson, who resigned as chairman effective Dec. 1, 1982 but remained on the faculty to continue his clinical, teaching and research roles. John C. Bunker, professor of anesthesiology, served as acting chairman until he left for a sabbatical leave Oct. 1. The most recent acting chairman was Ellis N. Cohen, professor of anesthesia emeritus.

A 1949 graduate of the Westminster medical School of the University of London, Fairley came to UCSF in 1969 after 14 years at the University of Toronto.

In a summary of his work prepared by university staff for the trustees, Fairley was praised for "important scientific contributions to the fields of Anesthesia, Respiratory Physiology and Care of the Critically Ill patient. Most influential has been the impact of his scientific investigations in the development of the interdisciplinary intensive care unit with the ability to manage patients in acute cardiorespiratory failure."

Fairley has already begun part-time duties at the medical school pending the start of his full-time appointment as chairman.

March 18, 1985 —30— mg1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

PUBLIC WARNED OF BOGUS RESEARCH CALLER

STANFORD—

A telephone caller misrepresenting himself as a Stanford University researcher has recently been asking Bay Area women intimate questions under the guise of a scientific survey, security personnel have reported.

Larry Jordan, assistant director of security at Stanford Medical Center, said three Peninsula residents have complained to various medical center offices that a telephone caller posed sexually oriented questions to them. The caller, Jordan said, said he was conducting research under the auspices of the medical center and Planned Parenthood.

Both Stanford and Planned Parenthood have disavowed any involvement with the study.

Norah Holmgren, a spokeswoman for the Planned Parenthood Federation of America, Inc., Western Region in San Francisco, said she has told local affiliates of her national oganization to advise women to be aware that misrepresentation of research has been reported.

Jordan said the Palo Alto Police have been notified, and "people who receive these phone calls should respond just like they would for any other obscene phone call—hang up and report the incident to police."

Stanford issued a similar warning in June 1981, after several women phoned the university to verify the authenticity of a caller who misrepresented a Stanford and Planned Parenthood connection.

Kathy Callahan, administrative coordinator for the medical center's Human Subjects Committee, said no study initiated by a telephone survey of sexual habits is currently under way. All Medical Center research involving the public must be reviewed and approved by the Human Subjects Committee, she added.

Callahan said any approved research involving telephone surveys requires that the interviewer describe the content of the study in detail, and then inform the respondent who specifically is conducting it. Participants must be reassured that they are under no obligation to participate.

Persons who receive calls from individuals persons who state they are Stanford researchers may call the Human Subjects Committee (415) 497-5244, to verify the authenticity, Callahan said.

Currently, about 2,000 projects of various complexity have been approved by the human subjects committee. Only a handful involve telephone surveys, she said. No study involves only explicit questions about respondents' sexual behavior. Such questions are only posed as followups to persons already enrolled in an ongoing study, she added.

March 14, 1985 —30— mg2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

WEIGHT CONTROL COURSE SCHEDULED

STANFORD—

An eight-week course on weight control is being offered in six sessions this year and early 1986 by the Stanford University Hospital Department of Dietetics.

"An Enlightening Experience," led by registered dietitians, includes a personalized weight loss plan, low calorie cooking demonstrations and recipes, menu planning and tips on dining out wisely, said dietitian Kristine Birge. Guest speakers in the program will discuss stress reduction, behavior modification techniques and exercise, she said.

Participants may register for either afternoon or evening sessions to be held in the hospital's north cafeteria dining room. The first evening class will meet 7:30 to 10 p.m., Tuesdays, April 23 through June 11. The first afternoon class will meet 1 to 3:30 p.m., Thursdays, April 25 through June 13.

Other afternoon starting dates include Sept. 26 and Jan. 16, 1986. Additional Tuesday evening sessions start Sept. 24 and Jan. 14, 1986.

Enrollment for each class is limited to 20 participants. The fee is $325 with a $50 refund if the individual's weight goal is achieved. Registration deadline for the first session is April 19.

For further information, call (415) 497-5432.

March 12, 1985 —30— mg1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD WILL CONTINUE ITS OWN AIDS SCREENING ALONG WITH NEW TEST

STANFORD—

Stanford University Blood Center plans to continue using its own screening test for AIDS even after a newly developed and highly publicized test becomes available here in about a month, an official said Tuesday (March 5).

"We're very interested in this new test, and we are anxious to begin testing it to determine if it is effective. But we are not going to throw out the successful and highly accurate test we have been using for 19 months until we get some hard evidence that the new screening is at least as accurate as what we have now," said Edgar Engleman, associate professor of pathology and medicine and medical director of the blood center.

On July 1, 1983, Stanford reportedly became the first blood bank in the nation to begin screening blood for the deadly AIDS, short for acquired immune deficiency syndrome. Since then, no cases of AIDS have been reported in Stanford Blood Center recipients who received the screened blood, although two recipients who had received blood from several centers, including Stanford before the procedure was begun here, subsequently contracted AIDS and one has died, Engleman said.

"Stanford was able to pioneer screening because as a research center the specialized equipment and expertise is available to conduct the test," Engleman said.

Using monoclonal antibodies—specially manufactured proteins—and a sophisticated $200,000 research tool called a fluorescence activated cell sorter (FACS), the blood center is able to detect an abonormal ratio in the white blood cell composition which is common to AIDS patients. Cost of running the test, he said is about $6 per donor.

A drawback to the Stanford test, said Engleman, is that the abnormal ratio of "suppressor T-cells" to "helper T-cells" detected in the test is also present in some persons who do not have AIDS. Therefore, healthy donations from about 1.5 percent of the Stanford Blood Center's 18,000 annual donors must be eliminated because their test results are positive.

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Other Bay Area blood centers announced this week that they would begin using another test, called HTLV-III, which measures the presence of antibodies to what is believed to be the AIDS virus.

Engleman said that this test is more specific, because it tests for evidence that the patient actually has been exposed to AIDS, rather than for the highly accurate but indirect evidence of measuring T-cell ratios.

Eliminating some healthy blood is an unfortunate but necessary result of the screening process, Engleman said.

"Obviously when you deal with a disease as deadly as AIDS, it is essential to err on the side of caution," Engleman said.

Some healthy blood might also be eliminated using the HTLV-III test, which would screen out persons whose antibodies have successfully fought off exposure to AIDS, Engleman said.

"Also, we want to make absolutely certain that persons who actually are AIDS carriers will not slip through the screening process, and we won't know that with a reasonable degree of certainty until we test this new screening process for awhile," he said.

Testing of the HTLV-III screening will begin at Stanford after Abbott Laboratories Inc., of North Chicago, Ill., makes the serum available within a month, Engleman explained.

In a related matter, Rhoda Burns, Stanford's blood donor coordinator, said donations have dropped about 4 percent in the last several months to an average of 1,550 units.

"People don't seem to realize that all collection of blood is done with disposable equipment and that there is absolutely no risk of contracting AIDS or any other infection from donating blood," said Burns.

"Healthy blood donors will result in healthy blood recipients," she added.

Burns said that members of high risk populations, including gays, have been "very responsible locally in deferring themselves from being blood donors at this time." The decrease in donors, she said, is significantly greater than what would be accounted for by the voluntary withdrawal of potentially high risk donors.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

ADVANCE FOR RELEASE 2:30 P.M. (PST) THURSDAY, MARCH 7

EDITORS: Paul Williams and perhaps other researchers involved in the study will be available at 10:30 a.m. Thursday, March 7 for a news conference to discuss the findings. Call the News Bureau at (415) 497-6911 for the location of the news conference.

COFFEE CONSUMPTION AND CHOLESTEROL LINKED IN NEW STANFORD STUDY

STANFORD—

Men who drink three cups of coffee or more per day have higher cholesterol levels than those who drink two cups or fewer daily, according to a new study by Stanford University Medical School researchers.

Heavy coffee drinkers also have higher levels of apolipoprotein B, a cholesterol-associated protein that is linked to heart disease, the study found.

It is the first study to show an association between coffee consumption and apolipoprotein levels, said Paul Williams, director of data management for the Stanford Center for Research in Disease Prevention.

And it is the first U.S. study to show a significant link between cholesterol levels and coffee drinking, although previous European studies have suggested such a relationship, Williams said.

The study was scheduled to be published in the March 8 issue of the *Journal of the American Medical Association* by Williams and his colleagues Dr. Peter Wood, research professor of medicine; Karen Vranizan, research assistant; Susan Garay, project coordinator; Dr. Barr Taylor, associate professor of psychiatry; and Dr. John Albers of the University of Washington

Williams stressed that the study does not prove that drinking coffee causes cholesterol levels to rise. But when other factors that could contribute to high cholesterol levels were taken into account—such as diet, age, obesity, stress, and cigarette smoking—the correlation was even stronger, he said, suggesting that coffee drinking may increase cholesterol levels.

Coffee intake was most strongly linked to elevated levels of apolipoprotein B, Williams said, but it was also associated with higher levels of low-density lipoprotein (LDL), a type of cholesterol, and total plasma cholesterol, all of which are considered important risk factors for cardiovascular disease.

Coffee consumption above approximately three cups per day seems to mark a risk threshold, Williams said. The group that consumed more than three cups had clinically high levels of all three of these risk substances, Williams said.

The results contradict previous U.S. studies that have found no significant link between coffee consumption and cholesterol, Williams said.

But there are several features of the Stanford study that could account for this difference, Williams said.

In previous studies, researchers looked at total plasma cholesterol levels, he said, while in the Stanford study the researchers looked at blood levels of specific cholesterol components, such as LDL, as well as examining total plasma cholesterol levels.

Also, the men in the Stanford study kept careful diet records over a period of three days, unlike previous study groups. In addition, the Stanford study took into account other factors that could have raised cholesterol, such as age, cigarette smoking, obesity, stress, and diet.

The 77 male subjects in the study kept track of coffee consumption and other dietary intake over a period of three days. They ranged in age from 30 to 55 years; all were sedentary and most were Stanford University employees.

Eighty-nine percent of the group drank coffee, and 91 percent of the coffee consumed was caffeinated and brewed from regular grounds. The average number of cups consumed daily was 2.6, and the maximum daily intake was 7.5 cups.

Apolipoprotein B, which was most strongly correlated with coffee intake, is considered one of the more important predictors of heart disease, Williams said. It is a protein that is part of the LDL particle. It is thought to help LDL dissolve in blood and it may play a role in the uptake of LDL into cells.

Levels of LDL, the type of cholesterol most strongly linked to heart disease, were also associated with coffee intake and finally, although less striking, there was also a link between overall plasma cholesterol—which includes LDL and other components—with amount of coffee consumed.

Williams said the European studies may have found a coffee-cholesterol connection earlier because the populations they studied may have drunk more and stronger coffee than do most Americans.

Williams noted that since the current study was limited to sedentary middle-aged men, further studies are needed to determine whether similar associations will be found in other segments of the population.

In addition, he stressed that more research is needed to prove conclusively whether or not coffee itself is a cause of the high cholesterol levels. Such a study is in the planning stages, he noted.

Williams said that if coffee turns out to be the culprit, a next step will be to pinpoint what substance in coffee is responsible. There are lots of things in coffee, he pointed out, not just the most frequently cited caffeine.

The research was supported by funds from the National Heart, Lung and Blood Institute.

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END ADVANCE FOR RELEASE 2:30 P.M. (PST) THURSDAY, MARCH 7

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415)497-6911

FOR IMMEDIATE RELEASE

STANFORD RESEARCHERS TEACH KIDS TO ARGUE FOR GOOD HEALTH

STANFORD—

The threat of bad breath may be a better argument than the threat of cancer in turning off teenagers to smoking, say Stanford researchers conducting a study in how to help kids develop good health habits.

"The idea is to catch youth before they develop bad living habits," said Nathan Maccoby of the Stanford Center for Research in Disease Prevention. "If they don't develop these bad habits in the first place they've got nothing to break when they grow older."

"If you tell a kid not to smoke because he may get cancer you won't have much of an effect," said Dr. Michael Telch, a Stanford behavioral scientist who together with Dr. Joel Killen is directing the study. "But if you tell him it's an expensive habit and smoking will cause bad breath and turn off girls, that'll mean something." Especially, Telch added, when the information is combined with skills for resisting pressures from peers and advertising.

"What we want to achieve is a 'psychological innoculation'," Maccoby said. "We want to arm youngsters in such a way that they can resist the pressures of smoking, for example."

The study, based on decades of research by Maccoby and colleagues, is aimed at teaching high schoolers, beginning in their sophomore year, how to resist the use and abuse of substances such as tobacco, drugs and alcohol. It's also intended to teach kids to adopt good eating habits, exercise programs and stress management techniques.

The teaching takes many forms such as information and role play. It also shows kids how to resist pressures from peers and advertising by being able to come up with counter arguments, a technique developed and proven effective by Maccoby and other scientists throughout the country.

"Knowledge alone is not enough to change behavior," Telch explained. "Kids need the behavioral skills in order to change. They need to know they can exert control of their behavior.

"Tenth graders are a good group to teach behavioral skills because they're at an age when they're starting to pull away from their parents a bit and take some control of their lifestyles," he said.

The study, funded by a grant from the National Heart, Lung and Blood Institute, involves four high schools in the South Bay area. It includes a 23-session program incorporated in the students' daily curriculums. The sessions are led by specially trained Stanford graduates who, according to Telch, are "bright, young, attractive—good role models for the kids."

The study is the latest in a series expanding upon Maccoby's concept of counter arguments, which he started researching during World War II. After many experiments, he found that if people knew both sides of an issue in deciding which side they believed, and had the opportunity to argue against opponents of their beliefs, they were much less likely to be persuaded to the other side.

Maccoby, Telch and colleagues established this fact in a study in which seventh graders were trained to resist smoking through counter arguments. Seventh grade kids were chosen, Maccoby said, because it's during that school year that the most experimentation with smoking takes place. Specially trained high school students led seven sessions in one seventh grade class throughout the year, while another class received no instruction as a source of comparison.

The results, published in the *Journal of Behavioral Medicine* in 1982, showed that at the completion of the nine-month-long school year 5 percent more kids who did not receive training smoked than those who did have the training. And a year later, the percentage of kids who did not undergo the training increased from about 10 percent to 18 percent, while the percentage of those who underwent the training barely increased from about 5 percent to 7 percent.

"Being trained in counter arguments can be useful in situations throughout one's life," Maccoby said. "People say you need will power. Well, we're teaching it."

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FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

FOR IMMEDIATE RELEASE

APPLE'S MACINTOSH COMPUTER HELPS APHASIC VICTIMS COMMUNICATE

STANFORD—

Aphasia victims may some day be able to communicate with others using a special pictorial language, Apple's Macintosh computer and its mouse, according to Stanford University scientists.

"The Apple Macintosh is best suited for our needs because it has high resolution graphics and is easily programmable," said neurologist Dr. Michael Weinrich. "It's also relatively affordable and portable. Together with the mouse, it's the perfect system."

In what may be the computer's first medical application, the Macintosh is already helping 45-year-old "JN", who hasn't been able to "talk" to anybody since a motorcycle accident nine years ago damaged the left side of his brain, wiping out his ability to read or speak.

But that may soon change. For several months now, JN has been learning to use the Visual Communications System for Aphasics. The system consists of "stacks" of symbols on a computer screen that JN can "flip" through by using the mouse, a hand-manipulated device that eliminates the need for a keyboard.

JN travels from his South San Jose home to the Rehabilitation Research and Development Center at the Palo Alto Veterans Administration Medical Center twice a week for training sessions on the system. JN is one of two patients currently working with Weinrich, linguist Richard Steele, graduate hearing and speech pathology student Judy Illes and others to regain the ability to express the simplist needs, "I want a drink," to more complex questions, "Do you have a can opener to give to me?" .

"He can't wait to come up here each day," said JN's father, who lives with and helps care for the stockily built man, balding and greying at the temples. "He knows he'll soon be able to talk with people that come to the house. That's what keeps him going."

JN is aphasic, one of thousands each year who suffer brain damage most commonly due to stroke or trauma, Weinrich explained. Some victims lose the ability to express their own thoughts. Other lose the ability to understand what is being said to them as well.

Corresponding with the loss of communication, Weinrich continued, is some paralysis of the right side of the body, which often leaves victims with only one fully functioning hand.

Past attempts to teach aphasics to communicate have often failed, Weinrich said, because they have been structured on ordinary verbal language, the comprehension of which takes place in the left side of the brain, which has been damaged. However they can recognize pictures and symbols, the comprehension of which takes place in the right side of the brain. Yet attempts to teach aphasics the language of symbols, typically drawn on flashcards, have met limited success because the paralysis makes the flashcards awkward to handle.

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"It was too difficult for patients to flip through a pile of flashcards with only one hand," Weinrich noted. "And the langugage was limited in order to keep the number of flashcards more manageable."

Enter high technology. By programming all the symbols into a computer, the scientists eliminated the need for the flashcards. And the mouse enables patients to operate the system in spite of their limited coordination.

Sure enough, JN's right hand lies motionless in his lap while with his left hand, he operates the mouse to move the cursor on the screen to each stack of symbols, organized into categories such as nouns, verbs and punctuation. Each push of the button on the mouse brings up the next symbol in the stack faster, it seems, than a blink of an eye. Once the desired symbols appear, JN moves the mouse to freeze their presence, thus forming sentences.

In order to allow JN to communicate with people who don't know the symbol language, linguist Steele incorporated programming into the system that prints the English translations below the pictorial sentences.

Patients like the system, Weinrich said, because of its speed and simplicity. Its flexibility, he added, encourages them to express more complex thoughts rather than just sticking to the bare minimum.

The scientists, who have been working on the system since last July and have been training patients on it since February, are continually expanding its vocabulary and capabilities. What they'd like to do, they said, is to program into the system pictures of actual places—the rooms in a house, for example. By using the mouse, "the patient could pick a room such as the kitchen to appear on the computer screen," Weinrich explained. "In the kitchen would be all the usual appliances. The patient could hone in on the refrigerator, let's say, open the door, and pick out the product—perhaps a jar of mayonnaise—that he wanted."

The scientists also see the possibility of programming a scratch pad into the system that could appear on the screen so users could develop their own symbols if needed. They even envision a hook-up to a voice synthesizer, which could allow aphasics to "talk" on the phone.

"What we hope to create," Weinrich said, "is a computer program and instruction manual for others to use to teach aphasics how to communicate."

What JN hopes for, his father said, is to go beyond the grunts and gestures he's developed to get his needs across to his dad, just about the only person who can understand him. He's anxiously awaiting the day he'll be able to "talk" to someone "who has come by the house to visit."

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

FOR IMMEDIATE RELEASE

LANE MEDICAL LIBRARY 'ALARMINGLY INADEQUATE,' REPORT SAYS

STANFORD—

Stanford School of Medicine's Lane Library, a central place in the training of physicians and one of the nation's major repositories of medical information, is "alarmingly inadequate," says a report of the library committee.

The library will have to be replaced in the near future to maintain excellence and fulfill its mission, the committee said.

"The lack of space interferes seriously with our ability to provide up-to-date services to students, faculty, medical staff, the university and our affiliated institutions," agreed Dr. David Korn, dean of the School of Medicine. "Providing sufficient growth space for the library is critical to our long range agenda."

Lane Library's collections rank tenth in size among the nation's medical school libraries, said Dr. William Northway, professor of radiology and committee chairman, yet Lane, with the exception of one East coast medical school, has the smallest facility in net square feet, the smallest staff of librarians and the least space per user of books among the top 10.

The paucity of space, insufficient number of librarians, and lack of room for future collection expansion were also noted by the Liaison Committee on Medical Education (LCME), an accreditation team which reviewed the medical school last year. The school received full accreditation, but it has been required to present to the LCME a plan for solving the problems of overcrowding in the library and to develop an approach for the application of automation technology.

"The staff problem is not simply budgetary," Northway said. "There is no space to put the staff and new service programs."

Northway reviewed the library's status last week before the school's academic leaders who make up the executive committee. "Although the dean will allocate 3,000 to 5,000 square feet of space to temporarily ease the situation, the library will run out of room to house its collection within five years," he said.

Part of the library's problem is that it is "land-locked" and cannot expand, Northway explained. The committee examined the feasibility of filling a courtyard within the library on two levels to add 12,000 square feet. That solution, however, is insufficient to meet future needs and costs would be greater than new construction.

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In spite of the difficulties, Lane's staff was praised highly by the accreditation team for the quality of services it provides. The report added the library's collections are still excellent. But library funding is only adequate for maintaining the current level of staffing and collection development.

A review document prepared by Librarian Peter Stangl and his staff states that for several years library funding has not provided for growth in services. With the addition of new academic programs, the library will not be able to provide services at current levels.

"The development of a new Center for Molecular and Genetic Medicine and other programs now planned by the school should be expected to saturate the library's resources," Stangl told the school's executives. "There's a flash point we will be soon approaching."

As the volume of published information continues to grow, Stangl said, the pressure on research libraries to provide progressively more sophisticated information services has increased. Both the publishing industry and the research library community have been looking to computer technology to help relieve pressures of workload and costs.

As a result, Lane Library is moving ahead with a procurement decision for an automated library system. "Basically, this involves a computer-based integrated system that combines on-line circulation, cataloguing, acquisitions and MEDLINE," said David Mendelow, associate dean for administration. The library has been using MEDLINE, a computerized data base of journal articles produced by the National Library of Medicine that permits faculty and staff to do literature searches. The new integrated system will provide local access to such data base."

This first step, Mendelow said, means simply that terminals will replace card catalogs, and faculty, medical staff, researchers and students will gain access to the library from their personal computers on their desks.

Lane Medical Library, established in 1912 by the directors of Cooper Medical College, forerunner of the Stanford medical school, was originally in San Francisco. The library was relocated to the Stanford campus in 1959 when the medical school was moved to the new Stanford University Medical Center constructed by architect Edward Durrell Stone.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
FOR IMMEDIATE RELEASE

HEALTHY VOLUNTEERS SOUGHT FOR KIDNEY STUDY

STANFORD—

Healthy, non-smoking men aged 18 to 40 who are taking no medications are being sought for a study by the Division of Clinical Pharmacology at Stanford University Medical Center.

The study is an attempt to determine how a common antifungal drug, ketocomazole, is removed from the body by the liver. Principal investigator is Dr. Terrence Blaschke, associate professor of medicine and pharmacology.

Six volunteers will make five visits of 48 hours each to a research unit at the medical center, where they will receive oral doses of ketocomazole. Blood tests, saliva and urine samples will be taken at each visit.

Prior to the first overnight visit, a complete physical examination, including laboratory tests, will be conducted and results will be shared with the participants, said Marnie Brown, R.N., study coordinator.

Volunteers will receive $250 compensation.

For further information, contact Brown at (415) 497-5266.

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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
FOR IMMEDIATE RELEASE

NURSING GROUP OFFERS PUBLIC LECTURES

STANFORD—

"Spanning the Ages, a three-part series of discussions focusing on health care needs required in childhood, adulthood and old age has been scheduled free for the public by the Stanford University Hospital (SUH) Friends of Nursing.

The first lecture, Wednesday, May 1, is entitled "Helping Your Child Deal with Life's Traumas." The program is a panel discussion featuring three registered nurses with advanced training. They are Janet Mohs, who works in the pediatric intensive care area; Pat Hartzer, a nursing education coordinator at Children's Hospital at Stanford; and Adrianne Burton, head of Child Life Services at UC San Francisco.

On May 8, Susan Zahl, nursing education coordinator at SUH, will discuss "Consumer Rights and Responsibilities in Today's Health Care System." On May 15, Karen Girton, a clinical nurse specialist in gerentology, will discuss the senior citizen years in her talk, "An Active Age."

All of the talks are scheduled from 7 to 9 p.m. in the Social Hall of the Community Congregational Church, 1985 Louis Road, Palo Alto. Friends of Nursing was founded in 1982 under the auspices of SUH to promote excellence in the visibility of nursing as a vital component of health care, and to support professional nursing practice at the medical center.

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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

MEDICAL STUDENTS SPONSOR LECTURE BY POET PHYSICIAN

STANFORD—

About 35 Stanford University medical students have decided to bolster their ties with the humanities and have enlisted the aid of a physician/scholar recognized as a poet.

John Stone, professor of medicine and associate dean at Atlanta's Emory University is scheduled to discuss "The Patient as Art: When Physicians are Writers" at 8 p.m., Monday, May 6 in Fairchild Auditorium at Stanford Medical School.

The lecture, free and open to the public, is sponsored by the Stanford Medical Student Association and the members of the Humanities Study Group at the medical school, said Sylvia Cerel, a first-year medical student who has helped arrange the talk.

She said the humanities group, with about 35 members, is an effort to help students maintain intellectual, cultural and even emotional balance in their lives at a time in their studies when it is easy to become intellectually limited.

"Dr. Stone is an ideal speaker and wonderful role model because he is a full-time academic physician and is still very much a poet. I first knew him when I was a student at Emory, and it is amazing to see how fully integrated the physician and poet are," said Cerel.

"When he is talking to patients and when he is talking to poetry students, he uses the same voice. As a cardiologist he is acutely aware of rhythms, both with heartbeats and poetry," said Cerel.

Many of Stone's poems and prose concern medical topics and his reflections on life as seen from the perspective of a physician, Cerel said.

"You will not, I suggest, be able to properly manage the patient until you find the art within him," Stone wrote in a 1974 medical society article.

4-30-85 —30— mg5

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News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911

FOR IMMEDIATE RELEASE

TRUSTEES APPROVE $1 MILLION HUMAN ANATOMY RENOVATION PROJECT

STANFORD—

A $1 million renovation project to improve facilities used for teaching gross human anatomy to medical students has been approved by the Stanford University Board of Trustees.

The project will provide seminar room space, improved cadaver storage, dissection rooms, laboratories and other program and code improvements, according to David Mendelow, associate dean for administration of the Stanford University School of Medicine.

Gross human anatomy, which teaches medical students basic human structure, is fundamental for physicians in every branch of medicine. The subject is taught in the Anatomy Building situated between Campus Drive and the Stanford Museum.

The space of 13,695 net square feet, presently occupied by the Human Anatomy Division, has been judged inadequate to support the academic program by both the Dean's Office and accrediting organizations, Mendelow said. And it must be in compliance with current safety code requirements. The building was constructed in 1892.

"A new facility is expected to be built in the next five or eight years to house human anatomy and other activities," Mendelow said. "While such a project is pending, some renovation of the existing space is necessary to support the teaching program and to bring the building in code compliance."

The renovation will be funded by the medical school's capital budget, Mendelow said, and the space should be available for the Autumn quarter.

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ANATONY-SA6

4-29-85

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911
FOR IMMEDIATE RELEASE

BUDGET CUTS THREATEN U.S. COMPETITIVE POSITION IN FIELDS DEPENDENT ON SOPHISTICATED INSTRUMENTATION, PROFESSORS SAY

STANFORD—

Nine Stanford University professors, including three Nobel laureates, said Monday, April 29, that Reagan administration budget cuts will place the United States in a non-competitive position in fields dependent on sophisticated new instrumentation.

In letters to the appropriations subcomittees of the U.S. Senate and House of Representatives, the professors urged the Congress to restore support for biomedical research technology to the level originally mandated by Congress.

The signers included Nobel laureates Robert Hofstadter, physics; Linus Pauling and Henry Taube, chemistry. Reductions in the budget of the National Institutes of Health (NIH) and other cuts "constitute a major overall setback," the professors wrote. "However, especially alarming are the disproportionate and selective cuts in instrumentation programs."

In recent years Congress has received testimony from federal agencies and study groups that the United States is rapidly becoming non-competitive in fields of research that depend on instrumentation, the professors said.

Examples of the types of modern instrumentation regarded essential for rapid progress in medical science include computers, X ray equipment, million volt electron microscopes, synchrotron radiation and magnetic resonance facilities.

One report, published by the NIH, said:

"Research universities, which are responsible for conducting a critical share of the nation's biomedical research and training, are facing serious financial difficulties in replacing worn out and obsolete equipment and developing new instrumentation required for further research advances.

"Because these universities are responsible for training future investigators for science and industry, deficiencies in research equipment bode ill for future research in all settings."

The Congress responded by increasing the federal budget for instrumentation programs. But the Biomedical Research Technology Program of the NIH, for which the Congress had originally appropriated $43 million for fiscal 1985 has been cut back to $35 million by the Reagan administration.

"The administration's plan represents a major reversal and seriously impairs the ability of the NIH to meet crucial needs," the professors said.

"Continued progress and competitiveness in agriculture, industrial technology and health care critically depend on scientific innovation, and innovation increasingly depends on the use of modern technology."

Other letter signers are Arthur I. Bienenstock, professor of applied physics and material science engineering and director, Stanford Synchrotron Radiation Laboratory; Carl Djerassi, professor of chemistry; Edward A. Feigenbaum, professor of computer science; Oleg Jardetzky, professor of pharmacology and director Stanford Magnetic Resonance Laboratory; and Harden M. McConnell and John Ross, professors of chemistry.

4-29-85 —30— CUTS-SA6

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
ADVANCE FOR RELEASE 6:30 P.M. EASTERN TIME WED., MAY 1, 1985

DNA ANALYSIS EXPLAINS WHY "BUBBLE BOY" DIED, AND ADDS NEW INFORMATION ABOUT DISEASE IN IMMUNE DEFICIENT PATIENTS

STANFORD—

Stanford University scientists who studied tissues from Houston's "Bubble Boy" have confirmed that a viral infection resembling mononucleosis can evolve into a cancerous condition in patients with poorly functioning immune systems.

The finding, which explains what ultimately killed David the Bubble Boy, was made from an analysis of the youth's hereditary material, DNA, following his death.

The analysis revealed that David had abnormal cell proliferations as well as cancer in his lymphatic system, and that his diseased cells contained genetic material from a virus that causes infectious mononucleosis.

The findings about how David died could be significant for the medical management of other patients with suppressed immune function such as organ transplant patients who receive immunosuppressive drugs and those with David's disease—SCID (severe combined immunodeficiency), said Dr. Jeffrey Sklar, assistant professor of pathology at Stanford.

A report on the DNA analysis of David's tissues is scheduled for publication in the May 2 issue of the *New England Journal of Medicine*.

The article, which focuses on the last few months of the Bubble Boy's 12-year medical history, was written by 13 authors, including the Baylor College of Medicine physicians who cared for David, doctors from the University of Texas Health Sciences Center and from the Dana Farber Cancer Institute in Boston, and the team of Stanford University Medical School scientists.

The Stanford researchers who carried out the DNA work included Dr. Michael Cleary, a postdoctoral scholar in Sklar's lab, and Drs. Roger Warnke and Carl Grumet, both associate professors of pathology.

The members of the Baylor College of Medicine medical team that cared for David are Drs. William Shearer, Milton Finegold, I. Celine Guerra, Howard Rosenblatt, Dorothy Lewis, Marilyn Pollack, and Larry Taber, as well as Dr. Ciro Sumaya from the University of Texas Health Science Center at San Antonio. Dr. Jerome Ritz from the Dana Farber Cancer Institute prepared cells for David's bone marrow transplantation.

Sklar said that without the DNA analysis of David's tissues, it would have been difficult or impossible to answer some important questions about the boy's death. The fact that these questions were answered shows the range of current applications of molecular techniques to clinical diagnostic questions, he said.

David's condition—SCID—is a rare deficiency in which two types of white blood cells needed for defense against disease are absent or are present in very low numbers.

Doctors at Baylor College of Medicine kept the child in a "bubble" isolation chamber from birth to protect him against bacteria and viruses which could cause life-threatening infections in the absence of the body's normal immune defenses.

In 1983, David's doctors decided that a bone marrow transplant from his sister might bolster his deficient immune system sufficently to enable him to eventually leave his protective chamber. Bone marrow cells give rise to the cells that can defend the body against disease.

The doctors took marrow cells from his sister because her tissues were the closest match to David's own the doctors could find.

However, the transplant failed to boost David's immune function. Four months following the procedure, he died from cancer of the lymphatic system that had spread throughout his body.

The Stanford researchers analyzed David's DNA using molecular techniques to find out how his cancer arose.

They found that DNA from David's tumor cells contained genetic material from the Epstein-Barr virus, a virus known to be associated with disorders of the lymphatic system in immune deficient patients. The virus was probably transported into his body via his sister's bone marrow cells, the doctors deduced, since evidence for past viral infection was found in her blood, and David had never been exposed to the virus prior to the transplant.

The researchers also found that David's cancer arose from his own cells, rather than from cells transplanted from his sister.

In addition to malignant cell growths, they found that David's lymphatic system also had given rise to numerous non-malignant cell proliferations similar to those seen in viral diseases like mononucleosis.

Lymphatic disease is 40 to 50 times more likely to develop in immune deficient patients than in the general population, said Sklar, who together with Cleary and Warnke has studied the disease in Stanford's heart transplant patients taking immune suppressing drugs.

The occurrence of lymphoproliferative disease in transplant patients has spawned debate among medical researchers as to whether it develops as a virus infection in the manner of mononucleosis or as a primary cancerous process, Sklar said.

Some researchers believe the disease is a malignant lymphoma from the start while others view it as a viral disease, something like a "runaway" case of viral mononucleosis, Sklar explained.

In a study published last year, Cleary, Warnke and Sklar found that among a group of ten heart transplant patients with lymphatic disease, all had a cancerous form.

"But in David's case, we found both forms of the disease—malignant and benign—in one patient," Sklar said. Furthermore, the DNA in some of David's tumors suggested that the malignant clone of cells emerged from the benign form of lymphoproliferative disease.

"This provides good indirect evidence that lymphatic tumors can develop gradually over time from an unrestrained viral infection in immune deficient patients, probably caused by the Epstein-Barr virus," Sklar said.

The research methods the Stanford group used to analyze David's DNA included DNA hybridization, a way of measuring the degree of similarity between pieces of DNA. This enabled the scientists to find the evidence of Epstein-Barr virus infection in David, and also to tell that his cells, rather than his sister's cells, were the cancerous ones.

Another method called immunogenotyping, pioneered by Cleary and Sklar, enabled them to see that David had both cancerous and benign forms of lymphatic disease. The method relies on the fact that different lymphocytes in the body have slightly different arrangements of their DNA that can be used as identifying "fingerprints."

The researchers found several growths in which all the cells had identical fingerprints, a hallmark of cancer where a single cell goes awry, giving rise to identical daughter cells. But they also found proliferations of lymphocytes with different fingerprints, suggesting a condition more like mononucleosis.

Finally, Warnke analyzed David's tissues by a method called immunophenotyping, which examines antibody proteins produced by lymphatic cells. Results of these studies confirmed the DNA findings that both cancer and a mononucleosis-like condition were part of David's final illness, Sklar said.

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LH8

END ADVANCE FOR RELEASE 6:30 P.M. EASTERN TIME WED., MAY 1, 1985

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
FOR IMMEDIATE RELEASE

NEW BLOOD TEST MAY HELP IDENTIFY PEOPLE WITH GENETIC SUSCEPTIBILITY TO ONE FORM OF ARTHRITIS

STANFORD—

Stanford scientists have developed a simple blood test that may help identify people who have a high genetic risk of developing one form of rheumatoid arthritis.

The new test also may speed up the diagnostic process for patients with this form of arthritis, making early treatment possible, the Stanford researchers said.

The test, which the researchers hope to make available for doctors' use in the form of a diagnostic kit, is undergoing evaluation for accuracy and effectiveness but is not likely to be commercially available until further studies can be completed, said Dr. Gary Fathman, associate professor of medicine at Stanford University Medical School.

In preliminary studies, the test has been able to identify 100 percent of patients diagnosed as having a particular form of rheumatoid arthritis called seropositive arthritis. But further testing on a larger number of patients is needed to establish the validity of the test, Fathman said.

The test is based on the fact that people with a high susceptibility to developing rheumatoid arthritis have certain genes in common.

These genes are located in a region of the human genetic material—DNA—known as the major histocompatibility complex (HLA).

The Stanford researchers have found a reliable method for using white blood cells to identify individuals whose DNA contains the "marker" genes.

Using the same principles on which the arthritis test is based, it might also be possible to develop diagnostic tests capable of identifying individuals genetically susceptible to developing juvenile diabetes and multiple sclerosis, Fathman said.

Fathman and his colleagues Drs. Kornelia Weyand and Jorg Goronzy, both postdoctoral scholars, reported on their research Tues., April 23 at a meeting of the Federation of American Societies for Experimental Biology in Anaheim.

"The major benefit of this test is that it would be a possible way of telling as early as prenatally if someone is susceptible to developing seropositive rheumatoid arthritis. Later, if they began experiencing arthritis symptoms, it would be possible to initiate treatment immediately for the best possible results," Fathman said.

With present methods, it may take as long as six months to make a diagnosis of arthritis after initial symptoms appear, Fathman explained.

The new test and others designed using the same principles also may enable doctors to identify subpopulations of arthritis sufferers for whom they can predict severity of disease and treatment outcome, Fathman said.

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This would be of particular clinical benefit in rheumatoid arthritis because it is such a heterogeneous disease, Fathman said.

"There are some populations of arthritis patients who don't respond to the conventional therapy which yields disease remission in the majority," he said.

"Likewise, there are populations of patients with rheumatoid arthritis who have a very mild or benign course and don't need any major therapeutic intervention."

Knowing early on that a patient had a particular form of the disease would help doctors tailor design the best treatment, he said.

The test that Fathman and his colleagues have begun evaluating was designed to recognize seropositive juvenile rheumatoid arthritis, a very homogeneous form of the disease found in children.

In preliminary studies of a group of 23 adults who had classical arthritis symptoms and circulating rheumatoid factor—the conventional way of diagnosing seropositive rheumatoid arthritis—the test reacted with 100 percent of the patients, suggesting that their form of the disease is related to juvenile arthritis, Fathman said.

In a control group of 27 non-arthritic individuals, the test reacted with two, Fathman reported. The false positive results were not surprising, he added, since about 50 percent of people who are genetically susceptible to arthritis fail to contract the disease.

The test uses white blood cells, or lymphocytes, called T cells. T cells recognize proteins on the surface of other cells in the body.

Fathman and his colleagues isolated T cells that recognized an arthritis "marker" protein specified by one of the HLA genes, HLA-DR4.

Then by cloning, or growing in large numbers, these T cells from healthy volunteers, they obtained enough cells to make a diagnostic test possible.

Rheumatoid arthritis is thought to be an autoimmune disease. In some people, the body's natural immune response to a particular stimulus has an unfortunate side effect of destroying some of the body's own tissues, Fathman said. The HLA region of the DNA, which produces the marker proteins the T cell clones recognize, is involved in this immune response.

Multiple sclerosis and juvenile diabetes are also thought to be autoimmune diseases associated with HLA genes. In each of these diseases, distinct marker proteins are present in the body that could be recognized by T cells, Fathman said.

For this reason, it may be possible to develop diagnostic T cell clones for these diseases using techniques similar to those employed in the arthritis test, Fathman believes.

Stanford University is applying for a patent on the T cell clone technique, Fathman said.

The research was funded by grants from the National Institutes of Health and the Arthritis Foundation.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD MEDICAL STUDENT WINS COMMONWEALTH FUND FELLOWSHIP

STANFORD—

Monica de la Paz, a third year medical student at Stanford University School of Medicine, has been selected as a 1985 Commonwealth Fund Medical Fellow.

The Commonwealth Fund Fellowship Program is designed to encourage academically outstanding minority medical students to pursue career interests in academic medicine, said Leon Johnson, president of the National Medical Fellowships (NMF), Inc. of New York, which administers the program.

De la Paz, the only Hispanic selected for the honor, is one of 20 minority medical students from 14 institutions named fellows this year. In addition to de la Paz, the group of 12 men and eight women includes 18 Blacks and one student of Black and Puerto Rican parentage, the NMF said.

She will use the $5,000 fellowship to pursue research on coronary atherosclerosis risk factors with Dr. John Farquhar, director of Stanford's Center for Research in Disease Prevention, she said.

De la Paz, from El Paso, Texas, is interested in cardiovascular medicine. She said she hopes to learn more about medical research opportunities in that field, as well as about academic medicine in general, during her fellowship period with Farquhar.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
FOR IMMEDIATE RELEASE

WEIGHT LOSS SUMMER CAMP SCHEDULED

STANFORD—

Summer camps for teenagers and children who want to lose weight are being offered by the Stanford Laboratory for the Study of Behavioral Medicine.

Called SHAPE, the four- and eight-week programs are intended to teach weight loss through a balanced program of non-competitive exercise and healthful foods, said Keith E. Saylor, SHAPE co-director.

The eight-week program includes—in addition to traditional camp programs and weight loss assistance—instruction by professional male and female models in how to change image and wardrobe to fit a new self-image, Saylor said. He added this was the first time that modeling has been offered in the program's four-year history.

Four-week programs are held in two sessions, beginning June 24 and July 22. The eight-week program begins June 24. Groups are divided into 7 to 11 and 12 to 17 age groups. Costs range from $350 to $800, depending on age group and length of session, Saylor said.

The price includes appropriate meals and snacks, as well as parent seminars. Field trips to wilderness areas and a video aerobics tape are provided with the eight-week sessions, which range from three to four hours per day.

For further information, call (415) 497-5065.

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
FOR IMMEDIATE RELEASE

WEIGHT MANAGEMENT PROGRAM SCHEDULED BY DIETETICS

STANFORD—

A 12-week course on weight management for teenagers has been scheduled this summer by the Stanford University Hospital Department of Dietetics, announced clinical nutritionist Kristine Birge.

Combining diet, exercise and behavioral techniques, the Shapedown Program is intended to help teenagers to take charge of their own weight management.

Classes for participants are scheduled from 3 to 4:30 p.m., June 11 through Aug. 27. Parent sessions have been scheduled at 7:30 p.m., on July 9 and Aug. 6

Cost for the program and materials is $165. The registration deadline is May 24. For more information call (415) 497-5432.

April 25, 1985 —30— mg4

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind

FOR IMMEDIATE RELEASE

JOHNSON RE-ARRESTED FOR CHILD ABANDONMENT

STANFORD—

A woman mistakenly released from detention after being charged with abandoning her newborn baby was returned to custody Tuesday, April 23, after she walked into the Stanford campus police station.

"She wanted her belongings back," said Stanford Police Capt. Raoul Niemeyer. Betty Ann Johnson, 36, a transient from New York, was re-arrested on a Palo Alto Municipal Court warrant on charges of felony child abandonment, Niemeyer said.

He said the woman, who had been sought by police for nearly a week, returned to the campus sheriff's substation about 1:40 p.m. and inquired about some clothes and other possessions that were being held there following her first arrest.

Johnson was originally arrested by Stanford campus police April 16 after she allegedly left her newborn infant in the back of a pickup truck parked near Stanford University Medical Center. The baby girl, about four hours old, was taken to the center and then released to a foster home Saturday, April 20.

Officers said the child was born in a field on the campus where the mother reportedly had been camping for several weeks. Johnson was apprehended shortly after the baby was found, taken to the medical center for treatment and then transferred under arrest to the detention ward at Santa Clara Valley Medical Center.

Niemeyer said the woman was later transferred to the Elmwood Women's Detention Center but was released Thursday after officers failed to note that a warrant had been issued.

"Somebody basically goofed," Niemeyer said.

Niemeyer said the woman was processed at the sheriff's substation on campus and was expected to be transferred back to Elmwood later on Tuesday.

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Baby MC

4-23-85

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD UNIVERSITY HOSPITAL HEALTH FAIR:

THINGS TO SEE, THINGS TO DO, THINGS TO LEARN

STANFORD—

Free blood pressure tests, low-cost computerized health appraisals and information about Stanford University Hospital treatment programs, community services and ongoing projects will be offered at the health faire from 10 a.m. to 4 p.m. Saturday, May 4, at the Stanford Shopping Center.

The fair will also offer free blood glucose level tests, low-cost cardiac risk panel blood tests, information on medicare and health insurance programs and booths and exhibits on topics ranging from diabetes and cardiopulmonary resuscitation to normal and high risk pregnancy and Life Flight, the helicopter rescue program. The fair is open to the public.

Sponsored by the hospital's nursing department, the fair kicks off the annual nurse week. Activities include a May 8 lecture by Pamela Maraldo, R.N., executive director of the National League for Nursing and named one of 20 most successful women by *Savvy* Magazine. The week-long celebration will culminate with a 10K fun run through the Stanford University campus on May 12.

The health fair and nurse week theme is to "celebrate 25 years of caring and sharing." The activities are part of the medical center's 25th anniversary celebration, marking the move of the medical school from San Francisco to Stanford, which prompted the establishment of the medical center.

For more information about the health fair or nurse week activities, call Gaye Bruce or Joan Caldwell at 415-497-7261.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911
FOR IMMEDIATE RELEASE

STANFORD EYE CLINIC ESTABLISHES LASER CENTER

STANFORD—

A new laser center for eye treatment has been established by the ophthalmology clinic at Stanford University Medical Center.

Located in newly remodeled space in the Boswell Building, the clinic has three new lasers. One of the lasers, a yellow Krypton laser, is one of only five in the world, said Dr. Michael Gaynon, assistant professor of ophthalmology.

"The yellow Krypton laser will set us apart from other laser centers," he predicted.

The rare yellow Krypton laser, a new argon laser, and a neodymium YAG laser were purchased with a $200,000 gift from the Televideo Foundation, established by Dr. and Mrs. Philip Hwang who also founded Televideo Corporation in Sunnyvale. Each type of laser has its own forte in ophthalmology, Gaynon said, and together they offer a wide range of treatment possibilities.

The beam of the yellow Krypton laser is much more precise than beams produced by other lasers, Gaynon explained, which may make it the laser of choice for many treatments. It has already been found to be more effective in treating the *macula lutea*, the section of the retina responsible for sharp focusing. Unlike the blue-green light produced by the argon laser, which is more easily absorbed by the central reading portion of the retina, the red and yellow light produced by the yellow Krypton laser is not, he explained. Thus, it has less chance of damaging healthy tissue.

The argon laser has been the mainstay of laser therapy in ophthalmology for many years, Gaynon said. The widely available machine is used to treat complications from diabetes, macular degeneration, retinal detachment, cateract corrections and other retinal vascular diseases.

"Lasers have really turned the tide for many patients who would have gone blind in the past," Gaynon said.

An estimated 75 percent of diabetics develop eye diseases, some of which can cause hemorrhage or detachment of the retina, the light-sensitive tissue lining the back of the eye. Even those diabetics who are not as severely affected often develop leakage from abnormal capillaries, sometimes suffering severe loss of vision. By using the argon laser, ophthalmologists can cauterize the leaky vessels or weld the retina back onto the eye. At the very least, Gaynon explained, this often allows them to stabilize their patients' vision; sometimes they can even improve it.

4-23-85

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The elderly often lose reading vision because of little blood vessels that grow abnormally and bleed underneath the retina. The laser can cauterize these errant vessels and preserve patients' vision. And in patients who have retinal tears—about two out of every 100 among those who have had cataracts removed—the laser can weld the tear to keep the retina from detaching.

Ophthalmologists are using lasers more and more to treat glaucoma, a disease that can cause blindness, especially in people over 40 years old. The condition is caused by blockage of normal fluid seepage out of the eye, which prompts the pressure to increase until it damages the entire eye. By using lasers, physicians "irrigate" the eye, restoring the pressure back to the normal range. Until now, this could only be done surgically.

The YAG laser, on the other hand, emits an invisible infrared light. Unlike the argon laser that works by heat, the Yag laser creates very precice and controlled microexplosions that literally blow up the tissue, Gaynon explained. Though still considered experimental by the Food and Drug Administration, the YAG laser is now used along with surgery on about 10 percent of the 500,000 cataracts removed each year.

Laser stands for Light Amplification by Stimulated Emission of Radiation. It involves either a gas, liquid or solid. The argon laser, for example, is basically a glass tube with mirrors at each end. The tube emits coherent precisely directed, powerful beams of light consisting of one or more colors. The type of gas or other substance in the laser tube determines the color emitted, which determines what what type of tissue will absorb the light as well as how penetrating that light will be.

A plaque-hanging ceremony honoring the Televideo Foundation for its gift of the funds for the purchase of the lasers, is scheduled for 5 p.m., April 26, in the clinic.

The lasers are just one type of treatment available at the clinic, with its new treatment rooms, waiting areas and reorganized operation.

"The new clinic will allow us to see patients in a much more timely and comfortable fashion," said Dr. Michael Marmor, associate professor of ophthalmology and head of the ophthalmology division.

For information or to schedule an appointment, call 415-497-6995.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
ADVANCE FOR RELEASE FRIDAY, APRIL 19, 1985.

STANFORD SCIENTISTS STUDY PROTEIN LINKED TO NERVE REGENERATION

STANFORD—

Stanford University neurobiologists are reporting new work on a protein that appears to be linked to the regrowth of damaged nerves in mammals.

Their findings could help scientists begin to understand at the molecular level why mammalian nerves in the brain and spinal cord cannot regrow after injury.

Dr. Hans Werner Muller, Dr. Peter Gebicke-Harter, Donald Hangen, and Dr. Eric Shooter are publishing a report on the protein in the April 26 issue of *Science* magazine.

The protein, initially discovered by Dr. Pate Skene, assistant professor of neurobiology, and Shooter, has been found in newborn rats and in rats with damaged nerves.

It may play a role in nerve growth in the young animals and in nerve repair in the injured adult rats, said Shooter, who is professor and chairman in the department of neurobiology at Stanford University School of Medicine.

Although it is only a basic scientific discovery with no medical applications now, the finding is a small step in the effort toward developing a treatment for spinal cord injuries and other currently irreversible conditions caused by damage to brain and spinal cord nerves, Shooter said.

He explained that in mammals, injuries to the peripheral nerves—such as those in the limbs or skin—can be repaired because axons, the long fibers of nerve cells, are capable of growing back to reform the pathways originally established during development.

But for some reason, damaged nerves of the brain and spinal cord do not regrow, Shooter explained. This is why spinal cord injuries, head traumas, and other conditions involving injury to the brain or spinal cord are so severe and irreversible, he added.

The scientists found in rats that a specific protein associated with growing nerves is synthesized at a high rate early in development when nerves are first being formed. Later in life, when the nervous system is established, the protein's synthesis drops off to a much lower rate.

But if the nerves are damaged, then adult rats synthesize the protein at high rates again both in the peripheral nerves and in the central nervous system, Shooter said.

The protein accumulates in the peripheral nerves, which regrow to repair the damage, Shooter explained, and once these axons have regrown, the protein's synthesis falls to low levels again.

But despite the fact that it is also synthesized in the central nervous system, the protein does not accumulate around damaged brain and spinal cord nerves.

"The lack of accumulation of the protein in the adult mammalian central nervous system may represent one of the critical molecular differences between peripheral nervous system and central nervous system which limit the ability of central axons in mammals to regenerate," the scientists wrote.

Shooter said that it is not yet known what role the protein might play in nerve regeneration. His lab is currently studying the protein's structure and function, and where its synthesis occurs.

Preliminary results suggest that the protein is not only manufactured by cells in the nervous system but also by cells in the blood that migrate to the site of injury.

The research was supported by funds from the National Institutes of Health and the Isabelle Niemela Estate.

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END ADVANCE FOR RELEASE APRIL 19, 1985.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

ADVANCE FOR RELEASE 6:30 P.M. EASTERN TIME WEDNESDAY (APRIL 17)

EXPANDING CLINICAL PRACTICE NOT AN ANSWER TO MEDICAL SCHOOL FINANCIAL WOES, STUDY SHOWS

STANFORD—

Increasing the patient care load of full-time medical faculty to offset lost research revenue will "probably fail and undermine present research activities," a Stanford University School of Medicine study shows.

"Research, essential to improving health care, cannot expect substantial support from other faculty activities," concluded the authors in the April 18 issue of *The New England Journal of Medicine*.

"Academic medical centers, which derive their financial basis from research support, should consider very carefully the effects before attempting to expand their clinical practices," said Dr. Kenneth Melmon, professor of medicine.

The study, conducted by Drs. Melmon, David Chin and Halsted Holman of Stanford's department of medicine, and David Hopkins, director of analysis and planning for the medical center, looked at the activities of Department of Medicine faculty members for a one-year period in an attempt to correlate them with sources of revenue.

The study was funded by the Robert Wood Johnson Foundation Clinical Scholar Program and the Kaiser Family Foundation.

The study shows for the first time, Holman said, that full-time faculty members typically spend about one-third of their time involved with research, one-third with patient care and one-third with teaching and administrative duties. The key issue for academic medical departments, Holman continued, is whether the array of activities should be maintained, and how they should be financially sustained.

"Subsidizing research activities with income from clinical activities won't work," Holman said.

Departments of medicine are typically the largest in academic medical centers. Stanford's department, with nearly $16 million in research revenue, includes 11 divisions plus the Stanford Center for Research in Disease Prevention.

The study looked at faculty members' activities during the year of 1980. Faculty members were observed for 40 of the 62 hours that made up the average work week. Faculty members reported their own activities for the remainder of the time. Activities were categorized into "patient care," "research," "teaching," and others. The largest percentage of activities—a minimum of 60 percent—were reported as "joint products," meaning that the activity fell into more than one category. Hospital rounds, for example, may fulfill patient care and teaching roles, and possibly research roles as well.

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Each full-time faculty member devoted to research activities brought an average of $944,000 to the department through direct and indirect research awards, the study showed. In comparison, faculty members devoted to the highest revenue-producing specialty—cardiology—produced only $507,000 in patient-care charges. The actual reimbursement from insurance companies and other third party payers was expected to be less.

It would take as many as 15 non-procedure-oriented full-time faculty members, the authors surmised, or as few as eight procedure-oriented full-time faculty members to produce the same amount of research support as one research-oriented full-time faculty member.

"The pressures academic medical center administrators think they're feeling to place more emphasis on clinical practice may not be entirely accurate," Melmon said.

Not only would an increased emphasis on clinical practice cut into research support, the authors stated, it would also cut back on the amount of time available to faculty members to devote to research.

And, they added, "recent trends in health-care financing and local competition from a growing supply of physicians severely limit the expansion of clinical activities that might generate excess revenues."

Five other medical school departments of medicine have since conducted similar studies, Melmon said, all with differing results.

"An attempt to find a blanket solution will not work," Melmon said. "Each school must be considered individually."

The authors state multiple reasons for the decline in research and patient care revenue.

* Many departments were developed through research funding during the emergence of modern biomedicine and are now experiencing a decrease in federal research support due to inflation and competition from increased numbers of schools and faculty.
* Steeply rising costs of health care are causing reimbursement agencies to restrict payments.
* Intensive specialization in medical departments has heightened dependence on referral patients.
* Competition for patients is growing from the increasing numbers of physicians in private practice.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind

FOR IMMEDIATE RELEASE

NEWBORN BABY ABANDONED IN HOSPITAL PARKING LOT; MOTHER FACES CHARGES

STANFORD—

A 37-year-old transient from New York City was arrested Tuesday shortly after her healthy newborn baby was found in the back of a pickup truck in a Stanford University Hospital employee parking lot.

The baby girl was taken to the hospital for observation where she was reported in excellent condition about 12:30 p.m., said Kathleen Palange, a clinical nursing coordinator. Palange said the baby was about four hours old and its placenta was still attached when brought to the hospital.

The woman, identified as Betty Ann Johnson, was apprehended at the Hoover Pavilion annex to Stanford Hospital, several hundred yards from the truck where employees had discovered the baby about 10:45 a.m., said Stanford Police Capt. Marvin Moore. The woman was to be booked Tuesday for investigation of felony child abandonment, Moore said. The truck was owned by a construction worker on the hospital modernization project, said hospital security supervisor Wayne Beban.

The woman was taken in police custody to the hospital emergency department, where she was reported in stable condition. Mary Durando, an emergency department supervisor, said the woman required stitches to close tearing which occurred during delivery.

Moore said the mother was found after a witness described a woman who had rapidly exited the parking area where the baby was found. Durando said the woman had told officers that she had come to California from New York via Florida and had found refuge by camping in the woods for at least several weeks near the mausoleum on the Stanford campus.

Moore said Santa Clara County Child Protective Services had been contacted. Palange said in cases of abandonment, newborn children are ordinarily placed in protective hold, which allows the hospital to provide care.

Carol Jensen Vaughn, a hospital office assistant, said she was summoned to the employee parking lot at 10:30 a.m. across from her office on Welch Road by "two women who came over and asked for help."

Vaughn said she called hospital security and then followed the women to the pickup truck, where they saw the baby wrapped in what appeared to be drapery. The infant, she said, was placed on newspapers in a cardboard box. Hospital security dispatched an ambulance and then contacted the campus substation of the sheriff's office.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
FOR IMMEDIATE RELEASE

11 COMPANIES SIGN ON WHILE FOUR TERMINATE LICENSING AGREEMENT WITH STANFORD

STANFORD—

Stanford University's genetic engineering licensing program has signed up eleven new companies since last August when the second of two major gene cloning patents was issued, a university official said.

During the same period, four companies terminated the licensing program, said Niels Reimers, director of the university's office of technology licensing.

This makes a total of 73 companies now licensed to use the patented recombinant DNA technology that underlies the entire biotechnology industry, Reimers said.

The new sign-ups are Merck and Co., Becton Dickinson, Phillips Petroleum, BASF, California Biotechnology, Calgene, Genencor, Life Technologies, Syntro, ZymoGenetics, and Triton Biosciences, a division of Shell Oil Co., said Katharine Ku, associate director of technology licensing.

The companies that terminated are Cetus, a biotechnology firm based in Emeryville, Universal Oil Products, an energy/engineering company, Carter-Wallace, a health care company and Koppers, a chemical company, Ku said.

The most notable drop-out company is Cetus, which has two biotechnology products—human beta interferon and human interleukin-2—nearing marketability, Ku said.

In a letter to Stanford stating the reasons for Cetus' decision, the company's patent attorney said, "it is our opinion that Cetus' existing and prospective activities are not included within the scope of any valid claim of either patent...and therefore it is no longer necessary or appropriate to maintain the license agreement."

"Cetus' termination is a disappointment," Reimers said. He added that the university is presently evaluating the Cetus withdrawal with regard to potential future action.

No litigation concerning the patents has been initiated, Reimers said. But he did acknowledge that some funds have been put aside should legal proceedings occur. The university is also consulting with Washington, D.C. patent attorney Donald Dunner on potential legal actions concerning the patents.

Stanford's genetic engineering licensing program is based on two patents covering gene cloning techniques, and the recombinant molecules produced through these techniques, developed by Stanley Cohen of Stanford and Herbert Boyer of the University of California, San Francisco (UCSF).

The two patent applications were filed in 1974. The "process" patent issued in 1980 and the "products" patent issued in 1984.

Although Stanford handled the patent applications and administers the licensing program, the two universities share revenues accrued through the program, Reimers said.

Over $3.5 million have been received since the licensing program was initiated in 1981, Ku said.

Terms of the licensing agreement call for a sign-up royalty plus an annual $10,000 minimum royalty in addition to earned royalties on sales.

4-15-85

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The earned royalty rate for end products is one percent on net sales ranging up to $5 million, three-quarters of one percent on sales between $5 and $10 million and one-half of one percent on sales above $10 million annually. (Separate royalty rates apply to bulk products, basic genetic products, and process improvement products).

Companies that signed up before Dec. 15, 1981 received the most favorable terms in applying the sign-up and basic annual royalties as credit against earned royalties, Ku said.

At least ten companies now have reportable sales, Ku said. Most of the products that have become available using the patented techniques are scientific research products, Ku said.

Only one pharmaceutical product is on the market, she added, a form of human insulin called "Humulin" developed by Genentech and marketed by Eli Lilly.

In addition to the Cetus products, several other pharmaceutical products are nearing commercial availability, including a hepatitis B vaccine, human growth hormone, and a drug for treating emphysema, Ku said.

Following is a list of the licensees as of April 12, 1985:

Abbott Laboratories
Advanced Genetic Sciences
Agrigenetics
Ajinomoto
Allied Corporation
American Cyanamid
American Home Products
Austgen-Biojet Int'l.
BASF Aktiengesellschaft
Baxter-Travenol
Becton Dickinson
Bio Logicals
Biogen, N.V.
BioTechnica International
Boehringer Mannheim GMBH
Bristol-Myers Company
Burroughs Wellcome
Calgene
California Biotechnology
Celltech Limited
Chiron Corporation
Codon
Collaborative Research
Corning Glass Works
CPC International
Creative Biomolecules
DNA Plant Technology
Du Pont
Eli Lilly
Engenics
G.D. Searle
Genencor
Genentech
Genetics Institute
Genex Corporation
Gist-Brocades N.V.
Green Cross
Hoechst AG
Hoffmann-La Roche
Integrated Genetics
International Mineral and Chemical
Johnson & Johnson
Kyowa Hakko Kogo
Life Technologies (GIBCO/BRL
Merck
Microlife Genetics
Miles Laboratories
Mochida Pharmaceutical
Molecular Genetics
Monsanto Company
Montedison S.p.A.
Nabisco Brands
National Distillers and Chemicals
New England Biolabs
Novo Industri A/S
P-L Biochemicals
Pfizer
Phillips Petroleum
Repligen Corporation
Revlon
Salsbury Laboratories
Schering AG
Schering Corporation
SmithKline-Beckman
Stauffer Chemical
Suntory
Synergen Associates
Syntro
Takeda Chemical Industries
Triton Biosciences
Upjohn
W.R. Grace
Zymogenetics.

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FOR IMMEDIATE RELEASE

STANFORD'S YOUNGEST TRANSPLANT PATIENT RETURNS HOME

STANFORD—

Elizabeth Craze's joy at tricycle riding and jumping down the stairs belie the nearly two-decade odyssey of fatal disease which has afflicted her family.

The youngster was only 2 1/2 last Oct. 8 when she became Stanford's youngest heart transplant patient. On Saturday, her parents were scheduled to take their bouncy daughter back home to Cleveland, where she will be reunited with her 18-year-old brother, Andrew.

He received his own heart transplant July 10, 1983, and returned to school the following fall. Now he is doing well enough to return to Stanford next fall—this time as a computer science freshman.

Andrew and Elizabeth are the fortunate children of Charles and Susan Craze. The couple's oldest son and a set of twins all died of the same disease which triggered Elizabeth and Andrew's transplants.

"We certainly have high hopes that Elizabeth will do extremely well and have a long lifespan," said Dr. Sharon Hunt, the Stanford cardiologist who takes care of transplant patients after surgery. "We've set no limits as to her physical activity."

Hunt said familial cardiomyopathy is essentially a deterioration of the heart muscle. The condition is rare, and even rarer as an inherited condition. While the cause is uncertain, Hunt said a current theory is that some people inherit an almost fatal sensitivity to a virus which is harmless to most people.

Cardiomyopathy has accounted for nearly half of the 335 transplants at Stanford since January 1968. Other than experimental drug treatments which offer promise, transplantation has been the major treatment for the condition in its advanced stages. The other most common reason for transplantation, coronary artery disease, occurs more often and can be treated in a variety of ways.

Elizabeth had been diagnosed as having cardiomyopathy when she was 1 month old, "but she was doing well and we had no sense of urgency" until last summer when she came out with her brother for his annual checkup, her mother said. Her condition had deteriorated. Doctors agreed to accept her into the program, which has been cautious about accepting young children, whose ability to deal with a complicated drug regimen during their growth years is uncertain.

Still Stanford's youngest transplant patient, Elizabeth's robust health so far is encouraging for future pediatric transplants, Hunt said. the child's surgeon, Dr. Philip E. Oyer, said he was pleased with her progress so far. "She looks wonderful. When you see her you would never think she has had a transplant," he said.

Hunt said she expects that the donor heart will grow along with Elizabeth, whose weight of 31 pounds is slightly small but not abnormal for a 3-year-old.

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Charles Craze, 44, a constitutional lawyer, and Susan Craze, 42, have been anxious to maintain family privacy since they rented a house near Stanford to be near their daughter before and after transplantation. But on the eve of their return to Cleveland, they both agreed to share their story in hopes that the public will be aware of the need for heart donors.

"We know of one case back in Cleveland," said Susan Craze, "where a family was willing to donate a heart of their child because they knew Andy and realized how much could be gained."

The Crazes can tell details of their story calmly, but not dispassionately.

In August 1967—four months before the world's first heart transplant operation took place in South Africa—the Craze's first child, Charles Jr., called Cheddy, died at 19 months of cardiomyopathy.

In 1968 the Craze's were given false hope of a happy family life when Susan gave birth to twin girls, Megan and Caitlin. Both children also came down with familial cardiomyopathy, which killed Megan in October 1971. Caitlin held out a bit longer but died in June 1972, the mother said.

Andrew was barely beyond the toddler stage when his twin sisters died, but the family was hopeful through the boy's healthy childhood that he might be free of the frequently fatal disease. Andrew remained healthy until Memorial Day in 1983, when for the first time he complained of chest pains toward the end of his sophomore year in high school.

His condition had developed so rapidly, that Susan Craze estimated that he only had a few weeks to live when a donor was found for him at Stanford where he had been waiting.

Charles Craze, recalling the loss of his own children, said he felt doctors shouldn't be reluctant to raise the possibility of organ donation to the relatives of a brain dead individual.

"Physicians need to understand that they need to give people credit for the ability to cope with grief. They should not be too reluctant to ask that life be passed on to someone who can benefit."

As Craze spoke during an interview, Elizabeth repeatedly jumped down from a bench, apparently restless to return home to Cleveland. For the past few months she has lived with her family, making occasional visits to Stanford's outpatient cardiovascular clinic.

"We know how it feels to lose children," said Susan Craze. "But if people can look past their grieving, offering the organs of a loved one has to be one of the most unselfish things they can consider."

Marguerite Brown, donor coordinator for the heart transplant program, said the news conference scheduled Friday (April 12) was intended as the prelude to national Donor Awareness Week April 21-27, an educational effort intended to make the U.S. public aware of the need to carry donor permission cards or allow a family members' organs to be used for transplanation.

Many persons who could benefit from a kidney, heart or other organ die before an appropriate donor is found. In the Stanford program alone, Hunt said about one potential recipient in four dies before a heart donor is found.

"A lot of our effort is public awareness," said Brown. "If more people could see healthy young people like Elizabeth and Andy Craze, they would realize just how much good can come from a decision to donate organs.

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FOR IMMEDIATE RELEASE

INTRAVENOUS FEEDING IS SAFE FOR MOST PREGNANT MOTHERS AND THEIR INFANTS

STANFORD—

Pregnant women who are undernourished because of an underlying medical problem can safely be given adequate nutrition intravenously, say doctors at Stanford University and the University of Southern California (USC).

In a study published in the April 12 issue of the *Journal of the American Medical Association*, the doctors reported that ten women who were fed intravenously during pregnancy delivered healthy normal birth-weight infants and experienced no obstetrical or fetal complications attributable to the intravenous feedings.

These findings help demonstrate that nutrient formulas are safe, when necessary, for pregnant mothers in the second and third trimesters and their children, said Dr. Kent Ueland, professor and acting chairman of gynecology and obstetrics at Stanford Medical School.

Ueland published the study with Drs. David Seifer and Valerian Catanzarite of Stanford and Santa Clara Valley Medical Center in San Jose, and Drs. Howard Silberman, Chris Conteas, and Robert Wood from USC and the Los Angeles County-USC Medical Center in Los Angeles.

Intravenous nutritional therapy has been consistently shown to be beneficial in nearly all patient groups studied, the doctors reported.

But a special consideration in obstetrical patients is whether the components of standard nutrient formulations produce unique adverse effects on either the mother or fetus, they added.

The ten women had a variety of illnesses that prevented them from digesting or absorbing enough nutritious food through the digestive tract. Their medical problems included conditions such as severe nausea and vomiting associated with pregnancy, bowel obstruction, and gall bladder inflammation.

One patient was treated during the first trimeseter, three during the second trimester, and five patients in the third trimester of pregnancy. Another patient received therapy during both the second and third trimesters.

Ueland stressed that more studies are needed to determine the safety of intravenous nutritional therapy during the first trimester.

The doctors noted that inadequate nutrition during pregnancy is associated with increased risk to the infant, including low birth weight.

4-11-85 —30— LH8

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FOR IMMEDIATE RELEASE

STANFORD UNIVERSITY HOSPITAL SHARES 'INNOVATIVE' SOLUTIONS TO NON-MEDICAL HEALTH CARE PROBLEMS

STANFORD—

How do you talk with patients who don't speak English? Have volunteers who speak foreign languages to serve as translators.

How do you help out financially-strapped patients and families coming from out-of-town for treatment who need housing? Rent them apartments for $10 per night.

If these solutions sound simple, they are deceivingly so. The problems are representative of the hundreds of non-medical issues that can impact medical care that health care professionals and hospitals at Stanford University Medical Center and all over the country face every day. The solutions to them and other problems are included in the "1985 Innovators Catalog" published by Healthwest Foundation's *Hospital Forum*.

Stanford's hospital has several solutions to problems included in the catalog, illustrating the innovative and imaginative nature of the institution's management, said Jeanne Kennedy, director of the office of community and patient relations. The entries and people to contact for more information follow:

- *Home project*—To lessen the financial burden for out-of-town patients who must find short-term housing in a high-cost area, the Assistance League of Santa Clara County and the hospital now provide a low-cost housing program to patients coming from outside a 50-mile radius. The League rents and manages five one-bedroom apartments near the hospital. Plans are under way to expand the program.

  Contact Jeanne Kennedy, 415-497-7167.

- *Translator Bank*—To allow communication between non-English speaking patients and physicians, nurses and other personnel, foreign language-speaking volunteers were recruited to serve as interpreters. More than 80 translators with proficiency in 23 languages participate in the program. They are available on an on-call basis.

  Contact Sharon Beckham, coordinator of volunteer services, 415-497-7424.

- *Physician-nurse committee*—To promote a more cooperative, effective working relationship between nurses and physicians, monthly meetings were established to serve as an opportunity to discuss and resolve shared problems. More than seven groups exist and those who participate notice increased tension and misunderstandings on units where such groups do not exist.

  Contact Ann Baldwin, nurse consultant, 415-497-5100.

- *Care review-risk management*—To define and monitor quality care on an ongoing basis, hospital personnel were assigned to run four programs constituting a hospital-wide system of care review: quality assurance, risk management, infection control and utilization reveiw. Administrators, physicians and nurses are involved in each of the programs. Through them individual patient care can be assessed and long-term institutional plans can be made.

  Contact Karen Axnick, director of care review-risk management, 415-497-6824.

- *Clinical microbiology data base/diagnostic related groups (DRG) analysis data base*—To establish inexpensive, flexible methods of collecting and analyzing data for these programs and others, low-cost microcomputer systems were installed that substitute for a major portion of use of larger computers. Costs were reduced and use of computers and data was simplified.

  Contact Kevin Volkmann, manager of microcomputer program, 415-497-7691.

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KICKOFF EVENT SCHEDULED FOR STANFORD HOSPITAL MODERNIZATION

STANFORD—

Surrounded by a jazz band, 2,000 balloons, and a display of construction equipment, an estimated 1,000 persons are expected to attend formal kickoff ceremonies April 10 for Stanford University Hospital's modernization project.

The public event, from 4 to 6 p.m. at the hospital construction site, is intended to show both members of the Stanford and neighboring communities what work has already been started and to emphasize the commitment that is needed by the university, hospital and neighboring communities, said Paul Edwards, associate director of medical development.

While the hospital's highly specialized care has attracted patients from many countries, SUH statistics show that more than 80 percent of the 23,572 annual admissions come from the Bay Area.

"Stanford University Hospital is indeed the link that binds us together, whether or not we consider ourselves 'Stanford people' in any other sense," said Stanford President Donald Kennedy.

"We are making a $112 million commitment for modernization at a time when health care needs are changing so rapidly that the future survival of many present hospitals is seriously in doubt. It is by any yardstick a bold move, one which anticipates our future health care needs, and expresses confidence in our society's commitment to meet those needs," Kennedy said.

Besides Kennedy, speakers at the ceremonies are to include Palo Alto Mayor Leland Levy, as well as hospital executive vice president and director Sheldon King, and Lawrence G. Crowley, vice president for medical affairs. The Stanford Jazz Band, attired in overalls and hard hats, is scheduled to perform before and after the speeches, held at the construction site near the corner of Blake Wilbur Drive and Quarry Road.

The modernization project, which includes renovation as well as new construction, is expected to be completed by December 1987. Kennedy has said the modernization project will provide 20 new operating rooms and two new four-story wings of patient beds. While no beds are being added to the current total of 663, the project will allow an increase in the average square foot per bed from 891 to 1,387, near the average for teaching hospitals throughout the country.

The ceremony, said Crowley, formally marks the kickoff of a public appeal intended to raise $15 million of the total cost from the business community and private donors. Additional money was expected to be raised through the issue in December of $81.6 million in bonds.

Nearly $1 million of the fundraising total, said Crowley, has already been raised from pledges by area corporations, including Hewlett-Packard Co., Varian Associates, Pacific Gas and Electric Co., Syntex Corp., Apple Computer Inc., Saga Corp., Lane Publishing Co., Advance Micro Devices Inc. (AMD), TAB Products Co., California Water Service Co., Lucky Stores Inc., Fairchild Camera and Instrument Corp., Siltec Corp., Industrial Indemnity Co., Del Monte Corp., and Teledyne MEC.

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RADIATION HELPS SEVERE ARTHRITIS AND LUPUS

STANFORD—

Patients with previously untreatable rheumatoid arthritis have obtained long-term relief from stiffness and pain following treatment with a form of radiation therapy developed by Stanford University doctors.

This form of radiation therapy—called total lymphoid irradiation (TLI)—also shows promise as a treatment for severe lupus nephritis, a disease in which the immune system attacks the kidneys, the doctors reported.

The potential of TLI against the two diseases was outlined in two reports published in the April issue of the *Annals of Internal Medicine* by Dr. Samuel Strober, professor of medicine at Stanford University School of Medicine, and his colleagues, including Dr. Richard Hoppe, associate professor of radiology.

The reports suggest that TLI, a radiation treatment developed more than two decades ago for cancer patients, may now be finding a niche as a treatment for some autoimmune diseases, conditions in which the immune system turns against the body's own tissues.

In rheumatoid arthritis, which is estimated to afflict nearly two million people in the U.S. alone, the immune system is believed to attack the joints. The kidneys are one of the main autoimmune targets in patients with lupus, who are estimated to number a few hundred thousand, Strober said.

TLI's action against these diseases probably stems from its ability to suppress part of the immune system, Strober said.

The radiation treatment—which consists of 2,000 rads delivered over a six-week period—appears to be more effective against severe arthritis and lupus than the conventional drugs used to treat these diseases, Strober said.

In addition, its relatively benign side effects make it preferable to more powerful cytotoxic (cell-killing) drugs with undesirable side effects, which are now used as last resort treatments for both conditions, he said.

Strober's colleagues in the arthritis study are Drs. Amir Tanay, Elizabeth Field, Richard Hoppe, Andrei Calin, Edgar Engleman, Brian Kotzin (Veterans Adminstration Medical Center, Denver), Byron Brown, and the late Henry Kaplan.

Collaborators in the lupus study are Drs. Field, Hoppe, Kotzin, Engleman, Ovadia Shemesh, Jon Ross, and Bryan Myers.

Nine of 12 patients with advanced rheumatoid arthritis who received a moderate dose of TLI (2,000 rads) showed significant improvement in morning stiffness and joint tenderness six months after therapy. Three patients improved in a control group of 11 given a low dose of TLI (200 rads), Strober and his colleagues reported.

After six months, the eight control patients who had not improved were given moderate doses of TLI and six then also improved, Strober said.

All the patients had previously failed to improve with conventional anti-arthritic drugs such as gold compounds, penicillamine, and aspirin-like anti-inflammatory agents, the scientists said.

Although many patients who entered the study had lost the ability to care for themselves or to carry out normal household or occupational duties, those who improved following TLI frequently regained the capacity to work, or to feed, clothe and bathe themselves, the scientists said.

In a separate study, eight of 10 patients with lupus who had failed previous forms of therapy—anti-inflammatory agents and cytotoxic drugs—showed substantially improved kidney function for at least one year following the radiation treatment, Strober said, and some patients have maintained the improvement for almost four years.

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Although a high proportion of patients with severe lupus nephritis eventually require kidney dialysis, none of the TLI patients needed dialysis in four years of followup, Strober pointed out.

Usual symptoms of lupus, such as skin rash, headache, chest pain, fever, and fatigue, have been minimal or undetectable in these patients, Strober said. Some patients also recovered from a disabling accumulation of many pounds of excess fluid, he added.

Among the lupus patients who improved, the turnaround came despite a worsening of their disease for at least six months prior to entering the study, Strober said.

The improvement after TLI enabled nine of the 10 lupus patients previously given cytotoxic drug therapy to eliminate these drugs and to reduce by almost one-half their daily dose of prednisone, an anti-inflammatory agent, he added.

But Strober said that despite the promising results from both studies, it is still too soon to know whether TLI should be routinely considered as a treatment for patients with intractable arthritis or lupus.

Although benefits have continued for as long as four years in some arthritis patients given TLI in an earlier pilot study, follow-up for five to ten years, with close monitoring of long term side effects, will be necessary to firmly establish when to use TLI in treating rheumatoid arthritis, Strober said.

The lupus results are more preliminary, he added, since the study was only a pilot program—rather than a controlled trial—to test the feasibility of using TLI in lupus patients.

Side effects observed among the patients were less severe than those that can be caused by cytotoxic drugs, Strober pointed out.

Both groups of patients experienced temporary side effects from the radiation, such as nausea, loss of appetite and fatigue, none of which persisted more than two months, Strober said.

Some patients later developed viral infections, which were treated with antiviral medication, and some experienced a drop in certain blood components, he added.

TLI is a form of therapy in which radiation from a linear accelerator is aimed at lymph nodes throughout the body.

It was developed in the 1950s by the late Dr. Henry S. Kaplan of Stanford, as a treatment for patients with Hodgkin's disease, a cancer of the lymphatic system.

During the radiation treatment, non-lymphoid tissues in the body are shielded by lead barriers while radiation is focused on lymph nodes of the neck, chest, and abdomen, and on the thymus gland and spleen.

TLI causes a drop in the number of lymphocytes, white blood cells responsible for the body's immune response, including the defense against infection. Yet, less than one percent of the Hodgkin's patients treated with TLI contract severe bacterial infections requiring hospitalization.

In addition, none of the several hundred cancer patients treated with high dose radiation in this manner over the past 10 years has developed leukemia, and none of the arthritis and lupus patients has developed a malignancy as a result of the radiotherapy, Strober said.

Autoimmune diseases are thought to be caused by an abnormality of one type of T lymphocyte—a suppressor lymphocyte—which plays an important role in keeping the immune system in balance.

Suppressor cells are like the brakes of the immune system; without their inhibiting action a runaway effect can take place in which the defense system's destructive cells attack some of the body's own tissues.

TLI, which causes a long-lasting drop in the overall number of lymphocytes, actually increases the relative proportion of suppressor cells, Strober and his colleagues discovered.

TLI also appears to encourage production of a cell called a natural suppressor, which helps the body tolerate transplants of foreign tissue. For this reason, Strober and his colleagues have also been testing TLI's ability to help kidney transplant patients avoid rejection of the new organ.

Last year, the scientists reported that TLI enables kidney transplant patients to survive with only minimal drug therapy, sparing them from the adverse effects of potent anti-rejection medications.

The arthritis research was supported by grants from the KROC Foundation. The lupus research was funded by grants from the National Institutes of Health.

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SMASH LECTURES FOR THE SPRING

STANFORD—

The Spring 1985 S * M * A * S * H (Stanford Medical and Scientific Highlights) lecture series at the Stanford University School of Medicine begins April 12.

The lectures, open to the University and medical community, will be held in the Fairchild Auditorium, at 4:30 p.m.

All lectures are designed to present current frontiers of bio-medical investigation in a manner that everyone with a basic scientific background will be able to understand.

The season's lectures are:

- April 12: "Cell Recognition During Neuronal Development," Dr. Corey Goodman, associate professor of biological sciences;
- April 26: "Social Cells and Intercellular Communication," Dr. Dale Kaiser, professor of biochemistry;
- May 24: "T Cell Clones and Ir Genes," Dr. Garrison Fathman, associate professor of medicine (immunology).

The lecture series was initiated in 1980 by the medical school's Faculty Senate, which now cosponsors it with the Stanford Medical Students Association.

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AUXILIARY BOASTS 25 YEARS OF SERVICE

Photos available on request if not included with story.

STANFORD—

In honor of its 25th anniversary, the Stanford University Medical Center Auxiliary was given a special reception in March by the board of directors and administration of Stanford University Hospital.

The Auxiliary is a non-profit volunteer organization which had its beginning in 1929 and took its present form in 1959 when the medical school moved from San Francisco to the university campus.

Today's Auxiliary, an in-hospital service organization, has nearly 600 members, and directs the services of several hundred active volunteers. Auxiliary members have contributed more than 1.7 million hours of service to the hospital, working on more than 15 different services.

Originally a small group formed in support of the old Peninsula Hospital in Palo Alto, the Auxiliary at that time had as its primary purpose the raising of funds for needy patients in the community.

The Auxiliary now donates many of the funds it raises through the gift shop and baby photo sales, together with contributions, to services and equipment that help patients directly. To date, financial donations by the group exceed $1,300,000.

Ruth Allen, a member for 15 years, said Auxiliary programs have not changed much, but that the hospital, just like everywhere, is depending more on volunteer help these days for many different kinds of work that used to be affordable. She sees that trend as one of many changes that have occurred at the hospital since she joined the Auxiliary.

One of the most important new activities, Allen feels, in terms of its benefit to the community, is Lifeline. The program began just over a year ago, providing an emergency link to the hospital for geriatric, chronically ill, and cardiac patients.

Sharon Beckham, coordinator of volunteer services at Stanford Hospital, said, "I don't think the motivations for volunteering have changed that much over the past 25 years. There is still altruism, but I think too more people today are interested in specific assignments to gain certain skills.

"Just as society has seen more women entering the work force, current trends have impacted volunteerism in the United States," she said. "There are fewer 'traditional volunteers' today than there were 25 years ago. There are more working people, younger people, career-oriented people, and men are volunteering too.

"Those members who joined the Auxiliary initially were a very special group, representing a valuable resource that is fast diminishing," Beckham said.

Carol Davis has been with the Auxiliary since its incorporation in 1959, focusing primarily on the gift shop. But the aspect of the job she likes most, she said, is "seeing a smile on a sick patient's face."

Most members would agree. "I found I had a special rapport with patients and families," said Allen, recalling how she first joined the group. "Working with patients is my love—that's when I really feel I'm doing something useful."

Davis is one of several Auxiliary members who have been with the group the whole 25 years of its existence. They were honored at the recent reception, along with all members of the Auxiliary.

Among awards presented at the reception was a plaque given to the outgoing Auxiliary president, Donnie Ellington. Phyllis Alper, incoming president for 1985-86, was welcomed.

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Eds: Photos available on request

HOSPITAL INTERPRETERS SERVE AS MENTORS IN PROFESSIONAL PROGRAM

STANFORD—

Stanford University Hospital's four Spanish-language translators will be serving as mentors in a new college program this summer intended to train students for the specialized skill of helping hospital patients who do not speak English.

Under terms of a May 8 contract, about 25 students at the Monterey Institute of International Studies will be spending one-week internships with one of SUH's four interpreters, said Wilbur Wright, director of the clinical social work service which directs the translator program.

In addition, at least two of the translators—John Chavez and Gisela Pyka—will visit the Monterey school for up to three weeks to lecture language students about the specifics of translating in a medical setting.

The contract, signed for Stanford by Director and Executive Vice President Sheldon S. King, should provide an opportunity to help develop an important new profession, Wright said.

Herschel Peak, a spokesman for the 450-student school, said the three-week certification program is limited this year to its own students in two-year master's degree programs. When the program is repeated in following summers, Peak said the school hopes to include non-student bilingual workers in the three-week course.

Chavez said officials at Monterey sought out Stanford's interpreter/translators because the program, started here 14 years ago, has gained a widespread reputation and has been largely unduplicated at other institutions. (Stanford's original sole interpreter, Olga Guerra, recently became a clinical social worker, Wright said.)

"The lack of a formal training and certification program for translator/interpreters is something else that we're trying to change through a formal association we helped form, the American Medical Language Services Network. We have developed a code of ethics and are in the process of developing a formal certification process for translators (who translate written material) and interpreters (who deal with the spoken word)," Chavez said.

Other institutions cooperating in the network include, Santa Clara Valley Medical Center in San Jose, Highlands Hospital in Oakland, the Department of Health and Human Services Office of Civil Rights, and the San Francisco Health Department.

Stanford's four interpreter/translators will be assisted by interns from Monterey on a full range of duties, which include interpreting physician queries to patients about their health, translating prescription directions and instructions for patients, as well as discussions between health professionals and patients and their families.

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Chavez said the hospital and the Monterey school are attempting to fill a specialized need for interpreters and translators who are knowledgeable about medical terminology and sensitive to the cultural needs of foreign language speaking individuals in a medical setting.

For example, Chavez noted that knowledge of medical terminology in two languages is needed before someone can accurately translate symptoms and biological terms during a physician exam.

Also, the translators can serve as a resource to health care professionals here by alerting personnel to cultural sensitivities of patients which might differ from routine practice. For example, Pyka noted that families in many Latin cultures are less likely to be candid about life threatening conditions.

"The interpreter can explain the cultural feelings of the patient to the doctor, who may or may not insist on the patient's right to know." Ultimately, the interpreter complies with the physician's wishes, "but we feel our input contributes to the final answer," she said.

Chavez said it is crucial to use well-trained professionals to avoid the pitfalls which can occur when other bilingual hospital personnel are used informally as interpreters.

He said precise language skills and technical knowledge is needed to translate biological terms and information accurately.

"And we need to ensure that people in our profession adhere to a strict code of ethics. The translator/interpreter must be sensitive to cultural values and suggest when something might be stated differently. But ultimately we are responsible for conveying the health professional's message. The last thing you need in a health situation is for a translator arbitrarily to impose values by altering what the doctor is saying."

As an example, Chavez recalled a case at another hospital where a housekeeper, instead of translating a doctor's recommendation that a patient undergo surgery, advised the patient against an operation.

Hospitals, said Chavez, also face the risk of losing malpractice or discrimination suits if they fail to use qualified translators. Hospitals also face the risk of losing federal fundings if they fail to adhere to maintain proper standards by providing needed language services.

"Our people here at Stanford spearheaded a new profession," said Wright. The four interpreter/translators currently work primarily in Spanish and English because of the high volume of need among primarily Spanish-speaking patients and families. About 20 percent of Stanford's aproximately 23,000 patients speak Spanish as a primary language and many of these people require translator services, Wright said.

The hospital Office of Community and Patient Relations maintains a volunteer translator pool for other languages which works closely with the four regular Spanish translator/interpreters, Chavez said.

The Monterey program will include persons with primary language skills in such other languages as Russian, German, Japanese and French, said Pyka.

Wright said Chavez and Pyka were selected to give the initial lectures in Monterey because they both have advanced degrees and have lectured for Monterey Institute students in the past. Pyka, from Chile, is working on a Ph.D. in physiology at Stanford, while Chavez is a doctoral candidate in early childhood education at the University of California at Berkeley.

Stanford's other interpreters, who will be involved in the mentor program, are Josefina Fayard, from Mexico, and Eva Wasmer, a UC Berkeley graduate who grew up in the United States in a household where her Nicaraguan parents spoke Spanish.

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JOYCE LAWSON: THE "PROTOTYPIC TECH" OF RADIATION THERAPY

STANFORD—

It's a typically hectic morning in the radiation therapy department in the basement of Stanford University Hospital. Quick smiles and occasional inquiries of "How are you?" among staff go unanswered as they focus their attentions on patients, spilling over into the cramped reception area from the waiting room filled with spouses, children and friends. Like a busy freeway junction, technicians, physicians, nurses and patients walk by and around each other with no collisions, amazingly enough, to reach their destinations.

An older gentleman shuffles in carrying a pink bakery box tied with string. "You're going to make us fat," says the tall, thin chief radiation therapy technologist, Joyce Lawson, with a faintly discernible Scottish lilt revealing of her origin. "We missed you on Friday," she adds, pointedly waiting for an answer.

"He was on a drinking binge and was too embarrassed to come in for treatment," she later explains, munching one of the doughnuts the box contained. "There's a strong correlation between the combination of smoking and alcohol among patients with head and neck cancer. When they find out they have the cancer, they often drink more to escape reality. But how can you get mad at them? If you're told you have a life-threatening disease, that's when you rely on your crutch the most.

"You get to know patients pretty well," Lawson continues. "They come for treatment every day for six weeks at a time. During that time the physicians usually only see them once a week. You're their primary contact; you're the one who sees their emotional ups and downs."

Lawson has seen thousands of ups and downs during her 40 years as a radiation therapy technician, administering high-powered radioactive beams to thousands of patients suffering from cancer. Nearly 30 of those years have been at Stanford, where she was hired by the late Dr. Henry Kaplan to operate the first medical linear accelerator in 1955 and has contributed to the radiation therapy department's international prominence.

"She's probably been treating patients longer than any other human being," says Dr. Malcolm Bagshaw, chairman of the radiology department. "There are not many radiation therapy technicians who are known, but a lot of people know who Joyce Lawson is."

"She's the prototypic tech," adds radiologist Dr. Norman Coleman. "She's conscientious; she's interested in delivering high quality radiation; she's a real professional."

And the profession is Lawson. During her years at Stanford she has molded the radiation therapy department and the other technicians to meet her high—and strict—standards. She has held onto as much of the physical area as she's been able to, but in the spatial crunch of the hospital, the department has been squeezed into a small area she doesn't like nor think is entirely workable. She's taken out her frustrations, however, by consulting in the planning of other institutions' departments and by developing "quite nice" plans for the new department in the hospital modernization project.

Lawson started a radiation therapy technician school in 1962, training more than 100 techs until the school merged in 1982 with one at Foothill Community College. The students still come to Stanford as part of their coursework. "We get to see who the good ones are so we can hire them,"she says matter-of-factly.

"They get things here they don't get elsewhere," Lawson says, such as Wednesday afternoon conferences when physicians, residents, nurses and techs discuss each patient currently under their care. "I encourage them to go so they can learn about the diseases and treatments and also so they can get an overall picture of each patient.

"I nurture the attitude that each patient should be treated as an individual and not just as patient X. It's the patient contact that keeps me going in this job. We try to make treatment a personal, positive experience. Anybody who doesn't think that way doesn't belong in radiation therapy. The last thing patients need is a cold shoulder."

This congenial, sympathetic attitude may seem a bit odd to some colleagues, who diplomatically figure if they haven't got anything nice to say about Lawson, they won't say anything at all. Yet none dispute her skill as a tech, and many look up to her as a role model. "She can fly through anything," Coleman acknowledges.

"She's strong-willed and outspoken," Bagshaw admits. "But she's dealing in an area where the stakes are incredibly high. She tends to be a bit strict with residents and other techs, but they think she's terrific. She brings techs here, whips them into shape and then everybody can't wait to steal them."

"I've got a file drawer full of letters from patients praising Joyce and the other techs for the confident and friendly way they were treated," Bagshaw reveals. "Joyce is responsible for any compliments we get."

"You have to tread a narrow path between getting too involved in a personal way and yet being involved enough so the patients are aware that you really are genuinely interested in them and in their problems," Lawson explains during a breather, her legs sprawling as she relaxes in a chair in her tiny office filled with books and travel memorabilia.

"Patients seem to open up to us more than to the physicians," she continues. "Lots of times they'll hesitate to ask questions; they don't think the physicians have the time or they don't want to seem stupid. We give out a lot of basic information and explanations of exactly what's happening to them."

What the therapy actually does inside the patients' bodies can be hard to comprehend, Lawson says. Depending on the area to be radiated, patients are precisely situated in either a reclining or sitting position under one of the ominous-looking machines. The experience is somewhat like that of being X-rayed; the patients don't feel anything as the powerful beams penetrate their bodies. Reactions to the treatment—nausea, diarrhea, swollen glands, for example—surface later.

"Sometimes cancer patients will say to you 'I don't think I'm going to make it. Why are we doing this?' " Lawson says. "You *have* to say to them 'We're doing everything we can. We can't give any guarantees but you've got to do everything you can too. We've got to work together.'

"We know some of the patients aren't going to make it," she says, "but even so you can really make their remaining time a lot more comfortable."

Radiation therapy is a far cry from languages, Lawson's true interest during her school years in her native Scotland. But when she was graduating from high school, the British army was drafting women. Since radiation therapy was one occupation that would keep her out of the war, she decided she'd rather switch than fight.

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After World War II ended, Lawson emigrated to Canada to work with the first cobalt 60 irradiation unit, a breakthrough in deep-penetrating radiation treatment. "I worked my tail off there," she recalls. "The doctors used to go home at 5 p.m. and leave me there until 11 treating patients."

That went on until one day her roommate suggested she look for a job in California, the vogue thing to do among Canadian nurses in those days. She wrote to the chief radiologist at University of California, San Francisco, who replied that a young radiologist, Henry Kaplan, at Stanford was interested in hiring her.

"I'd never heard of Stanford," Lawson says. But the prospect of operating the newest technological invention intrigued her, and the rest, as they say, is history.

"We moved down here in 1959 when they built the hospital," she continues. "We started treating people before they even had the linoleum laid. We were walking around in all this goopy black stuff and the workmen were still building and painting around us."

In the years since the move, the one linear accelerator has been replaced by three—a fourth is on its way—and Lawson has seen the field of radiation therapy develop. "We've pioneered many of the techniques here. We've had a few key people and the equipment to make some real contributions to the field. Bagshaw, with his advances in prostate cancer, is keen on trying new and innovative ways of doing things. And of course Kaplan, with his success with Hodgkin's patients, was a man of such enormous intellect—he was on to so many things."

"The physicians are the ones who get the credit for contributions to radiation therapy," Bagshaw says, "but the suggestions on how to do things better have come from everyone, including Joyce."

The high energy linear accelerator is the end of the technology line, Lawson believes. Future advances in radiation therapy lie in the combination of radiation and adjunct treatments, such as those involving chemicals and temperature changes, that increase the sensitivity of cancerous tumors to radiation.

Lawson herself did not go unscathed. She developed thyroid cancer about 18 years ago, which was treated and successfully cured. "I'm sure I got it from the early work with radiation before we knew the exposure to it was harmful," she says. "I panicked at the initial shock of being told I had cancer, but then I realized it was a very treatable kind. But I did develop a new sense of empathy for patients because I experienced what cancer was like.

"But then I have patients who I treated 20 years ago coming to visit and they're all right. That's the type of feedback that keeps me going," she adds.

Lawson paid a visit of her own recently. About a year ago she visited the Smithsonian in Washington, D.C., where the first linear accelerator now stands as a museum piece. "I went down and said hello," she says. "I feel like I grew up with that machine. I felt like I was visiting an old friend."

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FOR IMMEDIATE RELEASE

FIRST STEP TOWARD A TEST TO IDENTIFY DIABETIC PATIENTS AT RISK FOR COMPLICATIONS

STANFORD—

A new finding that may pave the way toward early diagnosis of diabetic patients who are likely to develop certain severe complications of the disease, has been reported by Stanford University researchers.

In an article in the May 30 *New England Journal of Medicine* the scientists report that most diabetic patients with kidney disease, visual problems, or nerve damage have high levels of a certain substance in their blood.

Healthy individuals and diabetics without these complications have much lower blood levels of the substance, called prorenin, said Dr. John Luetscher, professor of medicine (emeritus) at Stanford University School of Medicine.

The complications—which are called "microvascular" because they are caused by changes in the body's small blood vessels—do not arise in every patient who has diabetes, but when they appear, their effect can be very destructive, leading to partial blindness, kidney failure, or pain, the researchers said.

Estimates are that between 20 and 30 percent of diabetic patients develop at least some of these problems over the course of 10 to 20 years, Luetscher said.

The new finding opens up the possibility of using blood prorenin levels to spot susceptible diabetic patients early in the course of the disease before their complications become irreversible.

"If we have a test that can identify patients at risk, then we can make more efficient use of modern technological advances to treat the disease," Luetscher said.

His colleagues in the research are Dr. Fredric Kraemer, assistant professor of medicine and head of Stanford's adult diabetes clinic, Dr. Darrell Wilson, assistant professor of pediatrics and head of the diabetes clinic at the Children's Hospital at Stanford, Dr. Herbert Schwartz, professor of pediatrics, and Dr. Michael Bryer-Ash, senior resident in medicine.

Although most physicians believe that careful control of blood sugar levels may help reduce the incidence and severity of microvascular complications, "lack of compliance by large numbers of diabetics makes current practice relatively ineffective," Luetscher explained.

But if a patient knew he was at high risk of developing serious complications, he would probably be more likely to take measures to control the disease, such as following a careful diet, controlling blood sugar levels, or taking insulin, Luetscher said.

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In addition, susceptible patients could benefit from new treatments as they become available for diabetes, he added.

However, the researchers stressed that it is too early to say conclusively that prorenin levels accurately predict those at risk.

"This study shows that patients who develop microvascular complications consistently have high prorenin levels, while those who escape complications usually have normal levels of prorenin. But it will take several years of monitoring patients to ascertain whether an increased prorenin level can actually predict the appearance of these complications," Luetscher said.

The researchers are studying a promising new drug called glipizide, which can reduce high levels of prorenin in diabetics.

"But again, it will take time to determine whether this agent can postpone or prevent the appearance of complications," Luetscher noted.

Prorenin is an inactive form of an important body hormone called renin that is produced in the kidneys and helps regulate blood vessel function and the body's water balance.

Normally, prorenin is converted to renin in the kidneys. One possible explanation for higher blood prorenin levels in patients with microvascular complications is that the kidneys become damaged in some way so that they cannot convert the inactive prorenin substance into renin, the researchers suggested.

The kidneys are highly sensitive to microvascular changes, they noted, so it is not surprising that early signs of complications would alter their function.

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MORAL JUDGMENTS ON RESEARCH DEBATED AT AAAS MEETING

STANFORD—

Stanford's Committee on Research has reaffirmed the university's basic policies on freedom of inquiry at a time when the defense department is looking for more participation by the nation's universities in military-related research, David Korn, dean of Stanford's School of Medicine told the scientific community Monday, May 27.

The committee upheld Stanford's policy that funding for research on campus must be based solely on the scholarly merit of the work and not on any moral judgements about possible outcomes of the research, Korn told a workshop at the annual meeting of the American Association for the Advancement of Science, being held in Los Angeles this week.

The Stanford committee, which Korn chairs, also voted last year to continue to prohibit Stanford scientists from conducting any classified or secret research.

The workshop, titled "Military Research and the University: Questions of Responsibility," dealt with the issue of how universities can balance academic freedom for their faculty with institutional obligations to society.

There is a long history, in this country and in Britain, of cooperation—and mistrust—between the military and university scientists, said George Gamota, who directs the Institute for Science and Technology at the University of Michigan in Ann Arbor. And the ambivalent relationship between the military and universities is exemplified by the longstanding dilemma of whether the University of California should continue to manage the national weapons laboratories at Los Alamos and Livermore, said Willie Fraser, Vice President of Academic Affairs for the UC systems, another participant in the workshop.

Currently, the defense department is pressing for more university involvement in research that would aid national security. According to Gamota, the U.S. Senate has asked for an appropriation of $25 million to fund defense department efforts to solicit more grant proposals from university researchers. The House wants to greatly increase the appropriation to $175 million.

The exact amount, which would be included in the 1986 budget, is now being debated by a conference committee, Gamota said.

Korn related how a clash developed two years ago between two national laboratories situated on the Stanford campus, the Stanford Linear Accelerator Laboratory (SLAC) and the Stanford Synchrotron Radiation Laboratory.

Both labs are funded primarily by the Department of Energy, and each lab conducts research independently of the other. Yet the synchrotron facility must obtain its synchrotron x-rays from SLAC.

The clash came in 1983, when the synchrotron lab began a new set of research projects that included work for testing and calibration of nuclear detectors. The project was unclassified, with no restrictions on the dissemination of the research results. Some SLAC researchers, however, including faculty, staff, and

students, protested that research dealing with nuclear weaponry was "categorically inappropriate" for a university setting, Korn said. And "because SLAC had to produce the x-rays required for (synchrotron) research many of the SLAC researchers felt co-opted into participating in research that was morally repugnant to them."

The synchrotron research had been funded because it met the Stanford criteria: peer review judged it to be sound science, and it was not classified. Yet dissension among the researchers involved provoked Stanford's faculty senate to ask the Committee on Research to re-examine Stanford policies on academic freedom, Korn said.

The committee locked into a heated debate. A minority held that Stanford should adopt a prohibition against research whose future applications could prove harmful to society. Such a restriction, they argued, had a precedent in the existing ban on secret research, and in limits on research with human subjects.

The majority, however, took the view that moral judgements cannot be used to restrict university research. "Such judgements tend to reflect an individual's satisfaction with social, political, and ethical values, or with government policies, which change with time and circumstances," Korn said.

He noted the committee did debate scenarios where research goals might be "clearly heinous"—such as research to develop poison gas for mass extermination of people. But the committee members could not come up with useful generalizations that would guide decisions on all research topics. "We couldn't put it into words," Korn said.

Meanwhile, the University of Michigan, in addition to a policy forbidding classified work, has adopted a ban on any research whose "clearly forseeable end is to destroy human life or incapacitate humans," said Gordon Kane, a professor of physics at the Ann Arbor campus.

Korn worries that such a restriction could interfere with research in areas such as diagnosing malformations in unborn humans, which, because of the abortion debate, is a sensitive topic.

But Kane says of the University of Michigan's decision, "we felt it was better to err on the side of caution."

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Roberta Friedman, a graduate journalism student at UC, Santa Cruz covered this story as part of her internship in the Stanford University Medical Center's Office of Communications.

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FOR IMMEDIATE RELEASE

COMMUNITY HEALTH EDUCATION CONFERENCE PLANNED

STANFORD—

Stopping disease before it starts through community education is the focus of a July 24-26 conference for health professionals sponsored by the Stanford Center for Research in Disease Prevention (SCRDP).

William Haskell, associate director of SCRDP, said the conference, "Health Promotion and Disease Prevention in the Community," will feature lectures and workshops conducted by a variety of nationally recognized guest and Stanford authorities. Sessions will include material on both conceptual and practical issues of successfully achieving chronic disease prevention through community-wide health education, he said.

Lectures range from such theoretical discussions as "Application of social learning theory to community health programs" by Albert Bandura, professor of psychology at Stanford, to practical sessions such as "Use of contests for health promotion," conducted by June Flora, director of education for SCRDP, and Mia Clark, SCRDP special events coordinator.

Among the 32 faculty members are such guest lecturers as Lester Breslow, dean emeritus and professor of public health at the UCLA School of Public Health; Donald Iverson, associate director of the Cancer Control Science Program, Division of Cancer Prevention and Control, National Cancer Institute; J. Michael McGinnis, deputy assistant secretary of Health, director of the Office of Disease Prevention and Health Promotion for the Department of Health and Human Services; and Elaine Stone, health scientist administrator, National Heart Lung and Blood Institute.

SCRDP, which includes the Stanford Heart Disease Prevention Program, has been involved with community health education through its Five Cities Project and other community-based health efforts for more than a decade.

The conference is open to health profesionals interested in the theory and practice of community health education, including physicians, health educators, health counselors, nurses, dietetians, public health personnel, volunteer health organziatoin staff and private health program administrators.

For further information, contact Edelen Stevens, (415) 497-6254. Credit is available for physicians and nurses from the California Medical Association and for appropriate registrants from the American College of Sports Medicine.

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FOR IMMEDIATE RELEASE

EYE, HEART AILMENTS TARGETED BY FUND FROM FORMER STANFORD PRESIDENT

STANFORD—

More than $1.1 million from the estates of Stanford University's fourth President and his wife will go to the School of Medicine for the study of glaucoma and other eye, as well as heart, diseases.

Donald Tresidder had heart disease, and his wife, Mary, suffered from glaucoma.

The university board of trustees authorized the use of the funds for such research on Monday, May 13.

Both Donald and Mary Tresidder were graduates of Stanford, and devoted a great part of their lives to serving the university.

Donald Tresidder served as Stanford University president from 1943 until his death in 1948. In 1934, he helped found the Stanford Associates, a fund raising group. He was named to the Board of Trustees in 1939.

Before assuming the university presidency, Donald Tresidder was president of the Yosemite Park and Curry Co. at Yosemite National Park, a vacation-resort concession established by his wife's family.

In 1970, Mrs. Tresidder established by bequest the Donald B. and Mary C. Tresidder Charitable Remainder Annuity Trust Fund, which paid income for life to two beneficiaries. The last beneficiary died in January, making the principal of the trust available to the School of Medicine.

As of December 31, 1985, the principal of the trust will be more than $1.1 million, according to the Committee on Academic Affairs and Development, which made the recommendation to the trustees.

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FOR IMMEDIATE RELEASE

MALPRACTICE REFORM MUST COME FROM OUTSIDE MEDICINE

STANFORD—

Reform to alleviate both the size and increasing frequency of malpractice suits against physicians must come from outside the medical system, Dr. David Rubsamen told a Stanford Medical Alumni Association Symposium Saturday, May 18.

"As malpractice insurance premiums skyrocket because of the large awards granted to plaintiffs by the courts, the answer may be found in some type of state mechanism for insuring doctors," he said.

Physicians can play a role in educating California lawmakers about the seriousness of the problem, he added.

Rubsamen, an alumnus with both medical and law degrees from Stanford, is editor of the "Professional Liability Newsletter" which comments on current legal-medical decisions and how they affect California physicians.

Since 1968 malpractice verdicts in the state against physicians have sharply increased in size and frequency, Rubsamen said, with multimillion dollar awards constituting the most alarming trend, he said.

Several developments account for this, Rubsamen said. They include a greater willingness among patients to sue their doctors, and the number of attorneys spawned by law schools. Their numbers in the past 15 years have jumped from 2.9 attorneys per 100 physicians to 11 per 100. The best of the trial attorneys are attracted to the goldfields of malpractice litigation. And the public cannot help but be impressed by the million-dollar verdicts.

"But the most single outstanding feature is that physicians for the first time have been willing to testify against other doctors," he said.

This trend has had its roots in today's higher standards of medical practice and medicine's ability to respond rapidly to physiological events through sophisticated techniques and equipment.

"Fifteen years ago even the most catastrophically injured patient would have been lucky to win as much as $500,000," he said. "And in most instances such cases were not even tried."

One example is the field of anesthesia, Rubsamen said. A series of "anesthesia disasters" was reaching the courts in the late sixties and early seventies, resulting in large awards. For awhile it seemed unlikely that anesthesiologists would be insurable against malpractice. But the doctor-owned insurance carriers imposed on them new requirements and standards. The measures have reduced litigation incidence by 15 percent.

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Another vulnerable specialty is obstetrics and gynecology. Its problem stems from technical advances to salvage newborns which previously would have died. The most common suits involve brain damage often caused by a combination of human error and machine failures in labor rooms and neonatal ICUs.

"The problem is so serious," Rubsamen said, "that ob-gyn specialists may become uninsurable in the next four to five years."

Perinatal damages can be reduced significantly if high technology services were concentrated in metropolitan hospitals only, he said.

The passage of the Medical Insurance Reform Act, which became law in 1975, has had beneficial effects, Rubsamen noted. The law placed limitations on attorney fees in malpractice cases and required disclosure of plaintiffs' collateral benefits from other sources, pensions, insurance etc. The California Supreme Court last February put a quarter-million cap on the amount victims may collect for pain and suffering by malpracticing physicians, a provision knitted in the 1975 law.

"These measures have encouraged lower settlements and more fair verdicts," Rubsamen said.

Communication with the public is important in reducing the incidence of medical malpractice suits, Rubsamen feels. In teaching hospitals, for instance, it's not sufficient to say that the resident is "on the team" working with the faculty member. The patient must be made aware the resident will be performing the operation.

"A hospital's legal responsibilities can be relieved by a policy of complete disclosure, which has been the method used in the Stanford surgery service for years," he said.

Ideally, the best approach for dealing with medical malpractice is arbitration, he said. This would eliminate the jurors and courtroom. Arbitration would be informal with a hearing in a small office instead of the courtroom with an arbitrator agreed upon by both parties. The approach is similar to that used in tax cases.

The no-fault system, advocated by some, is another option, but it would bring pressures for defensive medicine far in excess of anything present today, Rubsamen said. In a no-fault system compensation means payment for every unanticipated liability. No-fault deals only with cause, and the issue of negligence does not arise.

In theory such a system would define "a standard of perfection for medical care" and paying compensation to any patient who suffered damages for lack of it, he said.

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EDITORS: This release issued jointly by Stanford University Medical School, the Whitehead Institute for Biomedical Research, and Albert Einstein College of Medicine.
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FOR IMMEDIATE RELEASE

NEW GENE TECHNIQUE AIDS SEARCH FOR TUBERCULOSIS, LEPROSY VACCINES

STANFORD—

Scientists at three institutions said Monday, May 20 that they are using a powerful new gene isolation technique to help identify new vaccines against two diseases that may afflict 50 million people worldwide.

The new biochemical approach has enabled the researchers—based principally at Stanford University School of Medicine, the Whitehead Institute for Biomedical Research, and Albert Einstein College of Medicine—to identify protein fragments that they hope to develop into vaccines against tuberculosis and leprosy, said Dr. Ronald Davis, Stanford professor of biochemistry.

The new vaccine-hunting strategy was originally developed by Dr. Richard Young—formerly a postdoctoral scholar with Davis and now at the Whitehead Institute and Massachusetts Institute of Technology—and Davis as a powerful tool for isolating genes in basic biological research.

"But what may originally have looked like an arcane research tool has turned out to have enormous practical value," said Dr. Barry R. Bloom, professor of microbiology and immunology at Albert Einstein College of Medicine, who is a collaborator on the tuberculosis and leprosy work.

A report on the tuberculosis vaccine research was published in the May issue of the *Proceedings of the National Academy of Sciences*.

Other collaborators include Dr. Clemens M. Grosskinsky of Albert Einstein College of Medicine, and Dr. Juraj Ivanyi, from the Wellcome Research Laboratories in England.

The leprosy work is being carried out by Young, Bloom, Davis, and Drs. Vijay Mehra and Douglas Sweetser at the Whitehead Institute and MIT, Dr. Thomas Buchanan of the University of Washington, and Dr. Josephine Clark-Curtis from Washington University.

The research is funded by the World Health Organization and the National Institutes of Health.

The new technique has broad potential for the field of vaccine development because until now, researchers generally needed considerable knowledge about a disease-causing organism in order to find even one possible vaccine against it, Young said.

The new strategy, based on recombinant DNA techniques, bypasses that need, Young said. It can search for and find all potential vaccine proteins at once for a given disease-causing organism, even if researchers have little knowledge of how the organism causes disease or if the organism can't be grown in culture, he explained.

But he added that while the new technology streamlines the search for potential vaccines, these promising vaccine candidates must still be developed into a form that can be delivered to people, and they must be tested in the normal way for safety and effectiveness in carefully controlled studies before being used on a wide scale.

This testing phase could become speedier as well, because of the new technology's capacity for isolating, and therefore, cloning the gene that codes for each vaccine candidate, Young said.

(A vaccine is a weakened disease-causing microorganism or protein material from the microbe that can be administered to stimulate the body's natural defenses against disease.)

The scientists chose leprosy as one of their first vaccine targets because the bacterium that causes the disease cannot be grown in the test tube, stymying attempts to develop an effective vaccine against it, Bloom said. The bacterium that causes tuberculosis is closely related to the leprosy pathogen but easier to work with, he added.

"In this country people have forgotten about these diseases," Bloom said. Yet tuberculosis is a respiratory infection that is estimated to afflict 30 million people worldwide and to kill 3 million annually, he added. Although there is a vaccine available for tuberculosis, recent studies in Asia suggest that it is not very effective, Young said.

Leprosy, thought to affect 10 to 15 million people worldwide, is re-emerging as a major world health problem as resistance to antibiotics develops in the bacteria that cause the disease, Davis said.

A recently developed vaccine against leprosy is showing preliminary promising results, Young said, but it needs to be made from the bacterium that causes the disease, which can only be grown in the laboratory in armadillos. "This is expensive and virtually impossible to do in large enough quantities for worldwide use," Young pointed out.

The new technology not only allows researchers to spot each protein or protein fragment that has vaccine potential but also permits isolation of the gene that directs production of the protein, Young explained.

By isolating these genes and using genetic engineering techniques, the researchers expect the vaccine candidates can be produced in large quantities, first for testing and later on a large scale for worldwide use if they are proven effective.

Young said that it is too early to predict when human testing might begin. The researchers are currently trying to modify an existing live tuberculosis vaccine with the genes they have isolated.

The workhorse of the new gene isolation technique is a special type of virus developed by Davis and Young, called lambda gt11.

Scientists dissect the genetic material, DNA, of a disease-causing microorganism into its individual genes, and splice these genes into lambda gt11's DNA. The virus serves as a ferry, carrying single genes into E. coli bacteria.

Hundreds of thousands of bacterial colonies are grown, each a tiny factory with a specialized output of only one particular protein from the disease-causing organism under study.

The proteins manufactured by each bacterial colony are then screened with antibodies against the disease to find proteins with vaccine potential. Since there are so many bacterial colonies, each producing a different protein from the disease-causing organism, the researchers believe the procedure won't miss any proteins of interest, Young said.

The technique is so powerful that it would even detect "silent" genes, those that code for proteins rarely produced by the organism or produced only during active infection, Davis said.

The new strategy also allows scientists in many laboratories around the world to isolate genes and proteins for more basic biological studies, Davis said. For the first time it gives researchers the ability to isolate any gene if they have an antibody to the protein specified by the gene, he explained.

The new biotechnology method can also be used to develop more sensitive and effective ways to diagnose infectious diseases. For example, some closely related strains of disease-causing organisms could be distinguished from each other if each produced unique proteins. The new method would allow researchers to find these unique proteins, Davis said.

(Davis can be reached at (415) 497-6277; Young can be reached at (617) 258-5218; Bloom can be reached at (212) 430-2889.

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THE FOLLOWING EMBARGOED FOR RELEASE 2:30 P.M. THURSDAY, MAY 16, 1985

MODERATE ALCOHOL USE INCREASES BLOOD PROTEIN LINKED TO REDUCING HEART ATTACK RISK

STANFORD—

Moderate alcohol consumption may reduce the risk of heart attacks by increasing a blood protein which has been linked to reduced risk of heart disease, according to a study by Stanford University researchers.

However, clinical physicians and researchers at the Stanford center where the 14-week study was conducted warned that alcohol consumption, particularly for motorists and pregnant women, poses other well established risks which must be weighed against potential benefits to the heart.

"We certainly don't recommend that people who normally abstain from alcohol start drinking because they believe it will lower their risk of heart disease," said Dr. Stephen Fortmann, associate director of the Stanford Center for Research in Disease Prevention (SCRDP). "There are too many potential psychological, social and physical risks associated with alcohol use, particularly for persons who do not customarily indulge in alcohol," said Fortmann.

The study, conducted under SCRDP auspices and reported in the Friday, May 17, issue of the **Journal of the American Medical Association**, was done as an extension of a summer project by Stanford human biology student, Carlos Camargo Jr., whose undergraduate research was sponsored by the American Heart Association. Camargo currently is a first-year medical student at the University of California San Francisco.

Other authors were Paul T. Williams and Karen M. Vranizan, SCRDP biostatisticians; John J. Albers, a blood fat researcher at the University of Washington School of Medicine; and Peter D. Wood, a blood fat researcher and associate director of SCRDP.

A study of 24 healthy men showed that alcohol clearly increased their average levels of a substance called apolipoprotein A-I, which has been shown in earlier studies to be strongly linked to reduced risk of heart disease. When some of the men stopped drinking, their level of Apo A-I decreased, said Williams.

Apo A-I is a component of the so-called "good cholesterol," high density lippoprotein (HDL). Persons with high HDL levels, including most athletes, are known to have a lower risk of heart attacks than persons with low levels. In recent years it was learned that APO-A1 is an essential, functional component of HDL.

Scientists believe that HDL lowers heart attack risk by clearing the arteries of fatty deposits. Another form of blood cholesterol, low density lippoproteins (LDL) have been shown to increase the risk of heart disease by causing fatty deposits in blood vessels.

Earlier studies have also shown that alcohol consumption increases HDL levels, but until this study was completed, it was not known whether the increase involved only inert components of HDL, which would rule out this blood component as a factor in reduced heart disease.

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The SCRDP study also showed that moderate alcohol consumption increased the level of apolipoprotein A-II, but that protein's relationship to heart disease has not been clearly established, said Camargo.

The study was conducted on nonsmoking volunteers, aged 30 to 60, who regularly consumed two to three drinks per day.

After studying diet, alcohol consumption and exercise level for three weeks, half of the participants stopped drinking entirely, while the other half continued with their normal consumption. After six weeks, the abstaining group resumed normal drinking for five weeks of further study.

The diet and exercise level of all participants was monitored to eliminate these factors as an influence on Apo A-I levels. But Camargo said the study clearly showed that alcohol—in whatever form it was taken—was the dominant influence in changing the Apo A-I level.

Camargo said other studies have shown persons who drink moderately have a smaller risk for heart disease than persons who drink heavily or not all. However, he cautioned that it is impossible to determine precisely how much reduction can be achieved, since there are many factors involved in heart disease.

The amount of Apo A-I increase occurred in all of the drinking men studied, averaging about a 14 percent increase in persons who consumed about 2 1/2 drinks per day. But the amount of increase varied depending on a variety of physical and environmental factors, and there is no accurate way to determine how much risk reduction can be achieved from a given increase in Apo A-I level, Fortmann said. The Apo A-I level must be studied in a context of other important risk factors, such as smoking, exercise, blood pressure and general physical condition, he added.

Fortmann explained:

"This study provides some additional evidence that moderate drinkers—persons who limit their intake to about one drink a day—may derive some modest cardiac benefits, particularly if their diet, exercise and lifestyle patterns are otherwise healthy.

"As a general rule, I would not recommend that anyone start drinking to benefit their health. There are many other ways to help protect against heart attack—exercise, diet, weight control—that do not carry the risks of alcohol. But for adults whose habits include a stable, modest alcohol consumption, there may be some protection against heart attack and one need not recommend that they stop drinking," Fortmann added.

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FOR IMMEDIATE RELEASE

ALUMNI BROTHERS INITIATE VISITING MEDICAL PROFESSORSHIP

STANFORD—

Ben and Jess Shenson, brothers who both graduated from Stanford Medical School and have had a lifelong commitment to clinical medicine, have established a visiting professorship intended to bring an outstanding academic clinician to Stanford for one month.

The Dr. Ben and A. Jess Shenson Visiting Professor of Clinical Medicine in memory of Louis and Rose Shenson, the benefactors' parents, was announced this week by the university and the Shensons. The two brothers have practiced internal medicine at the same location in downtown San Francisco for more than 30 years.

Dr. Rex Jamison, acting chairman of the Department of Medicine, said the visiting professor will conduct clinical rounds, occasionally lead grand rounds, and meet with faculty, students and house staff.

"In sum, the purpose of these activities will be to reaffirm the art of the clinician amidst the increasingly impersonal and administrative aspects of modern medical care," Jamison said.

The first recipient selected by the Shensons on the recommendation of a faculty committee is expected to be at Stanford in early 1986. The visiting professorship has been established for one year with the intention of becoming longterm, the Shensons said.

Ben Shenson graduated from Stanford Medical School in 1940, while Jess followed with his M.D. in 1950. Both brothers also received their undergraduate training at Stanford.

The two physicians served on the clinical faculty until the medical school moved from San Francisco to Palo Alto. For many years, both continued an active clinical appointment on the faculty by commuting to Palo Alto to teach.

The Shensons have continuously been active financial supporters of Stanford. In 1950 they established a medical student loan fund, now known as the Louis and Rose Shenson Memorial Loan Fund. Rose Shenson shared her sons' interest in Stanford and often accompanied them to campus events until her death at age 90 in 1983.

The brothers have a strong interest in the arts, particularly the opera and have collected the work of early California artist Theodore Wores.

5-14-85 —30— mg5

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FOR IMMEDIATE RELEASE

NEW CLINIC FOR PEOPLE WITH FACIAL PARALYSIS OPENS AT STANFORD

STANFORD—

A new multidisciplinary Stanford University clinic for patients suffering facial nerve damage offers hope to those who may have thought nothing could be done for paralysis.

"The face is very important," said ear, nose and throat specialist Dr. Richard Goode, coordinator of the clinic. "You can't cover it up with clothes. If it doesn't work it can affect a person's appearance, speech, eating ability and more."

Facial paralysis can be caused by viruses such as Bell's Palsy, tumors, strokes and other conditions, Goode explained. Patients of the clinic—the only one of its kind in this area, Goode said—will have access to physicians in a variety of specialties, such as neurologists, ophthalmologists, and surgeons, as well as physical therapists and psychologists. They will be provided with a consultation covering all aspects of their facial nerve disorders including diagnosis, treatment and longterm prognosis.

"I was in a state of dispair," recalled Los Angeles resident Barbara Horrall, who was told by numerous physicians she saw in Southern California that her partial facial paralysis was due to a tumor that would require "radical surgery. They said they would have to take out the tumor, disconnect nerves, do skin grafts, the whole works."

The paralysis to the right side of her face had come on gradually over a period of about three years, Horrall explained. By the time she finally noticed it, the muscle tone in the right side of her face had deteriorated considerably.

"My face was distorted," Horrall said. "I'm an English teacher and I've always enunciated very well when I talk. I had to learn not to move my mouth.

"I was asked to substitute for a teacher for six months and I refused. I was too embarrassed. I thought the kids would laugh at me."

Dissatisfied with the physicians and upset with his wife's vanishing sense of confidence, Horrall's husband called Stanford and was referred to Goode and neurologist Dr. David Prince. They ruled out the possibility of a tumor as well as surgery to remove it. What they did instead, Goode explained, was surgically alter some of the muscles on the left side of Horrall's face so that its function matched that of the right side.

"My face isn't perfect, but it's a lot better," Horrall said. "I'm not so self-conscious anymore."

Would she accept a teaching position today? "You bet," Horrall affirmed.

"There are so many cases like this where patients want a second opinion but have no where to go," Goode said. "Many physicians can provide the expertise in their own area, but do not consider the rest of the face.

"What this new clinic does is bring together all the available information and collective experience in one place," he said. "Our goal is to coordinate care for patients so they don't have to run from one physician's office to another."

5-14-85 —30— sk5

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SYMPOSIUM DISCUSSES STRATEGIES FOR GENE THERAPY

STANFORD—

Attempts to treat human disease using "gene therapy" techniques will begin earlier than three years from now and possibly within one year, predicted Dr. Paul Berg, professor of biochemistry at Stanford University School of Medicine.

Berg made his remarks at a press conference Thursday, May 9, held in connection with the third annual symposium of the medical school's program in molecular and genetic medicine.

The press conference marked the public announcement of plans for construction of a new $50 million building to house the molecular and genetic medicine program, headed by Berg, a Nobel laureate.

The first diseases to be treated through gene therapy most likely will be those caused by a defect in a single gene, Berg said. Dr. David Martin, vice president for research at Genentech, Inc. of South San Francisco, is one of the researchers contemplating such gene therapy clinical trials.

Martin, who has targeted two rare genetic diseases of the immune system for gene therapy, was one of the speakers at the scientific symposium which focused on causes, diagnosis, and treatment of genetic diseases—particularly those of the human immune system. The daylong symposium drew a full crowd of students, faculty, scientists and reporters to Sherman Fairchild Auditorium.

Martin has been studying two immune deficiency diseases, each of which is caused by a defect in a single gene. In each case, the gene defect causes an important enzyme required for normal functioning of immune system cells to be missing.

(The diseases—called adenosine deaminase deficiency (ADA) and purine nucleoside phosphorylase deficiency (PNP)—are named after the missing enzymes.)

In both diseases, patients can be treated if the missing enzyme is supplied. This has been done through transplantation of bone marrow cells or infusions of red blood cells, Martin said, but both of those treatment methods have drawbacks.

Martin outlined his proposal to use a genetically engineered virus as a ferry that could carry a normal "healthy" gene into patients to supply them with the enzyme their own defective gene cannot provide. Martin and his collaborators have already succeeded in transferring ADA and PNP genes into mice with this method, although they have yet to prove that the gene transfer results in production of the needed enzymes.

However, once that is accomplished human clinical trials might come soon. (The National Institutes of Health committee overseeing the introduction of gene therapy clinical trials recently recommended suspension of the requirement for experiments in primates prior to commencing gene therapy studies in humans.)

ADA and PNP are good candidate diseases for gene therapy, Martin stressed, since patients afflicted with them are "time bombs" who can die at any moment but if treated can live completely normal lives.

In addition, gene therapy for ADA and PNP does not present two of the formidable technical obstacles that would-be gene doctors will have to master for more complex diseases: making sure that genes are transferred only into specific tissues where they can provide benefit and making sure that they neither produce too much nor too little of the proteins they specify.

In ADA and PNP, Martin explained, therapeutic effects can be achieved even if the level of enzyme produced is not finely controlled and whether or not the new gene is placed or expressed only in certain specific cells.

Another method of transferring healthy genes into a patient to supplement or replace malfunctioning ones is bone marrow transplantation, which was discussed by Dr. Donnall Thomas from the University of Washington and the Fred Hutchinson Cancer Center in Seattle.

Thomas suggested that bone marrow transplants provide a more natural way of transferring therapeutic genes since the healthy genes are "packaged" in human bone marrow cells rather than in genetically engineered viruses.

Thomas reported on survival rates following bone marrow transplantation in patients with a variety of immune deficiency diseases and enzyme deficiences. But the requirements of finding matching donors, controlling rejection, and preventing donor cells from attacking recipients' tissues are still problematic, Thomas said.

Bone marrow transplantation can be considered a form of gene therapy, Thomas said, although in some cases, such as in cancers of the immune system, the underlying genetic defects causing the disease are not yet understood.

An alternative form of treatment for certain cancers of the immune system was reported on by Dr. Ronald Levy, associate professor of medicine at Stanford. Levy presented results from four years of clinical tests at Stanford with "tailormade" proteins known as monoclonal antibodies in 11 patients with cancers that affects cells in the immune system known as B-cells.

One patient's cancer receded within six weeks after he received doses of a monoclonal antibody tailor-designed to home in on his tumor, and the cancer has not reappeared in four years of follow-up, Levy said. Results in the ten remaining patients, most of whom had failed to improve with conventional anti-cancer therapy, were not as dramatic, although they are "encouraging," Levy said.

Five of the remaining 10 patients experienced at least a 50 percent shrinkage of their tumors, he reported, although in four the tumors returned within one to six months. In five other patients, the monoclonal antibody therapy showed no clinically significant effects, he said.

Levy said that further studies are needed to improve the clinical results and to determine how the monoclonal antibodies may achieve their anti-tumor effects. Some evidence suggests that monoclonal antibody therapy may work best in patients whose immune systems are already attempting to destroy their cancers.

Berg, who said that "all human disease is genetic in its origin," noted that defects in single genes account for 350 to 400 known human diseases. But many others are caused by the interactions of more than one defective gene.

"Schizophrenia and several forms of heart and hypertensive diseases" may fall in this category, he suggested.

Other examples of "polygenic" diseases are the so-called autoimmune diseases such as rheumatoid arthritis, juvenile diabetes, multiple sclerosis, and myasthenia gravis. Dr. Hugh McDevitt, Stanford professor of medical microbiology and medicine, discussed how genetic research is leading to new ways of diagnosing people who are highly susceptible to developing these diseases.

Certain genes associated with the immune system contain subtle variations from person to person, McDevitt explained. But individuals with multiple sclerosis all seem to possess one particular gene form while those who develop arthritis have in common a different gene variant.

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By developing ways of detecting these gene variations, scientists open up the possibility of diagnosing susceptible individuals as early as prenatally. Then, if preventive techniques such as vaccination are found, the susceptible people could be protected from developing disease. And as new therapies for these diseases become available, susceptible individuals could be treated at the earliest stages of disease for maximum effectiveness, he said.

One such new treatment strategy McDevitt described is an attempt to use monoclonal antibodies against multiple sclerosis. Earlier this year, Dr. Lawrence Steinman of Stanford, with colleagues reported encouraging results in mice in both prevention and reversal of an experimental disease considered a model for multiple sclerosis. Clinical trials in humans could begin within the next year, Steinman has said.

Several morning speakers concentrated on advances in understanding the basic biology of the immune system. Dr. Irving Weissman, professor of pathology, described recent research on the receptors immune system cells use to get where they need to go in the body. These "homing" receptors may provide useful diagnostic information to predict where immune system cancers might spread through the body, he said.

Dr. Mark Davis, assistant professor of medical microbiology, discussed the genes that code for "recognition" receptor proteins of immune system cells. He described some of the parallels and differences between the receptor genes for T-cells—the immune system cells involved in tissue rejection and regulation of the immune response—and receptor genes in B-cells, which play a role in fighting viral and bacterial infections. These receptor proteins enable immune system cells to recognize foreign substances and tissues in the body.

Dr. Leroy Hood, professor of biology from California Institute of Technology in Pasadena, also described work on the genes that code for the immune system's receptor proteins. Automated instrumentation in his laboratory is helping scientists find the DNA sequences of newly discovered genes and construct proteins coded for by those genes.

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FOR IMMEDIATE RELEASE

COMPETITIVE TRENDS IMPORTANT IN PLANNING M.D. CAREERS, PANEL SAYS

STANFORD—

The practice of medicine is a business, and those preparing for it should take that into account when planning their careers, a panel of doctors agrees.

The physicians, all from diverse backgrounds, met at the Stanford University Medical Center on Tuesday, May 7, to discuss what medicine will be like in the year 2000. All felt that increased bureaucracy in medicine probably will affect the interpersonal relationship between doctors and patients in the future.

And the doctors stressed that the economic realities of practicing medicine and the stiff competition for patients were areas they hadn't adequately evaluated as students.

Dr. Rosaline Vasquez, a practicing physician at the Redwood Medical Clinic, says she went to medical school with the intention of serving the Spanish-speaking population. She said she and her husband, also a physician, opened an office in a small town.

"The first year we lost $40,000," Vasquez said. Established physicians in the area, apparently fearing the competition, did not readily welcome them, and there was a fight over restrictions of hospital privileges, said Vasquez. The cost of equipment and overhead was high. "Finally, we came back and joined a 40-doctor multi-specialty group in Redwood City," she said.

Dr. Roger Peeks, who is in private practice in Oakland and assistant dean (Minority Affairs) at the Stanford University Medical School, told the some 120 persons attending the discussion he felt more and more physicians would shift from private practice toward group practices or working for pre-paid health plans. Peeks said that undoubtedly would reduce the amount of time most doctors would spend with each patient.

Dr. Patricia McGann, practicing physician at the Mid- Penisula Health Clinic in Palo Alto, a consumer-owned health care service, said, "Very few professions have enjoyed the amount of autonomy physicians have in the past. I think it's unrealistic to think we'll be allowed to continue without restraints."

Dr. Thomas Fiene, a practicing internist at Menlo Medical Clinic, said he thinks doctors "have an awfully long way to go in how we relate to our patients. how we guard the professional relationships, how we act as their advocates."

He also sees "a trend of increased care of patients at home" because the cost of hospital care is so high.

All the doctors felt that students should look realistically at the economics of medicine in planning their careers.

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Dr. John Harris, physician and administrator of the Fremont satellite facility of the Palo Alto Medical Clinic, went to business school after getting his medical training, and he found the knowledge he gained useful.

Dr. Ann Arvin, associate professor of pediatrics at Stanford University Medical School, said, "I'm a little uncomfortable that we're spending so much time talking about money...The reason we keep talking about money is that it is a real factor in our lives and I don't know any profession where that wouldn't be true."

All the doctors agreed that the future will see medicine belonging more to large health-care corporations and prepaid health plans, which will employ doctors on salary, rather than to the private practitioner.

And that, the physicians said, will mean spending less time with each patient.

In the future, Vasquez said, "things like developing a personal relationship will be left as a last priority."

Eventually, she feels, patients' expectations of their doctors also will change. "Patients will no longer expect their physicians to be available at all hours, 365 days a year," Vasquez said.

McGann felt some of the major changes in the future will come from "increased consumer involvement in decision-making. Patients have a strong desire to be educated about...what's going to happen to their bodies and their lives," she said.

New technologies will make a difference in treatment, the physicians agreed. "I think probably the quality of care will be better because of technology," said Peeks, "but you may not be better off in terms of a personal relationship with your patient."

Vasquez said, "I think there will be a crossing point at which the patients will say, 'Hey, wait a minute. I want more personal care, and I'm willing to pay more for it.'"

The group discussion was moderated by Dr. John Bunker, professor of anesthesia and health policy researcher.

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FOR IMMEDIATE RELEASE

NEW DIVISION OF HAND SURGERY ESTABLISHED

STANFORD—

Stanford University School of Medicine has established a new division of hand surgery, announced Dean David Korn.

The division—the first ever at a major medical school—grabs onto a national trend leading towards the creation of hand surgery as a new medical specialty, said Dr. Vincent Hentz, head of the new division.

The advent of microsurgery—techniques with which surgeons can cut and splice vessels, nerves, muscle, tendons and more with minuscule tools they maneuver while peering through a microscope—enhanced the young specialty. The techniques gave physicians the ability "to cope with any of the deformities that occur within a hand whether they result from injury, birth defect, lost of part due to infection or treatment of tumors or degenerative disease," said surgeon Dr. Robert Chase, who will join Hentz as a faculty member for the division.

"Within two years there will be some type of national certificate of special competency in hand surgery," Hentz predicted. Other schools will be scrambling to develop a curriculum to satisfy the requirements for the specialty while Stanford's division will be up and running, he added.

"Stanford is wise to establish this division now," he said.

The hand is of interest to surgeons, Hentz explained, because of its relative importance—it is one of two elements that separates man from other animals. The other is man's highly developed brain.

The goals of the new division are to provide academic and clinical training to medical students, postdoctoral students, interns and residents, Hentz said, as well as to develop a "first class patient care facility." In addition to Hentz, a plastic and reconstructive surgeon who has for the last 10 years specialized in hand and microvascular surgery, and Chase, internationally known as one of the "deans" of hand surgery, Dr. Vincent Pelligrini, an orthopedic surgeon currently at Unviersity of Rochester, New York, will join the faculty this summer.

"The combination of expertise among the faculty is unique," Hentz said.

Surgery of the hand and upper extremities began its evolution as a specialty during WWII, Hentz explained. General; plastic and reconstructive and orthopedic surgeons became intrigued with the specialty because of the hand's function and opportunity it provides for research and discovery. Two national organizations with about 2,000 members now exist for physicians specializing in this area.

5-13-85 —30— sk5

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ADVANCE FOR RELEASE AFTER 2:30 P.M. THURSDAY, MAY 9, 1985

BECKMAN FOUNDATION GIVES $12 MILLION TO STANFORD FOR NEW MOLECULAR AND GENETIC MEDICINE CENTER; COMMITMENTS TO DATE BRING CENTER CLOSER TO REALITY, SAYS STANFORD PRESIDENT

STANFORD—

The Arnold and Mabel Beckman Foundation has announced a $12 million gift to the Stanford University School of Medicine towards construction of a new $50 million Center for Molecular and Genetic Medicine which will allow scientists to bridge molecular biology and clinical practice—a field that promises dramatic changes for medicine in the future.

The announcement of the gift was made by California philanthropist Arnold O. Beckman, founder and chairman of Beckman Instruments, and Stanford University President Donald Kennedy at a press conference held Thursday, May 9, at Stanford University in conjunction with the Third Annual Symposium of the Program in Molecular and Genetic Medicine.

A commitment, Kennedy said, has also been made by the Howard Hughes Medical Institute for $17 million in advanced lease payments to aid in the construction of space in the building to house a Hughes laboratory unit in molecular and genetic medicine. Dr. Donald Fredrickson, president of the institute, also participated in the press conference.

The occasion marked the first public announcement of the university's plans to proceed with the establishment of a new academic program designed to apply basic knowledge from molecular biology to vexing problems of human disease and to construct a new center for the multidisciplinary research effort under the direction of Nobel Prize winning biochemist Paul Berg.

The new center will contain four programs, including Stanford's renowned biochemistry department which is in need of new facilities, Kennedy said. The gift will build the Arnold and Mabel Beckman Laboratories of Biochemistry in the Center for Molecular and Genetic Medicine.

"This generous gift," Kennedy said, "brings us a step closer towards the realization of our fundraising goal for the center. It comes also at a critical time in which the future underpinnings of health research depend on capital for new laboratories and equipment—something the federal government has neglected to provide for the past 15 years."

"A large part of the impetus of the genetic revolution grew out of research in biochemistry at Stanford under the leadership of Drs. Arthur Kornberg and Paul Berg," Dr. Beckman said. "My purpose is to help guarantee that biochemistry at Stanford will remain strong and be able to contribute to the next revolution of biomedical advances."

The Beckman Foundation, based at Corona Del Mar in Southern California, was established by Dr. Beckman, a leading scientist, whose firm has pioneered in the development of precision instruments and related products for medicine, science, industry, environmental technology and other fields.

Dr. and Mrs. Beckman have been donating substantial sums to the advancement of education and research for many years. The beneficiaries have included the California Institute of Technology, the University of Illinois, Rockefeller University, the Beckman Research Center at City of Hope in Duarte, and the Beckman Laser Institute and Medical Clinic of the University of California at Irvine.

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"The concept of the Center for Molecular and Genetic Medicine represents not only a new and interesting approach to science, but an institutional experiment on how to make the process of innovation work better," said Kennedy in remarks prepared for the press conference. "Anybody who has looked at the history of biomedical research and its relationship to applications in clinical medicine is struck by how slowly even the most important basic advances are translated into procedures, devices, drugs or ways of intervening in order to improve the human condition."

Stanford is widely recognized for its pioneering work on the development of the new biology and the molecular cloning method which has allowed scientists to study genes and their role in disease. "We have the tradition and the experience," Kennedy said. "The determination is there, and now we are close to having the resources."

The new center has been in the planning stage for about two years. In addition to the Beckman Foundation gift and Hughes Medical Institute commitment, its construction will be sought from several other sources, Kennedy said.

The Institute-leased space will house about 10 Howard Hughes investigators who will hold full Stanford faculty appointments. Under a separate commitment, Hughes will also fund those scientists' research. Altogether the new center will involve about 40 scientists in several interrelated academic units—the Hughes laboratory unit in molecular and genetic medicine, a new department of molecular and developmental biology, a department of molecular and cell physiology, and the department of biochemistry whose laboratories will bear the Beckman name.

Staffed by eminent scientists and clinicians when it opens in 1988, the center will maintain a unified program devoted to a molecular understanding of critical biological functions, how these are affected by disease, and the potential applications of the new biology ranging from advanced therapies for cancer and diseases of the immune system to correction of genetic defects.

Complementary to the new programs will be a parallel expansion of medical school efforts in such areas as bone marrow transplantation, clinical genetics, gynecology and obstetrics, pathology, and pediatrics, all of which will play a major role in molecular approaches to treatment and gene therapy.

Berg described the center as one of the most ambitious projects ever undertaken at Stanford. "It's natural that it should happen here," he said. "In addition to its science strengths, the character of the medical school permits a contiguity of medical expression with clinical science." The other ingredients listed by Berg include:

- a comprehensive academic medical center comprising a university-owned hospital, outpatient clinics, and a school of medicine under one roof
- a faculty with a demonstrated capacity to transfer basic discoveries from the laboratory to the bedside in such areas as cancer therapy, immunology, and organ transplantation.
- an environment that attracts some of the best faculty, students, and postdoctoral fellows, and
- proximity of the center to a major research university with renowned programs in biology, chemistry, clinical medicine, computer technology, engineering and physics.

Dr. Beckman is a native of Cullom, IL. He holds a master's degree in physical chemistry from the University of Illinois, and a doctorate in photochemistry from the California Institute of Technology where he served on the chemistry faculty. In 1940 he left Caltech to devote full time to the development and manufacture of scientific instruments. In 1982, Beckman Instruments merged with SmithKline Corporation, one of the world's leading health care and life sciences companies.

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END ADVANCE RELEASE AFTER 2:30 P.M. THURSDAY, MAY 9, 1985

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FOR IMMEDIATE RELEASE

NURSES CAN THRIVE IN HEALTH CARE CHAOS, NURSING LEADER SAYS

STANFORD—

Nurses are the only members of the health care team whose priority remains patient care, claimed one of the nation's nursing leaders.

"Physicians increasingly have taken on the role of technologists and hospital administrators have taken on the role of businessmen, while nurses are the only members of the health care team to whom patients are still the primary concern," said Dr. Pamela Maraldo, executive director of the National League for Nursing (NLN) at a breakfast speech May 8 at Stanford University Hospital.

This role change is part of a revolution in health care, she explained, caused by a new federal- and state-imposed health care system of scarce financial support, limited third party payments, diagnostic related groups and other payment schemes—all of which are intended to limit payment for health care services.

However, in the midst of this health care revolution the cutbacks have created, Maraldo continued, the nursing profession can thrive.

"In the midst of the doom and gloom of stringent state and federal budget cutbacks, and with the promise of more to come, nurses can find tremendous opportunity," she said.

But to take advantage of the current opportunities to be involved in shaping health and social policy, she stressed, "nurses must acquire financial independence.

"We must have control of the health care dollar—at least our share of it—in and out of hospitals," Maraldo said.

Nurses need to stress the profession as a viable alternative to providing many services including those included in primary health care that physicians now almost exclusively provide, she said.

Nurses can pick up the slack in providing quality care for reduced cost in a number of ways, Maraldo explained, such as:

* *Keep patients out of the hospital.* In hospitals, Maraldo said, good nursing care can decrease the length of patient stays "without question," while out of hospitals community nurses can provide primary care services, thereby eliminating the need for hospitalization.

- *Shift from acute care to community care*. Nurses should expand their role of providing services and consultation to clients in homes, schools, industries and clinics. These could include, Maraldo said, adult day care centers, home health care agencies, nursing homes and hospices.
- *Respond to changing demographics*. The elderly population is expected to increase as much as 100 percent by the end of the decade, Maraldo said. This creates a need for care of chronic illnesses, which constitute the majority of the elderly's health problems. "The treatment of choice for chronic illness, of course, is nursing care," she said.

Consumers are dissatisfied with hospitals, medical care and health care costs, Maraldo said. "Nursing can emerge as the linking pin between cost and quality."

This health care revolution stems from severe budget cutbacks instituted by the federal government in an attempt to put a cap on spiraling health care costs.

"Every character in the health care play was seriously affected," Maraldo said. "Hospital occupancy rates dropped dramatically because people could no longer afford to pay for hospitalization at a time when hospitals could no longer afford people who could not pay."

Policy makers are looking to prevention as "the great white hope" for decreasing health care costs and improving the quality of people's lives, Maraldo continued. Nursing is already focused on prevention, she said. "Preventing disease and promoting health is what nursing science is all about."

Maraldo presented the keynote address hilighting Stanford Nurse Week. Activities for the week also included a hospital-wide health fair May 4 at Stanford Shopping Center, and a 10K fun run scheduled for May 12.

Maraldo has been with the NLN since 1977, and has held the position of executive director since 1983. She is noted for establishing a more active role in government health care policy for the NLN, a coalition of nursing leaders, educational programs, institutional and community health nursing services and consumers working towards the betterment of nursing. Maraldo received a Ph.D. in nursing at New York University in 1984.

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FOR IMMEDIATE RELEASE

MALPRACTICE, SCIENTIFIC TOPICS TO BE DISCUSSED AT STANFORD MEDICAL ALUMNI REUNION

STANFORD—

Dr. David Rubsamen of Berkeley, an authority on medical malpractice, is scheduled to be the keynote speaker at the spring alumni reunion of the Stanford Medical Alumni Association May 18.

Rubsamen, editor of the *Professional Liability Newsletter*, plans to discuss "Prospects of Dramatic Changes in the California Malpractice Scene." His address to more than 50 alumni, spouses and guests scheduled to attend the all-day event follows a morning scientific session in Stanford medical school's Sherman Fairchild Auditorium.

An alumnus of Stanford medical school and Stanford law school, Rubsamen provides consultation on medical aspects of litigation for attorneys who represent physicians. The newsletter, which he has edited since 1968, outlines and comments on current legal-medical decisions and how they affect California physicians.

The morning program includes sessions by faculty members from the departments of medicine, psychiatry and behavioral medicine, surgery and pediatrics. Topics include a Hodgkins disease update, care of the dying and bereaved, growth and growth hormones and low back pain.

Class reunions are scheduled for graduates of the classes of 1935, 1960, 1940,1950, 1955A, 1955B, 1965 and 1970 during the evening.

For more information call the Stanford University Alumni Association at 415-497-6389.

5-8-85 —30— sk5

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FOR IMMEDIATE RELEASE

FEDERAL FUNDING CUTBACKS THREATEN CURE FOR THIRD WORLD SCOURGE

STANFORD—

Paul F. Basch had false confidence that he could escape federal budget cuts for his research into a disease which afflicts 200 million persons worldwide.

The panel of scientists responsible for reviewing the Stanford University Medical Center scientist's funding had recommended "approval with considerable enthusiasm," noting that Basch's studies of the third world scourge called schistosomiasis had in recent years "led to several very important and exciting discoveries."

But in February, funding ranging from $142,134 to $158,229 for each of the fourth, fifth and sixth years of his project was abruptly put on hold, and most of his laboratory staff—including a research associate, a lab technician and a glassware washer—had to be laid off.

The project was studying the reproductive biology of schistosomes, the worms which enter the body, and then deposit eggs in the blood stream, causing liver and other internal damage.

Basch, a parasitologist and professor of Family, Community and Preventive Medicine, said he hoped to understand the lifecycle well enough to find a way to interrupt it, and thus save millions of residents of third world countries from the debilitating chronic infestation. The World Health Organization said the disease is present in 74 developing nations in the tropics and is spread by contact with fresh water.

Basch and the dean's representative responsible for reviewing research funding at Stanford Medical School—Elwood Pierce—point out that it is unusual for a highly rated project praised by reviewers to fail to receive renewal funding. Moreover, both Basch and Pierce said they were convinced that the project would have been continued were it not for the Reagan administration decision in January to reduce the number of funded National Institutes of Health projects by 23 percent.

Projects are rated on a point system by a panel of scientists with expertise in the field. The rating is confidential, but both Basch and Pierce, the medical center's operation director, said the score assigned by the panel which reviewed Basch's application—The Tropical Medicine and Parasitology Study Section—would have been high enough to assure funding prior to the admnistration cuts. The administration reduced from 6,500 to 5,000 the number of projects to be funded.

The Department of Health and Human Services, which oversees funding of the National Institutes of Health grants, told Basch in a Feb. 5 letter that the agency would hold the application for the project until the fiscal year ends Sept. 30, pending availability of new funds.

5-7-85

-more-

"But that's not really practical. I've already had to shut down most of my project. We're dealing with a live organism which must be maintained continuously," Basch said. He said the material needed to study the lifecycle had been carefully cultivated "and if we had to stop completely it would take us many months to build our material back up.

Basch said he has been able to keep his lifecycle study at a minimal level only with the help of his wife, a trained laboratory technician.

Tag E. Mansour, chairman of the Department of Pharmacology and an authority on parasites, said Basch will continue to share some research funds from a $1.5 million, five-year grant funded by the John D. and Catherine T. MacArthur Foundation of Chicago.

But loss of the federal grant and shutdown of the project will at least involve a delay in finding a solution to schistosomiasis.

Mansour said a decision to halt research on that parasite is shortsighted, because the condition, while rarely fatal, causes chronic ill health and loss of productivity in its victims.

Current treatment require many months of expensive and potentially toxic drugs, Mansour said.

Mansour said:

"One of the major obstacles to progress in the Third World is the inability of people to be productive at work because of chronic diseases such as schistosomiasis. We can spend billions of dollars in foreign aid, but if the population we are trying to help to become productive is chronically ill, all other forms of assistance will be wasted."

While limited to the tropics and largely eliminated from developed nations even in warmer climates, schistosomiasis is a threat to Americans and other visitors to the third world countries who must avoid even washing or bathing in many otherwise safe sources of fresh water.

Eds: Basch's phone number, (415) 497-6698

—30—

LA10

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Jacki King (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD BLOOD CENTER USES NEW AIDS SCREENING TEST

STANFORD—

The Stanford University Blood Center has substituted the test procedure it pioneered for AIDS with a new highly-publicized screening test, officials announced last week.

"Fortunately, to date, no patient who has received T cell tested blood from our blood bank has contracted AIDS," said Dr. Edgar Engleman, associate professor of pathology and medicine and medical director of the blood center.

"Nonetheless, the new HTLV-III (AIDS virus) antibody test appears to be more specific and at least as sensitive as the T cell test and, therefore, as of April 1985, the T cell screen has been replaced with the AIDS virus antibody test."

Engleman said the decision "is consistent with the Stanford University Blood Bank policy of making every effort to ensure a safe blood supply."

Stanford became the first blood bank in the nation to begin screening blood for the deadly AIDS on July 1, 1983, Engleman said.

Engleman said the HTLV-III is more specific than the test Stanford has been using because it screens for evidence that the donor actually has been exposed to AIDS, rather than for the highly-accurate but indirect evidence of measuring T-cell ratios.

The HTLV-III measures the presence of antibodies to what is believed to be the AIDS virus. The Stanford test detected an abnormal ratio in the white blood cell composition which is common to AIDS sufferers.

A drawback to the Stanford test was that the abnormal ratio of "suppressor T-cells" to "helper T-cells" detected in the screening was also present in some persons who do not have AIDS, said Engleman. That meant healthy blood from about 1.5 per cent of Stanford's donors had to be eliminated because those test results were positive, he added.

In the past several months, many blood banks in the Bay Area and elsewhere have begun using the HTLV-III test routinely.

Abbott Laboratories Inc. of North Chicago, Ill., makes the serum for the HTLV-III screening.

In a related matter, Rhoda Burns, Stanford's blood donor coordinator, said donations have dropped about 7 per cent in the last few months, primarily because of student donor schedules. Stanford's goal, she said, is to average 1,550 units per month.

"We depend so heavily on Stanford students for blood donations," said Burns. "The students are taking finals this month and then, they'll be leaving for the summer. Our need for donors is very great now, especially because a lot of people schedule elective surgery during the summer because it's a good time for them to take time off work."

—30— jk1

May 7, 1985

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Jacki King (415) 497-6911

(Editors, News Directors: The seminar is not open to the public, but reporters are are welcome to attend)

FOR IMMEDIATE RELEASE

JOURNALIST/PHYSICIAN LAWRENCE ALTMAN TALKS AT STANFORD

STANFORD—

New York Times medical reporter Dr. Lawrence Altman will be the featured speaker at Stanford Medical Center Health Services Research Seminar from 4 to 5:30 p.m., Monday, May 13 at Schultz Auditorium.

Altman, a practicing internist as well as a journalist, will discuss, "Responsibility of the Scientist and the Media to the Public."

Altman is expected to discuss ethical and medical issues based on his own experience on such stories as implantation of permanent artificial hearts in Salt Lake City and later Louisville.

He has been a critic and observer of both the ethical and public information issues involved in the Baby Fae case, the implantation of a baboon heart in a newborn girl at Loma Linda University last year.

May 7, 1985 —30— jk1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
FOR IMMEDIATE RELEASE

MEDICAL SCHOLARSHIP HONORS STANFORD'S FIFTH PRESIDENT

STANFORD—

A Southern California insurance executive with a long history of support for Stanford has pledged $250,000 to create a medical scholarship fund in honor of J.E. Wallace Sterling, the university's fifth president.

The J.E. Wallace Sterling Medical Scholarship Fund creates an endowment that will support the work of a number of medical students by returning more income than the typical scholarship fund, said Sally Agle, associate director of medical development.

Scholarship donor John C. Cosgrove and Sterling's paths crossed significantly 25 years ago, when the supporter and his wife, Emilie Dohrmann Cosgrove, became major donors in the 1959 relocation of the School of Medicine from San Francisco to the Palo Alto main campus.

Sterling, currently chancellor, was university president then and "the driving force in the relocation," said current Stanford President Donald Kennedy.

Cosgrove's gift is particularly aptly named, Kennedy said, because Sterling has contributed "in such a special way to the remarkable advances that Stanford has made among the great universities of this land."

Medical School Dean David Korn called the fund "very fitting. Wally Sterling has a very special place in our affection here because of his role in creating the 'new' (Palo Alto) Stanford School of Medicine."

Cosgrove's formal relationship with Stanford began when he became an undergraduate in the class of 1934. In the early 1950s he was asked to join Stanford Associates, a selective volunteer fund-raising and advocacy group. Cosgrove accepted, noting his "very high regard for President Sterling."

From 1964 to 1967, Emilie Cosgrove was one of the first women trustees of the university.

For several decades, Cosgrove has financially supported numerous educational and medical programs, including the Willard W. Keith Jr. fountain near Memorial Church, the Frederick W. Dohrmann Jr. classrooms at the medical school, as well as programs in respiratory medicine, psychiatry and a variety of other departments at the medical center and university.

5-6-85 —30— mg5

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

DIABETIC VOLUNTEERS NEEDED FOR STUDY

STANFORD—

Diabetics currently being treated with oral medications or diet are still needed as volunteers in a Stanford study evaluating a new oral drug for diabetes.

Dr. Patricia Kapsner said participants must be in good health and between 40 and 70 years old. Volunteers will receive physical exams, blood work and electrocardiograms during the study. There will be an initial hospitalization of seven to 10 days, followed by five weeks of outpatient evaluation. All services are free and patients may be compensated for their time.

The study is being conducted under the direction of Dr. Fredric Kraemer, assistant professor of medicine. Kapsner said six volunteers were recruited in February and about six more are currently needed. For further information, contact Kapsner at (415) 497-6892 between 9 a.m. and 4 p.m., weekdays.

May 3, 1985 —30— LA10

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Jacki King (415) 497-6911

EDITORS: The press is invited to a first anniversary celebration of "Life Flight" at the Stanford University helipad on Friday, May 10 from 7 a.m. to 4 p.m. Photo available on request.

FOR IMMEDIATE RELEASE

LIFE FLIGHT CELEBRATES ONE YEAR

STANFORD—

As "Life Flight" completes its first year of service, medical personnel in the program agree that a number of lives were saved because of the emergency helicopter transport system.

"Life Flight," sponsored jointly by Stanford University Hospital and Santa Clara Valley Medical Center, has gone on almost 300 rescues since it began operation last May 1. The first month, there were 15 emergency calls. In April, "Life Flight" answered more than 50.

Flight Nurse Tony Leiker remembers one particularly dramatic rescue. A young motorcyclist went over the side of an embankment and his bike crushed his chest, puncturing both lungs, lacerating his heart and causing numerous fractures.

"This man surely would have died if he'd been transported by ground ambulance because he was bleeding so badly," Leiker said. "We got him to the hospital fast. He had surgery, and a few weeks later, he walked out. It's moments like that that make all of us feel pretty good."

The "Life Flight" medical team is airborne within three to five minutes of a request for assistance, officials say.

Dr. Myron Gomez, a flight physician, says it's impossible to know exactly how many lives might have been saved because 'Life Flight" was there, but clearly there were cases when the savings in time made the difference between life and death.

"There were incidents where we got in, picked up someone, and got back to the hospital in less time than it would have taken a ground ambulance to even get to the scene," Gomez said. "There were other times when we got to accident or heart attack victims in remote areas or where all the ground access routes were jammed by traffic."

Chief Flight Nurse Marcia Katz stressed that "Life Flight," which serves a 150-mile radius from San Jose, is more than a transport system. "It's an extension of the hospital emergency department," said Katz.

The helicopter is always staffed by an emergency-care physician and a nurse. "Life Flight" is the only helicopter service in Northern California that routinely flies with a physician on board.

"That means a lot in an emergency situation," said Dr. Dan O'Brien, "Life Flight" medical director. "If there's a doctor on the scene, he doesn't have to take the time to radio back to an emergency department, give a complete assessment of the situation and wait for medical instructions. He can take action at once. For example, a doctor can intubate a trauma victim, a skill that many paramedics aren't certified to do that."

" 'Life Flight' isn't trying to replace ground ambulance or paramedic services," said Katz, "but in certain instances, critically-injured victims can get care more quickly than they would otherwise and that can make a great difference."

Dr. Michael Eliastam, local "Life Flight" program director and chief of emergency services at Stanford, said, " 'Life Flight' represents a major cooperative venture between Stanford University Hospital and Valley Medical Center. What's been exciting is introducing the new technique into the Bay Area communities."

Shortly after "Life Flight" began, another helicopter ambulance service, Calstar, started in Northern California. Before those two airborne ambulances, the Bay Area received only limited emergency helicopter service from the California Highway Patrol, the Army at Fort Ord and the Coast Guard. Other than "Life Flight," the closest service that always flies with a physician on board is out of UCLA in Southern California.

The Twin Star "Life Flight" helicopter has enough cabin space for two patients, and it's equipped with intravenous equipment, medications, monitoring systems, extrication devices to stabilize a patient as he or she is being removed from a vehicle, built-in suction to clear airways, oxygen, compressed air and ventilator for respiratory assistance.

"It's amazing how often emergency calls come at exactly the same time," said Eliastam. "When that happens, we'll refer to Calstar. One goal is for 'Life Flight' to become part of a regional EMS (emergency medical service) network, where there are primary zones of responsiblity. My prediction is that in the future, more and more patients will be transported by air rather than ground."

—30—

Lifeflig--JK1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911
FOR IMMEDIATE RELEASE

ADVISORY ON SYMPOSIUM AND PRESS CONFERENCE TO BE HELD IN CONJUNCTION WITH STANFORD'S NEW PROGRAM IN GENETIC MEDICINE

STANFORD—

Science writers and city desks: On May 9, 1985 the Stanford University School of Medicine will host a day-long symposium on the "new genetics" both as a research tool and as it is expected to be applied to the study and treatment of disease.

The focus for the advancement of the applications of molecular biology to human disease will be a new $50 million Center for Molecular Biology and Genetic Medicine (CMGM) currently being planned at Stanford University Medical Center under the direction of Dr. Paul Berg, a winner of the 1980 Nobel Prize in chemistry, and scheduled for completion in 1988.

The new Center, which Stanford University President Donald Kennedy has described as "an experiment on how to make the process of innovation work better," will attempt to bridge the gap between the laboratory and medical practice by taking advantage of the powerful new tools of molecular biology.

Some key topics that will be be discussed at the symposium include "Strategies for Gene Replacement Therapy," "Immunodeficiency Diseases as Candidates for Gene Therapy," and "Bone Marrow Transplantation" presently regarded by scientists as the target vehicle for somatic cell therapy for certain genetic diseases.

The symposium will begin at 8:30 a.m. in the medical school's Sherman Fairchild Auditorium. A press conference is being planned for your convenience. Drs. Kennedy, Berg and guests will discuss the new center. The press conference will be at 12 noon in the Neurobiology Library of the Sherman Fairchild Building adjacent to the auditorium.

Copies of the scientific program are available if not included with this advisory. If you plan to attend, we urge you to fill out the coupon below and return it to the Stanford Medical Center's Office of Communications, 750 Welch Road, Suite #301, Palo Alto, California 94304. You may also let us know that you are coming or that you want a copy of the program sent to you by calling 415: 497-6911.

Send me a copy of the program.

Name_____ Organization_____

Address_____

Telephone_____

5-2-85 —30— invite--SA6

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911
FOR IMMEDIATE RELEASE

STANFORD SCIENTIST REPUDIATES FALSE REPORTS ABOUT "SEXUAL STIMULANT" DRUG

STANFORD—

A Stanford University Medical School professor said today several publications are circulating false reports about his research on rats in which he is portrayed as endorsing a sexual stimulant for men.

"The reports say that I endorse the drug, yohimbine, as a sexual stimulant for humans. This is simply not true," said Dr. Julian Davidson, professor of physiology. "The implication that I and Stanford University have developed or endorse the use of these drugs is totally false.

"There is no adequate scientific evidence that the drug has any effect on human males' sex life," Davidson said.

A report in *Male Sexuality Report, Official Publication of Stamford (CQ) Center for Male Research* quoted Davidson and fictional patients about the effects of yohimbine, known in folk medicine as an aphrodisiac, as a product that stimulates and enhances men's sexual desire and performance. (While closely mimicking the University's name, the four-page advertisment has no address, phone number, or other identifiable orgin.)

A similar report in the tabloid *The Star* has been retracted at Stanford's request, said Susan deJongh-Kearl, Stanford University associate staff counsel.

"I never said anything they've quoted me as saying," Davidson said, "and the patients they quote do not exist."

Advertisers promoting yohimbine as a drug for human use have used Stanford University's and Davidson's name and work in an "improper and unauthorized" manner, deJongh-Kearl said.

"The University is concerned that consumers will be confused by this literature and incorrectly believe that Stanford University has developed or endorses the use of these drugs," she added. "The University is taking appropriate steps to halt this commercial use of its name."

Davidson has received many letters of complaint from people who have received the publications.

"There is no connection between these mail-order drugs and Davidson's research," deJongh-Kearl said.

Davidson, whose research focuses on the biology of human sexual behavior, published a report in the August 24, 1984 issue of *Science* magazine discussing his studies of the effects of yohimbine in male rats. The drug was found to strongly increase sexual drive in male rats, the *Science* article reported.

While Davidson is, in fact, conducting studies involving men, "it is way too early to reach any conclusions," he said.

Yohimbine, originally obtained from the bark of the tropical tree *Corynanthe yohimbe*, is now a synthetically manufactured prescription drug. It has also been used for depression and as an analgesic, Davidson said.

It is thought to increase the activity of norepinephrine, a natural chemical that certain nerve cells use to communicate with each other in the brain, Davidson explained. Norepinephrine and related chemicals called monoamine neurotransmitters may be involved with controlling sex drive, he suggested.

However, the drug's physiological effects in people may be different from those seen in rats, Davidson said. In addition, he added, human sexual behavior is complicated by the influence of emotional, social and other factors.

5/2/85 —30— sk3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Jacki King (415) 497-6911
FOR IMMEDIATE RELEASE
Editors: Photo available on request

EMPLOYEE OF THE YEAR

STANFORD—

Stanford University Hospital's employee of the year thinks she "stood out" for recognition because she was seven months pregnant when she finished the testing of the hospital's new Admission, Transfer and Discharge (ATD) system.

Susan Taylor, assistant director for administrative services in patient admitting, says her co-workers joked that the baby's first words would be, "The system is down," or "This does not compute."

Taylor, who began working at the hospital in 1973 as an account representative in the billing office, received the Thomas A. Gonda Employee of the Year Award at a banquet Tuesday night, April 30.

In addition to the Gonda Award for dedicated and exemplary service, special awards were presented to five surprised "outstanding employees." They are: Karen Axnick, director of care review/risk management; Gloria Baskett, paratechnical supervisor; Judy Lanigan, assistant director nursing services; Annie Ketchens, cafeteria cashier; and Regina Lopez, pediatric nursing assistant.

The Employee of the Year, who described herself as "low key," stressed that implementation of the ATD system last Aug. 29 "was totally a team effort."

"We were all putting in incredible hours," said Taylor, "10 to 12 hours a day, six days a week. There was an enormous amount of data to enter into the ATD system and verify. And we were training the staff to use the new system."

Taylor says her husband, attorney Richard Dwiggins, was "extremely supportive" but her daughter, Alison, who was then a year and a half, "didn't understand why mommy was away so much. At one point, when my husband took her to the park, she went over to a strange family and asked if she could join their picnic because she saw a complete family together."

Taylor says she's proud to have been part of the team that implemented the new ATD system. "We had a manual system before, and the ATD probably cut the time it takes to do the paperwork in half."

Taylor, who worked two years to assist in developing the system, says that the savings in time allows the admitting staff "to help patients by answering questions rather than spending an enormous time on paperwork. All of us in this department are really committed to service, and the ATD assists us with that aim."

Her son, Rob, was born last Nov. 9, "just minutes after I arrived at the hospital, and my co-workers tease me that it now takes just minutes for the ATD to process the paperwork for newborns." Coincidentially, her daughter, Alison Taylor Dwiggins, has the same initials as the ATD.

The Thomas A. Gonda Employee of the Year Award, established in 1976, is named for the former hospital director who now serves as professor and chairman of the department of psychiatry and behavioral sciences. Gonda received his 30 year pin at the 27th annual employee service awards banquet Tuesday night.

Before the award bearing his name was presented, Gonda said: "I come to you as one of over 10,000 patients at Stanford each year...Some eight weeks ago, I underwent pretty major surgery. I got out in six days."

Donald Kennedy, president of Stanford University and chairman of Stanford University Hospital board of directors, said Stanford employees have proven that "compassion and caring can co-exist with academic excellence."

Daniel Robinson, director of personnel management and master of ceremonies for the event, noted that 540 employees and guests, representing 3,650 years of service, attended the dinner at Hyatt Rickeys. Pins and accessories for five, 10, 15, 20, 25 and 30 years of service were presented. Jean Laing, nursing, was named for 35 years of service, and Marguerite Brickner, nursing, was honored for 40 years of service.

5-2-85 —30— gonda-jk1

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

LIFE FLIGHT PLACES SECOND HELICOPTER AT LAKEPORT THIS SUMMER

Eds: Pictures available if not included

STANFORD—

A second Life Flight emergency helicopter, sponsored by Stanford University Hospital (SUH) and Santa Clara Valley Medical Center (SCVMC), is scheduled to be launched Sunday, June 30, to serve Lake, Mendocino and surrounding counties for two months this summer.

Life Flight II is a cooperative venture with the health and emergency community in the largely rural area. The service will be headquartered at Lakeside Community Hospital in Lakeport.

The project was conceived about 4,500 feet above Clearlake in May, when a Lake County physician and a Stanford physician were caring for a patient.

Dr. Myron Gomez, a Stanford trauma fellow, and Dr. Richard Kurz, chief of staff at Lakeport's Lakeside Hospital and a family physician in Kelseyville, were transporting a 14-year-old girl to needed abdominal surgery at Sebastopol, a 20-minute helicopter trip.

As they provided care in the fully equipped airborne emergency room, the two physicians talked about how to reduce the one hour or more delay to secure a physician/nurse supported emergency medical air transport to the approximately 500,000 residents and visitors scattered over a 10,000-square-mile area of largely rural Lake, Mendocino and surrounding counties.

Specialized medical care is scattered in the forests, agricultural hillsides and rugged coastal areas of the lake region, North Coast and Wine Country, "and we had thought for a longtime that some sort of air service would provide a lifesaving benefit to end our medical isolation," said Dr. Dee Filgas, emergency department director of Lakeside Community Hospital, one of the organizers of the new service.

The airborne discussion in May led to a month of planning which is to culminate in the second helicopter at Lakeport during the busy summer months, when the population during some weekends can quadruple, said Dr. Michael Eliastam, director of the program.

Gomez estimated that the helicopter would provide one or two missions per day, about the same number as the Stanford-SCVMC-based helicopter. Nine nurses, with an average of 10 years trauma experience each, will rotate between the Lake County and Stanford/SCVMC bases.

Both helicopters are twin-engine French-built Aerospatiale Twin Stars leased from Rocky Mountain Helicopter Inc. of Provo, Utah. The aircraft, which can carry two fully-supported patients, cruise at 150 miles an hour with a top speed of 180.

Lakeside Community Hospital will supply a base, including on-call housing for the crew, said Eliastam, who is director of emergency services at Stanford.

Filgas said the service on the shores of California's largest lake is especially crucial in the summer, when tens of thousands of vacationers swell the local population, and boating and traffic accidents increase the need for emergency response.

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Although Life Flight has responded to many calls in Lake and Mendocino counties since its inception in May 1984, the second helicopter will reduce the response time to the area by about 45 minutes, said Eliastam. "That time can be crucial both for patient safety, and particularly for accident patients, airborne response available immediately can mean a substantial reduction in suffering," he said.

Eliastam and Filgas both said they envision that the helicopter will provide two types of service—quick intervention for trauma patients, as well as transfer of patients already undergoing general hospital treatment to facilities where highly specialized care is available.

In traumas such as traffic accidents, victims could be moved from the scene to the nearest appropriate medical facility.

Life Flight is as well equipped as a typical hospital emergency department, so that sophisticated care begins as soon as the jet helicopter lands at the scene, said Eliastam. The crew, in addition to a pilot, always includes a flight nurse and physician specially trained in trauma care.

Filgas noted that Queen of the Valley Hospital in Napa, a 25-minute helicopter trip from Lakeport, is the designated trauma center for the area, "and we expect that many of our trauma patients will be taken there." She said some cardiac patients might be transferred to St. Helena Hospital.

Eliastam said he expected that a majority of the patients transferred by Life Flight would remain in Lake, Mendocino or surrounding counties.

"We are anxious to maintain traditional referral patterns in these communities," said Eliastam. Life Flight, since its inception by Stanford and SCVMC in May 1984, has made more than 350 emergency flights.

In addition to general trauma aid, the helicopter can offer rapid transport dispatch for patients when a specialized facility is required. For example, burn and spinal cord injury patients can be transferred to SCVMC's burn unit, Filgas said.

Highly specialized care in a university setting is available in less than an hour at either Stanford or the University of California, Davis. Eliastam said patients might be transferred to SUH for highly sophisticated intensive care, replantation surgery (such as reattaching fingers), neurosurgery, pediatric surgery or complicated cardiovascular surgery.

"Patients already receiving intensive care in a local hospital can continue to receive physician and nurse monitored care enroute to a specialty hospital," Filgas explained.

The second helicopter, said Gomez, provides a research institution an opportunity to study the patterns of emergency medical needs in a rural area. Meanwhile, said Filgas, the medical community around Lakeport has been given an opportunity to establish a working, learning relationship with an academic medical institution.

Life Flight may be contacted at (415) 497-5578.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

LEADERS, RESEARCHERS CRITICIZE FACILITY INSPECTION BILL

STANFORD—

A bill expanding the inspection powers of private groups "invites a vigilante approach to monitoring research laboratories," a Stanford official said Thursday (June 27)

Dr. Lawrence G. Crowley, vice president for medical affairs at Stanford, is among California medical school leaders opposing Senate Bill 1405, sponsored by state Sen. President Pro Tem David Roberti, D-Los Angeles.

Crowley said he believes that inspection of biomedical laboratories where animals are used "is the responsibility of federal and state government, not private organizations with little accountability to the public."

SB 1405 would expand law enforcement powers of privately appointed officers in California to federally-licensed biomedical research facilities. These facilities, including Stanford and other medical schools in California, are regulated by the federal Animal Welfare Act.

The United States Department of Agriculture (USDA) is responsible for inspecting these research facilities and is mandated to make unannounced inspections. Humane officers may enter only with the permission of the institution or with a warrant. SB 1405 would grant humane society officers entrance without a warrant for unannounced inspections to these federally-regulated facilities.

The bill passed the state Senate 21 to 11 on June 18 and is currently pending in the assembly. If it passes there, it would go to the governor for signature.

Senate Republican leader Jim Nielsen of Woodland opposed the bill on the senate floor.

"What we don't need is more amateur law enforcement in this state," Nielsen said later.

Another legislator, Sen. Walter Stiern, D-Bakersfield, a practicing veterinarian for 24 years, called SB 1405 "an attempt by persons who have misplaced feelings to expand a mechanism that is misguided and not needed. It will ultimately harm law enforcement and medical progress in this state while accomplishing nothing of value for animals," Stiern said.

"This moves away from a long established trend toward professionalized law enforcement in this state," said Marvin Herrington, chief of the Stanford University Police and a reserve captain in the Santa Clara County Sheriff's Department.

"It grants enormously expanded powers to nonprofessional persons in an arena where a great deal of technical and legal expertise is required. Also, it sets up a category of law enforcement officials which are answerable to a private corporation, not to an elected body. For example, there is no requirement that these new enforcement officers even be deputized, bonded or insured."

In Southern California, Albert A. Barber, vice chancellor for research programs at UCLA, said, "It is important that appropriately trained federal and state employees have the resposibility for inspecting our animal research facilities. However, Senate Bill 1405 would permit untrained individuals to assume this complex responsibility.".

Crowley said, "this bill would permit a group vehemently opposed to animal research under any circumstances to designate any number of humane officers to 'ensure compliance' with complex federal laws pertaining to research," said Crowley.

6/27/85 -more-

"It is clear that biased or uninformed humane officers outside the mainstream could disrupt important medical research.

"We have already seen incidents throughout the state and nation of important research stopped by vandalism of facilities and harassment of scientists and health workers by irresponsible individuals who would gain legitimacy through this ill-conceived legislation. SB 1405 invites a vigilante approach to monitoring research laboratories because it expands police powers indiscriminantly and unprofessionally.

"While the controversy about the use of animals in research has existed for more than a century, the public through its elected representatives has always chosen to continue and support biomedical research. Government has been the impartial agent of the public to regulate and oversee the research to ensure that animals are properly treated and that the public welfare is served," Crowley said in a statement.

"Enforcement of applicable federal laws and rigorous standards of humane care are important objectives," Crowley continued. "But enforcement must come from fair, impartial and qualified inspectors.

"While some existing humane societies might indeed endeavor to provide fair and competent inspections, the reality is that SB 1405 makes no distinction between reasonable enforcement and blatant harassment.

"It might be useful to draw on the expertise available from humane groups at some point, but we would hope that this support would come in the context of professional veterinary care, not an adversarial relationship," Crowley said.

The vice president said institutions such as Stanford have made major strides in recent years to improve animal care and ensure safeguards for humane treatment. At Stanford a $12 million state-of-the-art animal care facility is about to open, and a committee which reviews care and experiments has recently been expanded by adding more non-Stanford members, including a veterinarian outside the research community.

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Roberti3 mg5

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

ANTI-CANCER ANTIBODY RESULTS ARE ENCOURAGING BUT MIXED

STANFORD—

Stanford University Medical School doctors who four years ago pioneered the experimental use of monoclonal antibodies to treat cancer, this week reported "encouraging" but mixed results in an extended series of patients with lymphoma, cancer of the lymph glands.

In two articles, published in the June issue of the medical journal *Blood* and in the June 27 issue of the *New England Journal of Medicine*, the scientists outline their results in 11 patients, describe why the experimental therapy sometimes fails, and suggest ways to overcome the complications.

The overall outlook for monoclonal antibodies in cancer treatment is promising, they predict, particularly as researchers learn more about which patients are likely to achieve the best response, and how to modify the treatment to get the maximum anti-cancer effect.

Antibodies are disease-fighting proteins made by the body that can be targeted to recognize specific substances or cells.

Four years ago, the Stanford team treated their first patient with the experimental therapy. That 67-year old man whose cancer was growing at the time had a complete remission of his disease. Since then, ten more patients have been treated and although four of these have had beneficial effects, none has shown a complete disappearance of tumor like the first patient.

"We are just beginning to realize why some patients respond to the treatment better than others," said Dr. Ronald Levy, the Stanford oncologist who leads the research.

"Also, we now know why some tumors do not respond completely," he said.

In the study reported in the *New England Journal of Medicine*, the Stanford team discovered that tumors contain rare mutant cells that can escape the effects of the treatment and give rise to a new tumor.

Based on this finding and their experience with the first 11 patients, the researchers have already made an important modification to their treatment plan that they believe will improve its effectiveness.

The researchers plan to administer more than one monoclonal antibody, each tailored to attack a different cell population present in the patient's tumor.

"It's the same idea as using multiple drugs to treat infectious diseases," Levy said.

In the same way that multiple drugs have a better chance of controlling a disease if the infectious agent becomes resistant to a single drug, multiple antibodies may be more effective against cancer than a single one, he explained.

Levy thinks there will be a role for the specialized antibody proteins in combatting B-cell lymphomas, cancers of the body's white blood cells.

The approach may also be of benefit in other types of cancers involving the white blood cells known as T-lymphocytes, although the researchers are only just beginning to explore this possibility, Levy added.

The *Blood* article outlining results in 11 patients was written by Drs. Timothy Meeker, James Lowder, David Maloney, Richard Miller, Kristiaan Thielemans, Roger Warnke, and Levy.

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The *New England Journal of Medicine* article, which describes two patients whose tumors escaped effects of the antibody therapy, was written by Drs. Meeker, Lowder, Michael Cleary, Stanford Stewart, Warnke, Jeffrey Sklar, and Levy.

The research program is funded by the American Cancer Society and the National Institutes of Health.

To deploy monoclonal antibodies against cancer, Levy and his colleagues prepare the protein molecules in the laboratory for each patient. The antibodies are custom-tailored to specifically recognize the patient's own tumor cells.

It is possible to target antibodies specifically against cancer cells if the cells have a specific "marker" protein the antibodies can be aimed at, Levy explained. B-cell tumors, whose cells all produce a specific antibody molecule, have precisely this characteristic, he said.

Five of 11 B-cell cancer patients—all of whom had failed to respond to conventional anti-cancer treatments such as drugs and radiation—experienced at least a 50 percent shrinkage of their tumors and one patient had a 40 percent shrinkage after injections of the special antibodies, the scientists reported. However, tumors in four of the patients returned within one to six months after the treatments, they added.

In another five patients, the experimental therapy produced no clinically significant effects, although one patient died of complications of his tumor before a clinical response would have been expected, the doctors said.

A fifty percent response rate for a new form of treatment is quite encouraging, Levy suggested, particularly in a group of patients with advanced disease who had previously failed to respond to conventional forms of anti-cancer therapy.

The most complex problem arose when the tailor-designed anti-cancer proteins failed to completely eradicate all tumor cells, allowing the cancer to regrow.

Levy and his colleagues believe that in at least two of their patients and probably more, this occurred because of mutations—slight variations—in the marker proteins of a small number of cancer cells.

The highly targeted monoclonal antibodies helped kill off the majority of cancerous cells but failed to recognize the variant tumor cells, the scientists believe.

Although only a few camouflaged cancer cells might escape the antibody therapy, these could then quickly regrow into a new cancer.

Levy and his colleagues believe they will be able to surmount this problem by preparing multiple anti-tumor antibodies for each patient, targeted to recognize all the variant cells of which the tumor is composed.

Levy said that the researchers are trying to develop a way of predicting which patients stand the best chance of being helped by monoclonal antibodies. Some evidence suggests that it may be those people whose immune systems are already mobilized to fight their tumor.

Monoclonal antibodies alone don't kill tumor cells, he explained, but they help induce the patient's own immune system to fight the tumor.

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antibody LH8

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

SOCIAL WORKER AARON SMITH HONORED WITH AWARD, PROMOTION

STANFORD—

Aaron Smith of Stanford University Hospital's department of clinical social work is the recipient of the 1985 John B. Harris Award from University of California, San Francisco.

Smith, who earned his Ph.D. in medical sociology from UCSF's School of Nursing, received the award for "best exemplifying the qualities of the late teacher, physician and civil rights advocate."

Smith is the seventh recipient of the award. He received $400 and an inscribed scroll. His name will be engraved on a plaque with other award recipients.

Smith, who was recently promoted to assistant director of the hospital's department of clinical social work, has been at Stanford since 1969. He is a supervising clinical social worker in charge of the cardiology team, and works primarily with patients in pediatric cardiology and cardiovascular surgery. In his new position he will be responsible for all teaching and research activities of the department and will assume the director's duties in her absense.

Smith is also a lecturer in Stanford's department of family, community and preventive medicine, a visiting lecturer for the American Cancer Society and a field instructor in hospital settings for second year students at University of California, Berkeley.

Smith has conducted a four-year American Cancer Society study on the impact of leukemia on the family unit and a two-year Stanford study on what role the family plays in children with Down's Syndrome who survive open heart surgery.

Smith holds a masters of public health degree from UCB, a masters of social work degree from Howard University and a bachelors degree in psychology from Florida A. & M. University.

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FOR IMMEDIATE RELEASE

SPELLING DEFICIENCIES TURN TO SUCCESS FOR SEMI-RETIRING ADMINISTRATOR

Eds: Photos available on request

STANFORD—

Her career at Stanford University having flourished to a peak after a rocky beginning 17 years ago, Rosemary Hornby now looks forward to semi-retirement as a time to share with others some of the knowledge she has gained.

Hornby is about ready to shift from her full-time career as manager of the medical school's Human Resources Group (HRG) to a semi-retirement slot as director of training for the 1,400 non-faculty staff members in the Stanford University Medical School and Clinic.

The seven-person HRG, which Hornby, 62, heads and where she will continue to work 50 percent time, is the only office concerned solely with the medical school and clinic's non-faculty employees. Its duties range from job classification and pay under the university's recently decentralized system, to employee events and courses.

"We are continuing to search for a replacement for Rosemary, and it is not an easy task," said David Mendelow, associate dean for administration at the medical school. "Rosemary has a particular style—a great deal of grace along with the ability to be firm and consistent with a huge number of constituencies. She has unique 'people' skills, and finding the right person to replace her is quite difficult."

Hornby credits her professional growth in great part to a Stanford personnel policy which she said attempts to creatively match people with their jobs. It is not coincidence that her own job has turned into a primary force behind that policy.

When Hornby first joined Stanford in 1968, she was recently divorced with two children, and as she put it, "I needed the money."

She had worked at jobs, including several years of increasing responsibility as a research assistant at Mills College before she was laid off. But Hornby needed a steady paycheck when she walked into the political science department for her first day as a secretary.

"I bombed out," she recalled in a recent interview. "I couldn't spell and I couldn't type."

Arlee Ellis, the department administrator then and now who hired Hornby, agreed with the evaluation but felt strongly that she shouldn't let this new employee walk away with a sense of defeat—not only for Hornby's sake but because Ellis sensed this new employee had something potentially valuable to offer Stanford. Ellis asked the personnel office to try and find something for her.

Hornby was hired as an administrative assistant in the medical school, processing personnel forms to ensure that funding for each position was available. Her role gradually increased as she took on additional responsiblity for reviewing hiring decisions.

There was no typing and no critical need for spelling skills, said Hornby, and the job offered an opportunity in a specialized area to learn the burgeoning array of new federal anti-discrimination regulations which were becoming an increasingly crucial component of the hiring and termination process.

"People started to rely on the information I was able to pick up, and my responsibilities continued to increase." By 1972, Hornby had been promoted to administrative assistant II. "I thought I had it made," she said.

"I had never seen myself as an administrator but I was really enjoying the work," she said.

"In effect, I created my own job growth by identifying areas that needed doing and problems that needed to be solved. Later someone would look around and find that my job classification didn't match the increased responsibility. You can't just sit back and expect other people to give you more work and more responsibility," she said.

Gradually she became a resource on a wide variety of personnel issues. In 1976, she was named an administrative service manager, and, three years later, was given her most recent title. Over the years she had made the transition from homemaker to breadwinner and then to successful executive. Hornby, perhaps predictably, said the increased responsibility she received wasn't just luck.

"It was a combination of being in the right place at the right time, curiosity, and liking what I was doing," she said.

Other people agree.

Rob Parker, the university's director of personnel, said Hornby has effectively built her career around relationships in the workplace and an intimate knowledge of the institution's objectives and missions.

"She established relationships and credibility with faculty and staff, and people began to gravitate to her to solve problems and get things done," said Parker.

He said her approach is a nice blending of understanding and appreciating both the employee and employer needs to effect solutions to problems without simply invoking regulations or bureaucratic procedure.

"She's gracious, yet powerful," he said.

Hornby said she sees her function and that of human resources as that of problem solver, one who can overcome the oft-stated attitude, "You can't do that."

A typical problem was how to develop a job description and salary level for a position in an academic division that needed an administrator with engineering background. Another challenge was to properly classify an employee who spent most of her time doing office assistant tasks but occasionally was thrust into the role of dispatcher for the center's pediatric transport service.

In her new role, Hornby said she hopes to be able to pass along some of the things she's learned about how to succeed in the university environment by offering career counseling as well as augmenting the personnel courses currently on the books.

Of particular interest, she said, is establishment of short, specific courses which will teach employees, including managers and perhaps even faculty, skills they need to function effectively as supervisors and administrators.

For example, she is interested in conducting sessions on how to check references—"not the theory, but a step-by-step rundown of what questions can and should be asked and how to interpret the answers."

Counseling, she said, could take on the role of helping persons "find the right situation in the university. There are a lot of talented people whose careers, like my own many years ago, are threatened because they are in the wrong job."

Hornby said she would like to explore ways to provide more assistance to faculty who suddenly find themselves managers.

Not all of the experience she hopes to pass on was garnered on the job at Stanford. A fundamental lesson, she said, she learned on a summer job away while still a Stanford undergraduate in the early 1940s.

Hornby was working as a desk clerk in Yosemite National Park's Curry Village.

"A family was about to check in, and my boss informed me that he had had to substitute their long-requested reservation with an alternative. As my boss fled out the door, he told me:

" 'Rosemary, not only are you going to tell them about the change—you're going to make them like it.' "

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ADVANCE FOR RELEASE FRIDAY, JUNE 21, 1985

MODIFIED CANCER DRUG—STILL ONLY EXPERIMENTAL—MAY BE MORE POWERFUL WITH FEWER SIDE EFFECTS

STANFORD—

Laboratory tests of a new anti-cancer agent that is at least two years away from clinical trials, suggest that it is less toxic and 500 to 1,000 times more powerful than most presently available anti-cancer drugs, according to a report in the June 28 issue of *Science* magazine.

But a Stanford University researcher who is studying the experimental agent in his laboratory cautioned that it is far too soon to know if the drug might some day be valuable against cancer in people.

At this early stage in the drug's development it still requires further laboratory and animal testing, and "it is probably at least two years away from clinical studies in humans," stressed Dr. Branimir Sikic, assistant professor of medicine (oncology) at Stanford University School of Medicine.

"It is an exciting new drug that is very promising for clinical trials in the future but at this point we don't have a new drug for patients," Sikic said.

The drug, called MRA-CN, was first synthesized three years ago by Dr. Edward Acton of SRI International in Menlo Park, Sikic said.

The average time it takes for a new drug to go through safety testing is five to seven years, he explained. Thus far the drug's effects have been studied in mice with tumors, with mixed results, and in cells taken from patients with cancers of the breast and ovary.

Some of the studies were sponsored by a grant from the National Cancer Institute administered through the Northern California Cancer Program, Sikic said.

The *Science* report on the drug's effects in cultured human cancer cells was written by Sikic, Acton, and colleagues Mohamed Ehsan, Dr. W. Graydon Harker, Nina Friend and Dr. Byron Brown of Stanford University School of Medicine; Dr. Robert Newman from M.D. Anderson Hospital in Houston; and Dr. Miles Hacker of the University of Vermont.

MRA-CN is chemically related to adriamycin, generically known as doxorubicin, the leading drug applied against a broad spectrum of cancers, including lymphomas, sarcomas, breast cancer, lung cancer, and cancer of the ovaries and uterus, Sikic said.

For many years researchers have been trying to chemically modify adriamycin and related drugs in order to design an agent with fewer side effects while retaining the anti-tumor effect, Sikic explained. This is one of the first such compounds to show promise, he said.

When the scientists compared the abilities of MRA-CN and adriamycin to prevent growth in cells from nine different human tumors, they found that the potency of MRA-CN ranged from 100 to 15,000 times that of the standard drug.

In another test they found that MRA-CN appears to lack one of adriamycin's most severe limitations, which is its tendency to destroy heart muscle cells, Sikic said. Above a certain cumulative dose, which is usually reached after six to nine months of therapy, patients have to discontinue adriamycin in order to minimize heart damage, even though the drug may be working against their cancer, Sikic said.

MRA-CN, on the other hand, appears not to damage heart tissue at doses which kill cancer cells, Sikic said. When the researchers administered the agent to cells from the hearts of fetal mice, cardiac toxicity was observed only at doses which because of its potency would be several hundred times those needed for a therapeutic effect, Sikic said.

MRA-CN also was effective in halting growth of cancer cell lines that had become resistant to adriamycin, he added.

"These studies demonstrate a clear separation of the anti-tumor and cardiotoxic actions . . . and also suggest that MRA-CN may be active against some human cancers which are resistant to doxorubicin," the researchers said.

Sikic said that MRA-CN's properties make it an attractive candidate for new "targeted drug delivery systems."

One such system under development is called liposome packaging, in which tiny membrane spheres containing drugs are aimed at specific targets, such as tumors, in the body. It is possible to make the spheres home in on specific targets by attaching them to monoclonal antibodies, proteins that are designed to recognize specific "addresses" in the body.

The advantage of such a system might be that the drugs are directed only against diseased tissues while normal tissues are spared from toxic effects, Sikic said.

Sikic's laboratory is collaborating on these studies with Drs. Demitrios Papahadjopoulos and Kate Mathay at the University of California, San Francisco, he said.

Sikic's lab is also studying how MRA-CN acts to halt cancer cell growth. Most cancer drugs work by blocking synthesis of DNA, the cellular hereditary material. This makes the drugs toxic not only to rapidly dividing cancer cells but also to other rapidly growing tissues in the body such as bone marrow.

MRA-CN may act to prevent DNA replication by two different mechanisms, Sikic said, which could be one explanation for its unusual potency.

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END ADVANCE FOR RELEASE JUNE, 21, 1985

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FOR IMMEDIATE RELEASE

KENNEDY ANNOUNCES REORGANIZATION OF MEDICAL CENTER

STANFORD—

President Donald Kennedy Tuesday, June 18, announced a reorganization of the Stanford University Medical Center administration to be effective January 1, 1986.

Under the new structure, the heads of the two largest components, School of Medicine and Stanford University Hospital, will no longer report to a vice president for medical affairs. That office will be discontinued when Dr. Lawrence G. Crowley, vice president for medical affairs and president of the Stanford University Hospital Corporation, retires at the end of 1985.

Dr. David Korn will hold a new title of vice-president and dean of the School of Medicine, and Sheldon S. King will become chief executive officer of Stanford University Hospital and president of the hospital corporation.

Korn, formerly chairman of the department of pathology, was appointed dean of the School of Medicine in October 1984. King has served as executive vice president and director of Stanford University Hospital since 1981, coming from the University Hospital and Clinics of the University of California, San Diego.

Presently, they both report to Crowley. He was the first executive to hold the vice presidential post when it was created in 1980 to meet special needs of the center. These included greater autonomy of the hospital, a restructuring of the faculty practice program, and the launching of a large-scale building program.

As vice president, Korn will be a member of the university's administrative council, thus providing important coordination between medical school programs and other parts of the university. On academic matters, Korn will report to the vice president and provost.

The vice presidential title for the dean, Kennedy explained, recognizes the varied responsibilities of the job. "Especially important are the medical school's interactions with affiliated hospitals, voluntary faculty, the community and Stanford University Hospital. That relationship is critical to each of the school's missions," he said.

King will report to the chairman of the Stanford University Hospital board of directors. Kennedy chairs the hospital board.

"The complexity of the hospital, its external relationships, and patient-care responsibilities seem to me to require a somewhat greater degree of independence than it has had in the past," Kennedy said.

Under the new arrangement Korn and King have also agreed on a plan of expanding the role of the existing medical center coordinating council.

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Several important functions, Kennedy said, "require coordination across the medical center. They include development (fund-raising), public affairs, and center matters related to planning, administration and finance. Over the summer, I will consult with other vice presidents and with medical center staff to work out more precise administrative arrangements for the management of these functions."

Kennedy said he acted on the recommendations of a committee, headed by Vice President and Provost James Rosse. He also consulted with other individuals who provided "extremely thoughtful views."

The Rosse committee was asked last January to study the medical center's administrative structure in view of Crowley's impending retirement.

"Under the leadership of Larry Crowley, the vice presidency for medical affairs has been very successful in establishing coordination and in providing sound leadership," Kennedy said. "With unusual and able leadership in both the school and the hospital, it is not unreasonable to suppose that other modes of providing coordination might be equally effective.

"I have become convinced that the present leadership of the school and the hospital can work together in a coordinated fashion without there being a separate vice president for medical affairs."

Kennedy, however, left open future options. "Dr. Korn and I have agreed to review the situation at the end of 1986, to determine whether there is reason, based on the coordination of medical center affairs, to alter the administrative structure of the center," he said. "If at that time there appears a need for a separate dean and vice president for medical affairs, a decision on how to fill those two positions could be made then, with the benefit of a year's additional experience."

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FOR IMMEDIATE RELEASE

MEDICINE AND FILMMAKING PAVE WAY FOR 'UNIQUE' CAREER

STANFORD—

When Joseph Sachs entered Stanford medical school, he knew he was on his way toward his goal of becoming a doctor. He pushed aside his lifelong fantasy of becoming a filmmaker, however, thinking it would never be realized.

Six years later, Sachs is leaving Stanford with both an M.D. and an M.A. in filmmaking. His track record in both professions proves that medical students do not have to fulfill the stereotype of "eating, breathing and sleeping" medicine. Sachs was honored at Sunday's convocation with a research award for "outstanding achievement." And thanks to the filmmaking program, he has three films—and three awards—to his name.

"Stanford provided me with the perfect opportunity to pursue both fields," Sachs said. "I couldn't have done it anywhere else."

Despite joshing by friends that he will drop out of medicine and pursue filmmaking fulltime, Sachs plans to combine the two to make what he considers a unique contribution. He'd like to achieve two things with his dual expertise: demystify science for the lay public and improve medical education.

Towards these goals, Sachs' first film, "Just What *is* DNA?"—for which he won awards at the Birmingham International Educational Film Festival and at the National Educational Film Festival—coaches viewers through 15 minutes of the ABC's of deoxyribonucleic acid, the grand chemical of genetics.

His latest project hits on one of his soapbox topics: ways to improve medical education. Entitled "Between a Rock and a Hard Place: Values, Ethics and the Physician-In-Training," the film consists of four 5-minute vignettes that point out many conflicts and dilemmas medical students confront during their clinical training.

Issues such as honesty, confidentiality, informed consent, rational decision-making, quality and dignity of patient care and teamwork among health care workers surface during the "trigger" films, so-called for their purpose of prompting thought and discussion among viewers.

Deans, ethicists and educators from medical schools throughout the country reviewed the scripts for Sachs' film, which was produced with funding from Squibb Co. through the American Medical Student Association and the Henry J. Kaiser Family Foundation. San Francisco director of photography Peter Thomas donated his services to the project, as did many local film industry members.

"People would always be blown away when I would say I was working on a film about ethics," Sachs said. "But we're not talking about the two-babies-and-one-respirator type of dilemmas. We're talking about day-to-day common events that people should be thinking about. For example, how common is it that a pack of doctors discuss a patient at the foot of the bed and act as if the patient isn't there when it would be just as easy for the pack to step outside the door?

"I'm hoping that after seeing these films, students will be better prepared to react if they disagree with a decision of a resident or an attending physician," Sachs continued. "Medical education as it is today prepares students to deal with the scientific aspects of treating disease and making diagnoses, but there is little preparation for dealing with the psychosocial side of medicine.

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"Medical education is good, but it can be great," he said. "The challenge is to make it better."

Sachs has a lighter side to him as well, evident in his attempts to imitate filmmakers in his pinstriped seersucker jacket, light-colored slacks, bow tie, straw hat and wire-rimmed glasses he wears on some behind-the-camera occasions. And then there's his third film, a 4-minute video parody called "Treat It."

Filmed for the medical school's annual faculty-student show in 1984, the parody of singer Michael Jackson's tune features Stanford faculty and students in a fast-moving rock video style. It too did not escape notice—the film won an award at the annual Palo Alto Film Festival earlier this year.

"That was just plain fun," Sachs said.

Sach's interest was not always in medical education. As an undergraduate at Yale, he was involved with basic laboratory research. "It was enjoyable but it wasn't satisfying something in me," he said. He came to Stanford with a new interest in public health education and preventive medicine. It was the experience of receiving a medical education that awakened his interest in the educational process itself.

"Learning how to think and solve problems is a part of medical education that is exciting to me, but it isn't always taught as well as it could be," he said. "And then there is the need to teach students how to act in their roles as physicians."

It's that acting quality that appeals to Sachs—an acomplished musician, juggler and magician—as well. "Some of the best teachers are great actors," he explained. The satisfaction gained from acting is similar to that he gets from making films.

"The wonderful thing about films is you work so many hours for each minute of film," Sachs said. "You pack all your creativity, energy and ideas into that one minute and it's preserved forever. It's permanent.

"Film work is every bit as hard and challenging as the work in being a medical student. But when you walk into a theatre where an audience is watching your film and you see their reaction, well, it's quite an experience."

Sachs is on his way to University of California, Los Angeles, Medical Center where he plans to train in internal and emergency medicine. And then what?

"I'm not sure where all this will take me," he said with a smile. "I'm just going to sit back and enjoy the ride for a while, and we'll see where I end up."

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FOR IMMEDIATE RELEASE

DUPERRAULT NAMED ASSOCIATE DIRECTOR OF CLINIC

Photos available if not included with story.

STANFORD—

Jane Duperrault has been named associate director of the Stanford University Clinic and Faculty Practice Program (FPP), announced Donald Tower, executive director.

Duperrault has served as FPP director of finance since March 1982, a position she will continue to hold in her new appointment, which was effective March 1, 1985.

In addition to many of her current responsibilities, Duperrault will assume primary responsibility for legislative analysis, the FPP Budget Committee, departmental administrative service manager liaison, University Controller's Office liaison, and various special projects.

As the second ranking officer in the FPP organization, she will also assume staff responsibility for FPP strategic planning and coordinate educational activities for FPP departments, Tower said.

Duperrault also served as acting director of data systems for the Clinic/FPP from July through December 1983. Before joining Stanford she held finance positions at the University of Michigan Medical Center in Ann Arbor, and the Manufacturers Bank of Detroit.

She graduated from American University, Washington, D.C., in 1975, and received a master's degree from the University of Michigan Graduate School of Business Administration, in 1981. Her M.B.A. is in finance and information systems.

The Clinic/FPP is the organized medical group practice of physicians who are on the faculty of Stanford University Medical School. Stanford's medical group practice is one of the largest in the country with 290 physicians.

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FOR IMMEDIATE RELEASE

PREVENT NUCLEAR WAR, STANFORD MEDICAL SCHOOL GRADUATION SPEAKER SAYS

STANFORD—

Stanford University School of Medicine's commencement speaker challenged the medical and scientific community to "prevent the final epidemic of nuclear war" in his address at the Sunday (June 16) afternoon ceremony held on the medical school's alumni green.

"The overriding problem facing humanity today is the threat of nuclear holocaust," said Dr. David Hamburg, president of the Carnegie Corporation of New York. "A new level of commitment of the scientific community is urgently needed to reduce the risk of nuclear war.

"This requires a mobilization of the best possible intellectual, technical and moral resources in a wide range of knowledge and perspectives," continued the former chairman of Stanford's psychiatry department. "A science-based effort is essential to maximize analytical capability, objectivity and respect for evidence—the outlook that is characteristic of the scientific community worldwide."

Hamburg spoke to graduates, families and friends gathered for the presentation of 156 academic degrees, including 78 M.D.s. Faculty awards and student research awards were also presented

While concerned primarily with the threat of nuclear war, Hamburg stressed that all technology developed over recent decades must be further evaluated for efficacy, safety and cost-effectiveness in health care. "Scientific assessment of medical technology and its uses is extremely limited at present," he said.

There must be, Hamburg continued, "a major increase of funding for research on health care—not instead of basic research—but rather building on the essential base of fundamental research that is now being so powerfully strengthened."

But the funding trend, he added, is leaning in favor only of research and development for defense.

"A look at total federal research and development for fiscal year 1986 compared to 1985 shows big increases in defense research and development, decreases in non-defense research and development, and virtually flat basic research," Hamburg said.

Such clinical research involving medical technology assessment has not had a high priority in the past, Hamburg said, and poses "formidable clinical, methodological, logistical, ethical and financing problems." It's essential, however, because it provides a significant link towards improving health care in the future.

"The crucial integrative task is to foster innovation and provide adequate asessment as rapidly as possible when innovation is applied to health care," he said.

The ideal place for this type of clinical research is university-based health centers, Hamburg continued. It's important to examine how to organize the functions of academic medical settings to encourage such research, and how to combine the expertise of other disciplines—engineering, statistics, social sciences—in research assessing technological innovations.

The unprecedented technological innovations that have occured over recent decades have been used both for better and for worse, Hamburg said. "While we take pride in our accomplishments, we must seek to make better use of them to relieve human suffering and improve chances for a decent future."

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FOR IMMEDIATE RELEASE

FACULTY, STUDENTS HONORED AT STANFORD MEDICAL GRADUATION

STANFORD—

Awards were presented to 14 faculty members at Stanford University School of medicine's convocation ceremony Sunday (June 16).

Dr. Harry Oberhelman, professor of surgery, received the Alwin C. Rambar Award for Excellence in Patient Care.

Receiving the Arthur L. Bloomfield Award in Recognition of Excellence in the Teaching of Clinical Medicine were Dr. Robert Sladen, assistant professor of anesthesia, and Dr. Ross McDougall, associate professor of radiology.

The Henry J. Kaiser Family Foundation Award for Outstanding and Innovative Contributions to Medical Education was awarded to two faculty members: Dr. Kelley Skeff, assistant professor of medicine and Dr. Robert Cutler, professor of neurology. Cutler is associate dean for faculty affairs.

Drs. Paul Basch, professor of family, community and preventive medicine; Charles Carrington, associate professor of pathology; Robert Chase, professor of surgery; and Charlotte Jacobs, assistant professor of oncology, received the Henry J. Kaiser Family Foundation Award for Excellence in Preclinical Teaching.

The Henry J. Kaiser Family Foundation Award for Excellence in Clinical Teaching was awarded to Drs. Nirmala Bhat, clinical assistant professor of gynecology and obstetrics; Ira Greene, physician specialist in dermatology; Henry Jones, professor of radiology; Teresa Ponn, clinical instructor of surgery; and Chris Snow, physician specialist in general internal medicine.

The final graduating class in physical therapy presented the Lucille Daniels Recognition Award for Outstanding Contribution to Physical Therapy at Stanford to Dr. John Medeiros, director of the program.

Meanwhile, 16 graduating medical students received outstanding acheivement in research awards. They were Graham Barnard, Paul Berger, Peter Brett, Randy Bucalo, Irving Kaplan, Susan Knox, Frank Lexa, Charles Link, Michael Mai, Jane Marten, Linda Meier, Tien Pham, Daniel Rubin, Reid Rusamen, Joseph Sachs, Stephen Salloway, Gary Schwartz and David Wexler.

Three other medical graduates—Rona Giffard, David Maloney and Kevin Roth—were recognized for their participation in the Medical Scientist Training Program.

—30—

sk6

6-17-85

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News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR LUNG STUDY

STANFORD—

The division of respiratory medicine at Stanford University Medical School is seeking healthy, normal volunteers for a painless, non-invasive study to access normal airway function.

The results will be used to compare normal lung function with that of heart-lung transplant patients.

Selected volunteers will spend a total of about three hours at the medical center. Benefits to participants include a free pulmonary function test and lung evaluation.

Excluded from the study are people with personal or family history of asthma or allergies, and persons who have had a cold or flu in the past two months.

For further information or to volunteer, call James Harvey at (415) 497-6381.

6-13-85 —30— LA9

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FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911
FOR IMMEDIATE RELEASE

MARIAN KNOX APPOINTED ASSISTANT DEAN FOR FACULTY AFFAIRS

STANFORD—

Marian Knox has been promoted to assistant dean for faculty affairs at Stanford University Medical School, announced Dean David Korn.

"I was really pleased to learn of the promotion," Knox said. "I'm looking forward to working with the deans of the medical school in my new position."

Knox had served as assistant to the associate dean for faculty affairs since 1973.

"Knox brings to the job considerable finesse in what can be difficult personnel problems," said former associate dean of faculty affairs Dr. John Wilson. (Dr. Robert Cutler succeeded Wilson, now professor of sugery emeritus, earlier this year.) "She's a tremendous asset to the deans and department chairmen of the medical school."

As assistant dean, Knox is responsible for "facilitating" faculty appointments, promotions, salary determinations, sabbaticals and other related issues. It is her job to obtain and organize required documentation for any faculty position changes before it is sent to the University provost for review.

Knox is also the staff person who arranges schedules for and takes minutes at major school committee meetings. In this capacity, Wilson said, the medical school deans, associate deans and other committee members call upon Knox's broad knowledge of medical school and university rules and policies concerning any proposed actions.

"One of her many strong points is that she works extremely well with other people," Wilson said. "In her position, that's key."

Knox is a graduate of Northwestern University. Prior to joining the medical school staff she held posts at Stanford's engineering school and at University of Chicago Hospitals and Clinics.

6-12-85 —30— knox--sk6

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FOR IMMEDIATE RELEASE

PHYSICAL THERAPY PROGRAM TO GRADUATE ITS LAST CLASS

Photos available on request if not included with story.

STANFORD—

Stanford University's physical therapy program will graduate its final class June 16, 1985, during the School of Medicine's convocation ceremonies.

The nationally recognized, 63-year-old physical therapy program will be terminated effective Aug. 31, 1985, because of a change of academic priorities as well as fiscal constraints in the medical school.

Students, alumni and faculty of the division held a "last dance" reception here Saturday, June 1.

"I believe the years ahead hold many opportunities in the field, and that we'll be all the better for having weathered this storm," said Dr. John Medeiros, acting director of the division since 1982, in comments to the crowd.

The 30 graduating students of the class of 1985 organized the event, partly as a fund raiser for the Foundation for Physical Therapy Education and Research, a group formed by Medeiros and lecturer Wendy Mason in response to the closing of the division at Stanford.

"This is our last get-together to talk about future and past directions for physical therapy," said student Erica Gould, chief organizer. Most of her fellow classmates from the two-year master's degree program, Gould said, will be looking for jobs all over the country after taking their board examinations July 19 in Los Angeles.

"Today we're at a crossroads," continued Medeiros, an assistant professor of physical therapy. "But our commitment to learning unites us. I like to think of physical therapy as a synthesis of caring and learning."

The final decision to end the program at Stanford was made in November 1983 by Albert Hastorf, vice president and provost of the university. Hastorf said he had reached his decision "reluctantly" after committee review because physical therapy was clearly a program of quality and its graduates are highly respected, occupying faculty posts in more than 40 percent of the schools of physical therapy in the nation and directing 17 percent of the programs.

"It's never easy to terminate programs that have embodied a worthy cause," Dr. Dominick Purpura, medical school dean at the time, had commented. "But budgetary constraints are becoming severe. Everything the medical school does must have a clear relationship to its core academic programs."

6-11-85

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The physical therapy program was established in 1922, just one year after the American Physical Therapy Association formed. It was based at Stanford University Hospital on Clay and Webster Streets in San Francisco.

In 1940 physical therapy was transferred to the Stanford campus with facilities divided between the men's and women's gymnasiums. Catherine Worthingham—"a pioneering figure" according to Dr. Helen Blood, a physical therapy professor and herself an alumna of the program—was director.

The program moved to what was then known as the Stanford Village in Menlo Park in 1946, and it became technically a part of the School of Education. It was housed in Stanford's emergency housing project which was formerly the Army's Dibble General Hospital.

Faculty included Lucille Daniels as director, and the late Dr. William Northway, professor of physical medicine in the medical school.

With the outbreak of the polio epidemic in the mid-forties physical therapy gained prominence as the Polio Epidemic Unit to send trained workers anywhere on the West Coast when polio outbreaks got out of control.

Much of program financial support was then coming from the National Foundation for Infantile Paralysis.

In 1955 on recommendation of Dr. Windsor Cutting, then dean of the medical school, the Board of Trustees transferred the physical therapy program to the medical school. When the school moved from San Francisco to the Stanford campus in 1959, the physical therapy division and the Stanford School of Nursing became a part of what was then envisioned as an expanding department of allied medical sciences, with the potential of added programs in the future.

This never became a reality. The School of Nursing was the first to be phased out in the mid-seventies because of new medical school directions and priorities.

In recent years the Stanford physical therapy program has included requirements for licensure, three advanced study areas and student research projects. It has offered an entry level master's degree for students beginning in physical therapy, and a post-professional master's program for physical therapists interested in pursuing advanced graduate work.

"There have been many highlights over the years," recalled Blood, citing, as an example, that "we were the first group to set up physical therapy in home care services in Santa Clara County."

Blood, a former director of the division, plans to take the summer off. Then she will resume work, hoping to teach and consult overseas.

Professor Barbara Kent will officially retire, although she is working on a book about the hand. She and Blood, the two senior faculty members, were made professors emerita last month. Kent was also honored and surprised at the event, when Blood presented her with copies of many letters from students, faculty and alumni supporting her nomination last year for the national Baethke-Carlin Award.

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Other faculty members are still finalizing their plans.

Medeiros is interested in aerospace efforts to counteract muscle atrophy in astronauts.

Gail Jensen, physical therapy lecturer and a 1978 graduate of the division, is now a doctoral student in Stanford's School of Education. She plans to complete her dissertation in the fall, work as a clinician at Stanford Hospital, and then look for another teaching position elsewhere.

Kay Shephard, assistant professor, will move to Philadelphia as an associate professor at the School of Allied Health, Temple University. There she will direct graduate studies in physical therapy.

Ann Hallum, senior lecturer, is enrolled in the doctoral program in counseling psychology at Stanford. Her long-range goal is to combine both backgrounds, working with families of children who have physical problems or disabilities.

Mason has been named director of the cardiac rehabilitation center at Saddleback Community Hospital in Laguna Hills, Newport Beach. For the summer she will teach at the University of Texas. One of few physical therapists interested especially in cardiopulmonary aspects of recovery, she said she also hopes to remain in the teaching field.

Lecturer Emily Savinar will work as a clinical specialist in orthopedics at Kaiser Hospital in Oakland.

Dr. Martha Jewell, lecturer, will continue part-time teaching and enter private practice as well. Her specialties are neuroanatomy and pediatrics.

Sarah Semans, associate professor emerita, is currently working on a book on exercise for the elderly.

Three support staffers of the division are still looking for new jobs, with help from the medical school's human resources group, Medeiros said.

In addition to a donation from the physical therapy alumni club, money was raised at the last dance through the sale of alumni T-shirts with a design by student Devra Einkauf, showing the Stanford tree with a large branch symbolically broken off.

It was the second fund raiser held for the new Foundation. The first, Gould said, was aboard a yacht once owned by Julie Andrews, "The Tempest," at the St. Francis Yacht Harbor in San Francisco, May 11.

The Foundation was started, Medeiros said, as a strong, non-profit group outside the university to support continuing programs in the Bay Area as well as possibly to open a new one.

Nationwide efforts to focus attention on the contributions of physical therapy to improving the health of all Americans will take place during National Physical Therapy Week, June 16 through 22, this year entitled "Physical Therapy Promotes Healthy Aging." The week is sponsored by the American Physical Therapy Association.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

AWARENESS OF CHILD ABUSE KEY TO GETTING HELP

STANFORD—

In compliance with a state requirement, certain health professionals now are required to sign a form acknowledging they are aware of and will comply with their obligation to report known or suspected cases of child abuse to a child protective agency.

"Our compliance with the new requirement is only part of our commitment to increase employee awareness of this problem," said Karen Axnick, who is coordinating implementation of the form requirement among Stanford University Hospital, Clinic, and Medical School employees hired after Jan. 1 of this year.

Axnick, director of Care Review/Risk Management, noted that "last year a multidisciplinary task force headed by the Department of Clinical Social Work developed Hospital guidelines for managing child abuse and neglect cases."

"We generally report two or three cases of child abuse each month," said Maria Nasjleti, clinical social worker at Stanford. "Most of those are children brought into the emergency room or clinic. They aren't always overt cases of abuse. Some are what appear to be accidental injuries that are actually a result of poor supervision."

She said summer is a time when these injuries are more common. "When people leave their windows open during the summer, they need to take extra care with their kids. We've had cases of children falling cut of second story windows or running into traffic. Kids need responsible supervision and sometimes the reason they aren't getting it is because their mother is unavailable or absent."

She spoke of one case that would come under a relatively new category of child abuse--"medical neglect." A one-year-old girl suffering from infantile asthma was admitted to Stanford with pneumonia three times over a three-month period. After each discharge, the mother had not brought her back to the clinic for follow-up checks and she admitted that she had not given the little girl her medication, Nasjleti said. Her reason was that she didn't have a ride to get back to the clinic or to go to the pharmacy.

"We felt the mother had no appreciation for the seriousness of her child's problem," Nasjleti said. "We reported the case to a child protective agency and they investigated. That child is now in a foster home."

Nasjleti stressed, "When a professional makes a report to the welfare department, it's not necessarily because the parent is abusive, and it's not a requirement that the child be removed from the parent's care. Often, the parent needs some assistance in terms of services to the family. They might need transportation services. They might need guidance in terms of child development, so they might be required to attend a parenting class, for example. Ultimately, the main thing we're concerned about is helping the child."

The intent of the state legislation is to strengthen the reporting system for child abuse which the legislature views as "...a serious problem, as evidenced by the fact that the number of cases reported to the Attorney General each year...has increased over 900 percent from 1974 to 1983."

"It's important for all employees, even those not specifically designated by the new law, to be aware of the need to report suspected cases," Axnick said. "Often the signs and symptoms are subtle, but alerting the proper authorities may literally mean the difference between life and death for an individual child."

Those required to sign the new forms are:

Medical practitioners, such as nurses and physicians, including house staff, emergency medical technicians and paramedics. Others include physical therapists, speech pathologists, pharmacists and clinical lab technicians. Also required to sign the form are psychologists, psychological assistants, dentists, dental hygienists, chiropractors, and optometrists.

Non-medical practitioners, such as marriage, family and child counselors, coroners, state or county public health employes who treat minors for venereal disease or any other condition; and religious practitioners who diagnose, examine or treat children.

Child care custodians, such as social workers, teachers, licensed day care workers, employees of child care institutions and probation office.

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FOR IMMEDIATE RELEASE

COLORFUL PIGMENTS FROM ALGAE BLEND MARINE BIOLOGY WITH MEDICINE

STANFORD—

Stanford and University of California scientists have turned colorful pigments from algae into molecular "tags" with widespread uses in medical diagnosis and research.

The pigments can substitute for many of the radioactive substances now widely used to identify specific cells or proteins, the scientists said.

When attached to cells or molecules, the brilliant blue and red pigments are like tiny fluorescent beacons that enable doctors or researchers to see substances even at very small concentrations.

Because they are not radioactive, the proteins are safe to use in research and clinical laboratories, the researchers said.

The fluorescent molecules have already been used clinically to screen donated blood for abnormalities such as AIDS, and to monitor blood levels of drugs such as digoxin in patients, according to Dr. Lubert Stryer, professor of cell biology at Stanford University School of Medicine.

A patent covering use of the pigments was issued last week by the U.S. Patent and Trademark Office in Washington, D.C., said Katharine Ku, associate director of Stanford's office of technology licensing.

The pigments, which have the tongue-twisting name of phycobiliproteins, were developed by Stryer and colleagues Dr. Vernon Oi, formerly a postdoctoral scholar at Stanford and now at Becton Dickinson Monoclonal Center, and Dr. Alexander Glazer, professor of microbiology at the University of California in Berkeley.

The development came about because Oi was looking for a tag that would fluoresce in the orange and red wavelengths, to extend the detection range of fluorescent markers already available, Stryer said.

Fluorescence happens when a substance gives off light of a particular color in response to being hit by incoming light of a different color.

At a New Year's Eve party, Stryer and Glazer discussed the problem and realized that phycobiliproteins, the subjects of Glazer's research, might provide the solution.

"We sketched out a research plan that night," Stryer recalled. It took only about six months to develop a useful product, the researchers reported.

The pigments fluoresce with 10 to 20 times the intensity of most other fluorescent labels, Stryer said, which makes them the first real viable alternative to high-sensitivity radioactive labels for spotting important cells or molecules that are now otherwise out of range.

"For instance, early detection of cancer is one possible application," Stryer suggested.

For diagnostic use, the proteins must be attached to the substance that is to be detected, forming what is called a conjugate, Stryer explained.

A conjugate can be formed with an antibody molecule—a protein made by the body's immune system that is targeted to recognize abnormal cells or substances in the body.

If the antibody is one that recognizes cancerous cells, then doctors might be able to detect the cancer at early stages by taking tissue samples and looking for the fluorescent tags under the microscope or with sophisticated cell-sorting equipment.

Conjugates formed with drugs are also useful diagnostic tools. One company has already developed such a test that uses a phycobiliprotein conjugate to track blood levels of the medication digoxin in patients, Stryer reported.

Antibodies and other specific proteins have been tagged by three phycobiliproteins so far, all fluorescing in the orange to red range, Stryer said. More are under development, he added.

Since the phycobiliproteins fluoresce in slightly different colors from one another when stimulated by a single beam of light, they can be used to track several different kinds of molecules or cells simultaneously, he added.

Phycobiliprotein pigments are manufactured by marine algae for use in photosynthesis, the process of converting sunlight into energy the cells need to grow.

The name comes from the Greek "phykos" which means seaweed and "bili" because the proteins are related to similar pigments found in bile.

Stanford has licensed the phycobiliprotein technology to Applied Biosystems of Foster City, which manufactures the proteins and provides the materials and sublicenses to other companies interested in the technology. Stanford has also licensed Becton Dickinson in Mountain View to develop phycobiliproteins for use in flow cytometric systems, Ku said.

—30— algae LH8

STANFORD UNIVERSITY NEWS SERVICE STANFORD, CALIFORNIA 94305 (415) 497-2558

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FOR IMMEDIATE RELEASE

TWO YOUNG PROFESSORS WIN PEW SCHOLARSHIPS IN BIOMEDICAL SCIENCES

STANFORD—

Two Stanford University assistant professors have been awarded $200,000 four-year biomedical research scholarships from The Pew Memorial Trust of Philadelphia.

Dr. Mark Davis, 32, assistant professor of medical microbiology, and Dr. Richard Scheller, 32, assistant professor of biological sciences, are among twenty "outstanding young medical researchers" selected for the 1985 Pew Scholars Program in the Biomedical Sciences, the Trust announced June 4.

The awards, presented for the first time this year, go to junior faculty members selected because of their outstanding promise in basic science or clinical research that will help advance human health, according to a Trust announcement.

Forty-four institutions were invited by the Pew Trust to nominate two candidates each for the 1985 scholarships. The recipients, chosen by a 13-member national advisory committee chaired by Rockefeller University President Dr. Joshua Lederberg, come from 17 medical schools and research institutes in the U.S., the Trust said.

Each scholar will receive a total award of $200,000 in annual stipends of $50,000 during the next four years, contingent upon progress toward stated research goals, the Trust said.

Both Davis and Scheller received their Ph.D. degrees from the California Institute of Technology in 1980. They worked in nearby labs at Caltech, and they have known each other and been friends for more than 10 years, Scheller said.

Davis was a postdoctoral fellow at the National Institutes of Health in Bethesda before coming to Stanford, while Scheller carried out postdoctoral studies at Columbia University prior to his Stanford appointment.

Davis is using modern molecular techniques, including recombinant DNA methods, to isolate genes that help control the immune system, the body's defense network against disease.

The major focus of his laboratory's research is the gene family that codes for receptor proteins on cells of the immune system. He and his associates were the first to find a T-cell receptor gene, one of the genes that codes for a protein involved in the body's ability to distinguish its own healthy tissues from abnormal cells and foreign tissues.

Among Davis' other recent honors are a Mellon Foundation Fellowship in 1983 and the 1985 Passano Foundation Young Scientist Award. He was also named one of the nation's top 100 young scientists by *Science Digest* last year.

Scheller has been using recombinant DNA techniques to analyze the nervous system of *Aplysia*, a dark brown sea snail that has only about 20,000 central nervous system cells.

His ultimate aim is to find out how genes are expressed in the nerve cells and eventually to understand what molecular changes occur in the nervous system to make learning and memory possible.

Scheller's other recent honors include a $500,000 Presidential Young Investigator Award, the Esther A. and Joseph Klingenstin Fellowship in the Neurosciences, and a Young Investigator Award from the Society of Neuroscience.

The Pew Memorial Trust is the largest of seven Pew Charitable Trusts, which support other programs in education, health sciences, culture, human services, public policy, religion and conservation.

6-5-85 —30— pew--LH8

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FOR IMMEDIATE RELEASE

EPIDEMIC ERADICATION EFFORTS HAMPERED BY LIMITATIONS IN RESEARCH METHODS

STANFORD—

Public health efforts against disease epidemics based on information from studies of laboratory-grown bacteria can be ineffective because of limitations in research methods, according to Stanford University Medical Center scientists.

"There is a fundamental problem in laboratory research," said associate professor of medical microbiology Abdul Matin. "Many public health and treatment decisions are made on the basis of laboratory findings. But these findings may not pertain to the actual behavior of the bacteria in a natural environment."

Legionnaire's Disease and other bacterial epidemics continue to break out despite attempts to eliminate them because of this problem, Matin said.

A series of articles, the most recent in the June issue of *Applied and Environmental Microbiology* show that laboratory-grown bacteria are much more susceptible to disinfectants and other treatments designed to eradicate them, while the same naturally grown bacteria resist the treatments and continue to thrive.

The studies were funded by the U.S. Environmental Protection Agency (EPA). Matin's collaborators include former graduate student James Berg, postdoctoral associate Steve Harakeh, Dr. John Hoff, EPA, and Paul Roberts, Stanford University civil engineering professor. The studies represent one of only a few attempts to look at bacteria in their natural state, Matin said.

The scientists reached their conclusions after studying a number of different bacteria, such as *Legionella pneumophila, Escherichia coli, Klebsiella pneumoniae and Yersinia enterocolitica*.

In order to grow bacteria quickly and in quantities large enough for research, scientists use a technique called "batch culture" in which the bacteria are given "superabundant" amounts of nutrients, Matin said.

These growing conditions differ greatly from those in natural environments, in which nutrients are nearly always limited and temperatures are not necessarily ideal. Bacteria grow at a much slower and lower rate because of these limitations, he explained. Using a device called a chemostat, the scientists were able to duplicate in the laboratory this aspect of bacterial growth in nature.

"The different concentrations of nutrients and different growth rates can greatly influence the composition of the bacteria," Matin said. These changes, he added, cause a difference "by orders of magnitude" in the sensitivity of bacteria to various disinfectant agents.

Specifically, the scientists have found that the make up of the cells' outer membrane changes significantly when grown under usual laboratory conditions. One protein, labeled *33 kDa*, on the surface of the bacterial cells completely disappears. Matin said they do not know why this happens. However, this change may be directly responsible in making the laboratory-grown bacteria much more sensitive to disinfectant agents such as chlorine dioxide and phenylphenol commonly used in bodies of water, air conditioning cooling towers and other places to prevent outbreaks of bacterial disease.

Bacteria grown in natural environments have the ability to adapt to a less-than-ideal situation, Matin explained. This makes them much more hardy.

"The whole question of whether or not to study microorganisms under conditions resembling nature has been shoved aside," Matin said. "But any study has got to be interpreted in a certain frame of reference. And if your frame of reference isn't right, the study is not worth as much as it could be."

Matin and his colleagues are now conducting further studies of bacterial composition under natural conditions in an effort to define the structural and physiological features that determine the ability of bacteria to cause disease. By doing so they hope to find a more effective way to help eliminate outbreaks of disease such as Legionnaire's Disease.

The most recent occurrence of Legionnaire's Disease was in Detroit in April, resulting in the death of at least one man and illness of at least 29 people after a hotel banquet.

The difficult-to-diagnose disease is symptomized by fatigue, muscle aches and headache. Fever, chills and sometimes abdominal pain follow.

Legionnaire's Disease was first identified in 1976 when 34 people died and 221 became ill during an American Legion convention in Philadelphia. The Centers for Disease Control estimate that about 25,000 people a year get Legionnaire's Disease.

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STANFORD UNIVERSITY MEDICAL CENTER
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CITY DESKS: Review copies of "Panic" are available if not included with story.
FOR IMMEDIATE RELEASE

FEARS AND PANIC CAN BE OVERCOME, PSYCHIATRIST SAYS

STANFORD—

Everyone has experienced fear at some time, but when fear becomes panic, it's time to seek help, says Dr. Stewart Agras of Stanford University Medical School.

Agras, director of the behavioral medicine program at Stanford, has written a book, "Panic" (pp. 151, The Portable Stanford and W.H. Freeman, New York, 1985, $11.95 paper; $21.95 cloth), to help the average person identify the point at which our fears stop protecting us from danger and begin to cripple us.

"The panic attack itself is only part of what for simplicity's sake we will refer to in this book as the panic syndrome," Agras writes. "The syndrome includes anxiety, phobia (particularly the limitation of mobility known as agoraphobia), isolation, and depression."

The professor of psychiatry says the details and extent of the development of the panic syndrome vary from person to person, but the first panic attack generally occurs in a public place.

"The victim of the attack suddenly feels ill, notices a fast and erratic heartbeat, experiences a tight feeling in the chest, breathes rapidly, and may feel faint," Agras says. "The rapid breathing leads to chemical changes that cause tingling in the hands and feet, numbness around the mouth, and dizziness.

"Nausea, headache, and stomach cramps may also occur during the attack. Often the physical symptoms are accompanied by a fear of death or impending doom, of becoming insane, or of losing control. The victim wants to rush home. Feelings of unreality, such as the sensation of being outside one's body, or of peculiar changes in the quality of light, may occur."

Nearly one in every 12 persons suffers from a mild to a moderate phobia, the psychiatrist said, and more than two per every 100 persons have a phobia that limits them in some way. The phenomenon generally runs in families.

Fear is an experience everyone has had at some point, and Agras says the seven most commonly reported fears are snakes, heights, storms, doctors, sickness, injury and death.

"Although a fear of a harmless snake may be intense , or may extend to a fear of crawling insects and mice,...such a fear is not likely to interfere much with everyday living."

In the last decade, Agras said, doctors have made tremendous advances in understanding and treating fears and phobias—that point at which fears begin limiting functioning.

While agoraphobia (fear of open spaces) strikes only 0.6 percent of the general population, it is the most common phobia doctors see at the Stanford University Clinic, Agras said, and it can keep someone housebound and severely limit their lives. About half of the some 150 phobic patients at Stanford each year are suffering from agoraphobia.

While this is an oversimplification, he said the cause might ultimately be traced to "the separation fear—the child's fear of separation from the mother, from venturing out into the world where they might be hurt."

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He said agoraphobics should not be seen as weak. For many of these people, Agras said, it takes enormous courage just to leave the house to go to work each day. Some depend on their spouses or friends to take care of simple chores like supermarket shopping.

"Some of these people who have panic attacks think they are having heart attacks," Agras said. "They are not. I don't know of anyone who has ever died from a panic attack, but it can be terrifying nevertheless."

Doctors have achieved great success prescribing antidepressant medications, such as Imipramine, combined with the therapy of gradual exposure to the feared situations.

"If someone is afraid of snakes, we don't force them to go into a snakepit," Agras said. "We might begin by showing them pictures of snakes, then having them touch a stuffed snake, then taking them to the zoo where they can observe live snakes, and then perhaps holding a snake. With people suffering from agoraphobia, we encourage them to gradually take on some of the activities they've been afraid to do."

Within the last 20 years, doctors started changing the way they treat phobias, Agras said. They used to treat phobias with traditional psychotherapy—looking for whatever it was in the patient's background that created the fear. But, Agras said, psychiatrists have gotten extremely encouraging results with exposure therapy—actually changing behavior by gradually exposing the patient to the feared situation or object without necessarily understanding what caused it.

"Avoidance of a feared situation blocks the normal process of unlearning the fear response," Agras said, adding that exposure to the phobic situation reduces compulsive behavior, as well as the underlying fear.

Support and encouragement of others helps motivate patients "to reaffirm the daily decision to expose themselves to their feared situations," Agras stressed.

More than 85 percent of people with simple phobias can be cured after just a few visits, Agras said, and many don't require medication. The more extreme cases take longer, but generally the medications that help block panic attacks can be discontinued after about six months, he added.

"No matter what avoidance one has," Agras said, "it can and should be overcome."

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panic/jk1

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FOR IMMEDIATE RELEASE

ADVISORY

Editors, news directors: The following sent Business Wire Tuesday p.m.

STANFORD—

The news media are invited to a briefing and tour of Stanford University Medical Center's new $12 million Research Animal Facility at 10:30 a.m., Friday, Aug. 2.

The state-of-the-art facility recently opened and is the primary care area for the approximately 17 to 25 species of animals which typically are housed for research at the Medical Center. The facility replaces several scattered housing areas for animals. While most research is carried out at other locations, the Research Animal Facility contains several surgical suites and intensive care facilities for a variety of species and includes innovative environmental and health monitoring systems.

Animals have been moved into the facility gradually since about mid-June and most systems in the 32,000-square-foot complex now are fully functional.

Dr. Thomas Hamm, a veterinarian who heads the Division of Laboratory Animal Medicine, will lead the news media tour and answer questions. Photographers are welcome. Animals currently housed in the facility include cats, dogs, pigs and ducks. There may be an opportunity to observe an ongoing research project if one is in progress at the time of the news conference.

We hope to have available one or more scientists who use animals in research. Some areas of the building, including a biohazard area, are expected to be unavailable for entry.

To find the facility, arrive at the Medical Center along Campus Drive West. Turn into the Medical Center parking lot near Fairchild Auditorium by turning AWAY FROM the mountains and AWAY FROM the main part of campus onto Panama Street or Via Ortega.

Newsmen may park in the employee lot (marked for 'A' or 'C' stickers). Please display news media credentials on the driver's side of the front dashboard to avoid towaway or citation in the employee lot. The Research Animal Facility is located down outdoor stairways near Fairchild Auditorium.

A driveway leading to a loading dock also is available for temporary parking to offload gear.

7-30-85 —30— dogreles mg6

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

HOUSING NEEDED FOR OUT-OF-TOWN PATIENTS

STANFORD—

The department of social services at Stanford University Hospital is seeking information from community members regarding possible free or inexpensive housing for out-of-town patients and their families.

The urgency of the housing situation warrants public concern, said Wil Wright, director of Stanford Hospital's department of clinical social services.

Long-term patients from outside the Bay Area, from around the nation and the world needing low-cost places to stay in the vicinity while being treated at Stanford Hospital include transplant candidates, oncology patients, medical and surgical patients.

"It's difficult to find affordable temporary housing in this area for any considerable length of time," said Wright. "If members of the community are made aware of the situation, perhaps they can help."

One family recently was placed by social workers at four different locations in five weeks—an example of the continuing problem in finding adequate temporary housing for patients.

A "Hometel," a joint project by Stanford University and the Assistance League of Santa Clara County, is hoped to alleviate some of the problem with 42 apartment units on Welch Road in Palo Alto. But its expected completion is mid-1987, as much as two years away.

The Assistance League has also provided several low-cost rentals to patients and their families at Oak Creek Apartments for the past few years. But the units have been 100 percent occupied with a long waiting list since the program began in 1978.

"The housing shortage is a problem we've always had and we always will have," said Duane Walker, associate director of Stanford Hospital. The current appeal, he explained, is part of the hospital's "ongoing response to our patients' needs and concerns."

What the hospital now seeks are people going out of town on holiday or otherwise vacating their homes for a short time, or people who have extra rooms they might make available free of charge or for no more than $7 to $10 per night.

Several community members have already begun the practice of sharing their homes with out-of-town patients, an arrangement that has brought benefits to both parties, Walker noted.

Also, a local hotel has recently offered to make discount prices available to Stanford Hospital patients and families on a limited basis, especially in emergencies.

Anyone willing to share or rent housing space is asked to call Pat Ochoa, patient assistant specialist, at (415) 497-5091, between 9 a.m. and 5 p.m. weekdays.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

COMMUNITY PHYSICIANS SUPPORT HOSPITAL MODERNIZATION

STANFORD—

A $100,000 check from the Palo Alto Medical Clinic (PAMC) has has been received as a contribution to Stanford University Hospital's modernization plan, a physician leader announced Friday (July 26).

Dr. Alfred P. Spivack, a Palo Alto physician who heads the community physicians steering committee fundraising for the project, said the check brings to $1.7 million the amount either received, pledged or otherwise intended for the $114 million project from physicians or physician groups who use the hospital. Spivack said the physician goal for the project is $2 million out of a total fundraising goal of $15 million.

Approximately $80 million has been obtained through issuance of tax-exempt bonds, about $20 million is to come from hospital reserves, with the remaining from gifts.

On July 2, the Faculty Practice Program, which guides the patient treatment activities of the 280 full-time Stanford faculty doctors who use the hospital, announced a pledge to the project of $1 million over five years.

In addition to the group practice gifts, about 100 individual physicians have contributed or pledged $200,000 toward the project, scheduled for completion in the fall of 1987. These doctors include members of the full-time Stanford faculty, PAMC, Menlo Medical Clinic, as well as other physicians in private practice who use the hospital.

"Physicians recognize the need for better patient care and are making their own financial contibution to create the finest hospital possible," Spivack said.

Stanford University President Donald Kennedy, who also serves as chairman of the hospital board, said, "the burgeoning support for this project from community as well as full-time faculty physicians shows the modernization project to be a vital community resource that warrants support from everyone in this area."

Spivack said PAMC's gift represents "a significant commitment from a physician group which utilizes and enriches a community resource—our hospital. The clinic's gift sets an example that the rest of us in the community need to join, not just follow."

In a letter on behalf of some 100 partners of the PAMC (the health care division of the Palo Alto Medical Foundation), clinic executive director Dr. R. Hewlett Lee said, "It is hoped that this will be the first of five annual contributions that the Clinic will make to the project."

Lee said PAMC clinic is "in full-hearted support of the modernization project and the unanimous decision of our executive board to make this contribution was enormously heartening to me."

The project includes remodeling of portions of the present facilty while adding about 357,000-square-feet of new space, including 20 new operating rooms and modernized nursing units which will provide modern patient room accomodations.

"This is in truth 'our hospital,' as it is the hospital of all other community physicians," Lee said. "It is imperative that we work together to make it the best hospital it can be as it continues to serve all the patients and physicians in our area."

Lee said PAMC's relationship with Stanford Hospital began in the late 1950s, when clinic physicians were instrumental in helping the medical center relocate to Palo Alto from San Francisco by guaranteeing patients.

He said PAMC physicians used the hospital for virtually all their patients who required hospitalization. In support of the hospital's academic role, clinic doctors donate more than 5,000 hours a year teaching Stanford medical students, he said.

Community physicians on the medical staff—those doctors who do not work fulltime on the Stanford faculty—number more than 700, said Spivack, who is in private practice in Palo Alto. A large percentage of the community physicians, he said, hold part-time, non-paying teaching appointments on the faculty.

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News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

ONE-DAY PSORIASIS WORKSHOP OFFERED

STANFORD—

A one-day session of the Self-Help Workshop on Psoriasis, sponsored jointly by Stanford University's department of dermatology and the Psoriasis Research Institute, will be offered free of charge to patients and their families Saturday, Aug. 10.

The workshop will meet from 10 a.m. to 4 p.m. (with a lunch break at noon) at the Psoriasis Research Institute conference room, 600 Town and Country Village, Palo Alto.

Patients and their families will be presented with information regarding the cause and course of psoriasis, treatment, preventive measures, myths, and research, said workshop director Dr. Lexie Nall, senior research associate and epidemiologist.

The session will consist of mini-lectures with slide presentations, discussions with patients and health care professionals, and handout materials.

The free self-help workshop is ordinarily given in four two-hour weekly sessions, said Nall. "But some people can't commit to four sessions, so we decided to also give the one-day format a try."

Registration for the upcoming session, which can accommodate about 50 participants, may be made by calling (415) 497-7967. Registration forms are also available and may be returned to Nall at: Department of Dermatology, R156, Stanford University School of Medicine, Stanford, CA 94305.

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Hultgren added that deaths and disabilities due to altitude sickness can be prevented and treated.

Sarnquist, a veteran climber who was a mountaineering guide in the Eastern Sierra Nevadas in the 1960s, said the 1981 American Medical Research Expedition to Everest confirmed that humans can adapt to the thin atmospheres of high altitudes.

On that expedition, Sherpa porters carried stationary exercise bicycles and medical laboratory equipment to above 20,000 feet. The team, which included scientists and professional climbers, were wired for electrocardiograms and carried equipment to measure their breathing capacity at the 29,028-foot summit. Numerous blood tests to study metabolism were performed, and other tests monitored brain functions and breathing during sleep.

Researchers found that climbers breathed more often or deeper than they'd expected, and so, were able to raise their oxygen level. Possibly because of the higher oxygen content, their blood was more alkaline and less acid than anticipated, and so the climbers were able to do more work and exercise at a higher altitude than expected.

Sarnquist also participated in a Soviet-sponsored mountaineering expedition in the U.S.S.R. in 1974. The nations represented included the United States, Russia, Holland, Italy, Germany, France, Great Britain, Scotland, and Japan.

Sarnquist survived "a couple of avalanches" on that trek, but two participants, one of them an American, were not so lucky and perished on the expedition, he said.

"Mountaineering is an incredibly intense experience," Sarnquist said. "It's an exercise in trust and physical stamina. You live with people for long periods of time under stressful conditions. The scenery is sometimes fabulously beautiful. And probably because of the intensity of the experience, food tastes better when you're hungry, water tastes better when you're thirsty. And you always end up learning a lot about yourself and your body."

Those wishing further information about the seminar in Equador should contact Hultgren at (415) 493-5000.

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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

DIRECTOR OF FINANCIAL AID, STUDENT AFFAIRS NAMED

Photos available on request if not included.

STANFORD—

Earl Smith has been named director of the office of student affairs and director of the office of financial aid at Stanford University School of Medicine, announced Dr. John Steward, associate dean for student affairs.

Smith, whose appointment was effective July 1, has more than 20 years of experience in student financial aid administration at both public and private institutions.

For the past 11 years Smith served as associate director of financial aid at the University of Illinois Health Science Center in Chicago, one of the largest of such centers in the country. There, he designed and implemented a comprehensive computerized financial aid system serving more than 3,000 students.

Smith's experience at the University of Illinois also encompassed other areas of student affairs, including student orientation, commencement, and efforts to increase the number of health professionals from ethnic minorities.

At Stanford, Smith will direct the financial aid operation of the medical school, formulating policy to conform to state and federal regulations as well as to the needs of students and the institution, and working toward the continued smooth delivery of financial aid to students. He will also be involved with such activities as medical school orientation, student government and organizations, and management of the office of medical education.

Smith replaces Marcia Sexton in the office of student affairs. Sexton had relocated with her husband to the Laguna area last February.

Smith received his B.A. at Valparaiso University in Indiana, in 1961. He then pursued some graduate work at Northeastern Illinois University, Chicago.

On arriving at Stanford, Smith said, "I look forward to being able to serve a much smaller medical student body with a more personalized approach than was possible at the University of Illinois."

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Jacki King (415) 497-6911
FOR IMMEDIATE RELEASE

HEALTH HAZARDS OF MOUNTAIN CLIMBING

STANFORD—

Two mountain medicine experts on the faculty of Stanford University Medical School will be among those conducting a unique high altitude climbing seminar in Quito, Equador this December.

"The seminar is for physicians and other health professionals with an interest in mountain medicine," said Dr. Herb Hultgren. "It used to be that only hardy climbers had access to certain high mountain regions, but in the last few years, modern travel has made it possible for others to get there, and there are certain high altitude medical problems that health professionals should know as much about as possible."

Dr. Frank Sarnquist, who is an associate professor of anesthesiology (clinical) at Stanford and assistant chief of the anesthesiology service at the Veterans Administration Medical Center in Palo Alto, said the seminar curriculum will include discussions on high altitude pulmonary, cerebral, and systemic edema (excessive fluid in tissues), mountain sickness, cold injury, and traveler's diarrhea. The participants also will perform experiments on each other to illustrate physiologic changes due to high altitude exposure.

In 1981, Sarnquist climbed with the American Medical Research Expedition to Mt. Everest—the first team to perform medical experiments above 26,000 feet to determine the effects of extremely high altitudes on humans.

Hultgren, who is a staff cardiologist at the Palo Alto VA in addition to his Stanford affiliation, has spent years researching high altitude pulmonary edema, or swelling of the lungs. Symptoms include headache, nausea, vomiting, low blood pressure, and increased heart rate. The climber might act disoriented, cough and wheeze, perhaps even claim to hear a "bubbling" in the chest. He or she might not be able to sleep, complain of dizziness and cough up a whitish liquid.

Hultgren said people who experience those symptoms should be moved to a lower altitude as quickly as possible, and oxygen should be administered. The earlier the symptoms are recognized the better the chances for a successful treatment, he said. He added that pulmonary edema can affect anyone, including those in the best physical condition, if they climb so fast the body can't acclimate.

The conference in Equador will be held from Dec. 2 through Dec. 11. It is being sponsored by the Palisade School of Mountaineering in Bishop, in cooperation with Stanford. The schedule includes climbs to Cotopaxi's summit, above 19,000 ft.

Hultgren said he often is consulted by other physicians who ask if it's safe for their patients with heart or lung conditions to travel to high altitudes. "Each case has to be evaluated individually, but this seminar can help physicians make those decisions," he said.

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FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
FOR IMMEDIATE RELEASE

CANCER BIOLOGY TRAINING APPROVED FOR FIVE MORE YEARS

STANFORD—

A one-of-a-kind training program in cancer biology for graduate and postdoctoral students has been approved by the faculty senate at Stanford University for another five years.

Presently supported by a $500,000 per year grant from the National Cancer Institute, the program is thought to be unique in the country, said Dr. Errol Friedberg, the program's director.

"Cancer biology is rapidly becoming a recognized area of specialized study in molecular biology," Friedberg said.

"This program gives students rigorous training in the basic sciences as well as an understanding of cancerous disease in patients," he explained.

The dual focus helps fill a growing need for trained research scientists with a knowledge of human disease, and also helps "bridge the communications gap that frequently prevents M.D.s and Ph.D.s from communicating," he added.

The program offers a Ph.D. in cancer biology to graduate students, and research training to postdoctoral scholars. Forty-two graduate students and nine postdoctoral fellows currently are enrolled. Approximately half of the Ph.D. students are working simultaneously toward an M.D. degree.

Students may choose as a preceptor any faculty member in the university whose research relates to the molecular or cellular regulation of normal and abnormal cell growth, Friedberg said. Thirty-seven faculty members in departments such as pathology, oncology, radiology, and biology currently supervise cancer biology students.

"The variety of research opportunities available to students is a great strength of the program," said Friedberg, a professor of pathology whose own lab this year houses three cancer biology students.

"We receive applications from some of the best students around the country who are planning careers in molecular biology," he added, "even though the program is relatively young."

Six students have earned Ph.D.s since the program began nine years ago, he noted, while another handful is near graduation, having completed all the necessary requirements.

The $2.5 million NCI grant that has supported the program for the past five years is up for renewal next year, Friedberg said.

The federal training grant funds 16 positions—four students for four years. Those not supported through the grant use a variety of alternative sources of funding, Friedberg said.

At Stanford, faculty senate review and approval is required every five years for interdepartmental Ph.D. programs, Friedberg explained. The faculty committee—chaired by cell biology professor Dr. Lubert Stryer—that reviewed the cancer biology program for the faculty senate, said in its report that the program is "thriving and is making a distinctive contribution to graduate education at Stanford."

At its June 13 meeting, the faculty senate unanimously approved the program's continuation, effective Sept. 1, 1985.

One unusual feature of the program is that every other year, in place of the core course requirement, senior students help organize a series of minicourses on cancer-related topics.

"It's quite an educational experience for them," said Gina Johnson, cancer biology program administrator. "They learn how much effort it takes to organize and teach a graduate level course."

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
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INTERNATIONAL CONFERENCE ON ONE OF BIOTECHNOLOGY'S MOST PROMISING BACTERIA

EDITORS: An international conference on advances in the genetics and biotechnology of *Bacilli* will be held at Stanford University Medical School's Fairchild Auditorium July 15-17. Copies of the program may be obtained by calling the News Bureau. Members of the press who are interested in attending should also contact Dr. A.T. Ganesan at (415) 497-5806.

STANFORD—

One of biotechnology's most promising bacteria—*Bacillus subtilis*—will be the focus of a major international conference to be held next week (July 15-17) at Stanford University Medical Center.

Three hundred scientists from more than 17 countries, including the Soviet Union and the People's Republic of China, will assemble to discuss new prospects for genetically modifying *B. subtilis* and related *Bacilli* to produce a variety of valuable chemicals, ranging from insecticides to antibiotics to human hormones and useful enzymes.

The meeting, the Third International Conference on Genetics and Biotechnology of *Bacilli*, is sponsored by Stanford and by Syntro Corporation, a La Jolla biotechnology company that also sponsored a similar conference at Stanford in 1983.

The conference will be opened by two Stanford biochemistry professors who were pioneers of recombinant DNA techniques: Dale Kaiser and Nobel laureate Paul Berg.

Although *Escherichia coli* is the current genetic engineering industry workhorse, *Bacilli* have several advantages that may better adapt them as bacterial factories, explained Dr. A.T. Ganesan, who is a Stanford genetics professor and conference organizer, along with Dr. James Hoch of La Jolla's Scripps Clinic.

One attribute that makes *Bacilli* appealing to the biotechnology industry is their ability to secrete some of the proteins they manfacture.

"This secretion is genetically controlled," Ganesan explained. "We believe that it is possible to insert into the DNA a gene for a protein you want, coupled to the secretory mechanism. The bacteria should then secrete the product out into the growth medium, where it can be easily collected instead of breaking the cells open and then going through a complicated purification process."

Bacilli are soil bacteria that do not cause human illness, and therefore pose no health threat even when grown in the large quantitites required for industry, Ganesan added. In addition, unlike *E. coli*, they lack an assortment of chemicals that can be toxic to humans.

Another bonus of *Bacilli* is the diversity of potentially useful products naturally made by different strains. "Some *Bacilli* produce antibiotics; others produce specific insect toxins," Ganesan said. "There are so many different strains of *Bacilli* that nobody has even tested them for their potentialities."

One obstacle that has stalled bioengineers in harnessing *Bacilli* for commercial production is their ability to make and secrete enzymes that break down the biological products before they can be harvested.

But in the last year or two, scientists have overcome the problem by creating genetically engineered forms of the bacteria that lack the destructive enzymes. "These are already starting to become very useful," Ganesan noted, outlining some highlights expected at the conference, including reports on:

- *Bacilli* that produce large quantities of alpha-amylase, an enzyme that streamlines breakdown of starches into sugars (for example, corn starch in the production of corn syrup, a basic ingredient of many soft drinks and other sweetened foods);
- *Bacilli* that have been engineered to produce highly sought proteins such as interferon and human growth hormone—Finnish scientists have successfully introduced the human interferon gene into *B. subtilis* along with additional DNA sequences that cause secretion of the valuable protein;
- *Bacilli* that produce a toxin that is deadly to mosquitos—the toxin, which is undergoing tests in India, would be most useful in underdeveloped countries where malaria is endemic, as a possible safe and inexpensive replacement for poisons such as DDT;
- cloned genes from Bacilli for antibiotics such as bacitracin—new knowledge about genes from *Bacilli* that code for such antibiotics "will put us in a position to produce a new generation of genetically engineered antibiotics," Ganesan said.

There is a growing emphasis on *Bacilli* in industry, particularly in the agricultural, fermentation and biomedical sectors, Ganesan added. "Now that we know the chemical structure of useful proteins from *Bacilli* and the genes that produce them, in the future we will be able to design new sets of related proteins that we may want, and engineer new genes to produce them," he predicted.

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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911
FOR IMMEDIATE RELEASE

DIABETES-NUTRITION STUDY SEEKS VOLUNTEERS

STANFORD—

Volunteers with diabetes are needed to participate in a study at the clinical research center (CRC) of Stanford University Hospital.

The long-term study seeks volunteers who have diabetes and are being treated with oral medications or by diet, but not with insulin injections. Researchers will continue their study of the effects of carbohydrate variations on the nutritional management of diabetes.

The study consists of two six-week periods during which volunteers will visit the CRC, with a one-week break between. The CRC will provide all meals. Participants will also receive a complete physical examination including laboratory evaluation.

Volunteers will receive a complete evaluation of their blood lipids, including cholesterol, triglyceride, and high-density lipoprotein (HDL) cholesterol information.

The study reflects "an increased awareness of the importance of nutrition in relation to health," said CRC director Dr. Gerald Reaven, professor of medicine. "This concern has been extended to the nutritional recommendations for individuals with diabetes."

Those interested in volunteering should call (415) 497-5430 between 9 a.m. and 4:30 p.m. for further information.

DIABETES-OBESITY STUDY SEEKS VOLUNTEERS

STANFORD—

Diabetic and non-diabetic volunteers are needed to participate in a study of the linkage of diabetes mellitus with moderate obesity and other abnormalities of fat metabolism.

Volunteers may be treated with oral medication or diet, but not with insulin injections.

The CRC study will include an oral glucose drink and glucose infusion to assess blood sugar, insulin, and fatty acid response. Also, researchers will study fat cell metabolism by performing a biopsy and removing two tablespoons of fat tissue from the abdomen.

The study requires approximately three-and-a-half days in the CRC at Stanford Hospital. These can be scheduled at the subject's convenience.

Participants will receive a complete physical examination and screening laboratory evaluation. In addition, they will have an opportunity to continue on a weight reduction program using a liquid formula diet. For those who participate in weight reduction, studies will be repeated after weight loss.

Interested volunteers may call (415) 497-5430 or (415) 497-6973 between 9 a.m. and 4:30 p.m. for further information.

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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911

FOR IMMEDIATE RELEASE

NARCOLEPSY CONFERENCE SCHEDULED

STANFORD—

The Second International Symposium on Narcolepsy is being sponsored July 6-7 by the Sleep Disorders Center at Stanford University Medical Center.

Scientists from Stanford, other U.S. institutions, as well as researchers from several countries, including Japan, France, Czechoslavakia, and Belgium will discuss the latest efforts to understand the neurologic disorder which affects more than 250,000 Americans, said Dr. William C. Dement, professor of psychiatry and director of the Sleep Disorders Center.

Dement said that the focus of current research is to better understand the genetic base of the illness, which causes people to lose control over when they sleep. Narcoleptics tend to be sleepy during the day and may have sudden, uncontrolled sleep attacks while engaged in normal activities, he said.

Currently, medications can be prescribed to maintain wakefulness, he added.

Dogs, subject like humans to narcolepsy, have been instrumental in studies leading to a better understanding of the condition, Dement added.

The conference is being held in Fairchild Auditorium. For further information, contact Stuart Rawlings or Laurie LaBerge, (415) 497-8131.

The first international narcolepsy symposium was held in France in 1975.

7-5-85 —30— sleep--mg5

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911

EDITORS: This release is based on an article in the current issue of *Stanford Medicine* now available. If you have not received a copy, please call.

FOR IMMEDIATE RELEASE

DISMAL OUTLOOK FOR AIDS, STANFORD SCIENTISTS PREDICT

STANFORD—

The outlook for the spread of AIDS—Acquired Immune Deficiency Syndrome—is dismal and will get worse in the future, Stanford University Medical Center scientists predict.

Blood banks and society as a whole fail to realize how big the problem is and how much it will impact the health care delivery system, wrote Drs. Edgar Engleman and Jeff Lifson in the current issue of *Stanford Medicine*.

Engleman is associate professor of pathology and director of Stanford's blood bank. Lifson is a postdoctoral fellow in the pathology department. Both are involved with AIDS research.

"Nearly 10,000 cases of AIDS have been documented," they wrote. "Reported cases doubled in all risk groups in 1984 and are expected to double again in 1985. The true number is probably at least three times and possibly as many as ten times greater.

"In San Francisco two to four people are expected to die from AIDS every day next year," Engleman and Lifson said. This is in spite of improved screening methods of donor blood and increased awareness of AIDS.

The first 7,200 cases of AIDS, they wrote, have already consumed 1.3 million hospital days and have generated more than $1 billion in health care costs. Yet patients had a median survival of only 12 months.

Transmission of the disease via blood transfusions accounts for only a small number of AIDS victims. The actual risk to transfusion recipients, the authors wrote, is at most one in 100,000. With improved screening methods of donor blood, that number "should become vanishingly small in the future."

Engleman's and Lifson's article, "Special Report on AIDS" recapped Stanford blood bank's attempts to halt transmission of the disease through blood donations by screening patients who were at high-risk, soon after the disease surfaced. Because of their efforts, they said, they faced "negative and hostile" reactions from other blood banking institutions.

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"Chief among the objections was the contention that screening was unnecessary because there was 'no proof' that AIDS was transmissible by blood transfusion," they wrote. Other blood banks assumed people who fell into high-risk groups would voluntarily refrain from donating blood, Engleman and Lifson added.

"To date, no cases of AIDS have been reported in Stanford Blood Center recipients who received screened blood," they observed. "Nearly 150 cases of transfusion-associated AIDS have been documented—many in the Bay Area within the last year."

Lifson and Engleman said they understood why other blood banks tried to deny that AIDS could be transmitted via blood transfusions, but called it a "counterproductive, head-in-the-sand approach to the problem.

"Organized blood banking in the United States is highly dependent on the good will of volunteer blood donors. Thus it is extremely conscious of its perceived public image," they wrote. By associating AIDS with blood donations, the authors stated, other blood banks feared a decrease in donors.

By the spring of 1983, Lifson and Engleman wrote in the article, they "were convinced that more had to be done by blood banks to protect transfusion recipients from AIDS." Until then, blood banks depended on voluntary deferral from donors who suspected they were in high-risk groups. So, the scientists developed and implemented a screening procedure using tailor-made monoclonal antibodies to detect an abnormal ratio in the white blood cell compostition characteristic of AIDS victims. They knew by using the test they would exclude some healthy donors as well, but considered the loss, estimated to be two percent of the donor pool, acceptable.

The often-fatal AIDS surfaced in 1981, afflicting homosexual men, intravenous drug abusers, hemophiliacs or recent Haitian immigrants to the United States. Researchers in the United States and France have since found that a virus called HTLV-3 seems to be the cause of the disease. A screening test for this virus has just recently been developed and is now being used by many blood banks. The test works by measuring the presence of antibodies to what is believed to be the AIDS virus.

Stanford's blood bank began using the HTLV-3 test routinely in May. The new HTLV-3 test is more specific and at least as sensitive as the test the blood bank had used previously, Engleman said.

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aids mc-nr sk5

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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

TRUSTEES ANNOUNCE TWO MEDICAL FACULTY APPOINTMENTS

STANFORD—

Dr. Inder Perkash has been promoted from associate to full tenured professor of surgery, and Dr. Eric Glasgow named professor of anatomy in surgery (teaching) for a five-year term, at Stanford University School of Medicine effective September 1, 1985.

The Stanford University Board of Trustees approved the two medical school faculty appointments at its June 14, 1985, meeting.

Perkash is also the Paralyzed Veterans of America Professor of Spinal Cord Injury, and chief of the Palo Alto Veterans Administration Medical Center Spinal Cord Injury Service.

He is widely recognized for his investigation of neuromuscular disorders responsible for malfunction of the bladder after a spinal cord injury.

Educated in India, England and at Stanford, Perkash has been working with Stanford engineers at the VA's Rehabilitative Engineering and Development Center to modify and develop robotic arms and other devices to help the paralyzed and those with limited muscular control regain some independence.

Perkash has served since 1980, also, as an associate professor of clinical urology, by courtesy, at University of California, San Francisco. Before joining the Stanford faculty in 1973, he held positions at Baylor College of Medicine in Houston, and at the Postgraduate Medical Institute and Nehru Hospital, Chandigarh, India.

Glasgow received both his undergraduate education and his doctor of medicine degree at Queen's University, Belfast, Northern Ireland. His residency was at Route District Hospital, Northern Ireland, and he was a senior research fellow in renal diseases of children at the University of Birmingham and The Children's Hospital, Birmingham, England.

He has served on the faculties of several universities including Queen's University and the University of Western Australia.

Glasgow's most recent affiliation has been at Monash University, Clayton, Victoria, Australia, as acting professor and chairman of the department of anatomy, and as Monash University Representative in Melbourne, Victoria.

He was a visiting professor of anatomy at Stanford in 1979, 1981, and 1982. For the term of his upcoming appointment, he will serve on the Stanford faculty half-time.

Glasgow belongs to numerous societies, including the International Society of Nephrology, a field which has been the topic of much of his study.

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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

STANFORD'S WEIGHT LOSS PROGRAMS FIT EVERY TASTE

STANFORD—

Confused by all the different weight loss programs offered by Stanford University Medical Center?

No wonder. There are several, each with a different approach, appeal, or geared for a different audience. And doctors may be just as baffled in trying to match program with patient.

But all the programs listed below incorporate exercise and healthy attitudes with diet to achieve weight loss for persons who need it and who feel motivated to make that change in their life.

• About to be introduced on the scene is the new "weight kit" of the Stanford Center for Research in Disease Prevention (SCRDP). Different because it is a study—and because it is offered only to the Stanford community through the Health Improvement Program (HIP)—the kit nevertheless joins the ranks of already established weight loss programs offered by a variety of Stanford professionals. They include the following.

• The department of dietetics at Stanford University Hospital combines behavior modification, nutritional expertise, physical exercise and positive attitudes to provide an eight-week-long "Enlightening Experience" for adults three times a year.

Led by registered dietitians, the course, which uses guest psychologists and other Stanford professionals, has a fee of $325, with a $50 refund at the end if the weight loss is attained. This also includes instructional materials and some food, an individual counseling session, and monthly follow-up weigh-ins after the program ends. The course is open to the public, with enrollment limited to 20 participants per session.

• For the second year, dietetics this fall will offer the Stanford Weight Management Program for Teens, a 12-week course led by registered dietitians. With adolescents, "we don't really put them on a diet, but work on developing good eating habits," said Kristine Birge, registered dietitian. The *Shapedown Workbook* is used.

Parents are invited to two of the 12 weekly, late afternoon sessions. The course is open to the public, at a fee of $165.

• A recorded message at (415) 497-5432 provides information about the dietetics department's programs. Individual nutritional counseling is available weekdays, at $45 for instruction, $10 for instructional materials, and $30 for each follow-up visit.

• Stanford's department of psychiatry and behavioral medicine offers a comprehensive, medically-oriented adult weight loss program open to the public, which for $255 includes one individual session plus nine group sessions with about 10 people per group. Physicians are available to group members as needed. (Call 415-497-5065.)

Using a largely behavioral approach, the group focuses on factors of general lifestyle, including eating behavior, nutritional behavior, physical activity, and attitudes. "We introduce people to better coping skills with which to solve problems, and we help them become their own best therapists," said Susan Raeburn, clinical psychologist.

She said a five-year follow-up study of the program conducted several years ago looked for predictors of long-term success. Of no surprise, she said, was the researchers' finding that people who continued the behaviors they had learned during the course had the most lasting success. "Also," she stressed, "the most successful ones were those who had reached out for therapy at some point."

While the program has thus far been directed toward treating mild to moderate obesity, the clinic plans a new group, under close medical supervision, for the very obese.

All these obesity programs are part of a larger eating disorders clinic within the psychiatry department, which also deals with anorexia nervosa, a disorder in which victims are obsessed with thinness to the point of starving themselves, and bulimia, the binge/purge syndrome. The clinic is available to such patients 18 and over, offering inpatient and outpatient psychotherapy, behavior modification, and nutritional guidance.

• Summer camps for teenagers and children who want to lose weight are offered by the Stanford Laboratory for the Study of Behavioral Medicine, also within the psychiatry department.

Called SHAPE, the four- and eight-week programs are intended to teach weight loss through a balanced program of non-competitive exercise and healthful foods, said Keith Saylor, SHAPE co-director. The eight-week program includes instruction by professional male and female models in how to change image and wardrobe to fit a new self-image, Saylor said.

Groups are divided into 7 to 11 and 12 to 17 age groups. Costs range from $350 to $800. The price includes appropriate meals and snacks, as well as parent seminars. Field trips to wilderness areas and a video aerobics tape are provided with the eight-week sessions.

Interesed persons should call (415) 497-5065.

• The eating disorders clinic at Children's Hospital at Stanford (CHAS) (415-327-4800) offers a unique interdisciplinary approach specifically designed to treat both underweight and overweight teenagers through a team effort by nutritionists, child psychiatrists, and adolescent medicine specialists. The clinic sees obese teens as well as patients with anorexia nervosa and/or bulimia.

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• CHAS is now offering a Shapedown program for overweight teenagers, using a group approach which combines behavioral techniques, nutritional guidance, and physical exercise. The fee is $100.

• HIP currently offers two other weight loss programs—emphasizing exercise as well as diet—only to Stanford faculty and employees of both the university and hospital:

Weight Loss by Mail, in the process of being somewhat revised, uses an individualized approach to weight loss with a correspondence format. There is an introductory meeting and a $25 fee.

Advanced Nutrition, also for $25, is actually aimed at lowering cholesterol but often has weight loss as a side effect, said Fran Carl, program coordinator. This course uses a correspondence format and individualized approach as well, with an introductory meeting and two other optional meetings.

"We think we can save our people here at Stanford quite a bit of money by offering a work-site health promotion program," said Dr. John Farquhar, professor of medicine and director of the SCRDP associated with HIP.

He explained that for every person who comes to a group weight loss program, there are many more interested in losing weight. "Most people look in books or try a diet rather than joining a group," he said, "and there are even fewer people who would come for individual counseling." (The preventive medicine clinic run by Farquhar also offers weight control counseling on an individual and couples basis.)

"But I think all the weight loss programs offered by Stanford Medical Center professionals are good," Farquhar said.

An outside opinion

The key question to ask of any program is how much evaluation and long-term follow-up go into it, said Dr. Keith Taylor, professor of medicine. "A realist would probably say there's no one program that will be 100 percent effective in all people, or even in 50 percent," he added.

"Probably the most valuable weight loss programs anywhere are those which focus on healthy living styles generally, with eating habits as a part of that," said Taylor.

"Perhaps the reason behavior modification techniques don't appear to work as well *alone* is that the achievement isn't associated as much with an improvement in self-esteem as it would be in the context of an overall healthier living style."

As for the current programs available at Stanford, Taylor said he did not know that any had been fully evaluated enough to recommend to an obese patient for referral.

"Each group thinks it has a better answer," he said.

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STANFORD PHYSICIANS FINANCIALLY BACK HOSPITAL MODERNIZATION

STANFORD—

Faculty physicians at Stanford Medical Center have pledged $1 million to support the Hospital Modernization Plan, Dean David Korn announced Tuesday (July 2).

The decision to commit the funds over a five-year period was reached Friday, June 28, by the governing committee of the Faculty Practice Program, representing the approximately 280 full-time faculty doctors who use the hospital.

"This support by the Faculty Practice Program is a benchmark in support for this project," said Donald Kennedy, president of Stanford University and chairman of the Board of Hospital Directors.

"The financial involvement of the FPP—as well as other physicians in our community—is a strong message to our patients from those who care for them," Kennedy added.

"This is our effort to guarantee that our hospital will continue to offer the ultimate in state-of-the-art care for our patients," said Donald Harrison, chairman of the FPP and head of the division of cardiology.

The HMP includes remodeling of portions of the present facility while adding about 357,000-square-feet of new space but no new patient beds. It is scheduled to be completed in the fall of 1987.

The expected cost of the HMP is $114 million. About $82 million has been obtained through issuance of tax-exempt bonds. An additional $20 million is to come from hospital reserves, with the remaining from gifts.

Sheldon S. King, SUH's director and executive vice president, said patient care fees are not expected to be increased to pay for any portion of the HMP. The hospital expects to keep its rate increases in line with the inflation rate, King said.

The FPP commitment is the third largest sum pledged by any group so far, said King. The 18-member Board of Hospital Directors has pledged more than $2 million, while a group of leading area corporations, under the chairmanship of Syntex president Dick Rogers, has nearly reached its $1.25 million target.

Overall, the hospital has reached more than a third of its $15 million fundraising goal for the HMP, said John Ford, director of medical center development.

In addition to the FPP group pledge, Korn noted that individual full-time faculty members have contributed more than $130,000 to a current fundraising effort at the Medical Center, including the HMP and the new Center for Molecular and Genetic Medicine.

The modernization will provide 20 new operating rooms and additional wings of patients beds. While no beds are being added to the current total of 663, the project will allow an increase in the average square foot per bed from 891 to 1,387, near the average for teaching hospitals in the country, Korn said.

Korn said an important goal of the project is to keep pace with the fundamental changes in medical practice since the present structure was planned in the late 1950s. For example, a variety of high technology equipment creates pressure for larger patient rooms.

"The HMP includes a variety of amenities intended to make the facility more pleasant and efficient for patients, ranging from more private rooms and better treatment suites, to such improvements as traffic patterns which allow for more efficient delivery of medicine and supplies.

"New facilities for coronary and intensive care, as well as a new pharmacy will be built. Clinical labs will be consolidated and the overall ambience will be dramatically improved," said Korn.

The FPP commitment was expected to be submitted to the university Board of Trustees for formal approval in September.

7-2-85 —30— FPPGIFT--mg

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NEW HOSPITAL BOARD MEMBER NAMED

STANFORD—

Donald H. Seiler, 56, founder and managing partner of Seiler and Company, Redwood City, has been appointed to the Board of Directors at Stanford University Hospital by the general members at their recent meeting.

The 17-member board sets policy for the hospital. It is comprised of community, medical and lay leaders, as well as university faculty and administrators.

Seiler is co-chairman, along with his wife, Ruth, of the Friends of Cardiovascular Medicine at Stanford University Medical Center. He is active in community organizations, serving as director of the Jewish Community Federation and director and officer of the Jewish Home for the Aged in San Francisco. He has held leadership positions in other charitable organizations and business associations during the past 20 years.

Seiler received his MBA at University of California, Berkeley, in 1950. He founded his company, which is involved with real estate, venture capital and business operation ventures, in 1957.

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PHYSICIAN ASSISTANTS PARTICIPATE IN COURSE ON AGING

STANFORD—

No matter what our religious or ethnic backgrounds or our educations, there is one thing we all have in common—AGING.

But what is successful aging? Many health professionals agree that successful aging combines three elements: survival (longevity), health (lack of disability), and life satisfaction (happiness).

Six physician assistant teachers from around the country recently came to Stanford University Medical School for a three-week course in the care of well and ill elders. The curriculum included classroom work, as well as visits to a number of senior citizen centers in the area.

The six plan to use the material to help implement geriatrics in the physician assistant teaching programs in their areas.

"There are so many myths about aging," said Marc Dicker, who teaches P.A.'s at Wichita State University, "and I think it's important for people to know that. For example, the majority of old people are not senile. They don't have defective memories, and they're not disoriented. Their senses might have declined a bit, but that doesn't mean that their thinking is impaired in any way. Also, most of the older people I've known can be pretty active."

The Stanford training program for P.A. teachers, directed by Virginia Fowkes and Gwen Yeo in the Medical School's Division of Family Medicine, is funded by the Health Resources and Services Administration. In conjunction with Foothill College, Stanford also has a program to train physician assistants and nurse practitioners.

"This is the first time the federal government has funded a faculty development program for teachers of physician assistants," said Yeo. "It's significant that the training is for those who will specialize in geriatrics. Geriatrics isn't experiencing a glut of physicians like some other specialties so there's a real need in this area for concerned, well-trained P.A.'s. We plan two more of these training sessions for P.A. teachers, one next January and February, and the other next June and July."

Once trained, physician assistants often work with medically-underserved populations. Under the supervision of a physician, the P.A.'s can perform physical exams, take medical histories, assess and manage common acute and chronic medical conditions, treat wounds, and provide health education and counseling.

The six teachers who completed the Stanford training in August agreed they were most impressed with the range of care available to senior citizens in Northern California, particularly the day health care centers for the elderly, which, they said, might be unique to this area. The day centers are different, they said, because they offer more than just crafts and skilled nursing supervision. Many have physical therapy programs, speech therapy, occupational therapy, and other intense care programs.

A residential facility they felt also was unique is On Lok in San Francisco's Chinatown because it was designed to serve a specific ethnic population. On Lok is a longterm care program for frail persons over 55 who wish to stay in their community but have health or other problems that prevent them from living independently. They

also visited Lytton Gardens, a Palo Alto residential facility for healthy elders that offers outpatient P.A. services. In addition, the six observed programs offering health screening in a senior center, home health care, day health care for the chronically ill, intermediate care, and skilled nursing care with rehabilitation services for short-term residential stays.

The physician assistant teachers agreed they were impressed with the activities offered.

"Many of the health care centers we visited have exercise classes for the older people, even if it's just gentle exercise," said Kathryn Kundert, who teaches at the Medex Program in Seattle.

Marc Dicker added that he chose the geriatric specialty because he learns so much from the older people he assists.

Patricia King, who teaches at Mercy College in Detroit and works with seniors in the Hospice of Southeastern, agreed. "It really makes me angry when older people are written off as useless or complainers when they might be going through some physiological changes of vision or hearing that makes it difficult for them to relate to all the things going on around them," she said. "But that doesn't mean they can't be useful or that they're not bright. Older people are a storehouse of all of our history, and I, for one, learn a lot about life just from talking to them."

Dean Minton, who teaches at the Bowman Gray School of Medicine in Winston-Salem, said the older people he's observed "may have a greater appreciation for life than many young people, and it makes me feel good to help make the quality of their life as good as possible."

Minton said he was impressed with the day health care centers he has observed in California, and would like to see some of the therapy programs introduced into the residential and skilled nursing care facility in the Winston-Salem area where he currently works clinically. He also plans to incorporate some of the written course material he gathered at Stanford into the P.A. program he teaches.

"The experts say by the year 2000, there will be more people over 65 than under 25," said Minton, who graduated from the Bowman Gray P.A. program in 1983 after retiring as an Air Force chaplain. "Medical care has improved tremendously. We've wiped out lots of diseases, but many people still have to change their attitudes about the value of older people. Many of them can be active. Many of them can be productive, if we let them. Let's listen to them, talk to them, learn from them."

Patricia McKelvey, assistant director of the University of Iowa Physician Assistants program, said many of the older people she's seen are more concerned about losing dignity and autonomy than about dying.

"Feeling a sense of purpose is very important to a sense of well being," added Stacy Terrell, who teaches P.A.'s at the University of Oklahoma. "Older people have so much to contribute, and many of them have so much wisdom. It's important that we continue to make them feel needed and necessary, and that we treat them with respect. After all, with luck, we'll all be old people one day."

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aging jk1

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NEW GENETIC TEST FOR DIAGNOSING LYMPHATIC CANCER

STANFORD—

Stanford University researchers have shown that mycosis fungoides, a form of lymphatic cancer, can be sensitively diagnosed with molecular genetic techniques.

By analyzing DNA in cells from a patient's lymph nodes, scientists can detect the cancer earlier and monitor the cancer's spread more accurately than with conventional methods, said a report in the August 29 issue of *The New England Journal of Medicine*.

By adding mycosis fungoides to the list of diseases that can be positively diagnosed by DNA analysis, the report helps prove the rapidly growing clinical usefulness of modern molecular techniques, said Dr. Jeffrey Sklar, assistant professor of pathology at Stanford University School of Medicine.

The authors of the Stanford report are Dr. Lawrence Weiss, assistant professor of pathology, oncology fellow Dr. Eddie Hu, dermatologist Dr. Gary Wood, research assistant Courtney Moulds, pathology fellow Dr. Michael Cleary, Dr. Roger Warnke, associate professor of pathology, and Sklar.

The Stanford report is accompanied by two reports from Massachusetts General Hospital and the National Cancer Institute describing the use of DNA analysis in diagnosing other forms of lymphatic cancer.

The method used by the researchers specifically detects cancerous growth of T cells, white blood cells that form one branch of the body's immune defenses.

Similar techniques developed several years ago by Sklar and Cleary have already been used for positive diagnosis of B cell lymphomas, cancers of another major class of immune system cell.

Mycosis fungoides is a relatively rare type of cancer that starts out in the skin, later spreading to the lymph nodes and other internal organs. Early on, the cancer can be difficult to distinguish from other forms of skin disease, Sklar explained. More advanced forms of the cancer, when lymph nodes become involved, are often difficult to distinguish from benign inflammations.

It is important to find early signs of spread because then whole-body chemotherapy should be given rather than restricting treatment to the skin, Sklar said.

"But even an expert pathologist who examines biopsied lymph nodes through the microscope can sometimes have difficulty distinguishing mycosis fungoides from a benign inflammation in those tissues," Sklar said.

In uncertain cases like these, Sklar explained, the new method could become a valuable and practical diagnostic tool.

The test is a clinical advance that owes its existence to recent progress in basic immunology, including discovery of T cell receptor genes by Dr. Mark Davis of Stanford and his colleagues, Sklar said.

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The test also takes advantage of knowledge about how cancers arise. Several years ago, Sklar and his colleagues developed an unambiguous way of distinguishing cancerous growth from benign growth, relying on the fact that a cancer consists of a "clone" of genetically identical cells. Benign growths which can outwardly resemble cancer, are not composed of genetically identical cells. Therefore, analyzing the genetic material, DNA, can lead directly to a definitive diagnosis.

The Stanford researchers performed the genetic analysis successfully in B cell cancers. B cells lend themselves to this approach because each cell has a telltale "signature," a slightly different pattern of DNA in the genes that code for antibody molecules. Therefore, if a B cell becomes cancerous, giving rise to a clone of daughter cells, they will all have the same genetic signature.

In the last year-and-a-half, Mark Davis and other scientists discovered that each T cell also has a unique DNA signature in the genes that code for a protein called the T cell receptor. This finding enabled Sklar and his colleagues, and others, to adapt the same method for diagnosing T cell cancers.

Among the advantages of the new method are its sensitivity—a cancer can be diagnosed on very small tissue samples even if only one out of every 100 biopsied cells is malignant.

The researchers performed the test on 14 patients, all of whom had mycosis fungoides as confirmed by microscopic examination of skin biopsy tissue. For each patient, they found the cancer cells' telltale genetic pattern. They then looked at biopsy samples from lymph nodes that under the microscope appeared benign. In seven out of nine of these samples, they found the cancer cell signature using their new molecular test.

These findings suggest that spread of mycosis fungoides to the lymph nodes frequently cannot be detected with conventional methods, Sklar said.

The research was supported by grants from the National Institutes of Health and by fellowship funds from the Jane Coffin Childs Memorial Fund for Medical Research and the John A. Hartford Foundation.

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mycosis LH9

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Editors: Photo available if not included

STANFORD SCIENTISTS FIND UNUSUAL BURSTING CELLS IN THE BRAIN

STANFORD—

Unusual brain cells that fire in bursts which may trigger epilepsy have been identified by Stanford researchers.

The unique ability of these "bursting cells" to readily discharge a volley of electrical impulses makes them likely instigators of epileptic seizures, said Dr. Barry Connors, assistant professor of neurology at Stanford University School of Medicine.

Seizures result when large numbers of nerve cells in the brain suddenly synchronize their electrical activity. The abnormal rhythm produces the convulsive movements, fainting, or episodes of confusion that afflict the two million Americans who suffer from different forms of epilepsy.

Most people stricken with the disorder live normal lives with the help of drugs that prevent seizures by stopping the spread of aberrant electrical activity. But these medicines can cause side effects. And the seizures of 10 to 20 percent of epileptics are not fully controlled by currently available medications.

If proved conclusively that bursting cells indeed are the ones that start an attack, learning more about them could lead to design of drugs to stifle epileptic discharges at their source.

"We could target a drug towards them to shut them off specifically, rather than depress the whole central nervous system," said Connors. "This is the way anti-convulsants tend to work now."

His work is funded by the Division of Research Resources of the National Institutes of Health, other NIH grants, and the Klingenstein Foundation.

The bursting cells are a subset of pyramid-shaped nerve cells in the cortex, the outer shell of the brain that is especially prone to epilepsy.

Pyramidal cells in the cortex send out a network of spidery fibers that form an extensive web of connections with other nerve cells in the brain. They normally fire one pulse at a time when activated by other neurons.

But when bursting pyramidal cells are stimulated, they fire in staccato rounds of three to five pulses.

Previously, pyramidal neurons with this ability have been found, by other scientists, only in the hippocampus, a brain area also susceptible to seizures.

Connors speculates that in a normally functioning cortex, inhibitory neurons hold the excitable, bursting cells in check. But in epilepsy, deficiencies in the chemistry of inhibitory cells may allow trigger-happy bursting neurons to overwhelm the brain's normal balance between excitation and inhibition.

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Besides suggesting new approaches to the rational design of new anti-epilepsy drugs, Connors said his research may lead to a better understanding of how the brain works.

If bursting neurons "have this ability to cause epileptic activity, to drive the other cells of the cortex so hard," he said, "that could be telling us about their normal function in processing information in the brain."

Connors used the specialized techniques of neurophysiology to locate the bursting cells within the cortex of rat and guinea pig brains.

With micro-electrodes and a precise manipulator, he pierced individual nerve cells within a thin slice of cortex, which he kept alive in a chamber that mimics the environment of a living animal's brain. The electrodes were needle-like glass tubes filled with a salt solution that conducts the electricity of nerve impulses.

The tips of the electrodes are so small, that several thousand of them could be accommodated by a pincushion the size of the period at the end of this sentence.

But since bursting cells are relatively small for pyramidal neurons, it took especially fine electrodes to find them.

"We had a run of very good electrodes recently," said David McCormick, a post-doctoral fellow in neurology who collaborated with Connors.

By injecting a fluorescent dye through the micro-electrodes after they had finished recording a neuron's electrical behavior, the scientists could find the cell under a microscope. They could thus correlate a cell's size and shape with its firing pattern.

And by localizing the bursting neurons to the middle layers of the cortex, Connors was able to explain his earlier studies, which had found that these layers are exquisitely responsive in experimentally-induced epilepsy.

Other researchers who collaborated in Connors' experiments are Dr. David Prince, chairman of neurology, and Michael Gutnick, who is now at DuPont in Wilmington, Delaware.

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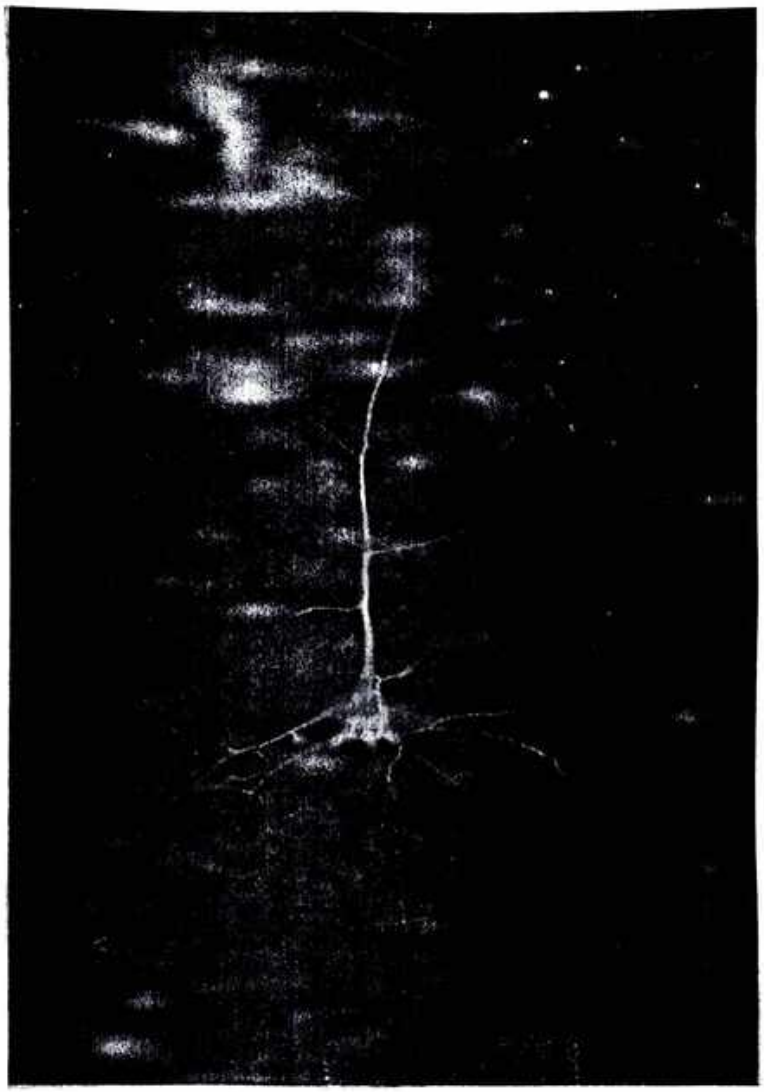

Spidery fibers of this pyramid-shaped nerve cell reach to contact other nerve cells. The cell, lit by an injection of Lucifer yellow dye, is one of the "bursting cells" that Dr. Barry Connors, assistant professor of neurology at Stanford University School of Medicine, has identified as possible triggers of epilepsy.

TO: NEWS BUREAU, 750 WELCH ROAD, SUITE #301, STANFORD UNIVERSITY MEDICAL CENTER, PALO ALTO, CALIFORNIA 94304

Bursting Nerve Cell

Please send me 5 x 7" glossy print.

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APPOINTMENT MADE BY DEAN KORN

STANFORD—

Dr. Michael Marmor has been appointed head of Stanford Medical School's division of ophthalmology in the department of surgery, announced Dean David Korn.

"I have two major goals," said Marmor, who has been acting head of the division for a year. "First is for the division to continue to provide the highest caliber of medical and surgical care possible, both primary and consultative. Second, I'd like to work toward establishing a stronger eye and vision research program, which will utilize Stanford's strengths in ophthalmology, and other academic resources. I'd like to facilitate, if not a collaboration, then an interchange with researchers in areas of neurobiology, molecular biology, and biomedical engineering."

The 44-year-old physician joined the faculty of Stanford in 1974 as assistant professor of surgery (ophthalmology). At the same time, he served as chief of the ophthalmology section of the Palo Alto Veterans Administration Medical Center, and continued to assume those responsibilities until 1984 when he became acting head of Stanford's ophthalmology division. Marmor continues to teach part-time at the VA.

He graduated cum laude from Harvard Medical School in 1966, served his internship at the UCLA Medical Center, and was a resident in ophthalmology at the Massachusetts Eye and Ear Infirmary.

In April of this year, Stanford's ophthalmology clinic established a new laser center for eye treatment. The three new lasers were purchased with a gift from the Televideo Foundation. One of those, a yellow Krypton laser, is one of only five in the world, Marmor said. The lasers are used to treat complications from diabetes, macular degeneration, retinal detachment, glaucoma, cataract corrections and other retinal vascular diseases, he added.

Before coming to Stanford, Marmor was an assistant professor of ophthalmology and director of the clinical electrophysiology unit at the University of California, San Francisco.

While at Stanford, he designed an inexpensive high-powered light to help people with night blindness get around in the dark. Unlike a conventional flashlight, the wide-angle mobility light casts a broad, intense beam that people with retinitis pigmentosa, severe glaucoma, or other diseases that impair night and side visions can easily follow.

In addition to his administrative duties, Marmor is an active clinician and surgeon. He was the first Stanford faculty member to do ultrasonic techniques of cataract extractions and intraocular lens implantations. As a researcher, Marmor is particularly interested in studying the physiology of retinal attachment and detachment and diseases of the retina, specifically aging disorders.

He also teaches an undergraduate course on how "the eye and vision can help someone develop an appreciation for art, literature and animal behavior."

Marmor is married to Dr. Jane Breeden Marmor, a radiation therapist at the Palo Alto Medical Clinic. The couple has two children, Andrea, 13, and David, 11.

Marmor enjoys playing the clarinet, listening to chamber music, and playing tennis.

8-27-85 —30— Marmor jk1

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DR. COX RETIRES AT AGE 78

STANFORD—

When Dr. Alvin Cox, Jr., retires from Stanford University Medical School on Aug. 31, he will end a family tradition that began in 1891.

Cox, 78, professor of pathology emeritus, joined the faculty in 1933. He was chairman of the Department of Pathology for 23 years, until 1964, when he joined the Dermatology Department to develop a dermatopathology laboratory and to do research in skin biology. Cox has continued to be active in research and teaching at Stanford.

His family has held Stanford faculty appointments since the opening of the University in 1891, continuously except for the years 1900-01, 1907-08, and 1910-15.

An uncle, Charles Cox, was an instructor and assistant professor of mathematics from 1891 to 1900. Cox's father, Alvin, Sr., was an instructor in chemistry from 1901 to 1907.

Cox, both of his parents, his two sisters, and his three children, are Stanford graduates. In addition, seven first cousins received degrees from Stanford University.

"I've seen Stanford change a lot through the years," Cox said. "When I came, the medical school was much smaller. We were in a rickety old building, and everybody knew everybody else."

During his career at Stanford, Cox has seen many technological advances in science, including the discovery of all the antibiotics and an extraordinary amount of knowledge about the chemistry of tissues.

He also is impressed with the advanced equipment. "Now we have microscopes where six people can look through the same microscope at the same time," said Cox. "And, of course, that's made a difference in teaching pathology."

Cox says the pre-War years were particularly significant for him. In 1935-36, he was an exchange assistant at the University of Freiburg, Germany.

On his way to Germany in 1935, Cox attended the XVth International Physiological Congress in Leningrad and Moscow. "It was the first time after the revolution that a group of foreigners was admitted to the Soviet Union," said Cox. "We were amazed at the grandeur of our reception. There were cocktail and dinner parties with caviar, eight or 10 kinds of wine, decorations of sculptured ice, tours of palaces and museums.

"That seemed very capitalistic to us, but it was obvious that the Soviets were doing serious work in science. Judging from the amount of American-made equipment there at that time, I'd say the Soviets were behind the Americans in a lot of areas. For example, we visited the Dnieper River dam in 1936, and were surprised to see that the generators were made by GE (General Electric)."

Once in Germany, Cox remembers quite "a bit of excitement" when Hitler moved his military forces into the Rheinland in the spring of 1936. Freiburg is about 15 miles from the French border, and there were days when he couldn't use his bicycle to cross the German-French border because of road barricades.

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"Many people were frightened about what was going to happen as Hitler moved his troops," Cox said. "We all heard about Jews being persecuted, being forced out of good positions in science and other areas, and it distressed us a lot."

When he returned to Stanford in 1936, Cox began working with a pharmacologist from the U.S. Department of Agriculture, studying the chronic effects of toxic substances.

The pharmacologist, Floyd DeEds, did toxicity studies on substances proposed for use as insecticides, and Cox examined the treated animals. The two discovered that one insecticide the Department of Agriculture was ready to approve for use on crops, acetaminofluorene, caused tumors in rats.

"For some time, this was one of the relatively few known carcinogenic agents that was effective by mouth," said Cox, "and it was the one that produced the greatest number of different types of tumor. Of course, it was banned as an insecticide."

Another early research effort involved coccidioidomycosis (a fungus disease caused by infection), the progressive form of which, Dr. Cox said, "was thought to be a uniformly fatal disease at that time." Cox found four cases where the fungus was present, but it did not cause death.

In 1946, Cox met Mary Helen Files, who was working as a volunteer on social events for servicemen going overseas. Six months later, the two were married.

"I owe so much of my happiness to my wife," Cox says. "She, my three children, my three grandchildren and my work have helped make my life worthwhile."

In organizing a dermatopathology program in the mid-60s, Cox says, he used "many fine points of this superspecialty" he had learned during his sabbatical as a research fellow in 1957-58 at Harvard University.

In 1973, Cox was elected president of the American Society of Dermatopathologists.

Of particular interest to him has been the study of psoriasis.

"The trouble seems to be that surface skin cells grow too fast," said Cox. "In essence, that's what happens in cancer too, the cells grow too fast. But why the cells grow too fast in both of these diseases is still a mystery. Perhaps one day, in my lifetime, the answer will be discovered."

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cox jk1

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BRITTON TO TAKE LEAD AS NEW PRESIDENT OF MEDICAL STAFF

Photos available on request if not included.

STANFORD—

Dr. Melvin Britton, a rheumatologist at the Palo Alto Medical Clinic (PAMC), will become president of Stanford University Hospital's medical staff effective Sept. 1.

Britton, an associate clinical professor of medicine at Stanford Medical School, has been vice president of the medical staff for the past two years. As president he will succeed Dr. George Waltuch, clinical professor of medicine.

Britton is medical director of the PAMC's TakeCare health maintenance organization, through which he has spearheaded efforts to reduce patient hospitalization. "The trend in medicine must be away from using hospitals as convenience houses for doctors," he said in an interview. "In many cases hospitalization isn't necessary, or patients can receive medical work-ups in outpatient settings pre-admission."

The idea, he said, is not for doctors to treat patients differently depending on coverage, but to develop a "new appreciation of what can be done" most efficiently for all patients.

Britton said he hopes, as president, to represent all members of the medical staff, both faculty and community, especially on issues such as access, disciplinary matters, and insurance contracts where doctors may find themselves in conflict with hospital policies.

"Although there are a lot of influences that seem to set doctors against hospitals and cause competition, I think the answer to conflicts lies in cooperation between medical staff and hospitals," Britton said.

The main thing for all to remember, he said, is that "it's not the hospitals or the doctors we should be concerned about, but the patients."

Britton graduated from Harvard Medical School in 1960. He served his internship at the University of Colorado Medical Center, and his residency at Dartmouth Medical Center. He received fellowship training at the Robert B. Brigham and Peter B. Brigham Hospitals in Boston.

Between his internship and residency, Britton served in the U.S. Navy as a general medical officer assigned to Hawaii, from 1961-64. He has been in the U.S. Naval Reserve since 1964, currently as a commanding officer (rank captain) at the Navy Medical Reserve Unit at Moffett Field.

Besides his faculty appointment at Stanford, Britton is an attending physician in the school of medicine's division of immunology.

He has published widely. He is a member and has served on the boards of numerous professional groups.

At Stanford he has chaired the bed utilization review committee and the quality assurance committee, and served on the medical board and the operational advisory group for the Hospital Modernization Project.

At the PAMC, Britton is a member of the professional affairs committee and chairman of the quality assurance committee.

8-27-85 —30— LA6

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
FOR IMMEDIATE RELEASE

CETUS CORP. RESUMES GENETIC ENGINEERING LICENSE AGREEMENT WITH STANFORD

STANFORD—

Cetus Corporation has resumed a license agreement with Stanford University covering basic genetic engineering techniques, representatives from the two organizations announced Friday, Aug. 23.

Earlier this year, the biotechnology firm, located in Emeryville, Calif., had terminated the license agreement, which covers patented recombinant DNA technology widely used throughout the genetic engineering industry.

"We wanted to resume our license as an indication of the high regard we have for the close collaboration in many fields between our two organizations," said Robert A. Fildes, president of Cetus.

"Given the changes which have occurred over the last nine months in our business plans, the decision also fits in with our needs going forward," he added.

"Just as we were very disappointed with Cetus' decision to terminate their license earlier this year, we are delighted that they will resume the license," said Niels Reimers, director of Stanford's Office of Technology Licensing.

"In effect, the license will continue exactly as before, as if there had been no termination," he added.

The license agreement is based on two patents for gene cloning techniques, and certain recombinant molecules produced with those techniques, developed by genetics professor Stanley Cohen of Stanford and molecular biology professor Herbert Boyer of the University of California, San Francisco (UCSF).

The two patent applications were filed in 1974. The "process" patent issued in 1980 and the "products" patent issued in 1984.

Stanford administers the licensing program for the patents, and net royalties are shared between the universities.

Terms of the licensing agreement call for a sign-up royalty plus an annual $10,000 minimum royalty in addition to earned royalties on sales.

Companies that signed up before Dec. 15, 1981 received more favorable terms in applying sign-up and basic annual royalties as credit against future royalties on sales.

When Cetus terminated the agreement with Stanford, it forfeited the credits it had accumulated. However, in resuming the agreement with Cetus, Stanford agreed to reinstate the $250,000 in credits the company had earned.

This brings to 74 the number of companies that are licensed to use the patented technology. Over $3.5 million have been received since the licensing program was initiated in 1981.

8-23-85 —30— cetus LH8

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News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

HOSPITALS CHALLENGED TO DEFINE QUALITY, DOCTOR SAYS

STANFORD—

Consumerism in health care is challenging doctors and hospitals to define quality, says Stanford University Hospital chief of staff James Silverman.

"What we physicians call quality and what patients call quality are two different things," writes Dr. Silverman in the August issue of *Update*, the hospital's medical staff publication.

Silverman draws comparisons from the airlines. They have a similar problem in quality perception and doctors and hospitals might learn something from them.

"I would imagine a quality flight for the pilot is similar to a quality treatment by a physician," Silverman writes. "The bottom line for the pilot is the passengers' safe arrival. For the physician, it's the patient's recovery from illness.

"But consumers may find other aspects of their hospital experience more important, or at least, more measurable or understandable than flying an airplane or the performing of an operation."

Silverman compares common problem areas between airlines and hospitals to make his point:

Airlines

- Time waiting to board plane
- Crowded seating with little leg room
- Tasteless food
- Delayed departure
- Delayed arrival
- Waiting for luggage

Hospitals

- Time spent in admitting office
- Semi-private room with no privacy
- Tasteless food
- Delayed surgery
- Late discharge
- Waiting for discharge medicine

Silverman concludes that public perceptions of quality health care include the service portion—the amenities—as well as the treatment outcome.

8-22-85

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"When very sick, the service portion has little meaning," he says."However, when recovered, patients remember all the frustrations that made their hospitalization uncomfortable."

Consumer perceptions create a serious dilemma, Silverman thinks, as funds are withdrawn from the health care system and institutions try to manage their costs.

"Should the funds be cut from the physician portion or the service portion? How can this be done sensibly, and is it possible?" he asks.

The answers are not so simple, Silverman responds. There are those outside medicine who think quality on the medical side could be improved and costs reduced by developing treatment protocols. Isn't there a best way to diagnose and treat pneumonia, anemia, or arthritis?

"We know," says Silverman, "that after 15 to 20 hospitals compared their coronary artery surgery data—taking years of study—it still is not entirely clear when or if to operate on large segments of patients with anginal pain." And not all doctors agree whether or not breast cancer should be treated with surgery or radiotherapy.

"Problems such as these make quality definitions difficult," comments Silverman. "We're going to have to continue to pursue choices between surgery and medicine, and we will have to force ourselves to find quality."

While physicians are making their efforts and letting the public know, the service part of the hospital must also press forward, he says.

"Hospitals have a long history of being difficult with patients," Silverman adds. "There seems to be tension through hospitals that often gets in the way and prevents their staffs from giving their whole attention to the patient.

"That must stop. Patients must feel all of a hospital's energy directed towards them—especially at the prices they are paying."

—30—

qualitySA8

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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ADVANCE FOR RELEASE FRIDAY, AUGUST 23, 1985

TNF, AN EXPERIMENTAL ANTI-CANCER PROTEIN, MAY HAVE MULTIPLE ROLES

STANFORD—

The natural anti-cancer protein called "tumor necrosis factor" (TNF) may be identical to a substance that affects fat storage in the body, two groups of scientists have found.

The finding suggests new uses for the substance in treatment of chronic disease, as well as potential applications in controlling obesity, said a Stanford University Medical School scientist who heads one of the research teams.

The discovery also suggests that possible weight loss as a side effect could complicate the experimental agent's future role in anti-cancer therapy, said Dr. Gordon Ringold, associate professor of pharmacology at Stanford.

The discovery also raises new questions about TNF's natural function in the human body, where it is produced in small quantities by certain white blood cells, the scientist said.

TNF, which was discovered 10 years ago by researchers at Memorial Sloan-Kettering Cancer Center, has generated considerable excitement in the past year as biotechnology companies have begun to produce the purified substance in large quantities with gene splicing methods.

Its ability to kill a wide variety of cancer cells in tissue culture has pushed the protein to the brink of clinical trials in cancer patients in the U.S..

But in the August 30 issue of *Science* magazine, Stanford and Rockefeller University scientists describe how an unidentified substance, only in recent weeks shown to be indistinguishable from TNF, completely shuts down fat synthesis and storage in fat cells in the laboratory.

"This really opens up questions about what TNF does in the body," said Ringold, a biochemist whose main research interest is how hormones interact with the genetic material inside cells. "It may not be there to act primarily as a tumor-killing factor. TNF's physiological role may be to regulate fat metabolism or some as yet unidentified processes," he added.

Ringold's colleagues on the *Science* paper are Dr. Frank Torti, Stanford clinical associate professor of medicine and staff physician at the Palo Alto Veterans Administration Medical Center, Barbara Dieckmann, research assistant, and Drs. Anthony Cerami and Bruce Beutler, Rockefeller University biochemists. Dr. James Larrick of Cetus Corporation in Emeryville contributed to subsequent experiments confirming TNF's role, Ringold said.

The work was supported by grants from the National Institutes of Health, the March of Dimes, Rockefeller University, Cetus Corporation, the Veterans Administration, and the American Heart Association.

Recent experiments carried out in Ringold's laboratory show that TNF turns off genes that give fat cells their special ability to manufacture and store fat.

When fat synthesis and storage halts, it leads to a medical condition called cachexia, which is a wasting away of the body often seen in cancer patients and in people with chronic infections or parasitic diseases.

Ringold and his colleagues have shown that TNF's effects are similar to those of "cachectin," a protein that appears to be associated with cachexia. This is a potential side effect that will have to be carefully monitored in upcoming anti-cancer clinical trials, he noted.

The body's own TNF production may be the cause of cachexia in some cancer patients, Ringold added, and may even be the first diagnostic clue that something is wrong. Some people who develop cancer experience an unexplained loss of appetite and weight associated with cachexia before their tumor is even discovered, he said. Since laboratory studies have shown that only some tumors appear to be killed by TNF, this suggests that some patients might actually benefit by getting rid of their own internal TNF.

"It might seem contradictory to eliminate a natural body substance that has some cancer killing abilities from a cancer patient," Ringold observed. "But obviously in those cases where the cancer is already growing in TNF's presence, the protein isn't working very effectively against the cancer," he said.

In order to eliminate natural TNF from the body, an inhibitory drug would have to be found, Ringold noted. One possibility would be a monoclonal antibody that selectively neutralizes TNF. Such substances should be available soon, Ringold said. If developed, it could also be useful in patients who develop cachexia as a result of a chronic disease such as parasitic infections or tuberculosis, he added.

Ringold also suggested that administering TNF in a controlled fashion might be useful for treating certain forms of obesity. Although there is as yet no experimental evidence to support this, some biotechnology companies that produce TNF are interested in pursuing this research, he noted.

Cachectin was originally discovered in 1982 by Cerami and his colleagues, who gave the name to a "soup" of proteins from macrophages, white blood cells known to produce interferon, interleukin, TNF, and other proteins. When applied to fat cells in the laboratory, the protein soup shut down their activity, providing a lab model of cachexia.

In collaboration with Cerami and Beutler, Ringold and colleagues determined that the substance's ability to switch active, specialized fat cells into quiet nondescript cells, was exerted at the genetic level, by turning off specific genes.

The Stanford and Rockefeller groups then independently discovered the relationship between cachectin and TNF.

The Stanford group tested pure samples of the individual proteins thought to make up cachectin, to see if any one protein alone could cause the cachexic effect. Cetus' Larrick suggested trying their TNF, which turned out to be the cachexia-generating protein, Ringold noted.

At the same time, the Rockefeller scientists found a strong similarity between portions of the structures of mouse cachectin and human TNF, Ringold said. This work has just been published in the August 8 issue of the scientific journal *Nature*, he added.

—30— TNF LH9

END ADVANCE FOR RELEASE FRIDAY, AUGUST 23, 1985

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
FOR IMMEDIATE RELEASE

SUH RATE INCREASES LOWEST IN 12 YEARS, DIRECTOR SAYS

STANFORD—

Stanford University Hospital will implement an overall rate increase averaging 7.9 percent, the smallest rise in 12 years, announced Sheldon S. King, executive vice president and director.

The new prices approved Wednesday (Aug. 14) by the Board of Hospital Directors take effect Sept. 1, the start of the 1985-86 fiscal year.

Price levels, which include daily rooming costs as well as all medical and related services, are based on a budget of $196 million. The budget—but not rate increases—must be submitted for approval to the university Board of Trustees, meeting as general members of the hospital on Sept. 10.

The budget proposes $6.1 million in capital improvements, including $401,000 budgeted this year for construction of a new linear accelerator for cancer treatment.

King noted that the $114 million hospital modernization program (HMP), scheduled for completion in 1987, "will bring far-reaching benefits to the community needed to bring the hospital into the 21st century." The HMP is funded from a variety of sources, including $82 million in tax-exempt bonds.

One of the most important components of patient charges is the daily care rate, which varies depending on the amount of nursing care required. The most commonly charged rate for a semi-private room with the benefits of round-the-clock housestaff (intern and resident) coverage will increase from $384 to $414. The rate without housestaff service will be $388.

Rates for another common category, obstetric patients, will be $389 with housestaff services, $363 without.

King said a cost management program enabled the hospital to cut $8.1 million in expenses this year. Much of the decrease, King said, was brought about by changes in the purchasing of supplies and services, including volume buying in conjunction with the university.

Following a trend of recent years, patients admitted are expected to have shorter hospital stays than in the past. In the fiscal year ending September 1984, patients were staying an average of 6.8 days. By Sept. 1, the average is expected to be 6.5 days, King said.

"Modern medicine as applied here at Stanford has enabled us to improve care and results while allowing the patient to return home sooner," King said.

8-15-85 —30— budget85 mg7

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News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

PROGRESS CONTINUES TOWARD URINARY TRACT INFECTION VACCINE

STANFORD—

A new finding, bolstering hopes that a vaccine can be developed to prevent complications of urinary tract infections, has been reported by Stanford University researchers.

The new finding shows that strains of *Escherichia coli* bacteria that cause severe urinary tract infections all possess certain genetic similarities.

This common genetic endowment is enabling the Stanford researchers to develop a vaccine that can target all the strains of *E. coli* bacteria that cause infection in the bladder or the kidneys, the scientists said.

Although a vaccine is not yet available for humans, the Stanford researchers have already tested in mice a prototype vaccine which was able to prevent urinary tract infections from spreading to the kidneys.

The new finding, published in the August 15 issue of *The New England Journal of Medicine*, "strengthens the evidence that we can develop a human vaccine," said Dr. Peter O'Hanley, one of the researchers, and an assistant professor of medicine and medical microbiology at Stanford University School of Medicine.

The work was conducted in the laboratories of Drs. Gary Schoolnik and Stanley Falkow. Schoolnik is assistant professor of medicine and medical microbiology and chief of infectious diseases at the Palo Alto Veterans Administration Medical Center. Falkow is professor and chairman of medical microbiology.

Other collaborators include Dr. David Low, now at the University of Utah, Irevis Romero, Dr. David Lark, and Dr. Kenneth Vosti, professor of medicine.

Urinary tract infections are among the most common medical problems of female outpatients, estimated to afflict at least 15 percent of women once in a lifetime, according to Schoolnik. Although usually not serious, the infections can be a major cause of discomfort and loss of work time, and can cost up to $150 to treat, O'Hanley said.

When a urinary tract infection is confined to the bladder it is called cystitis. In a small percentage of women with cystitis, the kidneys also become infected, causing pyelonephritis, a condition that may require hospitalized treatment and can lead to blood infections, and even to kidney failure in some cases.

Antibiotics are an effective treatment. But a vaccine to prevent infection would probably be more cost-effective, would spare considerable illness, and would minimize the use of antibiotics, to which growing numbers of bacteria are becoming resistant, Schoolnik said.

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The majority of urinary tract infections are caused by *E. coli*, which are normally harmless bacteria that live in the bowels, O'Hanley explained. The new finding shows that only a few strains of *E. coli* are associated with causing urinary tract infection. These strains all possess similar genes that control production of certain proteins. These specific proteins enable the bacteria to cause infection and to invade the patient's kidneys, O'Hanley explained.

He and his colleagues at Stanford are designing vaccines that induce the immune system to produce antibodies that inactivate these proteins. Finding that all the harmful strains of *E. coli* use similar proteins to do their dirty work streamlines the task of vaccine design and strengthens the possibility that a vaccine against one strain would be effective against all the others, O'Hanley said.

The researchers analyzed bacteria from the urine of women with pyelonephritis and cystitis. They compared these with samples from women with high levels of bacteria in their urine, and with bacteria from the stool of disease-free women.

They found that 100 percent of the *E. coli* bacteria from women with pyelonephritis produced a protein that alllows them to latch onto tissues lining the bladder and kidney. In non-diseased women, only about 30 percent of the bacteria from the stool produced this protein.

They also found that 75 percent of bacteria from women with kidney infections produced a protein called hemolysin that helps break down cells lining the kidney. This protein was produced by only 14 percent of bacteria from the stool of healthy women.

"These proteins might form the basis for a broadly cross-reactive vaccine for the prevention of pyelonephritis," O'Hanley said. But he added that there are still many steps to be taken before a vaccine is proven effective and made available, including tests to make sure that the agent is safe for humans.

The research was supported by grants from the Cetus Corporation of Berkeley, the National Institutes of Health, the John A. Hartford Foundation, and the American Urological Association.

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nejmuti LH9

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News Bureau Stanford, California 94305

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EDITORS: Photos available if not included.
FOR IMMEDIATE RELEASE

STANFORD ANESTHESIOLOGISTS MAKE HOUSECALLS AT SAN FRANCISCO ZOO

STANFORD—

A couple of Stanford anesthesiologists are wild about their work.

In fact, they're so enthusiastic they're even willing to arrange their schedules so they can make housecalls to their patients who live at the San Francisco Zoo.

When two snow leopards needed dental surgery, for example, they delivered the anesthesia while the dental surgeons operated.

And when a polar bear needed a CT scan, not only did they put him out but they had to carry him down two flights of stairs to boot.

They've put a lion to sleep while he underwent a vasectomy. They've anesthetized gorillas so the veterinarian could draw blood to be tested for virility, arthritis and growth problems.

While some of these procedures are relatively minor and take no more than a few minutes to perform on people, say Drs. Fred Mihm and Jim Scott, it's a completely different tale to tell when dealing with animals.

You just can't explain to a gorilla that you only need a couple of vials of blood and that drawing it won't hurt, they explain. Nor can you caution a polar bear to stay perfectly still so a CT scan will come out well. The only way to perform these procedures is to make the animals temporarily lose consciousness.

Veterinarians can do so for a minute or two by shooting a dart containing a small dose of anesthetic into an animal's body. But putting animals or people to sleep for longer time periods may trigger breathing or heart problems as well as other complications. The people most skilled to detect potential crises, monitor patients to make sure they don't occur and quickly react if they do, they say, are anesthesiologists.

"We're bringing hi-tech medicine to animals," says Mihm, an assistant professor of anesthesiology who has been volunteering his services to the zoo since 1983. "Zoos can't afford to lose their animals because of their cost, rarity or because they are gifts from other countries' governments. With our help, veterinarians can give the animals much more sophisticated medical care."

Speeding north on the freeway from Stanford University Medical Center towards San Francisco's zoo, Mihm describes today's case. Veterinarian Craig Machado needs some blood from Rita, an orangutan whom he estimates is about 20 years old. In addition to the standard tests, he needs to send some of her blood to be specially analyzed to determine which of two possible species she belongs to. Both are on the endangered list. The veterinarian called the anesthesiologists, Mihm explains, because of possible respiratory problems.

Driving out to Rita's cage in a motorized zoo cart, Machado explains the potential complications in more detail. Orangutans have a lot of tissue surrounding their neck, he says, and relatively small, collapsible airpipes. When she's out, he continues, they have to make sure the weight of tissue doesn't compress the airpipe and block it.

While Mihm, Scott, and anesthesiology resident Jim Pearson unload their portable monitoring equipment, about $25,000 worth donated to Mihm by private companies for this specific use, Machado checks on Rita. "She's known something is up since we isolated her this morning," he says.

Sure enough, Rita, hanging by her hands off the side of the cage, watches every movement as Mihm prepares the air gun with the dart containing the anesthetic. "It has to be a sure shot," Machado warns. If the full dose doesn't go in, they run the risk of overdosing her to compensate, which could endanger Rita, or underdosing her and endangering themselves by attempting to work on a still-active animal.

A momentary silence prevails as Mihm aims and fires. "Great shot," Machado exclaims while Rita looks a bit bewildered and then curious as she reaches out with her long arm and picks up the now-empty cartridge to examine it more closely.

In the following minutes Pearson begins to record all the data on Rita, while her head begins to droop and eyelids begin to blink.

"There are hardly any data at all on anesthetizing animals and their reactions to it," Mihm explains. "Having us come help is mutually beneficial. Data like ours will help veterinarians learn about anesthesiology, while we get to learn more about animals.

"We're used to intense situations like these because of the work we do with people," he continues. "The techniques we use are the same, although we sometimes do even more monitoring on the animals just because we're less familiar with how they're going to react."

Rita's head takes one final droop, and suddenly a flurry of activity erupts. Machado, Scott and Mihm leap into the cage, administer more anesthetic and start drawing a total of about a half a cup of blood. They carry the limp Rita out of the cage, quickly weigh her in at 146 lbs. and position her laying on her stomach back in the cage. Just as they begin to relax, Mihm starts. "No air is coming out," he says, holding his hand close to her mouth and nose. "Get me some tubes."

Mihm tries to insert tubes varying in diameter into Rita's trachea without success. As he discards one after another, he and Machado begin to sweat. "These tubes are too short," he observes. "Her airpipe is much smaller and much further back in her throat than a human's."

Giving up on the tubes, Mihm manually holds open her airpipe with a small tool. "Her trachea is as small as a four-year-old and much less rigid," he comments. The team watches Rita's heart beat on the monitors and the rise and fall of her stomach area. About 30 minutes later, her breathing has returned to normal. As her hands begin to flinch, a sign of regaining consciousness, they begin to withdraw their equipment.

"These animals are beautiful and they're smart," Mihm comments on the drive back to Stanford. "By working with them we're able to get much closer to them than we ever would in any other situation. People may think we're only interested in doing research on animals. But by administering anesthesia, we're offering a needed service and providing that extra margin of safety that the animals need."

—30—

animals sk6

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911

FOR IMMEDIATE RELEASE

WEIGHT MANAGEMENT COURSE OFFERED TO TEENS

STANFORD—

A 12-week course on weight management for teenagers has been scheduled for this fall by the Stanford University Hospital department of dietetics, announced clinical nutritionist Kristine Birge.

Combining diet, exercise and behavioral techniques, the "Shapedown Program" is intended to help teenagers take charge of their own weight management.

Classes for participants are scheduled from 4 to 5:30 p.m., Sept. 12 through Dec. 5. Parent sessions have been scheduled at 7:30 p.m., Oct. 3 and Nov. 7.

Cost for the program and materials is $165. The registration deadline is Aug. 23. For more information call (415) 497-5432.

WEIGHT MANAGEMENT COURSE OFFERED TO ADULTS

STANFORD—

An eight-week course for adults on weight management will be offered again this fall by the Stanford University Hospital department of dietetics.

"An Enlightening Experience," led by registered dietitians, includes a personalized weight loss plan, low calorie cooking demonstrations and recipes, menu planning and tips on dining out wisely, said dietitian Kristine Birge. Guest speakers in the program will discuss stress reduction, behavior modification techniques and exercise, she said.

Participants may register for either afternoon or evening sessions to be held in the hospital's north cafeteria dining room. The first evening class will meet 7:30 to 10 p.m., Tuesdays, Sept. 24 through Nov. 12. The first afternoon class will meet 1 to 3:30 p.m., Thursdays, Sept. 26 through Nov. 14.

Enrollment for each class is limited to 20 participants. The fee is $325 with a $50 refund if the individual's weight loss goal is achieved. Registration deadline is Sept. 10.

For further information, call (415) 497-5432.

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FOR INFORMATION CONTACT: Lisa Ames (415) 497-6911
FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED FOR DIABETES DRUG STUDY

STANFORD—

Volunteers with adult onset diabetes are needed to participate in a study beginning at Stanford University Hospital's clinical research center (CRC).

Researchers under the direction of Dr. Gerald Reaven, professor of medicine, seek diabetics being treated with insulin who in spite of treatment are not under optimal control (whose fasting blood sugar levels are too high).

The study will attempt to gain better control by adding the recently released medication glipizide to their treatment.

Participants must be in generally good health and between the ages of 40 and 70. They will receive a physical examination, complete blood count, evaluation of liver and kidney function and cholesterol level, and an electrocardiogram.

After an initial brief hospitalization, participants will visit the CRC weekly for a period of four to six months.

Those interested should call Dr. Elizabeth Fraze at (415) 497-6973.

8-6-85 —30— LA6

STANFORD UNIVERSITY MEDICAL CENTER
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(Eds: photos available if not included)

RESEARCHER FINDS EVIDENCE THAT HYPNOSIS CHANGES BRAIN ACTIVITY

STANFORD—

Hypnosis causes a specific change in the electrical activity of the brain, reports a Stanford University Medical Center psychiatrist.

Dr. David Spiegel, associate professor of psychiatry and behavioral sciences, said his research shows "a believable difference" in brain waves of hypnotized and normally conscious people. And, he said, his study provides a neurological test which distinguishes between people with high and low hypnotizability.

Under hypnosis, the brain's response to a pattern of colors was decreased, he reported in the August issue of the *Journal of Abnormal Psychology*.

People who are hypnotized can tune out what is actually coming to their eyes, and instead focus on an internally-generated image, Spiegel explained.

He said his findings are "a step towards understanding how people manage access to consciousness, how they control their response to pain or to unwanted ideas, the mechanism of mind over matter."

In his experiments, volunteers, who were Stanford students, watched colored patterns that were flashed on a television screen. Such visual displays evoke a characteristic change in brain waves, which Spiegel measured with an electroencephalogram (EEG).

An EEG records the peaks and troughs of electrical activity in the brain. And hypnosis altered a particular peak in the brain waves, Spiegel found. This peak was smaller in hypnotized subjects who were told to visualize a cardboard box that blocked their view of the colors on the screen.

The box was imaginary, but while in a hypnotic trance, students who were highly hypnotizable believed it was there.

No change in the peak was found in students who were not hypnotizable. They tried to visualize the blocking cardboard box but reported they could still see the screen, Spiegel said.

"When hypnotized people don't see what is actually there at all, they are dampening the way their brain responds to the stimulus," he said. "The process is something like turning down the volume on a stereo amplifier."

The peak suppressed by the hypnotically imagined box is usually activated when a person pays attention to an object such as the color pattern on the screen, Spiegel said.

He found that the peak was most suppressed in the back region of the brain, which interprets vision, and was especially dampened on the right side of that area. Scientists link the brain's right side or hemisphere with spatial and intuitive thinking, and the left with verbal and logical thinking. Other researchers have shown that people under hypnosis tend to rely more on their right brain hemisphere, Spiegel said.

He said hypnosis is a state of intense, focused concentration, in which mental perception is altered.

"It's really a form of alert concentration," Spiegel said. "It isn't sleeping."

Therapists today use hypnosis to help people concentrate on breaking habits, such as smoking, to conquer phobias such as fear of flying, and to control pain.

Spiegel will present his work Thursday, August 15 at a Toronto meeting of the International Society of Hypnosis and Psychosomatic Medicine, and then in New Zealand, where he will be the keynote speaker at the Annual Congress of the Australia-New Zealand Society of Hypnosis on August 24.

Spiegel's co-workers are Steven Cutcomb, Ph.D and Chuan Ren, M.D., both former students at Stanford; and Karl Pribram, Stanford professor of psychiatry.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE
(This is the first of three releases marking the opening of Stanford Medical Center's new Research Animal Facility. Pictures available if not included.)

STANFORD'S NEW ANIMAL CARE AND RESEARCH FACILITY OPENS

STANFORD—

Animals—and the humans who care for them—have begun moving into Stanford Medical Center's $11 million Research Animal Facility, said Thomas Hamm, veterinarian and director of the center's Division of Laboratory Animal Medicine.

The facility was approved by the university Board of Trustees nearly three years ago to augment the quality of biomedical research and care of animals.

Animals, ranging from ducks to pigs to dogs have moved in with the staff of more than 30 persons, including Hamm and two other veterinarians, as well as animal care technicians and office personnel.

"Stanford now has a state-of-the-art laboratory animal facility we can all be proud of," said Hamm. "The building's features will enable us to achieve the highest standards of research more easily while ensuring that our animals will receive the best care attainable from our staff of professionals and technicians.

"Fortunately, most of what is good for research is also good for the well-being of the animals," said Hamm. "You can't accomplish careful, competent research on highly stressed animals."

Among the features incorporated into the 32,000-total-square-feet structure is a filtration system that changes the air in the building up to 27 times an hour, which exceeds National Institutes of Health guidelines for animal care of 10 to 15 hourly air changes. Ventilation shafts extending 40 feet into the air mark the site and facilitate the air changes.

Air temperature can be precisely controlled, room-by-room to ensure that the thermometer conforms to an individual species' needs.

"Again, it's a question that an animal exposed to the proper temperature is going to be healthier than an animal facing conditions which are either too hot or too cold," Hamm said.

Water will be filtered to ensure purity—for the health of the animal, as well as to ensure that a foreign substance won't confound the results of experiments.

Sensor devices link with a central monitor which issue a warning to personnel when water or air standards deviate from normal. Steam cleaning equipment to sterilize cages and containers used in animal care is located in the building.

The RAF building is located underground with tunnels connecting to other research and instructional areas of the Medical Center.

"The location enhances our ability to control the environment for light and temperature, as well as permitting efficient access to the majority of our researchers," Hamm said.

While most of the actual research will be conducted in laboratories outside the building, the new RAF facility includes two operating rooms and an intensive care facility.

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"We're one of the few animal care facilities in the country where professional personnel, including nursing staff on the premises and an on-call veterinarian, are available round-the-clock for the care of animals," said Hamm.

Even though the building has just recently opened, its presence has already led to perceived benefits. A research team led by Dr. Gerald Reaven, was told it would qualify for federal funding only if the proposed rat colony was housed in the new facility. An unusually clean atmosphere free of disease was needed for a study on aging.

"They needed a situation where rats would be able to live to a ripe old age (about 2 years) so that they could then study the endocrine changes that occur as the animals get old. We were told by the National Institute of Aging that the new facility would have to be used to provide state-of-the-art care that would help ensure long-term, disease-free survival," Hamm said.

The facility has been designed to house a continuously varied array of animals. Initial occupants which moved into the facility since mid-July included about 21 cats, five chickens, 13 dogs, 18 ducks, 15 geese, 70 guinea pigs, two mice, one pig, 301 rabbits, and 13 rats.

About 95 percent of the 45,000 animals at Stanford are rodents. Approximately 50 percent of the animals will be housed in the new facility, and Hamm said most are expected to be moved in by the middle of August.

But several larger animals, including sheep helping to develop a partial artificial heart called a left ventricular assist device, and some primates and dogs involved in a variety of transplantation and other cardiac studies, will remain in specially designed animal facilities in the 1-year-old Cardiovascular Research Building.

A campus kennel will continue to be used to quarantine many larger animals prior to research. Large rodent colonies, some numbering 15,000 or more individual animals, will continue to be located in various departments until a second research animal facility is completed in several years. That project is under active planning consideration and would be built partially in conjunction with the Center for Molecular and Genetic Medicine, a previously announced basic research endeavor expected to be open in its own building in 1988.

The trustees approved the new animal facility in December 1982 for a cost of between $10 million and $12 million. It was designed by the San Francisco architectural firm of Stone, Marraccini and Patterson. General contractor was Rudolph and Sletten of Foster City.

S. Corbin Smith, a university project manager, said the total project cost, including design, planning and financing was $11 million with actual construction costs of $7.3 million.

The project was funded with $3 million of University and Medical School reserves. The balance of the cost was provided by tax-exempt bonds through the California Educational Facilities Authority (CEFA), said David Mendelow, associate dean for administration.

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rafopens MG6

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FOR IMMEDIATE RELEASE
(This is the second of three releases marking the opening of Stanford Medical Center's new Research Animal Facility. Pictures available if not included.)

LAB DIRECTOR COMBINES ANIMAL CARE WITH RESEARCH

STANFORD—

Dr. Thomas Hamm thinks Stanford's new $11 million Research Animal Facility will one day be the best place in the world for animals and research—including his own.

"I'd say in two more years, we might have the best animal program there is anywhere," said Hamm, director of the Division of Laboratory Animal Medicine at Stanford. "When I came to Stanford a year ago, this new facility was already under construction and there were plans to replace the outdated equipment. Right now, I'm recruiting a veterinary pathologist. A lot of other academic institutions in California have expressed an interest in using the Stanford lab once the pathologist is here."

Hamm, 42, came to Stanford from North Carolina, where he headed the department of general and biochemical toxicology at the Chemical Industry Institute of Toxicology in Research Triangle Park. The veterinarian also has a PhD in comparative pathology.

Once his staff is fully recruited, Hamm will begin a training program for research veterinarians who will come to Stanford as post-doctoral fellows.

"I'm very excited to be at Stanford because the university has always made such a strong commitment to be the best," Hamm said. "The quality of investigators doing research here is so high, and then to have the best laboratory animal facility could make a real impact on research."

He stressed that animal research is very important in the discovery process since virtually every new surgical procedure is first tested in animals for feasibility and safety and new medications undergo extensive testing in animals before humans are allowed to use them.

Prior to his four-year stint at the toxicology institute in North Carolina, Hamm served as an expert consultant and acting chief of the toxicology branch of the carcinogenesis testing program at the National Cancer Institute. Under his direction, Hamm said, several hundred chemicals were tested to determine if they caused cancer and to establish the level of exposure to humans that would be safe.

Hamm would like to do future research in whether some of these chemicals might also be a factor in heart disease.

He also wants to pursue another area of research in atherosclerosis.

"We have shown that behavior—stress—can lead to heart disease in monkeys, and we believe also in humans," Hamm said. I'd like to research what might be the basic mechanism why stress influences the development of heart disease."

Hamm said while his own research, the planned training program for postgraduate veterinarians, and the supervision of the Research Animal Facility's staff are important parts of his work responsibility, his primary function is the care of the research animals themselves.

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"We make every effort to keep the lab animals healthy and happy," Hamm said. He added that air is recycled 20 times each hour, the animals' food routinely inspected for contamination, and the room temperature is kept consistently comfortable.

"Since we know that stress is a factor in disease, it's an important part of good research to make sure the lab animals are as healthy as possible," Hamm said.

He said the level of light is controlled since the amount of light can affect an animal's physiology.

All animal research projects are reviewed by a 10-member panel, which includes Hamm, other scientists, as well as community members and an outside veterinarian. The panel meets once a month.

Hamm, who is a diplomate of the American College of Laboratory Animal Medicine, said as a veterinarian, he decided to go into research "because my primary interest is in prevention of disease, rather than treatment."

Hamm said in addition to his work, he is extremely proud of his 17-year marriage to Diane Mauck and of their son, Jon, 15. The family also includes a 3-year-old springer spaniel named "Buddy."

Hamm enjoys cross-country sking and hiking with his family, trout fishing, and stamp and coin collecting. He is an avid genealogist, and spends one or two hours at night "writing people I've never met, trying to trace our roots."

"There are many ways our lives can make a difference," Hamm said. "I feel very fortunate to be doing work that I think is very important. When I'm 60, I think the things I'll be most proud of will be my marriage, my son, and the students I've helped train who hopefully will be doing research that makes a difference in our quality of life on this planet."

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(This is the third of three releases marking the opening of Stanford Medical Center's new Research Animal Facility. Pictures available if not included.)

SCIENTIST SAYS NEW FACILITY MAY MAKE RESEARCH POSSIBLE

STANFORD—

Dr. Gerald Reaven believes that Stanford's new Research Animal Facility I (RAFI) may make the difference between whether a key portion of a project studying aging will be funded or discontinued.

Reaven and colleagues are attempting to determine whether many of the typical signs of aging, such as lack of glucose (sugar) tolerance in the body, are inevitable or can be avoided or minimized by such controllable factors as exercise or diet.

Reaven, an endocrinologist and professor of medicine, said he was told by the National Institute on Aging (NIA) that the portion of his grant earmarked for rat studies would not be renewed unless the investigations were carried out in the new $11 million facility.

Reaven said the scientists responsible for funding the project were concerned that the rats could come down with infections or diseases during the two year study, adding an extra variable to the research which could alter results.

The new facility contains features which are intended to minimize the risk of infection, including a double distilled water supply, a steam cleaning system which sterilizes cages, and extensive filtration in the air supply. Animal care areas are located below ground which enables personnel to carefully monitor and control the environment, explained Dr. Thomas Hamm, the veterinarian in charge of the facility.

Reaven and a principal colleague on the rat study, Dr. Andrew Hoffman, assistant professor of medicine/endocrinology, both said they won't know for sure whether they will receive funding for about three months.

"But they (NIA) made it quite clear that funding for the rat studies was predicated on having the new facility available," Reaven said.

The rat study is part of a project entitled the "Endocrinology of Aging," which has been funded by the NIA for the past six years. Current funding is approximately $400,000 a year, Reaven said, who along with colleagues had applied for a four-year renewal of the grant to take effect next April.

In the first six years of the project, the Stanford team has already learned that such signs of old age as lack of glucose tolerance are not inevitable but directly related to obesity and a lack of exercise—lifestyle factors which can be corrected.

Now the team wants to test other endorcrine functions, and also learn at what point in the life cycle corrective intervention is possible.

The rats which would be housed in Stanford's new animal facility play a crucial role, Reaven said, because they enable the scientists to study the entire life cycle in two years, rather than waiting many decades to determine the effect of aging on individual people.

He explained that a 2-year-old rat is equivalent in terms of aging to an 80-year-old human. If the rat is studied from adolescence at about two months, a complete lifespan can be tracked.

Reaven also said that rats are important to the study because scientists can examine specific organs, such as the pancreas. This could only be done in humans by autopsy he explained, "and by then you have deterioration which could affect the results."

Appropriate human studies are also involved with the project, and Reaven, who serves as director of the geriatric department at the Palo Alto Veterans Administration Medical Center, said those results will be correlated and analyzed when all the data have been collected.

8-2-85 —30— rafopens MG6

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PATHOLOGIST CARRINGTON DIES OF CANCER

STANFORD—

Dr. Charles Robert B. Carrington, an associate professor of pathology and internationally recognized authority on lung disease, has died after a year-long illness. He was 50.

Carrington, who died Wednesday (Sept. 25) of cancer in a local hospital, had served on the Stanford faculty since 1975. He was director of Stanford's Autopsy Service until he became ill nearly a year ago.

A colleague, Dr. Klaus G. Bensch, said Carrington was "internationally renowned as a clinical researcher and an outstanding diagnostician and teacher."

Because of his expertise on environmental factors and their relation to lung disease, Carrington was widely sought as a consultant on expert panels, including federal advisory committees.

Since 1979, he served as chairman or a member of the Secretary of Health, Education and Welfare's Mine Health Research Advisory Committee, a federal group dealing with such environmental safety hazards as black lung disease.

Carrington, a native of Illinois, graduated from Cornell University Medical College in 1960 and was a resident at Yale University Medical Center.

Before coming to Stanford as a tenured associate professor in 1975, Carrington served on the faculties of Yale University, the University of California, San Diego; and Boston University.

Carrington is survived by Pat, his wife of nearly 30 years. He is also survived by his father in Illinois and his brother, a Colorado attorney.

No services are planned.

9-30-85 —30— MG7

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SALMON HORMONE TESTED FOR OSTEOPOROSIS TREATMENT

STANFORD—

Scientists at Stanford University Medical Center are testing a hormone found in salmon to determine its effectiveness in retarding the effects of osteoporosis in older women.

Osteoporosis is a bone-degenerating disease, triggered by a lack of calcium, which affects about 20 million post-menopausal women.

Stanford is one of 10 medical institutions throughout the country at which the naturally occuring hormone, called calcimar, is undergoing final clinical testing required for approval by the Federal Drug Administration. The salmon hormone, similar to calcitonin in humans, is thought to affect calcium levels and bone metabolism in a way that decreases bone loss, researchers said. This may cut down the symptoms of osteoporosis, they added.

Calcimar "is not at present thought of as a cure for the disease, but rather as a treatment to prevent — slow down any further deterioration," said nutritionist Dr. Gail Butterfield, who is co-directing Stanford's clinical trials with Dr. Robert Marcus, associate professor of clinical medicine and director of the Geriatrics Research Education Clinical Center at the Palo Alto Veterans Administration Medical Center.

In order to test the drug, the scientists are seeking 30 post-menopausal women to volunteer for a three-year study. The women should be over age 45, and should already have experienced some bone deterioration. They should not be taking estrogen, a common therapy prescribed to combat the effects of osteoporosis.

Women who qualify for the study will be divided into two groups: one that will receive the experimental drug and one that will serve as a control group. All participants will undergo physical examination including blood tests and spinal X-rays. Follow-up checks will be required every three months. All procedures will be free of charge.

Considered one of the worst effects of menopause, osteoporosis causes bones to become thin and brittle, taking on a honeycomb consistency, Marcus said. Weakened vertebrae collapse under body weight, causing the stoop known as dowagers hump that older women develop. More than one million fractures each year occur in osteoporosis victims, at a cost of nearly $4 billion. About 15 percent of women with hip fractures die within three months, Marcus added, because of complications, such as pneumonia, blood clots and stroke, due to immobilization.

Women can help prevent osteoporosis early on in life through proper diet, exercise and other health-oriented habits such as not smoking, Marcus said. Calcimar, however, may keep the effects of osteoporosis from becoming more severe for those women who are afflicted.

For more information or to volunteer for the study, call (415) 493-5000, ext. 4572 from 1-4 p.m. weekdays.

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BAGSHAW RECEIVES GOLD MEDAL FOR CONTRIBUTIONS TO CANCER THERAPY

STANFORD—

Dr. Malcolm Bagshaw, chairman of the radiology department at Stanford University School of Medicine, has been named the 1985 Gold Medal Award recipient of the American Society for Therapeutic Radiology and Oncology (ASTRO).

He will receive the award and deliver an honorary luncheon address at the Society's annual meeting Oct. 1 in Miami Beach.

The Gold Medal, the highest honor the Society bestows, recognizes individuals who have made outstanding contributions to the fields of radiation therapy and oncology.

Bagshaw was cited for his "distinguished service and contribution to medicine" and to the Society, a national organization of radiologists and oncologists, of which he is a past president.

Bagshaw is an international authority on the use of the linear accelerator against a variety of cancers, including prostate tumors, infant retinoblastoma (an eye tumor), ovarian cancer, and mycosis fungoides, a cancer of the skin.

His special field of expertise is the treatment of prostate cancer, the second most common cancer in American males, accounting for 60,000 new patients and 30,000 deaths each year.

In clinical trials directed by Bagshaw since he joined the Stanford faculty in 1956, more than 900 patients with prostate cancer have been treated with a 75 percent survival rate, forming the largest group of such patients in the world to have been treated at a single medical center with the linear accelerator.

He has also been a leader in studying techniques for enhancing the effectiveness of radiation therapy and in the search for new forms of anti-cancer radiation. He was an early proponent of the use of chemical agents to augment the radiation response, and he has been a leader in the effort to develop negative pi-meson radiation treatments for deep-seated tumors.

Bagshaw has directed the division of radiation therapy at Stanford Medical School since 1960. He became chairman of the radiology department in 1972, and currently holds the Catharine and Howard Avery Professorship.

He has received a number of honors and awards, including the American Cancer Society's 1984 Medal of Honor.

9-27-85 —30— astro LH9

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MEDICAL CENTER TAKES STEPS TO COUNTER ROCKETING PRICE OF INSURANCE

STANFORD—

In 1975, the cost of malpractice liability insurance for Stanford University Medical Center was $500,000 per year. When officials recently were told that their malpractice insurance bill would be $5.5 million as of Oct. 1, they decided to make changes.

The Medical Center has chosen to go to a form of "self-insurance," paying less in premiums but increasing the deductible per case from $50,000 to $250,000.

"We felt something had to be done because between January and October of this year alone, Stanford's malpractice premiums skyrocketed from $2.7 million to $5.5 million," said Donald B. Tower, executive director of the Faculty Practice Program. "Going to a quarter-million-dollars deductible was an important decision for us."

In addition, the type of insurance coverage has been changed from an "occurrence" basis policy to a "claims made" policy, Tower said.

Under "occurrence" policies, premiums are pre-paid to cover claims regardless of when they are reported. For example, if someone is born with birth defects but doesn't file suit until the age of 18, that claim would be covered under the previous policy.

Under the "claims made" system, premiums are figured on a cumulative basis. Claims which occurred in the current year but are not filed until later years, such as the example above, are deferred in computing the premiums.

The first year such a policy is in effect, premiums would be based only on claims in that calendar year. The next year, they would be computed according to the claims filed in the years 1985 and 1986. The third year, they would be based on claims from 1985, '86, and '87.

By the fifth year, analysts have told Stanford, the cost of premiums probably will be as large as premiums under the old type of policy, but the advantage is that Stanford University Medical Center would be paying out less money right now, and can use that cash for other purposes.

Instead of paying $5.5 million in premiums now, the Medical Center will budget $3.4 million for malpractice insurance from Sept. 1, 1985, to Sept. 1, 1986. That amount includes $1.9 million for insurance premium, $1 million for "tail coverage," approximately $400,000 to cover deductible losses, and $100,000 for defense costs.

"Tail coverage" is a reserve amount held by the Medical Center to cover whatever future costs would be incurred if Stanford changes to a new insurer or a fully "self-insured" plan, said Robert M. Beth, Stanford University's director of risk management. The reserve would be needed, he said, to cover claims which occurred in the years the "claims made" policy was in effect, but were not filed until later.

He added that the decision to change the type of insurance from "occurrence" to "claims made" was made by officials from Stanford University Hospital, the Faculty Practice Program, and the Medical School. The committee making the recommendation was chaired by Carole Price, associate director, who was instrumental in establishing the first hospital-wide, risk management-quality assurance system.

During the past 26 years, Beth said, Stanford's malpractice insurance premiums were $23.8 million, while losses, defense costs, and expenses were $23.7 million.

Stanford is continuing to evaluate malpractice insurance alternatives, including reviewing and revising risk management procedures, Beth said.

Officials say the national "malpractice insurance crisis" impacts medical costs and the physician's choices of tests and treatment.

The American Medical Association (AMA) estimates that "defensive medicine"—physicians ordering extra health care procedures and diagnostic tests in order to protect themselves against potential suits—raises health care costs between $15 billion and $40 billion per year.

The insurance industry argues that the increases in premiums are the result of industry-wide losses, which reached $21 billion in 1984, the largest in history and the fourth year in a row of record losses. Underwriting losses for malpractice specifically amounted to $386 million last year, with New York cases accounting for $129 million of that deficit.

The AMA also reports that the number of malpractice claims has more than doubled in the last decade. Court awards of $1 million or more have gone from three in 1975 to 70 in 1983, the AMA says, even though some states have instituted stopgap measures:

For example, the amount of money that can change hands in a malpractice suit in California is limited by law. Lawyers' contingency fees are 40 percent of the first $50,000 of a malpractice award, a third of the next $50,000, 25 percent of the next $100,000, and 10 percent of anything more than $200,000. No pain-and-suffering award can exceed $250,000. Awards of more than $50,000 can be paid in installments, which are discontinued if the patient recovers or dies.

"The malpractice rates affect every hospital," said Dr. James F. Silverman, chief of staff, "but Stanford is probably in better shape than most places because we are a teaching hospital, and so we have built-in quality assurance. There are a lot of people here who review medical decisions.

"That scientific edge offers more opportunities for cures, but it still doesn't mean that everything is curable. Patients should be aware of that. They can't enter the hospital with serious and complex medical problems and expect to leave feeling perfect. If they leave feeling 50 percent better, that may be an excellent result. Patients have to change their unrealistic expectations."

Being a teaching hospital has its drawbacks too, said Silverman.

"It means that patients who come to Stanford may have more serious medical problems than patients at the average community hospital," Silverman said, "It also means that the patients haven't had a chance to develop a rapport with the physicians treating them in the way they generally do with their community physicians. A patient who has known a physician a long time and had a good relationship with that physician for years is less likely to sue if something goes wrong than if they've just met the physician."

One area where the courts have made huge malpractice awards in recent years has been in claims relating to obstetrics-gynecology.

Along with advanced techniques, such as ultrasound for fetal monitoring, have come potential risks, said Dr. Kent Ueland, acting chairman of Stanford's Department of Gynecology and Obstetrics.

"People feel they should be guaranteed a perfect outcome with childbirth and that isn't always possible," said Ueland, "but we do have a good review and monitoring system of cases that come to Stanford, and doctors who are weak in interpreting the results of certain procedures are required to have consultants when they use those procedures."

Ueland said there are many ways of reviewing physicians' performances, including nursing incident reports and periodic reviews of procedures and patient results by members of the quality care committee and the practice privileges committee.

Robert Kessler, associate professor of clinical surgery (urology), is chairman of the care review committee, and Karen Axnick is director of the care review-risk management department, "and both are actively involved in the identification, review and resolution of quality of care issues throughout the Medical Center," said Carole Price.

"Because of all the review at Stanford, the chances of having problems here are slimmer, I would say, than at the average community hospital," Ueland said. "We limit physicians' practice privileges if they aren't proficient in certain areas. Some doctors are asked to get consultants when they do fetal monitoring. Others are restricted from using mid-forceps. Some aren't allowed to do vaginal breech deliveries."

In recent years, modern technology has enabled hospitals to improve care and results, and allowed patients to return home sooner than in the past. According to Sheldon King, patients at Stanford University Hospital were staying an average 6.8 days in the fiscal year ending Sept., 1984, and in the fiscal year ending Sept., 1985, the average was about 6.5 days.

Donald Tower pointed out that because of changing medical technology, advances in drug therapy and improved diagnostic and treatment methods, much care that was rendered inside hospitals 20 years ago can now be provided on an ambulatory basis at lower cost. Still, he said, one major problem in terms of cost containment, is the size and the frequency of malpractice suits.

"Twenty years ago, patients generally didn't sue their doctors unless there was a really obvious case of malpractice," said Tower. "Today, people sue if they leave a place 50 percent better instead of 100 percent. I think patients need to understand that doctors aren't miracle workers, and they shouldn't expect unrealistic outcomes."

Tower added that he thinks the care at Stanford is "as good or better than anyplace in the country," and because of that, he supports the change to "self-insurance."

"Rather than pay more than $5 million for malpractice premiums, and let the insurance companies use our premiums to pay their losses for the crash of a jumbo jet somewhere, I think we're making a wise decision to take the malpractice risk and earn the investment income from the money we would have been paying out in premiums," Tower said. "Our doctors practice quality medicine here, and I think we'll end up saving lots of money with a self-insurance program."

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SAME-DAY SURGERY UNIT IMPROVED AT STANFORD HOSPITAL

STANFORD—

Patients don't have to wait for the Hospital Modernization Program (HMP) to be completed to begin benefitting from an improved Same-Day Surgery unit at Stanford University Hospital.

Carole Price, associate hospital director and administrator responsible for the project, said the new ambulatory surgery facility will begin service Monday, Sept. 23.

The unit is intended for use until a permanent one is built as part of the HMP.

There is a significant trend toward increased use of outpatient procedures, Price said, because they offer a more economical approach to less complicated procedures. They are geared toward the surgical patient not expected to require post-operative overnight care in a hospital.

In some situations, of course, admission to the hospital may be required after outpatient surgery, and "that's the advantage of having the unit as part of the hospital—which is right there for back-up as needed," Price said.

"As physicians we are looking forward to the conveniences that this new facility will offer not only to those of us who will be performing surgery there, but more importantly, to our patients," said Dr. John Collins, chairman of the Department of Surgery.

"Shorter hospital stays make surgery more economical and convernient for patients, and we're glad that our hospital can be a part of the evolution which is making this concept more prevalent," Collins added.

"Those of us in the community feel that this is a step in the right direction and will benefit our patients. I'm pleased with the enlargement of the unit, which will facilitate caring for our patients in a more timely fashion," said Dr. William R. Fielder, a Palo Alto general surgeon who operates at Stanford.

Advantages of the interim unit, Price said, include the comfortable accommodation of up to 12 patients on gurneys and reclining chairs. The old unit had only four adult slots.

"Services needed for the patient prior to surgery, such as blood tests, will be conducted in the unit, saving the patient trips to various labs or other areas of the hospital," said Claire Mailhot, director of operating room services.

To supplement the center's operating rooms where surgery is to be performed, the facility offers two minor treatment rooms. The two multi-purpose treatment rooms will allow space for pre-operative assessment of patients, including such diagnostic procedures as YAG laser therapy, and endoscopy/bronchoscopy, Mailhot said. Minor surgical procedures requiring local anesthesia may also be performed there.

"This provides a centralized place to do small biopsies, excisions of small masses and small basal cell cancers, and some minor ENT procedures," said Mailhot.

Patients coming for ambulatory surgery will be admitted, and have their lab work and tests done right at the unit, rather than having to go elsewhere for each function, she said.

The renovated facility also includes a recovery area, two bathrooms, one shower, lockers for patients, and a family waiting area (located conveniently close to the cafeteria). It will be well marked, Mailhot said, with easy access for patients, including designated parking (at no charge).

Price said starting in November physicians will be able to make a single phone call to arrange for both operating room scheduling and room reservations of surgery patients. This concept of "one call does it all," Price said, is an attempt to improve convenience and service to physicians.

The facility will open 5:30 a.m. weekdays. Clinical nursing coordinator is Lorraine Pucher, who remains CNC for same day surgery and the recovery room.

Mailhot said members of the public interested in touring the facility or making general inquiries about same day surgery should call (415) 497-5620.

9-18-85 —30— pricex mg7

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STANFORD — MAXICARE SIGN UNIQUE AGREEMENT

STANFORD—

In keeping with the changing trends in health care, Stanford University Clinic has signed an agreement to provide medical services to subscribers of Maxicare, one of the largest health maintenance organizations in the country.

"This is one of the few agreements between an academic institution and an HMO," said Donald B. Tower, executive director of the clinic. "We took this step because we recognize the soaring cost of health care is of concern to everybody. Employers are looking for ways to control expenses, and HMOs are one alternative to the traditional fee-for-service system."

The people who belong to HMOs pay monthly premiums that essentially enable them to get all the medical care they need with no additional costs, while the providers of care receive a fixed monthly "capitation payment" to pay for the cost of all care. This payment methodology produces a financial incentive to physicians to keep HMO enrollees healthy.

Last year, total spending for medical care in the United States was reported to be $322 billion, equal to 10.2 percent of the Gross National Product. The cost of health benefits cuts into employees' take-home pay, raises product prices, and impacts on the ability of American business and industry to compete in international markets.

By 1990, analysts predict, an estimated 15 percent or 40 million Americans will be members of prepaid health plans, as opposed to individuals covered by commercial insurers.

According to Dr. Fred W. Wasserman, chairman of the board and chief executive officer of Maxicare, "Although HMOs have been around for many years, their recent acceptance and growth in membership can be attributed to their ability to arrange health care in a cost effective manner by providing many surgical services on an out-patient basis, reducing the incidence of unnecessary surgery, covering periodic physical examinations and routine office visits, and by keeping members healthy through health education programs."

Members of Maxicare would pay a maximum of $2 for office visits to their doctors, and no claim forms are required, said Phillip L. Robbins, marketing director of Maxicare for Northern California.

The affliation with Stanford University Clinic is unique for both Maxicare and Stanford.

"I know of only a few other academic institutions affliated with an HMO," said Tower. "One is the Harvard Community Health Plan based in Massachusetts. That is affliated with Harvard University physicians. Another leader in this area is Washington University in St. Louis, which developed its own HMO several years ago."

Robert Dienes, executive director of Maxicare for Northern California, said that while it has contracts with individual physicians who are affliated with universities in different parts of the country, this is the first agreement between an academic institution and Maxicare. He added that 211 Northern California companies currently offer Maxicare to their employees. They include the Bechtel Power Corporation, Crocker National Bank, Honeywell, Inc., Neiman Marcus, and Pacific Telephone.

"When you mention the Stanford Medical Center to a lot of people, I think most of them think first of the world-renowned specialty care here," said Tower, "but it's important to note that we also have some of the finest primary care physicians available anywhere."

The clinic's professional staff includes 280 faculty physicians and surgeons, including 10 devoted to primary care.

"These are primary care doctors that patients come to develop a personal, one-to-one relationship with," said Tower. "These internists and pediatricians provide personalized, routine care, as well as acute care services when necessary. If a consultation with a specialist is needed, the primary care physician coordinates it so there's optimal continuity of care and cost effectiveness."

Stanford University Clinic is a practice with 140,000 patient visits per year, serving both the local and regional populations in Northern California and the West.

Within the last few years, there has been major renovation to modernize Stanford's clinic facilities.

The Maxicare plan covers primary care physician services, outpatient ancillary services and specialty physician services at Stanford. It also covers hospitalization in Stanford University Hospital.

Stanford's faculty practice physicians also participate in the Blue Cross Prudent Buyer Plan and Blue Shield's Preferred Plan. Patients insured by these plans must be seen by "preferred physicians" to receive maximum benefits.

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maxicare jk1

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FOR INFORMATION CONTACT: Roberta Friedman (415) 497-6911
FOR IMMEDIATE RELEASE

UNUSUAL THIRD WORLD DISEASE STRIKES SOUTH BAY MAN

STANFORD—

A rare case of parasites in the brain, a disease normally confined to third world countries, was revealed last week to have struck a Northern California resident now being treated at Stanford University Hospital.

The 22-year-old victim comes from a small village in Mexico. His disease is not contagious, but it illustrates the risks of bad hygiene, said Dr. Carlos Camargo, associate professor of clinical medicine who supervises the patient's care.

As more immigrants from rural areas in impoverished countries settle in the United States, Camargo added, American doctors may be introduced to diseases that are a legacy of primitive living conditions.

Miguel Garcia (not his real name, to protect his privacy) grew up drinking water from springs and rivers. There were no toilets or even outhouses in his village. He now carries the larvae of a pig tapeworm in his brain.

It is unusual for a human to be infested with the immature form of the worm, Camargo explained. More commonly, people will harbor the adult parasite in their intestines.

Infections with the adult worm, which give mild symptoms such as anemia or stomach cramps, are easily cured, Camargo said. But getting rid of larvae, he said, is more difficult.

Garcia, now living in a South Bay town, came to his local hospital complaining of a severe headache that was getting worse. Lights bothered him, he saw halos around objects, and he also had a stiff neck.

A spinal tap revealed evidence of severe inflammation of the tissues around the brain. He was rushed by the Lifeflight helicopter to Stanford.

"When we looked in his eyes (with an opthalmoscope), we saw clear evidence of severe pressure within his head," said Dr. Barbara Widom, the resident physician who first saw Garcia when he arrived at Stanford near midnight.

An emergency CT scan revealed clustered dark splotches of fluid-filled cavities, or cysts, within the patient's brain. A few older cysts, now calcified, could also be seen.

Knowing the patient was originally from rural Mexico led the attending doctors to suspect that the cysts represented the rare, larval form of the pig tapeworm disease, which is called cysticercosis. The next morning, Stanford neurologists confirmed the diagnosis.

A shunt surgically placed inside Garcia's head now drains excess fluid into his abdominal cavity.

Without this immediate step to decompress the brain, Widom said, Garcia would have suffered brain damage.

9-16-85

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"He seems fine neurologically," she said. "Our main concern was that he would lose his vision.

Garcia's visual problems have cleared, however, and his headaches are relieved, said Camargo, who converses with the patient in Spanish.

According to Widom, the patient "could have subtle deficits (in mental ability) that we're not aware of," but, she added, as far as Camargo and other Spanish-speaking care givers can tell, Garcia has suffered no permanent harm to his brain.

He has been placed on steroids in preparation for the drug therapy he will receive.

Praziquantel is the only compound available to kill the tapeworm larvae, Camargo said. It works, but debris left by the mass death of the parasites can provoke more swelling and inflammation within the brain. Steroids hopefully will avert this reaction, but Garcia will have to stay hospitalized so the doctors can carefully monitor his response.

In the more common infestation with the adult parasite, Camargo said, larvae living in the flesh of pigs can find their way to the human gut where they attach and grow into worms, if infected meat is eaten without being thoroughly cooked.

"Pork should always be cooked until gray, with no pink left," which will kill any parasites, Camargo said.

Larval infections are acquired differently.

Eggs laid by the adult worm are carried into the ground by the host's feces. From the soil, the eggs can contaminate drinking water.

Only by swallowing the eggs can people get the larvae in their body tissues.

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STANFORD OPENS SPECIAL CLINIC TO HELP BREAST CANCER VICTIMS

STANFORD—

A new multidisciplinary, consultative breast cancer clinic provides the final link in Stanford University Medical Center's breast cancer treatment program, said its director, Dr. Frank Stockdale, professor of medicine.

The new clinic, scheduled to open Sept. 27, provides an entry point for patients to be treated at Stanford.

"With this new clinic we now have a very comprehensive breast cancer treatment program," Stockdale said.

Unique to the region because of its multidisciplinary make up, he continued, the clinic provides women at high risk or recently diagnosed with breast cancer one central place at which they can undergo all necessary diagnostic procedures and be informed of all possible treatment options before treatment is initiated.

"If a woman gets breast cancer, she typically has to go to several physicians in order to learn about and get treatment," Stockdale said.

Women can come to the new clinic, staffed by breast cancer specialists including oncologists, surgeons and radiologists, for evaluation and consultation of all treatment options, Stockdale explained. The patients will then be referred to the appropriate Stanford clinics for treatment.

"Often what happens is one physician will initiate a treatment that may not be the optimal one," he added. "What we want to do is to be able to design for each individual a treatment program that takes into account all considerations."

The new clinic is "only part of a larger program for the diagnosis and treatment of advanced breast cancer already active in the medical center," he said.

Other services it provides include evaluation of pathological slides, mammography, radiological imaging, hormone receptor assays and breast self-examination training. Special programs including individual counseling and support groups will also be available to help patients cope with the emotional side of their illness.

For more information, call 497-7621.

9-16-85 —30— breast-sk6

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TWO STORIES

FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 497-6911
FOR IMMEDIATE RELEASE

MCDEVITT WILL BECOME NEW MICROBIOLOGY CHAIRMAN IN JANUARY

STANFORD—

Dr. Hugh O. McDevitt, Joseph D. Grant professor of medical microbiology and medicine, has been appointed chairman of the department of medical microbiology of the Stanford University School of Medicine, Dean David Korn has announced.

The appointment will be effective January 1, 1986.

McDevitt, 55, noted for his work on the genetic control of the immune system, has been on the Stanford faculty since 1966. He will succeed Dr. Stanley Falkow, professor of microbiology, who served as chairman since 1981. Falkow, widely recognized for his work on the application of modern concepts and technologies of molecular biology to problems of human infection and development of vaccines, will return to full-time research and teaching.

Medical microbiology is the third basic science department of the medical school to adopt a system of rotating chairmanships, explained Korn.

The dean recently announced a new policy which anticipates that in preclinical departments, the rotation of the chair will "become the usual and desired practice in order to promote stability of academic leadership and continuity of programmatic development."

Until recently, when departmental chairs became vacant, the prevailing practice in the school was to seek replacements from the outside. The new system of rotating chairmanships has been successful in departments such as biochemistry and cell biology, Korn said.

A Stanford undergraduate, McDevitt received the medical degree from Harvard Medical School. He was promoted to professor of medicine at Stanford in 1972 and received an appointment in the department of medical microbiology in 1978. During the 1970s he headed both the division of immunology in the department of medicine and the clinical immunology laboratory at Stanford University Hospital.

He was elected to the National Academy of Sciences in 1977 and to the National Institute of Medicine in 1983.

In recognition of his work, McDevitt has received the Borden Award for oustanding research from the Association of American Medical Colleges in 1977. In 1981 he received the Passano Foundation Award for his research on "the relationship between the immune system, histocompatibility antigens and human disease."

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SAUL ROSENBERG APPOINTED TO ENDOWED CHAIR

Dr. Saul A. Rosenberg, professor of medicine and radiology, has been appointed the Maureen Lyles D'Ambrogio professor in the Stanford University School of Medicine by the board of trustees.

Rosenberg, 57, chief of the division of oncology of the department of medicine, is internationally known as an innovator in the field of clinical oncology.

The D'Ambrogio endowed professorship was established in 1970 by the late N.J. D'Ambrogio of Carmel, as a memorial to his daughter, Maureen, who died of cancer in 1967. Cancer research pioneer Dr. Henry S. Kaplan became the first holder of the chair in 1972. Kaplan died in 1984.

Rosenberg, a graduate of Western Reserve University School of Medicine teamed up with Kaplan and other colleagues at Stanford in the early sixties. They helped develop an effective treatment strategy combining drugs, radiation and surgery, that has dramatically improved survival rates for Hodgkin's disease patients. Nearly 80 percent of these cancer patients, when prcoerly treated, can now be cured of the disease.

He is a recipient of the 1984 David Karnofsky Award from the American Society of Clinical Oncology for innovative clinical advances made in oncology during recent years.

Rosenberg heads a major research program which brings together both clinical trials and laboratory studies in an effort to improve the treatment of patients with all types of malignant lymhoid tissue tumors.

Rosenberg also holds the American Cancer Society's professorship in clinical oncology, awarded by its California division.

9-16-85 —30— promo-SA8

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FOR IMMEDIATE RELEASE

MEDICAL SCHOOL ADOPTS UNIQUE APPROACH TO ATTRACT MINORITIES

STANFORD—

A unique summer program to increase the number of minority and economically disadvantaged students has been under way at the Stanford University School of Medicine.

Started a year ago in response to a sudden decline in enrollment of minority students, the program gives students an early entry and orientation into Stanford's educational environment and prepares them for experiences not only in clinical medicine but in research as well, according to associate dean Dr. Robert W.P. Cutler. The program is opened to students of primarily hispanic, black, native American, and low income backgrounds.

The program is important, Cutler explained, because Stanford is committed both to training physicians for the scientific practice of medicine, and for biomedical research and academic careers.

Physicians from minority backgrounds are seriously under-represented on medical school faculties, Cutler said. The Stanford curriculum is designed to develop in all students the capacity for leadership in the clinical practice of medicine and to prepare them for research and teaching in the various branches of basic, clinical and social medicine.

"Although a small fraction (about 15%) of our students pursue a career in full-time research, we have little doubt that these research experiences taken by the majority contribute to their maturation as competent, scientifically-oriented physicians," said assistant dean Dr. Fernando Mendoza who, with assistant dean Dr. Roger Peeks, directs the new program under a three-year $331,000 grant from the Health Careers Opportunity Program of the U.S. Public Health Service.

An Office of Student Affairs analysis of those students who have not pursued research opportunities offered at Stanford has shown that about 75 percent are from minority backgrounds.

"We do not believe that these disadvantaged students are lacking in desire to enrich their education through research experience," said Mendoza. "Instead, many of these students have had to omit this important aspect of their educational program because they are often encumbered by a difficult struggle to do well academically during the preclinical years."

To counter these forces, Mendoza explained, the program offers an early matriculation, eight-week summer program in which students admitted to the school take courses in such subjects as biochemistry and histology coupled with research of their own choosing under faculty supervision.

In addition, the program offers educational assistance, counseling and individualized evaluations to insure a smooth transition into Stanford's medical environment during their first year.

Beyond the summer program, Stanford's efforts to increase the success of its affirmative action commitment includes continued support from tutorials to counseling during the preclinical and clinical years.

When the first class of seven students enrolled for the summer program, the results were very positive, Mendoza said. All students did well in their courses and their research experience was received favorably. This summer's class agrees.

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"The summer program gives us a chance to get two classes out of the way, to start on research projects that are of interest to us, and to adjust to an environment that is very different, much more affluent, than what most of us are used to," said Abe DeAnda, 23, one of the students in the program.

Before entering medical school, DeAnda worked as a mechanical engineer, designing automated test equipment. He would like to apply those skills and the skills he gains as a doctor to design artificial organs.

Adrienne Randolph, 23, who is working with researchers in the study of nerve regeneration, said, "The summer program has been very important to me, because it helped me make a social adjustment to Stanford. If I hadn't started early, I probably would have had a multitude of problems my first quarter, but the fact that I've met people and made friends during the summer will make the fall much easier, I know."

Miriam Larios, 22, was impressed with the fact that Stanford offers a five-year curriculum, whereas many schools require students to complete their medical education in four years. Larios is particularly interested in developing health and nutritional programs for Mexican-American children.

"There's a real need for minorities in health education," Larios said. "If you've got a dream, pursue it. Apply to medical schools. Keep applying if you're not accepted right away. Don't let anyone discourage you."

Abdullah Brooks, 29, agreed. "Many minorities might have felt medical school was out of their league, not a real option for them, but there are real opportunities now for minorities who want to go into science," said Brooks, whose research interests are malnutriton and certain parasitic diseases that are widespread in Africa, where he lived for many years. "The competition in medical school is intense for the truly qualified, but there are several things that can be done. Apply for outside loans and grants. Compete for fellowships and other grants and scholarships."

Brooks, who is married and the father of three children ranging in age from two to nine, said time management is an important aspect to being a successful student. "I think it's important to have realistic expectations, to understand that there are tremendous pressures in medical school," he said, "but don't be so discouraged by the problems that you don't follow your dream."

Stanford's medical school has been involved in the recruitment and education of disadvantaged students since 1969. They have comprised 15 to 20 percent of the entering class. According to a 1983 survey published in Health Careers Network, the percentage of minority students has been higher at Stanford than in any other U.S. medical school.

Recently, however, the school's minority enrollment declined to 12 percent. Mendoza attributes it to several factors explained by student questionnaires. They include misperceptions of financial cost and of Stanford being for those students interested only in research.

"But cost, viewed in context with the average indebteness of medical students in other schools show Stanford to be very competitive, because scholarship support is based on financial need and there is a tuition limit of 13 paid quarters," Mendoza said. "This results in an average indebteness of about $26,000 for Stanford students as compared to $24,000 for those attending state schools. And students can decrease their debt by research and teaching assistanships which provide tuition credits at Stanford."

The second misconception can be dispelled by statistics which show that about 85 percent of Stanford's medical graduates enter clinical practice, Mendoza said. "Research is an important part of the medical school curriculum to facilitate the teaching and learning of scientific medicine, to stimulate critical thinking and provide a wider range of professional career opportunities."

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PALO ALTO PHYSICIAN DISPLAYS UNDERWATER PHOTOGRAPHY IN HOSPITAL

STANFORD—

Man and the ocean have been intertwined in Dr. Alfred Spivack's life for many years.

The Palo Alto cardiologist taught swimming and boating to help pay his way through college and medical school. Now, his active interest in scuba diving and underwater photography is an active adjunct to his interest in sports medicine and underwater physiology.

Spivack, a clinical professor of medicine at Stanford, directs the sports medicine course at the medical school and personally teaches the section in diving medicine. During vacations and off hours, he takes his cameras underwater in such locations as the Philippines, Caribbean and the Red Sea, and then processes and prints his pictures himself to ensure quality.

Members of the public will have a chance to see 38 of Spivack's photographs in a display mounted outside the Stanford University Hospital cafeteria from Sept. 30 through the end of the year.

Entitled "Rainbows of the Sea," the photo display is open free to the public. Spivack has donated several of the photographs from the exhibit to be sold to benefit the Hospital Modernization Program (HMP), the $114 million construction and renovation project.

Kristine Erving, community outreach coordinator in the hospital's Department of Community and Patient Relations, said the photo display is the first of several by Stanford-affiliated physicians which will be held while HMP construction continues through the fall of 1987.

"We found there are several extraordinarily talented photographers among our medical staff," Erving said. "So we thought displaying their works during the time of construction was an unusually appropriate way to ensure a pleasant environment in our hospital while giving members of the broader community an opportunity to view an extracurricular dimension of our medical staff," Erving said.

Spivack said he became interested in scuba diving shortly after he resigned as director of the hospital's Cardiac Care Unit in 1975 to concentrate on his private practice and voluntary teaching duties. Once underwater, "I wanted to bring back some of what I saw in pictures," he said.

The physician's photographic work is varied, and includes scenic vistas of the underwater world, as well as closeup pictures focusing on color, shape and form.

Spivack's wife, Anita, is an interior designer who shares her husband's interest. "Her input is important in terms of artistic composition," says Spivack.

9-13-85 —30— spivart mg7

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NURSING CHIEF WALKER ACCEPTS HAWAII POST

STANFORD—

Duane Walker, associate hospital director and director of nursing, will be leaving Stanford University Hospital Nov. 1, 1985 after seven years for a position as vice president of Queens Medical Center in Honolulu.

Walker's many accomplishments at Stanford range from successful recruitment of nurses during a nationwide shortage in the early 1980s, to launching one of the country's first nursing research departments, to the development of a clinical ladder for staff nurses by which they are promoted and rewarded "just as much for bedside nursing as they would be for management."

Under Walker's direction Stanford's nursing department this year launched a home care program.

A satellite B.A. nursing program in conjunction with San Jose State University was set up during Walker's tenure, as well as a satellite master's program at Stanford through the University of California, San Francisco.

Walker, himself a registered nurse, has worked towards opening the nursing profession's doors to both sexes. Although the field is usually perceived as "feminine," Walker insists that any profession can only benefit from the variety of contributions provided by men and women.

Before coming to Stanford, Walker, a native of Iowa, served as assistant administrator for patient care services at the University of Utah Medical Center. He received his undergraduate degree from Weber State College, Utah, in 1964 and his master of science degree in psychosocial nursing from the University of Utah in 1975. He served in the U.S. Army Nurse Corps as an inservice education instructor from 1966-68.

At Queens Medical Center, Walker said he will have administrative responsibility for the mental health center, outpatient clinics, cardiology, EKG, physical therapy, occupational therapy, rehabilitation, volunteer services, patient relations, social services, emergency, operating rooms, ambulatory surgery, and general nursing units.

The 569-bed hospital recently moved into a new 10-story building with many new facilities—similar to the upgraded facilities planned for Stanford under the Hospital Modernization Plan (HMP), he said.

9-13-85 —30— walker mg7

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HARVARD PHYSICIAN VISITS STANFORD AS KOVITZ PROFESSOR

STANFORD—

Dr. Edgar Haber, Harvard Medical School's cardiac unit chief, is Stanford University Medical School department of medicine's 1985 Kovitz Visiting Professor.

Haber will give a research seminar in cardiology, "Antibodies as *in vivo* diagnostic and therapeutic agents in cardiovascular disease," Wednesday, Sept. 25, at 4 p.m., in the cardiovascular research building library.

Haber will lead grand rounds and give the Kovitz lecture, "Fibrin-specific antibodies as potential diagnostic and therapeutic tools," Thursday, Sept. 26, at 8:30 a.m. in Fairchild Auditorium.

A reception honoring Haber will be held for department of medicine faculty, fellows and housestaff Sept. 26, at 5 p.m., in the department's library.

The visiting professorship was established in 1970 in honor of the late Dr. Louis Kovitz and his wife, Dorothy. The purpose of the professorship is to allow physicians of national or international prominence to give annual lectures, rounds and clinical pathological conferences on topics of medicine and surgery at Stanford.

Haber is the Higgens Professor of Medicine at Harvard, where he directs the M.D.-Ph.D. program in addition to his responsibilities in the cardiac unit. He is involved in many medical school and hospital committees, and chairs one on conflict of interest and commitment.

Haber serves on several editorial boards, and is editor-in-chief of *Hypertension*. He is involved with many professional societies, including fellowship in the American College of Cardiology and American College of Physicians.

Haber received an award for outstanding research earlier this year from the International Society for Heart Research and *The Journal of Molecular and Cellular Cardiology*.

For more information, contact Teresa Terry in the department of medicine, 7-5452.

9-11-85 —30— kovitz sk6

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POST MENOPAUSAL WOMEN SOUGHT AS VOLUNTEERS FOR STUDY

STANFORD—

Volunteers are being sought to participate in a Stanford University Medical Center study examining the role of biological factors such as hormone levels and aging on human sexual behavior.

Dr. Julian Davidson, professor of physiology, is seeking about 30 postmenopausal women with whom he can examine the effects of hormone replacement therapy. The women should be at least one year past menopause, and should not have had any hormone treatments for at least three months. They should be generally in good health.

Participants will receive a physical examination upon acceptance to the study. They will be required to come to about six appointments at Stanford during the three-month long study, during which time they will be administered either one hormone, a combination of hormones or a placebo. The effects of the hormone therapy will be monitored by questionnaires and physiological responses to erotic stimuli.

For information about the study, call Dr. Lin Myers at (415) 497-2432.

9-11-85 —30— study sk6

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FOR IMMEDIATE RELEASE

(Editors: Photo available if not included)

RETIREMENT FOR HENRY JONES MEANS EXPLORING NEW VISTAS IN RADIOLOGY

STANFORD—

Professor Henry H. Jones anticipates having the time to cash in on exciting advances in radiology as he retires from full-time duties at Stanford University School of Medicine.

At 68, Jones has spent 37 years with the university, having joined the radiology department as instructor in 1948.

For his retirement, he has drafted a three-page list of ideas to pursue, "though if you come by in six months you'll probably find me in front of the TV drinking beer," he quipped during an interview. Belying his light-hearted prediction are some serious thoughts for future teaching and medical sleuthing.

A colleague, Dr. Ronald Castellino, calls Jones "a skilled radiologist and one of our better teachers." Jones received the Henry J. Kaiser award for excellence in clinical teaching from the medical students in 1982.

Jones said he will continue his "formal classes which are very informal" for medical students and residents, and hopes to finally create a computerized order out of the controlled chaos of his files of x-ray films used in teaching.

"I plan to put my wife to work on that," he noted about the latter task. Since Proposition 13 closed the clinic at which his wife, a pediatrician, had worked, Jones said she has helped him prepare the Saturday morning conferences that he holds with pathologists and orthopedists. The weekly meetings have generated valuable teaching materials that he would like to organize so others can easily use them.

Meanwhile, he said, he will "keep his eye at the knothole" to follow the latest developments in magnetic resonance imaging (MRI) and synchrotron radiation. These sophisticated technologies were almost beyond imagination three decades ago when Jones, as assistant professor of radiology, struggled to improve ways of watching a beating heart with conventional x-rays.

In retrospect, his efforts at improving the efficiency of x-ray movies failed, Jones said, not because the potential wasn't there, but because "I didn't push hard enough. I didn't appreciate how you have to get the people and money together."

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The experience, he said, taught him how frustrating it can be to work on "the edge of technology."

But, fascinated by that fast-moving edge, he now cites MRI as the most important advance in medical imaging that has occurred during his lifetime. "CT (computed tomography) opened the door to a tunnel," he said. "MRI has opened a door to a whole plain—it's mind-boggling."

And it may finally solve what has remained a mystery throughout his career. His main research interest has been the skeletal system, but details of the route blood takes through bones remain sketchy. Once a blood vessel dives into a bone, the trail it traces on an x-ray picture vanishes, as bones block x-rays, Jones explained.

Yet understanding the blood supply of bone may give clues as to why some fractures don't heal properly, or at all.

Though he has not yet pursued funding, and the ability to peer inside bones with the new methods is not yet fully explored, he expects that both MRI and synchrotron radiation "can make bone disappear, so we can get an idea of which way the blood is flowing."

The radio-frequency waves of MRI can penetrate bone. And, he said, the precisely tuned x-rays generated by a synchrotron can theoretically subtract calcium's signal, leaving behind an image of the vessels.

In past research, Jones has studied the nutritional requirements of embryonic bones grown in tissue culture, and he helped document the increase in bone mass that occurs in the playing arm of tennis professionals.

Other academic pursuits have ranked equally with work in the lab. "One of the most rewarding things I've done is pre-medical advising," Jones said. And according to his consecutively numbered student files, he has counseled 847 undergraduates who he describes, with tongue only partly in cheek, as "misguided enough to wish to become physicians."

"It is a demanding profession—it requires such an investment of time and energy," he said. To choose medicine, he continued, there should be "a direct, emotional commitment to patients."

Having started at Stanford before the medical school moved from San Francisco to join basic sciences on the Stanford campus, Jones has seen the medical school grow from "a relatively small place to a nationally recognized one" with a roster of "extraordinary people."

He received his M.D. degree from Yale University in 1943, spent his internship in New York and his residency in New Haven, and was a radiologist in the army for two years before coming to Stanford. He also served as Chief of Radiology at the Palo Alto VA Hospital from 1960 to 1972.0September 9, 1985

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FOR IMMEDIATE RELEASE

VOLUNTEERS NEEDED TO TEST INTERFERON ON WARTS

STANFORD—

Scientists at Stanford University Medical Center are looking for 10 volunteers to test the effectiveness of an interferon lotion in treating warts.

Volunteers must be in general good health and at least 18 years of age. They must have at least four warts that are no less than one-and-one-half inches apart.

Human warts, *verruca vulgaris*, are caused by a virus infecting the skin. Currently accepted treatments include using a lotion called Podophyllin, freezing with liquid nitrogen or surgically removing them. Interferon, an antiviral agent produced naturally by the body or synthetically manufactured, may be effective in combatting the wart-causing virus, the researchers believe.

Patients admitted to the study will receive a complete physical examination and blood chemistry tests at the beginning and end of their treatments. They will be required to come to the dermatology department daily for a three week period to have the interferon lotion applied. Those who complete the study will receive a $150 reimbursement.

To volunteer for the study, call Diane Wenner, clinical studies coordinator, at (415) 497-7944.

9-5-85 —30— warts sk6

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NATIONAL KIDNEY FOUNDATION HONORS STANFORD PHYSICIAN

STANFORD—

Stanford nephrologist Dr. Roy H. Maffly will be presented with the Gift of Life Humanitarian Award from the National Kidney Foundation of Northern California on Sept. 13.

The foundation is honoring Maffly, Stanford medical school associate dean for student affairs and professor of nephrology, with a scientific symposium and a testimonial dinner on the same day.

Maffly is receiving the award for "his research in kidney disease, involvement in kidney organizations, improvement of patient care and the training of medical students, housestaff and fellows in kidney disease."

The all-day symposium, "Review of Nephrology," will be held at Fairchild Auditorium, Stanford University Medical Center. The dinner will be held at the Stanford University Faculty Club that evening.

Proceeds of the program will benefit the National Kidney Foundation and the Robert Maffly Endowment Fund for Stanford Medical Students.

Maffly has served in numerous positions since he joined the Stanford medical faculty in 1961. He currently co-heads the division of nephrology in addition to his responsibilities as associate dean for student affairs. He has received eight awards for excellence in teaching, most recently the university-wide Walter J. Gores Award. Maffly is the first medical school faculty member ever to receive the award.

Maffly has been actively involved with the National Kidney Foundation and the American Heart Association in research and leadership capacities. In 1984 he received the AHA Scientific Council's Distinguished Achievement Award.

Maffly has also been a member of the Board of Trustees of the Satellite Dialysis Center, a non-profit corporation that provides dialysis in Northern California and contributes to kidney research.

For more information about the symposium or the dinner, call the national Kidney Foundation of Northern California at (415) 697-0110.

9-4-85 —30— maffly sk6

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FOR IMMEDIATE RELEASE

STANFORD HOSPITAL FACING FEWER PATIENTS ADOPTS NEW STRATEGIES

STANFORD—

A slogan floating in the hallways of Stanford University Hospital these days is something called the "paradigm shift."

To those unfamiliar with the term, its mere mention evokes smiles or bewilderment. But to managers, concerned about a shrinking patient census and bottom lines necessary for the survival of the hospital, the idea is nothing more than a strategy shift to meet the trends reshaping medical care.

"The message we're trying to get across is that we must change our primary standard of excellence," said executive vice president and hospital director Sheldon S. King in an interview. "For lack of a better term we've adopted 'paradigm shift,' meaning that we will make the satisfaction of physicians and their patients our first priority.

"If the physicians are unhappy, chances are their patients are unhappy. It comes back to the fact that rarely patients choose hospitals. It's doctors who decide."

This message seems to have been lost in university hospitals, King explained. "Until now their training and research missions were guided by national policies that had allowed them to place their priorities closer to their institutional convenience. This isn't true anymore.

"We are in a period of review and change in America's traditional health care systems. Hospitals must incorporate institutional values, employee concerns and patient considerations into their everyday operations. Patient service, teaching and research and public education must be blended with all factors which influence the productive functioning of the hospital."

To make the point, King cited the hospital's computerized accounting system. "It produces timely bills and the people who use it have done an excellent job," he said. "But the system still produces an unintelligible bill. Our mistake was to build it from the perspective of the hospital, not the patient. Today we'd do it differently."

Stanford hospital will stress more than ever the importance of service in personnel training and hiring, King said. "We now have a plan. It's a draft because it must be flexible, but it identifies some of the directions we'll be taking."

The plan, he said, reflects not only his own but the hospital board's concerns—"how to care for patients in a less costly way, with the quality a hospital such as Stanford should provide."

When he came to Stanford from the University of California at San Diego, King had said, "I believe I do understand what it takes to make a large teaching hospital run effectively. That's what I'm here for, and essentially it is what I am interested in professionally."

In four years, the 54-year-old executive has been recognized for his deft touch in guiding the process of change. He started by telling hospital managers they must look at goals, resources, and budgets and consider needs of the immediate and national communities served by Stanford hospital.

He assembled a new management team, and developed a program in which objectives were specified in writing along with departmental action plans accompanied by timetables for completion and evaluation.

"Interactions between subordinates and supervisors in deciding objectives leads to improved performance," King said.

The result: a hospital which has run consistently in the black.

King attributes the success, in part, to the hospital's reorganization as a university "sister" corporation. "It has allowed us to set priorities, adapt more readily to external challenges, and develop more comfortable relationships with the medical school and the community physicians," he said.

The "sister" corporation status enables the hospital to enter into joint ventures not only with the medical school and the faculty practice, but other organizations, King said. "We're still tied to the mother house, yet independent enough to pursue relationships as a community hospital."

For example, the hospital participates with the Palo Alto Medical Clinic in TakeCare, a prepaid health plan sponsored by Blue Cross, and it is discussing other possible joint ventures. It is a participant in Blue Shield's prudent buyer plans. And it is exploring with a group of independent physicians prospects for offering primary care services to employees of local corporations. Other efforts include the launching of a home care program, and Life Flight, a helicopter emergency service run jointly with Santa Clara Valley Medical Center.

In January, in addition to his present duties, King will become president of the corporation, succeeding Dr. Lawrence G. Crowley, the vice president for medical affairs who recruited him. Crowley will be returning to academic duties.

Clad in a light beige suit and a tie, the confident, tough but congenial King candidly touched on a wide range of topics during the hour-long interview. He included things he found professionally satisfying and those that have frustrated him most. Some excerpts:

On medical education and the teaching hospital—"The metaphor of the three-legged stool—education, research and patient care—often invoked to describe the functions of academic medical centers is no longer valid. It may be a triangle, but the sides are not equal. There's now a longer side—patient services. Within that I would subsume the members of the medical staff and their satisfaction. An emphasis on patient care is not a conflict of values. It's the proper environment for a hospital where young physicians are trained."

On relationships of medical school and hospital—"Dean David Korn and the decisive approach he brings will match what the hospital needs from the medical school side. There will be very good consonance in direction. The school and hospital, for example, have been working closely on joint ventures in magnetic resonance imaging and ambulatory surgery. The hospital is a participant with the faculty practice in Maxicare, one of the nation's largest private health maintenance organizations. These represent a real joining of interest and a sharing of risk-taking which are positive features."

On the decline of patient census—"In a way you may associate the decline with my arrival. But perhaps all that means is that I came at a time when the new era, the re-regulated era in patient care, was beginning.

"We are now faced with a competitive economy. For hospitals it translates as competition on the basis of cost since there's no yardstick for measuring quality in health care.

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"Stanford is perceived as an expensive hospital. It's perhaps one reason why some patients go elsewhere. But comparisons are misleading. When hospitals claim they are providing superior quality of care, they are looking only at morbidity and mortality statistics. These don't tell you what the patient's condition was like when treatment began.

"Community hospitals treat healthier patients without the overlay of teaching. At Stanford we can make a substantial argument that having a housestaff makes our intensive care units more cost-effective.

"Our challenge will be, Can we continue to attract patients to Stanford for particular services? Can we make our focus one which gives physicians good reasons to want to bring their patients? Our hospital modernization will help. It means we'll have new facilities, including enough operating rooms to meet medical staff needs. Many of our very talented physicians do not admit patients now because of the physical limitations. The number of private rooms for patients will be increased. And a new, attractive Children's Hospital linked to a Women's Center, handling not only perinatal medicine and routine obstetrics but all women's illnesses, will give us a unique facility."

On physician relations—"One of my tasks has been to begin a dialogue with our physicians, both on the full-time faculty and the community side. We have had frank and interesting discussions. Rarely are two consecutive meetings the same.

"But I'd like to see an end to the acidity that has characterized relationships in the past. The medical staff should feel more a part of the decision-making process. Physicians participate in the development of the capital budget now and we follow their recommendations. We want them involved in the operating budget, too, which is really a translation of the hospital's objectives. By that I don't mean participatory democracy. It's my responsibility to make decisions, with the kind of information only the medical staff can provide.

"To strengthen the hospital, we must get rid of administrative rigidities. We have physicians in the community who seek access to hospital laboratories as voluntary faculty. The hospital board has policies governing the conditions of access. Many university services are cooperating, but others seem unable to act quickly to implement board policy. Meanwhile, we are confronted with an underutilized hospital. While we agree the primacy of our university hospital is important, to maintain it by sacrificing its community component would be unrealistic. The result would be a 200-bed hospital, which would suffice for nothing."

On the board of hospital directors—"The separation of the hospital allowed the creation of an exceptional board. We're very fortunate, and I am saying this because I really believe it. Our board members are helping to shape and provide direction for the hospital, which is much more tuned to the times."

On the need to be proactive—"We have not moved quickly enough to seize initiatives. Our pace of change, our ability to respond to external factors is still slow. I understand the reasons since I have worked in academic institutions all my life. But it represents a clear and present danger no longer acceptable. If we continue to move deliberately and slowly, too much will have passed us by.

"It has to be part of our understanding that we can make mistakes, that most of them are retrievable and there's nothing wrong if something didn't work no matter how carefully we planned it. We have to make decisions and move when we have enough facts to do so, not when we have *all* the facts. In an academic environment one wants to have as many facts as he can get. But I don't think in today's competitive environment it's a plausible approach."

On the challenges facing the hospital—"These are not exclusively Stanford's. They affect all hospitals. One can look at what is happening to the proprietary health care corporations. They were touted as the prototypes of survival for health care in the eighties and nineties, but they've run into considerable difficulty. Their expansionist philosophy began to backfire as the health system entered a period of retrenchment and consolidation.

"Stanford faces problems that are national in scope—how to pay for graduate medical education, how much graduate medical education there should be in light of a predicted glut of physicians. We'll have to look at the size of our housestaff, but only in terms of the size of the population treated at Stanford hospital. Unless we introduce new services to justify its size, there will be a need to do something about. But I wouldn't relate such an action to the national issue of physician surplus.

"If one wanted to reduce the number of residencies in this country, he should start with those that are third-rate. They are not here at Stanford, which is not to say the each of ours is supurb either. But they can be strengthened."

On his administration—"It did take us awhile to build up momentum here. Part of the reason was changing the team, part was being able to understand the complexity that is Stanford hospital, and learning how to move it. I don't think we've done it yet completely, but we've learned how to do it.

"Next year when I reach five years on the post, I expect to ask the president of the university for a formal review. This is not only to decide whether we have taken the right course, but also to determine future directions. It's my responsibility to make sure it happens. The evaluation should not be done by the hospital board alone, but the medical staff, including people who disagree with me."

On his vision about Stanford hospital—"I see Stanford hospital as having a unique responsibility. It comes with its being one of a dozen institutions the country cannot do without, because they're essential to our national purpose and to the progress of medicine. My goal is to make certain that this hospital emerges as a leader in that group—in the development of new delivery patterns, applications of new technology, and as a model institution."

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FOR IMMEDIATE RELEASE

DIABETES STUDIES NEED VOLUNTEERS

STANFORD—

Volunteers in general good health are needed for three studies being conducted at Stanford University Medical Center by Dr. Gerald Reaven, professor of medicine, and his associates.

In one study individuals with diabetes as well as non-diabetic volunteers will participate in a study to help determine if fat cells of individuals with diabetes mellitus respond differently to insulin than fat cells from individuals without diabetes.

Volunteers should be between 20 and 75 years old and able to spend two to three days over a two week period in the Clinical Research Center (CRC) at Stanford University.

Another study will test individuals with diabetes with a newly approved oral medication for diabetes.

Volunteers for the second study should be between 20 and 65 years old and be willing to switch to the new drug from their current medication. They should be able to spend three to five days in the CRC to adjust to the new medication. Participants will then be monitored on a weekly basis for three months.

Individuals with diabetes are also needed in a third study to determine whether the addition of an oral agent to individuals with diabetes who are poorly controlled on insulin alone will improve their diabetic control.

These volunteers should be between 35 and 65 years old, currently taking 40 or more units of U-100 long acting insulin (NPH, Lente, or Ultra Lente), and be able to spend one to three days over a two-week period in the CRC.

Volunteers will receive free a complete medical examination including blood chemistry and urinalysis, an EKG, and dietary consultation.

For more information, contact Dr. Claire Hollenbeck or Dr. Arthur Swislocki at 497-6973, between 9 a.m. and 5 p.m.

10-31-85 —30— diabetes jtk1

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FORMER TIMES-TRIBUNE EDITOR NAMED TO STANFORD NEWS POST

STANFORD—

Two appointments to fill personnel vacancies, and a change in staff responsibilities at Stanford University Medical Center's Office of Communications were announced Thursday, Oct. 31, by Spyros Andreopoulos, director.

Ron Goben is the new associate director, and Jane Ayers Reimold is publications editor.

News editor Mike Goodkind now becomes the new editor of the *Medical Center Report*, a weekly supplement of Campus Report. He will continue to edit *Medical Staff Update*, the publication of the medical staff, and will be responsible for *Health Tips*, a new feature service scheduled to start this fall.

Laura Hofstadter remains science editor, and Shirley Kraus will continue as managing editor of *Stanford Medicine*, the medical center's magazine.

Goben, veteran journalist, former city editor and associate editor of the editorial page of *The Peninsula Times Tribune*, will report on scientific, medical and administrative developments at the medical center and hospital, and will participate in the day-to-day management of the office, Andreopoulos said.

Reimold, former manager of the communications division of the American College of Physicians (ACP) in Philadelphia, will be responsible for writing, editorial supervision and production of informational publications of the School of Medicine and Stanford University Clinic, in addition to reporting.

A graduate of Northwestern University's Medill School of Journalism, Goben worked as an editor for the *Chicago Tribune* and *Honolulu Star-Bulletin*. He covered medicine from 1964 to 1969 for the *Palo Alto Times* before the paper changed name and ownership. He has authored a medical book and has contributed popular articles on science and medicine to national magazines.

Reimold received a degree in journalism from Ohio University, Athens. She worked as a reporter/researcher for *Forbes* magazine, and from 1980 through the present helped to create and manage the communications program of the ACP.

The realignment of responsibilities was occasioned by the recent departures of staff writers, Lisa Ames and Jacki King, said Andreopoulos.

10-31-85 —30— changes SA7

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FOR IMMEDIATE RELEASE

EDITORS: This article originally appeared in the Fall 1985 issue of *Stanford Medicine*. Copies of the magazine are available on request. Inquire about photos.

CLUES ON NERVE CELL GROWTH AND FUNCTION MAY LEAD TO NEW TREATMENTS FOR CRIPPLING CONDITIONS

STANFORD—

Late one May evening in 1978, an elderly north Bay Area man and his wife were shot through their locked front door in an attempted robbery. Mr. Niemela, an 83-year-old retired San Francisco businessman, was killed instantly. His 79-year-old wife, Isabelle, was paralyzed from the neck down by several bullets that lodged in her spinal cord.

In the aftermath of the tragic event, Mrs. Niemela spent six months convalescing in the specialized spinal cord injury unit at Santa Clara Valley Medical Center, where she was surrounded by other paraplegic and quadriplegic patients. Their plight deeply distressed the elderly widow. When she died in 1981, she left more than two million dollars, one million of which went to Stanford University, to support basic biological research that could lead to a paralysis treatment.

Mrs. Niemela's bequest, part of which supports research at Stanford Medical School, may offer hope to the approximately 10,000 people who suffer spinal cord injuries each year in the United States. Because cells in the central nervous system do not regrow after damage or injury, the condition is irreversible. Until now, medicine has had little to offer.

But scientists are beginning to make headway against nerve injuries. With the new tools of molecular and structural biology, they are looking inside nerve cells to discover how they function and grow. The findings could lead to new approaches for treating paralysis, as well as to treatments for crippling conditons such as stroke, multiple sclerosis and degenerative nerve diseases like amyotrophic lateral sclerosis, better known as Lou Gehrig's disease.

Stanford scientists are exploring different approaches to reversing nerve cell damage. One is regeneration, the regrowth of severed, crushed or otherwise broken nerves. Another is reviving lost function in sick or degenerating nerve cells.

"Functional recovery is really what we want, whether it's restoring function in a damaged nerve fiber or regrowing a physically severed one," says Dr. Stephen Waxman, Stanford neurology professor and head of the neurology service at Palo Alto's Veterans Administration Medical Center. "You don't have to spend much time on a neurology or spinal cord injury ward to know that if we could repair just five percent of the lost nerve fibers, these patients would put them to use."

Getting nerves to grow seems like it should be a straightforward task. Skin grows back after it's cut, so why not nerves? A first step toward answering that question is to study nerves at the one time in life that they do grow: development.

The nervous system takes form as millions of newly born nerve cells, or neurons, sprout long fibers that elongate and connect up with target organs or other nerve cells. Each neuron knows just which other neuron to connect with. Like millions of elongating tentacles, the fibers, called axons, grow purposefully to their targets. But once the axons reach the target cells, growth stops.

In some cases, growth can recur. For example, peripheral nerves—the network of nerve fibers that reaches out to muscles, skin and other parts of the body—may regrow after being severed or crushed. Central nerves in some lower animals, such as fish and amphibians, can regenerate following injury. But in humans and other higher animals, neurons in the brain and spinal cord, called the central nervous system (CNS), do not regenerate, even after injury. Like adult teeth, they grow into place, but once they're lost, they're gone forever.

Or are they? What if scientists could find the "switch" that turns on nerve growth during development? Would it then be possible to flip the switch on and off as needed, triggering axon regeneration after a spinal cord injury, for example?

Stanford neurobiologists are looking for switch candidates among the genes and molecules active in developing and regenerating nerve cells. Dr. Eric Shooter, neurobiology department chairman, is studying one interesting contender, a protein linked to regrowth of damaged peripheral nerves in rats.

The protein, discovered by Shooter and neurobiology assistant professor Dr. Pate Skene, is synthesized at a high rate in young animals while developing nerves are still growing. In adult rats with established nervous systems, the protein is synthesized at a much lower rate. If an adult rat's nerves are damaged, regeneration occurs only in its peripheral nerves. Yet the scientists observed heavy synthesis of the protein in both central and peripheral nerves.

A closer look showed that the protein accumulated in peripheral nerves but didn't collect around central nerves. Stockpiling of the protein in peripheral nerves may contribute to their ability to grow, the scientists believe.

Skene and Shooter and their colleagues have now found that the protein is almost identical to a blood protein that shuttles fats in and out of cells in the body. Their suggested role for the protein, which is supported by preliminary evidence, is that it helps sponge up fat molecules that spill out of the damaged nerve cells. Then it hangs around with its fat cargo, which can be reutilized in construction of the new nerve that grows through.

While they are investigating further this protein's crucial role in peripheral nerve regeneration, Skene is also concentrating his current efforts on a protein called GAP-43. "GAP" stands for growth-associated protein and "43" stands for the protein's molecular weight.

GAP-43 has been found in growing nerves of animals ranging from goldfish to toads to rabbits. Skene, and his colleague Mark Willard at Washington University, discovered it initially in toads, where it is present in large quantities in the growth cone, the growing tip of regenerating axons.

In mammals—baby rabbits, for example—Willard and Skene found GAP-43 in developing nerves. Skene and Kate Kalil, a colleague at the University of Wisconsin, have found GAP-43 in newly developing axons of baby hamster cells. But as the proper nerve connections form in the maturing baby hamsters, levels of GAP-43 drop off. Skene and other colleagues found a similar pattern in studies of developing rat brain, suggesting that in mammals GAP-43 plays an important part in nerve growth during CNS development.

Are these proteins the crucial switches? "We don't yet know the functions of GAP-43 or other growth-associated proteins," Skene says. "There are a lot of jobs that go into constructing a nerve cell. We need to find out if we are dealing with the scavengers, architects, electricians or plumbers."

Ultimately, the scientists expect that at least several proteins will be needed for successful switching on of nerve growth. Skene has already identified several GAPs other than GAP-43. They hope to find a way of manipulating genes that control these proteins so that they can summon all the necessary "workmen" when nerve reconstruction is needed.

In a slightly different approach to studying nerve regeneration, neurologist Waxman and his colleagues are trying to learn from a master of the trade: the South American electric fish, *Sternarchus*, also known as the black ghost knife fish. This freshwater cave-dweller can regenerate a bitten-off tail, including its spinal cord nerves, within a few months after a predator's attack.

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"What we basically want to find out is what makes the fish able to regenerate so completely when a mammal cannot," explains Dr. Marilyn Anderson, a research associate who works with Waxman at the Palo Alto VA Medical Center. "And is there anything in those mechanisms that we can apply to humans?"

Waxman and Anderson have found that the fish can grow whole new nerve cells, not just new axons, in its spinal cord. Anderson has been able to remove nerve cells from the fish's spinal cord and get them to grow in the test tube. Waxman's lab is very unusual in having the ability to produce new neurons from adult tissue in culture. "The important point is that this enables us to look for the molecular mechanisms that control cell division and differentiation into neurons," Waxman says.

The new nerve cells grow from a region in the fish's spinal cord called the ependymal layer. A similar layer in mammalian embryos gives rise to CNS neurons. But although in the adult black ghost knife fish the layer can spawn new nerve cells, in the mammal it is dormant after the animal is born. But Anderson thinks that the ependymal layer has developmental potential which is repressed in adult mammals.

"If we can find a way to stimulate it—with a hormone, chemical, or other means that we may find in studies with *Sternarchus*—then it may be possible to produce new nerve cells in mammals, too," she explains.

Learning how to produce new or regenerated nerve cells is the ultimate challenge, Waxman says, but the far less dramatic rehabilitation of damaged nerve fibers may be equally useful.

"The word 'regeneration' is suddenly very popular. It connotes regrowth of structure, which is great when it occurs, but you can also get functional recovery from reorganization at the molecular level, as well as from regrowth of the cell at the tissue level," he explains.

"When a multiple sclerosis patient has a remission, he is not regenerating tissue; when a stroke patient improves, he hasn't regenerated neurons. What we want to understand is functional recovery," he stresses.

One of Waxman's main interests is multiple sclerosis, a disease estimated to afflict 250,000 people in the United States. In MS patients, a protein called myelin is destroyed. Like the rubber coating around an electrical wire, myelin is an insulating material that sheathes cells in the CNS. Without myelin, electrical impulses do not travel down the nerve cell membrane and communication along nerve pathways shuts down, which results in weakness, paralysis, tremors and disturbances of speech and vision.

MS can be like a teeter-totter, Waxman says. "Patients may get better, then worse, then better again," he explains. "There are very few neurological diseases that do this. We desperately want to understand the molecular basis for this apparently spontaneous recovery."

Waxman and colleague Joel Black think they have found a clue from examining the structure of tiny channels through nerve cell membranes that are responsible for impulse conduction. Sodium channels are protein molecules that function like molecular "batteries" in promoting impulse conduction in nerve fibers; potassium channels make neurons more resistant to firing. The sodium channels are clustered at gaps in the myelin, forcing impulses to jump between gaps, like arcing sparks.

When myelin insulation is destroyed in MS, impulse conduction is blocked because underneath the myelin there are no sodium channels, just potassium channels. The membrane is "essentially electrically dead," Waxman explains.

So why do MS patients experience remissions? Waxman, Black and their colleagues discovered that following demyelination, sodium channels may begin to pop up in the demyelinated regions, allowing impulse transmission to resume. Although this migration of sodium channels into demyelinated regions may not be the total explanation for remission in MS, it is probably an important factor, Waxman believes.

The scientists therefore are eager to understand how it occurs so that perhaps they can hasten the process to help alleviate MS symptoms. "We don't have a cure in our front pockets," Waxman cautions. "But we are beginning to understand what's going on, and that is very exciting."

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4-4-4 Neurologist Dr. Jeffery Kocsis, one of Waxman's colleagues, is also trying to find ways of overcoming conduction block in MS.

"We are trying to understand the basic biology, the organization of channels in the nerve cell," he says. "Then we can look for ways to improve conduction through the blocked sites."

Even if scientists some day find a way to prevent MS, Kocsis explains, therapy will still be needed for those who already have the disease and for patients whose disease is too far advanced to turn around. "Our ultimate goal is to manipulate malfunctioning nerve fibers that are still intact," he adds.

In studying membrane channels, Kocsis and colleagues use some promising new experimental drugs that block potassium channels. One drug is already undergoing tests in Europe in patients with neuromuscular disease.

Kocsis believes that scientists need a better understanding of the drug—called 4-amino pyridine—at the physiological and molecular levels. He is studying the drug's effects in rats afflicted with a disease that resembles MS. By blocking the inhibitory potassium channels, the drug helps boost nerve impulses across the electrical wasteland of demyelinated nerve membrane.

It is important to know the drug's effects on all nerve activity, not just on demyelinated fibers, Kocsis says. For example, one side effect patients experience is an unpleasant tingling sensation. Kocsis has found a physiological explanation for this phenomenon. The drug produces bursts of impulses in sensory fibers—the nerves that carry sensory information into the brain. Lowering the drug dosage helps curb the effect.

In other studies of potassium blockers, Kocsis and Waxman discovered that regenerated peripheral nerves in rats are structurally different from the original nerves they replaced. The regrown nerves seem good as new—from observing how well the animal functions—but unlike newborn nerves, they are sensitive to potassium blockers. The scientists found out why: Little pieces of myelin continually fall off and get replaced in regenerated nerves.

"So although functional recovery occurs, sensitivity to pharmacological agents can be vastly different in original and regenerated tissue," Kocsis observes.

"Drugs can always be double-edged swords," adds Waxman. "We need to proceed slowly and carefully in considering them for any kind of therapy."

Ironically, sometimes nerve regeneration, one of medicine's long-sought goals, can be bad. For example, if a cut arm is surgically repaired, regrowing axons may get lost on their way back to the original targets. The fibers twist and gnarl to form a knot called a neuroma, Kocsis says.

"It's a major clinical problem that is excruciating for patients because it becomes abnormally sensitive to touch and to some chemicals." Current treatment—involving surgical removal and then hope that the nerves will grow back in a less contorted fashion—is not very effective, Kocsis adds.

In neuromas removed from rats, Kocsis has found that the extreme sensitivity arises from electrical "crosstalk" between nerve fibers.

"Normal nerve fibers are spatially separated from each other," he explains, "but neuromas are made of very thin sprouting fibers and the electrical activity in one can activate the other axons around it." The result is an avalanche of electrical activity that the patient feels as intense pain.

Kocsis and his colleagues are now looking for abnormalities in membrane channels or in membrane receptor proteins that may be involved in the increased excitability. These could then become targets for drug therapy to shut the fibers off.

Nerve regeneration—for better or worse—still remains largely out of medicine's reach. But researchers who believe it may be the only solution for certain medical problems are convinced the remaining obstacles eventually will be overcome. "Some research focuses on the biochemical 'soup,' and some on nerve 'sparks,'" says Waxman. But the common goal—to understand nerve function and growth—should bring the day closer when broken nerves can mend. "It may seem like fantasy right now," says Kocsis, "but let's see what happens in the next couple of decades."

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EDUCATION, LEGISLATION WILL CONQUER HEART DISEASE, SAYS STANFORD EXPERT

STANFORD—

Heart disease is beginning to yield to public awareness of how to avoid it, as well as to better treatment, yet a Stanford expert says tough legislation to deter smoking is needed to topple the reign of the nation's number one killer.

Statistics prove lifestyle has a major impact on heart disease, said Dr. C. Barr Taylor, director of behavioral science for the Stanford Center for Research in Disease Prevention, in a talk Thursday night (Oct. 24). And he gave an encouraging account of a Stanford study that has used social learning theory to inform and persuade Californians to adopt healthier living habits.

Preliminary results show the percent of smokers in populations targeted by the Stanford study has been cut in half, he reported.

But, he said, it will be harder to convince the remaining half to quit.

Taylor, who is associate professor of psychiatry at Stanford, warned that our society is beginning to split along a line dividing those who have access to health information and have changed their habits, from those who do not and have not.

"We run the risk of creating a class structure based on health," he said.

Recognizing that smoking is "highly addictive and strongly perpetuated in our culture," he called for a ban on all cigarette ads, an end to tobacco subsidies, and higher excise taxes to deter smokers, in order to achieve the Surgeon General's goal for a smoke-free society by the year 2000.

Half of the decline in deaths from all cardiovascular diseases in the United States that has occurred in the last two decades has come from changes in lifestyles, Taylor said.

He estimates that the fall in smoking accounts for 24 percent and decreased cholesterol consumption for 30 percent, while bypass surgery is responsible for only 4 percent (the remainder is due to other medical treatments).

Other preventive methods that are conquering heart disease relate to food. Chicken is beginning to replace beef as the mainstay of the American diet, he said, and egg consumption has nose dived since the 1950s.

This change in eating habits "is reflected in a corresponding (downward) shift in mean cholesterol levels" in the blood of Americans of all ages, Taylor said.

Another chart he presented illustrated that Americans now are better informed about risk factors than the British, and the U.S. death rate from cardiovascular disease has dropped below theirs.

Early findings from Stanford's Five Cities study reinforce this impression that knowledge leads to health. The test subjects in several small California cities (population of about 100,000) who were given a media blizzard of health tips are smoking less, have lower blood pressures, and have gained less weight with age, compared to matched residents of other, similar sized cities in the state who received no health instruction, Taylor said.

He projected that the Stanford study had achieved "close to a 20 percent smoking rate" in Salinas, a test city, as compared to a rate of 30 to 40 percent in many other American communities.

The project, headed by Dr. John Farquhar of Stanford, is now in its sixth and final year of educating, he said, but a complete analysis of the results will not be available until next summer. Moreover, he added, all of the tangible benefits to the participants' life spans may not be apparent for another 20 or 30 years.

In his talk at Fairchild auditorium, sponsored by the Friends of Psychiatry and Behavioral Sciences, Taylor showed the audience some of the 30 second TV spots that were aired in the test cities of Monterey, Salinas and Pacific Grove. The TV commericals featured interviews in which people who have given up cigarettes tell how they succeeded.

"We provide a model for social skills," Taylor explained, "we don't try to frighten people" into quitting.

The multi-million dollar research project also ran stop smoking contests, and stuffed 3 million "hints on heart healthy food" leaflets into grocery bags. More tip sheets on nutrition were mailed, accompanied by a Stanford logo magnet for pinning the flyers to the family refrigerator, Taylor said.

Accompanying fact "kits" on exercise stressed walking, "which is much more compatible with most people's lifestyle," he said, adding, "we wanted to get away from the 'no pain no gain' philosophy."

The health campaign was also conducted in Spanish, with the motto "Yo no fumo," Taylor said.

Outreach to the Spanish-speaking residents in the test cities was important, he said, as cigarette smoking rates have been rising among migrant workers.

"We need to continue disseminating the information (on heart risks) that has become common in our society, but has not yet moved into many socioeconomic groups," he said.

In general, he pointed out, blue collar workers persist in smoking, but that the stratification of healthy habits is not strictly by economic class. For example, he said, many nurses are still smokers, while most doctors have stopped.

Improved medical treatments to help those who already have cardiovascular risks are also needed, Taylor said.

Medicines to cut cholesterol levels are "literally difficult to swallow," he pointed out, referring to the unpalatable resin, called cholestyramine, that doctors prescribe to bind cholesterol in the gut and keep it out of circulation.

"What we need," he joked, "is a drug that could neutralize even the creamiest French meal before it could hit our bloodstreams."

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News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE
(Editors: Photos available if not included.)

STANFORD CLINIC LAUNCHES IN VITRO FERTILIZATION PROGRAM

STANFORD—

An in vitro fertilization program has been started at Stanford University Clinic, involving an initial group of five couples who have been unable to have children.

The program is headed by Dr. Emmet J. Lamb, director of the reproductive endocrinology and infertility service of Stanford's Department of Gynecology and Obstetrics. He said formal planning for the program started in May of 1983, but "in 1978, we knew we were going to be doing this." He was referring to the birth in England that year of Louise Brown, the first so-called "test-tube" baby.

"We made the decision at that time," Lamb said, "that we would wait until this was clinically useful and no longer strictly a research procedure."

Since 1978, there have been more than 1,000 IVF births worldwide and there are more than 100 IVF programs in the United States, including programs at the University of California-San Francisco and Alta Bates Hospital in Berkeley. Lamb regards both programs highly and has referred patients to both.

All of the IVF programs are expensive and Stanford's is no exception. It will cost $5,000 for each cycle of treatment. And only 10 percent of the couples who start each cycle can expect to have a baby at the end of the process.

However, that 10 percent compares very favorably with the 2 percent monthly pregnancy rate that can be expected by the average infertile woman, such as those registered in the Stanford infertility program. In addition, there are some women for whom in vitro fertilization offers the only hope of pregnancy—those with no fallopian tubes or tubes that are so severely damaged an egg cannot pass through from the ovaries and be fertilized.

Basically, the IVF process takes care of that by having fertilization in a plastic dish instead of the fallopian tubes. Eggs are removed from the ovaries, fertilized with sperm from the husband and inserted in the uterus with the hope that a healthy baby will result.

The actual process, of course, is vastly more complicated than that and it involves an elaborate array of equipment and testing procedures.

For a woman admitted to the Stanford program, the process begins with the start of her period, day one of the cycle. Two days later, she begins taking drugs to enhance ovulation. It is hoped that will stimulate the production of more than one follicle containing an egg; the more eggs that are available, the greater the chance of IVF success.

On the eighth day of the cycle, physicians begin ultrasound examination of the ovaries to check on the number and size of the egg-bearing follicles. When it is determined the follicles are ready, the patient receives an injection to trigger ovulation.

About 36 hours later, doctors perform an operation called a laparoscopy to "harvest" the eggs. A special telescope is inserted through the belly button to view the uterus, tubes and ovaries. Then a needle is inserted into each follicle and suctions out the fluid containing the egg. This operation at Stanford will usually be performed under local anesthesia.

The next step takes place in the laboratory. A gamete biologist examines the follicular fluid under a microscope for eggs. Any eggs are transferred to culture dishes containing a nutrient and placed in an incubator.

In the meantime, the husband has produced a sample of semen, and active sperm cells have been collected in a test tube.

About six hours after laparoscopy the biologist determines if any eggs are mature and adds sperm to any dishes containing mature eggs. If an egg does not appear to be mature, the biologist waits 24 hours before adding sperm.

That is the in vitro fertilization process. If it works, one or more of the eggs will have developed into embryos of 2 to 16 cells in two or three days. At that point, the eggs are placed in a catheter and transferred into the uterus through the cervix. That operation is usually simple and painless, requiring no anesthetic.

Now it's up to nature. If one or more of the embryos is successfully implanted, blood tests in about a week will show the woman is pregnant.

Obviously, there is a lot that can go wrong in such a complicated process. The Stanford IVF team took great care to point out the pitfalls to about 20 people attending an introductory session this month.

Team members went over the expected rates of success for each step in the process and explained that refunds would be available if there were failures at certain steps. For example, participants will be refunded $3,800 of their $5,000 if they do not go through laparoscopy because of a lack of harvestable eggs.

In addition, the doctors told prospective patients to consider the possibilities of multiple pregnancies and complications from laparoscopy, even though the likelihood of such problems is rare.

Lamb said the Stanford team's emphasis on the problems that can be expected in the program is "deliberate and it is designed to offset the wild enthusiasm other people have expressed. These are people who have a chronic disease and people with chronic diseases, whether it's cancer or arthritis or what have you, look for the magic cure. This is an extremely useful and wonderful technique, but it's not the magic cure for everybody."

On the other hand, it may be a magic cure for some women who have no hope of giving birth through other means. And Lamb sees the possibility of higher success rates in the future through the development of techniques to freeze eggs that could then be implanted in a woman's uterus during her next cycle.

He also thinks it's possible that advances in technology will make the IVF process simpler and therefore less costly.

But for the present, it's expensive because of the initial cost of elaborate equipment and because the process is "labor intensive," Lamb explained. That cost to Stanford is at this point considerably higher than the $5,000 charge for the treatment and makes it necessary, Lamb said, to have "a certain number of patients above the minimum required for our teaching goal."

However, he emphasized, IVF "is just one of the treatments that we use for infertility and we don't want to get into a situation where we are running just an in vitro fertilization clinic."

The members of the Stanford IVF team, in addition to Lamb, are Dr. Frank F. Polansky, a specialist in reproductive endrocrinology and infertility; Dr. Amin Milki, a fellow in reproductive endrocrinology and infertility; Dr. Tsai-feng Wu, laboratory manager; Eve Shen, gamete biologist; and Kathy Turner, nurse coordinator. Jill Field, a social worker in Palo Alto, will work with participants in the program to help them deal with psychological problems.

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FOR IMMEDIATE RELEASE

PSORIASIS SUFFERERS SOUGHT FOR RESEARCH STUDY

STANFORD—

The Department of Dermatology at Stanford Medical Center is seeking psoriasis sufferers in general good health and more than 18 years old to test an experimental drug.

Diane Wenner, coordinator of the study, said volunteers will be given without charge a complete physical examination, chest X-ray, EKG and blood chemistry screening.

About six serious sufferers of the skin malady will ultimately be accepted for the study starting Oct. 28 and will visit the department daily Monday through Friday for four weeks to have the drug injected.

Each daily visit to the Medical Center will last about 15 minutes and any patient who completes the study will receive $150 reimbursement, Wenner said.

The study is part of a continuing evaluation of a new drug, Wenner said, and volunteers will be given further details about its treatment potential.

Persons interested in volunteeering should contact Wenner at (415) 497-7964.

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(Editors: Photos available if not included.)

PHYSICAL, ORGANIZATIONAL CHANGES IN PLACE AT STANFORD CLINIC

STANFORD—

A medical historian attempting to chronicle the dramatic changes taking place in American health care could get a good idea of the situation simply by examining what is happening at the Stanford University Clinic.

The changes at the clinic reflect those occurring throughout the medical world and are the result of the same pressures of economic necessity and competition for patients.

In the past few years, the clinic has shifted its emphasis from specialization to a full range of patient care services and made a concerted effort to change its image from that of a sort of silent partner to the internationally acclaimed teaching and research arms of the medical center.

That new emphasis combined with the specialized expertise available through the medical center gives the clinic a medical care package that is "very, very attractive and probably one of the best in the world," according to Donald B. Tower, executive director of the clinic and the Faculty Practice Program.

"We're always on the cutting edge of medical treatment," he said. "We apply the techniques that result from our research to our patients and so our patients wind up getting state of the art in terms of medical care."

The clinic returns that kind of assistance to the other components of the medical center by providing a strong clinical practice, said Dr. David Spiegel, an associate professor of psychiatry and chairman of the clinic's professional practice committee.

"Excellence in one area facilitates excellence in another," he said. "Having a clinical program that attracts the best physicians can only enhance the mission of the Medical School."

The clinic is 26 years old. It was established in its present location in 1959, when the School of Medicine moved to the Stanford campus from San Francisco. Patient visits have grown from 20,000 in 1960 to more than 142,000 last year and there are now 280 physicians on the staff.

That growth made it apparent a few years ago that a major expansion of facilities was needed. The first two floors of the Boswell Building, housing the clinic, have been renovated and work on the third floor is under way. The $6.5 million project was financed largely by a gift from the James Boswell Foundation, the contributor to the original building.

According to Tower, the renovation has not only made the operation of the clinic more efficient, it has made it more attractive and pleasant—"a nice place for patients."

Just as important as the physical atmosphere from the patient point of view is the availability of primary care, which began in 1981 with the establishment of the Stanford Medical Group.

The SMG was started in response to patients' expressed desires to have a Stanford clinic doctor as a personal primary care physician. It now has five internists, all of whom are members of the Medical School faculty. Dr. Scott Wood, one of the group, said the physicians spend 70-80 percent of their time in primary care, seeing patients just as they would in private practice. The remainder of the time is spent teaching.

A little more than a year after the start of primary practice, there was a more subtle change that indicated the direction of the overall practice: The name was changed from Stanford University Clinics to Stanford University Clinic. Dropping that "s" signifies that the semi-autonomous clinics of the past are gone and "we are one unified group," according to Vera Waechter.

Waechter, assistant director of the Faculty Practice Program and director of clinic nursing, pointed out that there is physical as well as organizational unity.

"All of our ancillary facilities are in the same building," she said. "If a patient needs to have blood drawn and an X-ray examination, they're all in the same building."

That proximity is part of an exceptional emphasis on patient convenience and comfort that Waechter said is built into the new clinic facilities. Among other examples she cited:

- Large, pleasant examination rooms that are at least 120 square feet and provide space for family members as well as consulting physicians.
- Spacious waiting rooms designed with the aim of making waiting as comfortable and relaxing as possible. The waiting rooms have music and are situated away from the areas of heavy traffic.
- A specimen collection area and pharmacy conveniently placed near each other in the main clinic building.
- Waiting rooms and examination rooms painted in colors selected for their soothing, cheerful effects, and decorated with copies of well-known art works.
- Lights outside each examination room that flash on when they are in use.
- Rugs coded by color for each different clinical area, making it easier for patients to be sure they're in the right part of the building.

Outside the clinic, there's the same emphasis on patient comfort and convenience, Waechter said, noting that 300 parking spaces have been set aside for patient use. Referring to the frequent traffic problems around the medical center, she said, "We don't want patients to have to hunt for parking. Sometimes doctors can't find parking, but patients can."

All the attention to detail has paid off, according to nurse-manager Carol Hendrickson, who said patients frequently comment "on the art work and the cheerfulness of the place...It's just a nice place to walk into."

Dr. Keith Taylor, chairman of the clinic marketing committee and director of medical specialties, agrees that "patient satisfaction has enormously improved," but he is equally pleased with the way the changes have improved working conditions and efficiency.

"It's a much better means of handling the patient load," he said. "Central desks can coordinate services much more efficiently."

The physical changes have been particularly impressive to Dr. Robert A. Chase, professor of anatomy who was among those who moved from San Francisco to the Stanford campus in 1959.

He remembers that the space was adequate at first because of a relatively low patient load, but was quickly outgrown. His special pleasure in the new clinic is the size of the examination rooms; the old ones were "very, very inadequate."

But one thing that hasn't changed is something in which Chase takes great pride: the clinic's array of medical experts. "We're able to locate super experts in any domain," he said. "Each time a new field develops, we seem to have an expert."

To take full advantage of that expertise, the clinic is reorganizing its administrative structure as well as altering the physical environment. Spiegel is heavily involved in that reorganization as chairman of the professional practice committee and he sees efficient operation as crucial to the long-range success of the clinic in a highly competitive situation.

The reorganization involves a separate administrative structure to give clinic chiefs more responsibility and it includes changes in subcommittees operating under the professional practice committee, which is essentially the line governing body of the clinic. The subcommittees now include one dealing with the allocation of space, one handling credentials, one reviewing patient care and one dealing with quality assurance.

Spiegel hopes the reorganization will position the clinic to aggressively seek patients, which he sees as essential because of the increasing competition in the health care field and the changing role of the government.

He notes that many current patients seek out treatment at Stanford—"more than half of the clinic referrals are self-referrals"—but fears that patients in the future will have limited options in selecting treatment.

"We estimate in eight to ten years virtually all patients will be tied up in plans that restrict freedom of choice," he said. "If we do not get involved (in such plans), we will lose half of our patients."

The clinic has taken one major step toward such involvement by signing an agreement to provide medical services to the subscribers of Maxicare, one of the largest health maintenance organizations in the country.

Too much government influence in health care is another problem that must be dealt with in the future, Spiegel said. He called changes in government financing of health care "a particular threat to teaching clinics as well as hospitals." He also warned about a future in which "institutionalized health care will result in doctors being evaluated solely for their productivity."

"Increasingly now it's systems treating people," Spiegel said. "We try to preserve at Stanford the notion of individual responsibility. That's a crucial part of the medical tradition."

Stanford, he said, must continue to fight for that notion of individual responsibility—in the clinic, the hospital and the medical school. "If we don't do it, how do you expect others to?" he said. "People notice what we do. We have a special responsibility to set an example."

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WHAT MEDICINE CAN DO ABOUT PAIN

STANFORD—

New insight into how the nervous system works has brought an expanding array of treatments to chronic pain, yet even today's most high-tech methods may fail to banish a burden of misery.

But the load can be lightened, according to Dr. Lorne Eltherington, anesthesiologist and director of Stanford University Clinic's pain service.

The service combines nerve blocks and non-narcotic drugs with mild exercise, stress management, biofeedback training, and other positive steps to propel a patient back into an active life.

"We try to convince (pain patients) that they've got to go on with their lives in spite of their pain," Eltherington said.

Those whose search for help brings them to Stanford learn to become participants in therapy, rather than recipients.

"They come in and say, 'fix me,' and we say, 'you've got to fix yourself, and we're going to give you the ideas and treatments to hopefully get you there,'" explained physical therapist Joan Smithline.

The pain service brings together Stanford professionals from the departments of anesthesiology, medicine, physical therapy, and psychiatry, who devise a coordinated approach to each patient's pain.

Therapists at Stanford University Hospital's physical and occupational therapy outpatient services (located at Lytton Gardens in Palo Alto) try to get a total picture of the pain, so they can plan a realistic course of rehabilitation, Smithline said. They start by asking what daily activities make a person's pain better or worse, and look for changes in the bones and muscles that might be contributing to the problem.

And Stanford staff psychologists in the department of psychiatry's behavioral medicine clinic use interviews, questionnaires, and physiological measurements to see if stress or depression is compounding pain. By detailing how an individual has reacted to chronic pain, they can then devise a treatment strategy that is tailor-made to each person.

Many chronic pain conditions bring people to the pain service.

Back pain is most common, accounting for about half of his patients, said Eltherington, who is associate professor of anesthesiology at Stanford.

He estimated that $6 billion is lost annually in this country to medical care and sick leave for people with bad backs.

A third of his remaining cases have myofacial pain, an ailment where touching one area triggers severe pain in another part of the body. Typically, pressure on the upper back in these patients "makes pain go up into the shoulder and neck," Eltherington said. "It can progress to where they can't use their arm," he said.

Current medical knowledge cannot explain why the nervous system plays such cruel tricks in myofacial victims, Eltherington said, and the disorder remains difficult to treat.

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But he has a better handle on other pain disorders, such as reflex sympathetic dystrophy (referred to as causalgia by the Civil War doctors who first noted the condition), where an injury to the main nerve of the arm or leg leads to hypersensitivity—"you just touch their skin (on the affected limb) and they scream," Eltherington said.

If treated early after the initial injury, reflex sympathetic dystrophy, which affects about 10 percent of his patients, is a "curable chronic pain problem," he said.

Another disorder, though less amenable to therapy, is at least somewhat understood.

Post-herpetic neuralgia begins when the herpes zoster virus that gave a person chicken pox as a child resurfaces from the nerves where it had laid dormant for years. Trauma or cancer later in life rouses the virus into an attack of big blisters that can cover the trunk from mid-back to mid-belly.

The rash, called shingles, fades, but in 15 percent of his patients, pain has remained. It "stabs like an ice pick on top of a constant, unbearable ache," Eltherington said. It is possible, he added, that the virus attack has left damaged nerves in its wake.

Other chronic pains can be so recalcitrant that Eltherington refers the patients to other specialists, such as Dr. Ken Peters of the Northern California Headache Clinic in Mountain View, and Dr. Arnold Kresch, a gynecologist and psychiatrist in Palo Alto. Both are members of the clinical voluntary faculty at Stanford.

Anesthesiologists with Stanford's pain service, including Eltherington, Dr. William Forrest, and Dr. John Bunker, try to silence pain impulses with nerve blocks.

They can destroy a nerve with an injection of alcohol or phenol. Or, a probe can be used to heat or freeze a pain-producing nerve into submission.

Eltherington said he always use a reversible test before killing a nerve— first he numbs it with an anesthetic to see if the pain subsides.

He also uses this anesthetic test to sort out complicated pain puzzles such as stress versus migraine headaches, or to find the source of abdominal and pelvic pain.

Even permanent nerve blocks often provide only temporary respite, but with some problems such as testicular neuralgia (usually caused by a straddle injury) and reflex sympathetic dystrophy, the technique can give a complete cure.

Similarly, some chronic pains are relieved by injecting steroids into an inflamed nerve to ease its swelling.

Other drugs are given by mouth in an attempt to interrupt a reverberating message that chronic pain can set up inside the brain.

Like a bad memory, the signals can echo on, even after the original source of pain is removed, Eltherington said.

This "central pain" can tell a paraplegic "your knee hurts," although the patient's broken spinal cord makes it impossible for the brain to receive any actual sensation from the legs, he said.

So he tries anti-epileptic drugs on spinal injury patients in pain, and a tranquilizer plus an anti-depressant for people with post-herpetic neuralgia.

If these methods fail, patients can go to physical therapy for a trial with a transcutaneous nerve stimulator (TNS).

Just as it helps to rub your elbow after you bang it, the TNS can cover up pain by activating other nerve fibers besides the ones that carry painful signals, said Smithline, who is clinical coordinator of physical therapy outpatient services for Stanford University Hospital.

Flat electrodes taped to the skin and powered by a palm-sized battery pack mask pain by electronically stimulating a painful area. The current may also cause nerve cells to release endorphins and enkephalins, which are the body's own painkiller molecules, she said.

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Occasionally she has seen dramatic results with the TNS, but more often, its success is short-lived.

So Smithline uses insights from her initial evaluation of patients to work on their pain with simpler techniques.

Heat and ice packs can ease aches and prime the body for exercises to increase joint movement and stretch painfully tight skin and muscles, she said.

Such therapy can loosen the stiff neck of a post-herpetic neuralgia patient who has held his whole torso rigid because of the pain, she said. And a limb long immobilized by reflex sympathetic dystrophy can be recruited back to use by manipulating the joints and limbering the muscles.

When pain sits deep, heat generated by an ultrasound device can penetrate to soothe and loosen tight tissues.

Most important, Smithline teaches patients to treat themselves. A man with chest pain taught to massage the skin surrounding his scar eased his discomfort and freed his movements, she said. Massage also aided a woman whose migraines were compounded by tension headaches, especially since her boyfriend learned the technique, Smithline said.

"We try to incorporate the family (into the therapy)," she said.

More self-help is available for back pain at the Stanford Back School, where four one-hour sessions show the proper way to sit, stand, clean house, garden, lift, and rest, Smithline said.

And while a patient can learn better posture and acitivity habits through physical therapy, clinical staff psychologists Drs. Mark Pratt, Andy Carman, and Hugh Baras assist with managing stress.

Biofeedback monitors can reveal the tense muscles, sweaty palms, and restricted blood flow to the hands that signal over-reaction to stress, said Pratt. Presence of these tension signs suggests that biofeedback training could help a person manage his or her pain, he said.

Through biofeedback, a patient can learn to spot which muscles are knotting with tension, and how to relax them. And many migraine sufferers can learn to derail an oncoming headache by redirecting the flow of blood from their heads to their hands, said Pratt.

Depression often accompanies chronic pain, not surprisingly, but it can interfere with a patient's response to treatment, Pratt said. He recommends anti-depressant medication combined with psychotherapy for pain patients who are depressed.

He also sees if personality factors are adding to a person's stress level. For example, if a worker always assumes he is the target of anger each time his boss slams the door, he may be aggrevating his pain by over-reacting to other people. Analyzing a person's "cognitive processes," —what you say to yourself—might give hints to reduce tension and thereby pain, Pratt said.

Indeed, important obstacles to overcoming pain may lie within the patient's own mind, he said.

Eltherington added that most chonic sufferers have developed "pain behavior," and have allowed their physical distress to govern all aspects of their lives.

Therapy to modify behavior is "one of the best treatments" for patients with ingrained habits built around years of pain, he said.

People can deal positively with having to live with pain by using distraction, Pratt said.

"Don't abandon previous sources of pleasure," Pratt advised. "If you can't jog, then swim."

Mild exercises—walking, swimming, wading chest-deep in a heated pool—are the clinic's favorite prescription for turning the diability of chronic pain into merely a handicap.

Fear of adding to their pain has kept his patients inactive, Eltherington said. But, he said, "for the vast majority," those fears are unfounded.

"You can either sit home doing little or nothing, or be swimming laps," he said, and your pain will be "absolutely the same."

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MENOPAUSE MISUNDERSTOOD

STANFORD—
Menopause no longer need be a traumatic event in a woman's life. Treatments for its symptoms are continually improving, and some of its effects can be prevented.

Once considered the scourge of old age for women, menopause no longer need be a source of apprehension. Its worst effect, osteoporosis, can be prevented and treated. Its symptoms — such as hot flashes, mood swings and depression — can be treated as well. Signaling the end of fertility, menopause can have a liberating effect for women. The more medicine learns, the more it's apparent that some of the changes menopause brings can, in fact, be for the better.

Stanford physicians are adding to medicine's knowledge about menopause. Endocrinologist Dr. Robert Marcus, aging study unit director at the Geriatrics Research Education Clinical Center at the Palo Alto Veterans Administration Medical Center, recently initiated a research, education and treatment program for osteoporosis, a bone disease affecting about 20 million post-menopausal women. Physiologist Dr. Julian Davidson is studying the effects of hormonal changes that occur during menopause on sexual functioning. Together with physicians all over the world, they are working to learn about all the causes and consequences of menopause and to sort through the controversies of treatment and prevention. By doing so, they hope to provide women with the most effective and unimposing way in which to deal with this midlife rite of passage.

"Menopause has traditionally been considered a disease of sorts, but it's not," Davidson says. "It is a natural change of life with some very beneficial aspects."

Menopause, the cessation of menstruation, typically occurs in women in their late 40s and early 50s. It begins with a decrease in the levels of two key players: the hormones estrogen and progesterone.

"Estrogen causes all human changes that we consider feminine," says Dr. Emmet Lamb, gynecology-obstetrics professor, "such as body contours, fat distribution, breast development and other pubertal changes. Progesterone," he continues, "causes the changes in the lining of the uterus necessary for a fertilized egg to burrow itself and start to develop. It causes the secretion of a nutrient-filled fluid that supports the egg as well."

In a normal menstrual cycle, ovarian cells band together to form sacs, called follicles, which hold the eggs. As part of their activity, the follicles produce estrogen and progesterone. The estrogen travels through the bloodstream to numerous places, including an area in the base of the brain called the hypothalamus, which is responsible for the control of basic body functions such as temperature. The hypothalamus registers how much estrogen is present and responds by secreting a chemical called GNRH, gonadotropin releasing hormone. The GNRH travels to the pituitary gland, located near the hypothalamus and responsible for secreting some hormones. The pituitary gland reacts by releasing FSH, follicle stimulating hormone, and LH, luteinizing hormone. While the LH is responsible for ovulation, the FSH stimulates the follicles to produce more estrogen.

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Women are born with a finite number of eggs — about 400,000 — to use during their lifetime. Yet only a fraction of these — one a month during women's fertile years — are actually released from the follicles with fertilization potential. By the time menopause sets in, Lamb explains, women have essentially run out of eggs. Without the eggs, the follicles fail to produce enough estrogen to keep the cycle going, basically shutting down the reproductive system. And the lack of enough progesterone fails to trigger the uterus lining to slough off cyclically in the form of menstrual bleeding. When the hypothalamus, which also sends out electrical impulses to other parts of the brain, does not receive enough estrogen to control its function, it goes a bit berserk, Lamb says. The result? Menopause's well-known side effects, the most common of which are hot flashes.

Hot flashes are not, as was once the popular thought, just an illusion. Work by Dr. Howard Judd at University of California, Los Angeles, has shown an actual physiological event that causes the hot feeling, the flush and the sweating. "The estrogen-deprived hypothalamus sends out a wrong signal telling the body to react as if it were in a hot room," Lamb says.

Each hot flash lasts a few minutes. Their rate of occurence differs drastically from individual to individual. Further work by Judd showed that they interrupt women's REM sleep. "When anybody is deprived of sleep, they get crabby. This is what accounts in large part for the mood swings and depression," Lamb says.

In collaboration with San Francisco State University psychologist Dr. Norma McCoy, Davidson has found that women who maintain a consistent sex life are less apt to experience hot flashes. Published in the October, 1985 issue of *Archives of Sexual Behavior*, a study of 43 women, which the authors say is the first of its kind, established that a "close association exists between increasing irregularity of menstrual cycles, hot flashes, declining estrogen levels and declining frequency of intercourse." What are the possible explanations for the association?

"First, the discomfort of hot flashes and other associated menopausal symptoms might have an inhibiting effect on sexual behavior," the authors surmise. "Second, regular sexual activity might have a protective action against lowering hormone levels and therefore its absence is associated with the disruption of cycles. Finally," McCoy and Davidson write, "the association between hot flashes and reduced frequency of sexual intercourse may be the result of some common third variable."

A possible solution, then, may be for aging women to maintain an active sex life, though Davidson points out this has yet to be proven. While the absence of ovulation may alleviate women's fears of pregnancy, he says, other factors may negate that sense of liberation. In other studies comparing pre- and post-menopausal women, he found that those who had gone through menopause experienced a decline in sexual thoughts and fantasies. He and his colleagues were also able to physiologically measure a decline of vaginal lubrication and frequency and satisfaction of intercourse.

These symptoms, however, do not have to seriously affect sexual functioning, Davidson continues. Together with hot flashes and other menopausal side effects, they may be treated with what physicians now universally recognize as the most effective treatment: estrogen replacement therapy (ERT).

ERT has been a source of controversy over the years; the most recent rift surfaced when it was associated with cancer of the uterus lining, the endometrium. The cancer occurred, Lamb explains, because there was nothing to trigger the unused lining to slough off. That risk has been eliminated, however, by adding a progesterone-like agent towards the end of the cycle. Women may have some menstrual-like bleeding, he adds, but it is only to rid their bodies of unused and unwanted cells.

"There's lots of justifiable confusion on the part of the public concerning ERT because medicine has gone back and forth so often," Marcus says. "But there is no question of its efficacy."

ERT has been associated with other potential problems as well, such as gallbladder disease, hypertension and blood clots, but these risks are far outweighed by its benefits in treating hot flashes, vaginal atrophy, depression and in preventing heart disease and osteoporosis.

Osteoporosis —"porous bones"— afflicts about 20 million post-menopausal women. The skeleton's most common disease, it is triggered by a lack of calcium due to the lost ability estrogen provides for bones to hold onto minerals. The spine, vertebrae, pelvis and other bones become thin and brittle, Marcus says.

As a result, a mere slip on a rug, or lifting a bag of groceries, can fracture an older woman's wrist or hip. The stoop many older woman develop, known as dowager's hump, is caused by weakened vertebrae that collapse under body weight. More than one million fractures each year occur in osteoporosis victims, at a cost of nearly $4 billion. About 15 percent of women with hip fractures die within three months, Marcus notes, because of complications such as pneumonia, blood clots and stroke, due to immobilization.

But, Marcus points out, osteoporosis can be prevented and treated. And the sooner women start doing so, the better.

"We recognize that it's good to deal early with osteoporosis," he says. At adolescence, when the body is laying down its final amount of bone, Marcus explains, proper diet and exercise are key to building dense bones that will withstand the effects of osteoporosis later on.

A living tissue, bone requires constant renewal and repair throughout life. In the cyclic process called bone remodeling, bone-stripping cells, osteoclasts, resorb calcium from bone while bone-forming cells, osteoblasts, replace it to form new tissue. During adolescence, Marcus explains, bone density reaches its peak because tissue formation outpaces tissue removal.

Bone loss begins for most women around age 35 when the scales tip in the opposite direction. The loss begins slowly — less than one percent per year — but increases significantly during menopause, Marcus says. Thin, white women are most susceptible; black women are among the least affected. A family history of the disorder, heavy alcohol and caffeine use, smoking, high-protein diet and lack of exercise are believed to contribute to osteoporosis.

"As women enter the age of menopause we should determine the risk of osteoporotic fractures by measuring bone mass. Sequential measurement gives an estimate of the rate at which the bone is being lost. Then we can advise the best regimen."

At Marcus' clinic, women can undergo bone analysis by either a specialized X-ray procedure called computerized tomography (CT scan), or a new and not yet widely available procedure called dual-photon absorptionometry (DPA), which measures the amount of mineral present in bone. "We are one of the few facilities in the area offering DPA," Marcus notes.

Once bone loss begins, he continues, ERT is almost always prescribed, though the dosage can be tailored to each individual's needs. In addition to its other menopausal benefits, estrogen helps maintain bone mass.

"It's unlikely that we'll ever swing back to rejecting estrogen," Marcus says, though through research medicine may find ways of using it more selectively. But until then, it helps women get through what was once a traumatic event in their lives.

"Menopause doesn't have to have a great effect on women," Davidson says. "It still seems to dominate some women's lives. Yet others," he adds, "hardly even notice."

Preventing osteoporosis

Arming your body against osteoporosis should be a lifelong process, physicians say. Adopting healthy habits in your teens or early adulthood may help you avoid menopausal complications in later years. Here are some tips that may not only prevent osteoporosis but may give you a healthier lifestyle overall.

- Eat a calcium-rich diet. Children aren't the only ones who need calcium for growing bones. If your diet does not contain enough calcium, your body will cannibalize your bones in order to maintain calcium levels in your blood. "Women as a group grossly underconsume calcium, especially teens who often substitute colas for milk," endocrinologist Dr. Robert Marcus says. Women need the equivalent of a quart of milk per day until age 50, he adds, and a quart and a half of milk after that. For those who can't consume dairy products, Marcus says, calcium supplements of up to 1,500 mgs. a day are recommended.
- Calcium can be consumed in the form of milk and other dairy products such as cheese, yogurt and ice cream. Chicken bones also contain a lot of calcium, as do small fish and dark, leafy vegetables.
- Exercise regularly. Not only will regular exercise make you look and feel better, it also stimulates your body to build stronger, more dense bones. "Weight-bearing" activities, such as running, walking and bicycling, have a preventive effect against osteoporosis, Marcus says. Just as straining muscle helps build it up, working against gravity helps bones become thicker and sturdier.
- Don't smoke. Not only does tobacco cause cancer, emphysema and heart disease, it also causes earlier onset of menopause.

menopaws sk6

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FOR IMMEDIATE RELEASE
Editors: this story originally appears in the Fall 1985 issue of *Stanford Medicine*, available through the Stanford medical news bureau.

LIFE AFTER CANCER

STANFORD—
The good news: cancer, once considered fatal, is now survived by as many as 50 percent of people it strikes. The bad news: the issues and problems they come up against are often as difficult to overcome, if not more so, as the disease itself.

A group of people sit around a table. A teenaged boy, a baseball cap taking the place of a headful of hair, tells a middle-aged man he really shouldn't feel guilty because his cancer recurred. A young woman reveals she gets so angry sometimes—she has already broken two windows in her home. This evokes concern from the group; one member suggests she buy a punching bag. It's cheaper and safer, they all agree. An old man with a thick European accent adds to the conversation with a consistent stream of one-liners, most concerning his attraction to young beautiful women. "You're a dirty old man," the middle-aged man says jokingly. "I was born that way," the old man replies.

A young woman, fairly certain she's sterile from radiation, says a close girlfriend recently told her she was pregnant. "I feel really happy for her, but I feel sad, too," she confesses. "I'd like to have a baby someday." An attractive woman laughingly recalls how, one day towards the end of her treatment, she was very excited at the prospect of going shopping. She had dressed up for the occasion, complete with wig and hat to cover her head, bare from the effects of radiation. As she approached the store a gust of wind blew her hat and wig off. Instead of shopping, she crawled under a car to recover her belongings and cried all the way home. "That was the only time I ever felt like a victim," she admits.

Individuals, they vary in age, lifestyle and background. The chances of meeting under any other situation is unlikely. Yet they come, week after week, to talk openly and uninhibitedly about their hopes, dreams, fears and problems. Their unifying link? They are cancer survivors. Some are undergoing treatment, some have recently finished. Some have been free of disease for years. All share the unexpected confrontation with their own mortality and the will to live. The only people who can fully comprehend and understand the impact of that battle, they feel, are others who experience it.

So they come to support groups, the core of Stanford medical center's programs to help patients deal with the non-medical side of cancer. In addition to the groups, Stanford offers patients home health care instruction; individual counseling, a newsletter and educational materials, as well as guidance in specific areas such as estate planning and wills, employment and financial concerns. Support groups, and the whole area of helping people cope with the psychological and social impact of disease, are phenomena as new as the increasing numbers of survivors of cancer, which as recently as a decade ago was considered almost certainly fatal.

But years of medical research and experimentation with various treatment combinations, primarily surgery, radiation and drugs, have paid off. Many forms of cancer, caused by cells-gone-awry, can be conquered. It is no longer a death sentence. Some forms, such as Hodgkin's disease, a cancer of the lymphatic system, have cure rates of 85 percent for adults seven years after treatment, and as high as 96 percent for children 11 years after treatment. Some 50 percent of all cancer patients are now cured, physicians estimate. But overcoming the disease, a feat remarkable in itself, is the easy part, many patients feel. It's after treatment ends that the real battle begins.

"Everyone thinks you go to the hospital, have your tumor taken out, come home, make love to your wife and that's the end of it," says Jerry Schleimer, a 44-year-old businessman who has had two bouts with tumors in his abdomen. "It doesn't work that way. I feel like I've grown apart from my friends . . . apart from the world. There's the rest of the world and then there are cancer patients, and the two don't mix." Until his recent move back to Los Angeles, Schleimer was a regular attendant at a support group for patients whose cancers may not be curable. Other groups are geared towards patients with specific types of cancer such as breast or head and neck cancer, as well as towards couples, families and friends. There is even a support group for AIDS patients, who, with immune systems destroyed by the disease, have contracted cancer.

Susan Taylor, who was treated at Stanford in 1979 and again in 1981 for Hodgkin's disease, came to her first support group meeting about two years ago for a class project. "I remember sitting there and thinking, 'Wow! Everybody here has Hodgkin's and they all look normal.' I didn't say a word the entire first meeting," recalls the outgoing 25-year-old formerly Olympics-bound swimmer. "I just couldn't get over the fact that all these people were there."

Taylor's class has long since ended, but she has continued attending the meetings. "I knew things were wrong in my life and I couldn't pinpoint them. Going to the meetings lets me talk with others in the same situation. I can say, 'I have that problem too. What are you doing about it?' "

But they have survived! What problems could possibly overshadow life itself?

A Stanford study, supported in part by the Robert Wood Johnson Foundation, of 403 patients treated for Hodgkin's disease showed that among their concerns were perceptions of poor health, impaired energy and activity levels, impaired body image, depression, marital troubles, inability to have children, decreased sexual interest and activity, decreased work ambition and employment problems. While the study concerned one specific group of patients, the issues are universal.

When patients are first diagnosed as having cancer it's a shock, says psychiatrist Dr. David Spiegel. "But then they're very active in treatment. This gives them the sense that they're doing something to help beat it. They have daily contact and get a lot of encouragement from the staff administering treatment. But when treatment is over they get depressed. All of a sudden they're not doing anything to prevent the disease. Every lump or pain is automatically suspect. It's very painful just to sit and wait."

"Just as my doctor touches my stomach once a month to check for any lumps that may mean a recurrence, I check myself every day," Schleimer says. "I'm absolutely scared out of my mind. The last thing I want to do is die."

"When people are diagnosed as having cancer they go through the devastating experience of losing control," explains Isabel Walker, the clinical social worker who leads Schleimer's support group, among others. "They immediately have to start to regain that control. They have to learn the process of being a patient." They have to focus on what they can do, rather than on what they cannot do, she stresses. "It's making substitutions. If they used to jog, I suggest they take walks," she says. "If they're upset because they cannot work, I tell them their new job is to stay alive — probably the most difficult one they'll ever have." Many, she adds, end up making a lot of changes beginning with day-to-day activities and branching out to broader, philosophical attitudes about life.

"I was extremely self-confident from swimming and the cancer just wiped that out," Taylor says. "The support groups and going to school helped build it back up. I look at my life as a pyramid. It seems like the Hodgkin's is the base and my whole life is made of blocks stacking up on that base."

That sense of confidence is often just one factor affecting individuals' self-image and self-esteem. This is especially true for women with breast cancer who have had to undergo mastectomies. "Breasts are a symbol of femininity, of desirability," explains Dr. Regina Kriss, project director of Stanford psychiatry department's postmastectomy group therapy, who has undergone two mastectomies herself. "Without them, it's the loss of an essential part of your core of existence as a woman."

"People go through a shift in values, a change of who they are and what they want out of life once they've accepted this event that has taken place," says Pat Fobair, a clinical social worker dealing primarily with Hodgkin's patients. "The shift is definitely in favor of people instead of material things or money."

So true, agrees Schleimer, a self-described former Type A workaholic whose work days started at 6 a.m. and ended at 7 p.m., after which he'd play tournament-level racquetball. "I don't want any type of position with a lot of stress or responsibility," he says. "All I want to do now is eke out a living. Life is very short and you should enjoy every day of it.

"Through the support groups I learned that killing yourself trying to make a buck just isn't worth it," he continues. "I've adopted more of a 'smell the flowers' type of attitude."

"I'm much more willing to take risks now," admits Maria Grabowski, a 25-year-old nurse who moved to Stanford from Pittsburgh a few years ago for treatment of cancer in her pelvic region. "You don't know if you'll have another chance to do something so you live each day as if it were your last." Since being declared disease-free, Grabowski has gone hang gliding and scuba diving, for example, and is much more honest with her emotions as well. "People tell me I'm a much nicer person to be around," she says.

While many patients, like Grabowski, feel they come out of their cancer experience a better person, the emotional impact, within themselves and particularly with spouses, can be major. Studies have shown the divorce rate among cancer patients is somewhat higher than normal, Fobair says. In many instances, people can't handle the intense stress of the crisis and spouses realize their mates are not everything they may have thought, or hoped, them to be.

"The cancer has affected everything about our lives," says Schleimer's wife of 20 years, Paulette. "We've always been very, very close," Schleimer continues, "but since my recurence we seem to really be on each other's back. We're not really angry at each other, we're just angry."

What they do periodically, upon Walker's suggestion, is something called a "10-10." "We both write for 10 minutes and leave out all the superficial garbage," he explains. "Then we talk about what we wrote. What comes out is some really heavy stuff—mostly just how much we need each other."

Children too are affected when they learn that a parent has cancer. One mother recalls telling her daughter of her disease. "For the next few weeks, I heard 'I hate you, Mommy' over and over," she says. Schleimer's wife remembers that her son could not look at his father during the stage when his hair fell out from the radiation.

Taylor, who met her husband just weeks before she was diagnosed, feels forever indebted for his care during her treatment, which consisted of cycles of radiation, high-powered radioactive beams administered to the cancerous body area, and chemotherapy, a combination of potent drugs. Both have potentially severe side effects including hair loss, nausea, fatigue, energy loss, weight loss and depression.

"He went to school at night so he could take me for radiation treatment every day," she recalls. "When I was on chemotherapy there were days when I would never get out of bed. We had a big calendar in the bathroom and he kept track of everything my body was doing and of the pills I had to take. I hardly talked to him; I just isolated myself. I was a pretty depressing person to live with."

Yet he recently told her, she says, that had he known she had cancer when he met her, he would not have pursued her friendship.

An expansion of his attitude is one that many cancer patients say they often encounter. Cancer, they contend, still holds a stigma similar to that of a contagious social disease. Bad enough on a social level, the stigma often permeates the work place.

In the Stanford study of Hodgkin's patients, 42 percent reported difficulties at work attributed to their cancer experience. Patients were not offered jobs, not promoted, demoted and denied benefits. Many feared the effects of telling employers about their disease. Perhaps most agonizing of all, patients reported being denied health and life insurance because they had cancer.

"I am completely uninsurable," Schleimer says. "If my company decides to drop me, no other insurance company will touch me. With each visit to the physician costing $175, and one hospital visit $12,000, you have no idea how stressful that is."

When his wife recently began looking for a new job, he says, a major consideration was the size of the company. The larger the company, their reasoning went, the better chance of good insurance coverage.

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Cases of job discrimination have now started to surface throughout the country. A Philadelphia firefighter was rejected from the Coast Guard Reserve; a New York woman was rejected by the New York City Police Department. For the first time, the U.S. Congress is considering a proposal, introduced by New York Rep. Mario Biaggi, to amend the 1964 Civil Rights Act making it illegal to discriminate on the basis of race, age, sex, national origin or cancer history.

"We're trying to fill in a gap in the legal system to prevent discrimination against people with a history of cancer because most of the time it has no effect on their ability to perform a job," says Barbara Hoffman, a Philadelphia civil rights lawyer who presented the first draft of the proposal to Rep. Biaggi.

"We are just beginning to see this kind of problem," says psychiatrist Spiegel. "Health care plans are pressuring subscriber companies not to hire people who have had cancer in the name of cost containment. From an actuarial point of view it may make perfect sense but from a public policy point of view it stinks. When you combine this type of attitude with the improved survival rates, you realize that we haven't even begun to see how bad this is going to get."

But these problems, or any other difficulties cancer brings on, are surmountable, survivors say. Many, through support groups or personal efforts, strive to help others in the situations they've been through. "Cancer," Grabowski says incredulously, "was a really good experience for me." Having cherished the support the hospital staff members gave her during treatment, she moved from a surgical intensive care unit to one in which cancer patients are cared for. "I want to be able to tell patients that it's okay to feel awful, that they can live with being bald for a while or with radiation mapping marks all over their bodies because people will still accept them and they'll be all right."

And Taylor spent the summer visiting other organizations' support groups to get ideas on how to improve those offered by Stanford. "Life now is much more complicated," she says, "but that makes it a challenge. I have a lot of pride. Anyone who can face a challenge like cancer can do anything."

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MOLECULAR SWITCH TURNS INACTIVE GENES INTO "WORKAHOLICS"

STANFORD—

Scientists at Stanford University Medical School and the Linus Pauling Institute in Palo Alto have isolated a small piece of DNA that can turn an idle gene into the genetic version of a "workaholic."

The finding could be valuable to the biotechnology industry and in scientific and medical research, the scientists believe.

The DNA fragment, called a promoter, is basically the "on-off" switch from one of the most active genes found in mammalian cells, explained Dr. Larry Kedes, Stanford professor of medicine who is based at the Palo Alto Veterans Administration Medical Center.

With genetic engineering methods, last year the researchers isolated and cloned the promoter fragment. More recently they have determined the sequence of its nucleotide subunits.

Using additional genetic engineering techniques, the scientists are now coupling the promoter to other genes, and they have successfully turned normally sluggish genes into hardworking ones.

"This promoter gives us a new approach to regulating gene expression in mammalian or human cells," said Dr. John Leavitt, head of the molecular carcinogenesis group at the Pauling Institute.

Kedes, Leavitt, Dr. Peter Gunning and their colleagues published reports on the promoter in the October issues of two scientific journals, the *Proceedings of the National Academy of Sciences* and *Molecular and Cellular Biology*.

Their research has been funded by the National Institutes of Health, the Veterans Administration, the National Cancer Institute, and the American Cancer Society.

Scientists have known for about a decade that stretches of DNA called promoters help determine gene activity levels inside cells. When a gene's promoter gives the green light, then cells express that gene by synthesizing the protein whose structure the gene directs.

But because some promoters are more powerful than others, not all genes are expressed at the same level. The promoter of one gene may tell a cell to make only a few copies of its protein while the promoter attached to another gene tells the cell to make thousands of copies of its product.

The promoter isolated by the Pauling Institute/Stanford team is set permanently to the "on" position. "This may be one of the most efficient promoters in nature," Leavitt said.

The promoter is very active because it drives the gene that codes for one of the most in-demand, abundant proteins in mammalian cells: beta-actin, the "brick" used throughout the cell's structural scaffolding.

Using recombinant DNA techniques, Gunning, a senior research associate in Kedes' lab, has designed a way to couple the promoter to genes other than beta-actin. Like a cassette machine that can play any tape that's plugged in, the beta-actin promoter then will direct high levels of protein expression for any gene to which it's attached.

"Since this promoter operates in many different kinds of mammalian cells, it could be widely useful in a large variety of cells in industry to boost production levels of biologically or commercially valuable proteins," Kedes said. "Any time you can improve a process by increasing the production per cell of the protein, there's an obvious benefit."

The promoter is expected to be effective only in mammalian cells rather than in bacteria, which are the current workhorses of the biotechnology industry. But as more companies tool mammalian cells into tiny protein factories, the promoter could become more important, he said.

An exciting, but speculative, potential use of the beta-actin promoter is in a new molecular approach to reversing cancer and other diseases, Leavitt said.

He and his colleagues will test the promoter's ability to squelch destructive genes by overpowering them.

The idea is to neutralize disease-related genes from viruses or bacteria, defective genes that govern genetic diseases, or genes associated with cancer, Leavitt explained.

The target is messenger RNA, a molecule that helps translate genetic information encoded in DNA into the language of proteins.

An RNA molecule can be neutralized by its complement, a second piece of RNA that fits into it like opposing strip of a zipper.

The scientists' strategy is to create a gene that produces that opposing RNA, which can then zip into the bad RNA from the disease-causing gene. "This has been tried in the past and has worked to some degree, but the process has never been efficient enough to make sufficient neutralizing RNA," Leavitt said. "You need to generate huge quantities to smother the target RNA."

That is where the extremely powerful beta-actin gene promoter comes in, Leavitt said. Harnessing it in front of a gene for disease-neutralizing RNA could be the key scientists need to make the experimental therapy work.

Other colleagues who worked with Leavitt, Kedes and Gunning include Drs. Ching-Shwun Lin, Sun-Yu Ng of the Pauling Institute; Drs. Roger Eddy and Thomas Shows of New York's Roswell Park Memorial Institute; and Dr. Phyllis Ponte of Stanford and the Palo Alto VA.

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NEW TECHNOLOGY PERMITS PATIENTS TO ADMINISTER OWN PAINKILLERS

STANFORD—

Machines that allow hospitalized patients to administer their own painkillers have proven successful in three years of clinical trials at Stanford University Medical Center, says Dr. Paul White, an assistant professor of anesthesia.

White predicts the machines, called Patient Controlled Analgesia (PCA) devices, will be widely used within five years for cancer victims and surgical patients.

"Anyone who has undergone surgery knows how terrible it can be to be in excruciating pain and have to wait for a nurse to come with an injection," said White. "Then, it takes awhile for the painkilling drug to take effect. Subsequently, the patient may become groggy because a large dose of medication is required to produce a sustained effect. Then, the pain cycle starts again, and it might be awhile before their next injection."

With conventional nurse-administered analgesia, the usual time interval between injections is four hours.

The concept with the PCA machine is for the patient to administer small doses of painkiller as needed. The patient has by their bedside a button at the end of a cord, which is attached to the PCA machine. By pressing the button, a small amount of the analgesic is injected into an intravenous tubing that sends the pain reliever directly into the bloodstream.

A timer built into the computer-programmed machine inactivates the device for a period of from five to 15 minutes after the pain medication is administered to ensure that patients do not inadverently overmedicate themselves.

"Because the patient isn't as groggy as with nurse-administered injections," White said, "most surgical patients are able to get up and become mobile sooner using the PCA. Also, we've found that most patients use less medication with the PCA. And, because the patient is taking responsibility for their own care, there's a real psychological benefit."

White, who has a Ph.D. in Pharmacology as well as an M.D. degree, added that pain and anxiety are clearly interrelated. "Increased anxiety will make pain less tolerable," he said, "and conversely, increasing pain enhances anxiety.

"Highly aggressive patients consume more medication than patients whose coping styles are more passive. The PCA helps patients keep their anxiety in control because the pain never reaches a level that can be close to intolerable for some."

White said PCA machines have been used on about 250 post-surgical patients at Stanford over the last three years with great success.

The first research on the devices was done in this country about 15 years ago, but the PCA machines only became commercially available last year, he added. Each unit costs from $1,500 to $3,000, although some community hospitals are leasing machines for about $80 per month each, said White.

There are currently four commercially-available PCA devices for hospital use, the anesthesiologist said, and others are being developed for use both inside and outside the hospital environment.

"Although there are risks associated with the injection of any medication, including the narcotic analgesics given by nurses, the chances of serious injury or death from using the PCA are virtually non-existent if the machines are programmed properly and their use explained clearly to the patients," said White.

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"In trials with about 250 patients, we've only had two minor problems resulting from the patients not clearly understanding how to use the PCA. Because the patients still are closely monitored by nurses, those problems were easily rectified," he continued.

White said one of the patients under-utilized the device because she had difficulty adjusting to the idea that she was responsible for administering the medication, rather than the nurse. He said the other patient developed transient hypotension (lowered blood pressure), which seemed to be the result of excessive use of the PCA device. Later it was learned that this patient had a history of drug abuse, and so the amount of medication the machine dispensed was lowered, and the patient was able to continue using the device without problems, the physician added.

"There were no cases of morphine overdoses requiring the use of opiate antagonists (counteracting medications)," said White.

He concluded that the vast majority of patients preferred PCA therapy to their previous postoperative analgesic regimes. However, one patient stated a preference for injected intramuscular medications "because she was more sleepy and therefore had less recall of the early postoperative period."

* * *

For writers interested in the types of PCA machines available, details follow:

The Abbott Life Care PCA Infuser (Abbott Laboratories, North Chicago, Ill.) combines microprocessor (with self-checking electronics) and stepping motor technology for the delivery of intermittent doses of medication from prepackaged, disposable cartridges. It is a lightweight (14.5 lbs.), portable, computerized infusion pump with a lockable security door that prohibits any unauthorized person from getting to the drug or the controls while the unit is in operation.

The Bard Harvard PCA Pump (C.R. Bard, Inc., Englewood, Colo.) is a portable syringe infusion pump capable of both continuous and intermittent infusion. The pump is a stepper motor which is microprocessor-controlled to prevent faulty operation due to an empty drug syringe, low flow, excess pressure, low battery, or control circuit failure.

The Intermedics (Graseby Dynamics) Cardiff Palliator (Intermedics Inc., Angelton, Tex.) is a line-powered syringe pump, which is pre-programmed to deliver the desired dosage of medication at a pre-determined flow rate. The parameters are adjustable over a wide range to accomodate a variety of drugs and dosage regimens. To minimize the possibility of the button being pressed accidently, the button must be pressed twice within one second to release the medication.

The Pharmacia Prominject Pump (Pharmacia Laboratories, Piscataway, N.J.) is a microprocessor-controlled, programmable infusion pump with three different modes of operation — patient-controlled, consecutive infusions, and constant infusion.

In addition, Pharmacia is marketing a small (15 oz.), portable, programmable infusion device (Deltec Cadd-Pac), which can provide for the delivery of pain-relieving medication outside the hospital environment.

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HOW DEVELOPMENT OF A SYNTHETIC GROWTH HORMORE WILL AFFECT TREATMENT

STANFORD—

The Food and Drug Administration's approval of a genetically engineered human growth hormone has tremendous implications for medical treatment in general, but for 60 young patients at Stanford Medical Center, it has a more specific meaning: They can start receiving growth treatments again.

The 60 children had been receiving natural growth hormone extracted from the pituitary glands of human cadavers, but that treatment was stopped earlier this year because of indications it might be responsible for development of an extremely rare, always-fatal infection called Creutzfeld-Jakob disease. The virus of the disease can incubate for years before it appears. Experts estimate the risk of it occurring in people under 40 as only about 1 in 100 million.

Four deaths from Creutzfeld-Jakob disease were reported this year among young adults who had received the natural growth hormone. The first death reported was that of a 20-year-old man who was a patient of Dr. Raymond Hintz, professor of pediatrics at Stanford School of Medicine.

The discovery of four cases in a brief time, Hintz said, "makes it seem almost impossible that it was a matter of chance." However, he said, any determination of a link between the natural hormone and Creutzfeld-Jakob disease awaits the results of animal tests that will be released in about a year.

Although it is believed that any danger in the use of natural growth hormone was eliminated when refined methods of preparation were adopted in 1977, distribution of the hormone was halted earlier this year by the National Hormone and Pituitary Program.

That meant an anxious waiting period for children who are deficient in growth hormone and need treatment to avoid dwarfism. The hormone must be given before a child reaches puberty to be effective and some children nearing puberty have been particularly concerned about the cessation of treatments.

Hintz said all of the Stanford patients who were receiving the natural hormone before will be put on the synthetic hormone as quickly as possible, "we hope within a month."

He said Genentech Inc., the South San Francisco company that makes the hormone under the trade name Protropin, expects no problems in meeting all the needs although there could be a slight delay in getting it distributed to all the hospitals using growth hormone.

Stanford has been one of about 10 medical centers across the United States testing the synthetic growth hormone for the past four years. More than 200 children have been tested, Hintz said, and "the consensus is it's safe and effective."

Approval of the synthetic hormone should open the way to other research, Hintz said. He said he and Dr. Ron Rosenfeld, associate professor of pediatrics at Stanford, have been involved in research testing the effectiveness of growth hormone on 70 girls around the country suffering from Turner's syndrome, a chromosomal defect in females that causes stunted growth and other deformities.

"Other possible uses (for the hormone) are under research or will be fairly soon," he said.

Genentech officials said the synthetic hormone would cost $6,000 to $10,000 for a year's treatment, slightly less than the natural hormone. Hintz noted, however, that at least two other companies are testing synthetic growth hormone. "I think as soon as competition exists, the price is likely to drop," he said.

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SMITHKLINE BECKMAN SCIENTIST DESCRIBES MALARIA VACCINE RESEARCH

STANFORD—

An anti-malaria vaccine, made through a new high-yield genetic engineering process, may be tested in U.S. Army volunteers next year, a research scientist said Thursday, Oct. 17 at a scientific symposium held at Stanford University Medical Center.

If effective, it could become one of the world's most widely used disease prevention agents because malaria, a parasitic disease spread by tropical mosquitoes, infects hundreds of millions of people worldwide.

The vaccine has nearly completed preclinical tests proving that it stimulates antibody production against the malaria parasite in mice and rabbits, reported Dr. Martin Rosenberg, vice president and director of the molecular genetics department at SmithKline Beckman, Inc.

Studies have also demonstrated that the test substance can block the parasite from invading human liver cells in the laboratory, Rosenberg said. Soon, Food and Drug Administration approval for human testing will be sought, he added.

Rosenberg spoke at a symposium on genes and disease organized by the Stanford Center for Molecular and Genetic Medicine and sponsored by Beckman Instruments, Inc., in celebration of the 50th anniversary of the company's founding.

The vaccine is being developed collaboratively by Dr. Wayne Hockmeyer and other scientists at the Walter Reed Army Institute of Research and the National Institutes of Health, with Rosenberg and his colleagues at SmithKline Beckman.

The agent blocks an early stage of the life cycle of the malaria parasite, *Plasmodium falciparum*, Rosenberg said.

Infection begins when the parasite slips into the body in the saliva of a biting *Anopheles* mosquito. Shortly after it enters the bloodstream, the tiny parasite—at this stage called a sporozoite—migrates into the liver where it matures into a different form and then multiplies in the red blood cells.

The vaccine is designed to snare the sporozoite before it can enter the liver, Rosenberg said.

The vaccine consists of protein material identical to portions of a protein that coats the surface of the sporozoite, he explained. The researchers hope that injections of the vaccine will stimulate a person's immune system to manufacture antibodies that recognize portions of the sporozoite protein.

Then, if the malaria parasite ever invades an immunized person, his body is already stocked with antibodies to attack and eliminate the sporozoite.

Rosenberg described how he, Dr. Jim Young, and other scientists at SmithKline Beckman employed genetically engineered bacteria to obtain high yields of the test vaccine.

They inserted a small piece of DNA into *Escherichia coli*, a bacterium widely used in the biotechnology industry. The DNA contained the gene that produces the sporozoite protein, isolated from the malaria parasite by scientists at NIH. The DNA also contained regulatory signals telling the bacterium how to interpret the foreign gene.

The scientists also engineered some special genetic tricks into the bacterium to obtain record harvests of the foreign protein, Rosenberg said.

One of these special adaptations prevented *E. coli* from destroying the foreign protein before it could be harvested.

The other enabled the scientists to grow a large number of the bacteria while keeping the foreign gene suppressed. By simply raising the temperature at which the bacteria were growing, the scientists could flick protein production on in the bacteria, which spewed out huge quantities of the product before dying.

Rosenberg said that in a little less than two hours, 10 liters of bacteria generated a quantity of protein equal to the amount that could be harvested from the parasites contained in a hundred million million (1 followed by 14 zeroes) mosquitoes.

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FOR IMMEDIATE RELEASE

(Editors: transmitted Business Wire 10-18 am)

AIDS APPEARED FIRST IN DRUG ADDICTS, EXPERT SAYS

STANFORD—

Drug abusers may have been among the first to come down with acquired immune deficiency syndrome (AIDS) in the United States, according to Dr. William Haseltine of the Dana Farber Cancer Institute at Harvard, who spoke at Stanford Thursday, October 17.

Haseltine said the presence of the virus among drug users has "worrisome consequences" for the general public, as many prostitutes are also addicts.

In central Africa, he said, a fourth of the men who report visiting prostitutes carry the AIDS virus, whereas of men who do not, only five percent have antibodies to the AIDS virus.

Haseltine cited the work of Dr. Don Des Jarlais who found that by 1979, when the first cases of AIDS appeared in homosexual men, intravenous drug users in Manhattan were also infected with the virus that causes the disease.

As doctors began to see damaged immunity in the gay population, Haseltine said, they noted another malady that was striking drug users. They were diagnosing a "walking pneumonia," in addicts whose congested lungs had "filled up" with white blood cells, he said.

The lung disorder, called lymphoid interstitial pneumonitis, is caused by the AIDS virus, and it is also common in children with AIDS, Haseltine said.

Blood samples collected from 40 drug abusers in 1979 were tested recently by Des Jarlais, a researcher with the New York State Division of Substance Abuse Services.

In a telephone interview Thursday, Des Jarlais said that blood from 13 of the 40 addicts contained antibodies to the virus that causes AIDS. Today, he estimates, 60 percent of the city's illicit drug users carry the virus in their blood.

Haseltine detailed his own research on the family of viruses that includes HTLV-III, the one that causes AIDS, in a talk at the Beckman Scientific Symposium on Genes and Disease at Stanford University School of Medicine.

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He described how HTLV-III efficiently invades and takes over the metabolic machinery of human cells.

Retroviruses such as HTLV-III insert themselves into the nucleus of a host cell. The infected host cell now churns out viruses, in addition to its own products.

Unless this genetic merger takes place, Haseltine said, these viruses cannot reproduce themselves.

Like any other member of the retrovirus family, the AIDS virus sets out to be a "good parasite," he said. But in humans, HTLV-III is too successful an invader.

The AIDS virus has a unique gene that spurs the genetic controls of the host cell, so that it makes lots of virus, Haseltine said.

By rapid replication, the virus gains the advantage of quickly swelling in numbers, he said. But, he added, the disadvantage is that the host cell burns out and dies.

"Now that we understand this gene, we may be able to make drugs to counteract the (AIDS) infection," he said.

Because HTLV-III kills one of its host cells in humans—immune cells called T4 helpers—it causes the disease AIDS. But the virus also has more subtle effects in people that resemble more closely its probable origins as a parasite, Haseltine said.

It can ride into the brain within white blood cells "like a Trojan horse" and slowly destroy nerve cells, and it also causes the interstitial pneumonitis seen in drug addicts, he said.

These actions more resemble those of successful retroviruses which can co-exist with their host for years, he said, such as the visna virus that slowly kills sheep with lung and brain disease.

In contrast, he said, the rapidly lethal effects of HTLV-III on human T4 helpers make it a "maladapted virus for man."

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JACOBS IS ACTING DERMATOLOGY CHAIRMAN; FARBER TO RETIRE

STANFORD—

Dr. Paul Jacobs has been named acting chairman of Stanford University School of Medicine's department of dermatology, succeeding Dr. Eugene M. Farber, professor and chairman who is retiring after 35 years at the post.

Jacobs, professor of clinical dermatology, has served on the Stanford faculty since 1970 after a number of years of practice in military medicine and as a member of the faculty of Georgetown University Medical School. He is a graduate of the Stritch School of Medicine, Loyola University in Chicago.

The appointment was announced by Dr. David Korn, dean of the School of Medicine. Korn stated that he had granted Dr. Farber's request for a sabbatical leave starting Oct. 1, 1985, for the remainder of the current academic year, with his retirement to be effective Sept. 1, 1986.

"Dr. Farber has informed me that the exigencies of his health necessitate his relinquishing his university and hospital positions and duties," said Korn. "We are grateful for his many contributions to the university, and wish him well in his retirement."

Farber recently told the Stanford University News Service that the need to end his university activities was influenced also by the time and energy required to defend against charges filed in Jan. 1985, by a former female patient seen by him at the university dermatology clinic. Farber pleaded innocent in Palo Alto Municipal Court in Jan. 1985. No hearings have occurred to date.

Farber's attorney, Harry B. Bremond, said, "We are certain that he will be vindicated; the charges are entirely without foundation. We believe the university's internal proceedings would also have exonerated our client."

A university investigation was begun in Jan. 1985, but was delayed for months while first-hand testimony was not available to the university. The investigation was governed by faculty disciplinary procedures, which require it to remain confidential.

Korn stated that the proceedings were not completed, and have been made moot since Dr. Farber no longer has any institutional duties.

Joining the Stanford faculty from the Mayo Clinic in 1948, Farber was appointed dermatology chairman in 1959 when the School of Medicine was moved from San Francisco to the campus.

Among Farber's contributions are the training of more than 200 specialists in dermatology, the development of the nation's first Psoriasis Day Care Center, and research to obtain basic knowledge about the biology of the skin.

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SCIENTIFIC ADVANCES HELP DEVELOPMENT OF NEW WHOOPING COUGH VACCINE

STANFORD—

Stanford University scientists are helping to develop a new generation of whooping cough vaccines that may be safer than the current injection, whose rare side effects have raised a controversy over its compulsory use.

The scientists have identified a toxic component of whooping cough vaccine that is responsible for seizures or convulsions in an estimated one of every 750 vaccinated children and permanent brain damage in one out of 300,000. They also have cloned the harmful toxin's gene from the bacterial agent that causes whooping cough.

These advances are helping to speed the development of several alternative forms of a vaccine to prevent whooping cough.

On one front, the scientists are already testing in mice a vaccine that lacks the harmful component. On another front, they are using genetic engineering techniques to manipulate the offending bacterial gene so as to chemically defuse its toxic effect. The weakened gene could then be replaced in the whooping cough organism to provide another possibly safer vaccine.

The research is taking place in the laboratories of Dr. Stanley Falkow, professor and chairman of medical microbiology at Stanford, and Dr. Lawrence Steinman, associate professor of neurology.

Falkow will report on the progress Thursday (Oct. 17) at a scientific symposium to be held at Stanford Medical Center to celebrate the 50th anniversary of the founding of Beckman Instruments, Inc. In addition, some of the findings soon will be published.

Whooping cough, sometimes called pertussis, is a respiratory illness that annually in the U.S. infected hundreds of thousands—and killed thousands—before the vaccine became available about 40 years ago. (It is still a killer in many underdeveloped parts of the world, Steinman said.)

The current whooping cough vaccine is made from the bacterium that causes the disease—*Bordetella pertussis*—and is administered to infants and children in "DPT" shots which also include vaccines against diphtheria and tetanus.

Controversy over its use has boiled up in the last several years. Two of the drug's three major manufacturers halted production last year, citing increasing costs associated with insurance and with lawsuits by families of brain-damaged children. As a result, some parents, frightened by the vaccine's rare side effects, have refused to get their children immunized.

Most physicians feel that protection against the disease far outweighs the small risk of side effects, said Steinman, a pediatric neurologist. But even though the risk of nervous system damage is small, the vaccine could be improved, he added.

Steinman, Falkow, and their colleagues recently identified pertussis toxin, one of several chemicals the whooping cough microbe produces, as the culprit that causes the adverse reactions.

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They made a test vaccine from a *Bordetella* strain modified to produce a defective pertussis toxin. When administered to specially bred mice that are highly susceptible to the standard vaccine's side effects, the modified vaccine was 100 times weaker in its ability to cause neurological damage, Steinman said.

And although no other purified protein from the normal whooping cough bacterium produces neurologic damage when injected into the inbred mice, shots of purified pertussis toxin cause nervous system effects resembling those seen in affected children.

These findings suggest that the *Bordetella* strain with defective pertussis toxin might be a good candidate for a safer human vaccine, Steinman said. Preliminary studies suggest that mice given the vaccine develop a protective immune response against the bacteria, and this may prevent the disease, he noted.

Other promising vaccine candidates are being developed by researchers in Falkow's laboratory who have isolated and cloned the gene that codes for pertussis toxin. They are trying to develop new strains of the organism that are crippled in their ability to cause side effects but retain the ability to trigger a protective immune response.

With gene splicing techniques, Dr. William Black, a postdoctoral fellow in Falkow's lab, cut up the pertussis toxin gene into pieces. Inserting single pieces of the gene back into a whooping cough bacterium then creates an organism that makes defective pertussis toxin. Since the small gene pieces cannot make the entire pertussis toxin protein, side effects should be minimized. But even small pieces of the gene may produce enough of the protein to elicit a protective immune response against the disease, Falkow explained.

But although Steinman said his group is just "half a step away from saying we have a good vaccine candidate for human testing," scientists face a statistical dilemma in actually demonstrating a new vaccine's improved safety.

Statistical rules would require a clinical trial of nearly one million children to prove the new vaccine's safety is better than the current vaccine's one in 300,000 odds, he said. "Other than our experience with polio and swine flu, you don't usually start clinical trials of that size," he remarked.

"But nobody likes to see a child have a convulsion," he added. Even a smaller clinical trial that could demonstrate improved safety above the one in 750 odds of seizures would be a "significant improvement," Steinman said.

The researchers also are working on ways of predicting which individuals might be at greatest risk for developing adverse reactions from the current vaccine. In mice, they have found that the strains most susceptible to the vaccine's side effects share a genetic factor that controls their immune response to bovine serum albumin, a protein found in cow's milk. Steinman said that further research may show if a similar genetic predisposition exists in people.

Others who were involved in the research are Drs. Alison Weiss and Erik Hewlett, now at the University of Virginia, Drs. Scott Stibitz and Nancy Adelman, Mae Lim, Richard Zuniga, and John Oehlert, all of Stanford.

The research funding came from the National Institutes of Health.

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CO-FOUNDER OF WINNING PEACE GROUP ASTONISHED AT GROWTH

STANFORD—

The awarding of the Nobel Peace Prize to the International Physicians for the Prevention of Nuclear War (IPPNW) prompted feelings of "great joy" and "some astonishment" in Dr. Herbert Abrams, professor of radiology at Stanford University Medical School.

The joy was a natural reaction to the recognition for an organization he helped found. The astonishment was at "the degree to which in five years the organization has been able to reach goals that we defined for it at the outset."

It was actually a little more than six years ago—in June, 1979—when a few members of the American organization Physicians for Social Responsibility met to consider the possibility of forming an organization of physicians from many countries.

Abrams, at the time chairman of the department of radiology at Harvard Medical School, became vice president of the embryonic organization. Dr. Bernard Lown, a Harvard cardiologist, became president, and Dr. James Muller, also a Harvard cardiologist, was named secretary.

Later that year, Lown and Dr. Eugene Chazov, personal physician to Leonid Brezhnev, exchanged letters on the role physicians could play in reducing the threat of the accelerating nuclear arms race. It wasn't until October, 1980, however that the IPPNW really got started at a formative meeting of American and Soviet physicians in Geneva.

Once started, it grew rapidly. There are 30,000 members in the United States and more than 100,000 in 58 other nations. The Soviet Union, Abrams says, claims to have one million members of IPPNW.

Abrams left Harvard in 1984 to return to Stanford, where he had been director of the diagnostic radiology division from 1960-67 and an instructor and professor in radiology from 1951-67.

In the past year, his concentration on anti-war activities has led him to scale down the medical research that earned him international recognition in the field of cardiovascular radiology. He is the author of the first definitive text on angiography as well as several other books and more than 150 articles.

He is a member in residence of the Center for International Security and Arms Control at Stanford, and has a heavy writing and lecturing schedule for that organization that parallels his work for the IPPNW.

Despite the distance from the IPPNW headquarters in Boston, he has maintained a very active role in the organization. He is a member of the IPPNW advisory committee and he writes and lectures extensively on the nuclear threat. He has addressed large audiences in Moscow and Leningrad and appeared on Soviet television.

In recent years, Abrams has become particularly involved in writing and lecturing about the dangers of accidental or inadvertent nuclear war. In September, he prepared a 65-page pager on "Sources of Human Instability in the Handling of Nuclear Weapons" that cataloged the human weaknesses in military personnel involved in the handling of nuclear weapons. The paper was delivered at a symposium on the "Medical Implications of Nuclear War" sponsored jointly by The Institute of Medicine and the National Academy of Science.

The role of physicians in saving life makes it natural for them to be involved in the anti-nuclear movement, Abrams says. Since medicine has no national boundaries, he points out, it's easy for physicians from many nations to work together on political issues as they have in IPPNW.

IPPNW has formed "a bridge between East and West," Abrams said, emphasizing that American and Soviet physicians have made a determined effort to "depoliticize" their role in preventing nuclear devastation.

He scoffed at critics who object to Americans working with Soviet physicians, saying he welcomes their participation "if they can help in accomplishing the goals of making the world alert to the dangers in nuclear weapons."

Winning the Nobel prize is almost certain to make IPPNW more effective in delivering its message to world policy makers, Abrams said. He said he is among American members of the organization who plan to make personal calls on President Reagan stressing the importance of arms-control talks in Geneva.

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FOR IMMEDIATE RELEASE

(EDITORS: photos available if not included.) **HOW TO DEAL WITH CHRONIC PAIN**

STANFORD—

When clinical psychologist JoAnn LeMaistre conceived of the idea for her new book, "Beyond Rage: The Emotional Impact of Chronic Physical Illness," she had no idea she'd be writing about her own experience.

Now that the book, which defines the six stages of emotional response to chronic physical illness, is published, LeMaistre realizes it was as therapeutic for her to write as she hopes it will be for all who read it.

The message LeMaistre strives to convey in her book is that the emotional responses chronically ill patients may experience are normal. Eventually, she wants readers to know, they will feel psychologically better.

"I want people to realize that there are very competent people who are walking around with very serious illnesses," she says. "They need to learn to see the competence and not just the illness."

LeMaistre is a victim of multiple sclerosis, an incurable progressive deterioration of the nervous system. The disease first surfaced about seven years ago, within a month of completing her post-doctoral training at Stanford University Medical Center, completing her dissertation and giving birth to her daughter.

"My neurologist said he had never seen such a malevolent force," she recalls.

It took her nearly two years to adapt to her new physical limitations, which include being legally blind and having lost control of many muscular functions. During that time she studied and passed the licensing exam required of all working psychologists. She also had to regain the professional and personal confidence the disease wiped out in order to be able to continue seeing patients and caring for her daughter, for example.

Today LeMaistre is victorious. She has a busy private practice, in which she specializes in the care of the chronically ill. She teaches in the psychiatry and behavioral sciences department at Stanford. She advises psychology interns. She provides inservice training for other health care professionals. She gives lectures to professional and community groups. In 1982 she received the Mother of the Year Award from the Santa Clara County Multiple Sclerosis Society, and in 1984 LeMaistre received the Distinguished Humanitarian Contribution Award from the California State Psychological Association.

The original concept for the book came to LeMaistre while she was working as an intern at Stanford University Medical Center's Pain Clinic. She conducted the psychological testing of patients, whose data showed her that when people did not physically feel well, they experienced "massive psychological changes, such as depression and anxiety, as well."

"I never expected that I would be almost two years recovering from an unexpected illness that completely laid me out," she says in her articulate and softspoken manner. "But it did give me a lot of time to think about this book."

LeMaistre describes the six stages of chronic illness through anecdotes and analysis. She attempts to make readers aware of harmful and destructive responses, and tells how to avoid or eliminate them. She stresses positive responses, which she hopes serve as a guide to patients, families and physicians.

The six stages include*crisis*, during which time the patient is afflicted by the illness; *isolation*, a common reaction when the patient realizes the illness is not going to go away; *anger*, the reaction to the realization during the isolation stage; *reconstruction*, the patient's attempt to try to adapt to a new lifestyle; *intermittent depression*, periods when a patient may go through setbacks in spite of being determined to return to as productive a life as possible; and finally, *renewal*, a patient's self-acceptance of a new physical and psychological state.

"Other books of this type have been geared towards the care taker," LeMaistre says. "This one is geared toward the patients, their families and friends. Physicians are telling me that when they lend the book to a patient, it ends up being passed around and read by many people.

"Someone recently told me that after reading the first chapter he spent an hour crying because it was the only thing he'd ever read that hit all the right chords.

"*Beyond Rage* seems to be having just the effect I was hoping it would," she says.

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REPORT QUESTIONS CATHETER USE IN PATIENTS WITH HEART OR LUNG DISEASE

STANFORD—

The use of Swan-Ganz catheters in patients with lung or heart disease has increased dramatically in recent years despite evidence that the risks of the procedure exceed benefits, a Stanford University professor said Wednesday, Oct. 16.

The catheter, a balloon-tipped hollow tube floated into the blood vessels of the lung, is commonly used in hospital intensive care units to measure the pressure in these blood vessels. The procedure differs from the ordinary cardiac catheterization used to diagnose narrowing of coronary arteries. Swan-Ganz catheters are left in place for monitoring patients over substantial periods of time.

"But it has become clear," wrote Dr. Eugene D. Robin, "that improved outcome is found only in small groups of patients and that use of these catheters is associated with considerable complications, including death."

Robin, a professor of medicine and physiology, said there is a need for well-designed clinical trials to evaluate the catheter and its use which has reached "epidemic proportions."

"While awaiting such trials," he said, "physicians should limit catheter use to patients on whom there is a large probability that measurements can answer specific questions about therapy." The number of such patients would be very small, he added.

Robin's remarks appear in an article in the September issue of the *Annals of Internal Medicine* in which he reviews recent studies on the catheter's use. The work was supported in part by a grant from the Samuel and Leah Osher Medical Education Fund.

One such study provides direct evidence of a high level of use of the catheter in critically ill patients, Robin wrote. In the study, which involved close scrutiny of 142 consecutive postmortem examinations, 55 (38 percent) of the patients had undergone pulmonary artery catheterization before death.

"In the absence of data derived from an acceptable clinical trial," said Robin, "it is not possible to determine which of these patients were catheterized 'appropriately' or 'inappropriately.' The point is that high frequency of use should be reserved for measurements unequivocally shown to have highly favorable risk-benefit ratios.

"If we assume that the patients who underwent postmortem examinations were typical of patients who died at that hospital, the data would indicate that almost 4 of every 10 patients are catheterized during the period of dying.

"These data, if generally representative of practice in American hospitals, would establish the use of the catheter as not only a rite but very commonly a last rite."

Robin cited indirect evidence showing extensive use of the catheter. Courses on intensive care for doctors in practice deal with its use, he wrote. Most intensive care and coronary care units training interns, residents and medical students provide similar instruction. And community hospitals hiring physicians for their intensive care units require that applicants know how to use it.

In some coronary care units, patients suspected of having suffered a heart attack have the catheter installed routinely when they are hospitalized, Robin said. This leads to the possibility that patients with essentially benign disorders like chest wall pain or viral infection of the percardium may undergo catheterization unnecessarily.

"Studies show the rate of complications from use of the catheter to be substantially high," Robin said. One study of critically ill patients with excessive fluid in the lungs, caused either by heart disease or other factors, showed that over 4 percent died of complications related to the Swan-Ganz catheter and between 20 and 30 percent of them had major complications requiring treatment.

Complications may range from blood clots and knotting of the catheter to heart arrhythmias and infections, Robin said.

The benefits of the catheter's use are difficult to define, Robin said, because often its measurements and subsequent interpretation are unsatisfactory and do not result in a significant change in the management of the patient.

"The results mislead rather than enlighten the physician," he noted.

There are major economic advantages resulting from use of the catheter, Robin wrote. "The fee paid to physicians for inserting the catheter is usually in the hundreds of dollars. An entire industry has been spawned in manufacturing and distributing catheters, as well as for the required recording equipment."

Robin said physicians not directly involved in critical care must act as advocates for the patients. They must ask how the catheter's use will benefit their patients. "If the expert cannot provide convincing answers, the physician must decline to have the device used on his patient," he said.

Some people have argued that catheter use leads to the accumulation of physiological data, Robin said. They assume that more data lead to better management of the patient.

"This result has not been shown," Robin said. "Even if there were no hazards or expense, these benefits might be acceptable. However, there are hazards and there is expense, and routine use of catheters to reap such benefits should not be acceptable."

Robin cited a Stanford University Hospital study showing that treatment of critically ill patients without pulmonary flow catheters is possible. The study involved 23 heart-lung transplant patients. A catheter was used in only one patient, despite the fact that many patients develop pulmonary edema (fluid in the lungs) following transplant surgery. The mortality rate in heart-lung transplant patients has been 20 percent compared to a 50 percent rate shown in patients with adult respiratory distress syndrome in whom the catheter is used routinely.

"Heart-lung transplant patients may be so special that general conclusions about the study cannot be drawn," Robin said. "Nevertheless, the data provide a challenge to advocates of catheterization."

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FEWER PATIENTS RAISE CONCERNS FOR STANFORD HOSPITAL

STANFORD—

Low patient census, finance, and ways to expedite applications of physicians seeking access to hospital laboratories preoccupied the October meeting of Stanford University Hospital's board of directors.

Sheldon S. King, executive vice president and hospital director, reported that the hospital is only 66 percent full.

"We may be seeing a reflection of what every other hospital is seeing, but it's an issue of great concern," he said.

The census has dropped by 2,000 patient days since last year, King said, and this will require further cost reductions while the hospital gets ready to implement new programs designed to bring the census back up. This cannot be achieved overnight, however.

Last year, the hospital through cost management achieved an $8.1 million reduction in expenses as part of a three-year $20 million goal. It has launched two new programs and has signed contracts with prudent buyer plans in an effort to maintain its share of the patient care market. But other area hospitals, the directors were told, are involved in more aggressive efforts while Stanford hospital, being part of a university with several missions, is often too slow in acting to stay ahead of its competitors. The reason: it is not simple to achieve consensus among various constituencies on the best and most appropriate way to proceed, the board was told.

Even with a lower census, however, reported Stanford Vice President for Business and Finance William Massy, the hospital continues to maintain a favorable financial condition—due mainly to the acuity of cases being treated. However, future uncertainties should be of concern to the board, he warned.

In other business, the board said that service access committees should shorten the timetable for acting on applications of community physicians seeking staff privileges in hospital laboratories.

While in general access policies are working smoothly, there have been some delays, explained hospital chief of staff James Silverman, because some physicians previously granted access do not utilize the facilities. The committee wanted to evaluate the pending requests around the applicants' plans to bring patients to the hospital. The committee was concerned about granting privileges to inactive physicians who keep other applicants out."

Hospital policies call for a specified number of slots available to community physicians in the specialized laboratories directed by full-time faculty.

The board suggested that its concerns be conveyed to the service access committees. And Stanford university president and hospital board chairman Donald Kennedy summed up the board's feelings. "While faculty members understandably are worried about those matters, the board is equally concerned about the hospital census."

In other action, the board voted to create an academic committee to advise the directors on issues affecting the hospital's academic missions.

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The committee is expected to "facilitate and to support the synergy of the educational, research and patient care missions of Stanford University, the Stanford University School of Medicine and the Stanford University Clinic," the board stated.

The committee's role "will be important," said Kennedy, "in view of the changing relationships of the hospital and medical school."

Under the revised organizational structure, as Kennedy explained in a recent memo, the university and the hospital are sister "corporations"—separate entities with related goals and a common set of "owners," the Stanford's trustees who also serve as members of the hospital corporation. The university depends on the hospital to provide vital academic support for the missions of the medical school. In addition, the hospital is located on the campus. The actions of each affect the other in important ways. The hospital also serves as a community hospital for patients of physicians in private practice.

The committee, whose membership will be appointed shortly, will have at least five voting board members, including the dean of the School of Medicine and the board representative of the full-time faculty, and up to three voting non-board members, with the hospital board chairman and hospital president serving ex-officio.

Among its functions, the committee will advise the board on policies and plans that may influence the academic mission of the hospital, including medical student, graduate and postgraduate education and training.

The board approved in concept the hospital's strategic plan, a document which outlines approaches to keep the institution viable in a shrinking and highly competitive health care market.

The board also received a progress report on the hospital modernization project which is proceeding on schedule.

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(editors: transmitted business wire)

POSITIVE AIDS TEST REVERSED IN WOMAN EXPOSED TO VIRUS

STANFORD—

A woman who had tested positive for antibody to the AIDS virus and showed decreased immune cells has regained normal readings without contracting the disease, although only time will tell if she remains free of AIDS, Stanford doctors report.

Her case suggests that the decrease in immune cells caused by the initial infection with the AIDS virus may not always be irreversible, the researchers write in the October issue of *Annals of Internal Medicine*.

The findings show that at least one person who developed antibodies to the AIDS virus has lost her antibody response to it while remaining well, said Dr. William Robinson, professor of infectious diseases and principle author of the report.

"We will have to follow her for a long time to be sure of this," he cautioned.

In contrast to the woman in the report, those who become ill with AIDS lose their antibodies to the virus because their damaged immune system can no longer make them.

Robinson cautioned that the results should not be interpreted to mean the woman has recovered from AIDS, as she has never been ill with the disease as some press reports have suggested.

The woman was exposed to the virus through sexual relations with her husband, a hemophiliac who died of AIDS a year ago. He had probably acquired AIDS from contaminated blood products, the scientists wrote.

Although this is a single instance where the human body has recovered from contact with the AIDS virus, the case "suggests that avoidance of repeated exposure to LAV (the AIDS virus)...may sometimes result in recovery" of normal immune function and loss of antibody to the virus that causes AIDS, the scientists wrote.

The couple was referred to Robinson as subjects for his clinical research on the AIDS virus, he said.

Initial blood tests revealed that AIDS virus had entered the wife's body. But subsequently, after the couple began to use a condom during sex, antibodies to the virus disappeared from her blood, and she recovered normal numbers of disease-fighting cells, the doctors reported.

The couple's two children did not develop AIDS antibodies, they retained normal numbers of immune cells, and they have not had any sign of the disease, according to the report.

Neither the husband nor the wife admitted to intravenous drug use or sexual contact with any other partners, the report said.

Other authors of the report are Drs. Edgar Engleman and Jeffrey Lifson of Stanford University Medical Center; Drs. Harold Burger and Barbara Weiser, formerly of Stanford and now at the State University of New York at Stony Brook; and Dr. Luc Montagnier and associates at the Pasteur Institute in France.

The couple had continued to have sex after the husband developed the swollen lymph nodes, fatigue, and weight loss that often precede AIDS.

In December of 1983, the husband's blood had antibody to the AIDS virus, and he had a "severely decreased" number of T helper lymphocytes, the cells that are invaded and then killed by the AIDS virus.

In January of 1984, his wife was tested, and her blood also had the antibodies, and showed "mildly decreased" numbers of T helper cells, the report said.

In February, they started using condoms, and in March, the husband developed AIDS (specifically, an infection with *Pneumocystis carinii* pneumonia), and sexual relations stopped, the scientists reported.

He died in September, 1984.

When the wife was tested again in April, 1984 the antibodies were gone from her blood and the number of her T helper cells had reached normal values.

The husband's four brothers, sister, and mother were all well and had no evidence of AIDS antibodies as of April, 1984, according to the report.

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MICROBUBBLES MAY REPLACE CATHETERIZATION

STANFORD—

Stanford University Medical Center scientists are testing special "microbubbles" as a new noninvasive method to detect high blood pressure in the lungs.

Preliminary results, reported in the October issue of California Medical Association's *Western Journal of Medicine*, show the experimental technique to be less risky, less uncomfortable and less expensive than the current method of catheterization.

More work, including developing a way to mass produce the carbon dioxide bubbles, is necessary before the technique is ready to test in humans, the researchers said.

The technique works by injecting the bubbles into a patient's veins. When they reach the heart, they vibrate at a frequency dependent on the surrounding pressure. The vibrations can be picked up by a microphone placed on the chest.

"This is just one of many ways being investigated as a way to avoid catheterization," said one of the article's nine authors, Dr. Stephen Oesterle, physician specialist in the departments of medicine and cardiology.

High blood pressure in the lungs, caused by stress, fatique and heart problems, can be fatal by causing one of the heart's arteries to rupture.

The current detection method of catheterization involves threading a long narrow tube from a leg artery to the heart. Because of its potential complications, such as infection, physicians are looking for alternative techniques, Oesterle said.

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FOR INFORMATION CONTACT: Laura Hofstadter (415) 497-6911
FOR IMMEDIATE RELEASE

STANFORD SCIENTISTS FIND A BACTERIAL "INVASION" GENE

STANFORD—

Stanford University scientists have found a gene that allows disease-causing bacteria to invade animal cells.

The discovery—the first identification of a specific genetic factor required for the bacterial invasion process—should help scientists better understand the critical yet mysterious first steps involved in many bacterial infections.

It should also help advance the quest for new ways to stymie pathogenic (disease-causing) bacteria, which are becoming inreasingly resistant to antibiotics.

The invasion gene was found in a bacterium called *Yersinia pseudotuberculosis* by Drs. Ralph Isberg and Stanley Falkow, two Stanford medical microbiologists who reported the work in the September 19 issue of *Nature*.

Falkow, head of Stanford Medical School's department of medical microbiology, also will describe the research at a scientific symposium on genes and disease to be held in Stanford Medical Center on Thursday (Oct. 17) in celebration of the 50th anniversary of the founding of Beckman Instruments, Inc.

Although *Yersinia pseudotuberculosis* is not a major cause of human disease, it is closely related to the microbe that causes bubonic plague and it is responsible for a serious veterinary infection nicknamed "guinea pig plague."

It is one of a large class of bacteria—including the organisms that cause typhoid and tuberculosis—that infect by penetrating and surviving inside animal cells rather than growing outside cells, Isberg said.

Having identified the invasion gene, the scientists are now beginning to dissect the process by which bacteria penetrate cells in more detail, they said.

"The more we learn about pathogenic bacteria, the more able we are to combat their ability to grow," Isberg explained. "We're looking toward the day when we can use alternatives to antibiotics in fighting bacterial infections.

"If we can gain knowledge about particular steps in bacterial growth, such as invasion, then we may be able to design therapies that will block those steps without involving antibiotics," he added.

Another potentially valuable outgrowth of the discovery is that bacteria engineered to contain the invasion gene might become useful ferries for shipping substances such as drugs, other proteins, or even pieces of DNA, into animal or human cells, Isberg said. These ferries could be useful in medical therapy as well as in basic research.

Far more speculative but also a possibility, Isberg added, was the potential that the invasion gene could aid vaccine development by transporting weakened bacteria into cells, where they could persist long enough for the body to mount an immune defense against them.

The scientists found the gene using recombinant DNA techniques in which they transferred pieces of the *Yersinia* chromosome into *Escherichia coli* bacteria that cannot normally penetrate animal cells. Acquisition of the single gene turned the non-invading *E. coli* into bacteria capable of infiltrating animal cells grown in tissue culture.

In continuing studies, the researchers have found that the *Yersinia* invasion gene codes for a large protein found on the bacterial surface, Isberg said. But the researchers don't yet know whether that protein facilitates binding to the animal cell or whether it performs other roles that could be involved in invasion.

Isberg said the scientists were surprised to find that in *Yersinia*, a single gene confers the capacity to invade. But he added that as researchers investigate other bacteria that evolved separately, they may find variations in the invasion process requiring more, or different, genetic factors.

The research was funded by grants from the Jane Coffin Childs Fund for Medical Research, the National Science Foundation, and the U.S. Army Medical Research and Development Command.

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UCSD RESEARCHER TO GIVE FIRST FEIGEN MEMORIAL LECTURE

STANFORD—

The first George A. Feigen Memorial Lecture will be held Friday, October 25 at 4:30 p.m. in Fairchild Auditorium.

The speaker will be Dr. Seymour Jonathan Singer, professor in the biology department of the University of California at San Diego.

His talk, entitled "The cell biology of cytotoxicity," will be followed by a reception and is open to all interested members of the community.

Originally trained as a chemist, Singer has made major contributions to variety of fields of biological research. He was the first to propose the fluid mosaic structure of cell membranes, a major leap toward the present understanding of how biological membranes function.

Singer also has been an innovator in studies of the structure of biological molecules, particularly those involved in immunological reactions, and with colleagues, he helped usher in the new era of molecular disease.

Feigen was a Stanford faculty member in the department of physiology from 1949 until the time of his sudden death in 1983. He was an authority on anaphylaxis and the mechanisms involved in its expression, and was widely regarded as an impeccable scholar and a first rate teacher.

The Feigen Memorial Lecture, established shortly following his death, is intended to bring distinguished immunologists to Stanford each year as a reminder of Feigen's numerous contributions to Stanford and to his many friends, students and colleagues.

10-14-85 —30— feigen LH9

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FOR INFORMATION CONTACT: Shirley Kraus (415) 497-6911
FOR IMMEDIATE RELEASE

CHILDRENS HOSPITAL AT STANFORD OPENS NEW CHILD PSYCHIATRY CLINICS

STANFORD—

The child psychiatry division at Children's Hospital at Stanford has added four new clinics to round out its clinical services, announced Dr. Herbert Leiderman, psychiatry professor.

"With the new clinics we can now provide more comprehensive and specialized services to our patients," said Leiderman, who directs the outpatient services.

"We have established a clear focus on family in treating children," he continued. "We want to help children in their home, school and play environments, and not simply treat them in isolation."

The new outpatient clinics include:

- a child and adolescent psychiatry clinic and an infant and preschool psychiatry clinic, through which a staff of psychiatrists, social workers and psychologists offers comprehensive assessment and therapy of infants, children, adolescents and their families;
- a pervasive developmental disorders clinic, through which staff members can treat developmental disorders such as autism;
- an obesity clinic, through which staff members can assess and treat children and adolescents for obesity, which "aside from the physical effects is known to have severe social consequences in this society as well," Leiderman said; and
- a medication clinic, through which staff members can consult and manage medication for children. "The responsible use of psychopharmaceutical agents is a relatively new area in child psychiatry," Leiderman said. "Many physicians and patients are not well acquainted nor feel comfortable with them."

The child psychiatry division has also established a consultation network for physicians in the areas of general pediatrics, birth defects and neurology.

The new clinics add to the existing outpatient services, which include specialized clinics in affective disorders, such as depression; gifted children; and eating disorders, such as bulimia and anorexia nervosa. Inpatient services are also available.

For more information call Leiderman at (415) 497-0817.

10-14-85 —30— psych sk6

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Ronald Goben (415) 497-6911
FOR IMMEDIATE RELEASE

STANFORD--One of the founders of the organization which Friday (Sept. 11) won the Nobel Peace Prize says the award validates the importance of recognizing the threat of nuclear war.

Dr. Herbert L. Abrams, professor of radiology at Stanford University Medical School, was one of the three American physicians who founded the prize-winning International Physicians for the Prevention of Nuclear War.

Abrams, Bernard Lamb and James Muller were all professors at Harvard Medical School when they formed the organization and began corresponding with Soviet physicians.

The Soviets were skeptical at first, but eventually agreed to the meeting in Geneva at which the organization was formed, Abrams said. The IPPNW now has members in 60 countries.

Abrams, who is now on the IPPNW's Advisory Committee, called the Nobel award ``very exciting recognition of the work the IPPNW has done in educating physicians, the public and policy makers on the very great threat of nuclear war.''

Physicians are a natural group to form such an organization because ``medicine has no national boundaries,'' Abrams said.

Abrams was at Stanford from 1951-67, as an instructor and professor in radiology. He was director of the diagnostic radiology division from 1960-67.

He went to Harvard in 1967, returned to Stanford as a visiting professor of radiology in 1980-81, and joined the Stanford faculty again as a professor of radiology on Sept. 1, 1984.

Nobel prizes are usually given to individuals, but news accounts have said that the peace prize has been given to organizations previously.

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FOR IMMEDIATE RELEASE

STATUS OF RESEARCH ON AIDS

(Editors and Writers: Roberta Friedman is spending a year at Stanford University as an intern-fellow of the Council for the Advancement of Science Writing. The following article, based on published reports and interviews with scientists around the country, describes how science and medicine are tackling the disease.)

STANFORD—

For the past four years, two groups of scientists have been following parallel paths, both with their sights on the puzzle of AIDS, the disease which has lethally compromised the immune systems of 13,000 Americans.

While the discovery of the AIDS virus (HTLV-III) by basic scientists sits in the scientific spotlight, clinicians have been observing the disease in patients, tracking how it spreads and recording the results of experimental treatments. From such diverse activities and perspectives, scientists believe, a way to control AIDS will be found.

"I'm a virologist," says Stanford's Dr. William Robinson, "so I think of all the viruses I know, and test ideas I have learned from them."

An expert on hepatitis B, he points out parallels between that blood-borne disease and AIDS. And he focuses on becoming familiar with the habits of HTLV-III, the better to outwit it.

A different tack is taken by Dr. Edgar Engleman, a Stanford immunologist. To him, the AIDS virus has been a jigsaw piece that fits neatly into his own research puzzle—finding the function of a molecule that sits on the surface of immune cells called T4 helpers.

T4 helper cells happen to be the ones killed by the AIDS virus.

Engleman had just shown that one of the cells' receptor molecules, named CD4, is critical to the proper performance of T4 helpers, when, he says, "lo and behold, here comes this virus that appears to use this molecule to attach to the cell and get in."

He is now investigating just how the AIDS virus latches onto, invades, and ultimately destroys these front-line defenders of the body's immune system. Describing the virus's invasion mechanism, Engleman says, could suggest a design for a drug to jam it.

Still another question some scientists ask is, did the AIDS virus cross the species barrier from animals to man? These researchers hope that learning about animal versions of the virus will lead to a vaccine as successful as the one against smallpox, which Edward Jenner crafted from the cowpox virus, vaccinia, in the 1800s.

"Jenner used the fact that certain viruses penetrate the species barrier to point the direction to control diseases in man," explains Dr. Thomas Merigan, chief of infectious diseases at Stanford.

"Through Jenner's approach, smallpox has become the only infectious disease we have controlled on a world-wide basis," he adds.

In the case of cowpox virus, the new host, humans, are not harmed, and are protected against smallpox. Other instances of cross species spread, Merigan says, do not give such happy endings.

As a British expert, Dr. John Seale, wrote in the August issue of the Journal of the Royal Society of Medicine, "a virus which successfully crosses the...barrier is often...lethal to the new species, though harmless to its natural host.

"The virus of African swine fever does not inconvenience the African wart-hog," Seale continued, "but it kills nearly all infected European pigs."

A virus that merely causes mouth sores in monkeys gives people deadly encephalitis, Merigan says. And the viruses of Lassa fever, Marburg-Ebola disease, and South American hemorrhagic fever peacefully inhabit rodents, but rapidly kill people.

Did HTLV-III really scale the species wall? Merigan says, "Our best epidemiologic evidence suggests that (the first cases of AIDS) occurred in Africa." And he agrees with Dr. Max Essex, chairman of the cancer biology department at the Harvard University School of Public Health, that the original source of HTLV-III could have been African monkeys.

Essex has found a virus remarkably similar to HTLV-III in Green monkeys that dwell in the same African countries, Zaire, Congo, Rwanda, and Burundi, where scientists think the outbreak of human AIDS began.

These Green monkeys, Essex finds, are not sick.

"We'd like to know why an agent is so well controlled by the monkey," Merigan says, "as that may give us leads on how to control the human disease."

Essex's hypothesis of Green monkeys as the source of the AIDS virus is "the most attractive theory that exists," says Dr. Peter Drotman, an epidemiologist from the national Centers for Disease Control.

Not all researchers agree. Engleman emphasizes that the AIDS virus seems to have a "special affinity" for the CD4 receptor on the human T4 cell.

"I'd argue that the only animals that would be infectible (with HTLV-III) are those with a CD4 molecule that is very similar to that of humans," he said.

As with other viruses that have found people a convenient place to live, Engleman explains, the ability of HTLV-III to mesh with the CD4 receptor is an unlucky accident of evolution.

Robinson is also cautious about an animal-AIDS connection. "Most viruses have a fairly narrow host range," he says.

It is possible that a monkey virus closely resembles human HTLV-III, he says, but that doesn't mean there was a transfer.

The virus that causes hepatitis in humans, he explains, has relatives among those that produce hepatitis in ducks, woodchucks, and ground squirrels.

The different versions of hepatitis disease are not cross-contagious among the species, yet similar coding within the genes of each of the responsible viruses suggest they had a common ancestor, he says.

But differences in the viral genes are enough to indicate that thousands or even millions of years have elapsed since that ancestor was around. And the same may be true for HTLV-III, Robinson says.

Deciphering the genetic code of the monkey virus to see if it is identical to the code of HTLV-III would decide the issue. The sequence of genes in HTLV-III is already known.

Still, even if the Green monkey virus is only a relative of the human AIDS virus, a monkey version of AIDS could help with a human vaccine.

Rhesus monkeys, which come from India, can be stricken by a virus that, like HTLV-III in humans, suppresses their immune systems. They die of infections, as do human AIDS victims. And Dr. Murray Gardner, chairman of the pathology department at the University of California at Davis medical school, has already fashioned a vaccine from killed, whole virus which protects healthy monkeys from getting the disease.

Gardner points out that the virus he is studying, called Type D, is only a distant relative of either the human AIDS agent or the virus in African Greens. But he hopes his success with the Rhesus will suggest strategies for human AIDS patients.

An even closer monkey model of human AIDS may be available. Essex has found that Rhesus monkeys also harbor a "simian T cell leukemia virus" (STLV) which does suppress their immune responses.

STLV, which makes the Rhesus sick, closely resembles the virus that apparently does not harm African Green monkeys. They could indeed be the same virus, Essex says.

The proteins of STLV, HTLV-III, and the Green monkey virus are all the same size, he says. Moreover, human antibodies to HTLV-III recognize both monkey viruses. The converse is also true: antibodies in blood taken from infected monkeys bind HTLV-III as strongly as either of the monkey viruses.

He plans to dissect the surface proteins of the monkey and human viruses so he can find the critical regions for immunity.

"It would be logical to take a piece of the virus that stimulates immunity in monkeys and use it as a vaccine for people," Essex explains.

Isolating a specific piece through techniques of genetic engineering, Gardner adds, would avoid the risks of vaccinating with the whole virus of such a deadly disease.

Yet one potential problem in developing an effective vaccine against AIDS has already surfaced.

The genes of HTLV-III differ among viruses obtained from different AIDS patients, and even the samples from a given patient have shown genetic variety.

These findings worry scientists. Genes determine the protein make-up of viruses, and the proteins that coat a virus are usually the attack targets for the immune system, and thus are the best candidates for a genetically engineered vaccine.

If these coat proteins vary among AIDS viruses, it will be hard to make a vaccine that will stimulate immunity against all the different viral varieties.

But Robinson claims the fear of failure is premature. He points out that gene differences are two steps removed from the resulting protein shapes which the immune system sees—genes have some leeway to vary, he says, without having their final protein products come out so altered that antibodies can't recognize them.

Genetic diversity also occurs among strains of hepatitis viruses, Robinson says. Yet a promising, genetically engineered hepatitis vaccine is already being tested in people.

Monkeys might have started the AIDS epidemic in people, but that says little about how the disease jumps from one person to another.

On the subject of transmission, the overwhelming consensus is that the HTLV-III virus is not adept at entering bodies. The disease AIDS is just not easy to catch.

According to Essex, the medical literature documents that Green monkeys have passed other, non-epidemic diseases to humans: notably Marburg fever, probably when the monkeys bite people who try to capture them; and jungle yellow fever, courtesy of a mosquito intermediary.

Yet this bridging of the species gap would be a rare event in the evolution of a virus, one that might start an epidemic but could not sustain one, Essex emphasizes.

"Once it crosses the species barrier," he says, "then people obviously transmit (the AIDS virus) to each other."

And whereas a monkey's bite could have been the isolated accident needed to inject the virus into the human community, scientists agree that saliva is not a good vehicle for transferring HTLV-III.

For one thing, Essex says, the amount of AIDS virus in human saliva is orders of magnitude less than the amount of cold virus present in the saliva of someone with the sniffles.

For another, Engleman adds, HTLV-III becomes frail outside the protective salinity of body fluids. Tap water breaks it apart; drying quickly destroys it.

Factor the fragility of the virus with its low numbers in saliva, and the resulting probability makes it unlikely that people acquire AIDS from a peck on the cheek, Essex says. A bite raises the probability, he says, because it introduces blood into the equation.

The final case against saliva as a transfer route for HTLV-III is statistics.

"The epidemologic pattern would look very different," Essex says. "More women would have AIDS, and more kids would have gotten it from their parents."

Another assurance that AIDS, although deadly, is not a particularly infectious disease is that health care workers have not contracted it through their contact with patients. Doctors and nurses who treat the disease would be especially likely to acquire AIDS were it easily transmitted.

In a prospective study at San Francisco General Hospital, 300 workers exposed to AIDS patients and lab specimens are being monitored for the presence of antibodies to the virus, according to the principle investigator, Dr. Julie Gerberding. The study has been going for one and a half years, and, so far, the only people who have tested positive are those who are gay, have bisexual partners, or belong to another high risk group for contracting AIDS.

And of 1758 American health care workers enrolled in similar studies, the CDC reported on September 27 that only two have acquired the AIDS virus through accidental exposure to patient blood: a female worker stuck herself with a contaminated hypodermic needle on two separate occasions, and a male lab technician cut his hand while handling a blood sample, and also stuck himself with a needle.

Both have had symptoms of swollen glands that often precede AIDS, but neither has yet developed the full blown disease, nor has the one British worker who tested positive for HTLV-III antibodies after a needle injury.

The CDC has concluded, in an editorial in its Morbidity and Mortality Weekly Report, that the risk of acquiring AIDS by occupational hazards in health care is "extremely low'—much less than the threat of hepatitis through needle accidents.

Certainly, Gerberding says, doctors and nurses take precautions around AIDS patients if a particular test or treatment they are giving risks accidental contact with blood or other virus-bearing body fluids.

At San Francisco General and at Stanford University Hospital, care givers don gloves to collect blood, stool, urine, or other secretions, and label such samples "Blood Precautions" (Stanford) or "H/a" (hepatitis/aIDS, San Francisco General). Hands are washed before and after any patient contact.

It is not unreasonable to wear gloves and a gown with AIDS patients, says Stanford's Robinson. But, he adds, gloves are not really necessary unless there is a break in the skin.

And hospital guidelines recommended by the CDC state that masks and gowns are needed only if the worker is likely to be soiled by spraying blood or vomit.

Simple hand washing is usually an adequate precaution, Robinson says, and when he treats AIDS patients, he often leaves it at that.

"We should prevent turning AIDS patients into untouchables," he says.

Hospital practices adopted for AIDS are similar to those used for handling people with hepatitis, since hepatitis B and AIDS share similar modes of transmission, Robinson points out.

In the western world, both diseases often strike intravenous drug abusers who exchange blood when they share needles, and homosexuals exposed to each other's blood through anal intercourse.

But in underdeveloped countries, hepatitis has a different pattern, Robinson says.

Mothers probably pass the hepatitis B virus to their newborn children, he says. Rather than causing an acute infection with fever, jaundice, and stomach pain, the hepatitis virus stays "silent," until accumulated insults to the liver kill the host, at age 40 or 50, with cirrhosis.

Perhaps a similar history for AIDS, with different, more silent symptoms, will be uncovered in Africa, Robinson speculates.

Primitive cultures might not recognize AIDS, but would think victims were dying of pneumonia or the other opportunistic infections, he says, "so it's hard to say if AIDS hasn't been around."

According to Drotman of the CDC, only one in fifteen of American AIDS victims are women, whereas available records show that the number of cases in African women and men is equal.

This different incidence suggests that AIDS, like hepatitis, takes a different pattern of transmission once it enters developed countries, Robinson says.

He doesn't think AIDS will spread as rapidly through heterosexuals in America as it has in the homosexual community, because many gays have been promiscuous.

"We're talking about several thousand sexual partners in one lifetime for some gays," he says.

Yet Engleman notes that we may not have waited long enough to see AIDS march through all segments of the American population, as the virus's incubation period can be five years or longer.

Knowing more about the habits of HTLV-III could be the key to halting the virus in its tracks.

To unravel the "natural history" of the AIDS virus—when it first appears in the blood, how long it takes for it to cause symptoms, how it passes from one person to the next—Robinson is watching Stanford AIDS patients and their contacts.

He can directly test for HTLV-III in their blood with a DNA probe. The probe's sequence of DNA bases matches the corresponding genetic code in the virus, so the probe sticks specifically to HTLV-III.

In contrast, the test now used to screeen blood is indirect. It measures the antibodies which HTLV-III has stimulated the body to produce, not the virus itself.

Robinson says about 100 investigators have the probe. "We'll need work by many labs to find the answers" to how the AIDS virus behaves, he says.

But, he adds, focusing solely on the behavior of HTLV-III may be too narrow of an approach to AIDS.

Robinson suspects that concurrent infections may sway the course of HTLV-III. "People are looking for what leads to activation of the AIDS virus in T cells," he says.

Engleman has found that HTVL-III does not readily invade "fresh, resting T4 cells" taken from the blood and grown in tissue culture. First, he says, the cells must be turned on by an immune challenge.

Early in the search for the cause of AIDS, he says, a popular idea was that repeated infections somehow render the body more susceptible to the disease. Many doctors pointed out that promiscuous gay men frequently contract many sexually transmitted diseases, and are exposed to sperm which may suppress immunity when introduced into the lining of the rectum.

A new version of this hypothesis of weakened immunity is again gaining credence, Engleman says. "In a way, the argument is coming full circle."

—30—

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A MODEL BABY'S LIFE THREATENED BY RARE DISEASE

STANFORD—

Taylor Zak is six months old, weighs 20 pounds, smiles about 90 percent of the time and is alert and playful. In short, he appears to be a perfect model of a healthy baby.

But he is not healthy. Taylor suffers from a disease so rare that only five other cases have been diagnosed in the world. It is also a disease that is almost invariably fatal; most of its victims die in the first year of life. Unless medical science finds a cure for the disease, Taylor's life expectancy is probably no more than two or three years at best.

However, Taylor's apparently healthy condition is evidence of a medical breakthrough of sorts in the treatment of the disease at Stanford University Medical Center, where the baby was transported a few days after birth in Santa Cruz. Dr. John Kerner, assistant professor of pediatrics at Stanford, calls the treatment "state-of-the-art parenteral nutrition." Without it, Taylor would either be dead or extremely weak and emaciated.

What Taylor has is called congenital microvillous atrophy. It is an extremely rare subgroup of a rare disease called familial enteropathy or lethal protracted diarrhea that has the same symptoms: extremely severe diarrhea from birth, resulting in weakness, dehydration and ultimately death. The diseases appear to be hereditary.

Taylor developed severe diarrhea shortly after his birth March 20 in Dominican Hospital in Santa Cruz. He went home from the hospital with his parents, Richard and Kelly Zak of Santa Cruz, but they took him back to the hospital almost immediately because of the diarrhea. Doctors there couldn't determine what was wrong and transported him to Stanford, where he has been ever since.

Stanford physicians couldn't be sure about the illness, either, until an electron microscopy performed on a small intestinal biopsy revealed microvillous atrophy, which means that Taylor essentially has no functioning villi in his intestinal tract. (One reason the diagnosis of microvillous atrophy is so rare is the rarity of sophisticated diagnostic techniques such as electron microscopy.)

Villi are minute hairlike projections that are present by the millions in the small intestines of most people. Since the villi's normal function is to absorb nutrients from food passing along the intestine, their lack means that Taylor can get no nutrition from food.

Stanford has solved that problem by intravenous feeding that supplies all the vital nutrients for Taylor. Such treatment is standard, but it has worked spectacularly well in Taylor's case because of experience Stanford had earlier with victims of familial enteropathy. Kerner says that experience contributed to a "mistake-free" treatment that has worked so well that Taylor is "actually too fat" at present.

The IV feeding, however, has solved only the nutritional problem. The diarrhea remains, and so does the threat of fatal infection—the villi in a normal body also act as a protection against the invasion of intestinal bacteria that normally live in the large intestine. Without that protection, Taylor is in constant danger. "He's already had four life-threatening infections that came through the gut," Kerner said.

Kerner describes Taylor's problem as an "immature gut," one that just didn't develop fully in the womb. He said Stanford physicians have tried a number of drugs in an attempt to aid the development, but nothing has worked so far.

If further drug treatments don't produce the desired result, Taylor will go home to Santa Cruz about Nov. 1. He will remain hooked up to his intravenous feeding equipment, although it is hoped that eventually he'll be able to leave it eight hours out of every 24. Kelly Zak has already taken all the necessary training for administering the IV feeding, and she will have nursing help at night.

All of that, of course, is expensive. Marla Diamond, assistant clinical nursing supervisor in pediatrics at Stanford, says that the cost of Taylor's intravenous feeding nutrients alone will be $100 a day. Costs of equipment and nursing help will bring the total to $50,000 a year, according to Kelly Zak.

Insurance has paid most of Taylor's bills so far, but the insurance is expected to run out soon. In an attempt to help pay for Taylor's home treatment, the Zaks have set up a trust fund at the Bank of America in Capitola.

Taylor will be happy at home, but he's also happy in the hospital, despite the diarrhea and his ever-present IV hookup. He plays happily with his toys and stuffed animals, gurgles at nurses and volunteers and gets ecstatic at the appearance of his mother. Kelly Zak is at the hospital daily—she quit her job in Santa Cruz as soon as Taylor was hospitalized—and Richard Zak is there on weekends and during the week whenever he can spare a few hours from his job with a Santa Cruz plumbing supply company.

—30—

Zak, RG1

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CALIFORNIA TO REQUIRE THAT HOSPITALS SEEK DONATIONS OF ORGANS

STANFORD—

California hospitals will be required as of Jan. 1 to ask families for organ donations whenever a patient dies.

The rule is the result of a new state law signed recently by Gov. George Deukmejian. The law is intended to increase the availability of scarce organs for transplants by taking the onus off physicians and hospital staffs who are reluctant to intrude on a family's grief.

The law requires general acute hospitals in the state to "develop protocols for identifying potential organ and tissue donors in a specified manner." In addition, hospitals will be required to notify organ or tissue procurement organizations of donation of organs.

The new rule was welcomed by Dr. Stuart W. Jamieson, associate professor of cardiovascular surgery and director of Stanford University Medical Center's heart-lung transplantation program. "We only retrieve a small percentage of the available organs for transplantation purposes," said Jamieson. "The law will help increase significantly the public consciousness on this life-saving issue."

Researchers such as Jamieson have been saying that the transplant picture, glowing with success rates as high as 94 percent for some organs, is clouded by inadequate procedures for finding donors.

Stanford, which has the largest heart-transplant center in the world and is one of the few doing heart-lung tranplants, estimates one-fourth of the people in need of transplants die waiting for organs.

"That's the biggest anxiety, the thought of coming here and dying," said Stanford's Mary Burge, the clinical social worker on the transplant's screening team.

State Assemblyman Bill Leonard (R-San Bernandino), legislative sponsor of the rule, noted the growing awareness of the need for more organs throughout the United States and the need to educate Californians further on the issue.

Quoting estimates from the Regional Procurement Agency of Southern California, Leonard said 10,000 people are waiting for kidney transplants nationwide, 175 for livers, 150 for hearts and 30 for pancreases.

New York and Oregon are the only other states so far to require that organs be solicited from surviving families.

The new rule also stipulates that hospitals should "encourage reasonable discretion and sensitivity " to the family circumstances in discussions regarding organ donations, including religious concerns that may prevent donations.

10-9-85 —30— donor SA7

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FOR IMMEDIATE RELEASE
City desks and science writers: You are cordially invited to attend this symposium October 17, 1985 in Stanford Medical School's Sherman Fairchild Auditorium. The conference will focus on molecular aspects of disease. Program copies available on request if not included with story.

GENES AND DISEASE SYMPOSIUM TO BE HELD AT STANFORD OCTOBER 17

STANFORD—

A day-long symposium on "Genes and Disease" will be held Thursday, October 17, sponsored by Beckman Instruments, Inc., in celebration of the 50th anniversary of the company's founding.

The symposium, organized by the Stanford Center for Molecular and Genetic Medicine, will be in the Sherman Fairchild Auditorium, beginning at 8:15 a.m. with welcome remarks by Stanford University President Donald Kennedy.

Featured topics will range from the molecular biology of insulin production, the genetic regulation of viruses causing human leukemia and AIDS (Acquired Immune Deficiency Syndrome), to the latest research on the molecular basis of how bacteria invade animal cells.

"We now begin to change our perspective on disease," said Nobel prize winning biochemist Paul Berg who will preside at the meeting. "Disease is a defect in the molecules that make up our cells."

Understanding cellular regulatory processes in chemical and molecular terms, Berg said, holds promise in enabling man to intervene and repair abnormalities that cause disease. Berg directs Stanford's $50-million Center for Molecular and Genetic Medicine. When completed in 1987, the center will house several departments devoted to research and applications of molecular approaches to treatment of disease.

The Beckman symposium is the third of its kind held at a major university in celebration of the company's 50th anniversary. Previous symposia were held this year at City of Hope Hospital and Medical Center, Duarte, Calif., and Rockefeller University, New York.

The company, founded in 1935 by Dr. Arnold O. Beckman, a noted scientist, has pioneered in the development of indispensable analytical tools for chemistry, medicine, industry, agriculture and environmental technology. In 1982, the company merged with SmithKline Corporation to form the SmithKline Beckman Corporation.

Through the Arnold and Mabel Beckman Foundation, Dr. and Mrs. Beckman have supported the development of the department of biochemistry's laboratories in Stanford's new center.

The day's schedule will include:

8:45— "The molecular biology of insulin production"—Dr. Donald Steiner, professor of biochemistry and molecular biology, University of Chicago, and senior investigator, Howard Hughes Medical Institute;

9:40—"Genetic regulation and pathogenesis of retroviruses: the human leukemia and AIDS viruses"—Dr. William Haseltine, associate professor of pathology, Dana Farber Cancer Institute, Harvard Medical School;

11:00—"Development and use of a human chromosome map"—Dr. Uta Francke, professor of human genetics and pediatrics, Yale University School of Medicine;

1:10—"Using bacteria to express gene products of interest to biomedical research and development"—Dr. Martin Rosenberg, vice president for biopharmaceutical research and development and director of the molecular genetics department, SmithKline Beckman, Inc.;

2:00—"Oncogenes and retroviruses"— Dr. Harold Varmus, American Cancer Society professor of molecular virology, University of California, San Francisco;

3:10—"Molecular basis of bacterial invasion"—Dr. Stanley Falkow, professor and chairman of medical microbiology, Stanford.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

WAYS TO CUT MEDICAL COSTS BUT NOT QUALITY INCREASINGLY IN DEMAND BY PHYSICIANS

STANFORD—

Decision-making aids—tools to help physicians more accurately diagnose and pinpoint the most appropriate therapy in today's cost-conscious environment—will be increasingly in demand, according to Dr. Harold Sox, associate professor of medicine at Stanford University School of Medicine.

One such tool, called a clinical prediction rule, has come of age, so to speak, with a recent *New England Journal of Medicine* article by Sox; Dr. John Wasson, Dartmouth Medical School; Raymond Neff, University of California, Berkeley; and Dr. Lee Goldman, Harvard Medical School.

"Clinical prediction rules are ways for physicians to maintain the quality of medical care while reducing the cost to patients," Sox said in an interview.

"We wanted to call attention to the existence of these rules, and to establish standards with which to design them," he added.

A clinical prediction rule, Sox said, is actually just a guide, data collected from individual patient cases over time and from experience, to help physicians in predicting events among their patients. They serve to reduce the uncertainty in diagnosis, thus eliminating the need for physicians to order tests and possibly even hospitalization, all which add to medical costs.

For example, Sox said, if a patient is complaining of chest pains, there is a certain probability that he may have a heart attack. If the physician is aware of the clinical prediction rule that states that probability, he can immediately prescribe appropriate therapy rather than subject the patient to a series of tests and diagnostic procedures.

"It's not that physicians don't know," Sox explained. "It's just that there is a great deal of uncertainty in medicine and in order to protect patients, physicians may order tests and hospitalization to confirm their diagnosis. Clinical prediction rules help them achieve that goal without the extra expense."

However, Sox warned, physicians should adopt these rules—of which there are about 50—with caution. "The rules are only a guide, and should not be the sole element involved in decision making. Physicians should rely on their own clinical instincts and expertise as well. The rules simply provide a broad data base of experience for those who may not have as much personal experience."

Before adopting a rule for their own patients, Sox and his colleagues wrote, physicians should consider factors, such as the makeup of the patient population from which the rule was derived, in order to ensure that the rule is applicable to their own patients.

In the article, published in the Sept. 26 issue of the journal, the authors looked at 33 clinical prediction rule reports. They considered the way the rules were derived and how applicable they were to patient care. In order to be most useful to physicians, they concluded, the rules must comply with certain standards in regards to collecting and analyzing the data.

Key to the usefulness of a rule, Sox said, is to try and apply it to as many patients as possible to see if it really is relevant.

"We hope this is *the* standard-setting paper," Sox said. "We hope future studies will look to ours as a guide to design and evaluate a clinical prediction rule."

10-3-85 —30— sox sk6

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FOR IMMEDIATE RELEASE

COMMISSION TOLD OF MEDICAL HAZARDS OF MARS MISSION

STANFORD—

Medical hazards of a round-trip mission to Mars are significant, but not insurmountable, a Stanford University Hospital surgeon told the National Commission on Space Wednesday, Nov. 20.

Dr. William DeCampli, a surgical resident who also is an astronomer, discussed the medical aspects of a Mars mission as part of the commission's three-day meeting at Stanford University Nov. 18-20. The 15-member commission appointed by President Reagan is charged with developing a long-term space policy for the United States.

Research done in the next two decades of preparation for the manned flight to Mars should answer a lot of currently puzzling questions, he indicated.

Medical problems on the trip to Mars would certainly include the well-documented difficulties of weightlessness such as bone and muscle loss, Dr. DeCampli acknowledged. He predicted, however, that those drawbacks would be solved by scientists working on the Space Station due to be in orbit by 1995.

The Mars mission would take at least three years, and man has never spent more than a year in outer space. Soviet astronauts who returned from 237 days in space reportedly were carried from their craft because their bones and muscles had weakened and could not support them. Little is known about that mission or astronauts, however. The longest American space flight was the 84-day Skylab mission.

The greatest health risks to astronauts, according to Dr. DeCampli, may be infectious diseases, psychological problems of isolation and confinement, radiation exposure, accidental injuries and everyday health problems.

Dr. DeCampli, who holds a Ph.D. in astronomy, also is a member of the National Academy of Sciences task force on "Major Directions in Space Science 1995-2015."

A fourth-year resident in general surgery, Dr. DeCampli has served as an advanced research fellow in cardiovascular surgery. As a fellow in astronomy, Dr. DeCampli conducted both observational and theoretical studies of planets and stars.

Astronauts will be faced with health problems from inside and outside of their spacecraft—as well from within their own bodies, he said.

Some problems arise because spaceships are small, closed environments, DeCampli said, but lessons learned on submarine missions can be applied to space travel. Other challenges will surface because of "novel recycling techniques and waste disposal methods."

"Any time you have a closed system, you'll find a microbe that likes it," he said, recommending that people be included in a mandatory trial run of the spacecraft's circulatory systems conducted to determine whether those bacteria cause disease or death.

This test of the spacecraft also could help predict the stress of isolation and confinement.

"Show us that mental health can be maintained inside this glorifed elevator for (the) three years" it takes to get to Mars and back, he challenged in his prepared statement.

The mental stresses of space travel may be considerable, but "personally, I think that the uniqueness, sense of achievement and, frankly, prospect for recognition would keep the crew motivated."

Although astronauts are exceptionally fit and are carefully screened for health risks before being selected, they still run the risk of certain medical problems just because they are human.

Acute appendicitis, gastrointestinal disorders, heart trouble and cancer may happen at any time during the mission, Dr. DeCampli said, and preparations must be made to treat some of the more probable maladies. Each crew member runs a good chance of "contracting a condition that normally would have put him or her in the hospital on the earth," he indicated.

Accidents normally treated on earth must be anticipated, too, Dr. DeCampli continued. The gravity field of Mars is about a third of that of Earth, "enough to provide ample force for fatal falls and crush injuries."

An astronaut could be wounded in a construction accident on Mars—or an explosion on the spacecraft could injure him before he gets there.

Will surgeons be able to operate in space? "A decision to treat moderate to severe trauma implies a major commitment to critical care medicine, perhaps for a long time," Dr. DeCampli stated. "I am certain that the surgeon on board the Mars ship will be prepared to perform emergency procedures, but they are only the beginning of care for the trauma victim."

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FIRST MULTI-LEVEL PARKING STRUCTURE AT STANFORD BEGINS CONSTRUCTION

STANFORD—

Groundbreaking for the first multi-level parking structure on the Stanford University campus will take place Monday, Nov. 25, near the medical center.

The new structure will be built in the area now occupied by the "A" and "C" permit parking lot surrounded by the anatomy building, Roth Way and Campus Drive.

Those currently using the parking lot will be temporarily redirected to lots within walking distance to the medical center. They include a new lot between the anatomy building and the museum, street parking on Museum Way and an extension of Roth Way, the lot bordering Quarry Road, the lot north of the heliport, a temporary lot between Pasteur Drive and Mayer cancer research laboratory and a new lot at the corner of Campus Drive and Welch Road.

The present anatomy building parking lot holds 260 cars; the new structure will hold 1,050 cars when completed, said Jonathan Ryan, project manager from the facilities project management office.

The new structure will require one volleyball court to be permanently relocated. In order to make it accessible and "user-friendly," Ryan said, Roth Way will be extended to Palm Drive, and Quarry Road will be extended to the parking structure. "We'll be quadrupling the use of the land," he said.

Construction is scheduled to take 16-18 months. However, an estimated 500 parking spaces will be available about 10 months into the project, Ryan said.

The new structure, with a price tag of $9.4 million, will be five stories high with a total of 40,000 square feet. The design calls for a "step-back" arrangement--each floor receding from the one below--in order to create a less imposing presence, Ryan said. "Our challenge was to incorporate a parking structure in a non-industrial environment," he explained. "It has to be visually unobtrusive."

The structure was designed with the safety of its users--an estimated 80 percent of which will be medical center personnel--in mind. It will contain two glass elevators, and five stairwells all located on the outside of the structure. Police pulls will be located throughout the well-lit structure.

The structure was designed by Watry Engineering, Inc. of Redwood City, one of eight firms that submitted designs. Their design was chosen by a jury of architecture and other faculty and staff.

11-21-85 —30— parking sk6

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FOR IMMEDIATE RELEASE

PATIENT RELATIONS ASSOCIATES PROGRAM CELEBRATES FIVE YEARS

STANFORD—

Stanford University Hospital's patient relations associates program celebrated its fifth-year Sunday, Nov. 17, with a reception at the Buck Estate attended by more than 100 associates, staff and guests.

The all-volunteer effort was started five years ago by community and patient relations director Jeanne Kennedy to "provide a needed personal link" between patients, families and the hospital. It now functions as part of the hospital's community and patient relations department.

It was no simple undertaking, Kennedy recalled, because there was no budget or staff to run the pilot project. Working with Diana Roth, a hospital auxiliary member, and Sandra Perkins, then director of patient admitting, a group of volunteers was formed to test the idea as a pilot project. Roth served as chairperson.

Later when a hospital committee evaluated the project, it was determined a success. The program has been growing ever since.

Today there are 24 patient relations associates, five of whom are on-call round the clock. They meet with families of patients brought to the hospital by critical care transport or Life Flight helicopters, and they are available to all hospitalized patients and their relatives. The volunteers range from their mid-twenties to their sixties and work from four to thirty hours a week.

"These are volunteers who are professional in every way," said Kennedy. "I am impressed with the caliber of people we have working here."

"The associates meet with patients when they're admitted to the hospital, make them feel at home, inform them of available services, visit them during their stay, solve problems and act as a referral source," explained Donna Pronko, patient relations coordinator.

Sometimes issues are emotionally charged and sometimes problems are grave. At other times patients simply need a friendly ear. "We answer questions about television sets, phones, food, smoking, and housekeeping all of the time, " said Caroline Pease, one of the original associates. "Other issues are more sensitive such as helping to clear up misunderstandings between patients and doctors.

"Often times we help patients to become more assertive in asking their doctors and nurses questions because patients may feel intimidated by medical personnel," Pease said.

"There is such a diversity of activities," added Mary Ives, who has also been with the program from the start.

"We're trying to be liaisons with the patients and the medical staff, chaplaincy services, social workers, dietary staff, and others. We get to know a lot of people," Pease said.

Patient relations associates get calls from nurses and others who feel a visit from one of them would help ease a tense situation or brighten the spirits of a patient from out-of-town or one who has no visitors.

To handle the variety of personalities and situations they encounter, new volunteers first attend a training orientation and tour of the hospital, followed by six sessions of communication workshops, four to six sessions of on-the-job-training, infection control training, fire and safety disaster drills, and monthly meetings, Pronko said.

However, it was a lot of on-the-job-training for the first four associates. "We learned as we went along," recalled Pease. She credits the building of resources and monthly exchange of ideas to the success of the program.

The associates volunteer for a number of different reasons, Kennedy explained. "The program gives some the professional credentials they need to start a paid career. Others join because their own job doesn't offer enough involvement with people. And some have had a lot of hospital experiences with family members who have been sick, and they know a lot about the problems patients go through and want to help with that. Also it's an affective way for people who have not gone out into the work environment, but who have had a lot of mature experience in life, to apply their knowledge."

Although they may have different reasons for joining the associates share certain prerequisites: personal experience with illness, good communication skills, an empathetic, warm, and friendly manner, and the desire to help people, said Pronko.

"It's a rewarding job," Pease feels. "There are a lot of grateful people and I think it's wonderful when someone says to me, 'I'm doing fine now' and thanks me."

At the Sunday reception Roth, Pease, and Ives were honored for their five-year involvement with the program. Kennedy also paid tribute posthumously to the fourth original member of the group, Mrs. Lucile McNichols who died in March of 1984.

The community and patient relations department donated an Indian Pechwai painting on fabric in honor of the patient relations associates, in particular the four original members. The painting, from the Krishna-Lili School and painted around 1880, will be displayed at a hospital location yet to be determined.

Persons interested in volunteering should contact Pronko at 497-7581.

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crpra jtk1

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FOR IMMEDIATE RELEASE

STANFORD'S PEDIATRIC PLAY NOW INCLUDES COMPUTERS

STANFORD—

The newest toy in the pediatric playroom at Stanford University Hospital is an Apple Macintosh computer.

A volunteer from Apple Computer, Inc., of Cupertino comes to the hospital every Tuesday evening carrying a Macintosh. The volunteers play computer games and try out various programs with six to ten hospitalized children each evening. Youngsters involved range in age from 2 to 18.

"The kids just love it," said recreation therapist Mary Trahan. In addition, she said, the young patients get useful training on computers.

Ellen Vanderwilt, acting director of recreation therapy, said, "The people from Apple are really wonderful. They adapt the programs according to the age of the kids."

The Apple volunteers are part of the company's Employee Volunteer Action program coordinated by Anne McMullin. She said four volunteers visit the Stanford pediatric playroom on a rotating basis.

More than 400 Apple employees have participated in the volunteer program during the nearly two years it has been in operation, McMullin said, helping recreational programs at hospitals and other institutions.

11-20-85 —30— Computer RG1

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FOR IMMEDIATE RELEASE

MEMORY SCHOOL HELPS HEALTHY ELDERLY FIGHT FORGETFULNESS

STANFORD—

A memory school for forgetful folks?

Yes, says Stanford's Dr. Jerome A. Yesavage, who is seeking volunteers for the two-week school he has been running for normal curious healthy persons aged 55 and over who have trouble remembering.

Yesavage thinks most, if not all, memory loss can be restored to pre-geriatric levels. The key for many persons is appropriate training, which is what he and colleagues have been trying to develop in the research project he's been running for eight years at the Palo Alto Veterans Administration Medical Center in Palo Alto.

"One of the basic facts of old age," says Yesavage, associate professor of psychiatry, "is that memory, particularly recent occurrences, decline steadily with age. The average, normal 70-year-old suffers a memory loss in the order of 20 to 40 percent," he said.

In addition, a lot of recent research indicates that anxiety about losing one's memory may in fact be a major cause of forgetfulness. If you can reduce stress, you can probably help someone improve their memory, Yesavage says.

Yesavage, instructor Danielle Lapp, and research assistant Pamela Ponich are currently seeking at least 50 persons aged 55 and above to attend classes at the Palo Alto Veterans Administration Medical Center, where Yesavage is associate director of the Clinical Diagnostic and Rehabilitation Center.

The classes are free and sponsored under a research grant from the National Institute of Mental Health. Participants must be healthy and must make a commitment to attend classes for two hours a day for two weeks. Volunteers are also needed to take tests to see how they compare with similar people who are taking the full class. These volunteers will get practical information about improving their memory but will have a shorter time commitment, Ponich said.

Lapp, who has taught the classes since the project began eight years ago, said she spends a good part of the first two-hour class explaining how the brain processes information to become memory. She also tries to reassure the six to eight students in each class that a certain amount of memory loss is normal and that even people many decades younger than the students can have problems with their memories.

Yesavage notes that most memory loss involves things that have occurred recently.

"We find elderly people that can tell you exactly what was on every shelf in a little store where they went with their parents 50 years ago, but if you ask them where their neighborhood supermarket is now, they can't remember."

Techniques taught in each class vary, and Lapp is reluctant to talk about specifics, since such advance knowledge could interfere with the research effort. Generally, however, the techniques for learning such skills as remembering names and faces might include such mnemonic devices as associating a person's name with a prominent feature.

Lapp herself gets students to remember her name by calling attention to a prominent feature—her eyes—and the physical feature associated with her last name.

"I might get students to try and visualize that 'my eyes are on my lap.' People do this kind of thing unconsciously. All we're trying to do is get them to do it consciously.

"They do get the idea that they can gain control over their memory, and that is constructive," Lapp says.

"We need all the tools we can get to become more successful in aging," says Shirley Maher, a retired Redwood City travel agent who took the course last summer. "I learned a lot about the process of memory itself, and we were certainly given every opportunity to use what we were taught," she added. "The results depend on how much you use it."

Some of the value of the program, said Lapp, is the information and support that a memory-losing senior citizen isn't alone. "They learn that they are not the first person to have forgotten the names of their grandchildren, and this relieves tension and helps them learn to improve their memory," she explains.

Maher said that members of her class have continued on their own to meet once each week to practice what they've learned in school.

The VA study is reserved exclusively for persons over 55, but Yesavage notes that even younger people can benefit from mnemonics or other similar training.

While the senior citizens can gain back a fifth or more of their memory loss, younger persons can actually achieve a net gain if they practice the techniques educators have been developing for many years.

Persons interested in finding out about the current study at the VA may call Ponich at 493-5000, ext. 4570. There is no upper age limit, and Ponich noted that the oldest volunteer so far was a man aged 95 who did very well in the class.

Volunteers must not be suffering from any organic memory loss, such as senile dementia or Alzheimers disease, she said. Persons interested in studies for those conditions should call 493-5000, ext. 5150.

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memory mg8

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NURSING CARE, COSTS INCONGRUOUS WITH FEDERAL REIMBURSEMENT RATES, STANFORD STUDY SHOWS

STANFORD—

A Stanford study shows that the federal government's reimbursement system for Medicare patients' health care services does not accurately reflect nursing care and costs in hospitals.

The results of the study were included in a report to the secretary of U.S. Department of Health and Human Services by the Prospective Payment Assessment Commission, established to evaluate the effectiveness and validity of the diagnostic related group (DRG) classification system that went into effect in 1983.

One conclusion of the Stanford study and the federal report is that nursing care and costs vary greatly between and within DRGs and that the reimbursement rates do not correspond with those costs, said Malinda Mitchell, acting director of Stanford University Hospital nursing service and one of the study's authors.

Mitchell presented the Stanford study last week at the annual Nursing Research Rounds.

DRGs were developed as part of the government's prospective payment program, aimed at capping health care's spiraling costs. Each of 468 classifications is based on a different disease diagnosis, and has a pre-set reimbursement rate. If a hospital spends more per patient, the theory goes, it loses income. If it spends less per patient, it pockets the extra payment.

But after determining hours of direct nursing care and nursing costs for 10 DRGs during a five-month period, Mitchell said, the system doesn't seem to be working.

Consider, for example the DRG for patients with lymphomas or leukemia involving a surgical procedure. The number of direct nursing care hours ranged from 24 to 709 hours. The cost of those hours ranged from $487 to $14,386.

"The problem is that the resources used are not homogenous with the actual costs," Mitchell said.

That disparity could be resolved, Mitchell continued, if the government took into account severity of illness when determining reimbursement rates.

"The evidence suggests that Medicare's current method of allocating nursing cost by patient day does not adequately account for a hospital's resource use relative to case mix," the report to the HHS secretary stated. More information, it concluded, is necessary to determine how to "correct nursing resource misallocations."

Mitchell and one of the co-authors, Joyce Miller, associate director of nursing, are continuing to analyze data to expand their study results to include more DRGs. They hope to be able to use it to "educate the people involved in making legislation," Mitchell said, as well as to use it as a comparison with other hospitals and over time to see if changes in health care and treatment effect nursing care.

11-12-85 —30— nurse sk6

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FOR IMMEDIATE RELEASE

SCIENTISTS WORKING ON AN EYE TEST FOR SCHIZOPHRENIA

STANFORD—

Researchers at Stanford will be looking into the eyes of schizophrenics to search for differences in the response to light in an attempt to devise an objective measure of their illness.

The study on schizophrenia is part of a larger project funded by a grant recently awarded to Michael Marmor, head of the division of ophthamology at Stanford University School of Medicine, who will be collaborating with psychiatrists at Stanford and the Palo Alto Veterans Administration Medical Center.

In an effort to develop noninvasive ways to study the eye, Marmor will be looking at the electrical signals generated by the light-sensing cells of the retina and its supporting tissue.

"We can record from the surface of the eye to see disease inside," he said in an interview.

He said a computer system has been programmed by the psychiatrists and is ready to analyze readings from the eyes of schizophrenics, as compared to the eyes of normal volunteers.

Scientists have linked a part of the retinal response to light with dopamine, one of the brain's chemical messengers that is also used by some cells within the retina.

Dopamine is suspected by researchers to be involved in schizophrenia. And any abnormality in brain dopamine might also be reflected in the retina, which is more accessible to measurements, Marmor said.

He explained that a contact lens carrying an electrode can eavesdrop on the signals created by retinal cells as they convert light into the electrical messages that they relay to the brain.

With a research team of psychiatrists that includes Dr. Philip Berger, director of the Norris Mental Health Clinical Research Center, Dr. Adolf Pfefferbaum, and Dr. Gail Schechter, Marmor said he and his colleague Dr. Peggy Hock hope to find within the eye "an objective criterion for diagnosing or following schizophrenia."

Marmor will also use his new grant to peer into the function of the pigment epithelium, the dark-colored lining of cells that nourish and protect the clear cells of the retina.

"When the pigment epithelium breaks down, as it does in a number of eye diseases, visual function is affected," Marmor said.

The pigment epithelium, like the retina, produces electrical signals that can be read at the eye surface. And learning more about the responses of cells in the pigment epithelium could lead to specific, noninvasive tests "to see if it is working properly," he said.

The National Eye Institute is awarding a total of $206,847 to Marmor for his studies of the electrical signals of the eye, with $69,141 for the first year of work.

This new grant runs concurrently with another award, now in its second year, by the Institute to Marmor, which funds his research into how the pigment epithelium keeps the retina healthy and attached to the inner rear of the eye.

11-12-85 —30— marmorgrant macrf

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FOR IMMEDIATE RELEASE

DOCTORS TRAIN PATIENTS TO EXERCISE SAFELY AT HOME

STANFORD—

A quickly learned, simple measurement may allow patients recovering from cardiac trouble to exercise safely at home.

The measurement, known as the rating of perceived exertion (RPE) scale, lets patients gauge the difficulty of exercise while they run on a treadmill in the doctor's office. But Dr. Martin Juneau, a Canadian cardiologist doing research at Stanford University School of Medicine, has found that the scale has practical value for patients who are exercising at home.

Dr. Juneau presented his research during a session of the American Heart Association meeting in Washington, D.C., Nov. 11.

To determine the RPE, patients run in place on a treadmill and rate the difficulty of the exercise from 6 to 20, with 20 representing complete exhaustion. Researchers monitor the patient's heart rate and other body signs and gradually increase the intensity of the exercise. Multiplying the RPE number by 10 gives a very rough indication of the exerciser's heart rate.

Although the scale seems subjective, it actually is very accurate, Dr. Juneau explained.

"People are very good judges of their own exertion," he said. "Using the RPE scale allows persons who have had heart trouble to exercise safely and take part in vigorous sports with confidence that they will not overexert." The findings apply to healthy individuals as well, he noted.

The RPE scale is accurate because it takes into account signals from the respiratory, cardiovascular and central nervous systems, as well as information from the working muscles and joints. The net result is a very accurate, highly personalized scale of how much stress the body undergoes during exercise.

"Previously," he said, "patients were taught to take their pulses periodically during exercise" or were outfitted with portable heart monitors—and were told not to exceed a certain number of beats per minute. Not only is checking heart rate impractical in sports such as swimming and skiing, Dr. Juneau pointed out, it also neglects the physiological signals included in the RPE scale.

Doctors have long known that the RPE scale is very accurate in the laboratory; patients always select the same number of the scale when their heart rates and other body signals reach certain points. But until now, doctors doubted that the scale was accurate enough to be used at home, because laboratory results often differ from real-world experience.

To find out, Dr. Juneau strapped portable heart monitors and recorders onto patients and sent them home. Patients wore the monitors continuously for three days; all walked or jogged and noted what their rating of perceived exertion was during exercise.

The conclusion? Exercising at home seems harder than exercising in the laboratory. As a result, using the RPE scale during home-based training gives patients worried about heart trouble an added protection against overexertion. The scale also may be helpful to healthy individuals who are beginning home exercise programs, Dr. Juneau suggested.

Joining Dr. Juneau in preparing the study, "Use of the Rating of Perceived Exertion Scale to Regulate the Intensity of Unsupervised Exercise Training," were Flay Rogers, Drs. William Haskell and Robert F. DeBusk, all of the Stanford University School of Medicine.

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EMBARGOED FOR RELEASE UNTIL NOON FRI., NOV. 15

COMMON ANTIBIOTIC MAY HELP NON-INVASIVE DIAGNOSIS OF ATHEROSCLEROSIS

STANFORD—

A common antibiotic may one day help doctors see fatty deposits that clog blood vessels in people with atherosclerosis, Stanford cardiologists reported Friday (Nov. 15) at the annual meeting of the American Heart Association in Washington, D.C.

Noninvasive ways to view atherosclerotic plaques would aid diagnosis and treatment of problems caused by hardening of the arteries, according to Dr. Robert Ginsburg, physician specialist in the Center for Cardiovascular Research at Stanford University Medical Center. He directed research to show how plaques can be revealed to the gaze of magnetic resonance imaging (MRI).

MRI machines send out a magnetic field rather than x-rays to look inside people. The new technique is in use at many medical centers on an experimental basis, and already is delivering detailed views of many body areas.

But some structures, including plaque, are hard to see with MRI. The signals made by their molecules cannot be read by machines now available to medicine, Ginsburg said in an interview before the meeting.

"The problem with (currently available) MRI is that it doesn't pick up calcium, and plaque has lots of calcium," he said.

But an ordinary drug, tetracycline, readily absorbs into the fat of plaques, Ginsburg said, so it can be used to carry other compounds, visible to MRI, into the deposits.

Dr. Douglas Murphy-Chutorian, senior cardiology fellow, presented the results of experiments in which diseased arteries taken from human cadavers were soaked in a solution of tetracycline that was tagged with a marker easily detected by the MRI magnet. The tagged tetracycline was able to enhance the view by MRI of fatty deposits within the arteries, he reported.

Other researchers on the project are Drs. Steven Quay, Peter Selzer, and Lewis Wexler of Stanford.

In research to be reported elsewhere, Ginsburg has also used tetracycline as a homing device for laser surgery on atherosclerotic deposits. Dyes attached to the drug stain the plaque so it "absorbs (the laser's) light preferentially," he said, explaining, "we want the laser to damage plaque without burning holes through normal tissue."

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EMBARGOED FOR RELEASE UNTIL NOON THURS., NOV. 14

CORDS WITHIN HEART MAY BE VITAL FOR FUNCTION, STANFORD RESEARCHERS FIND

STANFORD—

Threads of tissue within the heart that surgeons usually sever while replacing a failing valve may be crucial to proper pumping, researchers at Stanford University School of Medicine reported Thursday (Nov. 14) at the annual meeting of the American Heart Association in Washington, D.C.

In experiments on dogs, the scientists found that cutting cords which tether the flaps of the mitral valve to the heart wall harms the organ's efficiency.

The finding is important, said cardiology fellow Dr. David Hansen in an interview before the meeting, as "people are undergoing surgery that could possibly have detrimental side effects."

The threads, called *chordae tendineae*, are routinely cut when surgeons take out the mitral valve to replace it with an artificial one. But the old valve could be left in, according to Dr. D. Craig Miller, associate professor of cardiovascular surgery at Stanford.

Surgeons usually take out the entire failed valve since its leaflets would get "mixed up in the mechanism of an artifical, mechanical type of replacement valve," Miller said, but if a pig valve is used, in most cases it can be safely sewn to the patient's own, worn-out one.

He added that he already prefers to replace mitral valves with a pig valve, as fewer blood clots and strokes follow, compared to mechanical implants.

The mitral valve regulates blood flow from the upper to the lower left chambers of the heart. Diseased mitral valves were replaced in 12,000 U.S. patients in 1984, according to figures from the National Center for Health Statistics, and Hansen said that faculty cardiovascular surgeons at Stanford alone did 1300 such operations between 1967 and 1981.

Heart valves prevent backflow. If a valve leaks, the heart must strain to propel enough blood through the body with each beat. Heart failure can follow, requiring the valve to be replaced.

Doctors have known that the thin cords leading from valve leaflets to the heart wall hold these flaps firmly closed as the lower chambers contract to eject blood, Hansen said.

But, he said, the Stanford experiments show that the cords also reinforce the strength of the heart muscle.

As the closed mitral valve strains to hold back blood during each contracting squeeze, Hansen proposed, the valve "acts as a giant sail, catching the force of the contracting heart and tugging against its ropes"—the *chordae tendineae.*

Tension in the tethering cords is transmitted to the muscular heart wall, which would pull the heart to contract more efficiently, he said.

Replacing a mitral valve, even if the cords are cut, works well for many patients, Hansen said, because the heart often can adapt to lost efficiency by growing thicker, and by other means.

"If the heart muscle is pretty healthy to begin with, severing the cords is usually well tolerated," he explained, "but if the heart has already been compensating (for advanced heart failure), one more insult, and it's in trouble."

The heart is not just a bag that fills with and then ejects blood, it needs cross-reinforcement, Hansen said, which he thinks the cords provide.

Still, although cutting the tissue in 22 anesthetized dogs decreased the pumping force of their hearts, he said, "we'll have to show (the same effect) in humans before we can prove the clinical usefulness of keeping the cords intact."

Other researchers on the project were Drs. William DeCampli, R. Scott Mitchell, Peter Cahill, and Geraldine Derby of Stanford.

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MARIJUANA'S "DAY-AFTER" EFFECTS INTERFERE WITH PILOTS' PERFORMANCE

STANFORD—

Airplane pilots who smoke marijuana may have trouble performing standard landing maneuvers as long as 24 hours after smoking a joint, concludes a new study by Stanford University Medical School and Veterans Administration researchers.

The study is believed to be the first to examine marijuana's day-after, or "carryover," effects on people who perform complex tasks, said Dr. Jerome Yesavage, Stanford assistant professor of psychiatry and behavioral sciences.

And it is thought to be only the second scientific study to examine marijuana's effects on pilots, he added, despite the fact that "during the past 10 years, there have been documented cases of marijuana use by flight trainees and pilots involved in fatal accidents . . .including a commercial landing crash at Newark airport in 1983."

Yesavage stressed that the research is preliminary and that more detailed studies are needed to clearly document how drugs affect airline pilots' performance. He is currently examining how pilots perform at various times following consumption of alcohol.

Yesavage said that the marijuana report's results should alert those concerned with airline safety to a potentially growing problem of drug-related mishaps.

But the study's implications extend beyond the airline industry, said Yesavage, who is based at the Palo Alto Veterans Administration Medical Center.

"These results suggest concern for performance of those entrusted with complex behavioral and cognitive tasks within 24 hours after smoking marijuana," he said. "Such results may be applicable to other tasks such as operating complicated heavy equipment, railway trains and switching procedures."

Although computer measurements of the pilots' landing maneuvers showed significant impairment in their performance 24 hours after smoking marijuana, the pilots themselves felt no drug hangover and reported normal alertness and mood. This suggests that a marijuana smoker's evaluation of whether or not he can do his job safely may not be objective, Yesavage said.

Yesavage and his colleagues are reporting their findings in an article published in the current issue of the *American Journal of Psychiatry*.

His collaborators on the study are Dr. Von Otto Leirer, Stanford psychiatry research associate, and Dr. Leo Hollister, professor of medicine/clinical pharmacology at Stanford University School of Medicine.

The ten experienced private airplane pilots recruited for the study carried out landing maneuvers in a computerized flight simulation laboratory located at the Palo Alto Veterans Medical Center.

Measurements of their manipulations of landing controls and of landing accuracy were carried out both before and after the pilots smoked a cigarette containing 19 milligrams of marijuana's active ingredient, tetrahydrocannabinol (THC).

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The cigarette is "the equivalent of a strong social dose," the researchers said.

The pilots—all experienced marijuana smokers—were then tested at intervals approximately one hour, four hours and 24 hours following the smoke.

At each testing interval, the researchers found significant impairments in a variety of landing tasks compared to the pilots' baseline pre-pot performance.

Particularly striking, said Yesavage, was the finding that impairments persisted even at 24 hours.

The pilots tended to increase the size and frequency of their manipulations of the ailerons—the movable wing parts that provide side-to-side control of the plane—and the elevators, which provide vertical control.

Performance also fell off as reflected in measurements of the plane's runway approach—distance off-center on landing and vertical and lateral deviation on approach to landing.

"The difficulty the subjects experienced in aligning and landing precisely at the center of the runway is a particular cause for concern," the researchers said.

"The near doubling of lateral deviation on a landing at 24 hours may be an extremely serious error . . . In actual flight, where there is wind and turbulence; such errors can easily lead to crashes," the scientists said, noting that one of the 24-hour tests did include an off-runway landing.

The researchers stressed that further studies should continue in an attempt to "define the point after smoking THC at which the performance of complex tasks returns to baseline."

Similar studies examining post-alcohol performance of pilots and others entrusted with complex tasks are also needed, Yesavage said. The "bottle to throttle" guidelines—eight hours for commercial pilots and 12 hours for military pilots—may be outdated, he warned.

Studies have shown that 12 hours after an alcohol blood level of 0.1 percent, normal volunteers show impaired performance on cognitive "problem solving" tests and 24 hours after drinking alcohol people still test lower than normal on tasks involving balance and equilibrium.

Pilots' actual performance of flight tasks following alcohol consumption is just now being studied by Yesavage and his group.

"The major concern is that subtle hangover effects from drugs should be carefully documented in order to establish safe guidelines for people carrying out complicated tasks," Yesavage said.

The research was funded by grants from the National Institutes of Drug Abuse and from the Veterans Administration.

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GRANT SUPPORTS RESEARCH ON LOWERING HOSPITAL COSTS

STANFORD—

Stanford Medical Center is launching a project to see if doctors and other primary care providers can become leaders in reducing hospital costs while maintaining quality care.

Support for the work comes from a two-year grant of $219,460 from the W.K. Kellogg Foundation, Battle Creek, Mich. The project, announced Nov. 8, will be conducted through August 1987 by a team headed by Dr. James F. Silverman, chief of staff at Stanford University Hospital (SUH); and Dr. Lucia S. Sommers, a research associate in the Department of Family, Community and Preventive Medicine, who will serve as project director.

Other investigators in the study are David Sakai, the hospital's chief financial officer, and Duane Walker R.N., formerly associate hospital director and director of nursing.

Researchers have been developing cost containment approaches at Stanford since August 1984. The approaches are now being refined and tested at Children's Hospital of San Francisco and San Francisco General Hospital. The major objective is to see how costs are incurred and how they might be reduced without compromising the quality of patient care, Silverman said.

Silverman, who also serves as associate dean for clinical affairs at Stanford Medical Center, said the demonstration is unusual in at least two ways. First, it will take a close look at whether the doctors, nurses and persons actually working with patients can take a leadership role in cutting costs.

Secondly, it will be searching for ways to set up processes for cutting costs, rather than simply looking for ways money is being spent needlessly or inappropriately.

"Whether or not these processes can be successfully transferred to other hospital settings is the major question the two-year study will address," Silverman said. Both he and Sommers, whose doctorate is in public health, believe that from this demonstration will come some widely applicable tools for helping hospitals implement these mechanisms quickly and efficiently.

The four cost containment projects already underway at Stanford are in the areas of orthopedics, radiology, urology and pulmonary medicine. Silverman said the process has already shown excellent promise at not only decreasing costs but also at encouraging medical staff and employees to commit themselves to the process of analyzing how services can be used effectively.

In each pilot area a professional facilitator works with a group of interested health care providers to help them raise and answer questions about the appropriateness, necessity and manner in which services are provided.

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The team develops recommendations and seeks to gain support from their colleagues to make cost saving changes.

Traditionally, Silverman said, cost reductions have been mandated by administrators or hospital boards.

"It was then up to a manager of a department to figure out how to effect a particular level of savings. If a specific budget cut were ordered, the manager would be required to tailor savings to that specific level.

"The Kellogg study, on the other hand, will find ways for physicians, nurses, and other health professionals to become intimately involved in a process for both identifying and removing excess costs in a manner so as to not endanger patient care quality," Silverman added.

He said the kinds of issues being addressed in the SUH projects have been reduced length of stay of patients, economical ordering patterns of supplies and services by physicians, improvements in nurse staffing, and more effective delivery of ancillary services, which include such things as physical or respiratory therapy, or laboratory tests.

"We believe that perhaps the most pressing need in hospital cost containment is to ensure that within each hospital a mechanism, such as a multi-disciplinary committee, exists, which will be responsible along with hospital administration to define and oversee cost management strategies," Sommers said. "This committee process will act to assure patient care quality."

The W. K. Kellogg Foundation, established in 1930 to "help people help themselves," is one of the largest private philanthropic organizations in the world. The foundation said it has distributed more than $843 million in support of programs in agriculture, education and health in the United States, Latin America and the Caribbean.

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sommers mg8

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STUDY NEEDS MALE VOLUNTEERS

STANFORD—

Healthy sedentary males, less than 155 pounds, and male runners, greater than 175 pounds, are needed to participate in a Stanford University Medical Center study as part of on-going studies examining the relationship between physical training and glucose (blood sugar) utilization.

Participants will be required to spend about four half-days in the Clinical Research Center at Stanford and will receive a free physical examination, including an oral glucose tolerance test, measurement of maximum aerobic capacity, measurement of percent body fat, a fat tissue biopsy, and studies of glucose utilization.

The studies are being conducted under the direction of Dr. Gerald Reaven, professor of medicine.

For more information contact Ken Rodnick, graduate research assistant, weekdays between 8 a.m. and 5 p.m., at (415) 497-6973.

11-8-85 —30— rodnick jtk1

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CONCERT WILL BENEFIT STANFORD HOSPITAL MODERNIZATION PROJECT

STANFORD—

A benefit concert for the Stanford University Hospital Modernization Project will be held at Stanford University Memorial Church on Friday, Nov. 22 at 7:30 p.m.

The Truelight Missionary Baptist Church Young Adult Choir of East Palo Alto will sing their versions of "Hold on to God's Unchanging Hand," "My God is Real," "I'm Running for the Lord," and other favorites. The choir has recently traveled to Houston on part of an ecclesiastical tour.

Cost of admission will be $5 for adults and $3 for students, children and senior citizens. Tickets are available at the Personnel Office, Room E009, Stanford University Hospital, 300 Pasteur Drive, Stanford. Tickets will also be sold at the door the night of the concert.

The event is sponsored by the Hospital Modernization Project Employees Steering Committee.

For more information, call Susan Cabral at Employee Relations, (415) 497-6251.

11-8-85 —30— concert jtk1

FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911
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FREE GLUCOSE TESTING OFFERED THE PUBLIC

STANFORD—

Free blood glucose screening will be offered to Stanford employees and members of the public next week by the Medical Center's Diabetic Patient Teaching Committee.

Stanford University Hospital Pharmacist Sandy Bardas said the glucose testing to detect potential signs of diabetes is being offered at an information booth outside the hospital's main cafeteria, 300 Pasteur Drive, from 10 a.m. to 4 p.m., Tuesday, Wednesday and Thursday (Nov. 12-14).

A display, in conjunction with Diabetes Awareness Week, will feature information on understanding and managing diabetes, Bardas said.

For further information, contact Bardas (415) 497-6374.

11-8-85 —30— diabetic MG8

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EDITORS: This article originally appeared in the Fall 1985 issue of *Stanford Medicine*. Copies of the magazine are available on request. Inquire about photos.

RADIATION OF LYMPH NODES EXPANDS FROM CANCER TREATMENT ROLE

STANFORD—

Traditionally used for treatment of cancer, high-powered radiation beams have moved beyond the realm of oncology and are now being aimed at serious maladies involving the body's immune system.

Encouraged by the results so far, scientists are optimistic that an experimental therapy known as total lymphoid irradiation (TLI) may revolutionize the way medicine treats many conditions ranging from autoimmune diseases, in which the body attacks itself, to organ transplants. For some people, it may end a life-long requirement for drugs.

A handful of the nation's 2 million arthritis sufferers are already feeling less pain and regaining freedom of movement thanks to TLI. Others suffering from a disease called lupus nephritis are finding relief from this specialized radiation. And kidney transplant patients, who traditionally are put on large amounts of medication to prevent rejection, are shedding dependency on some of the more toxic drugs because of TLI.

"TLI is exciting because it offers the potential to treat more effectively than ever before a variety of diseases that previously would respond only to powerful, toxic drugs with damaging and potentially lethal side effects," says Dr. Samuel Strober, head of Stanford medical center's TLI program.

"Our aim is no drugs, not new drugs for treatment of these diseases. One of the most encouraging things we're learning is that TLI has relatively few severe side effects when applied properly for appropriate conditions."

In the next few years, Strober predicts, victims of multiple sclerosis, thought to be an autoimmune disease, may benefit from TLI. It may also induce permanent immunity, or tolerance, against other diseases. Graft vs. host disease, in which transplanted tissues attack their new owner's body, is another potential target.

TLI is now used for treatment of the immune system at about a dozen research centers around the nation, including Stanford. But the core of its technology is available at any hospital with a linear accelerator. These sophisticated X-ray machines direct moderate doses of radiation selectively at any body area where lymph nodes are located, such as the neck, chest, abdomen or spleen. Neighboring organs are protected with lead shielding.

Dr. Henry Kaplan harnessed the linear accelerator's power nearly 25 years ago at Stanford as a treatment for Hodgkin's disease, a cancer of the lymph nodes. The technique's success at changing Hodgkin's from an almost universally fatal to an almost universally survivable form of cancer is responsible for much of the current interest in TLI for other diseases.

The common factor in Hodgkin's disease and other conditions that can be treated by TLI is the lymphocyte, a type of white blood cell that until recently was thought to be largely inert. But it's now known that these unassuming, microscopic structures are crucial to the body's immune system. Lymphocytes help manufacture antibodies that fight infection. They also kill off and purge the system of cells that have become infected.

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 The lymphocytes collect in the lymph nodes, where they can be attacked selectively without serious risk to other cells. And that's exactly what TLI does. The radiation is aimed at the lymph nodes and causes a long-lasting drop in the overall number of lymphocytes by damaging DNA, the genetic coding that tells them how to function. Once they're zapped with radiation, the lymphocytes lose their ability to survive or reproduce.

Lymphocytes generally proliferate when the body is attempting to fight infection, which physicians can observe by feeling a swelling in patient's lymph nodes. But when lymphocytes begin to proliferate inappropriately--as in cancer, autoimmune disease or transplant rejection--they can become harmful. Healthy cells as well as diseased cells are destroyed.

Not only does TLI cause a drop in lymphocytes, but as an extra advantage, it creates a predominance of a type of lymphocyte called a suppressor T-cell. These act as the brakes of the immune system, keeping the number of lymphocytes in balance.

In arthritis, lymphocytes collect around the joints in tissue called the synovial membrane. The cluster causes the membrane to become inflamed, which in turn causes pain when the joint is moved. TLI cuts down the number of lymphocytes available to accumulate around the joints.

In recent experiments, 16 of 21 patients with advanced rheumatoid arthritis showed significant improvement after TLI treatment, Strober says. All the patients had previously failed to improve with conventional anti-arthritic drugs.

One grateful TLI recipient is Susan Echenrode, whom physicians diagnosed with rheumatoid arthritis more than 25 years ago when she was 9. Since then, the young woman has undergone more operations than she can remember--at least 15--to relieve excruciating joint pain and make the best use of her arthritic limbs.

About six years ago, her deteriorating condition forced her to stop working as a respiratory therapist at Stanford hospital. "I just couldn't function on my feet all day," she recalls.

Having taxed available therapies to the limit, Echenrode's physician referred her to the then-embryonic TLI program for arthritis sufferers, led by immunologist Strober.

"I had two alternatives: radiation or powerful cell-killing drugs," she says. "Neither one sounded particularly good, but somehow I felt that the radiation might be the best choice."

Today Echenrode says she isn't cured, but "it has lessened the pain." She's back at work at a medical products company office and is even able to enjoy long bike rides on weekends.

Patients usually don't report a decrease in symptoms immediately after treatment, says Stanford's Dr. Richard Hoppe, a radiation therapist who collaborates with Strober on TLI studies. Improvement reaches a maximum level of about 50 percent, based on widely recognized criteria of such arthritic symptoms as joint tenderness, swelling and morning stiffness, and then appears to remain at a plateau after about six months, he explains.

Echenrode, for example, says she felt tired from the radiation treatment and somewhat disappointed, "because after my treatments I wasn't feeling any better." But after several months, she began to feel less pain in spite of the years of previous damage to her joints.

Lupus, an autoimmune disease in which the connective tissue between organs becomes inflamed, is also being attacked with TLI. In another recent study, TLI helped eight of 10 lupus patients who previously had failed to respond to medication. Some of these patients, who had become ill when the lymphocytes proliferated and attacked their kidneys, have shown improvement for nearly four years.

In the case of organ transplant patients, immune disease is induced by the very surgical procedure performed to save the patient's life. Their lymphocytes attack the transplanted organ whose tissues are different from the rest of the body.

Since transplantation became a viable therapy more than three decades ago, powerful drugs have been used to suppress the immune system. These drugs have significant side effects, including damage to the kidneys and skeleton. In addition, they suppress the immune system, leaving the patient vulnerable to a variety of infections.

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For more than three years, Strober has been collaborating with kidney specialists and surgeons at Pacific Medical Center in San Francisco, using TLI as an immunosuppressive treatment for kidney patients.

Nearly 20 percent of Pacific's kidney transplant patients--about 60 in all--were treated with TLI before their organ transplants, says Dr. Barry Levin, the nephrologist who has worked with the Stanford TLI team. This has eliminated the need for most drugs otherwise required to prevent kidney rejection after the transplant.

"The survival rate of the transplanted kidney, normally about 80 percent after one year, is a little better among our TLI patients," Levin says. The big advantage, he adds, is an improved quality of life.

TLI patients have fewer rejection episodes and spend less time in the hospital recuperating from the infections that may debilitate or even kill many transplant patients treated only with immunosuppressive drugs.

Transplant patients given TLI continue to take small doses of prednisone, a drug mimicking the action of cortisone, a natural body hormone. Efforts to wean patients entirely from prednisone have resulted in rejection of the new organs, Levin says.

Dr. Edward Stinson, a cardiac surgeon who heads Stanford's heart transplant program, says animal studies using TLI indicate "very promising results for cardiac transplantation." Stinson and his team are watching the results of TLI in kidney transplantation before introducing "this exciting new variable" to heart transplants.

But, he says, TLI poses some technical barriers. "Our patients are extremely ill and cannot be supported as readily as kidney patients during the weeks of pre-transplant radiation required," Stinson says. Since donor hearts are scarcer than kidneys--and their availability less certain--patients are not likely to find a heart within a week or two of the end of a finite six-week pre-transplant treatment period. A maintenance dose might be administered until a donor is found, radiologist Hoppe says, but how long a wait is feasible is still a question to be answered.

Strober is optimistic that these barriers can be overcome for heart transplantation. Eventually, he says, with better tissue matching among donor organs and recipients, many powerful drugs used to prevent rejection will be eliminated entirely.

Strober, Hoppe and Levin agree that the side effects from TLI have been minimal for transplant and other patients, consisting of such symptoms as nausea and sore throats. Not a single case of cancer, sometimes a side effect of radiation, has resulted from the new treatment.

While no Hodgkin's patients treated with TLI alone during a 25-year period ever contracted leukemia from radiation treatment alone, Hoppe says, some who received drug or a combination of drug and radiation therapy did contract leukemia.

While the chances of contracting cancer from TLI does exist in theory, Hoppe admits, it's not a major risk for non-cancer patients because the total radiation dose administered to treat arthritis, about 2,000 rads, is low; it's about half the amount administered for Hodgkin's disease.

TLI, as promising as it may be for the small groups of patients that so far have experienced it, should become more exciting as treatment protocols are fine-tuned, Hoppe continues.

"It's not so much a situation where we're talking about TLI vs. drugs. It's a question of getting the right combinations of therapy. We also need to discover the optimum stage of disease for treatment."

So far the deck has been stacked a bit against TLI by nature of its experimental status. Patients ethically can't be put on TLI until other measures have failed.

"It might be significantly more effective if we were able to use TLI first," Hoppe says. "With more experience and confidence in its efficacy and safety, we'll be able to improve constantly," Strober adds.

"It's our firm belief that the long-term toxicity of TLI is less than that of the available drugs," Hoppe concludes, "and that's the main reason for its potential advantage."

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Editors: Photos available on request if not included.

CLINICAL ENGINEERS KEEP ALIVE THE MACHINES THAT SUSTAIN PATIENTS

STANFORD—

One of the white-coated men and women grouped around a critically ill patient's life support monitor is most concerned with the machine itself.

The patient's life may depend on this special attention by one of the three engineers or nine biomedical equipment technicians (BMETs) from the Clinical Engineering Department at Stanford University Hospital. The professional team is responsible for making sure that more than 8,000 pieces of assorted equipment used to keep patients alive or monitored are working faultlessly and effectively.

Department Director Steven Friedman notes that the equipment ranges from such headline-grabbing clinical research devices as a partial artificial heart to the life function monitors routinely placed at the bedside of every intensive care patient in the hospital. Even the television sets which boost patient morale pass through the Clinical Engineering Department for a safety inspection before they are sent bedside.

Friedman, who came to Stanford two years ago as department director, notes that a major function is to try to stop problems before they become repairs.

"It's critical that we know for certain that a piece of equipment does in fact do what it is supposed to do," emphasizes Eben Kermit, the engineer in charge of cardiology equipment. His job recently was moved from the Division of Cardiology into the SUH Clinical Engineering Department.

Judy Martin, a biomedical technician in the department, remembers the testing of a hypothermia device which is used to control body temperature of surgery patients during operations.

"The specifications said the device was accurate to within three degrees of the temperature selected," said Martin.

But it wasn't. The machine temperature fluctuated widely—and potentially dangerously. Obviously that equipment never made it upstairs to the operating room after clinical engineering had a close look at what the machine could—and clearly could not—do.

Friedman said that he and his staff consult with physicians, nurses and other members of the health care team to evaluate potential purchases and serve as consultants to a variety of hospital committees. For example, when the hospital was ready to buy bedside TV sets, clinical engineering took a close look at the potential purchases to make sure they were safe and a good value.

Clinical engineering's role is more complex in a university hospital setting, where many devices are new or have been modified—often made more complicated—for special research projects. For example, Clinical Engineering recently spent considerable effort, Friedman said, in inspecting a left ventricular assist device (LVAD) before it was implanted in the first patients by Stanford cardiovascular surgeons.

Some clinical engineering occurs within the hospital on patient units, "and you can believe there is stress when a patient's relative is standing right there with you watching while you make sure that a vital piece of equipment is working properly," said Edward Young, department manager and a BMET.

But much of the time, the engineers and technicians wield soldering irons, screw drivers and their own analytical skills at the bench in the department, located in the hospital's basement.

On a recent afternoon, Martin put down her soldering iron while servicing equipment to talk about her career as a BMET.

"I came to California (from North Carolina 18 months ago) for personal reasons, but before I arrived I applied for a job here at Stanford." She said she was looking forward to the complexities and professionalism which the Stanford clinical engineering department had as far away as her Southeast home.

"Success here is not just doing your job right," said Martin. "Its choosing to do the right thing."

Friedman amplifies that theme:

"There are major differences between what we do here and what is done by an electronics technician in a typical Silicon Valley plant. In the typical industrial setting, each engineer or technician gets to know one or two devices intimately. We don't have the luxury of being able to learn the intricacies of only one or two pieces of equipment. We have a tremendous range of devices, and its vital that we be innovative and effective when problems occur."

Part of the job in this era of cost containment, said Friedman, is knowing when to spend time fixing a piece of equipment and when it is more practical to send the device back to a manufacturer. "That's the sort of judgment our people develop working here," Friedman adds.

Some specialized equipment, such as testing devices in the core clinical labs, come with service contracts from the manufacturer or supplier. In these cases, clinical engineering is not primarily responsible for service. But Young notes that the department's crew sometimes makes quick or emergency repairs as needed on these devices.

In fact, Friedman and Young both say proudly that sometime the manufacturer of a particular piece of equipment will call the department seeking service advice about their own product.

Friedman notes that the department must compete for its work. Departments are free to use outside contractors or services if they choose, but the vast majority of hospital and medical school departments have chosen to use SUH Clinical Engineering, he said.

The work of the technicians and engineers is highly specialized, and an International Certification Commission, now widely recognized in the United States and Canada, examines the technicians and engineers on their knowledge of hospital electronics. Friedman serves on a board which conducts inspections for the organization.

Friedman says two-year colleges have specific programs in biomedical technology, although some of his staff have combined extensive on-the-job training with four-year or more college degree programs in biology, physics, chemistry or an engineering-related field. Martin, for example, has two bachelor's degrees, in biology and medical technology. She began learning biomedical technology when she started fixing the equipment she needed to use for her own work in a chemistry lab.

"A major criterion, beyond a lot of intelligence, is strong analytical skills and the ability to be innovative when problems occur," says Friedman, who has a master's degree in biomedical engineering from New York University.

Before coming to Stanford, he served in a similar capacity at the UC Irvine Medical Center. He has worked in biomedical engineering since 1969 but began his engineering career as an instrumentation engineer helping to design systems for the Boeing 747 jetliner in Seattle.

Kermit, a six-year veteran at Stanford, has a master's in electrical engineering from Sacramento State University.

One of the BMETs, Joe Bennett, is a testament to how the complexities of bioengineering have progressed in the past two decades.

Bennett came to Stanford 12 years ago as a television repairman, "back when the TV was the most complex piece of machinery in the hospital setting," said Friedman. The knowledge proved useful as video monitors began assuming a larger role in the hospital setting and Bennett began training on a variety of more complex equipment as it was added to the patient care inventory.

And Friedman himself began developing an interest in electronics when his father became one of New York City's first television repairmen in the 1940s, "and I began to go with him at the age of 4 when he went out to service the neighborhood televisions."

Friedman now as director doesn't get much opportunity to service televisions or anything else around the hospital. "My hands-on work is confined pretty much to my family. I fix my kids' toys—but only if they fill out a work order first," he jokes.

Editors: Friedman may be contacted directly at (415) 497-7131

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STANFORD'S MCDEVITT WINS $100,000 AWARD FOR RESEARCH

STANFORD—

Dr. Hugh O. McDevitt, Joseph D. Grant professor of medical microbiology and medicine at Stanford University School of Medicine, has been named the 1985 recipient of the $100,000 Lita Annenberg Hazen Award for excellence in clinical research.

He was presented the award Tuesday, Nov. 5, at The Mount Sinai Medical Center in New York City. The award is made annually by the Mount Sinai School of Medicine.

McDevitt, who will become chairman of Stanford's department of medical microbiology in January, was selected for his work on the genetic control of the immune system. He has been studying immune response genes since the early 1960s and has developed immunological approaches for the clinical treatment of diseases.

The award was established in 1979 by Lita Annenberg Hazen, a philanthropist who has made many contributions to biomedical research. It has the double purpose of honoring established researchers and encouraging young physicians to enter biomedical research. As a result, half of the $100,000 prize goes to a young physician chosen by the award winner to join in current research.

In 1982, the Hazen award went to Drs. Michael Brown and Joseph Goldstein of the University of Texas Health Science Center in Dallas, recipients of the Nobel Prize in Medicine this year. Other recent winners include Dr. Robert J. Lefkowitz of Duke University Medical Center in 1983 and Dr. Yuet Wai Kan of the University of California-San Francisco in 1984.

"We honor Dr. McDevitt for his elegant research, which bridges basic and clinical immunology and which has yielded significant insights into the possible prevention or cure of immunologically mediated disease, and for his excellence as a mentor," Dr. James F. Glenn, president and chief executive officer of the Mount Sinai center and chairman of the award selection committee, said in making the presentation.

The selection committee is made up of nationally recognized scientists who meet each spring at Mount Sinai to choose the recipient from a list of nominees.

McDevitt, 55, was a Stanford undergraduate and received his medical degree from Harvard Medical School. He has been on the Stanford faculty since 1966. He was promoted to professor of medicine in 1972 and received an appointment in the department of medical microbiology in 1978. During the 1970s he headed both the division of immunology in the department of medicine and the clinical immunology laboratory at Stanford University Hospital.

In 1977 he received the Borden Award for outstanding research from the Association of American Medical Colleges and in 1981 he received the Passano Foundation Award for research on "the relationship between the immune system, histocompatibility antigens and human disease."

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NEW RESEARCH PROGRAM FOCUSES ON BLOOD TRANSFUSION MEDICINE

STANFORD—

A federally funded specialized center of research in transfusion medicine—one of two in the nation—has been established at Stanford University Medical Center.

The center, funded by more than $3.5 million from the National Institutes of Health for the next five years, will apply the latest advances in molecular biology and immunology to clinical problems associated with blood transfusion, said Dr. Carl Grumet, associate professor of pathology and director of Stanford Medical School's transfusion service.

"There are 15 million blood units transfused annually into approximately two-and-a-half million recipients in the United States," said Grumet, who is the new center's director.

"Most transfusions are safe and effective," he added. "But because of new therapies, such as bone marrow transplantation, and new diseases, such as AIDS, this area of medicine is not moving fast enough. As a result, we are behind in translating basic research progress into clinical benefits."

Three of the center's five major research projects focus on investigations of viruses that can be transmitted through blood transfusion, including cytomegalovirus (CMV), the AIDS (acquired immune deficiency syndrome) virus, and hepatitis viruses. A fourth project involves study of varicella-zoster virus (VZV) infection, and its prevention or treatment by antibodies derived from blood. VZV causes chicken pox and shingles. The fifth project aims at developing better methods for determining tissue compatibility, with particular application to bone marrow transplantation.

CMV infection is the number-one cause of death following bone marrow transplantation, said Grumet. It is also a major problem for susceptible premature infants, with a death rate as high as 1 in 40 for those who are transfused. Researchers will attempt to identify possible vaccine candidates against CMV and better methods for screening against CMV-contaminated blood. They will also be developing better methods for treating post-transfusion CMV infections.

About one percent of the estimated 15,000 AIDS cases in the U.S. are thought to be associated with blood transfusion or blood products. As many as 150,000 people may be carriers of the virus, Grumet said.

The AIDS project in the new center will attempt to develop improved methods for detecting the AIDS-associated virus and preventing transmission of the virus through blood transfusion. The researchers also hope to learn more about the virus' role in causing AIDS, with the ultimate goal of finding possible preventive or treatment methods.

The hepatitis-B virus—although less prevalent today than formerly in donated blood, due to better screening methods—can still be transmitted through transfusion, Grumet said. Researchers in the center are working on a genetically engineered vaccination method which could provide protection against this disease.

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The varicella-zoster project focuses on production of human monoclonal antibodies against the virus. These may help in development of a vaccine, as well as lead to better methods for diagnosing and treating VZV infections.

Development of better methods for typing and matching donors and recipients could help improve results in the 1,500 bone marrow transplants performed annually in the U.S., Grumet said. The researchers are developing monoclonal antibodies and DNA probes to aid in this effort. The monoclonal antibodies could also be useful in suppressing rejection of transplanted tissues as well as in new modes for treating certain autoimmune diseases, such as multiple sclerosis, Grumet said.

A common thread throughout most of these studies is the use of human monoclonal antibodies, Grumet said. A monoclonal antibody facility, headed by Dr. Steven Foung, assistant professor in pathology, is one of the important core elements of the center.

In addition to Grumet and Foung, other Stanford investigators in the center include Dr. Edgar Engleman, associate professor of medicine and pathology, Dr. Rose Payne, emeritus professor of medicine, Dr. Edward Mocarski, assistant professor of medical microbiology, and Dr. William Robinson, professor of medicine.

Although the center is based at Stanford, several other local scientists are participating as investigators, including Dr. Lenore Pereira, associate professor at the University of California, San Francisco (UCSF), Dr. Michael McGrath, assistant professor at UCSF, and Dr. Evelyne Lennette, co-director of Virolab in Emeryville.

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FOR IMMEDIATE RELEASE

TECHNIQUE TO MEASURE TEMPERATURE OF STARS EXPLORED IN MEDICINE

STANFORD—

A new technique to measure body temperature, which would allow doctors to non-invasively treat tumors with heat, has been suggested by Stanford University scientists.

Radioastronomers have used the technique, called microwave radiometry, to record temperatures of stars. Now engineers want to use it to detect the small amount of microwaves emitted by warm, living bodies.

Precise readings of the temperatures within a tumor would aid success of an as yet experimental therapy to kill cancers with heat. The treatment, called hyperthermia, is being tested in combination with radiation at Stanford University Medical Center and other hospitals.

The key to hyperthermia is keeping the tumor tissues evenly warmed to a target temperature a few degrees above body heat. But present methods to monitor and give feedback on heat are invasive, hence the need for alternatives.

"We would like to measure the three-dimensional distribution of temperature within the treated area without having to introduce anything into the body," said Dr. Stavros Prionas, research associate in radiology at Stanford.

In a feasibility study published in the November issue of the journal *Bioelectromagnetics*, Prionas and Dr. George Hahn of the Stanford University School of Medicine outlined the theoretical basis and requirements for microwave radiometry.

Prionas, a cancer biologist with a Masters in engineering, explained in an interview that advances in technology now make it possible to use microwave radiometry to take a tumor's temperature.

Equipment can be cooled to reduce electronic noise that otherwise would mask the minute microwave signals coming from the human body. And, he said, there are new spiral antennas to transmit and receive the microwaves.

He said that the Stanford hyperthermia group intends to develop a microwave applicator that can double as a sensor. The applicator, a palm-sized plate with an embedded spiral antenna, will intermittently scan the temperature of the tumor and nearby healthy tissue as it delivers warming microwaves. Electronic circuits will adjust the amount of microwaves applied, to correct any deviations from the desired temperature and thus keep the tumor evenly heated.

Cost of the instrument as yet is prohibitive for routine clinical use, Prionas said. But he expects the price to come down, he added, as many of the components required to detect microwaves within the human body "are already cheaper than they were a few decades ago."

RCA and a research group in France have already developed devices that can look at one or two frequencies of the microwaves emitted by humans, he added.

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As the science of medicine becomes more sophisticated, doctors demand more and more of engineering. Since the seventeenth century, a simple glass tube filled with liquid has served to measure body temperature. Now, the need to control heat directed at tumors has rendered the humble thermometer obsolete.

Sampling the temperature at the skin or within a couple of convenient body orifices is fine for monitoring the course of a fever. And surface temperature suffices for physicians who wish to guide hyperthermia treatment of skin cancers.

But to watch over the heat delivered by hyperthermia therapy to deeper tumors, doctors have had to insert temperature probes. This invasive requirement has posed a limit to the hyperthermia approach, according to Stanford researchers.

In hyperthermia therapy, radiologists try to selectively heat and thereby weaken cancerous cells, explained Prionas.

With microwave radiation, tumor cells are taken from normal body temperature of 39 degrees Centigrade, he said, to 43 degrees (109 degrees Fahrenheit, the heat one encounters in a hot tub, or by day in a desert). He added that an hour of this elevated temperature renders the tumors more sensitive to conventional cancer therapies with x-rays or drugs.

The amount of microwave energy used to induce localized hyperthermia (literally, elevated heat) is not enough to char cells the way a microwave oven cooks food, he noted.

Currently, Prionas said, researchers testing hyperthermia in cancer patients can thread fine, temperature-sensing thermistors or thermocouples into tumors to monitor temperature.

These devices, Prionas said, "are very nice indeed, but they only give temperature profiles along the track (of their insertion)."

Conceivably, he said, a number of thermistors or thermocouples could be placed in and around a cancer to get a view of temperatures in three dimensions. But while thermocouple and thermistor wires come as thin as horsehairs, a bristling array would be required for a complete temperature picture, and that would be too invasive, Prionas said.

Even such innovations as fiber optic probes and silicon diodes can take temperatures "at only a few points or along a line," he said; "we want a volume."

So far, his calculations show that microwave radiometry can scan temperature in one dimension. But, he said, an applicator made of a mosaic of smaller spiral antennas could expand the microwave profile into a three-dimensional picture.

He expects the method of microwave radiometry to help doctors treat cancers that generally lie an inch below the skin. Thus many deep tumors will still be beyond the reach of precisely controlled, noninvasive hyperthermia. But, Prionas points out, cancer of the breast and chest wall will be especially amenable to microwave heat therapy.

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TWO STORIES

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SHOOTER RECEIVES JAVITS RESEARCH AWARD

STANFORD—

Dr. Eric Shooter, professor and chairman of neurobiology, recently was awarded a $2.7 million seven-year Javits Neuroscience Investigator Award from the National Institutes of Health (NIH).

The award honors former Senator Jacob K. Javits of New York, a victim of amyotrophic lateral sclerosis (a neurological condition also known as Lou Gehrig's disease).

The special Javits awards, mandated by the U.S. Congress, are made by NIH's Institute of Neurological and Communicative Disorders and Stroke to investigators "who have a distinguished record of substantial contributions in some field of neurological or communicative sciences."

Shooter is using the funds to study nerve growth factor, a substance required for proper development of many nerves in the body and brain.

Shooter's Javits award is the second made to a faculty member in Stanford's department of neurobiology, he pointed out. Last year, professor Uel McMahan received a $2 million seven-year Javits Award to study the structure and function of regenerating synapses, the communication junctions between nerve cells.

12-18-85 —30— javits LH9

FOR IMMEDIATE RELEASE

FATHMAN RECEIVES DEVIL'S BAG RESEARCH GRANT

STANFORD—

Dr. Gary Fathman, associate professor of medicine at Stanford University Medical School, has received a $150,000 three-year Devil's Bag Research Award from the Arthritis Foundation, based in Atlanta.

Fathman is one of five researchers in the country to receive the award, which is named after a racehorse that had been favored to win the 1984 Kentucky Derby until it broke two bones shortly before the race.

Fathman will apply the research award to studies of Lyme arthritis, a form of arthritis that may develop following the bite of a certain tick, called *Ixodes damminni*.

The Devil's Bag Research Award was created from a $600,000 fund donated to the Arthritis Foundation by James Mills of Middleburg, Va., from the syndication of his retired horse.

Other recipients of the award are from Johns Hopkins University School of Medicine, Harvard Medical School, Duke University, and Dartmouth Medical School.

12-18-85 —30— devil LH9

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NEW ANTI-TYPHOID VACCINE UNDER DEVELOPMENT MAY BE ENGINEERED TO "PIGGYBACK" ALONG IMMUNITY TO OTHER DISEASES

STANFORD—

A "piggyback" vaccine that may be able to immunize against several diseases at once is being developed by Stanford University Medical School scientists.

The vaccine consists of live typhoid fever bacteria—*Salmonella typhi*—which have been genetically disabled so that they can't cause disease.

Supplemented with genetic material to induce immunity against other infections, the enfeebled bacteria some day may be engineered to pack a "five-in-one" wallop, suggested Dr. Bruce Stocker, professor of medical microbiology.

Stocker's laboratory is working with support from Praxis Biologics, a company based in Rochester, New York, to develop and test the anti-typhoid vaccine.

The still-experimental agent may soon undergo trials of its power to prevent typhoid fever in Santiago, Chile, where that illness is common, Stocker said.

Although typhoid fever is now rare in the United States, World Health Organization estimates suggest there are 12 million cases each year worldwide, Stocker said. "With good treatment, the mortality rate is only about one percent," he added. "But where such treatment is not available, the mortality rate is about 10 percent."

An existing anti-typhoid vaccine given by injection is only partially effective, produces some undesirable side effects, and requires yearly boosters, Stocker noted.

The new vaccine is given by mouth and should produce no unpleasant side effects, he added. The vaccine already has passed its initial safety tests in human volunteers at the Vaccine Development Center of the University of Maryland School of Medicine in Baltimore.

Stocker hopes that it will be more effective than another anti-typhoid live vaccine recently developed by a Swiss researcher. That vaccine was highly effective in initial trials in Egyptian schoolchildren but has since performed less well in trials in Chile, he said.

Moreover, by adding optional genetic "accessories," the new vaccine from Stocker's lab could perhaps be engineered to provide immunity against diseases such as malaria, schistosomiasis and hepatitis, he hopes.

One experimental version of the anti-typhoid vaccine already contains an additional gene—engineered into the vaccine by Dr. John Clements of Tulane University Medical School—that may protect against "the commonest sort of traveller's diarrhea," Stocker said.

Tony Nnalue, a graduate student in Stocker's lab, is investigating the possibility of incorporating an anti-malaria component.

And researchers in England are attempting to fortify the vaccine with genes which might enable it to protect against schistosomiasis, one of the undeveloped world's most devastating parasitic diseases for which there is currently no preventive agent, Stocker said.

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The hoped-for result is that one or two swallows might provide multi-disease immunity as well as protection against typhoid. This would be particularly advantageous for people in the Third World who do not usually have easy or frequent access to medical care.

Others who contributed to the vaccine's development are Stocker's former graduate students, including Susan Hoiseth, Ronald Brown, and Mary Frances Edwards.

Manufacturing the vaccine may be very economical, Stocker said, because harvesting and purification steps aren't needed as they are for many of the new vaccines made through recombinant DNA techniques. "The typhoid bacteria in our vaccine will themselves manufacture the other immunity-inducing proteins, forming a naturally 'packaged' multiple vaccine," he explained.

The vaccine is called "live" because the typhoid bacteria, though crippled, remain alive and harmless inside body tissues. "For some diseases, vaccines made from killed bacteria or viruses just don't work," Stocker explained.

The persistence of the live bacteria gives the body's two systems of immunity time to be recruited into action, he explained. ("Cellular" immunity as well as "humoral" immunity—mediated by antibodies—is thought to be necessary for banishing parasitic diseases from the body.)

Stocker's vaccine work has come to fruition at the culmination of his scientific career.

In 1959, he first thought of the strategy embodied in the new vaccine. However, at that time there was no easy way to genetically cripple bacteria in the required way, he recalled. But developments in bacterial genetics now have made it possible to genetically modify bacteria so that they can't grow unless they are provided with specific growth factors.

Stocker's lab modified the *Salmonella* bacteria so that they require two growth factors—para-aminobenzoic acid and adenine—that are unavailable in human tissues. "Such nutritionally dependent bacteria can easily be grown in the laboratory, but they cannot multiply in human tissues and so cannot cause disease," Stocker said.

However, the bacteria can survive in the person's tissues for several days. "This probably explains the ability of live bacterial vaccines to stimulate a good immune response," he said.

The anti-typhoid vaccine is made from bacteria that are crippled in two different ways, requiring two different growth factors; this provides extra safety, Stocker said.

"Each mutation by itself would probably make the strain harmless, which means that a strain with both mutations can be guaranteed to be safe," he explained. The bacteria have been mutated in such a way that they cannot revert to their original form, he added.

The first strains of the new vaccine were designed to protect cattle from a bovine disease caused by *Salmonella* bacteria. These animal vaccines are now undergoing testing in calves, in Sweden and at the University of California Veterinary School in Davis.

"I think it's quite appropriate that a vaccine using typhoid bacteria has been developed at Stanford," Stocker commented. "The Stanfords founded the university 100 years ago after their 17-year-old son died of typhoid fever in Italy. Stanford University owes its existence to this bacterium."

In addition to Praxis' support, other funding for the vaccine research has come from the National Institutes of Health, the U.S. Army Medical Research and Development Command, and SmithKline-RIT (Belgium).

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(Editors: Photo available upon request if not included.)

SHUMWAY PREDICTS INCREASE IN HEART TRANSPLANTS FOR CHILDREN

STANFORD—

Heart transplant operations in the next few years are likely to feature increasing numbers of children, according to Dr. Norman E. Shumway, transplant pioneer and chairman of the Department of Cardiovascular Surgery at Stanford University Medical Center.

Stanford, which has the largest heart-transplant center in the world, has had only a handful of young patients so far. But Shumway said advances in anti-rejection drugs and surgical techniques have dramatically expanded the transplant possibilities for children.

He noted that of the 18 Stanford patients under 18 who have received transplanted hearts, 16 are alive and doing well. "The results seem to be better in the younger age group," he said. "We're very interested in looking into that."

Shumway credited an operation performed by Dr. Philip E. Oyer with changing the thinking at Stanford about transplants in children. In that operation, a grown man received the heart of a 12-year-old boy. When the heart turned out to be much smaller than expected, Oyer was forced to use it as a "piggy-back" heart, supplementing the functions of the man's original heart rather than replacing it.

But the smaller heart grew, eventually taking over the primary heart function for the recipient. "So we know a transplanted heart will grow and develop along with the patient," Shumway said. "That made it feasible to consider heart transplants in younger patients."

Another factor increasing the prospects for transplants in young patients is the development of cyclosporine, an immunosuppressant drug that reduces the chances of a heart being rejected by the body of the recipient. Cyclosporine can be used in smaller doses and has less severe side effects than some of the drugs that were used previously.

But any kind of immunosuppressant poses more problems in a child's body than in an adult's and physicians have to be very careful even with cyclosporine, because large dosages can be toxic.

Heart biopsies, which must be performed regularly to monitor the rejection possibilities, present another unusual hazard in young transplant recipients. The procedure involves inserting a fine wire into the heart, and the risk comes from the fact that the thinner walls of a child's heart are more easily perforated.

However, Shumway said, there are other means of diagnosing possible rejection. "An echocardiogram is one," he said. "It can be done without piercing the skin. And we're looking at other indicators (of rejection)."

One thing that is not as much of a problem as might be expected is finding a donor heart small enough to replace that of a child. That's because most young transplant candidates are suffering from familial cardiomyopathy, in which diseased hearts become very large.

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"The donor pool is not as restricted as you might think," Shumway said. "We can use teen-age or even young adult hearts."

Of course, there is always a problem in finding enough donors for transplants of any age. Shumway hopes that a new state law, requiring hospitals to ask families for organ donations when a patient dies, will help increase public awareness of the need. He also noted that more and more drivers are carrying donor cards supplied by the Department of Motor Vehicles.

Dr. David Baum, chief of pediatric cardiology, said Stanford receives six to ten inquiries a year about heart transplants for children and two or three transplants are performed annually. He expects the inquiries to increase as people become more aware of the possibility of such transplants.

Stanford's youngest transplant patient to date is Elizabeth Craze, who was 2 1/2 when she received a transplanted heart slightly more than a year ago. She is now back home in Cleveland and thriving; so is her 18-year-old brother, Andrew, who received a heart transplant in 1983.

As those two transplants and the name indicate, familial cardiomyopathy is an inherited condition. Stanford, in fact, has had two other sets of sibling transplants and all four of those patients were suffering from familial cardiomyopathy.

Elizabeth's parents, Susan and Charles Craze, lost three other children to the disease before transplants in children were successful. They are vocal supporters of programs encouraging organ donations.

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STANFORD APPROVES NEW ALCOHOL AND DRUG ABUSE PROGRAM

STANFORD—

A new program to treat patients with alcohol and drug dependencies was approved Wednesday, Dec. 11, by Stanford University Hospital's board of directors.

The hospital medical board is expected to approve the medical policies and procedures at its January meeting, and the program is scheduled to get under way by late February.

There will be a 12- to 14-bed unit at Hoover Pavilion to treat patients who require short-term detoxification and stabilization. There will also be a well organized outpatient component that will provide intensive outpatient therapy and continuing care. Patients with significant medical and psychiatric problems will also be cared for, if necessary.

Dr. William Hazle, a psychiatrist, will be medical director of the program and Robert Matano, a psychologist, will be program director. Medical treatment will be supplied by physicians of the Stanford Medical Group and the full range of hospital services will be available to treat acutely ill patients.

The Stanford program is intended to offer a flexibility lacking in many similar programs. Patients will not be hospitalized for a fixed length of time, such as 30 days. The intent is to have them return to their normal routines as quickly as possible, with an emphasis on outpatient treatment.

Surveys indicate there are more than 125,000 people with alcohol and drug problems in San Mateo and Santa Clara counties. Stanford projections estimate the program would handle 383 patients the first year.

Carole Price, hospital associate director who presented the program report to the board, said that at some point patients under 18 might be admitted but there are no plans at present to include adolescents.

In other action, the board:

- Approved the membership of the newly organized academic committee. It will be chaired by Dr. David Korn, dean of the medical school. Members include Dr Peter S. Bing, Dr. Robert Chase, Dr. Robert Cutler, William F. Massy, Dr. William Northway, Mona Cross Sowiski and Geraldine Steinberg. University President Donald Kennedy and hospital Director Sheldon S. King are ex-officio members and Dr. James F. Silverman is the staff member.
- Received word of the appointment to the board of Dr. R. Hewlett Lee, executive director of the Palo Alto Medical Clinic. He replaces Dr. Walter L. Arons.
- Accepted the resignation of board member Nancy Munger.
- Approved an increase in the Hospital Modernization Program fundraising goal from $15 million to $27 million.
- Discussed procedures for the access of community physicians to hospital-based clinical services and approved the granting of access to Drs. Edward Anderson, Bruce McAuley, Hardwin Mead, Matthew Selmon, John Simpson and Roger Winkle.

12-16-85 —30— hospbrd rg1

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R. HEWLETT LEE APPOINTED TO STANFORD HOSPITAL BOARD

STANFORD—

Dr. R. Hewlett Lee, executive director of the Palo Alto Medical Clinic, has been appointed to the Stanford University Hospital Board of Directors.

He was named by the general members of the Hospital corporation to replace Dr. Walter L. Arons, a community physician whose term is ending. Arons has been on the board since February, 1981.

Four other members of the hospital board were reappointed: Dr. Lawrence G. Crowley, William F. Massy, Linda Meier and Dean Morton.

All of the appointments are for three-year terms.

The 18-member board sets policy for the hospital. It is comprised of community, medical and lay leaders as well as university faculty and administrators. Twelve of the members are elected by the general members of the Hospital corporation, who are also trustees of the university.

Lee, 59, received both his bachelor's degree and his M.D. from Stanford. He has been a member of the surgical staff at Stanford University Hospital since 1956 and has served on several hospital committees.

He is also chairman of the board of governors, health care division, of the Palo Alto Medical Foundation. He has been president of the Santa Clara County Medical Society and has been appointed to several state commissions, including the Health Care Commission of California and the special advisory committee to the director of health.

12-16-85 —30— lee rg1

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Editors: Photo of Boothroyd available on request if not included.

ANCIENT SCOURGE OF AFRICAN SLEEPING SICKNESS SLOWLY YIELDING NEW CLUES ABOUT MOLECULAR BASIS OF DISEASE

STANFORD—

A platoon of invaders aims for the heart of the defense system. Wave after wave of attackers are destroyed, but they keep coming back and eventually conquer.

This isn't the latest adventure movie: It's a drama played out in the body of a person with African sleeping sickness.

The invaders are *trypanosomes*, tiny parasites that enter the bloodstream through the bite of the tsetse fly. The defenses that finally give way are those of the body's immune system.

Researchers at Stanford University Medical School are studying the molecular biology of the cunning *trypanosome* to learn more about how the parasite scales the body's immune fortress.

The knowledge could have broad implications for understanding infectious disease at the molecular level. Other organisms, including those that cause gonorrhea and acquired immune deficiency syndrome (AIDS), can also elude the immune defenses.

It could also some day lead to an effective vaccine or drug against sleeping sickness, a disease that helped shape the history of the African continent.

At the turn of the century, says medical microbiologist Dr. John Boothroyd, sleeping sickness terrorized equatorial Africa.

"Even AIDS doesn't compare in terms of the fear," says Boothroyd about the disease that in one epidemic alone killed two-thirds of the population around Lake Victoria.

Symptoms of fever, fatigue, daytime drowsiness and nocturnal insomnia are common, leading to more generalized apathy, convulsions, coma and death when the invading *trypanosomes* reach the spinal cord and brain.

Henry Stanley—of "Dr. Livingstone, I presume?" fame—unwittingly spread the disease as he traveled down the Congo River. Sleeping sickness felled native tribespeople, colonial missionaries and explorers alike. It also decimated livestock herds and beasts of burden.

The scourge was so severe that Belgium and England, holders of African territory, established major centers for studying the disease. The quest for an effective drug spawned the science of chemotherapy, Boothroyd says.

A century later, despite programs to eliminate the tsetse fly, and drugs that can at least partially curb the disease, sleeping sickness still affects much of Africa and kills 10,000 people each year, Boothroyd says.

It also prevents susceptible livestock from grazing throughout large portions of the African continent.

A vaccine could prevent the parasite from gaining a foothold in the body, says Boothroyd. But the search for a vaccine so far has been stymied by the organism's unusual ability to escape destruction by the immune system. Like a criminal with a repertoire of "aliases," the parasite repeatedly switches the make-up of its external protein coat, assuming a new disguise to stay one step ahead of the host's immune response.

It's not surprising that the parasite has developed an ingenious survival strategy, says Boothroyd. It needs to outwit the host's immune defenses because it lives in the bloodstream, which is constantly patrolled by the cells and proteins of the immune system.

When the immune system detects the first wave of invading *trypanosomes*, it unleashes antibodies that recognize distinctive proteins on the parasites' outer surface. The antibodies bind to the parasites, signaling other immune system components to kill the invaders. But a small number of the organisms produce an alternate surface protein that the antibodies are unable to recognize immediately. These survivors swell to large numbers before the immune system can gear up to catch them.

"Each time, it's like a new infection to the body," Boothroyd explains. "*Trypanosomes* have a repertoire of up to 1,000 different surface proteins," he adds.

Scientists are beginning to understand the genetic details of how the organism switches its protein coat. Each time the parasite makes a new protein it must decode a gene, a portion of its DNA.

"It's like a cassette recorder with a library of tapes," Boothroyd explains. The "tapes" are the separate genes, each coding for a slightly varying protein. "The organism takes the new gene and duplicates it, then plugs it into a 'play' slot on the DNA molecule," where it is transcribed into another molecule called messenger RNA.

In trying to understand how this process occurs at the molecular level, Boothroyd, postdoctoral scholar David Campbell, and research assistant Deborah Thornton discovered that *trypanosomes* transcribe their genes discontinuously. Humans and most other organisms transcribe genes in one continuous piece.

This difference suggests one possible approach to fighting the disease, Boothroyd says. Drugs now used to treat sleeping sickness are toxic, he explains, because while they block the metabolic processes of *trypanosomes*, they also disrupt the chemistry of human cells. But since discontinuous transcription is so far known to occur only in the parasite, it could perhaps be derailed by a drug that would not harm humans.

Despite the fact that the *trypanosome*'s varying surface proteins form a moving target that the immune system can't strike, Boothroyd and his colleagues still hope that a vaccine might be possible, because preventing the disease is preferable to treating it with a drug.

"It might be possible to find a way that would knock the parasite out before it switches from fly to human," Boothroyd says. Like a person who needs a different wardrobe when moving from the tropics to the arctic, the parasite needs different sets of enzymes for the different environments—tsetse fly and human—it lives in, he explains.

Graduate student Maurine Hobbs is investigating the differences between the set of enzymes the organism uses in the fly and the new set it substitutes for living in human blood.

Boothroyd's work is funded by the National Institutes of Health, the MacArthur Foundation, and the Burroughs Wellcome Fund.

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IF MEDICAL SCHOOL IS TO REMAIN COMPETITIVE, FACULTY MUST EXPAND PATIENT BASE, TASK FORCE SAYS

STANFORD—

"In the new health care environment, Stanford University Medical Center cannot continue to achieve its education and research missions with its present specialty emphasis and faculty structure."

This is the conclusion of a special Task Force headed by Duncan E. Govan, professor of surgery. The group was appointed by Dr. David Korn, dean of the School of Medicine, last January to study how Stanford could maintain the patient base it needs for its missions of clinical care, teaching and research.

The medical school should develop "training and education programs compatible with the changing delivery system," the Task Force recommended in its 30-page report. "A major challenge is the development of effective clinical learning opportunities in primary care practice, where an increasing amount of physician activity is likely to occur."

Development of a primary care practice will not only help improve Stanford University Clinic's competitive position in the medical market, but "it is a critical element of medical education," the Task Force stated. "If the school seeks to prepare physicians adequately to meet the health needs of the future, its academic program must reflect current trends, in particular, the shift from inpatient to outpatient care."

Noting that present events are seriously affecting patient referrals from private practice physicians to academic centers, the report predicts that fewer patients will be coming to Stanford unless specific strategies are adopted. The Task Force said it explored various alternatives, from identifying areas of potential cooperation with local physicians on the voluntary faculty to regional arrangements.

"The medical center should continue efforts to enter into contracts with other health care institutions to provide secondary and tertiary services on referral," the task force recommended. "It should develop the capacity to provide the full range of services from primary to specialty care, and open up opportunities for contracting with employers, HMOs, and insurers to provide care at reasonable cost."

To achieve a balanced development of clinical programs, the report stressed, the medical school must examine not only the organization of primary care programs, but the academic standing of all Stanford full-time faculty physicians engaged principally in clinical and teaching activities.

"The Task force considers these to be critical issues," the report said. "They encompass questions of department organization, faculty status, appointment and promotion policies, and compensation of all physicians employed by Stanford to be engaged primarily in clinical teaching."

The issues, the report added, extend to fundamentals regarding the school's missions and objectives and should be addressed by the dean immediately, without in any way impeding implementations of its other recommendations.

In accepting the Task Force report, Dean Korn agreed that school mechanisms for accomplishing clinical objectives have been far from optimal. In the past, we have relied on the so-called "triple-threat person"—faculty who were both excellent clinicians as well as researchers and teachers. "The triple-threat person is fast disappearing," Korn commented.

The dean added that independently of how the school deals with new definitions of the clinical professoriate and criteria for rewarding clinical excellence, he will move quickly to begin implementing some task force recommendations.

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"If we are going to have a medical school and a hospital, we've got to have patients. That's the bottom line," Korn said.

Forces and trends, the report noted, which require academic centers to revise their strategies include:

- Businesses seeking to control the cost of employee medical benefits through alternatives to hospitalization, elimination of unnecessary services, and larger deductibles and co-insurance.
- Employer-sponsored programs focused on preventing illness.
- Insurance companies and other third-party payers, such as Blue Cross and Blue Shield, changing their historical links to hospitals and doctors through fixed price contracts, and discounts which shift some costs and much of the risk to hospitals, clinics and their physicians.
- Advances in diagnosis and treatment which allow medical services previously rendered by hospitals to be provided at lower cost in outpatient clinics and the doctor's office; also pressures on hospitals to reduce length of stay.

A very significant trend affecting academic centers, the report notes, is the development of Health Maintenance Organizations (HMOs).

California alone has 42 percent of the nation's HMO enrollees, with 36 percent of San Francisco Bay area's population now belonging to an HMO, according to the report. Twenty-five percent of Medicare recipients will belong to HMOs by 1990 while California expects nearly 100 percent participation in MediCal HMOs over the same period.

Price competition, coupled with restrictions in payment methods, have serious consequences for academic programs, the report concludes. Academic centers have multiple missions because they train physicians and do research to develop new treatments. The centers care for very sick patients who require specialized staffs and the most advanced technology, which cost more.

Additional suggestions for the future have been incorporated in the Task Force report from its subcommittee on an expanded patient base, chaired by Dr. Halsted Holman, professor of medicine.

The group said special centers for intensive care of premature infants, cancer, arthritis, geriatrics, adolescent psychiatry and health improvement should increase cooperation by developing regional arrangements with other health service agencies and professionals for referral of patients.

The subcommittee also recommended:

- Stepped up efforts to achieve an integrated group practice to allow Stanford clinic units to achieve more efficient and satisfying operations for patients and staff.
- Improving services to patients such as expanding clinic hours to evenings and weekends.
- Shortened waiting hours for patients by improving timing of appointments and responses from laboratories.
- A prompt response system for communicating with physicians referring patients to Stanford.

"Their realization would serve to expand and stabilize the patient base for activities at the medical center and medical school, and to initiate a new era in health services for central California, one characterized by cooperation among health care providers, their institutions and the general community," the report said.

Stanford University Clinic averages 140,000 patient visits a year. About 55 percent of the patients come from the Santa Clara and San Mateo Counties, and 45 percent from outside the two counties. More than 65 percent of the patients make their own decision to seek care at Stanford clinic, while the rest are referred by their own doctors.

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FOR IMMEDIATE RELEASE

FORMER STANFORD PROFESSOR CREATES IMAGINARY ZOO FOR CHILDREN

STANFORD—

With this month's publication of a trilogy of children's books, Dr. Jon Eisenson isn't sure whether he's launched a new career—or just picked up an old one.

Stanford University's professor emeritus of hearing and speech science began his career as an English teacher, "And I don't think I've ever gotten over it," he chuckled.

My Special Zoo, illustrated rhyming verse written just for fun, is a radical departure from the long list of scholarly publications already to Eisenson's credit.

The three-book series may have some roots in his work as a neuropsychologist and psycholinguist, but Eisenson insists that, "once begun, the books took on a life of their own."

Although Eisenson is known for working with children and adults with learning and language problems, *My Special Zoo* is appropriate for any child age 3 to 8, he said. Cassette tapes accompany the books for enjoyment and as a learning tool.

Creating the zoo and its imaginary creatures was not a solo effort, Eisenson admits—considerable inspiration came from his grandchildren, then three and six years old.

Even producing the book was a collaborative effort, he said. His sister, Lena Koblentz illustrated the works and family friend Charles Graen composed the tape's musical scores.

Plans for a sequel are already on the boards, he said. "Other animals are waiting in the wings, ready to populate the zoo."

Published by Modern Education Corporation (MEC) of Tulsa, OK, Eisenson's books are available locally and from the publisher.

A former head of the Institute for Childhood Aphasia, Eisenson retired from Stanford University School of Medicine in 1973 and has continued to work with dyslexic children and children with severe language delay.

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PSYCHOLOGY AND PAIN LINKS SOUGHT IN CANCER STUDIES

STANFORD—

Self-hypnosis and psychological support groups which help patients master anxiety can be effective ways to control cancer pain, says a Stanford researcher.

Now Dr. David Spiegel, associate professor of psychiatry, is seeking volunteers to expand on the results of previous studies to further test the apparent link between psychological factors and cancer pain.

Research has shown that pain is widespread among cancer patients. For example, he said studies have shown that between 60 and 80 percent of patients whose cancer has spread from its initial point suffer substantial pain. But Spiegel added that comparatively little research has been done on how to relieve pain.

Spiegel wrote about the benefits of hypnosis in pain control in the July/August issue of *Cancer Journal for Clinicians*:

"Pain control techniques employing hypnosis are simple and effective, easy to learn and teach patients, and applicable to approximately two thirds of cancer patients in pain.

"They can be a helpful adjunct to treatment in controlling pain, reducing dependence on analgesic medication, and giving patients a greater sense of mastery over their illness," the study concluded.

In an earlier five-year study of 86 women with breast cancer, Spiegel and colleagues were able to demonstrate that weekly group support and training in self-hypnosis resulted in the elimination of half of the pain experienced by the patients.

"We found that it was the psychological factors—the anxiety and depression and the patients' belief that the pain indicated a worsening of the illness—that were most strongly related to the amount of pain they experienced," Spiegel said recently.

The women in the study all had metastatic breast cancer, meaning that it had spread to another location. Colleagues in the project, conducted from 1977 to 1982, included Dr. Irvin Yalom, professor of psychiatry at Stanford; and Dr. Joan Bloom of University of California at Berkeley.

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These studies have lead to the need for more research, and Spiegel is looking for about 100 cancer patients to help with the new project.

Spiegel, who will serve as principal investigator for the two-year project funded by the American Cancer Society, said the patients will help investigators understand whether such disorders as anxiety and depression are significantly higher among high-pain than among low-pain patients.

Spiegel predicted that cancer patients who have a great deal of pain will be much more anxious and depressed than people with a little pain.

"We want to learn more about what makes pain better or worse for the cancer patient so that we can help patients manage their pain more effectively," said Spiegel, who directs Stanford's outpatient psychiatry clinic.

In the current study, all volunteers will receive at no cost to themselves a complete psychological evaluation. Half the volunteers, said Susan H. Sands, Ph.D., research psychologist, will receive specific treatment for pain, including self-hypnosis and biofeedback techniques, as well as more traditional treatments such as antidepressants, antianxiety medications and individual psychotherapy.

The researchers will compare measures of pain, mood disturbance, and social support among the treatment and control patients at intervals of one, three, and six months.

For further information, to volunteer, or to refer a patient, contact Sands at (415) 497-6341. Sands said volunteers might need to make several trips to Stanford Medical Center, although patients requiring bedside or home visits by the researchers will be accommodated.

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FOR IMMEDIATE RELEASE

STANFORD OFFERS POST-HOLIDAY WEIGHT LOSS COURSES

STANFORD—

Two post-holiday courses on weight management led by registered dietitians will be offered by the Stanford University Hospital's department of dietetics.

One course, the "Shapedown Program," is intended to help teenagers take charge of their own weight management by combining diet, exercise and behavioral techniques, said clinical nutritionist Kristine Birge.

Classes for this course are scheduled from 4 to 5:30 p.m., Wednesdays, Jan. 29 through April 23. Parent sessions have been scheduled at 7:30 p.m., Feb. 26 and March 26. The registration deadline is Jan. 10.

An adult course, "An Enlightening Experience," includes a personalized weight loss plan, low calorie cooking demonstrations and recipes, menu planning and tips on dining out wisely, explained Birge. Guest speakers in the program will discuss stress reduction, behavior modification techniques and exercise, she said.

Participants for the adult course may register for either afternoon or evening sessions. Evening classes will meet from 7:30 to 10 p.m., Tuesdays, Jan. 15 to March 11. Afternoon classes will meet from 1 to 3:30 p.m., Thursdays, Jan. 16 through March 13.

Enrollment for each of the adult sessions is limited to 20 participants. The registration deadline is Dec. 31.

There is a fee for both courses to be held in the hospital.

For further information on either course, call (415) 497-5432.

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STANFORD STARTS WEIGHT LOSS PROGRAM FOR SERIOUSLY OBESE

STANFORD—

A new weight loss program designed to treat patients with serious obesity problems is being started by the Stanford University Behavioral Medicine Clinic in collaboration with the Stanford Medical Group.

Serious obesity, according to the physicians running the program, means that patients will be at least 40 pounds overweight. More likely candidates for the program will be people who need to lose as much as 100 to 150 pounds.

The program is being planned by Dr. Bruce Arnow, clinical director of the Behavioral Medicine Clinic, and Dr. Robert Berkowitz, medical director of the weight loss program. They will operate in conjunction with Dr. Michael Jacobs, director of the Stanford Medical Group.

Berkowitz said the program involves a combination of fasting—in conjunction with a nutritional supplement—behavior therapy and nutritional counseling.

Those accepted into the program, he said, will go without food for 12 to 16 weeks, subsisting on the formula that provides all the basic nutrients. The amount of the formula taken by most patients will average slightly more than 400 calories a day.

Berkowitz and Arnow both emphasized that patients will be under close medical supervision by physicians of the medical group throughout the program to make sure there are no medical complications.

Fasting is just the start of the program. Arnow said that it also involves essential life-style changes. Patients will receive nutritional training and help in changing their eating habits. They also will be encouraged to set up programs of regular exercise.

Obesity is a dangerous medical condition. As Berkowitz pointed out, it contributes to hypertension, adult onset diabetes, heart disease, orthopedic problems and increased risk during surgery.

Berkowitz said the patients will attend weekly meetings and lectures while they are fasting. After they complete the initial part of the program, there will be weekly or bi-weekly meetings for a year to reinforce the life-style changes.

Similar programs have been tried in other parts of the country in recent years, Berkowitz said, and 80 percent of the patients have managed to lose at least 40 pounds.

Arnow and Berkowitz both made it clear that a fasting program is not appropriate for all severely obese persons. Those who have medical problems that might be aggravated by fasting will be referred to other programs.

The Stanford program will start in January. An orientation meeting is scheduled Dec. 17. Information on the meeting or the program is available by calling (415) 497-5065, from 9 a.m. to 5 p.m., Monday through Friday.

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HOME HEALTH CARE SERVICES GROWING AT EXCEPTIONAL RATE

STANFORD—

The health care facility that seems to be showing the greatest increase in use during the 1980s isn't the hospital, the clinic or the convalescent hospital—it's the home.

According to Kathryn Janz, director of the Stanford University Hospital Home Care Program, there are now 5,000 home health care agencies in the United States. In the last 15 months, she said, such agencies have increased by 23 percent and there has been an astounding increase of 250 percent in the number of hospital-based agencies.

But Janz, a veteran of home care agencies in New York, Chicago and San Francisco who started the Stanford program earlier this year, finds the increase in the type of home nursing services just as impressive. And she credits the competition from growing numbers of agencies with bringing about that change.

"In the last five years, the types of services we do in the home have increased dramatically," she said. "Agencies have learned they have to offer a much wider range of services to keep up with the competition and they've greatly increased their availability and accessibility."

Janz surveyed the accomplishments of the Stanford program as health care agencies across the country took note of Home Health Care Week, celebrated from Dec. 1 through Dec. 7 this year.

In the seven months since Stanford's program started in May, she said, nurses have made approximately 6,000 home visits. Most of the visits have been to elderly patients, as is typical in home care services, but there are patients in a variety of categories.

For example, 7 to 10 percent of the cases involve pediatric or pre-natal care. One infant in particular had been in the hospital for almost a year, with a lot of serious problems, and would probably still be hospitalized if it weren't for home care.

"We took that baby home," Janz said, "utilizing the pediatric nurses that were in the hospital. It was really a joint effort between the hospital, the nurses and home care. We've had him for almost six months now and he's doing fine ... The doctor says he would never have sent that baby home if we weren't here."

To Barbara Burgess, clinical nursing coordinator of the home care program, that kind of a situation is a concrete example of the extra benefits of the Stanford program because it can draw on the specialized knowledge available through the hospital.

"We're providing a service that clearly was not provided before," she said, "because we can use the specialty nurses in the hospital. We're part of Stanford."

The nurses in the home care program have the same contract and the same standards as those in the hospital. Besides Janz and Burgess, there are six registered nurses, two relief nurses who work both in home care and in the hospital, three aides, three physical therapists, three occupational therapists and one social worker. Home care also uses other aides from the hospital and has a contract with a speech and language therapist.

Burgess noted that nurses are on call at all times. "We have full seven-day-a-week services so that we can provide aides, nurses and other services," she said.

"When I was staffing the program," Janz said, "I made a conscious decision to provide as many full-time people as possible so we would be able to have continuity. The patients have a really close relationship with one particular nurse and therapist. Either the nurse or the therapist acts like a case manager and coordinates all the other services."

Stanford's home care program is based in the Lytton Gardens Nursing Home at 437 Webster St., Palo Alto, in the heart of an area of elderly persons likely to need such help. However, the program covers a much wider area, serving Alameda County as well as San Mateo and Santa Clara counties.

"We started the first week with two counties," Janz said, "then found there were a lot of patients in Alameda County that really needed our services. ... We can provide very high tech care to those patients who have a more difficult time."

Janz expects the Stanford service to keep growing for many of the same reasons home care across the country is growing: Length of stay in hospitals is decreasing, there is an increase in the numbers of elderly who are likely to need home care, and the costs are less than other types of care.

In addition, there is a special benefit cherished by many elderly people and their families—independence. Most patients want to decide how and where they will live, Janz said, and welcome the fact that "home care is focused on short-term, get-in-get-out care that teaches the patient how to be as independent as possible."

Some patients also want to determine how and where they will die, she added, noting that home care makes it possible for some terminally ill patients to die at home. "Death at home is a much bigger option now than it was," she said.

Regardless of the degree of illness, Janz said, most patients want to avoid institutionalization and home care can often help them achieve that goal. Home care, she said, has "a much higher well-discharge rate" than nursing homes, which often do not stress having a patient become independent.

"When you walk in the door of a nursing home," she said, "there's a back door to leave. But it's a narrower door than the one you walk into."

Obviously, she said, some people must be institutionalized, particularly if they are mentally confused. But, she added, "people who have multiple problems from a clinical and medical point of view but are alert can stay at home with home care services."

Those services involve treatment as specialized as chemotherapy and visits as frequent as three or four times a day. The average number of visits per patient is 12-14, Janz said, and the goal is always to make patients independent as soon as possible.

Stanford physicians as well as the patients welcome the home care services. Dr. Michael Jacobs, medical director of home care services and director of the Stanford Medical Group, said that having nurses go into homes and assume patient care "has made our lives much easier. They've done an outstanding job."

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FOR IMMEDIATE RELEASE

STANFORD APPROVED FOR SANTA CLARA COUNTY TRAUMA CENTER

STANFORD—

Stanford University Hospital won approval from a review committee Monday to become one of three trauma centers for Santa Clara County.

County and hospital officials now will begin negotiating a trauma center contract, which must be approved by the county Board of Supervisors. Contracts are also being negotiated with Valley Medical Center and San Jose Hospital, the other two sites approved as trauma centers. The three centers will treat the county's critically injured patients, estimated at 1,300 a year.

Monday's visit was the second to Stanford by a site review committee. It was necessary because on the first visit, in September, the committee found problems that were largely the result of inadequate time for Stanford to organize its trauma center presentation.

"This (trauma center) represents a shifting of the hospital to be more clinically and patient oriented," said Dr. Michael Eliastam, the hospital administrator coordinating the program. "It also represents our orientation to our local community and to the greater region."

Milton Silberberg, the county's emergency medical services administrator and a member of the review committee, said he was "delighted" that Stanford was approved and said the hospital "absolutely" cleared up any questions that were brought up at the first site visit.

Eliastam said Stanford officials felt it was "just a question of time to get (the trauma system) up and operating in a complex institution such as this."

On the second visit, he said, "we were able to clarify how the system works at Stanford and specifically that the trauma service is part of the surgery service and is operated by the surgery service."

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MYSTERY OF HEART FAILURE YIELDING TO RESEARCH

STANFORD—

While heart transplants make headlines, Stanford University medical scientists search for defects that make the heart muscle fail.

Processes that cause heart tissue to deteriorate are still a medical mystery. Today that mystery can be solved only by replacing the dying organ, a heroic maneuver that grabs attention. Far less fanfare has greeted some important spinoffs from the surgery.

"Transplant programs are generating unique research material—human hearts—which we can study to understand more about the disease," said Dr. Michael Fowler, physician specialist at Stanford's Center for Cardiovascular Research.

Already, the work has "produced some profound findings," he said in an interview, and may explain a new, paradoxical therapy that aims to sedate rather than stimulate the weakening pump.

Studies of discarded hearts from transplant recipients show that the muscle is less sensitive to stimulating hormones. This finding may change scientists' views on treatment for the disease of heart muscle called cardiomyopathy, according to Stanford researchers.

"Cardiac stimulants were thought to help," Fowler said, "but our results show that it may be detrimental to flog a failing heart."

The membranes of cells in failed hearts contain a decreased number of the receptors that read hormone messages, according to experiments done three years ago at Stanford by cardiologist Dr. Michael Bristow, who is now at the University of Utah.

Hormones released by nerves and the adrenal glands during exercise or stress tell the heart to pump harder, Fowler explained. But in the diseased hearts there are fewer receptors to transmit the command into the muscle cells.

With this clue to the underlying disorder, doctors can begin to devise new strategies to deal with cardiomyopathy, a progressive disintegration of heart muscle that so far can be slowed, but not stopped.

"We haven't solved cardiomyopathy," Fowler said.

Yet the missing receptors "give us a marker that we can measure to study different drugs or to look at the natural course of the disease," said another member of the Stanford team, physician specialist Dr. Robert Ginsburg.

By studying the worn-out organs taken from transplant recipients, researchers have uncovered some details of the hearts' demise. They find that a particular subset of the receptors on the cell membrane, called beta-1, are lost as the heart muscle fails.

Beta-1 receptors can be stimulated by certain drugs, and a healthy heart pumps more vigorously in their presence. These medications elicit weaker contractions in hearts obtained from transplant patients, reported cardiologists from Stanford and the University of Utah at the annual meeting of the American Heart Association earlier this month.

Failed hearts could still respond to agents that act at beta-2 receptors to increase the heart's pumping force, the researchers found, as beta-2 receptors are still present on the cell membranes.

These results suggest that beta-1 stimulants will not help cardiomyopathy patients. But even stimulants that act at the beta-2 receptors would probably be of no benefit because they may exert other, undesirable effects on the heart, Fowler said.

"Increasing evidence suggests that beta-adrenergic stimulation has its down side," he said. He explained that giving drugs to stimulate the receptors may actually further decrease their numbers.

Data on the loss of beta receptors in heart failure have reawakened interest in treating cardiomyopathy with beta blockers, Fowler said. By chance, Swedish doctors a decade ago noted that beta blockers helped some patients with diseased heart muscle.

Beta blockers are drugs that prevent hormones from binding onto, and activating, the receptors in the heart that regulate its pumping.

In collaboration with Swedish colleagues, American physicians have performed pilot studies with the beta blocker called metoprolol, Fowler said. He added that cardiologists hope to begin multi-center trials of the drug.

With beta blockers, Ginsburg said, doctors may be able to interrupt the underlying pathology of the disease by prodding the heart to make new beta receptors.

"You only partially block the receptors (with the drug)," he explained, "so you allow protein resynthesis and regeneration, yet you still are permitting the receptors to respond."

Fowler cautioned that doctors as yet have no idea if the approach will be better than existing treatments.

"We have to be careful not to raise false hopes," he said.

Currently, the best way to treat heart failure is with vasodilators, which ease the strain on the heart by opening blood vessels, and with diuretics, which flush the body of excess fluid, according to Ginsburg.

Many patients with cardiomyopathy can live with their condition for three to five years if they are carefully monitored and their medication is properly controlled, Ginsburg said. But in some people, the heart becomes unresponsive to drug treatments, he said, and a transplant becomes the only "viable alternative."

"If you could solve why the heart fails, it would make heart transplants obsolete," he added. "It probably won't happen in our lifetime, but that would be the ultimate goal."

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SCIENTISTS FIND A WAY TO SWITCH "IDENTITIES" OF SPECIALIZED CELLS

STANFORD—

In basic research with broad implications for understanding development of living things, Stanford Medical School scientists have converted human liver—and other—cells into muscle cells by manipulating signals that control their genetic material, DNA.

The feat is one of the first convincing demonstrations that cells destined for one specialized fate can switch to another, said Dr. Helen Blau, assistant professor of pharmacology and head of the research team.

The finding contradicts previous notions that specialized cells have a fixed and irreversible pattern of gene expression, she added.

In the laboratory, Blau and her colleagues succeeded in reprogramming DNA from human liver, lung, skin, and cartilage cells so that it functions more like the DNA in muscle cells.

The ability to change the functional characteristics of cells provides scientists with a new tool to study such diseases as cancer, developmental afflictions such as muscular dystrophy, and to develop more effective strategies for gene therapy.

The work was reported in the November 15 *Science* magazine special "Frontiers in Biology" issue devoted to research areas that have "great potential for the future," according to an editorial written by Dr. Daniel Koshland, Jr..

Blau's coauthors on the article are Grace Pavlath, Edna Hardeman, Choy-Pik Chiu, Laura Silberstein, Steven Webster, Steven Miller, and Cecelia Webster.

The experiments reported by the Stanford researchers establish a new way to study the genetic basis of differentiation, the process by which cells descended from a single fertilized egg become highly specialized to perform different functions, Blau said in an interview.

All the millions of cells in an individual's body contain the same genetic information in their DNA. Yet, as cells develop into specialized organs, they use different portions of the genetic code.

Skin cells, for example, make certain proteins found only in the skin, while muscle cells produce proteins involved in muscle contraction. Each cell type activates a different set of genes in the DNA in order to produce the proteins it needs to carry out its particular role.

Scientists understand very little about how cells activate or suppress different sets of genes. It's one of the most intriguing unsolved puzzles of biology, Blau said.

The Stanford scientists fused two different kinds of cells—human and mouse—to create a hybrid cell called a heterokaryon. In each case, they fused a mouse muscle cell with a human cell specialized for a non-muscle function such as skin, lung, or liver.

The result was that quiescent muscle-specific genes in the human non-muscle cells became active, producing proteins that are characteristically found only in specialized muscle cells, Blau said.

"I think this technique affords us a unique opportunity to isolate regulators of gene expression, to learn how they interact with specific genes, and to determine how they control the time sequence of differentiation," she said.

Although Blau stressed the basic nature of her laboratory's research, she acknowledged that understanding differentiation is important in cancer research, in successful genetic engineering, and for future attempts at using gene therapy to treat disease.

"Anything that tells us about normal gene regulation and differentiation also can tell us about when regulation goes awry, such as in cancer," she noted.

"In the genetic engineering industry, one wants to make a lot of a particular product. If that is a tissue-specific product, then you have to understand the regulation of tissue-specific genes," she explained.

"In gene therapy, the idea is to try to replace a gene in a tissue where it's aberrant or absent," she continued. "In order to do that properly, you have to know how the gene is regulated."

Blau and her colleagues are using heterokaryons to study how muscle cells differentiate, she noted, which could be important in understanding more about muscular dystrophies, diseases of muscle development.

Blau said that one other possible use of heterokaryons would be in prenatal diagnosis of certain diseases. By fusing undifferentiated amniotic cells with differentiated cells, she pointed out, it might be possible to reveal tissue-specific abnormalities that would otherwise be undetected until later.

The Stanford researchers tested the ability of a variety of different types of non-muscle cells to activate their muscle genes when fused with mouse muscle cells. They found that both adult and fetal skin cells could be activated so "aging does not seem to make a difference," Blau noted.

In addition, they found that cells more closely related to muscle—derived from similar tissue in the fetus—consistently expressed their muscle genes sooner and at a higher frequency than cells less similar to muscle.

They also found that muscle genes could not be activated in one type of cancer cell they tested, unless the cells were first treated with a drug called 5-azacytidine that changed the chemical composition of the DNA.

"It's intriguing that the one abnormal cell couldn't activate its muscle genes in the way that the seven types of normal cells could," Blau said. "It makes even more dramatic the point that cells specialized to be liver, cartilage, or skin, all can be changed into muscle by fusion. That was very surprising."

She also noted that they had established that DNA replication is not necessary for previously silent muscle genes to become active.

The researchers believe that activation of muscle genes is mediated by regulatory molecules that are produced by the mouse cell, transported through the cytoplasm of the hybrid cell and gain access to the human nucleus. (A nucleus is the part of the cell that contains its DNA.)

Isolation of the genes encoding the regulators responsible for muscle gene activation should now be possible, the researchers concluded.

So far, Blau and her colleagues have studied only the activation of muscle genes using heterokaryons, but she believes that "stable heterokaryons could be achieved with cell types other than muscle."

The research was supported by grants from the National Institutes of Health, the Muscular Dystrophy Association of America, the March of Dimes Foundation, and the National Science Foundation.

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STUDY SCRUTINIZES COST OF REPRODUCTIVE HEALTH CARE

STANFORD—

Only a small portion of the American health care dollar is spent on reproduction-related care, says a report published today (Jan. 3) in the Journal of the American Medical Association.

Obstetrical care, infant care, contraception, abortion and infertility services accounted for about 5.5 percent of the nation's total outlay for health care in 1982, according to Dr. Victor R. Fuchs, professor of economics at Stanford and research associate at the National Bureau of Economic Research (NBER), and Leslie Perreault, a research assistant at the NBER.

"Expenditures for Reproduction-Related Health Care" is one of the first studies to document information about these services from an economic perspective. Controversy over high-tech obstetrical methods and costly intensive care for newborns, and lack of data on other expenditures sparked the study, the researchers indicated.

All figures in the study are based on 1982 prices and quantities. Approximately $17.8 billion of the nation's $322 billion total health care spending went to reproduction-related health care that year.

Obstetrical and infant care were the heftiest portions of this health care sector; the two consumed 46 and 37 percent of the total, respectively. Contraception accounted for 13 percent, abortion took up 3 percent and infertility services amounted to the remaining 1 percent, the researchers found.

The authors caution that these figures and ratios cannot be projected with certainty into the future, since spending for reproduction-related health care is affected by varying factors: the number of women of childbearing age, changes in medical technology, alterations in economic conditions, and certain social and legal considerations.

About 55 million American women are of childbearing age (15-44), approximately 30 million of whom use some form of contraception, including sterilization. An estimated 10 percent of the total have difficulty in conceiving; one million couples seek medical advice or treatment for infertility each year.

Of the six million pregnancies documented annually, 25 percent end with an induced abortion and another 15 percent end in miscarriage or stillbirth. More than 3.6 million babies are delivered in this country, and about 40,000 die within a year of birth.

The researchers estimate that hospital charges account for more than half of the average $2,230 bill per live birth; physicians fees take up 35 percent, and laboratory tests and other procedures make up the remainder. Almost all—99 percent—of babies born in 1982 were delivered by physicians in hospitals or other medical facilities.

About 5 percent of all newborns need intensive care. Many of these children are normal weight babies born with congenital defects; others are low birth weight babies who weigh 5 ½ pounds or less.

Low birth weight babies comprise about 7 percent of all newborns, but they account for more than half of all infant deaths and three-fourths of all deaths within the first 28 days after birth.

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Teen-aged and unmarried women are more likely than most to bear low birth weight infants.

Because there are no national data on the use of intensive care by newborns, the authors drew their data from clinical studies. These studies indicated that medical care for tiny babies—those weighing 1 to 2 pounds—was far costlier than that for babies who weighed at least 5 ½ pounds. Costs averaged about $19,000 for the tiny infants and about $5,600 for the larger.

Low birth weight babies also are more likely to be put back into the hospital during their first year.

Despite commonly held beliefs to the contrary, these children use only a small part of the total health care dollar, the authors stress. An insurance mechanism that would spread the cost of high-tech baby care over all infants delivered yearly would add between 5 and 10 percent to the total cost per live birth, they contend.

For the 54 percent of American women who are avoiding pregnancy, most rely on male or female sterilization (33 percent), birth control pills (28 percent), or intra-uterine devices (7 percent). Over the last decade, sterilization has overtaken the pill as the most popular form of birth control. Women younger than 30, however, still prefer oral contraceptives.

Barrier methods such as the diaphragm, condom and spermicidal foam account for 23 percent of those who use contraception; 9 percent rely on the rhythm method or withdrawl. About 4 million sexually active women use no form of contraception, although they are not seeking to conceive.

Costs of contraception vary among the different methods. The authors figured the total annual cost of various forms of contraception as follows: $130 for the pill; $111 for the diaphragm; $106 for female sterilization; $47 for the IUD; $30 for the condom; and $22 for male sterilization.

In their comparison, the authors took into acount the timing of payments for contraception. Surgical sterilization is a one-time expense, they noted, but pills and devices must be purchased repeatedly.

The one-time payment for surgical sterilization averaged $1,180 for tubal ligation and $241 for vasectomy; the first-year expenditures for the IUD, diaphragm and pill averaged $154, including the cost of a physician visit and the expense of the device itself.

Average expenditure in 1982 was $81 for each woman who used contraception.

Data indicate that nearly 3 percent of all women aged 15 to 44 had an abortion in 1982; each of the 1.5 million procedures cost approximately $307. Publicly funded abortions (210,00 in fiscal year 1982) cost slightly more at an average cost of $322, the study revealed.

Most abortions (82 percent) are performed in clinics and doctors' offices; the remainder take place in hospitals. Approximately 90 percent of abortions are performed in the first three months of pregnancy and 10 percent in the second three months.

Of the 10 percent of women of childbearing age who have difficulty conceiving, the study determined that most spend little or nothing for infertility problems. A few spend a great deal. In 1982, for example, in vitro fertilization—the so-called "test-tube" procedure—cost about $3,000 for medical expenses for each attempt. Only 15 percent of couples using this technique succeeded in having a live birth.

About half of infertility is partly or completely attributable to a problem in the male partner. As a result, about 10,000 couples turn to artificial insemination each year. If insurers paid for infertility services, more couples might seek counseling and procedures, according to Fuchs and Perreault. The authors estimated that 1 million couples sought counseling and that each spent an average of $200.

Expenditures for each woman of childbearing age averaged $329 per year, although amounts varied greatly between age groups and individuals, the researchers discovered. Women aged 20-30, for example, incurred far more reproduction-related expenses than women aged 35-45. The total average amount spent on reproductive-related care is relatively low, they point out, comparing it with the average of $4,000 spent on persons 65 and over in the same year.

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STANFORD TO START KIDNEY, BONE MARROW TRANSPLANTS

STANFORD—

Stanford University Medical Center, the world's leading heart and heart-lung transplant center, is on the verge of starting kidney and bone marrow transplantations.

The executive committee of the School of Medicine gave formal approval Dec. 20 to the report of a task force preparing for the expansion of transplantation activity at Stanford.

Dr. Stanley Schrier, professor of medicine (hematology) and vice chairman of the task force, told the committee that Stanford could have both kidney and bone marrow transplant procedures set up sometime in 1986.

"We've been recruiting in renal transplantation for a year," he said in an interview. Stanford plans to have a three-member team, two transplant surgeons and a nephrologist, but Schrier said the program could get under way as soon as the first surgeon is hired.

Kidney transplants, he said, are "much less invasive" than bone marrow transplants and because they don't require as much in the way of back-up and follow-up medical procedures, are "much easier to set up in terms of specialty services."

Nevertheless, Schrier said, "the bone marrow program is about to take off" and may be in operation before the kidney program.

That's because a pediatric hematologist/oncologist on the Stanford faculty, Dr. Michael Amylon, assistant professor of pediatrics, is already undergoing additional training at the University of Washington in Seattle, a pioneer in bone marrow transplantation.

Stanford intends to do about 100 kidney transplants a year, which Schrier characterized as the number "necessary to meet the needs of clinical research." He stressed the research aspects of the program, saying "our best people tell us that we need that many cases to get reliable answers (to research questions)."

Bone marrow transplantation, used increasingly to treat certain forms of leukemia and other blood diseases, probably would involve only 20 patients a year at first and gradually be extended to 40 or 50. The first transplants, Schrier said, will probably be performed on children.

Schrier estimated that kidney transplantation, which costs about $30,000 per operation, would be financially self-supporting if Stanford had 100 cases a year. Bone marrow transplantation, which costs about $100,000, would need 40 to 50 cases a year to reach the break-even point.

Finding patients is not expected to be a major problem. The task force report noted that in 1984 Stanford referred 14 adult patients to other institutions for bone marrow transplants and that six to eight pediatric patients are referred elsewhere for such transplants each year.

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Schrier pointed out that the transplantation task force was designed by Dean David Korn of the medical school to be "super-departmental" because transplantation involves several departments.

"For example," he said, "renal transplantation involves certainly surgery, medicine and pathology. Bone marrow transplantation has pathology, medicine, pediatrics and radiation therapy—just to begin with and that's on the effective clinical level. On the other end there's the research input."

Research capability is one of Stanford's major strengths in recruiting members of the transplantation teams. "We have some of the world's best immunologists," Schrier said, "and immunologic manipulations are key to the success of the transplantations. We certainly have enormous strengths in that area—tissue typing and the ability to modulate the immune response."

Stanford also will have the new Center for Molecular and Genetic Medicine, which is scheduled for ground-breaking next June. "One of the things we're doing as part of our recruiting process is letting candidates know that the opportunity for interaction with the CMGM is a key to the success of the program," Schrier said.

The intent is for Stanford to become a major center for several types of transplantations, he said, and once the kidney and bone marrow procedures are in place there will be consideration of other organ transplants.

He said that in task force discussions about the next step "the thing that really intrigued us is that if some of the technical problems were solved, we could get into pancreas transplantations. There are a lot of diabetics who would benefit from a new insulin-secreting pancreas."

The technical problems are on the way to being solved through experiments with animals, he said, although "the trick in getting the human transplantation easily successful is still a little bit elusive."

Stanford's task force also considered liver transplantation, but Schrier said there are "horrendous" problems with such operations and there seems to be little sentiment for getting into that field at present.

Dean Korn told the executive committee that the personnel and office space needed to start the kidney and bone marrow programs will come out of existing medical school billets and space. "There is nothing yet identified as a major expense not covered in the table of organization," he said.

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STANFORD RESEARCHERS OFFER STOP SMOKING PROGRAM

STANFORD—

A do-it-yourself program that helps individuals stay off cigarettes now is available to Bay Area residents as part of a Stanford University Medical School research program.

The eight-week Stanford Stop Smoking Program includes no group meetings and is offered at no cost to participants.

"Most smokers who have quit have done it on their own, and most people prefer not to attend group sessions," said Dr. Stephen Fortmann, principal investigator in the project and assistant professor of medicine at the Stanford University School of Medicine.

Although smokers often quit cigarettes for a short time, Dr. Fortmann explained, most eventually start smoking again. The Stanford Stop Smoking Program is an attempt to counter this fact.

Only two visits to a project center—at the beginning and end of the program—are involved. Researchers will collect follow-up information from participants throughout a two-year period.

The study's main facility is located on the Stanford University campus; satellite centers are located in San Jose and Oakland. Smokers who are 18 to 64 years old and who are determined to quit smoking are encouraged to contact the nearest center.

Stanford researchers joining Dr. Fortmann as co-investigators in the study are behavioral scientists Dr. Joel D. Killen and Dr. Michael J. Telch. Funded by the National Cancer Institute, the program is based in the Stanford Center for Research in Disease Prevention, of which Dr. Fortmann is an associate director.

For details, contact the nearest facility: Stanford Clinical Research Facility, (415)497-6254; Oakland Satellite Center, (415)633-1651; or San Jose Satellite Center, (408)977-4653.

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YOUNG HEART PATIENTS FEATURED IN FILM PREMIERING AT STANFORD

STANFORD—

"A Different Heart," a documentary film on children with congenital heart disease, will have its premiere at 2 p.m., Saturday, Jan. 11, in Fairchild Auditorium at the Stanford University Medical Center.

The 20-minute film, produced by Itaka Schlubach-Hicks as her master's thesis for the Stanford department of communications, features three young patients at Stanford Hospital.

They are 4-year-old Juliana Ross of Gilroy, 11-year-old Jason Heppler of Cupertino and 15-year-old Steve Fields of Stockton.

All are now reasonably healthy and active, but at one time they all suffered from potentially fatal heart defects. The film shows how those defects affected the youngsters and their parents.

Lorraine Ross, mother of Juliana, expressed the emotion of most parents:

"Finding out that your child has any kind of health problem is probably one of the most monumental experiences in your life. It changes the course of your life forever."

A good part of the film explains how the parents adjusted to their children's illnesses and how the youngsters eventually accepted the fact that despite reasonable good health there were some kinds of physical exertion that were too strenuous for their participation.

The three children in "A Different Heart" are not isolated examples. Approximately one out of 100 infants is born with a heart defect, although sometimes the defect is so mild that a person can go through life without becoming aware of it.

Advances in medical care have greatly increased the chances of survival for infants with congenital heart defects. The film points out that Steve and Juliana probably would not have survived if they had been born a few years earlier than they were.

Schlubach-Hicks received a $7,500 grant from the Louis B. Mayer Foundation to help finance the film; the rest of the $14,000 cost came from her own funds and a few donations from interested individuals.

A preliminary version of the film, called "Jason," won honorary mention at the Palo Alto Film Festival in May 1985.

Information and assistance on the film was provided by the Stanford Hospital staff and by members of "Parents for Heart," a group sponsored by the Santa Clara County chapter of the American Heart Association.

The premiere of "A Different Heart" is being sponsored by the hospital and the Stanford department of communications. After the film, Schlubach-Hicks, members of the hospital staff and the families in the film will answer questions from the audience.

The showing is free, but space is limited and those wishing to make sure of seats are advised to call (415) 325-8878 for reservations.

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STANFORD PUTS RESEARCH TO USE, IMPROVES HEALTH OF EMPLOYEES

STANFORD—

Steve Papier weighed 224 pounds, his blood pressure was a threatening 150/94 and his heart pounded away at 131 beats a minute after he finished a three-minute exercise test.

Three months later, he weighed 194, his blood pressure was 120/80 and his post-exercise heart rate was 94.

Papier is one of the major beneficiaries of a Stanford University health program that makes practical use of a decade of research at the university medical center into methods of improving health.

His physical improvement was the result of regular exercise and it involved a lot of effort on Papier's part—but it might not have happened without the intervention of the Stanford Health Improvement Program (HIP).

HIP enrolled Papier and about 50 co-workers from Stanford's department of Operations and Maintenance/Utilities in a special exercise program tailored for the skilled workers in the department. It helped a lot of the men in the department, but nobody more than Papier. And he has continued to show gains. Now, more than a year after the program ended, he still exercises regularly through HIP classes.

Aside from the individual benefits to people such as Papier, there were benefits to the department operation. Jerry Ostrander, who was director of Operations and Maintenance/Utilities at the time, wrote:

"I cannot estimate the dollar value of this program to us in reduced stress, more physically fit employees, hopefully less sickness, certainly less injury from pulled muscles/backstrain."

That program, of course, was just one of dozens of health and fitness offerings directed by HIP, which is a division of the Stanford Center for Research in Disease Prevention. HIP is sponsored by the university and hospital personnel departments and offers classes for all faculty and staff members and their families.

Classes cover most of the principal forms of exercise, as well as other areas beneficial to health. There are classes in aerobics, swimming, weight control, stress management, nutrition and smoking cessation. HIP officials are always ready to add to the list. A new class in walking is starting this month, for example.

Fran Carl is the HIP program manager and the person responsible for day-to-day operation. Dr. John Farquhar is the director and he was the principal force behind the start of HIP in 1982.

As director of the Center for Research in Disease Prevention, Farquhar has been actively involved in studying and implementing health promotion programs, particularly those aimed at reducing the risk of cardiovascular disease.

"We developed all those methods over the past decade," he said, "and many other places were trying them out. It seemed wrong to be helping the rest of the world and not doing anything in our own baliwick."

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STANFORD MEDICAL SCHOOL RECEIVES $12.6 MILLION FOR NEW DEVELOPMENTAL BIOLOGY DEPARTMENT

STANFORD—

Stanford University School of Medicine has received a $12.6 million grant from the Lucille P. Markey Charitable Trust to support the establishment of a Department of Developmental Biology, the trust announced Wednesday, Jan. 8.

The new department will be a component of the new Center for Molecular and Genetic Medicine, whose construction will begin this summer, said Dr. David Korn, vice president and dean of the medical school.

"Our grant," said Louis J. Hector, chairman of the Miami-based trust, "recognizes the existing strength in biomedical research at Stanford, and the opportunity now to build on that strength and ensure further significant advances in the understanding of the complex process of development."

The funds provided to Stanford will be used to support additional faculty members, staff and initial research, as well as to provide laboratory equipment. The new department is one of four academic units that comprise the $50-million Center for Molecular and Genetic Medicine directed by Dr. Paul Berg, a 1980 Nobel prize winner in chemistry.

The center will allow scientists to bridge molecular biology and clinical practice—a field that, scientists say, promises dramatic changes for medicine in the future.

Developmental biology, one of four units to be included in the center, is a fundamental science likely to have an impact on genetic medicine. Its focus is understanding how the complex multicellular structures of the adult organism result from the fertilized egg.

"One benefit of an enhanced basic understanding of development is the more effective transfer of discoveries from basic research to the study of human disease," Berg said. The other units in the center will be biochemistry, molecular and cell physiology, and the Hughes laboratory in molecular and genetic medicine.

The grant will enable Stanford to begin recruitment of eight faculty members for the new department split evenly between promising junior scientists and more established investigators, with the majority being newly recruited, Berg said.

The goal is to create a principal center of research and teaching by creating a focal point of communication and collaboration among scientists throughout the university whose research impinges on problems of development, Berg added.

Other funding for the Center for Molecular and Genetic Medicine at Stanford has been provided by the Arnold and Mabel Beckman Foundation of Corona Del Mar, and the Howard Hughes Medical Institute. Fundraising efforts are continuing for the remaining $12 million needed for the project, said Stephen Peeps, associate director of medical center development.

In addition to the Stanford grant, the Markey Trust announced a $12.5 million grant to the California Institute of Technology, Pasadena, to assist the institution in expanding its developmental biology program; and an $8.7 million grant to the University of Chicago's neurosciences research program.

The trust was created by the late Lucille Parker (Wright) Markey, who directed that all funds be spent by 1997 exclusively for supporting basic medical research. The estate, now in probate, is expected to total more than $300 million. Mrs. Markey was the owner of the famed Calumet Farm, a thoroughbred breeding operation and racing stable based in Lexington, Ky.

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NEW STANFORD DIVISION AN EXAMPLE OF DRAMATIC DEVELOPMENTS IN HAND SURGERY

STANFORD—

Few if any modern physicians place any credence in the ancient gypsy art of palm-reading, but many physicians actually are themselves expert at a type of palm-reading.

Three physicians at the Stanford University School of Medicine, for example, can give an accurate reading of many patients' medical problems simply by looking at their hands. They can see indications of congenital heart disease, neurological disease, hyperthyroidism and a host of other medical problems.

The physicians, all members of the new division of hand surgery at Stanford, are Dr. Vincent Hentz, Dr. Robert Chase and Dr. Vincent Pellegrini. They have all spent years studying the human hand and to them there is nothing unusual about finding disease symptoms in the hands. After all, physicians since the time of Hippocrates have known that some symptoms manifest themselves in the hands.

But Hippocrates couldn't have dreamed of the medical advances that are almost routine to the Stanford surgeons: replantation of severed fingers and hands, substitution of toes for useless or missing thumbs and fingers and implantation of artificial joints throughout the hands and arms.

Most of those surgical techniques have been perfected since World War II and the greatest advances have come in the past 15 years.

Even greater advances—notably the transplantation of hands and arms—are forecast for the near future and Stanford is positioned to be a leader in any such developments through its division of hand surgery, the first of its kind at any major medical school in the United States.

Each of the three members of the division brings a particular expertise to the program. Hentz, head of the division, is a specialist in microvascular surgery; Chase, internationally known as one of the "deans" of hand surgery, is interested in anatomy and hand imaging techniques and robotic substitutes for upper limbs for severely disabled patients; and Pellegrini, who came to Stanford in July from the University of Rochester, New York, is an orthopedic surgeon specializing in arthritis and disorders of the wrist.

All three physicians admit that the new division would more properly be called the division of hand and upper extremity surgery. Reconstructive surgery of hands can often involve surgery on arms or shoulders, and all of the surgeons work on the upper extremities as well as the hands.

Hentz sometimes is involved in even more exotic surgery because of his ability in microsurgery—which involves cutting and splicing vessels, nerves, muscles and tendons with minuscule tools maneuvered by peering through microscopes. (Chase says flatly that Hentz is "one of the world's experts in the field.")

One of Hentz' more unusual surgical challenges was reattaching the scalp of a man who had lost it when his long hair got tangled in a machine that simply ripped the scalp off. The surgery, using microsurgery to repair arteries and veins, was a complete success; the reattached scalp even survived a subsequent accident that left it split and bleeding.

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That patient was brought to Stanford from Alaska on an emergency flight, and there are others who are rushed to the hospital by helicopter, landing just a couple of hundred yards from the emergency room. But Hentz has lots of stories about other patients arriving in more or less routine fashion, such as the contractor who flew from San Diego to San Francisco on a PSA jet, carrying his amputated thumb with him in a small ice chest.

Almost all of those stories have a happy ending, with patients leaving the hospital with replanted thumbs or fingers. Replantation has become a frequently performed operation and the public has come to take for granted surgery that only a few years ago prompted newspaper headlines.

The replantation operation isn't simple, but it usually is successful. And even when it isn't a success at first, there are several options available to modern surgeons.

Take, for example, the case of an 8-year-old boy who came to Stanford two years ago after losing all of his fingers, including the thumb, when a hand got caught in a machine.

"We must have spent 25 to 30 hours in the operating room over the weekend, trying to save his fingers," Hentz said. "But they were too badly damaged; he lost them all."

The subsequent steps involved psychology and patience. The boy's family wanted him fitted with a prosthetic hand, and doctors cooperated, even though, Hentz said, "Our feeling was that the experience that boy would have would be similar to that of other young people with a prosthesis where the other hand is normal. That is, the prosthesis winds up in a drawer; it's just too much trouble."

That's exactly what happened, and recently the family members came to Hentz and agreed with what the physicians had felt all along was the best solution: Taking toes off a foot and turning them into fingers on the hand, where they can be used to pinch and grab.

The result may be an unorthodox appearing hand, Hentz said, but "he'll go from being someone who does things with just one hand to using both ... to being a two-handed person."

That kind of operation may be more dramatic than one to replace an arthritic joint in the hand or upper extremity with a prosthetic implant, but the results of the latter surgery are certainly dramatic to a patient who has improved function and is often free of pain for the first time in years.

Most of the joint replacement that is done today is for the relief of pain from arthritis, Pellegrini said, and a lot more work has been done with hand implants than with the rest of the upper extremity. However, total shoulder replacement has compiled an excellent track record in the past ten years and with recent advances in implant design an equally bright future may be in store for elbow joint replacement.

The trend in hand implants, he said, is toward the use of natural tissue instead of silicone replacements, particularly in areas such as the wrist where there is a lot of stress. That's because the natural tissue doesn't wear out and silicone implants sometimes do, especially in areas that are under a great deal of stress or in younger people who are likely to have the implants a long time.

About 20 percent of the patients in the hand surgery division have arthritis or some other disease; roughly 30 percent have congenital problems or miscellaneous infections or tumors; and 50 percent have some kind of injury.

In the country as a whole, hand and upper extremity problems account for a staggering proportion of hospital visits. An estimated one-third of all emergency room visits are for injuries to hands or upper extremities and such injuries are responsible for about 16 million days lost from work each year. In addition, there are 25 million arthritis sufferers and three million people with some kind of hand or upper extremity impairment.

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Those figures translate into a lot of work for the Stanford hand surgeons. In the 1983-84 fiscal year, before the special division at Stanford was established, there were about 4,000 patient visits to the hand surgery clinic. That's a sharp increase in the 10 years Hentz has been at Stanford. He recalls that when he joined the faculty in 1975, "we were seeing about 12 patients a week in one little clinic."

Chase has memories of Stanford that go back a bit further, and he has memories of hand surgery that go back almost to World War II, when it really emerged as a specialty.

In fact, Chase is directly responsible for much of the progress in reconstructive hand surgery at Stanford. When he became chairman of Stanford's surgery department in 1963, he set up a reconstructive and plastic surgery specialty section within the department. And he invited Dr. Harry Buncke to share in the use of Stanford's laboratories for research and teaching. Under Buncke's leadership, several of Stanford's young surgeons have themselves become renowned in microsurgery.

Chase also performed one of the notable operations in Stanford's history when he restored the almost-severed finger of Atlanta Braves' pitcher Cecil Upshaw. The surgery was so successful Upshaw was able to pitch the next year.

That was in 1970, before the development of the microsurgery techniques of today, and Chase had to transfer tissues from another finger, carried on their own tiny vessels and nerves, to repair the finger on Upshaw's pitching hand.

The next great step in hand surgery, Chase predicts, will be transplantation. As president of the American Society for Surgery of the Hand, he delivered an address in 1984 in which he compared progress in hand surgery over the past five centuries to a fire: "at first a small, long-smoldering spark, one that did not reach a kindling point until the beginning of the Twentieth Century; it has burst into full flame in the last two decades and presently seems ready to explode, as immunologic research brings transplantation closer to minimal risk and practical reality."

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FEDERAL, STATE LAWS FOR ABUSED AND NEGLECTED CHILDREN 'WHOLLY INADEQUATE,' STANFORD STUDY CONCLUDES

STANFORD—

Abused and neglected children placed in foster homes may fare better than those left at home, but neither alternative is an adequate remedy for many of nearly one million children in the United States who fall into these categories, Stanford University researchers report.

Moreover, providing services to parents alone is not enough to change the cycle of abuse and neglect, conclude co-authors Michael Wald, professor of law, and Dr. Herbert Leiderman, professor of psychiatry.

Unless social and psychological services are geared toward the children as well as the parents they are simply "bandaids," Leiderman said.

Federal and state laws dealing with abused and neglected children are wholly inadequate, Wald and Leiderman said in their report to the California social services department. And programs to help children overcome developmental problems associated with abuse and neglect are lacking.

Legislatures must provide funding to develop such programs, they recommended. But these cannot be short-term or inexpensive and in many instances, both children and family may require several years of service.

Wald and Leiderman compared the physical, academic, social and emotional development of abused and neglected children placed in foster homes to those kept at home with their biological parents. The study was done in response to the "paucity of evidence regarding the impact of different intervention strategies"—home versus foster care—that Wald found while developing legal standards for protecting such children.

"If the only goal of public policy is to prevent severe physical harm to children, the current policy is justifiable," the authors said. "However, if legislators are concerned with children's academic, social and emotional development, as we believe they should be, legislators have to do more than adopt a preference for home or foster care. Under present policies, abused and neglected children remain at serious risk in both settings."

Present federal and state laws direct the courts and social service agencies to keep children in their homes as often as possible. Even though the victims' home situations may not be ideal, many experts argue, at least the children are spared the trauma of being separated from their own parents. And, it's often cheaper than paying for foster care.

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"Sadly, we have found that current options leave the children in great distress," the researchers said.

"The social work system does not pay enough attention to the children themselves," Leiderman explained. "They're going on the assumption that if you help the parents, the children will be all right. Helping the parents may be necessary, but it is not sufficient in treating abused and neglected children."

Leiderman and Wald found that despite the social services provided, half of the children who remained at home were reabused or neglected. Many lived in fear of physical safety. Many bore the burdens of family conflict and were forced to cope with problems that their parents should have been handling.

The study included 65 children between the ages of 5 and 10 identified by the courts and child protection agencies as being abused and neglected. Of the 65 children, 36 remained at home and 29 were placed in foster homes. The children were evaluated for a two-year period.

The study originally included white, chicano and black children. However, the final report did not include the minority children because the researchers were not able to obtain enough data about them.

While the researchers pointed out that limitations of the study include the small number of participants and the lack of minority involvement, it nonetheless establishes that what may be correct intervention for white children and their families may not be good for minority children and their families. "Their experience with abuse and neglect is different," Wald and Leiderman found.

The researchers interviewed the children, parents, teachers and social workers to measure the children's physical health, cognitive development and social behavior at home and school. They also tried to assess the children's perspectives about their own lives.

While "you cannot try to generalize or draw any conclusions from a study of 32 white children," Wald and Leiderman concluded, "we've raised some interesting issues for other researchers to consider."

What they found is that for home children, "the academic performance remained below what would be expected based on their IQ scores. Nearly half of the home children continued to miss substantial amounts of school. Relations with their parents remained poor; nearly half of the children continued to have significant emotional problems.

While neither group of children improved considerably, the researchers found, those placed in foster homes seemed to be better off in terms of improved physical health, school attendance, academic performance and social behavior at school.

"The stress caused by the conflict in the home environment may have had a more negative impact on the home children than the stress that separation and adjustment to new 'parents' had on the foster children," Wald and Leiderman said.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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ADVANCE FOR RELEASE 3 PM PACIFIC TIME WEDNESDAY, JANUARY 15, 1986

NEW GUIDELINES EMPHASIZE SPEEDY RECOVERY FOR LOW-RISK HEART PATIENTS

STANFORD—

Early, systematic evaluation can hasten the recovery of patients after heart attack and coronary artery surgery, according to an article in the January 16 issue of *The New England Journal of Medicine*.

Nearly half of all heart attack and three-quarters of bypass surgery patients have a very low risk of a second heart attack or death during their first year of recovery, said the article, co-authored by researchers from 12 university medical centers.

These low-risk patients don't benefit substantially from further diagnostic or treatment procedures, the article adds.

The article contains the first published set of guidelines for physicians on how to identify and treat low-risk heart patients, said Dr. Robert DeBusk, the lead author.

"What low-risk patients need from physicians are explicit recommendations about safe levels of physical activity and reassurance that they can soon resume normal lives," said DeBusk, a cardiologist and professor of medicine at Stanford University School of Medicine.

"These guidelines present a systematic approach to diagnosis and treatment which will enable physicians to provide this information to patients," he said.

"The guidelines are based on experience with thousands of patients who have undergone systematic follow-up during the past decade," he added.

The report stresses the role of exercise stress testing, performed alone and in combination with other techniques such as radioisotope imaging, in evaluating the risk of subsequent heart attack or death in recovering patients.

Exercise testing involves walking on a treadmill or pedaling a stationary cycle while heart rate, blood pressure and electrocardiogram are monitored. Radioisotope imaging is a method of using radioactive substances to obtain pictures of the blood flow to the heart muscle and the strength of contraction of the heart's pumping chambers.

Physicians can use exercise testing and radioisotope imaging to measure two important aspects of heart function—the extent of impairment of the heart's pumping ability and the extent to which blood flow to the heart muscle is impaired—under conditions similar to those encountered by patients in their normal activities, DeBusk explained in an interview.

These two measures of heart function help the physician predict both prognosis, or the patient's risk of subsequent cardiac problems, and the patient's functional capacity, or ability to perform physical work, DeBusk said.

A stepwise diagnostic approach, outlined in the report, enables physicians to distinguish high-risk from low-risk patients, he added.

"Within the first week of hospitalization, it is possible to identify 20 percent of heart attack patients who have clinically evident impairment of heart function that places them at high risk," DeBusk said, "and by the end of the second or third week, it is possible with exercise testing to identify an additional 30 percent who have less obvious impairment of heart function that nonetheless places them at moderate or high risk."

More than ten percent of these moderate- and high-risk patients die within their first year of recovery, the article said. Moderate- and high-risk patients are appropriate candidates for coronary angiography, coronary artery bypass surgery, or balloon dilatation, a procedure that opens narrowed coronary arteries, DeBusk said.

"The remaining 50 percent of patients have a very low risk of heart attack or death within the first year—less than two percent," DeBusk explained.

"These are the patients who benefit least from further evaluation or treatment and who are most capable of resuming their customary activities, including occupational work, at an early point," he said.

A similar stepwise approach can be used to identify low-risk bypass surgery patients, DeBusk and his colleagues suggested.

"Because medical research in recent years has emphasized high-risk patients, many physicians don't realize how large the low-risk group really is," DeBusk noted.

"Since approximately 800,000 patients in this country survive an acute myocardial infarction (heart attack) and another 180,000 undergo coronary-artery bypass surgery each year, the distinction between low-risk and high-risk patients has important economic and public policy implications," the authors wrote.

The other authors of the report are Gunnar Blomqvist, MD (University of Texas Health Science Center); Nicholas Kouchokos, MD (Washington University School of Medicine); Russell Luepker, MD (University of Minnesota School of Medicine); Henry Miller, MD (Bowman Gray School of Medicine); Arthur Moss, MD (University of Rochester School of Medicine); and Michael Pollock, PhD (University of Florida College of Medicine).

Also, Joseph Reeves, MD (University of Texas School of Medicine); Ronald Selvester, MD (Rancho Los Amigos Medical Center); William Stason, MD (Harvard School of Public Health); Galen Wagner, MD (Duke University School of Medicine); and Vallee Willman, MD (St. Louis University School of Medicine).

The report was developed with grant support from the American Heart Association.

END ADVANCE FOR RELEASE 3 PM PACIFIC TIME WEDNESDAY, JANUARY 15, 1986

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES

FOR INFORMATION CONTACT: Mike Goodkind
FOR IMMEDIATE RELEASE

PSORIASIS SEMINAR SCHEDULED

STANFORD—

A free one-day educational session for psoriasis patients and their families has been scheduled Saturday, Jan. 25.

Dr. Lexie Nall of the Stanford Medical School's Department of Dermatology said the session is to be be held from 10 a.m. to 4 p.m. at the Psoriasis Research Institute, 600 Town and Country Village, Palo Alto.

The cause and course of psoriasis, treatment, preventive measures, myths and research will be discussed, she said. Slides, lectures, and discussions with patients and health care professionals will be augmented by handout materials participants can take home.

Psoriasis, a worldwide problem affecting millions of people, is caused by a little understood overproduction of certain cells. It can be triggered in genetically predisposed persons by a variety of factors, including injury to the skin, sun, prolonged low humidity or medications. It is not contagious.

The course of the disease is unpredictable, and recurring flareups can be particularly stressful for patients, Nall explained.

The course is sponsored by the Department of Dermatology and the Psoriasis Research Institute. For further information, contact Nall at (415) 497-7967.

1-13-86 —30— mg7

FOR INFORMATION CONTACT: Mike Goodkind
FOR IMMEDIATE RELEASE

VOLUNTEERS WITH DIABETES RECRUITED FOR TWO STUDIES

STANFORD—

Stanford researchers are seeking older patients with diabetes as volunteers for two projects.

One study, conducted by the Stanford Diabetes Clinic, is attempting to learn if a new oral medication, linogliride, is effective at controlling diabetes. Volunteers must be Type II adult onset diabetics between 40 and 70 years old in generally good health.

Participants may or may not be taking insulin to help their condition but must be able to give up that medication during the study, said Dr. Elizabeth Fraze, a fellow in endocriniology.

The linogliride study is headed by Dr. Fredrick Kraemer, director of the diabetes clinic. Persons interested in further information should call Fraze at (415) 497-5947 or 497-6054.

The second study needs Type II (adult onset, non-insulin dependent) diabetics to evaluate the relationship between diabetes and mental functioning.

Funded by the National Institute of Aging through the Teaching Nursing Home Award to Stanford University, the project will require an overnight stay in the Aging Study Unit at the Palo Alto Veterans Administration Hospital.

Project coordinator Gwen Yeo said participants will undergo a series of physical and psychological tests. Results will be provided to volunteers at no charge to them, she said.

For further information on the aging project, contact Yeo at (415) 497-7063 or 493-5000, ext. 2006, or project director Larry W. Thompson at (415) 858-3989.

Fraze said about 80 percent of the estimated 5.5 million diabetics in the United States suffer from Type II adult onset diabetes mellitus, a metabolic disorder in which the body fails to process carbohydrates properly. Strict attention to diet, as well as medication including insulin, are common treatments.

1-13-86 —30— mg7 Dermo

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Ron Goben (415) 497-6911, or Karen Walles (415) 964-9278
Photo available upon request if not included.

NOTE TO EDITORS: After the groundbreaking ceremonies described in the accompanying release, from 10:30 to 11:30 a.m. Jan. 22, there will be an opportunity to interview a couple staying in one of the Oak Creek apartments supported by the Assistance League. They are Beatrice and Larry Strobel and both suffer from multiple sclerosis. They are awaiting the birth of Beatrice Strobel's first child. The Strobels have agreed to be interviewed in their apartment, which will provide an opportunity for photographs of a living situation similar to that expected in the Hewlett apartments. Please inform the Medical Center Office of Communications if you are interested in interviewing the Strobels.

FOR IMMEDIATE RELEASE

CONSTRUCTION STARTING ON UNIQUE 'HOMETEL' AT STANFORD MEDICAL CENTER

STANFORD—

Groundbreaking ceremonies will be held Jan. 22 for the Flora Lamson Hewlett Apartments, which will provide short-term, low-cost lodging near the Stanford University Medical Center for out-of-town patients and their families.

The 42-unit building, which has been informally labeled a "Hometel," is the result of a unique cooperation between the university, the William and Flora Hewlett Foundation of Menlo Park and the Assistance League of Santa Clara County.

Stanford provided the land for the apartments under a $1-a-year lease, and the construction is being financed by a $3,750,000 grant to the Assistance League from the Hewlett Foundation. The building is named for Flora Lamson Hewlett, the late wife of William R. Hewlett and one of the foundation's founders.

The building, at 1100 Welch Road, will be owned and operated by the Assistance League of Santa Clara County, a chapter of the National Assistance League, a volunteer service organization. The bulk of the operating funds will come from the Costume Bank in Los Altos, the principal fund raiser for all of the chapter's philanthropic activities.

The project is apparently unique in American health care circles. A handful of U.S. hospitals provide nearby housing for patients and families, but as far as is known this is the first time such housing has been provided through the cooperation of institutional and private interests.

Simultaneously with the Hewlett building, Stanford will build an adjacent 108-unit apartment project intended primarily for use by medical center employees. Construction of both projects is expected to be completed by June of 1987.

Hospital outpatients and families who stay in the Hewlett Apartments will pay $10 a day, a fraction of the cost at hotels and motels in the area. Occupancy will be limited to those whose homes are at least 50 miles from the medical center and stays will be restricted to nine weeks.

Potential occupants of the apartments will be screened by the hospital's division of social services, and the members of the division will make the decision on who gets to use the apartments.

Such a system has been operated successfully at five apartment units the Assistance League has leased for patient housing at Oak Creek Apartments, across Willow Road from the Hewlett Apartments site at the intersection of Welch Road and Pasteur Drive. The league began the project in 1979 by leasing two one-bedroom apartments and has gradually increased the number of apartments available to families and patients at the $10-a-day rate. More than 300 families have been helped since the rentals started and all five units have had 100 percent occupancy with long waiting lists.

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The Assistance League's involvement with patient housing goes back even further than 1979. It started with personal experiences, according to Kay Clair, chairwoman of the league's HOME (Housing for Medical Emergencies) project.

"Many of our members had personal experiences with family and friends with cancer," she said. "Being at the hospital day after day, seeing relatives in the waiting rooms, we became aware of the desperate need for patient and family housing near the hospital."

That awareness prompted a 1976 study by Assistance League volunteers of the housing needs of patients and their families. The study, in turn, led to the leasing of the Oak Creek apartments and the establishment of a formal housing program.

League members soon realized, however, that the Oak Creek facilities were inadequate to meet the needs of patients and families seeking housing. In 1980, Jeanne Kennedy, director of patient and community relations at Stanford Hospital, began working with Clair on a plan for a separate building to house patients and families.

Three years later, that plan resulted in the grant from the Hewlett Foundation to the Assistance League and the HOME project became a major enterprise.

The Hewlett Apartments will average 640 square feet. Each will have a bedroom, living room, kitchen and bath and be designed to accommodate two people. There will be a communal lounge and laundry facilities and residents of the apartments will be able to use the swimming pool at the adjacent Stanford complex. There also will be a full-time resident manager, whose salary will be paid by the Assistance League.

"One of the great things about the project is that it eases the financial burden on patients and their families who come from a distance," said Kennedy. "Besides the hospital costs, they have the extra expenses of housing—which in this area is very expensive—plus eating out, transportation and similar items. This alleviates those expenses. They have inexpensive accommodations, they can cook their own meals and they're just a short distance from the hospital."

Karen Walles, who is coordinating the groundbreaking ceremonies for the Assistance League, noted that Stanford has some patients who come from foreign countries. Having housing available near the hospital is particularly important for them, she said.

To Kay Clair, who has been involved with every phase of the project since the first survey 10 years ago and who was presented Stanford Hospital's distinguished service award for that work, the building represents "a dream about to become a reality."

"I can't believe it's finally happening," she said. "It's kind of a fitting way to celebrate our (the league's) 25th anniversary."

Clair knows how much the Hewlett Apartments will mean to some hospital patients. She showed some of the letters the Assistance League has received from grateful occupants of the league's apartments at Oak Creek.

"My husband has been terribly ill with cancer and I am unable to work due to a heart problem," one woman wrote. "Consequently, it would be almost impossible to stay here for his radiation therapy without this help. Thank you and God bless you."

Another woman wrote of her experience on arriving at Stanford: "We had tried all types of possibilities and were really at the end of our rope and our pocketbooks. I was overwhelmed by the apartment and motel prices in that area."

After a five-week stay in one of the apartments, the same woman and her mother expressed their gratitude in concrete ways: "Before we left the apartment, my mother reupholstered three of the dining room chairs that were worn through to the wood, and I added a place setting for four to the silverware in the kitchen. Thanks again for everything."

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FOR IMMEDIATE RELEASE

TO EAT OR NOT TO EAT—ONLY YOUR COMPUTER KNOWS

STANFORD—

Behavioral scientists at Stanford University School of Medicine are using microcomputers to treat obesity.

In a recent study, published in the *Journal of Consulting and Clinical Psychology*, six obese patients were equipped with an interactive microcomputer system small enough to be carried in their daily routines.

Treatment results in the six patients were compared with those in six matched controls who received similar treatment but monitored its effects using paper-and-pencil methods.

"Patients who received computer-assisted treatment lost about 2.5 times as much weight compared to patients who relied on self-monitoring," reported Drs. Kent F. Burnett, C. Barr Taylor and W. Stewart Agras of the Laboratory for the Study of Behavioral Medicine.

The study is significant, Agras explained, because behavioral treatment for obesity relies heavily on self-monitoring to provide continuous feedback. When such feedback is delayed until the next meeting with the therapist so are the essential therapeutic instructions and reinforcement. That is by no means ideal.

"Technical advances in portability of microcomputers now provide new pathways for fulfilling the potential of behavior treatments based on self-monitoring," the researchers reported.

Volunteers in the study were women between 30 and 50 years of age, and about 35 percent overweight. The volunteers were equipped with a portable, battery-operated computer developed for the project. The computer, weighing two pounds, was carried in a pouch on a shoulder strap and was capable of 45 days of continuous operation.

A keypad permitted users to enter data into the computer and messages were displayed in a liquid crystal screen. The system included a clock that tracked collected data chronologically, a programmable beeper signal and capacity to process and transfer physiological data to another computer for storage and analysis.

Volunteers in the computer-assisted therapy program made regular reports on their eating behavior ranging from snacks to regular meals and exercise. Although the volunteers were expected to make reports following each of these activities, the beeper signal also reminded them to make self-reports every four hours.

Volunteers entered codes for reports on food consumption and physical activity, including duration of exertion. The computer not only stored data, but following the self-reports, it displayed for the patient's benefit the total calories reported, and remaining caloric intake limit for the day.

The computer also provided praise and instructions. If the data indicated that caloric intake had exceeded daily limits, the computer instructed the volunteer to stop eating and recommended alternative behaviors. If the data indicated caloric intake within prescribed limits, a message was displayed praising the volunteer with the words, "Fantastic! (subject's name), You have Self-Control!"

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In the control group, similar information codes were used for self-monitoring, but the data were entered by the volunteers into a hand-written form.

While the computer-assisted volunteers could look up and analyze their code values in their portable computers, the controls had to look up and tally these values themselves in their hand-written forms. And they had no beeper signal to remind them to make reports and receive praise and instructions.

Throughout the study, volunteers in both treatments met with therapists once a week for 15 minutes to discuss progress and set goals. They also completed forms at home each week soliciting comments about the program.

While the results, because of the small number of patients, must be interpreted cautiously, stressed Dr. Agras and his associates, computer-assisted therapy opens new avenues for research in behavioral medicine.

One is discovering which learning principles incorporated into the computer programs are most influential in affecting therapeutic behavior change, they wrote.

"Because software-based therapy programs permit rapid modification of treatment components," they said, "it's possible to dissect and analyze the effects associated with diverse combinations of treatment components."

Beyond the scope of their study, the researchers noted computers in therapy raise many issues. How can they be developed for easy and friendly use? for example. How does the novelty or apparent mystery of the computer affect treatment outcome?

These questions must be answered, they added, "before we will be able to fully understand and exploit the potential clinical utility of this new technology."

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FOR IMMEDIATE RELEASE

BREAST CANCER THERAPIES IMPROVE BUT SURVIVAL RATES DON'T, STANFORD STUDY FINDS

STANFORD—

The good news for women diagnosed with breast cancer is that less destructive therapies are replacing mastectomies--removal of the breast and surrounding muscles--without lowering the cure rates, a Stanford University Medical Center scientist has found.

The bad news is that even with the improved therapies, the survival rate, adjusted for age since women live longer than they used to, has not significantly increased over the last 50 years, said Dr. Stanley Chism, assistant professor of radiation therapy.

His findings contradict other reports that show improving survival rates of "selected" populations.

What those reports are actually showing, Chism contends, is a change in the numbers of women being treated rather than a change in the treatment outcomes.

Women used to not go to a physician when they discovered a lump in their breast because they feared the treatment, he explained. By the time they came in for treatment, the cancer had often spread throughout their body.

Now however, improved diagnostic procedures such as mammography, health education programs and availability of health insurance are allowing physicians to identify patients with earlier stages of the disease, or "more favorable disease," Chism said.

"Women aren't dying of the local breast cancer itself, they're dying because it spreads through their body," he said. "It's clear that we need to put the emphasis on treatment for systemic cancers in order to be effective."

Chism recently presented his findings, the result of a study involving 530 women in a community, at the annual meeting of the American Society of Therapeutic Radiology and Oncology.

Meeting attendants were suprised to learn that the newest type of breast cancer therapy, biopsy and radiation treatment, is the most commonly used in some communities, Chism said. As of 1984, about 60 percent of patients in one Bay Area community opted for biopsy and radiation treatment, while less than 40 percent opted for radical mastectomy, he reported.

While the five-, 10- and 15-year survival rates were slightly higher for women treated in recent years, the number of women with more favorable disease treated doubled. This may explain the improved survival rates, Chism said.

Only about two percent of the women truly benefitted from one of the most advanced treatments, chemotherapy.

"You can look at it positively or negatively," Chism said. "Ladies now don't have to have a mastectomy to have the same likelihood of cure. Preserving the breast is a step forward. Yet, we have not significantly budged survival rates."

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

NEW ALUMNI DEAN APPOINTED AT STANFORD MEDICAL SCHOOL

STANFORD—

Dr. Patricia Engasser has been appointed Associate Dean for Alumni Affairs at Stanford University School of Medicine, announced Dean David Korn.

Engasser, a dermatologist at Kaiser-Permanente Medical Center, Redwood City, and a member of the voluntary clinical faculty at Stanford and University of California, San Francisco, will take on her new responsibilities Feb. 1.

Engasser was unanimously chosen for the associate deanship by the Committee on Alumni Affairs, appointed by Korn more than a year ago to examine the relationships between the medical school and its alumni and recommend ways to strengthen those ties.

In its report to Korn last June, the committee, made up of 12 full-time faculty and community physicians who are all alumni, recommended the creation of the part-time position.

"I would like to open up communication between the dean and the alumni," Engasser said. Specifically, she plans to establish regional alumni groups, update the alumni directory and cultivate an alumni network all over the country.

"I'd like to create more of an extended Stanford family," she said.

Engasser received her M.D. in 1962 and her undergraduate degree in 1959 from Stanford. She has served on the Stanford Medical Fund Council since 1977, and has chaired the Medical Fund since 1982. She has also served on the Stanford Medical Alumni Association Board of Directors since 1981.

"She is a thoroughly delightful person to work with and to know, and the high regard in which she is held by colleagues and students will doubtless be shared by all who will meet her in her new administrative role," said Korn in a letter to alumni announcing Engasser's appointment.

Engasser will be located in the medical center's Office of Public Events, 750 Welch Rd., 314, for the equivalent of one day each week.

"I hope to hear from lots of alumni to see what types of activities they'd like and to hear their concerns," she said.

More than 3,400 graduates of the medical school are members of the alumni association, and more than 1,750 physicians who completed training at Stanford are associate members.

1-21-86 —30— alumdean-sk7

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FOR IMMEDIATE RELEASE
(editors: photo available if not included)

NEW ANALYZER WILL HELP BONE PROBLEMS IN SPACE AND ON EARTH, STANFORD SCIENTISTS HOPE

STANFORD—

A Stanford engineer together with a NASA investigator have designed a bone analyzer that they hope will allow doctors to detect disease, as well as help scientists solve the bone wasting that can occur during space travel.

Just as physician "Bones" McCoy on the popular TV series "Star Trek" used a hand-held scanner to diagnose illness, the prototype analyzer, though mounted on a drill press stand, promises to give non-invasive measures of bone health.

Lack of the constant tug of gravity in space means that astronauts no longer need their long bones to support their weight. Similarly, prolonged bed rest or disuse of a limb due to chronic pain leaves bones with nothing to do.

According to Dr. Charles Steele of Stanford, co-inventor of the instrument,"If you don't use bones, you lose them."

Although by adolescence our bones have stopped lengthening, he explained in an interview, they never stop growing. Cells within bone tissue are constantly breaking down and reassembling the mineral matrix of the skeleton.

Daily activity prompts hormones to keep the rate of rebuilding equal to the rate of dismantling, Steele said. For instance, each step while walking puts a load on the leg bone of five times the body's weight. But if one is up in space, or kept in bed, he continued, "there is no load, and no regrowth."

Loss also exceeds repair in a condition called osteoporosis, which causes brittle bones and "dowager's hump" in "a substantial proportion" of women past menopause, Steele said.

Prolonged dialysis of patients with kidney damage, as well as therapy with anti-rejection drugs for transplants, also can affect metabolism of bones adversely, he said.

The bone analyzer would detect these harmful changes earlier than can other methods such as X-rays or photon absorption, Steele explained, because it directly tests the strength of bones.

"We get a direct measure of the functional property of stiffness," he said.

"We hope we can get enough precision to measure five percent changes in bone, to detect early stages (of bone loss) and judge the success of diet changes, exercise, or drugs," he added.

Dr. Donald Young, a NASA physiologist at the Ames Research Center in Mountain View, California, collaborates with Steele on the project, and initiated work with the analyzer approach.

Analysis begins by positioning a person's limb in place. A fingertip-sized probe then presses and vibrates against the long bone of a person's forearm or lower leg. The bone vibrates in response, but with a frequency that depends on its strength, or "how hard it is to bend it," Steele said.

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An attached force transducer and accelerometer send data to a microprocessor system that analyzes the bone's resistance to being shaken by the probe.

Measurement of each limb takes less than a minute.

An objective number that indicates strength would be superior to methods medicine now uses to judge whether a fractured limb has healed, Steele pointed out.

Doctors take X-rays to view how healing progresses in a broken leg. But when they decide to remove a cast, all they can do is have the patient stand on tip-toe (which places a quick load on the bone) and tell if it hurts, Steele said.

A quantitative measure would be better, agreed Stanford professor of orthopedics Dr. Donald Nagel, who is helping Steele develop tests for fracture patients.

The bone analyzer has already quantified the degree of weakness that can follow disuse. One woman Steele measured had a shoulder injury that for four years kept her from lifting her arm. "She had a 68 percent drop in that bone's stiffness," he said.

Steele is also collaborating with associate professor Dr. David Schurman at the orthopedic clinic at Stanford University Medical Center. They will follow the recovery of bone strength in patients who receive joint implants and begin to use limbs that pain had kept idle.

Steele, a professor of mechanical engineering, said he is still trying to improve the mathematical formula that extracts information from the response of the bone. "We have a primitive algorithm right now," he admitted.

Because overlying skin, sinew, and fat mask the vibrations of bone in response to the probe, the computer must correct the readings, Steele explained. While the majority of body builds can already be handled accurately, he said, "we want an algorithm that will accomodate everyone."

NASA's Young hopes to develop exercises that would entertain astronauts as well as keep their bones from losing strength. Previous exercise routines involved treadmills that were both boring and ineffective in curbing bone loss, Steele said.

By carrying a version of the bone analyzer aboard space vehicles, astronauts could constantly measure their bones and adjust their activities to correct any detected weakening, Young and Steele suggest.

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FOR IMMEDIATE RELEASE

STANFORD UNIVERSITY HOSPITAL PLANNING STAFF REDUCTIONS IN RESPONSE TO COMPETITION, FEWER PATIENTS

STANFORD—

Stanford University Hospital, adjusting to sharp declines in patient stays and reimbursement limitations, is facing its first major reduction in personnel since the creation of Medicare and Medicaid 20 years ago led to a period of expansion for all hospitals.

"The decision to cut staff is painful, but essential for the institution's continued livelihood," said Hospital President Sheldon S. King.

The layoffs will not diminish the quality of care for which the hospital is known, he said. Reductions will enable the hospital to become more affordable and cost-competitive than it has been in the past in comparison to institutions of its class.

In the past four years in keeping with national trends the hospital's average length of stay dropped from 6.8 to 6.3 days, and patient days went from 156,654 (exluding newborns) to 140,552, King explained. The hospital is also staffed higher than similar teaching hospitals on the West Coast.

In a letter mailed to hospital staff Tuesday, Jan. 28, officials said they have not yet decided how many employees will be affected by layoffs. They called on all employees to understand the reasons behind the "painful decision," and stressed they are looking at ways to ease the transition for those who will be affected.

"Right now we are defining the details of the program," wrote Hospital Deputy Director William Arnold. "But we can tell you that we will make these reductions in a responsible way."

Reductions will be selective, not across the board, and administrators will be affected along with other staff. "Whenever possible, we hope to cut activities, not people," Arnold said.

The letter said an analysis to determine how and where cuts will be made is under way, with details to be announced when firm information is available.

"We expect to complete the process by the middle of April," Arnold said.

The 663-bed hospital has 4,239 employees, including those who work part-time.

"The cuts will enable the hospital to scale down its activities to a realistic volume of patients and trim $25 million from its $210 million operating budget in the coming year," King said.

"Members of the medical staff—both community and faculty physicians—will be working with administration on issues related to quality of care," King said.

Middle managers will participate in layoff decisions. "They understand best how their departments are run and can recommend choices that do not compromise the quality of care," he said.

"The cuts," King noted, "represent an acceleration of the cost management and expense reduction programs started by the hospital three years ago."

The hospital, Arnold said, will still reserve some funds for new program development. The hospital last year launched new programs, including Life Flight, trauma center, home care, and same day surgery. It also entered into contracts with several discounted health plans and similar cost-cutting programs.

The hospital began "downsizing" its operations three years ago to adjust to a lower level of patient days, King said. Its cost management effort succeeded in reducing expenses by $17 million. But it wasn't enough, and hopes that there would be an upturn in patient admissions or stays were not fulfilled.

The major causes of the decline in census, King said, are federal reimbursement policies and the number of unnecessary beds in the San Francisco Bay Area combined with a number of economic, medical and surgical innovations enabling many procedures to be done in outpatient clinics or hospitals to discharge patients more quickly.

"We know now the situation is permanent," King said. "This will be the prevailing approach to the way medical care is delivered over the next 25 years."

The reductions are not expected to affect the $114 million hospital modernization scheduled for completion in 1987. Stanford officials believe the project is an essential investment for correcting problems afflicting the present facility and creating an attractive and more efficient hospital for patients and their families.

As all hospitals in recent years, Stanford has entered into contracts with various health plans at considerable discounts in order to maintain its patient base, King said in citing other reasons for the layoffs. This means less income to the hospital and greater pressures on administration to operate the institution more cost effectively.

"Third-party payers, our medical staff, and the hospital board," King said, "have expressed concern about our costs."

The hospital's prices are similar to those of the University of California in San Francisco with which Stanford is often compared. But it is regarded as the most expensive hospital in Santa Clara County with an average daily charge of $1,498 per patient compared to $1,251 at Santa Clara Valley Medical Center and $1,000 less at community and tax-supported district hospitals.

"Because we are a teaching hospital, there will always be a cost differential," King explained, "but it has to be seen by both patients and insurers as reasonable and worth the difference."

The hospital can't continue to raise prices, King said. Most patients nowadays come under a fixed per diem or prospective reimbursement scheme covering their hospital care.

The future is equally uncertain, added King, who as past president of the Council of Teaching Hospitals has given testimony frequently before Congressional committees trying to trim Medicare's costs.

"The effect of pending legislation, for instance, is still speculative but it is unlikely to be favorable," King said.

The hospital executive reiterated a theme echoed by members of his staff. "The months ahead will not be easy," he said. "But we now have a chance to preserve and rebuild. Is it difficult? You bet. There's no management in the country that wouldn't prefer to be expanding. That's the easiest form of management."

In their efforts to find the most responsible process for staff reductions, King and his staff weighed the pros and cons of various options. These ranged from putting everyone on a shorter work week to phasing the staff reductions over a period of time.

"Despite the social value of some of these approaches," King said, "we agreed we merely postponed the inevitable.

"As a philosophy for the institution, it's our responsibility to make sure that those individuals who still have a place at Stanford hospital after the reductions take place are here as full participants and not penalized by uncertainty.

"When you postpone decisions of this sort for too long, it means also that you are making cuts in an unplanned way and often sacrificing services that are important."

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FOR IMMEDIATE RELEASE

EXPLORING THE GOMER PHENOMENON

STANFORD—

The term "gomer" and other informal language young physicians use to classify patients are more a reflection of their disillusionment stemming from medicine's limitations and dilemmas within the health care system rather than of their feelings about the patients, say the authors of a new study.

Gomer, the most popularized of the terms, refers to patients whose illnesses are never resolved: they do not die nor do they ever get well.

The term "captures universal human fears of illness, intellectual decline, loss of autonomy and aging as well as doctors' frustrations that modern medicine, which promises to do so much, too often fails to deliver on its promise," concluded Stanford University Medical Center senior neurology resident Dr. Deborah Leiderman and Dr. Jean-Anne Grisso of University of Pennsylvania's department of medicine.

The authors reported their findings, based on a study they conducted at University of Pennsylvania School of Medicine, in the September, 1985, issue of the *Journal of Health and Social Behavior*.

The authors noted that the terms are used primarily by housestaff—physicians-in-training—who are typically more idealistic and under more stress than older physicians who have more experience and perhaps are more realistic about what medicine is, and is not able to do.

"The inconsistencies in the system--the gap between the myth of omnipotence of technologic medicine and the realities of gomer patients on the wards--become starkly visible to young physicians in the early stages of professional socialization," they said.

Gomers, they explained, are patients who have more difficult diagnostic, therapeutic and behavioral problems. They often suffer more mental decline, stay hospitalized longer and are less often able to return to their own homes and usual adult roles.

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The authors analyzed hospital records of gomer patients and interviewed housestaff about their attitudes and perceptions regarding gomers' treatment. The study compared 18 patients, labeled gomers by housestaff, with 18 general medical patients. They compared the patients' background characteristics, events occurring during hospitalization and outcomes.

The two groups were similar except that at the time of admission to the hospital the gomers were less active and had less ability to function in adult social roles. Also, nearly half of the gomers were in some way mentally impaired, compared with less than one-quarter of the general patients.

While the reasons for admission were similar for the two groups, the patterns of hospital stay drastically differed, the authors found.

Twice as many gomers suffered serious medical complications during hospitalization, the authors documented, and more than two-thirds suffered mental deterioration. Few gomers fully recovered, and three-quarters had some mental impairment at discharge. The general patients were able to resume their adult roles once they were discharged.

Because of their impairment, nearly one-half of the gomers--compared with only two general patients--were sent to nursing homes following discharge from the hospital. Nursing home beds are hard to obtain, however, resulting in the gomers' hospital stay being extended beyond medical necessity.

The longer the gomers stayed in the hospital, the more frustrated physicians caring for them became, the authors said.

"Gomers may be seen as an index of medicine's insoluble problems . . .that lead to neither death nor cure," they continued. Gomers "confront residents with two profound threats to their ideals of themselves as physicians." Their lingering presence challenges physicians' ideals about the powers of medicine, and forces the young physicians to confront uncertainty "arising from the limits and gaps in the present state of medical knowledge and perhaps from doubts about their own competence."

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(Editors: Photo of Baldwin available if not included)

NEW HEAD OF STANFORD HEART-LUNG PROGRAM NAMED

STANFORD—

Dr. John C. Baldwin, a cardiovascular surgeon and board certified internist, will head Stanford University's heart-lung transplant program.

Dr. Norman Shumway, transplant pioneer and chairman of Stanford's Department of Cardiovascular Surgery, announced Wednesday (Jan. 29) that Baldwin will succeed Dr. Stuart Jamieson effective April 1.

Jamieson has been named professor of surgery and chairman of cardiovascular surgery at the University of Minnesota. Jamieson will also direct a newly-formed Minnesota Heart and Lung Institute, a multidisciplinary surgical and medical center for research and treatment of cardiovascular disease, the Minneapolis-based medical center announced Wednesday.

"It's exciting to see such bright young surgeons come through our program," said Shumway. "The patient care and scientific investigation involved with heart-lung transplantation will continue to develop under John Baldwin. He is a Rhodes Scholar with outstanding intellectual and research qualifications and superlative surgical and medical skills."

Shumway said that Baldwin's internal medicine training should bring extremely useful insight into both the management of patients following surgery and the ability to explore research questions on a very broad basis.

The heart-lung transplant program evolved from Stanford's research and clinical experience in heart transplantation, which started with Shumway's early animal experiments in the 1950s. These were followed with one of the world's first human heart transplant operations in January 1968. Then in March 1981, a Shumway protege, Dr. Bruce A. Reitz, led the team which performed the world's first successful combined heart-lung operation at Stanford on a 45-year-old Arizona woman, Mary Gohlke, who currently is reported active and doing well.

Jamieson took over leadership of the dual-transplant service in July 1982 after Reitz left to head the cardiac surgery program at Johns Hopkins University.

Stanford remains one of the most active cardiac transplant centers in the world with nearly 370 heart transplants and 30 heart-lung transplant operations on 29 patients to date (one patient received two sets of organs).

Jamieson, who came to Stanford eight years ago as a postdoctoral fellow in cardiovascular surgery, said in an interview that he has seen during his time here a progression in cardiac transplantation "from a somewhat exotic clinical research venture to an important therapeutic procedure now performed routinely in major centers throughout the world."

Now, both he and Baldwin are interested in solving at their respective centers the problem of scarce donors, one of the major hurdles to expansion of the therapeutic technique.

Baldwin said he is interested in finding ways to use a wider range of donors, including older persons. Both Baldwin and Jamieson are interested in techniques to preserve the donor heart and lungs for longer periods outside the body.

"I believe one of our major recent accomplishments in the laboratory has been the ability to preserve the (delicate) tissues of the lung for up to six hours outside the body," Jamieson said.

New techniques developed in Stanford's cardiovascular surgery laboratories involve transporting the donor organs in solutions which have been developed to match the composition of the lung itself.

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Transporting organs outside the body extends the geographic distance teams can travel to collect organs and "also helps solve some of the human relations issues involved with families, who may be reluctant to allow the body of a loved one to travel to another city for removal of vital organs," Baldwin said.

On the political front, Jamieson was vocal in supporting a recent California law which requires that families of potential donors be informed by hospital personnel of the procedures for allowing organs to be transplanted.

Baldwin is anxious to increase the uses of heart-lung transplantation but sees practical obstacles because of the donor shortage. Currently 15 persons are waiting for heart-lung donors at Stanford. Because of the donor shortage, the Stanford team has never been able to perform more than seven operations in a year.

To date, various birth defects causing heart and lung damage have accounted for 14 of the 29 patients who received the dual transplants at Stanford. The other patients suffered from a condition called primary pulmonary hypertension, in which the blood vessels in the lungs constrict. This causes breathing problems but also causes a damaging backup of blood into the heart. There is currently no known cure for the condition other than replacing both the heart and lungs.

Baldwin foresees the possibility of using heart-lung transplantation for other maladies, including perhaps cystic fibrosis, a congenital ailment which results in deterioration of the lungs. But Baldwin is even more encouraged that underlying research involving the program may lead directly to knowledge which would benefit cystic fibrosis patients without the need for transplantation.

"One aspect which has been noted in heart-lung patients who have suffered long-term rejection of their new organs is that the changes in lung tissue may resemble the damage that occurs in cystic fibrosis. This leads us to consider the possibility that cystic fibrosis might be studied as an autoimmune disease in which the body's immune system attacks itself. Antirejection drugs, which help the body to accept the donor organs, might someday be useful at treating cystic fibrosis patients."

Rejection and medication to prevent that phenomenon has been a major thrust of Stanford's transplant research. It was the pioneering work at Stanford and elsewhere on a new immunosuppressive drug, cyclosporine, which facilitated the first heart-lung operations at Stanford in 1981.

"Our very first concern," said Baldwin, "is our patients and what we do as physicians reflects this priority. But as the cystic fibrosis example indicates, the transplant program has given us a unique opportunity to study questions which otherwise we would not be able to explore."

The program has enabled the scientists to explore important but more general physiological questions. Jamieson notes that breathing and circulation are maintained without nerves connected to the heart and lungs, and this phenomenon has been useful for a variety of studies.

Baldwin said he decided to become a cardiovascular surgeon when as a Stanford medical student in the early 1970s, he served a student clerkship (training experience) under Shumway. After graduating in 1975, he completed residency at Massachusetts General Hospital in internal resident and subsequently in general surgery.

Baldwin said he decided to include internal medicine in his training after consulting with Shumway while still a medical student at Stanford. He credits this experience with providing "useful perspective in the postoperative management of patients."

Since returning from Boston to Stanford as chief resident in cardiac surgery in 1981, Baldwin has personally participated or served as primary surgeon in all but two of the 30 heart-lung transplant operations.

Baldwin, a Stanford staff member in cardiovascular and thoracic surgery since January 1984, was named assistant professor of cardiovascular surgery in 1985. He received his B.A. summa cum laude from Harvard University in 1971 before becoming a Rhodes Scholar in physiology at Oxford University in England. In addition to his transplant and cardiac surgery duties, Baldwin is an active thoracic surgeon. In 1985 he received the Gothenburg (Sweden) Thoracic Society Medal.

Jamieson, who has been a primary or secondary author of more than 200 professional journal papers during his eight years at Stanford, is a native of Rhodesia (now Zimbabwe). He was a 1971 graduate of the University of London Medical School. At Stanford, he was granted a tenured appointment as associate professor of cardiovascular surgery in September 1984.

In addition to his transplant and other cardiac surgery activities at Stanford, Jamieson has recently served as co-director of cardiovascular surgical services at the Palo Alto Veterans Administration Hospital.

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QUENTIN M. GEIMAN, RETIRED TROPICAL DISEASE EXPERT, DIES AT 81

STANFORD—

Memorial services have been scheduled Friday (Jan. 31) for Quentin M. Geiman, Ph.D., an internationally recognized authority on tropical diseases and professor emeritus of preventive medicine at Stanford University Medical School.

Geiman, who retired in 1970, died in his sleep at his Los Altos home late Monday (Jan. 27) at the age of 81. Friends said he had suffered recently from ill-health but remained active in community senior citizen affairs until his death.

Dr. Count Gibson, chairman of the Department of Family, Community and Preventive Medicine (FCPM) and a colleague, said he planned to attend a civic meeting the evening of his death but told his wife of 55 years, Anne, he was tired and wished to rest.

"His greatest academic contibution was in encouraging and stimulating the interest of medical students and other faculty in the health of other nations," said Dr. Rodney Beard, a retired colleague who served as chairman of Geiman's department, preventive medicine, the predecessor of FCPM.

Geiman was perhaps best known as an authority on malaria and for directing a Tropical Health Training Program which awarded traveling fellowships to students interested in gaining experience in developing countries.

He directed a Parasite Diagnostic Laboratory at the Medical Center and served as a consultant to government agencies on diagnosing and handling parasitic infections in patients and the public. He traveled extensively throughout the world in connection with his research and consulting activities.

Geiman came to Stanford in 1955 after a 20-year career at Harvard Medical School and the Harvard School of Public Health. A native of Glen Rock, Penn., Geiman received his B.S. degree in 1927 from Gettysburg College in Pennsylvania. He received a master's degree in 1931 and a Ph.D. in 1934 in biology from the University of Pennsylvania.

In addition to his wife, Geiman is survived by a son, Rodney of Sunnyvale; a daughter, Carolyn Smith of Del Mar; a brother, Harry, of Pennsylvania; a sister, Ruth Geiman of Connecticut, and five grandchildren.

Friday's memorial service is scheduled at 2 p.m. at Spangler Mortuary in Los Altos. Memorial contributions may be made to the library fund of the Department of Family, Community and Preventive Medicine, c/o Dr. Count Gibson, Stanford Medical Center, Stanford, CA 94305.

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VOLUNTEERS WITH MODERATE CHOLESTEROL SOUGHT FOR STANFORD STUDY

STANFORD—

Stanford researchers will be studying whether a drug widely used for 20 years to lower high cholesterol is equally effective at helping persons with moderate levels of fat in their bloodstream.

"High blood cholesterol is widely recognized by the American Heart Association as a major cause of coronary heart disease. Now the evidence is mounting that even persons with moderate levels of cholesterol can benefit from a program to improve this condition," said Dr. Robert Superko, medical director of Lipid Research Clinic of the Stanford Center for Research in Disease Prevention (SCRDP).

Superko and his team are looking for about 60 to 80 persons who have moderately high blood cholesterol to participate in a 16-week trial of the drug colestipol.

Superko said the volunteers should have levels of cholesterol (about 220 to 265 mg/dl) which traditionally are treated by diet but not medication.

"We're talking about a large group of the population, perhaps as many as 30 percent of the Bay Area population (whose cholesterol level would qualify them as potential participants). These are persons who by lowering their blood cholesterol below about 200 can reduce their risk of heart attack by approximately 20 percent," Superko explained.

Although colestipol has been prescribed since the 1960s to persons with extremely high cholesterol levels, generally in access of about 270 mg/dl, "it is only in the last few years that the evidence indicates that persons with moderate levels can significantly benefit from blood cholesterol reduction," Superko said.

Colestipol removes a damaging component of blood cholesterol, low density lipoproteins (LDL), from the body by enhancing the liver's ability to remove LDL from the blood. The drug is a bile acid binding resin.

Certain components of cholesterol, essentially fat molecules such as LDL, are dangerous because they attach themselves to the interior of blood vessels, causing reduced arterial blood flow, potential blockage of arteries and ultimately heart attacks as total blockage occurs and/or the heart muscle becomes damaged.

The researcher noted that areas of Asia where the average LDL cholesterol level is about 110, coronary artery disease is virtually nonexistent. "Diets which are low in saturated fats help most people to reduce their cholesterol. But for some people such a diet is impractical, and for other people, genetic and other health factors preclude them from using diet alone to lower their cholesterol," Superko said.

In the current study, half of the volunteers will take the Food and Drug Administration-approved medication in doses smaller than customarily given to persons with severely high levels of cholesterol.

The remainder of the volunteers will be in a control group and will take a placebo, an inert substance which looks and tastes like colestipol.

The volunteers will receive the medication, periodic testing for blood cholesterol level, and general cardiac health information at no cost, Superko said. He said colestipol has proven to be extremely safe. Potential side effects can include minor gastrointestinal discomfort.

Persons interested in volunteering should contact Pamela or Paula at (415) 497-6254 between 1:30 and 5 p.m. on weekdays. Dr. William Haskell, deputy director of SCRDP, is principal investigator for the project. Superko is medical director.

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GEORGETOWN CARDIOLOGIST VISITS STANFORD AS FIRST SHENSON VISITING PROFESSOR OF MEDICINE

STANFORD—

Dr. Proctor Harvey, a renowned cardiologist and professor of medicine at Georgetown University School of Medicine, will be at Stanford for the month of February as the first Drs. Ben and A. Jess Shenson Visiting Professor of Medicine.

The professorship was established last spring by the Shenson brothers, both of whom received their undergraduate and medical degrees at Stanford, in memory of their parents, Louis and Rose Shenson.

Harvey will present a number of lectures, conferences, seminars and meetings during his visit, including the department of medicine's grand rounds on Feb. 13. The title of his presentation, to be held in Fairchild Auditorium, is "Cardiac Pearls."

Harvey has been on the Georgetown faculty since 1950. Throughout his career he has been actively involved in professional organizations and has held editorial positions on several cardiology journals. He has received numerous honors for his clinical and teaching excellence, the latest of which was for an exhibit, "W. Proctor Harvey Textboxes of Cardiology," at the 1985 American College of Cardiology meeting.

Harvey will have an office in the cardiovascular research building, room 156, and can be reached at 497-6141.

The Shensons have practiced internal medicine in San Francisco for more than 30 years. They served on the clinical faculty of the medical school in San Francisco as well as in Palo Alto.

The Shensons have been active financial supporters of Stanford. They established a medical student loan fund in honor of their parents in 1950. They have a strong interest in the arts, particularly the opera. They have also patronized the work of early California artist Theodore Wores.

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(Editors: Photos available on request if not included.)

STANFORD PHYSICIAN SHATTER KIDNEY STONES WITH SHOCK WAVES

STANFORD—

A new, non-invasive technique that shatters kidney stones with shock waves is now available to Stanford urology clinic patients through a unique collaboration with the Los Gatos-based Northern California Kidney Stone Center.

The center was established nearly a year ago by Stanford medical school alumni Drs. Kersten Kraft and Robert Dale and operates under the medical direction of Stanford urology professor Dr. Duncan Govan.

The physicians at the center, the only facility of its kind not located in a hospital, have blasted kidney stones using extracorporeal shock wave lithotripsy in more than 550 patients since it opened.

Kidney stones, most commonly composed of calcium deposits, affect about one of every 10 American adults. If the stones are small enough, the body eliminates them along with urine. For as many as 30 percent of those who have kidney stones, however, this does not happen. Too big to pass through the uretha, the stones can be a source of infection, obstruction and extreme pain, Dale explained.

Until now, physicians have had to surgically remove kidney stones, a procedure that entails prolonged hospitalization and recuperation times for the patients. With lithotripsy however, patients recline in a tub of warm water instead of laying on an operating table. The non-invasive procedure takes about an hour, and a few days later most patients are back to work and their regular activities.

"People want to eliminate kidney stones mostly because of the pain they're causing, or the fear of it," Dale said. "Some professionals, such as pilots, are not allowed to work if they have kidney stones." The pain is so intense, he explained, it might compromise their ability to fly.

The outpatient facility enables most patients to save time and money by avoiding hospitalization, Kraft said. Even so, the cost of the treatment is upwards of $7,000. In establishing the facility, the physicians wanted to create a center that physicians from all hospitals in the area could send patients to rather than limit access by having the machine in a specific hospital. The lithotripter machine is expensive--nearly $2 million for purchase and installation--and they saw no need for its unnecessary proliferation.

The center attracts patients from all over the region and bordering states. Stanford urology residents train there as well.

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To undergo treatment, patients under general anesthesia are immersed in the warm bath in a reclining position. An electrode on the bottom of the tub is responsible for emitting sparks that cause the shock waves. Physicians can precisely pinpoint the location of the kidney stones with the aid of X rays and then position the patients so that the stones are in direct line of the force of the shock waves. Up to 3,000 shock waves are produced during a treatment, each passing harmlessly through tissue to unleash its force on the stones. Physicians can watch computer screens that show the stones being shattered into fine sand-like particles.

"Patients are put under general anesthesia because the procedure is very painful," Kraft said. "Imagine being slapped on your back as hard as possible thousands of times. That's what it would feel like."

But, other than being bruised by the "slaps," many patients experience no side effects. After waking up from the anesthesia, which takes an hour or two, patients can rest at home for a couple of days and then resume regular activities. An estimated 80 percent of the patients need only one treatment to rid them of their stones.

"We found that 50 percent of the patients have no pain following lithotripsy," Kraft said. "About 25 percent experience minor pain and another 25 percent experience major pain."

About 20 percent of the patients, he continued, need a brief hospitalization following treatment. Complications can arise from the anesthesia, or if the patient has only one functioning kidney, other health problems such as asthma or heart disease, or if the stones were particularly complex. Nonetheless, the physicians feel they have a pretty good track record."After all, this is an operation," Kraft emphasized.

Kraft and Dale began researching lithotripsy after they heard a speaker from Germany describe the technique at a medical meeting in 1981. After the Federal Food and Drug Administration approved the lithotripter for import into the United States in 1984, they started vying for a machine, all of which they assumed would go to academic medical centers. Dr. Thomas Stamey, head of Stanford's urology division, lent his support to their efforts and to seal the relationship. Govan was appointed medical director. Dr. George Duecker, another Stanford alumnus, also joined the team. When the German manufacturer selected the first 10 groups to purchase a lithotripter, the center was the only one named in Northern California (the only other machine in California went to University of California, Los Angeles).

Since then, University of California, San Francisco, and Los Gatos Community Hospital have purchased lithotripters. But, Kraft said, "there's something to be said for being the first."

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STANFORD'S KEY ROLE IN STATE SCREENING PROGRAM FOR PREGNANT WOMEN

STANFORD—

The state of California is about to start a major new program to screen pregnant women for signs of neural tube defects in their fetuses, and Stanford University Medical Center will play a key role in the program.

Neural tube defects, abnormalities of the spine and skull that can cause severe lifelong medical problems or result in death in infancy, are present in approximately 1 in 1,000 births. They can be detected about 85 percent of the time by a simple test to determine the level of alpha fetoprotein in the mother's blood.

California will start a statewide campaign in the next two or three weeks with the goal of making the screening available to all women in the state between the 15th and 20th week of pregnancy.

Stanford's role in the campaign is twofold:

- It is the headquarters of the genetic counselors coordinating the program in the five counties of Santa Clara, Santa Cruz, Monterey, San Benito and San Luis Obispo.
- It will be one of the diagnostic centers for follow-up procedures necessary if the blood tests are positive (a positive blood test is not a certain diagnosis of neural tube defects).

Although pilot programs of alpha fetoprotein screening have been conducted in other states, California's is the largest so far in the United States. It is to be offered to all pregnant women in the state, but participation is voluntary.

The screening fee is $40, which will be paid by most medical insurance plans and MediCal. That will take care of the initial blood test, which can be taken in a clinician's office, and it will also pay for any further authorized tests—such as amniocentesis or ultrasound—that might be necessary at diagnostic centers such as Stanford. The program is designed to be self-supporting and no tax money will be involved.

Blood samples will be sent to one of several large laboratories throughout the state and the results will be returned to the clinician. In about 92 percent of the cases, the results will indicate no problem. But even in the cases where there is a positive result, it doesn't necessarily mean a neural tube defect. It merely means the woman will have to undergo repeat testing for alpha fetoprotein and possibly ultrasound or amniocentesis.

Cindy Soliday is the coordinator of the program operating out of the genetic counseling clinic of the department of gynecology and obstetrics of the Stanford Medical Center. She emphasized that the test is not 100 percent accurate as far as negative results go, either. "Patients really need to understand," she said, "that if they take the blood test and they get back a normal result, it's not necessarily guaranteed that there's not a neural tube defect because there is a false negative rate."

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If the blood test and further tests with ultrasound and amniocentisis do show a neural tube defect, parents are faced with an agonizing decision. About half of neural tube defects involve anencephaly, which means the incomplete formation of brain and skull; almost half involve spina bifida, defective closure of the spinal cord encasement; and about 5 percent involve encephalocele, a bony defect of the skull that can be accompanied by brain involvement.

At that point, a decision on whether to terminate or continue the pregnancy is left entirely up to the parents, but at least they will be aware of the problem before birth.

There were 435,000 births in California in 1983, the last year for which figures are available. On the basis of 1 in 1,000 being neural tube defects, that means the testing program would detect approximately 435 fetuses with the defect if all the pregnant women in the state could be included in the program.

Soliday said that sometimes the test will pick up other birth defects, such as Down's Syndrome, but most abnormalities of that order will not be detected.

Up to now Soliday and Linda Whipperman, who is also working out of Stanford under a state grant setting up the program, have been concentrating on informing doctors and hospital employees in their five-county area about the program. But the state will soon be ready to begin educating the public and they will help in the program of information and education.

Dr. Luigi Luzzatti and Dr. James E. Ferguson II are co-directors of the screening program at Stanford.

Once the program is under way, Soliday said, she will monitor the results in her five-county area. Although the laboratories will return test results directly to the doctors and hospitals, Soliday will be hooked up to the state system by computer and will get a list of the positive results in her area.

"My responsibility will be to call the clinician and inform him or her in advance of the written notification so they can be timely in recommending follow-up procedures," she said. "Then we can help the physician or midwife or whomever's case it is with referrals, getting them hooked up to the right places, answering patients' questions if necessary."

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LEACH APPOINTED CHAIRMAN OF FRIENDS OF RADIOLOGY

STANFORD—

Frank Leach, a leader in the corporate community and resident of Woodside, has been appointed chairman of Stanford University Medical Center's Friends of Radiology.

Leach, chairman of Pollock Financial Corporation and Acme Fixture Company, began his new responsibilities Feb. 19. He succeeds Keith Erdman, chairman of the philanthropic organization since 1978.

The group, which includes about 3,500 members nationwide, raises as much as $500,000 each year to help support the research and clinical activities of Stanford's radiology department. Current projects include raising $1 million for a magnetic resonance imaging machine and funding cancer research by Stanford faculty.

Leach, who was successfully treated at Stanford for cancer, has been actively involved with the group since 1983. One of his goals as chairman, he says, is to continue to broaden the membership of the group. "It's especially important to continue our support in this time of funding cutbacks," he said.

"We are fortunate to have someone with his leadership position to call upon," said department chairman Dr. Malcolm Bagshaw. "With Leach serving as chairman, the Friends of Radiology will be in good hands."

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ALCOHOLICS NEED INDIVIDUALIZED TREATMENT, RESEARCHERS SAY

STANFORD—

The treatment of alcoholism must be more flexible than in the past and must be measured carefully for effectiveness, according to the co-directors of Stanford's new alcohol and drug treatment center.

Dr. Robert A. Matano and Dr. William Hazle, who structured Stanford's recent second annual conference on alcoholism around that theme, have built Stanford's new unit on those principles as well.

Already accepting outpatients, the Stanford unit features short-term detoxification and long-term, well-organized outpatient counseling and medical care. Official opening of the unit, a joint arrangement between the hospital and the department of psychiatry, is expected in about a month.

"We're seeing that the cookie cutter approach of the past may not have been as effective," said Matano, psychologist and program director of the Stanford center.

Alcohol treatment programs previously have been shaped more by reimbursement policies than by medicine, Matano maintained.

"The treatment of alcoholism currently lacks the core scientific base common to other areas of medicine," agreed Hazle, the psychiatrist who is medical director of Stanford's alcohol clinic,

As a social disgrace, alcoholism was shunned by mainline society—including medicine. Treatment of the disease was left to organizations such as Alcoholics Anonymous and the Salvation Army, Hazel explained, "and only now is the science beginning to catch up."

Statistics presented during the day-long conference "Evaluating the Effectiveness of Alcohol and Drug Treatment" on Feb. 14 supported the Stanford researchers' views.

"We need to realize that (patients') life context affects everything," Dr. John Finney told the 140 physicians, therapists, and employee assistance personnel attending the Stanford conference.

Family status, work settings, life stresses, socio-demographic factors and personality all affect treatment outcome and must be taken into account, said Finney, a research associate in the department of psychiatry and behavioral sciences at the Veterans' Administration Medical Center in Palo Alto.

"We need a more differentiated view of treatment," he said, stressing that many factors must be monitored and recorded in order to evaluate programs seeking to rehabilitate alcoholics.

Dr. Joseph Frawley, medical director of the Schick Shadel Hospital in southern California, agreed.

"Before we can establish treatment," he said, "we have to come to a prognostic idea of how well an individual will do."

"Knowing the reasonable outcome is a part of the standard treatment of any disease," including alcoholism, he continued.

Drawing parallels between treating an alcoholic and rehabilitating a patient who has had a stroke, he called for greater precision in recording alcohol-related complications as an aid to patients' recovery.

Gauging a patient's alcohol consumption is tricky, but necessary, said Dr. Lorraine Midanik, assistant professor at the University of California, Berkeley's school of social welfare.

Midanik urged those who treat alcoholics to try to determine the individual's drinking pattern.

"Don't ask only what quantity they drink," she said,"but how it affects the person's life." More accurate questions, such as asking about the most alcohol consumed in a single incident and the frequency of drinking, will help establish a pattern, Midanik stated.

But predicting the damage alcohol will do is difficult, observed Dr. Kevin Olden as he detailed the impact of medical problems on the recovery process. Amounts that cripple some people may leave others virtually unscathed.

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For example, neither nutritional status, drinking patterns nor type of alcohol abused affect development of alcoholic cirrhosis, noted Olden, medical director of the Pacific Recovery Center.

Cirrhosis, the most common medical complication of alcohol abuse, is irreversible damage to the liver. This form of liver damage often accumulates without warning until it is deadly, and is almost always attributable to substance abuse.

"Alcoholic cirrhosis could well be the leading cause of death in the future," Olden warned, especially "as we continue to make inroads against heart disease and cancer."

Accidents, homicide and other traumatic events are another major cause of death in alcoholics, especially in young abusers who have not yet developed other medical problems. A history of repeated accidents should prompt physicians to ask about substance abuse, Olden stated.

Dr. Stephanie Brown, program consultant to Stanford's Alcohol Clinic, took that thought even further. Every therapist and physician should assume alcoholism in each patient unless it's ruled out, she said.

"You must be looking to discover whether alcohol has become the major, centralizing factor in a patient's—or family's—life."

In order to recover, alcoholics must hit bottom and undergo a "basic change in their core identity," she said as she explained her new model illustrating the stages of alcoholism and recovery.

Recovery is an untidy process, she stressed. Alcoholics will go through certain stages as they recover, but the process is full of relapses and advances. "There are no formulas here," she admitted.

Therapists—historically opposed to the spiritual aspect of Alcoholics Anonymous (AA)—must accept and support AA's methods, according to Brown. Many alcoholics want traditional psychotherapy but fear that therapists will strip away or undercut their AA program and spirituality. Therapists, patients and AA must act as a partnership, Brown maintained.

Hostility between AA and medicine springs from differences in their wording, suggested Dr. Tony Radcliffe. "It's like interpreting two languages," he said, crediting Brown with presenting a successful translation.

Radcliffe established a substance abuse program for the Kaiser health maintenance organization in Southern California in 1979. Treatment for addiction to any mind-altering drug, including cigarettes, is available through the Kaiser unit.

The Kaiser program has seen the median age of patients drop from 57 to 33 years old in a seven-year period. Patients who have abused more than one drug are also more common, Radcliffe noted.

America is one of the top three nations in the world with a per capita problem with mind-altering drugs, Radcliffe stated.

Experts estimate that there are more than 14 million alcoholics in America. Those individuals directly affect at least 56 million more, however, escalating alcohol's already heavy toll.

"Alcoholics don't have relationships: they take hostages," Dr. Timothy Cermak said dryly.

Cermak, himself the child of an alcoholic, studied at Stanford under Stephanie Brown, a pioneer in treating adult children of alcoholics. Now an assistant clinical professor of psychiatry at the University of California, San Francisco, Cermak also is founder of a national organization for adult children of alcoholics.

Problems may lie hidden for years and may masquerade as other disorders, Cermak cautioned, encouraging therapists to ask patients about substance-abusing parents. Adult children from substance abusing homes are more likely to seek therapy than the general public, he noted.

Those with alcoholic parents may show signs of post-traumatic stress similar to that suffered by Vietnam veterans, according to Cermak. A great rupture between these individual's feelings and their consciousnesses has occurred and must be brought out in order to be healed.

Therapists must use different approaches with alcoholics themselves than with their adult children, Cermak recommended.

Counseling for adult children of alcoholics is available through Stanford's alcohol clinic. Phone (415) 497-6682 or 6683.

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A SPECIAL KIND OF NURSING CARE HELPS A SPECIAL PATIENT

STANFORD—

Al Perez had his birthday party last week in a room at the East Intensive Care Unit at Stanford University Hospital—a hospital room decorated with 120 balloons and featuring the smell of Chinese food.

It was a hastily arranged party, because the nurses who organized it had just learned that Perez was being transferred the next day to Santa Clara Valley Medical Center in San Jose. Originally, the party had been scheduled for Feb. 19, Perez's 32nd birthday, and it was to be a joint celebration with his wife, Maria, and with the three primary care nurses who have been at Perez's side almost constantly since he entered Stanford last September. All of them, coincidentally, share February as a birthday month.

Perez smiled a lot at his birthday party, but he couldn't do much more to show his appreciation. The accident that brought him to Stanford last September crushed his spinal cord at the neck and he has been a quadriplegic ever since.

However, he has made progress. At first, it was feared he wouldn't live—or wouldn't want to live; that his mind or vision might be impaired; or that he wouldn't be able to eat.

All of those obstacles have been overcome. He has survived, he has made it clear to his wife that he wants to live, his mind and vision are clear and he can eat anything he wants.

That progress is a source of pride and joy to the three primary care nurses who have almost become family members of Perez during his stay at Stanford. The nurses—Mary Hafey, Ray Martel and Linda Thompson—all feel certain that Perez has been helped by the fact that he has had familiar faces taking care of him day after day.

"We think that having the same nurse over and over again and doing the same things tends to help a person," said Hafey.

"When you do primary care the big thing is that you oversee that all the things he needs are done appropriately to his liking," Martel said. "But the biggest thing is psycho-social; we are really his support for the day."

Thompson elaborated on that: "We were able to get close enough to him to make a difference. He was able to open up to us."

It wasn't just Perez; his entire family needed support. As Thompson said: "You're not just treating a patient in crisis. You're treating a whole family in crisis."

In Perez's case, that was a large family indeed. He is one of 11 brothers and sisters and his parents are both still living. Then there are his wife and three young children.

Most of the family members live in San Jose, where Perez has his home. They had great difficulty accepting his accident, because he had been exceptionally vigorous and active before. He had worked as a teacher and insurance salesman and at one time had been a member of the San Jose Police Department. He also had been an active soccer player and was a volunteer counselor for youths in drug rehabilitation programs.

"They were always hoping for a miracle," Hafey said of the Perez family. "It was a long time before they were convinced that he would never move again."

Martel sees the miracle as "not necessarily being that he walk and that he's up but rather that Al be given a chance to be alive, which was really in question when he arrived. And through nursing and the work that we did we brought the world to him or him to the world so that he is alive and he can communicate and he can do some things. Al can still function with his mind and that's the big thing."

Now, Hafey said, the Perez family members "are like good friends, almost like family." And Martel said, "The family has fed back to us that we are the miracle they were looking for. That's the best reward you can get on the job, to know that these people feel good about the nurses that are taking care of him."

It was far more than just "taking care," of course. For example, there was Christmas, as Hafey described it:

"We asked if he'd like to get Maria something for Christmas, and brought in some catalogs and magazines for him to look at. He knew right away what he wanted; he wanted to give her a necklace with a heart and a little diamond in it.

"So we took up a collection and we were able to get her necklace. On Christmas morning we put it in his hand. When she came in, he mouthed the words to her, 'touch my hand.' She couldn't understand him at first so he had to use his alphabet board to write it out. Then finally she got the point and touched his hand and then she saw this little box. She was very touched."

The alphabet board mentioned in that account is a device the nurses have worked out with Perez to help him communicate. They hold up the lines of letters, he opens his mouth at the correct letter and they write it down. The board is set up in lines and Perez has the lines memorized, so the system can be reasonably fast.

All of the nurses have many touching stories to recount involving the Perez family. Hafey recalls hearing one of his daughters tell Perez: "Daddy, we need you to come home because we're afraid. The other night there was a noise and we didn't know what it was and we wished that our dad was there. We need you to protect us."

Those strong family ties undoubtedly have helped Perez's recovery and they should help at Valley Medical Center, where he and the family will undergo rehabilitation training in preparation for his return home.

At home, of course, he will need even more help from his family members as they fill the roles now handled by the nurses.

Hafey, Martel and Thompson have a total of about 40 years in nursing, almost 20 of them in Stanford's ICU. They all prefer ICU work for the same basic reason: the opportunity for personalized nursing, taking care of the needs of one or two patients and getting involved with them more intensely.

They are all pleased to see Perez ready for the next step in rehabilitation, but they admit to feeling sad at seeing a close friend leave.

And they make it clear that for all the help they gave Perez, they got a lot back in return. As Thompson put it: "Al's been a real inspiration to me. He's a special guy."

alperez--rg1

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$1 MILLION TO SUPPORT NEW MOLECULAR MEDICINE CENTER AND CANCER RESEARCH LAB

STANFORD—

Stanford University has received $1 million from the Agnes Axtell Moule Medical Research Foundation to support the proposed Center for Molecular and Genetic Medicine (CMGM) at Stanford University School of Medicine, according to a report heard February 11 by the Stanford University Board of Trustees.

The $1 million amount is a portion of a bequest to the University valued at a little more than $4 million from the estate of Manley Moule, who died in 1974.

The remaining $3 million in the bequest also has been designated to help build and equip CMGM, which will include a cancer research laboratory to be known as The Agnes Axtell Moule Laboratories for Cancer Biology Research, the report said.

Moule, who was a 1917 graduate of Stanford, intended the funds to be used for medical research and/or building and equipping a medical research laboratory.

Prior to his death, he was involved in real estate with the W. Ross Campbell Co. in Los Angeles. The new laboratory within CMGM will be a memorial to his mother, who died of cancer in Palo Alto in 1939.

The Moule Medical Research Foundation has held the Moule bequest to the University since 1975. Income from the endowment has funded research fellowships for junior faculty members at the Medical School.

2-19-86 —30— moule--LH10

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GONDA APPOINTED TO HOWARD ROBBINS PROFESSORSHIP IN PSYCHIATRY

STANFORD—

Dr. Thomas A. Gonda was appointed The Howard C. Robbins Professor of Psychiatry and Behavioral Sciences in the School of Medicine by the Stanford University board of trustees at its February 11 meeting.

The Howard C. Robbins Professorship, established in 1985 by a gift from an anonymous donor, honors Howard C. Robbins, M.D., a Cornell University Medical School graduate who joined the Stanford Medical School psychiatry department's clinical faculty in 1962.

Gonda, who has been a Stanford faculty member for more than 30 years, has served as professor and chairman of the psychiatry department since 1974.

He is widely recognized for scholarly research relating to the link between behavior and the central nervous system, medical jurisprudence, pain and its relation to terminal illness, and psychological and social issues related to treatment of the dying and the bereaved.

Gonda earned both his bachelor's and medical degrees from Stanford University in the 1940s, joined the faculty in 1953, and became full professor in 1965.

In addition to his long tenure as psychiatry department chairman, Gonda has held several other key administrative posts at the medical center, including associate dean of the medical school from 1967-74, and director of Stanford University Hospital from 1968-74.

He is the recipient of a number of awards including a 1983 Life Fellowship Medal from the American Psychiatric Association, and a 1984 Outstanding Achievement Award from the Northern California Psychiatric Society.

His widely praised 1984 book, *Dying Dignified: the Health Professional's Guide to Care*, was named the outstanding book for nurses by *Nursing '84* magazine and "book of the year" by the *American Journal of Nursing*.

Dr. Robbins, who is now clinical associate professor emeritus, graduated from Ursinus College in 1933, received an M.A. in psychology from Columbia University in 1936 and gained his M.D. from Cornell in 1940. He served as a flight surgeon in the Army Air Force from 1941 to 1945.

As a tribute to Dr. Robbins, the professorship is to be held by a member of the Department of Psychiatry and Behavioral Sciences who is engaged in studies to advance the field of psychiatry.

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RAYCHEM'S HALPERIN NAMED TO STANFORD HOSPITAL BOARD

STANFORD—

Robert M. Halperin, president and chief operating officer of Raychem Corp. of Menlo Park, has been appointed to the Stanford University Hospital Board of Directors.

He was selected by the general members of the Hospital corporation to complete the unexpired term of Nancy Barry Munger. The term runs until Dec. 31, 1987.

The 18-member hospital board is comprised of community, medical and lay leaders as well as university faculty and administrators. Twelve of the members are appointed by the general members of the Hospital corporation, who also are trustees of the university.

Halperin, 57, joined Raychem in mid-1957, a few months after the company was founded. He is also a member of the board of directors of Molecular Design, Ltd., a trustee of the University of Chicago and chairman of the university's visiting committee to the division of physical sciences. He is a member of the Stanford University Athletic Board.

A native of Chicago, Halperin earned a bachelor's degree in liberal arts from the University of Chicago and another in mechanical engineering from Cornell University, both in 1949. He received a master's degree in business administration from Harvard University in 1952.

He was a lieutenant in the U.S. Air Force during the Korean War.

2-18-86 —30— halperin--RG1

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STANFORD HOSPITAL BEGINS FUNCTIONING AS TRAUMA CENTER

STANFORD—

Stanford University Hospital began operation as a trauma center last Saturday morning, eight months after the hospital began preparations for the role.

An official contract designating the hospital as one of three Santa Clara County trauma centers was signed Tuesday, Feb. 11, after hospital officials and Santa Clara County supervisors agreed on contract language.

Approval of the contract had been considered just a formality once Stanford was approved for the trauma center designation by an evaluation team in December.

San Jose Hospital and Valley Medical Center have also been approved as trauma centers for the county, meaning that critically injured patients throughout the county will be brought to one of the three hospitals. County officials estimate there are about 1,300 patients who require such treatment each year.

Concentration of trauma treatment services in a limited number of hospitals is expected to save both lives and money. The trauma centers will get enough patients to make the extra costs of trauma treatment financially feasible and the trauma teams will see enough critically injured patients to maintain their skills.

It has been estimated that trauma centers would have prevented 73 traffic deaths in the Bay Area in one year.

2-18-86 —30— trauma3--RG1

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PANEL TO DISCUSS MEETING MEDICAL NEEDS OF POOR

STANFORD—

Three directors of large medical organizations and a California state senator with a wide background in mental health will discuss "New Challenges for Public Service: Meeting the Medical Needs of the Poor" at a workshop Saturday, Feb. 22, at Stanford University.

The workshop, scheduled at 1:45 p.m. in the Graduate School of Business, is part of a day-long conference called "You Can Make a Difference: Private Initiatives and Public Responsibilities."

Panelists at the medical needs workshop will focus debate on a topic paragraph:

"For two decades public concern for equal access to medical services for all citizens has dominated changes in public policy. When Medicaid passed in California, the theme was 'Mainstream Medical Care' and the elimination of the county hospital or 'dual level of care system.' Cutbacks in health services in recent years are forcing the poor back into the county hospitals and placing other segments of society—among them the elderly—at financial and clinical risk. Can the health system address these questions or should the answers be given by the total society?"

The workshop panelists are:

State Sen. Dan McCorquodale, D-San Jose, a former member of the Santa Clara County Board of Supervisors. He chairs the Senate Subcommittee on Mental Health, Developmental Disabilities and Genetic Diseases and is a member of the Health and Human Services Committee and the Subcommittee on Health Care Cost Management.

Carol B. Emmott, executive director of the California Association of Public Hospitals, an organization headquartered in San Mateo that includes 22 of the state's largest county hospitals. She has been deputy director for policy and program support in the San Francisco Health Department and a special assistant in the U.S. Department of Health, Education and Welfare.

Dr. Ralph W. Schaffarzick of Burlingame, senior vice president and medical director of Blue Shield of California. He received his bachelor's degree and his M.D. from Stanford and is a clinical professor of medicine at the Stanford School of Medicine. He has served on a dozen state and local medical advisory committees.

Clifford U. Portis, executive/project director of the San Francisco Medical Center Outpatient Improvement Program, Inc. He directs the activities of three community health centers providing primary care to approximately 75,000 persons. For six years prior to accepting his present job, he was assistant director of hospitals and clinics for the University of California-San Francisco.

2-18-86 —30— workshop--RG1

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HUMAN GENE THERAPY MAY BE ON THE HORIZON BUT IT IS NOT IMMINENT, SCIENTISTS SAY

STANFORD—

The dramatic swing between optimism and pessimism — among scientists' attitudes towards human gene therapy — took a turn for the latter at an all day media round table on gene therapy held at Stanford Thursday, Feb. 13.

Human gene therapy is a technique for treating genetic diseases, such as diabetes and sickle-cell anemia. It involves transplantation of good genes to do the work of defective ones.

Recent experiments in animals have proved to scientists that, in theory, gene therapy is simple, but in practice it is very complex and it may take weeks, months, or even years before it will be a viable treatment for human disease, according to Paul Berg, Stanford professor of biochemistry and a 1980 Nobel Laureate, who gave the opening comments at the conferece.

The purpose of the conference, sponsored by Scientists' Institute for Public Information, the American Association for the Advancement of Science, and the Association of American Universities, was to inform journalists about human gene therapy. The morning session was devoted to the science of gene therapy while the afternoon session covered ethics and policy of gene therapy.

Previous success in experiments on insects and mice had made scientists optimistic, but more recent experiments in monkeys show that there maybe something that turns off foreign genes in live animal experiments, that is not seen in test tube experiments.

This new stumbling block has made some scientists more pessimistic, according to W. French Anderson, chief of the Laboratory of Molecular Hematology at the National Heart, Lung and Blood Institute.

In Berg's lab, researchers "are trying to repair the old gene by introducing the normal gene sequence and trying to promote repair of the defective gene." This is the situation that is closest to normal, he said.

The scientists made it clear that the gene therapy they were discussing included manipulation of the genes in somatic (body) cells, not germ line (reproductive) cells which effect future generations.

Gene therapy today is only at experimental stages and is not federally approved for use on humans, but many scientists see its potential for curing the 3-4,000 known genetic diseases of which there are currently no cures and only poor treatments.

"With this marriage of molecular biology and medicine, something is going to be born and 'this child' is going to be a genetic attack at disease, something that is conceptually new and in a way revolutionary," said Theodore Friedmann, professor of pediatrics at University of California at San Diego.

But according to David Cox, associate professor of pediatrics at University of California at San Francisco, in order for gene therapy to be approved for use on humans, in general, "the probable benefits have to outweigh the probable risks."

A more imminent "reality" of "modern gene technology, is the ability to isolate genes," for early diagnosis of genetic diseases, according to Berg.

With some diseases, based on DNA analysis "it is possible to determine if an individual has a normal, abnormal, or modified form of any particular gene that has been isolated and identified, according to Berg. It can be done "at a very early stage in development, perhaps as early as the 8 week of pregnancy," he said.

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Thus, with some genetic diseases "there is at least one option of treatment and that is to abort the fetus," he said. Given a choice of raising a child with a severe congenital disease or aborting a fetus and conceiving another, it is Berg's impression that most people would elect abortion, he said.

However, according to Nancy Wexler, from the Hereditary Disease Foundation, "some people say my brother has that disease, therefore how could I abort 'my brother,' but I also hear kids saying I wish I had never been born."

"It is not theoretical anymore, everybody is going to have to face these questions," she said.

If funding does not continue for research we will be stuck with the consequences of "the power to predict, but not the power to prevent (disease); we have a certain responsibility to carry on research," she said.

But, "funds for research are becoming increasingly constricted at the very time that people are having the best ideas," she said.

Berg said, currently "there is an enormous frenzied activity (in research) all over the world in trying to fill in the details about how all the genes work."

"All human disease in fact has a genetic component; a chromosomal abnormality is a genetic disease," he said. For "the largest number of (diseases) we don't know either the genes or the number of genes that are involved in producing a particular disease symptomatology."

"The next step for ultimately doing (gene therapy) in patients is to go into primates and primate cells and to chose a human disease that is the most likely candidate," said Anderson. And ADA (adenosine deaminase) deficiency is the chosen disease, he said.

This rare disease is brought on by lack of an enzyme which leads to severe disabling of the body's immune system, and death by infection around the age of two, Anderson said.

Scientists are currently working on developing gene therapy to cure ADA deficiency because it is a disease caused by a single gene defect and it occurs in the blood which is more accessible to doctors than a kindney or a liver is, for example.

"If gene therapy doesn't work for ADA deficiency it is probably not going to work for anything," Anderson said.

"Now, the most likely place for advances (in treatment of genetic diseases) is in organ transplant," he said. ADA deficiency can be cured through bone marrow transplant if there is perfect tissue match between graft and host, he said.

Friedmann said, "we are all convinced that the science of tissue transplantation is on the verge of rather major improvements and developments," which could make bone marrow transplants the treatment of choice.

Yvonne Baskin, free-lance science writer, said that people's apprehensions about gene therapy are sort of "a mystical feeling about genes."

And, according to Anderson people's apprehensions are valid because "we don't really know what makes us human" and people think that scientists may be interfering with something that they don't really know about, he said.

Other conference participants include: Robert Cook-Deegan, Office of Technology Assessment, U.S. Congress; Eric Jungst, University of California at San Francisco division of medical ethics; moderator Laurie Garrett, science reporter, National Public Radio; Dave Perlman, associate editor and science editor at the San Francisco Chronicle; James Risser, director of the John S. Knight Fellowship Program at Stanford; and Knight fellow Linda Herskowitz, on leave from the Philadelphia Inquirer.

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EXECUTIVES PLOT STRATEGIES FOR MANAGING CORPORATE HEALTH CARE COSTS

STANFORD—

Bay Area corporations are likely to attempt to have employees share more of the costs of health care in the future, and they'll stress "wellness" programs aimed at keeping employees healthy.

At least, those two areas emerged as prime considerations for reducing health care costs in strategies devised by some 40 executives attending a symposium co-sponsored by Saga Corp. and Stanford University Hospital.

The day-long symposium, held at Saga Thursday, Feb. 13, emphasized a "partnership approach" to the problem of rising medical costs. After health care authorities addressed several aspects of the problem, the participants broke up into small groups to work on the cost-management strategies at the end of the program.

Since the participants were just making suggestions without any constraints as to practicality, there were a great many ideas for controlling health care costs. But the wellness and cost-sharing themes turned up repeatedly. Other popular ideas were for better communications with employees—and with management—and for putting limits on the amount of treatment an employee's dependents could receive for drug-related problems.

The participants were also asked to pinpoint areas in which health care cost management has made progress and areas in which there is a lot of room for improvement.

Most agreed that there has been a considerable improvement in public awareness of the rising costs and a realization that something must be done. They also thought the growth of alternative delivery systems such as health maintenance organizations was beneficial.

Among the major continuing problems, in the views of the participants, are the oversupplies—or poor distribution— of physicians and of hospital beds.

Speakers earlier in the day included Sheldon King, president and chief executive officer of Stanford Hospital; William Arnold, executive vice president and chief operating officer of the hospital; Daniel Brunner, president of Affordable Health Care Concepts of Sacramento; and Chuck Fuhrman, manager of human resources for the White Paper Division of Boise Cascade.

King discussed "The Reality of Health Care Costs Today," pointing out that the health care field is in for an extended period of no growth or very limited growth.

He also noted that "a return to a second system of health care for the poor is emerging" because of government limits on medical aid.

Despite the current problems, King said, hospitals in general continue to make money, with their net income up approximately two percent. But he noted that there are regional differences in hospital situations and those in some areas, particularly smaller hospitals, "are in real difficulty."

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Arnold outlined some of the steps Stanford Hospital is taking to become more competitive. After the budget cuts this spring, he said, "we will emerge leaner and much more aggressive in terms of the market place."

Discussing the downsizing, he said, "We're writing the book ourselves on how to downsize a teaching hospital."

Arnold also noted the governmental pressure to cut health care costs is producing some inequities in care and said that although Stanford is facing the issue of cost management squarely, "we aren't going to lose our ethical compass along the way."

Brunner said that up until recently, there really hasn't been any system of health care cost management. The system "has not been driven by normal economic factors," he said, and the providers have simply passed along charges to payers. Employers, as the payers, have felt it necessary to provide the necessities of life or were pressured into doing so. Employees have had the expectation of "totally unrestrained use of the health care system."

All three—providers, employers and employees—have been involved with bringing the system to the point it is, Brunner said, and all three must change their roles to reflect the new realities of cost management.

Fuhrman said there are "no quick fixes, no universal solution" to the problems of health care, but noted that the kind of approach being undertaken at the symposium was very encouraging.

"There are a number of places in the country where this kind of conversation would not be possible," he said. "A year ago, this kind of conversation wasn't likely even here in California."

At the end of the symposium, most of the participants indicated they woulc like to attend similar meetings in the future and Saga and Stanford officials were accepting suggestions for subjects that might be covered at future events.

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EVEN LOW-INTENSITY EXERCISE IMPROVES AEROBIC FITNESS, STANFORD STUDY SHOWS

STANFORD—

Low-intensity exercise—a brisk walk, for example—is effective in improving the aerobic fitness of middle-aged, healthy, sedentary men, a Stanford University Medical School study has found.

This should be encouraging news for men in the 50-and-older age group, said Dr. Robert DeBusk, professor of cardiology. More than 90 percent who fall into this category do not exercise regularly because they're reluctant to embark on a strenuous exercise program. Their reasons include lack of time to participate in organized exercise programs and fear of injury or cardiovascular problems.

But now, they have no more excuses. In a study reported in the February issue of *American Journal of Cardiology*, DeBusk and his team found that after 12 weeks of low-intensity, home-based exercise, participants' aerobic fitness levels, measured by their peak oxygen consumption, improved eight percent.

Although they did not improve as much as their counterparts who exercised at high intensity for a 17 percent aerobic fitness improvement, the men far exceeded the control group of participants who did not exercise and did not benefit at all.

"We're directing this information not at younger active people but at a very large group of older inactive people who need to realize they can fit exercise into their daily schedules," DeBusk said.

A group of 64 healthy but sedentary middle-aged men participated in the study. Of the 64 men, 21 trained at a relatively low intensity of between 60 and 72 percent of the peak heart rates they had achieved during treadmill exercise testing. Another 23 men exercised at a relatively high intensity of between 75 and 87 percent of their peak heart rates. The remaining 20 men did not exercise during the course of the study.

The exercising men walked or jogged at home five times a week with no direct supervision for the duration of the study. Their exercise intensity was periodically measured by a computerized device, called a Vitalog, small enough to wear on a belt. The participants filled out daily reports about their physical activity, and received occasional phone calls of encouragement from the researchers. More than 90 percent of study participants kept up with their home-based exercise, proof that organized group programs are not the only way to ensure regular exercise and that home-based exercise is an viable alternative.

Results showed no differences in the resting heart rates of participants. But the aerobic fitness level of the men improved at a rate directly related to the intensity of their exercise.

The study "demonstrates that even relatively low intensity physical activity performed at home significantly augments functional capacity in normal sedentary middle-aged men," the researchers concluded. For many physicians who hesitate to promote exercise for older patients because of concern about the risks and discomfort, they added, low-intensity exercise provides an attractive option.

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(Editors: Photo available on request if not included.)

EDUCATION AND EXERCISE HELP STANFORD HOSPITAL HEART PATIENTS GET AN EARLY START ON RECOVERY

STANFORD—

On a Monday last November Albert Ingram was admitted to Stanford University Hospital's coronary care unit with a heart attack.

Within 72 hours, he was walking down the hall.

This week, only three months later, Ingram returns to work after racking up nearly a hundred miles of walking in the new exercise regimen that has given him a headstart on regaining good health.

Ingram was a participant in a cardiac rehabilitation program at Stanford University Hospital (SUH) that helps heart patients learn to take better care of themselves.

On Friday, Feb. 14, Valentine's Day, between 10 a.m. and 2 p.m., staff members involved in the program will sponsor an exhibit in the W1B waiting area of SUH to mark the second anniversary of the program's start.

In the two years since the program began, more than 500 patients with heart attacks, heart arrhythmias and other cardiac problems have participated with good results, says its coordinator, Denise Myers, R.N..

"A serious and sudden illness such as a heart attack can motivate people to change," explains Myers. "We try to capture that high level of motivation by teaching patients new health-promoting behaviors as early as their first day in the hospital."

Although the idea of encouraging heart patients to adopt better health habits is not new, promoting change from day one in the hospital seems particularly effective, Myers says.

"Positive reinforcement from nursing and medical staff, families and other patients, encourages patients to maintain behavioral changes even after they're discharged," she says.

Myers and two nurse colleagues, Barbara Ellis and Betty Linden, begin at the patient's bedside, where they help explain in everyday language what is wrong with the person's heart and what to expect from treatment.

The nurses use charts, diagrams, three-dimensional models of the heart, and a bedside slide show during the teaching sessions, in which they also provide information about medications, exercise, and diet. Spouses or others close to the patient are encouraged to participate.

The key to the program's effectiveness seems to be that it helps patients gain control of their lives at a very frightening time.

"Many people arrive on the unit terrified that they almost died," Myers explains. "They want to live, they are motivated, but they need the right information, resources, and plans to channel that high level of motivation."

While the patient is hospitalized, rehabilitation team members develop diet and exercise plans with the patient, and also help him learn proper medication schedules. They teach patients how to monitor their exercise levels and how to watch for new symptoms or for unexpected side effects of drugs.

Patients are referred to community services for continuing help. For example, those that want structured exercise programs or help in smoking cessation may join classes after they have left the hospital. For those who need special care or assistance at home, the nurses arrange for help through Stanford Hospital's home care program or other community services.

Patients go home feeling prepared to cope with a new lifestyle. "You have to reorganize your whole life after such a shock to your system," explains former patient Margaret Ayer. "Having the right information when I got home helped me very much."

Myers estimates that about 20 to 25 percent of the patients hospitalized in the coronary care unit and cardiac surveillance unit take part in the program. The patient's physician has to request participation, she notes. Dr. Charles Tucker, a cardiologist who practices at the Menlo Medical Clinic, uses the program frequently and calls it "excellent."

"The more patients understand what has happened to them, the more compliant they are in taking their medications and persisting in positive behavioral changes," Tucker explains.

Encouraging patients to be active partners in their own health care can help them overcome the natural tendency to feel defeated and depressed by their illness, Myers points out. Ivan Sindell, a program graduate, recalls that just three days after leaving intensive care he was doing warm-up exercises. "It was a real lift to the spirit," he says.

But the best effects are the ones that cause lasting change, adds Myers. "We help patients realize that they can actually be healthier after they leave the hospital than they were before they came," she says.

Dr. John Schroeder is the medical director of the program. Other members of the rehabilitation team include dietitian Lillian Tanabe, physical therapist Elizabeth Wright, occupational therapists Kerri Rohrkemper and Liz Bianchi, social worker Jane Zimmerman, discharge planner Liza Taft, and pharmacist Pete Jordan.

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FOUR TO RECEIVE STANFORD HOSPITAL'S DISTINGUISHED SERVICE AWARDS

STANFORD—

Four individuals who have found widely different ways to help hospital patients have been named the 1985 winners of Stanford University Hospital's Distinguished Service Awards.

They are Maria Teresa Asquith, founder of the Mother's Milk Bank in San Jose; Diana Roth of Woodside, founder and chairman of Stanford Hospital's Patient Relations Associates program; Alice Green, who has opened her Palo Alto home to more than 200 out-of-town patients receiving care at Stanford; and Rabbi Sidney Akselrad of Congregation Beth Am in Los Altos, who helped create the hospital's chaplaincy service.

A committee of hospital administrators chaired by Jeanne Kennedy, director of community and patient relations, selected the award winners.

"We're proud to be a hospital that is supported by the community in so many different ways," Kennedy said.

The awards will be presented Feb. 18 in a ceremony sponsored by the hospital board of directors and administration. The presentation will take place at 5:30 p.m. in Fairchild Auditorium at the Stanford Medical Center.

This is the third time the awards have been presented. Previous winners were Kay Clair of the Assistance League of Santa Clara County, driving force behind the outpatient and family housing project now being constructed at 1100 Welch Road near the hospital; and Charles and Rose Jones, owners of Jones Mortuary in East Palo Alto, who have provided free burial service for many infants who died at the hospital.

Brief backgrounds on the 1985 winners:

Maria Teresa Asquith

In 1974, Maria Teresa Asquith was working as a technician for the Transplant Bank of the Institute for Medical Research in San Jose when the plight of a 7-month-old boy who needed mother's milk prompted calls for a milk bank in Santa Clara County. Asquith was asked to set it up, and after a visit to a milk bank operated by Children's Hospital in San Francisco, she did.

"I set it up and prayed," she said, explaining the prayer was for the $20,000 she knew was needed to get the project under way.

The March of Dimes and other community sources provided the money, and 12 years later, the Mother's Milk Bank is an undeniable success. It has supplied more than 400,000 ounces of milk for infants in hospitals throughout the Bay Area and Asquith has been invited to conferences on milk banks sponsored by the Surgeon General of the United States and the National Institutes of Health.

Financially, it's been a rougher road. Although the milk bank now gets some money from United Way as well as from fund-raising activities of the milk bank auxiliary and private donations, Asquith said that "year after year we were on the verge of closing."

But, she emphasized, "nobody was ever turned away because they didn't have the ability to pay" the usual milk processing fee.

There are only two full-time workers at the milk bank—Asquith and a technician. Another technician works part time, and everybody else is a volunteer. That includes 13 volunteer drivers and, of course, the more than 1,600 women who have donated their excess milk to help feed hospitalized infants.

Diana Roth

To Diana Roth, a patient relations associate is "as close to being a professional as you can be without being one."

Members of Stanford's associates undergo a professional training period and they often put in professional-type hours ministering to the needs of hospital patients. Some are on call 24 hours a day. "We've all been called at 2 or 3 in the morning to come over," Roth said.

She was a hospital auxiliary member when she got involved in founding the associates program in 1980 and she has seen the numbers grow to the present complement of 24 on active service.

The associates are actually patient advocates and do anything needed to help patients. That includes helping to clear up any misunderstandings between patients and medical staff, meeting arriving patients, providing lodging and transportation for patients and their families—and sometimes talking over with families crucial decisions on life support systems.

The hours can be long and the work hard, while the monetary rewards are nonexistent. But Diana Roth knows there are a lot of other rewards. "It's one of the most worth-while things I've ever done or will do," she said.

Alice Green

Recently widowed Alice Green was out of state visiting her daughter in the fall of 1977 when she got a telephone call from Stanford Hospital Chaplain Ernle Young. He said he had a young woman at the hospital who wanted to stay in a private home. Would Green take her in for a while?

She would, and did. Now, more than 200 house guests later, she has a home full of memories and the lasting affection of those she has helped.

It's like having a big, extended family, she said, calling a Brazilian medical student who came to Stanford Hospital for cancer treatment "my South American daughter."

Sometimes having an extended family means sharing extra grief. Green recalls the death of a patient whose wife and son were staying with her. "I was up and waiting for them when they came home," she said. "You just have to be able to give a lot of support, comfort and let them cry."

Most of the time, though, the visits to Green's home end happily and the patients return to their own homes. A lot of them keep in touch with Green, and often invite Green to visit their homes. She has accepted on a couple of occasions and is hoping to have the opportunity to accept the invitation to visit the Singapore home of a former patient.

Rabbi Sidney Akselrad

Rabbi Sidney Akselrad has been involved with the chaplaincy service at Stanford Hospital since before it was started in 1974, but he's been involved with the hospital for much longer.

"I've been coming here for 24 years," he said, explaining that when he was appointed to Congregation Beth Am he began visiting Stanford as a volunteer Jewish chaplain because of his experience in hospital visitation in Cincinnati and Detroit.

"No matter where I have served one of my emphases has been hospital visitation," he said. "When people are hospitalized it's one of the most sensitized times of their lives. It's also a time when they most appreciate a visit from a clergyperson."

With that background and his familiarity with Stanford Hospital, Akselrad was a natural choice for the committee of religious leaders that helped create the hospital chaplaincy. "With people of so many different faiths from so many different parts of the world coming to Stanford (for treatment), we felt it was necessary to serve their spiritual needs as well as the physical," he said.

Since the formation of the chaplaincy service in 1974, Akselrad has been a member of the Chaplaincy Advisory Committee and has been active in establishing the Jewish component of the chaplaincy program.

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MEDICAL SCHOOL COURSE UNDERSCORES PERILS OF NUCLEAR ARMS RACE

STANFORD—

"Take a deep breath," Gary Lapid says.

The class watches in awe as the psychiatrist climbs up on a stool, pitcher in hand, and peers over the table with an empty copper container resting on top of it.

"I'll now demonstrate how 18,000 nuclear warheads may sound like when they explode in sequence," Lapid calmly explains. "The beans I have in this pitcher represent the combined nuclear arsenal of the United States and the Soviet Union. It's equal to the firepower of 6,000 World War IIs."

The students gaze at the psychiatrist, then at each other in suspenseful silence.

"I know this is going to be difficult for some of you," Lapid says softly. "I want you to close your eyes as I do this. Then find someone near you. Talk to each other about what you're about to experience."

Lapid takes a bean out of the pitcher. Holding it high above the container, he tells the class, "This represents all of the firepower of World War II--three megatons." He lets it go. The bean ends up at the bottom of the metal container with a resounding clang.

He reaches into the pitcher again. "These beans represent 9 megatons, the weapons of just one Poseidon submarine, enough firepower to destroy over 200 of the Soviets' largest cities," he says. "The Soviets have similar levels of destructive power."

Now Lapid empties the pitcher slowly into the container. Each clang is an imagined nuclear detonation, a giant fireball hotter than the sun, incinerating everything in its path, with devastating winds of more than 550 miles per hour. The process of emptying the pitcher of beans takes about a minute. If it happens in real life, if someone deliberately or accidentally pushes the wrong button, it's the destruction, the end of civilization, Lapid says.

Next, Lapid tells the visibly shaken students to be silent, to ponder what they have just heard and imagined.

Scary stuff? Yes. But it could happen say the physicians who organized this unique one-day course to underscore the perils of the nuclear arms race. "Exploring the physician's role in a nuclear age" was attended by 30 medical students and faculty Saturday in Fairchild Auditorium of the Stanford University School of Medicine.

The course was organized by psychiatrist David Daniels and his colleagues on the regular and voluntary faculty of the departments of medicine, psychiatry and surgery, and the local chapter of Physicians for Social Responsibility. The organizers included John Farquhar, Roland Finston, June Flora, Kate Forrest, Theodore Postol and Ward Trueblood, and two medical students, Stuart Shepherd and Jim Slayton.

Why should such a course be offered? Because with the massive stockpiles of nuclear weapons, serviced by tens of thousands of personnel and an estimated 10 to 20 additional nations obtaining nuclear bombs by 1990, said a handout distributed to the class, you can readily imagine a computer malfunction or human aberration upsetting the balance of a complex system and starting World War III.

Advanced technologies, which now allow one superpower to target another's nuclear missiles in a preemptive strike, have shifted the strategy from the mutual suicide pact that until now was the basis of deterrence to the possibility of fighting a nuclear war to win.

Studies of nuclear war scenarios in the range of 5,000 to 10,000 megaton yields have estimated there would be 750 million immediate deaths from the blast alone, 1.1 billion deaths from the combined effects of blast, fire and radiation and an additional 1.1 billion injuries requiring medical attention.

But Stanford radiology professor Herbert L. Abrams, a fellow at Stanford's Center for International Security and Arms Control, has concluded that a medical response in such a catastrophy would be inadequate. In his study, in which the United States is exposed to 6,559 megatons of nuclear explosives, Abrams wrote that the doctors, nurses and hospitals, because they are located in urban centers, will have perished also during the attack, to say nothing of disruptions in transportation and severe shortages in blood and medical supplies.

To create an understanding of this problem, Trueblood, a clinical assistant professor of surgery, showed slides from his experiences in Vietnam.

"We had the best transportation system and medical organization in the world," Trueblood said." But the nature of the injuries often required as many as six surgeons working on a single patient. Try to extrapolate that, to imagine what surgical and medical manpower will be needed to treat one million casualties."

Beyond the human casualties, said physicist Postol of Stanford's Center for International Security and Arms Control, will be the long-term biologicai effects on the ecosystems of the Northern Hemisphere, a condition scientists have labeled "nuclear winter."

Even though "nuclear winter" theories are fraught with uncertainties," Postol said, "we could be dealing with enormously catastrophic possibilities."

Smoke and dust will be injected into the atmosphere of much of the Northern Hemisphere, he said. The smoke effects may be more persistent than originally suspected. The smoke cover could linger for months, causing cooling of the ground and upper atmosphere, with adverse effects on agriculture and food supplies. The Soviet Union would suffer more from the cooling of the earth than the United States. This is because some believe the oceans might have a moderating effect on the North American continent.

The students were shown slides of how nuclear weapons look, the current and planned levels of U.S. and Soviet nuclear forces and early warning systems. They took part in exercises to learn how people of different ideologies and persuasions think, and how varying points of view can be redirected to constructive social change through communication.

They also learned that in 1983 figures, the United States military budget was $215 billion or $62 billion greater than it was in 1980, that the United States spends 6.7 percent of its Gross National Product for defense compared to the Soviet Union which spends 10.9 percent of its GNP, and that total defense spending by all countries is now close to a staggering $800 billion a year or $2 billion a day.

When thousands of children in third-world countries are dying from malnutrition, infection and disease, some countries are producing instruments of death, the speakers said. Physicians cannot remain apathetic to these developments.

Shepherd, a second-year medical student, said that increases in military expenditures have been accompanied by cuts in health programs in the United States.

A study by Victor Sidel of the Albert Einstein College of Medicine, distributed with the course materials, cites that in 1970 for an additional $120 million for six surveillance and command planes the Headstart program was cut by $20 million; for an additional $262.5 million for one submarine tender to support nuclear attack submarines, maternal and child health centers were cut by $112 million; for an additional $89 million for the Army XM 1 Tank program, mental health centers were cut $88 million. Similar cuts have affected cancer and other programs. Increases for armaments have continued for the past 15 years, Sidel concludes, at the expense of health programs. The cuts have added new burdens on state and local governments to provide these health services.

But the economic problems caused by the arms race have an impact beyond specific cuts on health services, Shepherd said. Economists have shown that support for human services depends largely on an expanding economy. Massive arms investments divert both capital and skilled people away from the modernization and productive capacity of a civilian economy.

"Japan," said Shepherd, "has spent far less than the United States for arms, and it has surpassed the world in its rate of economic growth and manufacturing productivity.

Citing economists, Shepherd added that military spending creates employment which does not contribute to increasing the supply of goods that consumers buy. It also eats up materials that would be used to produce consumer goods.

The problem, several speakers said, was "military addiction," which like all addictions is difficult to break. Many companies rely on military contracts for their survival, they said. When military expenditures are cut, they result in layoffs. They, in turn, create enormous pressures on Washington to restore military spending, leading to further stagnation in the nation's manufacturing capacity.

"But there are strategies for the nation's economic conversion from military spending," Shepherd said. "It can be done. True security must combine both defense and social and economic development."

Farquhar, director of Stanford's Center for Disease Prevention Research, said physicians have a responsibility to look at the root causes of problems and find ways to prevent them. "One can define international concerns about thermonuclear war as a new social movement," he said. "Physicians, because of their effectiveness as educators, can influence social change and behavior."

Interpersonal and mass media channels could be employed to effect changes in attitudes. "One example of a social movement that has succeeded is when 35 million Americans stopped smoking," Farquhar said. "It's a matter of influencing the way we think."

Farquhar noted that in 1985 some 37 articles on the effects of nuclear war had been published in scientific journals versus seven the year before. "That's amazing," he said, "since there are no government grants for this kind of work." Another positive development was the growth of the national membership of Physicians for Social Responsibility, from 1,500 in 1980 to 38,000 in 1985.

The result has been a shift in public opinion in the United States and in the Soviet Union regarding the nuclear arms race, the speakers agreed. This shift has had profound implications for nuclear disarmament.

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VOLUNTEERS NEEDED FOR SEVERAL DIABETES STUDIES

STANFORD—

Several studies at Stanford University Medical Center are seeking volunteers to enhance researchers' understanding of diabetes and potential treatments.

One of the largest groups of studies regularly recruits about 250 persons annually, said Dr. Clarie Hollenbeck.

Hollenbeck coordinates volunteers for diabetes projects currently underway in the Clinical Research Center (CRC) at the Medical Center. Dr. Gerald Reaven, professor of medicine, directs the studies.

Hollenbeck said that the team currently needs persons, both with and without diabetes, for a study which is trying to determine if the fat cells of indviduals with diabetes respond differently to insulin than fat cells from individuals without the malady.

Diabetic and non-diabetic volunteers should be 20 to 75 years of age and in general good health. The diabetic volunteers may be on a controlled diet or taking oral agents but should not be taking insulin, Hollenbeck said.

The participants will spend two to three days in the resarch center during a two week period, and will receive at no charge to themselves a complete medical examination including blood chemistry and urinalysis, an EKG and dietary consultation.

In another study, researchers are testing a new oral medication and are seeking volunteers between 20 and 65 years who need treatment for their disease but are not currently taking insulin. The participants will spend three to five days in the hospital research center and then be monitored weekly for three months as they adjust to the new medication, Hollenbeck said. Participants will also receive general treatment for their diabetes as well as an extensive physical in return for their participation, she added.

A third study is seeking individuals between 35 and 65 years who are not responding optimally to large doses of insulin. The study, she said, will attempt to learn if supplementary oral medications will improve their response. This study also includes diabetes treatment and an extensive physical exam.

Persons interested in volunteering for a current study should contact Hollenbeck or Dr. Arthur Swislocki, a research physician, between 9 a.m. and 5 p.m. at (415) 497-6973.

Another research team is attempting to find the optimum diet for adult patients with diabetes.

Ann M. Coulston, research dietitian, said the current study consists of two six-week study periods during which all food and beverages will be provided for participants, who should be adults with diabetes not undergoing insulin injections.

Coulston said the volunteers will receive a complete physical examination, laboratory evaluation and nutrition counseling. The study is being held at the Clinical Research Center under Reaven's direction.

For further information on the diet study, contact Coulston between 9 a.m. and 4:30 p.m., at (415) 497-5430.

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LEGISLATORS URGED TO REJECT RESEARCH INSPECTION POWERS FOR HUMANE SOCIETY OFFICERS

STANFORD—

Almost 50 faculty members of the Stanford University School of Medicine have written state legislators urging them to vote "no" on Senate Bill 1405, which would give humane officers authority to oversee research facilities' compliance with laws governing the use of animals in research.

The bill, by Senate President Pro Tem David Roberti, D-Los Angeles, has passed the Senate. It is expected to be taken up by the Assembly Judiciary Committee this month, and if approved by the committee will go directly to the floor of the Assembly. The Assembly bill differs somewhat from that approved by the Senate, but if it passes the Assembly it is considered certain to go to Gov. George Deukmejian with its main provisions unchanged.

Those provisions would expand the law enforcement powers of private citizens appointed by California humane societies. In the views of the Stanford physicians and many other researchers throughout the state, the bill could cause severe damage to biomedical research in California.

David Korn, vice president and dean of the medical school, summed up many of the objections in a letter he wrote to Assemblyman Elihu Harris, chairman of the judiciary committee.

SB 1405 would, he wrote, "Introduce humane officers to the conduct of biomedical research—a role most inappropriate and potentially dangerous. . . This bill in effect empowers a group of individuals philosophically opposed to biomedical research using animals to disrupt research and to make judgments on proper use of anesthetics, analgesics and other matters requiring substantial technical expertise."

That argument echoes part of a statement opposing SB 1405 endorsed by 19 members of the Coalition for Biomedical Research, including Stanford, the American Heart Association and the American Cancer Society. The coalition summarized its stand by stating, "Authority over life-saving medical research ought not to be granted to private groups which may be partisans in a highly emotional controversy."

The coalition also noted that existing laws provide for close monitoring of the use of animals in research. "The irony of considering SB 1405 now," the coalition stated, "is that never in history has more attention been focused on the proper treatment of animals in research or on ways of involving the public in the process of overseeing such research."

Other statements by Stanford physicians included:

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Dr. Samuel Strober, professor of medicine and chief of the division of immunology: "The use of untrained personnel to monitor the research is as absurd as having untrained personnel participate in the research."

Dr. Norman Shumway, professor and chairman of the department of cardiovascular surgery: "Open heart surgery could never have evolved without animal research. Transplantation of the heart, which originated at Stanford, was born of animal research. . . All of the work that is in preparation today to make transplantation safer has its origins in animal research."

Dr. Stanley Falkow, professor and chairman of the department of medical microbiology: "I would assert as a working scientist that we are probably more concerned than most other members of the community that laboratory animals be cared for properly, kept in excellent health and as free from stress and pain as possible. . . The practical reality is, for improved health, animals are required for many kinds of biomedical research including those diseases which are very much in the mind of the public and legislators like AIDS, cardiovascular disease and cancer."

Dr. Roland D. Ciaranello, professor of psychiatry and chief of the division of child psychiatry: "The potential for mischief by uninformed groups is awesome. . . SB 1405 is a draconian departure from responsibility. It would effectively shut down all biomedical research using live animals, depriving the citizens of the United States of the innumerable benefits such work would have."

Dr. Avram Goldstein, professor of pharmacology: "If we are to learn more about why people become addicted to drugs, we have to study the addiction process either in people or in animals—there are no alternatives."

Dr. Lars M. Vistnes, professor of surgery and head of the division of plastic and reconstructive surgery: "It is my feeling that current laws and regulations under which an animal research facility, such as ours at Stanford operates, protect the research animals in a very admirable fashion."

Among the others who sent letters to the legislators were Thomas E. Hamm Jr., director of the division of laboratory animal medicine; Howard Schulman, associate professor of pharmacology; Dr. Frank E. Stockdale, professor of medicine in the division of oncology; Robert E. Kates, associate professor of medicine in the cardiology division; Carla J. Shatz, associate professor of neurobiology; Dr. Merton Bernfield, Josephine Knotts Knowles professor of human biology; Dr. Leslie J. Dorfman, associate professor in the department of neurology; and Dr. F. Blair Simmons, professor of surgery in the division of otolaryngology/head and neck surgery.

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STANFORD PHYSICIAN GOES TO GLASGOW AS VISITING PROFESSOR

STANFORD—

Dr. Joseph Kriss, professor of medicine and radiology at Stanford University Medical School, will spend six weeks in Ireland as the Mcfarlane Professor at University of Glasgow.

He will also be admitted to the Honorary Fellowship of the College of Physicians and Surgeons of Glasgow "in recognition of the help given to Glasgow medicine by accepting people for training and also in recognition of a very distinguished career in academic medicine."

Kriss, director of the division of nuclear medicine, is renowned for his heart research and for his diagnosis and treatment of thyroid diseases. He has authored papers on a wide spectrum of nuclear medicine topics, including bone marrow scanning, hematological studies, renal evaluation, Gallium scanning for tumors, pulmonary scanning and nuclear cardiology.

The University of Glasgow's Mcfarlane Chair was established in 1962 by a private benefactor. During Kriss's stay there, scheduled from April 14-May 23, he will visit hospitals associated with the university and present teaching seminars and public lectures.

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SUCCESS OF HOSPITAL FUND-RAISING CAMPAIGN LEADS TO SECOND PHASE

STANFORD—

Bay Area corporations have committed more than $1.4 million to Stanford University Hospital's modernization project (HMP) in a fund-raising campaign launched by a $250,000 challenge grant from Hewlett-Packard Co.

Hospital officials reported the "unprecedented" success of the campaign as they announced a second round of corporate fund raising aimed at bringing the total contributions from area companies to the $2 million level.

Dean Morton, executive vice president and chief operating officer of Hewlett-Packard and a member of the hospital's board, will head the second phase of the corporate fund-raising campaign. "The success of the initial phase really lays the groundwork for success in phase two," he said.

The campaign started last January with the announcement from H-P President John Young that his company would contribute $1 for every $4 raised from other corporations, up to a $250,000 maximum, to help finance the $114 million HMP.

Thirty-three companies responded, easily surpassing the $1 million needed to meet the H-P challenge.

Paul Edwards, the hospital's director of development, called the response "an unprecedented outpouring of corporate support for a Bay Area hospital, particularly with the two qualifiers that it was unrestricted giving by corporations and unrestricted giving for bricks and mortar."

Many corporations, Edwards noted, avoid making cash contributions to building projects and are more inclined to make gifts of needed equipment. He cited Hewlett-Packard and Apple Computer as examples of companies that usually give equipment but contributed cash to the HMP.

Apple was one of the companies that committed between $50,000 and $100,000 to meet the H-P challenge. Other major contributors included IBM Corporation, Pacific Bell/Pacific Telesis, PG&E, Saga Corporation, Syntex Corporation, Varian Associates, Advanced Micro Devices, American Building Maintenance, AT&T, Sunset Publishing and Wells Fargo Bank. Other local contributors included the real estate company of Hare, Brewer & Kelley, Crocker Bank and Lucky Stores, Inc.

Richard G. Rogers, recently retired president and chief operating officer of Syntex who headed the fund-raising drive, said he was "delighted with the result of the campaign. It shows the corporate community in Santa Clara County really is motivated to play a significant role in helping to make the cost of health care more efficient in our county by supporting an outstanding medical facility such as Stanford."

It also indicates, he said, "that the corporate community really does care about giving something back to the community from which it gets all of its people resources."

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Edwards made the same point about the corporate sense of responsibility, noting that even though the fund-raising campaign began in the midst of an economic downturn "there were companies that came forward and came forward in an important way for a very important regional resource." He pointed out that contributions came "from as far south as IBM, in southern San Jose, and as far north as the banks in San Francisco."

To Morton, that corporate support goes beyond simple financial backing.

"It's important in terms of longer term relationships," he said. "When people give to and support a place like Stanford Hospital, it changes their attitude about it. They take a greater interest in it. I think over the long run that will probably have value beyond the $2 million or so that we raise."

The ongoing relationship between the hospital and the corporate community, Edwards said, is exemplified by a symposium on health care cost management that will be co-hosted by Saga Corporation and the hospital on Feb. 13. The symposium, to be held at Saga, will analyze health care costs from the corporate viewpoint and will include addresses by hospital officials. Officers of corporations throughout the Bay Area are expected to attend.

Besides getting help from the success of the first part of the fund-raising drive, Morton expects the second phase to benefit from the fact that "the hospital itself is well along in terms of construction."

"It's obvious that it's going to be an important modern facility," he said. "My guess is that our success in phase two will be facilitated by what happened in phase one and by the physical evidence of the project going forward."

The modernization project is scheduled for completion in 1987. It will provide 20 new operating rooms, modern intensive care units, consolidation of many clinical laboratories now scattered throughout the hospital and medical center, new isolation and recovery rooms, anesthesia space, facilities for magnetic resonance imaging and a surgicenter for outpatient procedures.

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NEW TEST DETECTS POTENTIAL CANCER-CAUSING AGENTS WITHOUT USING LABORATORY ANIMALS

STANFORD—

A new, more precise method for identifying potential cancer-causing chemicals has been developed by Stanford University School of Medicine researchers.

The method examines substances' harmful effects directly in human cells, making it more accurate than the Ames test, which screens potential cancer-causing compounds in bacteria.

The process can be carried out in laboratory "test tubes" without the need to expose animals to chemicals, another standard procedure for detecting hazardous substances, according to its developers.

The test pinpoints mutations, slight chemical changes in DNA, the cell's genetic master molecule. Mutations alter the genetic message, sometimes causing minor aberrations in cell function, in other cases leading to cancer. One leading model of cancer formation proposes that mutations in certain human genes transform them into cancer-causing genes, or oncogenes.

Although the new test requires further development and study before its powers are fully evaluated, it is expected to be of interest to the pharmaceutical, pesticide, and other chemical industries that are required to document the dangers of chemical compounds they produce.

The test also may be a valuable basic research tool that could lead scientists to a more precise molecular understanding of mutation and of certain rare genetic diseases that predispose their victims to cancer.

The research was conducted in the laboratory of Dr. Michele Calos, assistant professor of genetics at Stanford University School of Medicine.

An article describing an early version of the test method was published in the December issue of the *Proceedings of the National Academy of Sciences*.

Calos' co-authors on the article are Dr. Jane Lebkowski, a former Stanford postdoctoral researcher, Suzanne Clancy, a graduate student, and Dr. Jeffrey H. Miller of the University of California in Los Angeles. Others involved in the work are Bob DuBridge, a graduate student, Michele Schwartz, a medical student, and Peter Tang, a research assistant.

Since that article was written, Calos and her group have refined the test system to be faster and more sensitive. The refined test also permits chemicals to be screened in cells from different kinds of human tissues. Research by Bill Sugden at the University of Wisconsin played a vital role in the new refinements, Calos said.

"What we're really trying to do is model the human organism in tissue culture because we obviously won't do these kinds of experiments directly on people," Calos explained.

The advantage of being able to use different cell varieties is that it could shed light on how and why different types of cancer arise. "Different tissues may be more susceptible to mutations caused by certain chemicals," Calos pointed out.

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These kinds of tissue differences can't be explored using the Ames test, which for many years has been the gold standard in screening for mutagens, substances that cause mutations, Calos explained.

Some potentially dangerous or harmless chemicals can be misread by the Ames test, she added. "Our bodies have some enzymes which bacteria lack, that activate otherwise harmless chemicals into mutagenic compounds, and inactivate others" she explained.

The test can also measure effects of other mutagenic agents such as ultraviolet light, on human cells, and it could be useful for studying chemicals that are touted to prevent cancer, Calos said.

"You've probably already heard claims that vitamin C can prevent cancer and seen ads on television for beta-carotene to ward off cancer," she said. "But no one has compelling proof that these compounds really work."

The method would enable scientists to test those claims, she suggested, by actually measuring whether or not they can decrease the mutation frequency in human cells.

The key to the new method is that scientists use a transportable piece of DNA as the mutation target. This piece of DNA is a bacterial gene whose structure down to the last atom is already known.

They slip the gene into a human cell and then expose the cell to the chemical or other agent being tested.

Later, they remove the target gene and return it to bacteria where the number and nature of the resulting mutations can be easily detected and analyzed.

The research was supported by grants from the National Cancer Institute, the National Institutes of Health, the Chicago Community Trust/Searle Scholars Program, and the Leukemia Society of America.

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FOR IMMEDIATE RELEASE

STANFORD TO HOST FEB. 14 CONFERENCE ON ALCOHOLISM

STANFORD—

"Improving the Effectiveness of Alcohol and Drug Treatment" will be the focus of the second annual Stanford Conference on Alcoholism on February 14 at the Hyatt Rickeys in Palo Alto.

During the day-long conference, seven guest faculty will discuss research in areas intended to help treatment providers improve care given to alcoholics and their families. Problems with alcohol affect an estimated 70 million people nationwide.

About 150 physicians, nurses, family therapists, alcohol and drug counselors, social workers, psychologists and others who work with alcoholics are expected to attend the conference.

In the past, alcohol programs were gauged to be anywhere from highly successful to barely helpful—but measurement methods varied so widely that trying to examine programs "was like comparing apples and oranges," contends Dr. Robert Matano, conference co-chairman with Dr. William Hazle.

Now, however, more uniform ways of evaluating programs have been developed. This information allows treatment to be tailored to individuals, boosting success rates, according to Drs. Hazle and Matano, who are Stanford researchers.

"Improving the Effectiveness of Alcohol and Drug Treatment" is co-sponsored by Stanford University's Department of Psychiatry and the Stanford Alcohol Clinic.

Drs. Hazle and Matano direct Stanford's new Alcohol and Drug Treatment program, which offers highly flexible, individualized care. Dr. Hazle, a psychiatrist, serves as medical director of the program; Dr. Matano, a psychologist, is program director.

Continuing medical education credit is offered for the course, which costs $65. There is no charge to members of the press. For more information or registration information, call Diana Kennedy, 497-6682.

2-4-86

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JOURNALISTS, SCIENTISTS TO DEBATE HUMAN GENE THERAPY, FEB. 13

STANFORD—

A day-long news media roundtable on human gene therapy, its ethics and national policy implications will be held February 13 at Stanford University School of Medicine.

The roundtable, the first of its kind on the West Coast, is designed to familiarize journalists with the topic of gene therapy trials in humans as they are getting closer to reality. The first guidelines for some forms of gene therapy were issued last year by the National Institutes of Health.

The program, which is open to the public, will begin at 10 a.m. in Fairchild Auditorium, with opening comments by Paul Berg, a Nobel laureate and director of Stanford's new Center for Molecular and Genetic Medicine. More than 300 journalists, faculty and students are expected to attend.

A panel of scientists will address the research issues in the morning. Besides Berg, it includes W. French Anderson, National Heart, Lung and Blood Institute of the National Institutes of Health; David Cox, University of California, San Francisco; and Theodore Friedmann, University of California, San Diego.

Laurie Garrett, science reporter for National Public Radio, will be the moderator.

Two panels starting at 2:30 p.m. will discuss gene therapy--ethics and policy. It includes Robert Cook-Deegan, Office of Technology Assessment, U.S. Congress; Eric Jungst, ethicist, University of California, San Francisco; Marc Lappe, author of *The Broken Code: the Impact of the Recombinant DNA Revolution*, University of Illinois; and Nancy Wexler, Hereditary Disease Foundation.

A panel of journalists will question the participants. The journalists are Yvonne Baskin, freelance writer and author of *The Gene Doctors*; Linda Herskowitz, medical writer, *Philadelphia Inquirer* and Knight Fellow, Stanford; and David Perlman, science editor, *San Francisco Chronicle*.

Pulitzer prize winning journalist James Risser, professor and director of the Knight Fellows Program, will moderate the afternoon session.

Presently, the key targets for gene transfer are maladies in which scientists hope to introduce a needed gene product into the appropriate tissue. Eventually some 3,000 diseases known to be caused by one or another single defective gene could be amenable to gene therapy, scientists believe.

But transplanting good copies of a gene into a patient's cells requires more research of how genes are organized, their regulation and other aspects now very poorly understood.

Scientists only plan to transplant genes that do not lead to inherited changes. But some people fear someone may someday attempt to redesign the human race by tranplanting genes into sex cells that lead to inherited changes. Even though the technical feasibility to do this does not presently exist and no one has proposed such studies in humans, this factor has fueled a continuing debate over the ethics of gene therapy.

The Media Outreach Program is a cooperative project of the American Association for the Advancement of Science, the Association of American Universities, and the Scientists Institute for Public Information. It is funded by a grant from the Andrew W. Mellon Foundation.

Stanford hosts are the Departments of Communication, and Family, Community and Preventive Medicine.

Coordination is provided by the Medical Center's Office of Public Events and Office of Communications.

2-3-86 —30— genes-SA8

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FOR IMMEDIATE RELEASE

STANFORD HOSPITAL PATIENTS GET FREE USE OF TV

STANFORD—

Stanford University Hospital has made television use free to all patients and has signed a new contract designed to substantially improve television service.

The actions were taken after three surveys showed television cost and maintenance were two areas that produced a high number of patient complaints.

Patients, physicians and nurses were all interviewed for the surveys, which were conducted over the past year by a 16-member patient television committee chaired by Jeanne Kennedy, director of community and patient relations.

The hospital contracted with J. Allen Corp. of Burlingame to provide new television sets and pillow speakers. The company also will provide three hours of service daily for the television operation.

Television service formerly cost $3.50 a day. Donna Pronko, the hospital's patient relations coordinator, said that most hospitals on the Peninsula continue to charge for television use, although some in the East Bay offer free television.

She said the hospital plans to expand its closed-circuit programming and will supply a wider range of educational and entertainment programs on channel 3 and channel 17.

2-3-86 —30— freetv-RG2

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EXERCISE INCREASES THE ACTION OF INSULIN IN METABOLIZING SUGAR, STANFORD STUDY SHOWS

STANFORD—

A new Stanford Medical Center study shows that regular exercise helps the body metabolize sugar more efficiently by increasing the body's sensitivity to insulin.

People who exercise regularly -versus those who don't- secrete less insulin "to accomplish the same task," said Dr. Gerald Reaven, Stanford professor of medicine and endocrinologist.

This study has implications for the treatment and understanding of type II diabetes, a disease caused by resistance to the action of insulin.

Insulin is a hormone that stimulates glucose (sugar) metabolism and stabilizes the amount of sugar in the blood.

The study supplies substantial evidence for understanding what many scientists already believed through inference: that exercise plays a key role in determining how well insulin works, Reaven explained. This study also provides a clue to the basic mechanism of this phenomenon.

The study was presented at a Feb. 6 subspecialty meeting held after the annual Western Association of Physicians meeting in Carmel, CA.

Normally, cells in the pancreas make insulin and secrete it into the blood after meals. This stimulates other body cells to take up glucose from the blood. Once inside, glucose can be used as fuel for the cells.

By secreting specific amounts of insulin at appropriate times, the body is able to maintain a fairly steady blood-glucose level, Reaven said. "An hour after a meal you are right back where you started from, and perturbations in the blood-sugar level are very small," he said.

"A diabetic is someone whose blood-sugar level is always too high," Reaven said. This, in conjuction with other factors, may result in blindness, heart attacks, kidney failure, gangrene and damage to nerves and blood vessels.

Type I diabetes is caused by a failure to secrete insulin at all. These diabetics require regular injections of insulin to make up for their deficiency. Type II diabetics secrete plenty of insulin; some secrete up to twice the normal amount, Reaven said. But, despite their ability to secrete insulin they are diabetic, leading doctors to believe that they are resistant to the action of insulin.

For these people, an exercise program to increase insulin sensitivity "ought to be useful therapeutically," Reaven said.

But pragmatically, "If you have a 68-year-old diabetic who is 42 pounds overweight and has never exercised in her entire life, the chances of making substantial in-roads in that person are not too great," he said.

Also, "no one really knows yet how much exercise training you have to have to make a real impact, but it is not insubstantial," he said.

This study compared active runners to people not in active training, but "who were just as healthy and were matched for other variables,' Reaven said.

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Previous studies by Reaven and his team have shown that in normal people "there are great differences in insulin action." Approximately 50 percent of this variability is accounted for by degrees of obesity and physical fitness (which often go hand in hand), Reaven said. "The other half is unknown; it could be genetic, it could not be," he said.

Understanding the relation between exercise and insulin sensitivity helps explain why being obese appears to increase an individual's chances of developing diabetes. Nearly two-thirds of all type II diabetics are overweight.

Basically, if a person has a high resistance to insulin, getting heavier and more sedentary makes the problem worse, Reaven said. "The fatter and the lazier you get, the more likely you will get the clinical syndrome" of diabetes, he said.

However, if the problem is bad enough, a person will get the disease whether they are overweight or slim. "That is why there are many non-fat diabetics," Reaven said.

But, "there is no question that (getting heavy and sedentary) is a risk factor" in developing type II diabetes.

Understanding the relationship between exercise and insulin sensitivity may also explain why people become more insulin resistant as they age, Reaven said.

"As people get older, they often get more sedentary and heavier." But in reality, "if you are active when you are older, your glucose metabolism seems to be very normal," he explained.

At the sub-cellular level, Reaven's study isolated where the basic mechanism for the effect of exercise on insulin sensitivity takes place. When insulin is released into the blood stream it binds to receptor molecules, which is necessary for the cells to take up glucose, he said.

By comparing insulin binding and glucose uptake in cells from exercised trained and untrained individuals, scientists isolated the effect of exercise to be after insulin binds the receptor, Reaven said.

He said the participation of volunteers made this study possible, and his research team is currently seeking additional diabetic and non-diabetic volunteers between the ages of 20 and 75 to participate in other studies. In exchange for their participation, volunteers receive a free comprehensive medical and physical examination, general treatment for their diabetes, and the opportunity to participate in on-going research.

Persons interested in volunteering for a current study should contact Dr. Clarie Hollenbeck, at (415) 723-0266 or Dr. Arthur Swislocki, at (415) 723-7024.

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Reaven MC1a

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WOMEN AND HEALTH TO BE TOPIC OF STANFORD LECTURE SERIES

STANFORD—

Health issues and their impact on women will be explored in nine free lectures open to the the public at Stanford University Medical Center during April and May.

Health insurance, stress, childbirth and nutrition are some of the issues to be covered each week in the noontime, hour-long lectures.

The Women and Health Series has been held each year since 1977; this year, however, it has been named for its founder, Leona McGann, assistant professor emerita of family, community and preventive medicine. The McGann Women and Health Series is sponsored by the division of family medicine.

The lectures will be held at noon on Fridays in room M-112 of the Medical School.

Lecture topics and dates follow:

April 4: "Menstrual Myths and Reality: Psychosocial Research on Menstruation," Barbara Sommer, Ph.D., department of psychology at the University of California, Davis; and board member of the Society of Menstrual Cycle Research.

April 11: "The Wisdom of Our Bodies," Patricia Sun, philosopher of wholeness and international lecturer in communication and creative thinking.

April 18: "Black Women's Health Issues: Taking Care and Taking Charge," Felicia Ward, co-director, Bay Area Black Women's Health Project.

April 25: "Women Coping with Health Insurance in the 80s," Leona McGann, M.S.W, M.P.H., Stanford assistant professor emerita of Family, Community and Preventive Medicine, and Director of Stanford Health Insurance Training Project; and Shirley H. Wattenberg, associate professor of the School of Social Work and College of Medicine at the University of Illinois, Champaign-Urbana.

May 2: "Coping with Stress in the 80s," Anne Baldwin, R.N., Ph.D., nurse consultant to Stanford University Hospital.

May 9: "Mothers and Midwives: A History of Childbirth from Prehistory to the Present," Janet Ashford, author of the Whole Birth Catalog and editor of Childbirth Alternatives Quarterly.

May 16: "Delivering Good Care: The Oakland Midwives' Struggle," Debbie Le Veen, Ph.D., associate professor of urban studies and public administration at San Francisco State and a member of the California State Alternative Birthing Methods Study Advisory Committee.

May 23: "Update on Women's Nutrition Issues," Debbie Waterhouse, M.P.H., R.D., nutrition consultant to the Wellness Program at Merritt Perolta Institute.

May 30: "Alternative Childbirth and the Malpractice Insurance Crisis," Rosemary J. Mann, C.N.M., J.D. and director of the Women's Health Care Training Project at Stanford.

3-31-86 —30— mcgann-JR1

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NEWS CONFERENCE ADVISORY

STANFORD—

Stanford Medical Center has scheduled a news conference at 10 a.m. Wednesday April 2 to announce participation in a $15 million initiative by the Henry J. Kaiser Family Foundation, Menlo Park, to develop health promotion projects in communities across the nation, beginning with 13 Western states.

Speaking at Stanford will be Dr. John W. Farquhar, director of the Stanford Center for Research in Disease Prevention (SCRDP) and professor of medicine, and Dr. Robert Melton, director Monterey County Health Department, where an active SCRDP intervention program has been in progress for about 10 years. Foundation officials will also be available.

The Kaiser grant, which will be announced simultaneously in Washington, D.C. designates the Stanford Center for Research in Disease Prevention (SCRDP) as the first of several Health Promotion Resource Centers which under the foundation's auspices will aid communities in developing community health projects. A pioneer in community health education, Stanford has a 15-year history of developing community-based health education efforts. A largescale project intended to change health habits on a community-wide basis currently is continuing in Monterey County.

The Foundation's proposal, intended for the first time to expand the principles developed at Stanford and other centers to eventual nationwide availability, will be unveiled in Washington, D.C. at the same time as the Stanford conference. The Washington briefing will be telecast live at 10:15 a.m. via a satellite hookup to persons attending the Stanford news conference. The Washington announcement will be made at a briefing for representatives of medical, labor, civic, educational and other organizations that will be involved in the projects, plus Congressional representatives, federal officials and journalists.

The Stanford news conference will be held in Room TE 110, the conference room in the Psychiatry Building. The room is located on the extreme Western (mountain) side of the Medical Center in a two-story redwood temporary building near Sherman Fairchild Auditorium. Limited parking will be available for newsmen in the parking lot adjacent to the building.

Remote feeds are to be available to media personnel for recording.

3-31-86 —30— advisory-MG10

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MEDICAL STAFF KEY TO SAVING LIVES, HOSPITAL STUDY SHOWS

STANFORD—

The quality of physicians and nurses is more important than advanced technology in saving the lives of severely ill patients, according to a study of intensive care units in 13 major U.S. hospitals.

Stanford University Hospital was one of the institutions surveyed in the study, which was directed by Dr. William A. Knaus of George Washington University Medical Center in Washington, D.C., and reported in the March issue of *The Annals of Internal Medicine*.

The study made a statistical comparison of the death rates of 5,030 ICU patients at the 13 hospitals, but the report did not identify the ranking of the hospitals. Knaus said identification of the ranking was prohibited by the terms of the study grants from the National Center for Health Services Research and the Robert Wood Johnson Foundation.

The report said that 11 of the hospitals were grouped in a broad middle range with death rates about as expected. One hospital, however, was significantly better than all the others and one hospital was significantly worse.

Hospital number 1, the report said, emphasized reliance "on carefully designed clinical protocols implemented by senior level in-unit physicians. This hospital also had the most comprehensive nursing educational support system. . . As a result of this educational program, the nursing staff at Hospital 1 had independent responsibilities within the clinical protocols. Excellent communication between physicians and nursing staff was ongoing to ensure that all patient care needs were met.

By contrast, hospital number 13 "lacked a comprehensive nursing organization" and "admitting physicians and unit nursing staff coordinated poorly. In fact, the study said, "frequent disagreements about the ability of the nursing staff to treat additional patients occurred, and there was an atmosphere of distrust."

Those two approaches produced marked differences in the ratio of actual deaths to those predicted according to certain risk factors. While the ratio for most of the hospitals was close to 1—in other words, the number of deaths about as expected—the ratio for the top hospital was .59 and that for the last-place hospital was 1.58. That means the top hospital had a death rate 41 percent lower than predicted and the last hospital had 58 percent more deaths than predicted.

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In concrete figures, there were 41 deaths at the first-place hospital in comparison with 69 that were predicted, while the last-place hospital had 52 deaths compared with a prediction of 33.

A system called APACHE II (Acute Physiology and Chronic Health Evaluation) was used to prepare the death estimates. In that system, weights were assigned to 12 physiologic measurements taken during the first 24 hours of ICU treatment. Those values were combined with other values such as the patient's age to obtain the death prediction.

The report emphasized that statistics were examined in several different ways to reduce the possibility of misleading conclusions. "We could find no measurement biases that would have systematically favored one hospital over another," it said. "Therefore, we are confident that the results represent real differences in therapeutic efficacy that are related to differences in the process of care and, specifically, in the interaction and coordination of the unit staff."

There were 10 teaching hospitals and three nonteaching hospitals in the study. Although the top-rated hospital was a teaching hospital, the next two were nonteaching, a somewhat surprising result because hospitals affiliated with medical schools usually care for the most severely ill patients and are considered to have higher comparative survival rates.

Those results, according to the report, indicate that "intensive care units do not have uniform results among large teaching hospitals. Large tertiary care teaching hospitals, although generally treating a greater number of severely ill patients and doing more complex operations, may not achieve optimal results based solely on teaching status. These hospitals must develop highly coordinated systems for management of their patients, similar to the one used in Hospital 1."

In addition to Stanford, the teaching hospitals in the study were Cooper Medical Center, Camden, N.J.; Johns Hopkins Hospital, Baltimore; Maine Medical Center, Portland; Massachusetts General Hospital, Boston; Medical College of Georgia, Augusta; University of Maryland Hospital, Baltimore; University of Virginia Medical Center, Charlottesville; and University of Wisconsin Hospital and Clinics, Madison.

The nonteaching hospitals were Polyclinic Medical Center, Harrisburg, Pa.; St. Francis Hospital, Tulsa, Okla.; and South Shore Hospital, Weymouth, Mass.

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STANFORD CONSIDERS JOINT VENTURE FOR PSYCHIATRIC CENTER

STANFORD—

Stanford University is considering affiliating with a major for-profit health corporation in an arrangement that would provide a new psychiatric building near the Medical Center.

If a satisfactory agreement can be worked out, it would produce a full-fledged psychiatric center at Stanford without touching the strained capital budgets of the University or the Hospital.

Construction of the building would be financed by the corporation and operation would be a joint venture. The building would allow consolidation of widely dispersed academic functions and clinical programs of the Department of Psychiatry and Behavioral Sciences.

The executive committee of the School of Medicine approved preliminary negotiations with health corporations at its meeting Friday, March 21, after Dean David Korn presented the report of a task force recommending such negotiations. The concept previously was approved by the Hospital Board of Directors and the University Board of Trustees' Committee on the Medical Center.

Sheldon King, Hospital president and chief executive officer who chaired the task force, said the new facility would cost between $15 million and $25 million and probably would have 60 to 80 beds.

Both King and Korn emphasized that if negotiations produce an agreement, Hospital and University interests would be protected in any contract. "We'll be extremely careful and proceed with caution," Korn said.

Korn called the proposal "a precedent-setting effort to undertake this pathway of capital acquisition," and King said it was "a way of having an arrangement (we want) while safeguarding University and Hospital funds."

Although such an arrangement would be new to Stanford, there have been a number of similar affiliations between hospitals and for-profit corporations. King noted that Vanderbilt University and the Hospital Corporation of America (HCA) are working together on a similar psychiatric facility.

Other examples of successful alliances include American Medical International (AMI) with Creighton University in ownership and operation of St. Joseph's Hospital in Omaha and National Medical Enterprises (NME) with the University of Utah in ownership and operation of a new psychiatric hospital.

In addition, McLean Hospital, one of Harvard Medical School's leading psychiatric institutions, has just signed an agreement with AMI to do business through a newly created company called McLean Medical Services, Inc.

The Stanford task force recommended that a non-profit form of operation would be best for the psychiatric facility but noted that any corporation agreeing to finance construction of a new building would expect a return on its capital investment.

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King said a corporation might be willing to accept a small return because of the desire to have a "flagship" operation associated with Stanford.

The building would be on Stanford land, which the University would lease to the corporation.

In summarizing the need for a new building, the task force said, "Stanford's Department of Psychiatry and Behavioral Sciences is well established and preeminent in many areas of the discipline, despite its relatively small faculty and its limited and limiting facilities.

"To continue this tradition of excellence the department must expand its clinical activities and, at some future time, its faculty. Neither is possible given current facilities. Further, the department's strong interdisciplinary tradition and commitment to an accessible teaching environment are hampered by the geographic dispersion of facilities."

As examples of that "geographic dispersion," the report pointed out that the department has clinical programs in such widely scattered locations as the Medical Center, the Palo Alto Veterans Administration Medical Center (VAMC), Children's Hospital at Stanford, San Jose Hospital, Cowell Student Health Center and Santa Clara Kaiser Permanente Hospital.

All of those sites have deficiencies in addition to their locations, the report noted. VAMC, for example, has a patient population "confined almost exclusively to men of a certain socioeconomic stratum," which limits opportunities for research and teaching.

Teaching, research and administrative space for the department is also widely scattered, the task force said, which "hampers collaboration among faculty members, and, more importantly, impairs students' and trainees' exposure to the rich intellectual milieu of the faculty as a whole."

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STUDY SUGGESTS A NEW DRUG CAN TEMPORARILY CONTROL VIRAL INFECTION COMMON IN AIDS

STANFORD—

A common viral infection that often turns fatal in patients with immune deficiencies—including acquired immune deficiency syndrome (AIDS)—can be temporarily controlled in certain patients with an experimental drug, a new study has found.

The drug, known as DHPG, was able to temporarily improve the conditions of 17 of 22 patients with underlying immune deficiencies who had contracted cytomegalovirus (CMV) infection, according to the study published in the March 27 issue of *The New England Journal of Medicine*.

But despite the initial improvement, most of the patients subsequently had a relapse of the viral disease and a majority of the patients died within 10 months after completing treatment.

The researchers, however, are encouraged that the drug offers promise as a treatment for CMV, an infection that is currently untreatable and can produce fatal complications in AIDS, and other, patients.

"This is certainly not a cure for AIDS and not even a cure for CMV. But it is a foot in the door in a situation where we really had no effective treatment approach before," said Dr. Thomas Merigan, Becker Professor of medicine at Stanford University School of Medicine and chairman of the collaborative study group.

"This study gives hope that a drug can be used to intervene in CMV infection," Merigan added, "but it has to be judged as only the beginning of this drug's study. We've got to improve on its action."

Merigan's colleagues included Dr. Stuart Koretz of Syntex Research in Palo Alto, who was study director, Drs. William Buhles, Austin Brewin, and Robert Roe, also of Syntex; Drs. Jack Bissett and Mark Eisenberg from Stanford, and researchers from 15 other collaborating medical institutions in this country and abroad.

The research was supported by a grant from Syntex Research, which manufactures the drug DHPG. The experimental drug, whose chemical name is 9-(1,3-Dihydroxy-2-propoxymethyl)guanine, is also manufactured by other pharmaceutical companies and is known by several other names.

CMV is a common virus that infects almost everyone at some time in life, and usually causes an infection so mild that it goes unnoticed, Merigan explained. But in people whose immune systems are weak or not working properly, CMV can become a serious, often fatal, disease involving the eyes, central nervous system, lungs, gastrointestinal tract, or liver.

Those at highest risk of a serious infection include organ transplant patients who are on immunosuppressive drugs, some patients with cancers involving cells of the immune system, newborn infants who contract the infection from their mothers, and AIDS patients, Merigan said.

In the study, 26 extremely sick patients thought to be dying from CMV infection were given DHPG on a "compassionate use" basis. "This is a way of making an experimental drug available, on a patient-by-patient basis, because the circumstances are so compelling that there is no other therapy and the drug could be life-saving," Merigan explained. The drug has not yet been generally approved for use by the Food and Drug Administration.

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Twenty-two of the patients had AIDS, two had received bone marrow transplants, one had a congenital immunodeficiency disease, and one was receiving immunosuppressive drugs. Although all were thought to have CMV infection when they were given the drug the researchers subsequently determined that four of the patients probably did not have CMV.

Among the remaining 22, 17 patients showed some clinical improvement when given the drug and five patients died before completion of the 14-day treatment, with no apparent benefit from the experimental agent. Of the 14 patients who could be followed up after the DHPG treatment was discontinued, 11 had a relapse of the infection.

"The important thing is that we can reproducibly suppress CMV infection with this drug. It's the only way we've got right now to get this virus," Merigan said. "However, with a disease like AIDS, you have such profound immune suppression that the moment you stop treating with the drug, the infection recurs.

"Among the patients who were helped, as long as they kept getting the drug, the disease was held back. Therefore, we're looking for ways to give the drug safely for long periods of time, or to combine it with other treatment strategies to get enduring suppression of CMV," Merigan added.

The drug was most effective in improving CMV infections involving the eyes and gastrointestinal tract. It was less effective when CMV involved the lungs, the study showed.

Vision in nine of 13 patients (69 percent) with CMV retinitis improved during DHPG treatment. The retinal infection stabilized in two additional patients given the drug. Only seven of these 11 patients were followed up. Five had a relapse of the CMV retinitis within two to six weeks after the therapy was discontinued.

Among the patients who had CMV infection involving the gastrointestinal tract, five of eight (62 percent) showed improvements such as a decrease in pain and diarrhea. Four of those five had relapses two weeks to three-and-a-half months after the drug was discontinued, the researchers said.

Among the seven patients with CMV pneumonia, four (57 percent) died of respiratory failure before completing the 14 days of treatment. Of the three patients who survived, all died of pulmonary failure within a few weeks after the treatment course had ended.

None of the deaths was attributed to DHPG, although the researchers added that the death of an additional patient treated following the original 26, could have been partially due to a decrease in white blood cells, the most serious of the drug's potential side effects. Other side effects included nausea, headaches, muscle pains, hallucinations, phlebitis, and fluid accumulation.

"This is the first agent that reproducibly suppresses CMV infection," Merigan said. "But it's just a beginning rather than a final effort. For now, all we can do is suppress the infection, rather than eradicate it."

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dhpg-LH10

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DESPITE MUSCULAR DYSTROPHY, STUDENT EARNS PH.D. IN GENETICS

STANFORD—

Jeff Dangl didn't let muscular dystrophy stop him from going to graduate school, although he admits it may have slowed him down a bit.

"I can't buzz around the lab at 90 miles an hour, which is what most graduate students do," he explains.

Dangl, 28, just earned his Ph.D. in genetics from Stanford University Medical School and will soon be jetting to Germany where a postdoctoral research position awaits him.

For some people, a chronic disease might seem to close off the future, but Dangl credits his muscular dystrophy with opening up new doors. "My disease helped me see things I would never have known were out there," he says.

Dangl has a rare form of muscular dystrophy which causes extensive muscle weakness in his face, shoulders, arms and legs. Unlike the most common form of muscular dystrophy, Duchenne's, which strikes early, worsens through the teen years and is usually fatal by the 20s, Dangl's form of the disease first appears at puberty, generally plateaus in the mid-20s, and doesn't curtail life expectancy.

Nevertheless, "it was a traumatic thing," he recalls of his initial diagnosis at age 12. "I was at the stage where I wanted to be a handsome football player and all of a sudden I was falling down all the time."

His family was hit with a triple blow on learning that his younger brother and sister also had the disease, inherited from their mother who had a case so mild she didn't realize the affliction.

But the young family rallied, Dangl recalls. "My parents have always been very supportive of us," he says. "What we've gone through has made us all stronger, and because of it we're very closely knit."

At first a doctor in his northern California hometown of Redding diagnosed the condition as Duchenne's muscular dystrophy. But even when they later realized his disease was the less severe form, adjusting to the reality wasn't easy. "Because it was such a rare disease, I spent a lot of time as a guinea pig," Dangl recalls.

As a teenager, he made the rounds of medical centers and clinics up and down the state. He underwent surgery in which plugs of his muscle tissue were removed for examination, and allowed himself to be pricked and punctured with electrified needles to measure muscle contractility. He and his brother also took high doses of cortisone in an attempt to curb the disease.

"It was my first exposure to medical research," Dangl observes.

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-more-

The medical forays reached a climax on one particular week-and-a-half stay at a hospital for children d teenagers with severe back and burn injuries. "At that point my family and I saw clearly that things could have been worse," Dangl remembers. "I realized that my condition was nothing compared to what a lot of people have to go through. I'm constantly amazed when I see people who have severe handicaps. They deserve much respect."

Dangl's positive outlook helps him surmount the obstacles life throws in his way. In day-to-day activities, his disability forces him to be highly organized. "Getting up and down is difficult," he explains. He plans each move in advance, and tries to arrange his surroundings with conveniences such as bookshelves he can reach while seated at his desk.

Dangl says he has become highly sensitized to issues such as building access. "I can walk, but I have a real hard time with stairs and with gravity in general," he explains. "I much prefer walking up an access ramp to stepping up a curb."

While he was an undergraduate at Stanford, Dangl got around the sprawling campus in a golf cart provided to him through the Department of Rehabilitation, a state agency that provides assistance to people with disabilities of all kinds. The help he received through the agency's staff was critical, Dangl says, but he is now worried that others won't be able to obtain similar benefits because of state government budget-cutting pressures.

Another concern focuses on the young people in his hometown. Noting a recent rash of suicides among students at his former high school, Dangl reflects on the fact that kids growing up in a small town may have a harder time finding new opportunities. "Maybe I can be a role model, to let kids know that there are options," Dangl suggests.

Dangl's thesis research, in which he used genetic engineering techniques to study how the immune system's antibody molecules function, was conducted in the laboratories of Stanford genetics professor Dr. Leonard Herzenberg and Dr. Vernon Oi, of Becton-Dickinson. In Germany, at the Max Planck Institute, he plans to study the genetic regulation of plants' responses to fungal infections, "a sort of plant immunology," he says.

When asked if he has considered applying his scientific expertise to studies of muscular dystrophy, Dangl turns pensive. "I have thought about it," he confides, "but I felt I wouldn't be able to distance myself from it emotionally. I would be too driven, it would just be too much," he adds.

Dangl's drive and positive outlook have taken him a long way but pursuing a graduate degree hasn't been easy, he admits. "All graduate students have moments when they think they'd like to quit and go pump gas. I've had those moments too, mostly when I've run into situations where I can't devise a system to beat gravity—it can be extremely frustrating.

He is quick to add that he might not have succeeded over the years without the help from his parents, his wife, Sarah Grant, also a geneticist, his many research colleagues, and the Rehabiliation Department.

"But you can either stay home, or you can go out in the world and see what happens," Dangl observes. "My attitude has always been that there aren't many situations that I can't figure a way out of, and that the benefits of the adventure always outweigh the hassle."

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SYMPOSIUM EMPHASIZES EARLY DIAGNOSIS OF BREAST CANCER

STANFORD—

Spotting breast cancer when it is very small greatly increases chances of cure. Different ways of detecting breast cancer were among the many topics physicians discussed at Stanford's first annual breast symposium, held March 21 and 22 in Palo Alto.

Doctors "can feel cancers when they are from two to three centimeters in size. The role of imagers is to intercept the cancer at its hopefully curable state when it is less than 2 centimeters," said Dr. James Brenner, chief of the section on breast imaging at Cedars - Sinai Medical Center.

An estimated 123,900 people will be diagnosed with breast cancer this year, 900 of whom will be males. Approximately 74 percent of those will live five years or more after diagnosis. Women with a personal or family history of breast cancer are considered at risk of developing breast cancer. Some other risk factors include: not having children, not having children before age 30, being overweight, or eating diets high in fat.

Mammography, which takes pictures of the breast using X-rays, is the only proven standard imaging technique, said Dr. Ralph Smathers, Stanford's chief of mammography and coordinator for the symposium. According to Brenner, mammography can detect over 90 percent of tumors under two centimeters. It has been developed so that patients are exposed to as little discomfort and radiation as possible, Smathers said.

Some doctors believe mammography may involve a risk of radiation exposure, but "I am not terribly concerned about the radiation hazards for properly performed and interpreted mammography," Brenner said.

The risk of exposure to radiation from film screen mammography is comparable to smoking only three-fourths of a cigarette, Smathers explained. But "other modalities (of imaging the breast) are being investigated because there is a constant effort to try and find the cancer earlier and earlier," he said.

Ways of imaging the breast that are currently being investigated include thermography, ultrasound, magnetic resonance and light transmission. Thermography, which uses heat to obtain an image, may be useful as an indicator of women at very high risk of developing breast cancer, Brenner said.

Ultrasound may be used in selective cases to determine if a tumor is benign or malignant, eliminating a significant number of biopsies, Brenner said. Mammography doesn't provide this information; surgical removal of a piece of the tumor -a biopsy- is required to make this identification.

Ultrasound may also be useful as a screening method for patients with little fat in their breasts, he said. Mammography can be difficult in patients with a low fat content in their breasts, because small tumors become harder to find, Smathers said.

Light transmission technologies, if used in corroboration with mammography, may increase the sensitivity of detecting lesions and the specificity of determining malignancies, Brenner said. But, "as much as we know about the interaction of X-rays and matter, we know very little -ironically- about the interaction of light and matter," he said.

"In our experience (with magnetic resonance imaging) we haven't had a great deal of success in imaging breast cancer. My personal feeling is that we have been imaging the wrong atom," Brenner said. But, research into magnetic resonance imaging is very new compared to other modalities, Smathers explained.

So far, no other kind of imaging has proven to be a substitute for mammography, Brenner said. Techniques to improve mammographic images are also being investigated, Smathers said.

The two-day symposium, held at the Hyatt Rickeys hotel in Palo Alto, was sponsored by Stanford's Division of Diagnostic Radiology and the CGR Medical Corporation of San Leandro, Calif.

3-26-86 —30— B/cancer

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Photos available if not included

LECTURES TO FOCUS ON TRANSPLANTS, MONOCLONAL ANTIBODIES AND AIDS

STANFORD—

Sale of body parts, monoclonal antibodies in therapy and the acquired immunodeficiency syndrome (AIDS) will be discussed in three public lectures at Stanford University Medical Center this April.

"The Impact of Biotechnology on Blood Transfusion and Transplantation" is the topic of the Spring Progress in Medicine lectures, which are free and open to the community.

The presentations will be held in Sherman Fairchild Auditorium beginning at 7:30 p.m. on consecutive Tuesdays, beginning April 1.

Dr. Rose Payne, a professor of medicine and hematology at Stanford, will introduce the series. Dr. Payne's discoveries about white blood cells and the body's immunity has helped open the way to heart transplants and understanding of certain genetic diseases.

"Sale of Body Parts: New Moral, Ethical and Biotechnical Dilemmas in Transplantation" will be the first lecture, given by Dr. F. Carl Grumet, associate professor of pathology and director of Stanford University Hospital's transfusion service.

Terminally ill patients have offered finder's fees for compatible bone marrow donors, "bringing this issue to a head," Grumet explained. "Bone marrow is replaceable tissue, but what about the sale of non-replaceable tissue such as kidneys and hearts?"

After presenting a review of advances in transplantation, Grumet will raise questions about moral, ethical, political and social issues involved in transplantation.

On April 8, Dr. Steven K.H. Foung will focus on "Human Monoclonal Antibodies: Potential Use in Therapy." Once described as "magic bullets," monoclonal antibodies are tailor-made proteins that fight disease.

Foung, assistant professor of pathology and assistant director of the transfusion service at Stanford University Hospital, will focus on ways monoclonal antibodies are expected to be used to fight disease within the next three to five years.

On April 15, Dr. Edgar G. Engleman, associate professor of pathology and leading AIDS researcher, will discuss the past, present and future of AIDS, the acquired immunodeficiency syndrome.

Engleman will explain the current understanding of how the AIDS virus enters and kills cells; he also will describe possible therapies to prevent or treat the fatal disease.

Engleman is medical director of the Stanford Blood Center, associate director of Stanford University Hospital's Transfusion Service, and an associate professor of pathology and medicine at the medical school. Under his direction, Stanford became the first blood bank to test donated blood for AIDS in July 1983.

All three researchers will take questions from the floor after their presentations.

Seating is limited for the three lectures. For information and registration, call the office of Public Events, (415) 723-6389.

3/26/86 —30— pim--jr1

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DEATH RATE STATISTICS FOR SCVMC MISLEADING, STANFORD OFFICIALS SAY

STANFORD—

Stanford University officials Wednesday, March 26 took issue with recently released Medicare statistics showing a higher-than-average death rate at Santa Clara Valley Medical Center (SCVMC).

Stanford President Donald Kennedy and Hospital Chief of Staff James Silverman said the statistics are "misleading" and do not indicate the high quality of care at the county hospital. Stanford's School of Medicine has a teaching affiliation with SCVMC and staffs many clinical services with educational programs.

"Valley Medical Center has been a valued partner of Stanford and we have great regard for the quality of medical care there," said the Stanford president.

Kennedy, a former Commissioner of the Food and Drug Administration, said the statistics were not conclusive enough for accurate ratings.

"I hope we will one day have at our disposal good comparative published figures on mortality rates on different hospitals for specific diagnosis and adjusted for severity," he said. "Until we have these, it seems to me premature to make judgments about particular institutions."

Silverman criticized the entire process under which the Department of Health and Human Services released the mortality figures of Medicare patients, naming 142 hospitals nationwide.

SCVMC was one of six Bay Area Hospitals with higher than average mortality rates. The statistics showed that 60 percent more Medicare patients had died at SCVMC in 1984 than would have been expected under national norms.

"The mortality rates are unrelated," Silverman said. "There's no evidence they reflect quality of care at all."

Silverman noted that SCVMC by its very nature as a teaching hospital "takes care of very complex patients and is obviously going to have a higher death rate."

The Stanford officials were not the first to challenge the significance of the federal statistics. Equally strong criticism has been voiced by the American Hospital Association and physicians. Officials at the county-owned VMC also called the figures misleading, pointing out that their hospital gets many patients who are sicker or more severely injured than are treated at some other hospitals.

Silverman said, "It's our feeling that SCVMC does an excellent job. We're aware of their physicians and their house staff and think that they're a first-class county hospital."

As for the mortality statistics, Silverman said "the problem is that aggregate data do not give you a fair snapshot of what really happens in any hospital."

He said the situation is like comparing the death rates of patients of two physicians, one of whom is a cancer therapist and the other a dermatologist. "The second one would have no deaths at all," he said.

Even comparing the same types of hospitals, such as university hospitals, doesn't give you an accurate picture, he said, "because some university hospitals treat a lot of cancer and some treat a lot of heart disease and the mortality from those two diseases varies a great deal."

Silverman said that if it were possible to "totally equalize the things you are comparing," the statistics would be meaningful. But, he said, it's almost impossible to achieve such equality because even if doctors and hospitals were the same, "the patients are different."

One patient with heart disease can be in vastly different condition than another heart patient, he pointed out.

3-26-86 —30— kennedya rg2

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USE OF OWN BLOOD MORE COMMON NOW, STANFORD BLOOD BANK REPORTS

STANFORD—

Autologous blood donations—units drawn from and used by the same person—have increased threefold in the last year at Stanford University Blood Bank. Currently about 15 to 20 individuals visit Stanford each week to give blood for their own use within a month or so.

"Your own blood is certainly the safest kind," acknowledged Rhoda Burns, recruitment supervisor of the Stanford University Blood Bank.

The Blood Bank has always encouraged patients and physicians to consider autologous donations, Burns said. The option, which must be ordered by a physician, has been popular in the past.

Most donations made at Stanford's blood bank, founded in 1980, supply patients at Stanford University Hospital.

Blood Bank officials attribute the increase to public concerns about the acquired immunodeficiency syndrome (AIDS) and other infectious diseases, but are quick to state that current tests effectively identify AIDS-tainted blood and that not all patients can store their own blood.

Because autologous donations must be drawn, tested and stored in advance, the procedure works best for healthy individuals who have planned elective surgery, Nathalie Finkle, RN, explained. Finkle, a supervisor at Stanford's Blood Bank, schedules and coordinates autologous donations.

Persons who are very sick, require emergency transfusions or need specialized products such as platelets can't give to themselves, she pointed out. These individuals depend on the generosity of others.

Evelyn Morrell of Menlo Park is typical of autologous donors at Stanford. Back in the Blood Bank last week for her third and final autologous donation before knee surgery in April, the senior citizen expressed her thanks for volunteer donors.

During emergency surgery a few years ago, Morrell explained, "I needed blood right away and was very glad someone else donated.

"But now I'm happy to be able to give my own blood and leave the other for someone else who needs it," she said.

Stanford University Blood Bank also accepts directed donations, blood designated for use by a particular individual.

The procedure, now accepted at most blood banks, has been controversial. Directed donations require extra handling and paperwork, boosting the cost to patients. Too, blood banks were afraid the public would incorrectly read such a move as an indication that the blood supply was unsafe.

Despite the drawbacks, Stanford decided the benefit of "alleviating fears in the eyes of the public" justified the procedure, SUBB Administrator Roger Svoboda said.

Research has shown that directed donations and regular volunteer donations are just as safe, Burns explained. "We readily accept directed donations," she said, "but we don't want patients who can't arrange them to be concerned."

Surgery in the family is stressful and blood banks don't want individuals to feel additional pressure, Burns continued. Still, people commonly become regular volunteer donors after someone in their own family needs blood, she indicated.

Stanford doesn't check blood types before donations. If a donor's blood type is inappropriate for the patient to whom he'd like to give, the donation usually goes to a patient who matches and needs it, she said.

Because of special handling procedures, both autologous and directed donations carry a higher price tag than regular blood. An autologous unit may cost only 17 percent more than an average unit of blood, but directed donations—which must be screened and tracked very closely—may cost up to 60 percent more.

Although the price may sound high—especially since the blood itself is given for free—the careful testing, typing, and cross-matching needed to ensure suitablity for a patient is costly.

Often called "the gift of life" because of its essential, irreplaceable functions, blood can cause painful and quick death transfused incorrectly.

autobld--jr1

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HOSPITAL DIETITIANS OFFER WEIGHT CONTROL PROGRAM

STANFORD—

An eight-week course on weight management is being offered by the Stanford University Hospital Department of Dietetics starting next month.

Entitled "an Enlightening Experience", the course is led by registered dietitians and includes a personalized weight loss plan, low calorie cooking demonstrations, recipes, menu planning and tips on dining out, said dietitian Patricia Kearney.

Guest speakers will discuss stress reduction, behavior modification techniques and exercise, Kearney said.

Afternoon or evening classes, limited to 20 participants each, are available and are held at the Stanford Medical Center. An evening class will meet 7:30 to 10 p.m., Tuesdays, April 22 through June 10. The afternoon class meets 1 to 3:30 p.m., Thursdays, April 24 through June 12.

Kearney said the fee is $325 with a $50 refund if the individual's weight goal is reached.

Registration deadline for the first session is April 18. For further information, call 723-5432.

3-24-86 —30— fatty--MG10

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DESIRE FOR THINNESS PUSHES MANY TEENS TO DESTRUCTIVE EATING HABITS, STANFORD SURVEY DISCLOSES

STANFORD—

Thirteen percent of 15-year-olds report practicing purging behaviors — self-induced vomiting and abuse of diuretics and laxatives — as a means of weight control, according to a Stanford study.

Purging is associated with the eating disorder bulimia, which is characterized by a self-perpetuating pattern of binge eating followed by fasting and various methods of purging or both. Purging methods remove food from the body before it is digested.

In the survey 13 percent of 1,728 tenth-grade students from four northern California high schools reported engaging in some form of purging behavior. Female purgers outnumber male purgers two-to-one.

The survey identifies self-induced vomiting as the most common purging behavior among tenth-graders, followed by the use of laxatives and then the use of diuretics.

For most of these teenagers, purging occurred on an infrequent basis, said Joel Killen, behavioral scientist at Stanford's Center for Disease Prevention Research. Of the 10.6 percent of tenth grade girls who reported self-induced vomiting, 8.6 percent vomited on a monthly basis or less, 1.1 percent vomited weekly, and 0.9 percent vomited several times a week or more.

The survey, reported in the March 21 issue of the *Journal of the American Medical Association*, was conducted by Killen and Drs. C. Barr Taylor and David Maron, and researchers Michael Telch, Keith Saylor, and Thomas Robinson.

The rate at which these teenagers purge is probably not physically harmful, Taylor said. Most of them would not be diagnosed as bulimics because most bulimics induce vomiting in themselves at least once a day, Killen said. But, many bulimics say they began purging as teens, he said.

"What we may be seeing is the beginning of the use of unhealthy weight regulation strategies and unhealthy attitudes about weight and dieting," he said. Teenagers with these unhealthy attitudes combined with the purging behavior may be at risk of developing eating disorders that can lead to serious medical complications, Killen said.

Results of the study did not surprise Taylor "because there is so much pressure (from society) to control weight."

This survey is one of the first to document a high frequency of purging behavior in normal weight teenagers and purging behavior in males as well. This surprised Taylor because men are rarely seen in eating disorder clinics, he said.

The survey was conducted, in part, because clinics are reporting increases in the number of people -mostly females- with eating disorders, Killen said. Recent studies indicate a possible increase in bulimia in normal and overweight groups, Killen said. The actual prevalence of bulimia in the population at large is unknown, but it is associated mainly with women, he said.

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The survey indicates that in contrast to nonpurgers, purgers dieted more frequently, counted calories more often, and felt greater guilt after a period of excessive eating.

Male purgers were generally fatter than their nonpurging counterparts, but there was no significant difference in weight between female purgers and nonpurgers. Female purgers reported more pronounced fluctuations in weight than their nonpurging counterparts.

An obsessive fear of gaining weight and a distorted body-image are common among bulimics, Killen said. The survey showed that attitudes of purgers are "in the direction of being more preoccupied and concerned about weight" than nonpurgers, he said.

Actually, the desire to be thin in purgers and nonpurgers may be very similar, Taylor said. But "purgers in general have more of a problem in regulation of emotions and behavior," he said.

"Sociocultural factors that link beauty, success, and happiness to a thin body shape may be partly responsible for the possible increase of bulimia," the researchers said.

"There certainly does seem to be a pressure in society to maintain a slim figure," Killen said. This pressure may lead "psychologically vulnerable individuals" to develop the binging and purging syndrome.

In follow-up studies, the researchers hope to examine possible causes of unhealthy attitudes in teens, Killen said. "That will be a major and challenging task."

Later studies will also examine how these purging behaviors progress over time and if educational intervention — such as teaching healthy eating and exercise practices and weight management techniques — has any positive impact.

Because it is very hard to get adults to change long ingrained habits "it may be more cost effective in the long run to do more primary prevention and work with adolescents," Killen said.

The survey is part of a larger Stanford study that is examining ways to change behaviors in teens to prevent coronary artery disease later in life, he said. "By changing certain lifestyle behaviors you can change your risk of developing heart disease," he said.

"The goal is to get adolescents to quit smoking, improve their eating habits, start exercising, learn symptons of stress and some ways of managing stress in their lives," Killen said.

In further studies "we will look for changes over time in variables like weight and blood pressure," he said.

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PETER B GILES APPOINTED TO STANFORD HOSPITAL BOARD

STANFORD—

Peter B. Giles, 41, president and chief executive officer of the Santa Clara County Manufacturing Group, has been appointed to the Stanford University Hospital Board of Directors.

His appointment was approved March 11 by the general members of the hospital corporation. He will fill the unexpired term of Frank H. Roberts, which ends Dec. 31, 1987. Roberts, who had been a member of the board since 1970, said in his resignation letter that he felt he had served long enough.

Giles, like Roberts, is a Palo Alto resident. By-laws provide that three members of the hospital board be Palo Alto residents.

The 18-member board is comprised of community, medical and lay leaders as well as university faculty and administrators. Twelve of the members are appointed by the general members of the hospital corporation, who also are trustees of the university.

The Santa Clara County Manufacturing Group is an association of 90-member companies that employ more than 180,000 people in Santa Clara County. Giles has directed the group's attempts to provide a constructive industry approach to such issues as high housing costs, inadequate commute transportation and environmental problems.

Before joining the manufacturing group, Giles was an associate with the management consulting firm of Booz, Allen, & Hamilton, specializing in improvement projects for cities and counties.

He earned a Master of Public Administration degree in urban management from the University of Pittsburgh and a bachelor's degree in history from Brigham Young University.

3-18-86 —30— giles--RG2

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MAGNETIC RESONANCE LAB TO EXPAND STUDIES INTO LIVING SYSTEMS

STANFORD—

A $1.25 million grant to enable Stanford's Magnetic Resonance Laboratory (SMRL) to expand its research to medical problems in living systems has been approved by the National Institutes of Health.

The grant from NIH's Division of Research Resources will support, in part, SMRL's activities for the next five years, said Dr. Oleg Jardetzky, the laboratory's director and professor of pharmacology at Stanford University School of Medicine. SMRL, started 10 years ago, is a national resource and its use is open also for a fee to academic researchers outside Stanford.

Most of SMRL's research until now has concentrated on chemical studies. "The expanded program is important because the whole state of magnetic resonance applications in the body is still very developmental," Jardetzky said.

The technique gives fine images of the body, but is not good enough when it comes to obtaining chemical information from deep structures, he added.

Magnetic resonance, discovered simultaneously by Stanford physicist Felix Bloch and E. M. Purcell of Harvard 40 years ago, is used to obtain information from the body both anatomically and chemically over time. It works on the basic concept that the body's nuclei contain magnetically charged particles that can be manipulated to give off signals that are picked up and interpreted by computers. The differences in the signals tell scientists precisely which structure of the body they are coming from, what the organ is made up of, and how it works on its own in relation to other organs.

The technique offers information through high resolution spectroscopy, graphs with distinct lines that show exactly how substances are processed in the body, and through the recently developed application of magnetic resonance imaging, X ray-like pictures that show soft tissue.

But while it's simple to obtain a spectrum from the head of an animal, a human arm or leg, Jardetzky explained, you can't localize the spectrum very well and you can't get anatomic or chemical information selectively from deep structures of the brain, for example.

"That's a major technical problem," he said. "Whoever solves it will open up the field to a large number of medical applications. And we as well as others have some ideas of how we can go about it."

Once the problem is solved, the scientist said, it will be possible to study the chemistry of the brain as a function of signals travelling from a sensory organ to the cortex. "This kind of mapping of the brain will be far more extensive and precise than information obtained now with the more conventional EEG," he said.

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An important advantage is magnetic resonance's noninvasiveness, the scientist said. "You'll be able to study the human brain without sticking needles, without biopsies, without any kind of interference. That's the only method which can be ethically justified for getting information from a normal human brain," he said.

Three SMRL pilot projects using magnetic resonance spectroscopy have paved the way for the new applications, Jardetzky said. One of these was a study of plant metabolism done in association with Dr. Justin Roberts, now on the faculty of UC, Riverside. Another study with Dr. Eugene Robin, Stanford professor of physiology and medicine, showed how turtles sustain themselves underwater without oxygen for long periods of time.

The 1980 study, believed to be the first use of magnetic resonance in a physiological experiment, showed clearly that turtles survive underwater by a slowing down of their metabolism. The study defined the precise sequence of chemical events in cells that give the turtle this ability.

A third study with Dr. Stuart Jamieson, associate professor of cardiovascular surgery, has determined exactly how long a heart can be out of the body and still function, the best way to preserve it, and the heart's capacity to restore lost energy, Jardetzky said.

This information, he added, is important to enable surgeons to expand their donor pool of hearts, lungs and conceivably other organs as well.

In addition to its expanded scope, Jardetzky said SMRL will continue to do a very significant amount of macromolecular work. Collaborations in this area involve the departments of biochemistry, biological sciences, chemistry, and pharmacology at Stanford, as well as collaborations with scientists from the UC, Berkeley, UC, Santa Cruz and the University of Wisconsin.

Another new direction involves collaboration with Stanford's Department of Computer Science. The research involves an artificial intelligence program called PROTEAN and its development as a tool for interpreting magnetic resonance data on proteins. Computer scientists Bruce Buchanan, James Brinkley, Craig Cornelius and Barbara Hayes-Roth are studying to determine the strengths and limits of PROTEAN with protein molecules of known and unknown structure.

"In the past year we developed a completely new method for deducing protein structures from magnetic resonance data," Jardetzky said.

SMRL's equipment, he said, presently includes three NMR spectrometers—500 MHz (Mega Herz), 360 MHz, and 100 MHz. Agreement has also been reached with Bruker Instruments, a West German firm, to install a fourth instrument—a 30-centimeter bore horizontal magnet operating at 100 MHz.

The Bruker instrument, Jardetzky said, will be used primarily for magnetic resonance studies in living organisms and for the development of techniques for localizing spectra to deep structures.

SMRL's scientific activities are governed by a national advisory committee. In addition to Jardetzky, its members are Reymond Andrew, professor of radiology, physics and nuclear science, University of Florida; Erwin Hahn, professor of physics, UC, Berkeley; David Hubel, professor of biochemistry, Harvard; Martin Karplus, professor of chemistry, Harvard; Harden McConnell, professor of chemistry, Stanford; Manuel Morales, professor of biophysics, UC, San Francisco; Lubert Stryer, professor of cell biology, Stanford; and Gregorio Weber, professor of biochemistry, University of Illinois.3-17-86 —30— MRI-SA9

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NERVE REGENERATION PROTEIN IS LINKED TO CHOLESTEROL TRANSPORT

STANFORD—

Scientists reported in this month's *Proceedings of the National Academy of Sciences* that they have deciphered the identity of a protein involved in nerve degeneration and regeneration.

To their surprise, the protein they have been studying for several years turns out to be apolipoprotein E, a protein that carries cholesterol and fat in the bloodstream, said Dr. Eric Shooter, professor and chairman in the neurobiology department at Stanford University School of Medicine.

The discovery may be a clue in the mystery of why damaged nerves in the periphery of the body can be repaired, but nerves of the brain and spinal cord generally do not regrow following injury.

Researchers would like to understand what controls nerve growth and regeneration in hopes of finding "switches"—genes or proteins—to turn the process on and off as needed.

The eventual goal would be to switch nerve regeneration on in patients who suffer damage to the brain or spinal cord.

Research findings on the protein, which has been studied in rats, appear in an article published in the March issue of the *Proceedings of the National Academy of Sciences*.

Shooter's colleagues and coauthors on the article are Drs. Michael Ignatius, Peter Gebicke-Haerter, and Pate Skene from Stanford; Dr. James Schilling of California Biotechnology, Inc., in Mountain View; and Drs. Karl Weisgraber and Robert Mahley of the Gladstone Foundation Laboratories for Cardiovascular Research at the University of California, San Francisco.

In its role in the bloodstream, apolipoprotein E helps ferry cholesterol and other fat molecules between cells.

Shooter and his associates believe that when a nerve degenerates after injury, the protein sponges up fat molecules that spill out of damaged nerve tissue and carries them into the cells surrounding the nerve to store the fats until they are needed to construct new replacement nerves.

Shooter and Skene originally became interested in the protein when they discovered that it was produced in relatively large quantities in developing nerves but was scarce in nerves that were not growing.

For example, the protein was plentiful in developing nerves of young rats, but not in adult animals whose nervous systems had stopped growing. One of the interesting findings is that while the protein accumulates in regenerating peripheral nerves of rats it does not accumulate in damaged brain and spinal cord nerves, which do not regenerate, Shooter said.

The research was supported by grants from the National Institutes of Health, the Spinal Cord Society and the Isabelle M. Niemela Fund.

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FOR IMMEDIATE RELEASE

BIOCHEMIST ROTHMAN WINS PASSANO YOUNG SCIENTIST AWARD

STANFORD—

Dr. James E. Rothman, professor of biochemistry at Stanford University School of Medicine, has been selected to receive this year's Passano Foundation Young Scientist Award.

Rothman, 35, is being honored for his work in clarifying the functions of the Golgi apparatus, a set of stacked membranes involved in regulating the flow of protein traffic inside cells.

He is scheduled to receive the award and a $10,000 honorarium at the Passano Foundation's award presentation dinner in Baltimore on Monday, March 17.

At the same time, the Foundation named the late Dr. Albert Lehninger of Johns Hopkins University and Dr. Eugene Kennedy of Harvard University co-winners of this year's senior Passano Award.

The Young Scientist Award is presented to researchers whose work demonstrates an extraordinary level of achievement early in their careers, the Foundation said. Rothman's work, in particular, has "thrown unique light on the intricacies of cellular regulation," the Foundation said.

His research has provided "the first comprehensive view of the manner in which various compartments of the Golgi apparatus modify the structure of proteins and thereby direct intracellular traffic," the Foundation citation added.

In order for cells to function, newly synthesized proteins must make their way through a maze of membranes to their proper locations. In finding a way to reconstitute the Golgi apparatus in the test tube, Rothman has been able to study the Golgi's role in this process in detail.

Rothman earned his bachelor's degree from Yale University in 1971 and his Ph.D. from Harvard in 1976. He joined the Stanford Medical School faculty in 1978 as an assistant professor, became associate professor in 1981 and full professor in 1985.

In 1984, *Science Digest* magazine named him as one of "America's 100 brightest scientists under 40."

Beginning in 1945, the Passano Foundation has presented an award each year to a person or persons who have made an outstanding contribution to the advancement of medical sciences and whose work was done in the United States. The Foundation's directors give prime consideration to work that has immediate clinical value or gives promise of practical application in the near future, the Foundation said.

Founded by the late Edward Boteler Passano, then chairman of the board of the medical publisher, The Williams and Wilkins Co., the Foundation has honored 62 scientists in the past. Eleven winners subsequently have gone on to receive the Nobel Prize. The Young Scientist Award has been presented since 1975.

Previous Stanford Medical School recipients include Dr. Hugh McDevitt, who was a Senior Laureate, and Drs. Roger Kornberg and Mark Davis, who received the Young Scientist Award.

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SCIENTISTS USE NEW APPROACHES TO CURB IMMUNE ATTACKS

STANFORD—

Scientists meeting last week at Asilomar painted an encouraging picture of how the immune system one day may be prevented from turning inward to attack vital body tissues.

This is good news for millions of people with a wide variety of medical conditions, including organ transplant patients and those suffering from diseases such as rheumatoid arthritis and diabetes.

The ultimate goal the scientists seek is the ability to create tolerance, a state of truce between the body's immune system and tissues it wants to attack.

The ultimate benefit for patients is that millions of people who would otherwise face a lifetime of taking powerful and often hazardous drugs, could have the chance to lead medication-free lives.

The meeting, convened by scientists from Stanford University School of Medicine and supported by Varian Associates of Palo Alto, attracted researchers from around the world, said Dr. Samuel Strober, professor of medicine, one of the conference organizers.

Monoclonal antibodies, alone and linked to toxins, and radiation treatments are among the approaches that Stanford scientists discussed for achieving immune tolerance in patients and in animals.

Strober stressed the experimental nature of the research, but some preliminary results both in animals and humans suggest that scientists are getting closer to their long-sought goal.

In addition to the work's hoped-for clinical applications, it is also helping scientists better understand the immune system, which is normally the body's defense against disease but can become a patient's worst enemy when it mounts an inward attack on the body's own, or transplanted tissues.

Medicine has amassed a battery of powerful immune-suppressing drugs to control such immune attacks, which are called rejection episodes when a transplanted organ is the target, or autoimmune disease when the body fails to recognize its own normal tissue and launches an attack against itself.

But these medications, a lifelong necessity for many patients, have serious side effects and are extremely expensive. So scientists are exploring drug-free ways, such as tolerance, to gain control over the immune system. But they need to strike a vital balance because of the critical role the immune system plays in warding off disease.

"A requirement for immune tolerance is getting the immune system to tolerate a tissue it wants to attack without compromising its ability to defend the body from disease," Strober explained. This means that selective suppression is the key.

The scientists are using a variety of methods to try to induce selective tolerance, including radiation treatments, monoclonal antibodies, short-term drug therapy, and in the case of organ transplants, by manipulating donor tissue prior to transplant so that it doesn't trigger the recipient's immune system to attack.

One promising approach under study by Strober and his colleagues is the use of total lymphoid irradiation (TLI), a radiation technique originally developed to treat a form of cancer called Hodgkin's disease.

TLI is thought to suppress the immune system by causing a drop in number of the specific type of white blood cells that boost autoimmune attacks and transplant rejection episodes.

TLI has been administered to kidney transplant recipients, and to patients with two autoimmune diseases, severe rheumatoid arthritis, in which the immune system destroys linings around the joints, and lupus nephritis, in which the immune system attacks the body's connective tissue and kidneys. All the patients had previously failed to improve with conventional immunosuppressive drug therapy.

3-17-86

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Strober reported at the meeting that five out of nine lupus patients have withdrawn from all drug therapy after TLI substantially improved their condition. This is in striking contrast to the normal situation, in which fewer than one in 100 lupus patients with severe kidney disease are likely to improve without chronic drug therapy, he noted.

"The question now is how long can we keep them off the drugs," he said. A disease recurrence would require them to return to medication, he explained. So far, the patients have remained drug free for periods ranging from one month to as long as three-and-a-half years without recurrence.

The use of TLI to induce improvement in rheumatoid arthritis patients has been encouraging as well, Strober said. Twenty-four of 32 patients with advanced arthritis improved significantly following TLI, but although their doses of conventional anti-arthritic drugs have been reduced, none has been weaned off medications completely.

In kidney transplant patients, TLI has reduced but not eliminated the need for immunosuppressive drugs, Strober said. In a collaborative study with Pacific Medical Center in San Francisco, Strober and his colleagues reported that most patients can avoid rejection of the foreign kidney by taking very low doses of a single drug, prednisone, rather than the usual immunosuppressive regimen which consists of larger doses of several drugs including prednisone, cyclosporine, and imuran, all expensive and likely to cause undesirable side effects.

The ability to achieve immune tolerance could also help researchers develop a new method for treating diabetes, a disease in which islet cells of the pancreas, which normally make insulin, are destroyed, cutting off the body's supply of the vital hormone.

For some time, scientists have wanted to revive insulin production in diabetics by transplanting healthy islet cells into the patient. But as with other tissue transplant procedures, rejection of the foreign cells becomes a major problem.

In new studies using rats or mice with drug-induced diabetes, Dr. Garrison Fathman and colleagues are experimenting with a double-barrelled approach to overcome islet cell rejection. In one technique, they treat the islet cells before transplantation to remove the small number of cells responsible for triggering an immune attack in the recipient animal. In another approach, they deplete the recipient's supply of the type of white blood cell responsible for rejection attacks when they transplant the islet cells.

Both methods rely on the use of monoclonal antibodies, tailor-made proteins targeted to destroy the specific type of cell the scientists aim to remove. The monoclonal antibody is attached to a toxin when pre-treating the islet transplant to destroy any immune-triggering cells.

Results with both of these techniques have been encouraging, Fathman reported. Most of the recipient animals became non-diabetic as the transplanted islet cells began manufacturing insulin. In addition, the animals have so far survived more than three months without experiencing rejection of the foreign islet cells.

Fathman and his colleagues believe they may get even better results by coupling the two techniques together. However, he stressed that much more research needs to be completed in animals before the procedures could be tried in humans.

"Even if this works as well as we hope, it would still be at least five years away from use in people," he said.

Other scientists at the meeting discussed new approaches to immunosuppressive drug use in autoimmune disease and in transplant recipients, as well as other types of studies using TLI and monoclonal antibodies. In addition, experimental attempts to induce tolerance in animals using bone marrow transplantation were discussed.

Doctors expect the number of transplant patients to soar in coming years, making control of rejection an increasingly important clinical goal.

"Part of the reason for the lack of crisp, overwhelming interest in tolerance up to now is because, by hook or by crook, people have been doing a pretty good job of getting the majority of transplanted organs to stay in for at least a year or two using drugs," Strober noted.

"But in the last analysis, the recipient would like to have something that stays in more than a year or two. We're trying to go beyond the challenge of exchanging a diseased organ for a healthy one. The meaningful thing now is how long can we get the new organ to function, and how can we do it with the fewest side effects and costs," he said.

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STANFORD HOSPITAL ANNOUNCES LAYOFFS

STANFORD—

Stanford University Hospital announced the layoff this week of approximately 150 employees. The number affected were significantly fewer than had been expected when the hospital began planning the downsizing effort as part of its overall cost containment target last January.

A letter to all hospital employees from Sheldon King, president and chief executive officer, and William Arnold, vice president and chief operating officer, dated Friday, March 14, stated:

"Some 400 full-time equivalents (FTEs) have been eliminated from the 1986-87 budget. That does NOT mean that we will lay off 400 people. For several months, we have been reducing the number of FTEs by attrition—by not filling vacant positions. We have also placed careful controls on the creation of new positions."

The layoffs were part of a $25 million budget reduction outlined by the hospital in January. Before the reduction, the hospital had 4,239 employees, including those who work part-time.

In Friday's letter, employees were told: "Our managers have come up with a variety of creative ways to manage costs and eliminate expenses. As a result, the effect on our staff has been less than we had originally anticipated."

The letter noted that layoffs were not made across the board, but through an examination of the staffing needs of each hospital service.

All laid-off employees will receive at least 30 days notice. The last day of work for most will be April 11.

Most laid-off emlployees are eligible for severance pay (based on salary and length of service). There are also provisions for the continuation of some benefits.

In addition, the hospital has set up a job search center to help those employees seek new jobs. The center will provide assistance in writing resumes and submitting employment applications, list available positions in other health care institutions and offer analysis of skills and career goals.

The letter from King and Arnold concluded: "This has not been an easy time, but we have positive results to show for the work and worry of the past few weeks. We have defined a downsizing program that has the least possible effect on our employees, and now we are ready to move on—to rebuild and redefine our institution in ways that will lead us to a strong, successful future."

3-14-86 —30— layoffs--RG1

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CHARLES E. McLENNAN, RETIRED OBSTETRICIAN, DIES AT 76

STANFORD—

Dr. Charles E. McLennan, an emeritus professor of gynecology and obstetrics at Stanford, died March 8 in Portola Valley.

McLennan, who was 76, succumbed to fibrosis of the lung after a long illness.

A memorial service will be held 2 p.m. April 5 at the First Congregational Church in Palo Alto.

McLennan joined the Stanford faculty in 1947. He served as head of his department for 26 years before retiring in 1973.

He was known for his contributions to the understanding of the function of the lining of the uterus and for work in the treatment and detection of uterine cancer.

McLennan was nationally recognized and headed several prestigious medical organizations, including the American Board of Obstetrics and Gynecology, the American Gynecological Society, the Pacific Coast Obstetrical and Gynecological Society, the Society for Gynecological Investigation and the San Francisco Gynecological Society.

McLennan is survived by his wife, Dr. Margaret McLennan, a resident of Lytton Gardens in Palo Alto; and four children: James of Rhode Island, Nancy King of New York City, Jane Stearns of Menlo Park, and Thomas of Palo Alto. Dr. Margaret McLennan also served on the Stanford medical faculty.

Before joining the Stanford faculty, McLennan chaired the department of obstetrics and gynecology at the University of Utah.

McLennan, a Minnesota native, also served on the faculty of the University of Minnesota, where he earned his bachelor's degree in 1930, his medical degree in 1934 and his doctorate degree in 1942.

From 1940-41 McLennan was a Commonwealth Fund Fellow at the University of Virginia.

Memorial contributions may be made to the Charles E. McLennan Fund for medical student scholarships, c/o Stanford Office of Medical Development, 780 Welch Road Suite 106, Palo Alto, CA 94304.

3-11-86 —30— obit--JR1

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MAGNETS MAY JOIN MICROSCOPES IN DIAGNOSING DISEASED TISSUE SPECIMENS

STANFORD—

Nuclear magnetic resonance (NMR) could become a new diagnostic tool for analyzing tissue samples taken from patients during surgical biopsy, predicts a Stanford University Medical School pathologist.

It would be more rapid, and perhaps more accurate, than microscopic analysis, which is the current method for identifying infections or cancer in biopsy samples, said Dr. Steven Quay, Stanford assistant professor of pathology based at the Palo Alto Veterans Administration Medical Center.

Quay and his colleagues, Kenneth Comess, Delip Worah, and Renu Gandhi, were scheduled to report preliminary but encouraging results from a feasibility study of this use of NMR at the annual meeting of the International Academy of Pathology in New Orleans on Tuesday, March 11.

NMR recently burst onto the medical scene as magnetic resonance imaging (MRI), a new technique for viewing internal body structures to supplement more conventional X-ray images.

In MRI the patient is placed in a multi-million-dollar machine that generates a powerful magnetic field capable of rigidly aligning the nuclei of atoms in his body. Radio waves beamed at the patient "relax" the nuclei, which then emit signals that can be used to form images or to provide physiological information about body tissues.

Biopsy specimens surgically removed from a patient can be analyzed with NMR using the same basic technique but with a much smaller machine, since it doesn't have to accommodate a whole body and since images are not being formed.

Using this approach, the researchers are taking an NMR inventory of all the body's tissue types and the various kinds of tumors that can arise in them, to catalog the characteristic NMR "profile" of each.

Quay said that they have preliminary evidence that the two major types of human malignancies, carcinomas and sarcomas, have different profiles from normal tissues and from each other.

In addition, certain types of infections may be identifiable. For example, "We've got a very characteristic signal from pneumonia in the lungs," he said.

"The idea is that eventually, a pathologist might be able to put a little piece of tissue in this instrument, make a few measurements, and then make a preliminary diagnosis very quickly," Quay said.

Since NMR analysis does not alter the tissue, the sample can later be analyzed by more conventional methods under the microscope to confirm the diagnosis or to obtain additional information. "This is an unusual bonus because most diagnostic techniques do something irreversible to the tissue which prevents some further uses," Quay pointed out.

Whereas in microscopic examination, "pathologists look for patterns of abnormal tissue growth or abnormal cellular behavior, this new technique could provide a totally different kind of picture at a different level of cellular organization," Quay said.

The researchers have been using a small machine that provides more accurate information than large MRI machines because it can pick up subtle differences between tissues that imaging machines are unable to detect, he added.

But Quay stressed that there is a large amount of work to be done before the technique can be used. "It will take three to four years to fully characterize most of the important tumors," he pointed out.

If the technique turns out to be useful, however, the equipment needed is small and inexpensive enough that "many pathology departments could have one," Quay suggested.

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NMR--LH10

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EDITORS: Photos are available on request if not included.

SPECIAL CHILDREN HELP STANFORD BLOOD BANK

STANFORD—

When Lori Biagini donated blood last summer, she went home with more than a bandage on her arm: she came up with an idea.

While Biagini was giving blood, nurses in the blood bank were bundling test tubes and preparing paper bags for needle disposal. One nurse commented on "how boring it was," Biagini recalled.

"But I thought: 'What a great job for our kids!' " Biagini is a recreational therapist for retarded, autistic and disturbed children at PCC Children and Youth Services (formerly Peninsula Children's Center) in Palo Alto.

As a result, a dozen retarded and autistic children now have experience in practical work habits—and the Stanford University Blood Bank (SUBB) receives a valuable service.

"Finishing a job, paying attention to detail, and attending to tasks is easier if it's real work," explained Connie Camp, head of PCC's workshop.

Before receiving the job from the Stanford University Blood Bank, the children assembled "pretend" projects that the staff took apart at night. Now, with a real job, quality is easier to strive for and achieve, "since someone else cares," Camp said.

The children bundle three test tubes together with a rubber band; they also nest one paper bag inside another and then turn down the top edges. The tasks allow the children to practice motor skills and apply work habits, Camp observed. They also "give the kids an identity of being a worker in the community," she said.

Children sometimes accompany Biagini when she drops off finished work and picks up new materials each week.

"It's good for them to see the bags in use and see the nurses with the tubes and let them talk to the nurses," Biagini said.

Each week, more than 120 bags are used for disposal of used needles in the Blood Bank's Welch Road facility and out in the mobile unit, according to SUBB Nursing Supervisor Pauline Burn, RN. About 500 sets of bundled test tubes are needed weekly to run tests on donors' blood, she added. The children usually meet both of these quotas.

"This really saves us a lot of time," Burn said. "And these kids are not only reliable, they're consistently reliable."

Biagini, a regular donor at Stanford University Blood Bank, began giving blood four years ago as a result of a blood drive at PCC. She credits her contributions toward a co-worker's needs.

PCC Children and Youth Services provides day-time service to up to 50 autistic, developmentally delayed, behaviorally different and emotionally disturbed children from Santa Clara and San Mateo Counties. Their work with SUBB is arranged through Maureen Roskoph, SUBB's volunteer coordinator.

3-11-86 —30— bbvol--JR1

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NEW STUDY FINDS CLUES ABOUT HOW CELLS AGE

STANFORD—

A new study, which casts doubts on widely held notions of how we age, was reported Friday, March 7, by scientists at the Linus Pauling Institute of Science and Medicine and Stanford University School of Medicine.

For years many scientists have believed that cells get older and die, in part because errors accumulate in their hereditary and protein molecules.

But according to the new findings, published in the March 7 issue of *Science* magazine, the proteins an old cell produces are indistinguishable from those of its youth, suggesting that the genetic code remains largely error-free as cells age.

A key difference between young and old cells, the research hints, may be how they use the information encoded by their genetic material, DNA.

The study, carried out in fruit flies, could have far-reaching implications for future research on the molecular mechanisms of aging in cells of higher animals, including human beings.

"We haven't solved the aging problem—we've only made a discovery that needs to be further pursued," James Fleming, research biochemist at the Linus Pauling Institute, was quick to point out. "The evidence suggests that something very subtle is going on at the genetic level as cells get old."

Fleming's colleagues on the *Science* report are Elizabeth Quattrocki, who as a Stanford undergraduate participated in these studies and is now at Yale Medical School, Klaus Bensch, professor and chairman of Stanford Medical School's pathology department, and scientists from the Linus Pauling Institute, including Gerald Latter, a computer specialist, Jaime Miquel, a research associate, Rick Marcuson, a biostatistician, and Dr. Emile Zuckerkandl, director and president.

The researchers chose to study flies because cells in the adult insects cease dividing, providing a population of cells that are almost all growing old at the same rate.

"Nearly every cell in the tissues of a 40-day-old fly is 40 days old," Fleming explained.

Cells of the human body that similarly do not divide or renew themselves—many cells in the brain and heart, for example—are thought to be important factors in human aging, Fleming explained in an interview.

Although compared to a person's lifetime, the month-and-a-half long lifespan of a fly seems short, "we assume that what goes on in a fly is similar to what goes on in the non-dividing cells of higher animals," Fleming said.

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3/10/86

The researchers used a technique called quantitative two-dimensional gel electrophoresis to look for age-related changes in a large fraction of proteins found in fly cells.

Since proteins are the molecules that carry out cell activities, alterations in their structure could bring about significant changes in a cell's ability to function. In addition, since the blueprint for proteins is encoded in the DNA, changes in protein structure would probably reflect errors, or mutations, in the cell's genetic material.

They found no evidence of any alterations in the proteins they examined as the insects aged from young (10-day-old) to middle-aged (28-day-old) to old (44-day-old).

But the researchers did find that some of the proteins are produced in vastly different quantities at the various stages of life.

"The things that go wrong in aging appear not to be associated with changes in molecules, but are instead changes in the synthesis rates of individual proteins," Fleming said.

He added that for some time people have known that overall protein synthesis slows down in aging cells. The new findings show that the decrease in synthesis is not uniform, Fleming added.

"The synthesis of some proteins increased, for others it decreased, and for some it didn't change as the cells aged," he noted. "We do not yet know the identities of most of these proteins, but one of our next steps is to try to find out. It could be important for understanding what happens during aging to identify some of the proteins that have dramatic changes in their rates of expression."

The finding appears to contradict several hypotheses about aging, including the "error catastrophe theory" which holds that an error in a key protein can quickly become amplified. For example, if a protein involved in making other proteins becomes defective, it could cause a cascade of defects among proteins throughout the cell.

The report also raised questions about other hypotheses of aging, all of which revolve around the idea that mutations in a cell's DNA lead to flawed proteins that accumulate in the cell, hindering its ability to function.

"We don't know what's going on, but whatever it is, it's subtle—it's certainly not a catastrophe," Fleming said, "and it appears not to be a result of mutations in genes that code for many proteins."

The research was supported in part by a grant from the Glenn Foundation for Medical Research.

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TWO STORIES

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FOR IMMEDIATE RELEASE

DIABETICS NEEDED FOR RESEARCH STUDY

STANFORD—

Diabetics can obtain a comprehensive free physical examination while helping researchers at Stanford University Medical Center test a new medication.

Dr. Elizabeth Fraze, a fellow in endocrinology, said at least 20 adults between 40 and 70 years are needed for the study, which will be determining the effectiveness of a new medication, Linogliride. Fraze said the medication could reduce or eliminate varied side effects, such as reddening of the face, for some patients if proven effective.

Volunteers must have Type II adult onset diabetes but be otherwise in good health, said Fraze. She added that participants may or may not be taking insulin but must be willing and able to give up that medication while taking the new oral medication during an approximately six-month trial.

The physical exam will include an evaluation of kidney and liver function, cholesterol level and an electrocardiogram.

The study is headed by Dr. Fredric Kraemer, director of the medical center's diabetes clinic. For further information or to volunteer, contact Fraze or Kraemer at (415) 497-5947 or 497-6054.

About 80 percent of the estimated 5.5 million diabetics in the United States suffer from Type II adult onset diabetes mellitus, a metabolic disorder in which the body fails to process carbohydrates properly. Strict attention to diet and medication are common treatments.

3-7-86 —30— lingo--MG10

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FOR IMMEDIATE RELEASE

CLASS SCHEDULED FOR PSORIASIS PATIENTS, FAMILIES

STANFORD—

Psoriasis patients and their families will have an opportunity to learn about the chronic and often debilitating disease at a one-day workshop scheduled March 15.

The workshop is to cover such topics as cause and course of the disease, treatment, preventive measures, myths and current research, said Dr. Lexie Nall of the Stanford Medical Center Dermatology Department, which is co-sponsoring the event with the Psoriasis Research Institute.

The free session is scheduled from 10 a.m. to 4 p.m. at the Psoriasis Research Institute conference room, 600 Town and Country Village in Palo Alto.

The need for workshop sessions are important for psoriasis sufferers because the course of the disease is unpredictable, and recurring flareups can be particularly stressful for patients and their families, Nall explained.

For further information, contact Nall at (415) 497-7967.

3-7-86 —30— lingo--MG10

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FOR IMMEDIATE RELEASE
Editors: This article originally appeared in the Winter 1986 issue of Stanford Medicine, *now available from the News Bureau*. Photos are available.

PUTTING THE HEAT IN CANCER

STANFORD—

An ancient idea is back. Combined with radiation, development of better equipment and understanding of its biology, heat could gain an important place in the armory of weapons against cancer.

It all began with fever. Ancient peoples believed it cured illness. In the late 1800s, reports appeared that patients with cancer were cured after becoming sick with smallpox, pneumonia and malaria. Searching for answers, some doctors speculated that fever, which accompanied the illnesses, might have been responsible.

Scientists all over the world have since tried, with varying success, to use heat to treat tumors in patients. They have used low and high frequency currents, carbon lamps, infrared heaters, hot baths—even methods to induce fever. By 1950 mouse tumors heated by microwaves could be destroyed without damaging the animals. And studies in dogs and man showed that in some instances cancers could be selectively reduced by heat without damaging adjacent tissue.

"Today hyperthermia (heat therapy), used in combination with radiotherapy, offers a hopeful option to patients with surface cancers and their physicians when all else has failed," says Dr. Daniel Kapp, director of Stanford's clinical hyperthermia program.

In studies, heat alone produced complete shrinkage of surface tumors in 15 percent of the patients treated, but the effect was short-lived. When hyperthermia treatments were combined with radiotherapy, however, the response rate improved dramatically. Kapp and his colleagues have reported a 73 percent response rate in patients treated for superficial lesions with heat and low to moderate dose radiation.

"Heating tumors increases their sensitivity to treatment with radiation," explains Dr. George Hahn, a radiobiologist and hyperthermia pioneer at Stanford. "Heat increases the permeability of cell membranes and cells may appear to be less able to repair damage to DNA. When heat disrupts the repair process, you can use radiation to kill tumor cells more effectively."

Hahn and his colleagues have shown similar effects in animal studies by combining heat with common anticancer agents adriamycin and bleomycin. Their research has paved the way for studies in which hyperthermia will be combined with chemotherapy to achieve enhanced tumor-killing.

But for the time being, Kapp and his associates are treating tumors on the surface of skin or under the skin with temperatures up to 44 degrees centigrade. Most available microwave or conventional ultrasound heat sources often can't get any deeper in a predictable, controllable manner, they have found.

"Another reason for concentrating on surface tumors," Kapp explains, "is that you can safely monitor their response and toxicity (burns) to adjacent tissue. It's tougher to get temperature data from deep-seated tumors unless you use more invasive procedures."

Surface lesions treated with hyperthermia by the Stanford team are usually squamous-cell tumors, often the result of metastasis from oral and head-and-neck cancers, and malignant melanomas that can appear anywhere on the skin. "But its most important application is in chest wall metastasis from breast cancers, which has been difficult to manage in any other way," points out radiology chairman Malcolm Bagshaw.

Kapp estimates that despite chemotherapy and radiation therapy, chest wall recurrences develop in up to 20 percent of patients with breast cancer, representing as many as 20,000 patients a year in the United States alone. Such patients can't tolerate additional high radiation doses because of tissue damage from previous treatments. But with the combined heat and radiation treatment, "we can often get a complete response," Bagshaw adds.

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Stanford's clinical studies began more than five years ago with patients with chest wall cancers for whom conventional therapy had failed. "Their cancers had already spread outside the areas that could be treated with curative therapy. It was with such patients willing to participate in our studies that the combined therapy could be ethically justified," Kapp says. In most patients who later died of their disease, heat treatments produced a palliative effect. Some are still living. But overall results were so encouraging that hyperthermia in combination with radiation will become a front-line treatment for such patients. It will also be extended to others with less metastatic cancer, Kapp predicts.

Knowing if the tumor is heated uniformly is the key in hyperthermia, experts agree. Medical physicist Dr. Thaddeus Samulski explains: "We can't deliver heat as consistently as we'd like with the type of equipment and controls now available. The body has built-in mechanisms to compensate when tissues are overheated. Blood vessels dilate and circulation increases to cool the tissue. The problem gets really complicated when you consider that a tumor often contains different tissues and heterogenous areas of blood flow.

"We have physiological variables to overcome. They outmatch our equipment."

Another target for hyperthermia study is low pH and the lack of adequate nutrients including oxygen. Decreased oxygen and low pH, a measure of acidity in cells, dramatically sensitize tumors to heat treatment. Hahn is looking for ways to manipulate this concept in order to increase tumor sensitivity to heat. If he succeeds, some believe, one might destroy tumors more efficiently in spite of present equipment limitations.

Under the direction of Kapp and physicist Dr. Peter Fessenden, a Stanford group of physicians, physicists, engineers and biologists have teamed up to grapple with the technical challenges. They are developing, refining and evaluating instrumentation for generating and controlling high temperatures in the human body. Part of this work is funded by the National Cancer Institute in a project which includes three other centers: the University of Arizona, University of Utah, and M.D. Anderson Hospital in Texas. A new NCI grant to Stanford for further equipment development is also expected to be funded soon.

The activity is centered in the Virginia and Dean Morrison Hyperthermia Suite in the basement of Stanford's hospital. Cluttered with computers and monitors, it is the place where patients are treated. Under console control, an oscillator generates microwaves. They are amplified and transmitted to an antenna or heat applicator in the treatment room, shielded with copper screen to prevent radio interference. The patient, lying on a gurney, receives the microwaves delivered by the applicator. Heat sensors implanted on and under the skin show on a color TV screen that the heat is reaching the targeted tumor.

"A heat applicator must allow energy to pass into the tumor efficiently," says Samulski in explaining the difficulties. "This isn't simple when you try to get it into tissue with different electrical or acoustic properties."

Because existing applicators are inefficient and limited in size, Stanford researchers are collaborating with Varian Associates in Palo Alto to develop better ones. "Varian designed one that's more conducive for clinical use," Samulski says. "The applicator is more amenable for placement on areas of the body. Moreover, several applicators powered individually could be used to heat larger regions, particularly when scanned over the surface."

Another improvement was to add a water interface between applicator and skin to achieve better contact, permit cooling of uninvolved skin and prevent accidental decoupling during treatment.

"The next step in our hyperthermia equipment development will be robots," Samulski predicts. "Robots may be useful because heating large tumor areas requires moving the applicator in repetitive motions for an hour, a difficult task for a person to do accurately." Engineer Eric Lee is adapting a robotic arm to scan heat applicators by computer control.

The team is also looking into alternate methods for heating tumors, such as ultrasound and interstitial hyperthermia. Both offer promise for the next step—local treatment of deep-seated tumors.

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Interstitial hyperthermia, developed by Drs. Don Goffinet and Stavros Prionas, combines two techniques relatively new to cancer therapy. Seeds of radioactive iridium-192 are embedded in ribbons. Both the radioactive seeds and heat are delivered by means of slender, hollow tubes temporarily placed into a patient's tumor. Ionizing X and gamma rays emanate from the ribbon seeds inside the tubes. Heat is produced by radio frequency waves pulsed through a metallic grid that coats the outside of the tubes. An insulating sheath coating the grid permits researchers to heat only the targeted cancer, sparing healthy tissue. Sensors in the tumor relay temperature information to a computer that controls radio frequency pulses generated down each tube. The computer is set to keep the tumor volume evenly heated at the selected temperature. The monitoring and delivery system was developed by Prionas. The special tubes were developed in collaboration with Oximetrix, a Mountain View-based company.

So far 10 patients with head-and-neck, colon and rectal cancer have been treated with the experimental technique. Goffinet reports that with some patients there have been"impressive" results. However, he cautions, interstitial hyperthermia is nowhere near being considered standard therapy.

"The technique gives you a handle on what you're heating or you're not," Samulski comments, "but it's terribly invasive. So there's the tradeoff."

Ultrasound was the earliest method of heating tumors tried in patients in combination with radiation by Hahn and oncologist Dr. Jane Marmor at Stanford. One patient, Bagshaw recalls, was a bald-headed man in his fifties whose cancer of the larynx had metastasized to form two scalp tumors. One vanished after hyperthermia plus radiation treatments, but the other tumor treated with radiation only did not completely respond and promptly grew back. Similarly, partial remissions were recorded in 54 percent of 25 patients with squamous-cell cancers.

"The advantage of ultrasound is that you can focus it. You can deposit the heat where you want it," Hahn says. "For some deep-seated tumors, ultrasound works very nicely. But it doesn't penetrate air tissue such as the lungs, for example. And it's deflected by bone. There are few areas in the body where you can get it to work."

Ultrasound is also painful when it heats bones. Hyperthermia researchers have been reluctant to use anesthetics, however, because pain warns them when some tissue is getting excessively heated. Also, heat may make certain topical anesthetics increasingly toxic. "Pain is something to be reckoned with," Fessenden says. "If ultrasound is going to work for deep heating, it must have tremendous flexibility and control precision. This must be coupled with a sophisticated imaging system that allows you to know which tissues you want to heat or miss."

Another approach to heat deep tumors being tested is the Annular-Phased-Array, developed by BSD Corporation in Utah. It consists of 16 radiating elements in a drum with a hole in the middle where the portion of the patient's body to be heated lies. The machine's microwave energy can be synchronized to heat deeper areas with enhanced effect. Samulski describes it as a "dump and pray approach. You dump in the energy and you pray you've heated the tumor," he says. "It's a crude way of doing it, but it avoids some of the problems of ultrasound."

As hyperthermia evolves, another concern worrying its practitioners is cost. "Hyperthermia is much more labor intensive than radiation therapy alone," observes Fessenden. "You're lucky if you can finish a treatment session in two hours. That includes getting the patient ready, placing the temperature monitoring probes, delivering the heat, removing the probes. The same treatment with radiation can be done in ten minutes." So another project is trying to determine how hyperthermia combined with radiation can be cost-effective. For example, are two hyperthermia treatments as effective as six? "We're comparing and analyzing the statistical difference," he says.

As for fever, which has given hyperthermia its start, science is beginning to zero in on that puzzle, too.

"The function of fever can now at least be partly explained in molecular terms, proving that the intuition of our ancestors was right all along," muses Hahn. "Recent published studies have shown that if you heat tissue, the cells make heat-shock proteins in competition with production of viral proteins. The reduced synthesis of viral proteins inhibits virus multiplication. This must clearly be one purpose of fever."

Whether this finding will lead also to an elaboration of the molecular basis of hyperthermia and its anticancer properties could be the next chapter in Hahn's research. "Some of the heat-shock proteins participate in determining a cell's purpose and function," he explains. "We're looking at how fever may actually modify differentiation patterns of cells responsible for immune responses and how heat could enhance them, hopefully to fight cancer."

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A HYPERTHERMIA PIONEER

Austrian-born George Hahn, 59, is considered the father of the hyperthermia research program at Stanford. A microwave physicist-turned cellular radiobiologist after his son died of cancer in 1962, he has done much of the basic laboratory research that has given hyperthermia the status it has today.

Ironically, Hahn's work didn't start with heat. "We were looking for ways of inhibiting damage induced by radiation," he recalls. "We tried drugs but they were so toxic they were useless."

So Hahn shifted his research to cold. Temperatures of 4 degrees centigrade inhibited repair, he found, but only as long as cells were kept cold in his laboratory dishes. Why repair? "Because after radiation, you don't want cancer cells to start repairing themselves and forming new colonies," he replies.

Next, Hahn tried heat. To his surprise, it permanently inhibited repair. "But we also found other interesting things," the scientist remembers. "Some aspects of cellular response to heat are unique. If you heat cells nonlethally, return them to the host temperature of 37 degrees centigrade and heat them again, they become remarkably heat resistant.

"Such cell behavior," Hahn admits with a gleam in his eye, "makes hyperthermia treatment more difficult, but it also makes the biology more interesting." As part of this development, called thermotolerance, it seems that specific proteins are synthesized and very likely play a role in this protective effect. "What's even more remarkable about thermotolerance," Hahn adds, "is that bacterial yeast and insect cells give a similar response. The proteins involved are conserved over the cell's evolutionary development."

These "heat-shock" proteins, Hahn thinks, are associated with differentiation, the process that gives cells their characteristics during the organism's development. "An entire new area of thermobiology has opened up as a result of these studies," he says, "and several laboratories are now trying to determine how heat activates the process at the molecular level."

In 1976 Hahn gained some local fame among pet owners when he and Dr. Jane Marmor, now with the Palo Alto Medical Clinic, began treating cancer-ridden pets with ultrasound heat. The results were encouraging, and the word got around fast in the pet community. People who noticed nasty looking sores on their dogs and cats began to bring them to Hahn for treatment.

"George is getting way ahead of us," says radiology chairman Malcolm Bagshaw, whom Hahn calls one of his mentors along with the late Henry Kaplan. "For example, he's demonstrated that drugs are also enhanced by heat, but we haven't had the time to put in our studies all three elements—hyperthermia, chemotherapy and radiation—together."

Among those influenced by Hahn is Daniel Kapp, now director of Stanford's hyperthermia program. As a resident, Kapp did research in Hahn's lab. They found that certain drugs that are not normally considered harmful become toxic under hyperthermia. Being aware of this problem may prevent complications in patients undergoing heat treatments. And, such compounds selectively delivered to heated tumors may be useful as adjuvants in cancer therapy.

Hahn's work spans more than 150 publications and a book, *Hyperthermia and Cancer.*

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ADVANCE FOR RELEASE 3 P.M. PACIFIC TIME, WEDNESDAY, MARCH 5, 1986

EXERCISE IS LINKED TO LONGER LIFE IN STUDY OF HARVARD GRADUATES

STANFORD—

A joint Stanford/Harvard study of nearly 17,000 Harvard alumni has revealed that physically active men live an average of slightly more than one to two years longer than their sedentary counterparts.

The report, published in the March 6 issue of *The New England Journal of Medicine*, is believed to be one of the first scientific studies linking increased longevity to an active lifestyle.

The study does not fully explain why active men live longer, although it appears to be a result of reduced cardiovascular and respiratory disease in the alumni who exercise, said Dr. Ralph Paffenbarger, the Stanford epidemiologist who led the study.

Paffenbarger is professor of epidemiology in the department of family, community and preventive medicine at Stanford University School of Medicine. His colleagues on the study are Robert Hyde, a Stanford epidemiologist, Alvin Wing, a statistician-programmer in the department of epidemiology at Harvard's School of Public Health, and Chung-cheng Hsieh, an epidemiology faculty member at the Harvard School of Public Health.

The study was funded by grants from the National Heart, Lung and Blood Institute, the Marathon Oil Foundation, the G. Unger Vetlesen Foundation, and the E.I. du Pont de Nemours Company.

The researchers were careful to point out that the study does not prove that exercise prolongs life, nor did it answer the question of whether a change in lifestyle, from sedentary to active, can prolong life. What it did show is that the Harvard men who habitually spent approximately three or more hours per week exercising lived longer, on the average, than those who rarely exercised.

The results also showed that the alumni who lived longer were those who remained physically active after graduation. Men who had been very active in sports during college but later became less active or sedentary did not live as long as those who exercised moderately throughout life.

The increased length of life associated with regular exercise was seen across all age groups. In all, ten percent more of the active men survived to age 80 than did their less active classmates, according to the study findings.

The increased survival associated with exercise was found to be independent of factors associated with a shortened length of life, such as cigarette smoking, high blood pressure, extremes of body weight, and family history of early death, the researchers reported.

The study followed 16,936 Harvard alumni, aged 35 to 74, for a period of 16 years. In addition to college and medical records made available to the researchers, participants answered questionnaires about their personal health habits, including how many hours per week they spent in various types of sports and other physical activities. There were 1,413 deaths during the follow-up period.

Paffenbarger, who exercises regularly, said in an interview that at first he was personally slightly disappointed to learn that a physically active lifestyle is associated with only about two additional years of life. "I would have guessed that it would have been longer," he confessed.

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But Paffenbarger and his colleagues stress that the public health implications of the study's findings are significant. "If we completely eliminated cancer as a cause of death, years of life gained would be about the same—Americans would live on the average only two years longer," he said.

The researchers hope the results will not provide an excuse to stop exercising to those who don't enjoy it. "Two years is a long time," he said. "Our computations suggest that for every hour the active graduates spent exercising, they lived that hour over, plus an extra one or two hours," Paffenbarger said.

In addition, the researchers pointed out that being physically active often improves the quality of life, no matter what the overall length of life may be.

Other results from the study suggest that smokers and those with high blood pressure are at greatest risk of death, but that being physically active can lower this risk.

The study also revealed that graduates who had a net weight gain of more than 15 pounds after college lived longer than those who gained less than 15 pounds. This was a surprise to the researchers, since the men who gained more weight were at greater risk for cardiovascular diseases, which can lead to death from heart attack and stroke.

However, they believe that the low-weight-gain group didn't live as long because "this represents a group of people who eventually die from wasting conditions such as cancer, neurological diseases, and perhaps diabetes," Paffenbarger said. "The leanness that is frequently associated with cigarette smoking is not a sufficient explanation."

Since the study was restricted to Harvard men, the results should be extended to the entire population at large only with caution, the researchers said. "The Harvard alumni may not be typical of the general population," they noted. "The bulk of these men are cut from the same cloth—intelligent, educated and affluent," Paffenbarger said, "and in general, they live longer than the average Caucasian American of comparable age."

The results also are inconclusive for women, although Paffenbarger noted that epidemiological studies identifying characteristics predictive for heart disease have revealed the same ones for men and women. "So, if you had to guess, you'd probably suggest that these results hold for women as well as for men," he said.

"Another question that remains unsettled is whether vigorous exercise is the only kind of physical activity associated with increased length of life," Paffenbarger said. The study only examined each man's energy output per week during activities such as walking, stair-climbing and sports, but did not measure heart rates achieved or other indicators of effort. Vigorous activity is known to be important in improving cardiovascular fitness, Paffenbarger said.

Previous findings from the same follow-up of Harvard alumni have shown that habitual exercise has a beneficial effect in lowering blood pressure, and that it is associated with a reduced incidence of cardiovascular disease, including heart attack.

Paffenbarger noted that the researchers are planning to examine, in the same overall group of Harvard men, whether or not changing from a sedentary lifestyle to an active one is associated with increased longevity.

This debate over the benefits of exercise in lengthening life, which started in antiquity, has been going on and will probably continue for some time, Paffenbarger said. "People back in the 1700s showed that tailors did not live as long as farmers, presumably because the tailor was inactive and the farmer was active."

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END ADVANCE FOR RELEASE 3 P.M. WEDNESDAY, MARCH 5, 1986

STANFORD UNIVERSITY MEDICAL CENTER
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FOR INFORMATION CONTACT: Mike Goodkind (415) 497-6911)

FOR IMMEDIATE RELEASE

ANTISMOKING PROGRAMS WITH VARIETY PROVE EFFECTIVE IN COMMUNITY STUDY

STANFORD—

Stop smoking programs can significantly reduce cigarette use throughout a community but a variety of educational approaches are needed, a more than four-year study in four California cities has disclosed.

Smoking decreased 11 percent more among men and women aged 25 to 74 in the two cities where an aggressive education campaign was mounted, said Dr. Stephen Fortmann, associate director of the Stanford Center for Disease Prevention (SCRDP), which conducted the study. He was scheduled to present his results, which are preliminary, Tuesday, March 4 at the American Heart Association's 26th annual conference on cardiovascular disease epidemiology in San Francisco.

In 1979, before the concerted education effort was launched, smokers in the education cities of Monterey and Salinas numbered about 29.9 percent of the population. This closely paralleled the national average of 30 percent. After four and half years, the smoking rate had dropped to 20.3 percent of those who continued in the survey, Fortmann said.

In the reference (control) communities, Modesto and San Luis Obispo, 28.9 percent of the population were smokers in 1979. By the end of the study, 22.7 percent of survey participants continued to smoke.

Because of the nature of the survey, Fortmann said the true decline in smoking rates was probably less than reflected in the figures, but the difference between the education and reference cities should hold up. Other survey results are still being analyzed to further evaluate the program, he added.

"Statistically, there's a net difference of 11 percent between the towns where there was an education campaign and the two towns where there wasn't. In human terms, that means less cancer and heart disease, less heartbreak for individual families," Fortmann said.

In the study, Monterey and Salinas were provided with a variety of anti-smoking programs, including a massive television and newspaper education campaign on the dangers of smoking, group therapy, contests with a free trip to Hawaii offered as a prize to a smoke quitter, and educational kits distributed to individual smokers.

In Modesto and San Luis Obispo the surveys were conducted, but no education programs were initiated.

"We found that some types of programs worked better than others but that all types of programs were needed for an overall effective community effort," Fortmann said.

For example, Fortmann noted that the support groups were most effective. Twenty-five percent of the participants, numbering about 500 per year in each community, were still off cigarettes after six months. About 11 percent of the persons using the quit kits, which offered a step-by-step stop smoking plan for individuals, were still off cigarettes after six months, said Fortmann.

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"One could argue that because the groups were more than twice as successful as the kits, that you should concentrate only on that approach. But what we found was that in total numbers, a lot more people—about 5,000 per year in each community—were using the kits.

"And some people simply wouldn't go to a group, or if they did, they wouldn't be comfortable with that approach. And for that segment of the smoking population, the quit kit represented a viable—and perhaps unique—alternative to smoking," Fortmann explained.

The researcher noted that techniques such as the quit kits are economical, costing about $18 per person, which is far less money than medical costs associated with continued smoking.

He noted that other efforts, including television and newspaper messages, may have had an effect both on getting people to stop smoking and on spreading the word about groups and other aids to quitting.

The free trip to Hawaii, offered by local business in Monterey and Salinas, seemed to be particularly successful at publicizing the anti-smoking message, Fortmann said. Persons who signed up for the contest and successfully quit smoking were eligible for the prize drawing.

About 650 persons were surveyed as to health habits, including smoking, in each of the four cities. An effort was made to survey the same persons four times between 1979 and 1984 to record any changes in health or behavior.

"Smoking dropped in all four communities, and that was both positive and a sign of the decline of cigarette smoking in our society," said Fortmann.

"What was significant was that the educational programs had a measurable effect at encouraging smokers to kick the habit over and above the decrease in smoking already taking place," Fortmann said.

The project was funded by the National Heart, Lung and Blood Institute, which annually provides $1.7 million in funding for SCRDP's Five Cities Project, a study of community health and education intervention which included the current smoking study.

Fortmann said that the communities had been carefully selected to be comparable. One of the education communities, Salinas, and one of the reference communities, Modesto, were agricultural service towns. Monterey, an education community which is a resort center, and San Luis Obispo, a college town which served as the second reference community, both had similar income and education levels.

Results are still being analyzed, but Fortmann said several trends appeared to emerge from the study. Women, he said, are more likely to quit, and perhaps not surprisingly, quitting was harder for the heaviest smokers.

Currently, SCRDP is studying special techniques for heavy smokers in the education communities and elsewhere, including physician involvement and the use of medication such as nicorette gum as an aid for the most seriously addicted smokers.

The survey and education efforts involved the smoking habits and potential exposure of children as young as 12, and results of special prgrams to discourage teen-age smoking are still being analyzed, Fortmann said.

Other researchers involved in the project included June A. Flora, Ph.D., education director of SCRDP; Dr. C. Barr Taylor, a psychiatrist and behavioral science director of SCRDP; and SCRDP director, Dr. John W. Farquhar.

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FOR IMMEDIATE RELEASE

DIET, EXERCISE EQUALLY EFFECTIVE IN IMPROVING CHOLESTEROL AND BLOOD PRESSURE LEVELS, STANFORD STUDY SHOWS

STANFORD—

Losing weight only by dieting or only by exercising are equally effective in improving cholesterol and blood pressure levels, a new Stanford study has shown.

Each weight loss method was found to similarly increase levels of high-density lipoprotein (HDL), the so-called "good cholesterol" believed to help prevent heart disease. At the same time, each method similarly reduced blood pressure levels, said Dr. Peter Wood of Stanford's Center for Research in Disease Prevention (SCRDP).

While either method is effective, the researchers concluded, a weight loss program combining both diet and exercise is the optimal approach for physical as well as physiological benefit.

Wood and SCRDP co-investigators Drs. Stephen Fortmann and William Haskell presented their findings at the American Heart Association's 26th Annual Conference on Cardiovascular Disease Epidemiology in San Francisco Monday through Wednesday (March 3-5).

The study, funded by the National Institutes of Health, looked at changes in cholesterol levels and blood pressure levels to see how they were affected by different methods of weight loss. The researchers were suprised, Wood said, to learn that the effects were similar.

"Exercise has the advantage of minimizing loss of body muscle, relative to the diet approach, while it enables the loser to maintain caloric and nutrient intake and also to gain the established health benefits of regular exercise," the researchers concluded. "However, it is clear that increased exercise is not an essential component of weight loss" to achieve beneficial changes in cholesterol and blood levels.

The researchers placed 155 generally healthy but moderately overweight—between 20 and 50 percent above the ideal weight—men into three groups. The exercise-only group did not change their eating habits, but increased their exercise to an average of jogging about 10 miles a week. The diet-only group did not increase their exercise amount, but decreased their caloric intake by about 300 calories a day. The control group did not change their diet or exercise habits at all.

Each participant was monitored for a year. The diet-only group lost an average of about 16 pounds, while the exercise-only group lost an average of about 10 pounds. However, Wood pointed out, the percentage of body fat of participants in both groups remained similar. This, he said, is a more accurate measure of actual loss of body fat.

Participants' levels of HDL, the type of cholesterol that may help prevent heart disease, significantly increased and levels of low-density lipoprotein (LDL) tended to decrease regardless of which weight loss regimen they followed, the researchers found. However, while the HDL levels of those in the exercise-only group increased in direct relation to the number of pounds they lost, the HDL levels of those in the diet-only group did not correspond in the same direct relationship but rather in a much more random manner. This, Wood explained, suggests that factors other than weight loss are involved in cholesterol level changes.

"We plan to pursue these unknowns," Wood said.

The different weight loss methods had similar effects on blood pressure levels as well, Haskell added.

The researchers found that participants' blood pressure levels decreased an average of five percent in real life situations—a meeting at work, a relaxing evening at home or a weekend bike ride, for example. The decrease was not detected when participants underwent testing in the laboratory, possibly because it is an artificially controlled setting, Haskell said.

"This is the first time physicians have been able to look at the effects of weight loss on ambulatory blood pressure levels," he explained.

Participants wore specially designed electronic recorders that monitored their blood pressure levels every 20 minutes all day long. "This supports the generally held notion that weight loss does provide positive effects in lowering blood pressure," Haskell said.

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FOR IMMEDIATE RELEASE

HOSPITAL SPONSORS SHOPPING CENTER HEALTH FAIR

STANFORD—

Stanford health information is being taken shopping from 10 a.m. to 4 p.m., Saturday, May 17 at the Third Annual Stanford University Hospital Health Fair.

"Help Yourself to Health" is the title of this year's event at Stanford Shopping Center in Palo Alto.

Hospital Community Outreach Coordinator Linda Romley-Irvine said the event features free blood pressure checks and counseling, as well as a free cardiac risk factor analysis.

Various hospital departments and services will be staffing booths to help the public understand the range of sevices offered by the hospital, she said.

Among topics available in the booths are diabetes, the Life Flight emergency transport service, Home Care, surgery and operating room, as well as information on the new Trauma Service.

All booths, located in the pavilion area near the center of the shopping center, are free and open to the public.

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EXPERTS OUTLINE POSSIBLE MEDICAL CONSEQUENCES OF CHERNOBYL NUCLEAR ACCIDENT

STANFORD—

Both short-term and long-term medical consequences can be expected as a result of the Chernobyl nuclear reactor accident in the Soviet Union, two Stanford University medical experts agree.

The short-term effects will be the result primarily of acute radiation sickness and possibly of burn or blast injuries, while longer term effects will be the result of exposure to radioactive fallout and consumption of radioactive materials that enter the food chain, the two scientists predicted.

But the many remaining unknowns in the situation make it difficult now to accurately predict the extent of medical and environmental damage, according to Dr. Herbert Abrams, professor of radiology and Dr. Roland Finston, director of health physics at Stanford University and lecturer in radiology.

Abrams is a co-founder of International Physicians for the Prevention of Nuclear War. Both he and Finston are experts on radiation exposure.

"Many variables determine the amount and type of radioactive elements released, and their spread through the environment," Finston explained. "The operating history of the nuclear reactor and the age of the fuel will affect the release," he said. The temperature of the fire that is consuming the fuel can also make a difference, he said.

None of this kind of information has yet been released by Soviet authorities.

At lower temperatures, radioactive iodine will be released and as the temperature gets hotter, other radioactive elements such as cesium, strontium, tellurium, and ruthenium can escape, the scientists said.

Reports from Scandinavia have already indicated the presence of these elements in the radioactive cloud.

Radioactive iodine can accumulate in the thyroid gland where, in large amounts it can cause thyroid tissue damage that reduces the gland's activity, and eventually may cause nodules to form or even thyroid cancer, Abrams explained. Radioactive iodine has a relatively short half-life, which means that half of the released volume will have decayed within eight days.

Cesium, strontium and some of the other elements are more likely to harm tissues in the body that have rapid turnover of growing cells, such as the gastrointestinal lining and the bone marrow, Abrams and Finston explained.

These elements, which have longer half-lives of up to 30 years, are capable of penetrating the food chain for years to come in the areas where the radioactive fallout reaches the ground, Finston said.

The worst radioactive release would be of trans-uranic elements such as plutonium, which has a half-life of 25,000 years, Abrams noted, although there is no evidence that this has occurred in the Chernobyl disaster.

The magnitude of the fire and weather patterns will determine where the radioactive plume spreads, Finston said.

A mammoth explosion could lift radioactive particles high into the atmosphere where they have a greater chance of spreading rapidly, Finston said. But a fire probably cannot hoist the radioactivity into the stratosphere, he said.

Both Abrams and Finston agreed that there is little danger that medically hazardous levels of radioactivity will reach the United States because the cloud gets diluted as it moves away from the reactor site.

But regions closer to the the Ukraine, the site of the accident, may be affected. "A lot depends on the weather patterns," Finston explained. If it rains in an area where the radioactive cloud is present, the raindrops carry the particles to the ground. "This would cause a more intense deposition of radioactive particles under the area of rainfall," he said. Wind patterns also are important factors in the plume's spread.

Finston and Abrams outlined a scenario, based on the few facts available, of what could happen in the weeks and months following the accident in the vicinity of the nuclear reactor. Their predictions are based on, among other things, previous experience with radiation from the atomic bomb explosion in Hiroshima.

To follow their scenario requires learning a little about levels of radiation exposure. Abrams explained that scientists use three units for measuring tissues' radiation exposure, that are roughly similar: the "roentgen," the "rad," and the "rem." Radiation exposure is cumulative, Abrams explained.

Normal radiation levels are usually about 200 millirems each year for a person in the U.S., of which about 100 is naturally occurring radioactivity and 100 is manmade. A millirem is one thousandth of a rem. A common chest X-ray delivers about 20 millirems, he said. Up to about one-half a rem, or 500 millirems, is considered safe, Abrams added, although not desirable since any increase in exposure adds to a person's total cumulative radiation exposure.

A current generally accepted notion is that 200-400 rems is the "LD-50" (lethal dose for 50 percent of a population) for a single dose of radiation exposure, Abrams said. This means that 50 percent of a population of people exposed to this radiation level would die within 30 days, he said.

"An exposure of 25 rems or more is the level at which you start seeing blood count changes," said Finston, although the person most likely will not become ill.

Most scientific models suggest that highly lethal effects are limited to those who are within a 10-15 mile radius of a nuclear power plant accident, Finston said.

No one know what the actual exposure levels around the Soviet plant have been, but in a hypothetical situation, this is what would probably happen.

The first wave of deaths would occur among people exposed to thousands of rems, Abrams said. "These people would die within hours or days from central nervous system failure," he said. How radiation damages the brain is not fully understood, he said, but there is accumulation of fluids resulting in mental confusion, disorientation, and rapid death. There is no medical treatment possible for such victims, he added.

Those exposed to smaller, but still large, amounts of radiation such as 700-1,200 rads would die within days to weeks from gastrointestinal damage. External radiation and radioactive particles that are swallowed destroy the cells lining the GI tract, leading to nausea, vomiting and diarrhea as the GI tract can no longer absorb food. Medical treatment such as administration of fluids and intravenous nutrients could help but probably would not be able to prevent people from dying, Abrams said.

Those exposed to a dose below 700 rads could become sick or die within weeks due to damage to the bone marrow, which gives rise to all the body's red and white blood cells, Abrams said. As white blood cells are depleted, the person becomes highly susceptible to infection. As platelets diminish in number, hemorrhaging becomes a problem, he added, and with red cell loss, anemia may become profound.

Medical support in the form of antibiotics to fight infection, sterile conditions to minimize exposure to infection, or even bone marrow transplantation could help save people in this group, Abrams suggested. "There is a documented case of an individual exposed to 700 rads who was given a bone marrow transplant and survived," he noted.

Another danger for anyone who inhales any of the radioactive fallout is lung damage and lung cancer, Finston noted.

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Any pregnant women, particularly those in the first trimester, are at particular risk for damage to the fetus, the two scientists agreed. Pregnant women who receive 100 rads or more will have a much greater risk of giving birth to a retarded or malformed child, Abrams said. Even a dose of 5 rads has the potential to harm unborn children, Finston noted.

Over days, weeks, and months as fallout settles to the ground, water in lakes and rivers and food crops such as vegetables and grains will be contaminated with radioactivity, Finston noted. People in the Ukraine and surrounding areas such as Poland should probably avoid eating crops or wash them thoroughly, he said. Milk becomes contaminated quickly because cows graze on large quantities of contaminated grass, he explained. Use of powdered milk would be advisable, he added.

Long term effects will be much more subtle, Finston and Abrams agreed, and are harder to predict. "There may be no dose of radiation below which you're guaranteed not to be harmed," he explained, "but your likelihood of damage goes down the lower your dose."

An increased incidence of leukemic cancer in the population near the accident site after about four or five years is predicted, Abrams said, judging from the Hiroshima experience. After about 10-12 years, there is likely to be an increase in the number of people who get lung, breast, thyroid, esophageal and bladder cancer, he added.

Daily doses of potassium iodide tablets might be recommended for those in the vicinity of the fallout, Finston said, who are likely to inhale or ingest radioactive iodine particles. The tablets protect against damage because if the thyroid gland absorbs enough normal iodine it can't take up any of the radioactive element. But there are some risks of hypersensitivity to the tablets, Finston noted, so this precaution will probably be limited to areas with significant fallout, he said. "Each country's public health agency should make a determination about this kind of prophylaxis," he said.

Abrams noted that there are some other simple precautions people in Europe or other areas can take if they are worried about fallout. "Stay indoors when the cloud passes over," he said, "or go in the basement. That alone can reduce your exposure tenfold." Abrams also said that even clothing alone could provide considerable protection to those outside the immediate area of the accident.

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EDITORS: Photos available if not included.

NEW TECHNIQUE ENHANCES USE OF MRI FOR SPINAL SCANS

STANFORD—

Magnetic Resonance Imaging (MRI) may become the standard method of diagnosing spinal problems, thanks to a new technique developed by researchers in diagnostic radiology at Stanford University School of Medicine.

MRI produces pictures of the human body and its organs that in many ways are superior to other imaging methods. It has been used for pictures of the spinal cord, but previous pictures sometimes lacked clarity.

The new technique provides much clearer pictures of the spine than previously possible through MRI scans and makes it feasible to use MRI routinely instead of the uncomfortable and sometimes risky procedure of myelography—which entails injection of dye through a needle and then taking X rays.

"I think we have discovered a very effective way of studying the spine and spinal cord," said Dr. Dieter Enzmann, associate professor of radiology and director of Stanford Radiology's magnetic resonance imaging program. "At this point, the technique that we have developed has the potential for replacing much of myelography."

The key to the new technique is the ability to adjust the MRI imaging sequence to match the patient's heart rate. That timing eliminates the interference that previously obscured many MRI images of the spine, especially in the neck.

MRI spinal scans are now performed regularly at Stanford's Advanced Imaging Center (Telephone: (415) 968-1750) and Enzmann predicts they will become common at other MRI centers throughout the nation. At present, the new technique is unique to Stanford radiology. It probably will be several months before other facilities develop the computer hardware and software necessary to perform spine scans in this way.

Stanford has not attempted to retain exclusive use of the new technique. In fact, researchers have made it readily available by presenting discussions on it at scientific meetings in recent months.

Dr. Jeremy Rubin, resident in radiology who was one of the three principal researchers on the project, was presented an award by the American Society of Neuroradiology in January for his role in the research. The award, the Cornelius G. Dyke Award, is for the best research performed by a young trainee or young faculty member in the field of neuroradiology.

4/30/86 more

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EDITORS: Reporters and photographers are invited to attend the open house and tour the Stanford Alcohol and Drug Treatment Center on May 8. Anyone interested in a tour is requested to contact the Stanford University Medical Center Office of Communications, (415) 723-6911.

STANFORD ALCOHOL, DRUG TREATMENT CENTER TO OPEN

STANFORD—

The new Stanford Alcohol and Drug Treatment Center will open on Monday, May 12, offering inpatient and acute care programs for the first time in addition to outpatient treatment modeled on the long-established procedures of the Stanford Alcohol Clinic.

An open house will be held from noon to 7 p.m. Thursday, May 8, at the Hoover Pavilion, site of the new 14-bed inpatient unit. The center is a joint operation of the Stanford University Hospital and the Department of Psychiatry and Behavioral Sciences of the Stanford School of Medicine.

"It is very exciting to work on a comprehensive program that has inpatient and outpatient components and is tailored to individual patient needs," said Carole Price, hospital associate director who is the line administrator responsible for the center. "It is also competitively priced," she noted.

Adding the inpatient and acute care facilities means that the center will be prepared to treat "pretty much every problem that's alcohol and drug related," said Robert Matano, Ph.D., who is director of services.

Dr. Thomas A. Gonda, chairman of the Department of Psychiatry and Behavioral Sciences, made the same point. "We should be able to treat the more chronic, the more difficult cases much more effectively, because we're going to have a very wide spectrum of services," he said.

Matano pointed out that the center would be able to call upon "the richness of the resources that we have here at the University, the School of Medicine and the Hospital. We have the ability to bring together resources from medicine, from social science research, from family and educational studies."

Flexibility will be the key to treatment at the center, just as it has been with the outpatients helped at the alcohol clinic. Matano and Dr. William Hazle, medical director, emphasize that the length of inpatient hospitalization will be determined by individual patient needs—unlike the programs at some facilities that have requirements for 28- or 30-day stays.

Hazle explained that the center will rely more on shorter inpatient stays supplemented by short-term structured outpatient treatment and long-term therapy. Most patients will be involved with the center for about a year, he noted.

Matano said well-structured outpatient counseling is not only a more flexible method of treatment, but also is usually less expensive for the patient because the length of hospitalization is reduced.

Outpatient services will be in the site of the present alcohol clinic in the Psychiatry Building at the Stanford Medical Center. During the past nine years, the clinic has received national attention for its programs developed by Stephanie Brown, Ph.D.—particularly the treatment designed for the adult children of alcoholics.

Hazle said that "in some ways, this field (drug and alcohol treatment) is just getting started." He said the number of treatment centers in Santa Clara County has grown from two in 1979 to nine today, but not because of any increase in those addicted to drugs or alcohol. The numbers are approximately the same, he said, but there is a growing community awareness of the problem and the fact that it can be treated successfully.

Gonda also stressed the community need for such treatment, adding, "We're going to meet this need in the most modern way that we can, the most knowledgeable way that we can and the most cost-effective way that we can."

Price said the May 8 open house will feature brief introductory remarks by Gonda; Melvin Britton, president of the Hospital medical staff; and Michael Kidder, editor of the *Times Tribune*.4-29-86

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BURNING CALORIES IS KEY TO DERIVING BENEFITS FROM EXERCISE, STANFORD RESEARCHER SAYS

STANFORD—

Just burning calories in exercise -not "super human efforts"- produces health benefits, according to William Haskell, Stanford associate professor of medicine and associate director of Stanford's Center for Research in Disease Prevention.

Most exercise regimes target particular heart rates or rates of oxygen consumption as goals, but "an increase in energy production" -burning calories- is the key stimulus promoting beneficial physiologic changes in the body, Haskell recently told the third annual symposium on Cardiovascular Nutrition. The symposium was cosponsored by the American Dietetic Association Practice Group of Sports and Cardiovascular Nutritionists (SCAN) and Stanford University Medical Center.

In adapting to the "stress" of exercise, beneficial physiologic changes occur in the body during and immediately following exercise, which leads to more efficient metabolism and reduced risk of developing coronary artery disease, as well as psychological benefits, Haskell said.

In his talk entitled "Is there an Exercise RDA (recommended daily allowance) for Good Health?," Haskell calculated the minimum energy expenditure needed to derive physiologic benefits from exercise based on numerous epidemiologic and physiologic studies.

Approximately four calories of energy for every kilogram of body weight (or 1.8 calories for every pound) should be expended at least every other day to get "relatively acute effects," he said.

For the average 165-pound man, this translates into approximately 30 to 40 minutes of "rigorous" exercise or 45 to 60 minutes of "moderate" exercise such as brisk walking, Haskell said. "Intensity and duration are always a trade off," he noted.

But significant health benefits can be achieved from low intensity exercise regimes focused on burning calories, Haskell said. Only slightly more benefits are derived from increasing the activity of an already active person, he said.

Very inactive persons benefit most from an increase in exercise because exercise rapidly reverses the detrimental health-related consequences of extreme inactivity, Haskell said.

In contrast to the large number of popular books and TV commercials promoting exercise and fitness, large numbers of people remain inactive, Haskell said. In fact, "national statistics show that 80 percent of men over 40 do not participate in any regular vigorous exercise," he said.

Because these people can't identify with television ads that feature very physically fit and slim people, such ads may serve as "a major deterrent to getting people to exercise," Haskell suggested. They "lead to the perception that to get any benefit you must achieve and look like that," Haskell said. Still, any regular activity produces substantial health-related benefits, he said.

Such benefits include an increased sensitivity to insulin, decreased levels of triglyceride in the blood, improved blood clotting mechanisms, and an increased ratio of HDL (good) cholesterol to LDL (bad) cholesterol, Haskell said.

He proposed that health professionals broaden their exercise prescriptions to include low intensity exercise regimes, focused on burning calories, so that larger numbers of people can benefit from exercise. "It is important to realize that there is a data base that says moderate exercise intensities are of good use," he said.

4-28-86 —30— Exercise MC2a

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ETHICS PLAY AN EXPANDING ROLE IN MEDICINE

STANFORD—

Physicians and other health care professionals—buoyed by recent national policy statements and court rulings—are becoming more sophisticated and confident in dealing with ethical issues in medicine, said a Stanford University Medical Center expert.

Yet dealing with the costs and benefits of medical treatment, or who's involved in determining if treatment should be initiated and to what extent it should be carried out, or even the very questions of life and death, is "never going to get any simpler," said Dr. Ernle Young, director of the chaplaincy service.

Ethical issues will remain an important aspect of medicine, he explained in a recent interview, because of the growing number of people involved with an individual's care as well as new issues concerning medicine and health care delivery that society has to answer.

The medical profession received a shot of encouragment last month when the American Medical Association determined that it is appropriate for physicians to withdraw life-supporting artificial feeding systems from hopelessly comatose patients, explained Dr. Thomas Raffin, assistant chief of medicine. And recent court rulings upholding decisions to withdraw life support systems have enforced the individual's right of self-determination.

But at the same time, the Reagan administration has stepped up its lobbying efforts to reinstate the Baby Doe rule, struck down in 1984 by an Appeals Court. The rule provides for government "squads" to ensure that hospitals provide the same care to handicapped infants as to non-handicapped babies. And record-breaking malpractice suits continue to drive physicians' insurance premiums beyond reasonable limits. As a result, some physicians, such as obstetricians, are being forced out of practice.

In the midst of the activity, medical centers are establishing mechanisms to help guide the decisions of physicians, nurses, patients and families.

At Stanford, a medical center-wide ethics committee sets general policy and reviews cases on a retrospective basis. It includes not only physicians, but nurses, medical students, a chaplain, economists, lawyers, social workers, sociologists and a philosopher as well. Since its formation, members have reviewed issues such as withdrawing life support, 'do not resuscitate' codes, informed consent, animals in research, severely impaired newborns and economics.

Meanwhile, a hospital-based committee provides a panel of ethical experts for individuals to consult about ongoing cases. Patients in the intensive care unit (ICU) or neonatal ICU are most often the ones to pose dilemmas, said Young, who teaches medical ethics as well.

The most difficult decisions arise in the ICU when a patient has extensive but not complete brain damage, he elaborated. In the neonatal ICU difficult decisions arise when parents of a severely impaired newborn want treatment stopped prematurely, or want it continued after there is no hope. "Decisions in all these cases are legally risky, but we have to consider the ethical obligations."

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The other principal researchers were Enzmann and Dr. Allan Wright, a fellow in cardiovascular radiology.

The concept behind MRI is that the body's nuclei can act as tiny magnets that can be manipulated by powerful magnets to give off signals. Those signals are interpreted by a computer to create images that give precise details of many parts of the body.

An MRI scan is simple and painless for the patient, requiring only that he or she lie inside a large, doughnut-shaped magnet for approximately 45 to 60 minutes. There are no known side effects and there is no exposure to radiation.

By contrast, myelography is what physicians call "invasive." It involves a puncture of the lumbar area of the spine and the injection of dye to outline the spinal cord and nerve roots. The patient must be placed in sometimes uncomfortable positions while X rays are taken of the spine.

Enzmann said there is "some risk" from the procedure and "it's often uncomfortable and has at times unpleasant side effects, either from the contrast medium that's used or just from simply having had a lumbar puncture."

MRI has been used for spinal scans, but, Enzmann said, "there were certain limitations where at times you would still fall back on the myelogram to answer some questions. At this point, there is much less reliance on the myelogram."

He said the new technique involved a lot of trial-and-error research. "We saw that we were getting artifacts on our spine scans and slowly through the process of investigation into what caused those artifacts we realized that if we timed our data acquisition with the cardiac cycle and kept that constant we could eliminate the artifacts and greatly improve the image quality."

The MRI scans now produced, he said, are for the most part equivalent to myelograms and at times superior, "and there's an advantage in comfort and less risk."

The cost of a myelogram ranges from $525 to $900 and that of an MRI scan from $600 to $800.

Stanford radiologists will hold a seminar on the new technique from 8:30 a.m. to 11:30 a.m. Saturday, May 17, in Room M-108 of the School of Medicine. Clinicians and any other interested persons are invited.

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Some basic changes in medical practice have evolved over the last decade or so that influence the guidance that ethics committee members provide, said Raffin, who is also associate director of the ICUs. Increasingly sophisticated technology has enabled physicians to develop such procedures as renal dialysis and organ transplantation. They have also been able to nurture increasingly premature babies along to the point where their tiny bodies can provide the necessary elements for life. The establishment of ICUs has given physicians the ability to care for more acutely ill patients. Yet these advances carry with them a number of ethical questions, not the least of which are quality of life and cost.

Consider the case of an older man who, after two failed kidney transplants and a lifelong dependency on daily dialysis, decides he'd like to stop treatment and die. Should he be forced to live a life he can no longer bear? And who will pay for his continued dialysis treatment, and perhaps another transplant? Treatment for him and other Americans in similar positions is already costing Medicare an estimated $2.5 billion annually, said Dr. Carl Grumet, associate professor of pathology.

The issue of cost is permeating medical practice like a deadly cancer, Raffin said, turning what may at one time have been relatively straightforward decisions into ethical dilemmas that may include considerations such as whether long term benefits of any given treatment are worth the cost, and how to allocate increasingly limited health care resources.

"The traditional laissez faire-type of solo medical practice has evolved into health maintenance organizations and other large group practices," he observed. "Americans are now facing the concept of limited health care resources. Over the next decade or two, all Americans may not be able to have access to the most expensive, high-tech types of medical care that can be delivered."

If a terminally ill patient who would die in a couple of days wanted to be put on life support in an ICU, for example, he might not be allowed to because the costs would outweigh the benefits, Raffin explained.

"We've got to be fair in the allocation of scarce resources," Young added. "We've got to consider whether we can have what we want in the context of what others may want or need."

Justice is one principle Young and others use in guiding the decisions of physicians, patients and families. He also upholds the principle of autonomy; if at all possible patients should be able to choose their medical care—and the consequences—for themselves.

The Durable Power of Attorney for Health Care, in which individuals can describe what they would like to be done if they cannot speak for themselves, is now legally binding. *The Living Will* and *California Natural Death Act* are also helpful in determining future treatments.Individuals should fill them out when they are healthy, Raffin said. They are available through the hospital's department of patient and community relations, (415) 723-7176.

The most important guiding principle is one that states that the medical profession shall "do no harm," Young said. "If treatment will inflict more harm than good, it is not the optimal choice."

Malpractice suits and the growing involvement of lawyers with medicine have also had their effects, Raffin said. On one hand physicians are being told to cut back to reduce cost, yet on the other hand they are held liable for every possible outcome. "Physicians are practicing defensive medicine," he continued. "They're simply scared of being sued."

Key to the changes in medical practice, Raffin said, is the fact that consumers are much more informed about their health care. "The physician-patient relationship has changed dramatically over the last few decades. It used to be 'do whatever you think is best, doc.' Now, physicians tell patients all the possible options and jointly decide which to pursue."

This change has taken place, in part, because of an increased interest in health care by mass media, which has resulted in a better informed public, he said. Members of Stanford's ethics committees favor this trend. "People are worried about what will happen to them in the future," Raffin commented. "We're making an overall effort to bring these types of issues to the medical community and the public."

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NEW HIGH-TECH WAY OF ANALYZING ELECTRICAL ACTIVITY PROVIDES CLEARER PICTURE OF BRAIN'S FUNCTIONS

STANFORD—

A new computerized method of analyzing the brain's electrical activity may provide physicians with a much clearer picture of how the brain functions and how it is affected by various diseases.

Using the new technique, called computer-analyzed EEG, physicians can create a rainbow-colored picture of the brain on a computer screen. Each hue represents a level of electrical activity. The method is totally noninvasive, yet it offers instantaneous information about brain function in a way that easily enables physicians to detect unusual patterns of activity or localized areas of abnormality.

The technique is also much more precise that other ways of reading EEGs, said Dr. Glen Elliott, a research physician in Stanford medical school's psychiatry and behavioral sciences department. These qualities may lead to it replacing the more standard techniques in many areas of medicine.

For example, neurologists are beginning to use it to diagnose a specific type of epilepsy that affects its victims by causing personality changes rather than seizures.

Some anesthesiologists use the technique to more effectively monitor the brain function of patients under anesthesia.

And psychiatrists may be able to gain insights on diseases such as autism, depression and schizophrenia, which may help them develop more effective therapies.

"We're excited about being able to detect consistencies in abnormalities of electrical activity for different diagnostic groups," Elliott said.

The technique is based on something called fourier analysis, developed years ago by a mathematician for use in mathematics and physics. It essentially breaks down the signals created by the brain's electrical activity into component parts. The computer then reconstructs them in a much simpler way and displays the results as colored maps of the brain surface. A table of all the colors of the spectrum serves as the guide to be able to read the levels of activity. The patient simply puts on a special cap that contains all the electrodes and is hooked up to the computer.

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The machine is still fairly rare and is expensive, Elliott said. But he sees it gaining a prominent place in medicine. "There are no dramatic breakthroughs yet, but it gives us a different way of studying people with disorders in the brain."

An EEG, or electroencephalogram, produces a graph in which each line represents the electrical activity measured by individual electrodes attached to the skull. The ability to read the graphs takes considerable experience and expertise, Elliott explained. If the electrical activity in one area of the brain looks abnormal, he added, it can be difficult to determine if the abnormality stems from that area, or if it is simply spreading from another portion of the brain.

With the new technique, however, it is easily distinguishable to even an untrained observer how much electrical activity is produced throughout the brain. Physicians are able to pinpoint precisely if and where any abnormal activity is taking place, and how it dissipates to affect the rest of the brain.

"With an EEG there's always the possibility of missing something," Elliott said. "With this there's a sense of coherance. The computer can process information over time and space—something the human brain has trouble doing."

The computer-analyzed EEG can measure the brain's electrical activity over time, and it can detect changes much more subtle than those picked up by the standard EEG, he said.

It also shows how the brain processes information and can compare activity of the right side with the left side. If a patient is asked to solve math problems or speak, for example, the left side of the brain becomes more active, he explained. Yet if the patient is listening to music, it shows up on the right side of the brain.

"You can't do this type of comparison with an EEG," Elliott said.

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WEIGHT LOSS PROGRAM DEVELOPING FOR PRESCHOOL YOUNGSTERS

STANFORD—

A research team is hoping to halt obesity before it becomes a lifelong problem by working with preschool youngsters and their families.

While obesity programs for adults and adolescents are common, the director of the new program believes this is the first time that a medical school-sponsored program has been introduced for preschool children.

"Obesity, particularly in children, produces both physical and psychological problems. Our objective is to modify a family's eating behavior and patterns of physical activity before the youngster is even objectively aware of his condition.

"By doing so, we may be able to alter the negative psychological consequences and medical risks of obesity," said Dr. Lawrence D. Hammer, director of the Stanford-Children's Ambulatory Care Center at Children's Hospital at Stanford.

Hammer said that obesity in young children is caused by many of the same forces which cause the condition in adults, including genetic predisposition and food intake greater than needed. "It just starts earlier in some people than in others," Hammer said. "And there appears to be a greater likelihood of longterm obesity in youngsters who start becoming overweight in the preschool years."

He noted that children in their early school years are o*h* teased and taunted by their peers for being overweight. This can cause permanent psychological problems, he said.

Also, weight loss is easier to accomplish in a young child than in an adult when food habits have been established, and when physiological factors make shedding weight more difficult, Hammer said.

For the current study, Hammer is looking for several youngsters in the 4 to 6 age range who are already at least 10 percent overweight without an underlying medical cause.

The project is part of ongoing research and there would be no charge for treatment during the study, Hammer said.

The youngsters would need to be accompanied by at least one parent on 10 weekly visits to CHAS starting May 12. Each visit would last about two hours, said Hammer, who is an assistant professor of pediatrics at Stanford.

"Proper diet is a family affair, and especially for a youngster, participation of all family members in supporting a change in eating habits is crucial," Hammer said.

The behavioral treatment program couples nutrition education with techniques designed to increase physical activity and promote healthy eating.

For further information, contact Hammer at (415) 327-4800, ext. 539. The project is funded by the multidisciplinary Stanford Center for the Study of Youth Development.

The Ambulatory Care Center also sponsors an obesity evaluation clinic and weight loss programs for elementary school age children and teenagers, he said.

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FIRST LAZARD FACULTY SCHOLAR APPOINTED AT STANFORD MEDICAL SCHOOL

STANFORD—

Dr. Richard Roth, assistant professor of pharmacology, has been appointed the first Lazard Faculty Scholar at Stanford University School of Medicine, Dean David Korn has announced.

The Lazard Scholarship, established by Stanford alumnus Claude-Eric Lazard and his two sisters, provides $20,000 per year to a beginning assistant professor pursuing "exciting and promising research," Korn said. The award "permits us to reward brilliant young scientists on our junior faculty," Korn added.

Roth, who joined the Stanford faculty in 1984, was selected from among more than 50 applicants for the honor by a new Committee on Faculty Awards.

Roth's research centers on the action of insulin, one of the body's important hormones. He participated in the first successful attempts to clone the gene for the human insulin receptor, a protein involved in mediating insulin's actions on cells. He was also one of the first investigators to produce monoclonal antibodies to the human insulin receptor. These antibodies should aid research efforts aimed at understanding the hormone's actions throughout the body.

Roth, 35, received his Ph.D. from Brown University, went on to a postdoctoral fellowship at the University of California, Berkeley, and subsequently became a senior research investigator at Mt. Zion Hospital and Medical Center in San Francisco prior to his appointment at Stanford.

Lazard, a New York financial consultant, is a 1961 graduate of Stanford University who majored in economics. Through the years, he also has maintained a longstanding interest in medicine and biomedical research. In 1969, he established a fund to support research at Stanford Medical School in memory of his mother, Esther Ehrman Lazard.

This is the first year that the Lazard Scholarship has been awarded competitively. Terms of the fund stipulate that the same candidate cannot be appointed for more than three consecutive years.

4-22-86 —30— lazard-LH10

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STANFORD PATHOLOGIST RECEIVES WARNER LAMBERT/PARKE-DAVIS AWARD

STANFORD—

Dr. Gerald R. Crabtree, associate professor of pathology at Stanford University School of Medicine, has been named the recipient of this year's Warner Lambert/Parke-Davis Award.

The award is given annually by the American Association of Pathologists (AAP) to an experimental pathologist under 40 whose research has made a substantial contribution to pathology.

Crabtree received the award on April 14 during the AAP's annual meeting in St. Louis.

A graduate of West Liberty State College in West Virginia, Crabtree obtained his M.D. from Temple University Medical School in 1972.

After his residency at Dartmouth-Hitchcock Medical Center, he held research positions at Dartmouth Medical School and at the National Institutes of Health before joining the Stanford faculty in 1985.

His research focuses on the regulation and evolution of the genes for fibrinogen, a blood coagulation factor, and on control of the human interleukin-2 and interleukin-2 receptor genes and their relation to various types of cancers.

4-22-86 —30— crabawar-LH10

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FOR IMMEDIATE RELEASE

JAMES B. WYNGAARDEN: 'NO RECKLESS BUDGET SLASHING AT NIH'

—STANFORD

"The impression that the bottom is dropping out in the support of biomedical science is simply untrue," says the director of the National Institutes of Health (NIH).

"Things are going to be tighter, but the 1987 NIH budget represents a substantial commitment to biomedical research," Dr. James B. Wyngaarden said in an interview responding to questions from Stanford faculty.

Fifteen years ago the NIH was funding only about 10,500 research grants, he noted. In 1987 the number will be 18,000, compared with 18,649 this year.

The Gramm-Rudman-Hollings deficit reduction law, which exempts Social Security and defense, applies to all branches of the federal government. The law has imposed a cut of 4.3 percent or $236 million in this year's budget authority of the NIH, down from $5.5 billion to $5.13 billion.

"But there hasn't been reckless budget slashing," Wyngaarden insisted.

"What creates a lot of tension is that grants have doubled, but the number of applicants has tripled, and competition is intense," he said. "We haven't been able to develop resources to parallel the increase in the number of scientists and fundable ideas."

Wyngaarden said the NIH has been subject to the same economic unpredictabilities as the nation as a whole.

"But my sense is the Congress won't let that deficit have a destructive effect on the country's scientific effort," he added.

Wyngaarden was in Palo Alto last week to talk about the "outlook for academic research" at the annual meeting of the Pacific Division of the American Association for the Advancement of Science.

The 4.3 percent cut this year, Wyngaarden said, will apply to the budget of each institute of NIH. Health research, education and training, and NIH intramural programs will be affected evenly. Programs defined by dollar value, such as AIDS research, will be reduced similarly.

The administration's 1987 budget also has proposed an additional $77 million cut in NIH's 1986 congressionally approved budget. The $77 million could not be spent until the reduction request was approved within 45 days by the Congress.

But the Congress has not acted on the request, and Wyngaarden indicated that eventually the $77 million will come back to the NIH.

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Gramm-Rudman cuts will not affect the number of new and competing grants authorized this year, which is 6,100, Wyngaarden said. But they will be funded at a level 7 or 8 percent lower than planned. "With the reductions coming so late in the year, the impact on the budget is greater than the actual 4.3 percent," he noted.

Wyngaarden admitted that 1987 will be complicated by additional savings proposed in the president's budget. One modifies the indirect cost reimbursement to institutions, resulting in savings of about $85 million. The other will transfer about $143 million in AIDS research funds from the NIH to the budget of the assistant secretary of health.

Under the 18,000 research grant ceiling, new and competitive grants will be reduced from 6,100 to 5,140 in 1987.

"Because of the budget cuts and the average cost of a grant rising about 10 percent a year, the NIH will not have the money to support 5,140 new grants at full cost," Wyngaarden said. "If we fund them at lower levels, we'll be changing the scope of projects, creating difficulties for the scientists involved.

"For these reasons, I favor funding fewer new projects but higher quality work and funding it adequately."

Similarly, the biomedical research support program will be eliminated, resulting in a $63 million cut. These, coupled with the indirect cost savings if lowered as planned, would reduce the 1987 NIH budget to about $4.9 billion compared with $5.13 billion in 1986.

Wyngaarden acknowledged that the elimination of biomedical research support grants which have provided discretionary funds to medical school deans "doesn't obviously strengthen the universities."

He declined to comment on the controversy concerning another contested issue — administrative indirect costs on grants. The Office of Management and the Budget has proposed caps at rates of 26 percent this year and 20 percent next year. These, the universities say, would increase their costs of doing government-sponsored research.

"That's a major policy issue," Wyngaarden said. "It would not be appropriate for me to comment."

But in an interview in the May 1985 issue of the *Newsletter of the Federation of American Societies for Experimental Biology*, the NIH director did say that academic institutions are under "enormous" stress.

"The health of higher education institutions in this country is absolutely critical," he was quoted as saying. "We're utterly dependent on them to meet the mission of NIH and we're one component of all the things higher educational institutions do for this mission.

"So, the indirect cost issue has to be considered in the context of a near crisis situation for financing of higher educational institutions."

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Win MC2a

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Q: News reports about the effects of the Gramm-Rudman-Hollings deficit-reduction law on the budget of the National Institutes of Health (NIH) vary, depending on the publication. Can you set the record straight?

A: Let me begin with the NIH budget for fiscal 1986. The original congressionally approved budget was $5.5 billion. Gramm-Rudman imposed a cut of 4.3 percent. This means a reduction of $236 million in budget authority.

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Q: From a personal standpoint how do you feel about these cuts, the future of NIH, and our national commitment to biomedical research?

A: I'm optimistic about it. Things are going to be tighter, but there's no question the administration is solidly committed to continued support of biomedical research, including basic research specifically. The Congress, both houses and members of both parties, view biomedical science and health-related research as a very high national priority.

Even the Heritage Foundation, which normally doesn't favor government expenditures for many things, feels the NIH fully warrants substantial government support for its value to health, for its contributions to development of new industries and the nation's economic well-being.

Now having said that, I don't think the NIH will be exempted from present fiscal constraints. We're not going to be treated in the same category as national defense or Social Security. There's no realistic possibility of that happening. But what the Congress does to the 1987 budget is an important bellwether.

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A: We've heard this concern raised often. I'd like to make two points. When you look at the NIH budget between 1977 and 1985, the intramural programs grew 111 percent, the extramural 114 percent. There's some fluctuation between the two in given years, but overall their growth has been symmetrical.

My other point is that intramural programs have no citizen advocacy. We have to protect NIH intramural activities in our budget formulation. When the proposed budget is presented by the president in late January or early February before public hearings actually begin, the NIH intramural programs seem to have a higher priority.

But those who think so overlook the dynamics of the appropriations process. When reinforced by witnesses from professional societies, special disease agencies, and families of victims of disease, the Congress adds funds to the NIH budget each year. These go disproportionately to the extramural program, and the outcome is symmetrical growth.

Q: Many scientists think that NIH's intramural programs are generally first-class and match those one finds in academic centers. But there are also weak programs. How do you decide which intramural programs get funded and which do not?

A: We have an active review process by outside advisers for each institute. They review the work of laboratories and individual scientists every three years and recommend the level at which they should be supported. On that basis, some programs are expanded, others constricted.

Some university scientists would like to see prospective peer review applied to the budgets of NIH intramural programs, which is what they have to go through themselves. I'd suggest an alternative. Rather than saddle the intramural programs with all the encumbrances of the extramural review process, we should work on reducing the red tape for the extramural scientists. As I pointed out, we're trying to do that.

Q: In the United States there's a growing consumer movement demanding cost-effective and safer medical and surgical treatments. The safety and efficacy of many procedures can be established through careful clinical trials. Do you think the NIH has a responsibility to support clinical trials and if so, what will happen to those after Gramm-Rudman?

A: We have a responsibility in this area. We have supported clinical trials and they're a visible part of what we do. When the budgets are constrained, however, we can only fund a smaller number. The Congress asks many details about clinical trials. At the last appropriations hearing I cited 12 examples that had led to annual reductions in health care expenditures totaling $2.5 billion.

Q: Can you cite specific examples?

A: One was a clinical trial of the use of a drug called indomethacine for closure of patent ductus arteriosus in children. This condition occurs when the blood vessel that links the pulmonary artery and aorta before birth fails to close properly after birth. The leakage puts an additional strain on the baby's heart. The ductus or vessel can be severed and closed off in a surgical procedure. But there's now a less expensive approach, thanks to the work of Abraham Rudolph, professor of pediatrics at UC-San Francisco.

Rudolph had studied the physiological mechanism of the maintenance of the patent ductus in fetal lambs. He found that prostaglandins present in the ductal wall maintained the prenatal patency of the ductus of fetal sheep and that inhibitors of prostaglandin synthesis such as indomethacine caused constriction of the vessel. After the animal observations, studies with indomethacine were carried out in premature babies with patent ductus arteriosus. Such treatment for several days was followed by closure of the vessel in the majority of infants.

Subsequent clinical trials, supported by the National Heart, Lung and Blood Institute, found that 85 percent of children with that condition could be managed medically. The clinical trial cost $1 million, the cost of the medical treatment is about $40 per patient. The total savings of that innovation to the country is on the order of $200 million a year.

Another multicenter study, which sounds rather trivial, had to do with the criteria for tonsillectomy. The removal of tonsils had been performed almost ritually by physicians for decades. The study established new criteria leading to a remarkable decline in tonsillectomies nationwide. The Institute of Child Health and Human Development estimates the annual cost savings on the order of $800 million.

Q: What is your position on the pork-barrel projects approved by the Congress last year? The question refers to funding facilities for specific institutions bypassing the normal peer review process.

A: We don't have any official position on this issue. My personal view is that we'd like to see as many of these projects as possible subjected to peer-review. But the number of instances in which this review has been bypassed is not large.

Q: Various reports have suggested that as a nation we have not provided the necessary investments required to maintain university laboratories and equipment up-to-date. Do you plan to address this issue?

A: We're very concerned about it. The fraction of the NIH budget for equipment in individual grants has declined over time. Now it's about 2.9 percent of the average project award, and 4 to 4.5 percent of the total NIH budget, including large instrument funding programs. The NIH studied the shortfall in availability of large instruments that can be shared among two or more grantees. The shortfall was estimated at about $100 million per year. We've set a target of $20 million a year to alleviate that, and we're exceeding that amount every year. But we don't think the shortfall will be made up in five years, even though we're on target with respect to instruments costing $100,000 to $200,000.

Another study has indicated a very serious shortfall in small instruments costing between $5,000 and $60,000. The shortfall is greater in state-supported institutions, with a number of chairmen reporting that many research projects cannot be attempted because of the lack of instrumentation.

We've discussed this issue with the institute directors' advisory committee. Our sense is that our funding has fallen below the critical level and we need to address it.

Q: How can scientists help you in your efforts?

A: There's no country in the world that prepares its budgets for science the way ours does. It's important that our scientists understand the process and its politics. We at the NIH propose, defend, and appeal budget decisions, but there comes the time when the president's budget is formally presented each year. From that moment on I'm obliged to defend those decisions.

The special interest groups make their case to the Congress. The scientific community has the opportunity and obligation to make its case. But the effective way is to make it on altruistic grounds. It's not appropriate for scientists to make their case on the basis of personal pain. There's a lot of pain in the country. Our farmers are in trouble, small business people are suffering. Right now even the oil producers are in trouble. The idea that all scientists should be kept working, which is often the case made, I think damages the effort.

Q: In your opinion how does science fare in terms of public support?

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FOR IMMEDIATE RELEASE

STANFORD HOSPITAL NAMES DIRECTOR OF NURSING

STANFORD—

Malinda Mitchell has been appointed associate hospital director and director of nursing, Executive Vice President William Arnold announced.

Mitchell had been performing both jobs on an acting basis since Oct. 1. She replaces Duane Walker, who resigned to become vice president of Queens Medical Center in Honolulu.

"Our nationwide search has ended," Arnold told members of the hospital executive committee. "Malinda Mitchell was clearly the best candidate for the position."

Mitchell has been sitting on the executive committee since her interim appointment began. She will continue as a member of the committee.

She has been a hospital employee since August 1975, starting as a clinical nursing coordinator. In January 1979, she was appointed assistant director of Nursing with responsibility for all surgery areas. She was named associate director of nursing in May 1982.

Mitchell received her training as a registered nurse at the University of Illinois and earned a master's degree in her field at Indiana University. She recently received an M.S. in management as a Sloan Fellow at Stanford's Graduate School of Business.

4-22-86 —30— mitchell rg2

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FOR IMMEDIATE RELEASE

STANFORD HOSPITAL HIRING NURSES TO ACCOMODATE INCREASED PATIENT CENSUS

STANFORD—

Take down the vacancy signs and call out the recruiters. Stanford University Hospital's intensive care units (ICUs) are overflowing and more nurses are needed to care for the increased number of patients.

The department of nursing services is hiring "experienced ICU nurses" as fast as it can, said Judy Lanigan, assistant director in charge of staffing. It had about 30 openings; about 20 of those have yet to be filled.

"Nobody knows why this is happening," said Malinda Mitchell, director of nursing service. But for about six weeks now, the number of patients in the pediatric and adult ICUs have burst not only beyond the depressed hospital census, but past the budgeted census as well.

Possible explanations include an increase in cardiovascular surgery patients and an increase in heart transplant patients, Mitchell said. Also, since the hospital was designated one of three trauma centers for Santa Clara County, there has been a slight increase of trauma patients who are admitted to the hospital. But none of these reasons account for all of the current situation, she noted.

Other peninsula hospitals are experiencing similar overloads, Mitchell said.

During the last two months, the ICUs have been running about 18 percent or more above the number of patients expected, Lanigan said. Nurse staffing is based on the number of patients, especially in the ICUs where in most cases one or two patients are cared for by one nurse on a 24-hour basis, she explained. Nurses have been working overtime and relief nurses have been scheduled to fill in the gap, but such measures only work temporarily.

"After a week or two of working overtime, you begin to get pretty tired," Mitchell said.

The nursing shortage comes as a suprise on the tails of the hospital's "downsizing" last month in response to fewer patients and shorter hospital stays by patients. No nurses were laid off during the downsizing, Mitchell said, but budgeted nursing positions were eliminated in anticipation of decreased staffing needs.

"We had stopped our recruitment efforts, and had put a hold on all our applicants," Lanigan said. But no more. "If the census continues to stay high, we'll need another 20 nurses in addition to those we need to hire now."

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FOR IMMEDIATE RELEASE

KORN REAPPOINTED CHAIRMAN OF CANCER ADVISORY BOARD

STANFORD—

Dr. David Korn, vice president and dean of the Stanford University School of Medicine, has been reappointed by President Reagan as chairman of the National Cancer Advisory Board (NCAB).

Korn was appointed in 1984 to a six-year term as a member of the board, then named to a two-year term as chairman. His second term as chairman runs through March 8, 1988, and his board term expires March 8, 1990.

The NCAB is an advisory panel to the director of the National Cancer Institute (NCI). Eighteen members are appointed by the president and there are also 11 ex-officio members from various government offices.

Board members advise the NCI director on activities of the National Cancer Program, the United States' comprehensive effort aimed at fighting cancer. They also review applications for grants-in-aid relating to cancer research.

The board meets four times a year at the National Institutes of Health in Bethesda, Md.

Korn previously served as an adviser on cancer to the federal government as a member of the Board of Scientific Counselors, Division of Cancer Biology and Diagnosis, National Cancer Institute. He was a member of the board from 1977 to 1982 and chairman from 1980 to 1982.

His own research is on enzymes that synthesize DNA and are involved in DNA replication of higher organisms.

Korn received both his undergraduate and medical degrees from Harvard University. He has been on the Stanford Medical School faculty since 1968, when he was named chairman of the Department of Pathology. He became dean of the School of Medicine in 1984 and added the title of vice president in an organizational change that took place last January.

4-22-86 —30— korn rg2

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FOR IMMEDIATE RELEASE

JAMES B. WYNGAARDEN: 'NO RECKLESS BUDGET SLASHING AT NIH'

—STANFORD

"The impression that the bottom is dropping out in the support of biomedical science is simply untrue," says the director of the National Institutes of Health (NIH).

"Things are going to be tighter, but the 1987 NIH budget represents a substantial commitment to biomedical research," Dr. James B. Wyngaarden said in an interview responding to questions from Stanford faculty.

Fifteen years ago the NIH was funding only about 10,500 research grants, he noted. In 1987 the number will be 18,000, compared with 18,649 this year.

The Gramm-Rudman-Hollings deficit reduction law, which exempts Social Security and defense, applies to all branches of the federal government. The law has imposed a cut of 4.3 percent or $236 million in this year's budget authority of the NIH, down from $5.5 billion to $5.13 billion.

"But there hasn't been reckless budget slashing," Wyngaarden insisted.

"What creates a lot of tension is that grants have doubled, but the number of applicants has tripled, and competition is intense," he said. "We haven't been able to develop resources to parallel the increase in the number of scientists and fundable ideas."

Wyngaarden said the NIH has been subject to the same economic unpredictabilities as the nation as a whole.

"But my sense is the Congress won't let that deficit have a destructive effect on the country's scientific effort," he added.

Wyngaarden was in Palo Alto last week to talk about the "outlook for academic research" at the annual meeting of the Pacific Division of the American Association for the Advancement of Science.

The 4.3 percent cut this year, Wyngaarden said, will apply to the budget of each institute of NIH. Health research, education and training, and NIH intramural programs will be affected evenly. Programs defined by dollar value, such as AIDS research, will be reduced similarly.

The administration's 1987 budget also has proposed an additional $77 million cut in NIH's 1986 congressionally approved budget. The $77 million could not be spent until the reduction request was approved within 45 days by the Congress.

But the Congress has not acted on the request, and Wyngaarden indicated that eventually the $77 million will come back to the NIH.

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Gramm-Rudman cuts will not affect the number of new and competing grants authorized this year, which is 6,100, Wyngaarden said. But they will be funded at a level 7 or 8 percent lower than planned. "With the reductions coming so late in the year, the impact on the budget is greater than the actual 4.3 percent," he noted.

Wyngaarden admitted that 1987 will be complic..ted by additional savings proposed in the president's budget. One modifies the indirect cost reimbursement to institutions, resulting in savings of about $85 million. The other will transfer about $143 million in AIDS research funds from the NIH to the budget of the assistant secretary of health.

Under the 18,000 research grant ceiling, new and competitive grants will be reduced from 6,100 to 5,140 in 1987.

"Because of the budget cuts and the average cost of a grant rising about 10 percent a year, the NIH will not have the money to support 5,140 new grants at full cost," Wyngaarden said. "If we fund them at lower levels, we'll be changing the scope of projects, creating difficulties for the scientists involved.

"For these reasons, I favor funding fewer new projects but higher quality work and funding it adequately."

Similarly, the biomedical research support program will be eliminated, resulting in a $63 million cut. These, coupled with the indirect cost savings if lowered as planned, would reduce the 1987 NIH budget to about $4.9 billion compared with $5.13 billion in 1986.

Wyngaarden acknowledged that the elimination of biomedical research support grants which have provided discretionary funds to medical school deans "doesn't obviously strengthen the universities."

He declined to comment on the controversy concerning another contested issue — administrative indirect costs on grants. The Office of Management and the Budget has proposed caps at rates of 26 percent this year and 20 percent next year. These, the universities say, would increase their costs of doing government-sponsored research.

"That's a major policy issue," Wyngaarden said. "It would not be appropriate for me to comment."

But in an interview in the May 1985 issue of the *Newsletter of the Federation of American Societies for Experimental Biology*, the NIH director did say that academic institutions are under "enormous" stress.

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A: When you reduce the scope of a project, initially that small cut will come out of supplies and other expendables. Seventy percent of the expense in a grant is personnel. About 4 percent is in equipment. You trim the supplies and it doesn't take long to realize you're not doing the job. If you, on the other hand, protect the supply category, the obvious alternative is to cut personnel. For these reasons I favor funding fewer projects but higher quality work and funding it adequately.

Q: From a personal standpoint how do you feel about these cuts, the future of NIH, and our national commitment to biomedical research?

A: I'm optimistic about it. Things are going to be tighter, but there's no question the administration is solidly committed to continued support of biomedical research, including basic research specifically. The Congress, both houses and members of both parties, view biomedical science and health-related research as a very high national priority.

Even the Heritage Foundation, which normally doesn't favor government expenditures for many things, feels the NIH fully warrants substantial government support for its value to health, for its contributions to development of new industries and the nation's economic well-being.

Now having said that, I don't think the NIH will be exempted from present fiscal constraints. We're not going to be treated in the same category as national defense or Social Security. There's no realistic possibility of that happening. But what the Congress does to the 1987 budget is an important bellwether.

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A: We've heard this concern raised often. I'd like to make two points. When you look at the NIH budget between 1977 and 1985, the intramural programs grew 111 percent, the extramural 114 percent. There's some fluctuation between the two in given years, but overall their growth has been symmetrical.

My other point is that intramural programs have no citizen advocacy. We have to protect NIH intramural activities in our budget formulation. When the proposed budget is presented by the president in late January or early February before public hearings actually begin, the NIH intramural programs seem to have a higher priority.

But those who think so overlook the dynamics of the appropriations process. When reinforced by witnesses from professional societies, special disease agencies, and families of victims of disease, the Congress adds funds to the NIH budget each year. These go disproportionately to the extramural program, and the outcome is symmetrical growth.

Q: Many scientists think that NIH's intramural programs are generally first-class and match those one finds in academic centers. But there are also weak programs. How do you decide which intramural programs get funded and which do not?

A: We have an active review process by outside advisers for each institute. They review the work of laboratories and individual scientists every three years and recommend the level at which they should be supported. On that basis, some programs are expanded, others constricted.

Some university scientists would like to see prospective peer review applied to the budgets of NIH intramural programs, which is what they have to go through themselves. I'd suggest an alternative. Rather than saddle the intramural programs with all the encumbrances of the extramural review process, we should work on reducing the red tape for the extramural scientists. As I pointed out, we're trying to do that.

Q: In the United States there's a growing consumer movement demanding cost-effective and safer medical and surgical treatments. The safety and efficacy of many procedures can be established through careful clinical trials. Do you think the NIH has a responsibility to support clinical trials and if so, what will happen to those after Gramm-Rudman?

A: We have a responsibility in this area. We have supported clinical trials and they're a visible part of what we do. When the budgets are constrained, however, we can only fund a smaller number. The Congress asks many details about clinical trials. At the last appropriations hearing I cited 12 examples that had led to annual reductions in health care expenditures totaling $2.5 billion.

Q: Can you cite specific examples?

A: One was a clinical trial of the use of a drug called indomethacine for closure of patent ductus arteriosus in children. This condition occurs when the blood vessel that links the pulmonary artery and aorta before birth fails to close properly after birth. The leakage puts an additional strain on the baby's heart. The ductus or vessel can be severed and closed off in a surgical procedure. But there's now a less expensive approach, thanks to the work of Abraham Rudolph, professor of pediatrics at UC-San Francisco.

Rudolph had studied the physiological mechanism of the maintenance of the patent ductus in fetal lambs. He found that prostaglandins present in the ductal wall maintained the prenatal patency of the ductus of fetal sheep and that inhibitors of prostaglandin synthesis such as indomethacine caused constriction of the vessel. After the animal observations, studies with indomethacine were carried out in premature babies with patent ductus arteriosus. Such treatment for several days was followed by closure of the vessel in the majority of infants.

Subsequent clinical trials, supported by the National Heart, Lung and Blood Institute, found that 85 percent of children with that condition could be managed medically. The clinical trial cost $1 million, the cost of the medical treatment is about $40 per patient. The total savings of that innovation to the country is on the order of $200 million a year.

Another multicenter study, which sounds rather trivial, had to do with the criteria for tonsillectomy. The removal of tonsils had been performed almost ritually by physicians for decades. The study established new criteria leading to a remarkable decline in tonsillectomies nationwide. The Institute of Child Health and Human Development estimates the annual cost savings on the order of $800 million.

Q: What is your position on the pork-barrel projects approved by the Congress last year? The question refers to funding facilities for specific institutions bypassing the normal peer review process.

A: We don't have any official position on this issue. My personal view is that we'd like to see as many of these projects as possible subjected to peer-review. But the number of instances in which this review has been bypassed is not large.

Q: Various reports have suggested that as a nation we have not provided the necessary investments required to maintain university laboratories and equipment up-to-date. Do you plan to address this issue?

A: We're very concerned about it. The fraction of the NIH budget for equipment in individual grants has declined over time. Now it's about 2.9 percent of the average project award, and 4 to 4.5 percent of the total NIH budget, including large instrument funding programs. The NIH studied the shortfall in availability of large instruments that can be shared among two or more grantees. The shortfall was estimated at about $100 million per year. We've set a target of $20 million a year to alleviate that, and we're exceeding that amount every year. But we don't think the shortfall will be made up in five years, even though we're on target with respect to instruments costing $100,000 to $200,000.

Another study has indicated a very serious shortfall in small instruments costing between $5,000 and $60,000. The shortfall is greater in state-supported institutions, with a number of chairmen reporting that many research projects cannot be attempted because of the lack of instrumentation.

We've discussed this issue with the institute directors' advisory committee. Our sense is that our funding has fallen below the critical level and we need to address it.

Q: How can scientists help you in your efforts?

A: There's no country in the world that prepares its budgets for science the way ours does. It's important that our scientists understand the process and its politics. We at the NIH propose, defend, and appeal budget decisions, but there comes the time when the president's budget is formally presented each year. From that moment on I'm obliged to defend those decisions.

The special interest groups make their case to the Congress. The scientific community has the opportunity and obligation to make its case. But the effective way is to make it on altruistic grounds. It's not appropriate for scientists to make their case on the basis of personal pain. There's a lot of pain in the country. Our farmers are in trouble, small business people are suffering. Right now even the oil producers are in trouble. The idea that all scientists should be kept working, which is often the case made, I think damages the effort.

Q: In your opinion how does science fare in terms of public support?

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EDITORS: This week, April 20-26, is national organ and tissue donor awareness week. Photo on request if not enclosed.

FOR IMMEDIATE RELEASE

38-YEAR-OLD, TERMINALLY ILL MAN, AWAITS A HEART-LUNG TRANSPLANT AT STANFORD UNIVERSITY HOSPITAL

STANFORD—

Facing grim odds, Doug Hoxworth, his wife, and four daughters wait optimistically and patiently for a donated heart and lungs, which they hope will give him a new chance at life. Doug is one of the 14 people currently on Stanford University Hospital's active waiting list for heart-lung transplants.

For Doug, who is 38 years old, this experimental surgery, if successful, is the only known cure for his lung disease, primary pulmonary hypertension. His need highlights a larger problem of insufficient organ donations to meet the large demand.

Selected from the hundreds of people who apply to the heart-lung program at Stanford, Doug considers himself fortunate to be on the waiting list.

The Hoxworths credit a chance meeting with Dr. Burt Groves from the University of Colorado's Hospital in Denver, who specializes in Doug's disease, as the key factor which brought them to Stanford.

Thinking that Doug would die soon, the Hoxworths went on a family vacation. On their final night, the Hoxworth's then-four-year-old daughter Katy precipitated this chance meeting with Groves.

It was then that Dr. Groves, said " 'I can't cure this disease, but I'll help you. I'm giving you a little light at the end of an otherwise completely black tunnel. I will get you into Stanford if it is possible to be done' and he did," Doug's wife Susan said. "That is the only way we got here," she said.

Doug met the program's stringent criteria for acceptance, which include being 55 or younger, terminally ill with cardiopulmonary disease, generally healthy otherwise, and having a stable family or psychological network.

The chances of someone getting on the waiting list, finding a donor in time, and surviving the surgery are slim. Of the 60 to 70 people accepted to Stanford's program since it began March 9, 1981, so far about half have received transplants, but one-third of those died within a month after the surgery according to Dr. Allen Glanville, Stanford post-doctoral fellow in pulmonary medicine. Several people have died while waiting for a suitable donor.

The average survival rate for those who live the first month, is 28 months, but "15 of these 21 long survivors are still alive," said Glanville. Doctors expect the survival rate to increase as the heart-lung program matures, he said. Mary Gohlke, the first successful heart-lung transplant and Stanford's first patient, is the longest survivor at five years.

Because of the lack of donors, people on the heart-lung waiting list must wait an average of 17 months to receive a suitable donor. Doug has been waiting seven months. His positive attitude helps him sit out the wait. "You have to stay mentally sharp and be careful of depression," he noted.

His chances of finding a donor may be better than others because of his average body size and common blood type, the two main factors in matching a donor and recipient, Doug said.

The Hoxworths wait with both anticipation and trepidation of receiving the phone call notifying them of a suitable donor. A call did come through Wednesday, April 9, at 3 a.m. The whole family went with Doug to the hospital, but after several hours doctors discovered a low-grade infection in the donor's lungs that made them unsuitable for transplantation. Turning back home was "really tough" on the whole family, Doug said.

Two other donors had been considered for Doug earlier, but those lungs also were inappropriate for transplantation, a common event, he said. Lungs are particularly delicate and prone to infection; thus, only about one in ten donors is suitable for heart-lung transplants. But, all is not lost; people waiting for heart transplants receive the hearts.

Doug, who describes himself as a former "workaholic," is a little frustrated staying at home and being so inactive, he said. But he is glad to have the opportunity to take a more active role as a parent, getting to know his daughters.

The Hoxworth's experience began two years ago in September at their home in Seattle when Doug realized he was getting short of breath doing normal activities like mowing the lawn and playing baseball.

"I figured I was out of shape," Doug said. Then in October 1984, he got what appeared to be an endless cold. Diagnosed as having the flu, Doug would "drag himself to work during the week and every weekend he was sick," Susan said.

His condition worsened. About four months later, after compiling "several pages of strange symptoms (including) a rash, swollen stomach, white toenails, bright purple knees, and a throbbing in his neck," Doug went to see an allergist, she said.

Numerous tests revealed an enlarged heart and the source of Doug's troubles was finally pinpointed. Doctors told him he had "a very bad case of primary pulmonary hypertension," Susan said. They also determined that he had "a few months or maybe even just a few weeks to live," she said.

Primary pulmonary hypertension is an uncommon disease, and the cause of it remains a mystery. It is characterized by defective blood vessels in the lungs leading to high blood pressure in the lungs and several other problems throughout the body. In particular, the right side of the heart may become irreversibly damaged because it works extra hard to compensate for the problem in the lungs.

The doctors in Seattle led the Hoxworths to believe that Doug's situation was hopeless. The family went through a "horrible" period of grieving, Susan said.

Then, "we decided to go on a trip to California in order to visit and say goodbye to friends and take the kids to Disneyland," Susan said.

The final night of their stay a woman who had been speaking with Katy on the steps of the hotel pool asked Susan why they were there. "I told her we were on our last trip because my husband was dying."

When she found he had primary pulmonary hypertension she was amazed, Susan said. At the time, she and her husband Dr. Groves were attending a symposium for cardiologists, and Dr. Groves was speaking on new treatments for primary pulmonary hypertension, Doug said.

As a result of this chance meeting, Doug went to Denver to participate in Grove's experimental program.

Their first visit to Denver was on April 7, 1985. After receiving oxygen and drug therapy, the rapidly deteriorating rate of Doug's condition lessened. And on September 9, 1985 Doug was officially accepted to Stanford's heart-lung transplant program.

"Groves said he had stabilized (the progression of the disease) a bit but there was no question that the only way he was going to make it was a heart-lung transplant," Susan said.

Doug came to Stanford immediately, and the rest of the family soon followed pulling a 6 by 12 U-haul.

The speed at which the events that led the Hoxworths to Stanford happened was remarkable, they said. "It usually takes forever to get anywhere," Susan added. "You are playing a game with time. Time is running out constantly and you are kind of running trying to keep ahead of it," she said.

Doug doesn't worry too much about it "I'm either going to make it or I'm not," he said.

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FOR IMMEDIATE RELEASE

STANFORD SEES INCREASE IN ORGAN DONORS, CREDITS NEW STATE LAW

STANFORD—

Stanford has performed six more heart transplants—a 30 percent increase—this year than last, largely because California now requires hospitals to ask families for organ donations whenever a patient dies.

"We've definitely seen an increase in donors since the law's been in effect," said Marguerite Brown, R.N., donor coordinator for the transplant program at Stanford University Medical Center.

Twenty heart transplants and two heart-lung procedures have taken place since the state law went into place on January 1. Last year 14 heart replacements and two heart-lung transplants were completed during the same period. More than 380 individuals have received new hearts at Stanford, the largest heart transplant center in the world.

Despite the increase in transplants, "The rate still needs to be better," Brown said. "There's never an instance when someone isn't waiting for organs."

At all times, Stanford's waiting lists include eight to 10 persons needing hearts and 15 to 20 awaiting new hearts and lungs. About 25 percent may die before receiving new organs, and many more must be turned away from the program, Brown said.

According to estimates from the Regional Procurement Agency of Southern Califonia, about 10,000 persons are waiting for kidney transplants nationwide, 175 for livers, 150 for hearts and 30 for pancreases. Physicians have estimated that only 15 percent of organs able to be donated actually reach those waiting.

Heart transplants are now standard treatment for certain kinds of end-stage heart disease and are no longer considered to be experimental by the government and most insurance companies, Brown pointed out.

As part of national organ and tissue donor awareness week April 20-26, a special exhibit of transplant and donor information is set up outside the main cafeteria at Stanford University Hospital. Pamphlets and donor cards are available from the booth.

Following is general information made available by Stanford University Hospital to encourage organ donations:

When are donations made? Organ donations are made when patients have been declared legally brain dead—which means all brain functions have ceased—by two physicians uninvolved with the transplant team. Brain death is the standard, legal definition of death in California.

Many heart donors at Stanford are victims of accidents such as auto or motorcycle crashes, according to Marguerite Brown. Cornea, skin and bone can be donated under less traumatic circumstances, she noted.

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After the family's consent is received, surgeons remove the organs under sterile conditions. The incisions are stitched and bandaged; the body is not disfigured and funeral arrangements are not delayed or altered.

How are organs matched to recipients? Organ recipients have been accepted into a transplant program and placed on a waiting list. Organs must be matched very carefully and quickly for biological compatibility and size.

What organs can be donated? The heart, combined heart and lungs, kidneys, liver, and pancreas. In addition, tissues such as the cornea, middle ear structures, cartilage, and skin—as well as bones—can be given.

Who can become a donor? Just about anybody. Persons over 18 years of age may fill out donor cards and tell their families of their wish to be a donor. The organs of children under 18 can be used only with the written consent of a parent or legal guardian.

Is there an upper age limit for donors? For transplant, yes. But some organs and tissues inappropriate for transplant can be used for research. For example, research done with corneal tissue has resulted in new treatments for glaucoma, advances in cataract surgery, and improved ways of storing transplant tissue.

What steps must be taken to become a donor? Persons who would like to donate organs should fill out and carry a signed Uniform Donor Card. The card must be signed in the presence of two witnesses aged 18 or older.

Families should be told of the desire to donate. Hospitals always ask permission from the legal next of kin and abide by the family's decision, whether or not an individual carries a signed card.

Donor cards are available from the California Department of Motor Vehicles, Nancy Manela of Stanford University Hospital Community and Patient Relations (415)723-7167, or donor coordinator Brown (415)723-5771.

Is the recipient told who donated the organs? No. To protect the privacy of donors and recipients, hospitals do not inform families of each others' names. The donor family is always told of the age and sex of the recipient, however, and is notified of the inital outcome of the transplant surgery.

Who pays for the organ donatione? There is no charge or payment for the actual organ donation: It is illegal to buy or sell human organs. Funeral expenses remain the responsibility of the donor family.

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FOR IMMEDIATE RELEASE

MEDICAL STUDENTS RECEIVE OVERSEAS OPPORTUNITY

STANFORD—

Stanford University medical students interested in research opportunities outside the United States can now apply under a new program for scholarships to underwrite their study and travel expenses, announced Dr. John Steward, associate dean for student affairs.

The Peter Emge Traveling Scholars Program will grant tuition credit, research assistantship salary for one quarter, as well as cover travel expenses to and from the site of study, Steward said.

About six traveling scholars are expected to be funded annually at first, Steward said Friday, April 18. An endowment has been created to provide approximately $36,000 a year to fund the program, he added.

"This program will give students an opportunity to view medicine in an entirely different context from the Western, tertiary care institution Stanford represents," said Dr. Gary Schoolnik, chief of the Medical Center's division of geographic medicine.

"Here (at Stanford), students see mostly intervention in established illness. In developing countries, public health practices and preventive medicine have a far more significant impact," Schoolnik added.

The Emge program is expected to help students pursue research opportunities in a wide variety of locations. For example, Schoolnik said his division is in the planning stages of establishing medical study programs in Chiapas, Mexico, and Shanghai, China, both potential sites for Emge participants.

Rules for participating are similar to the Medical Student Scholars Program which administers the Emge program. Scholars must identify a research project, submit a formal proposal and secure faculty sponsorship in order to receive academic credit. When the project ends, participants must present their findings in a report suitable for publication in the medical press.

The Emge Program commemorates the only son of Dr. Ludwig Emge, a German-born physician who chaired Stanford's Department of Obstetrics and Gynecology from 1931 to 1949. Peter Emge, a Navy fighter pilot, died in an accident in 1945.

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(Editors: This story describes the work of one speaker at the third annual Cardiovascular Nutrition Symposium, sponsored by the American Dietetic Association Practice Group of Sports and Cardiovascular Nutritionists (SCAN) and Stanford University Medical Center. The conference, scheduled April 20-22 at Hyatt Rickeys Hotel, 4219 El Camino Real, Palo Alto, is open to the news media. A news briefing featuring several conference participants has been scheduled from 11:30 a.m. to 1 p.m., Monday, April 21 at Rickeys. Reporters wishing to cover the conference or any of the sessions should check-in with the SCAN registration desk at the hotel (415-493-8000). Conference schedules have been mailed to the news media and are available in advance from the Medical Center News Bureau.

ADVANCE FOR RELEASE 11 A.M., MONDAY, APRIL 21

RESEARCHERS START HEART DISEASE PREVENTION WITH FOURTH GRADERS

STANFORD—

Using such concepts as "friendly fruit trees" and SPIN foods, researchers are studying if grade school children can be taught to reduce their cholesterol intake.

While findings are preliminary, nutritionist Anne Snyder is encouraged by recent efforts. Next she hopes to continue teaching children—and their families—about how to replace foods which decades later may lead to cardiovascular disease.

Snyder, a registered dietitian, said she is currently collaborating with the Stanford Center for Research in Disease Prevention (SCRDP) on a project to learn if a six-week program in elementary schools can encourage heart healthy eating.

The latest effort is based on the longer study which Snyder and colleagues at the Gladstone Foundation Laboratories for Cardiovascular Research conducted with third and fourth graders in the Milbrae, Calif., elementary schools in 1982-84.

Snyder was scheduled to discuss the study, called SPIN (Special Program in Nutrition), on Monday, April 21 at a conference of "Cardiovascular Nutrition." The two-day meeting for health and nutrition professionals is sponsored by Stanford Medical Center and the American Dietetic Association Practice Group of Sports and Cardiovascular Nutritionists (SCAN).

"We found that girls particularly showed statistically significant declines in (LDL) cholesterol, the blood component which has been linked to premature hardening of the arteries, heart disease and premature death.

Complete results of the study are expected to be published soon by Gladstone. Principal researcher was Dr. Thomas P. Bersot, assistant professor of medicine at UC San Francisco.

The SPIN study involved 27 weekly lessons for the grade school youngsters on how they could substitute healthy "SPIN foods" and reduce their intake of cholesterol-laden and other unhealthy items.

"In order to get their attention, we brought along treats of heart healthy foods. The children began to look forward to each session."

"The friendly fruit trees," for example, were bananas with a variety of fruit attached to toothpick branches. "The kids made them themselves and at the end of the lesson, they got to eat them," she said. "Another time we baked whole wheat pretzels and let the children twist them to their own initials."

In order not to scare the children or convey a negative message, children were told that high cholesterol foods were "sometimes" foods.

"The kids got the message quickly, said Snyder, that potato chips and such weren't taboo, they were something you ate only occasionally.

"Eventually, I'd have kids come up to me in town, and say, shaking their heads somewhat sadly, 'this whole day I had nothing but sometimes foods.'"

The classes were taught by the children's regular teachers. Snyder and colleagues occasionally would sit in on the class and act as a resource.

"We did want the children to understand the purpose of what we were doing, so we did talk about heart disease and showed them heart models." She said one session featured the school nurse dissecting and describing a beef heart.

The third grade age level was chosen, Snyder said, because the youngsters were old enough to read and become involved as consumers in food choices. She emphasized that evidence suggests that atherosclerosis begins in young children, so the benefits to be derived from the project were real.

Participating families attended regular evening meeetings so that parents could be involved in altering family eating patterns. Snyder said more than 90 percent of participating families in the project attended the evening sessions.

The SCAN conference, open to registered health professionals and the news media, is being held at Hyatt Rickey's hotel in Palo Alto. Sponsoring groups at Stanford include SCRDP and the Stanford University Hospital Department of Dietetics.

The conference features several nationally recognized cardiovascular experts, including Dr. Basil M. Rifkind, a cholesterol authority and researcher from the National Institutes of Health. He led the NIH-sponsored 10-year Coronary Primary Prevention Trial which in January 1984 disclosed that lowering blood cholesterol levels can reduce the risk of heart disease by as much as 49 percent.

Stanford speakers include Dr. Peter D. Wood, professor of medicine (research), who recently with colleagues completed a study which shows that diet and exercise are equally effective at lowering blood cholesterol. Also, Dr. William Haskell, associate director of SCRDP and associate professor of medicine, was scheduled to speak on "Is There an Exercise RDA (recommended daily allowance) for Good Health?"

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ADVANCE FOR RELEASE 11:30 A.M., THURSDAY, APRIL 17

EDITORS: A press briefing with Senator John Garamendi and Dr. Lorrin Koran is scheduled for 11:30 a.m., Thursday April 17 in room 1190 of the State Capitol building in Sacramento. Senator Garamendi's office telephone number is (916) 445-2407.

CALIFORNIA'S MENTAL HEALTH SYSTEM LAX IN DETECTING PATIENTS' PHYSICAL ILLNESSES

STANFORD—

A Stanford University Medical School study has found that California's mental health system detects only half of the physical diseases requiring medical attention among its mentally disordered patients.

This means diseases that require medical treatment or monitoring are overlooked in about 22 percent of the system's patients, half of the 45 percent who have a significant physical illness, according to the study results.

The study was carried out by Stanford researchers as part of Senate Bill 929 sponsored by California State Senator John Garamendi (Democrat, 5th district).

This is the first time any state's mental health system has been surveyed in cross-section to find the incidence of physical disease among psychiatric patients, said Dr. Lorrin Koran, professor of psychiatry at Stanford University Medical School, one of the study's principal investigators.

Koran and Garamendi are scheduled to outline the study's results at a press briefing Thursday, April 17 in Sacramento.

The researchers studied 529 patients under care in eight mental health program categories—crisis intervention, psychiatric inpatient (24-hour acute hospital), psychiatric health facility (24-hour acute non-hospital), outpatient, day treatment (partial care), skilled nursing facility, community care, and state hospital. The study was carried out in Santa Clara, Santa Cruz, Monterey, and San Benito counties.

Koran said that overall the system seems to be doing a fairly good job of finding physical illnesses that directly cause patients' mental problems but it is not as effective in identifying diseases that may exacerbate or contribute to psychiatric symptoms, or in finding and caring for illnesses unrelated to a patient's mental health.

Thirty-two of the patients surveyed (6%) had a physical disease that caused their mental disorder, and the mental health system had identified 27 (5%), Koran said. But of the 49 patients (10%) who had a physical illness that exacerbated their mental disorder, the mental health system had recognized only 22 (4%), he noted.

Translated into statewide figures, these results suggest that undetected physical disease may be the cause of mental disorder in nearly 4,000 people being treated at state mental facilities, Koran said, and that nearly 15,000 patients may have undetected illnesses that compound their mental disorders.

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In addition, patients whose physical disease was known to the mental health system were as likely to be receiving inadequate,or ineffective medical care (36%) as patients whose physical disease was not known to the system (34%), Koran said.

"The mental health system is not very active or is not very effective in helping mentally disordered patients obtain or cooperate with medical care," the study authors concluded.

"What the state should do on the basis of our results is a public policy question," Koran said.

"Some people say it's not the job of the mental health system to detect physical illness, nor to treat it. But I am of the school that says you can't provide high quality mental health care unless you're aware of the physical diseases that may be causing or exacerbating patients' mental health problems," he added.

Aside from neurological conditions such as epilepsy or dementia, examples of the kinds of medical problems that can cause or contribute to mental disorders include any disease with severe effects such as diabetes or asthma, endocrine imbalances such as hypothyroid conditions, migraine headaches, anemias, and severe vitamin deficiencies, Koran said.

Koran carried out the study with Dr. Harold Sox, Jr., associate professor of medicine at Stanford, and Dr. Keith Marton, now assistant professor of medicine at Harvard Medical School, in collaboration with other Stanford colleagues and with personnel from the mental health departments of the counties surveyed.

The researchers determined that the mental health system could raise its detection rate from 45 percent of diseases present in its patient population to 90 percent by screening with a mini-medical exam and evaluating the exam's results according to simple rules developed by the study team.

Such a screening program would cost $75-80 per patient as opposed to the $45-55 screening cost per patient now, but it would lower the state's current cost per sick patient identified from $205 to $150, Koran said.

The study did not answer whether or not the state would save money in the long run by putting into place a screening program that would improve disease detection ability, Koran said.

In the study's three-month follow-up period, no significant increase or decrease in mental health care costs or medical care costs was observed, Koran reported.

No increase was seen in medical costs, he noted, because the diseases detected could be treated on an outpatient basis and, in some cases, patients didn't seek care during the three-month follow-up period.

No change in psychiatric costs was observed because medical treatment for an underlying physical disease would not be likely to ease mental symptoms sufficiently for psychiatric care to terminate within three months, Koran said.

"Because the three-month followup period limited our ability to find some answers regarding long-term cost-benefits, we are recommending that the legislature fund several larger and longer studies to answer this and other questions," he said.

But in the meantime, the report also recommends the state institute a provision in licensing state psychiatric health facilities that requires "all patients admitted to a psychiatric health facility must receive a medical evaluation that includes a medical history and comprehensive physical examination."

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Koran explained that the report's recommendations were developed by the authors in conjunction with the county mental health directors and their staffs, and with the SB929 policy advisory committee set up by the legislature and composed of representatives from the department of mental health and outside experts.

The group strongly recommended that the department of mental health educate staff at all organizational levels about the value of recognizing physical disease in mentally disordered patients, Koran said.

Most employees of the mental health system, such as psychologists or social workers, are not health care personnel, he noted, and generally they are not trained to recognize physical disease.

Koran and his colleagues also recommended that the department of mental health develop a "field manual" that could be distributed to county mental health departments, describing how to establish an effective medical screening program.

The screening procedure need only consist of 26 items of medical history that the patient can provide, a blood pressure test, and about 10 laboratory tests on blood and urine samples, Koran said.

By evaluating these items of health information and history according to a set of rules developed by the study team, the researchers were able to identify 90 percent of their study population's physical illnesses.

"This amounts to a doubling of the case finding rate for only about a 50 percent increase in screening costs," Koran said.

Since the medical history and blood pressure readings can be obtained by a skilled health worker such as a nurse practitioner, a physician's visit is not needed for such a screening program. And if the laboratory testing were done on a large scale, such as statewide, the screening cost per patient would be greatly reduced, he said.

The researchers looked into some of the barriers that might have prevented patients within the mental health system from seeking medical help. They found that one-fourth of the patient group under study hadn't consulted a doctor because they "couldn't afford to pay the bill."

Furthermore, those who experienced a financial barrier were much more likely to be physically ill than those who had not (54% vs 36%), much more likely to have had a previously undetected physical illness (27% vs 13%) and much more likely to have a disease related to their mental disorder (25% vs 9%).

As a result, the study recommendations suggest some actions designed to promote better medical care for mentally disordered patients. These include having the state ensure equal access to MediCal for those whose mental disorders impair their ability to complete application forms, and encouraging therapists and case managers to regularly update patients' medical records so as to help identify problems in obtaining or in complying with medical care.

END ADVANCE FOR RELEASE 11:30 A.M., THURSDAY APRIL 17

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FOR IMMEDIATE RELEASE

AIDS VACCINE ON HORIZON BUT THERAPY STILL REMOTE, STANFORD PHYSICIAN SAYS

STANFORD—

Scientists have made impressive steps in the battle against the acquired immune deficiency syndrome (AIDS), "but we still don't have a therapy worth a darn," admits Stanford immunologist Dr. Edgar Engleman.

In a public lecture on April 14, Engleman stated optimism about the development of a vaccine in three to five years. "I believe we'll lick this thing through massive public vaccinations," he said.

Still, effective therapy is at least five to 10 years in the future according to Engleman, head of the Stanford blood center and an associate professor of pathology and medicine at the medical school. His talk, "AIDS: Past, Present and Future," was the final lecture in the three-part spring Progress in Medicine series.

The AIDS virus infects white blood cells known as helper T-cells, Engleman continued. "The helper T-cell sits in the middle of the immune system directing traffic and turning the immune system on when needed," he said. "Without that cell, the defense doesn't work."

Lacking adequate defenses, the body cannot fight common infections and patients die from other diseases. "It's a very painful, ugly and slow form of death," Engleman said.

The statistics are equally grim: More than 20,000 cases of AIDS have been diagnosed in this country; about half of those patients have died.

"Once the diagnosis of AIDS is made, patients aren't likely to live more than two to three years," he said.

But only 10 percent of the individuals infected with the AIDS virus have full-blown AIDS; about 200,000 to 2 million persons have been exposed to the AIDS virus, according to Engleman.

Why those persons remain healthy is not quite clear. The current AIDS test determines whether individuals have been exposed to the virus, but cannot predict who will develop the devastating collapse in defenses.

The AIDS virus has a long incubation period—an average of three years, although perhaps as long as seven.

"We don't know if there's a permanent carrier state," Engleman said, alluding to persons who could pass the virus on to others but never show its ill effects themselves.

Scientists have suggested two factors that may lead to the development of AIDS: "One is the dose of virus to which persons are first exposed," Engleman said, indicating that larger doses are more dangerous.

The second is the state of the helper T-cells before and after the AIDS virus comes on the scene. Helper T-cells activated to fight invaders become "more effective machines for producing and spreading the virus than resting cells," he said.

Promiscuous individuals—either heterosexual or homosexual—"have helper T-cells already stimulated by chronic infections," Engleman warned.

"But don't give up. It seems that a change in lifestyle can mediate the future," he said. Curtailing promiscuous behavior may not be "a full explanation, but we're hopeful."

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2-2-2 Education and changes in lifestyle have dramatically reduced the spread of AIDS among homosexual men, Engleman pointed out.

But the promiscuous heterosexual population is probably at great risk of contracting the disease, he cautioned. About 75 percent of current AIDS patients are homosexual men, but men and women are equally susceptible to the disease, he said, pointing to evidence from Central Africa.

In Zaire in particular, he explained, equal numbers of men and women suffer from AIDS. Little homosexuality has been documented in that area, and heterosexual intercourse—with prostitutes in particular—has been implicated in the spread of the disease there.

Exactly why the disease is prevalent in that area and how it came to the western world still has scientists stumped. Some have speculated, however, that the AIDS virus is a mutant of an African monkey virus.

Vaginal and anal intercourse, contaminated needles and blood and blood products are the ways AIDS spreads best, Engelman said. The virus is found particularly in blood and semen, he noted, and infection seems to take place through direct introduction of those fluids into the blood stream.

"I'm pleased to say that no AIDS has been transmitted by blood screened at Stanford," Engleman said, "but I'm sorry to say that's not the case nationwide." Nationally, about 300 persons have AIDS as a result of receiving contaminated blood.

As the first blood bank in the country to screen blood for AIDS, Stanford was "criticized roundly" for its decision in July 1983. By 1985, all blood banks in the country were routinely testing blood for evidence of the disease.

The nation's blood supply is "very safe" from AIDS, Engleman assured the audience. Between the screening tests and huge public education efforts, "people at risk for AIDS know they're at risk and no longer donate."

Before the risk factors were known, individuals continued to donate unsuspectingly, Engleman said, but evidence indicates that is no longer true.

Because the current AIDS test has a high rate of false positives, additional tests should be conducted on blood screened out by blood banks, Engleman maintained.

Stanford conducts three tests before contacting individuals about their results; to inform persons of such damaging information requires certainty, Engleman said. Laboratories who test blood only once before informing donors are irresponsible, he charged.

Scientists are still perplexed by how the virus kills its host helper T-cells. "It doesn't make a whole lot of sense that a virus that wants to live a happy, comfortable life would kill the cell that houses it," he acknowledged.

Describing unpublished findings, Engleman said that Stanford researchers have shown that AIDS-infected helper T-cells have the ability to fuse to previously uninfected cells, creating giant, dying cells.

Competing theories exist, Engleman said, including one that asserts that the virus overworks the cell to death.

Engleman's collaborators in the cell-fusion research include Dr. Jeff Lifson and Barry Stein of Stanford, Dr. Mike McGrath of the University of California-San Francisco, and Dr. Greg Reyes of Gene Labs Inc.

—30— engle--JRr1

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RINGOLD RECEIVES ABEL AWARD

STANFORD—

Dr. Gordon M. Ringold, associate professor of pharmacology at Stanford University School of Medicine, is the recipient of the 1986 John J. Abel Award in Pharmacology.

The $2500 award is supported by Eli Lilly and Company of Indianapolis and is administered by the American Society for Pharmacology and Experimental Therapeutics.

Ringold was scheduled to receive the award at a ceremony April 16 in St. Louis during the Society's annual meeting.

The award recognizes "original, outstanding research in the field of pharmacology and/or experimental therapeutics," according to the Society.

Ringold, 35, joined the Stanford Medical School faculty in 1978. He did his undergraduate work at the University of California, Santa Cruz, and received a Ph.D. in microbiology in 1976 from the University of California, San Francisco.

His research focuses on the mechanism of action of steroid hormones.

4-16-86 —30— abel--LH10

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MCDEVITT RECEIVES 3M LIFE SCIENCES AWARD

STANFORD—

Dr. Hugh O. McDevitt, Joseph D. Grant professor of medicine and chairman of medical microbiology at Stanford University School of Medicine, will receive the 3M Life Sciences Award on April 16 in St. Louis.

The $10,000 award, sponsored by 3M of St. Paul, Minnesota, honors "researchers whose work has made a significant contribution to the health and welfare of mankind."

McDevitt will receive the award at the annual meeting of the Federation of American Societies for Experimental Biology in St. Louis, Missouri, where he will also deliver the 3M Lecture, entitled "Genetic control of the immune response by Ia antigens."

McDevitt, 55, is distinguished for his work in developing a cellular and molecular explanation of how immune response genes function. His work has potential applications in predicting individual susceptibility to certain diseases and in the prevention and possible treatment of immunologically mediated diseases.

After completing his undergraduate studies at Stanford, McDevitt earned his M.D. from Harvard Medical School in 1955, and joined the Stanford faculty in 1966.

He has been elected to membership in several scientific societies, including the National Academy of Sciences, the Institute of Medicine, and the American Academy of Arts and Sciences.

McDevitt also has received numerous awards, including the 1977 Borden Award for outstanding research from the Association of American Medical Colleges, the 1981 Passano Foundation Award, the Albion Bernstein Award in 1983, the American College of Physicians Award for research in medical science in 1984, and, last year, the Lita Annenberg Hazen Award for excellence in clinical research from the Mount Sinai School of Medicine.

4-15-86 —30— 3MAWARD--LH10

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DECADES LONG TRACKING LEADS TO SPECIAL FONDNESS FOR NAMESAKE DISEASE

STANFORD—

Dr. Ronald Dorfman, a Stanford professor of pathology, has a fondness for studying a rather special disease.

True, most of his professional time is occupied researching and diagnosing widespread health scourges such as Hodgkin's Disease, and more recently, acquired immune deficiency syndrome (AIDS).

He is a noted hematopatholgist, an authority on cancers and diseases of the lymphatic system. He co-directs Stanford's noted and busy surgical pathology service, where he and his colleagues and students must confirm diagnoses of common ailments or seemingly one-of-a-kind maladies which have eluded physicians elsewhere.

In some ways the South African-born researcher is little different from many of his distinguished colleagues in meeting the triple-threat challenge of research, clinical care and teaching.

But he is unusual in a way that few of his clinical colleagues are aware of—a disease, for all the world to know, has been named after him.

"I travel all over the world lecturing on Rosai-Dorfman disease, but sometimes I'm surprised that most of my clinical colleagues here at Stanford have never heard of it," says a dry-witted Dorfman. He's not a bit angry that he is not a prophet in his own land. But he is concerned that more clinicians do not know about Rosai-Dorfman disease, because it may be misdiagnosed and treated improperly—with potentially dangerous results.

Rosai-Dorfman disease is a swelling of the lymph glands. It is a form of massive lymphadenopathy that in terms of symptoms resembles certain forms of cancer, which as a hematopathologist, Dorfman is intimately familiar with. But Rosai-Dorfman disease isn't malignant, and common cancer treatments such as radiation therapy don't affect its course and are not indicated.

The malady is rare, and there have been only about 300 documented cases in the approximately 25 years since Dorfman and former colleague Juan Rosai—now at the Yale University School of Medicine—began seriously studying the disorder. The condition is not fatal by itself, although the large tumors can seriously damage surrounding tissues or organs if the tumor is not removed. When the disease strikes the face, particularly in adults, disfigurement can result.

The cause is unknown, although Dorfman suspects that it might be a virus which affects persons who are genetically predisposed to suffer from the ailment. He continues to pursue research efforts but has no idea when a breakthrough may occur.

Sometimes surgery is necessary for cosmetic reasons to remove the rapidly growing tumor, but frequently the tumor disappears unassisted. Treatment is symptomatic and there is no known cure.

But the good news is that to the knowledgeable eye, it is easy to diagnose.

In lectures to students or discussions with colleagues, he is apt to take a minute or two to explain what the condition looks like.

"Once they've seen it, it's easy to differentiate it microscopically from cancer," he says. "But it is a matter of making students and clinicians aware of its characteristic features."

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The rarity of Rosai-Dorfman disease was punctuated about 10 years ago when Dorfman presented details about a case at a Stanford University Hospital Tumor Board (a faculty patient care conference). Then and now, the disease is a rarity at Stanford—there have been only three documented cases in the Bay area, Dorfman said. Some of his other experience has come from the numerous consultation cases that have come from other parts of the country and from abroad.

At the tumor board, Dorfman was confronted by a skeptical Dr. Saul Rosenberg, professor of medicine and a noted oncologist, who recalled recently that he challenged whether such a large nonmalignant tumor was possible in the form Dorfman presented.

"The case was provocative," Rosenberg reminisced.

Dorfman's work on the lymph node condition later to be named for him began in the early 1960s in Johannesburg, South Africa. He was serving as a young pathologist with the South African Institute for Medical Research and a lecturer in the Department of Pathology at the University of the Witwaterstrand Medical School.

"I had the opportunity to see two young men with massive tumors. They were from rural areas, and our first thought, after ruling out malignancy, was an unusual lipid storage disease (a condition affecting the way the body processes fat). That turned out not to be true, and we remained puzzled even after the tumors receded and the patients improved."

Several years later and thousands of miles away, Dorfman was a faculty member in surgical pathology at the Washington University School of Medicine in St. Louis. He had brought with him the slides showing the unusual affliction of the two South African youths. One day his microscope revealed a familiar sight—another example of this rare disease.

"From that point on, I began to comb the case records at Washington University for similar examples. I found several, and soon I had enlisted the help of a bright, young research associate named Juan Rosai.

In 1969, the two doctors published a paper describing the condition. Included were case studies of four patients, the two South Africans, as well as two more cases from the files of Barnes Hospital in St. Louis where Dorfman and Rosai worked.

The two physicians called the disease "sinus histiocytosis with massive lymphadenopathy," referring to the first cases which involved enlarged lymph glands in the neck. Later it was found the disease could affect many organs other than lymph nodes, and the term "massive lymphadenopathy" did not always apply.

Informally, the disease became identified with its chroniclers, who in 1972, reported six cases in the journal *Cancer*. By 1981, other researchers began publishing papers referring to Rosai-Dorfman disease.

Dorfman recalls with some pride and satisfaction, the first time he saw his name as part of the title—not as an author—of a scientific publication. The benchmark piece appeared in the 1981 issue of Histopathology. Its arcane title: "Sinus histyiocytosis with massive lymphadenopathy (Rosai-Dorfman disease): report of a case with widespread nodal and extra nodal dissemination."

Dorfman chuckled when he recalled the first scholarly reference to his name was an afterthought to the generic, "sinus histyiocytosis with massive lymphadenopathy." Later articles—and a textbook chapter—refer directly to the malady as Rosai-Dorfman disease.

The disease afflicts mainly the young, with 62 percent of cases occurring in children younger than 10.

Although the first cases Dorfman identified were among poor blacks in South Africa, no particular races appear more likely to be affected by the disease.

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EDITORS: photos and diagrams available on request if not included in story.

USE OF ANGIOPLASTY, A NON-OPERATIVE APPROACH TO CORONARY HEART DISEASE, CONTINUES TO INCREASE

STANFORD—

Balloon angioplasty-a non-operative alternative to open heart bypass surgery- is gradually becoming a procedure of choice for up to half of all patients with coronary artery disease who require treatment, according to a Stanford University cardiologist.

The procedure is now used to treat over 100,000 patients annually, ten times the predicted number when it was first introduced nine years ago, said Dr. Stephen Oesterle, an assistant professor of medicine and director of Stanford University Hospital's unit for coronary intervention.

Angioplasty, also called percutaneous transluminal coronary angioplasty, is a procedure to re-open coronary arteries clogged with atherosclerotic plaques that form when mostly fats, cholesterol, and calcium accumulate in these arteries. These plaques constitute the essence of coronary artery disease.

In coronary bypass surgery -the alternative to angioplasty- a vein is removed from the leg and stitched into the coronary artery to bypass the plaque. This is a major open-heart operation.

"Patients prefer balloon angioplasty because it's so much simpler," Oesterle explained in an interview. "They don't have to be put to sleep."

Also, angioplasty costs about $5,000, nearly one-third the cost of bypass surgery and the hospital stay is about two days instead of 10, he said.

Oesterle predicted that balloon angioplasty will become the standard procedure, even though bypass surgery will continue to have its place in a number of very difficult patients.

Currently, angioplasty cannot be done in individuals whose coronary arteries have "funny angles," are inaccessible, or who have plaques that totally block the artery or extend over large areas. Bypass surgery is more appropriate in these people, Oesterle explained.

But, sometimes Stanford does angioplasty on patients that the surgeons think are inoperable, Oesterle said.

Stanford does approximately 200 angioplasty procedures and 500 coronary bypass operations each year. The reason Stanford's ratio of b*pass to angioplasty is not in accordance with the national 1-1 ratio is because so many "complex difficult (bypass) cases that nobody else wants to do" are referred to Stanford, Oesterle said.

Both angioplasty and bypass surgery "are for the relief of angina," pain due to insufficient blood flow to the heart, Oesterle said. But, it is not known if either of these techniques helps to reverse or retard coronary artery disease, he said.

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Oesterle credits the rising use of angioplasty to major strides made in the technology. "We didn't get better all of a sudden," he said. Instead, "The equipment for doing this procedure has gone through three or four generations of change. And now, it is spectacular," he said.

Because balloon angioplasty has grown so quickly, there are many practicing cardiologists who have not received formal medical school or postgraduate training in the procedure, but want to learn about it, Oesterle said. These cardiologists look to major angioplasty referral centers "as the next best alternative" to learn about it. Stanford is one of the few major centers in the United States to put on yearly demonstration courses in angioplasty, he said.

Every year here, 300-400 community physicians spend three or four days learning about angioplasty by watching live closed circuit TV of doctors doing angioplasty, Oesterle said. "Over 1,000 physicians have probably watched live demonstration angioplasty on closed circuit TV here," he said.

With angioplasty, a catheter -hollow tube- is initially inserted into an artery in the right leg. Using a fluoroscope (a form of X-ray) to see, doctors gently push it into the heart's main vessel, the aorta. A tiny cylindrical balloon is then threaded through the catheter and maneuvered into the coronary artery where it is positioned across the plaque. The balloon is repeatedly inflated and deflated to squash the plaque into the wall of the artery.

In two percent of the angioplasties attempted, doctors are unable to complete the procedure because the plaques are inaccessible, Oesterle said. And, in another three percent of angioplasty patients, serious complications resulting in an emergency coronary bypass operation arise.

Complications occur when inflation and deflation of the angioplasty balloon cause the artery to collapse, blocking blood supplies to the heart. "That is a heart attack," Oesterle said.

"We have never had a death in angioplasty at Stanford. But, there is a clear-cut chance of death, probably around one percent," Oesterle said.

Due to the reappearance of plaques, in 20 percent of angioplasty patients a second angioplasty is required to have a lasting effect. Although this is an added expense and a nuisance to patients, those who do require it are usually diagnosed within three months after the first angioplasty, Oesterle said. And, the second angioplasty is almost always effective, he said.

Coronary artery disease mostly attacks men in their 40s and 50s. Researchers don't know what causes the build-up of plaque in the arteries, Oesterle said. Most people who get the disease have a combination of many risk factors, including family history, diabetes, hypertension, and high blood pressure, Oesterle said

But, "If you had to make a list of ten (of the most serious risk factors) the first eight would be smoking," he said. The rising incidence of coronary artery disease in women correlates with the rise in the number of women smokers, he said.

Stanford is currently doing a study to see if changing personal habits such as smoking, diet, and exercise can reverse or stop the course of the disease. The Stanford Coronary Risk Intervention Project (SCRIP), directed by Edwin Alderman, cardiologist and professor of medicine, will be the first study to examine precise changes in artherosclerotic plaques over a five-year period comparing the effects of aggressive intervention and non-intervention on coronary artery disease.

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ADVISORY

STANFORD—

A Cardiovascular Nutrition Symposium, featuring internationally recognized speakers and panelists, has been scheduled Sunday through Tuesday, April 20-22, at Hyatt Rickeys Hotel, 4219 El Camino Real, Palo Alto.

This is the third annual conference sponsored by the American Dietetic Association Practice Group of Sports and Cardiovascular Nutritionists (SCAN). This year the co-sponsors are The Stanford Center for Research in Disease Prevention (SCRDP) and the Stanford University Hospital's Department of Dietetics.

The conference is intended for health professionals, but reporters are welcome to attend sessions and interview participants.

An informal news conference featuring several speakers has been scheduled from 11:30 a.m. to 1 p.m., Monday, April 21.

The news briefing will permit reporters to meet with participating speakers, including Anne H. Snyder, consulting nutritionist for the Gladstone Foundation Laboratories for Cardiovascular Research, affiliated with UC San Francisco. Snyder recently was involved with a project which investigated in the Millbrae school system whether classroom programs can encourage third and fourth graders to choose heart healthy foods.

Snyder is scheduled to lead a seminar at 11 a.m. Monday, "Teaching Children Heart Healthy Eating," which is open to the media, and she will meet with reporters during the news conference starting at noon.

Among the conference speakers are Dr. Basil M. Rifkind, a cholesterol authority and researcher from the National Institutes of Health. He led the NIH-sponsored 10-year Coronary Primary Prevention Trial which in January 1984 disclosed conclusively that lowering blood cholesterol levels can reduce the risk of heart disease by as much as 49 percent.

Rifkind will be speaking on "Present Status of Cholesterol Lowering" at 8:15 a.m. Monday. He will also be participating in a panel, "Recommendations for Practice: the bottom line in Diet and Drug Therapy at 4:15 Monday.

Other guest speakers include Dr. Terry Kavanagh, medical director of the Toronto Rehabilitation Center and associate professor at the University of Toronto in Ontario, who will discuss "Exercise in Cardiac Rehabilitation: The Toronto Experience." Steven N. Blair, director of epidemiology, Institute for Aerobics Research, Aerobics Center, Dallas, will discuss "Exercise, Fitness and Hypertension."

Stanford speakers include Dr. William Haskell, associate director of SCRDP and professor of medicine, who will speak on "Is There an Exercise RDA (recommended daily allowance) for Good Health." Exercise physiologists have debated for many years whether there is an optimal level of exercise, and whether the benefits of exercise change and become deleterious beyond a certain point.

Dr. Peter D. Wood, another SCRDP associate director and a professor of medicine (research) at Stanford will discuss "Weight Loss and Risk of Coronary Heart Disease." Wood recently reported a study which showed that exercise and diet are equally effective at lowering cholesterol.

Reporters wishing to cover the conference or any of the sessions should check-in with the SCAN registration desk at the hotel (415-493-8000) to obtain free admittance to the conference and to learn room location of events. A conference schedule is available if not included with this advisory.

4-14-86 **—30—** **advscan--MG10**

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NURSING DEPARTMENT SCHEDULES 10-KILOMETER RUN

STANFORD—

Nursing research at Stanford University Hospital will benefit from the Patient Care Run scheduled at 8:30 a.m., Sunday, May 11 at Stanford Stadium.

Entry fee for the 10-kilometer (6.2-mile) single-loop romp through the Stanford campus is $8 before May 7. Race Day tickets at the starting line near Stanford Stadium will be available for $10, said Gaye Bruce, director of nurse recruitment and a spokesperson for the race.

Proceeds from entry fees will be used to fund research project involving nursing care, she said.

T-shirts will be provided for the first 400 entrants and may be picked up between 7:45 and 8:15 a.m. on race day. All finishers will receive ribbons and prizes will be awarded for the top three men and the top three women in the open and master (over age 40) categories.

Refreshments, including mineral water, oranges and chocolate chip cookies will be provided, Bruce said. Proceeds from the event will be used for nursing research, she added.

Entries may be mailed to the Department of Nurse Recruitment, Room C020, Stanford University Hospoital 300 Pasteur Drive, Stanford, CA 94305. For further information, call (415) 723-7261.

4-14-86 —30— nurserun--MG10

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STERLING DRUG GRANTS STANFORD $50,000 TO ESTABLISH PHARMACOLOGY VISITING PROFESSORSHIP

STANFORD—

Stanford University School of Medicine has received a grant of $50,000 from Sterling Drug Inc. to establish a Sterling Drug Visiting Professorship in the Department of Pharmacology.

The grant was made in the honor of Dr. Maurice L. Tainter, noted pharmacologist, Stanford alumnus and former Stanford professor.

"I have known Dr. Tainter's work for years," said Dr. Tag Mansour, chairman of Stanford's department of pharmacology. "We're delighted to have this as a way of honoring a prominent scientist who served Stanford for 21 years."

Dr. Michael Silverman, clinical projects director at Sterling-Winthrop Research Institute, presented the grant to Mansour on April 14.

Proceeds from the endowment will help the school to invite a guest professor to the campus for a week every other year to present lectures, conduct workshops and seminars and participate in other educational sessions.

Established by Sterling in 1979, the Visiting Professorship program is designed to promote the interchange of knowledge between colleges and universities in the field of pharmacology.

Stanford expects to invite its first Sterling Drug Visiting Professor in the next academic year.

Tainter received his A.B., A.M., and M.D. degrees from Stanford University and went on to serve Stanford as a professor of pharmacology from 1922-43, leaving the university to join Sterling as director of research.

In 1946 Tainter established the company's key research center, the Sterling-Winthrop Research Institute; he directed the center for 15 years.

In 1946 Tainter also became vice-president of Sterling in charge of scientific affairs, a position he held until his retirement in 1969.

He is a life trustee and past chairman of the board of trustees of Rensselaer Polytechnic Institute; past member of boards of trustees of Albany Medical College and Albany College of Pharmacy; past president of the New York Academy of Sciences; and a fellow of the American Medical Association, among others. Tainter holds an honorary doctorate degree from Rensselaer Polytechnic Institute.

Tainter is widely known in the pharmaceutical industry as the author of numerous publications on medical and dental pharmacology, therapeutics, research administration and history of medical research.

Sterling Drug Inc., a New York City-based firm, manufactures and markets worldwide a broad range of pharmaceutical specialties, proprietary medicines, cosmetics, household and industrial products, and environmental controls.

4-14-86 —30— sterling--JR1

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CLINICAL SCHOLAR PROGRAM RECEIVES FUNDING RENEWAL

STANFORD—

A two-year fellowship program that permits physicians to expand their skills in fields ranging from law and economics to ethics and education recently was granted more than $1 million in a three-year funding renewal by the Robert Wood Johnson Foundation of Princeton, New Jersey.

Stanford and the University of California, San Francisco share funding and administrative responsibilities for the Clinical Scholars training program.

Examining risk factors that lead to heart disease and developing a computer program to help assess intensive care given to patients are projects currently being pursued by two of the five Clinical Scholars at Stanford.

Stanford Clinical Scholars completing their final year of study are Drs. David Maron and Adam Seaver; Drs. Lawrence Gottleib, Calvin Hirsch and Sylvester Quevado are currently in their first year of the program.

Since its start in 1974, the program has trained 419 physicians nationwide. These doctors are committed to clinical medicine, but have sought broader training related to the organization of health services, improvement of medical practice, and public policy in health, according to Dr. Halsted Holman, professor of medicine and director of the Stanford portion of the program.

Participants in the program attend seminars in such subjects as information sciences, sociology, cost-benefit analysis, anthropology and systems analysis to lay the groundwork for subsequent research. Faculty advisors for the Scholars are located on the Stanford, UCSF, and University of California, Berkeley campuses.

The joint Stanford-UCSF program is one of six Clinical Scholar programs funded by the foundation nationally. Former participants are involved in academic medicine, government and in the practice of medicine throughout the country, the foundation reports.

The program "allows physicians to develop skills in non-biological disciplines relevant to medicine," Holman said.

"Introducing non-biological disciplines into medical thinking and practice will not by itself resolve the problems of health care," Holman continued. "Nonetheless, these disciplines provide understanding and methods that are essential to the search for better solutions."

Other universities participating in the Robert Wood Johnson Foundation Clinical Scholars Program are the University of California, Los Angeles; the University of North Carolina, Chapel Hill; the University of Pennsylvania; the University of Washington, Seattle; and Yale University.

4-14-86 —30— linschl--JR1

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HUMAN MONOCLONAL ANTIBODIES AGAINST CHICKENPOX AND RH-FACTOR INCOMPATIBILITY ARE REPORTED NEAR

STANFORD—

Chickenpox and Rh-factor blood incompatibility are two diseases that within the next few years may be treated with monoclonal antibodies, protein "guided missiles" that can zero in on specific targets in the body, predicts a Stanford University scientist.

Scientists at the Stanford Blood Center—with other colleagues at Stanford—have developed human monoclonal antibodies that show promise as clinical agents against these conditions, although the experimental antibodies are still one to two years away from clinical trials, said Dr. Steven Foung, assistant professor of pathology at Stanford University School of Medicine.

Two of the new antibodies combat varicella zoster virus (VZV), the cause of chickenpox and shingles. Although chickenpox is a relatively mild disease that doesn't require special treatment in most normal individuals, it can be fatal in children with weakened immune systems, such as bone marrow transplant recipients and cancer patients, Foung said.

Another antibody could help prevent hemolytic disease of the newborn, a condition caused by Rh-factor blood type incompatibility between mother and child.

Administration of human blood serum is a current method for treating these two conditions, Foung explained. Anti-VZV antibodies present in serum can help to neutralize the virus in severe cases of the illness. Serum anti-Rh antibodies can also prevent an Rh-negative mother from mounting an immune attack against her Rh-positive fetus.

But there are drawbacks to using human blood serum, which is obtained from blood donors, Foung noted. One disadvantage is that donated serum is limited in supply. Another is that there is always a small chance of contamination from blood-borne diseases—such as hepatitis and other infectious agents—when using human blood products, he added.

In contrast, monoclonal antibodies can be made in large quantities in the laboratory and they are free of blood-borne contaminants, Foung explained.

Foung, who is also assistant director of the transfusion service at Stanford University Hospital, made his remarks Tuesday evening (April 8) in a public lecture entitled "Human monoclonal antibodies: potential use in therapy."

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His presentation was the second in a series of three "Progress in Medicine" lectures sponsored by Stanford University Medical Center. The lectures deal with the impact of biotechnology on blood transfusion and transplantation.

Monoclonal antibodies are gaining uses in medical diagnosis and already have dramatically advanced certain areas of biomedical research, Foung said. They will begin to have a big impact on medical practice within two to five years, he predicted, and in treatment they are most likely to be useful in fighting infectious agents such as bacteria and viruses, Foung said.

Monoclonal antibodies are made by fusing two different types of cells. One cell has the capacity to produce a highly specific antibody protein that can home in on a target in the body—such as a virus—and mark it for destruction by the body's immune system. The other cell, which comes from a tumor, has the capacity to grow forever in the test tube. By fusing the two cells, scientists create an "immortal" cell that is capable of churning out large quantities of the highly specific protein.

It has been relatively easy to make monoclonal antibodies by fusing mouse cells in the laboratory, Foung said. But scientists would prefer to generate human monoclonal antibodies for treating patients, he added. Fused human cells are often unstable, however, a technical problem that has slowed progress in this field.

But Foung reported that he and his colleagues at the Stanford Blood Center have developed "an efficient system" for producing human monoclonal antibodies in the laboratory. First, they fuse a mouse and human cell together, and then they fuse that hybrid cell to a human cell in a second fusion process.

They produced the anti-varicella zoster virus antibodies and the anti-Rh factor antibodies, and others, using this system, Foung said.

The third lecture in the Progress in Medicine series will be held Tuesday, April 15 at 7:30 p.m. in the medical school's Fairchild Auditorium. Dr. Edgar Engleman, associate professor of pathology, medical director of the Stanford Blood Center and assistant director of Stanford Hospital's transfusion service, will discuss "AIDS: past, present, and future."

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FOR IMMEDIATE RELEASE

ARNOLD NAMED STANFORD HOSPITAL VICE PRESIDENT

STANFORD—

William Arnold has been promoted to executive vice president and chief operating officer of Stanford University Hospital.

In announcing the promotion, Sheldon S. King, president and chief executive officer of the hospital, wrote: "Mr. Arnold will continue to assume the responsibilities for the daily operation of the Stanford University Hospital. He and I work together as the Office of the Director of the Hospital and will continue to work as a team."

Arnold, 37, had been deputy director of the hospital since June 1984. He joined Stanford as assistant director in 1979 and was promoted to associate director and senior associate director before being named deputy director.

He received a master's degree in public health in 1974 from the University of California, Los Angeles, and served as an administrator of Cottage Hospital in Santa Barbara before coming to Stanford.

He and his wife, Joan, and two sons live in Portola Valley.

4-8-86

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arnold-RG2

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News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 725-5375 or 723-6911
ADVANCE FOR RELEASE 2:30 P.M. (PST) THURSDAY, APRIL 10, 1986

STANFORD AUTHORS CALL "BABY DOE" RULE GOOD-INTENTIONED BUT MISGUIDED AND INADEQUATE

STANFORD—

The federal government should stay out of medical decision-making in the intensive care nursery, recommends a Stanford University pediatrician.

In particular, the government's attempt to regulate medical care of disabled infants—the "Baby Doe" rule—is good-intentioned, but misguided and inadequate, contends Dr. David Stevenson, associate professor of pediatrics at Stanford University School of Medicine.

The government could much more effectively help the disabled by allocating more money for their medical expenses and rehabilitation rather than trying to manage their medical care, Stevenson suggested.

It is especially ironic for the federal government to try implementing such a set of rules at a time when it is cutting back severely on social programs to prevent and treat disability, said Stevenson, who is also an associate director of the newborn nurseries at Stanford University Hospital.

If the federal government wants to help handicapped individuals, it should provide adequate resources for their lifelong care and rehabilitation, Stevenson said. It should also provide education and care to pregnant woman about nutrition and other factors that could help prevent high-risk pregnancies, prematurity and disability.

He made his comments in an interview and in an article in the April 11 issue of the *Journal of the American Medical Association*.

Stevenson's co-authors on the *JAMA* report are Dr. Ronald Ariagno, associate professor of pediatrics (clinical) and associate director of newborn nurseries at Stanford Hospital; Jean Kutner, a Stanford undergraduate; Dr. Thomas Raffin, assistant professor of medicine and chairman of the Stanford Medical Center ethics committee; and Dr. Ernle Young, Stanford Medical Center chaplain and senior lecturer in medical ethics at Stanford Medical School.

The Reagan administration has supported the reinstatement of the Baby Doe rule, which was struck down in 1984 by an Appeals Court, as well as the passing of the related Child Abuse Amendment of 1984.

Among other things, the Baby Doe rule states that hospitals must provide the same care to handicapped infants as to non-handicapped babies, and it permits the federal government to intervene if parents and doctors are thought to be withholding care because of the existence of handicapping conditions.

In such cases, the rule makes provisions for government "squads" to obtain medical records and to conduct on-site investigations concerning an infant's treatment.

The rule also encourages hospitals to establish Infant Care Review Committees (ICRCs), composed of physicians, nurses, and lay people, who would make treatment recommendations concerning life-and-death decisions affecting seriously ill newborns.

Debate over the rule, which was drafted in 1982, reached the Supreme Court earlier this year. At issue is whether or not the rule, which was promulgated by the government under the Rehabilitation Act, is consistent with Congressional intent in passing that Act.

The Baby Doe rule is particularly inapplicable to the kinds of complex medical problems posed by very small premature infants such as those who weigh less than 1,000 grams at birth, according to Stevenson and his co-authors.

In these cases, the longterm outcome of lifesaving treatment for each infant is uncertain, and physicians often base their crucial decisions about care on the basis of what is medically in the best interest of the infant, not what is presumed to be morally good or bad from some arbitary perspective, Stevenson said.

4-7-86

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All critically ill babies, especially those who are premature, are temporarily disabled and at risk for handicaps, he explained.

Since the distinction between handicapped and normal is so blurred, the Baby Doe rule's basic premise is flawed, Stevenson argued.

The regulations make the mistake of trying to simplify a vast range of complex medical cases into a few general categories, he added.

Treatment options for critically ill infants are not as simple as the Baby Doe rule assumes, Stevenson said. Although clear-cut solutions can be developed for a small number of handicapped babies whose medical conditions are easily identifiable, in most cases, there is no simple prescription for medical care.

This oversimplified approach will mislead people into believing there are simple answers to the care of critically ill infants, when there is actually "only ambiguity, equivocation and disagreement," he said.

"The guidelines do not resolve the uncertainties inherent in the practice of neonatal medicine and decisions about withholding or withdrawing life-sustaining therapies," the researchers wrote.

"Those of us who are really having to make these decisions and take care of these children are not helped by this rule," Stevenson said. "If people are led to believe that this rule has solved a problem, then it's a false belief. What's needed is more education and more financial resources to prevent and treat disability."

The rule is rife with ambiguous language and concepts, Stevenson added. "If people start suing each other over definitions of such vague terms as 'survival,' 'futility,' 'virtual survival,' and 'virtual futility,' then all it's going to do is displace a problem rather than address it head-on, by improving care," he said.

Another failing of the the Baby Doe rule is that it glosses over "the physician's commitment not only to maintaining the sanctity of life but to alleviating human suffering," the article points out.

If death is inevitable, then the risk of further injury to the infant enters into any consideration of withholding treatment, Stevenson explained.

Furthermore, it's impossible to consider an infant's "best interest" in isolation from social factors, including the family's circumstances and society's potential for caring for the infant, he added.

Another point Stevenson stressed is that most critically ill babies' medical conditions are so complex that physicians and parents usually aren't posed with a single monumental life-or-death choice but instead face numerous critical decisions daily.

It is unreasonable to expect that these kinds of choices—hundreds a day—can be referred to a committee for a decision, as the Baby Doe rule suggests, he said.

The establishment of infant care review committees also raises questions about the assignment of responsibility and legal liability for medical decision-making, Stevenson noted. "It's not clear whether such a committee has license to make medical decisions," he said.

However, an advisory committee can make sure all parties are able to air their concerns, he added.

Stanford University Hospital has had such a forum since long before the Baby Doe rule was drafted, he noted. This committee reviews cases when there is a difference of opinion about appropriate treatments among parents and/or those caring for an infant.

"We let all concerned express their opinions, but we still leave to the attending physician and the family to make decisions about what is appropriate for the care of the child," he explained.

The Baby Doe rule not only is inadequate but it is unnecessary, Stevenson added.

"It is not clear that the government...should implement a special moral code for the behavior of a group of licensed professionals (physicians) in addition to what has already been made explicit in the Constitution of the United States about the rights of citizens," the researchers wrote.

"In our opinion, a well-intentioned government attempting to practice medicine has mistakingly made itself vulnerable to violation of the medical maxim, *primum non nocere*, which means 'first do no harm'," the researchers concluded.

END ADVANCE FOR RELEASE 2:30 P.M. (PST) THURSDAY, APRIL 10, 1986

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babydoe-LH10

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News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 725-5375 or 723-6911

ADVANCE FOR RELEASE FRIDAY, APRIL 4, 1986

SCIENTISTS IDENTIFY GENES INVOLVED IN COLOR VISION

STANFORD—

Three human genes that specify the three pigments responsible for color vision have been identified and isolated by a scientific team based at Stanford University School of Medicine.

The work opens the way for the first direct studies of the color vision pigments and it suggests how color vision may have evolved, explained Jeremy Nathans, a medical student who is the principal author of two studies published in the April 11 issue of *Science* magazine.

The research also has enabled the scientists to pinpoint what goes wrong in color blindness, a condition that, in various forms, affects approximately eight percent of Caucasian men and one-half a percent of women.

Nathans is a student in the federally funded (National Institutes of Health) Medical Science Training Program at Stanford Medical School. A grant from the National Eye Institute also helped support the work.

His colleagues on the studies are Stanford biochemistry professor David Hogness, in whose lab he conducted the research, Darcy Thomas, a research assistant, Thomas Piantanida, a psychologist at SRI International in Menlo Park, and Roger Eddy and Thomas Shows, geneticists at the Roswell Park Memorial Institute in Buffalo.

Human color vision is based on three light-sensitive pigments found in approximately six million cone-shaped cells that line each eye's retina.

Scientists had previously deduced that each of these three pigments preferentially detects red, blue, or green light, and that during development a cone cell is programmed to produce only one of the three pigments, thus becoming sensitive to either red, blue or green light.

Scientists have also known that when a cone cell absorbs light it generates electrical signals which travel along a chain of nerve cells to the brain. We perceive different colors by analyzing the three color inputs. The exact color perceived depends on how strongly light excites each of the three types of cone cells.

But until now scientists had no way of determining the exact chemical structure of the color vision pigments, and no way of purifying the pigments for scientific studies.

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Now Nathans and his colleagues have used the powerful tools of molecular genetics to isolate the genes—segments of human genetic material—that specify the three color vision proteins, and to begin analyzing the proteins themselves.

The work doesn't provide a treatment for color blindness because scientists don't know how to repair or replace defective sets of genes inside a person's body. But it does tell scientists exactly what is wrong.

Nathans and his colleagues proved that inherited red-green color blindness, the most common form of color vision disorder, is a result of rearrangement or shuffling of the red and green pigment genes. Scientists had previously guessed that red-green visual disorders would be traced to the pigment genes, but without the genes or the pigments at hand the hypothesis had been impossible to prove.

Many individuals with more severe forms of color blindness have actually lost either the red or green pigment gene, the scientists found. Some individuals with less severe color blindness have gained a new red-green hybrid gene.

The scientists also found that the genes for the three pigments are part of a "family" of similar genes that probably all were derived from an original "ancestral" gene. The family includes a fourth gene that pecifies a visual pigment called rhodopsin, which is responsible for nighttime black-and-white vision.

The scientists now also have shown that the genes for the red and green pigments are nearly identical in chemical structure, and that they probably evolved together fairly recently because they are located next to each other on the X-chromosome.

The genes for the blue pigment and for rhodopsin probably evolved earlier, Nathans said. They are located on different chromosomes and are less closely related both to each other and to the red and green pigments.

But rearrangments of the color vision genes don't always lead to a deficiency. People with normal color vision may have more than one green pigment gene, the scientists were surprised to find.

"The propensity of these genes to become rearranged may help account for the high frequency of color blindness in the population," Nathans said.

—30— color-LH10

END ADVANCE FOR RELEASE FRIDAY, APRIL 4, 1986

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SCARCE BODY PARTS CREATE ETHICAL DILEMMAS FOR MEDICINE

STANFORD—

Advances in biotechnology have led to the development of techniques to successfully transplant living tissue, but society's failure to deal with these advances has created ethical dilemmas for physicians and patients, a Stanford scientist said Tuesday evening (April 1).

Dr. Carl Grumet, associate professor of pathology at Stanford University School of Medicine and director of the transfusion service at Stanford University Hospital discussed the "Sale of Body Parts: New Moral, Ethical and Biotechnical Dilemmas in Transplantation" at the first of three public lectures presented by Stanford University Medical Center.

One issue, he said, is the lack of donors from which vital organs--hearts, kidneys, lungs and bone marrow--can be procured for recipients. "How do we motivate people to donate?" he asked a crowd of about 300 community members.

In 1985 in the United States alone 6,000 kidney transplants were performed, he said, but another 10,000 people remained on the waiting lists, unable to find a donor. About 1,200 patients received bone marrow transplants during the same year, but again, more than 40,000 people who needed the transplants could not find suitable donors.

Heart transplants were performed in about 200 patients, Grumet continued, but an estimated 20,000-70,000 people who needed the life-saving procedure went without it because of a lack of donors.

The disparity between patients who need transplants and those who actually receive them is not due to a lack of potential donors, Grumet explained. Using kidney transplants as an example, he said that of 20,000 potential donors in 1985, only 15 percent of the organs were actually obtained for transplant purposes. A new California law requires physicians to ask families of patients who may be near death if they would, in fact, be willing to allow organs to be donated, but the overall picture has yet to improve.

An option some countries have resorted to is the selling of organs, Grumet noted. Selling kidneys is a fairly common way to upgrade one's socioeconomic status in India, he revealed, and a for-profit clinic that buys and sells organs exists in England.

In the United States, however, such practice is considered socially unacceptable. In fact, it's illegal. "There's the feeling that people would end up using coercion and other tactics to be able to sell organs purely for profit. Our society seems to be saying that organ procurement should be an altruistic endeavor," Grumet said.

Even if enough donors could be found, another issue is cost, a member of the audience pointed out. Grumet agreed. Even with the limited number of transplants, he said, Medicare spends about $2 billion annually on kidney transplants alone.

Another issue scientists are still grappling with is that of rejection. Medicine is developing and improving ways of dealing with the body's immune system, which can attack a foreign organ in defense. These methods include better donor and recipient matching techniques as well as irradiation and drug therapies that suppress the immune system enough to block rejection. Scientists are also working to develop tailor-made proteins, monoclonal antibodies, which can be manufactured to suppress the action of the immune system.

These antibodies will be the topic of the next lecture in the "Progress In Medicine" series. Dr. Steven Foung, assistant professor of pathology, will speak on "Human Monoclonal Antibodies: Potential Use in Therapy" on April 8. He will be followed by Dr. Edgar Engleman, associate professor of pathology and medicine, who will speak on "AIDS: Past, Present and Future" on April 15. The lectures are held in Sherman Fairchild Auditorium on the medical center campus, and they begin at 7:30 p.m. For more information, call 415-723-6389.

4-2-86 —30— grumet-SK7

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FOR INFORMATION CONTACT: Ron Goben (415) 725-5373 or 723-6911
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VIDEO CASSETTE WEIGHT-LOSS PROGRAM IS SUBJECT OF STUDY

STANFORD—

A weight loss and fitness program based on use of video cassettes will be the subject of a research study by Stanford University's Health Improvement Program (HIP).

HIP is seeking up to 200 volunteers for the 30-day program. Participants will be asked to deposit $150, but the total amount will be refunded when the program is completed and the cassettes are returned.

The cassettes present a mini-drama about a weight-losing family, along with nutritional advice and exercise programs. "It's like having your personal exercise physiologist, nutritionist and weight-loss counselor—all available on the TV set," said Keith Saylor, who designed the Stanford program.

Stanford University and Hospital employees and their families will be given preference in joining the program, but other individuals will be accepted if there are enough cassettes available. There are few restrictions, except that pregnant women will not be accepted and participants obviously must have access to a video cassette recorder with a VHS format.

Fran Carl, HIP program manager, said the cassettes were produced by a nationally known food corporation and the material was supplemented for the research study by Saylor, a graduate research fellow with the Stanford Center for Research in Disease Prevention. Dr. C. Barr Taylor, associate professor of psychiatry and an associate director of the SCRDP, is the principal investigator on the project.

"The study will help us evaluate the effects of mediated programs for weight loss," Taylor said. "Despite the tremendous marketing and sales of video-taped health programs, little is known about their effectiveness and how they can be made more useful. This program has been nicely designed to bring about behavior change and should be appealing to the subjects."

Carl said one group of participants will use the cassettes alone and another will be given supplementary educational material. A third group will serve as a comparison now and will start the program this summer.

The progress of the three groups will be evaluated and compared for the study. HIP intends to follow all participants for at least a year to compare the program variations for lasting weight loss.

Saylor said the cassettes depict 30 days in the lives of three actors portraying a typical family: a mother, a father and a teen-aged daughter. All of the actors were slightly overweight, he said, and actually lost an average of 10 pounds each during the 30 days by following the prescribed routines and eating the recommended foods.

Besides the main cassettes, which present the story line and advice from experts on dieting and nutrition, there is an exercise cassette. Saylor said the exercise routines offer participants the chance to try for basic, intermediate or advanced levels of fitness.

HIP plans to start the program with a series of meetings from Monday, April 14, through Friday, April 18. Attendance at one of the meetings is mandatory and a place can be reserved by calling (415) 723-9649.

4/2/86 —30— vcrplan-RG2

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

STANFORD GROUP NAMED FIRST HEALTH PROMOTION CENTER

STANFORD—

The Kaiser Family Foundation has named Stanford as the first of four centers to participate in a multi-million dollar program seeking to reduce preventable health problems and premature death.

"For the first time, the principles of community-based health intervention are going to be made available to people—first in the 13 Western states—and then nationwide through a cohesive and integrated project," said Dr. John W. Farquhar, professor of medicine and director of the Stanford Center for Research in Disease Prevention (SCRDP).

SCRDP's role as the first health promotion resource center in the foundation's Community Health Promotion Grant Program was scheduled to be announced Wednesday at a campus news conference by Farquhar, who will direct the center.

Simultaneously at a Washington, D.C. news briefing, Alvin R. Tarlov, president of the Menlo Park, Calif.-based foundation, unveiled plans for the program. The foundation has committed $15 million for the first three years of the program. He said the project would target five major health problems—heart disease, alcohol misuse and drug abuse, teen-age pregnancy, cancer and injuries.

"Because the target health problems are rooted in the popular culture, they will require comprehensive and prolonged community-wide efforts for their solution, which can come about through education aimed at altering personal behavior and societal practices," Farquhar said.

"Preventable illness and injuries claim nearly 1.3 million American lives and cost the nation more than $300 billion each year," Tarlov said.

The foundation president noted that 90 percent of all injuries are considered preventable, and injuries are the leading cause of death for persons under 44 years.

"It's obvious that community action and education can make a profound difference in reducing the 180,000 accidental deaths which occur in this country annually," Farquhar said. "The impact will be especially strong in reducing those accidents which are also linked to substance abuse."

Stanford and the SCRDP were selected as the site of the first Resource Center because of its 15 years of experience with community-based cardiovascular disease prevention, Tarlov said.

"We are grateful to the foundation for making available to a wide segment of the public the fruits of the research into community health intervention that have been carried out here and elsewhere for the past 15 years," Farquhar said.

The SCRDP, an outgrowth of the Stanford Heart Disease Prevention Program, has gained national attention for its community programs which use a variety of educational and environmental change approaches to help choose healthy lifestyles.

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Some of the approaches studied and implemented by SCRDP have involved community support groups, programs which help companies set up exercise or health education programs for employees, pamphlet education campaigns on nutrition, and television announcements or programs focusing on healthy living.

Many of the Stanford education programs have been concentrated in Monterey County, and have shown that a significant reduction in health risk can be achieved. For example, a recent study presented by SCRDP to the American Heart Association showed that by using a variety of educational approaches in a community, smoking can be decreased dramatically.

"The (Stanford) Center will provide important guidance to communities developing health promotion projects in our program. As we embark on the Kaiser Family Foundation Health Promotion Program, we are pleased to have Stanford as a partner," Tarlov said.

Stanford received $307,198 for six months to develop the center, and additional grants will support its operation over the next several years, Farquhar said.

As a Health Promotional Facility, Stanford is expected to provide technical expertise and support for community health projects, including development and production of training materials, training of volunteers and staff workers.

Tarlov said selected communities would be invited to apply for matching funds up to $150,000 per year from the foundation. Also, he said resources and expertise of the Stanford center would serve communities supporting their own projects.

Examples of community-based projects that might be supported in the foundation's program include tobacco, alcohol and drug abuse prevention programs for junior and senior high school students, or an education and social support project to reduce adolescent pregnancy.

Tarlov said the first projects are expected to be launched in the Spring of 1987. Prior to that, the Stanford center will host a campus conference July 17-19 for community leaders interested in health promotion.

Dr. Wendy Everett Watson, program director for the foundation's project, said priority for funding will be given to projects that focus on the social or environmental factors that have major impact on health behavior.

She said priority also will be given to projects that pay special attention to making healthy habits more feasible for communities with large low income and minority populations. Farquhar cited as an example Stanford's effort in Monterey County to help low income Spanish-speaking rural residents develop a balanced diet using traditional Mexican menu items.

The program requires applicants to form a coalition of organizations, encouraging active participation from broad segments of the community, including schools, churches, worksites, health care organizations and voluntary agencies.

Initial applications for grants would be limited to community groups in Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming, the foundation said.

At Stanford, Farquhar will be assisted by SCRDP research associate David Altman, Ph.D., who was named associate director of the project, and June Flora, Ph.D. education director of SCRDP, will function as liaison to the foundation for the project. A faculty advisory board is also being created and additional staff members have been assigned or recruited, Farquhar said.

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96-YEAR-OLD MAN GETS NEW KNEES AT STANFORD HOSPITAL

STANFORD—

Elzy Benson, a 96-year-old man, will walk away from Stanford Hospital Wednesday, April 2, after having had a bilateral knee replacement operation just 15 days earlier.

He is the oldest man believed to have undergone this type of operation at Stanford hospital.

Those new knees will bring renewed joy to his hobbies, fishing, hunting, and photographing the landscape, which he plans to continue when he returns to his home in Fowler, Calif., "ten miles south of Fresno," he said. His 91-year-old wife Agnes and a new camera await his return.

The operation was done to relieve the pain in Benson's knee joints caused by worn-out cartilage, a natural result of aging. One knee had been bothering Benson for three or four years, and recently the second knee began troubling him, he said. After a friend recommended that he have the operation, "I decided I had better have it done before I hurt myself," he said. Since surgery, "I have had no pain at all," he said.

The operation is basically a resurfacing of the bones with "specially manufactured materials" that imitate natural cartilage, said Dr. David Schurman, associate professor of orthopedic surgery, who performed Benson's operation.

The operation is similar to hip replacements, Schurman said. However, although artificial knees are more durable than artificial hips, they will "never allow someone to completely squat," he said.

During Benson's post-operative recovery at Stanford, a machine slowly and constantly moved his knees up and down, even while he slept. "You get used to it, you have to," he said.

Benson has had to get used to a lot of changes in his lifetime. "I'll never be able to understand all this electronic and computer stuff, but the younger generation can't get along without them."

To him the changes in the medical profession are astounding. "I can remember when diphtheria would come through and kill off every youngster," he said. Today, diseases such as diptheria are rarely seen in the United States.

"It is unbelievable what doctors can do today; look what they did to my knees," he gestured.

This surgery is common in elderly people, but it is also done in young people who have rheumatoid arthritis or multiple problems, Schurman said. Fixing both knees during one operation rather than two is unusual, although every indication shows that one operation is safer than two, Schurman said.

4-1-86 -more-

Approximately 40,000 people have knee replacements every year. Stanford does about 100 each year.

How does Benson account for his good health at his age?

"You just can't figure it," he replied. It may be related to the fact that "I never had a cigarette in my mouth (and) I wouldn't drink 6 oz. of liquor for $1,000," he said. He eats lots of fresh and dried fruit, lots of raw vegetables, and plenty of bread and milk, but he does not enjoy meat very much, he said. Through his experience he has found that it is very important to keep your mind working as you age, Benson said.

The Bensons were married in 1915. Mrs. Benson is renowned for the award winning flowers she grows in their back yard. "It is unbelievable what the woman can do for flowers," Benson said.

Benson was born in 1890 in Grahm, Texas. He and his family "were pioneers in the early days," he said. When he was nine years old, his mother died of typhoid fever. This left his father, who also had the fever, stranded in an eight-by-ten log cabin on a homestead in New Mexico with three boys and a girl, he said. "Finally Daddy was able to drive (the 500 miles) back to Texas" in a covered wagon during December, Benson said.

As a youth, he moved to California with his family; they also traveled here in a covered wagon, he said.

He has lived in Fowler since1903, he said.

Through his long time interest in photography, he has accumulated a large collection of photos of the area, some of which were taken from the earliest technology when "we had film stuck onto glass plates," he said.

He suggested that someone compile a book based on his longtime knowledge and pictures. "Somebody ought to get it all out of me, while I still can do it," he said.

—30—

96Benson MC1a

STANFORD NEWS

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EDITORS: This story is based on an interview with David Packard, chairman of the White House Science Council's panel on "The Health of U.S. Universities and Colleges." The panel's report will be formally released in a few weeks. Brief accounts on the panel's recommendations have appeared in various publications. An edited text of the interview accompanies this story.

PACKARD CALLS O.M.B. PROPOSALS TO CUT RESEARCH COST REIMBURSEMENT 'SERIOUS MISTAKE'

STANFORD—

David Packard, chairman of a panel of the White House Science Council Tuesday, April 1, called Office of Management and Budget (OMB) proposals to reduce federal research cost reimbursement to universities "a serious mistake."

"The government should increase funding of basic research at universities and colleges even if total federal spending for R & D is reduced," the former deputy secretary of defense said in an interview.

In a forthcoming report on "The Health of U.S. Universities and Colleges," the panel will recommend that academic institutions be allowed a faster writeoff on buildings and equipment used in federally sponsored research.

The Hewlett-Packard board chairman saidthe OMB proposals designed to limit reimbursement of administrative overhead costs were "out of tune with what is really needed."

"The OMB did precisely what we recommended they not do," Packard added.

The implementation of OMB's rules was postponed for two months after widespread criticism by university leaders.

The White House panel emphasized its suggestions should be considered as "an integrated package. It would be calamitous," Packard noted, "if the implementation of our recommendations resulted in decreased funding for university research."

But the OMB, presumably looking for ways to reduce the administration's budget, picked up on the administrative overhead issue, ignoring other council recommendations designed to increase substantially the indirect fraction of those total research costs, Packard said.

The federal government, the panel found, is not paying the full costs of research now. "In suggesting a fixed administrative overhead allowance," Packard said, "we also recommended important measures to inject reality into the way research costs are identified and paid for."

The support of university research is "actually an investment, not a commodity that can be bought," the panel said.

The OMB's controversial rules, originally scheduled to take effect April 1, would cap administrative overheads on federal grants to universities at rates of 26 percent this year and 20 percent next year. The changes, according to Stanford University President Donald Kennedy, will cost research universities $300 million annually, with about 40 percent of the loss concentrated in 10 institutions.

The OMB made the changes without the customary negotiations with the universities, and last week, confronted by a flood of protests, it announced it would delay their implementation. But in Packard's words, "The OMB lacks any understanding of what the problem is all about."

"I'm going to talk to them myself and see if we can get this thing turned around," he added.

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The panel's recommendations rest on the premise that the universities have been seriously constrained by insufficient and uncertain funding, and their operations have been increasingly tied up in bureaucratic red tape.

"At a time when we expect much of our universities," the report notes, "we find them at the end of more than a decade of retrenchment and belt-tightening. This is reflected in obsolete equipment, aging facilities, and growing shortages of both students and faculty in many important fields."

The report suggests ways in which federal and university relationships can be streamlined to become more cooperative and productive, and calls for significant increases in research support.

One area in need of increased support is research facilities and scientific equipment. The report recommends that a new fund be established in the National Science Foundation for each of the next 10 years to which the universities can submit proposals. Monies will be awarded on the basis of peer review based on merit and would have to be matched with nonfederal funds.

The report also recommends a shift to longer-term grants and contracts, with a duration of "at least three and preferably five years." It suggests that researchers be allowed to use up to 10 percent of their funds on a discretionary basis to support activities not necessarily covered by the grant.

"We felt it was desirable to extend the period of the grants to introduce stability in the way the government supports university research," Packard said. "We pointed out that research groups are fragile. Once they are disbanded they cannot be easily reassembled."

Because the panel found considerable friction and controversy regarding indirect costs of research, its report called for a fixed ceiling on the portion of those costs related to administration to be phased over a two-year period. However, it also called for offsetting changes in other indirect costs that in Packard's words "would allow the universities to recover their full costs."

Among the recommended measures are changes in the manner in which research costs are determined, including a new formula for a more rapid depreciation of buildings and scientific equipment, elimination of faculty effort reporting, and a reorganization of the federal tax code to encourage increased industry-university interaction.

Quoting from the report, Packard said it is in the national interest that a "healthy university system" be maintained. Universities must rank first in government priorities for allocating research and development support, he said.

He added that in 1984 the federal government spent $100 billion for research and development, but only $8 billion of this was spent for university research.

"Much of the R & D budget is for military research which is not relevant to strengthening the basic science of our country," Packard said. "We pointed out that this is not commensurate with the (research) demands being placed on the universities."

"The government," Packard continued, "is asking universities to participate in research on a cost-sharing basis by failing to provide adequate allowances for depreciation of buildings and equipment. Both of these have deteriorated and their replacement value, owing to age and inflation, has gone up much more rapidly than is generally recognized."

Packard said the panel agreed the federal government should pay the full costs of university research. "It should do so because the country in the long run has a stake in the health of the universities," he said.

Asked if the panel's call for increased research support is realistic in view of the federal deficit, Packard said, "Our recommendations can be implemented without any increase in the overall pool allocated for research and development.

"We have said the major federal agencies—the Defense Department is a good example—should use more university research resources than they do now, and they should make it much simpler to enter into research contracts with universities.

"If you look at the $100 billion now spent for research, and realize that only a small fraction of it reaches the universities, even if total federal spending is reduced, there's still plenty of money for what needs to be done."

Packard said university research is important for two reasons. "It provides the improvement in our store of basic knowledge on which everything will be built in the future," he said.

"The universities are the source of our scientists and engineers for the future. We've pointed out that the demand for new talent and new knowledge have never been greater and that our universities will not be able to respond to these growing needs without an increase in federal support.

"In essence, we are saying we ought to put more into the seed on which we're going to depend on in the future as a nation. There's no reason why this can't be done if it's simply recognized.

"I think the Congress will be sympathetic to this."

Packard, who also chairs the President's Commission on Defense Management, said the commission in its final report will add a provision requiring the Defense Department when appropriate to make more effective use of university resources for basic research.

"Despite our difficult financial situation, I believe things can be done to improve the overall position of our universities," he said.

The science panel, co-chaired by Yale University physics Prof. D. Allan Bromley, was asked in a 1984 White House memo to recommend new principles for improving relationships between the federal government and universities.

There was concern whether these relationships were adequate "to create the scientific and technical talent and to conduct the research needed to sustain America's leadership in industry and defense," the memo said. "The Council should provide a tautly reasoned policy statement, which would serve to guide federal actions with respect to universities and colleges."

"The panel has done what was asked," Packard said. "Now the scientists and the universities must try to do their part because they share some of the responsibility."

Echoing some of the panel's conclusions, Packard said scientists and engineers must become informed on the problems and challenges faced by the nation. "Each supporting voice counts and can make a real difference."

Universities must also try to reduce costs whenever possible, Packard said. This means being prepared to make hard choices, to operate within the levels of external support available.

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This is the edited text of an interview with David Packard, chairman of the White House Science Council's panel on "The Health of U.S. Universities and Colleges." The panel's report, which will be formally released in a few weeks contains recommendations for building a more solid and enduring partnership among the federal government, industry, and universities to enable the nation to keep pace with research and educational needs

Q: Why did the Reagan administration ask the science council to review the relationships between the federal government and the universities?

A: There's concern about whether or not the United States is keeping pace technologically with Japan and the European nations. One area the council had looked at earlier was the federal research laboratories. There are 700 of them and some are doing good work, but in many we found the research to be clearly unrealistic and non-productive. We recommended that our federal laboratories have closer ties with the universities where most of the fundamental research is done.

As a result of this work and that of the Commission on Industrial Competitiveness, headed by John Young (Hewlett-Packard president), we got back to the basic proposition that universities in the United States have very fundamental roles in generating the basic knowledge in all areas of science and technology on which the prosperity of our country depends, and in training the scientists and engineers for the future.

We felt, therefore, the federal government should review its relationship with the universities, and try to establish an even more productive one. In deciding priorities for allocating research support, for example, we think universities must rank first.

Q: Was the council's inquiry only limited to issues of science and technology?

A: No. We recognized that the contributions of our universities in the humanities and other areas were also very important and significant. We've stated the health of the entire spectrum of American higher education which trains young minds—from chemistry to the classics—is essential to our national future and that science cannot be viewed in isolation.

Q: What were some of the problems you discovered with respect to research?

A: The federal government is in fact not paying the full costs of university research. We've been reminded the United States still has one of the strongest science and technology enterprises in the world. Yet at a time when we expect much of our universities, we find them at the end of more than a decade of retrenchment and belt-tightening. As our report indicates, this is reflected in obsolete equipment, aging facilities, and growing shortages of both students and faculty in many important fields.

In the absence of significant changes in the relationships involving universities, industry and the government, the universities we think won't be able to meet the growing demands made on them in an increasingly techological and competitive world.

Q: What do you mean by "the federal government is not paying the full costs of research?"

A: The government is asking the universities to participate in cost-sharing. It doesn't provide, for example, adequate allowances for laboratory buildings and equipment which are deteriorating because of age, deferred maintenance, and just plain obsolescence. On top of these, inflation has caused their replacement value to go up more rapidly than it is generally recognized. We think the government should pay the full costs because university research is actually an investment, not a commodity that can be bought. The government has a great stake in the health of our universities.

Q: What should be done to enable the universities to meet society's demands?

A: We think the federal government and the private sector should make significantly greater investments in our universities in the 1980's and 1990's than in the 1970's. Our recommendations require increases in financial support. We're suggesting that a facilities fund be established in the National Science Foundation for each of the next 10 years to which the universities can submit proposals. The monies will be awarded on peer review based on merit, and would be matched 50/50 with non-federal funding.

We've suggested a shift to longer-term grants and contracts with the duration of at least three and preferably five years, and we added that scientists be allowed to use up to 10 percent of their funds on a discretionary basis to support activities not necessarily covered by the grant.

These changes are desirable because many of our talented people are wasting their time writing grant proposals. Research, our panel agrees, requires long lead times for preparation and incubation. Research groups are fragile. Once they are disbanded, they cannot be easily reassembled. In the absence of stability, important talent and research opportunities have been lost, and this is sad.

Q: What do you think of the caps on the administrative overhead that were proposed recently by the Office of Management and Budget (OMB) in Washington? You've recommended that the decade of university retrenchment and belt-tightening be turned around. Is the OMB out of step with your proposals?

A: The OMB did precisely what we recommended they not do. We said clearly our recommendations should be considered as an integrated package. We said it would be calamitous if their implementation resulted in decreased funding for university research. In picking one item out of the report— namely that payment of administrative costs within the indirect cost category be capped at a uniform percentage—I think the OMB has made a serious mistake. I'm going to talk to them myself and see if we can get this thing turned around. What they've done is out of tune with what is really needed.

Q: You said the council's proposals should be considered as an integrated package. In what way do you see this as helping the universities?

A: The panel was concerned about the friction associated with the reimbursement of indirect costs and the variation in overhead percentages among the universities. We felt everyone would be better off if we could agree on a reduced fixed allowance for the administrative components of overhead coupled with measures that would actually inject reality into the way research costs are identified and paid for.

Q: Can you describe some of these measures?

A: We suggested, for example, a realistic formula for determining depreciation allowances on buildings and scientific equipment. These we think should be based on true useful lifetimes. Useful life for buildings and facilities should be reduced from the present level of 50 years to 20 years. Useful life of equipment and instrumentation should be cut from 15 years to 5 to 10 years, depending on the equipment.

We recommended that the requirement of cost-sharing be eliminated, the paper work associated with grant and contracts be cut to a minimum, and the faculty effort reporting eliminated entirely. We thought the practice of the National Science Foundation, which requires overhead costs to be part of the project budget subject to peer review, was useful and should be adopted by all agencies supporting university research. We said also that much could be gained in efficiency if all agencies made greater use of block grants or contracts to support groups of researchers who have shared interests.

These were specific recommendations of the panel designed to increase substantially the indirect fraction of those total research costs.

Q: Your report mentions the importance of private industry in supporting university research? How can this participation be encouraged?

A: The relationship between basic research in the universities and the health and welfare of new industry is extremely important. Our universities have generated a very large amount of our basic knowledge. This knowledge has been instrumental in meeting our goals as a nation, be they industrial development, national security, health, agriculture or the improvement of the quality of life of our citizens.

We've recommended that any reorganization of the federal tax code should encourage greater industry-university interaction. We think that a 25 percent nonincremental tax credit should be set up for industrial funding of university research and for industry-supported servicing of university equipment. We also have suggested a merit-based scholarship program be set up by the government and a separate one by industries that depend on university research and education. The goal would be to support the most able one percent of the undergraduates in mathematics, engineering, and the natural sciences entering colleges or universities each year.

Q: With the administration concerned about cutting the federal deficit, how optimistic are you that your proposals will be implemented and why?

A: I think they can be implemented without increasing the overall pool of money available for research and development. You realize that of the $100 billion spent in 1984 for R & D most went for military research which is not relevant to strengthening the basic science of our country. Only $8 billion found its way to the universities. And that is not commensurate with the demands being placed on the universities. Some reallocation of R & D funds, even if total federal spending is reduced, would still provide plenty of money for what needs to be done.

University research is so important for two reasons: it provides the improvement of our store of basic knowledge on which everything will be built in the future, and the universities are the source of all of our scientists and engineers for the future. In essence, we're saying we ought to put more into the seed on which we're going to depend for the future. There's no reason why this can't be done if it's simply recognized. I think the Congress will be sympathetic to this.

It is also clear that in some areas we may not be able to accomplish all the things that would be in the national interest. Under these circumstances, as we point out in our report, universities should be prepared to make hard choices, to operate within the levels of external support available. This will require trade-offs among faculties, facilities and programs which are necessary to maintain their excellence and vitality.

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FOR IMMEDIATE RELEASE

VOLUNTEERS SOUGHT FOR RESEARCH ON PANIC ATTACKS

STANFORD—

People who suffer frequent attacks of panic or anxiety are being sought as volunteers for a study by researchers in the Department of Psychiatry and Behavioral Sciences at the Stanford University School of Medicine.

The researchers are attempting to measure the effects of panic attacks on heart rates and other physiological changes and to determine the value of certain treatments for panic.

Volunteers will be asked to wear small computers that measure physical activity and heart rate and to write in a diary when they think they have experienced an attack of panic or anxiety.

They will have physical examinations as well as diagnostic interviews to determine if they are acceptable for the study. All treatments include medication.

"The long-term purpose is to develop better and safer treatments," said Dr. C. Barr Taylor, associate professor of psychiatry.

Anyone interested in participating in the study should telephone (415) 723-7240.

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FAMILY HISTORY OF APNEA MAY INDICATE RISK OF SUDDEN INFANT DEATH SYNDROME

STANFORD—

Sudden Infant Death Syndrome (SIDS) may be a particular risk for babies who inherit a physical trait that probably has caused breathing problems in generations of their relatives, according to a study by researchers at Stanford University Medical Center and the University of California, San Francisco.

The physical trait is a small upper airway, usually behind the base of the tongue. It was found in six infants hospitalized after suffering "near-miss" SIDS episodes—and it was found in several of their relatives.

Four siblings of the six infants had died of SIDS, but they were not examined for small upper airways.

"We found out that in each generation on one side of the family, we had someone who obviously had a breathing problem and at the same time an abnormality of the upper airway," said Dr. Christian Guilleminault, associate director of the Stanford Sleep Disorders Clinic and professor of psychiatry in the School of Medicine.

Guilleminault, the lead researcher on the study, discussed the findings in an interview. The research was first reported in the Feb. 22 issue of *The Lancet*, British medical magazine.

The six infants in the study came from five families. In all of the families, one or two infants had died of SIDS and another child had apnea, or two infants had apnea. Apnea is an interruption of breathing during sleep that lasts a minimum of 10 seconds and is sometimes life-threatening.

Guilleminault emphasized that not much is known about SIDS, which claims 8,000 lives a year in the United States, and he said it probably has multiple causes. The research concentrated on a subgroup of SIDS patients, he said, and the findings probably do not extend to all SIDS patients.

However, the researchers did conclude that a small upper airway is "a risk factor for breathing impairment during sleep. It seems to be a familial feature, and should be suspected when sleep apneas in infants continue beyond the age of 10 months."

During sleep, Guilleminault said, there is a decrease in the size of the airway. That decrease, he added, "is much more pronounced in REM (rapid eye movement) sleep, when there is a lot of loss of muscle tone, particularly in the muscle of the tongue."

Infants have small windpipes simply because of their small size, he said, and those who inherit the small upper airway are particularly susceptible to breathing difficulties during sleep.

2-2-2 Adults with the same family characteristic may have breathing problems during sleep throughout their lives, particularly when they have colds or if there is some other complicating factor such as extra weight (fatty tissue can reduce the size of the already small airway).

Guilleminault said that in years of studying adults with sleep apnea he had heard references to children in their families who had died of SIDS. He and his colleagues decided to start the research with infants after discovering several cases of near-miss SIDS events, "meaning they were picked up by the parents at a time they were supposed to be asleep and they were found to be blue or very pale and not breathing."

Besides Guilleminault, the researchers were Drs. Nelson Powell and Robert Riley, who have DDS degrees as well as MDs, and Dr. Gregory Heldt, a pediatrician from the University of California, San Francisco.

They studied the six infants who had suffered near-miss SIDS episodes, their four living siblings, 10 parents and eight grandparents.

"We did a complex study of the families," Guilleminault said. "We used X rays and sometimes volume CT scans to look at the upper airways. We also monitored the breathing patterns, particularly when they were asleep."

They found a distinct connection between the small airway and breathing problems and they traced that connection through three generations.

"Each time we found it in the same direction," Guilleminault said. "If it was the father who had the problem, it showed up in one of the paternal grandparents."

Those who had breathing problems usually had other symptoms associated with sleep apnea. For example, many were heavy snorers and some of the grandparents tended to have excessive daytime sleepiness—which often accompanies a high level of respiratory disturbance during sleep.

Guilleminault also noted that a small upper airway is usually accompanied by a distinguishing facial characteristic: a small or discreetly recessive chin.

That also usually means a malocclusion, or improper alignment of the teeth, Guilleminault said. He noted that dentists have known for years that malocclusion runs in families, but "dentists are interested in teeth, not necessarily in the windpipe."

He added: "We are saying there is a subgroup of individuals who have a tendency to have an anatomical abnormality that may run in families that has an impact on the size of their windpipe."

However, he emphasized that not every child in a family inherits the same anatomical characteristics and a history of sleep apnea in a family does not necessarily mean an infant has a small airway or is at greater risk of SIDS.

Surgery can ease the problems of infants who do have small airways. All six infants in the study eventually had tonsillectomies and two underwent resectioning of the lateral walls of the soft palate to enlarge their airways. None has sleep apnea now, but two are intermittent snorers who snore continuously when they have upper airway infections.

Doctors also warned the parents that apnea could reappear if the children gain excessive weight or in boys when they reach puberty, which brings thickening of the mucosa in the pharynx.

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STANFORD MEDICAL STUDENTS FARE WELL IN INTERNSHIP MATCHING

STANFORD—

Out of a graduating class of 58 students at Stanford University Medical School this year, 65 percent were matched to their first choice of internship, and 84 percent obtained one of their first three choices, said Dr. Roy Maffly, associate dean of student affairs.

The 38 graduates who got their first choice hospital represents an increase over the last five years, which averaged 53 percent. And the 11 graduates who got one of their top three hospital choices represents an increase over the last five years, which averaged 72 percent, said Maffly in a report on the annual internship matching.

Seventy-two percent of the graduates will intern at university medical centers, Maffly continued. Of those, 21 percent will remain at Stanford and 17 percent will go to hospitals within the University of California system. Three percent will go to hospitals affiliated with Harvard Medical School.

"These are very satisfying results," Maffly commented. "They must reflect on the caliber of the graduating students, and they indicate that Stanford's clinical program must be well thought of."

The types of internships pursued by the graduates for the most part mirror 10 year averages. About 50 percent chose internships in medicine, 16 percent chose surgery and seven percent chose pediatrics. Obstetrics and gynecology and emergency medicine internships are on the rise in popularity, Maffly's report stated, with 10 percent of the students choosing the former and five percent choosing the latter. Family practice internships, on the other hand, are on the decline, with only three percent of the students choosing them.

As in past years, students' career choices differ somewhat from their internship choices. About 30 percent would like to practice internal medicine. Another 16 percent are going for surgery, while a high of 13 percent are aiming towards anesthesiology. Obstetrics and gynecology is the career choice of 12 percent of the graduates; pediatrics is the goal of seven percent. Only five percent of the graduating students listed research as their career goal.

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STANFORD MEDICAL SCHOOL STUDENTS OFFERED DIVERSE ACADEMIC OPPORTUNITIES

STANFORD—

The adage that medical students "eat, breathe and sleep medicine" is losing ground at Stanford University Medical School where, with the encouragement of administrators and faculty, more students each year round out their curriculum with nonmedical courses and activities.

In 1986, 65 percent of the medical students decided to stay at Stanford for longer than the standard four-year medical education. This tops 55 percent of the students who chose to prolong their medical education in 1985, and it signals an increasingly popular trend.

"There is considerable feeling that medical education is too narrow, too technical and that there is a lack of balance with nonmedical knowledge," said Dr. John Steward, associate dean for student affairs. Stanford tries to counter this image by encouraging its students to spread out their medical education over a longer period of time so they can include courses in the humanities, pursue hobbies and do research.

Stanford is unique in its stance, Steward explained. Admittedly, this year's quarterly tuition of $4,110 is none too cheap, but students are only charged for 13 quarters. If they choose to stay in school longer, it's at no additional cost.

The flexibility of the curriculum is also rare among medical schools, intentionally so to encourage students to take a broader range of courses, Steward said. In fact, the medical school's mission states that it will provide an educational environment that encourages "intellectual diversity."

Some students complain that the return in 1984 to a required curriculum for the preclinical years decreases that flexibility, but Steward disagrees. "Students don't have to complete their preclinical courses in two years. They can take as long as they want."

Stanford is one of a small group of medical schools in the country that is located on a university campus. In fact, in deciding to move the medical school from San Francisco in 1959, giving medical students an opportunity for "a broader focus" was one of the main considerations, he said.

The emphasis on the opportunity for a broader focus is a major consideration for many of the students who come to Stanford. It's one of the main points that third-year student Danny Sze stresses when, as a member of the admissions panel, he talks to candidates.

"Stanford is really well suited for people who like learning and who aren't yet willing to shut any academic doors," he said. Sze, who's earning a Ph.D. in biophysics as well as an M.D., has delved into oil painting, windsurfing, jazz dance and ballet and photography, just to name a few, since he's been at Stanford. In the past year he's made all the furniture for his apartment, has played cello with the local orchestra and does some graphic design on the side. "If you know how to manage your time effficiently, you can do a lot of nonmedical things," he added.

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Allen Efron, another third-year student, came to Stanford with the intention of getting through in four years. He admits he was a little scared when he considered deviating from his initial plan and taking another year, but did it anyway. In addition to taking computer science and French courses at Stanford, he spent a quarter at Oxford University studying the philosophy of the mind and brain. Now that he's back, he'd like to try his hand at creative writing. "Students should exploit as many of the resources here as possible," he said. Premed students have to pass up a lot of courses just to get those they need to get into medical school, he said. At Stanford, he feels he has the opportunity to make up for lost time.

Second-year student Marlene Sturm doesn't need to make up for lost time, yet she treasures the flexibility at Stanford for another reason. A comparative literature major in college, she continues to take humanities courses and is an accomplished pianist. "The nonmedical courses give me a sense of continuity," she said. "In medical school people tend to change quite a bit." Pursuing a few of her nonmedical interests, "helps me feel like I'm still the same person."

Sturm has had a chance to share her musical skills with her classmates at a monthly humanities group, where students take turns making presentations that have featured, for example, literature, poetry, art, ethical issues and in Sturm's case, piano pieces by Chopin. The group has drawn as many as 40-50 students, said Kathy Bradley, who organized it when she came to Stanford nearly three years ago. "I felt isolated, so one day I put notes describing what I wanted to do in all the students' mailboxes. About 15 showed up at my house at the designated time. And it's continued since.

"Medical school, especially the preclinical years, is downright boring and intellectually unstimulating," she said. "The basic work in medicine is humanities. Medicine doesn't have a cure for everything, so physicians have to be able to bring much more to their patients."

"The main thing physicians bring to their practice is themselves," agreed Lisa Smith, a fifth-year student. "It's important not to become too narrowly focused. You have a lot more to offer patients if you haven't excluded everything but medicine."

But the increasing cost of medical education, combined with the dwindling funds available for financial aid, is causing some medical students to make some exclusions, to pass up alternative routes for the quickest way through medical school so they can start earning an income to pay off their debt, said Steven Freedman, who started medical school six years ago. "I'm already $55,000 in debt, and I don't think I ever want to practice clinical medicine," he said. But if his current project is successful, he may not need to. Freedman, whose Stanford education has included computer science and communications as well as medical classes, has helped found a company called *Dynatext*. Still in its infancy, the company is developing a computerized medical library, in a sense. Rather than go from one book to the next for information, users can call up information from an array of standard medical texts and journals all on the same screen.

"Dr. Steward once said to me, 'I don't think you would have finished medical school somewhere else', " Freedman recalled. "Without the alternatives, I probably wouldn't have. Nor did I have any notion that this would be what I ended up doing."

"Stanford," Sturm summed up, "is open-minded about how to educate oneself. It lets you make most of those decisions."

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ADVANCE FOR RELEASE FRIDAY, MAY 23, 1986

SCIENTISTS REPORT NEW MECHANISM BY WHICH AIDS VIRUS CAUSES CELL DEATH

STANFORD—

A new finding about how the virus that causes acquired immune deficiency syndrome (AIDS) can kill cells in the immune system has been reported by a group of scientists from Stanford University School of Medicine and three other institutions.

The finding helps explain how the virus profoundly cripples AIDS patients' defenses against disease and cancer, said Dr. Edgar Engleman, associate professor of pathology and medicine and director of the Stanford Blood Center.

The discovery is "*not* a therapeutic breakthrough," Engleman stressed, but it could open up new approaches toward developing drugs or vaccines to block AIDS.

The new finding shows that cells infected with the AIDS virus fuse with healthy, uninfected cells, forming giant cell agglomerates which produce large quantities of virus and then die, Engleman explained.

The giant cells enlarge by fusing exclusively with helper T lymphocytes, white blood cells that orchestrate the body's defenses.

The disappearance of helper cells into dying giant cells could explain the collapse of immune defenses that is the hallmark of AIDS, he said.

"If you lose the helper cells, you lose the immune defenses, because without helper cells most of the immune system cannot be activated," he explained.

Engleman suggested that it could be valuable to look for drugs or vaccines that block the fusion process. "Right now, most of the experimental agents being tested against AIDS are aimed at blocking viral replication," he explained. "This provides a whole new avenue whereby we can try to prevent the virus from destroying the immune system.

"We should be trying to attack the virus at every point in its life cycle," he added. "It's important to test agents that interrupt viral replication, but we should also explore the use of agents that interfere with AIDS virus-induced cell fusion," he suggested.

The report on the giant cells will be published in the May 30 issue of *Science* magazine. Besides Engleman, co-authors on the article include Dr. Jeffrey Lifson, associate investigator at the Palo Alto Veterans Administration Medical Center, Dr. Gregory Reyes, a senior scientist at Gene Labs, Inc., of San Carlos, Dr. Michael McGrath, assistant professor of medicine at the University of California, San Francisco, and Dr. Barry Stein, research associate in Engleman's lab.

The work was funded by grants from the National Institutes of Health, the Medical Research Service of the Veterans Administration, the California State AIDS Task Force, and by fellowships from the Damon Runyon-Walter Winchell Cancer Fund.

Although the research was carried out on cell cultures in the laboratory, Engleman believes that the same process of giant cell formation, leading to helper T cell depletion and subsequent immune collapse, occurs in AIDS patients.

"You do see giant cells in the lymphoid organs of AIDS patients," he said. "I don't think there's much doubt that this process is also going on in AIDS patients."

Most research has concentrated on other ways to explain cell death caused by the AIDS virus. The most popular hypothesis has been that the virus commandeers its host cell to produce new viruses, ultimately working the host cell to death in the process.

"We are proposing a relatively new concept," Engleman noted, but added that "we are not claiming that this is the only way the AIDS virus kills cells."

Engleman said some other viruses are known to cause giant cell formation. But what sets this disease apart is the virus' cell specificity; the AIDS virus-infected giant cells engulf only helper T cells.

The researchers found that the basis for this specificity is a cell surface protein called CD4, which is found primarily on helper T cells. The virus-infected cells appear to use this surface molecule to latch onto uninfected helper cells. Other research suggests that the free-floating AIDS virus uses the CD4 protein to enter and infect cells.

"Not only is this a mechanism whereby the virus spreads," Engleman said, "but more fundamentally it's a mechanism whereby a single AIDS virus-infected cell can sop up many uninfected cells and kill them."

Engleman noted that in previous research he and his colleagues demonstrated that the CD4 molecule is essential to helper T cell function—without it, the normal immunological activity of these cells is blocked.

So, in looking for drugs or vaccines that block the cell fusion process, it would be crucial not to block the normal immune functions of the CD4 molecule, he cautioned. His research group is conducting preliminary studies of agents that could potentially fit these requirements.

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END ADVANCE FOR RELEASE FRIDAY, MAY 23, 1986.

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FOR IMMEDIATE RELEASE

VOLUNTEERS STILL SOUGHT FOR CHOLESTEROL STUDY

STANFORD—

The Stanford Center for Research in Disease Prevention is looking for additional volunteers for a cholesterol study.

Dr. Robert Superko, medical director of the Lipid Research Clinic at the Medical Center, says the project is attempting to learn whether colestipol, a drug widely used in lowering high cholesterol, is also effective in people with moderate levels of fat in their blood.

Superko said volunteers should know that they have total cholesterol levels between 220 and 280 mg/dl, a level normally treated by diet, not medication. There will be three groups of participants who will take colestipol in doses lower than those normally prescribed. A fourth group will take a placebo, an inert substance that tastes like the medicine.

Participants' blood cholesterol levels will be measured at regular intervals for the 16 weeks of drug therapy, Superko said, and blood pressure and other medical data will be made available to volunteers without charge.

An initial group of volunteers were recruited several months ago and are continuing with the study, Superko said.

Persons interested in volunteering or attending an informational meeting should contact Paula or Pamela at (415) 725-5038 after 1 p.m. on weekdays.

5-15-86 —30— superko-mg10

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Spyros Andreopoulos 725-5370
FOR IMMEDIATE RELEASE

$70 MILLION PACKARD PLEDGE FOR NEW CHILDREN'S MEDICAL CENTER AT STANFORD

STANFORD—

Lucile and David Packard have pledged $70 million to finance construction of a comprehensive new children's medical center by Stanford University and Children's Hospital at Stanford.

The gift encompasses a previous Packard pledge of $20 million for the project, making it the largest commitment from a private donor in Stanford's history, said University President Donald Kennedy Tuesday, May 13.

In a joint statement, Kennedy, Dr. Lawrence G. Crowley, board chairman of the New Children's Hospital at Stanford, and Charles Anderson, vice board chairman of Children's Hospital at Stanford, said:

"We're grateful to Lucile and David Packard for their generosity. It renders possible a magnificent contribution to human welfare—and to children especially."

Lucile Packard, a Stanford alumna, has been active in the Children's Hospital at Stanford for many years and now is chairman of its board. She is also vice chairman of the new board planning the project. David Packard, a Stanford alumnus, is chairman of the board of the Hewlett-Packard Co.

The Packard pledge includes $40 million to cover part of the design, planning, construction, and equipment costs of the new children's hospital; $22 million toward Stanford University Hospital's modernization project, including perinatal facilities; and $8 million for modernizing pediatric academic space of the School of Medicine.

Under the terms of the pledge, the University will pursue a $20 million development program for the new children's hospital as part of the current medical center fund-raising agenda. The total cost of the facility is estimated in excess of $60 million.

"The gift," Kennedy said "will enable the University to embark on a partnership with the Children's Hospital at Stanford in establishing one of the foremost comprehensive centers for pediatric care, research, and training in the country.

"It's in pediatrics that medicine faces its most exciting challenges. Each child born with a birth defect or incurable disease exemplifies the need for further knowledge. A better understanding of the causes of illness, better ways of detection, treatment, and prevention will result in dramatic changes in the quality of life."

These improvements span entire lifetimes, Kennedy added. "That is why investments in the health of children are very powerful."

Beyond the new facility, Kennedy said, the gifts complement University efforts to modernize Stanford hospital and academic research space for the Stanford University School of Medicine.

"Related to the new thrust will be the medical school's new Center for Molecular and Genetic Medicine," said David Korn, vice president and dean of the medical school. "Nowhere are the applications of the new genetic medicine more critical or promising than in the field of childhood disease."

Planning of the new 125-bed hospital is directed by a new 20-member board of directors chaired by Crowley, who is a former Stanford vice president for medical affairs. Twelve of its members are appointed by the Children's Hospital at Stanford and eight by the University. The project director is Langston Trigg Jr.

The facility, being designed by the San Francisco architectural firm of Anshen and Allen, will be attached to Stanford University Hospital's new addition scheduled for opening in 1987. Construction of the new children's hospital will begin shortly after, with completion expected in early 1989.

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The New Children's Hospital at Stanford will be an integral part of the Stanford University Medical Center, but its governing and management structure will be separate and independent, according to agreements approved by the University Board of Trustees and Children's Hospital at Stanford.

The new facility will be the medical school's principal hospital for clinical practice, research, and teaching relating to children's medical and health care.

Stanford and Children's Hospital have been operating their complementary pediatric programs from separate locations for many years under the medical direction of the Department of Pediatrics.

The new, three-story building will consolidate the pediatric and psychosomatic beds at Children's and the pediatric acute, pediatric intensive, and neonatal intensive care beds at Stanford.

The new hospital will house the Stanford Children's Ambulatory Care Center, which provides 27 separate clinical services. It will also include a compromised host unit, a day hospital, a 150-seat auditorium, cafeteria, and support services ranging from clinical laboratories and physical therapy to diagnostic radiology.

Stanford hospital's well-baby nursery and about 50 medical-surgical beds for mothers will be closely linked to the labor and delivery suites located in the new children's hospital.

By placing these units adjacent to each other the two hospitals will be able to provide an important new perinatal service for mothers and children. "The bringing of child and mother together is an important concept in the new facility," Crowley said.

"The Packard gift gives us an opportunity to put together all of these services in a very thoughtfully designed modern, efficient facility which will become a major center for pediatric care in the region and beyond," said Dr. Irving Schulman, chairman of the Department of Pediatrics and chief of staff at Children's Hospital.

• • •

Packard was born in Pueblo, Colo., in 1912. He attended Centennial High School in Pueblo, where he was an exceptional student and athlete. He attended Stanford University, receiving a bachelor of arts degree in 1934, and a master's degree in electrical engineering in 1939. After a brief stint with General Electric Co. in Schenectady, N.Y., he returned to Palo Alto and joined William Hewlett on a research project at the University.

The two friends in 1939 formed the Hewlett-Packard Co. Their workshop was a small garage in Palo Alto. One of their early devices was a new type of audio oscillator, based on a design by Hewlett. It represented a significant contribution to the field of electronic measurement. Today Hewlett-Packard is a worldwide organization with manufacturing plants in the United States and 12 countries in Europe and Asia. The company manufactures computers and electronic instruments and employs 80,000 people worldwide.

Packard was a member of the Stanford Board of Trustees and played a key role in the decisions that resulted in the construction of the Stanford University Medical Center and the move of the medical school from San Francisco to the campus.

Packard has served as deputy secretary of defense, and on numerous presidential task forces and commissions.

Mrs. Packard, the former Lucile Salter of San Francisco, graduated from Stanford in 1935. She has been a member of the board of directors of Children's Hospital since 1967 and has chaired the board since 1983. She has served as board president of the Children's Health Council and on the boards of Castilleja School and the San Francisco Symphony.

In addition to her work on committees and fund-raising drives on behalf of Children's Hospital, Mrs. Packard has been one of the original board members of the New Children's Hospital at Stanford planning the new facility. She has been the vice chairman of that board for the past three years.

The Packards have four children and nine grandchildren.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

PAIN IS UNRELIABLE FOR DIAGNOSING CORONARY ARTERY DISEASE

STANFORD—

Severity of angina—pain caused by narrowed coronary blood vessels—does not reliably reflect the severity of a patient's heart disease, a 10-year Veterans Administration study of 686 cardiac patients has revealed.

The finding is important because many physicians use the severity of a patient's symptoms, often without further testing, to evaluate the seriousness of coronary artery disease, according to Dr. Herbert Hultgren, the study's medical co-chairman, and professor of medicine at Stanford University School of Medicine.

"Physicians should no longer assume that coronary disease is mild just because a patient's symptoms are not severe," Hultgren said.

"We have found that some patients with very mild symptoms may have severe underlying heart disease that places them at high risk for a heart attack or sudden death," he said. "Others with severe angina may have only mild disease," he pointed out.

The new findings suggest that any heart patient with angina should undergo exercise treadmill and nuclear imaging tests for further diagnostic evaluation to evaluate their risk "profile," Hultgren added. "Testing should not be delayed, even in patients with mild symptoms," he stressed.

During exercise testing, a patient walks on a treadmill or pedals a cycle while his heart rate, blood pressure and electrocardiogram are monitored. Nuclear imaging is a method of using small amounts of radioactive tracers to obtain pictures of the blood flow to the heart muscle.

The VA study revealed that nine percent of patients with mild symptoms of angina actually had left main coronary artery disease, a high risk form of heart disease, while 56 percent had narrowing of the three main blood vessels in the heart, also considered serious.

Altogether, 34 percent of the patients with mild symptoms were considered to be at high risk for subsequent heart attack or death. That figure is only slightly lower than the 43 percent of patients considered high risk in the group with severe angina.

The Veterans Administration Cooperative Study was initiated in 1970. Patients joined the study from 1972 to 1974 from the Palo Alto Veterans Administration Medical Center and 12 other VA hospitals throughout the country, Hultgren said.

A progress report on the study, which will follow patients for a total of 15 years, was recently published in a series of articles in the November 1985-April 1986 issues of the journal *Progress in Cardiovascular Diseases*.

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In earlier reports, the VA study also concluded that certain types of heart patients are best treated with bypass surgery, whereas postponing surgery as long as possible should be recommended for most other patients, Hultgren said.

In bypass surgery, a segment of vein is removed from the patient's leg and sewn into the heart to form a bypass channel in which blood can flow around the blocked artery. The operation is one of the most commonly performed surgical procedures. Its national cost is estimated at over $3 billion, according to the American Heart Association.

The patients who benefit most from bypass surgery are those with narrowing of the left main coronary artery. Eighty-eight percent of a group of such patients who had surgery during the VA study survived at least 42 months. In contrast, the 42-month survival rate was only 65 percent among a group of similar patients who were treated with drugs but did not undergo bypass surgery.

"For patients with left main coronary artery disease and three-vessel disease with abnormal left ventricular function, we would therefore recommend surgery to improve survival, even if patients have only mild angina symptoms," Hultgren said.

"But other heart patients can generally be treated without surgery with no adverse effects on survival," he added.

With this in mind, surgery should be postponed as long as possible in low-risk heart patients, idence from the VA study suggests. This is because the operation's benefits begin to dwindle after about a decade, as new blockages form in the bypass grafts.

"We saw improved survival in the surgery group out to about eight to 10 years," Hultgren noted. "But after 10 years, there was a rapid fall-off due to late closure of the grafts.

"Our recommendation, therefore, is to not operate too soon to relieve symptoms in low-risk patients because 10 years down the pike, they may need a new operation," he said.

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STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

HOSPITAL'S PACKAGED, FLAT RATE COMPONENT REACHES 10 PERCENT

STANFORD—

About 10 percent of Stanford University Hospital's total revenue is now coming from health plans that have negotiated packaged discount or flat daily rates, said David I. Sakai, director of finance.

Sakai said nearly all of the largest health insurance carriers have recently requested contract proposals from the hospital for discounted or per diem payment arrangements for their newly formed health maintenance organizations (HMOs) or preferred provider organizations (PPOs), which afford lower premium rates for companies purchasing health plans for employees.

"It is becoming apparent that the full-charge portion of our business is rapidly converting to PPO/HMO-based business at significantly discounted rates," Sakai said recently.

The finance director said the hospital currently has contracts with eight separate companies offering PPO or HMO arrangements. Active negotiations are under way with at least seven other plans.

"This volume is especially significant when you consider that three years ago PPOs and HMOs represented virtually zero percent of our volume," Sakai added.

Generally, HMOs require that enrollees go to specific physicians or medical groups to receive total care. Services are prepaid with only a modest charge, typically less than $10 a visit, for physician services. Physicians agree to send their patients to a specific hospital at predetermined rates.

The rates are less than the published rates, an arrangement made feasible because of the volume of patients and the relative ease in processing paperwork for a large number of patients under the same plan. Costs to employees are usually significantly less than plans which allow free choice of physicians and hospitals.

PPOs allow the patient to choose virtually any physician, medical clinic or hospital each time service is needed, but PPOs offer the patient a financial incentive for choosing services from providers who have agreed to participate in the discount plan.

While details of individual contracts are confidential, Sakai noted that gross patient revenues in the current fiscal year are expected to be $285 million.

Sakai detailed the current status of contracts and negotiations:

The three largest contracts, representing approximately one third of all PPO/HMO volume at SUH, are Blue Cross Prudent Buyer Plan, Blue Shield Preferred Plan and Blue Cross' TakeCare Plan.

Blue Cross Prudent Buyer and Blue Shield Preferred are both PPOs open to participation by all members of the medical staff. TakeCare is an HMO, and most patients coming to SUH under this plan come from Palo Alto Medical Clinic.

A PPO open to the entire staff includes Metropolitan Life Insurance Co.'s MetElect Plan. Aetna Life Insurance Co. has a PPO contract with SUH and for physician services with Palo Alto Medical Clinic.

Other HMOs sending patients to the hospital include Maxicare, which is provided through the Stanford University Clinic-sponsored Stanford Medical Group, and Rockridge/Health America Plan through the Midpeninsula Health Service.

Also, Stanford recently concluded PPO-based referral arrangements with Health Pace and AvMed, which are subsidiaries of National Medical Enterprises.

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discount-mg10

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FOR IMMEDIATE RELEASE

MICROBIOLOGIST RECEIVES MOLECULAR PARASITOLOGY AWARD

STANFORD—

Dr. John Boothroyd, assistant professor of medical microbiology at Stanford University School of Medicine, has received one of two Burroughs Wellcome Molecular Parasitology Awards for 1986.

The award provides Boothroyd with $250,000 over a five-year period. Boothroyd's selection "is a signal of honor and conveys the importance of the teaching and training activities of his molecular parasitology program," said the advisory committee of the Burroughs Wellcome Fund.

Boothroyd's work focuses on *Trypanosoma brucei*, single-celled parasites that enter the bloodstream through the bite of the tsetse fly. The organisms have the unusual ability of eluding the protective forces of their host's immune system. Like criminals with a repertoire of "aliases," they repeatedly switch the make-up of their protein coats, assuming a new disguise to stay one step ahead of the host's immune response.

Boothroyd is studying the parasite at the molecular level to learn more about how it evades the body's immune system. The knowledge could have broad implications for understanding infectious disease at the molecular level. Other organisms, including those that cause gonorrhea and acquired immune deficiency syndrome, can also elude the immune defenses.

The work could also lead to an effective vaccine or drug against sleeping sickness, a disease that causes thousands of deaths annually on the African continent.

The second award went to Dr. Jeffrey Ravetch at Memorial Sloan-Kettering Cancer Center.

Boothroyd, 31, has been a member of the Stanford faculty since 1982. He received a special fellowship award from the Burroughs Wellcome Fund in 1984. He completed his undergraduate work at McGill University, Canada, and completed his doctorate work in molecular biology from Edinburgh University, Scotland, in 1979.

The Burroughs Wellcome Fund, located in North Carolina, established the annual awards in 1982 in recognition "of the pioneering contributions of Sir Henry Wellcome to the study of tropical medicine." The awards are intended to "stimulate the advancement of fundamental biochemical knowledge of the major pathogens responsible for devastating the health of man in developing and tropical countries."

5/8/86 —30— booth-sk7

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FOR IMMEDIATE RELEASE

STUDY SHOWS PANIC ATTACKS REAL, NOT IMAGINARY

STANFORD—

Most panic attacks are real and not the result of victims' imaginations, according to a study by researchers at the Department of Psychiatry of the Stanford University School of Medicine.

The study, published in the April 1986 issue of the American Journal of Psychiatry, found that 58 percent of the panic attacks reported by patients were verified by increased heart beats measured on small computers worn by the patients.

Twelve female patients with self-reported panic attacks and a control group of 12 women with no panic history were involved in the study. Similar results have been obtained since that study with a larger group of 50 male and female patients, said Dr. C. Barr Taylor, associate professor of psychiatry who was the principal investigator.

In the initial study, Taylor said, there were 33 panic attacks reported by the patients and in 19 of them heart rates were "disproportionate to the physical activity."

"That may seem like a very tedious way of finding the obvious," Taylor said, "but in fact no one has ever known whether or not you could measure panic attacks. The patients are often told by their physicians that they're making it up, that it's all in their heads."

One fringe benefit of the study, Taylor said, is knowledge that should reassure victims of panic attacks.

Although they are often terrified and have a "sense that they're going to die," he said, "they're physiologically not in any danger. The heart rate rarely goes to a level that is worrisome from a medical standpoint."

All of the patients have been equipped with Vitalog MC-2 computers, worn on belts and programmed to store data on heart beats and on eight levels of physical activity. Patients wear the computers for six days, during which they are asked to record in a diary all panic attacks or anxiety episodes.

In the study, three observers analyzed heart rate activity. The observers had no knowledge of the patients or of the panic attacks reported in their diaries. They were looking for three criteria:

- An increase of at least 30 beats a minute from surrounding 15-minute periods.
- An increased heart rate lasting at least three minutes.
- An increase accompanied by little or no physical activity.

Only when all three observers agreed on an episode of increased heart rate activity and when it occurred at the precise time noted in the patient's diary was it recorded as a definite panic attack.

One of the more significant findings of the study was that the nighttime panic attacks commonly occurred from 1:30 a.m. to 3:30 a.m., at times when hormonal shifts normallly occur in the body. The Stanford researchers are investigating that connection.

Taylor said attacks of panic or anxiety probably affect 5 to 6 percent of the entire U.S. population. "According to some studies, it's the most common psychiatric disorder," he said.

In the past, women have been considered 10 times more likely to be affected than men, but men have made up 32 percent of the total in the Stanford studies. It's possible men may be more willing to come in for studies, Taylor said.

Aside from the fact that more women are affected, "we don't really see any male-female differences," he said. "In terms of treatment outcome or medication side effects or improvement, both do equally well."

"The long-term purpose of all this is really to develop better and safer treatments," he explained. "That's one of the reasons we're so interested in the heart rate data—because the drugs we use do have some effect on the heart rate."

The Stanford research team is seeking volunteers for further study. Individuals with a history of panic or anxiety attacks are asked to telephone (415) 723-7240.

All participants will undergo thorough physical examinations and diagnostic interviews. They must meet specific criteria and can't have certain medical problems.

Researchers, in addition to Taylor, are Dr. Javaid Sheikh, Dr. W. Stewart Agras, Dr. Walton T. Roth, Juergen Margraf, Anke Ehlers, Dr. Richard J. Maddock and Dr. Denis Gossard.

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panic-rg2

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FOR IMMEDIATE RELEASE
(Editors: Members of the news media are welcome to attend the lecture, "Perspectives on Public Health in Chiapas" at noon Wednesday, May 21 in room M-106 of the Stanford Medical School.)

UNIVERSITIES SIGN AGREEMENT WITH MEXICAN STATE

STANFORD—

Herbal treatments still used by descendants of the ancient Mayans and recombinant DNA techniques are part of a research agreement among Stanford, the University of California at Berkeley and a rural Mexican state.

The two Bay Area universities and the public health service of Chiapas, which borders on Guatamala, were scheduled to ratify a formal agreement during the week of May 19 which will provide for collaborative research on a variety of environmental health issues, said Dr. Elois Ann Berlin, assistant professor of Family, Community and Preventive Medicine (FCPM) at Stanford.

"Our overall goal is to develop research projects that are in keeping with the goals of the public health department in Chiapas," said Berlin.

Stanford will be involved with basic research into intestinal bacterial diseases, a major health problem in Chiapas and throughout the Third World, Berlin said. Study into that question is ongoing in the Stanford laboratory of Dr. Stanley Falkow, professor of medical microbiology, and others.

Falkow said his laboratory currently is using the high technology tools available through recombinant DNA to provide accurate and effective diagnosis of bacterial infections through molecular identification.

"We've known what the treatments for various forms of diarrheal infections should be," Falkow said. "The problem has been in each case to pinpoint the specific cause," he added. "We are hoping to develop our techniques so that they can be transferred to the public health laboratory in Chiapas."

In addition to the bacterial and viral causes of diarheal disease, various parasites prevalent in Third World nations also cause many health problems, and parasitologist Dr. Paul Basch, of Stanford, will be investigating that aspect.

At UC Berkeley, Dr. Brent Berlin, a widely recognized ethnobotanist, will be working with colleagues to collect and analyze various herbal remedies used by the Indians in that rural Mexican state in hopes of eventually determining their efficacy.

Elois Berlin said the overall collaboration will attempt to determine how cultural factors influence health and the use of medical services with the ultimate aim in Chiapas of reducing disease. She added that the state is fairly typical of rural Third World areas where infectious diseases are still the leading causes of death.

Basch, of Stanford's Division of Geographic Medicine, said the agreement is expected to be signed during a week-long visit to Stanford and UC Berkeley by three public health officials from Chiapas.

And while they're visiting Northern California, the three doctors, will present a joint lecture-seminar entitled "Perspectives on Public Health in Chiapas" at noon Wednesday, May 21 in room M-106 of the Stanford Medical School. The lecture is open to the public, said Basch, who also serves at Stanford as professor of international health in FCPM.

The three visiting officials are Dr. Julio Cesar Sanchez Farrera, state director of public health; Dr. Victor M. Jara Astorga, state deputy director; and Dr. Francisco Millan Velasco, director of public health of the second sanitary jurisdiction in Chiapas.

The visiting doctors will return a visit made last September by Basch, and both Dr. Berlins.

Elois Berlin said she hoped the agreement would provide for long-term collaboration.

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FOR IMMEDIATE RELEASE

STANFORD HOSPITAL MOVES EMPLOYMENT SECTION

STANFORD—

The Employment/Recruitment Section of the Stanford University Hospital Department of Personnel will move to the main personnel offices in Room E009 in the Hospital basement on Monday, May 12, Employment/Recruitment Manager Renee Wald announced this week.

For the past year and a half, the section has been housed at 750 Welch Road, in a building that includes several other Medical Center offices. It has been situated outside the main hospital for the past six years.

Wald said the move is part of the Personnel Department consolidation resulting from the recent downsizing of the Hospital.

She said several hundred prospective hospital employees visit the Welch Road offices each month.

The office telephone number is 723-6361.

5-6-86 —30— employ-rg2

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

MAN WHO LOST LEG TO CANCER ENCOURAGES KIDS IN CHILDREN'S HOSPITAL AT STANFORD

STANFORD—

Twenty-three-year-old Jeff Keith is living proof that childhood cancer can be overcome.

In 1984 Keith ran 3,350 miles across America, after having lost a leg to bone cancer at the age of 12. He visited Children's Hospital at Stanford May 3 to encourage children there struggling with disease.

Jogging on his leg for eight-and-a-half months hurt a bit, "but you learn to suppress the pain," he said. "I lost 45 pounds and ran through 42 pairs of running shoes. Just running was hard, and that's what made me feel pretty normal," Keith said.

One purpose of his run across the United States was to increase the awareness that people who are "physically challenged" --rather than handicapped-- can participate in sports.

Keith is currently working on an MBA at the University of Southern California, but his dedication to helping others in their personal fight against cancer keeps him traveling once a week to hospitals and fund-raising events. His trip to the Bay Area was sponsored by the Golden State Moving Co. and the American Cancer Society of Santa Clara County.

Keith's experience with cancer at an early age makes it easier for him to talk to children with cancer, he said. Doctors were first alerted to his cancer after a knee X-ray, taken for an ice hockey injury, revealed a shadow in the bone just below his knee. A short time later his leg was amputated six inches above the knee to prevent the cancer from spreading.

Amputation is a common treatment for osteogenic sarcoma, Keith's type of bone cancer, which is usually found in the pre-teen or teenage years --"just when you are feeling sort of indestructible and planning great things for yourself"-- said Dr. Michael Amylon, assistant professor of pediatrics.

Keith's parents pushed him into going skiing just six weeks after his operation, Keith wearing a wig because he had lost all his hair. "I fell down for three days straight," wig and hat flying in different directions, Keith recalled. Still, skiing eventually became "everything I looked forward to," he said.

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For children, "normal activities are important in sustaining that drive and will to live," Amylon said. Also, having a role model can have a tremendously positive impact on a child, he emphasized. "It is helpful to the parents as well," he noted.

At Children's Hospital, several of the children's balding heads were evidence of their difficult battle: loss of hair is only one of many side effects of cancer treatments. Both the treatments and diagnostic techniques for cancer are very unpleasant to undergo, Amylon said. "But the worst thing is the psychological impact on the child and the family," he pointed out.

In children, initial treatments are very aggressive because the intent is almost always curative, Amylon said. With adults "oftentimes the approach is to keep someone comfortable for as long as possible, but that is almost never our approach with pediatrics," he said.

About 15 years ago all types of cancer were considered incurable, Amylon said. Now, however, some cancers such as leukemia have cure rates of up to 95 percent. Treatments for cancer usually last from one to three years with a five- to eight-year risk of re-occurrence, Amylon said.

Children's development can't be put on hold for two or three years, Amylon said. "Children need to continue to grow, develop, interact with people, and socialize. So we try hard to get them back into the normal stream of things as much as we can and as soon as we can," he said.

Children's Hospital at Stanford is oriented to meet the special needs of children and their families needing long-term contact with a hospital. Some special programs include a summer camp and skiing program.

Generally, children "naturally" tolerate the process of treatment, better than adults, both physically and emotionally, Amylon said. "They see it sort of as part of life; this is what life has dealt them, they don't have any other choice."

Because of past experiences, "I don't go near hospitals" except to visit patients, Keith said. But, noting the amicable atmosphere of Children's Hospital, he said, "I wish I had had something like this when I was ill."

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Keith MC1a

STANFORD UNIVERSITY MEDICAL CENTER
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ADVANCE FOR RELEASE TUESDAY MAY 6, 1986

HOMOSEXUALITY AFFECTS CURE RATES AMONG HODGKIN'S DISEASE PATIENTS

STANFORD—

Homosexuality may play a complicating role in patients being treated for Hodgkin's disease, a highly curable cancer of the lymph nodes, a Stanford study has shown.

Of 19 gay men treated for Hodgkin's disease, nearly half contracted diseases related to Acquired Immune Deficiency Syndrome (AIDS), the researchers found.

What's more, those men who contracted AIDS-related diseases died within six months of the diagnoses, said Dr. Sonja Schoeppel, who led the study.

These results differ drastically from those of nonhomosexual patients treated for Hodgkin's disease. Only three percent of the patients—all of whom have repeatedly undergone therapy and therefore are most susceptible—contract AIDS-related diseases. As many as 80-90 percent of the patients treated are cured.

Schoeppel, a senior resident in the division of radiation therapy, will present the results of the study, "Hodgkin's Disease in Homosexual Men: the San Francisco Bay Area Experience," at the American Society of Clinical Oncology meeting in Los Angeles on May 6.

"Homosexual men with Hodgkin's disease are at much higher risk of getting AIDS-related diseases than other Hodgkin's patients," Schoeppel said.

The researchers do not know the precise link between the two conditions, she explained. Hodgkin's disease and AIDS-related diseases, Kaposi's Sarcoma and opportunistic infections, have similar symptoms including enlarged lymph nodes, weight loss, fever, fatigue and night sweats. Treatment for Hodgkin's disease, which includes radiation and chemotherapy, suppresses the body's protective immune system. If the immune systems in patients at high risk for AIDS are already compromised, the combined effects may allow the AIDS-related diseases to invade the body.

"We're looking for ways to predict whether a patient is likely to get AIDS-related diseases," Schoeppel said. "We could then alter Hodgkin's treatment to be as effective without suppressing the immune system as much."

In the meantime, homosexual patients diagnosed with Hodgkin's disease are treated according to established protocol. "After all, more than 50 percent will not get AIDS-related diseases," she said. "But if someone is a homosexual and also has Hodgkin's disease, the likelihood of getting AIDS-related diseases is greater."

The study included 19 homosexual men with Hodgkin's disease, diagnosed after the AIDS epidemic began in 1979 and treated at hospitals throughout the Bay Area. The mean age of the men was 37; they ranged from 24-57 years old.

Fourteen of the patients were diagnosed with the more advanced stage III or stage IV Hodgkin's disease. Of the 19, 13 underwent chemotherapy, four underwent radiation therapy and two received a combination of the two treatments. Eight of the patients developed the AIDS-related diseases.

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END ADVANCE FOR RELEASE TUESDAY, MAY 6, 1986.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Ron Goben (415) 725-5371
FOR IMMEDIATE RELEASE

STANFORD TESTS SHOW MINIMAL RADIOACTIVE CONTAMINATION OF CALIFORNIA WOMEN JUST RETURNED FROM VISIT TO KIEV AREA

STANFORD—

Two California women who were visiting Kiev, Ukrainian Soviet Socialist Republic, when the Chernobyl nuclear reactor accident occurred 70 miles away showed minimal amounts of radioactive contamination in tests at Stanford University Friday.

The test results, said Dr. Roland Finston, director of health physics and lecturer in radiology, indicate that the residents of Kiev are in little immediate danger from radioactivity — and make it clear that Americans should not be concerned about effects of the accident.

The two women are Jan Wilson, 38, of Oakland, and Canda Kinney, 37, of Redding. They joined Finston at a news conference after their examinations and said no one in Kiev seemed to be aware of the nuclear accident, which apparently occurred Saturday, April 26. They stayed in Kiev over the weekend but knew nothing of the accident until they received a telephone call from the United States on Tuesday, after they had reached Leningrad.

At the news conference, Finston described the tests performed on the women and said they had a small amount of iodine 131 in their thyroid glands, equivalent to about three millirads of radiation.

That is about the same amount of radiation that the average Bay Area resident would absorb from natural sources in two weeks, he said, and is such a "very small additional dose to their thyroid glands" that it represents virtually no health hazard.

However, he said, that amount of iodine in the systems of visitors to Kiev is enough to leave no doubt that there was a nuclear accident. "I think it's quite clear that this is of Russian origin," he said.

Near the end of the news conference, Finston and the women were joined by a third woman, Lucille Rose of San Jose. She too had just left Kiev and had come to Stanford to be tested by Finston. She was tested after the news conference and showed even lower traces of iodine 131 than Wilson and Kinney.

Finston explained that iodine 131 is "one of the prominent radioactive fission products that might escape from a reactor in an accident" and is easy to detect because it concentrates in the thyroid gland.

He used a sodium iodide crystal detector in the form of a tube about a foot long and four inches in diameter to focus on the thyroid glands of the women. It picked up the traces of iodine 131 in about two and a half minutes. Wilson then had a full body scan with a larger crystal detector that showed no radioactivity other than the iodine.

Asked what the tests on Wilson and Kinney indicated for the 2.5 million residents of Kiev, Finston said:

"If the average citizen of Kiev is represented by our sample here of the two visitors and if the release of radioactivity after they left the area was not strikingly different from what happened on Saturday and Sunday, I would say the citizens of Kiev are not at any risk either."

He added, "I think it is worth mentioning that based on this experience of two individuals 70 miles from the reactor coming back with as little iodine in their thyroids that it is quite clear that those of us in the United States need not be concerned for radioactive iodine or any other fission products from this accident."

However, he warned that there is a danger from people taking iodine supplements to ward off any possible threat. There have been reports of people in this country taking iodine for that purpose since the Chernobyl accident.

Wilson and Kinney both said they felt little concern about the effects of radiation, but decided to be checked at Stanford just to be sure.

In Kiev last weekend, they said, people were thronging the streets for bicycle races and there was no indication of any trouble.

As they were leaving Kiev and heading for the airport, however, Wilson said, "we saw a stream of black smoke off in the distance. It looked like it could have been a refinery fire. . . . We forgot about it until we were coming home in the airplane."

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ADVANCE FOR RELEASE MONDAY, MAY 5, 1986

NEW DRUG COMBINATION FOR HODGKIN'S DISEASE MINIMIZES SIDE EFFECTS

STANFORD—

Stanford University cancer researchers have developed a new drug combination to help treat patients with Hodgkin's disease, a cancer of the lymphatic system.

The new drug regimen has fewer side effects than conventional chemotherapy—but is just as effective—when used following radiotherapy in patients with early stages of Hodgkin's disease, said Dr. Sandra Horning, assistant professor of medicine at Stanford University School of Medicine.

One of the new regimen's major benefits is that it appears to have almost no harmful effect on fertility, Horning reported Monday, May 5 at an American Society of Clinical Oncology meeting in Los Angeles.

In contrast, the most commonly used anti-Hodgkin's disease drugs cause sterility in approximately 90 percent of males and 50 percent of female patients, she said.

Hodgkin's disease, which tends to strike people who are in their 20s or 30s, is estimated to affect about 7,000 new patients each year. It is one of the most treatable cancers, with a cure rate of more than 70 percent.

It may be treated with radiation therapy alone, drugs alone, or with a combination of radiation and drugs. The most widely used drug combination is known as "MOPP," which stands for nitrogen mustard, vincristine (Oncovin), prednisone and procarbazine.

The new drug combination is called "VBM," short for vinblastine, bleomycin and methotrexate, Horning said.

Horning presented results from a Stanford study of 50 patients with early stages of Hodgkin's disease. Horning's colleagues on the study are Drs. Richard Hoppe, associate professor of radiology, and Saul Rosenberg, professor of medicine and radiology, and head of the division of oncology.

Half of the patients in the study received radiation therapy alone and half received radiation plus the VBM drug combination.

In the VBM group, 93 percent of the patients have remained disease-free compared with 78 percent of the radiotherapy group at 28 months, Horning reported, and no deaths have occurred. This compares favorably with results using radiation and MOPP, she added.

Seven of eight men tested showed no impairment of fertility, Horning reported. Ten of 10 menstruating women continued to have normal menstrual periods. There were three pregnancies in two different women who were given the new drug treatment, Horning added.

The new drug regimen's major side effect is muscle aching. Conventional Hodgkin's disease therapy causes nausea, vomiting, numbness and tingling related to drug therapy and additional side effects due to radiation therapy. In addition to infertility, increased risk of acute leukemia is a side effect of MOPP. But leukemia is not likely to develop after the VBM combination, Horning said.

Therefore, researchers would like to be able to reduce the use of MOPP and to reduce the total amount of radiation patients must receive, Horning said.

The results with VBM are "encouraging," she said.

END ADVANCE FOR RELEASE MONDAY, MAY 5, 1986

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STANFORD / KAISER-SAN FRANCISCO MEDICAL CENTERS TO PARTICIPATE IN $100 MILLION AIDS DRUG RESEARCH EFFORT

STANFORD—

Stanford University School of Medicine is one of 14 medical institutions selected for a nationwide research program to find a drug treatment for AIDS (acquired immune deficiency syndrome), federal officials announced Monday, June 30 in Washington, D.C..

The $100 million five-year study, funded by the National Institute of Allergy and Infectious Disease (NIAID), could enroll as many as 1,000 patients in the next six months, said NIAID director Dr. Anthony Fauci at a Washington press conference.

Approximately 50 patients are expected to be involved in the $8.1 million Stanford segment of the study during the first year, researchers said.

Those patients are expected to be treated in an experimental ward at Stanford University Hospital, at an AIDS Clinic to be established at the Stanford University Clinic, and with the cooperation of Kaiser-Permanente Medical Center in San Francisco, said Dr. Thomas Merigan, Becker professor of medicine and principal project investigator at Stanford.

The researchers hope to test one to two promising experimental drugs against AIDS each year of the study, said Merigan, head of Stanford's division of infectious diseases and an expert on viral diseases who pioneered early studies of interferon as an antiviral agent.

Although the primary goal is to identify an effective therapeutic strategy against AIDS, other objectives of the Stanford study are to learn more about the basic biology of the AIDS virus and its effects on the immune system.

"I am very enthusiastic about this effort," Merigan said. "These five years are going to be a critical time in which science can help bring this disease under control."

However, he cautioned that this is just a beginning—there is no drug yet proven effective against AIDS.

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In a prepared statement distributed prior to the press conference, Fauci said: "Everyone in the scientific community who works in AIDS research shares the sense of urgency that is felt throughout the country, and now the world, as we face a rapidly growing public health problem, and as we see the toll AIDS is taking in the lives of men, women and children. We believe that this new effort should greatly enhance our research capabilities and bring us closer to the answers we seek."

AIDS is a deadly disease which destroys the immune system, leaving patients vulnerable to a multitude of bacterial, fungal and viral infections, and susceptible to certain kinds of cancers.

As many as 22,000 Americans have been diagnosed with the illness and government estimates are that the number will rise to 26,000 by the end of the year. One million or more people may have been exposed to the virus believed to cause the disease.

There is as yet no treatment for AIDS, which will have killed 18,000 patients by the end of this year, according to federal estimates.

The disease is spread through intimate sexual contact with an infected person, and by transfusion with contaminated blood or use of contaminated hypodermic needles. Most researchers believe the disease will only be controlled through a combination of prevention and treatment methods, Merigan said. Researchers around the world have been working feverishly to develop a vaccine to prevent the disease and drugs to control it.

The new AIDS Treatment Evaluation Units will concentrate on testing drugs that, in laboratory studies or in preliminary clinical trials, have shown potential to inhibit growth of the AIDS virus or have shown promise in bolstering the weakened immune system.

The drugs most likely to be tested in the first year of the study are ribavirin, azidothymidine, interferon alpha, foscarnet, HPA-23, and possibly dideoxycytidine, officials at the NIAID said.

Many of these drugs, such as HPA-23, act by inhibiting a crucial enzyme—reverse transcriptase—that the AIDS virus uses to reproduce itself, Merigan said. Others, such as interferon, may stimulate the immune system.

Nine of the AIDS Treatment Evaluation Units will also be testing drugs to control the opportunistic infections and cancers that develop in AIDS patients, according to the NIAID. Stanford will not be participating in that segment of the program, Merigan said.

The overall research program, he added, is designed to be flexible, so that if promising new agents are identified they can be brought into the testing phase as quickly as possible.

The initial studies will determine safe dosages and side effects, while later studies will assess long-term effects in controlled therapeutic studies of patients with AIDS as well as those with ARC (AIDS-related complex), a less severe condition caused by the same virus.

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Merigan said that the tests will be conducted in both inpatients and outpatients by physicians and nurses who are experienced in treating AIDS.

Another Stanford faculty member who will be involved in the study is Dr. William Robinson, a professor of medicine and research scientist who has made major contributions to the understanding of hepatitis-B and AIDS-like viruses, Merigan said.

Other Stanford investigators include Dr. Terrence Blaschke, associate professor of medicine and head of the division of clinical pharmacology, Dr. Dennis McShane, clinical assistant professor of medicine, and Dr. William Lipil, clinical instructor of medicine.

Kaiser physicians who are collaborating include Dr. George Matula, consultant in infectious disease at Kaiser-San Francisco and chairman of the Northern California Permanente Medical Group's Regional Infectious Disease Committee, and Dr. Fred Hartley, assistant chief of medicine at Kaiser-San Francisco.

Scientists from the 14 research groups around the country will meet regularly and will be able to share research findings through computer links. "By tying together clinical research groups with a commitment to exchange information, it should be a strong step forward in trying to understand this illness," Matula said.

He pointed out that the number of patients involved will be limited at first but that as information is acquired, a broader base of patients may be studied. In order to get the information that is needed, patients must be carefully selected for such trials, he said. "Not all patients are good candidates for any given drug."

Kaiser-San Francisco, which treats the majority of AIDS patients seen in the northern California Kaiser system, has considerable experience in treating AIDS patients both on an inpatient and outpatient basis.

At Stanford Hospital, study patients will be treated in the Clinical Research Center, "a ward experienced in giving experimental therapy, with its own nursing personnel and separate physical setup," Merigan said.

Other institutions selected for AIDS Treatment Evaluation Units are San Francisco General Hospital, University of Southern California, University of California at Los Angeles, University of California at San Diego, University of Washington, University of Texas in Houston, University of Miami School of Medicine, Johns Hopkins Hospital in Baltimore, University of Pittsburgh, New York University, Memorial Hospital for Cancer and Allied Disease in New York, University of Rochester Medical Center, and Massachusetts General Hospital in Boston.

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STANFORD MEDICAL STUDENTS RETURN TO ROOTS FOR TRAINING

STANFORD—

For the first time in nearly 30 years, Stanford medical students will have the opportunity to return to the medical school's roots for certain elective clerkships, an essential part of medical training.

"We're reopening a chapter of our history," said Dr. Robert Cutler, dean of faculty affairs and medical education at the Stanford University School of Medicine.

The clerkships will be offered at Pacific Medical Center (PMC) located on Clay and Webster Streets in San Francisco. Stanford Medical School was based there until 1959 when the university decided to move it to the Palo Alto campus.

The move at the time had generated bitterness among the alumni and resignations of faculty who refused to give up their practices in San Francisco and move to the Farm. Many of them currently are members of the PMC medical staff.

It was on Clay and Webster streets that most of the present medical alumni had been trained in the rudiments of their profession for more than half a century. The red brick building that housed the old Stanford medical school is now a parking lot in the shadow of a new PMC hospital and medical sciences building.

Medical students participate in clerkships during the last two years in medical school. They are carefully supervised by attending physicians who are constantly available to guide them. The four-week stints, both required and elective, allow students to take primary responsibility for the medical care of sick people, Cutler said.

At PMC electives will be available in the areas of transplantation medicine, intensive care, pulmonary medicine, occupational medicine and ophthalmology. One or two medical students at a time will be accepted in each of the five areas, Cutler said.

"They have traditionally had a very strong teaching program," Cutler said of PMC. "The clerkships there will supplement those available at Stanford, and they will provide students with a different view of medicine than they see here."

Stanford has also teaching affiliations with the Palo Alto Veterans Medical Center, the Santa Clara Valley Medical Center, the Kaiser-Permanente Hospital in Santa Clara and the Children's Hospital at Stanford.

6-27-86 —30— sk6-pmc

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NEW CHILDREN'S HOSPITAL BONE MARROW PROGRAM MEANS NEW HOPE FOR SAN JOSE BOY

PALO ALTO—

Four-year-old leukemia patient Darren Cachola of San Jose was released from Children's Hospital at Stanford June 25 with healthy new bone marrow.

Darren's successful bone marrow transplant is the first to be performed on a child at Stanford University Medical Center, which recently expanded its organ transplantation programs. The new pediatric transplant program is directed by the Division of Hematoloty/Oncology at Children's Hospital and the Pediatrics Department of Stanford University School of Medicine.

Darren's operation, performed on June 4, is his only hope of beating a rare childhood cancer called chronic myelogenous leukemia, said Dr. Michael Amylon, staff hematologist-oncologist at Children's Hospital and assistant professor of pediatrics at Stanford, who directed the transplant.

"So far everything has gone very smoothly," Amylon said.

Darren is the son of Magno and Grace Cachola of San Jose. His 10-year-old sister, Michelle, donated transplanted bone marrow, Amylon said.

Bone marrow transplantation is "the treatment of choice" for children with a variety of blood disorders besides chronic myelogenous leukemia, including aplastic anemia, immune deficiency states, and acute leukemia, said Dr. Bertil Glader, Stanford associate professor of pediatrics and chief of hematology-oncology at Children's Hospital.

The largest number of children who benefit from the procedure are those with acute lymphoblastic leukemia — the most common form of childhood cancer, Amylon said. In the United States, up to 2,000 children are diagnosed with this leukemia each year, he said.

Although about 60 percent of these children respond to standard cancer treatments, such as chemotherapy, bone marrow transplants are "the only alternative" for many of the remaining 40 percent, Amylon explained.

However, suitable donors are available for only 35 to 40 percent of these children because tissue types between the donor and host must be nearly identical. A close tissue match reduces the possibility of graft versus host disease, which occurs when donated immune cells attack host cells.

The donor is usually a brother or sister. "For every child there is a one-in-four chance that any one sibling will have the same tissue type," Amylon said.

It is extremely rare that the tissues of an unrelated person will match. But national tissue typing networks are being set up to help match unrelated people, Amylon said.

Normally, "stem" cells in the bone marrow generate blood cells, which in turn transfer oxygen from the l[illegible]s to tissues, fight against disease, and prevent bleeding. Stem cells also renew themselves to ensure an ongoing source of new blood.

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The first step in bone marrow transplantation is destruction of the body's own bone marrow — and immune system — by means of total body irradiation and chemotherapy. Then defective stem cells are replaced with healthy donated stem cells, Glader said.

When the patient's own stem cells are wiped out, there is danger of infections, bleeding, and anemia, Glader said. But the replacement procedure allows the donated cells to "engraft" or take up residence in the patient's bone marrow. In leukemic patients, it also helps eliminate cancer cells so that the disease does not return, Glader explained.

Stem cells are harvested from the donor under general anesthesia with a needle and a syringe. Bone marrow is removed from the back of the donor's hip bone and bone fragments are filtered out, Glader said.

Then, "like a blood transfusion," the marrow is put into the patient's circulatory system through a vein. The stem cells "home in" to the central cavities of bones. There, they adhere, reproduce, and produce blood, Glader explained. How they actually "know" to do this is a mystery, he said.

To shield bone marrow recipients from infection, Children's Hospital built a special suite of pressurized rooms with air filters to remove airborne dust and germs. This $200,000 facility, along with special staff training and other expenses, was funded by a $130,000 challenge grant from the Irvine Foundation and matching gifts from other donors.

Immunologic tests, radiation treatments, and bone marrow collection are performed at Stanford University Hospital.

Success rates for bone marrow transplants varies from 10 to 90 percent depending on the patient's previous exposure to toxic materials, the disease being treated for, and the similarity of tissue types being transferred, Amylon said.

Although adults can also benefit from bone marrow transplants, many cannot tolerate the toxic levels of radiation and chemotherapy needed for a successful bone marrow transplant, Amylon said.

"Kids are basically healthier; they tolerate treatment much better," he said.

Possible complications of bone marrow transplants include infections due to suppressed immune systems, cancer relapse due to an inability to kill all the old leukemia prior to transplantation, and graft versus host disease due to minute differences in individual tissue types, Amylon said.

Another rare but deadly complication is failure to engraft. But with modern conditioning therapy, such a failure is extremely unlikely if the donor and the recipient are well matched.

Until now, Children's Hospital at Stanford has referred about eight patients each year to other institutions "hundreds or thousands of miles away from their families, friends, and support structures," Amylon said. This can be a "financial, emotional, and psychological burden for the families at a time that is very difficult in any case," he said.

Although the program is currently aimed at providing a clinical service, in the future Amylon expects it to include research that will, for example, expand the use of bone marrow transplantation to patients with "less than perfectly matched donors" and to patients with inherited diseases such as sickle cell anemia, thalassemia, and inborn errors of metabolism.

Amylon also suggested that future research may one day enable doctors to replace the defective or missing genes in stem cells, rather than replacing whole stem cells.

According to Dr. Irving Schulman, chief of the Department of Pediatrics at Stanford University Medical Center and chief of staff at Children's Hospital, the new children's bone marrow transplant program will be a component of a major bone marrow transplant effort at Stanford.

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FOR IMMEDIATE RELEASE

SUMC OFFICE OF COMMUNICATIONS RECEIVES TOP HONORS

STANFORD—

Stanford University Medical Center's Office of Communications has received top honors for its news writing program and magazine, *Stanford Medicine*, from the Council for Advancement and Support of Education (CASE).

The office received a "gold medal" for excellence in news writing, which includes news releases that go to local and national media and articles that appear in the medical center's section of the university's weekly newspaper, *Campus Report*.

For the second time in three years, *Stanford Medicine*, published by the office three times each year, was named to the "top ten" list of university magazines nationwide. An article that appeared in the Fall 1985 issue of the magazine, "Life After Cancer," by managing editor Shirley Kraus, received a "gold medal" for best articles of the year.

The magazine was also named the "best of the west" magazine by the Association of Western Hospitals, and was awarded a silver medal from the Society of Publication Designers earlier this year.

The office is directed by Spyros Andreopoulos. Staff writers include Kraus, Ron Goben, associate director; Laura Hofstadter, science editor, Mike Goodkind, *Medical Center Report* editor and Jane Reimold, publications editor. Support staff includes Lyn Tadena, Mary-Nelson Campbell and Becky Berntson. Palo Alto graphic designer Mike Shenon provides the art direction for the magazine and Janet McNeill, director of publications at Stanford University, directs the production.

6-26-86 —30— case-sk6

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FOR IMMEDIATE RELEASE

SCREENING FOR HYPERTENSION DOESN'T INCREASE ABSENTEEISM, STUDY FINDS

STANFORD—

On-the-job screening for high blood pressure does not generally cause increased absenteeism and psychosocial problems among those employees determined to be hypertensive, according to a study by researchers at the Stanford University School of Medicine.

The results of the study contradict earlier research that indicated such screening could produce major increases in illness-related absenteeism, and therefore have "critical implications" for the public health philosophy of preventive care, said Dr. Peter Rudd, associate professor of medicine.

Rudd was the principal investigator on the Stanford study, which was reported in the May 1986 issue of the *American Journal of Medicine*.

Identifying hypertension, or high blood pressure, is particularly important from a public health viewpoint, Rudd said, because it is a disease that can result in serious medical problems but has few symptoms.

However, earlier investigations had caused concern about the tradeoffs of such screening at the work site. In particular, a study of male steelworkers found that those newly labeled as hypertensive often developed some psychosocial dysfunction and had a higher degree of absenteeism.

The Stanford researchers focused directly on the issue of absenteeism and psychosocial dysfunction. They studied a heterogenous group of 5,888 workers from 11 Silicon Valley work sites and in screening found 296 with sustained hypertension—those who had blood pressure of at least 140/90 on three out of three determinations over three weeks.

Unlike the steelworkers, however, the employees in the Stanford study who were identified as hypertensive showed no significant increase in absenteeism or psychosocial problems when their records were compared to those of control subjects who were not hypertensive.

(Each hypertensive person in the study was matched with up to three control subjects on the basis of job type, work site, sex, age, race, educational level, household income and marital status.)

Rudd said one key to the Stanford study was "standardized labeling" of the individuals identified as hypertensive. "We always did it in a consistent way," he said, "since how the message is given may be as important as the message itself."

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However, there were two different ways of delivering the message. One he described as "a traditional, perhaps arousal or fear-type message in which we said effectively that 'You have high blood pressure, it may be a silent killer, you shouldn't ignore it.'

"In contrast, we had a reassurance message in which we said, 'Well, after all, blood pressure is a biological variable with a lot of difference from moment to moment in response to stress and we urge you not to overinterpret a single elevation today.' "

People who got the reassurance message, Rudd said, had significantly lower levels of sustained anxiety than those who received the traditional medical warning. They also exhibited a lower prevalence of hypertension, but the difference was of marginal statistical significance.

What was significant, he said, was the fact that participation in the study was voluntary after company-wide publicity. That resulted in a relatively low participation rate of 48 percent compared to near 100 percent for similar mandatory studies, such as that of the steelworkers.

"At one level, this (participation rate) was disappointing," Rudd said, but it may explain the difference in absenteeism changes between the Stanford study and earlier research.

"There may be reluctant participants who avoid voluntary screening but are captured by mandatory company-wide programs achieving almost 100 percent participation," he said. "Such individuals avoid the medical care system by and large."

When such individuals are forced to participate in screening and receive "unpleasant messages" about having high blood pressure, he said, "their self-image may be affected by attribution and they may take up 'sick-role' behaviors," which could translate into increased absenteeism or other psychosocial problems.

Rudd called that reasoning about reluctant participants "a provocative hypothesis," but emphasized "it is a hypothesis rather than a proven fact. From a public policy perspective, we must apparently choose between screening everyone and then dealing with some adverse reactions or screening only volunteers who minimize adverse reactions by self-selection, but then ignoring the reluctant participants with unsuspected hypertension.

"Our study offers reassurance that screening self-selected volunteers for hypertension avoids important adverse reactions which we measured. It remains an unresolved question about how optimally to approach, screen and label reluctant participants. For now, the best recommendations include explicit reassurance messages from the initial screening and close linkage with follow-up care."

Rudd's associates in the study were M. Gail Price, Lewis E. Graham, Barbara A. Beilstein, Sylvia J. H. Tarbell, Peter Bacchetti and Dr. Stephen P. Fortmann.

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NEW STUDENT DESIGN FOR BODY-POWERED ARM WINS FIRST PLACE

STANFORD—

An artificial arm powered by the body's own muscles has won three Stanford students a top place in an international engineering competition.

The mechanical limb, powered by a tricep muscle instead of an opposing shoulder, also promises to give below-elbow amputees a better alternative in body-powered prosthetics.

The arm's development began with a challenge posed by Maurice LeBlanc, research director of Children's Hospital at Stanford's Rehabilitation Engineering Center.

LeBlanc explained that the awkwardness of standard shoulder harness models deters most amputees from wearing any prosthesis. "Little research has been done in this area since World War II," he said.

This challenge piqued the interest of mechanical engineering students Scott Delp, Georgene Nielsen, and Robert Wood. With a grant from Children's Hospital at Stanford's Raffin fund, they designed, built, and tested the artificial limb they now call the "tricep power capture prosthesis."

Its simple, unconventional design eliminates the need for a shoulder harness and cables that can catch on clothing, Delp said. Contraction of the upper arm's tricep muscle simultaneously extends the forearm and opens the hand. A "nudge button" on the inner elbow allows the opening and closing of the hand or hook to be coupled or uncoupled with the extension of the forearm, Delp explained.

The main attractive feature of the prosthesis is that it is entirely contained on the amputated limb, Delp said.

As part of the project, Doug Franz, a below-elbow amputee and engineer with Hewlett-Packard, tested the new prosthesis. Although the initial prototype needs additional modification, Franz said, "it holds great promise as an alternative" to the shoulder harness.

The Rehabilitation Engineering Society of North America (RESNA) selected the tricep power capture prosthesis as one of five top place winners in their student competition.

The Stanford student design team will present their project at the ninth annual RESNA conference June 23-27 in Minneapolis, Minn. They hope to enlist others in the field to continue developing their idea into a practical device for below-elbow amputees.

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FOR IMMEDIATE RELEASE

NEW BOOK HIGHLIGHTS CONFLICTS IN INTENSIVE CARE NURSERIES

STANFORD—

When doctors make medical decisions, they are never completely sure they are right. They can only act in light of their knowledge, experience and intuition. But in all medical practice, it is assumed that if they ignore statistical probability without sufficient cause, they are acting against their patient's best interests.

Nowhere do these issues come into conflict more dramatically than in the intensive care nursery where modern technology tries to prolong life that has not yet begun, and often forces some to live when they are trying to die, according to a new book, *A Time to Be Born, A Time to Die* by Rasa Gustaitis and Ernle W.D. Young (Addison-Wesley, 272 pp. $18.95).

Gustaitis is a journalist and Young is a senior lecturer in medical ethics in the Stanford University School of Medicine and chaplain at Stanford University Hospital.

The well-publicized recent infant heart transplants, the case of Baby Jane Doe, who was brain-damaged but kept alive on orders of a court, and Baby Fae, who was given a a baboon's heart but died anyway, punctuate this complicated issue.

In one report a premature, 750-gram baby named Matthew was kept alive by heroic measures for nine months. The infant, his doctors determined, was a borderline case worth an attempt to save. It had been done before with babies smaller than Matthew who had been saved and went home perfectly normal and healthy.

In the hospital, Matthew contracted all the familiar intensive care nursery ailments—respiratory distress, pneumonia, viral and bacterial infections. While some preemies in neighboring incubators would die after months of lingering, Matthew outlasted them becoming "a kind of tiny hero, someone who refuses to give up," according to the authors.

"Babies like Matthew," Gustaitis and Young write, "are very hard to care for because their progress is slow and they have so many problems."

Some of the problems are iatrogenic, that is, caused by the treatments themselves. The breathing machines required to keep Matthew alive had damaged his lungs so that they could no longer perform their essential function. Matthew vomited intermittently, and had hernias and gastrointestinal obstructions.

Eventually, Matthew died of a galaxy of complications and the authors ask, "Was the expenditure of more than $530,000 on his care or the mental anguish suffered by his parents justified?"

"Such questions are important to consider, but they are not for those in the nursery to resolve," Gustaitis and Young reply. "In the intensive care nursery, the choices exist within the parameters of the resources made available. Reflections on the broader picture seem abstract, whereas Matthew (and his parents) are real."

But the problems in these tragic situations extend beyond the hospital. What happens, for example, to infants who are "salvaged" in the intensive care nursery only to grow up as disabled and permanent dependents?

"There is a notable imbalance between the resources invested in the initial rescue and the follow-through, just as there is a growing imbalance between rescue and prevention of prematurity," say the authors. "Services for the disabled have been cut nationally, even as the need for them has risen.

"We cannot demand aggressive life-saving treatment for borderline babies without also demanding that these children receive the support they require to live as well as possible."

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The authors do not blame only physicians for using high technology beyond the point likely to be helpful, but society in general, which seems to have adopted "an absolute and inflexible sanctity of life point of view."

The recent Baby Doe regulations promulgated by the Reagan administration but struck down by the U.S. Supreme Court would not help, the authors argue.

The rules which would have required that infants be treated aggressively, no matter how great their disabilities, Gustaitis and Young predict, would make the intensive care nursery "a torture chamber" and would deprive infants unequipped to live of their natural right to die."

In delineating the problems through a series of case histories, Gustaitis and Young emphasize that about $2 billion a year is being spent on newborn intensive care nurseries for some 200,000 babies, or 6 percent of those born in the United States. But in spite of a drop in infant mortality to about 10.9 deaths per thousand in the 1970s, the United States had slipped from seventh place in 1954 to seventeenth by 1982.

Neonatal intensive care units have contributed little to lowering the incidence of low birth weight, they point out. Low-birth weights are common in poor, predominantly black urban areas where almost 30 percent of all births are reported as premature.

"Though there are ethnic and racial variations in prematurity rates—Asians and American Indians have low rates, blacks have higher ones than Hispanics and whites—the clearest links are with low educational status, poverty, and lack of prenatal care," report Gustaitis and Young.

In other countries reductions in infant mortality were the result of maternal health and prevention programs, they write. Moreover, in Great Britain and Sweden, where medical services are free and paid for by the government, decisions on whether low-birth weight infants should be treated aggressively are made on medical grounds alone and infants born weighing less than 750 grams are not routinely treated aggressively.

Modern science has erased the sharp dividing lines that have separated a fetus from a baby or life from death, the authors note. Organs can be sustained now long after consciousness appears to have vanished.

"The definition of human life is up for review," Gustaitis and Young conclude.

"This does not mean that less attention should be given to the protection of the rights of the newborn. It means these rights must be considered in their special relationship to the rights of others and in the context in which they are to be exercised."

The authors don't think this will be easy as long as society fails to accept death as part of life and admires and rewards technological innovation. But they also see a ray of hope.

As consumers a growing number of citizens have begun to assume personal responsibility for the nature of their investments (including health care costs), according to Gustaitis and Young.

"Americans have discovered that (most of the time) they do not really want to think doctors are God."

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Young--SA10

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FOR IMMEDIATE RELEASE

DRUG THERAPY IMPROVES RELAPSE-FREE SURVIVAL TIME IN PATIENTS WITH A RARE CHILDHOOD BONE CANCER

STANFORD—

Anti-cancer drugs significantly improve disease-free survival rates in patients with osteosarcoma, a serious bone cancer once considered nearly incurable, concludes a new international study.

The study, published in the June 19 issue of *The New England Journal of Medicine*, contradicts previous reports suggesting that drugs are of no benefit to patients with this disease, said Dr. Michael Link, the study chairman.

"We have concluded that chemotherapy is of definite benefit in this kind of cancer," said Link, who is an associate professor in the department of pediatrics at Stanford University School of Medicine, and a hematologist/oncologist on staff at Children's Hospital at Stanford.

Osteosarcoma is a fairly rare tumor that strikes approximately 600 individuals each year in the U.S., mostly children and adolescents, Link explained.

In the majority of cases, a bone around the knee or shoulder becomes cancerous, and without treatment the disease is uniformly fatal, Link said. Primary treatment requires surgical removal of the affected portion of bone or amputation of the diseased limb, Link explained.

But in most cases, the cancer recurs because the tumor has spread to other parts of the body before the disease is diagnosed, he said.

The two-year study of 113 patients examined whether drug treatment, in addition to surgery, helps prevent relapse. One group of patients was treated only with surgery, while another group received chemotherapy beginning immediately following surgery.

Two years later, just 17 percent of the surgery-only patients had survived without a relapse in contrast to 66 percent of the surgery-plus-chemotherapy patients.

The study results should help end uncertainty about the value of drugs in osteosarcoma therapy, Link said. "We recommend that chemotherapy be given to all patients with this disease," he added.

However, Link noted that the drugs—cyclophosphamide, bleomycin, dactinomycin, high-dose methotrexate, doxorubicin, and cisplatin—all have serious side effects, requiring most patients to spend considerable time in the hospital during chemotherapy.

Lowered blood count, liver damage, nausea and vomiting were frequent problems associated with the chemotherapy, the researchers reported. Two deaths were reported among the 90 patients who received chemotherapy, one of which came about as a complication of the drugs; the other death appeared to be caused both by tumor recurrence and infection, Link said.

"Even though these drugs can be toxic, we feel the results prove that chemotherapy is worth giving," he said. In fact, Link noted that when surgery-only patients in the study relapsed, the researchers then instituted chemotherapy for them.

But because of the toxicity, "patients should be treated in centers that have a lot of experience with treating this disease and expertise in administering intensive chemotherapy," he added.

Link noted that there is a history of controversy over the usefulness of chemotherapy for osteosarcoma.

Prior to 1970, the prognosis for the cancer was dismal, he recalled. Relapse caused more than 80 percent of osteosarcoma patients to die within two years after diagnosis, despite amputation, he said.

Survival rates improved significantly in the 1970s when doctors began using chemotherapy, in addition to surgery, to eradicate tumor spread, Link said.

But chemotherapy was called into question in the mid-1970s when researchers at the Mayo Clinic reported that relapse-free survival rates in osteosarcoma patients had significantly improved, even without chemotherapy.

"The implication was that survival times increased, but that chemotherapy did not account for the improvement," Link said. "The Mayo Clinic investigators concluded that something else had changed the disease's prognosis—maybe the disease itself had changed or patients were being diagnosed earlier."

Because the drugs produced such severe complications, many doctors began to wonder whether their purported benefits outweighed the risks. Link and his colleagues initiated the current osteosarcoma study to try to settle the question once and for all.

"We now feel that the Mayo Clinic findings were wrong," Link added. "This is just as nasty a disease as it ever was, but if you give chemotherapy immediately after surgery, the number of patients who survive without recurrence is significantly higher."

Link said that the study will continue for several additional years to determine whether chemotherapy improves overall survival, not just relapse-free survival time.

And he added that "although there has been a dramatic improvement in overall outcome for children with osteosarcoma during the past 15 to 20 years, refinements in therapy are needed" to improve limb-sparing surgical procedures, and to reduce the side effects of drug therapy.

In addition to Stanford University Hospital and Children's Hospital at Stanford, other participating institutions include the Dana-Farber Cancer Institute and Children's Hospital, Boston; the Pediatric Oncology and Surgery Branch, National Cancer Institute; St. Jude Children's Research Hospital in Memphis; Children's Hospital of Philadelphia; Great Ormond Street Hospital, Royal Marsden Hsopital and St. Bartholomew's Hospital in London; Washington University Medical Center in St. Louis, and multiple pediatric cancer centers of the Pediatric Oncology Group.

The study was supported by grants from the National Cancer Institute.

NEWS
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EDITORS: If not included, photos available upon request.
FOR IMMEDIATE RELEASE
PALO ALTO—

MONTANA MAN GETS SPECIAL "FATHER'S DAY" GIFT FROM SON — A NEW SHOULDER AND ARM

Montana's best — and probably only — one-armed mandolin player, Clarence "Dude" Parker, recently received a special gift.

His 23-year-old son Doug Parker, a first-year Stanford medical student, custom-tailored a new shoulder joint and arm for his dad.

The new prosthesis, one outcome of a Children's Hospital at Stanford research project conducted by Doug, should help compensate for the real arm and shoulder Dude lost in a hay baler nearly 30 years ago.

The new shoulder — made of plastic surrounded by a soft skinlike foam — is the most "innovative" part of the prosthesis, according to Doug. "I imagine there is not another socket quite like it anywhere," he said.

According to Maurice LeBlanc, research director of Children's Hospital at Stanford's Rehabilitation Engineering Center, Doug's research project is helping to advance the state of the art in body-powered prosthetics. "There has been no substantial progress in this area since World War II," LeBlanc said.

Dude's new prosthesis — weighing about three pounds — replaces a "1957 vintage," ugly, cumbersome, six-pound, hard plastic prosthesis that no longer fits Dude properly and causes some pain, Doug said.

The new one has a locking elbow and a spring to open and close the hand. "It sure feels good," Dude said in a telephone interview from his home in Bridger, Mont., the town of 800 where he was born and raised.

Dude, now 68, was 39 at the time of the accident. According to Doug, Dude lost "everything right up to the shoulder blade." Therapists advised Dude to sell his cattle ranch and retire.

"Yup," Dude affirmed, "They told me I couldn't (maintain the ranch), but I decided I could."

And, with sheer determination, Dude did everything necessary — such as shoveling and building fences — with just one arm.

His left arm grew "incredibly strong." Dude went on to start and run a youth saddle club, Doug said. And then — about 10 years ago — he took up the mandolin.

"I use the fake arm as my pickin' arm," Dude said, admitting that it took awhile to coordinate. Dude now plays in country bars and is frequently recognized by strangers, Doug said.

The new prosthesis should make playing "easier on my shoulder," Dude added; the weight of the old "gets kind of tiresome."

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Dude was fitted with the old prosthesis in 1957 shortly after the accident, but the muscles around the joint area later wasted away, leaving an extremely thin layer of skin over blunt bones, Doug explained.

A conventional prothesis is unsuitable for Dude because this area is so sensitive; "nothing can touch there," Doug said.

But when touched gently, nerve endings at these sites give Dude the sensation of feeling his hand. "Dad will say 'You are touching the palm of my hand' or 'There is the back of my hand,' " Doug said. This is a common phenomenon for amputees called "phantom limb," Doug explained.

Being able to relate such classroom information to his father's experience excited Doug and prompted him to seek out a research project. His adviser, Dr. Robert Chase, a renowned Stanford hand surgeon, referred him to LeBlanc.

With the help of LeBlanc and other staff members, and funded by a grant from the Stanford Medical School Scholars program, Doug began a project to enhance body-powered prosthetics.

The prosthesis that Doug built for his father incorporates many of his newly formed ideas about comfort and cosmetics. "It was fun using my new anatomy knowledge to give him back his pectoral muscle and his deltoid, trapezius, and rhomboids," Doug said.

And, likening the experience to sculpting, Doug said building the prosthesis brought back memories of the two years he spent in art school prior to enrolling in medical school.

Doug's overall project "is far from over," he said. His other ideas include a hydraulic-powered, cosmetic, hooklike "hand" and sensory devices that take advantage of the phantom limb phenomenon.

As a child "I often fantasized about building bionic arms or transplanting arms," Doug said. "The 'Six Million Dollar Man' was an important TV show for me when I was young," he noted.

Doug thinks his experience with his father will help him assist other people with a variety of disabilities. "It never occurred to me that dad would be considered handicapped," Doug said. His only memories of his father are with one arm. "If he had two arms he would look really strange," he added.

Doug said that instead of feeling pity, which disabled people don't want, "I can say 'You are a person and so am I; we have all got our problems. Let's see what we can do about yours.' "

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Parker CH1a

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STANFORD MEDICAL STUDENT RECEIVES GRANT TO DEVELOP COURSE ON SEXUALLY TRANSMITTED DISEASES

STANFORD—

Sylvia Cerel, a second year Stanford medical student, is one of 34 medical students nationwide chosen this year as a SmithKline Beckman Corporation Medical Perspective Fellow by the National Fund for Medical Education (NFME).

Cerel plans to use her $3,300 grant to develop a course on the biosocial aspects of sexually transmitted diseases (STDs) for Stanford's undergraduate program in human biology, and to create a curriculum for others to use.

The course, Human Biology 128, will be given winter quarter of the academic year 1986-87. Dr. Gary Schoolnik, assistant professor of medicine and medical microbiology, is the faculty sponsor.

Cerel, who is developing the course's content and readings, is inviting a distinguished group of guest lecturers including national experts on STD research and policy.

"This is not going to be just another course on sexually transmitted diseases," she explained. "We'll explore the behavioral and legal implications of these diseases, as well as their scientific, medical and epidemiological aspects.

"Until recently, the term 'venereal disease' was used to describe a limited number of conditions, including gonorrhea and syphilis," Cerel added. "Now the STDs number in the 20s, and include chlamydia, herpes and AIDS. We hope that studying the historical, legal and psychological implications of these diseases will provide students with a broader perspective on the current political and social problem of STDs."

Among the guest speakers will be Dr. Ward Cates, from the Centers for Disease Control, who will discuss STDs from a national perspective; Dr. King Holmes from the University of Washington, who will talk about STD research methods and problems; and Dr. Constance Wofsy from the University of California, San Francisco and Margo St. James, founder of Coyote, who will discuss STDs and prostitution.

Other guest speakers will discuss such topics as AIDS and the law, syphilis in western history, STDs and the media, and more.

The guest lectures will be announced in advance and will be open to the public, Cerel said, although course enrollment for credit will be limited to 30 students.

Cerel, an Atlanta native, established an interest in STDs while she was an undergraduate at Emory University and worked at a family planning clinic in Atlanta. She has carried out research on pelvic inflammatory disease at San Francisco General Hospital and collaborated with investigators at the Centers for Disease Control in producing a book on contraceptive technology in which she wrote a chapter on STDs.

NFME administers the Medical Perspectives Fellowship Program for the SmithKline Beckman Corporation, which has contributed over $1.1 million to fellow sponsorship since 1978.

The NFME was chartered by Congress in 1954 to mobilize voluntary support for medical education. Its primary mission is to promote the best possible health care for the American people through improvement in medical education.

6-12-86 —30— cerel-LH11

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FOR IMMEDIATE RELEASE

FOUR STANFORD MEDICAL STUDENTS RECEIVE AMERICAN HEART ASSOCIATION FELLOWSHIPS

STANFORD—

Four medical students have been selected for 1986-87 American Heart Association (AHA) research fellowships at Stanford University School of Medicine.

The AHA fellowships enable the students to take one year out from the medical curriculum to pursue full-time research in a field related to cardiovascular disease, said Dr. Robert Kates, associate professor of medicine (cardiology).

The program was conceived by the AHA while Stanford cardiology division chief Dr. Donald Harrison was president of that association, Kates said. "The idea was to expose students to the research environment," he added.

"It's a very nice opportunity because it's a full year of research," noted Dr. John Steward, associate dean for student affairs.

The newest round of awardees will receive a stipend of $8,000 for 12 months beginning July, 1986, and $1,500 to cover travel expenses and health insurance. They also receive tuition credit and can arrange part-time research assistantships with faculty sponsors.

This year's recipients are:

- Deborah Clark, who will study regulation of adenosine receptors in the heart under the supervision of Dr. Brian Hoffman, assistant professor of medicine;
- Donnie Evans, who will study how human cardiac muscle cells adapt to disease or stress, in the lab of Dr. Frank Stockdale, professor of medicine;
- Berit Madsen, who is investigating hormonal control of circulation and body fluid homeostasis under the direction of Drs. Andrew Perlman, assistant professor of medicine, and Bryan Myers, associate professor of medicine;
- Gina Louie, who will investigate the effects on the heart of the anesthetic halothane, in the lab of Dr. Mervyn Maze, assistant professor of anesthesia.

Previous awardees in the fellowship program, which began in 1984, are Stuart Schlisserman and Eric Fain (1984-85), and Ali Karriem and Robert Hagberg (1985-86).

6-12-86 —30— Ahafels MC2

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FOR IMMEDIATE RELEASE

FOUR SCHOLARS AT STANFORD MEDICAL SCHOOL GIVEN LEUKEMIA SOCIETY AWARDS

STANFORD—

Four postdoctoral scholars at Stanford Medical School have been awarded three-year fellowship grants from the Leukemia Society of America.

Dr. Shelly Heimfeld and Dr. Leslie Berg were among 48 investigators nationwide awarded $70,500 Fellowship grants; Dr. Adam Geballe and Dr. Mark Danielson were among the 46 scientists who have received $87,000 Special Fellowships from the Society.

Heimfeld is studying with Dr. Irving Weissman in the pathology department the process by which blood cells differentiate, and how leukemia may result when this process goes awry.

Berg is working with Dr. Mark Davis in the medical microbiology department, where she is concentrating on how the body's immune system fights cancers such as leukemia.

Geballe, based in the lab of Dr. Edward Mocarski in medical microbiology, is investigating the viral basis of leukemia and related diseases.

Danielson is conducting his research on the molecular basis of malignant diseases in the laboratory of Dr. Gordon Ringold in the pharmacology department.

Overall, in the United States and abroad, the Leukemia Society currently supports 246 researchers with grants totaling approximately $6.2 million. All of the grants are committed to accelerating efforts to close in on the causes and eventual cures for leukemia and related diseases, according to the Society.

6-12-86 —30— leukfell LH11

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FOR IMMEDIATE RELEASE

HEART ASSIST SYSTEM SAVES PATIENT'S LIFE

STANFORD—

A 47-year-old man was reported recovering at Stanford Medical Center Thursday (June 12) after an implantable mechanical heart assist system kept him alive long enough to receive a human heart transplant, doctors said.

Dr. Philip E. Oyer, professor of cardiovascular surgery, said, "This use of the system may address the needs of a large patient population which previously had little hope of survival."

The patient was identified as the Rev. Dr. William Rainford, a chiropractor and Episcopal priest from Santa Cruz. Oyer said his heart had stopped beating six times within several hours before doctors decided to implant the left ventricular assist device (LVAD), said Oyer.

It was the third implantation into a Stanford patient of the electrically-powered cardiac assist pump, developed by the Novacor Medical Corp. of Oakland for ultimate use as a totally implantable, self-contained cardiac support system, leaving the natural heart intact.

The current patient was brought to Stanford after he was already in shock, said Dr. Peer M. Portner, president of Novacor and a consulting associate professor of cardiovascular surgery at Stanford.

On Sunday, the patient's own heart and the device were replaced with a donor human heart during a second operation, Oyer said.

"There is no doubt that a dramatic intervention was necessary to keep the patient alive, said Oyer. "Without the use of the heart assist device, the man would not be alive now."

The patient, had been transported in cardiogenic shock (a critical drop in blood pressure) by Stanford's Life Flight emergency helicopter from Santa Cruz on Wednesday, after physicians determined that an implantable cardiac assist system offered his only chance for survival.

Rainford was reported in stable condition Thursday and was expected to remain in intensive care for at least a week following the two major operations, the surgeon said.

The patient suffered his first heart attack last year and was hospitalized after a second myocardial infarction occurred about two weeks ago, doctors said.

The LVAD is an electrically powered, electronically controlled pump that synchronizes with the natural heart's beat. It does not replace the heart, but rather, assists the weakened heart muscle by taking over the function of the main pumping chamber, the left ventricle.

The Food and Drug Administration in July 1984 authorized the trial use of the system in 20 patients at Stanford, and subsequently, in additional patients at other hospitals outside California.

The first patient, Robert St. Laurent, then 51, received the device in September 1984 and a human heart transplant eight days later. He is reported doing well at his home in Florida. The second transplant patient received the device in April 1985 but died 16 days later of pneumonia, Oyer said. Both patients suffered from terminal coronary artery disease.

Portner said the "bridge-to-transplant" model of the heart assist system is implanted in the body but powered by an external power unit.

Eventually, the large power console of the system undergoing tests at Stanford is expected to be replaced by an implanted controller and a compact battery pack, worn as a belt, which would transmit power to the system through the skin.

"This will enable severely incapacitated patients the opportunity to return to a relatively normal life," said Portner. In contrast to the artifical heart, the heart's natural regulatory function remains intact, allowing normal physiologic response to exercise and emotion, Portner explained.

Testing in animals of the battery-powered LVAD is expected within a month at Stanford, Portner said. He said the first human trials of the totally-portable battery unit are expected in about a year.

In addition to transplant candidates and persons suffering imminent death from circulatory collapse, the system could help patients who cannot be weaned from a heart-lung machine following otherwise successful open-heart surgery.

Portner, who holds a Ph.D. in experimental nuclear physics, has been involved in biomedical research for the past 16 years. Partial funding for development of the LVAD has come from the National Institutes of Health.
EDITORS: Peer Portner can be reached at Novacor in Oakland, (415) 568-8338

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FOR IMMEDIATE RELEASE

PREGNANT WOMEN WHO GET CHICKENPOX MAY BE AT RISK

STANFORD—

Chickenpox can be dangerous to pregnant women who have never had this infection, according to a report in the June 12 issue of *The New England Journal of Medicine* describing a Stanford Medical School study.

The chickenpox virus, called varicella-zoster, is passed from mother to fetus in approximately one in four of such cases but does not often damage the fetus, the study found.

The study also found that pregnant women who get shingles—caused by the same virus—do not appear to be at risk for serious complications and do not pass the infection to their unborn children.

The study was conducted by Dr. Sharon Paryani, a former postdoctoral fellow in pediatric infectious diseases at Stanford University School of Medicine who is now at University Hospital in Jacksonville, Florida, and Dr. Ann Arvin, associate professor of pediatrics at Stanford.

Both chickenpox and shingles are caused by the varicella-zoster virus; chickenpox, a contagious illness most commonly characterized by fever and skin pustules, occurs on initial infection, while the painful condition of shingles occurs when the dormant virus is reactivated in the body.

The study was carried out because specific information concerning risks of varicella-zoster virus infection during pregnancy has been limited, Arvin explained.

"This is because most adult women have had chickenpox, whether or not they have a history of infection," she said.

Chickenpox during pregnancy has been associated with a congenital syndrome in the newborn involving skin lesions, eye inflammations, limb atrophy, mental retardation and other birth defects.

But only a few infants with the congenital varicella syndrome have been described in the medical literature, Paryani and Arvin noted.

The researchers studied 43 pregnant women who contracted chickenpox during pregnancy and 14 pregnant women who became ill with shingles.

Nine of the 43 pregnancies complicated by chickenpox resulted in serious medical problems for the mother, including one woman's death (the six-month old fetus did not survive), four severe cases of pneumonia, and four cases of premature labor, two of which resulted in premature births.

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Twelve percent of the infants who were examined after birth and then followed for a year had symptoms caused by infection with the varicella-zoster virus while in the mother's uterus, and 12 percent had immunologic evidence of infection but did not have symptoms, the researchers reported.

In contrast, there was no evidence that the virus was passed to the fetus among the 14 shingles-afflicted expectant women, although one woman had minor complications.

"These observations show that varicella (chickenpox) during pregnancy was associated with maternal morbidity and evidence of fetal infection, but that herpes zoster (shingles) was not," the researchers wrote.

The new study found that only one infant was born with the classical varicella syndrome. This infant's mother was one of 11 who became ill with chickenpox during the first trimester of pregnancy. None of the mothers who got the disease in the second or third trimesters gave birth to children with the classical congenital varicella syndrome, the researchers reported.

These results, combined with others from previous studies, "indicate that varicella in the second and third trimesters is rarely associated with birth defects," the researchers wrote.

"Although complications did not occur in the majority of women, the maternal risk justifies the administration of varicella-zoster immune globulin to pregnant women who have no (immunity) to varicella and who have had a close exposure to the varicella-zoster virus," the researchers concluded.

However, "the effectiveness of (the) immune globulin in preventing fetal complications is unknown," they said.

The varicella vaccine which is being developed should also be beneficial for women of childbearing age who have never had chickenpox, Arvin added.

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zoster LH11

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EDITORS: News coverage is invited for the June 19 wine tasting mentioned in the release below. Please call the Medical Center news bureau, (415) 723-6911, to make arrangements

FOR IMMEDIATE RELEASE

THE MOST EXCLUSIVE CLUB IN THE WORLD?

STANFORD—

At 7 p.m. on the third Thursday of every month, a group of ordinary looking men and women file into an ordinary building in Palo Alto for a meeting of one of the most exclusive clubs in the world.

There is only one requirement for joining the club, but it is one that rules out all but a tiny fraction of the world's population: Members must be heart transplant recipients.

Transplant recipients Linda Lamb and John La Bissoniere formed the club, called Cardiac Transplant Support, in January of 1985. "We thought there was a need for something like this—to communicate with someone who has had the same experience you have," Lamb said.

Meetings are held in a room provided by California Federal, a savings institution on El Camino Real in Palo Alto. The meetings are basically to provide communication and support, with recipients asking questions of each other and sharing their experiences.

About one meeting in three features a guest speaker, frequently one of the post-care transplant nurses at Stanford University Medical Center, where Lamb and La Bissoniere received their new hearts—in fact, where all club members so far had their transplant operations.

"The nurses give us the medical advice that is available and review our conditions and talk about symptoms and things like that," Lamb said. "They don't describe the surgery; they talk more about medication effects and other effects."

Although membership in the cardiac club is restricted to those who have had transplants, meetings are often attended by potential members: people waiting for transplants.

"We're not very strict (about attendance)," La Bissoniere said. "And a lot of pre-transplants are very interested in attending."

Anyone can attend one of the club's two scheduled yearly social events, a Christmas party and a wine tasting. The wine tasting will be held from 5 to 8 p.m. June 19 at Rickeys Hyatt House Hotel in Palo Alto, and the invitation list includes doctors, nurses, transplant candidates and recipients and their families and friends.

The Christmas party and wine tasting are fund-raising events. Prizes have been donated by restaurants and other businesses and will be raffled off.

Eventually, Lamb said, the club would like to raise enough money to provide financial support to some transplant candidate or recipient who needs assistance.

Right now, though, Lamb and La Bissoniere are concentrating on building up membership. That isn't easy, considering the limited number of available candidates.

Even when a new member signs up, he or she is likely to be gone in a few months—as soon as Stanford doctors give the OK to return home. Since only a handful of transplant recipients lived in the area originally, the club depends heavily on those who came to Stanford for transplants and liked the area enough to remain.

That was the case with both Lamb and La Bissoniere. Lamb, 25, came from Ohio for a transplant done in October of 1983. She and her husband, Tom, decided to remain and now live in San Mateo in an apartment building he manages. La Bissoniere, 34, came from Southern California for a transplant in December of 1979. He now lives in Cupertino and works full time at the American Heart Association in San Jose.

Lamb also worked for a time at the heart association, and it was there that she and La Bissoniere met, became friends and decided to form Cardiac Transplant Support.

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FOR INFORMATION CONTACT: Spyros Andreopoulos (415) 723-6911) (story written by Nina Greenberg)
FOR IMMEDIATE RELEASE

NEW MEDICAL LINEAR ACCELERATOR INSTALLED AT STANFORD

STANFORD—

A new, state-of-the-art medical linear accelerator—the Clinac 1800—to enhance Stanford University Hospital's radiation therapy capabilities, will begin operations this summer.

With beams of electrons and X-rays, the new Clinac 1800, made by Varian Associates of Palo Alto, will be used to battle a variety of cancers, according to Dr. Malcolm Bagshaw, professor and chairman of the department of radiology. It will also be used experimentally to treat autoimmune diseases and prepare patients for organ transplants, he said.

The Clinac 1800 features two new low electron beam energies and enhanced controls for penetration and accuracy; several standard electron and X-ray beam energies are also available, Bagshaw said.

The room that houses the accelerator is specially designed to contain radiation. It has round walls and a two-foot-thick, steel-and-concrete ceiling that weighs 160,000 pounds. It can only be entered through a curving corridor that scientists call a maze.

Both the room and accelerator are part of a large, $2.1 million project to boost the services of radiation therapy.

The new medical linear accelerator is Stanford's fourth. The accelerators have been used successfully to treat several types of cancers including cancer of the prostate, breast cancer, Hodgkin's disease, and other cancers of the lymphatic system.

The low electron energies and total body radiation capabilities make the Clinac 1800 also well-suited for treating skin malignancies, particularly mycosis fungoides, "a rare and terrible" skin cancer, Bagshaw said. Stanford is a major referral center for mycosis fungoides; more than 400 people with this cancer have been treated here, he said.

Radiation therapy, surgery, and drug therapy are the standard cancer treatments. However, the use of medical linear accelerators has been expanded to include patients who require immune suppression.

Radiation therapy at Stanford is also being used in conjuction with hyperthermia, heat therapy. Applying heat to cancer cells makes them more susceptible to radiation, Bagshaw said.

Accelerators are also "essential for total body bone marrow transplants," Bagshaw said. Radiation is used to "wipe out" a person's own bone marrow so that donated bone marrow can be transplanted, he said.

Medical linear accelerators hurl electrons and X-rays at cells targeted for destruction, such as cancer or bone marrow cells. The new accelerator gives electrons selected energies by speeding them along a six-foot path, "riding a microwave beam," Bagshaw said. Then, the electrons are either aimed directly at their target or first converted into X-rays.

The accuracy of the Clinac 1800 is plus or minus one millimeter, Bagshaw said.

Rotating delivery systems in medical linear accelerators maximize radiation to target (cancer) cells, and minimize radiation to non-target (healthy) cells by delivering it from different angles.

Another machine, called a simulator, is used to plan treatments with the accelerator. This medical linear accelerator look-alike, equipped with X-ray diagnostic equipment, mimics motions and positions of accelerators.

A new simulator—a Zimatron—will accompany the new Clinac 1800, Bagshaw said. Such instruments, in conjunction with precisely aligned laser lights, cut the time required to position patients within the accelerator for treatment.

The time saved is tremendous. In cancer treatments, radiation is usually given one or two times each day, five days each week, for approximately six weeks, "and sometimes up to four months," Bagshaw said.

The prototypes for both simulators and medical linear accelerators were initially developed at Stanford, he said. The first medical linear accelerator in the western hemisphere was developed by the late Dr. Henry S. Kaplan, Stanford's first chairman of the department of radiology and Dr. Edward Ginzton, former Stanford professor and chairman of the board of Varian Associates, he said.

It was built at the Stanford Microwave laboratory and installed in the old Stanford Hospital in San Francisco in 1955. Its descendents have become the "standard workhorses of radiation therapy worldwide," Bagshaw said. It is now housed in the Smithsonian Institution.

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FOR IMMEDIATE RELEASE

STANFORD ALCOHOL, DRUG TREATMENT CENTER ACCEPTS FIRST PATIENTS

STANFORD—

The new Stanford Alcohol and Drug Treatment Center has opened and is accepting its first patients in a hospital setting, co-directors Robert Matano and William Hazle announced Thursday, June 5.

The 13-bed inpatient center is situated in the Hoover Pavilion. Structured and long-term outpatient care will continue to be offered at the Stanford Alcohol Clinic.

Matano and Hazle noted, however, that the nine-year-old clinic has moved into new offices in the new Medical School Office Building, across the Medical Center parking lot from the old headquarters in the Psychiatry Building.

Combining the outpatient care of the alcohol clinic with the inpatient treatment of the new center gives Stanford the ability to treat "pretty much every problem that is alcohol and drug related," Matano said.

Matano is director of services and Hazle, an M.D., is medical director of the new center. They have emphasized that the length of inpatient hospitalization at the center will be determined by individual patient needs, unlike programs at some treatment centers that require 28- or 30-day stays, and the focus will be on the long-term process of recovery.

Structured outpatient services and long-term therapy are combined with the shorter hospitalization. The treatment model will be effective in providing individualized and comprehensive therapy, Matano and Hazle said.

For more information, telephone (415) 723-6682.

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FOR IMMEDIATE RELEASE

STANFORD'S HEART-LUNG TRANSPLANT PROGRAM LEADS TO NEW BASIC INFORMATION ABOUT ORGAN FUNCTION

STANFORD—

Transplantation does not adversely affect the long term function of lungs that have been separated from their nerve supply as well as from the respiratory and circulatory systems, Stanford University Medical Center researchers have established.

"Despite the fact that they have been denervated, the lungs seem to be a self-functioning unit," said Dr. James Theodore, associate professor of respiratory medicine.

Not only are the lungs unaffected by transplantation, he added, but there seem to be few adverse effects on them during exercise or on ventilation, the actual process of inhaling and exhaling air.

This information is just one spinoff of Stanford's heart-lung transplant program. It contradicts some important basic concepts of human physiology, Theodore said, which state that the lungs function as an integral component of the respiratory and circulatory systems, and that the integration of function between them is controlled primarily by the central nervous system.

"We have a unique situation here because Stanford happens to have an active transplant program," said Theodore, a pulmonary specialist. Stanford cardiovascular surgeons have performed 34 combined heart-lung transplants since 1981. Of these patients, 20 have been studied for as long as three years after the transplant.

These studies have given Theodore and a group of physicians and technicians in Stanford hospital's pulmonary physiology laboratory the opportunity to begin discerning normal from aberrant function of the lungs. In addition to rewriting some basic tenets regarding the basic physiology of the lungs, they are able to use their findings to modify and improve the care of heart-lung transplant patients.

The work is important, Theodore said, because "in order to pick up the subtle abnormalities that may come from disease, such as rejection, we have to define what the normal functions are."

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The physicians have already been able to detect some potentially lethal problems, the most significant of which is a complication called obliterative bronchiolitis, he said. Nearly half of Stanford's transplant patients have developed this condition in which the patient's airways become obstructed. If not detected and treated, it can lead to permanent damage of the lungs and necessitate a second transplant, Theodore said. By learning how to detect it, however, the physicians can aggressively treat it in order to avoid its effects.

"We are basically starting from scratch in defining the function of the lungs and how transplantation affects them," Theodore said. Yet overall, the studies conclude, when there are no complications, "the transplanted heart and lungs perform sufficiently well to support the activities of normal life."

At the Third Annual International Symposium on Applied Circulatory and Respiratory Physiology in Anesthesia and Intensive Care in Rotterdam last fall, Theodore presented an overview of the work he and his colleagues have been doing.

"No one had established what the functional status of transplanted lungs would be over a long period of time," Theodore said. "The main thing we've learned is that transplantation, per se, does not adversely affect long term function of lungs despite the fact that they have lost their nerve supply, and they have been separated from the other systems." The transplant procedure does not seem to adversely affect patients during exercise or ventillation either, he added.

The physicians found that the lungs do not limit transplant patients' ability to exercise. Rather, their exercise capacity is determined to a large extent by limitations due to their illness prior to transplantation.

Breathing, blood flow and the exchange of oxygen and carbon dioxide also continue normally with transplanted lungs. What this means, Theodore said, is that these functions are regulated from within the lungs. "Even though the lungs are no longer hooked up to a bigger system they still work within it," he said. "They don't seem to be greatly influenced by external factors."

"You have to understand the entire system in order to understand each individual part," Theodore explained. "Once you define what is normal, you know how to treat problems that arise."

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INSTABILITY AMONG WEAPONS PERSONNEL HEIGHTENS RISK OF NUCLEAR EXCHANGE

STANFORD—

Drug and alcohol abuse, fatigue, psychological instability, and job-related stress among personnel who handle nuclear weapons may heighten the danger of an accidental or inadvertent nuclear exchange, contends a Stanford University professor.

The danger is greatest during periods of extreme international tension when some of the usual safeguards against weapons firing may be temporarily loosened, warns Dr. Herbert Abrams in an article in the July/August issue of *The Sciences* magazine, a publication of the New York Academy of Sciences.

At such times, miscalculation, misperception or misunderstanding might lead to a catastrophic decision, said Abrams, professor of radiology at Stanford University School of Medicine and member-in-residence of the Stanford Center for International Security and Arms Control.

Instability among nuclear weapons workers plagues both the United States and the Soviet Union, Abrams said, despite military screening programs designed to select competent and reliable personnel.

Although no independent evaluations of these screening programs are available, indirect information suggests that they are, at best, imperfect, he added.

The U.S. military's Personnel Reliability Program (PRP), for example, screens candidates for nuclear weapons unit commanders, pilots, crews, and delivery personnel as well as security guards, supply and launch personnel, Abrams said.

But defense department figures indicate that among those who pass the screening, on average more than five thousand each year are decertified for a variety of causes including drug abuse (33 percent), alcohol abuse (nine percent), breaking the law (16 percent), and other psychological, behavioral or physical reasons (21 percent).

"The high rate of decertification is disturbing because it suggests the inherent weaknesses of the PRP as a screen for stability," Abrams wrote. "As a result, at any given time, thousands of potentially unstable individuals have day-to-day responsibility for handling nuclear weapons.

"As recently as last year, 1400 individuals were decertified from nuclear weapons handling because of drug and alcohol abuse," Abrams reported.

The problem of finding reliable personnel is compounded because "the military population in general suffers from high rates of drug and alcohol abuse and other psychiatric disturbances," Abrams explained.

A 1980 defense department survey showed that 36 percent of military personnel admitted to using illegal drugs, and a 1981 survey of personnel at U.S. military installations in Italy and Germany revealed that drugs were used on duty by 43 percent of army personnel, 17 percent of air force personnel, 35 percent of marines, and 49 percent of navy personnel.

Defense department officials also testified before Congress in 1982 that an estimated 28 percent of army personnel and 21 percent of naval personnel drank while on duty, with the highest prevalance of drinking reported among senior officers, Abrams said. Although drug abuse in the armed forces has decreased in recent years, he noted, it remains an urgent problem for nuclear forces.

Details remain secret about the probable Soviet counterpart to the U.S.'s Personnel Reliability Program, Abrams said. "Still, the Soviet military appears to be afflicted with many of the same staffing problems faced by the U.S. armed forces," including a small applicant pool for submarine patrols, which leads to lowering of selection standards, he added.

In the Soviet Union, alcohol rather than hard drugs, appears to be the greatest problem. According to Abrams' article, one U.S. army expert contends that alcohol abuse in the Soviet military is even more common than in the Soviet population at large where it is thought to be a problem of epidemic proportions, producing 100 times the number of acute alcohol-related deaths as the U.S..

Nuclear weapons work itself is likely to exacerbate drug- or alcohol-induced instability, Abrams suggested. "The isolation aboard nuclear submarines and in nuclear missile silos, unnatural work shifts and, in times of emergency, the extreme stress involved in being responsible for nuclear weapons all are likely to affect job performance," he pointed out.

A large body of psychological research has established the severe emotional consequences of prolonged isolation, including depression, irritability and hostility, Abrams said. In addition, rotating work shifts disrupt the body's biological clock, which controls the sleep-wake cycle, release of hormones, and other physiological processes. This can lead to emotional disturbance, impaired coordination, and job peformance problems, he said.

Despite these human instability factors, peacetime safeguards are likely to prevent the inadvertent firing of a nuclear missile or other weapon, Abrams said.

"The problem arises during crisis when measures to guard against inadvertent launches tend to undermine launch readiness," he argued.

Most United States nuclear weapons are fitted with permissive action links, electronic locks whose "keys" are supplied by the National Command Authority (the president and secretary of defense), Abrams explained.

In addition, "Before an intercontinental ballistic missile can be fired, a total of four officers at two sites...must decide individually to launch the weapon," he added.

But, during a crisis, "to ensure that their forces are able to respond rapidly to an attack, commanders on both sides may loosen safeguards—issuing advance authorizations, reducing the number of people necessary for a launch, or partially 'enabling' weapons so they could be fired quickly," he said.

Furthermore, "controls over firing of submarine-launched ballistic missiles are less stringent," Abrams said. "The navy maintains no permissive actions links on SLBMs, arguing that authorization codes transmitted from Washington could be disrupted...The captain and crew of a nuclear submarine are supposed to receive higher authorization before firing a missile, but if they should decide to act independently, there are no technical safeguards to prevent them from launching the weapon," he said.

This kind of situation may open the way "for unstable personnel to exert control over nuclear weapons," Abrams concluded.

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STANFORD INTERFERON PIONEER PREDICTS FDA APPROVAL MAY SPEED USES OF OTHER GENETICALLY ENGINEERED DRUGS

STANFORD—

The Food and Drug Administration's (FDA) approval of a genetically engineered form of interferon for one type of cancer is an "exciting beginning" in bringing genetically engineered drugs into everyday medical practice, a Stanford doctor predicts.

"This approval should accelerate the introduction of other forms of interferon and other recombinant products into clinical practice," said Dr. Thomas Merigan, a pioneer in interferon research who was a member of the FDA committee recommending the drug's approval.

In 1978, Merigan and colleagues at Stanford University School of Medicine were the first researchers to report a positive clinical response when interferon was used to treat patients with B-cell lymphoma.

The FDA today (June 4) announced that it had approved the use of alpha-interferon, produced through recombinant DNA techniques, for treatment of a rare form of cancer called hairy cell leukemia.

Clinical tests conducted at several medical centers around the country, have shown that alpha-interferon is effective in reducing or eradicating hairy cell leukemia in 90 percent of patients, Merigan said.

Although hairy cell leukemia is estimated to affect fewer than 1,000 patients in the United States each year, it is closely related to other forms of cancer that affect the white blood cells known as B-lymphocytes, noted Merigan, Becker professor of medicine at Stanford University School of Medicine.

Now that the drug has been approved, it's likely that clinical trials of interferon will speed up for other diseases that affect many more individuals, he suggested.

For example, interferon may prove useful in treating other types of B-cell lymphomas, which altogether afflict as many as 30,000 people in this country each year, he said.

Another potential application of alpha-interferon being studied at Stanford is in preventing relapse of certain types of lymphomas that afflict 10,000 new patients each year, he added.

Interferon is one member of a class of natural body substances called lymphokines, hormones that help activate the immune system to combat infection and cancer.

"There are other genetically engineered lymphokines coming down the pike that show promise," Merigan noted.

One such lymphokine is interleukin-2, which in preliminary clinical tests appears to have activity against a wide variety of cancers, Merigan pointed out.

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City desks: Telephone numbers of individuals interviewed for this story are: Dr. Edgar Engleman, Stanford Medical School Blood Center, Palo Alto, (415) 725-4463; Dr. Herbert Perkins, Irwin Memorial Blood Bank, San Francisco, (415) 567-6400; Dr. J. Lawrence Naiman, American Red Cross Blood Service, San Jose, (408) 292-6242; and Evelyn Bijak, Peninsula Memorial Blood Bank, Burlingame, (415) 697-4034 Ext. 40.

LOCAL LEADERS DEPLORE COMMERCIALIZATION OF BLOOD SUPPLY

STANFORD—

Putting one's own blood in the freezer for a "rainy day" when there is no expected need for its use is costly and wasteful, leaders from four San Francisco Bay area community blood banks said Monday (June 2).

The leaders' criticism was directed at commercial (for profit) enterprises that advertise in newspapers, encouraging autologous donations—units drawn from and used by the same person—as the safest kind of blood that can be frozen and stored up to three years for future use.

"They (the for profit enterprises) appear to be capitalizing on the fear of AIDS and what some people see as an investment opportunity on which they expect a return," said Dr. Herbert Perkins, medical director of Irwin Memorial Blood Bank in San Francisco.

That self-donated blood is the safest is not the issue, the leaders stressed. Community blood banks, including Stanford's, are also encouraging people who might need blood for surgery to donate for themselves in their blood bank as soon as they know that surgery is necessary. Liquid blood, which has a shelf life of six weeks, can then be used for anticipated needs.

"Autologous blood for transfusion eliminates all risks of infection, disease and incompatibility reactions," said Dr. Edgar Engleman, associate professor of pathology and director of the Stanford Medical School Blood Center in Palo Alto.

"But if surgery is not planned, the likelihood of that blood being used is remote," Engleman said.

Perkins noted that under Food and Drug Administration rules frozen blood can be stored for three years. "But the chance that a healthy person will need a blood transfusion within the next three years is so low as to be ridiculous to worry about," he said.

The main advantage of self-donated blood is prevention of non A, non B hepatitis, a potentially serious viral disease for which there is no test, said Dr. J. Lawrence Naiman, medical director of the Central California Region of the American Red Cross Blood Service in San Jose.

AIDS is now a lesser concern, he added, because the risk of AIDS from blood tranfusions has been virtually eliminated by the introduction of routine donor testing for antibodies to the AIDS virus.

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"Most healthy individuals never require blood transfusions in their lifetime," Naiman said. "The chances that an individual might need this blood are e tremely small. Therefore, it sits in the freezer depriving members of the community of a very valuable resource."

Naiman added that frozen blood cannot always be thawed in time for emergency use, and it provides only red blood cells, not plasma or platelets that might be needed to stop bleeding.

Evelyn Bijak, administrator of the Peninsula Memorial Blood Bank in Burlingame, said, "If your blood is frozen and you need it, you first have to be conscious to tell people where it's stored, and hope that you're not in Eureka where you had the car accident."

Bijak said self-donated blood is the safest for the patient in cases of planned surgery. "But at Peninsula we also feel that the blood available through a volunteer pool is extremely important and safer than it has ever been," she added.

What do the experts think about the commercialization of blood banking?

"It's not good for the community," said Naiman. "It's potentially capitalizing on the fear of AIDS and possibly will have a negative impact on the community blood supply. In essence those enterprises encourage people to hoard blood for themselves on the extremely remote chance that it will ever be used."

"It's an elitist kind of thing, a choice for those who can afford it," said Perkins. "An autologous donor dealing with these outfits will have to come up with the cash up front. He can't charge it to his insurance and in addition he pays for blood storage. As a form of insurance it's a bad choice to invest time, money or anything else."

Community blood banks, he explained, charge for blood when it's tranfused. There's no charge for storage.

Engleman said commercial enterprises charge between 30 and 50 percent more for liquid autologous blood than Stanford or other community blood banks.

Bijak said that people who donate blood are giving, caring types of individuals who want to help others. "I am sure they will continue to donate blood to the volunteer pool rather than store it for their personal use," she added.

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STANFORD FILES PATENT INFRINGEMENT SUIT AGAINST FLORIDA COMPANY

STANFORD—

A patent infringement suit has been filed by Stanford University against a Florida-based biotechnology firm, University officials disclosed today (June 2).

The suit, filed in United States District Court in Florida, alleges that Coulter Electronics of Hialeah, Florida, has been selling patented fluorescent pigment compounds, called phycobiliprotein conjugates, without a license.

Stanford seeks an injunction against Coulter to stop sales of the contested products and also seeks damages.

The patent infringement suit is the first Stanford has initiated, said Katharine Ku, acting director of the University's Office of Technology Licensing.

The suit is based on a patent issued to Stanford in May, 1985, for the fluorescent pigments when they are attached, or conjugated, to other biological materials such as antibodies or cells. The brilliant blue and red pigments, made by marine algae, act like tiny fluorescent beacons, enabling researchers to detect substances at minute concentrations.

The pigments fluoresce with 10 to 20 times the intensity of most other fluorescent "tags," making them the first real viable alternative to high-sensitivity radioactive labels, Ku explained.

They have wide potential in research and clinical laboratories, where they can be used in flow cytometry, a method of counting and sorting cells, Ku said. They can be used clinically to screen donated blood for abnormalities, and to monitor blood levels of drugs in patients, she added.

Two companies—Becton Dickinson of New Jersey and Applied Biosystems of Foster City, CA—have been exclusively licensed by the University to use the phycobiliprotein conjugate technology. To date, Applied Biosystems has sublicensed the technology to 12 other companies, Ku said.

The phycobiliproteins were developed by Dr. Lubert Stryer, professor of cell biology at Stanford University School of Medicine, Dr. Vernon Oi, formerly a Stanford postdoctoral scholar and now at Becton Dickinson, and Dr. Alexander Glazer, professor of microbiology at the University of California, Berkeley.

The patent was sought by both Stanford and the University of California. The two institutions share royalties accrued through the licensing program, Ku said.

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STANFORD MEDICAL ALUMNI HOLD SPRING SYMPOSIUM

STANFORD—

The Stanford Medical Alumni Association will hold its annual spring symposium, "The Application of Basic Research to Clinical Care," on June 7, 1986 in Sherman Fairchild Auditorium.

The symposium will feature talks by four medical school faculty: Dr. Irving Weissman, professor of pathology; Dr. Edgar Engleman, associate professor of pathology and medicine and medical director of Stanford's blood center; Dr. Stanley Falkow, professor of medical microbiology and medicine; and Dr. Stuart Young, associate professor of radiology.

The keynote speaker will be Dr. Nancy Ascher, assistant professor of surgery and director of the liver transplant program at University of Minnesota. Her talk is entitled "Liver Transplantation Comes of Age: New Twists to an Old Story."

The day's activities include a cocktail party for alumni, associates, spouses and faculty hosted by medical school dean and vice president David Korn. Class reunions will be held for the classes of 1941, 1946, 1951, 1956, 1966, 1971 and 1976. The class of 1936 will hold its 50-year reunion, and the class of 1961 will hold its 25-year reunion.

For more information or for registration, call the alumni office at (415) 723-5064.

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STANFORD SEEKS HEALTHY VOLUNTEERS FOR KIDNEY TESTS

STANFORD—

Healthy volunteers will be paid $75 to take part in a one-day evaluation of sensitive new kidney function tests that have been developed at Stanford University Medical Center.

The volunteers will receive an infusion of sugar and then have blood and urine samples collected for a period of time ranging up to eight hours.

Those interested in volunteering or receiving further information may telephone (415) 725-4741 or (415) 723-6248 from 8 a.m. to 5 p.m. Monday through Friday. They may also write the director, Nephrology Division, Room S215, Stanford University Medical Center, Stanford 94305.

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EDITORS: Photo available if not included

OPERATIONS RESTORE MAN'S VISION, USE OF LEGS

STANFORD—

Blind, wheelchair-bound Steven Raymond came to Stanford University Medical Center in May for an unusual series of operations—and walked out on his own, able to see where he was going.

The 70-year-old Raymond hadn't taken a step in four years and couldn't tell night from day when he entered the medical center. Thirty-two days later, he went home, his problems corrected.

"It was a miracle to me," he said. "I've told everyone, 'a miracle down there (at Stanford) isn't anything; they do it every day.' "

Raymond's multiple operations involved a hip replacement by Dr. Stuart Goodman, assistant professor of orthopedics, and cataract removal by Dr. Peter R. Egbert, associate professor of ophthalmology.

They were made possible by a bit of adroit scheduling by Heather Blyth-Foss, clerical supervisor in the eye and orthopedic clinics. She knew Raymond was coming to Stanford from a distance—his home is in Live Oak, 35 miles north of Sacramento—and she was able to accommodate his desire to have his operations completed in one hospital stay.

When the operations were over, Raymond was transformed from a man confined to a wheelchair and dependent on a seeing-eye dog to one able to walk about on his own, going where he chooses.

The joy he finds in such freedom was evident as Raymond, a robust man with a hearty laugh, walked through the Stanford corridors on a recent follow-up visit.

Before the operations, he said, "I couldn't take one step and couldn't tell daylight from darkness. I had about given up."

He had the hip replacement first, then his eyes were operated on one at a time. For some reason, he said, he wasn't aware of any change in his vision until the day after his first eye operation.

"I was having orange juice, sitting on my bed and I happened to look up," he said. "I saw what turned out to be a calendar and it had a card with the number 2 on it.

"Gradually, it dawned on me. I called the nurse and said, 'Do you see that? I think that's a calendar over there. It says today is the second.'

"She said, 'That's wrong; it's the third.'

"I said, 'I don't give a damn about that.' And then she said, 'You *did* see that, didn't you?' "

Raymond has lived for the last 20 years in Live Oak, but before that he lived and worked all over the world.

He was born in New Mexico and is a Comanche Indian. "I didn't speak English until after I was 5 years old," he said.

Once he started in school, however, he picked up English—and most other subjects—rapidly. He eventually attended Carlisle Indian Schools in Carlisle, Pa., and earned a degree in engineering.

He traveled a lot as an engineer, building schools and highways in many parts of the country, and he traveled a lot on his own. At one time or other, he has visited every continent on Earth, he said.

It was particularly difficult for a man with such an adventuresome spirit to be unable to get around on his own. "You know, I hated that wheelchair," he said. "For four long years, I counted every day."

Now Raymond is counting only the extra pounds he put on during four years of inactivity. He and his guide dog may both start an exercise routine, because the dog had little to do and "gained weight, just like I did" during the past four years.

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FOR INFORMATION CONTACT: (415) 723-6911 (This story was written by Roberta Friedman while she was a Council for the Advancement of Science Writing fellow at the Stanford Medical Center News Bureau.)
EDITORS: Drs. Harold Burger and Barbara Weiser can be reached at (516) 444-1669, at the State University of New York at Stony Brook.

FOR IMMEDIATE RELEASE

PEOPLE WITH POSITIVE AIDS ANTIBODY TEST DO NOT ALWAYS TRANSMIT INFECTION TO SEXUAL PARTNERS

STANFORD—

People who test positive for antibody to the AIDS virus do not always transmit the infection to their sexual partners, according to a study conducted at Stanford University Medical Center.

The study included nine couples, in six of which one person had antibodies to the AIDS virus. In only two cases did researchers find that a person had passed the virus to a partner.

Indeed, two persons who actually had AIDS did not infect their partners.

"Even after long periods of sexual contact, . . . not all subjects in our study with antibody . . . transmitted the virus," reported Drs. Harold Burger, Barbara Weiser, William Robinson, and others in the July issue of the *American Journal of Medicine*.

Nevertheless, "We are advising all (people) at increased risk for AIDS to use condoms," said Weiser, who is now at the State University of New York at Stony Brook.

The Stanford study only followed a small group, she noted. "Of course," she said, "researchers need to extend (our results) to a larger population."

The other researchers on the study were Drs. Jeffrey Lifson and Edgar Engleman of Stanford, and Drs. Jean-Claude Chermann, Luc Montagnier, Francoise Barre, Christine Rouzioux, and Francoise Brun-Vezinet of the Institut Pasteur in Paris.

Most research on sexual transmission of AIDS has involved people with multiple partners, according to Weiser. But in the Stanford study, she said in a telephone interview, two thirds of the subjects had been monogamous for at least a year, some for several years. For some of these subjects, "one can conclude from whom they contracted the virus," she said.

In two cases, men with antibodies to the AIDS virus in their blood appear to have infected their wives, the researchers noted.

One man had AIDS, yet the wife has remained well despite a positive antibody test. The other man was healthy, but his wife developed AIDS.

The woman with the positive antibody test also had decreased numbers of immune cells, called T helpers, which are killed when infection with the AIDS virus takes place. Yet she has subsequently recovered a normal level of these cells, according to Robinson.

A bisexual man in the study, who had AIDS and was also a hepatitis carrier, seems to have given the hepatitis virus to his female partner. Yet she has no antibodies to the AIDS virus in the blood, and she is healthy.

Hepatitis and AIDS are transmitted by the same routes—blood and semen, Robinson said. Yet AIDS appears to be less infectious, Weiser explained, probably because body fluids contain fewer of the viruses that cause AIDS, as compared to hepatitis.

The researchers followed a total of nine couples, both homosexual and heterosexual, from the San Francisco Bay area. At least one member of each couple was at risk for AIDS—they were either homosexual, bisexual, had received blood products for hemophilia, or had prior sexual contact with an AIDS patient.

All partners in the study had regular sexual contact with each other for more than a year.

The scientists sought clues on how the AIDS virus might spread but could find "no clear pattern" of transmission, according to the report.

Weiser said that the researchers had advised couples in the study to use condoms to prevent transmission of virus, but, she added, this advice was given at the time of antibody testing, and came too late for those who tested positive.

Yet infection may not always lead to the disease itself, Weiser said. In the case of the woman infected by her husband but who remained well, the couple had started using condoms after the woman's positive test. However, Weiser pointed out that their sexual relations fairly soon ceased due to her husband's continuing illness and subsequent death.

The researchers noted in the report that some subjects may have had low levels of the AIDS virus in their blood or semen and thus may not have transmitted infection, despite a positive antibody test.

Future studies should therefore isolate the actual AIDS virus from the blood of subjects, to learn more about how the disease spreads, the researchers wrote.

Unfortunately, Weiser said, techniques to isolate the AIDS virus now are "difficult, expensive and potentially hazardous" to perform, and routine tests that detect the virus itself "may be years away."

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ADVANCE FOR RELEASE FRIDAY, JULY 25, 1986

MOLECULAR "LOCK-AND-KEY" RECEPTOR SYSTEM COULD PROVIDE BASIS FOR NEW TREATMENT AGAINST RHEUMATOID ARTHRITIS

STANFORD—

A new finding by Stanford University School of Medicine researchers raises the possibility that more effective treatments could one day be developed to treat rheumatoid arthritis, a disease that afflicts as many as two million people in the United States.

The new information, published in the August 1 issue of *Science* magazine, points to the existence of a molecular "lock-and-key" system that controls the entry of white blood cells, or lymphocytes, into the joints of rheumatoid arthritis patients.

Lymphocytes are the white blood cells that serve as the foot soldiers of the immune system. Normally, they help fight invading bacteria and viruses. But in rheumatoid arthritis, they are thought to play a crucial role in the abnormal growth of joint lining tissue, called synovium, leading to the pain and crippling swelling associated with the disease.

The new finding suggests that it may be possible to find a drug or other agent that prevents the destructive lymphocytes from entering the besieged joints without affecting the cells' ability to migrate into other tissues where they may be needed to fight infections.

It's far too soon to know if the discovery will actually lead to a new rheumatoid arthritis drug, said research team leader Dr. Eugene Butcher, assistant professor of pathology at Stanford and an immunopathologist at the Palo Alto Veterans Administration Medical Center.

But he observed in an interview that "if we could prevent lymphocytes from getting into rheumatoid joints, we would be able to shut down the inflammation and much of the disease process."

Butcher's co-authors on the *Science* paper are Dr. Sirpa Jalkanen, a postdoctoral fellow, Dr. Allan Steere, an associate professor on sabbatical leave in Butcher's laboratory from Yale University School of Medicine, and Dr. Robert Fox of the Scripps Clinic and Research Foundation in La Jolla.

Lymphocytes constantly circulate through the body in the bloodstream, migrating into tissues where they are needed to fight infection by passing through tiny specialized blood vessels called high endothelial venules, Butcher explained.

The researchers had been studying these blood vessels and the molecular receptor signals on their linings that tell white blood cells whether or not they can pass through. Only white cells with molecular receptor "keys" that fit can open the "locks" of the venules of different types of body tissues, he noted.

For example, in the lymph nodes, only white cells with a particular receptor can bind to and exit out of the venules. White cells with a different receptor can bind and exit through the venules that serve internal organs such as the intestine and appendix.

These distinctive lock-and-key receptor systems were originally discovered in studies of mice carried out by Butcher, Michael Gallatin and Stanford pathology professor Irving Weissman.

When Butcher and his colleagues went on to examine inflamed synovial tissue from four patients with rheumatoid arthritis, they found that yet another distinct molecular lock-and-key set was needed in order for white blood cells to enter the joint tissues.

This suggests that it might be possible to jam lymphocytes' ability to penetrate the joints without blocking their entry into other crucial body tissues.

A drug or monoclonal antibody that could seal off the joints from lymphocyte entry would be a "more specific and less toxic" kind of treatment than is currently available against rheumatoid arthritis, the researchers wrote.

One hitch is that the researchers do not yet know whether the joint tissue lock-and-key system is unique or whether it's shared by other sites of inflammation in the body.

"But it is clearly different from the recognition molecules of the lymph node system and the mucosal (internal organ lining) system," Butcher said, leading to the hope "that a drug or other agent can be found that will selectively block lymphocyte traffic into the joints."

The research was supported by grants from the National Institutes of Health, the Veterans Administration, and the Leukemia Society of America.

END ADVANCE FOR RELEASE FRIDAY, JULY 25, 1986

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Veterans Administration

News Release

July 16, 1986

Stanford Med. Center
JUL 21 1986
News Bureau

Men and women in the early stages of Alzheimer's Disease and experiencing memory loss, mood changes, confusion or social withdrawal are needed for a six-month drug study conducted by researchers at the Palo Alto Veterans Administration Medical Center and Stanford University.

Volunteers need to be aged 40 to 79 and in good health. They need not be veterans. Volunteers will receive free diagnostic evaluation as well as visits with medical professionals.

Individuals who suffer memory problems due to stroke, head injuries, cardiac disease, Parkinson's Disease or substance abuse are unsuitable for this study.

For more information, call Ken Fong at the Palo Alto VA Medical Center, (415) 493-5000, ext. 4778 or 4779.

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Veterans Administration

July 16, 1986

News Release

Stanford Med. Center
JUL 18 1986
News Bureau

Iris Bernstein is 18 and wants to be a doctor. In the meantime, she spends her spare hours volunteering at the Palo Alto VA morgue as part of an unusual program that gives aspiring physicians a foundation in pathology before their first college class.

"This place for me is a magnet," she said. "People say 'Oh no, you work in the morgue. It's sick and gory.' But it's a fantastic working atmosphere and I'm learning a lot."

Leonard Kelley, supervisor of the morgue, said he started the cooperative program with Gunn High School 11 years ago. The program grew through word-of-mouth and now students from several high schools and colleges -- as well as medical professionals and others interested in medicine -- participate in the program.

Kelley said 85 percent of the students who go through the program become doctors and he has a lengthy list of successful alumni. This summer there are about eight volunteers in the program.

"They keep volunteering year after year and then go to medical school and end up physicians. One kid's been here seven years and is teaching the doctors," he said. "It's a good program, the best, but I'm prejudiced."

Kelley started a student volunteer program while working in the coroner's office in Oklahoma "because someone helped me. If those people hadn't, I don't know what I'd be doing." The program was so successful he brought it with him when he came to the Palo Alto VA.

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New volunteers are introduced to the morgue slowly. In the first days they learn weights and measures, how to read charts, how to clean instruments and answer the phones. Eventually they learn how to dissect, recognize disease, draw blood, take cultures and assist with the actual autopsy.

The students react well to the program, Kelley said, despite the unusual setting, and he's yet to have a student faint during a procedure.

"Most of them have never seen anything dead, but it's how we deal with it. It's 'This is where they used to live and they've gone on,' " he said.

David Mayer, 26, has been a volunteer for seven years. He initially joined because of an interest in emergency medicine and a desire to learn more about anatomy. Now a college graduate with a degree in chemistry, he plans to go into pathology.

"You can't get this exposure to medicine anywhere else," he said enthusiastically.

Kara Ornstein, 17, a senior at Gunn High, is another volunteer. She works at the morgue 15 hours a week during the summer.

"I help with the body and do the sections and learn," she said. "I like the subject and I like to learn. The first time (I saw an autopsy) I had nightmares, but it does get better."

At 64, John Gonzalez is one of the program's oldest volunteers. He is an engineer at Stanford and has spend his summer vacation volunteering at the morgue for the past four years.

"If you really want to help your fellow man, and I plan to spend the last years of my life helping man, this is where it's at," he said. "Pathology is where you find the root of disease."

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FOR IMMEDIATE RELEASE

MONONUCLEOSIS SOMETIMES LEADS TO CHRONIC DAYTIME SLEEPINESS

STANFORD—

Infection with the virus that causes mononucleosis may cause disabling daytime sleepiness in some patients for years following the illness, report two Stanford University Medical School researchers in the July *Archives of Internal Medicine*.

The finding is a new clue in the search for causes of excess daytime sleepiness, a chronic condition that plagues more than half of all patients with sleep disorders, said Dr. Christian Guilleminault, associate director of the Stanford Sleep Disorders Clinic and professor of psychiatry in the School of Medicine.

Not all "mono" patients become sleepyheads, Guilleminault cautioned. But further studies and follow-up of patients who come down with mononculeosis could provide insight about who is at greatest risk, he predicted.

The researchers followed 12 young adults who complained of drowsiness after infection with Epstein-Barr virus, the cause of mononucleosis, for periods ranging from three to 12 years after initial infection.

All 12 patients fell asleep more quickly, slept longer at night, and napped more often during the day, compared to normal individuals in the same age group.

Although dextro-amphetamine, a stimulant, helped five patients stay awake longer, in general, attempts to treat the patients with medications were "mediocre," reported Guillleminault and his colleague Dr. Susanna Mondini, a postdoctoral fellow.

None of the patients regained normal sleep patterns during the follow-up period, the researchers reported, and for some, the excess sleepiness was disabling.

The condition of the three patients with the longest history of sleepiness worsened over time, and despite treatment with stimulant medications, they are currently unable to work because of their affliction, the researchers reported.

Three other patients modified their career goals to pursue less demanding professions as a result of the chronic sleepiness, they added.

How the viral infection could lead to chronic sleepiness is unknown, the researchers wrote. But the causative agent, the Epstein-Barr virus, has recently been linked to another chronic condition characterized by persistent fatigue.

The research was supported by grants from the National Institutes of Health.

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FOR IMMEDIATE RELEASE

HEAT AND MICROSCOPIC DRUG-FILLED CAPSULES COULD PROVIDE NEW APPROACH AGAINST BLADDER CANCER

STANFORD—

A new way of delivering tiny drug capsules directly to a tumor has yielded encouraging results in animals with cancerous growths, reports a team of Stanford University Medical School researchers.

The technique is appealing because it delivers high drug doses to a tumor, but should spare healthy tissues from the drugs' powerful effects, said Dr. J. Ronald Tacker, clinical assistant professor of medicine at Stanford Medical School.

The new method combines two still-experimental approaches to cancer: tumor bombardment by tiny blood-borne packets containing anti-cancer drugs, and heat.

Because the method involves heating the tumor, it is potentially most suited to localized cancers, Tacker explained. He and his colleagues are pursuing its possible effectiveness against bladder cancer, a malignancy that strikes 40,000 individuals each year in the United States.

The anti-cancer drugs are packaged in tiny envelopes of fat, called liposomes, which are injected into the bloodstream and carried throughout the body. Millions of the tiny spheres—each only slightly larger than a red blood cell—can be administered in a single injection.

At normal body temperature, the drugs remain sealed inside the liposomes. But at temperatures a few degrees above normal, the microscopic parcels melt, allowing the drugs to leak out.

"We think this might be a useful new way of treating bladder cancer, particularly for individuals who are not good candidates for surgery—the elderly or those with other underlying disease," Tacker said.

"The usual treatment for the disease is surgical removal of the bladder. But some people can't tolerate that major an operation," Tacker explained.

The strategy in bladder cancer patients would be to heat the bladder a few degrees above normal and give patients a liposome injection.

Tests in humans have already shown that the bladder can be heated above normal temperature with some beneficial effect against cancer, Tacker said. The heating is accomplished by means of a catheter inserted into the bladder, through which heated water is pumped into the organ.

In Europe, liposomes have been given to cancer patients, with no detectable adverse effects, Tacker said. They are made of naturally occurring lipids, found in many mammals, he noted.

In an article in the March issue of the *Journal of Urology*, the scientists reported that in test tube studies, their specially engineered heat-sensitive liposomes tightly encapsulate drugs while at body temperature; but the tiny containers disintegrate when they are heated up a few degrees, promptly releasing 80 to 90 percent of the drugs.

Tacker's colleagues in the study were Dr. James Bassett, chief resident in Stanford Medical School's division of urology, and Dr. Rodney Anderson, Stanford associate professor of surgery.

The researchers also reported that high levels of drugs could be concentrated in a tumor using this technique. In mice with cancerous growths, eight to 10 times more drug was concentrated in heated tumors as compared with those left at body temperature, Tacker said.

The highest concentrations were achieved when a drug called methotrexate, a standard anti-cancer medication, was enclosed in the liposomes. In similar tests, the researchers found that two experimental anti-cancer drugs packaged in liposomes could also be concentrated in the tumors, but at levels lower than methotrexate.

However, in further studies that will soon be published, Tacker has found that methotrexate is not as effective in actually shrinking tumors as one of the experimental drugs, JM8.

After further study, the researchers hope to conduct clinical trials of the heated-liposome therapy in humans sometime in the future.

"We would like very much to have a non-surgical method that treats the entire bladder in these cancer patients," Tacker explained. There is an 80 percent recurrence rate of bladder cancer following surgery, he noted. "If there is one malignancy, then there are usually other sites in the bladder that will turn cancerous," he explained.

Although radiation therapy is a second choice for bladder cancer patients, and traditional chemotherapy can be effective, both affect the entire body and can therefore cause severe side effects in healthy tissues.

HealthTips
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KIDNEY STONE SURGERY CAN BE AVOIDED WITH SHOCK WAVES

Kidney stones, which affect about one in 10 Americans, can now be broken up using shock waves instead of surgery.

The new technique, called extracorporeal shock wave therapy or lithrotripsy, does not require surgery or, in most cases, hospitalization, says Stanford Medical Center's Dr. Duncan Govan. He is one of a small but potentially growing number of physicians who are making the treatment available. Since March 1985, the number of places nationally where the treatment is available has increased from seven to more than 60, he says.

Patients under general anesthesia lie in a tub of warm water while the force of up to 3,000 shock waves passes harmlessly through the tissue to blast kidney stones into fine, sand-like particles. Few side effects result, and in most cases patients can return to their regular activities following just a few days of rest at home.

Kidney stones, most commonly composed of calcium deposits, affect about one in every 10 American adults. They can be excruciatingly painful and can cause other complications. Until now they could only be surgically removed, Govan says.

HEADACHES USUALLY MINOR—BUT...

Headaches are uncomfortable although usually not dangerous, but a physician warns that when they persist for many days, it is time to see your doctor.

Dr. Michael Jacobs of the Stanford Medical Group says that headaches are most often caused by tension. Safe and effective cures include aspirin, hot or cold pads applied to the head or resting on one's back, he says.

But Jacobs adds that occasionally headaches can be a warning sign for more serious ailments. If the pain continues for many days without interruption, or if the headaches are accompanied by nausea, it is probably advisable to see a doctor, Jacobs says.

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FAINTING USUALLY SIMPLE, BUT CHECK WARNING SIGNS

Fainting is a fairly common problem, but it sometimes can be a symptom of a more serious condition, cautions Dr. Michael Jacobs of Stanford Medical Group.

"If a person tells you they feel faint, have them lie down with their feet elevated above their head," says the Stanford Medical Center physician.

"Check the airways (nose and mouth) and feel their pulse. If they're breathing and their heart is beating, then cardiopulmonary resuscitation (CPR) is not needed, he says. Sometimes cold compresses applied to the person's forehead are helpful.

If the fainting is accompanied by chest pains, convulsions or severe headaches, or if the person is unconscious for more than one or two minutes, Jacobs recommends that an ambulance be called to transport the victim to a hospital emergency department.

Fainting is a temporary loss of consciousness that occurs from lack of oxygen carried to the brain through the blood. It can be caused by environmental conditions, such as being in a stuffy room or witnessing an upsetting event. Or it can be triggered by a serious physical condition, such as a heart attack which halts or slows down blood circulation. The scientific name of fainting is syncope.

CAREFUL DIET PROTECTS WOMEN AGAINST BONE DISEASE

Women should start protecting themselves against a common bone ailment called osteoporosis early in life by eating a calcium-rich diet and exercising, says a Stanford University physician.

Women should also refrain from smoking, which causes a drop in estrogen and potentially an earlier onset of menopause and osteoporosis, adds Dr. Robert Marcus, a Stanford faculty member who heads an aging study unit at the Palo Alto Veterans Administration Medical Center.

He says women need the equivalent calcium in a quart of milk per day until age 50, and a quart and a half of milk daily after that to avert calcium loss in the bones.

Lack of calcium in the diet results in a woman's body cannibalizing bones to maintain sufficient calcium levels in the blood. This leads to the fragile bones characteristic of osteoporosis. Prevention should begin in the teen years or even earlier, Marcus says.

The physician says that calcium is found not only in milk, but in all dairy products, as well as chicken bones and dark leafy vegetables.

Another useful way to avoid osteoporosis is regular exercise to build stronger, denser bones, says Marcus.

ROUTINE X RAYS SHOULD BE HALTED, DOCTOR SAYS

Routine chest X rays, often given as part of a periodic health examination, may do more harm than good and should be stopped, says a Stanford physician.

Dr. Eugene D. Robin, professor of medicine, says the tests may be more harmful than previously suspected. Risks include exposure to radiation and a relatively high rate of inaccuracy which can suggest inappropriate or unnecessary treatment, he said. In addition the procedure is costly.

While evidence suggests that routine X rays can uncover lung cancer before symptoms occur, "there is no evidence to suggest that this early diagnosis in any way improves the chances of recovery or prolonged life for the patient."

The Food and Drug Administration's National Center for Devices and Radiological Health recently recommended that routine X rays not be required solely for hospital admission, "often for conditions having nothing to do with suspected lung or heart disease," Robin says. Other common uses—which Robin would like to see checked—include preemployment physicals or as a part of an annual physical.

Robin said there is no evidence that routine chest X rays provide information that ordinarily results in more benefits than risks.

The physician suggested that patients might be provided with a written record or diary of all X-ray exposure during their lifetime to alert them and their physicians to cumulative radiation risk.

"Physicians shouldn't order routine chest X rays and the public shouldn't request them from their physicians," Robin says.

EMERGENCY DEPARTMENT PLEA—CARRY YOUR PRESCRIPTIONS WITH YOU

Persons should try to bring current medication or copies of their prescriptions with them when they have to visit their hospital's emergency department, says a Stanford doctor.

"We can learn a lot about a patient from what drugs he is taking," explains Dr. Ric Martinez of Stanford University Hospital's Emergency Department. He suggests that persons can be prepared for emergencies by carrying copies or a list of their presciptions in their billfolds or purses.

Persons showing up in the Emergency Department are often unconscious or inconherent and thus incapable of communicating viatal information. Also, the doctor is usually seeing that particular patient for the first time, unlike a family physician who has records and knows his or her patient's special needs.

Knowing what drugs a person has been taking alerts doctors to a patient's special medical needs. Often it helps the physician to avoid ordering a drug which might react negatively—or perhaps dangerously—with the patient's regular medication. From medications, physicians can deduce the patient's medical problems, including high blood pressure, cardiac disease, diabetes or ulcers.

SIMPLE PRECAUTIONS IN PREGNANCY PREVENT RISKS OF TOXOPLASMOSIS

A few simple precautions during pregnancy could help mothers-to-be from passing on to their unborn infants a dangerous infection called toxoplasmosis, says a Stanford Medical School professor.

The infection, called toxoplasmosis, is usually harmless and in fact about 50 percent of the population have the toxoplasma organism without even knowing they're present, explains Dr. Jack Remington, professor of medicine.

But if the infection is acquired during pregnancy, the parasite may pass to the developing and otherwise unprotected fetus. This ultimately can cause mental retardation, epilepsy, or blindness later in life, Remington says.

Remington suggests just a few simple preventive steps pregnant women can take to avoid the potential danger to their unborn children:

- avoid eating raw or rare meat
- carefully wash all raw vegetables before eating
- wash hands thoroughly after handling raw meat or vegetables
- wear gloves when working in the soil or gardening
- avoid contact with cat feces and cat litter boxes

Remington adds that the danger to fetuses occurs when a pregnant woman becomes infected for the first time **during** pregnancy.

About 25 percent of women in the child-bearing age group already harbor the organism in their bodies before becoming pregnant. In them, the infection poses no threat to the unborn child because it is kept in check by the mother's immune system, he says.

CHILDPROOF CAPS CAN BE NEEDLESS NUISANCES

Childproof caps on medications save hundreds, perhaps thousands, of children's lives every year, but they can be a nuisance—and even a handicap—for many adults, says Robert Miller, pharmacy director at Stanford University Hospital.

"A senior citizen with arthritis, for example, might find it painful and confusing to handle a childproof cap," Miller explains.

Either the physician or the patient can specify an adult cap. The request can be put right on the prescription by the doctor, or the patient may simply ask the pharmacist to use an easy-open cap. Miller adds that as a precaution, some pharmacists might ask the patient to request the easy-open caps in writing.

Miller cautions, however, that families with children or elderly persons who have contact with children—such as grandparents—continue to use the safety containers.

"The evidence is just so overwhelming that childproof caps save lives," he says. Accidental drug overdose deaths among children have dropped dramatically since child resistant caps were mandated in 1972, Miller says.

NEW VACCINE PROTECTS CHILDREN FROM SERIOUS BACTERIAL DISEASE

Children aged 2 to 5 should receive a newly available vaccine which protects against hemophilus influenza type B disease, says Dr. Fernando Mendoza, assistant professor of pediatrics at Stanford.

"This is the first time that we have had a vaccine available for this serious infection, which afflicts one out of 1,000 of all U.S. youngsters between 2 and 5," says Mendoza. The infection, he explains, has been the leading cause of bacterial meningitis in young children and can also lead to pneumonia and a variety of other more serious illnesses.

"Children, such as those in day care, who are exposed to a lot of other youngsters may be especially at risk, but all parents of children in the 2 to 5 age group should ask their pediatrician about the vaccine," says Mendoza.

The vaccine appears to offer less protection to children less than 2 years old, but children in day care might be considered for the vaccine as young as 18 months, he says.

The vaccine, may produce mild fever in some children but has been proven safe and effective during extensive testing prior to general release in this country in the first part of 1985, says Mendoza.

LATE NIGHT SNACK NO ANSWER FOR NIGHTTIME SOLACE

A late night snack might be a satisfying way to end the day, but it can be hazardous to health if eaten regularly, says Dr. Keith Taylor, a gastroenterologist at Stanford Medical Center.

Persons who repeatedly go to bed and fall asleep too soon after eating may be asking for complications caused by excess acid production in the stomach, says Taylor.

To avoid the problem, Taylor recommends that persons eat not less than two to three hours before going to sleep at night. The same advice applies to persons who already have gastric (stomach) or duodenal (upper intestinal) ulcers.

Digestion is slowed down during sleep, along with just about every other body function. "Therefore, when you eat before sleeping, your stomach produces acid which wouldn't normally be produced," Taylor explains.

Some of the acid will wash back into the lower end of the esophagus (the gullet), if you are lying down, often producing irritation and even ulceration, as well as acting on ulcers already present in the stomach or duodenum.

A decade and more ago, physicians would recommend milk as a way to line the stomach, neutralize the acid and help heal ulcers.

"But we found that was actually harmful. Milk, of all the things we eat or drink, is unfortunately for would-be sleepers, one of the best stimulators of acid production," Taylor explains.

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FOR IMMEDIATE RELEASE

LIABILITY ISSUE THREATENS DEVELOPMENT OF AIDS VACCINE, SCIENTIST SAYS; URGES CALIFORNIA LEGISLATURE TO ACT

STANFORD—

"Without some form of liability protection, California biotechnology firms, now in the forefront of AIDS research, may not be able to develop an AIDS vaccine," a Stanford University scientist and member of the Institute of Medicine's special panel on vaccines said Tuesday, July 8.

Assembly Bill 4250 to encourage the development of an AIDS vaccine is moving through the California legislative process in Sacramento, but it has captured the attention of the Trial Lawyers Association (CTLA) which so far has been successful in winning key amendments that weaken it, said Dr. Thomas C. Merigan in an interview.

The bill will be heard by the Assembly's Ways and Means Committee tomorrow, July 9.

At issue is not just an AIDS vaccine but whether society's need for vaccines in general is compelling enough to warrant that kind of an effort on the part of state government to reduce manufacturers' exposure to liability, said Merigan, a professor of infectious diseases at Stanford University School of Medicine.

Merigan, who supports AB 4250, said that "without some form of liability protection, new vaccine development will be seriously hampered in the state."

Only a few biotechnology companies are now willing to take risks, Merigan added, and most of them are doing it against the wishes of their business people.

More than a dozen groups, including the California Manufacturers Association, Association of California Life Insurance Companies, Inland AIDS Project and two Northern California-based firms, Genentech, Inc. of San Francisco and Chiron, Corp. of Emeryville, support the liability legislation. Chiron, using the processes of genetic engineering, recently developed the long-awaited hepatitis B vaccine expected to be approved soon by the Federal Food and Drug Administration.

Merigan is a member of the committee on public-private sector relations in vaccine innovation of the Institute of Medicine of the National Academy of Sciences. The committee, composed of scientists, physicians, lawyers and economists recently issued an ominous warning on the current situation in a report titled *Vaccine Supply and Innovation*.

"There is cause for grave concern over the nation's vaccine supply," said the committee, listing the liability issue as a major deterrent.

Noting that the only supplier of vaccine products is private industry, the committee recommended the establishment of a federal commission to anticipate and resolve problems in vaccine development, supply and use, including the development of a compensation system for vaccine-related injury.

Merigan said AB 4250 would make California a leader in the nation in dealing with this issue in a socially responsible and just manner.

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The bill, authored by Assemblyman John Vasconcellos, D-San Jose, would remove the AIDS vaccine from the strict products liability doctrine by declaring it an "unavoidably dangerous" product, for which the public interest in its availability outweighs strict liability issues.

The bill creates an AIDS Vaccine Victims Compensation Fund to pay for all direct medical costs and up to $550,000 in noneconomic losses, and a special fund whereby the state guarantees purchase of one million doses of an AIDS vaccine at a cost of up to $20 million.

In California the "unavoidably dangerous" exemption is a recent development in *Kearle v. Lederle Laboratories* case. A state appelate court in 1985 ruled that the oral "live" polio vaccine was an "unavoidably dangerous" product and exempt from strict liability because the product was intended to provide an exceptionally important benefit that made its availability to the public highly desirable.

In essence, its proponents say, AB 4250 would codify the "unavoidably dangerous" doctrine spelled out in Kearle. The bill cleared the Assembly Judiciary Committee last month, but not before the original language, "dangerous," was changed to "unsafe" by an earlier assembly subcommittee at CTLA's urging.

"They (the trial lawyers) want to preserve the tort system," said Merigan. "They want to be sure that each individual can claim a special circumstance for a given liability.

"I can understand why we have tort law and what concerns the lawyers. Yet spreading the cost of risk throughout the society is the best approach to deal with vaccines because we will never have an absolutely safe vaccine.

"Whenever you try a new vaccine, you're not only taking it to protect yourself, but also to prevent the infectious agent from spreading in the community. One can argue the community has a stake in your being vaccinated. And certainly this California bill has the advantage of spreading the cost of risk to the whole population which is ultimately benefitting.

"You have both control of risk for the manufacturer, and a commitment to the rights of the individual."

Merigan compared California's effort to the Scandinavian approach where the state puts aside money and a commission decides whether an adverse reaction is due to the vaccine, and if so the individual who has made a personal sacrifice for society is compensated in a reasonable manner.

"It would be tragic," Merigan said, "if as a nation we overreact and stop using vaccines or withdraw from vaccine production because of some rare adverse effects while overlooking the benefits to the majority. When people in Great Britain did just that recently there was a recurrence of disease previously controlled by vaccines, including new cases of paralytic polio."

The Institute of Medicine report cites the difficulties of trying to find a cause-and-effect relationship where vaccines are concerned. As an example, it cites the pertussis (whooping cough) vaccine which has been the object of a flood of law suits because it is alleged to have caused neurological defects and sudden infant death in children.

"The appearance of one of these conditions shortly after vaccination may be difficult to prove or disprove in an individual case," according to the report. "Many of the alleged severe injuries from pertussis vaccine, such as infantile spasms, have not been found to be caused by the vaccine.

"This distinction between temporal association and causation may not be grasped readily by lay jurors and others who are unaccustomed to dealing with the concept, and most explanations are based on complex epidemiology that is even more difficult to comprehend.

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"Therefore, juries faced with a seriously damaged child and agonized family are understandably sympathetic to the plaintiffs."

The committee said "serious deterrents to vaccine manufacturing in the United States arise from the unpredictable nature of the current liability situation. And it warned that most major vaccines are available only from sole manufacturers who for any reason could withdraw from the market.

Vaccine stockpiling, the committee said, can do little to guard against the interruption in the supply of a vaccine, and there are no contingency plans to meet this situation.

Reliance on foreign manufacturers does not offer a practical solution either, the committee added, because of differing regulatory requirements, political considerations, and language barriers that often make the resolution of technical issues difficult.

The committee listed other deterrents to vaccine innovation—among them the complexity of development, production and quality control and the cost of research in relation to anticipated sales.

Concluding that all vaccines have risks, "even when they are manufactured according to licensed procedures and administered in accordance with recommended medical practice," the committee said:

"Most vaccines are promoted or required by the government for the public good; therefore, the committee believes that society has a responsibility to develop some means of compensating those those with vaccine-related injuries.

"Those who respond to the government's promotion of or legal requirement of vaccination convey benefits to other members of society because they reduce the risk of disease in the community.

"If vaccination results in an injury, the injured individual should be certain of receiving rapid and adequate compensation.

"The common law tort system cannot be relied on to provide such compensation because each claim requires an extended, costly and complex procedure to establish liability."

Although these problems exist, the committee also noted that the prospects for new and safer vaccines have never been brighter. They stem primarily from advances in genetic engineering and the ability to define the protein components responsible for inducing immunity.

"Researchers are presently trying to identify their precise chemical structures and to synthesize them with new technology," Merigan said. "We may soon have the capability of replacing existing vaccines that contain superfluous components with safer and more effective vaccines of higher specificity."

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STANFORD TO BEGIN HEART TRANSPLANTS IN INFANTS

STANFORD—

Stanford University Medical Center, the world's leading heart transplant institution, has taken formal steps to begin heart transplantation in neonates—babies in the first six to eight weeks of life—who have critical heart disease that is otherwise untreatable.

The transplantation will begin whenever there is a candidate and a suitable donor heart available, said Dr. David Baum, chief of pediatric cardiology. He said there are no neonates specifically waiting for transplants at Stanford.

The youngest patient to receive a heart transplant at Stanford so far was 2 1/2 years old at the time of the operation. However, Baum noted that Stanford has had a continuing program of heart transplantation in young people—those under the age of 19 years.

"Heart transplants have been done in this group for about 12 years," he said. "The program has been very successful, and with evidence of increasing need plus the fact that we were learning more and more about heart transplantation in young people, the age group gradually has been extended farther and farther back. This (the transplant decision) simply represents another extension."

Baum made it clear that the recent widespread publicity about infant heart transplants had nothing to do with the Stanford decision. The decision to include the neonatal period was made several months ago and preparations have been ongoing since then, he said.

"One of the reasons we haven't done it (a neonatal heart transplant) as yet is we have been taking pains in making the necessary preparations," he said. "We wanted to be sure that we had taken into account every possible recognized situation to assure the success of the transplant and to protect the child and his or her loved ones."

For that reason, Baum said, members of the cardiac transplant team had their plans reviewed by the medical center's Human Subjects Committee, a multidisciplinary group that has the responsibility to look after the rights of human subjects used in research.

The neonatal transplants could be considered experimental procedures, Baum said, because of the large number of unknown factors, such as how tiny bodies will react to immunosuppressant drugs. He noted there is almost no human experience in performing such operations.

Cardiac transplant team members also consulted with the medical center's Ethics Committee before deciding to go ahead with the procedure. "We were interested in getting as much insight as possible from others whose opinions we respect," Baum said.

He noted Stanford's role of leadership in heart transplantation, "not only with cardiac transplantation in general, but with cardiac transplantation in the very young." That leadership role, he said, was an additional factor in the decision to expand the age limits on transplantation to meet a growing need.

Dr. Norman E. Shumway, heart transplant pioneer and chairman of the Department of Cardiovascular Surgery, predicted in an interview last December that there would be increasing numbers of children receiving heart transplants.

Discussing the Stanford patients under 19 who have received transplanted hearts, he said, "The results seem to be better in the younger age group. We're very interested in looking into that."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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HOW TRAUMA CENTERS MAKE THEIR IMPACT ON PATIENT CARE

STANFORD—

One patient was a woman whose legs were crushed when she was hit by a car and thrown into a drainage ditch; another was a man hit by a motorboat and flown to the hospital by helicopter while bleeding profusely; a third crashed into a tree on his motorcycle and had multiple internal injuries.

All of those patients survived, but it's possible—even probable—that all would have died if they had not been taken to a trauma center where they could receive immediate surgical attention.

On the other hand, a 13-year-old boy whose spleen was damaged in a bicycle accident *didn't* have an operation for essentially the same reason: He was brought to a trauma center where a pediatric surgeon was immediately available to determine that he would be better off if the spleen were not removed.

All of those cases involved the Trauma Center at Stanford University Hospital, but they could have taken place at another trauma center similarly staffed and equipped. They illustrate the impact of this new concept on patient care.

Trauma centers are a relatively new concept for the San Francisco Peninsula. Santa Clara County got its first centers this year, and one has yet to be established in San Mateo County.

They are being developed more and more around the country, however, as medical authorities become more aware of their life-saving potential. The Stanford experience in just a few months is evidence of that potential. So is a 1982 study by the American College of Surgeons that said 42 percent of emergency room deaths could be prevented by proper trauma care.

What makes trauma centers different from the usual community hospital operations is the sheer volume of expert medical care available to each patient. At Stanford, a 13-member trauma team is on duty 24 hours a day, seven days a week.

The key member of the trauma team is the surgeon. He or she is the team leader and the first person to see the patient. That means, of course, that the trauma surgeon decides if surgery is necessary—and is immediately available to perform it.

The Emergency Department is staffed 24 hours a day with emergency medicine physicians who supervise pre-hospital care and direct paramedics as to which cases go to the Trauma Center.

A closer examination of the cases mentioned earlier shows how the system works.

- Berthella Dancy, 39, of Mountain View, is the woman hit by a car while jogging and thrown into a drainage ditch. She owes her life to several helpful individuals as well as the special medical attention she received.

One bystander reached her side immediately after the accident and helped hold her head out of the water. Other bystanders called the paramedics and two emergency medical technicians from Lockheed Missiles and Space Corp. helped get her out of the ditch and into an ambulance.

By the time she got to Stanford Hospital, Dancy was in shock and in desperate need of fluid resuscitation. "She needed the expertise of a whole group of surgeons," said Kathy Canevaro, trauma nurse coordinator. "General surgery and orthopedic surgery had to be coordinated and pulled together in a short time."

Dancy eventually had multiple operations and lost her right leg below the knee. But she lived.

- Stephen Dusse, 21, was riding a motorcycle when it careened into a tree at 40 miles an hour. Because he was wearing a helmet, he had no head injuries. But he suffered major injuries to his liver and one kidney.

"This is the sort of patient trauma centers are particularly helpful for," said Dr. John Collins, director of the Stanford trauma program. "The kind of patient who dies soon after arrival in the emergency room. His injury would have caused him to bleed to death if he hadn't been operated on almost immediately."

• Kevin Fuller, 23, was a long way from medical help when his boat was hit head-on by another boat in Calero Reservoir south of San Jose. By the time friends got him out of the water he was losing blood at an alarming rate.

Fortunately, a Stanford Hospital Life Flight helicopter was able to land at a school nearby and within minutes, Fuller was at Stanford Hospital. He was rushed into surgery for the first of a series of operations.

• Then there was 13-year-old John Polstra. He was in a bicycle accident in which he struck his chest and upper abdomen, injuring his spleen. In the past traditional practice of medicine, his spleen would have been removed. But modern pediatric medicine makes every attempt to save the spleens of children and a pediatric surgeon was available at Stanford to determine that an operation was not necessary. John recovered without an operation.

As that last example shows, the trauma team makes use of all the expertise available in the hospital when it is necessary. In the majority of cases, however, there are few medical problems beyond the knowledge of the 13 members of the team.

At Stanford, the trauma team consists of a senior trauma resident in surgery, the attending surgeon and an attending emergency medicine physician as well as a physician from anesthesia. Others on the team include a trauma resuscitation nurse, a patient nurse, an operating room nurse, a respiratory therapist, a pharmacist, an X-ray technician, a nursing assistant, a transfusion aide and a phlebotomist.

The arrival of a trauma patient brings all of the team members into the trauma room in the Emergency Department, all with specific tasks. To a non-medical observer, it is an impressive display of the kind of medical care that can be marshaled rapidly for critically injured patients.

Not all of the patients brought to the trauma center are critically injured. In fact, some have been able to leave in a few hours after little or no treatment.

Those patients, however, *could* have been injured critically. They were brought to the trauma center because paramedics were taking no chances. The patients had registered in the danger area on a "trauma score," which is based largely on the type of accidents known to cause severe injury.

"This is one of the most important groups of patients in any trauma system as it is in this group of seemingly well patients that many of the avoidable deaths occur," Collins said.

"Specialized knowledge and facilities and a high index of suspicion are required to properly evaluate these patients. Many will in fact prove to have no serious injuries and the system may thus appear at times to be wasteful. But only careful and expert evaluation can distinguish the not seriously injured from the deceptively intact patient with a disastrous hidden injury."

A fall of more than 15 feet is one of the high-risk accidents. Others are a motor vehicle accident at more than 25 miles an hour without a seat belt, one in which it took more than 20 minutes to extricate the victim from the vehicle, one in which the steering wheel is bent by the impact with the driver's body, or one in which the vehicle rolls over.

Other factors that will increase the trauma score are penetrating wounds, major burns or accidents involving potentially more fragile individuals such as infants or older adults.

The paramedics in the field work under very specific protocols. Those patients who have obvious significant injuries are transported immediately to trauma centers, with paramedics giving emergency care at the scene and en route to the hospital.

In evaluating patients who don't appear to be significantly injured, the paramedics communicate with the base station hospital. The emergency physician and the mobile intensive care nurse screen those patients. Any patients with significant chance of a major injury are taken to a trauma center for evaluation.

The emergency medicine specialist physician, responsible for all patients in the Emergency Department, works with the trauma surgeon in evaluating the patients, ensuring that patients who need aggressive resuscitation and surgery are identified and treated promptly.

Often, the trauma team deals with more than one patient at a time, and the team members have to treat several patients while back-up teams are being summoned.

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MITCHELL APPOINTED SUMC DIRECTOR OF DEVELOPMENT

STANFORD—

David L. Mitchell has been appointed director of the Stanford University Medical Center's Office of Development, Henry Riggs, University vice president for development, announced Monday, June 30.

The 36-year-old Mitchell will succeed John Ford who last March assumed new duties as associate vice president for development at the University. Mitchell's appointment is effective immediately.

Riggs said the appointment was made following a search, both within and outside Stanford, for an individual with strong leadership track record.

"David brings to this new position outstanding fund-raising experience gained at Stanford and several other universities," Riggs said.

Mitchell has been at Stanford since 1984. He has directed the university's major gifts program, staff and volunteer training, and coordinated the fund-raising campaign for a $30 million biology building.

During the several months of transition, Ford will continue to devote a portion of his time to medical development as Mitchell assumes his new responsibilities, Riggs noted.

He said that the Medical Center's $197 million fund-raising agenda is now mid-stream, "and we want to be certain that the momentum associated with a number of projects and solicitations is well maintained."

Paul Edwards, who served as acting director of the office for the past four months, will return to his duties as director of development of the Stanford University Hospital, Riggs said.

Prior to coming to Stanford, Mitchell had served as assistant chancellor for development at the University of California, San Francisco and vice president for Development for the UCSF Foundation. He also held key fund-raising posts at Northwestern University, and other schools.

Mitchell pursued a master's degree in management at Northwestern University's J.L. Kellogg Graduate School of Management and received his bachelor's degree from Lawrence University in Appleton, Wis.

7-2-86 —30— mitchell-SA11

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FOR IMMEDIATE RELEASE

STUDY SEEKS SIGNALS OF HEART IRREGULARITIES AMONG RUNNERS

STANFORD—

Serious runners are being sought by Stanford Medical Center researchers for a study of the physiological mechanisms that may cause abnormal cardiac rhythms among joggers and runners.

Although several studies have documented the health benefits of exercise, the dangers of sudden death during exercise also have been widely publicized—most notably by the death of author/runner James Fixx.

The intent of the study, according to Susan Garay of the Stanford Center for Research in Disease Prevention (SCRDP), is to measure physiological differences in runners by age groups to see if there are signals that might warn of cardiac problems during vigorous exercise.

Male runners are needed in two age groups, one 20 to 30 and the other 55 to 65. All volunteers must run at least 20 miles a week and have participated in at least two 10-kilometer races in the last year. The 20-30 year olds must have a 10-kilometer time of 35-41 minutes; the 55-65 year olds must have a 10-kilometer time of 45-51 minutes. The runners also must be healthy, non-smokers and free of known cardiovascular disease.

Drs. Peter Wood and William Haskell are the principal investigators on the research, which is a project of the SCRDP.

Volunteers will be given two treadmill tests at different times: one will be a test of maximum oxygen consumption or aerobic capacity and the other will be a simulated 10-kilometer run.

Blood pressure, cardiac rhythm and serum free fatty acid levels will be measured during and after the tests. In particular, volunteers will be tested for levels of catecholamines, chemicals released into the blood stream by the nervous system that influence heart function.

Catecholamine levels are known to increase with age and intensity of exercise. However, little is known about the effect of vigorous exercise on catecholamines in older men.

A second objective of the study is to determine whether vigorous exercise is associated with cardiac arrhythmias at significantly higher rates in older runners than in younger runners. Since the prevalence of heart disease increases with age, older runners may be at greater risk of cardiac abnormalities while running than younger runners. However, this is another area lacking specific data.

In addition, the study will attempt to determine the correlation between levels of free fatty acids and exercise. Research with animals has shown a relationship between excess levels of free fatty acids and heart irregularities.

All participants will receive free cholesterol, aerobic capacity, electrocardiogram and blood pressure information.

Male runners in the targeted age groups who are interested in participating in the study should call (415) 725-5311, from 9 a.m. to noon, Monday through Friday.

7-1-86 —30— runners-rg3

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Veterans
Administration

News Release

Stanford Medical Center
JUL 2 1986
News Bureau

July 1, 1986

The Veterans Administration's most wide-sweeping changes in health care eligibility took effect July 1, two months after Congress passed Public Law 99-272. The law will require some veterans -- for the first time -- to pay for a portion of their VA health care, while quaranteeing other veterans a hospital bed.

Under the new law, the VA is required to provide hospital care to service-connected and lower-income veterans. Veterans with higher incomes will will receive care on a space-available basis and also may have to agree to pay a $492 deductible every quarter.

These new standards replace the old system where service-connection and age -- not income -- were the basis for determining eligibility.

Specifically, the law establishes three eligibility categories. Category A includes service-connected veterans, former prisoners of war, veterans exposed to Agent Orange or ionizing radiation while in the service, a veteran receiving a VA pension and veterans of the Spanish American War and WWI. Veterans who earn less than $15,000 if single and $18,000 if married also are in this category. These veterans are quaranteed free hospital care. Outpatient care and nursing home placements may be provided on a space-available basis.

-more-

Veterans in Category B earn between $15,000 and $20,000 if single, and between $18,000 and $25,000 if married. These veterans will receive care on a space-available basis.

Category C veterans earn more than $20,000 if single and more than $25,000 if married. These veterans receive care on a space-available basis, but also must agree to pay a deductible. Veterans in this category who do not agree to pay the deductible will not be eligible for care from the VA.

Veterans receiving inpatient care prior to July 1 will not be affected until their current treatment is completed. Veterans receiving outpatient treatment prior to July 1 and needing additional care also will not be affected immediately.

For more information, call Michael Brown or Kenneth Swasey, at 493-5000 exts. 5633 and 2334.

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NEW ELECTROPHYSIOLOGY LABORATORY OPENS AT STANFORD

STANFORD—

A major new electrophysiology laboratory to aid heart specialists in their efforts to prevent cardiac arrest was opened in June at Stanford University Hospital.

The laboratory, described by Dr. Charles Swerdlow as "state-of-the-art," is one of the first components of Stanford Hospital's $114 million modernization project to be completed. It features equipment worth $550,000.

Swerdlow, director of the laboratory and assistant professor of cardiology, said, "The equipment is compact and easy to operate and there's a computerized switching system that allows us to switch between instruments measuring different areas of the heart."

Dr. Donald Harrison, head of the Division of Cardiology at the Stanford University School of Medicine, said, "The problem of sudden death because of abnormal heart rhythm disturbances is one of the most important challenges facing cardiologists today."

More than 150,000 patients under 65 die suddenly of these electrical disturbances in the United States each year, Harrison said.

"The number of people with abnormal rhythm seems to be increasing," he added. "The reason is more people with advanced heart disease are living because of other advances in cardiology."

Stanford's heart specialists have pioneered in the development of techniques for identifying patients at high risk for sudden death, Harrison noted. The research has begun to determine the most effective drug therapies and devices for preventing arrhythmias.

"The new laboratory will provide equipment to match these developments," Harrison added.

Cardiac electrophysiology is a technique for recording electrical signals from inside the heart to diagnose arrhythmias.

The normal heart of a resting individual beats steadily at about 70 to 80 times a minute in response to electrical signals within the heart. Any interruption of those signals can produce an arrhythmia, but a lot of arrhythmias are mild and pose no major threat.

Some people, however, have serious arrhythmias—those in which their hearts race wildly out of control or are unable to function properly in pumping blood. Those arrhythmias can be fatal if left untreated.

Treatment involves three basic approaches: the use of drugs, surgery, and implantation of devices that will stop arrhythmias.

Before any treatment, however, it is necessary to have an accurate diagnosis, a precise determination of the area of the heart that is causing the problem. That diagnosis is the function of electrophysiology.

The first step in electrophysiology is the insertion into the heart of long, thin tubes called pacing catheters. They are inserted through veins and arteries in the groin or collarbone areas, then positioned in specific areas of the heart by physicians using X-ray visualization.

Once in place, the catheters can alter a heart beat and help physicians diagnose an arrhythmia that can't be diagnosed by other means. They can also be used to reproduce an arrhythmia in patients who have had previous attacks, allowing physicians to evaluate the effectiveness of drugs or other antiarrhythmic treatments.

Swerdlow said Stanford physicians are also using new catheter techniques that avoid the need for surgery or life-time drug treatment for some patients with "supraventricular arrhythmias."

"Electrode catheter ablation" is the name for the new treatment, which Swerdlow described as "high energy electrical shocks delivered to the heart to produce a small area of localized damage," which blocks electrical conduction.

Such treatment can be used only in specialized cases. Many patients still need regular surgery, which involves either removing or freezing the area of the heart that is causing the problem. Swerdlow noted that surgery is particularly effective in cases of Wolff-Parkinson-White Syndrome, in which patients are born with extra electrical pathways and can suffer arrhythmias when heart impulses travel along those extra routes.

Swerdlow said there is "virtually certain cure" of Wolff-Parkinson-White Syndrome by surgery if the electrophysiological evaluation is accurate.

Supraventricular arrhythmias are called that because they start in the area of the heart above the ventricles. More common are ventricular arrhythmias, originating in the ventricles in the lower part of the heart. They are frequently the result of a heart attack that has damaged the tissue.

Surgery is equally effective on ventricular arrhythmias, but doctors prefer drugs if they are effective because they are less destructive to the body. "No anti-arrhythmia drug is effective uniformly, however, and all have some side effects," Swerdlow said.

Implantable devices that control arrhythmias are "generally a last choice for treatment," Swerdlow said, "because they only interrupt arrhythmias after they've started, rather than prevent their occurrence."

Swerdlow pointed out that the electrophysiology laboratory is "only one aspect of the total care of patients who have arrhythmias. That care includes better outpatient diagnostic equipment, cardiac surgery and a dedicated staff of nurses who specifically help care for arrhythmia patients."

—30—

electro-rg3

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VOLUNTEERS SOUGHT FOR HYPERTENSION RESEARCH

STANFORD—

Researchers at the Palo Alto Veterans Administration Medical Center are seeking volunteers for a study of metabolic changes that may be associated with hypertension, or high blood pressure.

The researchers are exploring the possibility that some of the metabolic changes may be risk factors for coronary artery disease.

Volunteers with hypertension are needed for a study of the possible similarity between hypertension and diabetes mellitus. Volunteers with normal blood pressure are also needed, to test the effects on blood fats of clonidine, a drug commonly used to lower blood pressure.

The studies will take place at the Aging Study Unit at the VAMC, under the direction of Drs. Gerald Reaven, Brian Hoffman, Art Swislocki and their associates. Reaven is professor of medicine at the Stanford University School of Medicine.

Those interested in participating in the study are asked to call (415) 493-5000, ext. 4572, between 9 a.m. and 5 p.m., Monday through Friday.

7-1-86 —30— hypervol-rg3

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HEART, KIDNEY RECIPIENTS TELL OF LIFE WITH TWO TRANSPLANTED ORGANS

STANFORD—

Two men who are apparently the world's only living recipients of both heart and kidney transplants issued a joint plea for public awareness of the need for organ donations at a news conference at Stanford University Medical Center Friday, Aug. 29.

The two are Mark Williams, 29, of Mountain View, and Louis Bonesio, 52, of Gilroy.

Williams had a heart transplant—his second—at Stanford on July 17 and a kidney transplant on July 19. Both organs came from the same donor, a 23-year-old man killed in a motor vehicle accident in Santa Rosa. Williams' first heart transplant was on Aug. 4, 1982.

Bonesio received his heart at Stanford 12 years ago, on May 11, 1974, and had a kidney transplant on July 29, 1985, at the University of California-San Francisco.

The surgeon who performed both kidney transplants, Dr. Nicholas J. Feduska of UCSF, also spoke at the news conference. He described the cooperation between the two medical institutions that brought him to Stanford for Williams' transplant because Stanford is not doing kidney transplants at this time.

Feduska, who had made calls to other medical centers performing kidney and heart transplants, said there were no records of any other survivors of the joint transplantations.

Two Stanford physicians, Dr. Sharon Hunt, clinical associate professor of medicine, and Dr. Vaughn Starnes, chief transplant resident, described some of the medical complications that brought Williams back into the hospital.

Williams' kidneys were deteriorating because of toxicity caused by the use of cyclosporine, an immunosuppressant drug he had to take to keep his body from rejecting his first heart transplant. Then he suffered a heart attack and was very near death when the donor organs became available and made the double transplant possible.

Hunt said cyclosporine is a "double-edged sword" because it is necessary to avoid the rejection of organs but it can have adverse side effects. However, she said physicians have become "a lot smarter about using it" since Williams was first put on the drug and she thought he would not encounter the same problems with its use now.

Williams and Bonesio both said they have no regrets about their operations and have enjoyed a high quality of life.

"I can do anything anyone else can," said Williams, pointing out that three weeks before his heart attack he had been on a white water rafting trip.

Both men, as well as the three physicians, spoke of the need for organ donors for other potential transplant recipients.

"I want to do well because someone else gave me a chance," Williams said.

8-29-86 —30— hrtkidny-rg3

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Editors: Photo available if not included.

13-POUND BABY BORN AT STANFORD HOSPITAL

STANFORD—

Frances Christine Petersen is only two days old, but she's already made a big impression on people.

A very big impression. Frances checked into the world at 13 pounds, 1 ounce, and sent nurses at Stanford University Hospital scurrying for the record books.

Although Frances' weight is about three pounds below the world record, she's the biggest baby in the memory of Stanford Hospital employees. She's also the biggest baby delivered by Dr. James Stickler in 28 years of medical practice and the biggest her pediatrician, Dr. Richard Green, has ever had as a patient.

Stickler and Green are both physicians at the Palo Alto Medical Clinic, where Frances' mother, Roxanne, works as a nurse. Being a nurse, Roxanne was prepared for a big baby—but not that big. "I expected about 11 pounds," she said.

The amazing thing about Frances' birth to nurses at Stanford Hospital was that it was a regular birth, not Caesarean. And it wasn't a delayed birth. "She was actually four days early," her mother said.

Roxanne and her husband, Samuel, have two sons, both of whom were robust infants weighing more than 9 pounds at birth, even if they didn't measure up to their sister.

The Petersens live in San Jose, not far from her parents, Franki and Marvin Rhodes of Campbell. Frances, who is named for her grandmother, is the Rhodes' 22nd grandchild, but she won't hold the title of youngest grandchild for long. Roxanne's sister, Rori Sota, is expecting a baby Monday.

8-29-86 —30— bigbaby rg3

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EDITORS: Photos are available
FOR IMMEDIATE RELEASE

STANFORD'S FIRST IN VITRO BABY BORN

STANFORD—

The first baby conceived with the help of Stanford University Clinic's in vitro fertilization program was born to a Campbell couple.

The healthy 7-pound, 6.5-ounce girl, Jordyn Elizabeth Austin, was delivered naturally at Good Samaritan Hospital in San Jose at 4:13 p.m. on Aug. 27.

The mother, Karin Austin, is resting comfortably and recovering from the long-awaited event.

"Every baby is special, but this one is especially so," said her husband, Kevin. "We're really flying. We feel just great."

The Austins were referred to Stanford's in vitro fertilization program by their obstetrician, Dr. Carl Sgarlata, after unsuccessfully attempting for "a good solid two years" to achieve a pregnancy.

"There was no medical explanation for their inability to conceive," said Dr. Frank Polansky, the reproductive endocrinology and infertility specialist who directs the in vitro program. "They just needed a little help."

The Austins were among the first group of couples to go through the program, which began in October, 1985. Couples can undergo two types of treatment: in vitro fertilization (IVF), in which the eggs are fertilized by sperm in a petri dish and, after they develop into embryos, are implanted in the woman's uterus; and gamete intra fallopian transfer (GIFT), the method of choice for the Austins.

Like all women in the program, Karin began taking medication to enhance egg production two days after the start of her period. Six days later, physicians began examining her ovaries with ultrasound to check on the number and size of egg-bearing follicles. When the follicles were ready, Karin received an injection to trigger ovulation, the process in which the eggs are released from the ovaries to begin their travels through the fallopian tubes to the uterus.

About 36 hours later, Karin underwent a procedure called a laparoscopy to "harvest" the eggs. Meanwhile, Kevin produced semen, from which active sperm were placed in petri dishes with the eggs. Once the eggs were fertilized by the sperm in the petri dish, they were placed back in Karin's fallopian tubes, from where they naturally made their way into the uterus. Ten days later, Karin took a pregnancy test that turned out positive, and the rest, as the saying goes, was left up to Mother Nature.

If Karin had undergone IVF treatment, the fertilized eggs would have been kept in the petri dish until they developed into embryos of up to 16 cells, a process that takes two or three days. Physicians would then have placed the embryos directly into her uterus.

It may sound simple enough, but there's a lot that can go wrong with the process, said Dr. Emmet Lamb, chairman of Stanford's gynecology and obstetrics department. Only about 10 percent of the couples who start each cycle can expect to have a baby at the end of the process. But, he added, that compares favorably with the 2 percent monthly pregnancy rate that can be expected by the average infertile woman. And for some women who may have severely damaged fallopian tubes or none at all, IVF offers the only hope of pregnancy.

The program is not cheap, either. Couples are charged $5,000 per cycle of treatment, on a par with similar programs at Alta Bates Hospital in Berkeley and University of California, San Francisco. In spite of the cost, about 50 couples have gone through Stanford's program. While some women have begun treatment more than once for a total of 71 cycles started, only 43 have progressed far enough for eggs to be harvested, said Kathy Turner, nurse coordinator for the program. Three other couples are now awaiting births.

08-28-86

—30—

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EDITORS: Dr. Alice Whittemore is on leave at the Harvard School of Public Health where she can be reached at (617) 732-1056

ADVANCE FOR RELEASE 3 P.M. PDT WEDNESDAY, AUGUST 27, 1986

BEST BREAST CANCER PROGNOSIS IS FOR WOMEN AGED 45 TO 49

STANFORD—

Women who are diagnosed with breast cancer in their mid to late 40s survive slightly longer, on average, than young or elderly women diagnosed with the disease, conclude four Stanford University researchers in a letter published in the August 28 *New England Journal of Medicine*.

Their conclusions, based on a review of 20 years of medical literature and on an analysis of survival rates in a group of nearly 13,000 women with breast cancer, agree with the results of a major new Swedish study published in the same issue of the *Journal*, examining survival rates among 57,068 women with breast cancer.

"In all reports (that were examined) except one, the age groups that included patients 45 to 49 years old had the best prognosis," wrote Dr. Alice Whittemore, professor of family, community and preventive medicine at Stanford University School of Medicine, and her three colleagues, Janet Mohle-Boetani, a medical student; Stella Grosser, a master's degree statistics student; and Mary Malec, a research assistant.

When Whittemore and her colleagues calculated five-year survival rates in a group of 12,994 white women with breast cancer they found, again, that the overall five-year survival rate was highest among patients 45 to 49 years old and lowest among those younger than 35 years at the time of diagnosis.

"Since all the studies show the same result—that women 45 to 49 have a better prognosis—there must be some biological reason for it that we need to try to understand," Whittemore said in an interview.

One possibility that Whittemore favors but the Swedish group plays down is that the different survival rates in women of different age groups could relate to hormonal changes occurring around the time of menopause.

Such hormonal changes, particularly a decrease in estrogen levels, could slow breast tumor growth, Whittemore speculated.

Another factor that could contribute to lower survival rates in younger women is recent pregnancy, the researchers speculated, since hormonal changes during pregnancy are thought to worsen breast cancer.

However, Whittemore cautioned that these explanations are only guesses, and further research needs to be done before a full explanation can be proposed.

According to the Stanford study, the approximate five-year survival rates were 70 percent for women diagnosed with breast cancer when 35 or younger, 75 percent for women aged 35 to 44, 77 percent for those aged 45 to 49, and 73 percent for those 50 to 54 years of age.

8-27-86 —30— breast LH11

END ADVANCE FOR RELEASE 3 P.M. PDT WEDNESDAY, AUGUST 27, 1986

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FOR INFORMATION CONTACT: Mike Goodkind (415) 725-5376 or 723-6911

FOR IMMEDIATE RELEASE

SHUMWAY TALKS ABOUT HIS WORK IN PUBLIC LECTURE

STANFORD—

In a rare public appearance, heart transplant pioneer Dr. Norman Shumway will talk about his own three decades of transplantation research and prospects for the future in the field.

Shumway is featured speaker at the Stanford University Hospital's Friends of Nursing fall fundraiser, 6 p.m., Friday, Sept. 12 in Fairchild Auditorium at the Medical Center.

Shumway's talk is entitled "Heart and Heart-lung Transplantation: The Past, Present and Future." In 1968 he performed the first successful adult heart transplant in the United States. Since then Stanford has become one of the most active and successful centers with more than 408 heart and more than 35 combined heart-lung transplants.

Shumway in recent years has been an outspoken critic of the artificial heart, favoring instead both biologic transplants and implantable devices which assist the patient's own heart.

The lecture is to be followed by wine and a light buffet. Entertainment is to be provided by the Churchill Street Ragtime Jazz Band.

The public may make reservations by calling Mark James, Stanford University Hospital Nursing Administration, (415) 723-8545. Cost is $20 per person and seating is limited.

Friends of Nursing at Stanford is a nonprofit organization intended to promote professional excellence in nursing practice and to increase the public visibility of the nurse as a caregiver and teacher. The group sponsors fund raising and education events.

8-27-86 —30— friends-mg10

EDITORS: Members of the news media are welcome to attend both the lecture and the dinner. Opportunities for interviews and for filming the event are possible but limited.

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

MONOCLONAL ANTIBODIES OFFER PROMISE IN ORGAN TRANSPLANT REJECTION

STANFORD—

Monoclonal antibodies may some day be used to track cardiac organ transplant rejection without the pain and complication of taking tissue from the heart, a Stanford University Medical Center immunologist says.

Dr. Randall Morris, a senior transplantation immunologist with Stanford's cardiac transplant program, says animal studies with rats indicate that the high tech "magic bullets" may offer an early diagnosis of rejection which can be detailed with photography instead of a surgical biopsy procedure.

Monoclonal antibodies, tailor-made protein molecules, have not realized their proponents' decade-old hopes of becoming a major cancer-fighting tool. But they are finding increasing potential use in the organ transplant and cardiac arenas. Scientists are starting to use monoclonals to diagnose heart attacks and treat kidney transplant rejection.

Morris presented the results of his monoclonal studies at the International Congress of the Transplantation Society in Helsinki, Finland, this month.

"We're encouraged even though there are still major obstacles which need to be overcome before this procedure could be considered for use on its own as a diagnostic test for human heart transplant rejection," Morris said in a recent interview.

"We've been looking for a long time for something which replaces the biopsy. That procedure is currently the only reliable test for organ rejection, but it's uncomfortable at best, and can be painful." It involves inserting a small scissors through a vein to snip off a small piece of heart tissue for analysis.

Morris described the experimental technique which has shown promise in rat studies:

The animal is injected with monoclonal antibodies, laboratory-refined protein molecules which have in effect been "programmed" to seek out and attach themselves in clusters to the damaged rejecting heart tissue. Minute quantities of radioactivity are attached to the monoclonals, and the radioactivity serves as a beacon to identify rejection.

The monoclonals, purified by a new technique developed by the researchers, are injected into the blood stream, where they travel until they come in contact with a protein called myosin, the substance responsible for making the heart contract, Morris explained. In healthy heart tissue, the myosin is covered with a membrane which deflects the monoclonals. But in hearts where rejection is occurring, the membrane is damaged and vulnerable to the cruising monoclonals.

The laboratory-engineered monoclonals, called antimyosin, are so specific that they recognize variations in myosin. In the animal tests, they bypassed myosin exposed in skeletal muscles. Instead, almost like a magnet, they attach only to the myosin in the heart, the scientist said.

The experiments involved sewing a second heart onto the abdomen of a rat. Since no drugs were administered, the second heart began rejecting within several days.

"The animals' own hearts serve as an effective control, because what we found was that the radioactive monoclonals attach themselves to the rejecting donor heart but bypass the non-transplanted healthy heart," said Morris. When the scientists looked at the rejecting heart tissue under the microscope, they could see the antibodies by using special stains.

more

"The next step is to photograph the radioactive monoclonals within the rejecting heart using X-ray style technology," Morris said.

Despite the encouraging results and the promise it offers to transplant patients, Morris indicates there are a number of serious barriers which need to be overcome before the monoclonal antibody test can be considered as a replacement for biopsies.

"We don't know if the test will be sensitive enough, at least initially, to pick up low levels of rejection that we can now find by biopsy, and secondly, we don't know how long it will take for the monoclonals to lodge in the right place. That's crucial because if it takes too long, we won't get results back fast enough to be effective. Third, there is a possibility that the the body will begin producing antibodies against the monoclonals, in effect causing the patient to build up an immunity against the test."

Still, the need to find a successful, safe and preferably comfortable test is vital, because rejection is perhaps the single greatest drawback to organ transplantation.

Rejection, caused by the immune system's natural tendency to fight off foreign tissue, is fought in patients with powerful drugs which are toxic if administered in high doses. The toxicity requires that physicians make a concerted effort to keep medication at the lowest possible level. But that caution renders at best a delicate balance which can easily be upset by rejection. Hence, the need for constant monitoring.

Morris believes that the current monoclonal test might be refined even further, perhaps eventually becoming a serum test requiring nothing more invasive than a simple blood drawing.

The immunologist and colleagues are currently testing to see if the myosin detaches from the heart and enters the bloodstream during rejection. If so, monoclonals used to test a blood sample from a patient might yield results as accurate as injecting the radioactive markers into the patient.

"Healthy people should have zero levels of the protein, persons who are rejecting may have higher levels of myosin in their blood," Morris explained. But initial tests of the laboratory test have not yielded definite results, he added.

Morris' colleagues were Patrick DeValeria, a Stanford medical student; Pi-Ju Cheng, a Stanford immunologist; William A. Clark, a biochemist at Michael Reese Hospital, Chicago; Brett Skogen and Johann Kim, research scientists at Tago, Inc., a Burlingame, Calif. biotechnology firm; and Frederic P. Pratt, of DuPont Biotechnology Systems, Wilmington, Del.

The work was funded by the National Institutes of Health, as well as the private Baxter, Hedco and McCormick foundations, and the Peyton Hawes Fund.

—30— randyout-mg10

EDITORS: Dr. Morris may be reached at (415) 723-5641 or 723-5771.

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EDITORS: Photo available if not included

DELIVERY ROOMS OUTFITTED WITH BETTER EQUIPMENT THANKS TO NURSE'S OUTSIDE CONSULTING

STANFORD—

The way in which medicine and industry can cooperate for mutual benefit is illustrated perfectly by the work registered nurse Barbara Petree did for Stanford University Hospital and Hewlett-Packard Company.

Petree has been clinical nursing coordinator of Stanford's delivery rooms and at the same time has been a part-time consultant and community instructor for Hewlett-Packard.

In her dual role, she contributed to 10 years of research on the development of newer and better fetal monitors. That research ended with the introduction of the HP 80240A fetal ultrasound telemetry unit this month.

"By working with the equipment and giving HP our clinical feedback," she said, "we can participate in the process of technological development, which in turn helps us care for patients."

Since January, Petree has been working as a nurse educator with the Midcoastal California Perinatal Outreach Program administered by Stanford's Department of Gynecology and Obstetrics. She was working in the hospital, however, when nine of the original HP fetal monitors were purchased in 1974.

"At that time," she said, "we didn't have the money to adapt them for use in the delivery rooms, so HP fitted our four delivery rooms with a special connection box and extension arm to make the adaptation possible."

In gratitude for Petree's consulting and teaching activities within the company, HP last year donated two dual heart rate retrofit kits to the hospital to even further update later versions of a fetal monitor, two of which were purchased by the medical center's Auxiliary in 1983. The later version has a new ultrasound system which picks up the fetal heart rate in an external mode. "The delivery room budget has not allowed for the purchase of these kits for the past several years," Petree said.

The kits make possible the functions performed by the "newest generation" of dual heart rate fetal monitors, Petree said. "With pre-term deliveries, it's important to monitor both the baby and the mother because the maternal heart rate is increased by labor-suppressing drugs," she said.

With this latest monitor picking up the heart beats of one baby, twins, or mother and baby, nurses and doctors in the delivery room can obtain more medical information than ever before, said Petree.

Petree's involvement is an example of how a staff member serving the community can lead to direct benefits for the hospital, said Jeanne DeJoseph, perinatal assistant director of nursing.

"It is something I've done on my own time," said Petree, "in response to Stanford's encouragement of employees to get involved, and as an opportunity for my own professional growth."

In keeping with HP's tradition of using clinical people to teach community courses, Petree has instructed nurses, physicians, salespeople and biomedical engineers in the use of HP fetal monitors since 1975.

She also coordinated clinical trials in the hospital of HP's new telemetry unit, which uses ultrasound for transmission of signals. The prototype equipment makes it possible for a mother to be mobile while her baby is monitored during labor. "The sender she carries is about the size of a portable radio," Petree said.

Studies have shown that walking may shorten labor for some women, she said.

Another advantage of the new technology is that it is non-invasive, in contrast to telemetry units which require electrodes to be attached to the baby's scalp, she added.

Hewlett-Packard is selling the new units for $5,800.

Community Affairs Dept.
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News Release

Stanford Med. Center
SEP 2 1986
News Bureau

Calendar item

August 27, 1986

Family members and medical professionals who care for the disabled, frail or chronically ill are invited to attend the Caregivers Faire, which will be held from 10 a.m. to 8 p.m. September 18 at the Veterans Administration Medical Center in Menlo Park.

The faire is free and will offer films, workshops, discussions and more than 80 exhibitors providing information on a variety of community resources and services. The fair is sponsored by the VA and a consortium of community groups who work with the ill and aged. For more information, call (415) 493-5000, ext. 2458.

# # #

EDITORS NOTE: Reporters or photographers are welcome to attend the faire. For more information on covering the event, call Holly Fletcher at (415) 493-5000 ext. 4888.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

CHRONIC SKIN DISORDER IDENTIFIED AS SELF-HEALING TYPE OF TUMOR

STANFORD—

A rare skin disorder that can afflict patients on and off for decades is probably a very slow-growing type of tumor, Stanford University Medical School doctors report in the August 21 *New England Journal of Medicine*.

By studying these rare self-healing tumors, scientists might be able to find new clues about the underlying causes of malignancy, said Dr. Jeffrey Sklar, assistant professor of pathology at Stanford and one of the investigators.

Sklar's colleagues on the study are Dr. Lawrence Weiss, assistant professor of pathology, Dr. Gary Wood, assistant professor of dermatology, Martha Trela, research assistant, and Dr. Roger Warnke, associate professor of pathology.

The disease, called lymphomatoid papulosis, is characterized by the intermittent appearance of small skin nodules which eventually break open, then heal, usually leaving small scars, the doctors explained. Many patients experience repeated episodes over a period of many years.

Despite its generally benign behavior, this disease has several features of a malignant cancer, Sklar said.

One hint which suggested the malignant nature of the disease is that occasionally patients develop an aggressive form of skin cancer called T-cell lymphoma, he said. Another is the observation that cells from the skin sores look malignant when observed in the microscope, he added.

But since common wisdom says that most cancers grow rapidly and inexorably, doctors had been unable to explain the decades-long course of the disease.

One possible explanation was that the disease, despite the malignant appearance of abnormal cells from the sores, is not really a tumor at all but an inflammatory reaction such as an allergy or infection.

To answer the question of whether this disease is truly a tumor or not, the Stanford scientists used biochemical methods to analyze genetic material from the abnormal cells. With these techniques they determined that the disease is most likely a lymphoma from the start, despite its indolent nature, Sklar said.

8-20-86 more

That finding in and of itself will not necessarily lead to improved treatments for patients who have the disease, he added, but it could provide new basic information about malignancy and how the body tries to control cancerous growths.

Sklar said that it's not known why this particular tumor grows so slowly and even appears to repeatedly heal itself. It could be that the body's immune system is able to hold the growth in check, he said. Another possibility is that there is something special about the particular cells that proliferate in this disease or about the abnormalities that make them grow.

Several years ago, Sklar and his colleagues began using a technique—based on recent advances in molecular genetics and immunology—for distinguishing cancerous growths from certain other types of cell proliferations. They used the same technique to determine that lymphomatoid papulosis is a tumor which is probably a very slow-growing, frequently self-healing, malignancy rather than an inflammatory process.

The technique relies on the fact that a cancer consists of a "clone" of genetically identical cells, all descended from a single cell that went awry. Inflammatory processes, which can outwardly resemble cancer, are not composed of genetically identical cells. Therefore, by analyzing certain genes within the genetic material, DNA, from cells in a tissue sample, scientists can determine whether or not it is a tumor.

In this study, the scientists removed skin samples from six patients with lymphomatoid papulosis and analyzed DNA from the cells. In five out of six patients, they found clones of cells, indicating that the disease is a tumor.

Sklar said that in the case of the sixth patient, the results were not definitive. In that case, there may have been too few tumor cells for detection in the specimen that was removed for study.

The research was funded by grants from the National Institutes of Health.

—30—

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Veterans Administration

News Release

August 20, 1983

For People in the News

Jon Rupp, a Fremont resident and the special assistant to the director of the Palo Alto Veterans Administration Medical Center, has been granted membership status to the American College of Healthcare Executives.

Members must demonstrate commitment to continuing education and participation in community affairs. They also must successfully complete comprehensive oral and written examinations.

The College is an international professional society representing 21,000 health care executives.

# # #

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PHYSICAL THERAPIST HELPS SICK BODIES CATCH UP TO HEALTHY HEARTS

STANFORD—

Surgeons give transplant candidates a new heart, but Steve Sadowsky is among a group of Stanford University Hospital physical therapists which helps them to use it.

Sadowsky also helps patients rebuild chest muscles deteriorated from disuse after many months of having their breathing supported mechanically by a respirator.

His skills are based on 10 years of progressively greater responsibility, and he has the credentials and honors to prove it.

Sadowsky is one of about eight therapists in the nation to be certified by the national Board of Physical Therapy Specialties as a clinical specialist in cardiopulmonary physical therapy. His is one of six specialties in the past two years that the board has begun to recognize.

So what does he do for a patient with a new heart?

Before leaving the hospital, Sadowsky teaches the patient to be capable of riding a stationary bicycle for 25 to 35 minutes, climb two flights of stairs and walk a quarter of a mile.

Do all his patients meet these criteria?

"No, but many do, and some progress to significantly higher levels of performance. One patient eventually ran a marathon (26.2 miles), while another rode his bike several thousand miles across the country a few years ago. Of course quite a number are more recreationally active—they ride their bikes through Europe or whatever."

Sadowsky or one of his colleagues is one of the first staff people a transplant or other surgical intensive care patient is likely to meet during recovery.

"We're there usually on the first day after surgery and almost as soon as the transplant patient is extubated (breathing on his own). The first day the patient performs such things as bending the knee toward the face with the help of the therapist. On the second day patients are doing arm and trunk exercises while seated, and by the third day they're doing standing exercises beside their bed."

While individual therapy is useful for all patients, "it is especially critical for transplant patients who are taking powerful drugs (immunosuppressants) which can weaken their bones and can interfere with muscle function."

Transplant patients pose a special challenge to therapists because of their uneven physical condition.

"You have a healthy heart in a debilitated body. Even if the patient had lived an active life, they wouldn't have been able to exercise or be very active in the months before surgery.

"Our challenge is to bring the body up to the standard of the new, healthy heart and to assist in countering the side effects of the immunosuppressants."

The respirator patients pose a different sort of challenge.

These people are also desperately ill. Some of these patients have not been able to breathe for months without a mechanical respirator.

"When they begin to recover and start breathing on their own, they have the same problem faced by anyone who hasn't used a particular muscle for a while. But obviously it's much more critical to get someone's respiration muscles back to normal than, say, muscles in an arm or finger."

Sadowsky and his colleagues use a technique which involves stretching and applying resistance to the chest wall to reestablish regular breathing patterns and to stimulate the chest muscles that control breathing.

Whether patients have just had a transplant or are coming off the respirator, Sadowsky and his Stanford Hospital colleagues work under a physician's orders. But in the room or hospital gym, the therapist is often alone and must be ready to respond to an emergency.

"It's not superfluous that cardiopulmonary rescucitation (CPR) is required for all physical therapists," Sadowsky explained. He hasn't had to use it yet at Stanford, but when you're in a gym or alone at bedside with a recovering acutely ill patient, the skill is vital.

The Stanford therapy team works at the main hospital, Hoover Pavilion and the new Home Care facility in downtown Palo Alto. Several of Sadowsky's colleagues also work in the cardiopulmonary area and a few are actively working to achieve board certified specialization.

Besides Sadowsky's cardiopulmonary specialization, other specialties recently recognized by the Alexandria, Va.-based board include orthopaedic, pediatric, neurologic, clinical electrophysiologic and sports physical therapy.

Sadowsky needed four recommendations from physicians and physical therapists to qualify for consideration after meeting the basic criteria of five years of experience, a completed research project, six months experience each in teaching and experience in administration. Then to qualify Sadowsky sat through a 12-hour written examination last February in Anaheim.

He's proud of his board certification but he believes it benefits the patient as well.

"I would hope that the professional review process would give the patient reassurance that they're getting help from someone who has met specific criteria for handling and understanding their problem. The bottom line is we hope it makes the patient feel more confident and comfortable."

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Sadowsky became interested in physical therapy after he got out of the Marine Corps in the early 1970s. He had been injured and needed physical therapy himself.

"I observed the therapists, became interested in what they were doing and how much they helped me."

And his personal interests are consistent with his work with patients. When Sadowsky tells a patient to peddle his bicycle or climb stairs, he's doing nothing more than what he demands of himself.

He pedals his own bicycle 200 miles each week, commuting daily from Newark in the East Bay, commonly with a wide detour on the way home through the Santa Cruz Mountains. He has clocked respectable times in the Davis Double Century, a grueling 200-mile single-day bike event held annually in the Sacramento area.

Sadowsky, in an interview, pondered the definition of his profession and then stated:

"Physical therapy is both the art and science of helping patients who have myriad disabilities return to the highest level of physical and functional activities they are capable of." (No, he said, he hadn't written that definition down in advance).

Sadowsky has gone beyond the role of "hands on" care giver, however. He's been active in program development at Stanford.

Several years ago he participated in establishing the Department of Nursing's in-patient cardiac rehabilitation program, which starts physical rehabilitation for recent heart attack patients while they are still in the hospital. Sadowsky surveyed physicians to determine what was needed for the patients and then worked to develop a physical training program to facilitate those needs.

Sadowsky received his B.S. in physical therapy from the University of Illinois Medical Center School of Associated Medical Sciences in 1976. He came to Stanford in 1982, and in addition to his hospital duties, he taught basic skills to physical therapy students before the Division of Physical Therapy was disbanded last year.

In 1984, he received his master's degree from the University of Southern California. He is the author of several professional publications in his specialty and has regularly made presentations at scientific meetings in his field.

He also was invited to teach cardiopulmonary physical therapy at the University of Texas Medical Branch at Galveston as a guest lecturer in 1985.

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Editors: Photos available if not included

HOW OCCUPATIONAL THERAPY DEPARTMENT GETS PEOPLE BACK TO WORK

STANFORD—

It took almost 18 months to get John Miller ready to return to work after an accident in which he lost several fingers, but learning to manipulate objects with his hands wasn't the most difficult part of his rehabilitation.

For Miller, the hardest part of readjustment was overcoming the excruciating pain of handling rough objects.

"He had some neuromas, sensitive nerve endings where he'd had a minor tumor that develops frequently in amputation," said Jennifer Green, occupational therapist in Stanford University Hospital's Physical and Occupational Therapy Department.

She explained that sometimes the neuromas are surgically removed, and sometimes people can be trained to "desensitize" themselves so they can tolerate the pain.

In the case of Miller (not his real name), the pain was so acute that all he was able to do at first was put his hand in water and squeeze a small sponge.

"Gradually he worked up to the point where he started doing clay projects, pushing things with his fingers," Green said. "Then he moved on to leathercraft projects where there was very light resistance, using a light hammer and tools, and then finally moved up to a wood-working project where he was actually hammering nails and tolerating what would be a work level of vibration to his hand."

That took a long time, but at the end Miller was ready to return to work at the same agricultural processing company that employed him before his accident.

His therapy illustrates some of the techniques used by the Stanford Physical and Occupational Therapy Department to get injured people back in the work force, but there are as many variations on those techniques as there are patients. The therapists stress individual attention and individual programs of rehabilitation.

A lot of the occupational therapy takes place in the outpatient unit at 457 Webster St., Palo Alto. The unit has almost every kind of tool needed to get patients ready to return to work, including a sophisticated piece of computerized machinery called a "work simulator" that can measure many levels of work-like exertion.

The central location of the outpatient services is important in work rehabilitation programs, Green said, because "one of the real issues in getting back to work is that you have to develop the ability to come to a work environment every single day. It's important that you're close to the program that you participate in because we're going to demand that you come five days a week, four hours a day."

Getting people back to work is the goal of the occupational therapy unit, but it's not always at the same job they had before they were injured. Sometimes they're not able to achieve the level of dexterity or endurance they had before and must try a different job.

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An example is the 33-year-old registered nurse in the intensive care unit of a California hospital (not Stanford) who suffered a shoulder injury helping prevent an agitated patient from leaping out of bed.

"She worked on developing handling skills and proving her ability to lift. Her exact limitations had to be determined," Green said. "It's very hard to rehabilitate shoulders and there was no way she was going to be able to lift above her shoulders again—at least not the ICU monitors, which are like 30-pound boxes and you have to adjust them over your head and lift them around."

The woman will be able to remain in nursing, Green said, but not in intensive care. She'll probably become a nurse practitioner, "but she has to wait until her legal cases are cleared."

A lot of the people treated in the occupational therapy unit have legal cases pending and others are interested in pursuing legal possibilities.

"Some people come to us because they want to have somebody identify what their disability is," Green said. "We help them understand that, but we also help them understand what their abilities are.

"We really focus on what people are able to do and we try to help and encourage them to do as much as possible while they're here. And we try to reflect that ability to them because unfortunately most of the injured workers that we see have only heard the negative aspects of their problem—what they can't do."

The occupational therapy unit finds out exactly what they can do in a series of tests measuring strength, endurance and dexterity. Then they typically undergo retraining for four weeks and at the end of that time are reassessed.

At that point, the therapists can tell exactly how much progress has been made and make an evaluation of what progess can be expected in the future.

"We can tell people what they're going to get better at and what they aren't going to get better at," Green said, "and that information can go back to their vocational counselor or their physician to help them determine future goals for that person."

Reaching those goals sometimes means more than strengthening muscles and developing dexterity. Frequently, patients must learn new ways of doing work—new ways of lifting or positioning their bodies to cut down on physical demands and stresses.

For example, one 21-year-old man had undergone wrist surgery and was having trouble lifting things because of continuing pain in his wrists.

"The problem was he didn't know how to position his wrists to decrease pain and increase function," Green said. So therapists devised a set of splints that enabled him to hold his hands and wrists in a practical and comfortable position. Once he had developed better wrist positioning, he was gradually taken off the splints.

When patients have learned proper techniques and developed enough strength, they usually still have to go through what Green calls "work hardening." That means simply adjusting to repeated use of certain muscles for hours at a time. The work simulator is very valuable for that process, because it can be adjusted to produce almost any kind of muscle tension.

It's not just muscles that need "work hardening," Green notes. "There are work-related behaviors that are very important: attendance, punctuality, responding to supervision, problem solving, following directions. If people don't practice those, they lose them.

"One of the keys to this program is that early referral here following an acute injury will result in their work behavior continuing so that they never lose hope that they really can go back to work."

Public Affairs Specialist

Veterans Administration

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News Release

August 19, 1986

Fifteen years ago, Menlo Park resident Arden Farey was a busy industrial designer who thought about doing some cartooning but never really found the time.

But multiple sclerosis has gradually robbed him of his strength and the ability to use his limbs and now Farey has time for art.

"Now I do just what I want to," he said. "There's a certain freedom. I guess that's the positive side of being disabled."

Farey, who has retained his naturally upbeat personality despite his disability, creates his art by attaching felt tip pens and a special felt tip brush to a mouthstick. It is a technique he read about and then taught himself through trial and error. Using the mouthstick he has created political cartoons for the Times Tribune Newspaper, has done a series of illustrations for church brochures and drawn plans to improve his wheelchair.

One of his most recent projects was particularly satisfying for Farey; he entered a design in the Caregiver's Faire poster contest. The faire, to be held at the Menlo Park VA Medical Center, offers information and support for families who care for a disabled or elderly person. The winning poster would be used to publicize the faire.

Farey's poster was a starkly simple design with two cupped hands around a heart on a black background. In red letters were the words "Honor the caregivers who care and give again and again."

"It's almost a tribute to my wife," Farey said of the poster. "I had a deep, stirring feeling to say 'Thank you' with it."

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His poster was selected from 12 entries; 1,500 copies of it will be reproduced and displayed around the community, and it will be sold on the day of the faire.

"It captures the essence of the faire, basically, which was to honor and support caregivers," said Nancy Delaney, VA social worker and faire committee chairperson. "This particular poster reached across all aspects of disability be it dementia, quadriplegia, frail elderly. That was a very, very difficult idea to portray artistically."

Farey came up with eight to 10 ideas before deciding on his final version. Some of his early ideas included portraits of a caregiver helping a disabled person, but he decided that was too specific. Once he decided on the symbol, it took about eight hours to produce, he said.

The poster contest came to Farey's attention while he was a patient in the VA's Respite program. At the Respite program, disabled or elderly veterans spend one week four times a year as a inpatient to give their caregiver some rest. Farey has been part of the program for over a year. He said it allows his wife to take a vacation and sleep through the night without waking, as he must be rolled over in bed every three hours.

Farey can be reached at 854-1733. For more information about the Caregivers Faire call 493-5000 ext. 2458.

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STANFORD HOSPITAL ANNOUNCES RATE INCREASES

STANFORD—

Stanford University Hospital's rates for rooms and services will be increased Sept. 1 by an average of 6.7 percent—the smallest rise in 13 years—Sheldon King, president and chief executive officer, announced Monday (Aug. 18).

The small increase reflects the determination to keep patient costs as low as possible, King said.

The new rates were approved by the Board of Hospital Directors Aug. 13. At the same time, the directors approved an operating budget for the 1986-87 fiscal year of $191.4 million, 2.4 percent lower than the $196 million budget approved for 1985-86.

That lower budget was accomplished despite an increase in inflation and depreciation costs of $13.4 million and is principally the result of the hospital's downsizing effort this year. The downsizing, which included staff reductions, made it possible to hold the budget total down without diminishing Stanford's ability to offer the highest quality medical care, King said.

University trustees, as general members of the Hospital corporation, must approve the budget for the next fiscal year. Their approval is not required for the rate increases.

The 6.7 percent price increase exactly matches the percentage increase forecast in the inflation facing the hospital. One factor pushing costs up during the coming fiscal year is a 69 percent increase in the cost of general liability and malpractice insurance.

Although the increases will average 6.7 percent, some areas will have higher increases, some lower. Patients requiring higher levels of care, such as those in intensive care units, will have higher increases. Those requiring less care will have lower increases.

For general care patients, the increase averages only 4.2 percent. In some specific areas, prices will remain the same or actually decrease.

Some examples of the new rates:

- A semi-private room in the medical/surgical unit with Level 1 care (up to five hours of nursing care daily) will be $414. If 24-hour housestaff coverage is provided, the rate will be $442.
- A semi-private room for obstetrics patients, also with Level 1 care, will be $387 without housestaff coverage and $415 with such coverage.
- All beds in the Alcohol and Drug Treatment Center will be $417.

8-18-86 —30— suhrates-rg3

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FOR IMMEDIATE RELEASE

STANFORD SPONSORS ONE-DAY WEIGHT LOSS COURSE

STANFORD—

A one-day workshop intended to help people lose weight and keep it off has been scheduled Saturday, Aug. 23 by the Stanford University Hospital Department of Dietetics.

The program is open to the public. It will run from 8:30 a.m. to 2:30 p.m. in Fairchild Auditorium at the south end of the Medical Center, said Diane Madgic, clinical dietitian.

Entitled "Basics for Safe and Successful Weight Management," the course is described as a "skillpower workshop" and is intended to help people bypass the "yo-yo syndrome," a cycle of weight loss followed by weight gain.

The workshop, Madgic said, includes sessions teaching "the skills to combine dietary moderation, behavior modification, exercise and frame of mind conducive to maximizing one's health and fitness."

Advance registration at $35 is advised and includes the workshop and brunch. On site registration is $40. For further information, contact dietitian Jane Dunn, Department of Dietetics, (415) 723-6904.

8-12-86 —30— MG10

NEWS
from CHILDREN'S HOSPITAL at Stanford
520 Sand Hill Road, Palo Alto, California 94304 / (415) 327-4800

Stanford Med. Center
AUG 12 1986
News Bureau

FOR INFORMATION CONTACT: Diarmuid McGuire (415) 327-4800 ext. 363

FOR IMMEDIATE RELEASE

WILLIAMS APPOINTED ACTING HEAD OF NEW CHILDREN'S HOSPITAL AT STANFORD

STANFORD—

John R. Williams, executive director of Children's Hospital at Stanford, has been named acting director of a new consolidated children's medical center on the Stanford campus.

The new Children's Hospital at Stanford, scheduled for completion in 1989, will adjoin Stanford University Hospital and will house the full range of programs currently offered by Stanford's Pediatrics Department and Children's Hospital. Construction of the new facility will be funded partially by a $70 million gift to the University from Lucile and David Packard.

Williams will design administrative systems for the New Children's Hospital at Stanford and plan the transition from the existing operation. He will report to the board of the new hospital, which is a joint venture between Stanford University and the current Children's Hospital.

Williams earned a Master of Public Health degree in hospital administration from UC-Berkeley in 1964 and joined Children's Hospital at Stanford in 1973. He was appointed executive director of Children's Hospital in 1979.

Previously, he held administrative positions with Peninsula Hospital in Burlingame and Community Hospital of the Monterey Peninsula.

A fellow of the American College of Hospital Administrators, Williams is an active participant in professional and industry associations. He has served as president of the California Association of Children's Hospitals and as a delegate to the American Hospital Association.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Laura Hofstadter (415) 725-5375 or 723-6911
EDITORS: Photo available if not included with story.
FOR IMMEDIATE RELEASE

MEDICAL SCHOOL TO DEDICATE NEW MAGNETIC RESONANCE RESEARCH LAB IN MEMORY OF NOBEL LAUREATE FELIX BLOCH

STANFORD—

A new state-of-the-art laboratory for research in magnetic resonance imaging will be dedicated at Stanford University Medical Center Friday, October 3 in honor of the late Felix Bloch, Stanford University's first Nobel laureate.

Bloch, who was a physics professor at Stanford from 1934 until his death in 1983, shared the Nobel Prize in 1952 with Edward Purcell for inventing the fundamental method used in the magnetic resonance imaging (MRI) process.

MRI is thought to be one of the most important advances in diagnostic medical imaging since the X-ray was introduced.

The laboratory, to be known as the Felix Bloch Laboratory for Research in Magnetic Resonance Imaging, was constructed as a result of a gift from Rhoda and Elliott Levinthal.

Housed in the Medical School's Department of Diagnostic Radiology and Nuclear Medicine, the new lab provides a much-needed MRI facility within the Medical School that can be devoted exclusively to MRI research, according to department chairman Dr. Ronald Castellino.

"We are particularly delighted that the laboratory will honor professor Bloch in view of his enormous contributions to this technology," Castellino added.

The lab is equipped with a Resonex MRI scanner, an innovative new machine with great flexibility for imaging research, said Dr. Leslie Zatz, professor of radiology who has been appointed the new laboratory's director by Castellino.

"Stanford was fortunate in having one of the two inventors of magnetic resonance on its faculty," Zatz said. "It is very appropriate to remember professor Bloch by having this laboratory apply his technique to improving patient care in medicine."

Levinthal, who received his doctoral degree with Bloch in the 1950s and is now director of the Stanford Institute for Manufacturing and Automation, noted that "Felix was especially pleased to find his ideas had broad utility, and he was thrilled that his basic work would find such rich application to a field that would relieve human suffering."

Bloch, who was born in Zurich in 1905 and obtained his physics doctorate with Werner Heisenberg, made numerous other fundamental contributions to physics, including his thesis research which applied quantum mechanics for the first time to the conductivity of metals, an achievement that underlies the modern science of materials.

MRI is based on the nuclear magnetic resonance (NMR) phenomenon discovered independently by Bloch and Purcell. Subsequent to these pioneering experiments, Bloch and his students further developed the field, achieving a revolutionary impact on chemistry and biology with their discovery of the "chemical shift," which has made possible the nondestructive analysis of chemical and biochemical materials.

Bloch participated for many years as a consultant in the development of the first commercial NMR instrumentation, and according to Levinthal, just prior to his death Bloch had become involved in the emerging development of clinical MRI machines.

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In MRI, the patient is placed in a powerful magnetic field that is capable of rapidly aligning the nuclei of atoms in the body that possess a property known as spin. Each water molecule has such proton atoms. Radio waves beamed at the patient "tilt" the nuclei, which then emit signals that can be used to form images of internal body structures.

"The potentials of MRI have only been scratched so far," Zatz said. It promises to provide highly detailed medical information in areas as diverse as psychiatry, oncology, neonatology and cardiology, and since it involves no radiation it is less risky than X-rays, he said.

The new laboratory will serve as a clinical research facility to explore new applications of MRI in medicine. The MR imaging technique can also be a useful new tool for other areas of research, Zatz noted.

The facility is already up and running, he added. The first Felix Bloch fellow, Dr. Adam Ratner, was appointed on July 1, and scanning of volunteer subjects began in August.

Zatz listed a few promising areas of research:

- Techniques to improve spine scanning, which could replace myelography in diagnosing spine diseases such as herniated disc or tumors;
- Development of MRI for diagnosing liver tumors, and distinguishing benign from malignant growths;
- Exploring MRI's ability to replace angiography in diagnosis of congenital heart lesions;
- Use of MRI to detect tissue rejection in its early stages in heart transplant patients, eliminating the need for more invasive heart biopsies;
- Use of MRI to scan for abnormal brain development in premature infants.

"Stanford University provides a particularly rich environment for magnetic resonance research," Levinthal noted. Among the other laboratories on campus are the Magnetic Resonance Systems Research Laboratory, directed by Albert Macovski, professor of electrical engineering and diagnostic radiology; a Chemistry department-based program directed by professor Harden McConnell; the Stanford Magnetic Resonance Laboratory directed by pharmacology professor Oleg Jardetzky; and an MRI clinical and research unit located in Mountain View, directed by Dr. Dieter Enzmann, associate professor in the Department of Diagnostic Radiology and Nuclear Medicine, who also oversees the department's entire MRI program.

In addition, the School of Medicine has just received from the University Trustees concept approval for a magnetic resonance spectroscopy research center to investigate non-imaging applications of MR in medicine and basic research.

The Bloch lab will act as a "beta" test site for Resonex instrumentation, Zatz said, which means that new features on the MRI machine will be evaluated here.

One of the specific advantages of the Resonex machine is that unlike most MRI devices, it can operate in a small space, Zatz said. The expensive external shielding required for most machines, which use superconducting magnets, is not needed for the Resonex device, which is built around a large iron magnet which confines the magnetism to a small area. This feature makes it possible to work close to the unit. "This may be helpful in studies of small infants or very sick individuals who need to be monitored," Zatz said.

The dedication ceremony will include a brief symposium on the status of magnetic resonance research at Stanford, followed by a formal dedication at which Levinthal, Castellino, Zatz, Enzmann, Medical School Dean David Korn, and Stanford University President Donald Kennedy will give talks. Tours of the laboratory and a reception will follow.

Attendance at the event is limited to invited guests only.

—30—

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

STANFORD NURSES GIVE TIPS TO WORKING NIGHTS

STANFORD—

If working the night shift leaves you feeling a bit wrung out, some tips from a couple of Stanford University Hospital nurses may be just the thing to get you functioning at your best during the day as well as the night.

Disturbed sleep, disrupted eating patterns, lack of exercise and unbalanced work schedules were the major problems identified by night nurses in a study by Marjorie Keys and Genevieve Fiedor, night nursing supervisors at Hoover Pavilion.

Tips on how to resolve these problems and more are included in their new pamphlet, "Welcome to the Night Shift." Some more apparent solutions include eliminating or covering up "day noise," exercising regularly and eating well. The researchers also suggest that nurses and other night workers develop positive attitudes about their work shifts, schedule family meals and other activities around their work schedules, plan for days off to coincide with family members and balance work with social events.

The pamphlet is the result of the supervisors' research project for which they questioned about 339 night nurses. About 79 percent of the 429 nurses initially contacted to participate responded.

All nurses, the researchers said, are required at some point in their career to work the night shift. They are often faced with patient care crises and need to be able to think clearly.

"We noted that some nurses felt that sleeping during the day is impossible," they said. "In addition, we've seen nurses who work the night shift come to work feeling tired. Many of these problems stem from lack of sleep. This sleep is of poor quality and insufficient duration."

The researchers found that the longer nurses have worked nights permanently, the better their coping mechanisms are. In addition, their work has less of a negative impact on their lives.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 725-5376 or 723-6911
FOR IMMEDIATE RELEASE

WEIGHT LOSS VOLUNTEERS SOUGHT FOR DIET-EXERCISE PROJECT

STANFORD—

A Stanford program will be comparing whether men and women have been created equally—or at least lose weight equally, and if they do, what's the best way.

The Stanford Center for Research in Disease Prevention (SCRDP)is looking for 270 moderately overweight persons—half of them men, half women—to help learn if diet alone, or a combination of diet and exercise work most effectively to shed excess pounds and improve the chance of avoiding heart disease.

A previous study, released in March, showed that either moderate dieting or increased exercise were equally effective at taking off pounds and concurrently improving such general health markers as blood cholesterol and blood pressure levels.

The new project, starting Oct. 23, will be studying for the first time at Stanford whether men and women respond equally to the same approaches, most particularly the double-barrelled diet and exercise approach. Volunteers will be followed for at least two years to see what combination of diet and exercise is best for long-term improvement.

Dr. Peter Wood, associate director of SCRDP and principal investigator of the study, said only men were used in previous trials, because the investigators felt having a single sex would make the results easier to analyze and because men are at higher risk for heart disease.

"But when we recruited volunteers we kept getting calls from women who said, 'why can't we participate?' So we decided to design a study where we could involve both sexes," Wood explained. The National Institutes for Health, which funded the study, agreed that a comparison of the sexes was appropriate and timely, he added.

Wood said he doesn't expect difficulty in finding enough women. "Generally, women outnumber men in seeking weight control programs by about 10 to one. Our challenge will be in keeping an even balance for scientific reasons."

The participants will be divided randomly into one of six groups—three for men and three for women.

One set of males and females will be coached on a heart healthy, calorie-reduced diet and asked to remain sedentary.

A second set will receive identical dietary instruction and will also participate in three-times-per-week supervised exercise. Wood said this will consist for the first six weeks of coed indoor fitness classes, and then primarily of outdoor walking and jogging sessions.

And finally, a delayed weight loss group will be asked to make no changes in diet or exercise for one year, so that the researchers can compare the changes in the other groups to the control group. This group will be given a weight loss program later at the end of one year.

All of the participants will receive periodic physical exams, including monitoring of cholesterol and blood pressure, as well as a precise measurement of their body fat and cardiovascular fitness, Wood said.

Volunteers should be moderately overweight, aged 25-49, and nonsmokers. Alcohol consumption must be less than four drinks per day. Women must be premenopausal and not planning to become pregnant for the next two years.

Appropriate weight ranges for volunteers are based on a participant's ability to lose substantial weight so that changes in health risk can be seen clearly. For example a 5-foot-10 male would need to weigh between 181 and 230 pounds, while a 5-foot-4 female should weigh 145 to 186.

There is no charge to participants, Wood said.

Other principal researchers include co-investigator William L. Haskell, Ph.D., who like Wood is an associate director of SCRDP. The project director is Marcia Stefanick, Ph.D., a research associate at the center.

For further information or to volunteer, call (415) 725-5013 between 2 and 5 p.m. on weekdays. Orientation sessions for prospective volunteers will start Oct. 23 and continue for several months.

9-29-86 —30— mg10-weight

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Mike Goodkind (415) 725-5376 or 723-6911

FOR IMMEDIATE RELEASE

FORMER OPERA OFFICIAL APPOINTED TO MEDICAL FUND-RAISING JOB

STANFORD—

Susan Overman, most recently director of development for the San Francisco Opera, has been appointed to manage the Stanford University School of Medicine fund-raising programs, David L. Mitchell, director of medical development, announced.

Mitchell said in a Sept. 22 announcement that Overman will report to him as associate director of medical development. She holds the additional title of director of development for the medical school.

Her specific duties will involve supervising selected development activities for the School of Medicine, with an emphasis on the school's ongoing support programs, Mitchell said. She will also concentrate on completing that portion of the Medical Center Agenda Campaign that involves fund raising to increase the school's endowment.

Overman is the Medical School's counterpart to the department's other associate director, Paul Edwards, who heads development for Stanford University Hospital.

Since 1984, Overman served in the top fund-raising capacity for the opera. For five years previous to that, she was director of resource development for the CARE Foundation in New York, where she directed a 78-person fund-raising staff for the nonprofit charitable organization, Mitchell said.

She earlier served as deputy director of development for the Save the Children Federation in Westport, Conn. Currently, she serves as a trustee of Earlham College, the Pennsylvania institution where she received her B.A.

She has a master's degree in English from Indiana University, and has taught literature and journalism in secondary schools.

"It will be exciting to work with Susan Overman, who brings a rich breadth of experience to this crucial fund-raising position," Mitchell said.

9-29-86 —30— mg10-overman

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News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

LEADERS AT STANFORD OPPOSE PROP. 64

STANFORD—

Acting as individuals, eight Stanford faculty members—including President Donald Kennedy and Medical School Dean Dr. David Korn—have signed a public statement calling for the public to defeat Proposition 64, the AIDS initiative.

A total of 12 prominent Bay Area leaders signed the anti-Proposition 64 statement, which appeared as a paid political announcement in the Sept. 24 editions of the independent community newspaper, the *Palo Alto Weekly*. The ad was sponsored by Scientists & Citizens Against 64, which is headed by former SRI International scientist Felix Smith.

In an interview, Korn, chairman of the National Cancer Advisory Board, said, "As an individual who serves in a position of public responsibility, I am very cautious about making statements involving political issues.

"But this measure is not a matter of weighing the normal subtleties of public policy. It has been presented to the public based on patently inaccurate scientific information which unproductively feeds on public fears of a genuine health threat."

The paid advertisement seeks contributions to support a public education campaign to provide scientific information for the public before the November election.

The statement augmented the widely reported arguments of Proposition 64's opponents that AIDS is not easily communicable and to treat it as such in the public health codes would foster administrative confusion, ply needlessly and irrationally on the public's fear of the problem, and hamper efforts to eradicate the disease.

The initiative, backed by supporters of political activist Lyndon LaRouche, would extend to AIDS state public health code requirements now used for certain highly communicable diseases.

Although the degree of enforcement would be subject to interpretation by health officers and ultimately the courts, opponents believe the measure would lead to diverting funds away from AIDS control activities to administrative and/or legal costs of administering the health code.

Opponents have said that Proposition 64 could increase the spread of AIDS, because high risk individuals would be unlikely to seek screening or medical care because of fear of being quarantined or fired when their risk or disease status was publicly disclosed.

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Proposition 64 "is opposed by the virtually unanimous opinion of the medical, scientific and public health communities of California. They are convinced that it is based on false science, and that its passage would make it more difficult to fight the AIDS epidemic in California," read the newspaper statement.

Additional Stanford faculty signatories included 1980 Nobel Prize winning biochemist Dr. Paul Berg; chemistry professor Dr. Carl Djerassi; emeritus engineering faculty member Edward Ginzton, co-founder of Varian Associates; Dr. R. Hewlett Lee, Palo Alto Medical Clinic executive director and clinical professor of surgery; W.K.H. Panofsky, former director of the Stanford Linear Accelerator Center; and Law School professor and state assemblyman Byron Sher.

Other signatories included real estate developer Ryland Kelley; Sunset Magazine publisher Melvin Lane; former Palo Alto Mayor Betsy Bechtel; and businessman Edwin A. Seipp. Neither occupations nor affiliations were listed in the ad.

Major groups which have publicly opposed the initiative include the American Red Cross, the California Medical Association, the California Hospital Association, the California Nurses Association, and the California Dental Association.

"The bottom line involving this initiative is that everyone wants to see a rapid culmination of the AIDS epidemic, but Proposition 64 would make that significantly more difficult. Because the measure is based on scientific inaccuracies, it will send the fight against AIDS off in unproductive directions, diverting resources and attention away from the most productive tracks of research and public policy," Korn said.

Proposition 64 gained widespread attention several months ago when a state court took the unusual step of ordering several "false and misleading" statements removed from the official ballot arguments mailed by the state to registered voters.

The statements indicated that AIDS (Acquired Immune Deficiency Syndrome) could be spread by casual contact.

"The facts are AIDS has never been 'caught' except by the most intimate contact, i.e. by sexual intercourse, by direct injection of blood (by transfusion or in intravenous drug use), or by passage from an infected mother to an infant in childbirth," the newspaper statement said.

In a speech Sept. 4 in San Francisco, state Department of Health Services Director Dr. Kenneth W. Kizer said that Proposition 64 "would hurt our efforts to control the spread of AIDS by fostering distrust and disrupting implementation of our public health programs, and by diverting resources away from AIDS control activities."

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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ADVANCE FOR RELEASE FRIDAY, SEPTEMBER 26, 1986

HUNTINGTON'S DISEASE ADVANCE REPORTED BY STANFORD SCIENTISTS

STANFORD—

Stanford University Medical School scientists have identified a protein on brain cells that may be involved in the development of Huntington's disease, they reported in the October 3 issue of the journal *Science*.

The finding opens up new avenues of research toward finding a drug that may be able to slow or halt Huntington's disease, a rare but significant hereditary condition thought to affect approximately one in 20,000 individuals, said Dr. Dennis Choi, Stanford assistant professor of neurology who led the study.

The protein is a receptor molecule found on the surface of certain brain cells, including those known to degenerate in Huntington's disease patients. Although the receptor protein itself is probably not the culprit that causes the disease, the scientists believe that it may be the docking point for chemicals that ultimately cause the cell destruction.

Choi, who carried out the research with Jae-Young Koh, a graduate student, and Dr. Stephen Peter, a postdoctoral fellow, was cautious about the therapeutic implications of the discovery and stressed that the research did not represent a breakthrough or a new treatment for Huntington's disease.

"We know there are drugs that can specifically block these damaging chemicals from docking, but we're quite a way from tests in humans," he said.

The major significance of the finding, he suggested, is that it confirms previous theories while moving researchers a step closer toward understanding at the molecular level what causes the brain cell death seen in Huntington's disease.

But the finding is certain to be of broad interest because Huntington's disease is representative of a group of degenerative brain diseases such as Alzheimer's disease, Parkinson's disease and others, which as a class constitute the fourth leading cause of death in the United States, according to Choi.

The finding could provide new clues about the molecular mechanisms underlying the development of these conditions as well, he suggested. "It's a class-action kind of thing. If we can start to get an idea of what causes one of these diseases, it may spill over into the others."

The research was carried out with support from the National Institutes of Health, the Wills and Hereditary Disease Foundation and the John A. Hartford Foundation.

Huntington's disease is transmitted in what geneticists refer to as an autosomal dominant mode. This means that, on average, half the children of an affected parent will acquire the condition. However, the disease usually only appears between the ages of 30 and 50.

Involuntary and jerky movements, as well as deterioration of mental function are typical symptoms, which are thought to arise primarily as a result of degeneration in two areas of the brain, the striatum and the cortex. The striatum helps control movements and the cortex is involved in higher mental functions such as language and conscious thought.

Choi said that the Stanford work is based on a flurry of recent advances in Huntington's disease research.

At one time, he explained, scientists believed that brain cells in the striatum died in a widespread fashion in Huntington's disease patients. However, recent studies by scientists at Massachusetts General Hospital (MGH) have shown that only certain brain cells degenerate while others are completely spared. "The pattern of cell death is a 'fingerprint' that is characteristic of Huntington's disease," he explained.

The MGH scientists found that by injecting into animals certain chemicals, which had been suspected of playing a role in causing Huntington's disease, they could reproduce the disease's "fingerprint" in the animals' brains.

Rather than using live animals, Choi and his colleagues studied the chemicals' effects on brain cells grown in dishes in the laboratory. Confirming the MGH findings, they observed that a chemical called quinolinic acid, which is normally present in the brain in small quantities, reproduced the Huntington's disease fingerprint: it killed the brain cells that degenerate in Huntington's disease patients but spared the cells that survive in patients with the disease.

Several other chemicals related to quinolinic acid, however, did not reproduce the Huntington's disease fingerprint.

"These results support the hypothesis that the disease may be caused by excess exposure to quinolinic acid or some highly similar substance," Choi said.

But Choi and his colleagues were able to go one step further. Their study suggests that some cells die and some cells survive quinolinic acid exposure because of the different types of receptor proteins that dot their surfaces. The dying cells possess a receptor protein that quinolinic acid "docks" onto. The cells that are spared may lack this receptor, Choi said.

"If this receptor is in fact critically involved in the progression of Huntington's disease" Choi said, "it is possible that blocking the receptor may prove to be therapeutically useful. We already know of some drugs that block this receptor, although much work remains before tests on patients could be done."

—30— neurons-LH12

END ADVANCE FOR RELEASE FRIDAY, SEPTEMBER 26, 1986

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

FOR INFORMATION CONTACT: Ron Goben (415) 725-5373 or 723-6911

FOR IMMEDIATE RELEASE

STANFORD HOSPITAL TO SPONSOR MEDICAL PROGRAMS ON KQED

STANFORD—

"Health Matters," a 22-week television series sponsored by Stanford University Hospital, will begin Oct. 4 on KQED (Channel 9) and its sister station, KQEC (Channel 32).

The series will feature prominent physicians or other health authorities discussing a wide variety of medical problems, including such topics as arthritis, colorectal cancer, heart disease and drug/alcohol rehabilitation.

Each program includes a 15-minute feature story on a specific medical problem, sometimes involving advances in research and sometimes showing individuals trying to cope with the problem. The second half of the program has a moderator interviewing physicians or other medical authorities who are knowledgeable about the problem in question.

The feature portion of the opening program, "The Assisted Heart," was filmed at Stanford because the School of Medicine has participated in research and development work on heart-assist devices, in particular the left ventricular assist device (LVAD).

Medstar, a Pennsylvania-based television company, is the producer of "Health Matters." This season, the program is being shown in 30 television markets across the nation.

The shows will be hosted by Carol Kline, a former news anchor at an ABC affiliate in North Carolina and producer and host of two shows in Japan. She also taught broadcast writing and television production at two universities in North Carolina.

Taking to the airwaves is not new for the hospital. Its clinical "firsts" generated by faculty research are featured regularly on local and network television.

But this is the first time the hospital has underwritten a weekly television series to bring up-to-date health information regularly to the general public.

"University hospitals have services and expertise as well as nationally recognized physicians and programs unique to the communities in which they reside," said Spyros Andreopoulos, director of Stanford Medical Center communications and consultant to the show. "They are, therefore, well-suited for taking leadership in this area."

The goal, he added, is to have a program that is credible, informative and in keeping with Stanford's overall philosophy of presenting topics from differing points of view.

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The producer of "Health Matters" retains complete editorial control of each program. In addition, the guests picked by the producer for their particular expertise include full-time faculty, area physicians and other health professionals.

Among the medical experts scheduled to appear on segments of "Health Matters" are Dr. Michael Eliastam, director of emergency services at Stanford Hospital; Dr. William Hazle, medical director of the Stanford Alcohol and Drug Treatment Center; Cecele Quaintance, director of the Mid-Coastal Perinatal Outreach Program; Dr. Norman E. Shumway, chairman of the department of cardiovascular surgery at Stanford; and Dr. Hewlett Lee, executive director of the Palo Alto Medical Clinic.

All of the programs will be shown at noon on Saturdays and repeated at 7 a.m. on Fridays. They will also be repeated at 9 p.m. on Thursdays on KQEC.

The complete list of programs and their initial showing dates:

The Assisted Heart.....Oct. 4, 1986
Emergency Medicine.....Oct. 11, 1986
Seizures.....Oct. 18, 1986
Diabetes.....Oct. 25, 1986
Colorectal Cancer.....Nov. 1, 1986
Children and Cancer.....Nov. 8, 1986
Heart Disease.....Nov. 15, 1986
Smoking.....Nov. 22, 1986
AIDS.....Nov. 29, 1986
Infertility.....Dec. 6, 1986
High-Risk Pregnancy.....Dec. 13, 1986
Drug/alcohol Rehabilitation.....Dec. 20, 1986
Anorexia and Bulimia.....Dec. 27, 1986
Blood.....Jan. 3, 1987
Back Pain.....Jan. 10, 1987
Aging.....Jan. 17, 1987
Saving Sight.....Jan. 24, 1987
Sleep Problems.....Jan. 31, 1987
Multiple Sclerosis.....Feb. 7, 1987
Organ Transplants.....Feb. 14, 1987
Hearing.....Feb. 21, 1987
Arthritis.....Feb. 28, 1987

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

BETTER STRATEGY NEEDED FOR CHOOSING DELIVERY METHOD IN PREGNANT WOMEN WITH HERPES

STANFORD—

The standard procedure for determining whether a pregnant woman with herpes needs a Caesarean section is unreliable, according to a new Stanford University Medical School study published in the September 25 *New England Journal of Medicine*.

The reason for performing a C-section on a woman with a history of genital herpes is to protect her baby from possible exposure to the herpes virus as the infant passes through the birth canal, said Dr. Ann Arvin, associate professor of pediatrics at Stanford and study leader.

Newborns who get the disease at birth are at risk of developing serious illness which can spread to the liver, lungs and brain, she explained.

Only a fraction of women—approximately one in 2,000—who have a history of genital herpes are likely to pass the infection to their babies during a vaginal birth, the doctors said.

Among the women with a history of herpes who have no active disease as delivery approaches, it is difficult to determine who should have the surgery.

Up to now, doctors have relied on a series of weekly lab tests to detect the herpes virus in the vagina during the last weeks of pregnancy. A positive test in an asymptomatic woman suggested that she should undergo a Caesarean delivery to protect her child.

But what the Stanford study has now shown is that the test is so inaccurate in predicting which infants will be exposed and come down with the disease that it is essentially useless in determining which herpes carriers should undergo a C-section, explained Dr. Paul Hensleigh, a co-author and associate professor of gynecology and obstetrics.

The unreliability of the test is due to the fact that it takes two to four days to get results, but the virus may be present in the vagina only for brief episodes, Hensleigh explained. "The test itself is an accurate one," he added, "but because of the time delay in getting results, the information is no longer applicable."

Other co-investigators on the study include Dr. Charles Prober, associate professor of pediatrics; Deborah Au, research nurse; Linda Yasukawa, research technician; Drs. Alec Wittek, Paul Palumbo and Sharon Paryani, postdoctoral fellows; and Dr. Anne Yeager, who had been an associate professor of pediatrics prior to her death in 1984.

Obviously a better strategy is badly needed, Hensleigh said, but none is yet available. "In the meantime, what we're recommending to doctors is that C-sections be performed in women with a history of herpes only if they have active lesions at the time of labor," Hensleigh said.

Approximately 35 to 40 percent of women with a history of herpes deliver by Caesarean section, Hensleigh said, as compared to the rate of Caesarean delivery in women without herpes, which is about 20 to 25 percent. Much of this increased C-section incidence has been due to the use of the weekly cultures, he added.

In the past, recurrent herpes infection was thought to affect about three to four percent of women, based on reports from women themselves. But newer information, based on blood tests, suggests that as many 20 percent, or one in five women, may be carriers of the disease and at risk of passing it to their newborn child, he added.

9-24-86 —30— herpes-LH12

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

LOW-FAT, HIGH-CARB DIET MAY POSE HEALTH RISKS FOR SOME AND NO BENEFIT FOR MOST, STANFORD RESEARCHER SAYS

STANFORD—

Low-fat, high-carbohydrate diets — currently recommended to decrease the risk of developing heart disease — actually may pose health risks for some people, a Stanford Medical School professor of medicine said.

Physicians at a consensus conference last year sponsored by the National Institutes of Health concluded that "all Americans" (except children under 2 years of age) should reduce their fat intake from 40 to 30 percent of all calories consumed, including reductions in saturated fats and cholesterol — the culprits of heart disease.

But, in an article in the July issue of the *Journal of Nutrition*, Dr. Gerald Reaven, a noted expert in diabetes, criticized the recommendation to "all Americans" as being too broad. "There was nobody invited (to the conference) who held a contrary view," he noted.

A low-fat, high-carbohydrate diet may increase the risk of developing heart disease in people with impaired tolerance to glucose (sugar), Reaven said. Thus, diabetics and people who are obese and inactive "could possibly lose more than they would gain by adopting the recommendation," he said.

The recommended diet is also "potentially dangerous for people who have hypertension," he added.

Although the recommended diet probably won't make any difference for most people," diabetics and people with high blood pressure make up a "substantial proportion" of the American population, Reaven noted.

The diet should be recommended only for "people who have a high plasma LDL-cholesterol concentration," he said. More research is needed before such large-scale recommendations can be made, he indicated.

"If all Americans were young, slim, and physically active, the impact of the proposed dietary change would be minimized," he said. But, "given our aging, overnourished, and relatively sedentary population," all Americans should not adopt the proposed diet.

In people with impaired glucose tolerance, the increase in carbohydrates needed to offset the decrease in fats is likely to cause glucose and insulin levels to increase above normal, Reaven said.

Studies in diabetics and non-diabetics who have abnormally high insulin and glucose levels show that such increases enhance a person's risk of developing heart disease. In fact, the frequency of heart disease in diabetics is two to three times that of the population at large, Reaven said.

The consensus conference based its recommendation on evidence indicating that people who consume more saturated fat have greater levels of LDL-cholesterol in their blood. Studies implicate this fat and "bad" form of cholesterol as causative agents of heart disease, Reaven said.

The proposed dietary change assumes that reducing the intake of fats decreases LDL-cholesterol levels in blood, but "there is no evidence that this can actually be accomplished in a free-living society," Reaven said. Thus, the proposed diet "may help nobody."

Furthermore, "there is substantial evidence" that low-fat, high-carbohydrate diets are likely to decrease HDL-cholesterol (good cholesterol) more than LDL-cholesterol (bad cholesterol), which the diet is targeted to reduce, Reaven said. And, "If your HDL goes down more than your LDL goes down you may have made your risk (for heart disease) worse," he said.

The proposed dietary change also would increase levels of VLDL-triglyceride (a fat) in blood, which studies indicate may increase a person's risk of developing heart disease, Reaven said. But most physicians ignore the effects of VLDL-triglyceride as transient and not of primary concern, he said.

However, they cite a 25-year-old study on South African prisoners, which cannot be extrapolated to "all Americans," Reaven said. And some researchers do identify VLDL-triglyceride as a primary risk factor. It is definitely a primary risk factor for diabetics, he said.

9-24-86 —30— RVNDiet MC4

STANFORD UNIVERSITY MEDICAL CENTER
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FOR IMMEDIATE RELEASE

STANFORD / SUNNYVALE STUDY SEEKS TO DETERMINE OPTIMUM EXERCISE RATE

STANFORD—

Most health authorities agree exercise is beneficial, but there is still disagreement on how vigorous that exercise needs to be, particularly for people who are middle-aged and who have been sedentary for some time.

Researchers from the Stanford University School of Medicine hope to find a key to the optimum amount of exercise in a project they are undertaking in cooperation with the city of Sunnyvale.

The project, called SSHIP (for Stanford/Sunnyvale Health Improvement Project), will be conducted by the Stanford Division of Cardiology and the Stanford Center for Research in Disease Prevention.

After conducting a telephone survey of randomly selected households, the researchers will focus their efforts on 400 relatively sedentary Sunnyvale men and women aged 50-64.

During the first year of the project some of these residents will participate in one of several different types of exercise programs while others will be asked not to change their exercise habits. Those participants assigned to exercise programs will either participate in supervised exercise classes or in one of two at-home or self-monitored programs organized around either high- or moderate-intensity exercise.

All of the participants will be evaluated at Stanford Medical Center at the start of the program, after six months and at the end of a year. These tests will determine the effects of the exercise program on cardiovascular endurance and many other heart disease risk factors such as blood pressure, smoking, cholesterol levels, body fat content, blood glucose and insulin and also measures of psychological stress.

Dr. William Haskell, associate professor of medicine, is directing the research project, which is funded by the National Institutes of Health. He said Sunnyvale, a city of 115,000, was chosen because its residents are representative of California as a whole.

In recent years there has been intense interest in the health and cardiovascular benefits derived from more vigorous exercise versus moderate-intensity exercise such as brisk walking.

Haskell notes that higher-intensity exercise has been shown to be effective for physical conditioning, but many adults do not care to exercise at this level. He suggests that moderate-intensity exercise might provide many of the same health benefits and that several researchers, including some at Stanford, have determined there is value in less strenuous exercise. However, he said, no one thus far has performed a study of the relative merits of moderate- and higher-intensity exercise on health status.

9-23-86 more

The project starts this month with a telephone survey of randomly selected Sunnyvale residences to find volunteers in the 50-64 age group who are sedentary, somewhat overweight and possibly smokers—in other words, the kind of people who would be expected to benefit most from an exercise program.

The researchers need 3,600 responses to the telephone survey. From these, 400 participants will be invited to volunteer for the next stage of the project. The volunteers, according to Haskell, will then be divided into four groups of 100 individuals:

- A group of self-monitored moderate-intensity exercisers, who work out at or near their homes.
- A group of self-monitored higher-intensity exercisers.
- A group of higher-intensity exercisers, who work out in a formal class setting conducted in the city of Sunnyvale.
- A group that will be asked not to change exercise habits for the next year.

The exercise intensity levels will be based on the heart rate achieved by the participants on a treadmill exercise test at the beginning of the project. Moderate-intensity exercises will bring the heart rate up to 50-60 percent of the maximal treadmill heart rate, while the higher-intensity exercises will aim at 70-85 percent of the maximal treadmill heart rate.

In addition to testing the fitness levels of participants three times during the first year, the research team will follow them through the second year to see if they continue to exercise.

Haskell said Sunnyvale officials have been highly cooperative in getting the project started and noted that there should be considerable benefit to the city and its residents aside from the examinations and physical conditioning of those who volunteer for the project. Some residents will be hired to conduct the telephone surveys; city organizations will receive information from the survey on the health needs and interests of Sunnyvale residents; and plans have been discussed to continue the successful aspects of the exercise program in Sunnyvale once the project is completed.

sship-rg3

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

TWO STORIES

FOR INFORMATION CONTACT: Ron Goben (415) 725-5373 or 723-6911
FOR IMMEDIATE RELEASE

VOLUNTEERS SOUGHT FOR STUDY OF HYPERTENSION MEDICATION

STANFORD—

People with hypertension whose quality of life has been adversely affected by taking certain medications to lower blood pressure are being sought as volunteers for a study evaluating various kinds of medications.

The study is being directed by Dr. Peter Rudd, associate professor of medicine at the Stanford University School of Medicine. It is being conducted at the Palo Alto Veterans Administration Medical Center.

Volunteers must be between the ages of 18 and 60, in generally good health except for their hypertension and willing to make weekly visits to the VAMC for 14 weeks.

The researchers are looking specifically for patients who have used or are using Inderal (propranolol), Lopressor (metoprolol), Corgard (nadolol), Viskin (pindolol) or Tenormin (atenolol).

Those accepted for the study will receive free comprehensive medical and laboratory evaluation, free blood pressure medication and $10 per visit travel reimbursement.

Potential volunteers are asked to call Valerie Zachary, R.N., at 493-5000, extension 5918, between 10 a.m. and 2 p.m. weekdays.

9-23-86 —30— hypstudy-rg4

FOR IMMEDIATE RELEASE

SHUMWAY TO SPEAK AT LIVERMORE HOSPITAL ANNIVERSARY

STANFORD—

Dr. Norman E. Shumway, chairman of the Department of Cardiovascular Surgery at Stanford University School of Medicine, will be the keynote speaker at the 25th anniversary celebration of Valley Memorial Hospital in Livermore Sept. 28.

His topic will be "Four Decades of Open Heart Surgery." He will review the evolution of cardiopulmonary bypass operations, valve replacement and heart transplants.

The Sept. 28 celebration will feature a hospital-wide open house at Valley Memorial, 1111 East Stanley Blvd., Livermore. It will be the culmination of a month-long series of events to mark the 25th anniversary of the hospital.

Shumway is scheduled to speak at 2:15 p.m. on the front lawn of the hospital. A question-and-answer period will follow his speech.

9-23-86 —30— vmhtalk-rg4

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FOR IMMEDIATE RELEASE

STANFORD MEDICAL STUDENT RECEIVES FELLOWSHIP TO STUDY HEALTH CARE IN CHINATOWN

STANFORD—

Stanford medical student Chen-Tan Lin has received one of 34 SmithKline Beckman Medical Perspectives Fellowships nationwide for his study of the melding of Western and Chinese medical practices in San Francisco's Chinatown.

Lin is looking at the interaction of these two distinct traditions and how it affects the medical care of Chinatown's residents.

The $2,300 fellowship is administered through the National Fund for Medical Education. Lin has also received funding from the Stanford Medical Scholars Program, supported by the Stanford Medical Alumni Association.

More than 82,000 Chinese are living in San Francisco's Chinatown, Lin said. Many of these residents are suspicious of Western medicine and seek out Chinese medicine such as acupuncture and herbal medicine as well as crystals, cupping and other traditional Chinese practices.

Chinese medical practitioners are found only through word of mouth, Lin said. Through extensive interviews with patients and physicians, he is trying to determine what types of medical practices are available to Chinatown's residents. He is also looking at the qualifications of the practitioners and their attitudes towards alternative practices as well as what types of medical care are in demand and whether any integration of the two traditions is taking place.

The ideal situation, Lin said, would be if there were physicians schooled in both types of medicine, and who knew their limitations as well as when to refer patients to physicians from the other tradition.

With his project, Lin hopes to contribute to a method of integrating both types of medical care for the benefit of patients coming from different cultural backgrounds.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

MAJOR MEDICAL CENTERS ARE BEST FOR HODGKIN'S DISEASE TREATMENT, ONCOLOGY EXPERT SAYS

STANFORD—

Although therapy and survival rates for Hodgkin's disease have improved dramatically over the last 20 years, patients should still be treated at major centers by experienced medical teams, said Dr. Saul Rosenberg, chief of the oncology division at Stanford University Medical School.

The proliferation of treatment to smaller hospitals and private physicians who do not see as many Hodgkin's patients is " at best a mixed blessing," Rosenberg said. The lack of experience, he explained, may increase the possibility of error in diagnosis and treatment with possible harm to the patient.

If patients do not come to major medical centers, he added, it also cuts back physicians' opportunities to research the causes of and ways to treat the disease.

Rosenberg, D'Ambrogio professor of medicine, reported on the current status of Hodgkin's disease treatment in a recent issue of Hospital Practice.

"No stage of the tumor is beyond cure," he said. "Every newly diagnosed patient can now be offered the probability of a cure; that probability is generally realized for three patients out of four treated at major cancer centers."

Hodgkin's disease is a cancer that strikes the lymphatic system, usually in people between 20 and 40 years of age. Once considered nearly always fatal, it is now curable in as many as 80 to 90 percent of patients with less advanced stages of the disease. Even those with more severe disease have as high as a 75 percent survival rate.

Long-term clinical trials involving hundreds of patients led by Rosenberg and the late Dr. Henry Kaplan account for much of the progress in treating Hodgkin's disease. Even so, "we do not know what is required to cause, reverse or prevent the disease," Rosenberg said. "Hodgkin's disease has long been recognized to have a number of peculiar characteristics, but most of them are still not fully understood."

Because of this, there is controversy about the different types of treatment and no established standards to manage patients. But, Rosenberg said, "all current programs that manage Hodgkin's disease effectively have one common aspect: they are complex, each demanding much from physician and patient alike. Experience is needed to treat the tumor properly. Equally necessary is a team approach, combining the special skills of surgeon, pathologist, radiologist, radiotherapist, medical oncologist and oncology nurse."

Hodgkin's disease is classified into four different stages dependent on its spread and severity. Each stage is treated by radiotherapy, chemotherapy or a combination of the two.

Kaplan was among the first to harness the power of the linear accelerator's powerful electron beams for the purpose of killing cancerous tumor cells in the early 1960s. Improvements over the years have led to more precise aiming of the beams so that nondiseased areas of the body are not affected.

Chemotherapy, on the other hand, involves various combinations of drugs, many of which are very potent and have adverse side effects. Physicians are continually testing new combinations and doses of the drugs to develop less toxic and more effective regimens.

Scientists are also researching new methods of treatment for Hodgkin's disease such as bone marrow transplantation and monoclonal antibodies, Rosenberg said.

9-22-86 —30— SAUL-sk7

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News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

EMERGENCY DEPARTMENT DOCTOR GOES TO AMERICA'S CUP

STANFORD—

The top contenders in the America's Cup Yacht Race will have a Stanford Medical Center doctor for two weeks starting in late October.

Grinder's elbow isn't among the more common maladies Dr. George L. Sternbach regularly treats in the Stanford University Hospital Emergency Department, but he says he is ready for such problems when he arrives at the race trials in Perth, Australia.

Sternbach, 40, is deputy director of emergency services and medical director of the institution's Life Flight emergency helicopter service. He was one of nine emergency physicians selected from more than 50 applicants for two week stints Down Under, said Dr. Thomas Kravis, director of the Department of Emergency Care at Mercy Medical Center in San Diego. The team physicians will be working for Sail America, the San Diego syndicate sponsoring top rated contender Dennis Conner's challenge for the Cup in January.

The 138-year-old race is perhaps yachting's most prestigious event. Private sponsors spend millions of dollars to mount teams and specially constructed 12-meter yachts for the event once every three years.

In 1983, Conner skippered the first American loss in 132 years, sending the event's prize, the Cup, from the New York Yacht Club to the winner's home club in Perth.

Kravis believes that the team physicians are key players in the crew and support effort to bring the cup back from Australia. The Sail America team includes some 70 persons, including a sports therapist. How was Sternbach selected for this assignment?

"Tom Kravis asked me about a year and a half ago if I were interested," Sternbach explained. I knew him from having written two chapters for the book he edited, *Emergency Medicine—A Comprehensive Review*.

Those chapters were about pulmonary edema and dermatology. Expertise in the latter might come in handy for treating sunburn as the south of the equator sun moves the temperature toward the 100-degree mark, says Sternbach, but "these guys have been training in the sun for a long time, and they're probably quite knowledgeable about sunburn already." Both he and Kravis believe that orthopedic injuries will take up the bulk of team physician time.

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more

Kravis says that 12-meter racing produces some specific injuries. For example, one crew member continually operates a winch and is prone to what's called grinder's elbow, similar to tennis elbow. Another crew member is responsible for keeping sails and must risk back injuries by stooping at a 90 degree angle in the cramped quarters below deck. The skipper gets to stand and shout orders, but even he is prone to tendonitis of the wrist from steering.

Sternbach said he has in fact crewed on some Great Lakes races at the time he started in emergency medicine in Chicago before coming to Stanford nine years ago.

But Sternbach said that was pretty low key racing, although some of his fellow crew eventually went on to bigger and better racing. "Maybe it was my encouragement," he jokes. He hopes some of that enthusiasm will help the U.S. sailors in Perth.

What else has he done for excitement? It's been a long time, 32 years, since the event Sternbach described as the most exciting of his life. In 1952, he and his family escaped under cover of darkness from Czechoslovakia, to begin a new life in the West and ultimately in the United States.

Sternbach, who received his M.D. from the University of Michigan Medical School in 1972, has had a lot of experience as a team physician, serving at auto races in his Chicago years. As acting director of emergency services in 1985, he was responsible for emergency care at the site of the Super Bowl at Stanford Stadium.

Kravis said the Australian government passed legislation enabling a U.S. physician to treat Americans during the course of the race. He said the Sail America syndicate decided to bring its own doctors to ensure that treatment was quickly available at the race site.

Sternbach and his fellow doctors are part of the Sail America syndicate, but they will be available to treat the four or five other American teams during the trials that precede January's finals, Kravis said.

—30— america-mg10

EDITORS: Sternbach may be contacted directly at (415) 723-6576.

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FOR IMMEDIATE RELEASE

PLASTIC AND RECONSTRUCTIVE SURGERY IS SUBJECT OF FALL PUBLIC LECTURES

STANFORD—

"More than a Pretty Face—The Fine Art of Plastic and Reconstructive Surgery" is the topic of a three-part evening lecture series open free to the public at Stanford University Medical Center.

Theme of the fall Progress in Medicine series, say organizers, is to show that plastic and reconstructive surgery goes far beyond reshaping noses and performing face lifts. Surgeons spend most of their time reshaping the damaged body and restoring its proper function using a variety of state-of-the-art medical approaches.

Each Tuesday evening features two speakers starting at 7:30 p.m. at Sherman Fairchild Auditorium at the Medical Center.

•Oct. 7, "Plastic and Reconstructive Surgery: Beyond Fixing the Body Image," Dr. Lars M. Vistnes, professor and head of the division of plastic and reconstructive surgery at the Medical Center; and "The Art and Science of Mending the Hand," Dr. Vincent R. Hentz, professor and head of the division of hand and upper extremity surgery.

•Oct. 14, "Plastic Surgery after Mastectomy," Dr. Seung K. Kim, assistant professor of surgery; and "Mirror, Mirror on the Wall," Dr. Robert M. Pearl, clinical associate professor of surgery and assistant physician-in-chief, Kaiser Permanente Hospital, Santa Clara.

•Oct. 21, "The Future of Microsurgery," Dr. Joseph M. Rosen, assistant professor of surgery and chief, division of plastic surgery, Palo Alto Veterans Administration Medical Center. Then Dr. Donald R. Laub, clinical associate professor of surgery, will discuss "The Interplast Story," the international group Laub was instrumental in forming which sends physicians and other medical personnel to help impoverished victims of birth defects or other deformities in developing nations.

Parking is free at the lot which is located at the extreme west end of the Medical Center near Campus Drive. Although these community outreach lectures are free, organizers would appreciate receiving reservations to help with planning. To RSVP, or for further information, call the Medical Center Office of Public Events, (415) 723-6389.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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FOR IMMEDIATE RELEASE

EDITORS: Photos are available if not included.

LIFE FLIGHT SERVICE GETS NEW HELICOPTER

STANFORD—

A spacious new helicopter that can be easily adapted to specific medical needs arrived this week at Life Flight, the emergency medical helicopter service shared by Stanford University Hospital and Santa Clara Valley Medical Center.

The new helicopter is a twin-engined BK 117 designed and developed by Messerschmitt-Boelkow-Blohm. It is owned and operated by Rocky Mountain Helicopters, Inc., of Provo, Utah, and leased by Life Flight—the same arrangement as that for the TwinStar used by the emergency service until now.

Life Flight began operations in May, 1984, and made its 1,000th flight just last week.

Marcia Katz, chief flight nurse for the program, said the BK 117 has a cruising speed of about 160 miles an hour and a range of about 150 miles—approximately the same as the old helicopter. Its chief advantage, she said, is in added space and flexibility for medical use.

"There is room for five members of the medical crew with a critical patient or two medical crew members and two patients," she said. "There is also more working space for taking care of trauma patients."

Dr. Michael Eliastam, director of the Life Flight program, described the BK 117 as "a flying emergency and critical care unit that enables us to accomplish all the missions of the medical center, including high quality care in a setting where research and teaching can occur. The aircraft is big enough for training and/or research data collection."

Katz also pointed out that the BK 117 can be used for the specialized missions of both Stanford and SCVMC.

"Stanford might require a complete transplant team to accompany a donor candidate or organ recipient," she said. "Or Santa Clara Valley could need specialized medical equipment on board for a patient with a spinal cord injury. Both of those needs can be easily accommodated with this helicopter."

She noted that the pilot of the BK 117 is completely isolated from the medical team. "We find this to be much safer than having the patient intrude upon the cockpit area," she said.

Life Flight is now averaging about 45 to 50 missions a month. It is always staffed by a trained flight physician and a flight nurse.

9-10-86

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nucopter-rg3

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News Release

Stanford Med. Center
SEP 9 1986
News Bureau

September 4, 1986

Dr. Lawrence Simon has been appointed acting chief of Medical Service at the Palo Alto Veterans Administration Medical Center, effective-September 1, 1986. This appointment had been held by Dr. Ferid Murad, who has accepted a position as acting chairman of the Department of Medicine at Stanford University.

Dr. Simon has been at the VA Medical Center since 1974, and has served as chief of the Respiratory Disease Section since 1979. Additionally, he has been a member of the Stanford University faculty since 1974; he is now an associate professor of medicine at the university.

A Los Altos resident, Dr. Simon received his medical training at the University of Miami School of Medicine.

The VA's Medical Service consists of such divisions as hematology, cardiology and gastroenterology. The service includes 30 doctors and 29 house staff who oversee 75 hospital beds and 100,00 outpatient visits a year.

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STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

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EDITORS: Photo of Dr. Cavalli-Sforza available on request if not included.
FOR IMMEDIATE RELEASE

NEW BOOK CHRONICLES AFRICAN PYGMIES' HEALTH, GENETICS AND WAY OF LIFE

STANFORD—

A single shot of penicillin could cure African Pygmies—the world's smallest people—of one of their major health problems, says a Stanford University geneticist.

Approximately 50 percent of Pygmies have yaws, an infectious skin disease, that could easily be treated with one shot of penicillin each, says Dr. Luigi Luca Cavalli-Sforza, genetics professor at Stanford University School of Medicine.

But because the world's 150,000 to 200,000 Pygmies live deep in the forests of tropical Africa, it would require a well-organized and well-funded medical relief effort to distribute the antibiotic to the entire population, adds Cavalli-Sforza, who is presently searching for a sponsor for such an undertaking.

Cavalli-Sforza, who has studied the Pygmies for 20 years, is the editor of a new book about the Stone-age people, called *African Pygmies* (Academic Press Inc., Orlando, Florida, 1986, 461 pages).

The book summarizes a large amount of biological and anthropological information gleaned from several expeditions during the last 20 years to Cameroon, the Central African Republic, Zaire and other African nations where the Pygmies live.

Scientists are interested in Pygmies because they are the shortest people on earth, with an average height of about 58 inches, or just under five feet.

But perhaps more significant, says Cavalli-Sforza, is the fact that African Pygmies are among the few groups of "hunter-gatherer" societies remaining relatively untouched by the modern world and living in much the same way as humans are believed to have lived more than 10,000 years ago.

Pygmies live in small groups of about 30 in the forest, erecting temporary camps of leaf-and-branch huts. They are semi-nomads who migrate through the forest in quest of game and other food, clad only in loincloths of bark or cloth.

Sometimes Pygmies emerge from the lush forests to trade with farmers or villagers on the outskirts, but "perhaps one of the most remarkable phenomena is the persistence of the Pygmy way of life for 2,000-2,500 years" despite this contact with the more modern world, Cavalli-Sforza notes in the book.

Although central Africa's tropical forests have been receding as the climate dries and farmers slash and burn the vegetation to make way for agriculture, further investigation of the paleolithic way of life among Pygmies can still take place and should be encouraged, Cavalli-Sforza suggests, before they are completely acculturated into the modern world.

The scientists who contributed to the book all found the Pygmies highly cooperative in the research efforts and extremely pleasant to work with, Cavalli-Sforza notes. Much of the research consisted of observation and interviewing Pygmy groups in remote jungles, as well as taking blood samples for later laboratory-based genetic and medical studies.

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The book lays out in detail the genetic analyses of blood groups, enzymes, and other hereditary markers which prove that the Pygmy groups that haven't had recent admixture have been isolated from other populations since ancient times, perhaps 10,000 to 20,000 years.

The book also presents a wealth of physical and medical data about Pygmies.

Probably of greatest interest is the information about Pygmies' short stature, which has been a subject of speculation for years, Cavalli-Sforza observes.

Their diminutive size now is attributed to a deficiency of somatomedin-C, a protein that in recent years has been shown to stimulate skeletal growth under the influence of growth hormone. The Pygmies' typical short stature first becomes apparent in their early teens when, unlike most other humans, they experience almost no post-pubertal growth spurt.

Although the shortness is genetic, the exact nature of its inheritance—recessive or dominant, a single gene or multiple genes—is not clear, Cavalli-Sforza points out. But with new techniques of molecular genetics, he and his colleagues may be able to home in on the precise genetic elements involved in an effort to answer the remaining questions.

Scientists can only speculate about why Pygmies have remained short when most other humans became taller over evolutionary time. Cavalli-Sforza and his colleagues argue, in the book, that being short is a beneficial adaptation to their hot, humid forest habitat. A small body, the scientists explain, does not generate as much internal heat and thus enables the Pygmies to stay cooler in the sweltering climate.

The scientists conclude that Pygmies tend to be fairly healthy considering their reliance on witchcraft, lack of access to modern medicine, and occasional malnutrition. However, they do suffer from heavy parasitic loads that could be reduced if they were taught some simple rules of hygiene, the book suggests.

In addition, the scientists suggest that poor hygiene and lack of clothing may contribute to the spread of yaws and other infectious diseases, such as diarrhea and respiratory infections, which appear to be the major causes of death among Pygmies.

The book also discusses what is known about the Pygmy way of life and rituals, including marriage, contraception, childbirth, and pubertal rites and practices.

Among the more than 30 contributors to the book are noted anthropologist Colin Turnbull and geneticist Walter Bodmer.

Cavalli-Sforza added in an interview that the work that began with the Pygmies is now expanding to include other rare human populations. In the last two expeditions to collect blood samples from the Pygmies (in 1984 and 1985), Cavalli-Sforza retrieved samples for "immortalization."

"This is a treatment of certain white blood cells with a virus which makes them capable of indefinite multiplication in the laboratory," he explained. "In this way it will be easier to apply the new techniques of molecular genetics for a study of these unique populations."

Cavalli-Sforza is collaborating with Yale genetics professor Ken Kidd to extend these techniques to other populations.

"Many of these are on the verge of extinction, usually because of loss of identity, and like Pygmies, they represent very different evolutionary directions and adaptations of the human species," he said. "This bank of disappearing populations will be invaluable for studies of human evolution and history."

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FOR IMMEDIATE RELEASE

CONSTRUCTION TO CAUSE BRIEF DETOURS NEAR MEDICAL CENTER

STANFORD—

A portion of Blake Wilbur Drive adjacent to the Stanford University Medical Center will be closed for about five days beginning Monday, Sept. 15.

The closure is necessary to complete work on trenches for sewers connecting to Stanford's hospital modernization project (HMP). The portion of the road affected will be the 300 feet from Quarry Road to the edge of the HMP work site.

The work will be done in two stages to allow continued use of the parking lot at the Cardiovascular Research Building at the corner of Blake Wilbur and Quarry.

Through traffic between Blake Wilbur and Quarry will have to detour along Welch Road or Campus Drive until the trenching is completed.

9-8-86 —30— rdclosed-rg3

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FOR IMMEDIATE RELEASE

GENETICALLY ENGINEERED HUMAN-GROWTH HORMONE MAY HAVE MULTIPLE USES, STANFORD SCIENTIST SAYS

STANFORD—

Now that a genetically engineered human-growth hormone is available in ample supply, physicians have been able to begin researching its potential uses other than treating abnormally short children who lack the real thing. Like the children under treatment, the possibilities continue to grow.

Preliminary work at Stanford University Medical School has shown that growth hormone can help children with Turner's syndrome, a rare chromosomal abnormality that causes problems including short stature, according to Dr. Raymond Hintz, Stanford pediatric endocrinologist.

Physicians are also looking into possible benefits for children whose growth is delayed but eventually normal, a condition called constitutional growth delay, and for the elderly. They're looking at ways the hormone can promote wound healing and bone growth following fractures as well.

Nearly 4,000 children whose pituitary glands fail to produce the hormone, which is responsible for growth, are now being successfully treated with the synthetic drug. But, Hintz said, at least another 4,000 undiagnosed hormone-deficient children could benefit from treatment.

"One of our goals is to increase the awareness among parents and physicians that the hormone treatment is available and is effective for some severely short kids," Hintz said.

Aiding in this effort is Human Growth Week, designated as Sept.7-14 by President Reagan and sponsored by the Human Growth Foundation.

The Food and Drug Administration (FDA) approved the man-made version of the essential hormone nearly a year ago, just in time to replace the scarce naturally made hormone, which can be obtained only in minute amounts from the pituitary glands of cadavers. That hormone is no longer used because of a fatal virus it possibly contained.

Natural growth hormone is secreted by the pituitary gland, a tiny organ at the base of the brain. It is released in spurts into the body, triggering growth during a child's pre-pubescent years. Once the bones have stopped growing during puberty, the hormone no longer functions although it is still produced.

Children whose pituitary glands do not produce the hormone, due to hereditary factors or illness, are significantly smaller than normal, which can cause social and psychological problems. By treating them with the synthetic hormone however, they can quickly catch up to other children in their age group.

The man-made hormone, called Protropin, was first synthesized in 1976. Scientists were able to determine the sequence of amino acids of the protein, duplicate it through recombinant DNA techniques and then clone it in mass quantities in the laboratory.

While its availability has allowed scientists to study the hormone, it has also placed them in a race against time. Only one company, Genentech, is presently making the hormone. The San Francisco-based company has limited distribution of the drug in order to keep track of how it's being used. But, Hintz said, several other companies are developing similar drugs; one could become available as early as next year. The more growth hormone available, the less control. And the less control, the more potential for abuse of the valuable drug.

"We're anxious to find out more about what else it will do and will not do," he said. The more research we can get done before the distribution expands, the more we can cut down on some of the misuse."

Opportunities for misuse, Hintz explained, are plentiful. The hormone has a beneficial effect on protein metabolism—it helps the body conserve proteins that help build muscle mass. This quality is what may prove useful in helping the elderly, whose hormone production diminishes over time, avoid some of the deterioration effects of aging. It may also promote healing and guard against muscle atrophy for patients who have temporary physical limitations. But it's also the quality that athletes looking for that "extra competitive edge" may be willing to risk taking the drug for, even though its effectiveness hasn't been proven.

And then, he added, there are always parents who wish their children were just a little bit taller. "You have to sort out those who will benefit from treatment and those who won't. We're looking at select people, we're not interested in growing a basketball team."

Significant amounts—as much as 20 percent—of the natural growth hormone were "diverted" from its proper use, Hintz said. Only one mishap has taken place with the synthetic hormone—about $250,000 worth was stolen from a distributor earlier this year.

The treatment is not cheap; it can run up to $15,000 a year. Most insurance companies, MediCal and Crippled Children's Services (CCS) cover the treatment for children with growth hormone deficiency. Genentech is picking up the tab for any children not otherwise covered, Hintz added.

"I hope other uses are found for the hormone because as it becomes more commonly used, the price will drop," he noted.

STANFORD UNIVERSITY MEDICAL CENTER
News Bureau Stanford, California 94305

EDITORS: This release issued jointly by Stanford University and the University of California.

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FOR IMMEDIATE RELEASE

STANFORD AND UC RECEIVE JOINT AWARD FOR COHEN-BOYER PATENT

STANFORD—

Stanford University and the University of California will receive a special award Sept. 8 from the American Chemical Society (ACS) for their cooperative activity relating to a gene-splicing patent which helped spark the biotechnology industry.

The award is being given to the licensing and patent offices at both universities for their combined efforts to license a patent on gene-splicing and cloning processes developed jointly by genetics professor Stanley Cohen of Stanford University School of Medicine and biochemistry professor Herbert Boyer of UC-San Francisco.

Licenses offered under the patent allow private firms to obtain rights to use the patented techniques in developing products and processes for public use and benefit.

Nearly 80 firms are now licensed to use the Cohen-Boyer techniques. Commercial recombinant DNA applications have led to the development of human insulin, vaccines for hepatitis B and livestock diseases, and a growth hormone to combat dwarfism.

The ACS's intention is "to recognize the patent and licensing offices at both universities for their cooperative efforts, which we believe established and continue to foster the emerging biotechnology industry in the United States," said Dr. Howard Peters, co-founder and councillor of the ACS Division of Chemistry and the Law.

Niels Reimers, director of technology licensing at Stanford, Katharine Ku, associate director, and Roger Ditzel, director of UC's patent, trademark and copyright office, will receive the award at the ACS's 192nd annual meeting in Anaheim.

9-5-86 —30— acsaward-LH11

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FOR IMMEDIATE RELEASE

HOSPITAL DIETITIANS OFFER WEIGHT CONTROL PROGRAM

STANFORD—

A personalized weight loss plan, low calorie cooking demonstrations, recipes and menu planning are featured in an eight-week weight management course offered at Stanford.

Guest speakers will discuss stress reduction, behavior modification techniques, and exercise, dietitian Diane Madgic said. A special feature is instruction on techniques for wise ordering while dining out.

Entitled "An Enlightening Experience," the course is offered by the Stanford University Hospital Department of Dietetics. Evening sessions, each Tuesday night from 7:30 to 10 p.m., run Sept. 23 to Nov. 11, while daytime sessions, Thursdays from 1 to 3:30 p.m., start Sept. 25 and end Nov. 13.

Participants must preregister for sessions, which are held at Stanford Medical Center, by calling (415) 723-6904. Enrollment is limited.

Madgic said the fee is $325 with a $50 refund if the individual's weight goal is reached.

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FOR IMMEDIATE RELEASE

PARTICIPANTS NEEDED FOR HYPERTENSION RESEARCH

STANFORD—

Volunteers are being sought by researchers at the Palo Alto Veterans Administration Medical Center for studies of metabolic changes that may be associated with hypertension, or high blood pressure.

The researchers are investigating the possibility that some of these metabolic changes may be risk factors for coronary artery disease.

People with normal and high blood pressure are both needed for studies of possible similarities between hypertension and diabetes mellitus. Volunteers with high blood pressure are also needed for a study exploring in detail a possible beneficial effect on cholesterol of prazosin, a commonly used antihypertensive.

The studies will take place at the Aging Study Unit at the VAMC, under the direction of Drs. Gerald Reaven, Brian Hoffman, Arthur Swislocki and their associates. Reaven is professor of medicine at the Stanford University School of Medicine.

Anyone interested in participating in the study is asked to call (415) 493-5000, ext. 4572, between 9 a.m. and 5 p.m. Monday through Friday.

Community Affairs Dept.
Medical Center
3801 Miranda Avenue
Palo Alto, California 94304
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Veterans Administration

News Release

October 29, 1986

Stanford Med. Center
OCT 29 1986
News Bureau

Two drugs that have shown promise in slowing the progress of Alzheimer's disease are being tested by researchers from the Palo Alto Veterans Administration Medical Center and Stanford University.

In a six-month study using 55 volunteers in the early stages of the disease, the drug ACTH 4-9 is being administered in higher doses than previously studied. The drug is a synthetic hormone fragment and works chemically on the way nerve cells communicate with each other. The drug has been very effective in improving memory in rats.

The study, which is nearly complete, is double blind so researchers do not know which participants are receiving the drug; however, some of the study participants have shown improvement, researchers say.

The second drug to be tested is Hydergine, a metabolic enhancer that improves the way nerve cells use glucose. The drug has been approved by the FDA for use in certain doses, although it has never been conclusively shown to be effective. The study will use doses three times higher than currently approved and will follow the patients over the course of a year. Volunteers are currently being recruited for this study.

Alzheimer's disease is the progressive loss of intellectual functioning caused by changes in the brain. The disease is estimated to strike between 600,000 and 1.2 million Americans over the age of 65 and kills approximately 100,000 annually. At the present time there is no cure or treatment.

Researchers are available for interview. For more information, call (415) 493-5000 ext. 4778 or 4780.

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News Bureau Stanford, California 94305

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EDITORS: This article appears in the current issue of Stanford Medicine, *now available through the news bureau. Photos are available.*
FOR IMMEDIATE RELEASE

WHO WILL CARE FOR ALL THESE PEOPLE? THE EFFECTS OF CHANGES IN HEALTH CARE POLICY

STANFORD—

A revolution is taking place in the health care field, and it's resulting in some changes in the way you may be treated the next time you seek medical care.

- If you're not yet one of the approximately 30 million Americans enrolled in a prepaid health insurance program, chances are you'll be joining one soon.
- As a member of such a plan, you may find your choice of physician or hospital limited according to those who honor your health care coverage.
- You may receive "less" care for a medical condition than you would have, say, five years ago.
- The care you do receive may be at one of the mushrooming number of outpatient or ambulatory care facilities instead of in a hospital.
- In the event that you are hospitalized for a procedure, more likely than not you'll be out of the hospital sooner than you would have been five years ago.
- You may be asked to pay for a larger portion of your medical care out-of-pocket.
- If you live in a rural area, your local hospital may have closed. If so, chances are that most, if not all, physicians have taken their shingles elsewhere. Thus, you may have to travel significantly farther distances to receive medical care.

These changes may be inconvenient, but as a member of the middle or upper classes in this country, you do have access to medical care. But if you're among the elderly, the fastest growing population group in the country, health care coverage may be increasingly costly and necessary services may be hard to come by. And if you're one of the approximately 30 million poor or uninsured, your access to health care may become extremely limited.

The health care revolution is spurred by spiraling health care costs, now estimated at nearly 11 percent of the total amount of the U.S. gross national product. Panicked by predictions of those costs topping $660 billion by 1990 and reaching $2 trillion by 2000, the federal government has declared a war of sorts. It has come up with new payment methods and has slashed program budgets in an effort to eliminate the "fat" in the health care system. The federal government set the example; state governments and private payors of health care, from insurance companies to individual employers, have followed suit. The goal? To cut costs without sacrificing the quality of care.

To some extent, it's working. Hospital administrators and physicians have taken a hard look at the health care industry, scrutinizing every aspect from the organizations they've established to the way individuals practice their trade. They've eliminated hospital programs not directly related to patient care; they're finding more efficient, and economical, ways to provide medical care. In some cases, they admit, the changes they were forced to make have resulted in better care.

But in the process, a few groups of people — namely the poor, the uninsured and the elderly — are falling through the cracks in this newly evolving health care system in which competition and the concept of a "medical marketplace" are key. Physicians and health care experts agree that these are problems that the government and society haven't yet begun to tackle. "The system is not reacting fast enough to meet the needs of society," says Dr. James Silverman, former chief of staff at Stanford hospital.

In their efforts to save dollars, government decisions are leading American society to shirk its social responsibility by not providing these people access to even the most basic medical care.

"We are on the borderline of a health care crisis," says Robert Sillen, executive director of Santa Clara Valley Medical Center, one of California's county hospitals. "In the next two years or so, people will start asking how we, the richest society in the history of the world, can treat the most vulnerable segments of our population in a totally unacceptable manner." This won't happen, he says, until people have "more awareness of the increased numbers of people having significantly untoward events, including death, from a lack of access to the kinds of medical care that historically have been available."

At first it was just anecdotal: a patient refused care at one hospital and "dumped" into another; another patient discharged too early, resulting in further illness; yet another patient denied medical care all together. But slowly, substantial evidence of a growing dissatisfaction with the health care system is mounting, as the following examples illustrate.

- Results of a Louis Harris Poll done in New York City, released last June, found that increasing numbers of the city's poor are being denied health care except at government-designated facilities.
- A Johns Hopkins School of Hygiene and Public Health study, released last May, concluded that because of lack of access to the medical system, blacks who reside in Maryland are less likely to undergo surgery for health problems than their white counterparts.
- A California Poll, released last July, found that among families with incomes of less than $10,000 a year, 42 percent said they had not seen a physician when they were sick because of the expense.

Nationwide, the goverments' main targets for lowering health care costs have been Medicare and Medicaid, programs that were introduced in the 1960s to insure medical coverage for all Americans, regardless of economic status. Eligibility requirements have been tightened, cutting the proportion of low-income Americans insured by Medicaid from 63 percent to 46 percent. Congress is allocating an increasingly smaller amount of the federal budget to fund the programs; it has given preliminary approval for a $3.2-billion cut in Medicaid during the next three years.

California's MediCal program, which covers the state's poor, has instituted comparable cuts. In addition, in 1983 a group of patients classified as medically indigent adults, or the "working poor," were assigned to state-supported county hospitals for care. Any other hospital treating such a patient is no longer paid for the services unless it has a contract with MediCal.

Most significantly, the federal government in 1983 came up with a new way to pay for health care. This new method, the prospective payment system, set the price hospitals are paid *in advance* for the care they give, a radical departure from the traditional fee-for-service system. By doing so, the reasoning went, reimbursement could be standardized across the country and capped.

Private payors of medical care followed the governments' example. Aside from adding a multitude of acronyms to the English language, prospective payment has taken health care in a new direction, one that includes competition for patients and contracts that bind patients to specific physicians and health care facilities. The emphasis is increasingly on preventive health care and on decreasing usage of hospitals and, in many cases, physicians.

"We started with relatively fat organizations across the country that had lots of services not directly related to patient care," Silverman says. With less reimbursement coming in, "hospitals are deleting those services that are least important to patients.

"The changes in reimbursement have been very effective for Medicare patients," he adds. "In fact, they've driven down the total cost of health care."

Patients may enjoy the prospect of getting lower medical bills, but taking the "excess" out of the health care system may have long-range effects that may do more harm than good.

One such effect is the so-called "commercialization" of medicine. Stanford hospital is "a sleeping giant," says David Sakai, director of finance. Because of its fame as a teaching hospital and as a tertiary care center, it has never before had to market itself or compete for patients. In this new environment, however, "we realize that just being Stanford is not enough."

In order to stay viable, in recent years Stanford, like most hospitals, has aggressively gone after groups of patients. For example, it has signed contracts to provide care at reduced costs for MediCal, which may pay about 50 cents per each dollar of care provided, private insurance companies and even large local industries. No longer is it unusual to see an advertisement for a hospital, or to hear about gimmicks such as VIP rooms and special menus instituted to help attract patients. But even the increased emphasis on marketing fails to compensate for more substantial changes in medical practice.

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Not only are payors paying less for medical care, but patients are receiving "less" care as well. Physicians traditionally have had a tendency to overtreat, says Dr. John Bunker of the family, community and preventive medicine department, partially for fear of malpractice and partially because of patients' desires and expectations that "everything possible be done." Now, they have started to be more selective in ordering diagnostic tests and procedures as well as in the treatment they give. Medical students are trained in decision-making; Stanford medical staff now carry a pocket-sized list of the charges for all tests to raise their cost-consciousness.

And, partially because of advances in medical technology, more treatments are being done on an outpatient basis — in urgent care centers, surgical centers, ambulatory care centers, rehabilitation institutes, freestanding diagnostic centers, hospices, alcohol treatment centers and through home health care services, says Robert Blendon, senior vice president of the Robert Wood Johnson Foundation. He estimates a further decline in hospital admissions of 15 percent — and as much as 20 percent for people under age 65 — by 1995. Combined with a continuing decrease in the length of time patients stay in the hospital, he predicts as many as 100,000 to 200,000 unused hospital beds by 1995. "This is the equivalent of about 1,000 average-sized community hospitals standing empty," he notes.

In a letter to all employees earlier this year explaining the need to "downsize," Sheldon King, Stanford hospital's president, explained the institution's predicament. "From 1982-83 to 1984-85, our average daily census fell from 429 to 385; the average length of stay dropped from 6.8 to 6.3 days; and patient days went from 156,654 to 140,552."

This translates into nearly $20 million lost because of reduced patient revenues, reduced government reimbursements and prepaid, discounted care contracts, King says.

"Physicians' practices are changing," Sakai observes. For example, removing cataracts used to be the most commonly performed procedure in the hospital, he explains. Now, it's done on an outpatient basis.

Even though it's providing less care to fewer patients, Stanford has come out slightly ahead under the new reimbursement rules. But, Sakai warns, that won't last. Medicare's new system, in which all patients are classified according to their illness into diagnostic related groups, has been phased in over a four-year period. Variances in reimbursement were allowed for differences in cost, dependent on geographic location. Teaching hospitals, such as Stanford, were reimbursed at a higher rate because its patients are usually sicker and require more care, and because of the added expense of their educational programs. But next year all rates will be standardized. And in California, where salaries and other costs of providing care are significantly higher than in other areas of the country, hospitals are sure to suffer. What's more, the news that a majority of hospitals saw increased revenues in recent years has prompted the government to freeze Medicare rates with only a one-half percent increase scheduled for next year. "Meanwhile our operating costs are going up 6.9 percent," Sakai says.

Discrepancies in the rates patients pay for health care have always existed, but hospitals have always been able to "cover" for those who paid less, or didn't pay at all, with those who paid the full amount. But with the number of patients paying full cost shrinking, "the clamps are on," Sakai says, and Stanford's "moral" commitment to providing care to all who need it is being affected by financial considerations.

For example, despite the fact that Stanford is in a relatively affluent area, and serves a relatively low Medicare population of about 33 percent of its total patient population, Stanford's bad debt—costs run up by care given to patients who are uninsured and can't afford to pay—has "increased dramatically," Sakai says. About $300,000 in 1982, this year it tops one million.

"We swallow the costs on patients who need our special kinds of care and come here but can't pay," Silverman says. "When push comes to shove I can't turn away a patient who needs unusual treatment. But if they can be treated elsewhere appropriately, they should be."

Silverman's "elsewhere" is a public county hospital, charged by the state to provide care for the poor. Unlike Stanford and other private hospitals that have experienced declining numbers of patients, however, county hospitals, such as Santa Clara Valley Medical Center (SCVMC), are bursting at the seams.

Since 1983, admissions to the 469-bed hospital have increased 61 percent, according to Ann Moses, assistant to executive director Sillen. "We've literally run out of beds on numerous occasions this year," she exclaims. Patient visits to the clinics and emergency department have gone up 63 percent. Staff, however, has increased only 11 percent.

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"Our primary cost containment effort has been holding the line on staff and absorbing increased volume," Sillen says. "We haven't compromised the quality of our care, but the experience patients have with the hospital has suffered. Patients wait as long as six hours in the clinics now. They complain, staff complain, I'm complaining, too. Everyone is trying to do the best they can, but we cannot produce if we do not have the resources to produce with."

Unlike private hospitals that can refer patients to county hospitals, SCVMC has no other institution to turn to. Over the past few years, Moses says, the bad debt has skyrocketed to 30 percent of the hospital's gross revenue.

"Nobody's competing for my uninsured patients," Sillen says. "Nobody's competing for the poor Medicare patients. Government is advocating a competitive market for health care. Well, General Motors doesn't give away cars to people who can't afford them. The same goes for health care. If this country wants to consider health care services in the same manner as the production of autos, we're in serious trouble."

While Sillen and others are continuing to operate in an environment that "is only going to get worse," health policy experts are grappling with the question of how to provide medical care to all Americans in an economically feasible way. Most experts agree that a national health insurance scheme isn't viable in the United States. Yet other ideas, however preliminary, are beginning to surface.

Alain Enthoven of Stanford's business school advocates a system in which people are forced to be more conscious of health care costs. He proposes a scheme in which employer contributions for health insurance are added to an employee's taxable income. In return, each individual would receive a tax credit with which to buy health insurance. Anything above that amount would come out of the individual's pocket. Stanford health care economist Victor Fuchs, of the National Bureau of Economic Research, has proposed that people buy only "catastrophic" insurance to cover major illnesses and pay for everything else out-of-pocket.

But what about people who are not employed? Dr. Ralph Schaffarzick, senior vice president and medical director of Blue Shield of California, describes another plan, one that is already being experimented with in some states. "Currently the best answer seems to be the creation of a risk pool," he explains. The uninsured and poor people should be divided up among all insurers, he says, so all would be collectively responsible for those who could not pay for their own health care. Countless other proposals will undoubtedly be considered before a solution is found.

In an article published earlier this year, Fuchs asks, "has cost containment gone too far?" The answer may not be available for years to come. But, says Dr. Kenneth Kizer, California's state health director, the current revolution is providing the opportunity for the medical profession to "go back to the drawing board and reexamine some basic questions as to how medicine should be practiced. The whole focus of care is changing.

"There are going to be some troubled times and a lot of changes. Just wait," he says, "you 'ain't seen nothin' yet."

The precarious position of teaching hospitals

Like all teaching hospitals, Stanford is in a more vulnerable spot than most other institutions when it comes to surviving in a cost-conscious, competitive yet regulated health care environment. Besides providing medical care to patients, they have some additional roles. Teaching hospitals are a source of advances in technology and procedures. They are responsible for training future physicians. They have also traditionally provided a major portion of care to the poor and uninsured. These functions, however, are not cheap.

One of the largest expenses teaching hospitals incur is the cost of training physicians. As interns and residents, physicians-in-training do provide care to patients for which they are paid much lower stipends than faculty physicians. But they must work under faculty supervision, and sometimes they order tests or procedures more for the educational value than patient benefit. These are essential as part of their training, but costly.

It's also essential that future physicians are exposed to as many types of patients as possible. To satisfy this need, teaching hospitals attract not only those with rare diseases, who come to receive the latest available treatments, but also the poor and uninsured who need more routine care. In fact, members of the Council on Teaching Hospitals of the Association of American Medical Colleges provide nearly 50 percent of all charity care and about 33 percent of all bad debt care, even though they account for only about 20 percent of the nation's hospital beds.

For example, about 30 percent of Stanford's neonatal and obstetrical patients are among the poor or uninsured. "Not only do we have a moral commitment to treat these people, but we need them for our teaching program," says David Sakai, director of finance at Stanford hospital.

In the past teaching hospitals have been able to "cover" these extra costs by spreading them around to all patients. But with the emphasis on reducing costs, that is getting more difficult to do.

"The central problem facing academic health centers is that the care rendered by their teaching hospitals is more expensive than that rendered by their nonteaching counterparts," writes Dr. Neal Vanselow, vice president of health sciences at University of Minnesota, in the summer 1986 issue of *Issues in Science and Technology*. A Commonwealth Fund Task Force found in 1981 that the mean cost for each patient discharged from major teaching hospitals was more than twice that for nonteaching hospitals.

"Unless policies can be formulated to reflect the unique needs of academic health centers, and unless the centers can adapt to the new environment, the future of these vital institutions is by no means assured," Vanselow says.

Cutting the costs of medical care

In an era where "less is better," Stanford is doing all it can to cut the costs of medical care without affecting the quality. Some actions have had an immediate impact, such as the hospital's "downsizing" earlier this year in which about 150 employees not directly related to patient care were laid off. Administrators and physicians are going further, however, delving beneath the surface of medical practice to see if, in fact, there is a better way to do their job.

With funding from the Kellogg Foundation, former chief of staff Dr. James Silverman is leading teams of physicians, nurses, and medical technicians from different specialties in looking at specific areas of patient care for ways to contain costs. For a specific urology procedure, for example, a group found they could decrease the number of tests they ordered without compromising the care of the patient. Those involved with the orthopedic surgery group found that for total hip replacement patients, some preoperative testing and two days of hospitalization could be eliminated, thus saving as much as $2,000 per patient. A group looking at a coronary angioplasty procedure, however, recommended that no changes be made.

Other cost-containment projects involve managers, who are given data about specific units from hospitals all over the country. With the data, they can see if comparable services have comparable costs, and make any indicated changes.

"Regionalizing" care may also lead to reduced costs, many experts believe. Recent studies, for example, have shown that patients who undergo heart bypass operations at hospitals that do a lot of the procedures have better outcomes and less expense. Heart transplant operations, exempt from most insurance coverage because of their experimental status, were approved for coverage by Blue Shield more than a year ago—if they were performed at Stanford. Because Stanford pioneered the procedure, says Dr. Ralph Schaffarzick, senior vice president and medical director of Blue Shield of California, his insurance company could be assured patients were getting the best quality as well as the most efficient care.

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EDITORS: Photo available if not included.

BLOOD DONORS WHO MEET A SPECIAL NEED

STANFORD—

Most people who donate blood know it could be used to save a life some day, but Robert Jackson is sure of his donations: Every time he visits the Stanford Medical School Blood Center, he knows he is helping extend the life of a critically ill person.

Strictly speaking, what Jackson is donating isn't a typical unit of blood. He gives blood components—platelets or white cells—through a procedure called apheresis. The blood is taken from one arm, the components separated by means of a centrifuge, the desired component retained and most of his blood is returned through the other arm.

The blood components then go to a hospitalized patient whose blood closely matches Jackson's, and who must have the component transfusions to survive. Most of the recipients need regular transfusions for short periods of time and may be dependent on apheresis donors such as Jackson.

Apheresis is more time-consuming than regular blood donations—it takes about two hours—but it is less draining of the body's resources because few red cells are taken and the components are replenished rapidly by the donor's body. It is possible for an apheresis donor to give blood components with only three days turnaround, compared with eight weeks for regular blood donations.

Most apheresis donors, however, are called on no more than two or three times a year, said Bobbi Ogden, apheresis coordinator at the blood center, "and some may never be called."

Jackson, who is flight director for the Pioneer spacecraft at NASA-Ames Research Center at Moffett Field, is an exception. He has the kind of blood that makes him much sought after for apheresis: It's a common type that matches well with that of many other people.

"Common" in this case doesn't mean type O. The typing used for apheresis donors is human leukocyte antigen (HLA), the same as that for organ transplants. In effect, Jackson's platelets are being transplanted into critically ill patients. And because his blood matches up well with that of the patients, there is less chance of rejection.

The recipients of apheresis donations are usually leukemia patients, ranging in age from infants to people 60 to 70 years old.

"Leukemia knocks out the bone marrow," said Ogden. "They become severely anemic in all blood components. In most cases, they receive blood transfusions from many people. But then they develop antibodies and have transfusion reactions because their bodies are rejecting that blood."

That's where donors such as Jackson come in. When they're called they know there is a crisis—"someone in the hospital is in trouble," Ogden says.

Jackson, a resident of Palo Alto, says he's been called by the blood center about a dozen times so far this year. That probably makes him No. 1 in number of visits, but there are many others in the apheresis program. Ogden says there are about 800, and they're a "very special group."

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Stanford wants to increase that donor pool. For one thing, a larger number of donors means greater chances of getting favorable matches for patients in need. In addition, the need seems to be growing; the number of apheresis procedures has been averaging about 100 a month recently, compared with 50-60 a month last year.

There will be an even greater need as Stanford Medical Center proceeds with plans for bone marrow transplantation. It takes several weeks for a transplant to take, and the patients will need transfusions of platelets as well as other blood components to get through the crisis periods.

Almost anyone who can donate blood can become an apheresis donor. "The only criteria are that they be in good health, have good veins in both arms, be 17 to 65 years old and not be taking any anti-inflammatory medicine," Ogden said. "They should weigh 110 pounds minimum and plan on staying in the area a year—it's very expensive to do the typing and we don't want to do it if someone's going to be moving away."

Although most apheresis donations go for leukemia patients, there are other diseases, such as aplastic anemia, that are treated with infusion of platelets.

White blood cells are needed less frequently than platelets, but they're just as important for specific patients. Usually, they are needed by patients on immunosuppressant drugs who develop an infection that doesn't respond to antibiotics.

The procedure is the same for platelets or white blood cells, although it takes 15 minutes to half an hour longer to get the white blood cells. For the donor, it simply means reclining in a chair with needles in each arm. The apheresis machine does the rest.

"It's a little bit uncomfortable to have needles stuck in each arm, but usually it's nothing," Jackson said.

He has never been told the identity of any of the people whose lives he has helped save, and says he has never "pushed" to find out.

What he would like to do, though, is follow some platelets—not necessarily his—through the whole procedure. He's just curious to see how the platelets are handled after they leave his body.

It was similar curiosity that got him involved in the apheresis program in the first place. He was a regular blood donor, saw signs about apheresis and made inquiries.

That was four years and dozens of life-saving donations ago, and the procedure has become routine to Jackson.

It will never become routine, however, to those recipients who would die without his platelets.

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ADVISORY TO EDITORS, SCIENCE WRITERS AND MEDICAL WRITERS:

You are invited to attend a scientific symposium at Stanford University Medical School Friday, November 7, focusing on new and upcoming medical applications of cloned gene products. Please alert the Stanford Medical Center News Bureau at (415) 723-6911 if you plan to attend. You may also phone for further information or to obtain a copy of the printed program.

FOR INFORMATION CONTACT: Laura Hofstadter (415) 725-5375 or 723-6911

NEW MEDICAL APPLICATIONS OF CLONED GENE PRODUCTS TO BE FOCUS OF STANFORD SYMPOSIUM

STANFORD—

The newest experimental treatments for conditions ranging from cancer to heart attack will be the focus of the fourth annual symposium of Stanford University Medical School's Program in Molecular and Genetic Medicine, to be held Friday, November 7 in Fairchild Auditorium.

The daylong meeting, entitled "Clinical applications of cloned gene products," will include presentations on treating cancer patients with interferon and tumor necrosis factor, human growth hormone therapy of short children, and new agents that can halt a heart attack in progress.

Other topics will include the potential clinical uses of newly discovered hormones such as interleukin-1, an important immune system agent, and atrial natriuretic factor, a powerful heart hormone.

The symposium features prominent scientists from Stanford Medical School and other institutions.

The speakers, their topics and presentation times are:

- 9 a.m.—Welcome by Stanford biochemistry professor Dr. Paul Berg, director of the Center for Molecular and Genetic Medicine;
- 9:05 a.m.—Introductions to the morning speakers by Dr. Ronald Levy, Stanford associate professor of medicine;
- 9:15 a.m.—"Cachectin: A macrophage monokine that induces a catabolic state and shock," by Dr. Anthony Cerami, professor and head of the laboratory of medical biochemistry at The Rockefeller University;
- 10 a.m.—"Clinical investigation of the interferons and tumor necrosis factor in cancer patients," by Dr. Jordan Gutterman, professor of medicine at the University of Texas System Cancer Center and M.D. Anderson Hospital and Tumor Institute;
- 11:15 a.m.—"Clinical relevance of interleukin-1," by Dr. Charles Dinarello, associate professor of medicine and pediatrics at Tufts University School of Medicine;
- 12 to 1:15 p.m.—lunch break;
- 1:15 p.m.—Introductions to afternoon speakers by Dr. Ronald Levy;
- 1:20 p.m.—"Use of recombinant DNA-derived human growth hormone in the therapy of short stature," by Dr. Ron Rosenfeld, Stanford associate professor of pediatrics;
- 2:05 p.m.—"Coronary thrombolysis with tissue-type plasminogen activator (t-PA): An example of applied molecular biology," by Dr. Burton Sobel, professor of medicine and director of the cardiovascular division at Washington University School of Medicine;
- 3:20 p.m.—"Atrial natriuretic factor: A new class of peptide hormones," by Dr. Ferid Murad, Stanford professor and acting chairman in the department of medicine.

10-27-86 —30— cmgmnr-LH12

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EDITORS: This article appears in the current issue of *Stanford Medicine*, available through the News Bureau.
FOR IMMEDIATE RELEASE

BEST AIDS ANTIDOTES ARE EDUCATION, BEHAVIORAL CHANGE, AND MEDICAL RESEARCH, STANFORD EXPERTS BELIEVE

STANFORD—

During the spring of 1985, eight-year-old Benjamin Oyler began to experience severe bouts of nausea and diarrhea. "At first, we thought it might be an ulcer," recalled his mother, Christine, but their family physician could find nothing amiss.

As Ben's condition worsened, Chris and her husband, Grant, realized "something was really wrong." Their physician advised them to consult the Children's Hospital at Stanford.

Ben, a hemophiliac, turned out to have AIDS, acquired immune deficiency syndrome. His nausea, diarrhea and profound weight loss were due to *Cryptosporidium*, a gastrointestinal parasite that causes just one of the multitude of infections to which AIDS patients are vulnerable.

"We had three hemophiliac sons," Ben's dad recalled recently in an interview at their Carmel home. "We had heard about AIDS . . . but when your own son is sick, you don't think the worst."

Once the diagnosis was made, Ben's parents were faced with the wrenching prospect of watching their son slowly die. "We could feel the doctors mourning along with us. All they could do was treat symptoms. We all knew there wouldn't be a getting better part," Oyler said.

"It is an extraordinarily difficult situation for patients and families, and also for physicians and nurses," admits Dr. Bertil Glader, the Stanford pediatric hematologist who was Ben's physician. "The diagnosis is a condemnation to dying—nobody yet has survived AIDS."

"But when you have a child with AIDS," Oyler explained, "you don't give up hope. You try to outlast the disease to the point where medicine can catch up with it."

But medicine didn't catch up in time to save Ben. He died July 4, 1986, less than a week after his ninth birthday, at home in his parents' arms.

AIDS is presenting medical science with an urgent challenge. "The advent of a new deadly virus was not predictable," points out Stanford pathologist Dr. Edgar Engleman. "We thought we were getting pretty sophisticated in this century—controlling bacterial infections and beginning to come to grips with heart disease and cancer. Suddenly we're faced with a fatal viral infection, and we have to start from scratch."

Medicine is not the only institution challenged by AIDS. The disease is stretching the ethical and moral fabric of society. Extreme, and often irrational, fears about AIDS have surfaced with increasing frequency. Ben was barred from entering third grade at his school because of parents' fears for their children's safety. AIDS patients have lost their jobs, their homes, and have been disowned by their families. Now, proposition 64 on the California November ballot sponsored by the conservative followers of Lyndon LaRouche would even require county and state officials to report and quarantine all AIDS carriers and patients.

Although AIDS is an incurable disease, physicians caution that fear and hysteria are not the solution. The antidote to the mounting epidemic, they say, is biomedical research, education and knowledge that can lead to behavioral change and prevention.

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AIDS is caused by a virus that destroys cells in the immune system and in the brain, leaving the sick person defenseless against cancers and myriad infections, and susceptible to neurological damage. In many cases, there is a lag time of up to five years or more between the onset of infection and the first signs of disease. Twenty to 30 percent of those infected develop the milder form of disease known as AIDS-related complex (ARC) or full-blown AIDS and its accompanying conditions: *Pneumocystis* pneumonia, *Cytomegalovirus* infection, toxoplasmic encephalitis, tuberculosis, dementia and cancers such as the previously rare malignancy called Kaposi's sarcoma. Due to the protracted lag time, scientists cannot yet say with certainty whether anyone who has been infected will ultimately escape the disease, even though some people seem to remain healthy and symptom-free. Once full-blown AIDS has set in, patients live an average of only three years.

These are sobering facts for people who are infected and admittedly alarming to the population at large. Yet, infected individuals can pass the virus to others in only three ways: through intimate heterosexual or homosexual relations, exchange of blood or from an infected mother to her fetus.

It is essential for people to understand that safe sex, such as reducing the number of sexual partners and using condoms to avoid exchange of body fluids, could go a long way toward curbing the spread of AIDS, says immunologist Dr. Dennis McShane. Eliminating intravenous drug use—or at the very least avoiding sharing needles and other drug apparatus—is also critical.

"The risk for becoming infected with the AIDS virus does not have to do with being a homosexual man or being a member of any group," explains Dr. Anthony Fauci of the National Institute of Allergy and Infectious Disease in a recent Science article. "The risk for AIDS is a behavior—having sex with someone who is infected or being exposed to blood that is infected."

Because important facts about its transmission are not fully understood or appreciated by the public, AIDS is gradually spreading from the "high risk" groups—male homosexuals and intravenous drug users—into the general population. Although the medical consensus is that there's no need for hysteria, there is also a growing realization that curbing AIDS' incidence may not be possible unless preventive measures become everyone's concern.

"There is no indication that AIDS will diminish soon," says Glader. "It's been projected that in 1991, more people will die of AIDS than will die from automobile accidents."

Federal statistics present a glimpse of the future burden of the disease. Since 1981, when AIDS was recognized in the United States, nearly 35,000 people have been diagnosed; by the end of this year, 18,000 of them will have died. In 1986 alone approximately 16,000 cases will have appeared, and 9,000 people will die. By 1991—only five years away—more than one-quarter of a million new cases of AIDS are expected—3,000 of them children—and a total of 179,000 people will have died. Fifty-four thousand deaths are expected in 1991 alone, approaching the number of U.S. casualties during the entire Vietnam war.

In Africa, where it is believed to have first infected heterosexuals, the AIDS virus may lurk in up to two percent of the population. In the United States, 1 to 1.5 million people are thought to be infected, with as many as 1,000 new exposures occurring every day. The medical costs in 1991 for AIDS are projected to be anywhere from $8 to $16 billion.

Although scientists have made headway against the disease, behavioral prevention of AIDS remains the only course until the remaining obstacles to finding a vaccine and a treatment can be overcome.

AIDS research passed a first milestone in 1984 when scientists in the United States and France identified the AIDS virus. A second goal was reached after scientists learned that the virus was passed through blood and that high temperatures could kill it. That enabled them to institute heat treatments for the blood components given to hemophiliacs. Another major step came in 1985 when the nation's blood banking industry adopted an effective screening test to identify infected blood and prevent AIDS spread by blood transfusion. Stanford's own blood center had pioneered almost two years earlier when it became the nation's first blood bank to screen for potentially infected blood.

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"For the time being, the blood supply is much, much safer," asserts Engleman, Stanford blood center's medical director. But since there will never be a perfect screening test—an estimated 120 units of tainted blood may slip by each year with the current one—there will probably continue to be a few cases of transfusion-mediated AIDS, he says.

More contaminated blood could enter the blood bank system as the number of cases in heterosexuals continues to rise, Engleman cautions. "Right now, it isn't just the screening test that's slowing the spread" he explains. "It's the fact that people in the high-risk populations have made a conscientious effort to stop donating blood." But as the disease spreads to "low-risk" individuals who don't suspect they are carriers, the problem could grow again.

Engleman's lab and others are working on more sensitive tests that may become commercially available to blood banks within the next two years. More pressing, he explains, is the need to learn more about the AIDS virus and the biology of the disease.

He and associates Jeffrey Lifson, Michael McGrath and Barry Stein want to know how the virus causes damage. The AIDS virus, they have found, latches onto a specific protein found on helper-T lymphocytes and monocyte macrophages, cells that play a vital role in orchestrating the body's immune defenses. Once the virus latches onto the protein "hook," it then slips inside and commandeers the cell machinery to manufacture more virus particles. To make matters worse, a cell hijacked by the AIDS virus can act like a sponge, sopping up many of its uninfected counterparts to form giant cell conglomerates. These giant cells ultimately die, depleting the immune system of the very cells it needs to defend against disease. This makes the patient vulnerable to the slightest infection.

The ultimate measure against AIDS would be a vaccine. Several Stanford scientists are working toward this goal. Virologist Dr. William Robinson and colleagues are attempting to design a "synthetic-peptide" vaccine. It would consist of a small piece of laboratory-manufactured protein that would mimic the protein coat of an AIDS virus particle. When injected, it would trigger the person's immune defenses to a state of readiness to fight off the actual virus.

The biggest challenge in designing an AIDS vaccine is to make sure it protects against different strains of the virus. David Ludwig, a medical student, and medical microbiologist Dr. Gary Schoolnik are testing an approach that could accomplish this. Their vaccine, based on "anti-idiotype" methods, would interfere with the virus' ability to bind to the protein hooks it uses to invade cells. Since all strains of the virus are thought to invade cells by means of this protein, the vaccine could prevent infection by a variety of differing strains.

However, vaccine researchers are only cautiously optimistic right now. They know that the AIDS virus may be closely related to animal lentiviruses, microbes that can incubate in the brain for decades and against which no effective vaccine has yet been devised. Even if scientists can surmount the obstacles, any vaccine against AIDS is still more than five years away, due to the extensive testing that would have to precede its widespread use in people, explains Dr. Thomas Merigan, head of infectious diseases at Stanford. And once it's ready, getting it to all who need protection will be a monumental task.

Then, what about people who are already infected? To combat ongoing disease, a vaccine is useless. Effective drugs must be found. In June, the National Institute of Allergy and Infectious Diseases announced a five-year $100-million program to test drugs that have shown potential to fight AIDS. Stanford medical school, in collaboration with the Kaiser Hospital in San Francisco, is one of 14 institutions involved in the national study, which may enroll as many as 1,000 patients. Led by Merigan, Stanford and Kaiser physicians will oversee trials of drugs that may inhibit growth of the AIDS virus. Other institutions will examine drugs that may control the infections and malignancies prevalent in AIDS patients.

Many of the drugs to be tested in the first year of the study act by inhibiting a crucial enzyme—reverse transcriptase—that the AIDS virus uses to reproduce itself. Others may bolster and strengthen the AIDS-debilitated immune system. Most physicians are skeptical that any single agent will suffice, Merigan says. One hurdle is the blood-brain barrier—any drug against AIDS will have to be able to get past it in order to reach infected cells in the brain that could otherwise stay sequestered, yet continue to cause damage for years.

Also daunting is the knowledge that the AIDS virus is a retrovirus, a class of viruses that has so far defied drug control. There probably won't ever be a cure for AIDS, Merigan admits, only treatments to suppress symptoms. Even that poses challenges. "In other diseases such as hepatitis, we have found drugs that can terminate an acute episode. But if you stop therapy, you get a recurrence. The same could very well be true for AIDS," he says.

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The drug strategy that will eventually subdue AIDS, he adds, will depend on interweaving antiviral medications and immune boosters. Ideally, researchers would like to have a drug that suppresses the virus in infected people who have not yet developed disease even though such a drug would have to be taken for the rest of the person's life to continuously muffle the virus.

As if an AIDS vaccine and treatment strategy weren't enough of a challenge, that isn't all that's needed. Scientists also must seek drugs to treat the different infections and malignancies that make AIDS so devastating. Merigan's lab is exploring new drug treatments against *Cytomegalovirus* infection, one prevalent disease associated with AIDS. Stanford oncologist Dr. Sandra Horning leads a study of lymphatic system cancers—Kaposi's sarcoma and lymphomas—in patients with AIDS.

Dr. Jack Remington, infectious disease specialist at Stanford and the Palo Alto Medical Research Foundation, is pursuing new approaches to one of the more deadly AIDS-associated illnesses, toxoplasmosis, a parasitic infection that can affect the brain. Most people are infected with *Toxoplasma* organisms but never become sick because a healthy immune system keeps the parasite quiescent. "But AIDS ticks off these little bombshells" in up to 10 percent of AIDS patients, he explains. Without treatment, it leads to death within months.

Remington is searching for diagnostic methods to replace brain biopsy, the radically invasive procedure often needed to confirm *Toxoplasma* encephalitis. New drugs he's exploring against toxoplasmosis may possibly replace the effective but sometimes toxic medications currently available. His lab is also studying "biologicals," immune system-bolstering agents that in animal studies have been shown to provide protection against *Toxoplasma* encephalitis.

New work by government scientists suggests that it may take more than the AIDS virus alone to cause the disease—another newly discovered virus may play a role. That there may be an intimate association between AIDS and other diseases has intrigued scientists all along. Remington, for example, is studying a possible link between the *Toxoplasma* organism and the AIDS virus. They are found in the same parts of the brain in AIDS patients, suggesting that they may influence each other in some cause-and-effect way.

Robinson is looking at interactions between the AIDS virus and other organisms, trying to learn why one patient infected with the AIDS virus becomes sick right away while another lives in good health for years. There is circumstantial evidence that people who have several concurrent infections—as is true for many gay men—may develop AIDS more readily than others, Robinson says. His lab team is trying to determine whether the viruses that cause these other infections help stimulate a latent AIDS virus into activity.

As researchers around the country are beginning to translate laboratory findings into clinical use, they face a whole range of troubling ethical issues, however. One question is how to test accurately the efficacy and safety of potential AIDS drugs without temporarily withholding potentially lifesaving treatment. Some researchers have suggested that the traditional method of drug testing—in which half the patient volunteers in a study receive an inert substance instead of the test drug—should be thrown aside in evaluating drugs for a uniformly lethal disease such as AIDS. All patients who want experimental drugs should be able to get them, contends Dr. Mathilde Krim, a Columbia University scientist.

But the investigators in Stanford's AIDS treatment evaluation unit believe that imperfectly controlled studies don't give reliable information and that introducing unproven experimental drugs, even on a "compassionate use" basis, could actually do desperate patients more harm than good. Even if it means denying drugs for now to some patients, "The most important thing is to get the *right* answer as quickly as possible" to provide the greatest benefit, Robinson says.

McShane, who sees many AIDS patients in his practice, raises an equally thorny problem. Now that a screening test for infection by the AIDS virus is available, there is pressure from the frightened public to mass-screen individuals in the high-risk groups, he explains. The Centers for Disease Control have recommended that all gay men be tested. Not only would the individual learn about his health status, screening proponents argue, but sexual contacts could then be traced and informed of their risk.

But McShane argues against mass screening in the high-risk groups since there is no treatment available for those who test positive and the test cannot predict who will get sick among those infected. Furthermore, he says, high-risk individuals should follow preventive guidelines, no matter how the test turns out.

"Whether the person is positive or negative the bottom line is the same," he explains. "If the person's positive, he doesn't want to transmit the disease, so he should follow safe sex practices, like limiting the number of partners and using condoms.

"But if the test is negative," McShane continues, "he wants to make sure he doesn't get the disease. So, the precautions are exactly the same: use safe sex practices, forgo IV drug use, and so forth."

The test can be useful in specific cases, he adds, such as for advising a positive hemophiliac or bisexual man not to father children.

But many experts remain reluctant to use the test on a widespread scale because of concerns about constitutional issues such as individual rights and liberties, should the information be misused. Some states, such as Colorado, require mandatory reporting. The results could be used in a discriminatory fashion by insurance companies or employers, McShane argues.

"We have not done testing on many of our hemophiliac patients because from statistical data, we know the likelihood of whether or not they are infected," Glader notes. "And because of the political aspects, you're almost better off not knowing."

Widespread testing would lay the groundwork for medically unsound measures such as the quarantine implied in the LaRouche initiative, McShane says. Most doctors and medical groups, including the California Medical Association, have denounced that measure, he points out.

Prevention can only be accomplished when individuals are well informed, McShane suggests. And, echoing a recent editorial in the *New York Times*, he bemoans the "feeble fight" the federal government has so far mounted against AIDS. "Not nearly enough education has been done except at a grass roots level," he contends. "We must stress over and over again that this is not a disease that can be transmitted through casual contact. But the disease's spread can be slowed or eliminated only if people understand that it's their own decision—the disease is acquired through behavior the individual can control."

At least for now, once individuals become infected they have relatively little control over the course of their disease. However, a study of AIDS patients at San Francisco General Hospital suggests that patients are making decisions about their medical care, says Dr. Thomas Raffin, codirector of Stanford hospital's intensive care units and chairman of the medical center's ethics committee.

The study found a changing pattern of intensive care unit admissions among AIDS patients with the highly lethal *Pneumocystis* pneumonia. As the number of AIDS patients diagnosed with this condition rose, the number of patients admitted to the intensive care unit dropped, the opposite of what would be expected if the most aggressive treatments were pursued. The explanation appears to be that AIDS patients with only a slim chance of survival are deciding early on in the course of their disease not to be placed on intensive care life support should the choice arise.

And all evidence suggests that at least for the next few years, that agonizing choice will come up more frequently as the AIDS epidemic grows. Researchers are the first to admit they don't have the desperately needed answers yet, but they nevertheless are confident that biomedical science has the tools to proceed. Says Engleman: "It's a close race, but I believe we will control this disease with time."

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ADVANCE FOR RELEASE FRIDAY, OCTOBER 24, 1986

GENE STUDY MAY PROVIDE A CLUE TO HOW AIDS VIRUS INFECTS THE BRAIN

STANFORD—

A new finding about how the AIDS virus may infect brain cells has been reported by Stanford University Medical School scientists.

The finding, to be published in the October 31 issue of *Science*, centers on a gene which plays a critical role in regulating immune reactions in mice and humans.

This gene is active in the white blood cells that the AIDS virus infects, where it controls a molecular "lock" through which the AIDS virus enters the cells.

The new findings have revealed for the first time that this same gene is also active in brain tissue, suggesting that the AIDS virus gains access to cells in the brain through the same lock that enables it to penetrate the immune system.

Although the experiments were carried out in tissues from mice, the researchers believe the results are highly likely to carry over into humans because of extraordinary similarities in the roles of this particular gene and a closely related one in humans.

But the scientists were careful to point out that further research is needed to prove that the human gene is active in brain tissue and that its activity underlies AIDS infection in the central nervous system.

The researchers were able to determine that the gene is active in mouse brain tissue as a result of another feat which they reported in the same paper: the determination of the gene's structure.

Because the gene plays a central regulatory role in the immune response, the Stanford team's work should lead to new insights about how the immune system recognizes foreign materials in the body, as well as providing information on how the AIDS virus could be invading cells in the nervous system, said Dr. Jane Parnes, Stanford assistant professor of medicine who led the study.

Parnes noted, however, that it is too early to know whether these new findings might be useful in developing a treatment strategy against AIDS. "That is far downstream," she said.

The research was carried out in Parnes' laboratory by postdoctoral fellows Drs. Beatrice Tourvieille, Scott Gorman, and Elizabeth Field. Tim Hunkapiller, a graduate student at the California Institute of Technology, was also a collaborator.

Although researchers have known for some time that the AIDS virus can infect the central nervous system, causing a variety of severe neurological symptoms in patients, they haven't known what kinds of brain cells it infects nor how it gets into them.

The new study provides a clue to how the AIDS virus gets into cells in the brain, although it does not answer the question of which kinds of brain cells are susceptible to infection by the virus. Further studies may reveal the answer to that question, Parnes said.

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Additional research has already suggested that the gene is active in certain support cells in the brain known as astrocytes, she added.

Scientists also have known for some time that the human equivalent of the newly deciphered gene was implicated in AIDS. The human gene controls a protein, called CD4, found on the white blood cells in the immune system that the virus infects—the T helper cells.

By binding to the CD4 receptor protein the AIDS virus unlocks and infects the cell.

The CD4 protein is known to be much more than a lock, however. Over the years, researchers have realized that it plays a critical role in triggering the body's immune response. Although its exact function isn't known, it is thought to help T helper cells recognize foreign cells.

Scientists at Columbia University recently made an important advance when they isolated the CD4 gene in humans, Parnes said. However, because it can be very difficult to study human tissues and processes, she and her colleagues pursued the analogous "L3T4" gene in mice.

Parnes explained that although the L3T4 protein in mice plays a very similar role to that of CD4 in humans, their new study has revealed some structural differences between the proteins from the two species that could help explain why L3T4 is not a receptor for the AIDS virus, and thus why mice don't get AIDS.

In the *Science* article, the researchers also reported on experiments which showed that the L3T4 gene seems to be active in brain tissue in two different ways, in contrast to its single form of activity in the immune system.

Parnes and her colleagues would like to find out what role this gene plays in the brain. The new work adds one more intriguing bit of information to scientists' growing knowledge about a family of structurally similar genes that are active both in the immune system and in the central nervous system, Parnes said.

The research was funded by grants from the National Institutes of Health. Fellowship support was provided from three French agencies (the Ministere des Affaires Etrangeres-France, the Ligue Nationale Francaise contre le Cancer, and the Philippe Fundation) and from the National Cancer Institute, the Bank of America-Giannini Foundation, and a John A. and George L. Hartford faculty award.

END ADVANCE FOR RELEASE FRIDAY, OCTOBER 24, 1986

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FOR IMMEDIATE RELEASE

STANFORD REORGANIZES RADIOLOGY DEPARTMENT

STANFORD—

Stanford University School of Medicine's department of radiology has been split into two discrete academic units — the Department of Therapeutic Radiology and the Department of Diagnostic Radiology and Nuclear Medicine.

The change became effective Sept. 1.

Dr. Ronald Castellino, professor of radiology, has been named acting chairman of the Department of Diagnostic Radiology and Nuclear Medicine. Dr. Malcolm Bagshaw, Catharine and Howard Avery professor and chairman of radiology since 1972, will continue to lead the Department of Therapeutic Radiology which includes the Divisions of Radiation Therapy and of Radiation Biology.

"Conceptually, the two disciplines are different and there has been a desire for a long time that they be separated," said Vice President and Dean David Korn. "Changes in specialty training and board certification, the increasing complexities of medical practice, and marked national trends all support this decision."

Until the 1960s, most persons trained in radiology and nuclear medicine had clinical training in the three disciplines — diagnostic radiology, nuclear medicine, and radiation therapy. Since then, there has been increasing emphasis here and nationally on separate training and certification. Most of Stanford's current faculty in each of the three clinical divisions have been trained in only one of these specialties.

Radiation is used for its biological effects, particularly but not exclusively in the treatment of cancer. Physicians in the field of diagnostic radiology and nuclear medicine use radiation primarily for diagnosis.

Castellino, who joined the Stanford faculty in 1968, has served as director of the diagnostic division since 1981 as well as associate chairman of the department of radiology. Prior to that he headed the diagnostic oncologic radiology section, the first such subspecialty section at a major medical center, and also directed the computerized tomography (CT) body scanning program.

He is noted for research leading to improved techniques for evaluating patients with cancer, especially spread of cancer to lymph nodes throughout the body, using radiographic techniques of lymphography and CT body scanning.

Born in New York, Castellino grew up in Brazil. He received the M.D. in 1962 from Creighton University School of Medicine in Nebraska. He completed his residency training in diagnostic radiology at Stanford in 1968 prior to joining the faculty.

Korn indicated that consistent with the school's policies, he will seek a full outside review of the new Department of Diagnostic Radiology and Nuclear Medicine in the near future. Reviews cover departmental structure, resources, academic goals and leadership.

10-21-86 —30— RadiologyMC5

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FOR IMMEDIATE RELEASE

PSYCHOLOGICAL TECHNIQUES TESTED TO CONTROL CANCER PAIN

STANFORD—

Cancer patients can adopt easily-learned psychological techniques to help them control pain and stress, according to preliminary results of a Stanford Cancer Pain Management study.

Dr. David Spiegel, associate professor of psychiatry and director of the study, said this week that many patients report that pain control techniques such as hypnosis and biofeedback help them feel less victimized by their pain and more in control of their illness.

"Ironically, techniques like hypnosis are too often associated with **loss** of control. Actually, patients who learn to hypnotize themselves at the exact time that they need it feel much **more** control over their pain and their lives," said Spiegel.

The need to provide means of reducing the pain of cancer is clear, Spiegel said. Earlier studies have shown that between 60 and 80 percent of patients whose cancer has spread from its initial point suffer substantial pain. But Spiegel added that comparatively little research has been done on how to relieve pain.

About 140 more volunteers are needed now at the midpoint of Spiegel's two-year study to join some 60 persons who have already been accepted. Potential volunteers must have received a diagnosis of cancer—of any type and at any stage. Those with high levels of pain will be compared with those who are feeling little if any pain.

"Cancer patients can experience a tremendous sense of mastery when they focus on symptoms that are treatable—such as their pain, their depression and their anxiety," Spiegel said.

As predicted, the researchers are finding significant levels of depression and anxiety among the current group of cancer patient volunteers who are reporting pain.

But the scientists are also finding how patients can take specific action to conquer or at least control their pain.

For example, one patient reported being able to reduce her anxiety while going through chemotherapy in October by using self hypnosis to visualize herself horseback riding.

Another patient, while in a trance state, pictured a garden hose cooling the painful area in her back, and she later described how satisfying it had been to "play with" her pain.

Spiegel reported his most recent patient findings earlier this month at the American Cancer Society's Feature Writer's Forum in New York City. Spiegel said this was the first conference of its kind, an indication of the growing interest by both patients and physicians in the psychosocial aspects of cancer treatment.

In the current study, all volunteers will receive at no cost to themselves a complete psychological evaluation.

Dr. Susan H. Sands, research psychologist, said half the volunteers will receive specific treatment for pain, including self-hypnosis and biofeedback techniques, as well as more traditional treatments such as antidepressants, antianxiety medications and individual psychotherapy.

The researchers will compare measures of pain, mood disturbance and social support among the treatment and control patients at intervals of one, three, and six months.

For further information or to volunteer, contact Sands at (415) 723-6341. Sands said volunteers might be asked to make several trips to Stanford Medical Center, although patients requiring bedside or home visits by researchers can be accomodated.

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FOR IMMEDIATE RELEASE

MAGNETIC RESONANCE IMAGING SHEDS NEW LIGHT ON KNEE INJURIES

STANFORD—

The powerful imaging capability of magnetic resonance may lead to its playing an increasingly important role in the diagnosis and treatment of common knee injuries, according to a Stanford University Medical Center scientist.

The revolutionary imaging method reveals so much about menisci, the cartilage in the knee joint, that Dr. John Drace, Stanford medical school assistant professor of radiology, has developed a new classification system describing different types of injuries, including some that could not be seen before.

Drace, also a radiologist at the Palo Alto Veterans Administration Medical Center, is conducting clinical trials to support his classifications and the effectiveness of magnetic resonance imaging (MRI) for diagnosing knee problems involving the menisci.

"So far, the classification system is dramatically improving the sensitivity and the specificity of diagnosing knee injuries with MRI," Drace said.

The menisci are triangular-shaped cartilage wedges positioned between the tibia and femur on either side of the knee. They serve as a cushion, preventing the bones from grinding against each other and absorbing the impact of physical activity. Many active or athletic people stress the knees to the point that the cartilage is damaged or torn, causing extreme pain.

Until now, physicians have only been able to diagnose definite tears that affected the surface of the cartilage, Drace explained. MRI, however, allows them to "see" within the cartilage to detect internal tears as well as other weak spots or disease.

Formerly corrected only through major knee surgery, meniscal injuries in recent years have been fixed with arthroscopic surgery. With arthroscopy, physicians need only make a few small incisions in the knee area. Then, guided with a special scope, they can make the necessary repairs with tiny surgical tools. The procedure is often done on an outpatient basis with much less inconvenience and a much shorter recovery period for patients.

Yet even with the great improvement of arthroscopic surgery, Drace said, physicians still have been limited in their diagnostic capabilities. A painful and invasive procedure called an arthrogram, in which a contrast dye is injected into the patient's knee, is increasingly bypassed because in very few instances do physicians find it useful. Most physicians make an initial diagnosis during a physical examination of the knee, and then confirm the diagnosis and correct the problems during arthroscopic surgery.

With MRI however, possible unknowns are eliminated, Drace said. It allows physicians to see the menisci from any angle, revealing problems that otherwise may remain covered up. It is noninvasive, and it takes about an hour to complete.

The technique is based on the nuclear magnetic resonance phenomenon discovered by the late Stanford physicist, Felix Bloch, and Edward Purcell of Harvard. Patients are placed in a powerful magnetic field capable of rapidly aligning the nuclei of the body's atoms, which possess a property known as spin. Each molecule has such proton atoms. Radio waves beamed at patients "tilt" the nuclei, which then emit signals that can be used to form images of internal body structures such as the menisci.

"When there's a complete tear it's no problem to diagnose," Drace said. "The problem comes up when there's some type of degenerative or subtle change that's harder to diagnose. But you can see it with MRI. MRI shows you 'sick' menisci, not just torn menisci."

Drace said MRI is not really competing with arthrography since many physicians rarely use the diagnostic technique anyway. "We're not really competing with arthroscopy either, although we may save a few people from having them," he added.

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COCAINE CAN DAMAGE THE HEART, STANFORD MEDICAL SCHOOL STUDY CONCLUDES

STANFORD—

Cocaine can cause life-threatening damage to heart muscle tissue, according to a report soon to be published by researchers at Stanford University School of Medicine and the San Francisco Medical Examiner's Office.

It is apparently the first study to find a specific anatomical lesion in the heart muscles of a group of cocaine users, although another recent medical report documented a similar finding in a single patient, said Dr. Henry Tazelaar, the Stanford surgical pathologist who coordinated the study.

Cocaine, which has been known for its euphoric and stimulatory effects in South America for thousands of years, has experienced a recent surge in popularity in the United States which may, in part, be due to the perception that it is a relatively safe drug.

Only in the past year have medical researchers become aware that cocaine can have direct, destructive effects on human heart tissue, Tazelaar said. Angina, heart attack, coronary artery spasm, irregular heart rhythms and sudden death all have been associated with cocaine use.

"The evidence is mounting up that cocaine is not the benign drug it was once thought to be," Tazelaar said in a recent interview.

The heart damage caused by the drug is of a type that can trigger irregular heartbeat patterns which, in some cases, can lead to sudden death, he said.

"Although some people may be more susceptible than others to these effects of cocaine on the heart," he added, "the bottom line seems to be 'don't fool with cocaine'."

The findings are "provocative and potentially clinically important," the researchers wrote in their report, which has been accepted for publication in an upcoming issue of the journal *Human Pathology*.

Tazelaar's coauthors on the study are Dr. Steven Karch, visiting scholar at Stanford, Dr. Boyd Stephens, chief medical examiner in the San Francisco Medical Examiner's Office, and Dr. Margaret Billingham, Stanford associate professor of pathology.

Karch presented the study's results at a meeting of the University Association for Emergency Medicine in Portland, Oregon earlier this year.

The research was supported by a grant from the National Heart, Lung and Blood Institute.

The researchers examined tissue samples from the hearts of 30 people, aged 25-74, determined by the San Francisco Medical Examiner's Office to have died of cocaine toxicity.

They also examined heart tissues from 20 other drug overdose victims who had not used cocaine, as controls for comparison.

In 28 out of 30 of the cocaine users, microscopic study revealed that the heart tissues contained red streaks known as "myocardial contraction bands." Only nine of the control hearts displayed similar lesions, and they had fewer of them, the report said.

These bands arise when muscle cells enter a permanent state of contraction that immobilizes them, Tazelaar explained.

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"Once it's happened, the cells are essentially useless," he said. "It's an irreversible process. And because you get these useless, or dead, cells sitting in the way, the normal conduction pathways of the heart don't work like they should," he added.

With the normal conduction pathways blocked, the heart is much more likely to beat in irregular patterns called arrhythmias. Severe arrhythmias can cause sudden death, Tazelaar noted.

Such bands have been identified in more than 80 percent of patients dying of sudden cardiac death unassociated with cocaine use, he noted.

"This new information may help to explain the cardiac arrhythmias and sudden deaths that are associated with cocaine use in the absence of coronary disease," Tazelaar suggested.

Contraction bands can be caused in a variety of ways, Tazelaar said, and are already known to be associated with the substance norepinephrine.

In a complex series of chemical steps, Tazelaar explained, an increase in norepinephrine may disrupt calcium metabolism, leading muscle cells to enter a state of permanent contraction, or hypercontraction. "It's almost as though the chemical apparatus involved in contraction gets jammed," he said.

"Attempts to revive or resuscitate patients are known to induce hypercontraction and contraction bands," Tazelaar explained, because drugs like epinephrine and norepinephrine may be given during resuscitation efforts.

Since resuscitation attempts had been made in approximately half of the drug overdose cases, the contraction bands seen in the study could have arisen in several ways, Tazelaar acknowledged,

"But even taking that into account, there were a lot more contraction bands in the cocaine users than in the non-cocaine users," he said.

Although the scientists do not yet have proof, they suspect that people who don't have any problems initially may be damaging their hearts over time, and be unaware that something is happening.

"We are particularly concerned about this in young people, because later in life when they begin to get regular coronary artery disease, it may be that the already damaged heart will be that much less able to withstand the added stress of another disease process," he noted.

"It is possible that young people who are now using cocaine may be setting themselves up for problems 20 years down the road," he cautioned.

One practical outcome of the study is that contraction bands may help coroners make a diagnosis at autopsy in suspected cases of lethal cocaine overdose, as they have in cases of sudden death associated with usual atherosclerotic coronary disease, Tazelaar noted.

"Contraction bands may provide confirmatory evidence at autopsy that cocaine toxicity was the cause of death," he explained. "They might suggest cocaine as the culprit for sudden or unexpected death if no other cause for contraction bands is identified, and if a blood or urine drug screen shows the presence of cocaine."

Tazelaar noted that in the past year or so, "there have been reports of 15 or more documented serious cardiac events in people who have used cocaine."

"I think these findings may provide insight into the deaths of the seemingly fit young athletes we've all heard about," he said, "although we haven't examined any of their heart tissues."

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CONFERENCE TO HELP "SANDWICH GENERATION" COPE WITH DOUBLE RESPONSIBILITIES

STANFORD—

A conference on "The Sandwich Generation"— adults concerned about caring for aging parents and at the same time possibly trying to raise a family of their own — will be held Nov. 8 at the Lucie Stern Community Center in Palo Alto.

The conference is sponsored jointly by the Stanford University Hospital Home Health Care Services and the Palo Alto Area Information and Referral Services (PAAIRS).

It will feature addresses by Dr. Carol H. Winograd, assistant professor of medicine at the Stanford School of Medicine; Kathleen McConnell, director of health and social services for the Senior Coordinating Council of Palo Alto; and Dr. Thomas A. Raffin, associate professor of medicine at Stanford and assistant chief of medicine at Stanford Hospital.

Winograd, who is also clinical director of the Geriatric Research, Education and Clinical Center at the Palo Alto Veterans Administration Medical Center, will disuss "The Aging Process"; McConnell will speak on "Emotional Issues for Caregsivers"; and Raffin will discuss "Withdrawing Life Support: A Medical/ethical Issue."

In addition, there will be three workshops: Drew Bradley, president of The Hillsdale Group, will lead one on "Group Living Arrangements"; Barbara Burgess, clinical nursing coordinator of Stanford's Home Health Care, will host "Care at Home"; and Susan Tilton, program manager of the department of community services at Little House in Menlo Park, will be the leader for "Support for Seniors in Group Settings."

Lori Anderson, director of planning for the Council on Aging of Santa Clara County, will deliver an opening address, "The Challenge is Ours." Kathryn Janz, director of Stanford's Home Health Care Services, will be the program moderator. Dorothy Low, vice president of the Senior Coordinating Council of Palo Alto will give a welcoming speech.

The conference will run from 8:45 a.m. to 1 p.m. There is a registration fee of $5.

Further information may be obtained by calling (415) 723-8395.

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$19.6 MILLION MEDICAL SCHOOL CONSTRUCTION PROJECTS APPROVED

STANFORD—

Two Stanford University School of Medicine construction projects totalling $19.6 million have been approved by the University Board of Trustees.

The projects comprise the second construction phase of the animal research facility, and renovation of portions of the second and third floors of the Boswell Building which houses the Stanford University Clinic.

The trustees have authorized a budget of $16.9 million for the second phase of the animal facility construction. The project will be funded by long-term debt, according to the trustees' action.

The project will add about 44,000 gross square feet as a single story underground facility located immediately south of the Center for Molecular and Genetic Medicine site now under excavation. The project, designed by the San Francisco architectural firm of Stone, Marraccini and Patterson, will bring animal facilities to full code compliance and allow consolidation of animal facilities now scattered at several campus locations, the trustees said.

Construction of the new facility is estimated to start in April 1987, with completion expected in late summer of 1988.

The completed first phase of a state-of-the art animal facility serves only about 50 percent of the institution's research animal needs. The rest, mostly mice and rats, are housed in various satellite facilities throughout the Medical Center.

The budget approved for the renovation of the Boswell Building will be $2.7 million. The project covering the renovation of some 12,000 gross square feet will continue the upgrading of the Boswell Building, according to the trustees action.

Costs will be funded by gifts from the James G. Boswell Foundation of Los Angeles, which supported an earlier major renovation of the Clinic. Most of Stanford's 90 specialty and subspecialty outpatient clinics are in the Boswell Building. The Stanford University Clinic is the medical practice base of some 280 faculty physicians. It averages more than 144,000 outpatient visits per year and is a major local and regional resource of patient care.

The renovated space will accomodate several clinic areas, including Gynecology and Obstetrics, Cardiology, Neurology, Primare Care, Cardiovascular Transplantation, the Stanford Medical Group and clinic administrative offices.

As in the earlier renovation of the Boswell Building, the new design by the architectural firm of Almeter and Finley of Palo will provide "an improved functional environment for staff and physicians while providing a relaxed, comfortable atmosphere for patients.

Project construction will be started in summer of 1987 and will be completed in October, 1988. It will be phased over a 16-month period so as to minimize inconvenience to patients and clinic physicians.

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NEW SIDS RESEARCH TO FOCUS ON INFANTS' NERVOUS SYSTEMS

STANFORD—

A Stanford University Medical Center researcher trying to solve the mystery of Sudden Infant Death Syndrome (SIDS) thinks the answer may be found in the largely overlooked area of the development of infants' central nervous systems.

Thus far, says Dr. Ronald Ariagno, associate professor of pediatrics, most of the research on SIDS has focused on cardiovascular and respiratory systems. He intends to explore circadian (day-night) rhythms, thermoregulatory control and similar functions controlled by the nervous system—and in particular, changes in their interaction with development.

SIDS is the number one cause of death in children between one month and one year, killing between 7,000 and 10,000 infants in the United States each year. The deaths are sudden and unexpected and the causes are undetected by autopsies.

Pending funding sources for Ariagno's research include the National Center for the Prevention of SIDS and the National Institutes of Health. He will receive money for pilot projects to start the most current research from an elaborate SIDS benefit being organized to support his studies.

The benefit is being planned by Gretchen Cebrian, a San Francisco public relations executive who lost a six-month-old son to SIDS last March. She expects 300-400 persons to attend the $200-a-person, black tie dinner-dance at the Fairmont Hotel on Nov. 6.

Besides providing initial funding for Ariagno's project, the benefit is intended to call attention to the problem of SIDS. Cebrian notes that President Reagan has declared October "National Sudden Infant Death Syndrome Awareness Month."

Ariagno has been conducting SIDS research at Stanford for 10 years. He said there is a general belief among researchers that a large percentage of SIDS cases result from apnea, "the interruption of the normal breathing rhythm long enough to cause changes in oxygen and slowing of the heart rate."

He added, "The primary causes of apnea and the factors which modulate respiratory control in the neonate are what really need to be examined in greater detail." He said his research will attempt to discover if "the mechanisms for SIDS are in the nervous system, and especially the brain stem ... as it relates to the control of breathing, temperature regulation, circadian rhythmicity and arousal state control."

Studies at Stanford of babies with apnea produced a significant amount of information about infants with nptomatic apnea, Ariagno said, but "we didn't find a pathological marker" that would identify which babies (symptomatic or asymptomatic) were at greatest risk for SIDS.

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"We know there's some problem with breathing," he said, "some problem with perhaps regulation of temperature, that it occurs during sleep, and primarily at night or early morning. ... What we'd like to do is to consider all of these factors and to examine the importance of the day-night (circadian) organization of the nervous system."

Ariagno plans to study approximately 50 babies a year for a five-year period. Some will be full-term babies, but he plans to concentrate on premature infants, not only because their nervous systems are less mature and may reveal more about how the systems develop, but also because preterm infants are at significantly greater risk for SIDS.

"In a nervous system from a baby of 28 weeks' gestation (three months early)," he said, "environmental cues from the mother are withdrawn; they're not there. The baby is essentially in an artifical environment which may be non-optimal for the developing nervous system."

Steve Glotzbach, a sleep researcher and physiologist who will collaborate with Ariagno on the studies, pointed out that the environmental adjustment is compounded for infants in neonatal intensive care units who may have their circadian rhythms disturbed by the constant light of the nurseries.

He emphasized the need to examine the relationships of circadian rhythms with other physiological factors. "We know that the thermoregulatory system is severely inhibited during REM (rapid eye movement) sleep," he said, "and that thermal stimuli have important influences on respiratory and arousal state control.

"Since constant light has been shown to disrupt the normal coupling of different physiological systems in animal studies, we need to examine the effect of different photoperiodic environments on the physiology of the neonate."

"From looking at what happens to the nervous system from 28 weeks to term," Ariagno said, "we hope to learn what developmental achievements are present, when those achievements aren't there what significance they have to the baby's ability to respond, and their importance in understanding the potential lethal vulnerability of that infant."

The "lethal vulnerability" Ariagno referred to comes from an analysis of the risk for SIDS among premature infants born at Stanford over the past 20 years. Those born early enough to weigh less than 1,500 grams (3.3 pounds) at birth were in the highest risk category for SIDS. The incidence of SIDS in that group, he said, was 1 to 2 percent, about 10 times as high as the 1 to 2 deaths per thousand in the general population.

It will not be possible to do all of the planned studies on an individual infant. Therefore, a group of infants will be required. The studies are designed to analyze the interaction of thermoregulatory control, respiratory control, sleep organization, arousal control and the development of sleep-wake organization.

"Our focus is going to be on what effects these factors have on the development of the nervous system and on the basic physiological responses which are necessary to protect the individual and decrease vulnerability to a lethal problem," Ariagno said.

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ADVANCE FOR RELEASE THURSDAY, OCTOBER 23, 1986

STUDY OF AIDS "ENVELOPE" PROTEIN HAS IMPLICATIONS FOR VACCINE RESEARCH

STANFORD—

One small piece of the AIDS (acquired immune deficiency syndrome) virus may be sufficient to kill cells in the immune system, suggests a new study to be published in the October 23 issue of *Nature* by researchers from Stanford University School of Medicine and four other institutions.

The study also shows that the AIDS virus uses this piece—a specific protein—to bind to and infect susceptible cells, and that this protein is the part of the virus that the immune system targets in attempting to fight off an AIDS infection.

The findings may have important implications for AIDS vaccine development, said Dr. Edgar Engleman, associate professor of pathology and medicine at Stanford University School of Medicine, in an interview.

Because it appears tc stimulate an immune reaction and is also crucial for the virus' infectivity, "this is the part of the virus which we believe should be the focus of vaccine development," Engleman said.

But the substance's ability—on its own without the intact AIDS virus—to cause cell death raises concern that a vaccine based on this protein could cause AIDS-like damage to the immune system rather than protect against the disease, Engleman said.

The piece is the "envelope" protein, the building block of the AIDS virus' outer shell. This protein alone, without the intact virus, can cause certain susceptible cells in the immune system to fuse together and die, the report concluded.

The report also demonstrated that blood serum capable of neutralizing the AIDS virus contains antibodies directed against the envelope protein.

Engleman's colleagues on the study are Dr. Jeffrey Lifson, a Stanford postdoctoral fellow who led the project in Engleman's lab; Drs. Mark Feinberg and Flossie Wong-Staal of the National Cancer Institute; Drs. Gregory Reyes, Linda Rabin, and Babak Banapour of Gene Labs, Inc. in San Carlos; Drs. Sekhar Chakrabarti and Bernard Moss of the National Institute of Allergy and Infectious Diseases; and Dr. Kathelyn Steimer of Chiron Corporation in Emeryville.

The research was supported by grants from the National Institutes of Health and the Veterans Administration.

The findings could present scientists working on an AIDS vaccine with a dilemma because on one hand, since the envelope protein appears to stimulate a protective immune response in some infected individuals, it could form the basis for an effective AIDS vaccine. But on the other hand, since it appears to promote one form of cell death associated with AIDS, it may be "contra-indicated," said Engleman.

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The dilemma could be resolved if scientists can learn more about the process of cell death mediated by the envelope protein, he suggested.

In May, Lifson, Engleman, Reyes and their colleagues Drs. Michael McGrath and Barry Stein, first reported on this process. They observed that in the presence of the AIDS virus, helper T cells—the type of white blood cell the AIDS virus destroys—fuse together to form giant cell conglomerates that eventually die. One infected cell can fuse with several healthy, uninfected cells, the scientists found, rapidly depleting the helper cell population.

The disappearance of helper cells into dying giant cells could contribute to the collapse of immune defenses that is the hallmark of AIDS, Engleman explained.

"If you lose the helper cells, you lose the immune defenses, because without helper cells most of the immune system cannot be activated," he said.

Engleman and other scientists are not certain that this is the major mechanism by which the AIDS virus depletes the immune system of its helper cells. But it may be an important point to resolve in development of an AIDS vaccine based on the envelope protein, he added.

Last month, researchers at two biotechnology companies reported early progress on a potential AIDS vaccine made from a vaccinia virus that was genetically engineered to contain genes encoding key AIDS virus proteins.

When Engleman and his colleagues used the same kind of genetically engineered vaccinia virus to carry AIDS envelope gene into human cells in the laboratory, they observed that the envelope protein initiated the lethal cell fusion process.

"There are a lot of people who think that vaccinia-based vaccines hold great promise, that you can give this kind of genetically engineered vaccine to a person and induce immunity without causing harmful effects," Engleman said.

"But because this vector by itself, without the rest of the AIDS virus, causes such profound giant cell formation, there is reason for concern," he added.

The scientists noted that the concerns are not at this point well enough founded to rule out pursuit of envelope-based vaccines, however.

Engleman said that several laboratories are testing experimental envelope-based vaccines. "They have been able to demonstrate that injection of the envelope protein into animals induces antibodies that neutralize the AIDS virus," he pointed out.

"But because there is no really good animal model for AIDS, it's not going to be until a vaccine is tested in human beings that we will know whether or not it works," he said.

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END ADVANCE FOR RELEASE THURSDAY, OCTOBER 23, 1986

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COMPLETE MEDICAL EXAMINATIONS OFFERED STUDY VOLUNTEERS

STANFORD—

Physicians at the Palo Alto Veterans Administration Medical Center are providing thorough medical evaluations free to volunteer patients in order to gain a better understanding of metabolic changes that may be associated with high blood pressure.

There is evidence that patients with high blood pressure have some of the same problems with carbohydrate and cholesterol metabolism as patients with diabetes, and that drugs commonly used to treat hypertension may worsen these problems.

The medical evaluations include a complete history and physical examination, blood and urine testing, an electrocardiogram and an oral glucose tolerance test. In addition, there will be a sophisticated assessment of an individual's glucose utilization.

Although the program is directed primarily at patients with high blood pressure who are not diabetic or obese, people with normal blood pressure are invited to participate.

The program is under the direction of Drs. Gerald Reaven, Brian Hoffman, Arthur Swislocki and their associates. It will take place at the Aging Study Unit at the VAMC.

More information is available by calling 493-5000, extension 4572, from 9 a.m. to 5 p.m. Monday through Friday.

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ANATOMY PROFESSOR WILLIAM WALTER GREULICH DIES AT 87

STANFORD—

Dr. William Walter Greulich, Stanford University Medical School emeritus professor of anatomy, has died at the age of 87.

Greulich, perhaps best known for his studies of human growth and as a diplomatic science adviser, died of cardiopulmonary arrest Friday (Oct.10) at the Palo Alto convalescent home where he had moved several years ago from his Menlo Park residence.

Dr. Robert Chase, chief of the division of human anatomy, said Greulich was perhaps best known for co-authoring the definitive **Radiographic Atlas of Skeletal Development of Hand and Wrist**, which documents childhood growth and has been used extensively by pediatricians as a desk reference since the first edition appeared in 1950.

Greulich, who became emeritus in 1964, conducted one of the first developmental studies on childhood victims of the atomic bombing of Hiroshima and Nagasaki. Chase said Tuesday that Greulich continued to maintain contact and follow the medical histories of the victims for many years into his retirement, even though the survey officially ended in 1952.

The Japanese studies provided a wealth of data which have been important to other international studies into the effects of radiation on growth, said another longtime colleague, Dr. Donald Gray, emeritus professor of anatomy.

Greulich "brought great luster to the university because he was so well known....He was a highly distinguished person with a great sense of humor," Chase said.

Gray noted that Greulich also had a political side, reflected in several diplomatic posts. He served from 1961 to 1966 as senior scientific attache for the U.S. embassy in London. Earlier, from 1952 to 1954, Greulich served as science advisor to the U.S. High Commissioner for Germany.

After leaving the London post, Greulich became a special deputy to the director of the National Institute of Child Health and Human Development of the National Institutes of Health in Bethesda, Md.

Born in Columbus, Ohio, in 1899, Greulich graduated with a Ph.B. in biology from Kenyon College in Ohio in 1926. After receiving a master's degree in biology in 1928, Greulich came to Stanford where he received his Ph.D. in anatomy in 1934.

Greulich joined the Yale faculty where he rose to the rank of associate professor in 1939. In 1940, he went to Western Reserve University School of Medicine as a full professor. Four years later he joined the Stanford faculty, and for many years after 1949, he served as executive head of the anatomy department.

A widower, Greulich is survived by two sons, James L. of Whittier, and Richard, of Severna Park, Md; and by six grandchildren and two great grandchildren.

The family prefers that contributions in Greulich's name be made to the Lane Medical Library at Stanford. Funeral services were scheduled Tuesday at Roller & Hapgood & Tinney, 980 Middlefield Road, Palo Alto.

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HOSPICE PROGRAM PLANNED BY STANFORD

STANFORD—

Stanford University Hospital's Home Health Care program, which recently marked its first year of helping patients recover from illness while remaining at home, is preparing a hospice program to help those with terminal illnesses.

Kathryn Janz, director of the home care program, said the program will help many patients who want to remain at home during the last weeks of their lives.

Recruitment of volunteers is the major task remaining before the hospice service can be inaugurated. Two open houses will be held this month to explain the program and responsibilities to prospective volunteers. The first will be at 6 p.m. Thursday, Oct. 23, at the Home Health Care office, 437 Webster St., Palo Alto. The second will be at 3 p.m. Thursday, Oct. 30, at the American Cancer Society, 535 Race St., San Jose.

Sharon Beckham, coordinator of volunteer resources for the hospital, said volunteer responsibilities in the hospice program will range from practical support such as helping a patient eat to providing respite for the family or seeing the family through the period of bereavement.

She said volunteers will be asked to make a one-year commitment to the program and those accepted will go through a five-week, 20-hour training program. During the year, they will be asked to attend monthly support group meetings.

"Volunteer involvement in a hospice program is invaluable," Beckham said, "particularly in providing respite to the patients' families. These people really do personalize the care we provide. And they find the experience personally gratifying; they grow as individuals by helping others."

Janz said Stanford decided to offer hospice care because "no one hospice program covers the entire three-county area (San Mateo, Santa Clara and Alameda) where the majority of Stanford patients live."

The Home Health Care service is already positioned ideally for hospice care, she said, because it provides the requisite 24-hour care. In addition, it can help the transition for patients who have been receiving home nursing services and would object to a transfer to a separate hospice program because it would sever relationships that had developed with the nursing service.

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Some patients, Janz said, also must be psychologically prepared for the transfer from home care to hospice care because they are not yet ready to accept their prognoses.

A principal difference between home care and hospice care, she said, is that in hospice care the patient and his or her family comprise the unit of care. Family members are involved in caring for the terminally ill patient, and they also become clients in a sense because they get bereavement counseling.

Janz described the hospice approach as labor-intensive and "high-touch," compared with the "high-tech" services offered by the hospital. If it becomes necessary for a hospice patient to enter the hospital, she said, the hospice care-givers will be available to offer advice and work with the hospital staff.

One factor influencing Stanford's decision to start a hospice program, she said, was the unusually high percentage of cancer patients receiving home care. Many cancer patients were in effect already receiving hospice care, she explained.

"We also have a lot of patients with end-stage cardiac respiratory diseases," she added.

Hospice patients come from all age groups, but Stanford expects a higher percentage of children than most hospices because the home care service treats substantial numbers of children.

Janz recalls one newborn with major cardiac disorders who "was sent home to die. The parents wanted the child to be with them in a warm, caring atmosphere."

Providing care under such circumstances was similar to the hospice program, Janz said, but it lacked certain aspects of the full hospice services, such as the volunteer component and a bereavement program.

She said another area in which hospice training will expand on the home care service is in development of "a strong expertise in the area of symptom control, particularly in the area of pain, so that a patient will not have to suffer. We will be no longer dealing just with the disease, but dealing with the symptoms."

Janz expects about 200 patients to enroll in the hospice program the first year.

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STANFORD SCIENTISTS ISOLATE A NEW CANCER-ASSOCIATED GENE

STANFORD—

A piece of human genetic material which may play a role in causing one form of cancer of the white blood cells has been isolated by Stanford University Medical School researchers.

The discovery will have no immediate impact on treatment methods for the cancer, but the research represents a new approach to studying the molecular basis of certain malignancies, the scientists said.

Alterations of the gene are strongly associated with a form of cancer called follicular (or nodular) lymphoma, a malignancy of the white blood cells known as B cells, which play an important role in the body's immune system, said Dr. Michael Cleary, assistant professor of pathology at Stanford University School of Medicine.

In the United States, follicular lymphoma is the second most prevalent adult lymphoma, after Hodgkin's disease, he said.

By cloning the cancer-related gene, the scientists were able to study the structure of its protein product in detail, Cleary said. An unexpected finding was that the protein product of the gene is related to a product of the Epstein-Barr virus, a virus known to affect the growth of B-cells, Cleary said.

"We now need to study the function of this protein to determine its potential role in the cancer process," he added.

Such studies may eventually result in the development of a new therapy to combat follicular lymphoma, a slow-growing cancer which is difficult to cure using current treatment methods, he said.

The isolation of the so-called "oncogene," one of only a handful associated with human malignancies, was reported in an article in the October 10 issue of the journal *Cell*.

The researchers were careful to point out that it will require further research for the newly found gene to be classified with complete certainty as a human oncogene. But their report presents strong circumstantial evidence that the newly isolated gene should be considered as a provisional member of this class of cancer-associated genetic elements, Cleary noted.

Cleary's colleagues on the work are Dr. Stephen Smith, associate professor of pediatrics, and Dr. Jeffrey Sklar, assistant professor of pathology.

The research was conducted with grants from the National Institutes of Health, the American Cancer Society, and the Lucille P. Markey Charitable Trust, as well as through scholarship funds from the Markey Trust and the Leukemia Society of America.

Oncogenes, which have only been recognized in the past decade, are pieces of the body's own hereditary material, DNA, that are thought to drive the uncontrolled cell proliferation that is a hallmark of cancer.

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Oncogene research is one of the most exciting and promising areas of basic cancer research. About 50 such cancer-associated genes are known, said Cleary, but "only a handful are clearly associated with human cancers.

"The more we know about oncogenes and their role in controlling cell division, the better able we might be to design new anti-cancer therapies," Cleary said.

Most of the time they are normal segments of genetic material, called "proto-oncogenes," that play important and needed roles in the body's cells and tissues. But disturbances of these Jekyll-and Hyde genes can turn harmless proto-oncogenes into cancer-causing oncogene forms, which are capable of transforming a normal cell into a cancerous one.

Certain viruses, chemicals, and types of irradiation are among the carcinogenic agents that can trigger such a gene's Jekyll-and-Hyde switchover.

But for the gene Cleary and his colleagues are studying, the trigger seems not to be an environmental agent such as a chemical. It may instead occur due to an error in the normal maturation process of B cells, Cleary suggested.

As B cells mature and become ready to produce disease-fighting antibodies, they must undergo rearrangements of their antibody genes, Cleary explained. In some cases, this shuffling of DNA may go awry, he said.

In the case of follicular lymphoma, for example, scientists have discovered that in 90 percent of patients the cancerous cells have a characteristic pattern of broken and reattached DNA, in which pieces from two separate chromosomes are translocated, or trade places.

Cleary and his colleagues showed that this DNA translocation breaks an antibody gene and the candidate proto-oncogene in half, then abnormally rejoins the two to create a hybrid gene.

They used advanced techniques of molecular biology to identify and isolate the abnormal product of the hybrid gene that was created by the translocation process.

The scientists went on to show that the candidate proto-oncogene is quiescent in some B cells but when it is translocated to the new site on a different chromosome, it becomes very active. The scientists believe that this abnormal "awakening" of the gene could be involved in triggering the follicular lymphoma.

Now, the researchers want to study the gene in more detail and analyze the function of the protein whose structure it specifies, in the hope that they can design agents to inhibit or block its activities.

"In the future, we're going to find more and more genes like this," Cleary predicted, "by performing molecular analysis of chromosomal translocations.

"The list of cancers that are associated with specific chromosomal translocations continues to increase as we refine our methods for detecting these abnormalities," he said.

—30—

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FOR IMMEDIATE RELEASE

PLASTIC SURGERY TARGETS FUNCTION, NOT JUST APPEARANCE

STANFORD—

Electrodes, computers and wood screws, as well as reattached muscles or blood vessels, help plastic surgeons make damaged bodies work—not just look—better.

Dr. Lars M. Vistnes, head of the Division of Plastic and Reconstructive Surgery at Stanford Medical Center, and Dr. Vincent R. Hentz, head of the Division of Hand and Upper Extremity Surgery at Stanford, stressed the rehabilitative function of their medical art during a free public Progress in Medicine Lecture at Stanford Tuesday night (Oct. 7).

Vistnes said that while individual practices vary widely, the average plastic surgeon spends no more than 40 percent of his or her time on purely cosmetic surgery.

Vistnes said that a key goal of plastic surgery is to improve somebody's body image, and "it is just as crippling to a person's body image to have a part that doesn't function correctly, even if it looks all right, as it is to have a part that doesn't look right but functions moderately well."

Hentz discussed advances in the use of computers to provide control and function in otherwise unusable muscles. Electrodes, implanted in muscles, are in turn controlled by computers, which give a paralyzed patient the ability to perform tasks. Such research accomplishments are an outgrowth of the plastic surgeon's art, which in the past has been stereotyped as simply a means to improve a patient's appearance.

"More Than A Pretty Face" is in fact the title of the Progress in Medicine series, which continues for the next two Tuesdays (Oct. 14 and 21) with speakers on a wide spectrum of the specialty.

Among other recent advances in reconstructive surgery is the ability to use screws—which look like ordinary wood screws—to hold broken bones in place to facilitate mending. The process allows persons to exercise their limbs during the healing process to prevent the stiffness that results form being immobile in a cast for a long time, Hentz said.

An important finding in recent years is that nerves can be reconnected, allowing muscles, for example, to regain function when they're transplanted from one part of the body to another.

10-8-86 -more-

For example, Vistnes noted that moving a toe to a finger is justified, because the foot can maintain nearly normal function, while the improvement to the hand is significant and makes the effort worthwhile.

Both Hentz and Vistnes noted that many of the important developments in plastic surgery have resulted because of microsurgery techniques. Surgeons can connect nerves and blood vessels using microscopes to guide their highly intricate task.

Other uses of plastic surgery include repair of damage from trauma or following cancer surgery, Vistnes noted.

Vistnes, a professor of surgery and 15-year Stanford veteran, said the name plastic in his field "refers both to what we do and how we do it." Many operations are intended to repair injuries, and often the surgery involves unique situations. Therefore, the surgeon may be faced with a procedure that in its entirety has never been done before.

"But all of the parts of the surgery have been done (in other contexts) before, so it's a matter of having a plastic mind and putting all of the correct elements together," Vistnes explained.

The next lecture in the series, Tuesday, Oct. 14, features Dr. Seung K. Kim, assistant professor of surgery, who will discuss "Plastic Surgery After Mastectomy"; and a talk on cosmetic surgery, "Mirror, Mirror on the Wall," by Dr. Robert M. Pearl, clinical associate professor of surgery and assistant physician-in-chief of Kaiser PermanenteHospital, Santa Clara.

The final talk in the series, Tuesday, Oct. 21, features "The Future of Microsurgery," Dr. Joseph M. Rosen, assistant professor of surgery at Stanford and Chief, Division of Plastic Surgery at the Palo Alto Veterans Administration Medical Center; and Dr. Donald R. Laub, clinical associate professor of surgery, who will talk about "The Interplast Story," a service by U.S. medical personnel to provide volunteer plastic surgery to children in Third World countries who are suffering from birth or other correctable defects.

All lectures in the three-part series begin at 7:30 p.m. in Sherman Fairchild Auditorium at Stanford University Medical Center. Parking is available in a parking lot accessed from Campus Drive West.

—30— mg10-PLASTIC

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FOR IMMEDIATE RELEASE

INTERNAL MEDICINE SPECIALIST JOINS STANFORD MEDICAL GROUP

STANFORD—

Dr. Jeffrey Croke, a specialist in medicine formerly associated with a multi-specialty group in Colorado Springs, has joined the Stanford Medical Group (SMG).

Croke is the seventh physician to join the group, which is made up of medical school faculty. The physicians provide primary care to patients from Stanford as well as from the local community, including those covered by Maxicare and other health insurance plans. "This is not just a referral clinic," said Dr. Michael Jacobs, director. "Our patients come to us for ongoing primary care."

Patient visits to the five-year-old clinic have increased 25 percent since the introduction of Maxicare, Jacobs said. The number of patients is projected to double in the coming year, he added.

Croke's appointment follows a national search because "he was clearly the most outstanding choice," Jacobs said. He received his M.D. from University of California, Los Angeles, in 1981, and completed his training at University of California, Irvine. After a three-month stint in the Amazon basin in Brazil, where he cared for patients and taught primary care skills to local nurses, he joined the Colorado group.

In addition to caring for patients, Croke said he plans to emphasize teaching residents strong primary care skills. "More students are becoming interested in general internal medicine rather than specialties. The demand is up for primary care physicians," he said.

10-7-86 —30— sk7-CROKE

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FOR IMMEDIATE RELEASE

STANFORD MEDICAL SCHOOL ADMISSIONS DIRECTOR APPOINTED

STANFORD—

Dr. Norman Blank, professor of radiology, has been appointed director of admissions at Stanford University medical school.

In his new position, Blank will oversee the application, selection and matriculation of all medical students.

"My goal is to obtain the very best class each year for the school and to choose students who will benefit most from what Stanford has to offer," Blank said.

Stanford, he explained, is unique in that it offers great flexibility and individual choice in the way students can choose to pursue their medical education. "I don't know any other school that offers the diverse opportunities that we do," he noted.

Students at Stanford medical school have the option of taking five years or longer to complete their medical education. By doing so, they can pursue activities in other nonmedical fields or get involved in research projects.

Appointed by the medical school's senate and committee of five, Blank succeeds Dr. Raymond Clayton, who chose not to renew his term as director.

"We will continue to be vigorous in our recruitment of students from all segments of society," Blank said. "I feel fortunate to have a very hardworking cadre of people working in the admissions office as well as the voluntary efforts of faculty and students. Without their help, we simply could not do our job."

Blank, who came to Stanford in 1962, has been active in medical education in addition to his field of radiology and has received several awards for excellence in teaching.

10-7-86 —30— sk6-BLANK

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HEIGHT IS LINKED TO INTELLIGENCE, STANFORD STUDY SHOWS

STANFORD—

A small but significant correlation between height and intelligence in children has been documented by a group of researchers at Stanford University.

While the reasons for the association are unclear, said Stanford pediatrician Dr. Darrell Wilson, a possible explanation may be that shorter children are treated differently by adults than their taller peers.

Short children tend to be babied more than others, Wilson explained.

The difference may also be caused by some intra-uterine damage or postnatal malnutrition that affects height as well as IQ, he added.

Because the researchers' study showed no change in the correlation as the children grew with age, the researchers cautioned against any type of therapy, such as synthetic growth hormone, to enhance growth among short children as a way of increasing intelligence.

The researchers published the results of the study in the October issue of *Pediatrics*, the journal of the American Academy of Pediatrics.

"If anything, this study shows that children should be treated according to their ability, and not height or other physical characteristics," Wilson said.

The scientists analyzed data provided by the National Health Examination Survey conducted by the National Center of Health Statistics during the 1960s to obtain health-related data from a sample of noninstitutionalized youth. They included 13,887 children between the ages of 6 and 17. They also looked at a group of 2,177 children who were tested initially and then again two to five years later.

The data included scores of the Wechsler Intelligence Scale for Children (WISC), which measures intellectual ability, and the Wide Range Achievement Test (WRAT), which measures academic achievement. The study also took into account socioeconomic factors such as family income, race, family size and birth order.

The analysis showed that height accounted for about a two percent variance in the IQ scores of the shortest to the tallest children. There was no major difference between males and females. There was also no difference in the group tested twice, leading to the conclusion that a relative change in height does not necessarily affect IQ scores.

Thus, they suggested, a child's intellectual abilities may be determined early on in life and are not affected by any relative changes in height.

The findings support other studies on the correlation between height and intelligence among adults. "While these studies have methodological flaws, they suggest that the association between height and IQ in childhood persists into adulthood and does not reflect transient differences in relative physical maturity or growth," the researchers said.

The study was funded by the Stanford Center for Study of Youth Development andd Father Flanagan's Boys' Home. Other authors included Drs. Lawrence Hammer, Paula Duncan, Sanford Dornbusch, Philip Ritter, Raymont Hintz, Ruth Gross and Ron Rosenfeld from Stanford's pediatric department and sociology department.

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FOR IMMEDIATE RELEASE

PROGRAMS ON ALCOHOL, DRUG DEPENDENCY SCHEDULED AT STANFORD

STANFORD—

A series of four programs on alcohol and drug dependency will be held this month at the Fairchild Auditorium of the Stanford University School of Medicine.

The hour-long programs, sponsored by the Stanford Alcohol and Drug Treatment Center, will feature four physicians who are experts in various aspects of the field.

Registration for each program will begin at 8 a.m. and the lectures will begin at 8:30 a.m. There will be a question and answer period after each speech. The programs, including dates and speakers:

- Friday, Oct. 10—"Physician Attitudes Toward Chemical Dependency," by Dr. John Chappel, professor of psychiatry at the University of Nevada, Reno.
- Friday, Oct. 17—"Making the Diagnosis," by Dr. Max Schneider, president of the American Medical Society on Alcoholism and Other Drug Dependencies.
- Wednesday, Oct. 22—"Initiating Treatment," by Dr. Jess Bromley, secretary of the American Medical Society on Alcoholism and Other Drug Dependencies.
- "Physician's Role in Treatment," by Dr. William Hazle, medical director of the Stanford Alcohol and Drug Treatment Center. Hazle will also be moderator for the programs.

There will be a fee of $20 for physicians to attend all four sessions. Members of the Stanford University Hospital nursing staff will pay $15 and the cost to other professionals is $20. Medical students and residents will be admitted free.

The program series is offered in conjunction with the California Medical Association and has been approved for credit by the CMA and the California Board of Registered Nursing.

Further information may be obtained by calling Diana Kennedy at (415) 723-6682.

10-2-86 —30— drugtalk-rg4

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PAIN MAY NOT GAUGE HEART ATTACK RISK

Pain is not a reliable way to judge the seriousness of a heart condition, according to a 10-year study led by a Stanford Medical School faculty member and other researchers for the Veterans Administration.

Dr. Herbert Hultgren, a professor of medicine, says the study of 686 patients at 13 VA medical centers showed some patients with very mild symptoms had very severe underlying heart disease and a high risk of a heart attack or sudden death. On the other hand, a majority of other persons with severe angina—pain caused by narrowed blood vessels in and around the heart—actually had milder forms of the disease with less chance of a heart attack.

In all, 43 percent of the patients with severe angina were considered to have a high risk of heart attack or death. But nearly as many, 34 percent of the patients with mild symptoms, were also deemed to have a high risk.

Hultgren, who practices at the Palo Alto Veterans Administration Medical Center, recommends that any patient with angina—mild or severe—should have an exercise treadmill and other diagnostic tests to determine the risk of heart attack.

If risk is high, a variety of options, including surgery or medication, can be considered.

BEAUTIFUL MODELS MAY NOT MOTIVATE FITNESS

Television and magazine ads featuring very fit and slim people may be a major deterrent to get people to exercise regularly, says William Haskell, Ph.D., a Stanford University exercise physiologist.

"Pictures of beautifully fit men and women lead to the idea that everyone must achieve and look like that," says Haskell, who serves as associate director of the Stanford Center for Research in Disease Prevention.

But Haskell says the reality is that "many routine activities such as brisk walking if performed regularly produce substantial health-related benefits." Besides the well-known advantage of helping to reduce heart attack risk, persons who exercise regularly gain myriad other advantages—helping the body in how it uses both fats and sugar, for example, or improving blood clotting mechanisms.

The ads are misleading if they portray a country of beautifully fit people. "National statistics show that 80 percent of men over 40 do not participate in any regular vigorous exercise," says Haskell.

The optimal amount of exercise varies for each person, depending on age, health and recent activity. However, for most adults, 30 to 40 minutes of moderate intensity activity relative to their own capacity will result in substantial health and performance benefits, says Haskell, who cites brisk walking, cycling, swimming or active gardening as examples of activities which can produce the desired effects.

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PATIENTS NEED TO PLAN FOR HOSPITAL RELEASE

Shorter hospital stays mean patients need to plan for their discharge more carefully if they are going to be comfortable when they return home, notes a discharge planner at Stanford University Hospital.

"With rising health costs, a hospital is not going to serve the function of a convalescent home, and so people are increasingly being sent home earlier," says discharge planner Liza Taft.

Both the need for and availability of home care services are increasing rapidly, Taft says, as medicine improves and as costs dictate shorter hospital stays. "Hospital beds are being reserved for the truly ill, and the modern hospital's role as a convalescent facility has not been feasible for many years," says Taft.

"Home care programs, which send either skilled caregivers or practical help into the home, are one answer," Taft says. But there are a lot of other services available in many areas. Some communities offer an emergency free grocery delivery service by volunteers or markets, while in other areas, volunteers will bring complete meals to recuperating patients at home. Some communities have available an emergency communications system which summons help at the touch of a button when a user becomes incapacitated.

The time to begin investigating these services is not the last day of the hospital stay. When hospitalization is planned in advance, such as for elective surgery, persons would be well advised to make arrangements before admission for the help they'll need when they get home, she says.

Taft advises that patients should be good consumers and ask to see a social worker or discharge planner before their release so that arrangements can be discussed.

SWAPPING HARD LIQUOR FOR BEER OR WINE IS DECEPTIVE

People who switch from hard liquor to wine or beer in an effort to avoid alcoholism aren't helping themselves, says the medical director of the Stanford Alcohol and Drug Treatment Center in Palo Alto, Calif.

"Alcohol is alcohol, and it offers the same potential for addiction in whatever form it's consumed," says Dr. William Hazle, a psychiatrist.

For example, a standard 12-ounce bottle or can of beer, a four-ounce glass of wine or a shot of liquor all provide the same alcohol content, notes Hazle. "Someone who thinks he is cutting back on alcohol by substituting three or four beers for three or four drinks of hard liquor is kidding himself," he adds.

If a person thinks he or she might have an alcohol problem, the only prudent move is to stop drinking and/or seek professional help, particularly if quitting feels difficult, Hazle explains.

HONESTY IN EMERGENCY CAN SAVE A LIFE

Honesty is a good idea in most situations, but in the emergency department it can mean the difference between life and death.

Dr. Ricardo Martinez, director of clinical services for the Emergency Department at Stanford University Hospital, says that patients or family members sometimes withhold crucial information for fear that it will embarrass them or get them in trouble with the law.

Patients who have overdosed on illegal drugs and fear arrest often won't tell emergency personnel, "and this quite simply means that we don't often have enough information to start the appropriate treatment to try and save their lives," says Martinez.

"This is particularly tragic when it involves young children who have somehow obtained and ingested their parents' drugs. True, the parents are already in trouble, but withholding information doesn't make either their legal or personal problems any easier."

A majority of withheld drug information involves presciption drugs which people are embarrassed to tell emergency personnel about, says Martinez. An example might be medication prescribed for a mental illness.

"The hospital emergency department is no place for vanity," he says. "The doctors and other health personnel are not going to make you feel embarrassed. When you tell them about your medication, their main reaction will almost always be gratitude for making their work possible."

PACIFIERS NOT ALWAYS GOOD FOR TEETH

Pacifiers in one form or another have been given to teething children for centuries, but recently questions about them have been raised.

The devices, now made mostly of rubber or plastic, can be useful for relieving or diverting the pain of emerging teeth. But the constant pressure applied by some tots could result in improper dental development, particularly when children continue to use them after their teeth have already penetrated the gum at about age 2, says Dr. Fernando Mendoza, assistant professor of pediatrics at Stanford University School of Medicine.

Constant biting on a pacifier with functional teeth could cause them to grow in at an angle, he says. Such buckteeth create an appearance problem and could interfere with proper chewing, adds Mendoza, who practices at Children's Hospital at Stanford.

However, for infants, a pacifier may be better than chronic thumb sucking, so if a teething youngster must use a pacifier, Mendoza advises parents to wash the device in detergent and boil it for 10 minutes when new. Ideally, it should also be washed before each use, he says. Flat pacifiers more closely simulate a mother's nipple and are potentially less damaging than round pacifiers, Mendoza says.

"Always make sure the pacifier is intact and doesn't contain cracks which would allow the baby to bite off and swallow a portion," he explains.

"And most of all," he says, "never tie a cord to a pacifier or any item your child might use. Children could wrap it around the neck and choke themselves."

HT3/ 4-4-4

ASPIRIN FOR CHILDREN NEEDS SPECIAL CAUTION

Check with your physician before giving aspirin to children under age 16, especially to relieve symptoms of chicken pox or influenza, says Dr. Michael Jacobs, of Stanford Medical Group.

The common and ordinarily safe medication has been associated with Reye's syndrome, a disease of uncertain origin which strikes children after they have already developed symptoms of chicken pox or influenza. Jacobs, a clinical associate professor of medicine who specializes in primary care at Stanford University, says that while more research is needed to show conclusively if Reye's and aspirin are linked, the association is sufficient to prompt a warning to parents.

Symptoms of Reye's usually appear at the time a child should be recovering from the flu. The first sign is persistent vomiting. If left untreated, that condition can be followed in about six hours by extreme sleepiness, disorientation, hostility-combativeness, followed by loss of consciousness and sometimes death.

If a child recovering from chicken pox or flu develops these symptoms, he or she should be seen by a physician immediately.

Jacobs notes that widely sold aspirin substitutes, made from acetaminophen and marketed under a variety of popular national brands, appear to be safe and free of any association with Reye's.

CONTACT LENS USE REQUIRES CARE AND CAUTION

A Stanford University Medical School eye specialist has some simple but important advice for contact lens wearers: clean them regularly to avoid infection and never keep them in the eye longer than recommended.

Dr. Michael F. Marmor, who heads the Division of Ophthalmology, says that contact lenses can give years of good service if cared for properly. But since they rest directly on the eye, they carry the seeds of disaster in the form of particles or bacteria which become lodged beneath them.

The risks of scarring or infection become greater the longer a lens is worn without cleaning. Lenses which are designed for daily wear should never be worn longer, Marmor believes. Extended wear lenses carry an added risk of infection and many eye doctors are now saying they shouldn't be used unless there is a strong reason to do so, says Marmor.

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INJURIES, IF NOT FALLS, CAN BE PREVENTED

Falls can't always be prevented, but many times the injuries which result can be avoided.

Dr. Ricardo Martinez, director of clinical services for Stanford University Hospital's Emergency Department, says elderly people and very young children are the most likely to be seriously injured when they fall.

Martinez says a common injury occurs when elderly people stumble in the dark after they get up in the middle of the night to use the bathroom—a trip seniors take more often than younger folk.

A few simple steps will help avoid injury. Clear the pathway from the bed to the bathroom, put padding on sharp objects, or remove those objects from the pathway. Night lights placed along the route are inexpensive, don't use much energy, and are very effective, he says.

Falls in the home accounted for 4,850 deaths among persons 65 and older in the United States in 1985, says the National Safety Council in Chicago.

MAGNETS OFFER CLEAR BODY PICTURES WITHOUT RADIATION

Magnets are increasingly helping to provide clear pictures of body organs, tissues and even bones without the radiation of X-rays.

And for most uses, the new technique of magnetic resonance imaging (MRI) not only eliminates the dangers of radiation, but also offers higher quality diagnostic images than X-ray, says Dr. Dieter Enzmann, associate professor of diagnostic radiology and director of Stanford University Medical Center's MRI facility.

Certain kinds of abnormalities in soft tissues in the body, including the brain and spinal cord, can be accurately imaged and analyzed for diagnostic purposes, says Enzmann. Some of these soft tissue abnormalities do not show up on X-ray images.

In addition, MRI is superior to other techniques because pictures can be taken at any angle, not just in cross section as in CT-scans, a form of X-ray. With MRI, physicians can visualize and chart brain tumor size, for example.

MRI is expensive and the latest techniques are currently available at only a few centers. Even though new centers are being started regularly, MRI is not likely to replace X-rays for many routine uses, such as diagnosing broken bones. However, the technique is potentially more accurate even for that common use, Enzmann explains.

MRI eliminates the risk of radiation. It is considered extremely safe, although it usually can't be used by persons who have metal implants, such as a pacemaker or brain aneurism clips.

The powerful magnetic field interacts with electrically charged atomic particles, protons, in the body. Energy is released from protons and is recorded and rendered into an image by the MRI system's computers.

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FOR IMMEDIATE RELEASE

NURSING RESEARCH DOESN'T MEAN ASSISTING DOCTORS

Editors: photos available on request

STANFORD—

Dr. Robinetta Wheeler, a Stanford University Hospital (SUH) nursing supervisor, bristles whenever someone says nursing research means collecting data for physicians.

It doesn't, and she helped organize a recent symposium, or rounds, to highlight that nursing's brand of research is distinct from the medical research performed by physicians. The nurses target questions directly related to the care of patients, including ways of making the work of nurses more efficient, said Wheeler. She is clinical nursing coordinator (head nurse) of an SUH patient unit and holds both an R.N. degree and a Ph.D. in medical sociology.

Wheeler and her colleagues were anxious that the doctors and others they work with on the units see what they are doing scientifically, so they set up 10 booths outside the hospital cafeteria. Not only doctors, but fellow nurses, other employees and even visitors enroute to lunch stopped and viewed exhibits or posters telling about projects. Most of the nurses were available to answer questions, and most of the participants passed out copies of research papers related to nursing projects, including journal publications nurses had authored.

In a five minute stop at a couple of booths, lunch goers could have learned, for example:

- That Claire B. Mailhot, assistant director of nursing and director of the SUH operating room; Linda Slezak, assistant OR director; and Marianne Zalar, a former nurse researcher at Stanford, had collaborated with two colleagues from Britain in an infection control study. The research, published in the September/October issue of *Nursing Research* journal, validated the effectiveness of cover gowns in preventing bacterial contamination of scrubsuits when nurses temporarily exit the OR.

- Four nurses in the Intensive Care Nursery, Jane Earenfight, Sandy Chapman, Pat Carter, and Arlene Sheehan, found no statistical differences between rectal and easier-to-administer axillary temperatures among infants nursed under radiant warmers.

"The results of this study enabled us to revise our nursing practice of requiring infants under radiant warmers to have rectal temperatures taken routinely," the authors said in an abstract published in the newsletter *Nurse Inquirer*.

• Two nurses at the Palo Alto Veterans Administration Medical Center, Anne Grillot and Pat McCarthy, found in a study conducted at several area hospitals, including Stanford, that nurses who work in intensive care units had a higher level of death anxiety than their non-ICU colleagues. This anxiety occurred even when conscious efforts were made to counteract the potential stress. Grillot and McCarthy's study has been submitted for publication.

Nurses have been encouraged for many years to undertake research projects, and Wheeler noted that the current emphasis at Stanford is on unit-wide efforts.

"We encourage a group of staff nurses to identify areas of concern and join together to study the issue," she said. Although there is no precise count of how many projects are currently underway at SUH, Wheeler noted that 48 current projects in various stages of completion are listed with the Medical Center's Human Subjects Committee. That group must approve the safety and appropriateness of all projects involving patients or volunteers.

Wheeler said she is particularly interested in chronic illness in the elderly, as well as studies to find ways of bringing families into the caregiving process.

And one of the posters at the recent event addressed the issue of family involvement in hospitalization, Wheeler noted. That research was completed by Dr. Nancy Lovejoy, a member of the nursing faculty at UC San Francisco.

"Traditionally, family visitors to the hospital have been viewed as a nuisance. Lovejoy found that is changing, and one of the things she looked at was how to help fulfill visitor needs while they're at a hospital offering support to a relative," said Wheeler.

"Patients come from family groups and when they leave the hospital they return to a family group. To ignore that while they are in the hospital is ridiculous.

"Lovejoy's research is particularly timely, because with shorter inpatient stays, family members will be called upon increasingly to help with care at home. The more we can help them learn skills, the more effective they'll be at home, and the patient will be the big beneficiary," Wheeler said.

—30— mg10-nurseout

EDITORS: Dr. Wheeler may be contacted directly at (415) 723-6973.

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FOR IMMEDIATE RELEASE

STUDY PLANNED OF HYPERTENSION DRUG WITH CHOLESTEROL-LOWERING POSSIBILITIES

STANFORD--

Physicians at the Palo Alto Veterans Administration Medical Center are seeking hypertension sufferers for a study of prazosin, a hypertension drug that seems to lower blood cholesterol levels.

In contrast with the apparent effect of prazosin, many drugs now used to treat high blood pressure result in higher cholosterol levels.

Volunteers will be given a free, thorough medical examination, as well as free blood pressure therapy for the duration of the study.

Participants must be between the ages of 21 and 60 and have hypertension, but otherwise be in good health. They must be able to come to the VAMC at regular intervals of roughly two weeks for blood pressure checks and metabolic measurements.

The program is under the direction of Drs. Gerald Reaven, Brian Hoffman, Arthur Swislocki and their associates. It will take place at the Aging Study Unit of the Palo Alto VAMC, although some measurements will be performed at the Clinical Research Center at the Stanford University Medical Center.

More information can be obtained by calling 493-5000, ext. 4572, from 9 a.m. to 5 p.m. Monday through Friday.

11-19-86 —30— prazosin MC5a

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EDITORS AND MEDICAL WRITERS: Following are brief reports on selected Stanford University Medical School presentations at the American Heart Associations's 59th Scientific Sessions in Dallas Nov. 17-20, 1986. Embargo times precede each brief report.

FOR RELEASE 12 NOON, MONDAY, NOV. 17

TYPE A PATIENTS ARE NOT AT EXTRA RISK FOR SECOND HEART ATTACK

STANFORD—

Type A patients who suffer heart attacks do not have a significantly greater risk of a repeat attack than Type B patients, according to a study by researchers at the Stanford University School of Medicine.

Type A behavior is considered coronary prone and is characterized by aggression, impatience and signs of stress. Type B behavior is more relaxed and is considered less of a coronary risk.

In a paper presented Monday at the American Heart Association's Scientific Sessions in Dallas, Dr. Charles A. Dennis, assistant professor of medicine, reported on studies of 303 men about 50 years old who were recovering from heart attacks. Sixty-one percent of the men were classified as Type A and 39 percent as Type B on the basis of structured personality interviews.

There were no significant differences between Type A and Type B patients in the frequency or type of coronary events in a six-month followup period, Dennis said.

However, he said, there was a difference in coronary events when the patients were classified as high-risk or low-risk according to historical and clinical variables. The high-risk category included 73 percent of the patients who had a subsequent medical event—cardiac death, nonfatal myocardial infarction or nonfatal cardiac arrest—and 60 percent of those who had a surgical event—coronary surgery or angioplasty.

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FOR RELEASE 11:30 A.M., MONDAY, NOV, 17

EARLY RETURN TO WORK IS GENERALLY OK FOR PATIENTS RECOVERING FROM HEART ATTACK

Patients recovering from heart attacks can return to work relatively soon without increased risk after exercise testing to determine their risk for future attacks and their physical capacity, Stanford University Medical School researchers reported Monday.

Dr. Charles A. Dennis, assistant professor of medicine, outlined results of the Stanford study at the American Heart Association's Scientific Sessions in Dallas.

He said 203 men about 50 years old who had suffered uncomplicated heart attacks were divided randomly into two groups: 102 received usual care and 101 were given an Occupational Work Evaluation.

This evaluation consisted of a treadmill test performed 21 days after the heart attack, followed by an explicit return-to-work date based on the test results. The usual care group received no such return-to-work instruction.

Those in the group receiving the Occupational Work Evaluation returned to their jobs a median of 51 days after heart attack, Dennis said, while those in the usual care group didn't get back to work until a median of 75 days after heart attack.

In both groups, the number of patients experiencing cardiac events within 6 months was small: there were deaths in 1.5 percent, recurrent heart attacks in 2 percent and revascularization procedures in 13 percent.

After 6 months, 89 percent of those in the work evaluation group and 87 percent of the usual care group were still working, Dennis reported.

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FOR RELEASE 12:15 P.M., MONDAY, NOV. 17

HEART'S "WORKHORSE" CHAMBER PUMPS LIKE A BELLOWS

The heart's major pumping chamber, the left ventricle, uses a "bellows" motion to push blood out into the body, Stanford Medical School researchers reported Monday, Nov. 17 at the American Heart Association meeting in Dallas.

This kind of pumping action is highly efficient and may minimize the blood's ability to stagnate or clot inside the heart, according to Dr. Craig Miller, associate professor of cardiovascular surgery, Dr. Neil Ingels of the Palo Alto Medical Research Foundation, and their colleagues.

The scientists used a computer to analyze X-ray "movies" of heart action in 15 heart transplant patients. The picture they obtained of the left ventricle's pumping action contradicts previous theories of how the left ventricle pumps blood.

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FOR RELEASE 9 A.M. TUESDAY, NOV. 18

WRINGING ACTION OF HEART DETECTED

Stanford Medical School researchers have discovered the function of fibers in the heart's wall, which have been known but unexplained since Leonardo da Vinci's time.

The fibers "wring" the heart's left ventricle like a washcloth, as it ejects blood out into the body, reported cardiology fellow Dr. David Hansen, Dr. Craig Miller, associate professor cardiovascular surgery, and their colleagues Tuesday, Nov. 18 at the American Heart Association meeting in Dallas.

The wringing motion called torsion, which had never before been detected, possibly allows the heart to store energy when it ejects blood, and then use this energy to refill its chambers, the scientists believe.

Torsion also may provide physicians with a relatively simple way to measure the contractility of heart muscle.

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FOR RELEASE 9 A.M., TUESDAY, NOV. 18

ULTRASOUND MAY REVEAL HEART TRANSPLANT REJECTION

Ultrasound—very high frequency sound waves—may provide a new non-invasive method for diagnosing rejection in heart transplant patients, Stanford University Medical School researchers suggest.

In a study of 22 heart transplant patients who experienced rejection episodes, ultrasound detected characteristic changes in the function of the heart's left ventricle, reported cardiologist Dr. Hannah Valantine, and her colleagues Tuesday, Nov. 18 at the American Heart Association meeting in Dallas.

Currently, rejection is diagnosed by heart biopsy, an invasive procedure which may be painful and inconvenient to the patient. Ultrasound measurements, which are easily performed and thought to be safe, might help reduce the number of biopsy procedures performed.

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FOR RELEASE 11:45 A.M., TUESDAY, NOV. 18

BREATHING AND HEART RATE CHANGES LINKED IN HIGH-ALTITUDE STUDY

Changes in the breathing patterns of subjects sleeping at high altitudes were accompanied by changes in their heart rates, Stanford University Medical School researchers reported.

Dr. Herbert Hultgren, professor of medicine at the Stanford University School of Medicine and a staff cardiologist at the Palo Alto Veterans Administration Medical Center, and his colleagues studied seven male subjects in a low-pressure chamber that simulated a 40-day ascent of Mt. Everest. They found changes in heart rates at 18,000 to 25,000 feet, Hultgren reported Tuesday, Nov. 18 at the American Heart Association meeting in Dallas.

It has been known for some time that people sleeping at altitudes above 10,000 feet often have periods during which their breathing stops for a few seconds.

Hultgren's study showed those changes in breathing are sometimes accompanied by changes in heart rate and rhythm.

Although the study shows a close relationship between breathing and heart rates under certain conditions, he said, "it does not indicate any danger to anybody who might experience the condition."

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FOR RELEASE 3 P.M. TUESDAY, NOV. 18

CARDIAC TRANSPLANTATION IN CHILDREN AND ADOLESCENTS YIELDS ENCOURAGING RESULTS

Heart transplants provide an "effective therapy for children and adolescents with end stage heart disease," Stanford University Medical School researchers said Tuesday, Nov. 18 at the American Heart Association meeting in Dallas.

Among 27 patients, aged two to 18, transplanted at Stanford in the last five years, there are 22 survivors, 100 percent of whom have achieved rehabilitation and resumed normal life, said cardiovascular surgeon Dr. Vaughn Starnes and his colleagues.

Like all transplant patients, the children must continue lifelong drug treatments to prevent rejection of the transplanted organ, and they also require treatment for high blood pressure, the researchers reported.

But the rates of rejection and infection in the children are similar to those observed in adult transplant patients, they noted.

Further time is needed before doctors will fully know to what extent chronic immune suppressive drug therapy affects children's growth and development. But so far, the researchers believe there is cause for "cautious optimism" about the future for heart transplants in young patients.

FOR RELEASE 4:45 P.M., TUESDAY, NOV. 18

CLUES TO WHICH TRANSPLANT PATIENTS ARE LIKELY TO GET CORONARY DISEASE

Stanford University Medical School researchers have identified two factors that could help predict which one-third of heart transplant patients will develop coronary disease within five years after their operations.

The findings, presented Tuesday Nov. 18 at the American Heart Association meeting in Dallas, suggest that an older donor heart and a recipient's serum triglyceride metabolism (one type of blood lipid) are the most likely factors, among those studied, to play a role.

In a review of 132 patients transplanted since 1979, Dr. Shao Zhou Gao and his Stanford Medical School colleagues found that the age of the heart donor and the recipient's serum triglyceride levels one year following transplant were significantly higher in the 44 patients who developed accelerated coronary disease than in those whose hearts remained healthy.

Other factors such as blood cholesterol profiles, extent of donor-recipient tissue matching, age of the recipient, drug therapy and number of rejection episodes were similar in both groups of patients, the researchers found.

Physicians would like to better understand why some transplant patients develop coronary disease since it affects long-term survival prospects in approximately one-third of transplant patients and can cause sudden death.

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FOR RELEASE 10 A.M., WEDNESDAY, NOV. 19

BIOPSY PREDICTS WHICH CARDIOMYOPATHY PATIENTS WILL BENEFIT FROM DRUG THERAPY

Stanford University Medical School researchers have found a test that may help predict which patients with cardiomyopathy are likely to benefit from treatment with the beta-blocker drug, metoprolol, they reported Wednesday Nov. 19 at the American Heart Association meeting in Dallas.

Some patients with cardiomyopathy—deterioration of the heart muscle—who are given the beta-blocker drug can further deteriorate, while others benefit from the therapy. Since simple tests have proved unreliable in distinguishing the two types of patients from each other, cardiologist Hannah Valantine and her colleagues explored the use of myocardial biopsy, a procedure in which a tiny piece of heart muscle is snipped off with a pincer threaded into the heart.

In a study of 41 patients with cardiomyopathy, they found that among the 21 patients whose biopsies showed only mild lesions, all but one tolerated beta-blocker drug therapy. In contrast, 11 out of 20 whose biopsies showed severe muscle damage had to be taken off the drug.

This suggests that patients whose biopsies reveal only mild or moderate abnormalities should benefit from beta-blocker drugs with minimal risk of deterioration, the researchers concluded.

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NEW QUARTERS TO MEAN EXPANDED OPERATIONS FOR STANFORD'S PAIN MANAGEMENT UNIT

STANFORD—

Dr. Lorne Eltherington is an authority on the treatment of pain, but he makes it clear that there's not much he can do to end the suffering of many chronic pain victims.

What he can do—and what he tries to do repeatedly—is teach them to control or cope with their pain themselves. That, to Eltherington, is the real key to dealing with chronic pain.

"Disability, it seems to me, is where the bottom line is, not pain," he said.

"There are many treaters who are only looking at the response of the patient to pain in the sense of 'Do you hurt more or less?' What we really should be doing is looking at the patients in terms of function. Are they working, are they doing the relaxation/entertainment exercises that they used to do?

"If indeed you have restored them from being in a chair all day to doing the kinds of things that they want to do, as far as I'm concerned, that's success."

Eltherington, an anesthesiologist, is director of Stanford University Clinic's pain management unit, which will move beginning Friday, Nov. 14, from the Hoover Pavilion into more spacious quarters on the second floor of the Clinic building in the main Stanford Medical Center.

In the new quarters, he hopes to be able to see more patients and to have the pain unit become more involved in research on the causes and treatment of pain.

He'll also have more ready access to the many resources of the Medical Center, which makes it easier to pursue the multidisciplinary approach he says is essential in the modern treatment of pain.

Stanford's pain unit, Eltherington says, includes "psychology, occupational and physical therapy, psychiatry, medicine and all the various consult services at Stanford such as neurosurgery and orthopedic surgery. That's the trend in the business—coming to multidiscipline programs—because pain is such a multifaceted problem that it really does cross a lot of specialty boundaries."

Eltherington is even willing to use the services of specialists not connected to the Medical Center—such as an acupuncturist. As far as he is concerned, any technique that helps patients is worth trying. "We use things like biofeedback, stress reduction, self-hypnosis," he says. "We've had patients involved in yoga and Transcendental Meditation."

Those techniques may produce some relief from pain, but what is equally as important to Eltherington is they teach patients to help themselves.

"The problem with patients who have chronic pain," he said, "is that they have no control, or they're unwilling to accept control, of their own kind of destiny. They keep coming to treaters and saying, 'Doctor, help me,' rather than saying, 'Well, I've got this problem, I've had it for many years and I'm probably going to have it for the rest of my life. Now what am I going to do about it.' "

Eltherington emphasizes he is not talking about acute pain—pain resulting from a recent injury and destined to ease with time—or the pain of terminal cancer. The chronic pain is usually something that has troubled the patient for years, and persists despite all attempts to treat it.

There has been striking progress recently in some methods of treating acute pain and cancer pain and Eltherington plans to incorporate those methods in the new quarters.

One technique involves the use of catheters implanted under the abdominal skin that can be used for the injection of small amounts of narcotics directly into the area where the pain is centered. This allows the use of much smaller amounts of narcotics than those administered orally or by muscle injection and consequently reduces toxicity.

The catheters can be attached to a device that will continuously administer the narcotics, or they can be set up so that nurses, or the patients themselves, can periodically administer the injections. The catheter treatment can be used to ease the pain of cancer patients at home or help any post-operative patient with a great deal of pain who is still hospitalized.

Another new device is called a dorsal column stimulator. It features a thin wire containing electrodes that is also tunneled under the skin in the area of the pain. Over the skin there is a small black box that sends electrical impulses to the wire. The patient can send electrical messages of varying intensity and duration that stimulate the dorsal columns of the spinal cord.

If the device provides pain relief, it can be left in for long periods of time, Eltherington says. It is used primarily for treatment of patients who have had multiple back surgeries but still have pain, or paraplegic patients who have pain from below the level of their spinal cord damage.

The dorsal column stimulator is a refinement of a device frequently used for chronic pain treatment that is called TENS, for trans-electrical nerve stimulation. Eltherington describes TENS as "very much like acupuncture that the patient takes home." Patients wear electrodes at the pain sites and have a small black box with a battery that they can use to stimulate the skin and get relief from pain.

TENS can be effective for many chronic pain patients, Eltherington said, but he noted the effectiveness often is diminished by a phenomenon of pain treatment:

"The response to TENS in the chronic pain population is probably about 90 percent over the first few days to weeks. At the end of a month, it's probably down to less than 50 percent. And at the end of a year, we're probably dealing with around 10 percent success.

"It's like many things in pain therapy. There's a very high initial success, because people with chronic pain want to hurt less. Then there's a very rapid falloff to where you level off at a 5-15 percent success over long periods of time."

That initial reaction to many pain remedies, coupled with the intense desire of patients to escape suffering, produces a "real problem" in pain treatment, Eltherington said.

"All these new treatments and new devices come on the market with enormous hope," he said. "Pain patients read about them and they phone you and say, 'I want to try brand X.' And sure enough brand X really helps them. Then they invest a thousand dollars in brand X and in one month they say, 'Gee, Doc, this didn't work.'

"There's an enormous amount of scam connected with chronic pain patients. They'll buy anything and they'll really let you do anything to them. . . They really are desperate in terms of accepting almost without thought anything—any injection, any procedure, any device, any drug—that will promise them even a modicum of pain relief."

But the solution to their problems, Eltherington emphasized, lies within the patients themselves.

"The more control they can obtain, the better their chances are for long-term functional increase and even pain reduction," he said. "The more they depend upon other people, the less the long-term success, in terms of either pain relief or increased function."

One major step in self-control, Eltherington said, is to eliminate dependence on pain-killing drugs. Drugs contribute to depression, anxiety and social withdrawal—all of which compound the problems of pain. In addition, he said, the pain sometimes becomes "secondary to an enormous dependency on narcotic drugs that are almost without exception contraindicated in chronic pain management."

Besides rejecting drugs, there are positive steps the chronic pain patient can take, such as losing weight or exercising. (Excess weight and flabby abdominal muscles are often "major components of chronic low back pain," Eltherington said.)

The most positive step, however, is likely to be psychological, the determination to get on with their lives as much as possible despite the pain.

That's why, Eltherington says, "I tell patients I don't much care about how much pain they have. What I really care about is how much disability they have."

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NEW CLOT-BUSTING AGENT MAY HELP HEART ATTACK VICTIMS, BUT IT'S "NO PANACEA," SCIENTIST SAYS

STANFORD—

A shot in the arm that stops a heart attack in progress may be on the medical horizon, a researcher told a meeting of scientists Friday, Nov. 7 at Stanford University School of Medicine.

But a shot that could be administered at the first sign of a heart attack by a doctor, relative, or even the heart attack victim, will be "very tricky" to develop, warned Dr. Burton Sobel, professor of medicine and director of the cardiovascular division at Washington University School of Medicine in St. Louis.

"It will require serious investigation with rigorous controls . . . as well as close medical surveillance and highly educated patients . . . if we don't want to do more harm than good," Sobel told an audience composed primarily of scientists and physicians at the fourth annual symposium of the Program in Molecular and Genetic Medicine at Stanford Medical School.

The shot would contain a new blood clot-dissolving agent that has shown great promise in clinical tests worldwide for reducing damage and sudden death due to heart attack.

The agent—called tissue-type plasminogen activator, or t-PA—has dissolved obstructing clots in 70 to 75 percent of several thousand patients worldwide, when injected into the coronary blood vessels within one hour of the onset of heart attack symptoms, Sobel reported.

An estimated 500,000 people in the United States die each year from heart attacks, Sobel said.

"But we are still a long way from saving lots of lives," he cautioned.

Right now, t-PA is administered directly into the blood vessels by means of intravenous lines. Scientists do not yet know how to get enough of the substance into the heart when it's given by a simple injection into the muscles, he said, although exciting new research on "absorption enhancement" agents may lead to a solution.

In addition, because the high doses of t-PA currently being tested can cause complications such as bleeding, more studies are needed to determine optimal—preferably lower—doses, he noted. Increased risk of bleeding can also be traced to the interaction of t-PA with heparin, another drug given to heart attack victims, Sobel said. Attempts are now being made to develop t-PA variants that may reduce such interactions, he said.

Another problem to be solved is that complications can develop when t-PA dissoves a clot, allowing blood to surge back into oxygen-starved heart muscle, Sobel said. Even a short period without oxygen, followed by a resurgence of blood flow, can damage heart tissues, Sobel said. Researchers are exploring the use of "calcium blocker" drugs in conjunction with t-PA to minimize some of these damaging effects, he added.

Sobel's presentation was one of six at the symposium entitled "Clinical applications of cloned gene products," a daylong meeting focusing on new drugs produced through genetic engineering techniques.

One of the handful of such recombinant-DNA derived products already available to patients is human growth hormone (HGH). Dr. Ron Rosenfeld, Stanford associate professor of pediatrics, discussed the benefits of HGH for children who are growth hormone-deficient and the ethical questions surrounding its other potential applications.

HGH has been available for many years but only last year did the Food and Drug Administration (FDA) approve the use of "recombinant" HGH obtained through genetic engineering techniques, Rosenfeld explained, after clinical studies at Stanford and elsewhere proved that it was effective and safe in inducing normal growth in HGH-deficient individuals. Over 1,000 such children have now been treated with good results, he said.

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There may be some medical conditions in which patients can benefit from HGH even though they have normal levels of growth hormone, Rosenfeld said.

For example, he reviewed preliminary results of a Stanford study in which HGH was given to girls with a genetic abnormality called Turner's syndrome. Despite their ability to manufacture growth hormone, Turner's patients have abnormally short stature, he explained.

Although none of the Turner's patients receiving HGH has yet reached adulthood, over the short term those getting the drug have achieved increased growth rates, he said.

Growth hormone is being touted as a potential treatment for conditions ranging from wound healing to osteoporosis, but it has not yet been proven effective in any of these applications, Rosenfeld said.

But now that large quantities of the substance are available to anyone who can get a doctor's prescription for it, the potential for misuse has become a concern, he noted. "Already we are turning away dozens of families" who want the substance to help their normal, but short, children grow tall, Rosenfeld said. In addition, the drug is beginning to be used for bodybuilding in Europe and in the U.S., he said.

Concern over widespread use of the agent when it's not medically needed focuses on potential dangers associated with its administration, the most serious of which is the possibility of inducing a diabetes-like condition, Rosenfeld said.

A variety of substances produced by the body's white blood cells are undergoing clinical tests in cancer patients, and several speakers focused their presentations on early work with these agents. One of these cloned gene products, alpha-interferon, has already been approved for one specific use by the FDA, noted Dr. Jordan Gutterman, professor of medicine at the University of Texas and M.D. Anderson Hospital and Tumor Institute.

Alpha-interferon, a molecule that seems to inhibit growth of some viruses and cancers, provides a complete or partial remission of a rare form of cancer called hairy cell leukemia in approximately 90 percent of patients receiving the drug, Gutterman said.

"It isn't a cure," he noted, because many patients get a recurrence of the disease if they stop taking the drug. But so far, most hairy cell leukemia patients who continue the treatment are able to resume normal lives.

Gutterman and his colleagues are now testing alpha-interferon in patients with a blood cancer known as chronic myelogenous leukemia (CML). Preliminary results suggest that about 80 percent of patients who get the drug obtain remission of their disease, although it's too early in the study to draw conclusions, he cautioned.

A combination of alpha-interferon and a closely related compound, gamma-interferon, is also undergoing testing in CML patients, Gutterman noted, with early indications of a high response rate. But again, he cautioned that it is too early in the studies to draw conclusions.

Another potential anti-cancer agent under investigation is tumor necrosis factor (TNF). Clinical trials combining TNF and interferons are just getting under way, Gutterman said.

Although test-tube studies suggest that TNF has potent destructive effects on certain types of cancer cells, in the last year or so researchers became concerned about its potential side effects, primarily as a result of the discovery that TNF is identical to a substance known as cachectin, which causes the "wasting" away of the body seen in cancer and many other chronic diseases.

Dr. Anthony Cerami, professor of medical biochemistry and a dean at The Rockefeller University, led the studies proving that TNF and cachectin are one and the same. He reported on ongoing studies to further clarify exactly what role the TNF-cachectin molecule plays in the body.

Other speakers discussed hormones whose wide-ranging effects in the body are just beginning to be understood.

Dr. Charles Dinarello, associate professor of medicine and pediatrics at Tufts University School of Medicine, spoke about interleukin-1, a fever- and sleep-inducing protein that has many important functions in helping regulate the body's immune system.

Dr. Ferid Murad, Stanford professor and acting chairman in the department of medicine, reported on his laboratory's studies of atrial natriuretic factor, a newly discovered hormone made by the heart that some day may have potential for treating heart disease, high blood pressure and kidney failure.

All the speakers stressed the fact that basic scientific research has made possible the new treatment possibilites of these compounds.

"All of this progress depends on work that has been done in basic biochemistry and molecular biology," Sobel remarked.

A major thrust of Stanford Medical School's Program in Molecular and Genetic Medicine is to bring basic and clinical scientists together to shorten the lag between scientific discoveries and bedside medical applications.

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FOR IMMEDIATE RELEASE

Pictures available on request if not included

KIDNEY TRANSPLANTS RESUME AT STANFORD

STANFORD—

Stanford University Medical Center, the West Coast pioneer in kidney transplants, will resume the procedure after a decade as part of a major thrust in transplantation medicine.

Dr. Stuart M. Flechner, associate professor of surgery and director of Stanford's renal transplant center, said the first transplants probably will take place this month. He said final approval for the procedures was received from the federal Health Care Financing Administration (HCFA) after a site visit Oct. 29.

That visit was necessary before HCFA could issue a license for transplantation, but Flechner described it as routine, "to verify the qualifications of the people and support services involved in the transplantation process."

Flechner came to Stanford in September from the University of Texas Medical School at Houston, which has one of the largest renal transplant programs in the United States.

Stanford will probably perform 15 to 30 transplants the first year, he said. "Our primary goal is to establish a first-class clinical program which will emphasize patient care and investigation into newer approaches which will enhance the chances of a successful transplant."

The first kidney transplant on the West Coast was done at Stanford in 1960. Dr. Roy Cohn, professor emeritus of surgery who headed the renal transplant program, said the first patient was Lenneth Pock, who received a kidney from his identical twin brother, Kenneth.

Cohn said the first 10 patients he operated on at Stanford all received kidneys from relatives. "We had much better control of rejection that way," he explained.

Eventually, surgeons were able to control rejection sufficiently to use kidneys from cadavers and more than 100 transplants were performed at Stanford before the program was phased out, initially because of the cost.

"We had a problem here with financing," Cohn said. "The (federal) government wouldn't finance the operations, and they were very expensive." Cohn said he suggested the late Dr. Samuel Kountz, who was performing the bulk of Stanford's transplants, move to the University of California-San Francisco, which was receiving financial aid from the state. At that point, Stanford's program stopped.

Federal financing now makes it feasible to restart the program as part of an expanded emphasis on transplantation at Stanford.

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In addition, there is a growing need in the area for a kidney transplant center, Flechner said. He noted that Santa Clara County is the fastest-growing portion of the Bay Area and has "a large dialysis-based population" of people suffering from end stage renal disease (SRD), but there has been no hospital closer than San Francisco performing transplants.

Stanford's well-established reputation for innovation in immunosuppressive techniques to block the body's rejection of transplanted organs was one of the things that attracted Flechner to the Medical Center.

Flechner plans to investigate the possibilities for limiting immunosuppressive drug use in transplants. "My career interest," he said, "has been in looking at ways to immunosuppress patients without steroids and to look into steroid-sparing forms of immunosuppression. Many of the complications relating to transplantation have been due to chronic administration of steroids."

Although all drugs have some adverse side effects, the immunosuppressive drugs cyclosporine and prednisone have helped produce a dramatic increase in the success rate of kidney transplantation from cadavers, Flechner said. However, he added, kidneys donated by relatives have an even better success rate.

"Better than 9 out of 10 living-related kidneys are working two years after transplantation," he said, "and about 7 to 8 out of 10 kidneys from cadavers are working two years after transplantation."

The use of cyclosporine has permitted the successful transplantation of kidneys without extensive preconditioning of patients by blood transfusions or surgically removing the spleen. It permits living donor transplants to be done without the risks of sensitization, which is so frequently observed when donor-specific blood is used.

Flechner performed hundreds of transplants in Texas, including one on a 1-year-old boy who was the youngest kidney recipient in Texas. He was a co-investigator for the initial federal Food and Drug Administration-sponsored trials demonstrating the efficacy of cyclosporine in clinical kidney transplantation.

Before joining the University of Texas faculty in 1981, Flechner was a fellow in transplantation and renovascular surgery at the Cleveland Clinic Foundation. He received both his bachelor's degree and his M.D. from UCLA. He was an intern at UC San Francisco, where he also served a residency in surgery and urology. He also was a resident at the University of Liverpool, England.

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SEARCH COMMITTEE FOR DERMATOLOGY CHAIR APPOINTED

STANFORD—

A search committee to recommend candidates for the vacant chair of the department of dermatology of the School of Medicine has been appointed by Vice President and Dean David Korn.

The eight-member committee will be chaired by Dr. Bruce Tune, professor of pediatrics.

The chair of dermatology has been vacant since Eugene M. Farber who headed the department for more than 30 years became professor emeritus. Dr. Paul Jacobs, professor of dermatology has been serving as acting chairman since 1985.

The committee, the dean said, should "seek the opinion of colleagues from inside and outside the school." During the past few months, the dean added, he had received advice about potential candidates during discussions with colleagues in academic dermatology and from an ad hoc advisory committee of full-time and voluntary faculty.

Dr. Robert W.P. Cutler, associate dean for faculty affairs, will continue to work with the ad hoc advisory committee as appropriate, Korn said. Marian Knox, assistant dean for faculty affairs, will coordinate the staff support.

The members are David Denneau, clinical associate professor of dermatology; Sarah Donaldson, associate professor of radiology; Leslie Dorfman, associate professor of neurology; Ronald Dorfman, professor of pathology; Stanley Falkow, professor of medical microbiology; Peter Gregory, professor of medicine (clinical) gastroenterology; and David Spiegel, associate professor of psychiatry.

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BOOK DISSECTS HEALTH ECONOMY, NEW WAYS OF THINKING ABOUT IT

STANFORD—

Admirers and students of Victor R. Fuchs will be especially pleased to see the noted Stanford health economist's previously published thoughts and insights accommodated in a single volume.

The Health Economy, 401 pages. Harvard University Press, 1986, $25, however, manages to be more than that: the essays adhere to Fuchs as a narrator in a process that lends his book an autobiographical sensibility—a meditation on a topic he admits is "difficult and complex."

"An economist is a person who sees something that works in practice and wonders if it will work in theory," Fuchs raises a finger in warning. "My view is somewhat different. Once a problem or puzzle engages my attention, I may use economic theory as a starting point, but then usually move rapidly to an examination of data through statistical analysis and through observation and reflection on the behavior of individuals and institutions. Useful answers to the questions only emerge, if at all, from a close study of the particular phenomemon."

The collection of essays spans some 15 years of Fuchs' work as a Stanford professor of economics and research associate at the National Bureau of Economic Research. His essays reflect many aspects of the health care debate from a broad social, political and economic perspective.

In the opening chapters, Fuchs discusses the relevance of economics to health problems, starting with the time in which many were looking for "a technological fix" to improve the population's health and contain the cost.

"It seemed to me then (and seems now) that the emphasis on technology was overdone," he writes. "When I entered the field I found that medical research, education and practice were overwhelmingly concerned with the diagnosis and treatment of diseases, not with the preservation and enhancement of health.

"Health policy, not surprisingly, also emphasized medical care as the primary route to better health; the physical and psychosocial environments and personal lifestyle did not receive attention commensurate with their importance."

Some of Fuchs' writings have used economic theory as a framework, but other studies, he admits, were sparked by casual observations.

For instance, a study of the economics of surgery grew out of what he describes as "a back-of-the-envelope calculation." It showed the ratio of operations to surgeons in the United States to be surprisingly small, but the product of that ratio and the average fee per operation to be substantial.

Another notion examined by Fuchs and widely debated has been the extent to which the laws of supply and demand apply to medicine. Some economists have argued that use of medical care is decided by the patient, and that information about income, insurance coverage and price is sufficient to explain and predict changes in demand of physicians' services.

But Fuchs found the supply of physicians to be an important determinant. "Because physicians can and do determine the demand for their own services to a considerable extent, one should be wary of plans which assume that the cost of medical care would be reduced by increasing the supply of physicians," he warned.

Fuchs confesses that involvement in policy debates has not been high on his agenda. He hopes, however, some of his work to be relevant to policymakers. In his essay "From Bismarck to Woodcock," for example, Fuchs examines the popularity of national health insurance around the world. He concludes that such programs encourage people to overuse medical care, and from an economic point of view are irrational. But "there may be some welfare gains lying below the surface that more than offset the losses so apparent to economists," he notes.

As everyone familiar with medical institutions knows, the verb "to restructure" has become an important semantic figure to describe the revolutionary changes in the way both the government and the public pay their medical bills. The policies have been motivated by public concerns about the high costs of medical care in light of a slow economic growth. But change in itself is not always a supreme virtue and Fuchs is worried.

"Every revolution carries with it the seeds of its own destruction," he writes.

The problem he sees is excessive preoccupation with saving money. That is to be done by slowing down an overuse of medical services, eliminating questionable technologies and programs, and addressing the glut of specialists and surplus hospital beds.

In doing so, the revolution has created new problems, he notes. They include inadequate insurance coverage for millions, erosion of professional ethics as an instrument of control, battles over money and power between doctors and hospitals, loss of trust between patients and their doctors, and a decrease in useful services. Surprising, the battle for control of medicine is not between doctors and the government, but between doctors and managements of medical care institutions.

As to the outcome, Fuchs predicts that physicians will lose some power. "Control of medicine, as far as I can see, will never again belong completely to physicians."

The negative aspect of these developments is that they are occurring at a time in which the health problems of younger people are dominated by trauma, suicide, homicide and accidents coupled by an aging population consuming a significant amount of the health dollar.

But Fuchs is an optimist. He doesn't think people face more insidious problems or venture into more precarious areas than other men have done. Like the Chinese curse, "May God let you live in an interesting time!" he thinks our times are interesting.

"Scientific advances have extraordinary implications for medical practice, medical education and health policy," Fuchs writes. "For instance, the elucidation of the role of genetic factors in disease will compel much greater attention to populations, to statistics, and to epidemiology—not just for a few diseases, but over a broad spectrum of illnesses.

"Genetics may prove to be the key that brings together disparate elements of university medical centers into fruitful cooperative efforts."

The challenge Fuchs sees is how to capture and preserve the benefits of the revolution while minimizing its costs. "Now that society has decided it can call the tune, it must think carefully about what tune it wants the piper to play," he concludes.

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FOR IMMEDIATE RELEASE
(The following sent Business Wire on Monday, Dec. 29. Photos available on request)

FISH OIL SUPPLEMENTS NEED MORE TESTING, SAY STANFORD RESEARCHERS

STANFORD—

Fish oil food supplements will be scrutinized in a five-year study by Stanford researchers who say the recently touted product may be "too good to be true" in helping to prevent heart attacks.

The promising fish oil, packaged recently in capsule form, has been advertised heavily in recent months based on studies which show that Eskimos, who eat large quantities of cold water fish, tend to avoid heart attacks.

"OMEGA-3 fish oil may offer great promise in reducing cardiac risk and may even have benefits unrelated to heart disease," said Dr. D. Craig Miller, associate professor of cardiovascular surgery. "But the bottom line is that no one really knows for sure."

It's not that Miller and his colleagues are pessimistic. Preliminary pilot results in animal experiments at Stanford already have shown that EPA, a key ingredient in OMEGA-3, has retarded hardening of the arteries (arteriosclerosis) in vein grafts, Miller said. The studies involved the type of accelerated hardening of the arteries that occurs when a vein is grafted from one place in the body to another, such as in bypass surgery.

"A serious concern is that some of the recent claims, particularly from companies promoting products containing the oil, have been fantastic and need to be scrutinized. That's one reason why we're undertaking this multidisciplinary study to take a close look," said Miller, principal investigator in the study which will be supported by a $1.1 million grant from the National Institutes of Health.

The study was conceived by Dr. Peter Cahill, a cardiovascular surgery research fellow with a special interest in OMEGA-3.

Funding for the study was unusual. The Stanford group asked for three years of funding, but the NIH extended the protocol for two additional years. Most federal studies are approved at levels shorter or less costly than applied for.

"Funding of a longer, more costly study than we originally applied for is some indication that the government is anxious to see some meaningful scientific data regarding this controversial, but potentially valuable, health aid," Miller said.

The scientists plan to study the effects of OMEGA-3 on the biochemical, cellular and entire animal level. They'll be looking at the effects of the chemical on individual cells, on the arteries of animals given large doses of the substance, and eventually on the health of animals and human volunteers who will take large doses.

In addition to the potential cardiovascular benefits, Miller and Cahill and the team will also look at the possibility that the fish oil might benefit sufferers of arthritis or other so-called autoimmune diseases.

Television commercials are picturing healthy Eskimos in idyllic settings. The ads promise longer, healthier lives by taking tablets containing OMEGA-3 fatty-acid fish oil.

Here's what triggered the current interest:

A 1977 study of Greenland Eskimos has traced that group's low incidence of heart disease to consumption of large quantities of cold water fish, including salmon, mackerel, bluefish, herring and menhaden. Further studies showed that when Eskimos moved to Denmark and ate a Western diet, their cardiac risk went up.

The central ingredient which appears to be beneficial is eicosapentaenoic acid (EPA), said Miller, and that's the chemical which has been partially isolated and is now one of the active ingredients in OMEGA-3 tablets marketed under a variety of trade names.

The fish oil derivative can be sold without the extensive testing and approval normally reserved for medications, because it is a food derivative and as such doesn't require the same level of federal testing as drugs, Miller noted.

The capsules offer a concentrated form of the substance that could only be duplicated by eating a diet which is very high in fish. The tablets have also been processed to eliminate partially the "fishy" smell or taste.

Miller and his colleagues are optimistic but less than certain that the food supplements can significantly change an individual's risk of heart attack or slow down the underlying hardening of the arteries.

"There are a lot of unknowns. Some questions we need to answer include, first and foremost, whether the EPA is in fact the ingredient which is beneficial. Secondly, even if the ingredient is useful, what dose is useful or optimal? Will it work in everyone?

"Is it equally effective in processed form? What are the mechanisms responsible for its effects? Is it effective when added to a Western diet, or has it worked for the Eskimos in combination with the other food they eat? Are there any side effects which could be potentially deleterious?" Miller asked.

One side effect has already been noted among the Eskimos. The EPA appears to allow them to bruise more easily, because the platelets in their blood are less sticky than in most Europeans. The effect appears to be relatively harmless, and the finding is further evidence of EPA's benefit, since it suggests that the diet is altering the platelets, which is the component of blood associated with normal clotting.

EPA's ability to make blood platelets less sticky may be a key to its potential effectiveness, and that is one primary area Miller and his colleagues will be exploring. Less sticky blood platelets tend to resist clotting and clogging key points in the artery.

EPA, said Miller, may lower cholesterol and almost always lowers high levels of triglyceride in the blood. Both of these substances have been associated with heart disease.

The EPA appears to reduce inflammation in autoimmune diseases such as arthritis, psoriasis or lupus, by interacting with compounds in the blood called leukotrines, chemical messengers which promote inflammation.

Again, further study is needed.

The use of EPA isn't new. In fact many people's grandparents have told them to use it. It is found in cod liver oil. However, cod liver oil is not the best source, since it also contains large amounts of vitamin A and D, which in doses large enough potentially to reduce heart attack risk could be toxic, researchers explain.

The study was conceived by Cahill, who has a particular interest in OMEGA-3," Miller said.

Joining Miller and Cahill in this study are Drs. Allen D. Cooper, associate professor of medicine (gastreoenterology); Frederic B. Kraemer, assistant professor of medicine (endocrinology); Jon C. Kosek, professor of pathology; R. Scott Mitchell, assistant professor of cardiovascular surgery; Randall E. Morris, a cardiovascular surgery senior research associate who will study the immunological aspects of EPA; and Peter D. Wood, research professor of medicine and associate director of the Stanford Center for Research in Disease Prevention.

Eds: Dr. Peter Cahill is available directly at (415) 725-3837, or 723-5771

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5-MONTH-OLD INFANT IN STABLE CONDITION AFTER HEART TRANSPLANT AT STANFORD

STANFORD—

A 5-month-old male infant, Stanford University Medical Center's youngest heart recipient, was reported in critical but stable condition Wednesday and had been taken off the respirator originally needed to assist his breathing.

The infant received his new heart Tuesday after a dramatic cross-country flight by a North Dakota National Guard F-4 jet carrying the donor organ strapped in the back seat.

Dr. Norman E. Shumway, chairman of the Department of Cardiovascular Surgery, and Dr. Vaughn Starnes, chief resident in cardiac transplantation, performed the operation 7 ½ hours after the heart was taken from the donor body.

Both took particular note of that time. Shumway said it was the longest a donor heart had been out of a body and successfully transplanted and Starnes said "the real significance" of the operation was the fact that the out-of-body time for the heart had been extended "to nearly twice what we considered (reasonable)."

The recipient and donor families both requested anonymity. The recipient suffered from endocardial fibroelastosis, a disease characterized by a thickened endocardium, which interferes with heart function.

North Dakota's governor, George A. Sinner, and the National Guard became involved when a Stanford medical team was stranded on the ground in Fargo after picking up the heart. The leased Lear jet flown to Fargo developed trouble and could not get airborne.

At that point, Dr. Edward Stinson, professor of cardiovascular surgery heading the Stanford team, called Sinner.

Sinner received the call at 2:30 a.m. CST and immediately alerted the National Guard. "The plane was in the air within 30 minutes," he said. "The guard is less than a quarter of a mile from the private terminal where the Lear jet was."

The F-4 is a two-seat supersonic plane, but Sinner said the pilot, Lt. Robert Becklund, had to make the flight solo "because the container with the heart was strapped in the back seat."

Becklund made a refueling stop in Ogden, Utah, then flew to Moffett Field Naval Air Station in Mountain View, from where the heart was rushed to Stanford.

The total flight time was three hours and the heart had been out of the donor's body 7 ½ hours by the time the operation started at 4:30 a.m. PST. Shumway said that despite that record time, the operation went very well. He added that one reason Stinson went to North Dakota to pick up the heart was because the expected delay in transplantation made evaluation of the organ critical.

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Shumway said, "If Ed (Stinson) hadn't been there to evaluate the heart, we would not have done the transplant."

Marguerite Brown, transplant donor coordinator who accompanied Stinson to Fargo, noted that four hours is the comfortable length of time for a donor organ to be out of the body without losing any of its ability to function.

Fargo was pushing the outer limit of time for getting donor organs, Brown said. "But pediatric hearts are so rare we thought it was unlikely that another one would become available in time to help this baby."

Brown said she, Stinson and four other transplant team members left the Bay Area at about 2:30 p.m. Monday and landed in Fargo three hours later. She said the donor heart was ready for transport by 8 p.m. PST, but on the runway the left engine of the Lear jet failed.

Mechanics were unable to get it started, and after consultation with a National Guard colonel in charge of the base, Stinson decided to call the governor and ask for his help. Stinson also was crucial in negotiating transport issues with the National Guard, Shumway said.

Sinner said that when he was awakened at 2:30 a.m., he expected the worse because "when a governor gets awakened at 2:30, it's usually something bad. I was glad it was something I could actually do something about."

Stinson, Brown and other members of the transplant team returned to the Bay Area via commercial airliner later in the day. Brown said that she had made about 150 flights to pick up donor organs, "and this was the first time the plane wouldn't start."

Shumway, who performed the first heart transplant in the United States, has long advocated transplants in younger patients. Last summer, Stanford announced plans to perform transplants in neonates—infants in the first 6 to 8 weeks of life—as soon as suitable transplant candidates and donor organs were available.

Starnes presented a paper at an American Heart Association meeting in Dallas last month stressing the encouraging results of heart transplants in children and adolescents at Stanford. Asked Tuesday about the ethical considerations involved in heart transplantation for infants, he said, "Without it, there is no hope; with it, there is optimism."

The infant transplanted Tuesday was Stanford's youngest by more than two years. The previous youngest was Elizabeth Craze, who was 2 ½ years old when she received her heart in October, 1984. Caillie Stufflebeam, 4 ½-year-old from Seaside who received a heart Sept. 15 and a second one Thanksgiving Day, is still recovering in the hospital.

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BRAIN CHEMICAL MAY BE LINKED TO EXTROVERTED PERSONALITY

STANFORD—

Extroverts — outgoing, active and talkative people — may have higher levels of the brain chemical dopamine than more introverted people, suggests a new Stanford University Medical School study.

It appears to be the first research finding that links one of the brain's chemical messengers to a general personality trait, said Dr. Roy King, assistant professor of psychiatry and behavioral sciences.

King cautioned that the research represents just a first clue to understanding the neurochemistry behind the many variations of human personality. The findings could also contribute to a better understanding of the chemical basis of behavioral problems such as drug addiction and social withdrawal, he added.

The findings are published in the December issue of *Psychiatry Research* by King and his colleagues Dr. Ivan Mefford of the National Institutes of Mental Health, Stanford research assistants Clifford Wang and Allison Murchison, Boston College graduate student Edward Caligari, and Dr. Philip Berger, Norris professor of psychiatry and behavioral sciences at Stanford.

The research was funded by grants from the Robert Wood Johnson Foundation, the MacArthur Foundation and the National Institute of Mental Health.

In the last decade, scientists have begun to explore potential links between brain chemistry and psychiatric disturbances such as depression, anxiety and schizophrenia, but few studies have probed the connections between brain chemistry and normal personality traits, King explained.

Instead of studying how the brain's chemical messengers regulate despair, King and his colleagues set out to learn how brain chemicals regulate positive types of behavior, such as extroversion or reward-seeking.

Animal studies had already suggested that in certain brain regions the chemical messenger, dopamine, may help regulate reward-seeking behavior, such as excitement when a hungry animal seeks food, King explained. The brain areas involved are the frontal cortex, the medial caudate, and the base of the brain in the temporal lobes, he said.

The scientists hypothesized that dopamine activity in similar brain regions might underlie human extroversion since the excited and energetic activity of an extrovert in many ways resembles reward-seeking behavior in animals.

In the study, the researchers compared dopamine concentrations in cerebrospinal fluid samples from individuals who had completed the Eysenck Personality Inventory, a psychological test that distinguishes extroverts from introverts. Cerebrospinal fluid (CSF) is the liquid that bathes the brain. CSF dopamine levels are thought to reflect levels of dopamine activity in the brain regions that interested King and his colleagues.

The study subjects were 16 male patients whose CSF had been obtained for a depression-related neurochemical study. None was taking anti-depressant drugs at the time the samples were obtained.

They found significantly higher levels of dopamine in cerebrospinal fluid of the more extroverted patients, King said.

Since the study was carried out in a group of people diagnosed with depression, the researchers are not sure how far the results can be generalized. But because they found no correlation between intensity of depression and dopamine levels, "we think the dopamine concentrations reflect something deeper, such as a basic personality trait" King said. The next step in their research is to examine CSF dopamine levels in non-depressed people.

For years, scientist have debated whether an individual's temperment is molded more by environment or by heredity. Studies of twins and other evidence suggest that an extroverted personality can be inherited, King said. "This new finding may be another step towards trying to resolve the 'nature versus nurture' debate," he added.

The new information also could help explain how certain drugs create their "highs," King said, and might be a new lead in studying drug addiction. Substances such as cocaine and amphetamines cause a release of dopamine in these same parts of the brain, he noted. "The reward of a drug high is an important motivating factor in humans as well as in animals, and may underlie substance abuse," King explained.

The new information might also shed light on personality disorders such as social withdrawal, the opposite of extroversion, or anhedonia, a condition in which people cannot experience pleasure or reward, he said.

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CHILDREN'S HOSPITAL AND NURSES BOTH FIND RELIEF IN FLEXIBLE SCHEDULING POLICIES

STANFORD—

For nine months each year, Nancy Dinsmore of Palo Alto cares for young cancer patients at Children's Hospital at Stanford. Then she packs her bags and boards a cruise ship headed for Alaska, the Caribbean, or Tahiti.

Dinsmore is one of many Children's Hospital nurses who have arranged their jobs to suit their individual needs. One of her colleagues continues her medical career while solo-parenting two young children. Another pursues a master's degree without giving up her charge nurse position.

Altogether, about 90 percent of Children's Hospital nurses have designed something other than a regular 40-hour work week.

These nurses help Children's Hospital at Stanford maintain high staffing standards in the midst of a national nursing shortage. In return, Children's Hospital helps them fit together the sometimes irregular pieces of a modern lifestyle: family demands; professional requirements; personal needs for decompression, variety, and even adventure.

To assist qualified nurses in solving their individual lifestyle puzzles, Children's Hospital has designed a set of flexible policies and programs, including:

- A relief pool system that allows nurses to work as few as 20 and as many as 40 hours a week, at times of their own choosing.
- Job-sharing arrangements that enable two nurses to share one position.
- A liberal benefits policy that provides full benefits starting from day one on the job, even for employees working less then full time.

The relief pool system is particularly attractive to nurses who have returned to school and to young mothers who cannot work full time but need to maintain full benefits.

"It's a matter of moving pieces here and there," says Carol Bradshaw, director of nursing, who helped develop the plan. The relief pool approach has helped Children's Hospital avoid expensive solutions to the nursing shortage, such as high-priced personnel agencies, costly recruiting campaigns, and cash incentives for signing contracts.

Bradshaw understands the many personal and professional pressures felt by her nursing staff. She earned her own advanced degree, subject by subject, at night and on weekends, while working full time.

"Most times the system is loaded on the hospital side," Bradshaw observed. "That's short-sightedness on the part of hospital administrators. Here we try to treat our nurses like customers. We make them feel it's worth their while to work with us, that it's something they want to do, not something they've got to do. The key is to keep that delicate balance between our needs and their needs.

"The relief pool works also wonderfully when a husband says to his wife, 'I have two weeks off, let's go to Hawaii,' and she can say, 'Sure, let's go!' " Bradshaw said. The pool then furnishes someone to cover for her.

Children's Hospital maintains a roster of approximately 200 trained nurses, 25 percent of whom work part time. Many work only weekends or evenings in order to make room for other commitments.

An enthusiast for the program is Kris Jessen, who has worked full time at Children's Hospital for 11 years.

"I never thought I'd stay this long," Jessen recalled. "I like it here because I get involved with my patients and with their whole family. The other day, a 4-year-old patient said to me: 'When I grow up I'd like to be a nurse.' It's that sort of thing that keeps us here."

Jessen decided recently to go back to school for a master's in pediatric nursing. To make time for studies and continue working at Children's, she now shares her job with Miriam Powell, who herself cannot take a full-time position because she has a young child at home.

Nancy Dinsmore, who cares for critically ill children in the Auxiliary Unit, balances her stressful duties with three months as a cruise ship nurse each year.

"I take care of all nursing needs on board, which means anything from band-aids to resuscitating a heart attack victim," Dinsmore said. "The crew comes from many different countries, so I can practice cross-cultural nursing, which I find quite stimulating."

While she enjoys life at sea, Dinsmore also values her work at Children's. By contracting to work 40-hour weeks for nine months, she has three months each year to explore exotic destinations.

Under the relief pool system, nurses sign a monthly commitment, agreeing to the number of hours they will work and dates when they will be available. It falls on Michael Puff, a full-time staffing person, to match the nurses' schedules against the hospital's needs. The complicated computerized system may leave Puff with as many as 21 vacancies to fill in a given day.

On those occasions, Puff has to be very persuasive. "If you know your nurses well and understand that they're individuals with their own individual concerns, the job becomes easier," Puff said.

"On holidays when I schedule the shifts a month ahead, I know precisely who is visiting a grandmother, who has a sick child that day, who has a cousin visiting and who is baking the turkey this year. And who might be available."

Children's Hospital demands highly skilled nurses because the institution cares for children during acute episodes of such long-term, catastrophic diseases as cancer and cystic fibrosis. Nursing these children is stressful and produces a high rate of burnout, according to Bradshaw. In addition, Children's requires expert nursing around the clock and on weekends, including time slots that are traditionally difficult to fill.

With this in mind, Bradshaw has a set up a rotation system in which nurses in high-stress positions are assigned to the outpatient clinics for two-month tours. The program provides relief from difficult environments and allows nurses to follow patients after they have recovered from acute episodes. "For many nurses, this gives their jobs more meaning. That is important in our line of work," Bradshaw said.

To help fill weekend slots, Children's offers bonuses. In addition to their regular salaries, nurses who have worked 48 extra weekend hours over a period of time receive an extra $5 per hour, retroactively. "That means a lump sum of $240, which can come in handy when they want to buy something special or when tax time comes around," Bradshaw noted.

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CHILDREN'S HOSPITAL HELPS OBESE CHILDREN GROW TOWARD NORMAL WEIGHT

STANFORD—

Twelve ounces does not sound like a lot of weight. For a group of obese children who participated in a Children's Hospital at Stanford study, however, two-thirds of a pound represented a major victory.

Obese children have a different problem than obese adults. Their goal is to grow, but to lose weight relative to height. The yardstick for measuring success is the Body Mass Index (BMI), which is calculated by dividing weight by the square of the height.

For 10 youngsters involved in the Children's Hospital pediatric obesity study, the overall BMI for the group declined from 23.85 to 22.95, or approximately 5 percent, over a 10-week period. On the average, each child lost two-thirds of a pound while growing about three-quarters of an inch.

Mothers who participated in the program also lost weight, about 2.5 pounds apiece. Researchers theorize that this reflects parents' better understanding of nutritional principles and a generally better "food environment" in the home.

That is a problem for many American children. Approximately 15 percent of all U.S. youngsters are clinically obese. Studies have demonstrated that obese children are likely to become obese adults. A long-term weight problem poses life-threatening medical risks.

"Clinical obesity is associated with physiological complications, such as high blood pressure and diabetes, as well as psychological disorders, including low self-esteem and depression," explained Dr. Lawrence D. Hammer, director of the pilot program.

But improper attempts to lose weight can be just as dangerous as obesity.

"Children must have adequate nutrition in order to develop normally. Uncontrolled dieting can actually retard growth," continued Hammer, assistant professor of pediatrics at Stanford University School of Medicine. "Parents should be very cautious about putting young children on diets without adequate supervision."

Hammer and his colleagues believe that by intervening early they can help children learn new attitudes and behavior patterns that will be carried into adulthood. Their pilot treatment program is aimed at building healthy eating patterns, encouraging selection of more nutritious foods, and increasing physical activity.

The treatment team, which includes Dr. Robert L. Berkowitz, clinical assistant professor of psychiatry, and research assistant Ronda Flanzbaum, has focused initially on overweight children between the ages of 4 and 6. Their program is designed to influence the eating patterns of the whole family. For each child, at least one parent must participate in 12 weekly sessions.

Of 10 children who participated in the first pilot program, nine completed the course. Participants in the program were generally more than 20 percent above their ideal body weights and eight of the nine finishers were among the top 5 percent of their age group in terms of body mass index.

The Children's Hospital program utilized the "Traffic Light Diet," developed at the University of Pittsburgh. The Traffic Light system divides foods into three groups based on nutritional value relative to calories.

Nutritious, low-calorie foods such as fresh fruits and vegetables get a "green light," meaning that you can eat all you want. Red light foods, such as cake, candy, and pizza, should be reserved for special occasions. The yellow light category should be consumed with caution.

Therapists used games and flash cards to help children distinguish between food groups. The youngsters also exercised for 15 minutes during each hour-long meeting.

"They need to learn what it feels like to have their hearts beat fast, to work up a sweat, and to get tired," Hammer explained.

Meanwhile, the parents learned to encourage correct eating habits and daily physical activity in their youngsters, and to control the foods made available to their children at home. The group sessions also allowed the parents to discuss the difficulties they experienced.

The parents helped their children keep daily records of the foods they ate. Children who achieved their dietary goals were rewarded with stickers and praise.

According to Hammer, the Traffic Light Diet may sound simple but it is not easy.

"It's almost impossible to go to a fast food restaurant and stay within the dietary recommendations," he pointed out. "Practically the only thing they could have would be plain hamburgers."

Hammer and his colleagues plan to organize a second pilot program in the near future. Children's Hospital also offers individual evaluation and treatment programs for overweight children and teenagers.

Funding for the pilot program has been provided by the multidisciplinary Stanford Center for the Study of Youth Development.

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PLASTIC MAN LEAPS LEGAL BARRIER TO AID CHILDREN'S HOSPITAL VIDEO NETWORK

STANFORD—

When an innovative closed circuit television system for hospitalized children ran into legal problems, producer/director Steve Whiting sent a superhero to the rescue.

The legendary Plastic Man himself bounded into Children's Hospital at Stanford with 30 half-hour episodes of the *Plastic Man Comedy Adventure Show*, complete with public performance rights.

For children confined to hospital beds, television provides much-needed escape from the routines of treatment and recovery. Video also offers important educational benefits. With these possibilities in mind, Children's Hospital recently installed a closed circuit TV network.

The idea is to provide suitable programming, free of charge, at each bedside. By carefully screening the shows, Children's Hospital plans to avoid problems associated with some over-the-air broadcasts.

"Television can affect the psychosocial health of children," explained Family Health Education Library coordinator Suzanne Flint, who has led the television project. "It may influence their physical health as well."

Because sick children watch television at odd hours, they may be exposed to almost anything that is broadcast. "The majority of what they see is developmentally inappropriate," Flint observed.

Unfortunately, the closed circuit system ran into a legal roadblock. Most video programs and movies are protected by copyright laws. Copyright owners must give (or sell) permission whenever these materials are shown in public places, including hospitals. The entertainment industry is working hard to preserve this protection, and has already threatened to sue one children's hospital for showing videotapes to patients.

Public performance permits can be very expensive, even for nonprofit organizations like Children's Hospital at Stanford. One distributor is asking $3,500 annually plus videotape rental charges.

That's where Plastic Man comes in. Steve Whiting, who is based in nearby Woodside, Calif., heard about the video predicament at Children's Hospital when he volunteered to help out with a telethon early last summer. Whiting's Plastic Man show, which features gentle, tongue-in-cheek humor and zany cartoons, is just the kind of upbeat fare that children need. Young viewers have responded to Plastic Man's off-the-wall antics by keeping the show among the top four nationally syndicated children's programs.

Several months later, Whiting and San Francisco comic Mark Taylor (the flexible genius behind Plastic Man) brought a bundle of videotapes to Children's. They were received with enthusiasm by a group of patients, who were particularly impressed by Plastic Man's dark goggles and panty hose.

"If laughter is truly a powerful medicine, we hope these shows will make the stays of your young patients both cheerier and shorter," Whiting commented.

Whiting expressed hope that other producers will follow in his footsteps by donating programs to Children's Hospital. "Certainly we can find a way to protect the legal health of our industry and still bring some joy into the lives of these children," he said.

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FREE SKIN CANCER SCREENING OFFERED BY STANFORD CLINIC

STANFORD—

Free screening for skin cancer will be offered Saturday, Jan. 10, at the Dermatology Clinic in the Stanford University Medical Center.

Dr. Chung-Hong Hu, director of the Dermatology Clinic and associate professor of dermatology in the School of Medicine, said the screening will consist of preliminary examination of the skin and is not considered complete diagnosis. Individuals with moles or other skin conditions that look suspicious will be advised to have more thorough examinations, including biopsies.

The examinations will take about 15 minutes, Hu said, and people will be examined in the order in which they arrive at the clinic. There will be no need to make appointments. Individuals who want inspections only of specific areas on their faces or extremities will not need to disrobe, but those who do disrobe will get more complete examinations.

Hu noted that skin cancer has been increasing rapidly in recent years, particularly among fair-skinned people who get sunburned readily. There have been estimates that 40 million Americans will develop skin cancer in the next century, and 400,000 will die from the disease.

Scientists have speculated that one reason for the increase in skin cancer is a thinning of the ozone layer in the upper atmosphere, which allows more ultraviolet light from the sun to reach the earth's surface. Another reason is increased recreational exposure to the sun.

But along with the increased danger of skin cancer, Hu said, there has been an increased awareness of the disease. The screening day is part of a campaign to educate the public further about the dangers and treatment, he said.

"If skin cancer is detected early, it can usually be treated easily," he said, and with early detection the cure rate is excellent.

There will be a full staff of six faculty members as well as residents and nurses on hand for the screening, which will be offered from 10 a.m. to 4 p.m.

The clinic, on the second floor of the Boswell Building, is accessible through the main entrance of the Medical Center. The location will be clearly marked by signs.

12-22-86 —30— skincan rg4

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FOR IMMEDIATE RELEASE

AZT AND OTHER DRUG TRIALS TO BEGIN IN AIDS PATIENTS

STANFORD—

Stanford Medical School researchers plan to begin two studies of the experimental drug AZT (azidothymidine) in AIDS patients beginning in January.

One study will test AZT's effects in AIDS patients with Kaposi's sarcoma, a malignant form of skin cancer. The other will test the drug's effects in patients who have had pneumocystis carinii pneumonia, a frequent complication of AIDS.

Both trials are part of a $100 million federally funded program, announced last June, to find a drug treatment for AIDS. Stanford is one of 14 medical centers nationwide participating in the program.

AZT is an experimental drug that has shown some promise in treating AIDS, although it is not a cure for the disease. In September, federal officials announced that the drug would be made available to certain types of AIDS patients, after preliminary results of a clinical trial suggested that the drug could prolong life.

But continuing studies are needed to accurately assess the drug's effects and to pinpoint the kinds of AIDS patients for whom it is most beneficial, explained Dr. Thomas Merigan, Becker professor of medicine and principal project investigator at Stanford.

Other experimental treatments for AIDS and ARC (AIDS-related complex) are also under way at Stanford, Merigan pointed out. Among the drugs under investigation are:

- Rifabutin, a potential agent for treating ARC;
- DHPG (di-hydroxy-propoxymethyl-guanine) and beta-interferon, two experimental drugs that may help control cytomegalovirus (CMV) retinitis, a viral infection commonly afflicting AIDS patients;
- Fluconazole, a new anti-fungal drug that may be useful in treating cryptococcal meningitis, a fungal infection.

Other studies may begin in coming months, Merigan added. Since each trial involves a specific sub-group of AIDS patients, potential volunteers must meet specific criteria, he noted. For more information, patients or their physicians may contact the Division of Infectious Diseases at Stanford University Medical Center or call (415) 723-6231.

12-22-86 —30— hivtrial LH12

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PALO ALTO PHYSICIAN TESTS MEDICAL PRACTICE OF THE FUTURE

STANFORD—

Dr. Andrew Newman doesn't pretend to be clairvoyant, but he has a pretty good idea of what the practice of medicine will be like in the year 2000—he's already practicing medicine that way in his office at 1101 Welch Road, Palo Alto.

Newman can do his part in admitting patients to the hospital or having them discharged without leaving his office. He can also find out the precise status of all of his patients in Stanford University Hospital, including the types and amounts of medication they have received in the past few hours and whether they've been moved to a different bed during the night. Soon, he'll be able to get the results of laboratory tests just as easily.

The secret is Newman's computer, and the fact that he's hooked up to the SUH medical information system. That gives him instant access to all of the hospital records on his patients. That information could take hours, or even days, to track down through the usual methods of leafing through written records.

Newman is the only doctor outside the hospital hooked up that way now, but within a year or 18 months, there will be others. And in a few years, all of the physicians in a 20-mile radius could have the same direct connection to the hospital. It will be possible for a physician in Modesto—or in Calcutta, for that matter—to check the progress of a patient in Stanford Hospital almost as thoroughly as if the physician were on the scene.

A few hospitals around the nation have pilot programs linking physicians with certain specialties to the hospitals' information systems. For example, "a couple of hospitals in New York have tied all their obstetricians to this kind of program," Newman said.

But no hospital has attempted anything on the scale Stanford envisions. "My office is a prototype," Newman said. "Once the system is up and running we're going to try to have every single physician in town get some type of computer and hook into the system."

Those who do will enormously simplify their own record-keeping and their dealings with hospital records, Newman said. A physician will have all the medical information on a patient, plus all the necessary insurance information and data on Medicare or MediCal, all available within seconds on the computer screen.

When the patient is discharged from the hospital, all the information on medication that was administered in the hospital and given to the patient on discharge will be readily available to the physician. Newman pointed out that patients often don't remember information on medication and physicians can be tied up for hours getting it from the hospital.

Besides all the advantages of instant information, Newman said, "there are other tremendous benefits" provided by computers.

12/17/86

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One such benefit will be the ability to tap into the National Library of Medicine and get information in minutes that would require hours of painstaking research in a printed library.

To show how that service works, Newman decided to check on all references in the national library to hyperbaric oxygen therapy that have been published since 1980. He found 1,354 references to hyperbaric, 33,748 to oxygen and 306,393 to therapy--but only 355 to all three words, hyperbaric oxygen therapy.

It's easy to break those references down even further, he noted, by searching through titles. Then a magazine article or professional document can be called up on the computer screen to provide detailed and specific information.

Another spinoff benefit of computerized medicine is what Newman calls the "business aspect." Instead of having someone spend half an hour on the telephone trying to track down insurance information on a patient for billing, as happens frequently now, physicians will be able to look at the hospital data base and find all the relevant information in about one minute.

There are other bits of information that will help immensely in dealing with patients. Newman explained:

"You've entered the data in the office after you see the patient and you can have that information on the screen when anybody calls up.

"So when you get on the phone with Jonathon Jober, instead of having him say, 'Are you sure you know who I am?', you know that he was born on this date in this state and this was his medical history. He had surgery, these allergies, he's a cigarette smoker, a mild wine consumer.

"You can also refresh your memory about important work or family details. It makes for radically better patient rapport."

Still another benefit is ready access to reference material the hospital has on line, such as poison control information. "If someone swallows a bottle of pills and you need to know what's in those pills, you can get that information right away," Newman said.

All of those things are available right now, but what really excites Newman are the developments still to come.

Among those are projects planned by artificial intelligence researchers at Stanford to teach computers to think like people. Newman described how that would work:

"The computer reminds you that you just gave blood pressure pills to a patient but you forgot that he also has gout and 20 percent of the time that blood pressure pill causes an exacerbation of the gout.... It doesn't tell you what to do. It doesn't make specific recommendations. It just gives a few helpful hints that you might have overlooked."

In another example, Newman said the computer might point out that "Mrs. Smith hasn't had a pelvic examination for nine years and she's of a risk group that the American College of Physicians would think should have it every two years."

Newman also expects personal computers to be used soon with compact disks, which can contain the equivalent of thousands of pages of information. Physicians would be able to keep what amounts to an entire encyclopedia set on one disk, calling up specific information in a few seconds.

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With all of the advantages that computers will be able to provide, Newman thinks any physician would be foolish not to have one.

That's particularly true when the cost is considered, he says. "I'm not talking about millions of dollars in investments. I could put a system that did all this in your office for $2,000."

Getting physicians to plug into the Stanford Hospital system will come as soon as the system is completed, in a year to 18 months. The uncertainty is because the system is being custom designed by the Integrated Health Care Laboratory Technologies. That means it may take longer to install, but will be capable of modification whenever the hospital wants changes in the operation.

Stanford considers the system as a model that it hopes will be in widespread use at other medical institutions in the future.

The system will make it possible for people to carry small cards with all their basic medical information. Those cards can be put into computers at hospitals around the country and will provide major medical diagnoses, pictures of chest X-rays, electrocardiograms, etc.

Newman has been interested in computers ever since he went to Stuyvesant High School for Sciences in New York City and began working with the school's IBM mainframe computer.

When he came to Stanford, he said, "I got very interested in medical records. I found they were terrible by and large; nobody could read what anybody else wrote and you could never find the charts."

He became chairman of the hospital's medical records committee and as computer companies gan developing cheap, easy-to-use hardware he began testing ways of using computers to simplify record-keeping. He has been working with hospital administrators for about three years on the computer system.

Newman is excited about seeing the end of the project draw near because "it's one of the areas in which you can change the future. It will change how medicine will be practiced in my lifetime."

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STANFORD NURSES SPREAD HOLIDAY CHEER

STANFORD—

The nurses in Stanford University Hospital's labor and delivery unit have been making lots of deliveries this month, but they haven't all been new babies.

With money they've raised among themselves, the physicians and other staff on the unit, they've been able to buy holiday food, clothing and other gifts for needy families in the Bay Area.

"This year we raised more money than ever before," said Gwen Anderson, who organizes the effort each year. With $1,500 they collected they were able to buy gifts--mostly warm clothing and food--for six predesignated families, as well as additional food and some holiday items such as cologne for many other recipients.

"Everyone just pulls together and we have such a good time buying, wrapping and delivering the gifts," Anderson says. "The feedback we get is really rewarding."

The charity started several years ago when the nurses decided to give presents to some truly needy people instead of to their colleagues on the unit. They contacted the Homemaker's Agency in Santa Clara County, who in the years since has identified families to receive the nurses' gifts.

Anderson said they also take the flower baskets left on the unit and fill them with flowers to deliver. This year, they were even able to purchase a movie screen for a nursing home.

12-16-86 —30— sk7xmas

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RECOVERING ALCOHOLICS COMPARE CHRISTMASES PAST AND PRESENT

STANFORD—

Roger is really looking forward to Christmas this year—he's even enjoying pushing through crowds and standing in line while Christmas shopping, activities most people find too stressful to enjoy.

But Roger is savoring everything associated with the holidays because this is the first time in years that he hasn't stumbled through the Christmas season in an alcoholic fog.

Roger is one of a group of about 20 recovering alcoholics and/thor drug users who meet regularly in group therapy sessions organized by the Stanford Alcohol and Drug Treatment Center. One night last week they talked about the reality of this year's holidays compared with the hazy remembrances of those gone by. (Roger's name and those of all the group members have been changed.)

"I was always shortchanging my family," said Dave. "I always wanted to be away from my family and be with friends, drinking and using. When I was with my family, I was hung over and I'd cut the time short to get out with my friends. I felt tension and guilt when I was with my family."

Alcohol and drugs serve many psychological functions," explained Dr. Robert Matano, director of the Stanford program, "but at some point a new dynamic in the experience of addiction occurs. Seeking and obtaining the drug of choice becomes the individual's overarching purpose in life. All else becomes less important—family, friends, health—until a point of collapse and despair is reached."

Now that he's quit drinking, Dave is finding real joy and relaxation with his family, but that's not always the case with recovering alcoholics. Susan, for example, will avoid spending Christmas with her family this year.

"I come from an alcoholic family," she explained. "This is the first year in my life that I'm not going to spend Christmas with my family. It's not that I'm terrified they'll start me drinking again, but the gap between us is too big. It will be nice to have Christmas with my own friends."

"For many adult children of alcoholics who are also recovering alcoholics themselves, we have several obstacles in the recovery process," Matano said. "The individual is between a rock and a hard place: Having to give up alcohol sometimes means giving up close contact with his or her family. The recovery group often serves to satisfy familial needs and is particularly useful during time of stress such as holidays, when individuals feel the conflict acutely."

12-16-86

Just sitting down to a holiday meal has particular meaning for John.

"I was a cocaine addict," he said, "and cocaine takes away your appetite. I didn't feel hungry at all and I had to force myself to eat those big dinners. Then I'd go hide in the bathroom (to take cocaine). I really enjoyed Thanksgiving dinner this year. It was the first time I'd enjoyed a big dinner like that in a long time."

Matano explained that "when a person begins recovery and gives up drugs, he or she often experiences joys we take for granted, such as a return of appetite and normal sleep. Some people say it's like being a kid again, with all the joys of childhood."

Joan, a long-standing member of the recovery group, says the difference between sober and drunken holidays is that of real vs. imitation happiness.

"I enjoy them, and I never did before," she said. "I pretended to enjoy them, and certainly drank enough. Everybody would think: 'She's having a great time.' But I used to wish they'd take from Thanksgiving to Jan. 3 out of the calendar."

Most of the therapy group members are confident they can resist the pressure to drink during the holidays, but they know there will be more pressure than usual.

"There's an emphasis on celebration at this time of the year," Susan said. "You just have to keep your life simple and uncomplicated; remember what's important to you."

Roger pointed out that help is only a phone call away. "I have a book of numbers to call, of people in the program," he said. "They're available on 24-hour call to help me (keep from drinking) if it's necessary."

Joan had some practical advice: "I recommend carrying a six-pack of soda whenever you go to a party. People don't think; at a party they'll have wine, beer and mixed drinks and no soft drinks at all. Take something with you and don't trust to chance."

"The holiday season serves to accentuate both everyday and longstanding conflicts for individuals such as our patients have described," Matano said. "We stress in our program resolving individual and family issues that have prevented our patients from enjoying previous holiday seasons and to encourage them to participate in a recovery process that is like a state of childhood in which every day is a joy."

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FIRST KIDNEY TRANSPLANT PERFORMED IN REACTIVATED STANFORD PROGRAM

STANFORD—

A young woman from Fairbanks, Alaska, received a kidney from her mother Monday in the first operation at Stanford University Medical Center's reactivated renal transplant center.

The daughter, Trudy Ekalook, 25, and her mother, Sharleen Ritchey, 43, of Livermore, Calif., both were "doing fine," according to Peggy Deveney, registered nurse who is clinical specialist for the renal transplant program.

The operation was performed by Dr. Stuart M. Flechner, kidney transplant specialist and director of the center. He came to Stanford in September from the University of Texas Medical School at Houston, which has one of the largest renal transplant programs in the United States.

Deveney said Ekalook came to Stanford for the operation because her mother was nearby and because of Stanford's reputation for transplant operations.

Operations such as Ekalook's, involving donor organs from relatives, present fewer problems because there is less chance of the body rejecting the transplanted organ.

Stanford pioneered kidney transplants on the West Coast in 1960, but the program was discontinued a decade ago because of space and financial considerations.

Federal financing now makes it feasible to restart the program as part of an expanded emphasis on transplantation at Stanford. Official approval was granted from the federal Health Care Financing Administration (HCFA) after a site visit Oct. 29.

12-16-86 —30— renal rg3

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RESEARCHERS SEEK VOLUNTEERS TO AID IN STUDY OF RESPIRATORY DISEASE IN FORMER PREEMIES

STANFORD—

Stanford University researchers will be looking for telltale signs of lung disease in people born prematurely and treated for Respiratory Distress Syndrome (RDS) at Stanford University Hospital between 1964 and 1974.

The three-year study, supported by a $270,000 grant from the National Institutes of Health, will involve individuals 13 to 22 years of age, but the researchers also will need healthy volunteers of the same ages to make scientific comparisons.

"Between 11 to 22 percent of infants with RDS, also known as hyaline membrane disease, who are treated with intensive care techniques, develop a severe chronic lung disease called bronchopulmonary dysplasia (BPD)," said Dr. William H. Northway, Jr., professor of diagnostic radiology and pediatrics at the School of Medicine.

"BPD remains a significant clinical problem for neonatologists throughout the world," emphasized Northway, who will direct the study.

He estimates that as many as 5,500 infants who receive life-saving oxygen therapy in U.S. intensive care nurseries each year develop BPD, and some of them perhaps may continue to have abnormalities of this disease into adolescence.

Some manifestations of this chronic condition may include predisposition to asthmatic attacks and respiratory infections, including repeated pneumonias, Northway explained.

"We wish to know if these individuals have residual lung disease, and if so, to find ways of preventing it and treating it," Northway said.

Ironically, BPD was first discovered by Stanford University researchers led by Northway in 1967, who were battling RDS, a disease expressed during the first hours of postnatal life. In RDS, the tiny air sacs of the premature infant's lungs resist inflation. The future course of these belabored infants was death for most within 72 hours of birth.

"But with oxygen-regulated ventilators and various supportive measures available," Northway said, "most infants who would otherwise have died now recover after being extremely ill for a week or more. These survivors have an excellent chance of developing normally as do premature infants who never had the disease."

Yet there is no denying the fact, Northway added, that breathing oxygen in higher-than-atmospheric concentrations is not what our lungs were meant to do—and certainly not what premature lungs are meant to do. The lungs of infants with BPD showed multiple abnormal cystic changes, including bronchial damage.

Northway credits the Stanford discovery of this problem and the revised criteria of oxygen therapy in the newborn infant for effectively reducing BPD incidence in intensive care nurseries throughout the world. This is especially true in premature infants with birth weights above 1,500 grams.

"The disease, however, continues to be seen in 40 to 50 percent of the infants below 1,000 grams," Northway added, "and how to manage these borderline babies is a real challenge."

The Stanford study will include 28 former premature infants treated at Stanford between 1964 and 1974. Many of the former patients have been notified, Northway said, and have agreed to take part.

But to validate the study's findings with comparisons from a normal population, Stanford researchers would like young healthy volunteers, ages 13 to 22, to take part. They will be matched for age and sex with the former patients and given a physical, which includes a standard pulmonary function test (breathing through a tube), an electrocardiogram, a heart ultrasound examination and a chest X ray. The volunteers will also provide a drop of blood obtained through the fingertip and will fill out a questionnaire.

Each volunteer will be paid $25, but to participate, parents' permission will be required, Northway said.

Individuals interested in volunteering, may contact the study's coordinator Kathy Carlisle at Children's Hospital at Stanford (415) 327-4800, Ext. 208.

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LUNGS-sa12

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FOR IMMEDIATE RELEASE

STANFORD HOSPITAL BOARD APPOINTMENTS ANNOUNCED

STANFORD—

Dr. Duncan E. Govan, professor of surgery (urology) at the Stanford University School of Medicine, has been named to the Stanford University Hospital Board of Directors.

He was appointed by the general members of the hospital corporation to serve a three-year term beginning Jan. 1. He succeeds Dr. Robert Chase on the board. By-laws provide that one board member be a full-time faculty member.

The terms of Chase, Geraldine Steinberg and W. James Ware all expire Dec. 31. The seats of Steinberg and Ware were left temporarily unfilled.

Board members John Freidenrich and Jack R. Wheatley, whose terms also expire Dec. 31, were reappointed to three-year terms. The 18-member board is comprised of community, medical and lay leaders as well as university faculty and administrators. Twelve of the board members are appointed by the general members of the corporation, who also are trustees of the University.

All of the appointments were made Tuesday, Dec. 9, and announced Wednesday, Dec. 10, at the regular meeting of the Hospital board.

At the same board meeting, University President Donald Kennedy announced that his position as chair of the Hospital Board will be filled by vice-chair Dean Morton during Kennedy's 2 ½-month leave. Kennedy expects to miss only the February meeting of the board.

Govan joined the Stanford faculty in 1961 as assistant professor. He was appointed associate professor in 1964 and professor in 1970. From 1977 to 1980, he was also the associate dean of curriculum at the School of Medicine.

He received his M.D. from the University of Manitody Medical School and a Ph.D. at the University of Chicago. He completed his residency in urology at the University of Chicago School of Medicine.

12-12-86 —30— board rg3

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NEW TOOL HELPS IDENTIFY DISEASE-CAUSING GENES

STANFORD—

A new tool that separates large pieces of DNA from one another could significantly speed scientists' attempts to identify disease-causing genes, according to Stanford University Medical School researchers.

The technique, described in the December 19 issue of *Science*, can accurately separate chunks of DNA—the genetic material of all living things—up to 100 times larger than possible with previous methods, the scientists said.

Since isolation of big pieces of DNA dramatically eases the problem of locating specific genes, the new method should allow scientists to decipher the identity and structure of disease-causing genes much more quickly than ever before, predicted Dr. Gilbert Chu, a research fellow in Dr. Paul Berg's laboratory in Stanford Medical School's biochemistry department. (On Jan. 1, Chu will become an assistant professor in the department of medicine.)

In the last decade scientists have made enormous progress in identifying certain important genes. Despite the progress, the number of known genes represents only a tiny percentage of the total number of existing human genes.

The new technique, which builds on previous advances by Columbia University researchers, is so promising that scientists from around the world have already contacted Chu for information about the special instrument he and his colleagues developed.

The new method may help solve "a broad range of problems," Chu and his colleagues said, including the identification of genes that cause diseases such as muscular dystrophy, cystic fibrosis, and Huntington's disease.

Chu developed the technique in collaboration with Stanford M.D./Ph.D. student Douglas Vollrath and biochemistry professor Dr. Ronald Davis.

The research was supported by grants from the National Institutes of Health and the MacArthur Foundation.

The researchers suggested that the new method could also accelerate efforts to create a genetic "map" of human DNA. Such a map would indicate precise locations for each of the thousands of human -- genes on the genetic superstructures in cells, which are called chromosomes. Such a genetic map would enable scientists to predict an individual's risk of developing many different diseases.

The technique also could be useful for studying sites of chromosome breakage and reattachment. These sites, called translocations, are believed to play a role in causing many types of cancer.

It also appears to be a more accurate method than those now available for isolating intact chromosomes from parasites that cause diseases such as malaria, sleeping sickness, or leishmaniasis, Chu said, and it will aid research on yeast, simple organisms whose cells resemble our own.

The technique improves on standard "gel electrophoresis," the basic method for separating pieces of DNA from one another. Gel electrophoresis works by passing DNA fragments of different sizes through a gel placed in an electric field. The pieces of DNA move through the electric field at different speeds determined by their sizes. The larger pieces move slightly more slowly, becoming separated from the faster small pieces.

But since the difference in speed is relatively small, conventional gels are most useful for studying DNA from viruses and bacteria rather than the "huge stretches" of DNA that often make up human genes, Chu explained.

The conventional devices can reliably separate pieces of DNA that are less than 50,000 base pairs long, he said. (A base pair is the chemical building block of a gene.) This is good for studying viral DNA, which might be on the order of 5,000 base pairs in length, he said.

But since many molecular biologists are moving away from studying viruses and on to more complex organisms, better tools were needed for resolving larger DNA pieces. One yeast chromosome may be about 2 million base pairs long while the average human chromosome is 150 million base pairs long.

The new methods, first suggested by David Schwartz and Charles Cantor of Columbia University, separate DNA pieces up to 5 million base pairs long, a 100-fold improvement. The Columbia researchers developed the idea of switching the direction of the electric field across the gel, making it possible to separate large DNA fragments. But distortions made their results difficult to interpret.

In the new process developed at Stanford, those distortions are eliminated, Chu said.

In the Stanford instrument, the electric field is controlled by a hexagonal array of electrodes to produce what the researchers call a contour-clamped homogeneous electric field (CHEF). In addition, the electric field periodically alternates 120 degrees in direction. Each time the electric field changes direction, the DNA pieces change their direction of movement. The back-and-forth switching causes the DNA to zigzag through the gel. In this case, the larger pieces lag much farther behind the small ones because all the corners of the zigzag pattern slow them down.

"It's like the difference between a bus and a passenger car going down a road with hairpin turns," Chu said. "Both can go fast down the straight parts, but the bus falls farther and farther behind because it crawls around each bend."

The method is not yet powerful enough to separate whole human chromosomes from one another, but the researchers hope that further work may achieve that goal. Although a process called karyotyping already exists, in which microscopic examination of the chromosomes can reveal obvious abnormalities, it is time-consuming and does not provide anywhere near the amount of information that would be available using the new method, Chu said.

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LH12-ZIGZAG

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EDITORS: Photo available if not included

TRANSPLANT RECIPIENT, 4, LEAVES HOSPITAL TO VISIT SANTA CLAUS

STANFORD—

Four-year-old Caillie Stufflebeam, Stanford Medical Center's youngest double heart transplant patient, left the hospital for the first time in three months on Tuesday, Dec. 9, to go see Santa Claus.

She and her mother, Janine Stufflebeam, attended the annual Christmas Party for children at the Ronald McDonald House at Children's Hospital at Stanford. Caillie sat on Santa Claus' lap and played with live reindeer.

Cardiologists at Stanford Hospital agreed to let her leave the North Intensive Care Unit long enough for the party after the results of a biopsy showed she was not rejecting the heart she received on Thanksgiving Day.

Caillie, of Seaside, Calif., had not been out of the hospital since her first transplant on Sept. 15. The second transplant became necessary when her body rejected the first donor heart.

Elizabeth Craze, who was 2 years old at the time of her transplant, is the only person younger than Caillie to receive a transplanted heart at Stanford. However, physicians have announced plans to perform transplants on neonates—infants in the first 6 to 8 weeks of life—when there are suitable candidates and donor organs.

12-11-86 —30— caillie rg4

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FOR IMMEDIATE RELEASE

HANGOVERS AFFECT PILOTS HOURS AFTER DRINKING

STANFORD—

A "hangover effect" may significantly impair pilots' abilities to perform critical flying maneuvers as long as 14 hours after they stopped drinking alcohol, according to a study by researchers from the Stanford University School of Medicine.

Results of the study were reported in the December issue of the American Journal of Psychiatry by the researchers, Dr. Jerome A. Yesavage, assistant professor of psychiatry, and Von Otto Leirer, a research associate in psychiatry.

The research was conducted at the Palo Alto Veterans Administration Medical Center. It involved 10 Navy pilots from Moffett Field Naval Air Station in California who consumed the equivalent of five to seven 6-ounce glasses of wine, then were tested 14 hours later on a flight simulator. In a control situation, they were tested after going 48 hours without any alcohol.

Although the pilots were unaware of any impairment in their flying abilities, the report stated, "performance was worse in the hangover condition on virtually all measures."

The pilots had no traces of alcohol in their blood at the time of the flight simulation, but all would have been considered legally drunk in many states at the end of a two-hour drinking session 14 hours earlier. All had blood alcohol concentrations higher than a tenth of a gram per deciliter, which is considered as positive evidence of driving while intoxicated in many states.

The pilots regularly fly four-engine P-3C Orion antisubmarine airplanes and the simulated flight conditions included takeoffs and instrument landings with the loss of two engines on one side of the airplane.

"Because the literature we reviewed suggested that the more complex the task studied, the longer the effects, we chose to study a complex flying task," the researchers reported.

Yesavage and Leirer said they were "particularly concerned by the lack of awareness of hangover effects by some pilots....This result replicates prior work from our laboratory in which a series of private pilots were unaware of hangover effects from marijuana. These results are consistent with survey findings indicating that most private pilots think it is all right to fly four hours after drinking some amount of alcohol."

12-9-86 —30— pilots-rg3

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TRUSTEES APPROVE DESIGN OF $73.9 MILLION NEW CHILDREN'S HOSPITAL AT STANFORD

STANFORD—

The Stanford University Board of Trustees Tuesday, Dec. 9, approved the design for a comprehensive New Children's Hospital at Stanford.

The project, expected to cost $73.9 million, is designed by the San Francisco architectural firm of Anshen and Allen. It will include 125 pediatric beds and support services.

"Everything's going on schedule," said Dr. Lawrence G. Crowley, pleased by the trustees' action. Crowley is chairman of the 20-member board planning the New Children's Hospital at Stanford.

Construction is expected to begin sometime in fall 1987, he said.

The new children's hospital will be financed principally by gifts. One of these is a $70 million pledge from Lucile and David Packard, one of the largest commitments from a private donor in Stanford's history.

The gift "will help establish one of the foremost comprehensive centers for pediatric care, research, and training in the country," Stanford President Donald Kennedy said when the pledge was announced last May.

The Packard pledge will provide $40 million for the design, construction and equipment costs of the project. The remainder will complement university efforts to modernize Stanford University Hospital, including perinatal facilities, and pediatric academic space for the Stanford University School of Medicine.

The present Children's Hospital at Stanford will contribute $5 million, and a community campaign will seek $20 million in gifts toward the children's hospital project.

The four-story structure, connected to Stanford University Hospital, will enable Stanford and Children's to consolidate inpatient and outpatient pediatric services now housed in separate locations at some distance from each other.

It will include 94 medical-surgical beds and a 31-bed neonatal intensive care unit. Adjacent to the latter will be a new labor and delivery suite for Stanford University Hospital's obstetrical service. A well-baby nursery and about 50 medical-surgical beds for mothers in Stanford University Hospital will be closely linked to the labor and delivery suites. The placement of these units adjacent to each other will provide an important new perinatal service for mothers and children.

Included in the new building will be the Stanford Children's Ambulatory Care Center, which provides 27 separate clinical services, a day hospital, an auditorium, cafeteria and clinical and diagnostic X-ray laboratories. An adjoining two-level parking structure will be located between the hospital building and Welch Road.

The new facility will be the medical school's principal hospital for clinical practice, research, and teaching related to children's medical and health care. Stanford and Children's have been operating joint programs for many years under the medical direction of the Department of Pediatrics.

Although the new hospital will be an integral part of the Stanford University Medical Center, it will be governed by a separate and independent board.

Anshen and Allen, the architects, have designed a building that will be "as non-threatening and non-institutional as possible," explained project director Langston Trigg, Jr.

The building uses stepped back terraces to break down a bulky appearance so common in many structures, he said. The entrance and drop off point are actually one story high in scale. "Attention throughout the building has been paid to the varying heights and perspectives of children and adults," he added.

One feature is the way functions are assigned to various levels of the building. For example, the second floor brings together several functions to support the concept of a Maternal-Infant Care Center.

"Terraces and garden courts are a key feature in the integration of natural elements into the building," Trigg said. "They provide a pleasing environment and accomodate functions such as therapy and recreation."

A large courtyard will serve as a central orientation feature, he said, and planting will feature a variety of trees, green plants, flowering plants and grass.

Automobile access to the New Children's Hospital will be from Welch Road when it is completed in 1989.

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FOR IMMEDIATE RELEASE

STANFORD UNDERGRADUATE BECOMES FIRST HEART TRANSPLANT RECIPIENT TO QUALIFY AS PILOT

STANFORD—

Andrew Craze said he was pretty nervous Monday, Dec. 8, but not because he was making medical history.

The 19-year-old Stanford sophomore had already become the first heart transplant recipient to qualify medically as a pilot. On Oct. 20, he was sent a third-class airman medical certificate. So on Monday, it was time for his first solo flight.

Encouraged by his Stanford Flying Club instructor, Robert Petersen, Craze, of Cleveland Heights, Ohio, got into the cockpit of a club-owned Cessna-150, taxied down the Palo Alto Airport runway, and then, in about 30 minutes alone in the plane, he made the three takeoffs and landings that qualified him for his private pilot's license.

That Craze was the first heart transplant recipient to receive medical clearance for flying was confirmed by Dr. William H. Hark, manager of the Aeromedical Standards Division of the Federal Aviation Administration in Washington, D.C.

Craze's medical certification, which was gained with the help of members of Stanford's Department of Cardiovascular Surgery, is unrestricted and was issued by Dr. Frank H. Austin Jr., federal air surgeon.

Unlike many young, new pilots — but similar to airline pilots — Craze will have to renew his medical certification every six months instead of once every two years. He is also required to report any changes in his condition to the FAA.

Like all new pilots, Craze's solo license allows him to fly a plane alone. Until he qualifies further, he cannot carry passengers and must continue to have cross-country flight plans approved by an instructor.

Unfortunately, Craze, who received his transplant at Stanford July 10, 1983, is not unique, medically, from other members of his family. His sister, Elizabeth, became Stanford's youngest heart transplant patient ever on Oct. 8, 1984, at the age of 2½.

Both Crazes suffered from cardiomyopathy, a deterioration of the heart muscle that appears to run in families. Craze's parents, Susan and Charles, had already lost a son and a set of female twins to cardiomyopathy when Andrew's once fatal diagnosis was made a few months before his operation.

The cause of cardiomyopathy is not precisely known, but Stanford heart transplant physicians believe that some people inherit an almost fatal sensitivity to a virus that is harmless to most people.

"I like to consider myself a fairly normal person," said Craze, as he stepped out of the Cessna after his historic flight.

Bert J. Postma, director of the Stanford Flying Club, said Craze qualified in training "a bit faster than average." But then, Postma said, club officials were surprised that his medical certification was delayed. It was then, said Postma, that Craze told fellow club members that he had had a transplant and would require more documentation than average to secure his medical certificate.

Craze, an undeclared major deciding between physics and engineering, said his father had gotten him interested in flying. Charles Craze had taken flying lessons but never completed the course to receive a solo license.

Andrew, who became interested in attending Stanford when he visited the campus while preparing for his transplant procedure, started taking flying lessons from the campus club soon after he arrived as a freshman in 1985.

His goals now include seeking a full license that will allow him to carry passengers.

Some 425 persons have received heart transplant operations at Stanford since the program began in 1969. Recently most are returning to productive lives, including Andrew's sister, who is attending nursery school, can count to 109, and enjoys making snow scenes with powdered sugar, according to her mother.

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VANDERBILT SURGEON LECTURES AT STANFORD

STANFORD—

Dr. H. William Scott, professor emeritus of surgery at Vanderbilt University, is the 1986 Louis and Dorothy Kovitz Visiting Professor at Stanford University Medical Center.

Scott, whose interests include surgery for peptic ulcer, endocrine surgery, and obesity, will deliver his talk at 4:30 p.m., Friday, Dec. 12, in Fairchild Auditorium at the Medical Center. His topic is "Cushing's Syndrome—The Vanderbilt Experience."

Major organizations Scott has served as president include the American College of Surgeons, the International Society of Surgery, the American Surgical Association, and the Society of Clinical Surgery.

The author of more than 300 publications, Scott served on the faculty of the Nashville, Tenn. medical school from 1952 to 1982 and currently serves as surgeon-in-chief emeritus.

The Kovitz visiting professorship was established in 1970 in honor of the late Dr. Louis Kovitz and his wife, Dorothy. The purpose of the professorship is to allow physicians of national or international prominence to give annual lectures, rounds and clinical pathological conferences on topics of medicine and surgery at Stanford.

The lectureship is sponsored in alternate years by the Medical School departments of Surgery and Medicine.

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FOR IMMEDIATE RELEASE

PATIENT RELATIONS ASSOCIATES OFFER SPECIAL KIND OF FRIENDSHIP

STANFORD—

When patients need the friendship that neither physicians or family have time to provide, patient relations associates may be the people who best fill the bill.

Patient relations associates "provide a liaison between patients and their families, on the one side, and the institution's staff and administration on the other," said Jeanne Kennedy, Stanford University Hospital director of community and patient relations. She described the hospital's program, which includes 25 volunteer patient relations associates, in an article in the current issue of *Perioperative Nursing Quarterly*.

Medical knowledge and the power of medical technology have advanced dramatically in the last few decades, she said. While this has led to improved treatment, it has also led to an increased lack of understanding for patients and their families. "Technology and medical specialization have fragmented patient care and made it difficult for hospital staff to respond to patients in a personal way," she said.

Patient relations associates can help compensate. They started appearing in hospitals in the late 1950s; now more than 3,300 hospitals offer their services to patients and staff, Kennedy said. A national organization, the American Hospital Association's National Society of Patient Representatives formed in 1972.

At Stanford, the patient relations staff are advocates and problem solvers, Kennedy continued. "Their responsibilities are to relieve the anxieties of patients and their families, to provide a single referral service and to give the hospital administration the information it needs to rectify problems.

"Patient relations interactions are not confrontational; the representative is not on anyone's side," she explained. "Rather, the representative's goal is to solve the problem to everyone's satisfaction."

For example, orthopedic nurses were having difficulty dealing with one patient who was threatening and abusive. After he threw a glass at one of the nurses, a patient relations associate was called. She found out he was a football player whose knee injury had put an end to his career. That understanding made the rest of his stay much more pleasant.

Another patient expressed a desire for a boysenberry pie. After checking with the appropriate people, a patient relations associate delivered one, which made all the difference to the patient.

It takes no formal skills to be a patient relations associate, Kennedy explained, but rather the "maturity and breadth of experience that allows them to understand what is going on with people in crises." A sense of empathy, interpersonal skills and good judgement are desired traits as well.

SUH's patient relations associates go through a 24-hour training and orientation course upon acceptance to the program, followed up by a four-to six-week preceptorship and monthly training updates. Some patient relations tips include touching patients in greeting and farewell; identifying oneself clearly; treating patients as colleagues and anticipating patients' needs. Even if patients are sedated, Kennedy noted, their knowledge of these seemingly small acts make a large difference in their well-being.

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Editors: photos available on request if not included

FLIGHT SIMULATOR-LIKE COMPUTER MAKES EMERGENCY PHYSICIANS SWEAT

STANFORD—

A computer system that functions like an airline flight simulator is making medical students and even experienced emergency physicians and nurses sweat as they learn.

"You really feel the pressure, and that's what makes it realistic and helpful," said Dr. Ricardo Martinez, director of clinical services for the Emergency Department at Stanford University Hospital. He's talking about the DxTER Clinical Simulator System, a computer package which he feels is helping to solve one of medicine's most difficult dilemmas—how to teach medical students and physicians new skills in lifesaving techniques without putting patients at risk.

Fourth year Stanford medical student Lavern Bentt ran into DxTER in the medical school library's media center while on vacation.

"I came back for several days, several hours at a time and really got into the system," said Bentt, from Jamaica, N.Y. She said it was extremely realistic and accurate and helpful during her subinternship in surgery.

Each time she sat down, Bentt selected one of six case studies available on the system's integrated videodisc and computer program. The videodisc rolling, Bentt watched as professional actors unfurled a scenario. A doctor and nurse chatted, and suddenly their calm was shattered with the arrival of a trauma patient.

An actor playing a paramedic explained what he knew about the patient. The actors listened, and so did Bentt. Her job, by touching preselected points on the videoscreen, was to tell those actors what to do next for the patient.

She could order tests, provide medication, and do virtually anything a doctor or nurse would do in a real situation. And the TV screen flashed the appropriate dramatized response. Then she watched the patient respond to her care.

Do the right thing, and the patient is stabilized and able to be transferred out of emergency. Do something really wrong, and the videodisc whirs briefly and flashes an image of a patient actor suddenly gone limp.

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"The patient has stopped breathing, doctor," said the nurse. "What are you going to do?" The choice was Bentt's. As a digital clock ticked off precious seconds on the screen, she had to take appropriate action. If she waited too long, the doctor and nurse would return to the screen to inform her that the patient died. Everything happens in "real time." If you need information from a blood test, it's going to take 30 minutes. Everything which could happen to a real patient while waiting for results can happen to the DxTER patient.

As Martinez put it: "The medical student or intern or nurse gets to make real decisions and real mistakes without threatening a patient.

"Knowledge from books and lectures is relatively easy to come by, but it's much more difficult to teach students or new physicians how to make critical judgments in a clinical setting in a realistic period of time.".

Bentt remembers one scenario in which she forgot to insert a nasal gastric tube. The computer took note, and the patient aspirated and died.

"I don't think I'll ever overlook that again," Bentt said later. "And I'm grateful it wasn't a real patient."

The DxTER system was developed by Dr. David Allan, a San Diego pediatrician, who said he began to realize the limitation of lectures while serving more than four years ago as associate dean for postgraduate education at the University of California at San Diego.

"Dealing with somebody who has a motor vehicle accident is a very emotional experience, so it's vital to include the human tension in the learning environment," Allan said in a telephone interview.

"There's a lot of evidence that the more emotion you generate in a learning situation, the better the educational experience is going to be," said Allan.

And Martinez agrees that knowledge is one thing, judgment is something else. "This system tests your ability to use judgment with the knowledge you bring."

Allan is now president of a San Diego computer company, Intelligent Images, which makes DxTER.

About 25 DxTER systems are being tested, half in medical schools and half in community hospitals.

Anne Brewer, media librarian at Stanford Lane Medical Library Fleischmann Learning Resource Center, said the library agreed to place a DxTER system in the learning center several months ago on a test basis,"and the response has been enthusiastic from both faculty and students. Everyone seems to agree it's uniquely helpful."

Allan said the tool is useful for smaller hospitals because it can be placed right in the emergency department, where doctors and nurses can practice when they have a free moment. Via the video computer, they have an opportunity to practice on serious trauma cases which in real life they must respond to quickly but only rarely.

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And nurses, said Allan, are very much a part of the process, including the vignettes. When a user makes a mistake, it is often the nurse who stares out from the video screen and says, "Doctor, are you sure you want to do that?"

At the end of each scenario, the computer compares the user's work with how a panel of experts managed the patient under similar circumstances. The analysis includes not only medical management but also cost. Every time a test or service is ordered, DxTER takes note of the price. At the end, the user finds out not only how much has been spent, but also how much in terms of dollars and tests an expert panel thought was optimal. (Failure to order a necessary test is a worse no-no).

The videodisc also includes formal instruction, which users can study before trying their hand on a patient.

The guts of the system includes an IBM PC linked to a videodisc player. Because of the large data base available, the lesson can branch in many different ways. Different endings, usually four, have been programmed into the lesson, and the result is dependent on how the learner manages the patient.

At $12,000 for the hardware and programs for the first 12 cases, "we're not exactly in the video game business," said Allan. The cost, he said, is reasonable as a working tool for a community hospital and can become even more economical when additional scenarios are developed for other uses, such as personnel education. Plans call for disks in hospital employee education, which can be used by individuals for their own education and to fulfill accrediting agencies' continuing education requirements.

Martinez said he hopes to have a DxTER system as a fixture in the emergency department (Stanford's gear is located in the Learning Resources Center). And he's hoping for more scenarios for people he supervises and for his own continuing education.

Martinez, who is residency trained in emergency medicine, said, "a lot of decisions are based on subtleties. Two patients may come in with identical symptoms but entirely different problems. Constant practice ensures you'll be able to get down to the guts of the problem, and tools such as DxTER help."

The batch of 16 programs currently available or under active development include such titles as "Abdominal Stab Wounds," "Chest Traumas," "Diagnostic Decisions," "Shotgun Wound to the Abdomen," "Initial Assessment of Respiratory Difficulties," "Adult Respiratory Distress Syndrome," "Chronic Obstructive Pulmonary Disease," "Discontinue Mechanical Ventilation," "Basic Neurological Assessment," "Closed Head Trauma," "Coma of Unknown Origin," and"Spinal Cord Injury."